| Name | logFC | AveExpr | t | P.Value | adj.P.Val | B |
|---|---|---|---|---|---|---|
| NDUFB3 | -1.09136663 | 6.31234456 | -29.20897714 | 1.64E-83 | 2.79E-79 | 179.3917534 |
| ATP5PF | -0.963773616 | 6.77208906 | -22.124294 | 2.24E-61 | 1.90E-57 | 129.0455613 |
| NDUFB6 | -0.914182236 | 6.20621312 | -21.81579598 | 2.36E-60 | 1.34E-56 | 126.7139035 |
| SUCLG1 | -0.974284443 | 6.07562036 | -21.10485038 | 5.58E-58 | 2.37E-54 | 121.3012767 |
| BOLA3 | -0.947246301 | 3.47380511 | -20.97908898 | 1.48E-57 | 4.38E-54 | 120.3383077 |
| NDUFA1 | -0.818722892 | 6.05785056 | -20.97283888 | 1.55E-57 | 4.38E-54 | 120.2904078 |
| COX7A2 | -0.836530884 | 6.91643563 | -20.07278229 | 1.70E-54 | 4.13E-51 | 113.3524598 |
| MORN2 | -1.107969433 | 5.42428643 | -19.93260777 | 5.10E-54 | 1.08E-50 | 112.265089 |
| TMEM14 | -1.069690474 | 5.49308101 | -19.66561744 | 4.15E-53 | 7.81E-50 | 110.1891682 |
| GCSH | -1.493511156 | 3.96125735 | -19.34202293 | 5.29E-52 | 8.98E-49 | 107.6650168 |
| NDUFB2 | -1.188724003 | 6.71950771 | -19.27872634 | 8.72E-52 | 1.34E-48 | 107.1702806 |
| ATP5MC | -0.941702637 | 5.92033624 | -18.58391115 | 2.13E-49 | 3.01E-46 | 101.7195076 |
| NDUFA8 | -0.784984764 | 7.1817636 | -18.2782545 | 2.42E-48 | 3.15E-45 | 99.31099672 |
| GLRX5 | -0.796341062 | 5.38719004 | -18.22521693 | 3.69E-48 | 4.47E-45 | 98.89247066 |
| UQCRH | -0.825315609 | 7.22489535 | -18.19284094 | 4.77E-48 | 5.39E-45 | 98.63690393 |
| ANAPC1 | -0.909031716 | 3.95405601 | -18.16854505 | 5.79E-48 | 6.09E-45 | 98.44507789 |
| ATP5F1C | -0.768771878 | 7.60941026 | -18.16179173 | 6.11E-48 | 6.09E-45 | 98.39175143 |
| MRPS33 | -0.960598112 | 4.53199966 | -18.14327166 | 7.08E-48 | 6.67E-45 | 98.245497 |
| ATP5PD | -0.87574813 | 6.91622254 | -18.10025304 | 9.97E-48 | 8.72E-45 | 97.9056979 |
| HSBP1 | -0.856228772 | 5.19954172 | -18.09641097 | 1.03E-47 | 8.72E-45 | 97.87534457 |
| LAMTOR | -0.848215696 | 6.92078986 | -17.86861051 | 6.32E-47 | 5.11E-44 | 96.07417912 |
| PARK7 | -0.853357009 | 8.18760805 | -17.74088547 | 1.75E-46 | 1.35E-43 | 95.06306647 |
| C15orf61 | -0.820938598 | 2.55703268 | -17.69821813 | 2.47E-46 | 1.77E-43 | 94.72511314 |
| COX7B | -0.914552186 | 6.26610868 | -17.69595231 | 2.51E-46 | 1.77E-43 | 94.70716386 |
| VDAC3 | -0.940531066 | 6.08461562 | -17.65369573 | 3.52E-46 | 2.39E-43 | 94.3723709 |
| RTN4IP1 | -0.832798621 | 3.74934224 | -17.63557545 | 4.07E-46 | 2.65E-43 | 94.22878002 |
| BEX3 | -1.216666792 | 8.54301211 | -17.61983173 | 4.61E-46 | 2.90E-43 | 94.10400891 |
| ATP5MC | -0.920433142 | 6.28588401 | -17.51504819 | 1.07E-45 | 6.31E-43 | 93.2732898 |
| ATP5MG | -0.7312178 | 7.06111501 | -17.51356767 | 1.08E-45 | 6.31E-43 | 93.26154868 |
| NDUFA1 | -0.867912529 | 8.17262181 | -17.49659237 | 1.24E-45 | 6.98E-43 | 93.12692086 |
| MRPS11 | -0.856075232 | 3.89986646 | -17.45368106 | 1.74E-45 | 9.53E-43 | 92.78654245 |
| COX8A | -1.056235889 | 9.58584415 | -17.35708781 | 3.77E-45 | 2.00E-42 | 92.02006019 |
| COX6C | -0.895119486 | 6.60591119 | -17.35180601 | 3.93E-45 | 2.02E-42 | 91.97813697 |
| SNAPC5 | -0.705466857 | 4.78932851 | -17.28358555 | 6.79E-45 | 3.39E-42 | 91.43654884 |
| RIDA | -0.940415316 | 4.42619839 | -17.26903243 | 7.63E-45 | 3.70E-42 | 91.32099055 |
| POLR3K | -0.972479105 | 4.60514021 | -17.15693578 | 1.87E-44 | 8.82E-42 | 90.43062027 |
| ELAC1 | -0.902643923 | 3.29914876 | -16.99746632 | 6.72E-44 | 3.08E-41 | 89.16319344 |
| ALG14 | -0.739688935 | 2.52859803 | -16.99199428 | 7.02E-44 | 3.13E-41 | 89.11968769 |
| APOO | -0.9309396 | 5.12193303 | -16.96034036 | 9.05E-44 | 3.94E-41 | 88.86800287 |

| | | | | | | |
|---|---|---|---|---|---|---|
| HDDC3 | -0.719882219 | 3.77673858 | -16.95263224 | 9.63E-44 | 4.08E-41 | 88.80670968 |
| METTL2: | -0.803587224 | 5.44293971 | -16.84342814 | 2.31E-43 | 9.56E-41 | 87.93815084 |
| MRPS28 | -0.869017026 | 4.46517745 | -16.83583031 | 2.46E-43 | 9.92E-41 | 87.87770823 |
| NDUFS3 | -0.661847354 | 5.71422434 | -16.81845206 | 2.82E-43 | 1.11E-40 | 87.73945393 |
| GON7 | -0.754202266 | 4.66029876 | -16.79756731 | 3.34E-43 | 1.29E-40 | 87.57329236 |
| ATP5MP | -0.801296689 | 5.72681232 | -16.77674096 | 3.95E-43 | 1.49E-40 | 87.40758361 |
| ANAPC1: | -0.875492991 | 6.42510629 | -16.75794345 | 4.59E-43 | 1.69E-40 | 87.25800781 |
| SDSL | -1.162990632 | 5.58024218 | -16.69007113 | 7.91E-43 | 2.86E-40 | 86.71785815 |
| FAM229I | -0.945498592 | 4.37937345 | -16.64982948 | 1.09E-42 | 3.86E-40 | 86.39754907 |
| POP5 | -0.856100246 | 5.05191122 | -16.59334807 | 1.72E-42 | 5.92E-40 | 85.94791484 |
| MALSU1 | -0.761890939 | 4.11241898 | -16.59158937 | 1.74E-42 | 5.92E-40 | 85.93391311 |
| NDUFA6 | -0.901321463 | 6.71728473 | -16.54951005 | 2.44E-42 | 8.13E-40 | 85.59888395 |
| PRADC1 | -1.042662904 | 5.04531792 | -16.54478763 | 2.54E-42 | 8.28E-40 | 85.56128253 |
| ELP6 | -0.797154396 | 4.66008014 | -16.53845738 | 2.67E-42 | 8.55E-40 | 85.51087827 |
| MSRB2 | -1.023102264 | 5.55736722 | -16.53494858 | 2.75E-42 | 8.63E-40 | 85.48293925 |
| LSM10 | -0.78855413 | 5.82948698 | -16.52090304 | 3.08E-42 | 9.49E-40 | 85.37109871 |
| FXN | -0.724162196 | 3.34679723 | -16.45565556 | 5.19E-42 | 1.56E-39 | 84.85150271 |
| TMEM12 | -0.664547996 | 5.44102572 | -16.45440203 | 5.25E-42 | 1.56E-39 | 84.84151956 |
| SMIM20 | -0.844960504 | 5.57483966 | -16.42976521 | 6.39E-42 | 1.87E-39 | 84.64530468 |
| FBXO16 | -0.946940962 | 2.28067155 | -16.38793883 | 8.95E-42 | 2.57E-39 | 84.31216403 |
| UQCR10 | -0.910662315 | 7.70280164 | -16.33001725 | 1.42E-41 | 4.03E-39 | 83.850783 |
| HINT2 | -0.864973789 | 5.05667864 | -16.25997459 | 2.50E-41 | 6.95E-39 | 83.29278839 |
| C11orf74 | -1.578786658 | 4.7385646 | -16.21828255 | 3.49E-41 | 9.48E-39 | 82.96062062 |
| DECR1 | -0.622934161 | 5.5715957 | -16.21741125 | 3.52E-41 | 9.48E-39 | 82.95367868 |
| NDUFB5 | -0.767788467 | 5.13632797 | -16.19102398 | 4.35E-41 | 1.15E-38 | 82.74343683 |
| BNIP1 | -0.756983648 | 3.71304687 | -16.15904364 | 5.62E-41 | 1.47E-38 | 82.48862288 |
| HSPB11 | -1.051982219 | 4.60275305 | -16.15579631 | 5.77E-41 | 1.48E-38 | 82.46274823 |
| COPZ1 | -0.74496838 | 7.23354378 | -16.13674409 | 6.73E-41 | 1.70E-38 | 82.31093849 |
| SNRNP2 | -1.091616558 | 4.6088203 | -16.13247431 | 6.96E-41 | 1.74E-38 | 82.27691616 |
| CISD3 | -0.908326049 | 5.40943298 | -16.08783434 | 9.97E-41 | 2.45E-38 | 81.92120852 |
| ECI2 | -0.774952025 | 4.89656526 | -16.04097995 | 1.45E-40 | 3.52E-38 | 81.54784156 |
| ZBTB8O: | -0.637069317 | 4.1327266 | -16.01159397 | 1.84E-40 | 4.36E-38 | 81.31366855 |
| TMEM24 | -0.752241479 | 3.74885418 | -16.01071165 | 1.85E-40 | 4.36E-38 | 81.30663738 |
| CYC1 | -0.882927 | 6.96017208 | -16.00917368 | 1.88E-40 | 4.36E-38 | 81.29438141 |
| RPL26L1 | -0.776385476 | 5.27017725 | -15.98805274 | 2.22E-40 | 5.09E-38 | 81.12606889 |
| TXNL4A | -0.697775931 | 4.77153828 | -15.95336 | 2.94E-40 | 6.64E-38 | 80.84959973 |
| MKKS | -0.795406204 | 4.0340548 | -15.93175445 | 3.49E-40 | 7.79E-38 | 80.67742178 |
| SLC25A2 | -1.059840668 | 4.52566057 | -15.92952948 | 3.56E-40 | 7.83E-38 | 80.65969067 |
| COX5A | -0.801715098 | 7.19357577 | -15.91210559 | 4.09E-40 | 8.89E-38 | 80.52083637 |
| SLC35B1 | -0.954341125 | 4.88748544 | -15.87539704 | 5.49E-40 | 1.18E-37 | 80.22829823 |

| MANF | -1.526630217 | 6.86362285 | -15.86787221 | 5.84E-40 | 1.24E-37 | 80.16833119 |
|------|--------------|------------|--------------|----------|----------|-------------|
| COPS9 | -1.026480561 | 5.74162387 | -15.8460933 | 6.95E-40 | 1.46E-37 | 79.99477052 |
| LSM3 | -0.780147869 | 4.9919175 | -15.76917984 | 1.29E-39 | 2.67E-37 | 79.38183732 |
| ATP5F1E | -0.886160739 | 6.90228386 | -15.72099211 | 1.90E-39 | 3.88E-37 | 78.99783291 |
| QDPR | -0.951356105 | 4.78463938 | -15.70436145 | 2.17E-39 | 4.37E-37 | 78.86530695 |
| NDUFC1 | -0.77670461 | 6.54297928 | -15.70180992 | 2.22E-39 | 4.37E-37 | 78.84497454 |
| CENPX | -1.028909084 | 5.21724697 | -15.70176625 | 2.22E-39 | 4.37E-37 | 78.8446266 |
| EIPR1 | -0.914073387 | 4.23519255 | -15.6808046 | 2.62E-39 | 5.11E-37 | 78.67759061 |
| KRT10 | -1.182198387 | 4.88124116 | -15.67155887 | 2.83E-39 | 5.44E-37 | 78.60391551 |
| DPCD | -0.806372542 | 4.99791853 | -15.58461752 | 5.68E-39 | 1.08E-36 | 77.91115087 |
| SSU72 | -0.71149955 | 6.03404695 | -15.58171175 | 5.81E-39 | 1.10E-36 | 77.88799835 |
| FDX1 | -0.927267486 | 5.04547093 | -15.53903724 | 8.19E-39 | 1.53E-36 | 77.54798672 |
| HGD | -2.906128409 | 3.69324535 | -15.53027196 | 8.79E-39 | 1.62E-36 | 77.47815137 |
| POP4 | -0.569683708 | 3.80299394 | -15.52385905 | 9.25E-39 | 1.69E-36 | 77.42705846 |
| SDF2L1 | -1.753185971 | 6.54614846 | -15.5095129 | 1.04E-38 | 1.87E-36 | 77.31276176 |
| MGST2 | -0.792527254 | 5.05977625 | -15.50840859 | 1.05E-38 | 1.87E-36 | 77.30396375 |
| EIF2B2 | -1.058277022 | 5.02626143 | -15.49601841 | 1.16E-38 | 2.04E-36 | 77.20525256 |
| EBAG9 | -0.91402719 | 5.0040177 | -15.48805691 | 1.23E-38 | 2.16E-36 | 77.14182519 |
| NDUFB1 | -0.926413408 | 5.89891093 | -15.47837355 | 1.33E-38 | 2.31E-36 | 77.06468127 |
| COX7C | -0.738516087 | 8.69184024 | -15.4443966 | 1.75E-38 | 3.00E-36 | 76.79400905 |
| TSFM | -0.638068361 | 4.45810069 | -15.44030105 | 1.81E-38 | 3.07E-36 | 76.7613836 |
| ATP5PO | -0.790607605 | 6.00696717 | -15.43204441 | 1.93E-38 | 3.25E-36 | 76.69561134 |
| NDUFA5 | -0.876170678 | 5.13045755 | -15.42859919 | 1.99E-38 | 3.31E-36 | 76.66816702 |
| UQCRQ | -0.852952864 | 7.42522976 | -15.40077721 | 2.49E-38 | 4.09E-36 | 76.4465466 |
| ATP5PB | -0.832873492 | 6.72856796 | -15.39170185 | 2.67E-38 | 4.36E-36 | 76.374258 |
| KCNQ1 | -1.175338912 | 6.65952727 | -15.36832544 | 3.23E-38 | 5.21E-36 | 76.18806254 |
| CMC2 | -0.577818865 | 2.34171428 | -15.36034162 | 3.44E-38 | 5.51E-36 | 76.12447274 |
| NDUFC2 | -1.023568138 | 6.53525763 | -15.34487092 | 3.90E-38 | 6.18E-36 | 76.00125433 |
| MFSD3 | -1.04637598 | 5.52686493 | -15.31271618 | 5.04E-38 | 7.92E-36 | 75.74516779 |
| MPPED2 | -2.163220144 | 2.15139702 | -15.30520165 | 5.36E-38 | 8.34E-36 | 75.68532342 |
| MGST3 | -0.762891308 | 5.22660806 | -15.29858876 | 5.65E-38 | 8.71E-36 | 75.63266043 |
| PLEKHJ1 | -1.155219582 | 4.78942408 | -15.29054623 | 6.03E-38 | 9.21E-36 | 75.5686134 |
| CRELD2 | -1.459188733 | 4.81845095 | -15.28190917 | 6.46E-38 | 9.78E-36 | 75.49983332 |
| SPR | -0.974503266 | 5.63711721 | -15.27803075 | 6.66E-38 | 1.00E-35 | 75.46894846 |
| COX16 | -0.77918213 | 5.26276567 | -15.27287111 | 6.94E-38 | 1.03E-35 | 75.42786149 |
| PEBP1 | -0.858145444 | 10.815693 | -15.25663547 | 7.91E-38 | 1.17E-35 | 75.29857819 |
| MTCH1 | -1.226655113 | 8.8479263 | -15.19365324 | 1.31E-37 | 1.92E-35 | 74.79710904 |
| SPX | -2.284886353 | 2.64901461 | -15.18945551 | 1.36E-37 | 1.97E-35 | 74.76368966 |
| MPC1 | -1.003704059 | 6.0812808 | -15.18788081 | 1.37E-37 | 1.97E-35 | 74.75115308 |
| SWI5 | -1.039459935 | 6.03657771 | -15.18623228 | 1.39E-37 | 1.98E-35 | 74.7380288 |

| | | | | | |
|---|---|---|---|---|---|
| CHCHD1 | -0.700311354 | 6.06985084 | -15.17784388 | 1.49E-37 | 2.10E-35 | 74.67124805 |
| HSD17B' | -0.855742707 | 7.40989445 | -15.17155694 | 1.57E-37 | 2.20E-35 | 74.62119827 |
| C1QBP | -0.765657996 | 6.1558855 | -15.11172104 | 2.53E-37 | 3.52E-35 | 74.14489943 |
| SEC61B | -0.782714631 | 7.67337925 | -15.09588631 | 2.87E-37 | 3.96E-35 | 74.01886913 |
| SETMAR | -0.856226003 | 4.02390554 | -15.03231454 | 4.79E-37 | 6.55E-35 | 73.51296437 |
| TIMMDC | -0.705917126 | 5.88812926 | -15.02796595 | 4.96E-37 | 6.73E-35 | 73.47836251 |
| NDUFA4 | -0.853734679 | 7.46949523 | -15.01901935 | 5.33E-37 | 7.17E-35 | 73.4071759 |
| PTRHD1 | -0.947920401 | 5.17289835 | -15.01588814 | 5.46E-37 | 7.29E-35 | 73.38226189 |
| C2orf76 | -0.730739828 | 3.97093864 | -15.01472826 | 5.51E-37 | 7.31E-35 | 73.37303319 |
| ENSA | -0.565035623 | 6.66427892 | -15.00383987 | 6.02E-37 | 7.91E-35 | 73.28640068 |
| COQ5 | -0.680609115 | 5.28085434 | -14.99043272 | 6.70E-37 | 8.74E-35 | 73.1797328 |
| CRADD | -0.820950761 | 2.85413127 | -14.97824357 | 7.39E-37 | 9.56E-35 | 73.08276024 |
| TRAPPC | -1.202065058 | 6.18675201 | -14.96912431 | 7.95E-37 | 1.02E-34 | 73.01021364 |
| CDKN2A | -0.777923598 | 5.3967706 | -14.96881291 | 7.97E-37 | 1.02E-34 | 73.0077364 |
| COX6A1 | -0.810525548 | 7.7366856 | -14.96510377 | 8.21E-37 | 1.04E-34 | 72.9782299 |
| SIRT4 | -0.946459375 | 2.1388413 | -14.95914306 | 8.61E-37 | 1.08E-34 | 72.93081272 |
| MRPL48 | -0.655257371 | 4.08182202 | -14.95670268 | 8.78E-37 | 1.10E-34 | 72.91139998 |
| PRDX5 | -0.949580002 | 10.4800696 | -14.9207977 | 1.17E-36 | 1.45E-34 | 72.62580514 |
| IDH3B | -0.725567665 | 6.27200217 | -14.8856301 | 1.55E-36 | 1.91E-34 | 72.34611756 |
| COQ3 | -0.63207233 | 3.78149554 | -14.87628896 | 1.67E-36 | 2.04E-34 | 72.27183481 |
| NDUFS4 | -0.801004058 | 6.59420167 | -14.85633951 | 1.96E-36 | 2.38E-34 | 72.11320277 |
| NDUFB4 | -0.611573768 | 6.98649697 | -14.85298591 | 2.02E-36 | 2.43E-34 | 72.08653729 |
| HSD17B{ | -0.931712316 | 6.46007274 | -14.82449403 | 2.53E-36 | 3.02E-34 | 71.86000694 |
| SPA17 | -0.844351466 | 3.39797188 | -14.82389041 | 2.55E-36 | 3.02E-34 | 71.85520801 |
| HEBP1 | -0.948638013 | 6.21731135 | -14.81986266 | 2.63E-36 | 3.10E-34 | 71.82318707 |
| STOML1 | -0.755565612 | 3.1750513 | -14.80733427 | 2.91E-36 | 3.40E-34 | 71.72358932 |
| NDRG2 | -1.133917703 | 4.52692116 | -14.78362377 | 3.52E-36 | 4.09E-34 | 71.5351128 |
| COX20 | -0.795450969 | 2.60240508 | -14.76014649 | 4.24E-36 | 4.90E-34 | 71.34851169 |
| TIMM21 | -0.711013791 | 3.38998839 | -14.74680287 | 4.72E-36 | 5.41E-34 | 71.24246426 |
| PDIA3 | -1.153303864 | 9.17333682 | -14.71562499 | 6.06E-36 | 6.90E-34 | 70.99470848 |
| TPMT | -1.168802338 | 6.97872637 | -14.711505 | 6.27E-36 | 7.09E-34 | 70.96197193 |
| NUCB2 | -1.119479833 | 4.56244755 | -14.69132448 | 7.37E-36 | 8.28E-34 | 70.80163193 |
| TCTA | -0.894328555 | 6.39528996 | -14.67578883 | 8.34E-36 | 9.31E-34 | 70.67820846 |
| ATP5MF | -0.758557711 | 6.45517344 | -14.67225328 | 8.58E-36 | 9.52E-34 | 70.65012167 |
| HSP90B' | -1.321934796 | 10.0129794 | -14.6684558 | 8.85E-36 | 9.75E-34 | 70.61995463 |
| COX17 | -0.777933962 | 5.37671457 | -14.65160288 | 1.01E-35 | 1.11E-33 | 70.48608336 |
| NUDT9 | -0.800502425 | 5.26768357 | -14.6297446 | 1.21E-35 | 1.31E-33 | 70.31247063 |
| LDHB | -1.005574139 | 8.31274704 | -14.62538005 | 1.25E-35 | 1.35E-33 | 70.27780705 |
| TUSC2 | -0.695461454 | 5.7268146 | -14.61890222 | 1.32E-35 | 1.41E-33 | 70.22636127 |
| DCTN3 | -0.813466142 | 5.39820456 | -14.57518112 | 1.87E-35 | 1.99E-33 | 69.87918648 |

| Gene | | | | | | |
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| RWDD1 | -0.625065222 | 4.74175575 | -14.54576327 | 2.36E-35 | 2.51E-33 | 69.64563969 |
| TMEM37 | -1.186332322 | 6.28698105 | -14.54403972 | 2.40E-35 | 2.52E-33 | 69.63195783 |
| CALR | -1.232375233 | 10.6242153 | -14.53763101 | 2.52E-35 | 2.64E-33 | 69.58108544 |
| UBB | -0.840457118 | 10.0562212 | -14.52845458 | 2.71E-35 | 2.82E-33 | 69.50824639 |
| TIMM8B | -0.704984491 | 5.97056002 | -14.52129869 | 2.87E-35 | 2.97E-33 | 69.45144845 |
| SPATA2 | -0.836760115 | 3.21600854 | -14.51358787 | 3.06E-35 | 3.14E-33 | 69.39024876 |
| DNAJB1 | -0.96951918 | 5.32312784 | -14.50393868 | 3.30E-35 | 3.37E-33 | 69.31366876 |
| C11orf1 | -0.732286825 | 3.93142105 | -14.49483264 | 3.55E-35 | 3.61E-33 | 69.24140356 |
| UQCC2 | -0.858174905 | 4.32770535 | -14.48188652 | 3.94E-35 | 3.98E-33 | 69.13867101 |
| POLR2G | -0.6763022 | 6.08223852 | -14.47633936 | 4.12E-35 | 4.13E-33 | 69.09465468 |
| ACADS | -0.915494164 | 5.20360723 | -14.47254251 | 4.25E-35 | 4.24E-33 | 69.06452788 |
| SLC25A4 | -0.913437497 | 5.29163106 | -14.46430029 | 4.54E-35 | 4.50E-33 | 68.99913093 |
| COX14 | -0.787543553 | 7.20419688 | -14.45280025 | 4.97E-35 | 4.90E-33 | 68.90789113 |
| EMC3 | -0.763120351 | 5.8951892 | -14.44529998 | 5.28E-35 | 5.18E-33 | 68.84838872 |
| SMIM19 | -0.807608985 | 4.95866084 | -14.42775822 | 6.08E-35 | 5.92E-33 | 68.70923497 |
| MRPS7 | -0.707691961 | 5.44267212 | -14.41618649 | 6.66E-35 | 6.46E-33 | 68.61744869 |
| FUNDC1 | -0.692855124 | 5.13533339 | -14.39720964 | 7.76E-35 | 7.47E-33 | 68.4669411 |
| CMC1 | -0.462343063 | 2.06667567 | -14.39590535 | 7.84E-35 | 7.51E-33 | 68.45659735 |
| MICOS1( | -0.688477401 | 4.07754416 | -14.3896984 | 8.24E-35 | 7.85E-33 | 68.40737396 |
| MRPS9 | -0.605525273 | 5.37579486 | -14.38083933 | 8.84E-35 | 8.38E-33 | 68.33712206 |
| OSCP1 | -0.869691035 | 3.91118601 | -14.37771056 | 9.07E-35 | 8.54E-33 | 68.31231204 |
| HMBS | -0.983990665 | 3.86219489 | -14.37098592 | 9.57E-35 | 8.96E-33 | 68.2589901 |
| WASHC3 | -0.59885085 | 4.89464182 | -14.36201869 | 1.03E-34 | 9.58E-33 | 68.18788978 |
| SRPRB | -0.899674205 | 5.26095582 | -14.35422144 | 1.09E-34 | 1.01E-32 | 68.1260697 |
| ALDH9A | -1.058412243 | 7.46017679 | -14.35213807 | 1.11E-34 | 1.03E-32 | 68.10955247 |
| SYTL3 | -1.239576236 | 4.7196463 | -14.35081101 | 1.12E-34 | 1.03E-32 | 68.09903145 |
| MRPL47 | -0.605135907 | 5.8010235 | -14.3222426 | 1.41E-34 | 1.29E-32 | 67.87256348 |
| WWOX | -1.010629116 | 3.67553789 | -14.31748115 | 1.47E-34 | 1.33E-32 | 67.83482302 |
| ETFA | -0.753840474 | 4.98433675 | -14.30925192 | 1.57E-34 | 1.41E-32 | 67.76959902 |
| CYB561 | -1.137765172 | 5.6841637 | -14.30741445 | 1.59E-34 | 1.43E-32 | 67.75503605 |
| COMMD7 | -0.639432772 | 6.4371579 | -14.29752006 | 1.72E-34 | 1.54E-32 | 67.67662056 |
| SMIM7 | -0.712592811 | 4.84115223 | -14.29457808 | 1.76E-34 | 1.56E-32 | 67.65330575 |
| CLN5 | -1.033028914 | 4.79353398 | -14.28169652 | 1.95E-34 | 1.73E-32 | 67.55122696 |
| GTF2A2 | -0.643502872 | 4.89966702 | -14.27814653 | 2.01E-34 | 1.77E-32 | 67.52309719 |
| COQ9 | -0.807654234 | 5.31667578 | -14.27256376 | 2.10E-34 | 1.84E-32 | 67.47886126 |
| SNX11 | -0.786659202 | 4.71792447 | -14.27134534 | 2.12E-34 | 1.84E-32 | 67.46920717 |
| SDHAF3 | -0.946747437 | 3.77821988 | -14.27097054 | 2.13E-34 | 1.84E-32 | 67.46623751 |
| TPI1 | -0.698206442 | 8.33198786 | -14.25659938 | 2.39E-34 | 2.05E-32 | 67.35237549 |
| BCDIN3D | -0.789642914 | 2.61856095 | -14.25404907 | 2.44E-34 | 2.09E-32 | 67.33217076 |
| TMEM21 | -0.761408949 | 2.80047409 | -14.25049332 | 2.51E-34 | 2.14E-32 | 67.30400124 |

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| DAD1 | -0.778899153 | 8.96553363 | -14.24748116 | 2.57E-34 | 2.18E-32 | 67.28013869 |
| FAHD2A | -0.944186286 | 3.74985354 | -14.23932589 | 2.74E-34 | 2.31E-32 | 67.21553491 |
| TIMM17A | -0.82105316 | 5.18906605 | -14.23114982 | 2.92E-34 | 2.46E-32 | 67.15077048 |
| PPIL1 | -1.197115249 | 5.49809655 | -14.22941836 | 2.97E-34 | 2.48E-32 | 67.13705573 |
| CA4 | -2.856553469 | 2.9751396 | -14.22790092 | 3.00E-34 | 2.50E-32 | 67.12503637 |
| NDUFAF | -0.655191534 | 4.887673 | -14.22158268 | 3.16E-34 | 2.61E-32 | 67.07499228 |
| ECHS1 | -0.845863176 | 8.06010338 | -14.20454761 | 3.62E-34 | 2.98E-32 | 66.94007717 |
| AIFM1 | -0.774181179 | 5.00682013 | -14.18455569 | 4.24E-34 | 3.48E-32 | 66.78176737 |
| MRPL22 | -0.50832551 | 3.6933174 | -14.18317458 | 4.29E-34 | 3.50E-32 | 66.77083177 |
| ZSCAN5 | -0.506009299 | 1.38415973 | -14.1826128 | 4.31E-34 | 3.50E-32 | 66.76638366 |
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| CINP | -0.52801639 | 3.97094176 | -14.15462965 | 5.39E-34 | 4.29E-32 | 66.5448401 |
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| CLYBL | -0.757648561 | 2.30671855 | -14.1499511 | 5.59E-34 | 4.41E-32 | 66.50780479 |
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| NEDD8 | -0.679164691 | 5.67030367 | -14.11296284 | 7.51E-34 | 5.77E-32 | 66.21505693 |
| C16orf89 | -2.171029713 | 8.35525466 | -14.10323013 | 8.12E-34 | 6.20E-32 | 66.13804134 |
| LRTOMT | -0.749552968 | 2.74510147 | -14.09465547 | 8.69E-34 | 6.60E-32 | 66.07019474 |
| MRPS14 | -0.773564514 | 4.96536293 | -14.09430674 | 8.72E-34 | 6.60E-32 | 66.06743552 |
| COA6 | -0.68815233 | 5.08302113 | -14.08684948 | 9.25E-34 | 6.98E-32 | 66.0084345 |
| SEC11C | -1.052434608 | 5.47066009 | -14.08569912 | 9.34E-34 | 7.01E-32 | 65.99933332 |
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| JTB | -0.704111688 | 7.98604095 | -14.06799534 | 1.08E-33 | 7.97E-32 | 65.85927947 |
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| C1orf122 | -0.948854497 | 5.624044 | -14.04823893 | 1.26E-33 | 9.20E-32 | 65.70301278 |
| SPCS2 | -0.836767708 | 5.62812856 | -14.04469743 | 1.30E-33 | 9.43E-32 | 65.67500357 |
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| HMOX2 | -0.622318547 | 5.30871317 | -14.02590272 | 1.50E-33 | 1.08E-31 | 65.52637346 |
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| TMA7 | -0.775143297 | 7.80620719 | -14.01523252 | 1.64E-33 | 1.17E-31 | 65.44200376 |
| FKBP1A | -0.800709969 | 8.08844688 | -14.01028216 | 1.70E-33 | 1.21E-31 | 65.40286372 |

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| MRPS22 | -0.554638081 | 4.01080252 | -14.00869141 | 1.73E-33 | 1.22E-31 | 65.39028687 |
| BCCIP | -0.639539506 | 5.01831277 | -13.99044374 | 2.00E-33 | 1.40E-31 | 65.24602907 |
| SLC25A3 | -0.961501906 | 2.44898241 | -13.97475761 | 2.26E-33 | 1.59E-31 | 65.12204072 |
| SMIM10L | -0.660428686 | 4.35957301 | -13.95624253 | 2.62E-33 | 1.83E-31 | 64.97571458 |
| TMEM12 | -0.73205567 | 6.33949265 | -13.9505183 | 2.74E-33 | 1.91E-31 | 64.9304806 |
| PXMP2 | -0.888922946 | 3.86608844 | -13.9437355 | 2.90E-33 | 2.01E-31 | 64.87688475 |
| MRO | -1.774424494 | 1.38739837 | -13.94056 | 2.97E-33 | 2.05E-31 | 64.85179398 |
| COA4 | -0.641530065 | 5.92611364 | -13.93637557 | 3.07E-33 | 2.11E-31 | 64.81873249 |
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| FKBP4 | -0.923646441 | 6.16339964 | -13.91728878 | 3.58E-33 | 2.43E-31 | 64.66794265 |
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| SLC25A3 | -0.645911793 | 7.20736545 | -13.89154131 | 4.39E-33 | 2.95E-31 | 64.46457569 |
| RPP25L | -0.75606044 | 5.76682524 | -13.89118604 | 4.40E-33 | 2.95E-31 | 64.46176988 |
| GCDH | -0.674450731 | 4.03312053 | -13.86715728 | 5.33E-33 | 3.56E-31 | 64.27202457 |
| SULT1A1 | -1.344963513 | 3.73833359 | -13.86040119 | 5.62E-33 | 3.73E-31 | 64.21868249 |
| MRPL24 | -0.655490506 | 6.59765987 | -13.86023554 | 5.63E-33 | 3.73E-31 | 64.21737465 |
| DSTN | -0.828985116 | 8.12823009 | -13.85758439 | 5.75E-33 | 3.80E-31 | 64.19644378 |
| WSCD2 | -2.624189402 | 2.1006274 | -13.84518376 | 6.35E-33 | 4.17E-31 | 64.09854784 |
| NCBP2A | -0.750789157 | 5.54409176 | -13.84082168 | 6.57E-33 | 4.30E-31 | 64.06411458 |
| RAB5IF | -0.778809687 | 4.74779148 | -13.83199237 | 7.05E-33 | 4.59E-31 | 63.99442259 |
| 2-Mar | -1.370274026 | 4.86477063 | -13.83180385 | 7.06E-33 | 4.59E-31 | 63.99293459 |
| MOCS2 | -0.684872385 | 4.7880034 | -13.82933126 | 7.20E-33 | 4.66E-31 | 63.97341898 |
| FAM104B | -0.686366926 | 3.85372317 | -13.82139799 | 7.67E-33 | 4.95E-31 | 63.91080657 |
| CYB5D2 | -0.95898822 | 5.43566305 | -13.82011843 | 7.75E-33 | 4.98E-31 | 63.90070829 |
| GTF2H5 | -0.569026771 | 3.86269757 | -13.8162955 | 7.99E-33 | 5.11E-31 | 63.87053848 |
| NFU1 | -0.658289521 | 5.45030823 | -13.80616241 | 8.66E-33 | 5.52E-31 | 63.79057573 |
| ATP5F1A | -0.828852245 | 6.98274551 | -13.79389666 | 9.55E-33 | 6.04E-31 | 63.69379469 |
| APOM | -0.822129556 | 2.71194961 | -13.79388321 | 9.55E-33 | 6.04E-31 | 63.69368856 |
| COMMD | -0.659586964 | 5.18038366 | -13.7819526 | 1.05E-32 | 6.62E-31 | 63.59956354 |
| UQCR11 | -0.779848912 | 6.48644433 | -13.77976764 | 1.07E-32 | 6.71E-31 | 63.58232683 |
| VPS25 | -0.713416927 | 5.65009941 | -13.7667375 | 1.19E-32 | 7.42E-31 | 63.4795429 |
| MTX2 | -0.731141999 | 5.69431519 | -13.76277342 | 1.22E-32 | 7.63E-31 | 63.44827629 |
| C9orf116 | -1.059541595 | 3.12444307 | -13.73476722 | 1.53E-32 | 9.50E-31 | 63.22741522 |
| DHRS7 | -0.962312447 | 6.54150841 | -13.72902924 | 1.60E-32 | 9.90E-31 | 63.18217278 |
| LYRM4 | -0.657558006 | 3.23603974 | -13.7239501 | 1.67E-32 | 1.03E-30 | 63.14212739 |
| KATNAL2 | -1.436743456 | 2.4228608 | -13.70582657 | 1.92E-32 | 1.18E-30 | 62.99925401 |
| PDHB | -0.580677887 | 5.22911349 | -13.70325617 | 1.96E-32 | 1.20E-30 | 62.97899297 |
| ATP5MD | -0.723481631 | 7.4044699 | -13.69963679 | 2.02E-32 | 1.23E-30 | 62.95046442 |
| ESAM | -1.281323834 | 7.14347879 | -13.69951762 | 2.02E-32 | 1.23E-30 | 62.94952513 |

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| SURF1 | -0.782515483 | 6.41713862 | -13.6813681 | 2.34E-32 | 1.42E-30 | 62.80648473 |
| ACSF2 | -1.125901602 | 5.2458958 | -13.67801907 | 2.40E-32 | 1.45E-30 | 62.78009339 |
| HSPA5 | -1.475377759 | 9.66959932 | -13.6655054 | 2.65E-32 | 1.59E-30 | 62.68149046 |
| RILP | -0.878608702 | 5.44060578 | -13.65888735 | 2.79E-32 | 1.67E-30 | 62.62934831 |
| YIPF1 | -1.051782744 | 5.95372122 | -13.65509471 | 2.88E-32 | 1.72E-30 | 62.59946866 |
| PIH1D2 | -0.770692314 | 2.27851454 | -13.63574424 | 3.36E-32 | 2.00E-30 | 62.44703892 |
| MRPL13 | -0.654593084 | 4.00968179 | -13.63467364 | 3.39E-32 | 2.01E-30 | 62.43860648 |
| COMMD8 | -0.842872057 | 4.61481014 | -13.62661519 | 3.61E-32 | 2.13E-30 | 62.37513806 |
| ACYP2 | -0.685321477 | 3.14218631 | -13.60335593 | 4.34E-32 | 2.56E-30 | 62.19198033 |
| MRPL51 | -0.66521736 | 7.33841674 | -13.59659967 | 4.58E-32 | 2.69E-30 | 62.13878651 |
| MTX1 | -0.593349085 | 3.80004529 | -13.59351027 | 4.70E-32 | 2.75E-30 | 62.11446418 |
| CFAP53 | -0.942073921 | 2.95188416 | -13.59170955 | 4.76E-32 | 2.78E-30 | 62.10028781 |
| XPA | -0.906070855 | 5.19976792 | -13.59110926 | 4.79E-32 | 2.78E-30 | 62.09556208 |
| STMP1 | -0.701431462 | 5.17774476 | -13.58350918 | 5.08E-32 | 2.94E-30 | 62.03573327 |
| SMDT1 | -0.863429564 | 6.76937984 | -13.56828837 | 5.74E-32 | 3.31E-30 | 61.91592896 |
| TXNL1 | -0.873968156 | 5.47311322 | -13.56784964 | 5.76E-32 | 3.31E-30 | 61.91247603 |
| MTIF3 | -0.611224463 | 5.993219 | -13.56575139 | 5.85E-32 | 3.35E-30 | 61.89596223 |
| SULT1A2 | -1.543366081 | 2.72125052 | -13.56412573 | 5.93E-32 | 3.39E-30 | 61.88316821 |
| MRPL34 | -0.802881428 | 6.23873835 | -13.56123518 | 6.07E-32 | 3.45E-30 | 61.86041993 |
| PRDX2 | -0.725893852 | 8.13997691 | -13.55653878 | 6.30E-32 | 3.57E-30 | 61.82346145 |
| COPZ2 | -1.240011048 | 4.59477975 | -13.54529382 | 6.89E-32 | 3.89E-30 | 61.73497725 |
| ARHGAP | -1.670953116 | 2.95003329 | -13.53204063 | 7.65E-32 | 4.31E-30 | 61.63070567 |
| MDP1 | -0.719885731 | 2.86151659 | -13.51476407 | 8.77E-32 | 4.93E-30 | 61.49480429 |
| PPCS | -0.665408337 | 6.13867072 | -13.51190397 | 8.97E-32 | 5.02E-30 | 61.47230882 |
| CNPPD1 | -0.712333069 | 6.87539597 | -13.50983307 | 9.12E-32 | 5.09E-30 | 61.45602111 |
| SLC25A4 | -1.179143039 | 4.89782424 | -13.5040618 | 9.55E-32 | 5.31E-30 | 61.41063186 |
| DNAJC19 | -0.59101638 | 4.4908446 | -13.49686406 | 1.01E-31 | 5.60E-30 | 61.35402833 |
| EEF1AKI | -0.659681328 | 4.1352457 | -13.48958878 | 1.07E-31 | 5.92E-30 | 61.29682012 |
| TMEM25 | -0.768980461 | 4.83486525 | -13.48017282 | 1.15E-31 | 6.35E-30 | 61.22278629 |
| IFT22 | -0.701534942 | 5.06414901 | -13.47994236 | 1.16E-31 | 6.35E-30 | 61.22097439 |
| PDRG1 | -0.694398419 | 4.84936505 | -13.47767785 | 1.18E-31 | 6.44E-30 | 61.20317086 |
| GNA14 | -1.889067638 | 3.63111054 | -13.47358417 | 1.22E-31 | 6.63E-30 | 61.17098756 |
| TXN2 | -0.673618332 | 7.02093004 | -13.46716933 | 1.28E-31 | 6.96E-30 | 61.12055931 |
| C3orf33 | -0.997332317 | 3.92070933 | -13.46530222 | 1.30E-31 | 7.04E-30 | 61.10588234 |
| FAM167A | -2.849215159 | 4.61370037 | -13.45555874 | 1.40E-31 | 7.58E-30 | 61.02929629 |
| MTFR1L | -0.693680357 | 5.12697298 | -13.45336406 | 1.43E-31 | 7.69E-30 | 61.01204693 |
| SF3B5 | -0.70487499 | 8.21622744 | -13.44604569 | 1.51E-31 | 8.12E-30 | 60.95453046 |
| LAMTOR | -0.536706589 | 6.35793172 | -13.43527108 | 1.65E-31 | 8.82E-30 | 60.86986022 |
| ATOX1 | -0.835941248 | 4.81231179 | -13.42566485 | 1.78E-31 | 9.48E-30 | 60.79438111 |
| KIF9 | -0.800259545 | 3.09159727 | -13.4118367 | 1.98E-31 | 1.05E-29 | 60.68574502 |

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| C3orf18 | -0.868139091 | 3.71108268 | -13.40741293 | 2.05E-31 | 1.09E-29 | 60.65099524 |
| MRPS36 | -0.638406257 | 5.61701212 | -13.3916021 | 2.33E-31 | 1.23E-29 | 60.52681313 |
| CDADC1 | -0.882098732 | 3.24791618 | -13.38893829 | 2.38E-31 | 1.25E-29 | 60.50589343 |
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| ECSIT | -0.811028506 | 5.34844161 | -13.38117917 | 2.53E-31 | 1.32E-29 | 60.44496264 |
| TOMM5 | -0.599062967 | 3.69188581 | -13.37937941 | 2.57E-31 | 1.34E-29 | 60.43083032 |
| MIEN1 | -0.621870681 | 6.08285489 | -13.35680499 | 3.07E-31 | 1.60E-29 | 60.25359668 |
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| TRIP4 | -0.770837694 | 4.98422481 | -13.3252984 | 3.94E-31 | 2.02E-29 | 60.00632269 |
| ERI3 | -0.616764453 | 5.69077116 | -13.31091197 | 4.41E-31 | 2.25E-29 | 59.89344742 |
| SRP19 | -0.632848321 | 4.47948309 | -13.30722589 | 4.54E-31 | 2.31E-29 | 59.86453005 |
| SDHD | -0.880237014 | 6.36841937 | -13.30059802 | 4.79E-31 | 2.43E-29 | 59.81253783 |
| TMEM14 | -0.611364602 | 7.96161975 | -13.28291853 | 5.50E-31 | 2.79E-29 | 59.67387399 |
| SFXN4 | -0.874475819 | 5.28811971 | -13.28020943 | 5.62E-31 | 2.84E-29 | 59.65262884 |
| AK6 | -0.639405438 | 4.84143169 | -13.26186983 | 6.50E-31 | 3.27E-29 | 59.50882774 |
| SDHB | -0.608637712 | 6.11006958 | -13.25480328 | 6.88E-31 | 3.45E-29 | 59.45342828 |
| NDUFV3 | -0.553717616 | 4.49888601 | -13.24875502 | 7.21E-31 | 3.61E-29 | 59.40601624 |
| MTHFS | -0.831895972 | 3.48486917 | -13.23462171 | 8.06E-31 | 4.02E-29 | 59.29524101 |
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| TMCO1 | -0.787874699 | 5.61940899 | -13.23129143 | 8.28E-31 | 4.11E-29 | 59.26914185 |
| COA3 | -0.662004127 | 6.27305979 | -13.22652006 | 8.60E-31 | 4.25E-29 | 59.23175095 |
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| OXSM | -0.617670588 | 3.72059366 | -13.21237939 | 9.61E-31 | 4.73E-29 | 59.12095211 |
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| FAAH | -1.038951478 | 5.47178656 | -13.18312777 | 1.21E-30 | 5.92E-29 | 58.89182117 |
| OAZ2 | -0.775486244 | 5.54651173 | -13.17465799 | 1.30E-30 | 6.31E-29 | 58.82549411 |
| ECI1 | -0.991335135 | 6.64313829 | -13.16803437 | 1.36E-30 | 6.62E-29 | 58.7736299 |
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| TFF3 | -3.879491737 | 5.47456694 | -13.16515094 | 1.40E-30 | 6.73E-29 | 58.75105365 |
| CHCHD2 | -0.726394135 | 8.79956232 | -13.16510277 | 1.40E-30 | 6.73E-29 | 58.75067649 |
| B9D1 | -0.845472084 | 4.75697373 | -13.16443918 | 1.40E-30 | 6.75E-29 | 58.74548095 |
| MRPL2 | -0.54872934 | 5.19848948 | -13.15692403 | 1.49E-30 | 7.14E-29 | 58.68664489 |
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| PREB | -0.581695295 | 5.43679822 | -13.13349624 | 1.79E-30 | 8.54E-29 | 58.50326939 |
| ABCB8 | -0.671295803 | 3.78552378 | -13.11437483 | 2.08E-30 | 9.90E-29 | 58.35364709 |
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| PNPLA4 | -0.934886699 | 4.70422287 | -13.09835239 | 2.37E-30 | 1.12E-28 | 58.22830584 |

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| AAMDC | -0.823252586 | 4.71088037 | -13.08483485 | 2.63E-30 | 1.23E-28 | 58.12258305 |
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| HINT1 | -0.779347873 | 8.26838313 | -13.07669691 | 2.81E-30 | 1.31E-28 | 58.0589451 |
| HACL1 | -0.744318086 | 4.50981773 | -13.07524744 | 2.84E-30 | 1.32E-28 | 58.04761117 |
| MRPL21 | -0.725152091 | 5.19212907 | -13.05598108 | 3.30E-30 | 1.53E-28 | 57.89698397 |
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| PSMC4 | -0.571387505 | 6.84912287 | -13.02593481 | 4.19E-30 | 1.92E-28 | 57.66216472 |
| CENPS-( | -0.50834287 | 1.02594468 | -13.01676706 | 4.50E-30 | 2.06E-28 | 57.59053765 |
| CCDC51 | -0.700634566 | 4.0346608 | -13.01602852 | 4.53E-30 | 2.07E-28 | 57.58476787 |
| ANAPC1 | -0.582725779 | 6.59422746 | -13.00478674 | 4.95E-30 | 2.26E-28 | 57.49695129 |
| MDH2 | -0.818014311 | 6.98189711 | -12.99733508 | 5.25E-30 | 2.39E-28 | 57.43874997 |
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| SPATA4 | -0.706066415 | 0.85494791 | -12.99229117 | 5.46E-30 | 2.47E-28 | 57.39935823 |
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| CAMKM1 | -0.608517191 | 2.77871877 | -12.97068095 | 6.47E-30 | 2.88E-28 | 57.23062226 |
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| TLE6 | -1.213974819 | 2.80124482 | -12.85581861 | 1.60E-29 | 6.78E-28 | 56.33472466 |
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| MRPL33 | -0.784143611 | 5.73902927 | -12.83737288 | 1.85E-29 | 7.75E-28 | 56.19100727 |
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| NDUFA9 | -0.501240974 | 3.48428123 | -12.78047707 | 2.89E-29 | 1.18E-27 | 55.74798859 |
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| SNX17 | -0.708397559 | 6.7178386 | -12.76236221 | 3.33E-29 | 1.34E-27 | 55.60702639 |
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| MMP15 | -1.251413733 | 6.86906579 | -12.74832543 | 3.72E-29 | 1.48E-27 | 55.49782793 |
| C20orf96 | -0.890262259 | 4.67405322 | -12.74650748 | 3.77E-29 | 1.50E-27 | 55.48368718 |
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| EMC7 | -0.624510987 | 7.03872348 | -12.72803877 | 4.36E-29 | 1.72E-27 | 55.34005532 |
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| PMVK | -0.726755248 | 7.00529718 | -12.69560195 | 5.62E-29 | 2.16E-27 | 55.08790425 |
| TACO1 | -0.556132983 | 4.48968408 | -12.69548275 | 5.63E-29 | 2.16E-27 | 55.08697786 |
| NELFCD | -0.738307002 | 5.12231649 | -12.69235648 | 5.77E-29 | 2.21E-27 | 55.06268308 |
| NMNAT1 | -0.773756906 | 3.47280288 | -12.68694891 | 6.02E-29 | 2.30E-27 | 55.02066303 |
| PRRG2 | -0.869265165 | 5.0490179 | -12.68083387 | 6.31E-29 | 2.41E-27 | 54.97315033 |
| POLR3G | -0.74577455 | 5.76853955 | -12.673473 | 6.69E-29 | 2.55E-27 | 54.91596456 |
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| ETFB | -0.845626335 | 5.11235777 | -12.66337008 | 7.24E-29 | 2.73E-27 | 54.83748828 |
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| RUVBL1 | -0.608119784 | 3.92478799 | -12.65894664 | 7.49E-29 | 2.81E-27 | 54.80313279 |
| SMIM8 | -0.443281811 | 1.72586857 | -12.6564956 | 7.64E-29 | 2.86E-27 | 54.78409748 |
| IAH1 | -0.571643661 | 4.27505498 | -12.64604415 | 8.29E-29 | 3.10E-27 | 54.70293873 |
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| SLC5A8 | -2.796601884 | 2.98240026 | -12.61048195 | 1.10E-28 | 4.05E-27 | 54.42690107 |
| PRPSAP | -0.809393961 | 4.50898287 | -12.60569784 | 1.14E-28 | 4.19E-27 | 54.3897798 |
| ATPAF1 | -0.56529389 | 5.10492375 | -12.60368375 | 1.15E-28 | 4.25E-27 | 54.37415288 |
| SOD1 | -0.674676555 | 8.13408657 | -12.59844112 | 1.20E-28 | 4.42E-27 | 54.33347908 |
| C11orf65 | -0.409885553 | 0.85944277 | -12.59065053 | 1.28E-28 | 4.69E-27 | 54.27304471 |
| NDUFB1 | -0.76323189 | 7.79318347 | -12.58403268 | 1.35E-28 | 4.92E-27 | 54.22171437 |
| MED11 | -0.555014668 | 5.25417118 | -12.56930635 | 1.51E-28 | 5.51E-27 | 54.10751442 |
| INAFM2 | -1.186148827 | 6.60482434 | -12.56838024 | 1.52E-28 | 5.54E-27 | 54.1003336 |
| COPS3 | -0.618979385 | 5.48185268 | -12.56121521 | 1.61E-28 | 5.84E-27 | 54.0447823 |
| ISOC2 | -0.884719061 | 4.88636037 | -12.56101926 | 1.61E-28 | 5.84E-27 | 54.04326316 |
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| EPHX1 | -1.088817202 | 7.16852777 | -12.55651143 | 1.67E-28 | 6.03E-27 | 54.00831733 |
| ACAD10 | -0.792333824 | 3.68707629 | -12.55064628 | 1.75E-28 | 6.30E-27 | 53.96285356 |
| DHRS4 | -0.666588094 | 3.89404402 | -12.53477202 | 1.98E-28 | 7.12E-27 | 53.83982903 |
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| PDIA5 | -1.211886952 | 4.72450028 | -12.53010388 | 2.05E-28 | 7.35E-27 | 53.80365817 |
| TMEM16 | -0.910132395 | 5.01469664 | -12.52870017 | 2.08E-28 | 7.41E-27 | 53.79278225 |
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| DCXR | -1.075031056 | 6.02898771 | -12.52621138 | 2.12E-28 | 7.51E-27 | 53.77349979 |
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| CCDC13 | -0.430985048 | 0.83986751 | -12.52082889 | 2.21E-28 | 7.80E-27 | 53.73180079 |
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| NDUFAF | -0.584849573 | 5.21894232 | -11.69933046 | 1.29E-25 | 3.31E-24 | 47.42239873 |
| SMUG1 | -0.543097721 | 3.99609086 | -11.69880312 | 1.29E-25 | 3.32E-24 | 47.4183871 |
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| NECAB3 | -0.886668467 | 4.45338482 | -11.65895241 | 1.75E-25 | 4.44E-24 | 47.1153904 |
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| RAD51C | -0.463368924 | 2.56390347 | -11.52420542 | 4.93E-25 | 1.16E-23 | 46.09321137 |
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| TAF11 | -0.584472669 | 5.56790992 | -11.46948865 | 7.48E-25 | 1.71E-23 | 45.67919187 |
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| GPR137 | -0.603844195 | 4.74505865 | -11.42425414 | 1.06E-24 | 2.38E-23 | 45.33739315 |
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| TMEM11 | -0.753141653 | 2.36536287 | -11.41283286 | 1.15E-24 | 2.59E-23 | 45.25116064 |
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| VEGFB | -0.614023045 | 7.32926443 | -11.37709146 | 1.51E-24 | 3.35E-23 | 44.98148718 |
| TIMM10 | -0.670546718 | 6.36181899 | -11.37509156 | 1.54E-24 | 3.40E-23 | 44.96640575 |
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| TCEANC | -0.48134536 | 1.71128115 | -11.36272974 | 1.69E-24 | 3.71E-23 | 44.87320337 |
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| NDUFB1 | -0.60305263 | 7.63568037 | -11.35264237 | 1.82E-24 | 4.00E-23 | 44.79717377 |
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| SGTA | -0.592156367 | 6.32281639 | -11.34291794 | 1.96E-24 | 4.29E-23 | 44.7239005 |
| SNRPE | -0.637532421 | 5.96609006 | -11.34169963 | 1.98E-24 | 4.33E-23 | 44.714722 |
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| BLVRB | -0.666883423 | 6.53962187 | -11.32235852 | 2.30E-24 | 5.00E-23 | 44.56905376 |
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| TMED4 | -0.73586265 | 7.70023797 | -11.3165508 | 2.40E-24 | 5.20E-23 | 44.52532869 |
| GBA2 | -0.662216448 | 5.43928899 | -11.31213868 | 2.48E-24 | 5.37E-23 | 44.49211571 |
| SNTA1 | -1.098042749 | 7.13235932 | -11.31121697 | 2.50E-24 | 5.40E-23 | 44.48517789 |
| BOD1 | -0.705083109 | 6.25025498 | -11.31013634 | 2.52E-24 | 5.44E-23 | 44.47704412 |
| KPTN | -0.642370598 | 3.04656235 | -11.30847497 | 2.55E-24 | 5.50E-23 | 44.46453976 |
| METRN | -1.282000587 | 4.52754299 | -11.30749851 | 2.57E-24 | 5.53E-23 | 44.45719067 |
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| IFT46 | -0.602028199 | 4.71440878 | -11.26077657 | 3.66E-24 | 7.77E-23 | 44.10579449 |
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| 2-Mar | -0.640525551 | 6.04557063 | -11.21611922 | 5.14E-24 | 1.07E-22 | 43.7703806 |
| DMAC2 | -0.492485442 | 4.86650742 | -11.21223416 | 5.30E-24 | 1.10E-22 | 43.74122182 |
| NOL7 | -0.506461848 | 6.48451842 | -11.2110449 | 5.34E-24 | 1.11E-22 | 43.73229661 |
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| PYM1 | -0.572748088 | 5.55220985 | -11.16545519 | 7.55E-24 | 1.53E-22 | 43.39039709 |
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| PRUNE1 | -0.912565034 | 5.4887262 | -11.11306571 | 1.12E-23 | 2.23E-22 | 42.99809121 |
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| KCNIP3 | -1.351657477 | 3.62929319 | -10.83845274 | 8.86E-23 | 1.57E-21 | 40.95239154 |
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| THNSL1 | -0.727125469 | 3.56298614 | -10.81433633 | 1.06E-22 | 1.85E-21 | 40.77362398 |
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| TMEM18 | -0.57664722 | 4.42619551 | -10.81058669 | 1.09E-22 | 1.90E-21 | 40.74584223 |
| ZSWIM7 | -0.674668754 | 4.82999017 | -10.80873548 | 1.11E-22 | 1.92E-21 | 40.73212764 |
| GLRX2 | -0.510331661 | 3.10641911 | -10.8069156 | 1.12E-22 | 1.95E-21 | 40.71864596 |
| FCGBP | -1.638205879 | 6.62797565 | -10.80521948 | 1.14E-22 | 1.97E-21 | 40.70608187 |
| HAGH | -0.512898517 | 4.72053019 | -10.8042209 | 1.15E-22 | 1.98E-21 | 40.69868519 |
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| ATP6V1 | -0.595029339 | 5.38844086 | -10.8028428 | 1.16E-22 | 2.00E-21 | 40.68847769 |
| UBE2M | -0.506181927 | 6.86069328 | -10.79784642 | 1.20E-22 | 2.07E-21 | 40.65147403 |
| 1-Mar | -1.336472943 | 3.93862265 | -10.79466637 | 1.23E-22 | 2.12E-21 | 40.62792559 |
| POR | -0.873392099 | 6.84390831 | -10.78903862 | 1.28E-22 | 2.21E-21 | 40.58625809 |
| COX6B1 | -0.610802691 | 8.86511895 | -10.78641859 | 1.31E-22 | 2.25E-21 | 40.56686228 |
| SERPINE | -0.567468841 | 6.28757199 | -10.78546321 | 1.32E-22 | 2.27E-21 | 40.55979013 |
| LMAN2 | -0.700523669 | 8.19127532 | -10.78088892 | 1.36E-22 | 2.34E-21 | 40.5259325 |
| COPS4 | -0.744791779 | 5.16974092 | -10.775993 | 1.41E-22 | 2.43E-21 | 40.48970018 |
| MRM3 | -0.548009443 | 4.24645591 | -10.77418484 | 1.43E-22 | 2.46E-21 | 40.47632041 |
| EMD | -0.531235645 | 6.91483606 | -10.77179723 | 1.46E-22 | 2.50E-21 | 40.45865422 |
| RAB17 | -0.821773136 | 4.64139824 | -10.77092429 | 1.47E-22 | 2.51E-21 | 40.45219559 |
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| ZNF763 | -0.613188155 | 2.17147652 | -10.76203891 | 1.57E-22 | 2.68E-21 | 40.3864664 |
| PEX2 | -0.644280328 | 4.83072089 | -10.76185953 | 1.57E-22 | 2.68E-21 | 40.38513971 |
| ABHD6 | -0.80266277 | 3.36675694 | -10.76006673 | 1.59E-22 | 2.72E-21 | 40.37188005 |
| COPE | -0.56860181 | 7.31702093 | -10.75697332 | 1.63E-22 | 2.78E-21 | 40.34900303 |
| TMEM23 | -0.462216723 | 0.8709223 | -10.75264149 | 1.68E-22 | 2.87E-21 | 40.31697149 |
| DUSP15 | -1.081275454 | 2.20057175 | -10.74743837 | 1.75E-22 | 2.98E-21 | 40.27850372 |
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| SMIM30 | -0.616327456 | 6.00409638 | -10.74115671 | 1.84E-22 | 3.11E-21 | 40.23207127 |
| MRPL40 | -0.879210895 | 6.77095785 | -10.73828732 | 1.87E-22 | 3.18E-21 | 40.21086483 |
| ERP44 | -0.674157658 | 5.90970689 | -10.73744626 | 1.89E-22 | 3.19E-21 | 40.20464938 |
| METTL2 | -0.566136681 | 3.03616114 | -10.73698928 | 1.89E-22 | 3.20E-21 | 40.20127229 |
| FN1 | 3.365305375 | 9.07048436 | 10.7293232 | 2.00E-22 | 3.39E-21 | 40.14462863 |
| ATG4C | -0.730058282 | 3.80409154 | -10.72596362 | 2.06E-22 | 3.47E-21 | 40.11980994 |
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| ST6GALI | 2.146533241 | 2.14818163 | 10.72367523 | 2.09E-22 | 3.52E-21 | 40.10290634 |
| ARIH2OS | -0.658765335 | 2.47633041 | -10.72319828 | 2.10E-22 | 3.53E-21 | 40.09938339 |
| ISCA1 | -0.703803994 | 4.90779546 | -10.72192543 | 2.12E-22 | 3.56E-21 | 40.08998201 |
| MZT2B | -0.926191874 | 7.07373513 | -10.72078252 | 2.14E-22 | 3.59E-21 | 40.08154068 |
| EMCN | -1.210471142 | 4.08102145 | -10.71764894 | 2.19E-22 | 3.67E-21 | 40.05839842 |
| FAM192A | -0.480512612 | 5.60856018 | -10.71696796 | 2.20E-22 | 3.68E-21 | 40.05336949 |
| ACAT1 | -0.960389485 | 4.97923892 | -10.71503246 | 2.23E-22 | 3.73E-21 | 40.03907698 |
| RILPL2 | -0.799374588 | 4.90620021 | -10.71438007 | 2.24E-22 | 3.75E-21 | 40.03425966 |
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| ADGRV1 | -0.872234036 | 0.86406779 | -10.71106273 | 2.30E-22 | 3.84E-21 | 40.00976593 |
| BCAS2 | -0.617919602 | 6.27874866 | -10.7053723 | 2.40E-22 | 4.00E-21 | 39.96775692 |
| MMACH( | -0.52215993 | 2.54651838 | -10.70170515 | 2.46E-22 | 4.10E-21 | 39.94068911 |
| SELENO | -0.59379478 | 5.5029569 | -10.69998848 | 2.50E-22 | 4.15E-21 | 39.92801926 |
| CXXC4 | -1.336300255 | 2.24618791 | -10.69856172 | 2.52E-22 | 4.19E-21 | 39.91748972 |
| DCTPP1 | -0.785692184 | 5.17335958 | -10.69769758 | 2.54E-22 | 4.22E-21 | 39.91111252 |
| RABEPK | -0.530934384 | 3.85243761 | -10.69609282 | 2.57E-22 | 4.26E-21 | 39.89927034 |
| CPQ | -1.146412305 | 7.26724785 | -10.69175937 | 2.65E-22 | 4.40E-21 | 39.8672953 |
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| ACACB | -0.927252285 | 2.78367751 | -10.67448434 | 3.02E-22 | 4.99E-21 | 39.73987771 |
| MAGOH | -0.570704471 | 5.85188304 | -10.6738359 | 3.03E-22 | 5.01E-21 | 39.73509644 |
| KCNE3 | -1.459385734 | 3.30136992 | -10.67265083 | 3.06E-22 | 5.05E-21 | 39.72635862 |
| LRP1B | -1.141938903 | 0.7650378 | -10.67223189 | 3.07E-22 | 5.06E-21 | 39.72326977 |
| PYGM | -1.547759841 | 1.81497545 | -10.67107907 | 3.10E-22 | 5.10E-21 | 39.71477027 |
| ARFIP2 | -0.604141691 | 5.18697983 | -10.67087007 | 3.10E-22 | 5.10E-21 | 39.71322939 |
| C6orf52 | -0.76619614 | 1.23630523 | -10.67010396 | 3.12E-22 | 5.12E-21 | 39.70758119 |
| SLC39A1 | -0.915222531 | 4.69990478 | -10.66913792 | 3.14E-22 | 5.16E-21 | 39.70045933 |
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| TOMM22 | -0.552472806 | 6.25786467 | -10.66726139 | 3.18E-22 | 5.22E-21 | 39.68662574 |
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| DPY30 | -0.633763241 | 5.78051879 | -10.66523258 | 3.23E-22 | 5.29E-21 | 39.67167054 |
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| TMEM17 | -0.566664509 | 3.46927078 | -10.656108 | 3.46E-22 | 5.64E-21 | 39.60442315 |
| COLEC1 | -1.347877952 | 2.13735488 | -10.6549499 | 3.49E-22 | 5.68E-21 | 39.59588961 |
| C4orf33 | -0.729409963 | 2.40808831 | -10.65184125 | 3.57E-22 | 5.81E-21 | 39.57298508 |
| NUDT7 | -0.670302954 | 2.81447138 | -10.65173168 | 3.58E-22 | 5.81E-21 | 39.57217782 |
| CGNL1 | -1.526281144 | 4.85119076 | -10.65014113 | 3.62E-22 | 5.87E-21 | 39.56045973 |
| ARL16 | -0.669504196 | 5.09207904 | -10.64734684 | 3.69E-22 | 5.99E-21 | 39.53987484 |
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| LAMTOR | -0.743128425 | 6.70978917 | -10.64522814 | 3.75E-22 | 6.07E-21 | 39.52426822 |
| MRPS21 | -0.550919031 | 7.13420984 | -10.64428812 | 3.78E-22 | 6.11E-21 | 39.51734432 |
| UBE3D | -0.399887746 | 1.5344292 | -10.64399408 | 3.79E-22 | 6.12E-21 | 39.51517857 |
| INSL3 | 0.919021917 | 0.9956942 | 10.63737057 | 3.98E-22 | 6.42E-21 | 39.46639888 |
| DUSP22 | -0.523406514 | 4.52927068 | -10.63516369 | 4.04E-22 | 6.52E-21 | 39.45014862 |
| FBXO8 | -0.645895943 | 4.77069985 | -10.63403604 | 4.08E-22 | 6.57E-21 | 39.44184573 |
| SPAAR | -0.809545951 | 1.73198794 | -10.63384581 | 4.08E-22 | 6.57E-21 | 39.44044506 |
| NME4 | -0.72304945 | 5.73196624 | -10.63345351 | 4.10E-22 | 6.59E-21 | 39.4375567 |
| HLF | -1.635816319 | 3.08830164 | -10.62974905 | 4.21E-22 | 6.76E-21 | 39.41028362 |
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| DNAJC3( | -0.507740713 | 5.11277153 | -10.62661286 | 4.31E-22 | 6.91E-21 | 39.38719716 |
| TRIM16L | -0.932989696 | 2.19078675 | -10.62636751 | 4.32E-22 | 6.92E-21 | 39.38539123 |
| ALAS1 | -0.738138973 | 5.91532261 | -10.62480796 | 4.37E-22 | 6.99E-21 | 39.37391196 |
| FAM32A | -0.464968736 | 6.7279549 | -10.62289066 | 4.43E-22 | 7.08E-21 | 39.35980034 |
| PARL | -0.528781496 | 6.00361667 | -10.62249236 | 4.44E-22 | 7.10E-21 | 39.35686892 |
| OXNAD1 | -0.483258257 | 2.93557987 | -10.61969061 | 4.54E-22 | 7.24E-21 | 39.33624968 |
| MRPL57 | -0.553426661 | 6.21626445 | -10.61880937 | 4.57E-22 | 7.28E-21 | 39.32976468 |
| C12orf57 | -0.720340253 | 6.76622925 | -10.61805509 | 4.59E-22 | 7.32E-21 | 39.32421417 |
| CDC26 | -0.630678567 | 4.1749627 | -10.61253942 | 4.79E-22 | 7.61E-21 | 39.28363058 |
| KLHDC8l | -0.692774934 | 6.25372292 | -10.60629991 | 5.01E-22 | 7.97E-21 | 39.23773096 |
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| BCL7B | -0.465458942 | 5.60887308 | -10.60579243 | 5.03E-22 | 7.98E-21 | 39.23399822 |
| SNN | -0.77347076 | 5.63428699 | -10.60498406 | 5.06E-22 | 8.02E-21 | 39.22805247 |
| MED7 | -0.498402539 | 3.9047119 | -10.60068822 | 5.23E-22 | 8.27E-21 | 39.19645856 |
| TMEM18 | -0.55950929 | 4.05674917 | -10.59601314 | 5.41E-22 | 8.55E-21 | 39.16208114 |
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| JMJD8 | -0.682478624 | 6.14393472 | -10.59402671 | 5.49E-22 | 8.66E-21 | 39.14747609 |
| STKLD1 | -0.420634245 | 0.94302843 | -10.59398854 | 5.49E-22 | 8.66E-21 | 39.14719541 |
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| STX18 | -0.462820061 | 3.91959115 | -10.58997114 | 5.66E-22 | 8.89E-21 | 39.11766103 |
| PSMD6 | -0.45523457 | 4.26033172 | -10.58764471 | 5.76E-22 | 9.03E-21 | 39.10056 |
| PITHD1 | -0.555607412 | 6.05103463 | -10.58516437 | 5.87E-22 | 9.19E-21 | 39.08232926 |
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| ANAPC1 | -0.621177757 | 5.46264263 | -10.57230367 | 6.45E-22 | 1.01E-20 | 38.98782815 |
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| TMPRSS | 2.99301171 | 3.37259789 | 10.56422994 | 6.85E-22 | 1.06E-20 | 38.92852481 |
| LHPP | -0.788745178 | 5.6564938 | -10.56414931 | 6.86E-22 | 1.06E-20 | 38.92793266 |
| MTERF4 | -0.689674803 | 3.44970788 | -10.56039899 | 7.05E-22 | 1.09E-20 | 38.90039182 |
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| CIAPIN1 | -0.589531056 | 4.73582283 | -10.55615207 | 7.28E-22 | 1.12E-20 | 38.86920873 |
| PDIA6 | -1.261193631 | 7.29064303 | -10.55484574 | 7.35E-22 | 1.13E-20 | 38.85961792 |
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| LYRM2 | -0.600902886 | 4.11706735 | -10.54978484 | 7.63E-22 | 1.18E-20 | 38.8224664 |
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| POLR1C | -0.562797182 | 4.90237971 | -10.54244818 | 8.05E-22 | 1.24E-20 | 38.76862113 |
| UQCRC2 | -0.681686893 | 6.28921021 | -10.53942815 | 8.24E-22 | 1.27E-20 | 38.7464607 |
| EBF4 | -1.974133568 | 4.22116623 | -10.53871212 | 8.28E-22 | 1.27E-20 | 38.74120702 |
| DHRS12 | -0.52603206 | 4.12538946 | -10.53855225 | 8.29E-22 | 1.27E-20 | 38.74003397 |
| CCNC | -0.679587356 | 4.90518851 | -10.53843375 | 8.30E-22 | 1.27E-20 | 38.73916452 |
| ZC3H8 | -0.625124407 | 2.49537018 | -10.53575821 | 8.46E-22 | 1.30E-20 | 38.71953474 |
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| PKNOX2 | -1.946882814 | 2.15974243 | -10.52776666 | 8.98E-22 | 1.37E-20 | 38.66091436 |
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| VPS45 | -0.530861314 | 4.42481627 | -10.51034678 | 1.02E-21 | 1.55E-20 | 38.53319497 |
| POLR3B | -0.673655563 | 3.03832595 | -10.51028157 | 1.02E-21 | 1.55E-20 | 38.53271701 |
| SUPT4H | -0.485680495 | 6.40107894 | -10.51000125 | 1.02E-21 | 1.55E-20 | 38.53066239 |
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| HABP4 | -0.622894134 | 4.244067 | -10.49674988 | 1.13E-21 | 1.70E-20 | 38.43356284 |
| LRRC45 | -0.697231083 | 3.62198436 | -10.49037142 | 1.18E-21 | 1.78E-20 | 38.38684182 |
| RCCD1 | -0.538970945 | 2.54339286 | -10.48977412 | 1.19E-21 | 1.78E-20 | 38.38246728 |
| COX10 | -0.595992248 | 3.48682647 | -10.48617497 | 1.22E-21 | 1.83E-20 | 38.35610972 |
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| SPIN2B | -0.50467502 | 2.47738957 | -10.47023406 | 1.38E-21 | 2.06E-20 | 38.23941328 |
| DUSP28 | -0.492132414 | 2.3205286 | -10.46689883 | 1.41E-21 | 2.11E-20 | 38.21500641 |
| MRPL52 | -0.593326055 | 5.28413673 | -10.46631651 | 1.42E-21 | 2.11E-20 | 38.21074541 |
| ARV1 | -0.585857026 | 5.14263114 | -10.46627635 | 1.42E-21 | 2.11E-20 | 38.21045154 |
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| WDR83C | -0.597877458 | 7.04447414 | -10.46064026 | 1.48E-21 | 2.20E-20 | 38.16921525 |
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| PSMG4 | -0.547517485 | 2.49084757 | -10.44160915 | 1.70E-21 | 2.50E-20 | 38.03004012 |
| DCLK2 | -0.951170964 | 2.56482398 | -10.4384133 | 1.74E-21 | 2.55E-20 | 38.00667868 |
| RPP14 | -0.532001354 | 3.13951769 | -10.43621416 | 1.77E-21 | 2.59E-20 | 37.99060478 |
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| NUP37 | -0.54879011 | 3.72049664 | -10.4283949 | 1.87E-21 | 2.74E-20 | 37.93346338 |
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| ACVRL1 | -0.933608704 | 4.29709952 | -10.3994973 | 2.32E-21 | 3.37E-20 | 37.72243553 |
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| WNT4 | -1.645824508 | 1.83786007 | -10.37756631 | 2.73E-21 | 3.93E-20 | 37.56243963 |
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| TXNRD2 | -0.54467536 | 3.41204771 | -10.3730391 | 2.82E-21 | 4.06E-20 | 37.52942866 |
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| SLC35G | -0.77653628 | 1.88969418 | -10.35958265 | 3.11E-21 | 4.45E-20 | 37.43134315 |
| MRPL53 | -0.58216279 | 2.57659833 | -10.35685217 | 3.18E-21 | 4.54E-20 | 37.4114467 |
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| PYCR3 | -0.625538827 | 4.12738285 | -10.33875715 | 3.63E-21 | 5.15E-20 | 37.27964591 |
| IMP3 | -0.534630305 | 5.67858761 | -10.33795141 | 3.65E-21 | 5.17E-20 | 37.27377916 |
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| SPG7 | -0.646143622 | 4.66332979 | -10.33275196 | 3.79E-21 | 5.36E-20 | 37.23592591 |
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| DDRGK1 | -0.67751851 | 6.96155498 | -10.32643477 | 3.97E-21 | 5.61E-20 | 37.1899457 |
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| FBLN7 | -0.994384315 | 2.895563 | -10.32304323 | 4.07E-21 | 5.74E-20 | 37.16526482 |
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| AP2S1 | -0.545611423 | 6.42080188 | -10.28619744 | 5.34E-21 | 7.43E-20 | 36.89734541 |
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| ACOT13 | -0.443136518 | 4.26839505 | -10.27819207 | 5.66E-21 | 7.84E-20 | 36.83918756 |
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| TFB2M | -0.736134413 | 4.59570206 | -10.15577561 | 1.39E-20 | 1.84E-19 | 35.95220035 |
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| LEKR1 | -0.498157234 | 0.90643188 | -10.12535625 | 1.73E-20 | 2.26E-19 | 35.73248619 |
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| GPD1L | -0.922633688 | 5.51453876 | -10.10276911 | 2.05E-20 | 2.65E-19 | 35.5695242 |
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| TMEM10 | -0.585347342 | 5.53608398 | -10.07377882 | 2.53E-20 | 3.23E-19 | 35.36059267 |
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| SERF2 | -0.588458581 | 7.45168129 | -10.00326407 | 4.22E-20 | 5.26E-19 | 34.85347704 |
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| ABCF3 | -0.487874614 | 5.12197141 | -9.977576019 | 5.09E-20 | 6.26E-19 | 34.66912274 |
| PRSS16 | -0.804329091 | 3.76107858 | -9.973806411 | 5.23E-20 | 6.43E-19 | 34.64208698 |
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| ANGPTL | -1.437555173 | 3.69269763 | -9.971648806 | 5.31E-20 | 6.52E-19 | 34.62661458 |
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| ZNF428 | -0.626169647 | 6.24023027 | -9.962179349 | 5.69E-20 | 6.97E-19 | 34.55872546 |
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| PSMC2 | -0.494936323 | 6.1061824 | -9.961574295 | 5.71E-20 | 6.99E-19 | 34.55438862 |
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| ABHD10 | -0.552704004 | 5.54786451 | -9.935794899 | 6.88E-20 | 8.34E-19 | 34.36971756 |
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| SYNE1 | -1.093838995 | 2.63317045 | -9.91168818 | 8.20E-20 | 9.83E-19 | 34.19721961 |
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| PRKRIP1 | -0.582391002 | 4.8635694 | -9.893924849 | 9.32E-20 | 1.11E-18 | 34.07023106 |
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| RIPOR3 | -0.828562537 | 1.09742432 | -9.89283113 | 9.39E-20 | 1.12E-18 | 34.06241546 |
| UFSP2 | -0.630481591 | 5.20136046 | -9.892557526 | 9.41E-20 | 1.12E-18 | 34.06046038 |
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| EPHX2 | -0.666230973 | 4.89210136 | -9.860805487 | 1.18E-19 | 1.39E-18 | 33.8337341 |
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| MAP2K6 | -0.587809145 | 1.069481 | -9.841916746 | 1.36E-19 | 1.59E-18 | 33.69901298 |
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| GCAT | -0.740550283 | 4.96013816 | -9.520863112 | 1.35E-18 | 1.41E-17 | 31.42729208 |
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| DNAJA2 | -0.480875455 | 5.55668694 | -9.440316298 | 2.39E-18 | 2.42E-17 | 30.86291286 |
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| DCSTAM | 3.49909712 | 4.34613684 | 9.345368398 | 4.68E-18 | 4.57E-17 | 30.20059916 |
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| DMAC2L | -0.459954806 | 3.23038685 | -9.227564824 | 1.07E-17 | 1.01E-16 | 29.38342305 |
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| PGK1 | -0.766161053 | 6.98902752 | -9.214408324 | 1.18E-17 | 1.10E-16 | 29.29247879 |
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| RABAC1 | -0.642721541 | 6.67615722 | -9.179459182 | 1.50E-17 | 1.39E-16 | 29.05120831 |
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| ALKBH5 | -0.505625699 | 6.74705387 | -9.161366135 | 1.70E-17 | 1.57E-16 | 28.92648433 |
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| TIMM50 | -0.378383547 | 4.9500624 | -8.95107025 | 7.33E-17 | 6.30E-16 | 27.48604091 |
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| LRRC73 | -0.597574992 | 1.64531341 | -8.767995491 | 2.58E-16 | 2.07E-15 | 26.24629487 |
| SLC20A2 | -0.784350732 | 6.23183776 | -8.76655123 | 2.60E-16 | 2.09E-15 | 26.2365688 |
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| RXRB | -0.52444782 | 5.67573077 | -8.765933011 | 2.61E-16 | 2.10E-15 | 26.23240579 |
| TTC12 | -0.647706063 | 3.61753442 | -8.765543329 | 2.62E-16 | 2.11E-15 | 26.22978181 |
| RFX4 | -0.137637078 | 0.10757869 | -8.763475911 | 2.66E-16 | 2.13E-15 | 26.21586156 |
| ERLEC1 | -0.645101405 | 6.81189707 | -8.760628762 | 2.71E-16 | 2.17E-15 | 26.19669415 |
| SLC25A1 | -0.522896915 | 4.12863684 | -8.760582767 | 2.71E-16 | 2.17E-15 | 26.19638453 |
| L3MBTL4 | -0.662174092 | 1.77299927 | -8.758339876 | 2.75E-16 | 2.21E-15 | 26.18128747 |
| MUL1 | -0.610826122 | 5.49588529 | -8.756807934 | 2.78E-16 | 2.23E-15 | 26.17097704 |
| KATNA1 | -0.47486258 | 4.56188762 | -8.752700291 | 2.86E-16 | 2.29E-15 | 26.14333617 |
| RBIS | -0.480366164 | 4.82410945 | -8.752477547 | 2.86E-16 | 2.29E-15 | 26.1418375 |
| PIGX | -0.411068905 | 3.86893624 | -8.750796523 | 2.90E-16 | 2.32E-15 | 26.13052782 |
| CEBPZO | -0.498690604 | 5.0427293 | -8.750724124 | 2.90E-16 | 2.32E-15 | 26.13004076 |

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| HDAC1 | -0.61047176 | 7.11802403 | -8.750638523 | 2.90E-16 | 2.32E-15 | 26.12946488 |
| CDNF | -0.68204963 | 2.61934876 | -8.750229354 | 2.91E-16 | 2.33E-15 | 26.12671226 |
| SERP1 | -0.554722522 | 6.68524248 | -8.749397467 | 2.92E-16 | 2.34E-15 | 26.12111608 |
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| MLST8 | -0.457953273 | 5.29098055 | -8.744798986 | 3.02E-16 | 2.41E-15 | 26.09018684 |
| SPCS3 | -0.659016977 | 5.86365484 | -8.743913976 | 3.04E-16 | 2.42E-15 | 26.0842353 |
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| SYNDIG1 | -1.219417033 | 2.20555197 | -8.740111374 | 3.12E-16 | 2.48E-15 | 26.05866711 |
| BZW2 | -0.561436888 | 5.51163601 | -8.740041898 | 3.12E-16 | 2.48E-15 | 26.05820002 |
| SGSM3 | -0.543147656 | 5.1616262 | -8.737563571 | 3.17E-16 | 2.52E-15 | 26.04153937 |
| SLC49A4 | -0.600964603 | 3.93110608 | -8.733951037 | 3.25E-16 | 2.58E-15 | 26.01725853 |
| VPS28 | -0.534005034 | 6.79829102 | -8.733287698 | 3.26E-16 | 2.60E-15 | 26.01280064 |
| AMACR | -0.672426333 | 1.83580619 | -8.733047563 | 3.27E-16 | 2.60E-15 | 26.01118689 |
| HSPBP1 | -0.487815061 | 5.93833732 | -8.731539065 | 3.30E-16 | 2.62E-15 | 26.00105002 |
| NADK2 | -0.540767391 | 4.00059115 | -8.73078027 | 3.32E-16 | 2.64E-15 | 25.9959514 |
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| CDH5 | -0.824898923 | 5.09518172 | -8.728712105 | 3.37E-16 | 2.67E-15 | 25.98205585 |
| NKIRAS1 | -0.465022926 | 3.61011244 | -8.728702442 | 3.37E-16 | 2.67E-15 | 25.98199093 |
| MACO1 | -0.506910271 | 5.18787796 | -8.727682873 | 3.39E-16 | 2.69E-15 | 25.97514132 |
| NIPSNAP | -0.561829385 | 5.95693355 | -8.727513565 | 3.39E-16 | 2.69E-15 | 25.97400393 |
| KLHL22 | -0.504403374 | 4.61801815 | -8.724773686 | 3.46E-16 | 2.74E-15 | 25.95559937 |
| FAM110D | -0.82901384 | 2.76870463 | -8.724356192 | 3.47E-16 | 2.74E-15 | 25.95279521 |
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| CLMN | -0.706839408 | 1.55582263 | -8.712201806 | 3.77E-16 | 2.97E-15 | 25.87119043 |
| HIST1H2 | -1.204636176 | 2.77287071 | -8.710635089 | 3.81E-16 | 3.00E-15 | 25.86067593 |
| COG8 | -0.495713094 | 3.59253183 | -8.710114011 | 3.82E-16 | 3.01E-15 | 25.85717912 |
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| SNRNP3 | -0.477107024 | 4.06095747 | -8.70380998 | 3.99E-16 | 3.14E-15 | 25.81488344 |
| TSR3 | -0.508918562 | 6.80551858 | -8.703151768 | 4.01E-16 | 3.15E-15 | 25.81046825 |
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| MTMR4 | -0.696742737 | 3.79800647 | -8.699600498 | 4.11E-16 | 3.22E-15 | 25.78664995 |
| TMED10 | -0.666379758 | 7.7223129 | -8.699027302 | 4.12E-16 | 3.23E-15 | 25.78280604 |
| POLR2J | -0.560648671 | 6.42575805 | -8.69894098 | 4.12E-16 | 3.24E-15 | 25.78222716 |
| TMEM10 | -0.586937867 | 3.8788016 | -8.698837263 | 4.13E-16 | 3.24E-15 | 25.78153164 |
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| WDR92 | -0.319965919 | 1.22882151 | -8.687413355 | 4.46E-16 | 3.48E-15 | 25.7049511 |
| PCDH12 | -0.892957057 | 3.80425931 | -8.684406649 | 4.55E-16 | 3.55E-15 | 25.68480463 |
| DPM1 | -0.534781575 | 6.18067168 | -8.680685144 | 4.67E-16 | 3.64E-15 | 25.65987387 |
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| RFESD | -0.287663819 | 1.24833777 | -8.672905311 | 4.92E-16 | 3.83E-15 | 25.6077747 |
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| SERPIN/ | 2.607669499 | 8.40740909 | 8.672487688 | 4.94E-16 | 3.84E-15 | 25.60497872 |
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| SOSTDC | -0.935463325 | 0.78091347 | -8.668594182 | 5.07E-16 | 3.93E-15 | 25.57891532 |
| CCS | -0.592412236 | 5.59309012 | -8.668236836 | 5.08E-16 | 3.94E-15 | 25.57652354 |
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| AKIRIN1 | -0.750764817 | 5.94734745 | -8.662806153 | 5.27E-16 | 4.08E-15 | 25.54018162 |
| C4orf47 | -0.752391389 | 2.38376216 | -8.661693178 | 5.31E-16 | 4.11E-15 | 25.53273516 |
| RUVBL2 | -0.460261313 | 6.13351462 | -8.661214273 | 5.33E-16 | 4.12E-15 | 25.52953116 |
| PRMT7 | -0.488279564 | 3.07624542 | -8.656555067 | 5.50E-16 | 4.25E-15 | 25.49836494 |
| ACKR3 | -1.062832042 | 5.17815963 | -8.655522294 | 5.54E-16 | 4.28E-15 | 25.49145778 |
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| HOGA1 | -0.745843284 | 0.79462141 | -8.650857855 | 5.72E-16 | 4.41E-15 | 25.46026774 |
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| ADAMTS | -1.0164997 | 2.26836073 | -8.647976395 | 5.83E-16 | 4.49E-15 | 25.44100466 |
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| HIST1H2 | -0.512470814 | 1.06706019 | -8.625125622 | 6.81E-16 | 5.21E-15 | 25.28836727 |
| DPP6 | -1.341303359 | 1.27854411 | -8.623387059 | 6.89E-16 | 5.27E-15 | 25.27676315 |
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| ZNRF1 | -0.510000777 | 4.24047099 | -8.619138677 | 7.09E-16 | 5.42E-15 | 25.24841253 |
| SMARCA | -0.775684554 | 6.08418885 | -8.617364204 | 7.17E-16 | 5.48E-15 | 25.23657325 |
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| GINM1 | -0.588993989 | 7.16756882 | -8.615411825 | 7.27E-16 | 5.55E-15 | 25.22354853 |
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| EMID1 | -1.557529873 | 3.67906432 | -8.613318077 | 7.37E-16 | 5.62E-15 | 25.2095825 |
| MID1 | -0.651074882 | 2.03376296 | -8.611761206 | 7.45E-16 | 5.68E-15 | 25.19919883 |
| NUS1 | -0.597186386 | 4.62028595 | -8.611302252 | 7.47E-16 | 5.69E-15 | 25.196138 |
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| NDUFS8 | -0.473316052 | 6.05760392 | -8.606209166 | 7.73E-16 | 5.88E-15 | 25.16217749 |
| CHADL | -0.706839651 | 2.98533369 | -8.606017488 | 7.74E-16 | 5.89E-15 | 25.1608996 |
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| TFG | -0.504316714 | 5.9265463 | -8.602446891 | 7.93E-16 | 6.02E-15 | 25.13709786 |
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| SCML2 | -0.52286327 | 1.13911372 | -8.596065243 | 8.28E-16 | 6.27E-15 | 25.09457106 |
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| CALM3 | -0.547052548 | 7.84418088 | -8.588826649 | 8.70E-16 | 6.57E-15 | 25.04635465 |
| SLC25A4 | -0.664801868 | 3.02030375 | -8.588605552 | 8.71E-16 | 6.58E-15 | 25.04488228 |
| YBX1 | -0.486937353 | 8.70339034 | -8.586861777 | 8.82E-16 | 6.65E-15 | 25.03327046 |
| PEAR1 | -0.842284702 | 2.42945278 | -8.586126257 | 8.86E-16 | 6.68E-15 | 25.02837302 |
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| PLAUR | 1.372760939 | 3.49340909 | 8.583110207 | 9.04E-16 | 6.81E-15 | 25.00829313 |
| USP16 | -0.588543744 | 4.5818894 | -8.582031223 | 9.11E-16 | 6.86E-15 | 25.00111055 |
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| FBXO25 | -0.463481797 | 3.74751923 | -8.580891738 | 9.18E-16 | 6.90E-15 | 24.99352576 |
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| ELF3 | 1.39051922 | 3.74059188 | 8.580071513 | 9.23E-16 | 6.94E-15 | 24.98806642 |
| SYPL1 | -0.655773854 | 7.11379538 | -8.578028571 | 9.36E-16 | 7.03E-15 | 24.97447004 |
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| LMNTD2 | -0.69058873 | 1.84070626 | -8.459776391 | 2.07E-15 | 1.49E-14 | 24.19053304 |
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| RCBTB2 | -0.614054544 | 4.95975341 | -8.365904694 | 3.88E-15 | 2.71E-14 | 23.57257655 |
| PPP2R5 | -0.449011855 | 5.24636298 | -8.365387954 | 3.90E-15 | 2.72E-14 | 23.56918566 |
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| EPM2A | -0.448813227 | 2.07936591 | -8.352384903 | 4.25E-15 | 2.95E-14 | 23.48389802 |
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| SETD3 | -0.496722703 | 5.84144472 | -8.350472829 | 4.30E-15 | 2.98E-14 | 23.471363 |
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| STARD1: | -0.852060505 | 3.57538268 | -8.347422414 | 4.39E-15 | 3.04E-14 | 23.45136874 |
| MRPS16 | -0.398527392 | 6.0352581 | -8.34701375 | 4.40E-15 | 3.05E-14 | 23.44869042 |
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| HYLS1 | -0.387410295 | 2.0055275 | -8.34269501 | 4.53E-15 | 3.13E-14 | 23.4203907 |
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| ZCWPW | -0.415310677 | 1.4833715 | -8.313420752 | 5.50E-15 | 3.76E-14 | 23.2287838 |
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| PGBD4 | -0.308859877 | 1.09521659 | -8.259266598 | 7.88E-15 | 5.30E-14 | 22.8753517 |
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| SUMF2 | -0.665934124 | 6.85806135 | -8.217766948 | 1.04E-14 | 6.87E-14 | 22.60541104 |
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| PAK1IP1 | -0.496573436 | 4.59044966 | -8.089002218 | 2.41E-14 | 1.54E-13 | 21.77290046 |
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| C19orf54 | -0.455347964 | 3.60314415 | -7.939466178 | 6.39E-14 | 3.86E-13 | 20.81589308 |
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| DSC3 | 1.133317055 | 1.07881327 | 7.858353079 | 1.08E-13 | 6.35E-13 | 20.30128513 |
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| BEX1 | -1.726718087 | 4.21125867 | -7.834862601 | 1.25E-13 | 7.33E-13 | 20.15285454 |
| RAB3A | -0.571905488 | 2.82109511 | -7.834859714 | 1.25E-13 | 7.33E-13 | 20.15283632 |
| CHMP4B | -0.404898117 | 8.30779505 | -7.833648886 | 1.26E-13 | 7.39E-13 | 20.14519275 |
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| BCL6B | -0.783896971 | 3.64962632 | -7.661208811 | 3.79E-13 | 2.09E-12 | 19.06408902 |
| KIF19 | -0.946774273 | 0.88839314 | -7.660836885 | 3.80E-13 | 2.10E-12 | 19.06177342 |
| SLC16A1 | -0.638781949 | 1.54337777 | -7.659874764 | 3.83E-13 | 2.11E-12 | 19.0557836 |
| ZNF527 | -0.359089822 | 1.9016891 | -7.659549258 | 3.83E-13 | 2.11E-12 | 19.05375722 |
| GFM1 | -0.583306232 | 3.99808878 | -7.659212312 | 3.84E-13 | 2.12E-12 | 19.05165969 |
| SH2D3C | -0.733056256 | 4.08880057 | -7.658403541 | 3.86E-13 | 2.13E-12 | 19.04662521 |

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| TIGD1 | -0.500243431 | 2.72938303 | -7.652904138 | 4.00E-13 | 2.20E-12 | 19.01240107 |
| RHOBTB | -0.800031767 | 2.73659988 | -7.651046524 | 4.04E-13 | 2.23E-12 | 19.00084416 |
| MORN1 | -0.451631311 | 2.2454081 | -7.650793991 | 4.05E-13 | 2.23E-12 | 18.99927319 |
| TIGD6 | -0.309458774 | 2.64094141 | -7.65017989 | 4.07E-13 | 2.24E-12 | 18.9954531 |
| RPS27L | -0.399370611 | 5.20858306 | -7.65013776 | 4.07E-13 | 2.24E-12 | 18.99519104 |
| C9orf92 | -0.495207093 | 0.5216492 | -7.649152023 | 4.09E-13 | 2.25E-12 | 18.98905957 |
| ACSL1 | -0.672299581 | 5.16858839 | -7.646779431 | 4.16E-13 | 2.28E-12 | 18.97430363 |
| NEIL2 | -0.542481288 | 4.74469544 | -7.646405271 | 4.17E-13 | 2.29E-12 | 18.97197687 |
| KCTD10 | -0.575235374 | 5.12676196 | -7.645683611 | 4.18E-13 | 2.30E-12 | 18.96748932 |
| UBE2L3 | -0.392978805 | 5.96950104 | -7.64562986 | 4.19E-13 | 2.30E-12 | 18.96715509 |
| AAR2 | -0.427445213 | 5.43829303 | -7.645124141 | 4.20E-13 | 2.31E-12 | 18.96401052 |
| FAM13A | -0.734319198 | 3.93883027 | -7.644922797 | 4.20E-13 | 2.31E-12 | 18.9627586 |
| MAGEL2 | -0.661216099 | 0.84922705 | -7.643985266 | 4.23E-13 | 2.32E-12 | 18.95692946 |
| ZNF830 | -0.438576598 | 4.52841508 | -7.643136564 | 4.25E-13 | 2.33E-12 | 18.95165301 |
| OLFM2 | -1.292157465 | 3.56617953 | -7.64211017 | 4.28E-13 | 2.35E-12 | 18.94527231 |
| RAB27B | 1.092108013 | 1.15036712 | 7.64091509 | 4.31E-13 | 2.36E-12 | 18.93784364 |
| ZNF787 | -0.419277322 | 4.50400193 | -7.640157316 | 4.33E-13 | 2.37E-12 | 18.93313367 |
| EMG1 | -0.37086979 | 3.45325843 | -7.639632646 | 4.35E-13 | 2.38E-12 | 18.92987273 |
| COMMD! | -0.378226612 | 4.98345648 | -7.639598025 | 4.35E-13 | 2.38E-12 | 18.92965755 |
| ITGAX | 0.986646447 | 2.49472466 | 7.637741358 | 4.40E-13 | 2.41E-12 | 18.91811913 |
| ROMO1 | -0.62505715 | 7.87792422 | -7.636574945 | 4.43E-13 | 2.42E-12 | 18.91087124 |
| PEX3 | -0.581170814 | 4.84416646 | -7.636562789 | 4.43E-13 | 2.42E-12 | 18.91079571 |
| PRDM11 | -0.706456258 | 2.7315043 | -7.635724826 | 4.46E-13 | 2.44E-12 | 18.90558919 |
| SLC28A3 | 0.688076101 | 0.97601143 | 7.634253519 | 4.50E-13 | 2.46E-12 | 18.89644838 |
| ACY1 | -0.458741961 | 2.73281645 | -7.633414245 | 4.52E-13 | 2.47E-12 | 18.89123471 |
| CBX1 | -0.523805185 | 5.98652049 | -7.633341307 | 4.52E-13 | 2.47E-12 | 18.89078162 |
| FMOD | -1.068237883 | 5.97128552 | -7.631847689 | 4.57E-13 | 2.49E-12 | 18.88150403 |
| SEC23B | -0.722517034 | 5.90194616 | -7.631673664 | 4.57E-13 | 2.50E-12 | 18.88042314 |
| RAD17 | -0.440830426 | 4.50162052 | -7.631437576 | 4.58E-13 | 2.50E-12 | 18.87895681 |
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| MRPL17 | -0.391307896 | 6.36848163 | -7.631027814 | 4.59E-13 | 2.50E-12 | 18.87641186 |
| SLC24A3 | -0.958712782 | 1.99914798 | -7.630541288 | 4.61E-13 | 2.51E-12 | 18.87339026 |
| ZNF415 | -0.465920845 | 3.56376562 | -7.630115219 | 4.62E-13 | 2.52E-12 | 18.87074423 |
| PCED1A | -0.562441212 | 6.05722967 | -7.629208668 | 4.64E-13 | 2.53E-12 | 18.86511455 |
| ST3GAL2 | -0.476353414 | 3.08926552 | -7.629099541 | 4.65E-13 | 2.53E-12 | 18.8644369 |
| CRLF2 | 1.15201025 | 1.24186374 | 7.627380496 | 4.70E-13 | 2.56E-12 | 18.85376289 |
| NPC1 | 0.63709712 | 3.45701326 | 7.624639736 | 4.78E-13 | 2.60E-12 | 18.8367479 |
| PEX16 | -0.431190634 | 5.18284442 | -7.623124727 | 4.83E-13 | 2.63E-12 | 18.82734419 |
| YY1 | -0.456581553 | 5.82241906 | -7.622141128 | 4.86E-13 | 2.64E-12 | 18.82123958 |
| MDM1 | -0.494278688 | 2.69162994 | -7.620226807 | 4.92E-13 | 2.67E-12 | 18.80935996 |

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|---|---|---|---|---|---|---|
| CSRP1 | -0.483460657 | 6.71238898 | -7.619716701 | 4.93E-13 | 2.68E-12 | 18.80619473 |
| RTN4RL | -0.523093631 | 1.12561926 | -7.619581974 | 4.94E-13 | 2.68E-12 | 18.80535877 |
| EXT1 | -0.596308447 | 4.06341082 | -7.619507891 | 4.94E-13 | 2.68E-12 | 18.80489909 |
| CCDC17 | -0.431182541 | 0.54143105 | -7.617663215 | 5.00E-13 | 2.71E-12 | 18.79345412 |
| PAGR1 | -0.463993913 | 4.1450348 | -7.61730542 | 5.01E-13 | 2.72E-12 | 18.79123444 |
| EFHC2 | -0.786162593 | 1.52527419 | -7.617214782 | 5.01E-13 | 2.72E-12 | 18.79067216 |
| CTSL | -0.47807294 | 7.08596255 | -7.610871056 | 5.21E-13 | 2.83E-12 | 18.75132837 |
| FAM200/ | -0.416053228 | 3.7513601 | -7.60951474 | 5.26E-13 | 2.85E-12 | 18.74291917 |
| IER3IP1 | -0.442889081 | 5.46288389 | -7.609376061 | 5.26E-13 | 2.85E-12 | 18.74205941 |
| FBXW5 | -0.393024804 | 6.76187076 | -7.608808918 | 5.28E-13 | 2.86E-12 | 18.73854343 |
| DNAJA3 | -0.48950911 | 4.58886514 | -7.608599606 | 5.29E-13 | 2.87E-12 | 18.73724584 |
| AQP9 | 0.735414316 | 1.03493604 | 7.608515598 | 5.29E-13 | 2.87E-12 | 18.73672506 |
| GOLGA8 | -0.543247551 | 0.54603069 | -7.608460474 | 5.29E-13 | 2.87E-12 | 18.73638334 |
| MMEL1 | -0.779885966 | 0.61585796 | -7.607491487 | 5.33E-13 | 2.88E-12 | 18.7303767 |
| DPH3 | -0.463637388 | 4.51550293 | -7.605753705 | 5.39E-13 | 2.91E-12 | 18.71960558 |
| FAM83F | -0.616574861 | 2.98144825 | -7.605199164 | 5.40E-13 | 2.92E-12 | 18.71616876 |
| POMT2 | -0.495415924 | 3.19539274 | -7.604535348 | 5.43E-13 | 2.94E-12 | 18.71205489 |
| CCT7 | -0.428019584 | 7.31694189 | -7.601726729 | 5.52E-13 | 2.99E-12 | 18.69465156 |
| ANAPC5 | -0.363840528 | 4.74773529 | -7.601491692 | 5.53E-13 | 2.99E-12 | 18.69319535 |
| GTPBP6 | -0.43743332 | 5.84455188 | -7.60133807 | 5.54E-13 | 2.99E-12 | 18.69224358 |
| TDGF1 | -0.360411293 | 0.37555313 | -7.600592387 | 5.56E-13 | 3.01E-12 | 18.68762386 |
| ZNHIT2 | -0.562779296 | 5.23062148 | -7.599940402 | 5.59E-13 | 3.02E-12 | 18.68358486 |
| SLC6A2( | 1.270134979 | 1.20883966 | 7.597988456 | 5.66E-13 | 3.05E-12 | 18.67149399 |
| FAM118E | -0.441481385 | 3.65482714 | -7.596799315 | 5.70E-13 | 3.07E-12 | 18.66412909 |
| ZNF132 | -0.547150529 | 3.05948074 | -7.596762346 | 5.70E-13 | 3.07E-12 | 18.66390014 |
| RPL21 | -0.641847998 | 7.96710502 | -7.596515409 | 5.71E-13 | 3.08E-12 | 18.66237084 |
| OPLAH | -0.727528564 | 2.58926313 | -7.59563583 | 5.74E-13 | 3.09E-12 | 18.65692381 |
| XXYLT1 | -0.443099316 | 2.91310721 | -7.593785957 | 5.81E-13 | 3.13E-12 | 18.64546925 |
| TSSK6 | -0.52200916 | 1.96351169 | -7.593163073 | 5.83E-13 | 3.14E-12 | 18.6416127 |
| CHKA | -0.618976634 | 4.9884233 | -7.593159741 | 5.83E-13 | 3.14E-12 | 18.64159207 |
| ADAMTS | -0.871912005 | 3.78629169 | -7.591983471 | 5.87E-13 | 3.16E-12 | 18.63430981 |
| WDR77 | -0.348415865 | 4.34371612 | -7.591937656 | 5.88E-13 | 3.16E-12 | 18.63402618 |
| RPN2 | -0.602906124 | 8.73983363 | -7.590994906 | 5.91E-13 | 3.18E-12 | 18.62819017 |
| C1GALT | -0.576136704 | 1.55927802 | -7.590198597 | 5.94E-13 | 3.20E-12 | 18.62326105 |
| SLC25A4 | -0.631590994 | 0.61142365 | -7.589641758 | 5.96E-13 | 3.21E-12 | 18.61981443 |
| PA2G4 | -0.311348398 | 6.48308401 | -7.589449254 | 5.97E-13 | 3.21E-12 | 18.61862294 |
| EWSR1 | -0.442665474 | 5.8553439 | -7.588748996 | 5.99E-13 | 3.22E-12 | 18.61428892 |
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| HIST1H2 | -0.609807525 | 1.88267615 | -7.585980381 | 6.10E-13 | 3.28E-12 | 18.5971559 |
| APOA5 | -0.198579936 | 0.13597598 | -7.58357407 | 6.19E-13 | 3.33E-12 | 18.58226814 |

| Gene | logFC | AveExpr | t | P.Value | adj.P.Val | B |
|------|-------|---------|---|---------|-----------|---|
| FOXO6 | -0.710219271 | 3.44318672 | -7.583292548 | 6.20E-13 | 3.33E-12 | 18.58052656 |
| ANKRD3 | -0.381222478 | 0.87167616 | -7.583092734 | 6.21E-13 | 3.33E-12 | 18.57929049 |
| PHF11 | -0.473045858 | 4.42071389 | -7.5807145 | 6.31E-13 | 3.38E-12 | 18.56457995 |
| SCAMP3 | -0.429751044 | 6.34709822 | -7.579941941 | 6.34E-13 | 3.40E-12 | 18.55980193 |
| PTGS2 | 1.175599734 | 2.26217358 | 7.578990181 | 6.37E-13 | 3.42E-12 | 18.55391603 |
| TSPAN1( | -0.513757442 | 1.7065 | -7.578710586 | 6.39E-13 | 3.42E-12 | 18.55218704 |
| RETSAT | -0.661231847 | 6.32175281 | -7.578695666 | 6.39E-13 | 3.42E-12 | 18.55209478 |
| GLT8D2 | -1.077284182 | 3.15101073 | -7.578033034 | 6.41E-13 | 3.43E-12 | 18.54799728 |
| LAMB3 | 2.062150824 | 5.30178186 | 7.575681284 | 6.51E-13 | 3.48E-12 | 18.53345669 |
| PRPF19 | -0.374273745 | 7.10985031 | -7.575611255 | 6.51E-13 | 3.49E-12 | 18.53302375 |
| SYPL2 | -0.859640863 | 3.10483112 | -7.575273348 | 6.53E-13 | 3.49E-12 | 18.53093476 |
| ABCF1 | -0.461630277 | 5.48048995 | -7.572903243 | 6.62E-13 | 3.54E-12 | 18.51628406 |
| SMYD3 | -0.529168002 | 2.50718712 | -7.572493505 | 6.64E-13 | 3.55E-12 | 18.51375157 |
| ARL5A | -0.618191649 | 4.68281625 | -7.57110966 | 6.70E-13 | 3.58E-12 | 18.50519903 |
| TRAM1L | -0.609849836 | 3.10550776 | -7.570559022 | 6.72E-13 | 3.59E-12 | 18.50179621 |
| P2RY8 | -0.862183609 | 3.37848128 | -7.570110844 | 6.74E-13 | 3.60E-12 | 18.49902669 |
| TMEM21 | -0.433772327 | 7.30230199 | -7.569843628 | 6.75E-13 | 3.61E-12 | 18.49737547 |
| HIST1H3 | -0.874446536 | 2.83918563 | -7.567196872 | 6.87E-13 | 3.67E-12 | 18.48102228 |
| TFEB | -0.419534691 | 4.44710323 | -7.567119975 | 6.87E-13 | 3.67E-12 | 18.48054722 |
| NSMCE1 | -0.424028279 | 5.77583408 | -7.566274662 | 6.91E-13 | 3.68E-12 | 18.47532518 |
| BRSK2 | -0.402806171 | 0.49764071 | -7.565242049 | 6.95E-13 | 3.71E-12 | 18.46894657 |
| NDUFS5 | -0.485583528 | 9.67259968 | -7.561536898 | 7.11E-13 | 3.79E-12 | 18.44606382 |
| PTPN9 | -0.610400355 | 4.59889776 | -7.56132244 | 7.12E-13 | 3.80E-12 | 18.44473957 |
| HMGCS1 | -0.634836649 | 4.2664763 | -7.560926824 | 7.14E-13 | 3.81E-12 | 18.44229673 |
| SNAPC1 | -0.505385475 | 3.7578734 | -7.560644005 | 7.15E-13 | 3.81E-12 | 18.44055044 |
| PSKH1 | -0.512985465 | 4.81216854 | -7.559779917 | 7.19E-13 | 3.83E-12 | 18.43521532 |
| PODNL1 | 0.798698346 | 1.01230753 | 7.557192721 | 7.31E-13 | 3.89E-12 | 18.41924354 |
| EMC9 | -0.56038465 | 4.89708908 | -7.557090834 | 7.32E-13 | 3.89E-12 | 18.41861462 |
| AHR | 0.942129729 | 5.50937884 | 7.556973417 | 7.32E-13 | 3.90E-12 | 18.41788985 |
| C7orf25 | -0.190772815 | 0.72094659 | -7.555111971 | 7.41E-13 | 3.94E-12 | 18.40640077 |
| COL11A' | 1.280269168 | 1.01805246 | 7.552137773 | 7.55E-13 | 4.01E-12 | 18.38804736 |
| GVQW3 | -0.276825061 | 0.63968423 | -7.551573296 | 7.57E-13 | 4.03E-12 | 18.38456456 |
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| GABRA6 | 0.153101097 | 0.15222032 | 7.55134318 | 7.58E-13 | 4.03E-12 | 18.3831448 |
| CHURC1 | -0.322408292 | 2.32322543 | -7.55053237 | 7.62E-13 | 4.05E-12 | 18.37814252 |
| PRR18 | -0.327925019 | 0.31249356 | -7.550388834 | 7.63E-13 | 4.05E-12 | 18.37725701 |
| TMEM50 | -0.412924535 | 6.7885315 | -7.549730159 | 7.66E-13 | 4.07E-12 | 18.37319362 |
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| TMUB2 | -0.436477816 | 5.33621935 | -7.549215236 | 7.69E-13 | 4.08E-12 | 18.37001721 |
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| | | | | | | |
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| CLCC1 | -0.537284766 | 3.87898749 | -7.547341632 | 7.78E-13 | 4.12E-12 | 18.35846062 |
| LSG1 | -0.444501563 | 4.57373164 | -7.546829666 | 7.80E-13 | 4.13E-12 | 18.35530307 |
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| BIRC3 | 1.221441349 | 2.59264747 | 7.537284447 | 8.28E-13 | 4.38E-12 | 18.29645795 |
| PAMR1 | -0.721134504 | 2.17242933 | -7.535704543 | 8.37E-13 | 4.43E-12 | 18.2867226 |
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| TSPAN18 | -1.211587974 | 4.31121794 | -7.531979516 | 8.57E-13 | 4.52E-12 | 18.26377414 |
| COL1A1 | 1.809327854 | 6.52060389 | 7.52816659 | 8.77E-13 | 4.63E-12 | 18.24029165 |
| VAV3 | -1.104393397 | 3.33540504 | -7.527606844 | 8.80E-13 | 4.65E-12 | 18.236845 |
| AFAP1L1 | -0.703693768 | 3.14861698 | -7.526397207 | 8.87E-13 | 4.68E-12 | 18.2293972 |
| ASF1A | -0.491565754 | 5.12752026 | -7.526317714 | 8.87E-13 | 4.68E-12 | 18.22890778 |
| POLR3E | -0.430831793 | 3.8574904 | -7.525579588 | 8.92E-13 | 4.70E-12 | 18.2243635 |
| TMEM25 | -0.453658188 | 6.69534568 | -7.524799889 | 8.96E-13 | 4.72E-12 | 18.21956359 |
| FNTB | -0.360477689 | 3.15129355 | -7.524775124 | 8.96E-13 | 4.72E-12 | 18.21941114 |
| DDX31 | -0.508727951 | 3.97473553 | -7.52186274 | 9.13E-13 | 4.81E-12 | 18.201485 |
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| YIF1A | -0.45958572 | 6.32205153 | -7.521179025 | 9.16E-13 | 4.83E-12 | 18.19727728 |
| EMC6 | -0.670929846 | 3.25786061 | -7.521004848 | 9.18E-13 | 4.83E-12 | 18.1962054 |
| TRAPPC | -0.357625843 | 6.24751394 | -7.519999704 | 9.23E-13 | 4.86E-12 | 18.19002008 |
| CYP26B1 | -0.99624621 | 1.9565035 | -7.519864121 | 9.24E-13 | 4.86E-12 | 18.18918578 |
| MSANTD | -0.519931313 | 3.48191739 | -7.519525128 | 9.26E-13 | 4.87E-12 | 18.18709987 |
| ACRBP | -0.834199192 | 3.17458298 | -7.517142067 | 9.40E-13 | 4.94E-12 | 18.17243798 |
| SLC7A6 | -0.569311829 | 2.11479962 | -7.515557835 | 9.49E-13 | 4.99E-12 | 18.16269257 |
| ATG101 | -0.507921352 | 4.79693179 | -7.514643285 | 9.55E-13 | 5.02E-12 | 18.15706729 |
| PARP3 | -0.502540729 | 5.0889776 | -7.513611884 | 9.61E-13 | 5.05E-12 | 18.15072382 |
| PITPNC1 | -0.681987523 | 3.11542942 | -7.512832023 | 9.66E-13 | 5.07E-12 | 18.14592777 |
| ATP6V1F | -0.329931725 | 8.29830854 | -7.510827099 | 9.78E-13 | 5.13E-12 | 18.13359918 |
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| DNAH9 | -0.340001593 | 0.38418482 | -7.507387277 | 9.99E-13 | 5.24E-12 | 18.11245207 |
| CFAP65 | -0.371068776 | 0.46976273 | -7.506557708 | 1.00E-12 | 5.27E-12 | 18.10735303 |
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| C1orf131 | -0.368827653 | 2.35240459 | -7.497484293 | 1.06E-12 | 5.56E-12 | 18.05160568 |
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| RALB | -0.486681026 | 5.93711931 | -7.488807362 | 1.12E-12 | 5.86E-12 | 17.9983346 |
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| HCN4 | 0.749780958 | 1.37842553 | 7.485989241 | 1.14E-12 | 5.96E-12 | 17.98104154 |
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| SLC25A1 | -0.514052059 | 3.43253716 | -7.471150247 | 1.25E-12 | 6.50E-12 | 17.89005249 |
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| 3-Mar | -0.393071953 | 1.04378539 | -7.463661293 | 1.31E-12 | 6.80E-12 | 17.84417597 |
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| TFF2 | -0.725918368 | 0.50175996 | -7.45932546 | 1.35E-12 | 6.97E-12 | 17.81762861 |
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| TTC23L | -0.30505448 | 0.62130675 | -7.45695475 | 1.37E-12 | 7.07E-12 | 17.80311746 |
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| KNTC1 | 0.425049085 | 1.85021625 | 7.454253904 | 1.39E-12 | 7.18E-12 | 17.78658914 |
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| ARMT1 | -0.605006216 | 5.3798077 | -7.445051963 | 1.47E-12 | 7.58E-12 | 17.73030505 |
| EPHA10 | 0.987282292 | 1.65832302 | 7.444728031 | 1.48E-12 | 7.60E-12 | 17.72832452 |
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| EML6 | -0.554800377 | 1.29506656 | -7.400068009 | 1.95E-12 | 9.89E-12 | 17.45580305 |
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| CENPT | -0.52233373 | 3.36291421 | -7.333236259 | 2.95E-12 | 1.47E-11 | 17.04997014 |
| TRPM3 | -0.350214031 | 0.25998309 | -7.33276726 | 2.96E-12 | 1.48E-11 | 17.04713063 |
| SYT9 | -0.460655122 | 0.57761087 | -7.332742394 | 2.96E-12 | 1.48E-11 | 17.04698008 |
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| LIMS2 | -0.66758547 | 3.22813953 | -7.330525913 | 3.00E-12 | 1.50E-11 | 17.03356218 |
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| MBD3 | -0.454452465 | 4.94621845 | -7.327414719 | 3.06E-12 | 1.52E-11 | 17.01473243 |
| CACNB4 | -0.610131289 | 0.7944697 | -7.327317785 | 3.06E-12 | 1.52E-11 | 17.01414585 |
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| TBKBP1 | -0.521905412 | 3.67853849 | -7.3268645 | 3.07E-12 | 1.53E-11 | 17.01140291 |
| DCTN5 | -0.442123773 | 4.07872135 | -7.325971361 | 3.08E-12 | 1.54E-11 | 17.00599862 |
| RAG2 | -1.369695515 | 0.89359175 | -7.324721928 | 3.11E-12 | 1.55E-11 | 16.99843917 |
| KAT8 | -0.388552752 | 5.27886575 | -7.324001005 | 3.12E-12 | 1.55E-11 | 16.99407774 |
| ILF2 | -0.502405856 | 7.63901437 | -7.323897822 | 3.12E-12 | 1.55E-11 | 16.99345353 |
| SSBP3 | -0.528574469 | 4.82507498 | -7.322366512 | 3.15E-12 | 1.57E-11 | 16.98419046 |
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| FRG1 | -0.424188324 | 5.3795221 | -7.3183826 | 3.23E-12 | 1.60E-11 | 16.96009723 |
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| SFMBT1 | -0.478705453 | 2.45226429 | -7.315702539 | 3.29E-12 | 1.63E-11 | 16.94389403 |
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| LETMD1 | -0.442413513 | 5.24362578 | -7.3061203 | 3.48E-12 | 1.73E-11 | 16.8859931 |
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| CFAP157 | -0.277200662 | 0.82655018 | -7.301386286 | 3.59E-12 | 1.77E-11 | 16.857406 |
| RAD9A | -0.504344217 | 3.59143787 | -7.299110035 | 3.64E-12 | 1.80E-11 | 16.84366481 |
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| ZNF280E | -0.500909525 | 1.76293275 | -7.294799207 | 3.74E-12 | 1.84E-11 | 16.81764903 |
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| MMADH( | -0.535486074 | 6.20705986 | -7.291088058 | 3.82E-12 | 1.88E-11 | 16.79526036 |
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| TMEM14 | -0.3399298 | 2.70643728 | -7.288558347 | 3.88E-12 | 1.91E-11 | 16.78000337 |
| CD274 | 0.812576076 | 2.7011023 | 7.287583924 | 3.91E-12 | 1.92E-11 | 16.77412742 |
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| GNAS | -0.751150577 | 9.66153818 | -7.282714918 | 4.02E-12 | 1.98E-11 | 16.74477418 |
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| KRT19 | 1.947011738 | 7.38285732 | 7.218008968 | 5.98E-12 | 2.88E-11 | 16.35591336 |
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| C12orf65 | -0.338933884 | 3.5360212 | -7.20585985 | 6.44E-12 | 3.09E-11 | 16.28315648 |
| ZNF2 | -0.375304475 | 2.42312482 | -7.205818261 | 6.44E-12 | 3.09E-11 | 16.28290756 |
| GTF2IRD | -0.414333581 | 2.2560851 | -7.205609512 | 6.45E-12 | 3.09E-11 | 16.28165814 |
| GOLGA7 | -0.395655833 | 5.55702095 | -7.204291801 | 6.50E-12 | 3.12E-11 | 16.27377188 |
| MRTFA | -0.442392047 | 4.4982667 | -7.204177043 | 6.51E-12 | 3.12E-11 | 16.27308511 |
| DHRS11 | -0.441593256 | 3.71045355 | -7.203634063 | 6.53E-12 | 3.13E-11 | 16.26983579 |
| PCID2 | -0.4282025 | 4.08380807 | -7.203233447 | 6.55E-12 | 3.14E-11 | 16.26743851 |
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| VPS51 | -0.502101318 | 5.89735399 | -7.201324138 | 6.62E-12 | 3.17E-11 | 16.25601444 |
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| PRTFDC | -0.705764022 | 2.58380666 | -7.200001528 | 6.68E-12 | 3.20E-11 | 16.24810197 |
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| MCEMP1 | 1.058673214 | 1.14903311 | 7.19927876 | 6.71E-12 | 3.21E-11 | 16.24377844 |
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| USP44 | -0.347838281 | 0.83073592 | -7.186927263 | 7.23E-12 | 3.45E-11 | 16.16993741 |
| UTP6 | -0.351020804 | 4.00394341 | -7.186722015 | 7.24E-12 | 3.45E-11 | 16.16871109 |
| BHLHB9 | -0.483060855 | 2.45857412 | -7.183221378 | 7.40E-12 | 3.53E-11 | 16.14779889 |
| PDE1B | -0.629136547 | 1.69248863 | -7.182534765 | 7.43E-12 | 3.54E-11 | 16.14369797 |

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| GPN2 | -0.37002967 | 4.33075513 | -7.180569805 | 7.52E-12 | 3.58E-11 | 16.13196335 |
| ARHGEF | -0.646214475 | 2.58038137 | -7.180361937 | 7.53E-12 | 3.58E-11 | 16.1307221 |
| OSMR | 0.906484727 | 3.60676385 | 7.180166661 | 7.53E-12 | 3.59E-11 | 16.12955606 |
| HSD17B | -0.519760612 | 2.94967839 | -7.179128375 | 7.58E-12 | 3.61E-11 | 16.12335656 |
| TBCD | -0.425162209 | 4.67114306 | -7.178997049 | 7.59E-12 | 3.61E-11 | 16.12257248 |
| SEMA3C | 0.893171073 | 1.52352797 | 7.176723786 | 7.69E-12 | 3.66E-11 | 16.10900131 |
| PSMC1 | -0.505654959 | 2.90685677 | -7.17669106 | 7.70E-12 | 3.66E-11 | 16.10880596 |
| ERG | -0.622439658 | 2.82174298 | -7.176405953 | 7.71E-12 | 3.67E-11 | 16.1071041 |
| DET1 | -0.403250576 | 2.47174009 | -7.17587036 | 7.73E-12 | 3.68E-11 | 16.10390717 |
| MYO1H | -0.204299656 | 0.35762887 | -7.175405363 | 7.76E-12 | 3.69E-11 | 16.10113176 |
| ZSWIM9 | -0.448264195 | 3.82864419 | -7.173125123 | 7.86E-12 | 3.74E-11 | 16.08752346 |
| OGFOD2 | -0.282229993 | 1.11572719 | -7.17254095 | 7.89E-12 | 3.75E-11 | 16.08403763 |
| PWWP3 | -1.204629122 | 2.26656535 | -7.172331307 | 7.90E-12 | 3.75E-11 | 16.0827867 |
| POLR2E | -0.411029141 | 6.39126023 | -7.168132847 | 8.11E-12 | 3.85E-11 | 16.05773998 |
| CFAP58 | -0.329402829 | 0.81060869 | -7.16808566 | 8.11E-12 | 3.85E-11 | 16.05745854 |
| GNPAT | -0.331346408 | 5.47800233 | -7.166495965 | 8.19E-12 | 3.88E-11 | 16.04797749 |
| C12orf4 | -0.365190718 | 3.29879467 | -7.166142358 | 8.21E-12 | 3.89E-11 | 16.04586874 |
| TM7SF2 | -0.679066058 | 5.94537404 | -7.165825094 | 8.22E-12 | 3.90E-11 | 16.04397679 |
| TMEM18 | -0.589210675 | 5.00116286 | -7.165770904 | 8.22E-12 | 3.90E-11 | 16.04365364 |
| CDC42E | -0.629333356 | 4.70296345 | -7.165381104 | 8.24E-12 | 3.91E-11 | 16.04132922 |
| CFAP61 | -0.165000874 | 0.2348601 | -7.165014238 | 8.26E-12 | 3.91E-11 | 16.03914163 |
| GPR153 | 0.823119454 | 2.1613626 | 7.164113363 | 8.31E-12 | 3.93E-11 | 16.0337701 |
| RAN | -0.426565569 | 6.61088306 | -7.163565301 | 8.34E-12 | 3.95E-11 | 16.03050247 |
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| MGME1 | -0.433905409 | 4.76207712 | -7.160039605 | 8.52E-12 | 4.03E-11 | 16.00948569 |
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| GTF2E1 | -0.425915925 | 3.01132256 | -7.156972006 | 8.68E-12 | 4.10E-11 | 15.99120523 |
| GAP43 | 1.607619817 | 2.06734902 | 7.15626079 | 8.71E-12 | 4.12E-11 | 15.98696769 |
| B4GALT | -0.418356795 | 5.28733902 | -7.155587331 | 8.75E-12 | 4.14E-11 | 15.98295537 |
| SLC31A1 | -0.592329543 | 4.16785335 | -7.155094774 | 8.78E-12 | 4.15E-11 | 15.98002098 |
| TCHP | -0.37896207 | 2.8297733 | -7.152472226 | 8.92E-12 | 4.21E-11 | 15.96439953 |
| LGALSL | -0.518705684 | 2.94826083 | -7.152211453 | 8.93E-12 | 4.22E-11 | 15.96284642 |
| TIMM8A | -0.344143163 | 2.79730385 | -7.150145836 | 9.04E-12 | 4.27E-11 | 15.95054537 |
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| EPPK1 | 0.762594428 | 1.49309802 | 7.149158824 | 9.10E-12 | 4.29E-11 | 15.9446684 |
| DPH2 | -0.390153831 | 3.96988792 | -7.147244067 | 9.20E-12 | 4.34E-11 | 15.9332689 |
| PSMG3 | -0.441838679 | 5.08926357 | -7.146754558 | 9.23E-12 | 4.35E-11 | 15.93035494 |
| FAM189 | -0.9472736 | 5.84594784 | -7.14649451 | 9.25E-12 | 4.36E-11 | 15.92880696 |
| RHOD | -0.490742963 | 6.2689129 | -7.142905163 | 9.45E-12 | 4.45E-11 | 15.90744477 |
| PSMC6 | -0.381492211 | 4.57045081 | -7.139531934 | 9.65E-12 | 4.55E-11 | 15.88737533 |

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| TNFSF9 | 1.06194603 | 1.47006994 | 7.139482413 | 9.65E-12 | 4.55E-11 | 15.88708074 |
| ZSCAN18 | -0.471721776 | 5.04798249 | -7.138890273 | 9.68E-12 | 4.56E-11 | 15.8835584 |
| ACBD5 | -0.603102193 | 5.03217978 | -7.138400762 | 9.71E-12 | 4.57E-11 | 15.88064669 |
| SULT1C4 | -0.639728383 | 1.38512318 | -7.137250843 | 9.78E-12 | 4.60E-11 | 15.87380728 |
| MMP11 | 1.049546099 | 2.3025196 | 7.137065116 | 9.79E-12 | 4.61E-11 | 15.87270269 |
| CLUAP1 | -0.394594228 | 3.80820735 | -7.136972816 | 9.80E-12 | 4.61E-11 | 15.87215375 |
| L3MBTL2 | -0.404780587 | 4.11992643 | -7.134712225 | 9.93E-12 | 4.67E-11 | 15.85871084 |
| TUBD1 | -0.48193989 | 3.24165989 | -7.134696009 | 9.93E-12 | 4.67E-11 | 15.85861442 |
| C2orf88 | -0.590169136 | 1.68730023 | -7.134051893 | 9.97E-12 | 4.69E-11 | 15.85478462 |
| GTF2H1 | -0.434275421 | 3.90428751 | -7.131991966 | 1.01E-11 | 4.75E-11 | 15.84253821 |
| WDR45 | -0.37960685 | 5.35749486 | -7.131738656 | 1.01E-11 | 4.75E-11 | 15.84103243 |
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| ARHGEF | -0.504831158 | 3.51942231 | -7.128501718 | 1.03E-11 | 4.84E-11 | 15.82179383 |
| POFUT2 | -0.505167832 | 4.37266962 | -7.128133118 | 1.03E-11 | 4.85E-11 | 15.81960344 |
| TOE1 | -0.462284362 | 4.41247074 | -7.127945214 | 1.03E-11 | 4.86E-11 | 15.81848686 |
| CREB3 | -0.402692377 | 6.65574275 | -7.126579749 | 1.04E-11 | 4.90E-11 | 15.81037345 |
| PSTK | -0.267816665 | 1.60879254 | -7.125125433 | 1.05E-11 | 4.94E-11 | 15.80173324 |
| DISP2 | -0.556251911 | 1.37634063 | -7.122433198 | 1.07E-11 | 5.02E-11 | 15.78574155 |
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| PDE5A | 1.341784083 | 5.44177433 | 7.120105031 | 1.09E-11 | 5.09E-11 | 15.77191567 |
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| AGPAT4 | -0.541742019 | 1.31358084 | -7.118628461 | 1.09E-11 | 5.13E-11 | 15.76314858 |
| MAGI1 | -0.579996288 | 3.85356097 | -7.118279681 | 1.10E-11 | 5.14E-11 | 15.76107788 |
| MAN1C1 | -0.717880269 | 4.45500847 | -7.11628493 | 1.11E-11 | 5.20E-11 | 15.74923643 |
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| DUOX2 | -1.439892739 | 6.86014999 | -7.115269936 | 1.12E-11 | 5.23E-11 | 15.74321196 |
| LMF2 | -0.442452714 | 6.39391388 | -7.112826762 | 1.13E-11 | 5.30E-11 | 15.72871293 |
| ENO3 | -1.108495636 | 2.81279171 | -7.110373651 | 1.15E-11 | 5.38E-11 | 15.71415828 |
| LRRC7 | -0.432086016 | 0.63260432 | -7.109665399 | 1.16E-11 | 5.40E-11 | 15.70995675 |
| MAPK3 | -0.376946707 | 5.94707444 | -7.108847642 | 1.16E-11 | 5.43E-11 | 15.70510595 |
| KTI12 | -0.403218822 | 3.82671522 | -7.108417886 | 1.16E-11 | 5.44E-11 | 15.70255686 |
| CYP1B1 | 1.698490806 | 4.12899042 | 7.10818386 | 1.17E-11 | 5.45E-11 | 15.70116878 |
| L1CAM | 0.539304173 | 0.73216002 | 7.107455488 | 1.17E-11 | 5.47E-11 | 15.69684879 |
| SMIM15 | -0.435448918 | 5.90186945 | -7.106928425 | 1.18E-11 | 5.49E-11 | 15.69372294 |
| SNRNP4 | -0.441930468 | 4.55445868 | -7.106479772 | 1.18E-11 | 5.50E-11 | 15.69106225 |
| BHLHE40 | 0.993246654 | 7.53870827 | 7.106335843 | 1.18E-11 | 5.50E-11 | 15.69020871 |
| ARFGAP | -0.378675066 | 5.7278435 | -7.105301196 | 1.19E-11 | 5.54E-11 | 15.68407335 |
| PIWIL2 | -0.401943719 | 0.55633032 | -7.104935276 | 1.19E-11 | 5.55E-11 | 15.68190362 |
| MTHFSD | -0.355173217 | 3.0594982 | -7.103225888 | 1.20E-11 | 5.60E-11 | 15.67176875 |
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| MRPL10 | -0.367233121 | 5.73609455 | -7.102747147 | 1.21E-11 | 5.62E-11 | 15.66893062 |
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| TTF1 | -0.442334684 | 4.08213157 | -7.098188981 | 1.24E-11 | 5.77E-11 | 15.64191471 |
| RDH13 | -0.384438939 | 2.50768205 | -7.095114494 | 1.26E-11 | 5.87E-11 | 15.62369903 |
| SDK1 | 1.207921382 | 2.16501271 | 7.094100604 | 1.27E-11 | 5.91E-11 | 15.6176931 |
| CCDC86 | -0.447864926 | 4.69003577 | -7.094060266 | 1.27E-11 | 5.91E-11 | 15.61745416 |
| PRIMA1 | -0.735302444 | 0.80804785 | -7.093571004 | 1.27E-11 | 5.93E-11 | 15.61455616 |
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| FBXO3 | -0.447223292 | 3.61444956 | -7.089284599 | 1.31E-11 | 6.08E-11 | 15.58917264 |
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| CHMP6 | -0.446707253 | 5.45791614 | -7.088168059 | 1.32E-11 | 6.11E-11 | 15.58256233 |
| GPI | -0.386545203 | 6.24998306 | -7.087562593 | 1.32E-11 | 6.13E-11 | 15.57897805 |
| DNTT | -0.43729892 | 0.32045811 | -7.087348623 | 1.32E-11 | 6.14E-11 | 15.57771142 |
| SLC25A2 | -0.853979625 | 6.97949887 | -7.085681944 | 1.34E-11 | 6.20E-11 | 15.56784615 |
| MMP7 | 1.783317881 | 2.520041 | 7.085216477 | 1.34E-11 | 6.22E-11 | 15.56509127 |
| ZNF671 | -0.493303092 | 3.73708156 | -7.085158515 | 1.34E-11 | 6.22E-11 | 15.56474823 |
| WDR63 | -0.455242489 | 1.0854877 | -7.0849291 | 1.34E-11 | 6.22E-11 | 15.56339049 |
| CTIF | -0.476151305 | 3.84354792 | -7.084579019 | 1.35E-11 | 6.24E-11 | 15.56131866 |
| TKT | -0.516833235 | 7.02261784 | -7.083622458 | 1.35E-11 | 6.27E-11 | 15.55565797 |
| FOXA2 | -1.160266323 | 1.69354726 | -7.083336226 | 1.36E-11 | 6.28E-11 | 15.55396421 |
| SLC43A1 | -0.860831447 | 3.07449971 | -7.083069902 | 1.36E-11 | 6.29E-11 | 15.5523883 |
| TAMM41 | -0.311313341 | 2.23447911 | -7.081014851 | 1.37E-11 | 6.36E-11 | 15.54022936 |
| MRRF | -0.346254436 | 2.98771094 | -7.080958224 | 1.37E-11 | 6.36E-11 | 15.53989436 |
| ZDHHC1 | -0.539918977 | 4.5465243 | -7.080933959 | 1.38E-11 | 6.36E-11 | 15.5397508 |
| OCA2 | -1.070870875 | 1.34934324 | -7.078984337 | 1.39E-11 | 6.44E-11 | 15.52821793 |
| CHMP7 | -0.354707271 | 4.90825253 | -7.077847759 | 1.40E-11 | 6.48E-11 | 15.52149555 |
| IRAK1 | -0.577844895 | 4.87154643 | -7.077129488 | 1.41E-11 | 6.51E-11 | 15.51724766 |
| METTL2A | -0.392312534 | 3.41839243 | -7.076383007 | 1.41E-11 | 6.53E-11 | 15.51283323 |
| MORF4L | -0.44872652 | 7.75070797 | -7.076278905 | 1.41E-11 | 6.54E-11 | 15.51221763 |
| MOB4 | -0.447507165 | 4.2312008 | -7.075610409 | 1.42E-11 | 6.56E-11 | 15.50826469 |
| TNN | -0.79673816 | 1.03127208 | -7.075215301 | 1.42E-11 | 6.57E-11 | 15.50592846 |
| ISY1 | -0.407243903 | 4.1261892 | -7.074252796 | 1.43E-11 | 6.61E-11 | 15.50023764 |
| TRMU | -0.435490568 | 2.96101258 | -7.07334222 | 1.44E-11 | 6.65E-11 | 15.49485432 |
| USP5 | -0.456322277 | 6.29882618 | -7.073272834 | 1.44E-11 | 6.65E-11 | 15.49444413 |
| ADGRF4 | 0.659968858 | 0.58143165 | 7.07258831 | 1.45E-11 | 6.67E-11 | 15.49039757 |
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| KCNIP4 | -0.623571301 | 1.41962055 | -7.067213898 | 1.49E-11 | 6.88E-11 | 15.45863588 |
| RNF225 | 0.653885251 | 0.88038544 | 7.064469431 | 1.52E-11 | 7.00E-11 | 15.44242289 |
| PELI1 | 1.039674372 | 4.24627583 | 7.06400427 | 1.52E-11 | 7.01E-11 | 15.43967537 |
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| EPHB3 | 1.213676273 | 3.25915176 | 7.0468396 | 1.69E-11 | 7.76E-11 | 15.33837541 |
| CHAC2 | -0.415410366 | 1.79865996 | -7.045998166 | 1.70E-11 | 7.80E-11 | 15.33341383 |
| GALNT1 | -0.485761756 | 4.78715573 | -7.045820381 | 1.70E-11 | 7.80E-11 | 15.33236556 |
| MRC1 | 1.0568612 | 2.86776717 | 7.045263779 | 1.70E-11 | 7.83E-11 | 15.32908378 |
| SLC9A1 | -0.488781586 | 5.00020284 | -7.0443635 | 1.71E-11 | 7.87E-11 | 15.32377603 |
| PHLPP1 | -0.515610555 | 3.15973998 | -7.043897636 | 1.72E-11 | 7.89E-11 | 15.32102962 |
| GRASP | -0.702566582 | 3.52518398 | -7.043629957 | 1.72E-11 | 7.90E-11 | 15.31945163 |
| CPEB3 | -0.545268963 | 2.68922346 | -7.043590015 | 1.72E-11 | 7.90E-11 | 15.31921617 |
| LSM14B | -0.430116451 | 5.25830561 | -7.042576677 | 1.73E-11 | 7.94E-11 | 15.31324285 |
| C4orf19 | -0.516362068 | 0.97467367 | -7.042046015 | 1.74E-11 | 7.97E-11 | 15.31011498 |
| TSTD1 | -0.534476533 | 8.0532765 | -7.040579748 | 1.75E-11 | 8.04E-11 | 15.30147324 |
| DMAP1 | -0.438660962 | 4.68804498 | -7.039979814 | 1.76E-11 | 8.06E-11 | 15.29793776 |
| WIPI2 | -0.339143056 | 4.89997177 | -7.039791416 | 1.76E-11 | 8.07E-11 | 15.29682755 |
| GIPC3 | -0.70058393 | 2.67807475 | -7.039332732 | 1.77E-11 | 8.09E-11 | 15.29412465 |
| GPATCH | -0.552785746 | 3.93377233 | -7.03899763 | 1.77E-11 | 8.10E-11 | 15.29215006 |
| XPNPEP | -0.397472164 | 2.44292646 | -7.036174246 | 1.80E-11 | 8.24E-11 | 15.27551582 |
| PI4KB | -0.438685566 | 5.79892216 | -7.035519073 | 1.81E-11 | 8.27E-11 | 15.27165645 |
| GOLGA7 | 0.887585457 | 2.06229502 | 7.034231134 | 1.82E-11 | 8.33E-11 | 15.26407039 |
| ASB3 | -0.341355205 | 1.5933411 | -7.033078331 | 1.83E-11 | 8.39E-11 | 15.2572811 |
| PARM1 | -0.75972741 | 7.31536651 | -7.032265092 | 1.84E-11 | 8.43E-11 | 15.25249208 |
| TLE5 | -0.394252174 | 8.50425138 | -7.030709412 | 1.86E-11 | 8.50E-11 | 15.24333199 |
| TRIM46 | 0.54000768 | 0.74669716 | 7.030478575 | 1.86E-11 | 8.51E-11 | 15.24197291 |
| IL1RL1 | 1.846498497 | 2.36545732 | 7.027806641 | 1.89E-11 | 8.65E-11 | 15.22624368 |
| ZNF559 | -0.490462225 | 3.29974668 | -7.027166575 | 1.90E-11 | 8.68E-11 | 15.22247633 |
| ADCY9 | -0.632653246 | 4.76892543 | -7.026782077 | 1.91E-11 | 8.70E-11 | 15.22021333 |
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| LEMD2 | -0.373995354 | 4.62955052 | -7.026579699 | 1.91E-11 | 8.70E-11 | 15.21902224 |
| DNAAF2 | -0.440125816 | 3.86079337 | -7.025763052 | 1.92E-11 | 8.74E-11 | 15.21421615 |
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| OR2T33 | -0.192387331 | 0.19291777 | -7.024102695 | 1.94E-11 | 8.83E-11 | 15.20444587 |
| ALG2 | -0.469985028 | 5.5586953 | -7.02365902 | 1.94E-11 | 8.85E-11 | 15.20183535 |
| APBA2 | -0.766455471 | 1.65136448 | -7.023488591 | 1.94E-11 | 8.85E-11 | 15.2008326 |
| QTRT1 | -0.51946173 | 5.14225749 | -7.023369219 | 1.94E-11 | 8.86E-11 | 15.20013026 |
| GLI4 | -0.510140439 | 3.30438941 | -7.022258333 | 1.96E-11 | 8.92E-11 | 15.19359464 |
| CD70 | 1.077768821 | 1.34357398 | 7.02190126 | 1.96E-11 | 8.93E-11 | 15.19149404 |
| ACADVL | -0.487097003 | 7.87318658 | -7.02133125 | 1.97E-11 | 8.96E-11 | 15.18814092 |
| FGF2 | 0.678630134 | 2.35658131 | 7.021030851 | 1.97E-11 | 8.97E-11 | 15.18637387 |
| GNG10 | -0.562421627 | 3.9851303 | -7.019520763 | 1.99E-11 | 9.05E-11 | 15.17749181 |
| TMED5 | -0.580813081 | 4.61546204 | -7.018716117 | 2.00E-11 | 9.09E-11 | 15.17275957 |
| VAMP2 | -0.456412884 | 6.71109264 | -7.018615031 | 2.00E-11 | 9.10E-11 | 15.17216509 |
| CLDN5 | -0.918177852 | 4.22834965 | -7.018463677 | 2.00E-11 | 9.10E-11 | 15.171275 |
| C16orf96 | -0.281966092 | 0.54537431 | -7.018341773 | 2.00E-11 | 9.10E-11 | 15.17055812 |
| RNF215 | -0.410541303 | 2.74887992 | -7.018306683 | 2.00E-11 | 9.10E-11 | 15.17035176 |
| ACAT2 | -0.38785332 | 3.0641151 | -7.018306146 | 2.00E-11 | 9.10E-11 | 15.1703486 |
| THAP7 | -0.417345158 | 5.16015978 | -7.018025687 | 2.01E-11 | 9.12E-11 | 15.16869933 |
| ZFP62 | -0.472906482 | 4.30671528 | -7.017125661 | 2.02E-11 | 9.16E-11 | 15.16340693 |
| MARCKS | -0.675427418 | 9.07064201 | -7.016897604 | 2.02E-11 | 9.17E-11 | 15.16206596 |
| SEPTIN4 | -0.486652838 | 1.68949561 | -7.01664998 | 2.02E-11 | 9.19E-11 | 15.16060997 |
| C4orf3 | -0.499430677 | 7.17052761 | -7.016276447 | 2.03E-11 | 9.20E-11 | 15.15841372 |
| PHYH | -0.608377838 | 5.6555333 | -7.015820728 | 2.03E-11 | 9.23E-11 | 15.15573436 |
| CFAP52 | -0.228718436 | 0.38770817 | -7.014048838 | 2.06E-11 | 9.32E-11 | 15.1453178 |
| RAB29 | -0.653844047 | 5.16429598 | -7.014019942 | 2.06E-11 | 9.32E-11 | 15.14514794 |
| E2F4 | -0.357575173 | 5.43736318 | -7.013669989 | 2.06E-11 | 9.34E-11 | 15.14309086 |
| FRMPD3 | -0.86111575 | 1.9367535 | -7.013535244 | 2.06E-11 | 9.34E-11 | 15.14229882 |
| SLC6A14 | 0.929217349 | 1.00950413 | 7.012769765 | 2.07E-11 | 9.38E-11 | 15.13779951 |
| NCAM1 | -1.289640289 | 3.09440613 | -7.012603793 | 2.07E-11 | 9.39E-11 | 15.136824 |
| IK | -0.384044824 | 6.615169 | -7.012432181 | 2.08E-11 | 9.40E-11 | 15.13581537 |
| CNTN3 | -0.636305601 | 1.05223515 | -7.011370946 | 2.09E-11 | 9.46E-11 | 15.12957842 |
| GABRG1 | -0.294654385 | 0.28176064 | -7.011068657 | 2.09E-11 | 9.47E-11 | 15.12780196 |
| TRAPPC | -0.671845706 | 0.62562064 | -7.01086471 | 2.10E-11 | 9.48E-11 | 15.12660346 |
| SLA | -0.873177038 | 3.39891509 | -7.010782199 | 2.10E-11 | 9.48E-11 | 15.12611858 |
| ARMC2 | -0.330255031 | 1.54667408 | -7.006645817 | 2.15E-11 | 9.72E-11 | 15.10181627 |
| FBXO42 | -0.37621848 | 3.62779376 | -7.006587 | 2.15E-11 | 9.72E-11 | 15.10147077 |
| MAMLD1 | 1.025073492 | 2.8531734 | 7.00568886 | 2.16E-11 | 9.77E-11 | 15.09619528 |
| JAM3 | -0.599823573 | 3.46997837 | -7.004214175 | 2.18E-11 | 9.85E-11 | 15.08753426 |
| DDX25 | -0.368345821 | 0.55502564 | -7.004168109 | 2.18E-11 | 9.85E-11 | 15.08726374 |
| UMAD1 | -0.514390356 | 4.58209044 | -7.004160872 | 2.18E-11 | 9.85E-11 | 15.08722124 |
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| TUBGCP | -0.364096158 | 5.05530911 | -7.001758839 | 2.21E-11 | 9.99E-11 | 15.07311651 |

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| RNF26 | -0.455652438 | 5.3089941 | -7.001164172 | 2.22E-11 | 1.00E-10 | 15.06962513 |
| TIAM2 | -0.568661131 | 1.92733375 | -7.001110992 | 2.22E-11 | 1.00E-10 | 15.06931292 |
| SCRN3 | -0.549380676 | 3.655964 | -7.000890469 | 2.23E-11 | 1.00E-10 | 15.06801825 |
| PTRH1 | -0.123450521 | 0.24810669 | -6.999547067 | 2.24E-11 | 1.01E-10 | 15.06013189 |
| KBTBD1 | -0.554854902 | 1.78988983 | -6.999263323 | 2.25E-11 | 1.01E-10 | 15.05846632 |
| YARS2 | -0.332418635 | 4.07496938 | -6.998413972 | 2.26E-11 | 1.02E-10 | 15.05348093 |
| SRARP | -0.430315285 | 0.30542189 | -6.997769195 | 2.27E-11 | 1.02E-10 | 15.04969658 |
| TRAPPC | -0.40640406 | 7.76810347 | -6.997697539 | 2.27E-11 | 1.02E-10 | 15.04927603 |
| PAPPA | 0.623583178 | 1.04353574 | 6.997308487 | 2.27E-11 | 1.02E-10 | 15.04699272 |
| PROS1 | 1.441337331 | 6.67154085 | 6.995680481 | 2.30E-11 | 1.03E-10 | 15.03743906 |
| VDAC1 | -0.383627447 | 6.94821536 | -6.994790282 | 2.31E-11 | 1.04E-10 | 15.03221572 |
| WDR53 | -0.306590449 | 3.61989767 | -6.994621149 | 2.31E-11 | 1.04E-10 | 15.03122337 |
| PAXX | -0.622032991 | 6.20181125 | -6.994298139 | 2.31E-11 | 1.04E-10 | 15.02932822 |
| GALNT5 | 0.733970019 | 0.97248541 | 6.993870475 | 2.32E-11 | 1.04E-10 | 15.02681913 |
| RPS6KB | -0.402811758 | 4.23155406 | -6.990812378 | 2.36E-11 | 1.06E-10 | 15.00888045 |
| CIITA | 0.842430588 | 2.20459425 | 6.989646736 | 2.38E-11 | 1.07E-10 | 15.00204425 |
| TMC8 | 1.026324162 | 3.43700121 | 6.988767028 | 2.39E-11 | 1.07E-10 | 14.99688548 |
| CDK5RA | -0.301494182 | 4.27088938 | -6.988112735 | 2.40E-11 | 1.08E-10 | 14.99304888 |
| SDC2 | -0.847646003 | 7.85340801 | -6.98702588 | 2.42E-11 | 1.09E-10 | 14.98667638 |
| CCL17 | 1.517983706 | 2.52720647 | 6.986801152 | 2.42E-11 | 1.09E-10 | 14.98535883 |
| ELOA | -0.434874656 | 4.97571664 | -6.986654717 | 2.42E-11 | 1.09E-10 | 14.98450031 |
| SUMO2 | -0.37282166 | 7.07192582 | -6.986632526 | 2.42E-11 | 1.09E-10 | 14.98437021 |
| TM6SF1 | -0.765860084 | 2.76762005 | -6.986561851 | 2.42E-11 | 1.09E-10 | 14.98395587 |
| ITGA3 | 0.883113715 | 7.56856187 | 6.985560594 | 2.44E-11 | 1.09E-10 | 14.97808611 |
| NPHP1 | -0.384569072 | 2.04373969 | -6.985296627 | 2.44E-11 | 1.09E-10 | 14.97653873 |
| CLPP | -0.384067488 | 5.77363287 | -6.981376242 | 2.50E-11 | 1.12E-10 | 14.953562 |
| GNPDA2 | -0.416863955 | 3.1947563 | -6.981269796 | 2.50E-11 | 1.12E-10 | 14.95293826 |
| KPNA5 | -0.476129583 | 3.46978629 | -6.980197228 | 2.52E-11 | 1.13E-10 | 14.9466537 |
| NT5C3A | -0.403912689 | 4.71540133 | -6.978710123 | 2.54E-11 | 1.14E-10 | 14.93794131 |
| CCL14 | -0.542080733 | 1.06633931 | -6.978588878 | 2.54E-11 | 1.14E-10 | 14.93723104 |
| CECR2 | -0.400472682 | 0.4588423 | -6.978086323 | 2.55E-11 | 1.14E-10 | 14.93428708 |
| TNFAIP2 | 0.834260519 | 4.78391522 | 6.977710041 | 2.56E-11 | 1.14E-10 | 14.93208292 |
| ENKD1 | -0.583329807 | 4.60177998 | -6.976458277 | 2.58E-11 | 1.15E-10 | 14.924751 |
| CA12 | -1.640180534 | 4.05756844 | -6.97615148 | 2.58E-11 | 1.15E-10 | 14.92295414 |
| MED18 | -0.356259104 | 4.42821401 | -6.975779894 | 2.59E-11 | 1.16E-10 | 14.9207779 |
| WDFY4 | 0.645386056 | 1.32790305 | 6.975603829 | 2.59E-11 | 1.16E-10 | 14.91974677 |
| TBX2 | -0.958333501 | 3.23357279 | -6.97434217 | 2.61E-11 | 1.17E-10 | 14.91235841 |
| ICAM5 | 1.278615992 | 3.11608497 | 6.974027832 | 2.61E-11 | 1.17E-10 | 14.91051777 |
| ZNF3 | -0.36337745 | 4.14127682 | -6.973397635 | 2.62E-11 | 1.17E-10 | 14.90682774 |
| ATXN7L3 | -0.516559193 | 5.70585004 | -6.972831367 | 2.63E-11 | 1.18E-10 | 14.90351224 |

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| C6orf47 | -0.348799808 | 5.46935719 | -6.971505406 | 2.65E-11 | 1.18E-10 | 14.89574944 |
| DCDC1 | -0.1787354 | 0.30068188 | -6.970904184 | 2.66E-11 | 1.19E-10 | 14.89222994 |
| NOD2 | 0.482676881 | 0.81009643 | 6.97041393 | 2.67E-11 | 1.19E-10 | 14.88936018 |
| KAT5 | -0.542444129 | 5.13538257 | -6.96872954 | 2.70E-11 | 1.20E-10 | 14.87950147 |
| HSD11B | -0.432160481 | 3.54632837 | -6.968221722 | 2.71E-11 | 1.21E-10 | 14.87652953 |
| DST | 0.827108423 | 2.61169635 | 6.966710554 | 2.73E-11 | 1.22E-10 | 14.8676865 |
| EIF3I | -0.308180885 | 8.57203889 | -6.96647162 | 2.73E-11 | 1.22E-10 | 14.86628843 |
| TRMT9B | -0.767249123 | 3.30404798 | -6.966231443 | 2.74E-11 | 1.22E-10 | 14.86488312 |
| DXO | -0.400102807 | 4.56994422 | -6.965882269 | 2.74E-11 | 1.22E-10 | 14.86284011 |
| ZBTB2 | -0.60094206 | 5.31041061 | -6.965272504 | 2.75E-11 | 1.23E-10 | 14.85927255 |
| RPL22 | -0.412645489 | 7.63282527 | -6.964201206 | 2.77E-11 | 1.23E-10 | 14.85300521 |
| FAM166 | -0.353907086 | 0.85854061 | -6.963995092 | 2.77E-11 | 1.23E-10 | 14.85179948 |
| TNFAIP8 | -0.575112309 | 2.74480765 | -6.962847683 | 2.79E-11 | 1.24E-10 | 14.84508774 |
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| RBM42 | -0.432069234 | 6.76831959 | -6.960708088 | 2.83E-11 | 1.26E-10 | 14.83257424 |
| DCAF17 | -0.560052999 | 3.09083458 | -6.959711079 | 2.85E-11 | 1.27E-10 | 14.82674409 |
| ALDH6A | -0.648227923 | 4.21750231 | -6.958241556 | 2.87E-11 | 1.28E-10 | 14.81815189 |
| STX10 | -0.411805094 | 5.57981747 | -6.957832803 | 2.88E-11 | 1.28E-10 | 14.81576215 |
| PINK1 | -0.646758514 | 4.75924244 | -6.95745863 | 2.88E-11 | 1.28E-10 | 14.81357467 |
| ZDHHC1 | -0.482062101 | 1.09205482 | -6.956165315 | 2.91E-11 | 1.29E-10 | 14.80601435 |
| PAPSS2 | -0.938944946 | 2.84883936 | -6.95550733 | 2.92E-11 | 1.30E-10 | 14.80216833 |
| RMDN3 | -0.41562982 | 5.09313825 | -6.952327883 | 2.97E-11 | 1.32E-10 | 14.78358751 |
| C5orf49 | -0.544844698 | 0.97138924 | -6.951831057 | 2.98E-11 | 1.32E-10 | 14.78068457 |
| RABL6 | -0.34598928 | 4.99955046 | -6.951139761 | 3.00E-11 | 1.33E-10 | 14.77664557 |
| ADCK2 | -0.445628805 | 5.22838847 | -6.950654506 | 3.00E-11 | 1.33E-10 | 14.77381056 |
| RXRA | -0.438861627 | 5.00071616 | -6.950127528 | 3.01E-11 | 1.34E-10 | 14.77073194 |
| NIP7 | -0.377921368 | 4.22053162 | -6.949321566 | 3.03E-11 | 1.34E-10 | 14.7660238 |
| SDR42E | -0.407645527 | 1.80475263 | -6.949172967 | 3.03E-11 | 1.34E-10 | 14.76515578 |
| RNPEP | -0.405808971 | 6.46133613 | -6.949006335 | 3.03E-11 | 1.34E-10 | 14.76418243 |
| PTCD3 | -0.383078537 | 3.83958094 | -6.948593473 | 3.04E-11 | 1.35E-10 | 14.76177086 |
| GOLGA8 | -0.580995769 | 0.88136685 | -6.948551481 | 3.04E-11 | 1.35E-10 | 14.76152559 |
| TMEM17 | -0.780385212 | 2.40653251 | -6.947302288 | 3.07E-11 | 1.36E-10 | 14.75422954 |
| JOSD2 | -0.549318674 | 5.37292971 | -6.946580315 | 3.08E-11 | 1.36E-10 | 14.75001318 |
| RANBP1 | -0.406317966 | 4.79015295 | -6.946414957 | 3.08E-11 | 1.36E-10 | 14.74904752 |
| TCEAL7 | -0.627226183 | 1.89828235 | -6.946234204 | 3.08E-11 | 1.36E-10 | 14.74799199 |
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| Gene | | | | | | |
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| RNF185 | -0.548292256 | 5.73097657 | -6.942960759 | 3.15E-11 | 1.39E-10 | 14.72887931 |
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| CCNO | -0.51306407 | 4.36017997 | -6.939999056 | 3.20E-11 | 1.41E-10 | 14.7115921 |
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| PDZD11 | -0.311777452 | 6.46194964 | -6.936998298 | 3.26E-11 | 1.44E-10 | 14.69408206 |
| MXD4 | -0.508101511 | 5.80295854 | -6.936068967 | 3.28E-11 | 1.45E-10 | 14.68866027 |
| CATSPE | 0.917696595 | 1.58405492 | 6.935708858 | 3.28E-11 | 1.45E-10 | 14.6865595 |
| COP1 | -0.364353049 | 4.89426729 | -6.934783754 | 3.30E-11 | 1.46E-10 | 14.68116305 |
| RALGPS | -0.513389465 | 2.77282656 | -6.932020146 | 3.36E-11 | 1.48E-10 | 14.66504491 |
| ENTR1 | -0.380973833 | 4.59192446 | -6.931997442 | 3.36E-11 | 1.48E-10 | 14.66491251 |
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| PACSIN2 | -0.526793864 | 6.04042191 | -6.930659901 | 3.38E-11 | 1.49E-10 | 14.65711318 |
| LTV1 | -0.410400651 | 4.80922291 | -6.927632227 | 3.45E-11 | 1.52E-10 | 14.63946234 |
| GALNS | -0.383041013 | 3.26113628 | -6.926399367 | 3.47E-11 | 1.53E-10 | 14.63227647 |
| GVQW2 | -0.241755932 | 0.62705436 | -6.92496521 | 3.50E-11 | 1.54E-10 | 14.62391843 |
| FAM49A | -0.593415272 | 5.74684995 | -6.924046352 | 3.52E-11 | 1.55E-10 | 14.61856409 |
| RAPGEF | -0.674915786 | 2.29699206 | -6.923286815 | 3.54E-11 | 1.56E-10 | 14.6141385 |
| ZNF350 | -0.413695839 | 3.21917056 | -6.922593983 | 3.55E-11 | 1.56E-10 | 14.61010187 |
| ID1 | -1.034099888 | 8.2831497 | -6.922123871 | 3.56E-11 | 1.57E-10 | 14.60736303 |
| TSEN2 | -0.351450771 | 2.66978047 | -6.921741524 | 3.57E-11 | 1.57E-10 | 14.6051356 |
| NARS | -0.454765815 | 6.99718494 | -6.920735397 | 3.59E-11 | 1.58E-10 | 14.59927461 |
| PICK1 | -0.391102961 | 4.40021138 | -6.919788867 | 3.61E-11 | 1.59E-10 | 14.59376133 |
| PSMD4 | -0.362626155 | 6.92075402 | -6.919315558 | 3.62E-11 | 1.59E-10 | 14.59100463 |
| PAK4 | -0.444782387 | 4.8878022 | -6.919272722 | 3.62E-11 | 1.59E-10 | 14.59075515 |
| BANK1 | -0.718018436 | 3.48324684 | -6.918440812 | 3.64E-11 | 1.60E-10 | 14.58591016 |
| KCMF1 | -0.3669383 | 4.55785209 | -6.91809982 | 3.65E-11 | 1.60E-10 | 14.58392437 |
| TRIP6 | -0.485375966 | 6.71573972 | -6.917353523 | 3.66E-11 | 1.61E-10 | 14.57957848 |
| TRAPPC | -0.391416151 | 4.58165687 | -6.917171853 | 3.67E-11 | 1.61E-10 | 14.57852062 |
| RYR2 | -0.701428489 | 0.8323766 | -6.917107384 | 3.67E-11 | 1.61E-10 | 14.57814522 |
| NUP62CI | -0.576891032 | 2.73805423 | -6.914619626 | 3.72E-11 | 1.63E-10 | 14.563661 |
| FAP | 0.836416961 | 1.39798025 | 6.913673474 | 3.74E-11 | 1.64E-10 | 14.55815325 |
| PRR36 | 0.940926684 | 3.58096367 | 6.913218394 | 3.75E-11 | 1.65E-10 | 14.55550431 |
| PGM5 | -0.606803698 | 1.78581752 | -6.913145001 | 3.76E-11 | 1.65E-10 | 14.55507712 |
| PARP16 | -0.352495143 | 3.55911041 | -6.911230087 | 3.80E-11 | 1.66E-10 | 14.54393216 |
| CHMP1A | -0.368753468 | 6.68479431 | -6.910259302 | 3.82E-11 | 1.67E-10 | 14.53828292 |
| SRPRA | -0.418337604 | 7.11247198 | -6.909220011 | 3.84E-11 | 1.68E-10 | 14.53223563 |
| TRIR | -0.454199488 | 7.75512439 | -6.908734833 | 3.86E-11 | 1.69E-10 | 14.52941275 |
| ZNF181 | -0.424733196 | 2.7253708 | -6.907103968 | 3.89E-11 | 1.70E-10 | 14.51992499 |
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| DAZAP2 | -0.465433879 | 7.29398362 | -6.902806463 | 3.99E-11 | 1.75E-10 | 14.49493108 |
| BAIAP2L | -0.4007578 | 4.64896382 | -6.902767703 | 3.99E-11 | 1.75E-10 | 14.4947057 |
| C11orf54 | -0.539845367 | 4.17426446 | -6.902036647 | 4.01E-11 | 1.75E-10 | 14.49045502 |
| RAB5C | -0.47889998 | 7.02834161 | -6.901545301 | 4.02E-11 | 1.76E-10 | 14.48759829 |
| CNOT11 | -0.369200781 | 5.19658661 | -6.901001955 | 4.04E-11 | 1.76E-10 | 14.4844394 |
| CXCL5 | 0.698944227 | 0.61164717 | 6.900645479 | 4.05E-11 | 1.77E-10 | 14.48236701 |
| METTL6 | -0.312923265 | 2.55544441 | -6.900194475 | 4.06E-11 | 1.77E-10 | 14.47974519 |
| ALG6 | -0.330935165 | 2.79686745 | -6.898377058 | 4.10E-11 | 1.79E-10 | 14.46918119 |
| ASAH1 | -0.666819734 | 8.22136491 | -6.898244771 | 4.10E-11 | 1.79E-10 | 14.46841233 |
| SLC35E3 | -0.272133402 | 1.44034002 | -6.897187588 | 4.13E-11 | 1.80E-10 | 14.46226826 |
| APOLD1 | -1.097614417 | 5.07688797 | -6.896429687 | 4.15E-11 | 1.81E-10 | 14.45786394 |
| S100A10 | 1.22569728 | 7.23584182 | 6.894637692 | 4.19E-11 | 1.83E-10 | 14.4474516 |
| FER1L5 | -0.134032345 | 0.16125989 | -6.892806498 | 4.24E-11 | 1.85E-10 | 14.43681341 |
| ZNF19 | -0.333454068 | 1.92440869 | -6.892349674 | 4.25E-11 | 1.85E-10 | 14.43415982 |
| KITLG | -0.670281923 | 2.41584745 | -6.889924026 | 4.31E-11 | 1.88E-10 | 14.42007181 |
| ARFRP1 | -0.39258851 | 4.15087604 | -6.889758529 | 4.32E-11 | 1.88E-10 | 14.41911074 |
| PTMS | -0.541273961 | 9.39349365 | -6.889600994 | 4.32E-11 | 1.88E-10 | 14.41819593 |
| YIPF4 | -0.415845142 | 4.10539124 | -6.888863143 | 4.34E-11 | 1.89E-10 | 14.41391134 |
| CKAP4 | -0.480553407 | 5.92974689 | -6.888651204 | 4.34E-11 | 1.89E-10 | 14.41268071 |
| PODXL | -0.753335029 | 5.79801997 | -6.886218746 | 4.41E-11 | 1.92E-10 | 14.39855836 |
| ZNF442 | -0.314236923 | 1.43133196 | -6.886096269 | 4.41E-11 | 1.92E-10 | 14.39784737 |
| ANKRD4 | -0.436651785 | 3.51690151 | -6.884101521 | 4.46E-11 | 1.94E-10 | 14.38626897 |
| TIPRL | -0.379082581 | 5.1042689 | -6.883657032 | 4.47E-11 | 1.94E-10 | 14.38368927 |
| ZNF541 | -0.3328227 | 0.54384287 | -6.883280927 | 4.48E-11 | 1.95E-10 | 14.38150654 |
| MRPS6 | -0.509481659 | 6.06984334 | -6.883050417 | 4.49E-11 | 1.95E-10 | 14.38016882 |
| SELENO | -0.544663396 | 6.93415367 | -6.882306176 | 4.51E-11 | 1.96E-10 | 14.37584996 |
| SGF29 | -0.433874441 | 5.00971462 | -6.881906517 | 4.52E-11 | 1.96E-10 | 14.37353085 |
| LRFN1 | -0.524428251 | 1.02130436 | -6.881422907 | 4.53E-11 | 1.97E-10 | 14.37072472 |
| ARHGEF | -0.786541807 | 3.29398304 | -6.879380341 | 4.59E-11 | 1.99E-10 | 14.35887432 |
| CKMT1B | -0.558777985 | 1.34489957 | -6.876417432 | 4.67E-11 | 2.03E-10 | 14.34168863 |
| SLC25A1 | -0.349677619 | 2.89347094 | -6.874465724 | 4.72E-11 | 2.05E-10 | 14.33037096 |
| PLPBP | -0.413903266 | 5.85046368 | -6.874416759 | 4.73E-11 | 2.05E-10 | 14.33008705 |
| IGDCC4 | -0.989094876 | 3.12728449 | -6.872893244 | 4.77E-11 | 2.07E-10 | 14.32125399 |
| ATP6V1C | -0.385753077 | 8.30115218 | -6.872599138 | 4.78E-11 | 2.07E-10 | 14.31954897 |
| MGMT | -0.439771486 | 4.85037916 | -6.872434154 | 4.78E-11 | 2.07E-10 | 14.31859253 |
| AXIN2 | -0.778317304 | 2.99031739 | -6.871266614 | 4.82E-11 | 2.09E-10 | 14.31182457 |
| FCF1 | -0.537881461 | 4.86105088 | -6.869157623 | 4.88E-11 | 2.11E-10 | 14.29960124 |
| ELF4 | 0.637114712 | 3.28665539 | 6.867938119 | 4.91E-11 | 2.13E-10 | 14.29253438 |
| FRY | -0.490671065 | 1.99665581 | -6.867892394 | 4.91E-11 | 2.13E-10 | 14.29226943 |
| TOM1L1 | -0.64488548 | 3.90616545 | -6.867734713 | 4.92E-11 | 2.13E-10 | 14.29135576 |

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| CCPG1 | -0.512225151 | 3.70772928 | -6.86514961 | 4.99E-11 | 2.16E-10 | 14.27637861 |
| CEP85 | -0.540137204 | 2.83898201 | -6.863460308 | 5.04E-11 | 2.18E-10 | 14.26659351 |
| FAXC | 0.710998396 | 2.01225344 | 6.862223997 | 5.08E-11 | 2.20E-10 | 14.25943336 |
| FAM181E | -0.614226744 | 0.93619271 | -6.861446437 | 5.10E-11 | 2.21E-10 | 14.25493054 |
| NMB | -1.38928291 | 6.58138937 | -6.860139116 | 5.14E-11 | 2.22E-10 | 14.24736069 |
| BBIP1 | -0.418583605 | 2.97055357 | -6.859755433 | 5.15E-11 | 2.23E-10 | 14.24513921 |
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| FAM49B | -0.431074457 | 3.75068038 | -6.857909882 | 5.21E-11 | 2.25E-10 | 14.23445492 |
| GNG5 | -0.368356479 | 7.99360464 | -6.856231875 | 5.26E-11 | 2.27E-10 | 14.22474229 |
| HIST1H3 | -0.671036731 | 1.76374455 | -6.855841862 | 5.28E-11 | 2.28E-10 | 14.22248506 |
| MESP1 | -0.629679747 | 1.81101271 | -6.853946901 | 5.33E-11 | 2.30E-10 | 14.21151905 |
| VEGFD | -0.200164599 | 0.27930299 | -6.85355577 | 5.35E-11 | 2.31E-10 | 14.20925586 |
| GSK3A | -0.286039017 | 5.60950408 | -6.85350315 | 5.35E-11 | 2.31E-10 | 14.2089514 |
| SUMO3 | -0.395901962 | 6.60527253 | -6.85201855 | 5.40E-11 | 2.33E-10 | 14.20036197 |
| HEMGN | -0.224679918 | 0.17421414 | -6.851650324 | 5.41E-11 | 2.33E-10 | 14.19823172 |
| SH3RF3 | -0.622405939 | 2.12603594 | -6.850266414 | 5.45E-11 | 2.35E-10 | 14.1902263 |
| CCDC9B | -0.71398421 | 3.79503665 | -6.850241455 | 5.45E-11 | 2.35E-10 | 14.19008193 |
| MEST | -0.474044091 | 3.90988833 | -6.850054697 | 5.46E-11 | 2.35E-10 | 14.1890017 |
| ZBTB48 | -0.441218466 | 4.20538799 | -6.847876838 | 5.53E-11 | 2.38E-10 | 14.17640609 |
| NFE2L3 | 1.318737192 | 3.90637507 | 6.847854006 | 5.53E-11 | 2.38E-10 | 14.17627406 |
| FBXL3 | -0.614961974 | 4.81935564 | -6.847603412 | 5.54E-11 | 2.38E-10 | 14.17482493 |
| ARMCX1 | -0.60886829 | 4.98850433 | -6.847540048 | 5.54E-11 | 2.38E-10 | 14.17445852 |
| PDIK1L | -0.547381234 | 4.50345079 | -6.845834521 | 5.60E-11 | 2.41E-10 | 14.1645969 |
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| CLUH | -0.410425212 | 4.60305369 | -6.844312643 | 5.65E-11 | 2.43E-10 | 14.15579859 |
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| ZNF425 | -0.463612084 | 2.3751748 | -6.840309813 | 5.78E-11 | 2.48E-10 | 14.13266381 |
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| ZNF138 | -0.436785597 | 3.24643477 | -6.839453836 | 5.81E-11 | 2.49E-10 | 14.12771781 |
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| ARSI | 0.630798017 | 0.70597156 | 6.836200441 | 5.92E-11 | 2.54E-10 | 14.10892297 |
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| JDP2 | -0.562098145 | 3.16026885 | -6.833671688 | 6.01E-11 | 2.58E-10 | 14.09431864 |

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| DDIT3 | -0.823063178 | 7.09662936 | -6.833221516 | 6.03E-11 | 2.58E-10 | 14.09171914 |
| MAGI2 | -0.485966554 | 2.41735511 | -6.833122995 | 6.03E-11 | 2.58E-10 | 14.09115026 |
| RAB41 | -0.367641161 | 1.51535652 | -6.832581183 | 6.05E-11 | 2.59E-10 | 14.08802179 |
| RAB9A | -0.40730145 | 5.02268026 | -6.832549552 | 6.05E-11 | 2.59E-10 | 14.08783915 |
| NUP42 | -0.38171005 | 3.88629177 | -6.832133934 | 6.07E-11 | 2.60E-10 | 14.08543946 |
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| RDH12 | -0.696293337 | 1.27837469 | -6.829448136 | 6.16E-11 | 2.64E-10 | 14.06993464 |
| SDR39U | -0.470360059 | 3.42407117 | -6.826565895 | 6.27E-11 | 2.68E-10 | 14.05330046 |
| TCAF1 | -0.514372447 | 3.51714 | -6.825639808 | 6.30E-11 | 2.69E-10 | 14.04795679 |
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| TMEM22 | -0.431119871 | 5.40940113 | -6.823232819 | 6.39E-11 | 2.73E-10 | 14.03407044 |
| HIKESHI | -0.332220599 | 4.07184649 | -6.822652003 | 6.42E-11 | 2.74E-10 | 14.03072011 |
| HSCB | -0.42764698 | 4.71897024 | -6.821011739 | 6.48E-11 | 2.77E-10 | 14.02125963 |
| NOL11 | -0.393353173 | 4.49088229 | -6.8195983 | 6.53E-11 | 2.79E-10 | 14.01310865 |
| ABRAXA | -0.407398419 | 4.48762243 | -6.819594432 | 6.53E-11 | 2.79E-10 | 14.01308635 |
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| CLEC2D | 0.559929738 | 2.00616597 | 6.816334147 | 6.66E-11 | 2.84E-10 | 13.9942895 |
| DHFR2 | -0.487448759 | 3.11633915 | -6.815935988 | 6.68E-11 | 2.84E-10 | 13.99199438 |
| INKA2 | -0.396233772 | 1.7448753 | -6.813125914 | 6.79E-11 | 2.89E-10 | 13.97579882 |
| COX7A1 | -1.236642926 | 5.3836037 | -6.812142301 | 6.83E-11 | 2.91E-10 | 13.97013097 |
| ORC4 | -0.38934215 | 3.49326371 | -6.812058253 | 6.83E-11 | 2.91E-10 | 13.96964668 |
| SSPO | -0.405836654 | 0.50954204 | -6.810198088 | 6.90E-11 | 2.94E-10 | 13.95892953 |
| AHCYL2 | -0.682518887 | 4.94906901 | -6.810090158 | 6.91E-11 | 2.94E-10 | 13.95830777 |
| NINJ1 | -0.440579719 | 7.48049739 | -6.80917706 | 6.95E-11 | 2.96E-10 | 13.95304784 |
| ZPBP | -0.140359104 | 0.17197225 | -6.808442203 | 6.98E-11 | 2.97E-10 | 13.94881503 |
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| PSMB2 | -0.326565173 | 5.85801315 | -6.806263656 | 7.07E-11 | 3.00E-10 | 13.93626836 |
| COL10A | 1.327313437 | 1.81197266 | 6.805553283 | 7.10E-11 | 3.02E-10 | 13.93217779 |
| ZFYVE9 | -0.600467302 | 4.2008473 | -6.804328701 | 7.15E-11 | 3.04E-10 | 13.92512692 |
| ZNF664 | -0.600174783 | 6.52706742 | -6.802992056 | 7.20E-11 | 3.06E-10 | 13.91743182 |
| EBP | -0.361169234 | 5.23090945 | -6.80275755 | 7.21E-11 | 3.06E-10 | 13.91608187 |
| ORMDL3 | -0.603026304 | 7.2443338 | -6.802631586 | 7.22E-11 | 3.06E-10 | 13.91535676 |
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| MED30 | -0.463738982 | 4.06322866 | -6.801580912 | 7.26E-11 | 3.08E-10 | 13.90930896 |
| NPRL3 | -0.377132135 | 4.40125109 | -6.801332584 | 7.27E-11 | 3.09E-10 | 13.90787965 |
| MMP13 | 0.927042686 | 0.65434043 | 6.800258157 | 7.32E-11 | 3.10E-10 | 13.90169595 |

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| AMOT | 0.8672119 | 3.72188531 | 6.799926506 | 7.33E-11 | 3.11E-10 | 13.89978732 |
| CALCRL | -0.846712788 | 4.40599043 | -6.798874353 | 7.38E-11 | 3.13E-10 | 13.89373267 |
| ATL3 | -0.433233191 | 5.28787173 | -6.79736113 | 7.45E-11 | 3.16E-10 | 13.88502592 |
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| TRNT1 | -0.380209859 | 3.41859509 | -6.796610892 | 7.48E-11 | 3.17E-10 | 13.88070971 |
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| RAC2 | 1.226372973 | 4.4644898 | 6.795572267 | 7.53E-11 | 3.19E-10 | 13.87473494 |
| SLC25A1 | -0.474573396 | 4.50658849 | -6.795158268 | 7.54E-11 | 3.19E-10 | 13.87235354 |
| NDUFS1 | -0.482835998 | 4.42714406 | -6.795140544 | 7.54E-11 | 3.19E-10 | 13.8722516 |
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| FANCC | -0.383472378 | 2.15605281 | -6.794606898 | 7.57E-11 | 3.20E-10 | 13.86918213 |
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| REEP1 | -0.580895126 | 1.14076315 | -6.790825906 | 7.74E-11 | 3.27E-10 | 13.84743912 |
| RORC | -0.619728576 | 4.82676763 | -6.790185225 | 7.77E-11 | 3.28E-10 | 13.84375565 |
| METTL22 | -0.300477751 | 2.1443041 | -6.787259303 | 7.90E-11 | 3.34E-10 | 13.82693668 |
| PLA2G3 | -0.743065386 | 0.99251054 | -6.786870471 | 7.92E-11 | 3.35E-10 | 13.82470195 |
| RFLNB | -0.724730282 | 4.34630256 | -6.785499861 | 7.98E-11 | 3.37E-10 | 13.81682536 |
| DAP3 | -0.366944106 | 5.70117 | -6.783721753 | 8.07E-11 | 3.41E-10 | 13.80660862 |
| CCDC170 | -0.64278024 | 2.69257705 | -6.783413461 | 8.08E-11 | 3.41E-10 | 13.80483741 |
| SLC50A1 | -0.383460832 | 6.14739666 | -6.782876525 | 8.11E-11 | 3.42E-10 | 13.80175272 |
| H2AFZ | -0.411686651 | 6.67789666 | -6.782817242 | 8.11E-11 | 3.42E-10 | 13.80141215 |
| CYHR1 | -0.423738961 | 4.39732539 | -6.781586198 | 8.17E-11 | 3.45E-10 | 13.7943405 |
| DERPC | -0.580940298 | 6.13123517 | -6.781383845 | 8.18E-11 | 3.45E-10 | 13.79317818 |
| CHTF8 | -0.580940298 | 6.13123517 | -6.781383845 | 8.18E-11 | 3.45E-10 | 13.79317818 |
| RPL27 | -0.427945305 | 9.33799644 | -6.780364974 | 8.23E-11 | 3.47E-10 | 13.78732614 |
| FANCF | -0.3709894 | 3.61297554 | -6.779112192 | 8.29E-11 | 3.49E-10 | 13.78013143 |
| RAB24 | -0.478108704 | 3.78494222 | -6.778908237 | 8.30E-11 | 3.50E-10 | 13.77896021 |
| ARFGAP | -0.567005902 | 5.87804759 | -6.7780058 | 8.34E-11 | 3.51E-10 | 13.77377821 |
| GLTPD2 | -0.417867732 | 1.29323015 | -6.777094269 | 8.39E-11 | 3.53E-10 | 13.76854448 |
| TIGD5 | -0.379914347 | 3.34808463 | -6.776749784 | 8.40E-11 | 3.54E-10 | 13.76656667 |
| PAK6 | -0.213283291 | 0.50745346 | -6.775976063 | 8.44E-11 | 3.55E-10 | 13.76212474 |
| LIMK2 | -0.583029117 | 5.12402196 | -6.775313602 | 8.48E-11 | 3.57E-10 | 13.75832183 |
| EID3 | -0.473065419 | 1.8093714 | -6.774281594 | 8.53E-11 | 3.59E-10 | 13.75239803 |
| MNS1 | -0.458597577 | 2.17998127 | -6.774038589 | 8.54E-11 | 3.59E-10 | 13.75100325 |
| YJU2 | -0.387283357 | 5.66184804 | -6.772610026 | 8.61E-11 | 3.62E-10 | 13.74280443 |
| MFSD9 | -0.444320814 | 2.70209553 | -6.771703213 | 8.66E-11 | 3.64E-10 | 13.73760066 |
| NDUFA4 | -0.869981505 | 5.01797241 | -6.771456989 | 8.67E-11 | 3.64E-10 | 13.73618779 |
| USP7 | -0.397389318 | 5.29993772 | -6.771203674 | 8.68E-11 | 3.65E-10 | 13.73473425 |
| CDK20 | -0.423300391 | 2.90647607 | -6.770180982 | 8.73E-11 | 3.67E-10 | 13.72886639 |
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| NNT | -0.666810451 | 4.7102648 | -6.767811525 | 8.86E-11 | 3.72E-10 | 13.71527362 |
| FOXP3 | 0.733983163 | 1.72949258 | 6.765240895 | 8.99E-11 | 3.77E-10 | 13.70053053 |
| MST1R | 0.874684009 | 2.70193995 | 6.763473454 | 9.08E-11 | 3.81E-10 | 13.69039615 |
| F12 | -0.553317015 | 1.15289361 | -6.762861945 | 9.12E-11 | 3.82E-10 | 13.68689023 |
| ZNF589 | -0.486222218 | 3.70785754 | -6.762097753 | 9.16E-11 | 3.84E-10 | 13.68250926 |
| TOR3A | -0.392257327 | 4.85002428 | -6.762011701 | 9.16E-11 | 3.84E-10 | 13.68201596 |
| TRMT61I | -0.487992664 | 3.59106182 | -6.760949979 | 9.22E-11 | 3.86E-10 | 13.67592993 |
| PSMD12 | -0.347374421 | 4.68236652 | -6.760920854 | 9.22E-11 | 3.86E-10 | 13.67576298 |
| TRPV6 | -0.629702879 | 0.80586087 | -6.758967858 | 9.33E-11 | 3.91E-10 | 13.66456973 |
| ILDR1 | -0.563624393 | 4.53592171 | -6.758403161 | 9.36E-11 | 3.92E-10 | 13.66133369 |
| FMNL3 | -0.481543067 | 4.11709837 | -6.75761885 | 9.40E-11 | 3.94E-10 | 13.65683944 |
| TIMP1 | 1.533704515 | 9.34593253 | 6.757099349 | 9.43E-11 | 3.95E-10 | 13.6538628 |
| EPS15L1 | -0.338288181 | 3.80750212 | -6.756201865 | 9.48E-11 | 3.97E-10 | 13.64872077 |
| PLXNC1 | 1.140974127 | 3.86454969 | 6.756149247 | 9.48E-11 | 3.97E-10 | 13.64841932 |
| VMAC | -0.376242734 | 3.09363362 | -6.754797847 | 9.56E-11 | 4.00E-10 | 13.64067758 |
| SYNGR3 | 0.458039333 | 0.797242 | 6.754616521 | 9.57E-11 | 4.00E-10 | 13.6396389 |
| ITGAM | 0.785483514 | 2.50748809 | 6.753729138 | 9.62E-11 | 4.02E-10 | 13.63455604 |
| CIRBP | -0.500995665 | 7.82742745 | -6.752440771 | 9.69E-11 | 4.05E-10 | 13.62717721 |
| LRPAP1 | -0.481470822 | 6.30081109 | -6.750791144 | 9.78E-11 | 4.09E-10 | 13.61773077 |
| MMP16 | 0.991275182 | 1.91490411 | 6.749914447 | 9.84E-11 | 4.11E-10 | 13.6127111 |
| WDR45B | -0.412327324 | 6.03132113 | -6.749613338 | 9.85E-11 | 4.12E-10 | 13.61098716 |
| IFIT5 | 0.656003302 | 4.44851779 | 6.749490052 | 9.86E-11 | 4.12E-10 | 13.61028132 |
| EED | -0.321475531 | 2.78326607 | -6.748565757 | 9.91E-11 | 4.14E-10 | 13.60498984 |
| RFX8 | -0.461906039 | 0.95981806 | -6.748008555 | 9.95E-11 | 4.15E-10 | 13.60180018 |
| STK19 | -0.400181632 | 3.4105495 | -6.747947776 | 9.95E-11 | 4.15E-10 | 13.60145226 |
| ZNF287 | -0.441921213 | 2.75087908 | -6.747797696 | 9.96E-11 | 4.15E-10 | 13.60059317 |
| SNRPD2 | -0.421856714 | 7.85017386 | -6.747234813 | 9.99E-11 | 4.17E-10 | 13.59737124 |
| ABHD1 | -0.290373498 | 0.65982944 | -6.746391219 | 1.00E-10 | 4.19E-10 | 13.59254287 |
| DPH6 | -0.313969356 | 2.22227981 | -6.745421629 | 1.01E-10 | 4.21E-10 | 13.58699387 |
| ZDHHC7 | -0.421851631 | 5.34414278 | -6.743636812 | 1.02E-10 | 4.25E-10 | 13.57678076 |
| BLOC1S | -0.372563415 | 5.50684165 | -6.74226175 | 1.03E-10 | 4.29E-10 | 13.56891363 |
| C17orf58 | -0.395248068 | 4.69780258 | -6.74128275 | 1.03E-10 | 4.31E-10 | 13.56331318 |
| DDX50 | -0.461173545 | 5.64748544 | -6.741047428 | 1.04E-10 | 4.31E-10 | 13.56196709 |
| CAMK2N | 1.515795627 | 6.41040615 | 6.740916918 | 1.04E-10 | 4.32E-10 | 13.56122055 |
| LYPLA1 | -0.460547118 | 4.24030589 | -6.74091438 | 1.04E-10 | 4.32E-10 | 13.56120603 |
| PGRMC2 | -0.448447058 | 6.15594799 | -6.740876137 | 1.04E-10 | 4.32E-10 | 13.56098728 |
| AASDH | -0.478582557 | 3.08680691 | -6.740823135 | 1.04E-10 | 4.32E-10 | 13.5606841 |
| BTF3 | -0.395966097 | 8.82833523 | -6.739398176 | 1.05E-10 | 4.35E-10 | 13.5525339 |
| INHBA | 0.942484454 | 2.0541601 | 6.739312388 | 1.05E-10 | 4.35E-10 | 13.55204327 |
| SLC25A2 | -0.46409325 | 6.69773882 | -6.738607049 | 1.05E-10 | 4.37E-10 | 13.54800949 |

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| RBM34 | -0.257363879 | 1.48069139 | -6.738297941 | 1.05E-10 | 4.38E-10 | 13.54624182 |
| TMEM19 | -0.230567914 | 0.44985281 | -6.737792695 | 1.06E-10 | 4.39E-10 | 13.54335263 |
| DELE1 | -0.394726798 | 5.15908327 | -6.737203544 | 1.06E-10 | 4.40E-10 | 13.53998382 |
| DHPS | -0.3415258 | 5.55717526 | -6.73714007 | 1.06E-10 | 4.40E-10 | 13.53962088 |
| ASPA | -0.367851988 | 0.6403835 | -6.736769253 | 1.06E-10 | 4.41E-10 | 13.53750065 |
| ZNF613 | -0.396961841 | 2.78166323 | -6.736232609 | 1.07E-10 | 4.42E-10 | 13.53443241 |
| FSIP1 | -0.268595895 | 0.76211266 | -6.736049996 | 1.07E-10 | 4.43E-10 | 13.53338836 |
| SHISA2 | -1.207998528 | 5.85745662 | -6.735927397 | 1.07E-10 | 4.43E-10 | 13.53268744 |
| MRM1 | -0.386897605 | 3.7942486 | -6.735689241 | 1.07E-10 | 4.43E-10 | 13.53132589 |
| KCTD18 | -0.520333425 | 3.87469295 | -6.735606844 | 1.07E-10 | 4.44E-10 | 13.53085483 |
| CDR2 | -0.486721095 | 5.21132304 | -6.733654927 | 1.08E-10 | 4.49E-10 | 13.51969697 |
| ATRN | -0.601843588 | 5.34257521 | -6.73346633 | 1.08E-10 | 4.49E-10 | 13.518619 |
| BLOC1S! | -0.408467136 | 3.84090104 | -6.733104808 | 1.09E-10 | 4.50E-10 | 13.51655269 |
| DIABLO | -0.407390194 | 2.48892826 | -6.732758473 | 1.09E-10 | 4.51E-10 | 13.51457327 |
| ITGA10 | -0.565739314 | 1.66603049 | -6.729389821 | 1.11E-10 | 4.59E-10 | 13.49532393 |
| ZFP82 | -0.349480934 | 2.06482715 | -6.729170359 | 1.11E-10 | 4.60E-10 | 13.49407011 |
| LMNTD1 | -0.270497783 | 0.20764168 | -6.728933482 | 1.11E-10 | 4.60E-10 | 13.49271681 |
| ARHGEF | -0.50257054 | 3.79344459 | -6.728454067 | 1.11E-10 | 4.62E-10 | 13.48997799 |
| PALMD | -0.544708505 | 2.4911114 | -6.728050045 | 1.12E-10 | 4.63E-10 | 13.48766998 |
| BNIP3 | -0.506244947 | 4.49607939 | -6.726904593 | 1.13E-10 | 4.66E-10 | 13.48112702 |
| LARS | -0.405005 | 5.22760341 | -6.726627228 | 1.13E-10 | 4.66E-10 | 13.47954279 |
| PIGT | -0.527089806 | 7.56464425 | -6.726513475 | 1.13E-10 | 4.66E-10 | 13.47889309 |
| DRAM1 | 0.802475875 | 4.17590568 | 6.726310614 | 1.13E-10 | 4.67E-10 | 13.47773444 |
| C9orf40 | -0.333906029 | 2.63806473 | -6.723026662 | 1.15E-10 | 4.76E-10 | 13.45898158 |
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| NXT1 | -0.374606366 | 5.20873869 | -6.721985299 | 1.16E-10 | 4.78E-10 | 13.45303626 |
| CST2 | 1.664916015 | 2.04151652 | 6.721688677 | 1.16E-10 | 4.79E-10 | 13.45134291 |
| PPP2R5( | -0.385531578 | 4.74761162 | -6.721662478 | 1.16E-10 | 4.79E-10 | 13.45119335 |
| OSCAR | 0.858535142 | 2.30833697 | 6.71978686 | 1.17E-10 | 4.84E-10 | 13.4404871 |
| GOLGA1 | -0.432552927 | 3.53569192 | -6.719617494 | 1.17E-10 | 4.84E-10 | 13.43952044 |
| ERVK3-1 | -0.403080388 | 3.25856993 | -6.717455161 | 1.19E-10 | 4.90E-10 | 13.4271804 |
| TSPAN1; | -0.401428154 | 4.39311508 | -6.71628633 | 1.20E-10 | 4.94E-10 | 13.42051125 |
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| BRF2 | -0.498799808 | 3.01795222 | -6.71495484 | 1.21E-10 | 4.97E-10 | 13.41291499 |
| SLC38A1 | -0.447656274 | 6.49834094 | -6.713134031 | 1.22E-10 | 5.03E-10 | 13.40252882 |
| SAP30BI | -0.34563183 | 4.40331787 | -6.71135936 | 1.23E-10 | 5.08E-10 | 13.39240773 |
| CRY1 | -0.525811739 | 4.14992853 | -6.711171839 | 1.23E-10 | 5.08E-10 | 13.39133839 |
| EGF | -0.633342443 | 0.95178299 | -6.706715526 | 1.27E-10 | 5.21E-10 | 13.36593242 |
| GJC3 | -0.20422163 | 0.41911906 | -6.705725205 | 1.27E-10 | 5.24E-10 | 13.36028809 |

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|---|---|---|---|---|---|---|
| C11orf98 | -0.423801867 | 3.56657764 | -6.703606124 | 1.29E-10 | 5.30E-10 | 13.34821235 |
| ZNF814 | -0.376227248 | 2.30457809 | -6.702435503 | 1.30E-10 | 5.34E-10 | 13.34154262 |
| AMIGO1 | -0.482692816 | 3.87097819 | -6.69896779 | 1.32E-10 | 5.45E-10 | 13.32178979 |
| NRXN2 | -0.724194205 | 1.48211456 | -6.69815833 | 1.33E-10 | 5.47E-10 | 13.31717996 |
| PARD6G | -0.495106407 | 4.20832921 | -6.697964433 | 1.33E-10 | 5.48E-10 | 13.31607579 |
| DDIT4L | -0.578150294 | 0.87033133 | -6.697124428 | 1.34E-10 | 5.50E-10 | 13.31129252 |
| PHACTR | 0.559309135 | 0.69103021 | 6.697014326 | 1.34E-10 | 5.50E-10 | 13.31066559 |
| MRTO4 | -0.339664185 | 5.06349555 | -6.69652005 | 1.34E-10 | 5.52E-10 | 13.30785124 |
| MED4 | -0.348578936 | 5.75411216 | -6.696516597 | 1.34E-10 | 5.52E-10 | 13.30783159 |
| KAT2B | -0.638981838 | 4.35350217 | -6.696463978 | 1.34E-10 | 5.52E-10 | 13.30753199 |
| BTBD17 | -0.872213436 | 0.59821429 | -6.696131274 | 1.35E-10 | 5.53E-10 | 13.30563771 |
| DCUN1D | -0.434799559 | 3.43554935 | -6.695365799 | 1.35E-10 | 5.55E-10 | 13.30127966 |
| DNAJB1: | -0.312830033 | 5.31106763 | -6.695172515 | 1.35E-10 | 5.56E-10 | 13.3001793 |
| FAF2 | -0.457612089 | 4.95914369 | -6.693913102 | 1.36E-10 | 5.59E-10 | 13.29301003 |
| EXOC6 | -0.537485648 | 4.73719901 | -6.692484544 | 1.37E-10 | 5.64E-10 | 13.28487904 |
| EIF4H | -0.492205738 | 7.69542202 | -6.691693604 | 1.38E-10 | 5.66E-10 | 13.28037774 |
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| LYNX1 | 0.751930796 | 3.98179082 | 6.690099415 | 1.39E-10 | 5.71E-10 | 13.27130621 |
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| BLOC1S: | -0.351027162 | 3.8938028 | -6.685842861 | 1.43E-10 | 5.85E-10 | 13.24709226 |
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| VPS26B | -0.368623799 | 4.75413015 | -6.684289115 | 1.44E-10 | 5.91E-10 | 13.23825627 |
| KHK | -0.483560457 | 1.79322945 | -6.683693878 | 1.45E-10 | 5.92E-10 | 13.2348716 |
| C19orf44 | -0.364814554 | 2.97993767 | -6.683546165 | 1.45E-10 | 5.93E-10 | 13.2340317 |
| PRPF31 | -0.381411826 | 5.99678747 | -6.682806889 | 1.45E-10 | 5.95E-10 | 13.22982835 |
| BEND6 | 0.574821365 | 0.89982564 | 6.681272044 | 1.47E-10 | 6.00E-10 | 13.22110262 |
| DDX23 | -0.419988802 | 5.69374689 | -6.680975372 | 1.47E-10 | 6.01E-10 | 13.21941618 |
| KBTBD6 | -0.428227162 | 3.33041887 | -6.680837491 | 1.47E-10 | 6.02E-10 | 13.2186324 |
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| ATP1B2 | -1.097937833 | 3.42039252 | -6.679666412 | 1.48E-10 | 6.05E-10 | 13.21197596 |
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| PCIF1 | -0.389217208 | 6.05422599 | -6.677726766 | 1.50E-10 | 6.12E-10 | 13.20095278 |
| INTS10 | -0.434707158 | 5.06255891 | -6.676727594 | 1.51E-10 | 6.15E-10 | 13.19527528 |
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| LSM8 | -0.287710462 | 3.46121097 | -6.674421543 | 1.53E-10 | 6.23E-10 | 13.18217408 |
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| LRRC46 | -0.427809148 | 2.34661896 | -6.673353963 | 1.54E-10 | 6.27E-10 | 13.17610999 |
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| NKAPD1 | -0.380146223 | 4.29024858 | -6.67018992 | 1.57E-10 | 6.38E-10 | 13.15814154 |
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| CRYBG2 | 0.523151826 | 0.76027296 | 6.667254752 | 1.59E-10 | 6.48E-10 | 13.14147822 |
| PDCD2L | -0.347588758 | 3.42433231 | -6.666485603 | 1.60E-10 | 6.51E-10 | 13.13711251 |
| TANGO2 | -0.466253927 | 4.30944268 | -6.666391499 | 1.60E-10 | 6.51E-10 | 13.1365784 |
| JHY | -0.399675879 | 2.43842158 | -6.666332629 | 1.60E-10 | 6.51E-10 | 13.13624427 |
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| TEKT3 | -0.289327553 | 0.49722858 | -6.665366708 | 1.61E-10 | 6.55E-10 | 13.13076227 |
| IL2RA | 0.693090847 | 1.37514255 | 6.663428378 | 1.63E-10 | 6.62E-10 | 13.11976314 |
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| MRPS2 | -0.364594637 | 5.294397 | -6.659249133 | 1.67E-10 | 6.77E-10 | 13.0960555 |
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| TTLL7 | -0.495393069 | 1.01189228 | -6.658201017 | 1.68E-10 | 6.81E-10 | 13.09011149 |
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| BLOC1S | -0.480377338 | 6.23902478 | -6.653270553 | 1.73E-10 | 7.00E-10 | 13.06215896 |
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| SIGLEC6 | 1.292377796 | 1.2666038 | 6.652010466 | 1.74E-10 | 7.05E-10 | 13.05501742 |
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| RIN1 | 0.678487154 | 2.20250595 | 6.647852648 | 1.78E-10 | 7.22E-10 | 13.03145977 |
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| MRPL55 | -0.437858982 | 5.7978663 | -6.644772902 | 1.81E-10 | 7.34E-10 | 13.01401701 |
| RBM18 | -0.430546319 | 4.22424373 | -6.64430269 | 1.82E-10 | 7.36E-10 | 13.01135437 |
| USP21 | -0.404469939 | 4.53184965 | -6.644112689 | 1.82E-10 | 7.36E-10 | 13.01027851 |
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| SETD6 | -0.385649265 | 3.23108104 | -6.634910283 | 1.92E-10 | 7.75E-10 | 12.95819645 |
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| SLC25A2 | -0.324917368 | 5.48261198 | -6.627409499 | 2.01E-10 | 8.09E-10 | 12.91578259 |
| HARS | -0.312759405 | 4.58362242 | -6.62729337 | 2.01E-10 | 8.09E-10 | 12.91512619 |
| REELD1 | 0.620570662 | 0.84483696 | 6.625958205 | 2.02E-10 | 8.15E-10 | 12.90758002 |
| E4F1 | -0.441963712 | 4.28362039 | -6.624678945 | 2.04E-10 | 8.21E-10 | 12.90035083 |
| NUDT12 | -0.519729809 | 4.30411314 | -6.622929692 | 2.06E-10 | 8.29E-10 | 12.89046727 |
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| CBWD5 | -0.18205972 | 0.59516358 | -6.622284577 | 2.07E-10 | 8.32E-10 | 12.88682273 |
| CXCL8 | 1.223344019 | 2.53834558 | 6.622188224 | 2.07E-10 | 8.32E-10 | 12.88627841 |
| USP20 | -0.438528038 | 5.13026917 | -6.620881536 | 2.08E-10 | 8.38E-10 | 12.87889719 |
| PAAF1 | -0.362554647 | 3.39003336 | -6.620640053 | 2.09E-10 | 8.39E-10 | 12.87753322 |
| ZBED8 | -0.438234429 | 3.28298594 | -6.620505831 | 2.09E-10 | 8.40E-10 | 12.87677511 |
| RDX | -0.645332872 | 5.22501166 | -6.619998468 | 2.09E-10 | 8.42E-10 | 12.87390951 |
| PWP1 | -0.359322545 | 5.44731377 | -6.619383581 | 2.10E-10 | 8.45E-10 | 12.87043682 |
| OLR1 | 1.051363168 | 2.84659846 | 6.6189123 | 2.11E-10 | 8.47E-10 | 12.86777533 |
| ZNF212 | -0.413702294 | 4.04050086 | -6.618459994 | 2.11E-10 | 8.49E-10 | 12.86522112 |
| FDXR | -0.528032386 | 4.30346632 | -6.615637572 | 2.15E-10 | 8.63E-10 | 12.84928547 |
| CNOT10 | -0.316548281 | 4.07862142 | -6.615516547 | 2.15E-10 | 8.63E-10 | 12.84860226 |
| CYB561L | -0.452647634 | 3.76441998 | -6.613425453 | 2.17E-10 | 8.73E-10 | 12.836799 |
| EREG | 0.71949983 | 0.58771595 | 6.610976499 | 2.20E-10 | 8.86E-10 | 12.82297915 |
| SPRY4 | -0.674517628 | 4.76129102 | -6.610283321 | 2.21E-10 | 8.89E-10 | 12.81906808 |
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| COX18 | -0.318052211 | 3.1329105 | -6.609178283 | 2.23E-10 | 8.94E-10 | 12.81283382 |
| FAM8A1 | -0.51565623 | 5.2576672 | -6.608850294 | 2.23E-10 | 8.96E-10 | 12.81098355 |
| RPL35A | -0.413707158 | 8.82337937 | -6.604897413 | 2.28E-10 | 9.16E-10 | 12.7886895 |
| FBXO5 | -0.451864789 | 2.29247487 | -6.604891597 | 2.28E-10 | 9.16E-10 | 12.78865671 |
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| VPS29 | -0.312901276 | 5.7764143 | -6.602073131 | 2.32E-10 | 9.31E-10 | 12.77276647 |
| COMP | 1.824566751 | 3.67670279 | 6.598610114 | 2.37E-10 | 9.49E-10 | 12.75324889 |
| ZBTB5 | -0.490367134 | 3.7494125 | -6.598205497 | 2.37E-10 | 9.51E-10 | 12.75096894 |
| THAP5 | -0.458590487 | 4.05759116 | -6.597969617 | 2.38E-10 | 9.52E-10 | 12.74963985 |
| ZNF689 | -0.389715361 | 3.33933039 | -6.59687993 | 2.39E-10 | 9.58E-10 | 12.74350029 |
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| ASPH | -0.653396008 | 3.99078652 | -6.596300381 | 2.40E-10 | 9.61E-10 | 12.74023526 |
| RPL5 | -0.421025973 | 10.1895448 | -6.596194324 | 2.40E-10 | 9.61E-10 | 12.73963779 |
| GSPT1 | -0.454767021 | 5.52732109 | -6.596099754 | 2.40E-10 | 9.61E-10 | 12.73910503 |

| ARRDC4 | -0.716486438 | 4.50911811 | -6.595996425 | 2.40E-10 | 9.62E-10 | 12.73852293 |
|--------|--------------|------------|--------------|----------|----------|-------------|
| C17orf50 | -0.374580284 | 0.68729635 | -6.595564912 | 2.41E-10 | 9.64E-10 | 12.73609211 |
| CHRAC1 | -0.367577675 | 5.19886719 | -6.594136847 | 2.43E-10 | 9.72E-10 | 12.72804828 |
| LRIG1 | -0.596734794 | 3.99221466 | -6.593636971 | 2.44E-10 | 9.74E-10 | 12.72523293 |
| LAMC3 | -0.607855645 | 0.86595746 | -6.593505385 | 2.44E-10 | 9.75E-10 | 12.72449184 |
| SH3RF1 | -0.62781202 | 4.19273712 | -6.593087067 | 2.44E-10 | 9.77E-10 | 12.72213599 |
| CARTPT | -2.036359126 | 1.82840687 | -6.592476972 | 2.45E-10 | 9.80E-10 | 12.71870028 |
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| ZDHHC1 | -0.374142236 | 2.02723216 | -6.589726207 | 2.49E-10 | 9.95E-10 | 12.70321233 |
| CYP7B1 | -0.701693718 | 2.35506789 | -6.585931293 | 2.55E-10 | 1.02E-09 | 12.68185291 |
| COL4A5 | -0.792708588 | 3.11698258 | -6.584974477 | 2.56E-10 | 1.02E-09 | 12.67646892 |
| HIST2H4 | -0.16295841 | 0.27917331 | -6.584931573 | 2.56E-10 | 1.02E-09 | 12.67622751 |
| OTUD7A | -0.241953902 | 0.69920702 | -6.584342184 | 2.57E-10 | 1.03E-09 | 12.67291131 |
| AK3 | -0.45010843 | 5.88123055 | -6.583687212 | 2.58E-10 | 1.03E-09 | 12.66922636 |
| CACNB2 | -0.51456239 | 1.14029021 | -6.582781342 | 2.59E-10 | 1.03E-09 | 12.66413026 |
| BRMS1L | -0.442738712 | 3.16743587 | -6.581866806 | 2.61E-10 | 1.04E-09 | 12.6589859 |
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| DHTKD1 | -0.515218679 | 4.20779936 | -6.575214115 | 2.71E-10 | 1.08E-09 | 12.62157913 |
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| FTSJ3 | -0.418933869 | 4.93877372 | -6.573129138 | 2.74E-10 | 1.09E-09 | 12.60986124 |
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| PHTF1 | -0.369976709 | 2.53005642 | -6.569374901 | 2.80E-10 | 1.11E-09 | 12.58876852 |
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| AP1S1 | -0.419476605 | 6.50401 | -6.565562433 | 2.86E-10 | 1.14E-09 | 12.56735739 |
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| WDR31 | -0.513137365 | 2.6703757 | -6.562458289 | 2.92E-10 | 1.16E-09 | 12.54993078 |

| | | | | | | |
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| KDM1B | -0.598291269 | 4.67349414 | -6.561823852 | 2.93E-10 | 1.16E-09 | 12.54636979 |
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| BUB1B-F | -0.132219535 | 0.29156055 | -6.551187537 | 3.11E-10 | 1.23E-09 | 12.48670628 |
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| RNASE1 | -0.635262478 | 6.74395337 | -6.547948827 | 3.17E-10 | 1.25E-09 | 12.46855269 |
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| TNK1 | -0.37091512 | 3.55612637 | -6.547406727 | 3.18E-10 | 1.25E-09 | 12.46551474 |
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| ERCC1 | -0.320456408 | 5.05323668 | -6.542543826 | 3.27E-10 | 1.29E-09 | 12.43827085 |
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| PIGS | -0.585368203 | 4.96271275 | -6.540345932 | 3.31E-10 | 1.30E-09 | 12.42596212 |
| CADPS2 | -0.589035147 | 3.92219462 | -6.540114619 | 3.31E-10 | 1.30E-09 | 12.42466688 |
| TMEM79 | 0.799417716 | 3.86611747 | 6.539927157 | 3.32E-10 | 1.30E-09 | 12.42361722 |
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| GPX3 | -0.894864636 | 11.1330279 | -6.534483645 | 3.42E-10 | 1.34E-09 | 12.39314632 |
| PRRT4 | -1.042683076 | 0.94642928 | -6.533928184 | 3.43E-10 | 1.35E-09 | 12.39003805 |
| GNA15 | 0.767621016 | 2.23115908 | 6.531460328 | 3.48E-10 | 1.37E-09 | 12.37623065 |
| COG5 | -0.530954368 | 3.7260422 | -6.531258425 | 3.49E-10 | 1.37E-09 | 12.37510118 |
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| RPAIN | -0.339192507 | 3.43599534 | -6.529923798 | 3.51E-10 | 1.38E-09 | 12.3676358 |
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| HAP1 | -0.651325082 | 0.9315304 | -6.525660806 | 3.60E-10 | 1.41E-09 | 12.34379755 |
| AOC2 | -0.32187547 | 0.76334918 | -6.524298736 | 3.63E-10 | 1.42E-09 | 12.33618332 |
| HAPLN3 | 0.845635062 | 2.81885557 | 6.524293906 | 3.63E-10 | 1.42E-09 | 12.33615633 |
| USP46 | -0.508992978 | 3.02563088 | -6.522528399 | 3.67E-10 | 1.43E-09 | 12.32628851 |
| ADAM12 | 0.767201844 | 1.16442277 | 6.521555826 | 3.69E-10 | 1.44E-09 | 12.32085339 |
| SH3TC1 | -0.467190256 | 2.65730386 | -6.519890581 | 3.72E-10 | 1.46E-09 | 12.3115487 |
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| DAXX | -0.324856688 | 5.60294968 | -6.519376084 | 3.73E-10 | 1.46E-09 | 12.30867424 |
| MTPAP | -0.339583781 | 3.06954028 | -6.51698633 | 3.78E-10 | 1.48E-09 | 12.29532502 |
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| MYRIP | -0.51105278 | 1.31447745 | -6.516373156 | 3.80E-10 | 1.48E-09 | 12.29190037 |
| MAP11 | -0.447097783 | 4.29092075 | -6.516359487 | 3.80E-10 | 1.48E-09 | 12.29182403 |
| GDF10 | -1.075913022 | 1.18754543 | -6.515688936 | 3.81E-10 | 1.49E-09 | 12.2880792 |
| ZNF17 | -0.361901177 | 2.47554294 | -6.51453636 | 3.84E-10 | 1.50E-09 | 12.28164305 |
| MMP12 | 0.943422339 | 1.09089989 | 6.513940127 | 3.85E-10 | 1.50E-09 | 12.27831391 |
| DTD1 | -0.400452379 | 5.40197596 | -6.513791643 | 3.85E-10 | 1.50E-09 | 12.27748487 |
| GDF15 | 1.401943856 | 6.31521389 | 6.513762436 | 3.85E-10 | 1.50E-09 | 12.2773218 |
| HRH1 | 0.828181822 | 2.58300931 | 6.510496992 | 3.93E-10 | 1.53E-09 | 12.25909304 |
| INO80E | -0.398184938 | 4.45084762 | -6.510212033 | 3.93E-10 | 1.53E-09 | 12.25750261 |
| ECHDC2 | -0.496112257 | 4.86987189 | -6.509023789 | 3.96E-10 | 1.54E-09 | 12.25087128 |
| IPO11 | -0.427502536 | 3.27133283 | -6.509005178 | 3.96E-10 | 1.54E-09 | 12.25076743 |
| TRPC4 | -0.387972368 | 0.89581874 | -6.508558357 | 3.97E-10 | 1.55E-09 | 12.24827404 |
| HTATSF | -0.484164435 | 6.34218431 | -6.50852922 | 3.97E-10 | 1.55E-09 | 12.24811146 |
| MS4A14 | 0.339488462 | 0.77747016 | 6.507377116 | 4.00E-10 | 1.56E-09 | 12.24168299 |
| NKAP | -0.295817271 | 3.26627327 | -6.50726079 | 4.00E-10 | 1.56E-09 | 12.24103396 |
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| TRIM4 | -0.534819549 | 4.84834293 | -6.504537365 | 4.06E-10 | 1.58E-09 | 12.22584133 |
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| PSMD1 | -0.421262439 | 5.58435525 | -6.500367083 | 4.16E-10 | 1.62E-09 | 12.20258622 |
| GTPBP4 | -0.378051256 | 4.09535068 | -6.500135821 | 4.17E-10 | 1.62E-09 | 12.20129692 |
| SRD5A3 | -0.463892264 | 3.32944224 | -6.499440143 | 4.18E-10 | 1.62E-09 | 12.19741869 |
| PIGO | -0.52258754 | 4.14354462 | -6.499159813 | 4.19E-10 | 1.63E-09 | 12.195856 |
| BIVM | -0.390954457 | 3.16937339 | -6.499076815 | 4.19E-10 | 1.63E-09 | 12.19539334 |
| NTMT1 | -0.379116278 | 4.05068501 | -6.498692103 | 4.20E-10 | 1.63E-09 | 12.19324888 |
| TCP10L | -0.214914578 | 0.58807649 | -6.497202689 | 4.24E-10 | 1.64E-09 | 12.18494744 |
| TLN2 | -0.695592196 | 2.89588291 | -6.495275104 | 4.28E-10 | 1.66E-09 | 12.17420583 |
| MRPL46 | -0.353931276 | 2.8596226 | -6.495185953 | 4.28E-10 | 1.66E-09 | 12.17370909 |
| ST6GALI | -0.685989368 | 3.2978848 | -6.49467303 | 4.30E-10 | 1.67E-09 | 12.1708512 |
| RP9 | -0.345700367 | 4.03217973 | -6.493904505 | 4.32E-10 | 1.67E-09 | 12.16656945 |
| CWC25 | -0.365209999 | 4.20634496 | -6.493704868 | 4.32E-10 | 1.67E-09 | 12.16545726 |
| ADAMTS | -0.450817689 | 1.29383815 | -6.493144551 | 4.33E-10 | 1.68E-09 | 12.16233582 |
| SOX3 | -0.830898478 | 0.57528144 | -6.490896684 | 4.39E-10 | 1.70E-09 | 12.14981524 |
| GJB3 | 1.41167036 | 3.44424566 | 6.488194213 | 4.46E-10 | 1.73E-09 | 12.13476663 |
| HEATR3 | -0.367746976 | 3.22507808 | -6.485426752 | 4.53E-10 | 1.75E-09 | 12.11936077 |
| MAP3K4 | -0.40753346 | 3.50445492 | -6.482751568 | 4.60E-10 | 1.78E-09 | 12.10447309 |
| ADCY8 | 1.181463731 | 1.40603544 | 6.479682578 | 4.68E-10 | 1.81E-09 | 12.08739924 |
| PRKD1 | -0.488376493 | 2.59485405 | -6.478517339 | 4.71E-10 | 1.82E-09 | 12.08091814 |
| RSL24D1 | -0.377424243 | 6.42695979 | -6.478468342 | 4.71E-10 | 1.82E-09 | 12.08064564 |
| HLA-DQI | 1.389362495 | 4.64090987 | 6.477683037 | 4.73E-10 | 1.83E-09 | 12.07627824 |
| KANK3 | -0.57612402 | 3.48013115 | -6.477518452 | 4.74E-10 | 1.83E-09 | 12.07536296 |
| DOK7 | 1.082907525 | 2.56267524 | 6.477136202 | 4.75E-10 | 1.84E-09 | 12.07323729 |
| RNF144/ | 0.676841833 | 3.34742435 | 6.476465774 | 4.77E-10 | 1.84E-09 | 12.06950929 |
| CMPK1 | -0.441599993 | 6.89715562 | -6.475257712 | 4.80E-10 | 1.85E-09 | 12.06279241 |
| KCNC4 | -0.328849643 | 1.1718265 | -6.472040465 | 4.89E-10 | 1.89E-09 | 12.04490876 |
| DEXI | -0.452087562 | 3.9885552 | -6.471304706 | 4.91E-10 | 1.90E-09 | 12.04081981 |
| ST6GAL2 | -0.990321034 | 5.22380103 | -6.469437399 | 4.96E-10 | 1.92E-09 | 12.03044382 |
| NAP1L4 | -0.33824422 | 6.39202947 | -6.466877171 | 5.03E-10 | 1.94E-09 | 12.01622099 |
| MBOAT2 | 0.80298464 | 4.01506969 | 6.466581525 | 5.04E-10 | 1.95E-09 | 12.01457885 |
| NCALD | -0.453101078 | 1.77658301 | -6.466195815 | 5.05E-10 | 1.95E-09 | 12.01243654 |
| C1GALT | -0.458185988 | 3.34834012 | -6.464170602 | 5.11E-10 | 1.97E-09 | 12.0011896 |
| RAP1A | -0.374853677 | 5.55816357 | -6.463899763 | 5.12E-10 | 1.97E-09 | 11.9996857 |
| SLTM | -0.459618274 | 5.07849293 | -6.463641884 | 5.13E-10 | 1.98E-09 | 11.9982538 |
| GSTA4 | -0.532008348 | 4.71260174 | -6.463358219 | 5.14E-10 | 1.98E-09 | 11.99667877 |

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| PEX5 | -0.428032396 | 4.55630312 | -6.462048949 | 5.17E-10 | 1.99E-09 | 11.98940979 |
| CCDC15 | -0.431744019 | 1.61047944 | -6.46200348 | 5.18E-10 | 1.99E-09 | 11.98915737 |
| PPM1F | -0.398273758 | 3.45562971 | -6.461926047 | 5.18E-10 | 1.99E-09 | 11.9887275 |
| CTU2 | -0.360798567 | 3.94277463 | -6.461404229 | 5.19E-10 | 2.00E-09 | 11.98583074 |
| TMEM12 | -0.378234734 | 2.43543904 | -6.460787414 | 5.21E-10 | 2.01E-09 | 11.98240683 |
| COG1 | -0.350287175 | 4.57412869 | -6.460398222 | 5.22E-10 | 2.01E-09 | 11.98024657 |
| CBX7 | -0.502415505 | 5.13880038 | -6.460369909 | 5.22E-10 | 2.01E-09 | 11.98008942 |
| TRAPPC | -0.419903674 | 4.52514505 | -6.459212668 | 5.26E-10 | 2.02E-09 | 11.97366658 |
| TMEM21 | -0.40477018 | 4.38459817 | -6.458805401 | 5.27E-10 | 2.03E-09 | 11.97140639 |
| ARPC5 | -0.338437829 | 5.20035941 | -6.458563723 | 5.28E-10 | 2.03E-09 | 11.97006521 |
| MYCN | -0.727274067 | 1.64521234 | -6.458212152 | 5.29E-10 | 2.03E-09 | 11.96811425 |
| SCUBE1 | -0.880452763 | 1.20491022 | -6.457461106 | 5.31E-10 | 2.04E-09 | 11.96394675 |
| MMP20 | 0.103307334 | 0.07423797 | 6.457181496 | 5.32E-10 | 2.04E-09 | 11.9623953 |
| LRRC57 | -0.378892237 | 3.19946886 | -6.45408729 | 5.41E-10 | 2.08E-09 | 11.94522999 |
| NCBP2 | -0.353108068 | 5.67945739 | -6.453063448 | 5.44E-10 | 2.09E-09 | 11.93955146 |
| CBLL1 | -0.438436063 | 3.94384882 | -6.452667038 | 5.46E-10 | 2.10E-09 | 11.93735302 |
| TFDP1 | -0.46794755 | 5.52464948 | -6.452628977 | 5.46E-10 | 2.10E-09 | 11.93714195 |
| ATP7B | -0.425754414 | 1.25077317 | -6.450507617 | 5.52E-10 | 2.12E-09 | 11.92537889 |
| TGM1 | 0.843434178 | 2.0432199 | 6.450472557 | 5.53E-10 | 2.12E-09 | 11.92518451 |
| RPRM | -0.692680552 | 1.36009973 | -6.450095597 | 5.54E-10 | 2.13E-09 | 11.92309454 |
| HLX | -0.624006099 | 2.48054832 | -6.449279317 | 5.56E-10 | 2.13E-09 | 11.91856917 |
| RPUSD1 | -0.3421664 | 4.35242118 | -6.44878841 | 5.58E-10 | 2.14E-09 | 11.91584783 |
| MIGA2 | -0.37621855 | 4.15035246 | -6.447867328 | 5.61E-10 | 2.15E-09 | 11.91074223 |
| SLC2A11 | -0.436178987 | 3.06752175 | -6.444308464 | 5.72E-10 | 2.19E-09 | 11.8910202 |
| QARS | -0.320538275 | 6.69455434 | -6.441677897 | 5.81E-10 | 2.23E-09 | 11.87644751 |
| CCDC81 | -0.214711298 | 0.59701643 | -6.440883971 | 5.83E-10 | 2.24E-09 | 11.8720502 |
| KIAA031 | -0.446067509 | 5.32953615 | -6.440238132 | 5.86E-10 | 2.24E-09 | 11.86847338 |
| ZC3H7A | -0.470162266 | 4.44793212 | -6.439640372 | 5.88E-10 | 2.25E-09 | 11.86516307 |
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| KIF7 | -0.522134226 | 2.78320972 | -6.437993266 | 5.93E-10 | 2.27E-09 | 11.85604278 |
| USP30 | -0.404295316 | 3.69629899 | -6.437938445 | 5.93E-10 | 2.27E-09 | 11.85573925 |
| PLAU | 1.430414877 | 6.22768368 | 6.437785587 | 5.94E-10 | 2.27E-09 | 11.85489294 |
| SRP54 | -0.442732062 | 5.35964956 | -6.437629102 | 5.94E-10 | 2.27E-09 | 11.85402657 |
| RHOJ | -0.538009229 | 3.24116972 | -6.437471948 | 5.95E-10 | 2.28E-09 | 11.8531565 |
| EIF6 | -0.365433311 | 7.44290256 | -6.436958498 | 5.97E-10 | 2.28E-09 | 11.85031395 |
| MVK | -0.370767299 | 3.88055934 | -6.436777189 | 5.97E-10 | 2.28E-09 | 11.84931023 |
| WBP4 | -0.348773535 | 4.41903757 | -6.436419697 | 5.98E-10 | 2.29E-09 | 11.84733123 |
| VPS33B | -0.315459232 | 3.74467348 | -6.435532038 | 6.01E-10 | 2.30E-09 | 11.84241768 |
| ACVR1B | -0.476751538 | 4.31610651 | -6.434441236 | 6.05E-10 | 2.31E-09 | 11.83638032 |
| ZNF674 | -0.297539172 | 1.4429031 | -6.433262454 | 6.09E-10 | 2.33E-09 | 11.82985683 |

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| SELENO | -0.400485595 | 6.39572866 | -6.432800728 | 6.11E-10 | 2.33E-09 | 11.82730183 |
| CHRM1 | -0.08076905 | 0.08616273 | -6.432006379 | 6.14E-10 | 2.34E-09 | 11.82290655 |
| WDR41 | -0.361226144 | 4.24297074 | -6.430158192 | 6.20E-10 | 2.37E-09 | 11.81268169 |
| S100B | 1.394820942 | 2.5618958 | 6.430043942 | 6.20E-10 | 2.37E-09 | 11.81204968 |
| ZBTB3 | -0.393816015 | 2.81345316 | -6.428813955 | 6.25E-10 | 2.38E-09 | 11.8052462 |
| SMAD7 | -0.604513576 | 5.12212817 | -6.427138163 | 6.31E-10 | 2.41E-09 | 11.79597832 |
| SLC25A3 | -0.516782323 | 1.49671461 | -6.426404213 | 6.33E-10 | 2.42E-09 | 11.7919198 |
| RIBC2 | -0.518958334 | 1.84927073 | -6.425393113 | 6.37E-10 | 2.43E-09 | 11.78632927 |
| PHLDA1 | -0.789268726 | 5.92718711 | -6.424783204 | 6.39E-10 | 2.44E-09 | 11.78295729 |
| C1orf116 | 1.239770034 | 4.38316259 | 6.424661871 | 6.40E-10 | 2.44E-09 | 11.78228651 |
| PMF1-BC | -0.482808795 | 2.90074017 | -6.423797131 | 6.43E-10 | 2.45E-09 | 11.77750612 |
| EXD2 | -0.421035669 | 3.90465304 | -6.423509496 | 6.44E-10 | 2.45E-09 | 11.77591614 |
| TRIM24 | -0.447653404 | 3.50636558 | -6.422992655 | 6.46E-10 | 2.46E-09 | 11.7730593 |
| MYO10 | -0.608739801 | 4.29184439 | -6.422733834 | 6.47E-10 | 2.46E-09 | 11.77162872 |
| BCAS4 | 0.664432119 | 3.4357639 | 6.421271967 | 6.52E-10 | 2.48E-09 | 11.76354937 |
| MCUB | 0.843348285 | 3.27104631 | 6.421193663 | 6.52E-10 | 2.48E-09 | 11.76311664 |
| P2RX3 | -0.171246549 | 0.15810601 | -6.420591646 | 6.55E-10 | 2.49E-09 | 11.75978986 |
| FATE1 | -0.52720663 | 1.01593588 | -6.419759619 | 6.58E-10 | 2.50E-09 | 11.75519241 |
| SAXO1 | -0.095823398 | 0.14424548 | -6.419672272 | 6.58E-10 | 2.50E-09 | 11.75470978 |
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| UBE2E1 | -0.354959911 | 5.95065727 | -6.418864108 | 6.61E-10 | 2.51E-09 | 11.75024465 |
| FADS2 | -0.605274147 | 2.2804647 | -6.418402729 | 6.63E-10 | 2.52E-09 | 11.74769569 |
| DHX40 | -0.446661171 | 4.82140997 | -6.418213657 | 6.63E-10 | 2.52E-09 | 11.74665117 |
| DOLPP1 | -0.419090318 | 4.35507899 | -6.418132189 | 6.64E-10 | 2.52E-09 | 11.74620111 |
| C1GALT | -0.443866579 | 5.61733404 | -6.417793621 | 6.65E-10 | 2.53E-09 | 11.74433079 |
| RNF13 | -0.502759212 | 5.96309459 | -6.416069363 | 6.71E-10 | 2.55E-09 | 11.73480669 |
| MEF2C | -0.543301694 | 3.65025904 | -6.415478123 | 6.74E-10 | 2.56E-09 | 11.73154135 |
| ALDH18A | -0.430595319 | 6.35969257 | -6.415464965 | 6.74E-10 | 2.56E-09 | 11.73146868 |
| CCDC16 | -0.215147223 | 0.28621647 | -6.415168344 | 6.75E-10 | 2.56E-09 | 11.72983057 |
| INTS12 | -0.383567089 | 4.20093775 | -6.414346279 | 6.78E-10 | 2.57E-09 | 11.72529093 |
| MED25 | -0.402105782 | 5.09545919 | -6.414300522 | 6.78E-10 | 2.57E-09 | 11.72503826 |
| EPAS1 | -0.685643677 | 6.88862563 | -6.412065488 | 6.87E-10 | 2.61E-09 | 11.71269805 |
| IRF5 | 0.559604296 | 3.16791532 | 6.411104367 | 6.91E-10 | 2.62E-09 | 11.70739241 |
| SHANK3 | -0.639897075 | 4.10274152 | -6.410438509 | 6.93E-10 | 2.63E-09 | 11.70371703 |
| PCDHAC | 0.678724231 | 1.24939877 | 6.409904209 | 6.95E-10 | 2.64E-09 | 11.70076802 |
| FXR2 | -0.361284832 | 5.1077159 | -6.408676891 | 7.00E-10 | 2.65E-09 | 11.69399465 |
| PSME3 | -0.409781251 | 5.53201453 | -6.408114836 | 7.02E-10 | 2.66E-09 | 11.69089307 |
| ATP6AP | -0.374999711 | 7.35593441 | -6.406757682 | 7.08E-10 | 2.68E-09 | 11.68340472 |
| SUGP1 | -0.343104403 | 4.27623954 | -6.40593545 | 7.11E-10 | 2.69E-09 | 11.67886846 |
| NUTM2B | -0.107483381 | 0.20691832 | -6.40391377 | 7.19E-10 | 2.72E-09 | 11.66771662 |

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| MTMR10 | -0.429210148 | 3.91683225 | -6.403079417 | 7.23E-10 | 2.74E-09 | 11.66311497 |
| SLC5A5 | -1.414234482 | 1.26707717 | -6.402595815 | 7.25E-10 | 2.74E-09 | 11.66044799 |
| URGCP | -0.327015534 | 4.27493277 | -6.398654403 | 7.41E-10 | 2.80E-09 | 11.63871722 |
| DYM | -0.399193834 | 4.68280233 | -6.398208103 | 7.43E-10 | 2.81E-09 | 11.63625718 |
| PLA2G12 | -0.423333006 | 4.79122033 | -6.396290593 | 7.51E-10 | 2.84E-09 | 11.62568912 |
| G6PD | -0.521330006 | 6.1853256 | -6.395734473 | 7.53E-10 | 2.85E-09 | 11.62262458 |
| FOLR3 | -0.535379478 | 0.67653162 | -6.394799691 | 7.57E-10 | 2.86E-09 | 11.61747383 |
| ACSS2 | -0.299320858 | 4.1149706 | -6.394024013 | 7.61E-10 | 2.87E-09 | 11.61320018 |
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| TUT1 | -0.386071601 | 3.81329701 | -6.393740326 | 7.62E-10 | 2.88E-09 | 11.61163727 |
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| SUV39H2 | -0.378322359 | 2.44113917 | -6.392398009 | 7.68E-10 | 2.90E-09 | 11.6042428 |
| SRR | -0.351226376 | 3.01335167 | -6.3920416 | 7.69E-10 | 2.90E-09 | 11.60227962 |
| MCFD2 | -0.612178135 | 6.41061594 | -6.388453569 | 7.85E-10 | 2.96E-09 | 11.58252041 |
| OSBPL6 | -0.463168695 | 0.7902671 | -6.386081233 | 7.95E-10 | 3.00E-09 | 11.56946042 |
| TNFSF14 | 0.415054437 | 0.69912067 | 6.385590199 | 7.98E-10 | 3.01E-09 | 11.56675766 |
| DTWD2 | -0.568243874 | 2.87273975 | -6.385290096 | 7.99E-10 | 3.01E-09 | 11.56510589 |
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| AIP | -0.357211872 | 7.39671696 | -6.384388399 | 8.03E-10 | 3.03E-09 | 11.56014331 |
| WDR89 | -0.368466631 | 4.11902498 | -6.38416193 | 8.04E-10 | 3.03E-09 | 11.55889699 |
| PREP | -0.371380474 | 4.79504261 | -6.383521971 | 8.07E-10 | 3.04E-09 | 11.55537531 |
| SPOUT1 | -0.355902212 | 4.44495816 | -6.383206186 | 8.08E-10 | 3.05E-09 | 11.55363765 |
| MAZ | -0.535295147 | 4.9395788 | -6.381146357 | 8.18E-10 | 3.08E-09 | 11.54230459 |
| TRAF6 | -0.432261928 | 2.93371311 | -6.380392385 | 8.21E-10 | 3.09E-09 | 11.53815694 |
| PIFO | -0.43958033 | 4.02140359 | -6.379329351 | 8.26E-10 | 3.11E-09 | 11.53230972 |
| WDR13 | -0.339025014 | 5.39578046 | -6.378158629 | 8.32E-10 | 3.13E-09 | 11.52587099 |
| GLYCTK | -0.362855614 | 2.4546594 | -6.377873464 | 8.33E-10 | 3.14E-09 | 11.52430276 |
| GP5 | -0.258197057 | 0.36043512 | -6.377199854 | 8.36E-10 | 3.15E-09 | 11.52059856 |
| RNF187 | -0.53498932 | 7.57966321 | -6.377131831 | 8.36E-10 | 3.15E-09 | 11.52022451 |
| GAS2L1 | -0.355137396 | 3.85827438 | -6.3770923 | 8.37E-10 | 3.15E-09 | 11.52000714 |
| FRA10AC | -0.367529819 | 3.54416607 | -6.375977489 | 8.42E-10 | 3.17E-09 | 11.51387744 |
| GOLGA8 | -0.121877496 | 0.15361709 | -6.37548597 | 8.44E-10 | 3.17E-09 | 11.51117511 |
| HIST1H3 | -0.350392638 | 0.66424405 | -6.375190799 | 8.46E-10 | 3.18E-09 | 11.50955236 |
| GTF2H2 | -0.365840486 | 0.94147882 | -6.375151876 | 8.46E-10 | 3.18E-09 | 11.50933838 |
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| RNF170 | -0.47040613 | 4.61571663 | -6.373921217 | 8.52E-10 | 3.20E-09 | 11.50257324 |
| NCF2 | 0.874740142 | 3.04567672 | 6.372058134 | 8.61E-10 | 3.23E-09 | 11.49233336 |
| TBC1D13 | -0.459068643 | 5.46232578 | -6.368399386 | 8.79E-10 | 3.30E-09 | 11.47223046 |
| OSTF1 | -0.378576717 | 6.68307061 | -6.367408908 | 8.84E-10 | 3.32E-09 | 11.46678974 |
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| TMEM23 | -0.776009219 | 3.74012737 | -6.365280103 | 8.94E-10 | 3.36E-09 | 11.45509825 |
| TFPT | -0.419526306 | 5.3823152 | -6.365236205 | 8.94E-10 | 3.36E-09 | 11.45485719 |
| ENPEP | -0.70233517 | 2.25306801 | -6.362551734 | 9.08E-10 | 3.41E-09 | 11.44011807 |
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| SH3BP2 | 0.497147296 | 3.23087039 | 6.359489559 | 9.24E-10 | 3.46E-09 | 11.42331068 |
| CHRNB1 | -0.488538416 | 4.33029678 | -6.35936999 | 9.24E-10 | 3.46E-09 | 11.42265452 |
| TMEM24 | -0.369583615 | 6.6307311 | -6.358908014 | 9.27E-10 | 3.47E-09 | 11.42011941 |
| SH2B1 | -0.405854547 | 5.15103022 | -6.358607032 | 9.28E-10 | 3.48E-09 | 11.41846784 |
| ACTR1A | -0.277454172 | 6.33450943 | -6.358565938 | 9.29E-10 | 3.48E-09 | 11.41824234 |
| ERICH2 | -0.777547431 | 2.24414119 | -6.358367878 | 9.30E-10 | 3.48E-09 | 11.41715556 |
| CUX2 | -1.133373658 | 0.95726783 | -6.357306791 | 9.35E-10 | 3.50E-09 | 11.41133369 |
| CCDC91 | -0.411436244 | 3.87115479 | -6.356920456 | 9.37E-10 | 3.51E-09 | 11.40921415 |
| WDR5 | -0.365123133 | 4.86501206 | -6.35677634 | 9.38E-10 | 3.51E-09 | 11.40842351 |
| ANKRD2 | -0.468371608 | 1.62280302 | -6.353449835 | 9.56E-10 | 3.58E-09 | 11.39017761 |
| PREX2 | -0.638653713 | 1.92722852 | -6.353257617 | 9.57E-10 | 3.58E-09 | 11.3891235 |
| MBD2 | -0.408826074 | 5.75290905 | -6.353021089 | 9.58E-10 | 3.58E-09 | 11.38782644 |
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| RPL11 | -0.381986124 | 10.2316019 | -6.352140226 | 9.63E-10 | 3.60E-09 | 11.38299629 |
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| MPP6 | -0.494214025 | 2.07360473 | -6.349073658 | 9.79E-10 | 3.66E-09 | 11.3661848 |
| ETV7 | 0.871510288 | 2.36229176 | 6.348861073 | 9.81E-10 | 3.66E-09 | 11.36501959 |
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| OLFM3 | -0.281908229 | 0.19045935 | -6.348026134 | 9.85E-10 | 3.68E-09 | 11.36044344 |
| TANGO6 | -0.389953604 | 2.62456067 | -6.348004492 | 9.85E-10 | 3.68E-09 | 11.36032482 |
| SOX17 | -0.630346582 | 2.54679317 | -6.347737093 | 9.87E-10 | 3.68E-09 | 11.35885936 |
| FAM178E | 0.699882619 | 1.27338663 | 6.347605305 | 9.88E-10 | 3.68E-09 | 11.35813711 |
| ZNF837 | -0.487556489 | 2.92283248 | -6.345828867 | 9.97E-10 | 3.72E-09 | 11.34840269 |
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| CLEC5A | 0.675007062 | 1.73432978 | 6.345167132 | 1.00E-09 | 3.73E-09 | 11.34477706 |
| NOXREC | -0.323085526 | 1.02070273 | -6.343740047 | 1.01E-09 | 3.76E-09 | 11.33695903 |
| GDAP1 | -0.4492603 | 3.41404244 | -6.342256756 | 1.02E-09 | 3.79E-09 | 11.32883444 |
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| KCNJ11 | -0.730243829 | 3.48315866 | -6.341204799 | 1.02E-09 | 3.81E-09 | 11.32307328 |
| ABHD17 | -0.376281489 | 4.01901797 | -6.340987727 | 1.02E-09 | 3.82E-09 | 11.32188455 |
| ZNF696 | -0.368236033 | 2.54267117 | -6.34090333 | 1.03E-09 | 3.82E-09 | 11.32142238 |
| CD109 | 0.964710506 | 2.51064876 | 6.340720688 | 1.03E-09 | 3.82E-09 | 11.32042223 |
| MAPK14 | -0.481606782 | 5.17350156 | -6.340399769 | 1.03E-09 | 3.83E-09 | 11.31866492 |
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| WNT11 | -0.806444575 | 1.34745191 | -6.33957324 | 1.03E-09 | 3.84E-09 | 11.31413924 |

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| IL17RD | 0.740890036 | 1.99775651 | 6.338201047 | 1.04E-09 | 3.87E-09 | 11.30662673 |
| GATD1 | -0.351736094 | 5.30605546 | -6.338046274 | 1.04E-09 | 3.87E-09 | 11.30577944 |
| R3HDM1 | -0.368999075 | 3.31651502 | -6.337678208 | 1.04E-09 | 3.88E-09 | 11.30376459 |
| GTF3A | -0.29955665 | 5.89138513 | -6.337517123 | 1.05E-09 | 3.88E-09 | 11.3028828 |
| TMEM63 | -0.582467402 | 1.25610237 | -6.336413619 | 1.05E-09 | 3.91E-09 | 11.29684265 |
| MLF1 | -0.494922476 | 3.27597387 | -6.334326828 | 1.06E-09 | 3.95E-09 | 11.28542245 |
| ZNF782 | -0.3664972 | 1.86636943 | -6.334279689 | 1.06E-09 | 3.95E-09 | 11.28516451 |
| NDUFAF | -0.332837678 | 3.31596617 | -6.334198555 | 1.06E-09 | 3.95E-09 | 11.28472055 |
| TIMP3 | -0.92305278 | 2.77914453 | -6.333910443 | 1.07E-09 | 3.96E-09 | 11.28314406 |
| CCN4 | 0.642837565 | 0.89916861 | 6.331984547 | 1.08E-09 | 4.00E-09 | 11.27260731 |
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| CPPED1 | -0.406087459 | 3.54988613 | -6.328766858 | 1.10E-09 | 4.07E-09 | 11.25500825 |
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| POP7 | -0.330944275 | 5.90486152 | -6.326703999 | 1.11E-09 | 4.12E-09 | 11.24372892 |
| POLR2H | -0.380066401 | 5.26209186 | -6.326266864 | 1.11E-09 | 4.12E-09 | 11.2413391 |
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| CHRNA4 | -0.523859685 | 0.48799377 | -6.324453315 | 1.12E-09 | 4.17E-09 | 11.23142566 |
| CNRIP1 | -0.441328626 | 2.43775621 | -6.323932705 | 1.13E-09 | 4.18E-09 | 11.22858023 |
| RWDD3 | -0.40180527 | 3.33308083 | -6.321679423 | 1.14E-09 | 4.23E-09 | 11.2162667 |
| MPP2 | -0.757564832 | 2.63103688 | -6.321498188 | 1.14E-09 | 4.23E-09 | 11.21527645 |
| DHDH | 0.788297295 | 1.89288937 | 6.320991343 | 1.15E-09 | 4.24E-09 | 11.21250719 |
| AARSD1 | -0.316866507 | 2.23146122 | -6.320652835 | 1.15E-09 | 4.25E-09 | 11.21065776 |
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| PGA5 | -0.345982828 | 0.34348522 | -6.319398548 | 1.16E-09 | 4.28E-09 | 11.20380565 |
| CPOX | -0.434970429 | 3.50008309 | -6.319219204 | 1.16E-09 | 4.28E-09 | 11.20282598 |
| CNST | -0.50265234 | 3.97860421 | -6.318925471 | 1.16E-09 | 4.29E-09 | 11.2012215 |
| CTNNBL | -0.347729948 | 4.83228121 | -6.318783965 | 1.16E-09 | 4.29E-09 | 11.20044857 |
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| SMARCD | -0.432667373 | 4.97928379 | -6.317686376 | 1.17E-09 | 4.31E-09 | 11.19445373 |
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| HMGN1 | -0.414913225 | 6.61439931 | -6.313908217 | 1.19E-09 | 4.40E-09 | 11.17382388 |
| NFKBIL1 | -0.38942079 | 5.713707 | -6.31384584 | 1.19E-09 | 4.40E-09 | 11.17348336 |
| SH2B2 | -0.486689839 | 3.27875401 | -6.31305138 | 1.20E-09 | 4.42E-09 | 11.16914655 |
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| GPNMB | 1.347763423 | 4.83564379 | 6.311657208 | 1.21E-09 | 4.46E-09 | 11.161537 |
| RHOT1 | -0.423382963 | 4.57890273 | -6.310451187 | 1.22E-09 | 4.49E-09 | 11.15495538 |

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| C11orf80 | 0.579740536 | 3.60811933 | 6.309805111 | 1.22E-09 | 4.50E-09 | 11.15142993 |
| ASNSD1 | -0.367066636 | 5.55516636 | -6.308803997 | 1.23E-09 | 4.52E-09 | 11.14596766 |
| PIGC | -0.293415744 | 4.11386555 | -6.306111171 | 1.25E-09 | 4.59E-09 | 11.13127821 |
| UBE2J2 | -0.325134143 | 4.8435715 | -6.306095392 | 1.25E-09 | 4.59E-09 | 11.13119215 |
| TRMT2B | -0.399661531 | 3.8099651 | -6.303757459 | 1.26E-09 | 4.65E-09 | 11.11844239 |
| POU2F3 | 0.679599761 | 2.25466839 | 6.303699298 | 1.26E-09 | 4.65E-09 | 11.11812526 |
| ACTR3B | -0.281477828 | 2.08651109 | -6.301910277 | 1.28E-09 | 4.70E-09 | 11.10837136 |
| LAMB4 | -0.187946246 | 0.20177595 | -6.301499594 | 1.28E-09 | 4.71E-09 | 11.10613256 |
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| DRAM2 | -0.311332821 | 5.15410842 | -6.300412627 | 1.29E-09 | 4.73E-09 | 11.10020759 |
| PLEKHA | -0.415379539 | 2.53143931 | -6.299789919 | 1.29E-09 | 4.75E-09 | 11.09681359 |
| TDRD9 | -1.107804386 | 2.16173266 | -6.299299574 | 1.29E-09 | 4.76E-09 | 11.0941412 |
| ARHGAF | -0.433900162 | 3.3833227 | -6.298902806 | 1.30E-09 | 4.77E-09 | 11.09197891 |
| ADRB1 | -0.365575645 | 0.68112164 | -6.296364032 | 1.32E-09 | 4.84E-09 | 11.07814558 |
| ZNF391 | -0.445778295 | 2.28635219 | -6.295711827 | 1.32E-09 | 4.85E-09 | 11.07459249 |
| C14orf93 | -0.350863128 | 3.52185104 | -6.29544312 | 1.32E-09 | 4.86E-09 | 11.0731287 |
| TIE1 | -0.586675976 | 4.13042362 | -6.294988867 | 1.33E-09 | 4.87E-09 | 11.07065425 |
| SYCE3 | -0.655627763 | 2.5498014 | -6.29424071 | 1.33E-09 | 4.89E-09 | 11.06657911 |
| ZNF512E | -0.477770387 | 4.45275134 | -6.293156541 | 1.34E-09 | 4.92E-09 | 11.06067436 |
| ZNF555 | -0.321341005 | 1.64759048 | -6.292896431 | 1.34E-09 | 4.93E-09 | 11.05925783 |
| RBM28 | -0.300625445 | 2.49434312 | -6.291484084 | 1.35E-09 | 4.96E-09 | 11.05156706 |
| GRAP | -0.400099575 | 1.04501156 | -6.291228766 | 1.35E-09 | 4.97E-09 | 11.05017689 |
| HESX1 | -0.353119536 | 1.45299568 | -6.291226543 | 1.35E-09 | 4.97E-09 | 11.05016479 |
| VILL | -0.573408869 | 2.67135297 | -6.290997032 | 1.36E-09 | 4.97E-09 | 11.04891516 |
| CDK5RA | -0.441112103 | 5.91395738 | -6.288582381 | 1.37E-09 | 5.04E-09 | 11.03577014 |
| CLDN16 | 1.788613581 | 4.94223662 | 6.288441913 | 1.38E-09 | 5.04E-09 | 11.03500557 |
| CTDP1 | -0.314741966 | 3.55377844 | -6.288428238 | 1.38E-09 | 5.04E-09 | 11.03493113 |
| DNAJB4 | -0.594225075 | 4.72403607 | -6.288340107 | 1.38E-09 | 5.04E-09 | 11.03445144 |
| MAPT | -0.531770228 | 0.69889236 | -6.287641203 | 1.38E-09 | 5.06E-09 | 11.0306475 |
| PUF60 | -0.422598383 | 6.22414537 | -6.287609002 | 1.38E-09 | 5.06E-09 | 11.03047224 |
| CPO | -0.367649381 | 1.18573058 | -6.285868875 | 1.40E-09 | 5.11E-09 | 11.0210026 |
| TADA3 | -0.376119911 | 6.52247116 | -6.285834562 | 1.40E-09 | 5.11E-09 | 11.02081589 |
| MYBPH | 0.874533314 | 1.34901194 | 6.28459517 | 1.41E-09 | 5.14E-09 | 11.0140724 |
| SPTBN4 | -0.401306866 | 0.98455249 | -6.284555029 | 1.41E-09 | 5.14E-09 | 11.01385401 |
| 11-Mar | 0.460534448 | 0.46920832 | 6.283729757 | 1.41E-09 | 5.17E-09 | 11.00936429 |
| PANK4 | -0.359773749 | 3.99944429 | -6.283568331 | 1.41E-09 | 5.17E-09 | 11.00848614 |
| FOXF1 | -0.597534974 | 1.8060779 | -6.283471638 | 1.41E-09 | 5.17E-09 | 11.00796014 |
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| DNAJC2 | -0.550904025 | 4.39574786 | -6.281245557 | 1.43E-09 | 5.23E-09 | 10.99585214 |
| KDM4D | -0.255964155 | 1.18881589 | -6.281238315 | 1.43E-09 | 5.23E-09 | 10.99581275 |
| GOLPH3 | -0.427677454 | 5.28545683 | -6.280953762 | 1.43E-09 | 5.24E-09 | 10.99426525 |
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| EHD4 | -0.440390689 | 5.14263072 | -6.279275487 | 1.45E-09 | 5.28E-09 | 10.98513924 |
| PWWP2I | -0.441010252 | 5.33228462 | -6.278803884 | 1.45E-09 | 5.30E-09 | 10.98257511 |
| ANAPC2 | -0.371359209 | 4.40597217 | -6.277340102 | 1.46E-09 | 5.34E-09 | 10.97461735 |
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| C1orf109 | -0.428521121 | 3.23857195 | -6.275531795 | 1.48E-09 | 5.39E-09 | 10.96478847 |
| C9orf152 | -0.358099603 | 0.34916908 | -6.275108016 | 1.48E-09 | 5.40E-09 | 10.96248536 |
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| SHMT1 | -0.471473067 | 5.01737491 | -6.270605379 | 1.52E-09 | 5.53E-09 | 10.93802194 |
| NAT1 | -0.502345453 | 1.7454542 | -6.270451223 | 1.52E-09 | 5.53E-09 | 10.93718462 |
| EFCAB1 | -0.307989065 | 2.15489167 | -6.269971052 | 1.52E-09 | 5.55E-09 | 10.93457659 |
| VEGFC | -0.518427946 | 6.04551779 | -6.269715303 | 1.53E-09 | 5.55E-09 | 10.93318756 |
| TMEM17 | -0.395215255 | 1.88061668 | -6.269020626 | 1.53E-09 | 5.57E-09 | 10.92941483 |
| RIC8A | -0.34498366 | 5.43301807 | -6.268461934 | 1.54E-09 | 5.59E-09 | 10.92638084 |
| HIST1H2 | -0.76886557 | 5.46524443 | -6.268037547 | 1.54E-09 | 5.60E-09 | 10.92407633 |
| SLC1A2 | -0.270236565 | 0.29839639 | -6.267847607 | 1.54E-09 | 5.61E-09 | 10.92304496 |
| CREB3L | -0.461642749 | 4.10117071 | -6.267504413 | 1.55E-09 | 5.62E-09 | 10.92118147 |
| DRAP1 | -0.456851648 | 8.12139042 | -6.267004388 | 1.55E-09 | 5.63E-09 | 10.91846654 |
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| TENM2 | -0.46836373 | 0.43722967 | -6.264972397 | 1.57E-09 | 5.69E-09 | 10.90743533 |
| DAND5 | -0.374293437 | 0.49157321 | -6.263743394 | 1.58E-09 | 5.73E-09 | 10.90076462 |
| PTGES3 | -0.4304333 | 7.72949084 | -6.259884666 | 1.61E-09 | 5.85E-09 | 10.8798267 |
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| DEAF1 | -0.424590681 | 5.39737411 | -6.259493877 | 1.62E-09 | 5.86E-09 | 10.87770676 |
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| WDR34 | -0.433816886 | 6.9698318 | -6.259321017 | 1.62E-09 | 5.87E-09 | 10.87676906 |
| RIMKLB | -0.461246257 | 3.68750335 | -6.259022594 | 1.62E-09 | 5.87E-09 | 10.87515029 |
| PLPP3 | -0.879878037 | 8.68364966 | -6.258914441 | 1.62E-09 | 5.88E-09 | 10.87456363 |
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| ELOF1 | -0.321268334 | 5.37088774 | -6.25679367 | 1.64E-09 | 5.94E-09 | 10.86306141 |
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| RHOT2 | -0.406825917 | 5.29074909 | -6.252950449 | 1.68E-09 | 6.07E-09 | 10.84222459 |
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| CFAP47 | -0.181529567 | 0.13586471 | -6.251741125 | 1.69E-09 | 6.10E-09 | 10.83566994 |
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| FOXC1 | -0.639050451 | 2.83630744 | -6.250693126 | 1.70E-09 | 6.14E-09 | 10.82999043 |
| OXA1L | -0.274642026 | 6.44517584 | -6.250066845 | 1.70E-09 | 6.16E-09 | 10.82659671 |
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| ZKSCAN | -0.446604298 | 1.88774584 | -6.243917748 | 1.76E-09 | 6.37E-09 | 10.79328894 |
| RERGL | -0.642638771 | 1.00796899 | -6.242694882 | 1.77E-09 | 6.41E-09 | 10.78666793 |
| PFKFB2 | -0.79707406 | 4.48946906 | -6.242375811 | 1.78E-09 | 6.42E-09 | 10.78494052 |
| ZNF518E | -0.564122081 | 2.98185712 | -6.24165556 | 1.78E-09 | 6.44E-09 | 10.78104143 |
| MAP3K1( | -0.326781716 | 2.8694185 | -6.240801371 | 1.79E-09 | 6.47E-09 | 10.77641769 |
| BSCL2 | -0.40789569 | 3.0175902 | -6.240428183 | 1.80E-09 | 6.49E-09 | 10.77439776 |
| FREM2 | -0.797228851 | 2.57833008 | -6.239639077 | 1.80E-09 | 6.51E-09 | 10.77012691 |
| HS6ST3 | -0.701006231 | 1.02236419 | -6.239434702 | 1.81E-09 | 6.52E-09 | 10.76902084 |
| ELFN2 | 0.580592225 | 0.51254681 | 6.238541077 | 1.82E-09 | 6.55E-09 | 10.76418491 |
| METAP1 | -0.34358368 | 1.85273427 | -6.238128001 | 1.82E-09 | 6.56E-09 | 10.76194968 |
| GALC | -0.493951286 | 4.09668507 | -6.238024618 | 1.82E-09 | 6.57E-09 | 10.76139028 |
| PPP1R1( | -0.460150576 | 5.82184519 | -6.235690522 | 1.84E-09 | 6.65E-09 | 10.74876228 |
| KAT7 | -0.434972787 | 4.21897151 | -6.235308902 | 1.85E-09 | 6.66E-09 | 10.74669795 |
| HIF3A | -0.397524693 | 0.72162957 | -6.235217077 | 1.85E-09 | 6.66E-09 | 10.74620125 |
| ZNF785 | -0.379778583 | 3.20507778 | -6.234768509 | 1.85E-09 | 6.68E-09 | 10.74377493 |
| SLC25A1 | -0.411746937 | 6.69856976 | -6.233402657 | 1.87E-09 | 6.73E-09 | 10.73638776 |
| CLTCL1 | -0.398357977 | 1.88276807 | -6.233397407 | 1.87E-09 | 6.73E-09 | 10.73635937 |
| RHOB | -0.772798304 | 8.00680792 | -6.231409962 | 1.89E-09 | 6.80E-09 | 10.72561248 |
| MXRA7 | -0.675228866 | 6.48561108 | -6.230998161 | 1.89E-09 | 6.81E-09 | 10.72338602 |
| GPR4 | -0.638424241 | 3.89648533 | -6.230431615 | 1.90E-09 | 6.83E-09 | 10.72032309 |
| PCDH9 | 0.342722555 | 0.45393196 | 6.228942192 | 1.91E-09 | 6.89E-09 | 10.71227178 |
| VEZT | -0.471498827 | 5.08704126 | -6.228722239 | 1.92E-09 | 6.90E-09 | 10.71108291 |
| SZRD1 | -0.33405695 | 6.50145075 | -6.228703752 | 1.92E-09 | 6.90E-09 | 10.71098299 |
| UBE2K | -0.405436722 | 5.50187203 | -6.22812454 | 1.92E-09 | 6.92E-09 | 10.70785243 |
| YWHAB | -0.406078312 | 7.90047617 | -6.22795803 | 1.92E-09 | 6.92E-09 | 10.70695251 |
| SDK2 | -0.645516874 | 1.10142401 | -6.226490655 | 1.94E-09 | 6.98E-09 | 10.69902269 |
| ZFAND4 | -0.370541789 | 2.54677415 | -6.22645871 | 1.94E-09 | 6.98E-09 | 10.69885007 |

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| ZNF653 | -0.365008418 | 3.0257536 | -6.225533291 | 1.95E-09 | 7.01E-09 | 10.69384976 |
| IGFBP7 | -0.635320612 | 9.13588468 | -6.225080203 | 1.96E-09 | 7.03E-09 | 10.69140178 |
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| HPRT1 | -0.314516525 | 5.79619462 | -6.22478572 | 1.96E-09 | 7.03E-09 | 10.6898108 |
| MUC16 | 0.481497748 | 0.40076884 | 6.224369733 | 1.96E-09 | 7.05E-09 | 10.68756348 |
| GOLGA8 | -0.183777501 | 0.25801821 | -6.224131456 | 1.97E-09 | 7.06E-09 | 10.68627626 |
| TNFRSF: | 0.95155947 | 4.5595924 | 6.221799765 | 1.99E-09 | 7.15E-09 | 10.67368194 |
| RIPK1 | -0.39928079 | 4.85683518 | -6.221027484 | 2.00E-09 | 7.18E-09 | 10.66951134 |
| FBXO24 | -0.235620216 | 0.63575464 | -6.220515061 | 2.01E-09 | 7.19E-09 | 10.66674427 |
| GUF1 | -0.350251068 | 4.00843237 | -6.22007588 | 2.01E-09 | 7.21E-09 | 10.66437284 |
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| INKA1 | -0.620990829 | 2.78336304 | -6.217319325 | 2.04E-09 | 7.32E-09 | 10.6494912 |
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| LTO1 | -0.329917564 | 2.73446756 | -6.215644086 | 2.06E-09 | 7.38E-09 | 10.64044957 |
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| LRRCC1 | -0.500599365 | 3.43405675 | -6.215383539 | 2.06E-09 | 7.39E-09 | 10.6390435 |
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| GP9 | -0.186828565 | 0.19790528 | -6.21406689 | 2.08E-09 | 7.44E-09 | 10.63193873 |
| CLEC1A | -0.447859096 | 1.89116584 | -6.213816501 | 2.08E-09 | 7.45E-09 | 10.63058773 |
| TARSL2 | -0.367290948 | 3.58641852 | -6.213807624 | 2.08E-09 | 7.45E-09 | 10.63053984 |
| MAN1B1 | -0.399254606 | 5.08321289 | -6.213063835 | 2.09E-09 | 7.48E-09 | 10.6265269 |
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| BANF2 | -0.366399004 | 0.28509814 | -6.203528244 | 2.20E-09 | 7.87E-09 | 10.57511115 |
| BEX4 | -0.517646962 | 8.01474073 | -6.203021629 | 2.21E-09 | 7.89E-09 | 10.57238112 |
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| VTI1A | -0.312334575 | 2.98220101 | -6.199470056 | 2.25E-09 | 8.03E-09 | 10.55324715 |
| C3orf62 | -0.328802058 | 3.0566958 | -6.199001067 | 2.26E-09 | 8.05E-09 | 10.55072109 |
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| RASSF9 | -0.465721299 | 1.0429557 | -6.197958271 | 2.27E-09 | 8.09E-09 | 10.54510491 |
| PSMA6 | -0.387525445 | 3.12876157 | -6.195644044 | 2.30E-09 | 8.19E-09 | 10.53264369 |
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| CTDSP1 | -0.388375838 | 7.00841846 | -6.189011099 | 2.39E-09 | 8.50E-09 | 10.49694686 |
| TSGA10I | -0.917322761 | 1.60536345 | -6.188886696 | 2.39E-09 | 8.50E-09 | 10.49627762 |
| CXCL2 | 1.390349098 | 3.67403177 | 6.188882393 | 2.39E-09 | 8.50E-09 | 10.49625448 |
| NUAK2 | -0.644794753 | 4.33148421 | -6.187984686 | 2.40E-09 | 8.54E-09 | 10.49142549 |
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| SLC17A9 | 0.711426553 | 1.88314064 | 6.187885504 | 2.40E-09 | 8.54E-09 | 10.49089199 |
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| SLC4A1A | -0.355353632 | 4.26795978 | -6.1870992 | 2.41E-09 | 8.57E-09 | 10.48666275 |
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| TFF1 | -0.661264866 | 0.57489014 | -6.18459007 | 2.45E-09 | 8.69E-09 | 10.47316969 |
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| ADGRD1 | -0.794322325 | 2.60245795 | -6.182840702 | 2.47E-09 | 8.77E-09 | 10.46376471 |
| KIF5C | -0.717886612 | 1.32429216 | -6.182089954 | 2.48E-09 | 8.80E-09 | 10.45972913 |
| SH3BP5 | -0.724007675 | 3.24383218 | -6.18180683 | 2.48E-09 | 8.82E-09 | 10.45820732 |
| PLPP6 | -0.401795497 | 3.90578728 | -6.181587271 | 2.49E-09 | 8.83E-09 | 10.4570272 |
| PRORP | -0.284777564 | 1.80282478 | -6.180856259 | 2.50E-09 | 8.86E-09 | 10.45309829 |
| SMYD2 | -0.38795559 | 4.39815192 | -6.179825933 | 2.51E-09 | 8.91E-09 | 10.44756128 |
| GADD45 | -0.511098503 | 6.55923317 | -6.179530523 | 2.52E-09 | 8.92E-09 | 10.44597385 |
| ABCA8 | -0.755106008 | 1.88108244 | -6.177482665 | 2.54E-09 | 9.02E-09 | 10.43497099 |
| TTC9B | -0.240933461 | 0.41848228 | -6.177199559 | 2.55E-09 | 9.03E-09 | 10.43345011 |
| XPO6 | -0.342173134 | 5.14460645 | -6.175623689 | 2.57E-09 | 9.11E-09 | 10.42498529 |
| EIF2B1 | -0.292980448 | 5.06388681 | -6.175330518 | 2.57E-09 | 9.12E-09 | 10.42341069 |
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| RPP30 | -0.247442715 | 3.6052046 | -6.17441877 | 2.59E-09 | 9.16E-09 | 10.41851412 |
| XKR4 | 0.177365114 | 0.15821909 | 6.173774031 | 2.60E-09 | 9.19E-09 | 10.41505185 |
| ARPC3 | -0.283888526 | 7.473598 | -6.171748278 | 2.63E-09 | 9.30E-09 | 10.40417523 |
| CAPN7 | -0.479797272 | 4.65656213 | -6.170154502 | 2.65E-09 | 9.38E-09 | 10.39561983 |
| UBE2Q2 | -0.449630405 | 5.20298734 | -6.170039843 | 2.65E-09 | 9.38E-09 | 10.3950044 |
| USP39 | -0.338355476 | 5.29808455 | -6.168634671 | 2.67E-09 | 9.45E-09 | 10.38746289 |
| ECHDC1 | -0.393703214 | 4.9638272 | -6.167838861 | 2.68E-09 | 9.49E-09 | 10.38319237 |
| RHEB | -0.410180369 | 5.92608503 | -6.167330102 | 2.69E-09 | 9.51E-09 | 10.38046245 |
| CHCHD3 | -0.45762658 | 5.25920662 | -6.167119813 | 2.69E-09 | 9.52E-09 | 10.37933412 |
| VANGL1 | -0.524195406 | 2.87304553 | -6.165841051 | 2.71E-09 | 9.59E-09 | 10.3724734 |
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| TM9SF1 | -0.413987088 | 3.07531327 | -6.164811703 | 2.73E-09 | 9.64E-09 | 10.36695158 |
| PI4K2B | -0.411566845 | 3.15610478 | -6.164357811 | 2.73E-09 | 9.66E-09 | 10.36451694 |
| C3orf70 | -0.442727633 | 1.47632141 | -6.164335812 | 2.74E-09 | 9.66E-09 | 10.36439895 |
| UBIAD1 | -0.363762552 | 3.7650407 | -6.163633423 | 2.75E-09 | 9.70E-09 | 10.36063167 |
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| OLA1 | -0.359303089 | 5.29561879 | -6.163214772 | 2.75E-09 | 9.71E-09 | 10.35838638 |
| TIMM44 | -0.332891272 | 4.67764587 | -6.163211992 | 2.75E-09 | 9.71E-09 | 10.35837147 |
| FMO4 | -0.358716631 | 2.7821878 | -6.16259279 | 2.76E-09 | 9.74E-09 | 10.3550508 |
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| DNTTIP2 | -0.328598064 | 4.51140526 | -6.161562071 | 2.78E-09 | 9.79E-09 | 10.34952378 |
| PPP6C | -0.379703378 | 5.74834619 | -6.15969605 | 2.81E-09 | 9.89E-09 | 10.33951938 |
| ZHX3 | -0.51624825 | 3.72329904 | -6.159649047 | 2.81E-09 | 9.89E-09 | 10.33926741 |
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| IQGAP3 | 0.484563962 | 1.13204126 | 6.159321395 | 2.81E-09 | 9.91E-09 | 10.33751099 |
| TMEM18 | -0.358278458 | 3.62900412 | -6.158792024 | 2.82E-09 | 9.93E-09 | 10.33467338 |
| AKAP7 | -0.432182851 | 2.59609085 | -6.1585815 | 2.82E-09 | 9.94E-09 | 10.33354495 |
| C1orf52 | -0.350597959 | 3.58708096 | -6.158419287 | 2.83E-09 | 9.95E-09 | 10.33267549 |
| POFUT1 | -0.423912895 | 4.99288011 | -6.158234549 | 2.83E-09 | 9.96E-09 | 10.33168532 |
| CD74 | 0.94163567 | 10.5698719 | 6.157079574 | 2.85E-09 | 1.00E-08 | 10.3254953 |
| FBXW10 | -0.209881379 | 0.20826024 | -6.156865995 | 2.85E-09 | 1.00E-08 | 10.32435073 |
| RPS21 | -0.46762689 | 9.57250263 | -6.154627093 | 2.89E-09 | 1.02E-08 | 10.31235422 |
| DAPP1 | 0.62853616 | 1.13036877 | 6.153376099 | 2.90E-09 | 1.02E-08 | 10.30565254 |
| SENP3 | -0.350686371 | 4.21868639 | -6.152181125 | 2.92E-09 | 1.03E-08 | 10.29925191 |
| LRG1 | 1.166836618 | 2.92381838 | 6.151940693 | 2.93E-09 | 1.03E-08 | 10.2979642 |
| SLC10A7 | -0.367700319 | 2.09209543 | -6.150994576 | 2.94E-09 | 1.03E-08 | 10.29289731 |
| PRMT5 | -0.608754596 | 5.14419971 | -6.150011632 | 2.96E-09 | 1.04E-08 | 10.28763382 |
| GYG2 | -0.593672279 | 1.56302189 | -6.149994674 | 2.96E-09 | 1.04E-08 | 10.28754302 |
| PALM | 0.960719747 | 4.79744792 | 6.149727417 | 2.96E-09 | 1.04E-08 | 10.28611202 |
| LRWD1 | -0.329798023 | 3.49316475 | -6.14926448 | 2.97E-09 | 1.04E-08 | 10.28363337 |
| HOMER1 | -0.596513055 | 3.88395647 | -6.14879759 | 2.98E-09 | 1.05E-08 | 10.2811337 |
| HTR1E | -0.315259697 | 0.27399869 | -6.148756093 | 2.98E-09 | 1.05E-08 | 10.28091154 |
| C6orf118 | -0.16460234 | 0.13677015 | -6.14747176 | 3.00E-09 | 1.05E-08 | 10.27403614 |
| AOC3 | -0.745116064 | 3.71398962 | -6.146505626 | 3.02E-09 | 1.06E-08 | 10.26886485 |
| TARS | -0.447095609 | 5.05350602 | -6.146499392 | 3.02E-09 | 1.06E-08 | 10.26883148 |
| HAUS7 | -0.383397213 | 1.37153117 | -6.146339957 | 3.02E-09 | 1.06E-08 | 10.26797816 |
| MCRIP1 | -0.406954586 | 6.26992377 | -6.145917884 | 3.03E-09 | 1.06E-08 | 10.26571922 |
| DFFA | -0.316070212 | 4.39049036 | -6.145652726 | 3.03E-09 | 1.06E-08 | 10.26430016 |
| PXYLP1 | -0.675066303 | 3.22587939 | -6.14490595 | 3.04E-09 | 1.07E-08 | 10.26030383 |
| ZNF414 | -0.37917682 | 4.11824138 | -6.144889913 | 3.04E-09 | 1.07E-08 | 10.26021801 |
| JMJD6 | -0.351145745 | 3.37996149 | -6.144547986 | 3.05E-09 | 1.07E-08 | 10.25838833 |

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| C5orf47 | -0.142241227 | 0.17668408 | -6.144351761 | 3.05E-09 | 1.07E-08 | 10.25733834 |
| CHCHD7 | -0.340607017 | 4.13592783 | -6.144326092 | 3.05E-09 | 1.07E-08 | 10.25720099 |
| CNIH1 | -0.393780388 | 5.19071215 | -6.143406555 | 3.07E-09 | 1.07E-08 | 10.25228097 |
| MPP5 | -0.543065884 | 4.34775784 | -6.143380437 | 3.07E-09 | 1.07E-08 | 10.25214123 |
| AKAP10 | -0.457201508 | 4.23958381 | -6.143016203 | 3.08E-09 | 1.08E-08 | 10.25019254 |
| PLA2G2E | 0.718988413 | 0.81316294 | 6.143007474 | 3.08E-09 | 1.08E-08 | 10.25014584 |
| SLC35F5 | -0.562772361 | 4.83753627 | -6.142670625 | 3.08E-09 | 1.08E-08 | 10.24834374 |
| EVA1B | -0.70860667 | 5.00719375 | -6.141972821 | 3.09E-09 | 1.08E-08 | 10.24461081 |
| COG3 | -0.436692106 | 4.18456641 | -6.141144749 | 3.11E-09 | 1.09E-08 | 10.24018141 |
| ONECUT | -0.083359844 | 0.08999092 | -6.139386034 | 3.14E-09 | 1.10E-08 | 10.23077543 |
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| BVES | -0.48019208 | 0.9162086 | -6.137792197 | 3.16E-09 | 1.11E-08 | 10.22225298 |
| GYS1 | -0.307442825 | 5.12073306 | -6.137633501 | 3.17E-09 | 1.11E-08 | 10.22140451 |
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| SHLD2 | -0.423886861 | 4.05419343 | -6.122464211 | 3.44E-09 | 1.20E-08 | 10.14037621 |
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| PCMTD1 | -0.473206654 | 5.14621416 | -6.12093679 | 3.47E-09 | 1.21E-08 | 10.1322256 |
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| ENPP5 | -0.561941102 | 5.80529115 | -6.073575437 | 4.49E-09 | 1.54E-08 | 9.88024836 |
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| ADGRE3 | 0.15687701 | 0.20053608 | 6.064868746 | 4.71E-09 | 1.61E-08 | 9.834085028 |
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| SORT1 | -0.428972654 | 6.09534716 | -6.042668049 | 5.32E-09 | 1.81E-08 | 9.716600062 |
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| TGFBR3| | 0.632714269 | 1.05339886 | 6.041516252 | 5.35E-09 | 1.82E-08 | 9.710513616 |
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| PRICKLE | 0.837456083 | 3.72779597 | 6.038481573 | 5.44E-09 | 1.85E-08 | 9.69448161 |
| TAOK2 | -0.360000399 | 4.73424361 | -6.03821292 | 5.45E-09 | 1.85E-08 | 9.693062627 |
| GRWD1 | -0.339158388 | 4.35933598 | -6.036698426 | 5.49E-09 | 1.87E-08 | 9.685064183 |
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| HIC2 | -0.477359527 | 2.09510166 | -6.031829642 | 5.64E-09 | 1.91E-08 | 9.659361037 |
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| SP2 | -0.486666924 | 4.84960831 | -6.018557626 | 6.06E-09 | 2.05E-08 | 9.589374839 |
| DCLK3 | -0.333143599 | 0.59180118 | -6.018129274 | 6.07E-09 | 2.06E-08 | 9.587117976 |
| IRF2BP1 | -0.368847373 | 5.57363926 | -6.017538541 | 6.09E-09 | 2.06E-08 | 9.584005771 |
| CDK11B | -0.322340532 | 4.70079574 | -6.01752083 | 6.09E-09 | 2.06E-08 | 9.583912463 |
| CAND2 | -0.509962004 | 2.35298962 | -6.017222431 | 6.10E-09 | 2.06E-08 | 9.582340474 |
| GOLGA5 | -0.400407539 | 5.81023428 | -6.016790163 | 6.12E-09 | 2.07E-08 | 9.580063359 |
| ZNF263 | -0.33482685 | 3.86849585 | -6.016033788 | 6.14E-09 | 2.08E-08 | 9.576079198 |
| UNC13D | 0.612918759 | 2.21436262 | 6.015903882 | 6.15E-09 | 2.08E-08 | 9.57539496 |
| KLHL14 | -0.558043111 | 4.36116546 | -6.015825585 | 6.15E-09 | 2.08E-08 | 9.574982564 |
| INIP | -0.417538434 | 4.11666829 | -6.015533886 | 6.16E-09 | 2.08E-08 | 9.5734462 |
| UCKL1 | -0.346146074 | 4.8947247 | -6.012634715 | 6.26E-09 | 2.11E-08 | 9.558179416 |
| ALDH1A | 0.963809563 | 3.00267189 | 6.011482949 | 6.30E-09 | 2.13E-08 | 9.552115853 |
| LRRC4 | -0.485604235 | 1.40657266 | -6.01120577 | 6.31E-09 | 2.13E-08 | 9.550656756 |
| FASTKD | -0.383328235 | 3.76349245 | -6.010171335 | 6.34E-09 | 2.14E-08 | 9.545211821 |
| TMEM81 | -0.281536191 | 2.51390661 | -6.010015863 | 6.35E-09 | 2.14E-08 | 9.544393526 |
| ZBTB45 | -0.332810199 | 4.04877562 | -6.009636466 | 6.36E-09 | 2.15E-08 | 9.542396719 |
| SYT14 | 0.633906395 | 2.5335475 | 6.009556378 | 6.36E-09 | 2.15E-08 | 9.54197522 |
| CYB5D1 | -0.48120123 | 1.56041944 | -6.00864923 | 6.39E-09 | 2.16E-08 | 9.537201234 |
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| SFRP2 | 1.993831297 | 4.21173224 | 6.008161728 | 6.41E-09 | 2.16E-08 | 9.534635911 |
| PRR9 | -0.335266242 | 0.28698891 | -6.008132206 | 6.41E-09 | 2.16E-08 | 9.534480565 |
| TASP1 | -0.434464253 | 3.42136013 | -6.006366214 | 6.47E-09 | 2.18E-08 | 9.525188952 |
| SLC25A6 | -0.375332914 | 9.68123332 | -6.006294681 | 6.47E-09 | 2.18E-08 | 9.52481263 |
| MAP10 | -0.577362464 | 2.03870437 | -6.003136748 | 6.59E-09 | 2.22E-08 | 9.508202716 |
| CD1C | 1.049635073 | 2.01652056 | 6.002801823 | 6.60E-09 | 2.22E-08 | 9.506441477 |
| SRSF2 | -0.389095196 | 6.59348155 | -6.002127601 | 6.62E-09 | 2.23E-08 | 9.502896244 |
| POLG2 | -0.373208683 | 2.97154865 | -6.001886421 | 6.63E-09 | 2.23E-08 | 9.501628131 |
| LRRC34 | -0.348632832 | 1.27713778 | -5.999315021 | 6.72E-09 | 2.26E-08 | 9.488110198 |
| PARP11 | -0.383524823 | 3.02797731 | -5.996723423 | 6.82E-09 | 2.29E-08 | 9.47449049 |

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|---|---|---|---|---|---|---|
| PTOV1 | -0.420861053 | 6.27537913 | -5.996542116 | 6.82E-09 | 2.30E-08 | 9.473537831 |
| CCR8 | 0.430259746 | 0.5363364 | 5.994145244 | 6.91E-09 | 2.33E-08 | 9.460945704 |
| MTO1 | -0.31002065 | 2.84671115 | -5.993601274 | 6.93E-09 | 2.33E-08 | 9.458088449 |
| CYGB | -0.717459895 | 4.48593591 | -5.992385691 | 6.98E-09 | 2.35E-08 | 9.451704187 |
| PLA2G15 | -0.388193871 | 4.30703507 | -5.992259233 | 6.98E-09 | 2.35E-08 | 9.451040087 |
| ZNF672 | -0.311052559 | 5.24666889 | -5.991860491 | 7.00E-09 | 2.35E-08 | 9.448946134 |
| ILKAP | -0.434398966 | 4.59057256 | -5.990946172 | 7.03E-09 | 2.36E-08 | 9.444145074 |
| SLC6A17 | -0.544114021 | 0.51504171 | -5.989146982 | 7.10E-09 | 2.39E-08 | 9.434699203 |
| PDE4C | 0.876853287 | 2.49998382 | 5.989031942 | 7.11E-09 | 2.39E-08 | 9.434095307 |
| SLC27A3 | -0.430557378 | 3.44208575 | -5.988936051 | 7.11E-09 | 2.39E-08 | 9.433591938 |
| KARS | -0.274221166 | 6.44355245 | -5.988052965 | 7.14E-09 | 2.40E-08 | 9.42895658 |
| YIF1B | -0.320892984 | 4.58208134 | -5.986641909 | 7.20E-09 | 2.42E-08 | 9.421550952 |
| C4orf36 | -0.343910049 | 2.31712264 | -5.986254185 | 7.21E-09 | 2.42E-08 | 9.419516297 |
| SLFN11 | -0.529921167 | 3.93545449 | -5.986086099 | 7.22E-09 | 2.42E-08 | 9.418634259 |
| LTB | 1.239296699 | 3.00779345 | 5.985789111 | 7.23E-09 | 2.43E-08 | 9.417075857 |
| DCLK1 | 0.521776181 | 1.09762845 | 5.985618607 | 7.24E-09 | 2.43E-08 | 9.416181191 |
| CYP20A1 | -0.348709212 | 3.69357099 | -5.985199046 | 7.26E-09 | 2.43E-08 | 9.413979749 |
| NAGK | -0.374758562 | 4.38520945 | -5.984906471 | 7.27E-09 | 2.44E-08 | 9.412444678 |
| PHF14 | -0.330840796 | 3.5349446 | -5.984190058 | 7.29E-09 | 2.45E-08 | 9.408686056 |
| C15orf62 | 0.45611327 | 1.83616774 | 5.98373977 | 7.31E-09 | 2.45E-08 | 9.406323824 |
| RIMBP2 | -0.647430522 | 1.26678749 | -5.982625015 | 7.36E-09 | 2.47E-08 | 9.400476336 |
| SCAMP5 | -0.465405151 | 3.94615674 | -5.9815826 | 7.40E-09 | 2.48E-08 | 9.395009053 |
| MED21 | -0.380539553 | 4.65319021 | -5.979026429 | 7.50E-09 | 2.51E-08 | 9.381605424 |
| STMN2 | 0.777640249 | 1.09912634 | 5.978881397 | 7.51E-09 | 2.51E-08 | 9.380845061 |
| ZNF217 | 0.614266112 | 4.87045521 | 5.978744088 | 7.51E-09 | 2.52E-08 | 9.380125195 |
| CRPPA | -0.249667658 | 1.01645793 | -5.978231713 | 7.53E-09 | 2.52E-08 | 9.377439101 |
| ANKRD2 | -0.377560264 | 3.73279352 | -5.977584944 | 7.56E-09 | 2.53E-08 | 9.374048709 |
| HELQ | -0.336974697 | 3.6759859 | -5.977514954 | 7.56E-09 | 2.53E-08 | 9.373681834 |
| TM9SF2 | -0.524941784 | 7.43276418 | -5.977248439 | 7.57E-09 | 2.53E-08 | 9.372284842 |
| NMT1 | -0.331843039 | 5.8250895 | -5.976590124 | 7.60E-09 | 2.54E-08 | 9.368834349 |
| SLC4A3 | -0.574787683 | 1.84094809 | -5.974069261 | 7.70E-09 | 2.58E-08 | 9.35562416 |
| SNX29 | -0.485930803 | 3.27473792 | -5.973451723 | 7.73E-09 | 2.59E-08 | 9.352388686 |
| TM4SF1 | 1.073388342 | 6.50830333 | 5.973201278 | 7.74E-09 | 2.59E-08 | 9.3510766 |
| CES2 | -0.426303879 | 5.64284436 | -5.971266564 | 7.82E-09 | 2.61E-08 | 9.340941992 |
| EFR3B | -0.638143626 | 2.91934774 | -5.970483081 | 7.85E-09 | 2.63E-08 | 9.336838582 |
| TMC6 | 0.772400758 | 4.70283214 | 5.97016518 | 7.87E-09 | 2.63E-08 | 9.335173723 |
| RASGRF | 0.917655835 | 1.5207241 | 5.969015636 | 7.92E-09 | 2.65E-08 | 9.32915408 |
| MAF1 | -0.295036977 | 7.25265095 | -5.968809648 | 7.92E-09 | 2.65E-08 | 9.32807551 |
| MOSPD3 | -0.373883596 | 4.75237885 | -5.967788243 | 7.97E-09 | 2.66E-08 | 9.322727746 |
| AKAP1 | -0.546246134 | 5.7099274 | -5.965206897 | 8.08E-09 | 2.70E-08 | 9.30921569 |

| ZNF789 | -0.366868471 | 2.40608585 | -5.963282421 | 8.16E-09 | 2.73E-08 | 9.299144895 |
|---|---|---|---|---|---|---|
| CDH22 | 0.810828759 | 1.49242024 | 5.962621792 | 8.19E-09 | 2.73E-08 | 9.295688384 |
| B4GALT4 | -0.375267628 | 3.66412413 | -5.961234364 | 8.25E-09 | 2.75E-08 | 9.288430093 |
| NSRP1 | -0.405474098 | 4.63920471 | -5.961062426 | 8.26E-09 | 2.76E-08 | 9.28753069 |
| SPATA6 | -0.407066648 | 3.48099462 | -5.961029619 | 8.26E-09 | 2.76E-08 | 9.287359081 |
| CERK | -0.531819121 | 5.2099331 | -5.95782748 | 8.41E-09 | 2.80E-08 | 9.270612484 |
| RNF130 | -0.292990415 | 4.13465141 | -5.957770471 | 8.41E-09 | 2.80E-08 | 9.270314401 |
| P2RY1 | -0.338160816 | 1.12149828 | -5.957530791 | 8.42E-09 | 2.81E-08 | 9.269061199 |
| DHRS9 | 0.742513316 | 1.1956339 | 5.957140336 | 8.44E-09 | 2.81E-08 | 9.267019732 |
| PRKCH | -0.516923044 | 3.99222714 | -5.955645713 | 8.51E-09 | 2.83E-08 | 9.259206137 |
| EIF4G3 | -0.464037751 | 5.31433336 | -5.954000233 | 8.58E-09 | 2.86E-08 | 9.250605609 |
| INO80B-\ | -0.065685916 | 0.08791418 | -5.953883713 | 8.59E-09 | 2.86E-08 | 9.249996653 |
| TMEM21 | -0.375761939 | 6.30646882 | -5.951509497 | 8.70E-09 | 2.90E-08 | 9.23759054 |
| CTNNA2 | -0.19553291 | 0.16049958 | -5.950127877 | 8.76E-09 | 2.92E-08 | 9.230372811 |
| PAPOLG | -0.504421187 | 3.63731771 | -5.94997271 | 8.77E-09 | 2.92E-08 | 9.229562283 |
| ZDHHC6 | -0.301447049 | 4.81447664 | -5.94981568 | 8.78E-09 | 2.92E-08 | 9.22874204 |
| LSM6 | -0.324088664 | 3.54977307 | -5.949718346 | 8.78E-09 | 2.92E-08 | 9.228233626 |
| ARIH2 | -0.391305266 | 4.81592069 | -5.949617642 | 8.79E-09 | 2.92E-08 | 9.227707611 |
| C16orf70 | -0.352611977 | 2.91043389 | -5.948497131 | 8.84E-09 | 2.94E-08 | 9.221855254 |
| STXBP3 | -0.383828269 | 4.74973558 | -5.946749678 | 8.92E-09 | 2.97E-08 | 9.212730081 |
| SNRNP4 | -0.363144257 | 2.81384016 | -5.945346602 | 8.99E-09 | 2.99E-08 | 9.205404711 |
| PNPT1 | -0.392486543 | 3.90331535 | -5.944895915 | 9.01E-09 | 3.00E-08 | 9.20305198 |
| HIST1H2 | -0.546910132 | 1.10704882 | -5.944190178 | 9.04E-09 | 3.01E-08 | 9.199368076 |
| CRYBB3 | -0.532346063 | 1.48381974 | -5.944047867 | 9.05E-09 | 3.01E-08 | 9.198625263 |
| PPP1R1I | 1.119439175 | 2.16641789 | 5.943996772 | 9.05E-09 | 3.01E-08 | 9.198358565 |
| CREBL2 | -0.412248525 | 6.56768579 | -5.943826435 | 9.06E-09 | 3.01E-08 | 9.197469492 |
| BAIAP3 | 1.028744207 | 2.81677923 | 5.943751924 | 9.07E-09 | 3.01E-08 | 9.197080582 |
| LAD1 | 0.844805652 | 5.03365822 | 5.941088891 | 9.20E-09 | 3.05E-08 | 9.183183471 |
| TYW1 | -0.369322973 | 4.18721035 | -5.940855098 | 9.21E-09 | 3.06E-08 | 9.181963641 |
| METAP2 | -0.377221842 | 5.59363559 | -5.93899384 | 9.30E-09 | 3.09E-08 | 9.1722537 |
| GIMAP5 | -0.337932043 | 0.94439092 | -5.938138899 | 9.34E-09 | 3.10E-08 | 9.167794358 |
| HAT1 | -0.441847849 | 4.13523792 | -5.937673719 | 9.37E-09 | 3.11E-08 | 9.165368198 |
| SPTBN1 | -0.568692047 | 5.829657 | -5.936504623 | 9.43E-09 | 3.13E-08 | 9.15927138 |
| PTEN | -0.354208116 | 4.7474603 | -5.934969667 | 9.50E-09 | 3.15E-08 | 9.151267989 |
| IGIP | -0.402232636 | 4.57923826 | -5.933675786 | 9.57E-09 | 3.17E-08 | 9.144522804 |
| THSD1 | -0.478044228 | 2.52987646 | -5.933412614 | 9.58E-09 | 3.18E-08 | 9.143150983 |
| IFT57 | -0.460760127 | 5.91671056 | -5.933061515 | 9.60E-09 | 3.18E-08 | 9.141320911 |
| CFL1 | -0.331100023 | 8.1830214 | -5.93205114 | 9.65E-09 | 3.20E-08 | 9.136054867 |
| C20orf20 | -0.254994973 | 0.66933959 | -5.931255243 | 9.69E-09 | 3.21E-08 | 9.131907151 |
| TMEM24 | -0.589967724 | 6.05809198 | -5.930672582 | 9.72E-09 | 3.22E-08 | 9.128870957 |

| | | | | | |
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| HNRNPF | -0.386362481 | 6.3043865 | -5.930622539 | 9.73E-09 | 3.22E-08 | 9.128610199 |
| BAMBI | -0.712533721 | 1.62028145 | -5.93007775 | 9.76E-09 | 3.23E-08 | 9.125771575 |
| RETREG | -0.447523383 | 3.90790708 | -5.929133391 | 9.80E-09 | 3.25E-08 | 9.12085146 |
| LIMCH1 | -0.561952225 | 4.76252675 | -5.929052655 | 9.81E-09 | 3.25E-08 | 9.120430853 |
| GOLGA8 | -0.157829083 | 0.1998086 | -5.928824831 | 9.82E-09 | 3.25E-08 | 9.119243988 |
| IGFBP6 | 1.581912977 | 7.31181775 | 5.928345324 | 9.85E-09 | 3.26E-08 | 9.11674608 |
| FMNL1 | 0.609672403 | 3.16952833 | 5.928200609 | 9.85E-09 | 3.26E-08 | 9.115992242 |
| CMSS1 | -0.304728599 | 3.41750722 | -5.925769576 | 9.98E-09 | 3.30E-08 | 9.10333079 |
| LNX1 | -0.578696594 | 4.10942596 | -5.924850738 | 1.00E-08 | 3.32E-08 | 9.098546265 |
| ALDH1L1 | -0.651913684 | 0.75294309 | -5.92429228 | 1.01E-08 | 3.33E-08 | 9.095638566 |
| PIGW | -0.394576259 | 3.05257422 | -5.924146617 | 1.01E-08 | 3.33E-08 | 9.094880185 |
| NKX2-1 | -0.557520601 | 8.16701774 | -5.922397642 | 1.02E-08 | 3.36E-08 | 9.085775392 |
| SLC25A3 | 0.513140612 | 4.30516047 | 5.922104097 | 1.02E-08 | 3.36E-08 | 9.084247457 |
| MROH6 | 0.795970817 | 2.75691355 | 5.921228376 | 1.02E-08 | 3.38E-08 | 9.079689577 |
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| ZHX1 | -0.50645415 | 4.76056667 | -5.919445187 | 1.03E-08 | 3.41E-08 | 9.070410159 |
| INPP1 | -0.299876427 | 4.55050788 | -5.918187883 | 1.04E-08 | 3.43E-08 | 9.063868637 |
| FCGR2A | 0.731709344 | 3.06176288 | 5.918123336 | 1.04E-08 | 3.43E-08 | 9.063532839 |
| FAM20C | 0.701769024 | 5.05919859 | 5.917000156 | 1.05E-08 | 3.45E-08 | 9.057690073 |
| STARD4 | -0.467704856 | 2.44300918 | -5.916777561 | 1.05E-08 | 3.46E-08 | 9.056532241 |
| PCLO | -0.40433715 | 1.39680485 | -5.916067424 | 1.05E-08 | 3.47E-08 | 9.052838656 |
| KLHDC2 | -0.475954907 | 4.77238587 | -5.914928026 | 1.06E-08 | 3.49E-08 | 9.046913098 |
| EIF2AK3 | -0.548058792 | 4.16546111 | -5.913731477 | 1.06E-08 | 3.51E-08 | 9.040691247 |
| TTC36 | -0.375115602 | 0.90380129 | -5.913145225 | 1.07E-08 | 3.52E-08 | 9.037643189 |
| NPIPB9 | -0.146723174 | 0.2270362 | -5.911904871 | 1.08E-08 | 3.54E-08 | 9.031195054 |
| RASL12 | -0.595633297 | 2.93517338 | -5.911706958 | 1.08E-08 | 3.55E-08 | 9.030166272 |
| LYAR | -0.311038111 | 3.59864276 | -5.908600782 | 1.09E-08 | 3.61E-08 | 9.01402335 |
| GPR150 | 0.208288947 | 0.41558036 | 5.908058249 | 1.10E-08 | 3.62E-08 | 9.011204444 |
| PRMT6 | -0.432991564 | 4.23559698 | -5.90688048 | 1.10E-08 | 3.64E-08 | 9.005085639 |
| FHAD1 | -0.458548272 | 1.01104435 | -5.906868682 | 1.10E-08 | 3.64E-08 | 9.005024351 |
| NUPR2 | -1.047854523 | 4.10021518 | -5.905516827 | 1.11E-08 | 3.66E-08 | 8.998002278 |
| SEC22C | -0.363815604 | 4.03696341 | -5.905144406 | 1.11E-08 | 3.67E-08 | 8.996067988 |
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| PIH1D3 | -0.110971176 | 0.10818951 | -5.902720499 | 1.13E-08 | 3.72E-08 | 8.983480911 |
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| LRRC4C | -0.56467953 | 1.09709309 | -5.900566865 | 1.14E-08 | 3.76E-08 | 8.972300629 |
| SLC35F2 | 0.660028333 | 4.61977306 | 5.899471741 | 1.15E-08 | 3.78E-08 | 8.966616633 |
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| Gene | | | | | | |
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| TPRA1 | -0.314089003 | 5.19692136 | -5.8982369 | 1.16E-08 | 3.80E-08 | 8.960208433 |
| TMEM18 | -0.302962965 | 2.50385074 | -5.897866822 | 1.16E-08 | 3.81E-08 | 8.958288113 |
| APPBP2 | -0.429972277 | 3.79245561 | -5.897572335 | 1.16E-08 | 3.81E-08 | 8.956760097 |
| MINDY3 | -0.357397157 | 4.1278473 | -5.897299565 | 1.16E-08 | 3.82E-08 | 8.955344819 |
| SIM2 | -0.32559164 | 0.6118661 | -5.89650658 | 1.17E-08 | 3.83E-08 | 8.951230664 |
| MAGI3 | -0.624943114 | 4.09528297 | -5.895883971 | 1.17E-08 | 3.85E-08 | 8.948000743 |
| DCUN1D | -0.384346144 | 3.71674935 | -5.895618343 | 1.17E-08 | 3.85E-08 | 8.946622819 |
| RPS7 | -0.363141956 | 7.68656484 | -5.895432745 | 1.17E-08 | 3.85E-08 | 8.945660072 |
| TREX2 | -0.307454735 | 0.66501908 | -5.895213291 | 1.18E-08 | 3.86E-08 | 8.944521734 |
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| POLR2I | -0.38170692 | 6.23567633 | -5.892016751 | 1.20E-08 | 3.92E-08 | 8.927944503 |
| ANKRD7 | -0.317412873 | 0.75715322 | -5.89166667 | 1.20E-08 | 3.93E-08 | 8.926129402 |
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| PIGN | -0.435339423 | 3.29693767 | -5.889790129 | 1.21E-08 | 3.96E-08 | 8.9164013 |
| DHX57 | -0.347184928 | 3.23689824 | -5.88960228 | 1.21E-08 | 3.97E-08 | 8.915427607 |
| JPT2 | -0.388591829 | 5.67032345 | -5.887765865 | 1.22E-08 | 4.01E-08 | 8.905910035 |
| FHOD3 | -0.663515221 | 1.79591279 | -5.887635701 | 1.22E-08 | 4.01E-08 | 8.90523552 |
| LYST | 0.541678291 | 3.08835664 | 5.887354225 | 1.23E-08 | 4.01E-08 | 8.903776944 |
| PEX10 | -0.371346366 | 4.10584492 | -5.887338663 | 1.23E-08 | 4.01E-08 | 8.903696302 |
| TTLL13P | -0.092904362 | 0.19040713 | -5.886553882 | 1.23E-08 | 4.03E-08 | 8.899629935 |
| ZNF596 | -0.380537627 | 2.0088864 | -5.886307632 | 1.23E-08 | 4.03E-08 | 8.898354069 |
| PHAX | -0.359602165 | 4.56463346 | -5.885958867 | 1.23E-08 | 4.04E-08 | 8.896547126 |
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| TMEM25 | -0.396382135 | 2.26421434 | -5.885745273 | 1.24E-08 | 4.04E-08 | 8.895440535 |
| DCLRE1 | -0.382434528 | 3.22642759 | -5.881861717 | 1.26E-08 | 4.13E-08 | 8.875325954 |
| DIRAS1 | 0.671939962 | 1.2772579 | 5.880272157 | 1.27E-08 | 4.16E-08 | 8.867095861 |
| FDXACB | -0.250449027 | 1.61533115 | -5.879945238 | 1.27E-08 | 4.17E-08 | 8.865403415 |
| REXO4 | -0.328778651 | 5.19596817 | -5.879164525 | 1.28E-08 | 4.18E-08 | 8.861361991 |
| HNRNPH | -0.379920872 | 7.12199902 | -5.879004441 | 1.28E-08 | 4.19E-08 | 8.860533358 |
| STK11 | -0.338222808 | 4.6030651 | -5.878967501 | 1.28E-08 | 4.19E-08 | 8.860342148 |
| LIN7A | -0.627971723 | 1.72801101 | -5.878345636 | 1.29E-08 | 4.20E-08 | 8.857123389 |
| RND3 | 0.793769281 | 3.41496247 | 5.877514753 | 1.29E-08 | 4.22E-08 | 8.852823161 |
| THYN1 | -0.318690872 | 6.46098018 | -5.877496121 | 1.29E-08 | 4.22E-08 | 8.85272674 |
| TMEM8B | -0.424895192 | 4.61428641 | -5.877435424 | 1.29E-08 | 4.22E-08 | 8.852412619 |
| MEIS2 | -0.441526603 | 1.21895044 | -5.877181917 | 1.29E-08 | 4.22E-08 | 8.851100704 |
| CHMP2B | -0.430917876 | 6.03435261 | -5.876653265 | 1.30E-08 | 4.23E-08 | 8.848365032 |
| TBCCD1 | -0.405557781 | 3.53336596 | -5.876622558 | 1.30E-08 | 4.23E-08 | 8.848206131 |

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| ZNF521 | -0.636906133 | 2.33829672 | -5.876580826 | 1.30E-08 | 4.23E-08 | 8.847990188 |
| ARF3 | -0.344354804 | 7.36577945 | -5.876247326 | 1.30E-08 | 4.24E-08 | 8.8462645 |
| FOLR1 | -0.931993698 | 5.43659677 | -5.875131916 | 1.31E-08 | 4.26E-08 | 8.840493379 |
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| FSD2 | -0.236165627 | 0.30698057 | -5.873773058 | 1.32E-08 | 4.29E-08 | 8.833463796 |
| SMARCD | -0.344670373 | 6.03977673 | -5.871790812 | 1.33E-08 | 4.34E-08 | 8.823211541 |
| SERF1A | -0.134298314 | 0.41411191 | -5.871069196 | 1.34E-08 | 4.35E-08 | 8.819479971 |
| PRSS22 | 0.785039049 | 3.79875695 | 5.870970805 | 1.34E-08 | 4.36E-08 | 8.818971205 |
| CASTOR | -0.421187946 | 2.46376492 | -5.870714253 | 1.34E-08 | 4.36E-08 | 8.817644643 |
| CCL7 | 0.384564087 | 0.49771197 | 5.870001172 | 1.34E-08 | 4.38E-08 | 8.813957722 |
| ALKBH1 | -0.338609376 | 3.74654136 | -5.86997222 | 1.34E-08 | 4.38E-08 | 8.813808034 |
| PTTG1 | -0.765073158 | 5.62716319 | -5.868762159 | 1.35E-08 | 4.40E-08 | 8.807552326 |
| MYLK4 | -0.260170143 | 0.86695809 | -5.86861224 | 1.35E-08 | 4.41E-08 | 8.80677735 |
| NAA10 | -0.348656152 | 4.25536555 | -5.868239365 | 1.36E-08 | 4.41E-08 | 8.804849916 |
| PRKCA | -0.579151655 | 1.87840782 | -5.866691314 | 1.37E-08 | 4.45E-08 | 8.796848863 |
| LRRC61 | -0.449929955 | 4.64414568 | -5.866302643 | 1.37E-08 | 4.46E-08 | 8.794840282 |
| SEC63 | -0.472670269 | 5.93779064 | -5.865731817 | 1.37E-08 | 4.47E-08 | 8.791890537 |
| RERG | -0.457325168 | 1.47637049 | -5.865208735 | 1.38E-08 | 4.48E-08 | 8.789187705 |
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| MROH7 | -0.385182377 | 0.81172244 | -5.862243541 | 1.40E-08 | 4.55E-08 | 8.773869632 |
| GPBP1 | -0.34622808 | 5.63532332 | -5.860625824 | 1.41E-08 | 4.59E-08 | 8.765515064 |
| LILRB3 | 0.332807419 | 0.93749431 | 5.859236211 | 1.42E-08 | 4.62E-08 | 8.75833992 |
| CPNE2 | -0.415493177 | 4.10396531 | -5.857835377 | 1.43E-08 | 4.66E-08 | 8.751108152 |
| CSF2RA | 0.637253692 | 1.98420502 | 5.857264111 | 1.44E-08 | 4.67E-08 | 8.748159384 |
| SSC4D | -0.90015575 | 2.10832222 | -5.856302191 | 1.45E-08 | 4.69E-08 | 8.743194634 |
| UBR7 | -0.336327805 | 5.04099012 | -5.853720033 | 1.47E-08 | 4.76E-08 | 8.72987043 |
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| ALAD | -0.42080914 | 5.44299588 | -5.853019097 | 1.47E-08 | 4.77E-08 | 8.7262543 |
| SIAH1 | -0.289399785 | 2.94525328 | -5.852909361 | 1.47E-08 | 4.78E-08 | 8.725688204 |
| ORC2 | -0.365129734 | 3.66039034 | -5.852735868 | 1.47E-08 | 4.78E-08 | 8.724793213 |
| PSPN | -0.316127893 | 2.38277052 | -5.850808347 | 1.49E-08 | 4.83E-08 | 8.714851207 |
| PPP6R2 | -0.337343841 | 5.34060173 | -5.850644448 | 1.49E-08 | 4.83E-08 | 8.71400594 |
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| SIK3 | -0.418307627 | 4.17088267 | -5.850227979 | 1.49E-08 | 4.84E-08 | 8.711858201 |
| FERMT1 | -0.695057102 | 1.51363575 | -5.846169303 | 1.53E-08 | 4.94E-08 | 8.690933611 |
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| COMMD | -0.312416259 | 4.61536204 | -5.8426403 | 1.55E-08 | 5.03E-08 | 8.67274877 |
| FLYWCH | -0.354225453 | 3.93484721 | -5.842179092 | 1.56E-08 | 5.04E-08 | 8.670372803 |
| SLC16A6 | -0.516494816 | 1.89463263 | -5.842015389 | 1.56E-08 | 5.05E-08 | 8.669529497 |

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| MEGF8 | -0.431957297 | 4.5570402 | -5.841456768 | 1.56E-08 | 5.06E-08 | 8.666651949 |
| TMEM35 | -0.544874397 | 4.87205946 | -5.840101392 | 1.58E-08 | 5.10E-08 | 8.659671048 |
| SCN4A | -0.787904445 | 2.560855 | -5.838645113 | 1.59E-08 | 5.14E-08 | 8.652171825 |
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| SLC16A1 | -0.503782818 | 3.27878129 | -5.837603212 | 1.60E-08 | 5.16E-08 | 8.646807351 |
| ADAM8 | 0.608469001 | 2.18550951 | 5.837121977 | 1.60E-08 | 5.17E-08 | 8.644329844 |
| GPM6B | -0.479822603 | 1.93397374 | -5.837021441 | 1.60E-08 | 5.18E-08 | 8.643812286 |
| PIANP | 0.749549767 | 1.60774027 | 5.836989597 | 1.60E-08 | 5.18E-08 | 8.64364835 |
| PPARD | -0.414311184 | 6.17546517 | -5.83556772 | 1.61E-08 | 5.21E-08 | 8.63632925 |
| DNAJC21 | -0.38070056 | 2.23927106 | -5.835031265 | 1.62E-08 | 5.23E-08 | 8.633568205 |
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| LIN7C | -0.383393142 | 4.8219879 | -5.833819922 | 1.63E-08 | 5.26E-08 | 8.627334338 |
| TSEN34 | -0.364368518 | 5.70371071 | -5.833484744 | 1.63E-08 | 5.27E-08 | 8.625609605 |
| TATDN1 | -0.358573335 | 3.92314829 | -5.8332936 | 1.63E-08 | 5.27E-08 | 8.624626062 |
| UBL4A | -0.355446468 | 5.95519722 | -5.832988609 | 1.64E-08 | 5.28E-08 | 8.623056769 |
| ACTR3C | -0.262864184 | 1.20149424 | -5.832488044 | 1.64E-08 | 5.29E-08 | 8.620481313 |
| HOOK2 | -0.461206777 | 4.8895744 | -5.831676469 | 1.65E-08 | 5.32E-08 | 8.616306032 |
| RNF212 | -0.792236865 | 2.08903791 | -5.830936366 | 1.65E-08 | 5.33E-08 | 8.612498836 |
| ANKK1 | -0.37909034 | 0.57911944 | -5.829935137 | 1.66E-08 | 5.36E-08 | 8.607348963 |
| LCMT2 | -0.347854691 | 2.9613744 | -5.826718092 | 1.69E-08 | 5.45E-08 | 8.590806496 |
| RAF1 | -0.365318552 | 5.48767265 | -5.825223666 | 1.70E-08 | 5.50E-08 | 8.583124337 |
| DLAT | -0.443754255 | 4.8742496 | -5.824479225 | 1.71E-08 | 5.52E-08 | 8.579298072 |
| BCAT1 | 0.760022187 | 2.14046288 | 5.823662953 | 1.72E-08 | 5.54E-08 | 8.575103041 |
| SKP2 | -0.37181796 | 2.69015477 | -5.823658079 | 1.72E-08 | 5.54E-08 | 8.575077992 |
| PRIMPOL | -0.355736821 | 3.44646625 | -5.822846443 | 1.73E-08 | 5.56E-08 | 8.570907235 |
| POT1 | -0.376803182 | 3.68056884 | -5.822152342 | 1.73E-08 | 5.58E-08 | 8.567340805 |
| PAQR6 | 0.679294491 | 2.3640246 | 5.821445933 | 1.74E-08 | 5.60E-08 | 8.563711472 |
| PLEC | 0.431688349 | 5.49340697 | 5.821227563 | 1.74E-08 | 5.61E-08 | 8.562589616 |
| IL2RB | 0.883817915 | 2.7595578 | 5.821095132 | 1.74E-08 | 5.61E-08 | 8.561909278 |
| FBXO33 | -0.403259414 | 4.3577273 | -5.820722838 | 1.75E-08 | 5.62E-08 | 8.55999676 |
| AXDND1 | -0.10997873 | 0.20192285 | -5.820687916 | 1.75E-08 | 5.62E-08 | 8.559817365 |
| APOBR | 0.666239721 | 2.55500332 | 5.818048225 | 1.77E-08 | 5.70E-08 | 8.546259695 |
| STIM1 | -0.503109028 | 5.90175558 | -5.817987927 | 1.77E-08 | 5.70E-08 | 8.545950055 |
| ZNRD1 | -0.349861036 | 3.62238494 | -5.81731803 | 1.78E-08 | 5.72E-08 | 8.542510184 |
| RAB11B | -0.364223515 | 8.12884525 | -5.814959639 | 1.80E-08 | 5.79E-08 | 8.53040244 |
| SLU7 | -0.358384091 | 5.40538199 | -5.814633364 | 1.80E-08 | 5.80E-08 | 8.528727673 |
| NDUFA1 | -0.457867947 | 5.06899127 | -5.814267326 | 1.81E-08 | 5.81E-08 | 8.526848887 |
| GABPA | -0.444591035 | 4.35257572 | -5.812853124 | 1.82E-08 | 5.85E-08 | 8.519590983 |
| PANK2 | -0.336144227 | 4.03611497 | -5.812312013 | 1.82E-08 | 5.86E-08 | 8.516814273 |
| CTSE | 1.444451013 | 3.70292606 | 5.811987693 | 1.83E-08 | 5.87E-08 | 8.515150122 |

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| GHDC | -0.55797337 | 5.86426877 | -5.811422514 | 1.83E-08 | 5.89E-08 | 8.512250242 |
| GNPTG | -0.317441356 | 6.0634266 | -5.810956977 | 1.84E-08 | 5.90E-08 | 8.509861778 |
| MRPL23 | -0.421176227 | 4.95554456 | -5.810737591 | 1.84E-08 | 5.91E-08 | 8.508736261 |
| TMEM45 | -0.555612592 | 1.76657836 | -5.809868427 | 1.85E-08 | 5.93E-08 | 8.504277486 |
| MYLIP | -0.608168864 | 6.31061967 | -5.808637123 | 1.86E-08 | 5.97E-08 | 8.497961828 |
| GTPBP8 | -0.326751534 | 3.32916828 | -5.807976093 | 1.87E-08 | 5.99E-08 | 8.494571671 |
| CAMK1 | -0.540862482 | 3.24787546 | -5.807655938 | 1.87E-08 | 6.00E-08 | 8.492929827 |
| C16orf72 | -0.3653811 | 3.45878011 | -5.807505414 | 1.87E-08 | 6.00E-08 | 8.492157922 |
| FSCN1 | -0.564194972 | 5.13967899 | -5.807198879 | 1.87E-08 | 6.01E-08 | 8.490586023 |
| TTC39B | 0.586686956 | 3.12873719 | 5.806389587 | 1.88E-08 | 6.04E-08 | 8.486436316 |
| C8G | -0.408591426 | 1.4564918 | -5.805373987 | 1.89E-08 | 6.07E-08 | 8.481229369 |
| SSR4 | -0.429366196 | 6.95059467 | -5.80530812 | 1.89E-08 | 6.07E-08 | 8.480891698 |
| RFNG | -0.324861527 | 5.13825869 | -5.803898161 | 1.91E-08 | 6.11E-08 | 8.47366411 |
| RCN2 | -0.528030739 | 4.87916403 | -5.803273367 | 1.91E-08 | 6.13E-08 | 8.470461786 |
| PPP3R1 | -0.334413288 | 5.20703026 | -5.802379515 | 1.92E-08 | 6.16E-08 | 8.465880888 |
| ZNF185 | -0.57898189 | 5.05964413 | -5.801926418 | 1.93E-08 | 6.17E-08 | 8.463559019 |
| PHF23 | -0.369352687 | 5.79865303 | -5.801841573 | 1.93E-08 | 6.18E-08 | 8.463124252 |
| PTGES3 | -0.073576319 | 0.08818087 | -5.801497831 | 1.93E-08 | 6.19E-08 | 8.461362877 |
| ZFP1 | -0.384702757 | 3.6456483 | -5.801394895 | 1.93E-08 | 6.19E-08 | 8.460835441 |
| ANO3 | -0.277370993 | 0.62797034 | -5.801090574 | 1.94E-08 | 6.20E-08 | 8.459276153 |
| EDARAD | -0.657776246 | 1.74735764 | -5.800833387 | 1.94E-08 | 6.20E-08 | 8.457958421 |
| ZNF780A | -0.364613307 | 2.81158889 | -5.800182826 | 1.95E-08 | 6.22E-08 | 8.454625386 |
| REM1 | -0.613420284 | 2.01845898 | -5.799970472 | 1.95E-08 | 6.23E-08 | 8.453537488 |
| C2CD5 | -0.428368118 | 4.41680871 | -5.799144587 | 1.96E-08 | 6.26E-08 | 8.449306741 |
| PTCD1 | -0.235305225 | 2.13662775 | -5.798766515 | 1.96E-08 | 6.27E-08 | 8.447370157 |
| TM4SF4 | 1.19043986 | 1.99843678 | 5.798002706 | 1.97E-08 | 6.29E-08 | 8.443458012 |
| AGPAT5 | -0.50570414 | 3.88569524 | -5.797527252 | 1.97E-08 | 6.31E-08 | 8.441022988 |
| LRRTM1 | -0.859110288 | 0.96827608 | -5.797259418 | 1.98E-08 | 6.31E-08 | 8.439651353 |
| PPME1 | -0.34090868 | 4.58635009 | -5.797025877 | 1.98E-08 | 6.32E-08 | 8.438455381 |
| ODF3L2 | -0.143403944 | 0.26099688 | -5.796471313 | 1.98E-08 | 6.34E-08 | 8.435615581 |
| PRKAR2 | -0.464696361 | 4.75304857 | -5.795803657 | 1.99E-08 | 6.36E-08 | 8.432196941 |
| SNX12 | -0.389424277 | 6.2636646 | -5.794876959 | 2.00E-08 | 6.39E-08 | 8.427452408 |
| MCIDAS | -0.405684463 | 1.69828805 | -5.794801531 | 2.00E-08 | 6.39E-08 | 8.427066254 |
| RIPOR1 | -0.397461902 | 4.75861144 | -5.794790753 | 2.00E-08 | 6.39E-08 | 8.427011078 |
| DPP4 | 1.542442634 | 5.38791353 | 5.794416631 | 2.01E-08 | 6.40E-08 | 8.425095828 |
| DECR2 | -0.412963862 | 3.06038534 | -5.793674111 | 2.01E-08 | 6.42E-08 | 8.421294909 |
| TCTN3 | -0.658995241 | 7.06337111 | -5.792794405 | 2.02E-08 | 6.45E-08 | 8.416792221 |
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| SLC12A4 | -0.431957572 | 4.97717631 | -5.790278887 | 2.05E-08 | 6.54E-08 | 8.4039197 |
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| ZNF436 | -0.522890743 | 4.47071258 | -5.789548388 | 2.06E-08 | 6.56E-08 | 8.400182363 |
| TMC3 | -0.484230394 | 0.8015244 | -5.789454784 | 2.06E-08 | 6.56E-08 | 8.399703493 |
| RNF141 | -0.424992328 | 4.2330585 | -5.789010435 | 2.06E-08 | 6.57E-08 | 8.397430348 |
| PTPRB | -0.571308016 | 3.42687309 | -5.788697806 | 2.07E-08 | 6.58E-08 | 8.395831118 |
| USO1 | -0.51849236 | 6.11671246 | -5.787550647 | 2.08E-08 | 6.62E-08 | 8.389963479 |
| MRPL41 | -0.466319739 | 6.21371368 | -5.787458351 | 2.08E-08 | 6.62E-08 | 8.389491428 |
| STRBP | -0.363168782 | 4.28159018 | -5.787385119 | 2.08E-08 | 6.63E-08 | 8.389116886 |
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| ATF4 | -0.377811697 | 8.01632448 | -5.786107085 | 2.09E-08 | 6.67E-08 | 8.382581025 |
| MAJIN | -0.252601566 | 0.37558503 | -5.784750652 | 2.11E-08 | 6.71E-08 | 8.375645446 |
| SLC1A5 | 0.852553256 | 4.48172881 | 5.784670885 | 2.11E-08 | 6.72E-08 | 8.375237625 |
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| PLD1 | -0.335913791 | 1.44000393 | -5.783021306 | 2.13E-08 | 6.77E-08 | 8.366804935 |
| ABITRAM | -0.357871183 | 4.69195858 | -5.781973084 | 2.14E-08 | 6.81E-08 | 8.361447351 |
| NRG2 | -0.250685041 | 0.43644483 | -5.780898689 | 2.15E-08 | 6.84E-08 | 8.355956771 |
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| UCK2 | -0.398619833 | 2.58955409 | -5.768110306 | 2.30E-08 | 7.30E-08 | 8.290663347 |
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| PRKRA | -0.30708522 | 4.8532937 | -5.767154705 | 2.31E-08 | 7.33E-08 | 8.285788812 |
| EPCAM | -0.511908626 | 9.05334811 | -5.766846188 | 2.32E-08 | 7.34E-08 | 8.284215197 |
| CCZ1B | -0.288547377 | 1.68687341 | -5.76537093 | 2.34E-08 | 7.40E-08 | 8.27669142 |
| CDKN2A | 0.718156724 | 1.66841899 | 5.765213821 | 2.34E-08 | 7.40E-08 | 8.275890258 |
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| YBX3 | 0.487784426 | 5.57375783 | 5.760908026 | 2.39E-08 | 7.57E-08 | 8.25393974 |
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| EPHX3 | 0.585204014 | 1.27823148 | 5.757016128 | 2.44E-08 | 7.71E-08 | 8.234110091 |
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| PPP2CB | -0.411956951 | 6.45081992 | -5.725787292 | 2.87E-08 | 9.00E-08 | 8.075369738 |
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| ESPN | 0.987804012 | 1.70434802 | 5.677630564 | 3.69E-08 | 1.14E-07 | 7.831891014 |
| POLL | -0.308095498 | 4.2561497 | -5.677461354 | 3.70E-08 | 1.14E-07 | 7.831038301 |
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| ENOSF1 | -0.466575198 | 3.94524785 | -5.67075506 | 3.83E-08 | 1.18E-07 | 7.79725869 |
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| ZNF280 | -0.331455968 | 2.7971287 | -5.66251402 | 3.99E-08 | 1.23E-07 | 7.755790991 |
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| KIAA132 | -0.682575948 | 2.23611084 | -5.660804104 | 4.03E-08 | 1.24E-07 | 7.747192811 |
| GSTO1 | -0.301386877 | 7.40035566 | -5.659327358 | 4.06E-08 | 1.25E-07 | 7.739768736 |
| CSF1 | 0.567745209 | 4.18967932 | 5.658909277 | 4.07E-08 | 1.25E-07 | 7.737667178 |
| KCNJ10 | -0.447288105 | 0.80257605 | -5.658883322 | 4.07E-08 | 1.25E-07 | 7.737536718 |
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| LRTM2 | -0.195434623 | 0.14318698 | -5.658537192 | 4.08E-08 | 1.25E-07 | 7.735796934 |
| SEL1L3 | 0.901109155 | 5.08316286 | 5.656759291 | 4.11E-08 | 1.27E-07 | 7.726861816 |
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| CARD8 | -0.354789555 | 3.07196039 | -5.6552747 | 4.15E-08 | 1.27E-07 | 7.719402447 |
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| PDZRN3 | 0.551330098 | 1.08999327 | 5.649739962 | 4.27E-08 | 1.31E-07 | 7.691606408 |
| PHLDB2 | 0.624081717 | 2.57900524 | 5.649421567 | 4.27E-08 | 1.31E-07 | 7.690008038 |
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| BPNT1 | -0.380090996 | 4.98474791 | -5.647594315 | 4.31E-08 | 1.32E-07 | 7.680836431 |
| NOP58 | -0.340208662 | 5.56848907 | -5.64732243 | 4.32E-08 | 1.33E-07 | 7.679471943 |
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| CCDC74 | -0.558564438 | 1.93086884 | -5.643962141 | 4.40E-08 | 1.35E-07 | 7.662612152 |
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| MAP2K1 | -0.418534441 | 5.13727118 | -5.643686387 | 4.40E-08 | 1.35E-07 | 7.661228943 |
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| NFE2L1 | -0.434187335 | 7.42770395 | -5.641181155 | 4.46E-08 | 1.37E-07 | 7.648664837 |
| FGFR2 | -0.661544369 | 4.48245912 | -5.640684597 | 4.47E-08 | 1.37E-07 | 7.646175045 |
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| GPC3 | -0.676045186 | 1.23443113 | -5.638306686 | 4.53E-08 | 1.39E-07 | 7.63425431 |
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| CCDC13 | -0.389311745 | 4.69106432 | -5.63596773 | 4.58E-08 | 1.40E-07 | 7.622532671 |
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| SH3BP1 | 0.556526457 | 2.64353251 | 5.632865254 | 4.66E-08 | 1.42E-07 | 7.606990514 |
| DOK2 | 0.73185765 | 2.60984491 | 5.632511801 | 4.66E-08 | 1.42E-07 | 7.60522028 |
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| ZNF764 | -0.263152937 | 2.9527453 | -5.630598933 | 4.71E-08 | 1.44E-07 | 7.595641364 |
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| ADAMTS | 0.485852654 | 1.10438792 | 5.628278023 | 4.77E-08 | 1.45E-07 | 7.584022535 |
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| HILPDA | -0.359706001 | 3.28203887 | -5.619007018 | 5.00E-08 | 1.52E-07 | 7.537647708 |
| RAB26 | -0.438612034 | 1.69299459 | -5.618970958 | 5.00E-08 | 1.52E-07 | 7.537467452 |
| LRRC15 | 0.949322273 | 1.15492593 | 5.618947319 | 5.00E-08 | 1.52E-07 | 7.537349279 |
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| MSTO1 | -0.308273573 | 3.10214928 | -5.61510148 | 5.10E-08 | 1.55E-07 | 7.518129522 |
| CARMIL3 | -0.178810876 | 0.5479286 | -5.614956899 | 5.11E-08 | 1.55E-07 | 7.51740717 |
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| LRSAM1 | -0.323943949 | 4.32698124 | -5.613174861 | 5.15E-08 | 1.57E-07 | 7.508505007 |
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| RTCB | -0.440125127 | 6.13222663 | -5.612256338 | 5.18E-08 | 1.57E-07 | 7.503917394 |
| PCGF1 | -0.279146526 | 4.14422335 | -5.611689272 | 5.19E-08 | 1.58E-07 | 7.501085441 |
| ZSWIM3 | -0.320651099 | 2.61143737 | -5.609958498 | 5.24E-08 | 1.59E-07 | 7.492443266 |
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| NKX3-2 | 0.317968784 | 0.38835978 | 5.608745398 | 5.27E-08 | 1.60E-07 | 7.486387201 |
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| AKAP8 | -0.330523917 | 4.47298864 | -5.604798359 | 5.38E-08 | 1.63E-07 | 7.466689778 |
| C1QL2 | 0.898015498 | 0.99252397 | 5.604380229 | 5.39E-08 | 1.63E-07 | 7.464603764 |
| FHL2 | -0.645400866 | 2.97145557 | -5.604136441 | 5.40E-08 | 1.64E-07 | 7.463387584 |
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| ABCG5 | -0.061638335 | 0.09312504 | -5.603992273 | 5.40E-08 | 1.64E-07 | 7.462668397 |
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| ZNF227 | -0.315402135 | 2.83887935 | -5.601292061 | 5.48E-08 | 1.66E-07 | 7.449200923 |
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| GJB1 | -0.329564432 | 0.28690754 | -5.589245402 | 5.83E-08 | 1.76E-07 | 7.389179251 |
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| CPNE4 | 0.867356344 | 1.35172507 | 5.585378003 | 5.94E-08 | 1.79E-07 | 7.369931612 |
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| ST3GAL' | -0.623976837 | 6.62468225 | -5.579512298 | 6.12E-08 | 1.84E-07 | 7.340758498 |
| SCARA3 | 1.202658309 | 6.13413868 | 5.578876851 | 6.14E-08 | 1.85E-07 | 7.33759954 |
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| KLHL13 | 0.394080555 | 0.65397349 | 5.569768991 | 6.44E-08 | 1.93E-07 | 7.292353129 |
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| PPP1R1' | -0.293847798 | 6.51711545 | -5.569309989 | 6.45E-08 | 1.94E-07 | 7.290074409 |
| KATNB1 | -0.309022191 | 3.91066616 | -5.569195777 | 6.46E-08 | 1.94E-07 | 7.289507428 |
| MVP | 0.590705312 | 6.76557537 | 5.568384537 | 6.48E-08 | 1.94E-07 | 7.285480444 |
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| BATF3 | 0.49317721 | 1.42813085 | 5.567402244 | 6.52E-08 | 1.95E-07 | 7.280604975 |
| GRB2 | -0.326618785 | 6.4922789 | -5.567291171 | 6.52E-08 | 1.95E-07 | 7.280053721 |
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| SERHL2 | -0.375082647 | 1.22920767 | -5.556366437 | 6.90E-08 | 2.06E-07 | 7.225876652 |
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| NR1D1 | 0.871614803 | 5.70848627 | 5.555678374 | 6.92E-08 | 2.07E-07 | 7.222467261 |

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| HACD3 | -0.564780519 | 6.17900343 | -5.551424738 | 7.07E-08 | 2.11E-07 | 7.201397575 |
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| JUN | -0.82418317 | 8.07335754 | -5.539653852 | 7.51E-08 | 2.23E-07 | 7.143158435 |
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| HSPB1 | -0.47468825 | 9.47114172 | -5.533506 | 7.75E-08 | 2.30E-07 | 7.112779123 |
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| CCR9 | 0.302964808 | 0.24852242 | 5.518153198 | 8.38E-08 | 2.47E-07 | 7.03702976 |
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| SNTG2 | -0.268081923 | 0.53910801 | -5.507660593 | 8.84E-08 | 2.60E-07 | 6.985355415 |
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| PEX1 | -0.406755704 | 3.33479036 | -5.477852897 | 1.03E-07 | 3.00E-07 | 6.838980312 |
| KCNT2 | 0.418997689 | 0.90513704 | 5.47643035 | 1.04E-07 | 3.02E-07 | 6.832010351 |
| SYNCRII | -0.381082675 | 6.00328123 | -5.475005789 | 1.04E-07 | 3.04E-07 | 6.825031958 |
| CAMKK2 | -0.314806961 | 4.44563116 | -5.474245143 | 1.05E-07 | 3.05E-07 | 6.821306421 |
| ZNF862 | -0.39881695 | 3.03853003 | -5.473606806 | 1.05E-07 | 3.06E-07 | 6.818180253 |
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| UTP14C | -0.559697202 | 4.05011375 | -5.470574805 | 1.07E-07 | 3.11E-07 | 6.80333537 |
| MEX3A | 0.568684661 | 1.80085559 | 5.470359191 | 1.07E-07 | 3.11E-07 | 6.802279961 |
| ACACA | -0.402826363 | 3.34509268 | -5.468639523 | 1.08E-07 | 3.14E-07 | 6.793863499 |
| DDX19B | -0.253535085 | 3.94444504 | -5.468215518 | 1.08E-07 | 3.14E-07 | 6.791788638 |
| CD37 | 0.746661417 | 2.8868923 | 5.467980851 | 1.08E-07 | 3.15E-07 | 6.790640354 |
| HRAS | -0.385486237 | 5.49485236 | -5.467371692 | 1.08E-07 | 3.16E-07 | 6.787659774 |
| SIGLEC1 | 0.804093043 | 1.5774539 | 5.464913795 | 1.10E-07 | 3.19E-07 | 6.775636081 |
| PTPRQ | -0.337162558 | 0.39679242 | -5.464852059 | 1.10E-07 | 3.19E-07 | 6.775334132 |
| RPS14 | -0.354323072 | 8.91701108 | -5.464771668 | 1.10E-07 | 3.20E-07 | 6.774940946 |
| PPP1R3( | -0.592170988 | 2.03482049 | -5.464746136 | 1.10E-07 | 3.20E-07 | 6.774816069 |
| GTPBP1 | -0.277912687 | 2.75866033 | -5.464307728 | 1.10E-07 | 3.20E-07 | 6.772671938 |
| SENP2 | -0.388602523 | 4.28673612 | -5.464286996 | 1.10E-07 | 3.20E-07 | 6.772570551 |
| C15orf48 | 0.996887612 | 3.9229348 | 5.463711975 | 1.10E-07 | 3.21E-07 | 6.769758498 |
| TTC9 | -0.447609351 | 4.30369008 | -5.463316331 | 1.11E-07 | 3.22E-07 | 6.767823798 |
| SSR3 | -0.419645156 | 6.98849569 | -5.463236365 | 1.11E-07 | 3.22E-07 | 6.767432776 |
| TMEM20 | -0.41239623 | 4.06224889 | -5.462572683 | 1.11E-07 | 3.23E-07 | 6.764187656 |
| TTC38 | -0.35136845 | 4.65577105 | -5.462401996 | 1.11E-07 | 3.23E-07 | 6.763353121 |
| CDCA7L | -0.678704047 | 4.2216569 | -5.461826724 | 1.11E-07 | 3.24E-07 | 6.760540609 |
| PERP | 0.717314255 | 7.02595858 | 5.460362543 | 1.12E-07 | 3.26E-07 | 6.753383264 |
| HEPHL1 | -0.258828312 | 0.50841766 | -5.460274624 | 1.12E-07 | 3.26E-07 | 6.752953536 |

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| CRISPLE | -0.741437273 | 3.24506852 | -5.458691268 | 1.13E-07 | 3.29E-07 | 6.745215439 |
| BET1L | -0.310327583 | 6.04168194 | -5.457165269 | 1.14E-07 | 3.31E-07 | 6.737759332 |
| GJD4 | -0.249590147 | 0.23071639 | -5.456842096 | 1.14E-07 | 3.32E-07 | 6.736180502 |
| COMMD2 | -0.353677879 | 4.42146462 | -5.456444023 | 1.14E-07 | 3.32E-07 | 6.73423586 |
| THBS1 | 0.91717488 | 4.21851318 | 5.455395452 | 1.15E-07 | 3.34E-07 | 6.729113981 |
| GGTLC2 | -0.525496987 | 0.87863138 | -5.454910741 | 1.15E-07 | 3.35E-07 | 6.726746611 |
| PLOD3 | -0.284421224 | 5.02162879 | -5.454717467 | 1.16E-07 | 3.35E-07 | 6.72580269 |
| PODXL2 | -0.62624888 | 4.20191293 | -5.454673162 | 1.16E-07 | 3.35E-07 | 6.725586315 |
| EFCAB7 | -0.312803861 | 2.29254025 | -5.454601565 | 1.16E-07 | 3.35E-07 | 6.725236656 |
| KLHDC1( | -0.35425842 | 4.92098349 | -5.453449078 | 1.16E-07 | 3.37E-07 | 6.719608729 |
| GPN3 | -0.363127914 | 4.64087209 | -5.453096485 | 1.16E-07 | 3.38E-07 | 6.717887107 |
| EDN2 | -0.615349587 | 1.20320813 | -5.452814631 | 1.17E-07 | 3.38E-07 | 6.716510944 |
| PPP2R1/ | -0.29214025 | 7.27771048 | -5.452728333 | 1.17E-07 | 3.38E-07 | 6.716089605 |
| TPM1 | -0.396924082 | 4.77572297 | -5.452555724 | 1.17E-07 | 3.38E-07 | 6.715246874 |
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| IKZF3 | 0.766562485 | 2.6120552 | 5.449025305 | 1.19E-07 | 3.44E-07 | 6.698014915 |
| ZNF225 | -0.273552628 | 1.67581493 | -5.448564209 | 1.19E-07 | 3.45E-07 | 6.695764961 |
| DAAM2 | -0.76088467 | 2.86530064 | -5.448328308 | 1.19E-07 | 3.45E-07 | 6.694613917 |
| RTKN2 | 0.298534493 | 0.69633021 | 5.448119855 | 1.19E-07 | 3.46E-07 | 6.693596842 |
| ZCCHC9 | -0.340784443 | 3.5585632 | -5.447482817 | 1.20E-07 | 3.47E-07 | 6.690488811 |
| EFCAB5 | -0.128105726 | 0.30571698 | -5.446342586 | 1.20E-07 | 3.49E-07 | 6.684926479 |
| NEK1 | -0.432333901 | 2.95060746 | -5.446261956 | 1.21E-07 | 3.49E-07 | 6.684533181 |
| TFRC | -0.555451613 | 3.95214711 | -5.444774224 | 1.21E-07 | 3.51E-07 | 6.677277127 |
| ZNF235 | -0.271948216 | 1.41902793 | -5.441935678 | 1.23E-07 | 3.56E-07 | 6.663437159 |
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| PLXNA3 | 0.500890265 | 4.06370065 | 5.438074999 | 1.26E-07 | 3.63E-07 | 6.644622726 |
| CCNH | -0.30538449 | 4.51273549 | -5.43805113 | 1.26E-07 | 3.63E-07 | 6.644506436 |
| SEC14L: | -0.260617284 | 0.17602393 | -5.437670997 | 1.26E-07 | 3.64E-07 | 6.642654492 |
| TIAL1 | -0.305707654 | 4.97131357 | -5.437602085 | 1.26E-07 | 3.64E-07 | 6.642318776 |
| METTL1! | -0.3024918 | 3.03407838 | -5.436405868 | 1.27E-07 | 3.66E-07 | 6.636491741 |
| LRRIQ4 | -0.072569259 | 0.09964173 | -5.436265286 | 1.27E-07 | 3.66E-07 | 6.635807005 |
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| DLX4 | -0.35571031 | 0.67811795 | -5.434572357 | 1.28E-07 | 3.69E-07 | 6.627562278 |
| ORAI1 | -0.365915221 | 5.23068967 | -5.434382524 | 1.28E-07 | 3.69E-07 | 6.626637901 |
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| AP2A2 | -0.269543616 | 4.21872462 | -5.431034313 | 1.30E-07 | 3.75E-07 | 6.610338243 |

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|------|---|---|---|---|---|---|
| ZNF248 | -0.365908499 | 3.22605448 | -5.429647016 | 1.31E-07 | 3.78E-07 | 6.60358698 |
| MNDA | 0.733590787 | 3.1817518 | 5.428994564 | 1.31E-07 | 3.79E-07 | 6.600412304 |
| NEK9 | -0.371135744 | 4.62030009 | -5.427233441 | 1.33E-07 | 3.82E-07 | 6.591844605 |
| TTC26 | -0.352763534 | 2.82426771 | -5.426778113 | 1.33E-07 | 3.83E-07 | 6.589629833 |
| PSRC1 | -0.316681849 | 2.0081828 | -5.426611801 | 1.33E-07 | 3.83E-07 | 6.588820911 |
| FOSL2 | 0.651392471 | 5.13555903 | 5.425698576 | 1.34E-07 | 3.85E-07 | 6.584379426 |
| ANXA7 | -0.351782573 | 7.51188968 | -5.424836017 | 1.34E-07 | 3.87E-07 | 6.580184902 |
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| MED27 | -0.323258868 | 4.74845989 | -5.421267163 | 1.37E-07 | 3.94E-07 | 6.562835605 |
| ELFN1 | -0.391308871 | 1.64300991 | -5.420112302 | 1.37E-07 | 3.96E-07 | 6.557223411 |
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| RBM27 | -0.286648707 | 2.84032015 | -5.417211563 | 1.39E-07 | 4.01E-07 | 6.543131079 |
| MSR1 | 0.655355642 | 2.37059752 | 5.416201461 | 1.40E-07 | 4.03E-07 | 6.538225223 |
| ACOT4 | -0.355630033 | 2.21786904 | -5.415839791 | 1.40E-07 | 4.04E-07 | 6.536468843 |
| CHMP1B | -0.504923669 | 6.6319013 | -5.41577056 | 1.40E-07 | 4.04E-07 | 6.536132647 |
| TCEAL5 | -0.659109892 | 0.86437299 | -5.415357687 | 1.41E-07 | 4.05E-07 | 6.534127744 |
| CFAP161 | -0.385460447 | 0.56730821 | -5.41480248 | 1.41E-07 | 4.06E-07 | 6.53143186 |
| CLEC7A | 0.59670968 | 2.00593105 | 5.41412062 | 1.42E-07 | 4.07E-07 | 6.528121293 |
| RNF113A | -0.266707085 | 4.99041187 | -5.413947949 | 1.42E-07 | 4.08E-07 | 6.527282996 |
| DEDD | -0.270595736 | 5.09495348 | -5.412480263 | 1.43E-07 | 4.11E-07 | 6.520158394 |
| SMCO2 | 0.127741858 | 0.16104134 | 5.411266356 | 1.44E-07 | 4.13E-07 | 6.514266872 |
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| HTRA1 | -0.548654705 | 6.97505166 | -5.410464511 | 1.44E-07 | 4.15E-07 | 6.510375807 |
| HAPLN2 | -0.266357356 | 0.3738591 | -5.408684728 | 1.46E-07 | 4.18E-07 | 6.501740805 |
| ZNF749 | -0.316574644 | 1.93599565 | -5.407151022 | 1.47E-07 | 4.21E-07 | 6.494301505 |
| ANTXRL | -0.105630136 | 0.12387685 | -5.406311952 | 1.47E-07 | 4.23E-07 | 6.490232272 |
| B3GNT6 | 0.155412895 | 0.13061745 | 5.405788316 | 1.48E-07 | 4.24E-07 | 6.487693052 |
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| MAP3K6 | 0.407366622 | 4.82160845 | 5.403842742 | 1.49E-07 | 4.28E-07 | 6.478260271 |
| TEKT2 | -0.62402862 | 2.14605768 | -5.403271381 | 1.50E-07 | 4.29E-07 | 6.47549064 |
| MUTYH | -0.341968105 | 3.65176917 | -5.40305889 | 1.50E-07 | 4.30E-07 | 6.47446066 |
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| RNF180 | -0.441929714 | 3.56328613 | -5.401027756 | 1.51E-07 | 4.34E-07 | 6.464617073 |
| RAB30 | -0.458014078 | 2.71915245 | -5.399746707 | 1.52E-07 | 4.36E-07 | 6.458410168 |
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| RASGRF | 0.561706576 | 1.16701714 | 5.395290421 | 1.56E-07 | 4.46E-07 | 6.436827818 |
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| | | | | | | |
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| SFXN3 | 0.422487924 | 4.81777558 | 5.394057936 | 1.57E-07 | 4.49E-07 | 6.430861236 |
| CXorf56 | -0.367480991 | 4.95420071 | -5.393095321 | 1.57E-07 | 4.51E-07 | 6.426201879 |
| LAMP5 | 1.297402122 | 2.97345419 | 5.391352504 | 1.59E-07 | 4.55E-07 | 6.41776778 |
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| SMPD4 | -0.367404673 | 4.61419238 | -5.388765515 | 1.61E-07 | 4.60E-07 | 6.405252439 |
| TBX6 | -0.358820159 | 1.55626548 | -5.388190673 | 1.61E-07 | 4.62E-07 | 6.402472118 |
| SPRR1B | 0.676614756 | 0.64046033 | 5.387292289 | 1.62E-07 | 4.64E-07 | 6.398127398 |
| RAB11FI | 0.866934737 | 3.74404476 | 5.387064685 | 1.62E-07 | 4.64E-07 | 6.397026762 |
| ABCB10 | -0.399935664 | 3.29818896 | -5.386709553 | 1.62E-07 | 4.65E-07 | 6.395309507 |
| FRMPD2 | -0.436878017 | 0.84012862 | -5.386561626 | 1.63E-07 | 4.65E-07 | 6.394594226 |
| UBTD2 | -0.361383797 | 4.54521276 | -5.38635097 | 1.63E-07 | 4.65E-07 | 6.393575656 |
| PPP1R2 | -0.368216338 | 5.67539309 | -5.385310798 | 1.64E-07 | 4.68E-07 | 6.388546648 |
| TADA1 | -0.337805473 | 3.53276906 | -5.385106015 | 1.64E-07 | 4.68E-07 | 6.387556661 |
| APOL4 | 0.639860715 | 1.96354475 | 5.384853781 | 1.64E-07 | 4.69E-07 | 6.386337317 |
| PFDN4 | -0.271992259 | 4.23916152 | -5.384773476 | 1.64E-07 | 4.69E-07 | 6.385949117 |
| AK4 | 0.467220344 | 2.12140875 | 5.38471665 | 1.64E-07 | 4.69E-07 | 6.385674422 |
| MPZ | -0.345782071 | 1.59950741 | -5.384599078 | 1.64E-07 | 4.69E-07 | 6.385106082 |
| FFAR4 | 0.3128287 | 0.64202084 | 5.384369332 | 1.64E-07 | 4.70E-07 | 6.383995535 |
| KRI1 | -0.327931106 | 4.7142359 | -5.384112499 | 1.65E-07 | 4.70E-07 | 6.382754091 |
| PGAM5 | -0.304022323 | 4.58180107 | -5.383666138 | 1.65E-07 | 4.71E-07 | 6.38059665 |
| FGD5 | -0.464737087 | 3.31267495 | -5.382834816 | 1.66E-07 | 4.73E-07 | 6.376578925 |
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| NOX4 | 0.506266753 | 1.84677863 | 5.380604597 | 1.68E-07 | 4.78E-07 | 6.365802846 |
| ZCCHC7 | -0.311882639 | 4.08143579 | -5.380036908 | 1.68E-07 | 4.79E-07 | 6.363060427 |
| GIPC2 | -0.27914002 | 0.97768382 | -5.379046713 | 1.69E-07 | 4.82E-07 | 6.358277502 |
| CD68 | 0.42757885 | 0.90344266 | 5.378879597 | 1.69E-07 | 4.82E-07 | 6.357470351 |
| FAM207/ | -0.355670687 | 4.14396402 | -5.378814155 | 1.69E-07 | 4.82E-07 | 6.357154278 |
| GGACT | -0.308146407 | 2.3431782 | -5.377475538 | 1.70E-07 | 4.85E-07 | 6.35068971 |
| CFAP45 | -0.346438427 | 0.85565213 | -5.377062854 | 1.70E-07 | 4.86E-07 | 6.348696995 |
| TRABD | -0.383723045 | 5.07063709 | -5.37699342 | 1.71E-07 | 4.86E-07 | 6.348361732 |
| TRIM39-I | -0.311055911 | 2.96920574 | -5.376486295 | 1.71E-07 | 4.87E-07 | 6.34591319 |
| RHBDD2 | -0.371477585 | 8.36734438 | -5.375160881 | 1.72E-07 | 4.90E-07 | 6.339514577 |
| SLC6A3 | -0.294305627 | 0.35518919 | -5.373610303 | 1.73E-07 | 4.94E-07 | 6.332030555 |
| SLC25A4 | -0.365403737 | 3.88884783 | -5.372513928 | 1.74E-07 | 4.97E-07 | 6.326739825 |
| TOP1MT | -0.320509806 | 4.11084883 | -5.371881279 | 1.75E-07 | 4.98E-07 | 6.32368727 |
| GPRASP | -0.493140618 | 4.54353129 | -5.371216978 | 1.76E-07 | 5.00E-07 | 6.320482302 |
| ARMCX5 | -0.493140618 | 4.54353129 | -5.371216978 | 1.76E-07 | 5.00E-07 | 6.320482302 |
| TOX4 | -0.334735741 | 5.07063061 | -5.37042807 | 1.76E-07 | 5.02E-07 | 6.316676569 |
| P4HA1 | -0.440988194 | 5.19789721 | -5.369873761 | 1.77E-07 | 5.03E-07 | 6.314002817 |

| SLC9A2 | -0.462566422 | 1.29125361 | -5.369681923 | 1.77E-07 | 5.03E-07 | 6.313077522 |
|--------|--------------|------------|--------------|----------|----------|-------------|
| DTNBP1 | -0.322259088 | 4.66328269 | -5.369206813 | 1.77E-07 | 5.04E-07 | 6.310786037 |
| TMEM18 | -0.417513638 | 4.86753671 | -5.369134605 | 1.77E-07 | 5.05E-07 | 6.310437784 |
| AXL | 0.578299793 | 4.56589693 | 5.367653665 | 1.79E-07 | 5.08E-07 | 6.303296223 |
| FAM126E | -0.324463286 | 2.54300639 | -5.367576521 | 1.79E-07 | 5.08E-07 | 6.302924254 |
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| RASL10E | -0.476146229 | 1.17482707 | -5.366287984 | 1.80E-07 | 5.11E-07 | 6.296711873 |
| PPP1R14 | -0.595266091 | 2.70829326 | -5.366202537 | 1.80E-07 | 5.12E-07 | 6.296299949 |
| MAPK12 | -0.329625597 | 1.30149325 | -5.365927235 | 1.80E-07 | 5.12E-07 | 6.294972819 |
| SERGEF | -0.656863019 | 5.6078403 | -5.365871527 | 1.80E-07 | 5.12E-07 | 6.294704274 |
| LAS1L | -0.247355393 | 4.67878668 | -5.365122775 | 1.81E-07 | 5.14E-07 | 6.29109511 |
| PCSK4 | -0.431003894 | 2.0426137 | -5.364844217 | 1.81E-07 | 5.15E-07 | 6.289752495 |
| ZNF530 | -0.199566718 | 1.31983283 | -5.364498897 | 1.82E-07 | 5.15E-07 | 6.288088172 |
| TTC9C | -0.269843821 | 4.33445278 | -5.364477094 | 1.82E-07 | 5.15E-07 | 6.287983094 |
| ZNF584 | -0.278276439 | 3.15487875 | -5.36417466 | 1.82E-07 | 5.16E-07 | 6.286525543 |
| TTLL9 | -0.201037746 | 0.4712154 | -5.363583611 | 1.82E-07 | 5.18E-07 | 6.283677227 |
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| CNTN2 | -0.127162264 | 0.13690848 | -5.362204291 | 1.84E-07 | 5.21E-07 | 6.277031146 |
| ESM1 | -0.995194525 | 3.84477688 | -5.361944276 | 1.84E-07 | 5.21E-07 | 6.275778447 |
| SMAD2 | -0.312473223 | 3.43176264 | -5.361175836 | 1.85E-07 | 5.23E-07 | 6.272076545 |
| ALG9 | -0.277270825 | 2.11282099 | -5.360319115 | 1.85E-07 | 5.26E-07 | 6.267949857 |
| JAKMIP3 | -0.232974145 | 0.3225542 | -5.356978218 | 1.88E-07 | 5.34E-07 | 6.251862316 |
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| TMEM87 | -0.526197802 | 6.28229573 | -5.356491131 | 1.89E-07 | 5.35E-07 | 6.249517499 |
| ETF1 | -0.384027791 | 6.07474257 | -5.356086746 | 1.89E-07 | 5.36E-07 | 6.247570931 |
| ABCA12 | 0.177570529 | 0.26540059 | 5.354762326 | 1.91E-07 | 5.40E-07 | 6.241196469 |
| WFIKKN | -0.242380971 | 0.44737469 | -5.354523205 | 1.91E-07 | 5.40E-07 | 6.240045704 |
| TRAF4 | -0.364535005 | 5.23087815 | -5.353946529 | 1.91E-07 | 5.42E-07 | 6.237270643 |
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| SLC9A5 | 0.426375791 | 1.41787206 | 5.351983437 | 1.93E-07 | 5.47E-07 | 6.227825695 |
| RETN | 0.844594969 | 1.24045169 | 5.351827208 | 1.93E-07 | 5.47E-07 | 6.227074155 |
| HSPA8 | -0.650714453 | 8.66945042 | -5.351711057 | 1.93E-07 | 5.48E-07 | 6.226515421 |
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| NFYB | -0.311673187 | 4.15374381 | -5.350747106 | 1.94E-07 | 5.50E-07 | 6.221878804 |
| WTIP | 0.575743046 | 2.80061718 | 5.350738565 | 1.94E-07 | 5.50E-07 | 6.221837725 |
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| TMEM39 | -0.309437973 | 4.57128872 | -5.348555869 | 1.96E-07 | 5.56E-07 | 6.211341397 |
| WDR12 | -0.296609875 | 2.81760836 | -5.347881104 | 1.97E-07 | 5.57E-07 | 6.208097226 |
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| DLGAP1 | -0.39811955 | 0.64905145 | -5.347179635 | 1.98E-07 | 5.59E-07 | 6.204725008 |
| DIP2C | -0.464965813 | 2.94647967 | -5.345325367 | 2.00E-07 | 5.64E-07 | 6.19581257 |
| LAPTM4I | -0.48322021 | 6.0474733 | -5.344541587 | 2.00E-07 | 5.66E-07 | 6.192046116 |
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| NCMAP | -0.691779161 | 3.94195809 | -5.340641085 | 2.04E-07 | 5.77E-07 | 6.17330882 |
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| TPD52L2 | -0.260448381 | 6.07468436 | -5.339232376 | 2.06E-07 | 5.81E-07 | 6.166544327 |
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| PLEKHA | 0.957929179 | 5.80512496 | 5.336847396 | 2.08E-07 | 5.87E-07 | 6.15509512 |
| NUAK1 | -0.436235137 | 2.48025258 | -5.336808091 | 2.08E-07 | 5.87E-07 | 6.154906465 |
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| AKR1C2 | -0.708338781 | 0.75872695 | -5.331299291 | 2.14E-07 | 6.02E-07 | 6.128476995 |
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| YARS | -0.344107314 | 5.02474274 | -5.331170607 | 2.14E-07 | 6.03E-07 | 6.127859871 |
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| CHURC1 | -0.428666952 | 4.6777735 | -5.324046035 | 2.22E-07 | 6.23E-07 | 6.093711459 |
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| HLA-DRA | 1.021577015 | 9.77849659 | 5.321923243 | 2.24E-07 | 6.29E-07 | 6.083543877 |
| NEK10 | -0.087909375 | 0.17025419 | -5.321503799 | 2.25E-07 | 6.30E-07 | 6.08153524 |
| RPS16 | -0.33018831 | 9.39267269 | -5.319546258 | 2.27E-07 | 6.36E-07 | 6.072162632 |
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| BTRC | -0.354356049 | 3.80944276 | -5.315966597 | 2.31E-07 | 6.47E-07 | 6.055030533 |
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| RUSC1 | -0.323510787 | 3.70332269 | -5.312406482 | 2.35E-07 | 6.58E-07 | 6.038001133 |
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| CCDC92 | -0.269032829 | 4.71210721 | -5.312256406 | 2.35E-07 | 6.58E-07 | 6.037283466 |
| TTC39C | 0.395926573 | 1.4951687 | 5.311629031 | 2.36E-07 | 6.60E-07 | 6.034283505 |
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| PGM2 | -0.425032754 | 4.30144461 | -5.308862379 | 2.39E-07 | 6.69E-07 | 6.021057401 |
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| TMEM10 | 1.128103141 | 2.71939401 | 5.306370528 | 2.42E-07 | 6.77E-07 | 6.009149721 |
| DISC1 | -0.252895772 | 1.30450738 | -5.306325985 | 2.42E-07 | 6.77E-07 | 6.008936909 |
| CPSF3 | -0.285561349 | 4.97633075 | -5.305076239 | 2.44E-07 | 6.81E-07 | 6.00296654 |
| HLA-DPA | 1.025951123 | 6.46431722 | 5.304912908 | 2.44E-07 | 6.81E-07 | 6.002186345 |
| ZNF570 | -0.299601939 | 2.4029555 | -5.304646734 | 2.44E-07 | 6.82E-07 | 6.000914939 |
| MXRA5 | 0.760446658 | 5.15879735 | 5.304265757 | 2.45E-07 | 6.83E-07 | 5.999095251 |
| DYDC2 | -0.141776218 | 0.23250807 | -5.30143477 | 2.48E-07 | 6.93E-07 | 5.985576696 |
| KRIT1 | -0.441327195 | 4.16262834 | -5.301234801 | 2.48E-07 | 6.93E-07 | 5.984622022 |
| TACR3 | -0.067902725 | 0.05087253 | -5.300666496 | 2.49E-07 | 6.95E-07 | 5.981909025 |
| C16orf87 | -0.247193429 | 1.86050621 | -5.300531117 | 2.49E-07 | 6.96E-07 | 5.981262779 |
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| HIST4H4 | -0.361380295 | 1.30874618 | -5.299779331 | 2.50E-07 | 6.98E-07 | 5.977674308 |
| DENND2 | -0.461549732 | 1.52884267 | -5.298881638 | 2.51E-07 | 7.01E-07 | 5.973389914 |
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| SMS | -0.337907727 | 6.43509211 | -5.296964369 | 2.54E-07 | 7.07E-07 | 5.964241372 |
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| FAM13C | -0.377174959 | 1.12981005 | -5.294574263 | 2.57E-07 | 7.15E-07 | 5.95284033 |
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| PITRM1 | -0.305925217 | 4.69979025 | -5.290705504 | 2.62E-07 | 7.28E-07 | 5.934394718 |
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| ACBD7 | 0.845110433 | 2.42689966 | 5.289604078 | 2.63E-07 | 7.32E-07 | 5.929145275 |
| JPH2 | -0.396418638 | 0.99714098 | -5.289510638 | 2.63E-07 | 7.32E-07 | 5.928699977 |
| PSG8 | 0.804148191 | 0.76053877 | 5.289385148 | 2.63E-07 | 7.33E-07 | 5.928101947 |
| NSUN2 | -0.297624842 | 4.74516238 | -5.289254224 | 2.63E-07 | 7.33E-07 | 5.927478038 |
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| CNPY3 | -0.335805364 | 7.20490639 | -5.27564019 | 2.82E-07 | 7.81E-07 | 5.86266886 |
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| ADSL | -0.307442303 | 4.58736745 | -5.26870983 | 2.92E-07 | 8.06E-07 | 5.829728623 |
| ADCY4 | -0.435565702 | 2.53352967 | -5.268703074 | 2.92E-07 | 8.06E-07 | 5.829696527 |
| MCMDC2 | -0.144639364 | 0.61902382 | -5.268084561 | 2.92E-07 | 8.09E-07 | 5.826758408 |
| MBD1 | -0.310035569 | 4.74493499 | -5.2679981 | 2.93E-07 | 8.09E-07 | 5.826347714 |
| OMA1 | -0.319953281 | 4.23650824 | -5.265939744 | 2.96E-07 | 8.17E-07 | 5.816572044 |
| HNRNPK | -0.35280639 | 8.24566784 | -5.265199773 | 2.97E-07 | 8.20E-07 | 5.813058479 |
| CLDN9 | 1.040113018 | 3.64020602 | 5.264814282 | 2.97E-07 | 8.21E-07 | 5.811228226 |
| CDC16 | -0.262679928 | 5.79447033 | -5.261759398 | 3.02E-07 | 8.33E-07 | 5.796727937 |
| FRMPD1 | -0.132370819 | 0.19923603 | -5.26169629 | 3.02E-07 | 8.33E-07 | 5.796428461 |
| KAT14 | -0.322006687 | 4.12986157 | -5.261516436 | 3.02E-07 | 8.34E-07 | 5.795574986 |
| CENPJ | -0.601541486 | 2.5467732 | -5.260783402 | 3.03E-07 | 8.37E-07 | 5.792096708 |
| NLRX1 | -0.329363967 | 4.26618468 | -5.260112025 | 3.04E-07 | 8.40E-07 | 5.788911335 |
| ZGPAT | -0.310421808 | 2.70219476 | -5.260012126 | 3.04E-07 | 8.40E-07 | 5.788437392 |
| MUC20 | 0.660398912 | 2.91676012 | 5.259582586 | 3.05E-07 | 8.42E-07 | 5.786399625 |
| SIRT3 | -0.341913994 | 4.24595975 | -5.259250722 | 3.05E-07 | 8.43E-07 | 5.784825333 |
| NXPH3 | -0.351978572 | 1.27519474 | -5.258771119 | 3.06E-07 | 8.45E-07 | 5.782550339 |
| SNX20 | 0.57928306 | 1.37682784 | 5.258681839 | 3.06E-07 | 8.45E-07 | 5.782126859 |
| IP6K2 | -0.392469611 | 5.53328615 | -5.258466123 | 3.07E-07 | 8.46E-07 | 5.781103683 |
| BLZF1 | -0.356871083 | 4.23039771 | -5.258349756 | 3.07E-07 | 8.46E-07 | 5.780551745 |
| TRIM26 | -0.312325215 | 5.50999132 | -5.258117588 | 3.07E-07 | 8.47E-07 | 5.779450589 |
| AKAP17A | -0.396784234 | 5.23516364 | -5.258006909 | 3.07E-07 | 8.47E-07 | 5.778925659 |
| PAFAH1I | -0.391348885 | 5.73940218 | -5.257811615 | 3.08E-07 | 8.48E-07 | 5.77799944 |
| REEP4 | -0.304478741 | 4.83385788 | -5.257213745 | 3.08E-07 | 8.50E-07 | 5.775164101 |
| MMP9 | 1.157344754 | 4.2928653 | 5.256884973 | 3.09E-07 | 8.51E-07 | 5.773605041 |
| ERBB4 | -0.563820164 | 1.21382015 | -5.256181789 | 3.10E-07 | 8.54E-07 | 5.770270757 |
| ERCC3 | -0.309478746 | 4.20880823 | -5.256090682 | 3.10E-07 | 8.54E-07 | 5.769838783 |
| MIA3 | -0.39134509 | 4.41780954 | -5.255945417 | 3.10E-07 | 8.55E-07 | 5.769150034 |
| SCCPDH | -0.353967542 | 5.98444301 | -5.254023387 | 3.13E-07 | 8.63E-07 | 5.760038515 |

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| PTER | -0.421609968 | 3.96852532 | -5.254011691 | 3.13E-07 | 8.63E-07 | 5.759983079 |
| RNF157 | -0.59046141 | 1.41184915 | -5.252413666 | 3.16E-07 | 8.69E-07 | 5.752409583 |
| C14orf11 | -0.303203268 | 5.7686488 | -5.251864978 | 3.17E-07 | 8.72E-07 | 5.749809619 |
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| DSN1 | -0.284816841 | 4.00912758 | -5.251699658 | 3.17E-07 | 8.72E-07 | 5.749026296 |
| RASSF1 | -0.306687617 | 4.00385332 | -5.251590173 | 3.17E-07 | 8.72E-07 | 5.74850754 |
| DUOXA1 | -0.612432231 | 6.34353112 | -5.25043724 | 3.19E-07 | 8.77E-07 | 5.7430453 |
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| TULP4 | -0.324808771 | 3.55387552 | -5.249581862 | 3.20E-07 | 8.80E-07 | 5.738993413 |
| MYEOV | 0.454908042 | 0.73511232 | 5.249267671 | 3.21E-07 | 8.82E-07 | 5.737505237 |
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| HCK | 0.712372499 | 3.0839645 | 5.248713368 | 3.22E-07 | 8.84E-07 | 5.734879935 |
| FN3K | -0.318695424 | 4.44061491 | -5.247909864 | 3.23E-07 | 8.87E-07 | 5.731074761 |
| NEPRO | -0.326839636 | 4.43307468 | -5.2467255 | 3.25E-07 | 8.92E-07 | 5.72546679 |
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| SH3GL2 | -0.818776611 | 1.06148909 | -5.246501018 | 3.25E-07 | 8.93E-07 | 5.724403985 |
| EPC1 | -0.341228968 | 3.49840341 | -5.246077132 | 3.26E-07 | 8.95E-07 | 5.722397201 |
| GJC1 | -0.528648267 | 2.31774187 | -5.244813417 | 3.28E-07 | 9.00E-07 | 5.716415225 |
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| PLEKHB | -0.464532208 | 6.0778414 | -5.244337599 | 3.29E-07 | 9.02E-07 | 5.714163172 |
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| ZNF606 | -0.324160935 | 3.04085087 | -5.241067694 | 3.34E-07 | 9.16E-07 | 5.698691127 |
| RPL36AL | -0.350445656 | 9.4684375 | -5.237730758 | 3.39E-07 | 9.31E-07 | 5.682909925 |
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| BRAP | -0.243551407 | 4.21059932 | -5.235558267 | 3.43E-07 | 9.40E-07 | 5.672640028 |
| TELO2 | -0.335738497 | 4.70199496 | -5.235075082 | 3.44E-07 | 9.42E-07 | 5.67035636 |
| TMEM69 | -0.276457993 | 5.20281512 | -5.234638663 | 3.44E-07 | 9.44E-07 | 5.668293868 |
| PPP1R3 | -0.427248267 | 5.43190767 | -5.234220179 | 3.45E-07 | 9.46E-07 | 5.666316268 |
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| RIOX1 | -0.279315965 | 4.08022784 | -5.230038504 | 3.52E-07 | 9.64E-07 | 5.646562205 |
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| SLC7A4 | 0.404226576 | 0.81826198 | 5.225873474 | 3.60E-07 | 9.84E-07 | 5.626899422 |
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| SCN1B | 0.62671643 | 3.70524741 | 5.224656328 | 3.62E-07 | 9.89E-07 | 5.621155755 |
| EEF1D | -0.355468063 | 5.51227557 | -5.224475342 | 3.62E-07 | 9.90E-07 | 5.620301781 |
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| SPRYD7 | -0.279398387 | 3.96554299 | -5.223402285 | 3.64E-07 | 9.94E-07 | 5.615239102 |
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| POLDIP3 | -0.440307274 | 6.37360232 | -5.220944704 | 3.68E-07 | 1.01E-06 | 5.603647407 |
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| LAPTM4/ | -0.437715623 | 9.12344802 | -5.220002732 | 3.70E-07 | 1.01E-06 | 5.599205566 |
| MEAK7 | -0.246922065 | 2.66317717 | -5.219064046 | 3.72E-07 | 1.01E-06 | 5.594779864 |
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| PLPPR1 | 0.221183419 | 0.21753742 | 5.215793589 | 3.78E-07 | 1.03E-06 | 5.579365374 |
| HAVCR2 | 0.649543241 | 2.48015597 | 5.214928842 | 3.79E-07 | 1.03E-06 | 5.575290908 |
| LEAP2 | -0.304475404 | 1.08491943 | -5.21422359 | 3.81E-07 | 1.04E-06 | 5.571968347 |
| SLC12A9 | -0.306784065 | 3.74121948 | -5.213579238 | 3.82E-07 | 1.04E-06 | 5.568933008 |
| FHL5 | -0.632858162 | 1.98620707 | -5.213043993 | 3.83E-07 | 1.04E-06 | 5.566411873 |
| ZNF44 | -0.317669667 | 3.13028207 | -5.212496005 | 3.84E-07 | 1.05E-06 | 5.563830929 |
| TRAPPC | -0.377429808 | 4.27999303 | -5.212146265 | 3.84E-07 | 1.05E-06 | 5.562183817 |
| MAP3K1: | -0.27259246 | 3.62010121 | -5.211818089 | 3.85E-07 | 1.05E-06 | 5.560638344 |
| FPR3 | 0.768744828 | 2.81011752 | 5.211622718 | 3.85E-07 | 1.05E-06 | 5.559718328 |
| SDC3 | 0.542437124 | 5.54992961 | 5.21158196 | 3.86E-07 | 1.05E-06 | 5.559526398 |
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| CXCL3 | 0.416901977 | 0.80284163 | 5.211066345 | 3.87E-07 | 1.05E-06 | 5.557098467 |
| CASTOR | 0.474060828 | 1.83428022 | 5.210776518 | 3.87E-07 | 1.05E-06 | 5.555733818 |
| TVP23C | -0.246077895 | 1.63233001 | -5.208899969 | 3.91E-07 | 1.06E-06 | 5.54689956 |
| AKNA | 0.514214747 | 3.68138071 | 5.208595243 | 3.91E-07 | 1.06E-06 | 5.545465239 |
| FSCN2 | -0.437992141 | 3.51736563 | -5.207763437 | 3.93E-07 | 1.07E-06 | 5.541550336 |
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| PEX6 | -0.38988407 | 5.54507846 | -5.207131825 | 3.94E-07 | 1.07E-06 | 5.538577989 |
| PTMA | -0.363453163 | 9.57994392 | -5.206846558 | 3.95E-07 | 1.07E-06 | 5.537235631 |
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| EVI2B | 0.819304219 | 3.27692805 | 5.206249557 | 3.96E-07 | 1.08E-06 | 5.534426549 |
| KLHL12 | -0.329691758 | 5.25835914 | -5.206071293 | 3.96E-07 | 1.08E-06 | 5.533587813 |

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| TRIM52 | -0.340426765 | 2.8467864 | -5.20597768 | 3.96E-07 | 1.08E-06 | 5.533147373 |
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| ZNF383 | -0.285016551 | 2.29386386 | -5.204010221 | 4.00E-07 | 1.09E-06 | 5.523892093 |
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| KCTD3 | -0.395466702 | 5.02335536 | -5.203131981 | 4.02E-07 | 1.09E-06 | 5.519761606 |
| DCHS2 | 0.297154516 | 0.53576287 | 5.20279137 | 4.02E-07 | 1.09E-06 | 5.518159816 |
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| SLC38A6 | -0.222166556 | 2.44620978 | -5.201766039 | 4.04E-07 | 1.10E-06 | 5.513338507 |
| CHRFAM | -0.243012846 | 0.47007196 | -5.201757245 | 4.04E-07 | 1.10E-06 | 5.51329716 |
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| ZNF112 | -0.361201235 | 2.57727506 | -5.200923323 | 4.06E-07 | 1.10E-06 | 5.509376467 |
| OR4D6 | 0.242742521 | 0.2758962 | 5.200123853 | 4.08E-07 | 1.11E-06 | 5.505618226 |
| SYDE2 | -0.402001048 | 1.67438572 | -5.199894614 | 4.08E-07 | 1.11E-06 | 5.504540678 |
| ZBTB46 | -0.302225858 | 3.81402833 | -5.198568035 | 4.11E-07 | 1.11E-06 | 5.498305797 |
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| C1orf174 | -0.288405556 | 3.8440319 | -5.190616674 | 4.27E-07 | 1.16E-06 | 5.460961601 |
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| CCDC7 | -0.178204022 | 0.75330706 | -5.18654196 | 4.35E-07 | 1.18E-06 | 5.441842297 |
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| EDDM13 | -0.138968801 | 0.41453001 | -5.177648891 | 4.55E-07 | 1.23E-06 | 5.400156601 |
| ATP4A | -0.413627287 | 0.55848217 | -5.177037629 | 4.56E-07 | 1.23E-06 | 5.397293476 |
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| TMEM19 | -0.347319245 | 3.83262094 | -5.170448499 | 4.71E-07 | 1.27E-06 | 5.366447658 |
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| BCL2A1 | 0.761607553 | 2.51702918 | 5.167382492 | 4.78E-07 | 1.29E-06 | 5.352105552 |
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| DKC1 | -0.325652692 | 5.40545371 | -5.16490934 | 4.84E-07 | 1.30E-06 | 5.340541714 |
| CFAP54 | -0.174418149 | 0.39876872 | -5.164737502 | 4.84E-07 | 1.30E-06 | 5.33973841 |
| SPINDO( | -0.307682418 | 4.21022152 | -5.164603593 | 4.84E-07 | 1.30E-06 | 5.339112428 |
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| C19orf81 | -0.677611732 | 0.95834002 | -5.163916209 | 4.86E-07 | 1.31E-06 | 5.335899349 |
| TBRG4 | -0.22717152 | 4.40451671 | -5.163863387 | 4.86E-07 | 1.31E-06 | 5.335652454 |
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| CTXN1 | 0.967541898 | 4.76087724 | 5.159406124 | 4.97E-07 | 1.33E-06 | 5.314826164 |
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| ACBD4 | -0.351617846 | 4.55747609 | -5.152966552 | 5.12E-07 | 1.37E-06 | 5.28476342 |
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| LAPTM5 | 0.724045023 | 6.20898146 | 5.152167231 | 5.14E-07 | 1.38E-06 | 5.281033963 |
| ZMYND1 | -0.258465421 | 4.1169378 | -5.152108116 | 5.15E-07 | 1.38E-06 | 5.280758166 |
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| KLF9 | -0.523992526 | 5.22471235 | -5.150779322 | 5.18E-07 | 1.39E-06 | 5.274559401 |
| NAPEPLI | -0.404180724 | 3.70232812 | -5.150701449 | 5.18E-07 | 1.39E-06 | 5.274196166 |
| INSC | -0.334412196 | 0.46149522 | -5.149961163 | 5.20E-07 | 1.39E-06 | 5.270743373 |
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| ATP6V1E | -0.302318756 | 6.76741931 | -5.139420205 | 5.47E-07 | 1.46E-06 | 5.221622615 |
| TESMIN | -0.283410703 | 1.13567023 | -5.138394103 | 5.50E-07 | 1.47E-06 | 5.216845352 |
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| CNBP | -0.274573557 | 9.08567915 | -5.130304244 | 5.72E-07 | 1.52E-06 | 5.179208252 |
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| PEX13 | -0.368163164 | 4.33692077 | -5.125890571 | 5.84E-07 | 1.56E-06 | 5.158694492 |
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| VRK1 | -0.265547475 | 3.37441094 | -5.112103831 | 6.24E-07 | 1.66E-06 | 5.094709321 |
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| TBC1D3 | -0.249053784 | 1.23385522 | -5.100641049 | 6.59E-07 | 1.74E-06 | 5.04161662 |
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| SH2D4B | -0.143010706 | 0.16632667 | -5.099519925 | 6.63E-07 | 1.75E-06 | 5.036429069 |
| RSRC1 | -0.306864513 | 3.66083931 | -5.0990773 | 6.64E-07 | 1.75E-06 | 5.034381257 |
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| HNRNPA | -0.344275507 | 6.09708226 | -5.085180925 | 7.10E-07 | 1.87E-06 | 4.970163107 |
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| SELPLG | 0.682954481 | 4.07567179 | 5.061204272 | 7.96E-07 | 2.08E-06 | 4.859698197 |

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| ZBTB14 | -0.335970713 | 3.93366628 | -5.060688501 | 7.98E-07 | 2.09E-06 | 4.857326628 |
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| STAU1 | -0.359377474 | 6.95721753 | -5.05847163 | 8.06E-07 | 2.11E-06 | 4.847135485 |
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| TP53RK | -0.270781888 | 4.28043545 | -5.058097791 | 8.08E-07 | 2.11E-06 | 4.845417273 |
| PATZ1 | -0.362471287 | 5.47906682 | -5.057770184 | 8.09E-07 | 2.12E-06 | 4.843911637 |
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| ZC3H18 | -0.292442522 | 4.08743726 | -5.051904823 | 8.32E-07 | 2.17E-06 | 4.81696874 |
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| ZNF737 | -0.548738775 | 3.49500646 | -5.046099025 | 8.55E-07 | 2.23E-06 | 4.790324636 |
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| ZNF517 | -0.291634062 | 3.24662085 | -5.045666439 | 8.57E-07 | 2.23E-06 | 4.788340407 |
| FIGNL1 | 0.373650914 | 2.4401083 | 5.045663888 | 8.57E-07 | 2.23E-06 | 4.788328706 |
| GTF2F1 | -0.29709286 | 6.91435377 | -5.045487653 | 8.58E-07 | 2.24E-06 | 4.78752037 |
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| TBCK | -0.318395506 | 3.0944669 | -5.044131865 | 8.63E-07 | 2.25E-06 | 4.781302585 |
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| NUGGC | -0.58800964 | 1.13392527 | -5.042753359 | 8.69E-07 | 2.26E-06 | 4.774982015 |
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|---|---|---|---|---|---|
| FAM189B | -0.309784229 | 3.44189036 | -5.038670149 | 8.86E-07 | 2.31E-06 | 4.756268441 |
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| PAG1 | 0.487653003 | 2.1026101 | 5.036924737 | 8.94E-07 | 2.32E-06 | 4.748272908 |
| HFM1 | -0.321047975 | 0.73120899 | -5.036623549 | 8.95E-07 | 2.33E-06 | 4.74689343 |
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| SSC5D | 0.577734007 | 1.7773405 | 5.036503709 | 8.95E-07 | 2.33E-06 | 4.746344564 |
| FAR1 | -0.34361297 | 4.14325752 | -5.036203089 | 8.97E-07 | 2.33E-06 | 4.744967782 |
| ARMS2 | -0.1319327 | 0.15211397 | -5.03538906 | 9.00E-07 | 2.34E-06 | 4.741240022 |
| HMGA2 | 0.899790021 | 2.66186482 | 5.034921125 | 9.02E-07 | 2.34E-06 | 4.739097387 |
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| TFIP11 | -0.408267426 | 3.98784264 | -5.033474512 | 9.08E-07 | 2.36E-06 | 4.732474495 |
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| METTL14 | -0.330642098 | 3.65009799 | -5.032927233 | 9.11E-07 | 2.36E-06 | 4.729969347 |
| MR1 | -0.405819739 | 4.4517285 | -5.032214912 | 9.14E-07 | 2.37E-06 | 4.726709061 |
| NPIPB6 | -0.217810651 | 0.47285154 | -5.031071637 | 9.19E-07 | 2.38E-06 | 4.721477092 |
| EIF2AK4 | -0.340752273 | 4.01150864 | -5.031003007 | 9.19E-07 | 2.38E-06 | 4.72116305 |
| IL4R | 0.474523882 | 4.62172257 | 5.03084372 | 9.20E-07 | 2.39E-06 | 4.720434191 |
| VPS50 | -0.299025965 | 2.91728209 | -5.030219997 | 9.22E-07 | 2.39E-06 | 4.717580361 |
| KXD1 | -0.256958714 | 5.50120454 | -5.030130385 | 9.23E-07 | 2.39E-06 | 4.717170369 |
| TRIM22 | 0.651636512 | 4.83992584 | 5.02960511 | 9.25E-07 | 2.40E-06 | 4.714767246 |
| HENMT1 | -0.43239173 | 2.22380154 | -5.028764581 | 9.29E-07 | 2.41E-06 | 4.710922274 |
| TRIM27 | -0.28505434 | 4.67812112 | -5.028551937 | 9.30E-07 | 2.41E-06 | 4.709949625 |
| HSD11B | 0.594786267 | 1.25734397 | 5.028473667 | 9.30E-07 | 2.41E-06 | 4.709591622 |
| DDX27 | -0.287224783 | 5.20822982 | -5.028030808 | 9.32E-07 | 2.41E-06 | 4.707566082 |
| IGLL5 | 1.707189291 | 2.82595097 | 5.027757383 | 9.33E-07 | 2.42E-06 | 4.706315572 |
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| EXOSC9 | -0.243028572 | 3.70954341 | -5.025138724 | 9.45E-07 | 2.45E-06 | 4.69434194 |
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| MITD1 | -0.273005036 | 3.42837953 | -5.022360837 | 9.57E-07 | 2.48E-06 | 4.681645841 |
| CLEC12A | 0.401960227 | 0.92190025 | 5.021648932 | 9.61E-07 | 2.49E-06 | 4.678393068 |
| UGT2B1 | -0.140674918 | 0.17867505 | -5.021517322 | 9.61E-07 | 2.49E-06 | 4.677791767 |
| RAC1 | -0.241212115 | 7.9743129 | -5.01936895 | 9.71E-07 | 2.51E-06 | 4.667978114 |
| FBXO22 | -0.262845939 | 2.98858693 | -5.018732042 | 9.74E-07 | 2.52E-06 | 4.665069411 |
| CSNK2A | -0.306632282 | 5.32463526 | -5.017945967 | 9.78E-07 | 2.53E-06 | 4.661479896 |
| ZCCHC4 | -0.253768216 | 2.70945952 | -5.017768888 | 9.78E-07 | 2.53E-06 | 4.660671348 |

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| ZNF16 | -0.293073881 | 3.28103896 | -5.017108049 | 9.82E-07 | 2.54E-06 | 4.657654154 |
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| RC3H1 | -0.359303537 | 3.16061479 | -5.01555453 | 9.89E-07 | 2.56E-06 | 4.650562523 |
| IFITM10 | 0.414671839 | 1.52485692 | 5.015535939 | 9.89E-07 | 2.56E-06 | 4.65047767 |
| TMLHE | -0.318882749 | 2.86890019 | -5.01499412 | 9.91E-07 | 2.56E-06 | 4.648004761 |
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| TRMT1L | -0.317252595 | 3.99639203 | -5.014498234 | 9.94E-07 | 2.57E-06 | 4.645741688 |
| AGR3 | -0.590565032 | 0.88029063 | -5.014196505 | 9.95E-07 | 2.57E-06 | 4.644364778 |
| CDH2 | -1.220018855 | 4.4537179 | -5.014104111 | 9.96E-07 | 2.57E-06 | 4.64394316 |
| LEMD1 | 0.673229296 | 2.702702 | 5.013956885 | 9.96E-07 | 2.57E-06 | 4.643271344 |
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| COL5A1 | 0.865989388 | 3.50343698 | 5.012687461 | 1.00E-06 | 2.59E-06 | 4.637479429 |
| UGT3A2 | -0.514602324 | 0.52198565 | -5.011286414 | 1.01E-06 | 2.60E-06 | 4.631088359 |
| GPA33 | 0.255166673 | 0.34090529 | 5.010329302 | 1.01E-06 | 2.62E-06 | 4.626723206 |
| GSDMD | -0.33890228 | 5.57372126 | -5.010225049 | 1.01E-06 | 2.62E-06 | 4.626247777 |
| TOGARA | -0.385159523 | 3.01956293 | -5.010084032 | 1.01E-06 | 2.62E-06 | 4.625604698 |
| NBEA | -0.630595206 | 2.99461939 | -5.009859144 | 1.02E-06 | 2.62E-06 | 4.62457918 |
| IQCA1 | -0.563440775 | 4.71352775 | -5.00981126 | 1.02E-06 | 2.62E-06 | 4.62436083 |
| GPR83 | -0.663480699 | 1.70039025 | -5.00889944 | 1.02E-06 | 2.63E-06 | 4.620203231 |
| TCTEX1[ | -0.402179997 | 1.26312266 | -5.008872856 | 1.02E-06 | 2.63E-06 | 4.620082023 |
| ASB6 | -0.241041828 | 4.10229013 | -5.008181359 | 1.02E-06 | 2.64E-06 | 4.616929453 |
| KIAA175 | 0.289979649 | 0.57715367 | 5.007460422 | 1.03E-06 | 2.65E-06 | 4.613643045 |
| ZNF583 | -0.234325196 | 1.59334102 | -5.007254377 | 1.03E-06 | 2.65E-06 | 4.612703854 |
| ZNF362 | -0.321611555 | 5.3122089 | -5.007234455 | 1.03E-06 | 2.65E-06 | 4.612613047 |
| IQCK | -0.420596972 | 3.9821869 | -5.005852029 | 1.04E-06 | 2.67E-06 | 4.606312545 |
| XRCC6 | -0.341451912 | 7.90842501 | -5.005582469 | 1.04E-06 | 2.67E-06 | 4.605084177 |
| ZNF839 | -0.30886966 | 2.61192717 | -5.005503116 | 1.04E-06 | 2.67E-06 | 4.604722576 |
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| TMEM23 | -0.342126689 | 3.33702882 | -5.004839449 | 1.04E-06 | 2.68E-06 | 4.601698547 |
| SLC37A4 | -0.2595298 | 3.71356019 | -5.001529873 | 1.06E-06 | 2.72E-06 | 4.586623236 |
| GRIK5 | -0.551967701 | 4.17993091 | -5.001463745 | 1.06E-06 | 2.72E-06 | 4.586322103 |
| ATP2A3 | -0.550512243 | 3.85237502 | -5.001173552 | 1.06E-06 | 2.72E-06 | 4.585000663 |
| KIFAP3 | -0.314513402 | 4.44410649 | -5.001122576 | 1.06E-06 | 2.72E-06 | 4.584768539 |
| TRIM66 | -0.394817771 | 2.08277847 | -5.000633289 | 1.06E-06 | 2.73E-06 | 4.582540655 |
| BMS1 | -0.263528379 | 4.19258212 | -4.99984498 | 1.07E-06 | 2.74E-06 | 4.578951595 |
| CYP21A2 | 0.344083514 | 0.90981383 | 4.999665471 | 1.07E-06 | 2.74E-06 | 4.578134381 |
| WDFY2 | -0.264893853 | 2.81661966 | -4.998493637 | 1.07E-06 | 2.76E-06 | 4.572800208 |
| ZUP1 | -0.264943808 | 3.16738707 | -4.998162584 | 1.07E-06 | 2.76E-06 | 4.571293444 |

| ISM1 | -0.872821218 | 5.08487716 | -4.997975372 | 1.07E-06 | 2.76E-06 | 4.570441397 |
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| ZNF513 | -0.371401353 | 4.80328765 | -4.997679869 | 1.08E-06 | 2.76E-06 | 4.56909655 |
| THEMIS2 | 0.650308386 | 4.56877825 | 4.997436811 | 1.08E-06 | 2.77E-06 | 4.567990427 |
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| UBE2Q1 | -0.271996579 | 5.93502849 | -4.99428332 | 1.09E-06 | 2.81E-06 | 4.553643367 |
| NRF1 | -0.28849973 | 4.05606141 | -4.993982619 | 1.09E-06 | 2.81E-06 | 4.552275691 |
| SH2D5 | 0.388819207 | 1.16498552 | 4.992709798 | 1.10E-06 | 2.83E-06 | 4.546487287 |
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| SLC30A4 | -0.345661462 | 2.48511604 | -4.991765373 | 1.11E-06 | 2.84E-06 | 4.542193108 |
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| PDE4A | -0.526444105 | 4.05717983 | -4.988775669 | 1.12E-06 | 2.88E-06 | 4.528603718 |
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| RAB5A | -0.325815461 | 5.86093325 | -4.985843329 | 1.14E-06 | 2.92E-06 | 4.515281572 |
| XYLT2 | -0.274734136 | 4.57070686 | -4.98572212 | 1.14E-06 | 2.92E-06 | 4.514731036 |
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| BTK | 0.532116382 | 1.72550831 | 4.981708217 | 1.16E-06 | 2.97E-06 | 4.496505964 |
| MROH2A | -0.79193369 | 0.74107807 | -4.981580404 | 1.16E-06 | 2.97E-06 | 4.495925829 |
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| NKPD1 | -0.211851958 | 0.37194996 | -4.975411172 | 1.20E-06 | 3.05E-06 | 4.46793865 |
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| IBTK | -0.35579399 | 4.35351181 | -4.97446754 | 1.20E-06 | 3.06E-06 | 4.46366031 |
| GMPS | -0.327175028 | 4.19929403 | -4.974311624 | 1.20E-06 | 3.07E-06 | 4.462953467 |
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| ADCY5 | -0.316565221 | 0.7242487 | -4.957082615 | 1.30E-06 | 3.31E-06 | 4.38495826 |
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| B3GALN' | -0.447643981 | 4.43882555 | -4.9331647 | 1.46E-06 | 3.68E-06 | 4.277052507 |
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| SIRPB1 | 0.304796059 | 0.53197209 | 4.921463509 | 1.54E-06 | 3.87E-06 | 4.224419531 |
| TBX3 | -0.497385666 | 6.6603842 | -4.920941019 | 1.54E-06 | 3.88E-06 | 4.222071732 |
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| TUBA3D | -0.269055254 | 0.74731119 | -4.920007965 | 1.55E-06 | 3.90E-06 | 4.21787959 |
| DUSP2 | 0.959463841 | 2.99144637 | 4.919082533 | 1.56E-06 | 3.91E-06 | 4.213722338 |
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| NXPH4 | -0.600415577 | 0.94623565 | -4.912223079 | 1.61E-06 | 4.04E-06 | 4.182928278 |
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| WDR48 | -0.339342471 | 4.7612471 | -4.904095975 | 1.67E-06 | 4.19E-06 | 4.146489381 |
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| PCDHB4 | -0.327391004 | 1.11018849 | -4.899966523 | 1.70E-06 | 4.26E-06 | 4.127993595 |
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| KIAA154 | -0.370293986 | 1.79599698 | -4.897421418 | 1.72E-06 | 4.31E-06 | 4.116600512 |
| TP53I13 | -0.380823188 | 4.74730971 | -4.897366574 | 1.72E-06 | 4.31E-06 | 4.116355056 |
| CTU1 | -0.379490911 | 2.46130386 | -4.896530193 | 1.73E-06 | 4.33E-06 | 4.112612127 |
| MADD | -0.280472523 | 4.04650293 | -4.895929852 | 1.73E-06 | 4.34E-06 | 4.109925841 |
| 5-Mar | -0.322829283 | 5.04646581 | -4.895034997 | 1.74E-06 | 4.36E-06 | 4.105922222 |
| IFRD2 | -0.305077889 | 5.24357735 | -4.894972489 | 1.74E-06 | 4.36E-06 | 4.105642583 |
| C17orf53 | 0.24668837 | 1.17486398 | 4.894704898 | 1.74E-06 | 4.36E-06 | 4.104445499 |
| ZEB1 | -0.457251773 | 3.04672995 | -4.894517531 | 1.74E-06 | 4.36E-06 | 4.103607335 |
| CDK4 | -0.430698351 | 5.89221357 | -4.894355379 | 1.75E-06 | 4.37E-06 | 4.102881989 |
| MOSMO | -0.296634387 | 2.80873797 | -4.89429175 | 1.75E-06 | 4.37E-06 | 4.10259737 |
| COQ10B | -0.304070541 | 5.31158895 | -4.894158549 | 1.75E-06 | 4.37E-06 | 4.102001549 |
| CALHM5 | -0.281899862 | 1.19744867 | -4.893955699 | 1.75E-06 | 4.37E-06 | 4.101094211 |
| DHX34 | -0.306419829 | 3.77261805 | -4.893875881 | 1.75E-06 | 4.37E-06 | 4.100737193 |
| ALDH5A | -0.363191508 | 4.95298565 | -4.893851035 | 1.75E-06 | 4.37E-06 | 4.100626061 |
| PECR | -0.534915201 | 4.56319822 | -4.892765971 | 1.76E-06 | 4.40E-06 | 4.095773231 |
| RNF40 | -0.444622788 | 4.8759199 | -4.892509283 | 1.76E-06 | 4.40E-06 | 4.094625353 |
| GALNTL | 0.299783299 | 0.6729882 | 4.891668055 | 1.77E-06 | 4.42E-06 | 4.090863825 |
| UBOX5 | -0.261152906 | 3.50714227 | -4.890771715 | 1.78E-06 | 4.43E-06 | 4.086856458 |
| ANK2 | -0.571512045 | 1.3603358 | -4.889792799 | 1.78E-06 | 4.45E-06 | 4.082480606 |
| CACTIN | -0.270922327 | 3.44683658 | -4.889775562 | 1.78E-06 | 4.45E-06 | 4.08240356 |
| CDS2 | -0.297349734 | 4.37730742 | -4.889270519 | 1.79E-06 | 4.46E-06 | 4.080146257 |
| KCTD1 | -0.374872259 | 3.27789642 | -4.889112732 | 1.79E-06 | 4.47E-06 | 4.079441062 |
| COL6A6 | -0.202976022 | 0.23408512 | -4.888996143 | 1.79E-06 | 4.47E-06 | 4.078920009 |
| GASK1B | -0.528742998 | 3.71263643 | -4.888770184 | 1.79E-06 | 4.47E-06 | 4.077910189 |
| CAPZA2 | -0.339320868 | 5.40572216 | -4.888046373 | 1.80E-06 | 4.49E-06 | 4.074675705 |
| CFAP44 | -0.462788725 | 1.63812153 | -4.88788198 | 1.80E-06 | 4.49E-06 | 4.073941141 |

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| HRK | 0.784501989 | 2.21781777 | 4.887705029 | 1.80E-06 | 4.49E-06 | 4.073150486 |
| DAW1 | 0.235094149 | 0.353348 | 4.885847047 | 1.82E-06 | 4.53E-06 | 4.064850052 |
| AGK | -0.27264563 | 3.734304 | -4.885179952 | 1.82E-06 | 4.54E-06 | 4.061870477 |
| UBE3A | -0.344038167 | 4.55356735 | -4.884038205 | 1.83E-06 | 4.57E-06 | 4.056771661 |
| CCNDBP | -0.383044456 | 5.12036425 | -4.882013421 | 1.85E-06 | 4.61E-06 | 4.047731803 |
| DNASE1 | -0.349884524 | 4.38959005 | -4.881925109 | 1.85E-06 | 4.61E-06 | 4.047337595 |
| APOL1 | 0.696516868 | 5.71356697 | 4.881784651 | 1.85E-06 | 4.61E-06 | 4.046710632 |
| SELENO | -0.357083984 | 6.76049188 | -4.881731697 | 1.85E-06 | 4.61E-06 | 4.046474263 |
| GPR176 | -0.43837223 | 3.00374936 | -4.881459775 | 1.85E-06 | 4.62E-06 | 4.045260533 |
| BATF | 0.761726511 | 2.23901575 | 4.881248773 | 1.86E-06 | 4.62E-06 | 4.044318762 |
| CRNKL1 | -0.274943737 | 4.45687287 | -4.880366928 | 1.86E-06 | 4.64E-06 | 4.040383153 |
| RPS15A | -0.324349588 | 7.52089779 | -4.879629764 | 1.87E-06 | 4.66E-06 | 4.037093699 |
| SNX5 | -0.37627006 | 6.71943158 | -4.877808653 | 1.89E-06 | 4.69E-06 | 4.028969108 |
| HSPD1 | -0.362124363 | 6.97851603 | -4.877396272 | 1.89E-06 | 4.70E-06 | 4.027129683 |
| ARTN | -0.253180544 | 1.06945737 | -4.877353176 | 1.89E-06 | 4.70E-06 | 4.026937463 |
| ZC3H3 | -0.335169642 | 4.68141138 | -4.877211402 | 1.89E-06 | 4.71E-06 | 4.026305116 |
| COPB2 | -0.371457831 | 5.86854178 | -4.876888387 | 1.89E-06 | 4.71E-06 | 4.024864444 |
| ZSCAN1 | -0.371232162 | 2.47988396 | -4.875956083 | 1.90E-06 | 4.73E-06 | 4.020706744 |
| CHMP3 | -0.366642444 | 5.4476478 | -4.874941468 | 1.91E-06 | 4.75E-06 | 4.016182719 |
| COLEC1 | 0.642960778 | 1.66709152 | 4.87416578 | 1.92E-06 | 4.77E-06 | 4.012724562 |
| CEP41 | -0.233188819 | 2.01777322 | -4.873760135 | 1.92E-06 | 4.78E-06 | 4.010916305 |
| EVPLL | -0.26920012 | 0.69651749 | -4.873220547 | 1.93E-06 | 4.79E-06 | 4.008511162 |
| ATP5MF | -0.065685813 | 0.15262074 | -4.871164854 | 1.94E-06 | 4.83E-06 | 3.999350197 |
| MDFIC | 0.490282847 | 5.17723568 | 4.869645713 | 1.96E-06 | 4.87E-06 | 3.992582375 |
| TUNAR | -0.681935164 | 0.61202879 | -4.868148071 | 1.97E-06 | 4.90E-06 | 3.985912048 |
| SULT1C | -0.52492526 | 3.38847401 | -4.868073067 | 1.97E-06 | 4.90E-06 | 3.985578031 |
| ATP6V1F | 0.515747771 | 1.57613067 | 4.867833115 | 1.97E-06 | 4.91E-06 | 3.984509483 |
| C8orf37 | -0.325790649 | 2.10012388 | -4.865852925 | 1.99E-06 | 4.95E-06 | 3.97569303 |
| VAC14 | -0.211052228 | 4.60706273 | -4.865305179 | 2.00E-06 | 4.96E-06 | 3.973254811 |
| ZNF593 | -0.346968189 | 2.8891563 | -4.864477367 | 2.01E-06 | 4.98E-06 | 3.969570347 |
| ZNF343 | -0.25910434 | 2.89652137 | -4.86257222 | 2.02E-06 | 5.02E-06 | 3.961092813 |
| NELFB | -0.298393158 | 6.35443342 | -4.861026738 | 2.04E-06 | 5.06E-06 | 3.954217741 |
| DDX55 | -0.271951514 | 3.1299847 | -4.8603904 | 2.04E-06 | 5.07E-06 | 3.951387519 |
| CCDC13 | -0.175340906 | 0.86445804 | -4.860130263 | 2.05E-06 | 5.08E-06 | 3.950230605 |
| SELL | 0.726992451 | 3.03067574 | 4.859643525 | 2.05E-06 | 5.09E-06 | 3.948066059 |
| HLA-DRE | 0.876780688 | 9.04401683 | 4.858863673 | 2.06E-06 | 5.11E-06 | 3.944598399 |
| ACE2 | -0.329744103 | 1.44471334 | -4.858169739 | 2.07E-06 | 5.12E-06 | 3.941513166 |
| CHST7 | -0.549679053 | 3.31163218 | -4.858018401 | 2.07E-06 | 5.13E-06 | 3.940840365 |
| TBXT | -0.396601787 | 0.30875755 | -4.8576196 | 2.07E-06 | 5.14E-06 | 3.93906751 |
| RNF181 | -0.332988803 | 7.53830933 | -4.856644756 | 2.08E-06 | 5.16E-06 | 3.934734377 |

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| GSTM2 | -0.514746457 | 3.06602465 | -4.856107201 | 2.08E-06 | 5.17E-06 | 3.932345281 |
| CD80 | 0.301738485 | 0.63732476 | 4.855874238 | 2.09E-06 | 5.17E-06 | 3.931309971 |
| TINF2 | -0.31278036 | 5.79758976 | -4.855660473 | 2.09E-06 | 5.18E-06 | 3.930360019 |
| UVRAG | -0.313246706 | 3.51887373 | -4.855044472 | 2.10E-06 | 5.19E-06 | 3.927622759 |
| ARHGAF | -0.417832742 | 1.19872739 | -4.854502961 | 2.10E-06 | 5.21E-06 | 3.925216742 |
| P2RX7 | 0.419374119 | 1.52716773 | 4.852872764 | 2.12E-06 | 5.24E-06 | 3.917974867 |
| STAT1 | 0.726955857 | 6.52950143 | 4.852392535 | 2.12E-06 | 5.25E-06 | 3.915841916 |
| CARHSP | -0.29034136 | 4.49930664 | -4.852348475 | 2.12E-06 | 5.25E-06 | 3.915646228 |
| CLINT1 | -0.432423392 | 5.37745268 | -4.851483419 | 2.13E-06 | 5.28E-06 | 3.911804532 |
| DNAJA1 | -0.415805819 | 7.32583754 | -4.851226845 | 2.13E-06 | 5.28E-06 | 3.910665199 |
| UNC80 | -0.115451535 | 0.18109095 | -4.851226774 | 2.13E-06 | 5.28E-06 | 3.910664886 |
| FES | -0.35531558 | 4.12314573 | -4.850816714 | 2.14E-06 | 5.29E-06 | 3.908844091 |
| WFDC1 | -0.2378439 | 0.77563229 | -4.850382272 | 2.14E-06 | 5.30E-06 | 3.906915178 |
| FBXO48 | -0.193344495 | 1.57227713 | -4.84953617 | 2.15E-06 | 5.32E-06 | 3.903158911 |
| GSR | -0.317845428 | 5.8644893 | -4.84941457 | 2.15E-06 | 5.32E-06 | 3.902619116 |
| LAGE3 | -0.398443614 | 5.65762147 | -4.848424427 | 2.16E-06 | 5.34E-06 | 3.89822416 |
| ZNF629 | -0.286722832 | 4.44491657 | -4.848061912 | 2.16E-06 | 5.35E-06 | 3.896615251 |
| TMEM52 | -0.27110908 | 0.90702965 | -4.847621075 | 2.17E-06 | 5.36E-06 | 3.89465887 |
| SPIDR | -0.369257557 | 4.51693342 | -4.846647627 | 2.18E-06 | 5.39E-06 | 3.890339341 |
| CDS1 | -0.393792141 | 5.70295034 | -4.845531642 | 2.19E-06 | 5.41E-06 | 3.885388218 |
| HIST1H4 | -0.579319588 | 1.60191915 | -4.845139635 | 2.19E-06 | 5.42E-06 | 3.883649285 |
| FLOT2 | -0.263740148 | 6.82807117 | -4.843985883 | 2.20E-06 | 5.45E-06 | 3.878531944 |
| FBXL12 | -0.283110297 | 4.19308681 | -4.842896341 | 2.22E-06 | 5.48E-06 | 3.873700333 |
| ATP2A2 | -0.456085501 | 5.66457747 | -4.842879893 | 2.22E-06 | 5.48E-06 | 3.873627402 |
| EIF3B | -0.257782525 | 5.53288401 | -4.842733701 | 2.22E-06 | 5.48E-06 | 3.872979179 |
| NVL | -0.280636143 | 3.7382057 | -4.841946276 | 2.23E-06 | 5.50E-06 | 3.869487976 |
| CD53 | 0.791147373 | 4.42714332 | 4.841808156 | 2.23E-06 | 5.50E-06 | 3.868875641 |
| COL18A1 | -0.472701641 | 6.0074901 | -4.841403079 | 2.23E-06 | 5.51E-06 | 3.86707988 |
| SUV39H | -0.220975489 | 2.67900268 | -4.84130419 | 2.23E-06 | 5.51E-06 | 3.866641508 |
| RASGEF | -0.486337956 | 2.18517126 | -4.840727308 | 2.24E-06 | 5.53E-06 | 3.86408437 |
| PAX1 | -0.523857787 | 0.40915171 | -4.840504911 | 2.24E-06 | 5.53E-06 | 3.863098625 |
| ACP6 | -0.384179312 | 3.35868446 | -4.840381164 | 2.24E-06 | 5.53E-06 | 3.862550145 |
| RNF144E | -0.553784801 | 5.90215161 | -4.838689769 | 2.26E-06 | 5.58E-06 | 3.855054623 |
| HBB | -0.947724828 | 5.49133106 | -4.838429283 | 2.26E-06 | 5.58E-06 | 3.85390046 |
| CDH4 | 0.888056402 | 2.27811302 | 4.836661515 | 2.28E-06 | 5.63E-06 | 3.846069165 |
| ERICH1 | -0.224780329 | 2.56998966 | -4.836391109 | 2.28E-06 | 5.63E-06 | 3.844871467 |
| LRRC14 | -0.32590819 | 3.71472037 | -4.836359991 | 2.28E-06 | 5.63E-06 | 3.84473364 |
| GPATCH | -0.295949764 | 3.3509177 | -4.835873178 | 2.29E-06 | 5.64E-06 | 3.842577566 |
| ACOT6 | -0.079973586 | 0.11220752 | -4.835851256 | 2.29E-06 | 5.64E-06 | 3.842480479 |
| ABCF2 | -0.283138147 | 5.18906689 | -4.835523898 | 2.29E-06 | 5.65E-06 | 3.84103073 |

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| ARMC12 | -0.24730364 | 0.6324134 | -4.835507118 | 2.29E-06 | 5.65E-06 | 3.840956422 |
| NKD2 | 0.474746327 | 1.16339855 | 4.83531883 | 2.29E-06 | 5.66E-06 | 3.840122602 |
| EXOSC5 | -0.320580014 | 5.19999097 | -4.834507888 | 2.30E-06 | 5.68E-06 | 3.836531721 |
| RPS6 | -0.320320893 | 10.8821883 | -4.834150361 | 2.31E-06 | 5.69E-06 | 3.834948733 |
| NEK8 | -0.310711369 | 3.68145374 | -4.833940226 | 2.31E-06 | 5.69E-06 | 3.834018385 |
| CCR1 | 0.588899899 | 2.47260024 | 4.833422076 | 2.31E-06 | 5.70E-06 | 3.831724484 |
| XDH | 0.547649048 | 0.69323511 | 4.833206857 | 2.32E-06 | 5.71E-06 | 3.830771749 |
| RRAGB | -0.364462904 | 4.6407823 | -4.833182634 | 2.32E-06 | 5.71E-06 | 3.830664519 |
| ICOS | 0.485495462 | 0.83609914 | 4.832470961 | 2.32E-06 | 5.73E-06 | 3.827514337 |
| CRHBP | -0.596489837 | 1.75146996 | -4.832141593 | 2.33E-06 | 5.73E-06 | 3.826056536 |
| COPS2 | -0.301647773 | 4.94055438 | -4.832101453 | 2.33E-06 | 5.73E-06 | 3.82587888 |
| PNPLA5 | 0.725704574 | 1.16370868 | 4.831794865 | 2.33E-06 | 5.74E-06 | 3.82452199 |
| IWS1 | -0.318016451 | 5.27937706 | -4.830162574 | 2.35E-06 | 5.78E-06 | 3.817299036 |
| GNAI3 | -0.254645914 | 3.02402252 | -4.829763471 | 2.35E-06 | 5.79E-06 | 3.815533295 |
| RNFT1 | -0.390644796 | 3.4546408 | -4.829572371 | 2.36E-06 | 5.80E-06 | 3.81468786 |
| INSYN2E | -0.344187142 | 0.29954259 | -4.829332896 | 2.36E-06 | 5.80E-06 | 3.813628456 |
| GDF7 | -0.184606178 | 0.3735218 | -4.829091519 | 2.36E-06 | 5.81E-06 | 3.812560674 |
| STK3 | -0.264720869 | 2.57418963 | -4.828655411 | 2.37E-06 | 5.82E-06 | 3.810631578 |
| HIST1H4 | -0.331264895 | 0.62373084 | -4.828163859 | 2.37E-06 | 5.83E-06 | 3.808457405 |
| CACNA2 | -0.443702877 | 3.46607369 | -4.828012261 | 2.37E-06 | 5.83E-06 | 3.807786911 |
| RNF20 | -0.373125896 | 5.15552144 | -4.827436048 | 2.38E-06 | 5.85E-06 | 3.805238575 |
| SBF1 | -0.440603556 | 5.60296914 | -4.826015223 | 2.40E-06 | 5.89E-06 | 3.798955977 |
| CNOT9 | -0.272264698 | 4.48357087 | -4.824850855 | 2.41E-06 | 5.92E-06 | 3.793808522 |
| PHACTR | -0.348884451 | 4.35020961 | -4.824658583 | 2.41E-06 | 5.92E-06 | 3.792958627 |
| NR3C1 | -0.365521037 | 4.38397068 | -4.824087325 | 2.42E-06 | 5.94E-06 | 3.790433665 |
| LRRC36 | -0.134653913 | 0.27163338 | -4.822943038 | 2.43E-06 | 5.97E-06 | 3.785376658 |
| CCNB3 | -0.129645245 | 0.3916455 | -4.820503442 | 2.46E-06 | 6.03E-06 | 3.774598569 |
| ATP10D | -0.459532533 | 3.17778375 | -4.820016982 | 2.46E-06 | 6.05E-06 | 3.772449941 |
| C15orf41 | -0.176653389 | 1.19474077 | -4.819464623 | 2.47E-06 | 6.06E-06 | 3.770010467 |
| FAM50A | -0.260195441 | 6.69195806 | -4.819249215 | 2.47E-06 | 6.07E-06 | 3.769059186 |
| GOPC | -0.368824696 | 4.97839879 | -4.818119834 | 2.48E-06 | 6.10E-06 | 3.764072224 |
| HDAC2 | -0.283693841 | 3.9097253 | -4.818028055 | 2.48E-06 | 6.10E-06 | 3.763667002 |
| PDPK1 | -0.348834204 | 3.424999 | -4.817482264 | 2.49E-06 | 6.11E-06 | 3.761257357 |
| RPL26 | -0.34493668 | 8.71089488 | -4.817029744 | 2.50E-06 | 6.12E-06 | 3.759259678 |
| FBH1 | -0.307177852 | 4.65709202 | -4.815956584 | 2.51E-06 | 6.15E-06 | 3.754522763 |
| RNASE2 | 0.467316986 | 1.1646974 | 4.81560097 | 2.51E-06 | 6.16E-06 | 3.752953278 |
| ZBTB16 | -0.645353903 | 2.35984903 | -4.815522102 | 2.51E-06 | 6.16E-06 | 3.752605214 |
| PEMT | -0.368961447 | 6.25886223 | -4.813123217 | 2.54E-06 | 6.23E-06 | 3.742020536 |
| RPA1 | -0.353560378 | 5.64003518 | -4.812997874 | 2.54E-06 | 6.23E-06 | 3.741467604 |
| SPATS2 | -0.295013197 | 4.41164368 | -4.811566885 | 2.56E-06 | 6.27E-06 | 3.735155834 |

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| CEBPZ | -0.348418495 | 5.13445586 | -4.811202881 | 2.56E-06 | 6.28E-06 | 3.733550545 |
| PUS7L | -0.295193886 | 2.36590428 | -4.81080271 | 2.57E-06 | 6.29E-06 | 3.731785876 |
| HSPB8 | -0.825073174 | 4.86275258 | -4.809326267 | 2.59E-06 | 6.34E-06 | 3.725276123 |
| NCL | -0.32950306 | 7.8685058 | -4.808369819 | 2.60E-06 | 6.36E-06 | 3.721059955 |
| ZNF500 | -0.298513007 | 3.04774012 | -4.808284749 | 2.60E-06 | 6.36E-06 | 3.72068499 |
| MYO1F | 0.482189122 | 2.30272075 | 4.807879654 | 2.60E-06 | 6.38E-06 | 3.718899506 |
| DGKH | 0.356504486 | 1.83371073 | 4.807738624 | 2.60E-06 | 6.38E-06 | 3.71827794 |
| NMUR2 | -0.33984979 | 0.56410538 | -4.807297066 | 2.61E-06 | 6.39E-06 | 3.716331933 |
| RPF2 | -0.230910766 | 4.58330469 | -4.806875008 | 2.62E-06 | 6.40E-06 | 3.714472006 |
| TRAF3 | -0.336801728 | 3.44600708 | -4.806711552 | 2.62E-06 | 6.41E-06 | 3.713751728 |
| CYTL1 | -0.502978966 | 1.64254532 | -4.806611322 | 2.62E-06 | 6.41E-06 | 3.713310065 |
| SAC3D1 | -0.326803494 | 3.3244854 | -4.805979435 | 2.63E-06 | 6.43E-06 | 3.710525844 |
| EDEM2 | -0.265525268 | 5.62366327 | -4.805925961 | 2.63E-06 | 6.43E-06 | 3.710290244 |
| SCNM1 | -0.26482825 | 4.43905627 | -4.804952296 | 2.64E-06 | 6.45E-06 | 3.706000718 |
| EXT2 | -0.320988695 | 5.40192013 | -4.804433326 | 2.64E-06 | 6.47E-06 | 3.703714672 |
| UEVLD | -0.330005716 | 3.48285793 | -4.804176139 | 2.65E-06 | 6.48E-06 | 3.702581844 |
| GPBP1L | -0.322166457 | 5.90046192 | -4.804004173 | 2.65E-06 | 6.48E-06 | 3.701824421 |
| FKBP9 | -0.365014248 | 5.66494571 | -4.80340175 | 2.66E-06 | 6.50E-06 | 3.69917122 |
| CYBB | 0.726058538 | 3.76183283 | 4.803279112 | 2.66E-06 | 6.50E-06 | 3.698631129 |
| MBTPS1 | -0.361464499 | 5.78057834 | -4.802681523 | 2.67E-06 | 6.52E-06 | 3.695999546 |
| RNF183 | 0.563669102 | 1.09117395 | 4.802535502 | 2.67E-06 | 6.52E-06 | 3.695356561 |
| SP3 | -0.397948259 | 4.61668639 | -4.802464121 | 2.67E-06 | 6.52E-06 | 3.695042252 |
| EPHA6 | -0.171714998 | 0.31314878 | -4.802261203 | 2.67E-06 | 6.53E-06 | 3.694148764 |
| TRIM13 | -0.286171735 | 3.69780774 | -4.801503352 | 2.68E-06 | 6.55E-06 | 3.690812079 |
| ODF3L1 | -0.606225441 | 1.28897548 | -4.801279611 | 2.68E-06 | 6.55E-06 | 3.689827071 |
| POLR3G | -0.252755007 | 1.32563802 | -4.800655545 | 2.69E-06 | 6.57E-06 | 3.687079858 |
| SGMS2 | 0.749906592 | 4.59328462 | 4.800004246 | 2.70E-06 | 6.59E-06 | 3.684213077 |
| ZNF587E | -0.277237731 | 2.5511602 | -4.799894311 | 2.70E-06 | 6.59E-06 | 3.683729215 |
| CATSPE | -0.074531427 | 0.08804932 | -4.798734328 | 2.71E-06 | 6.63E-06 | 3.67862429 |
| TMEM15 | 0.379109249 | 0.93725321 | 4.798400019 | 2.72E-06 | 6.64E-06 | 3.677153237 |
| COL24A | 0.129370874 | 0.21667185 | 4.797146245 | 2.73E-06 | 6.67E-06 | 3.671637033 |
| GLE1 | -0.286027261 | 4.98181554 | -4.797077813 | 2.74E-06 | 6.67E-06 | 3.671335988 |
| HLA-B | 0.65620348 | 10.4226704 | 4.79586296 | 2.75E-06 | 6.71E-06 | 3.665992234 |
| SMR3A | -0.444019048 | 0.52680415 | -4.795544401 | 2.75E-06 | 6.72E-06 | 3.664591183 |
| GORASF | -0.327433048 | 5.94681671 | -4.795178421 | 2.76E-06 | 6.73E-06 | 3.662981661 |
| UCP3 | -0.260295124 | 1.19305767 | -4.795164335 | 2.76E-06 | 6.73E-06 | 3.662919716 |
| NT5DC4 | 0.066395441 | 0.08074931 | 4.794498821 | 2.77E-06 | 6.75E-06 | 3.659993167 |
| HIST1H3 | -0.1251315 | 0.15325334 | -4.794082055 | 2.77E-06 | 6.76E-06 | 3.658160639 |
| NEBL | -0.50334513 | 4.88872757 | -4.792691427 | 2.79E-06 | 6.80E-06 | 3.652046988 |
| YBX2 | -0.456945849 | 1.18349072 | -4.791974277 | 2.80E-06 | 6.82E-06 | 3.648894745 |

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| RPS11 | -0.297805221 | 11.1672023 | -4.791694582 | 2.80E-06 | 6.83E-06 | 3.647665449 |
| DPYSL3 | 0.86605468 | 5.9408009 | 4.790059864 | 2.82E-06 | 6.88E-06 | 3.640481844 |
| TMCC3 | 0.608460717 | 4.81065881 | 4.789957836 | 2.83E-06 | 6.88E-06 | 3.640033557 |
| SPTLC3 | -0.41821916 | 4.08582194 | -4.789097863 | 2.84E-06 | 6.91E-06 | 3.636255382 |
| TWNK | -0.288313451 | 3.23698558 | -4.786723075 | 2.87E-06 | 6.98E-06 | 3.625825006 |
| SLC5A4 | -0.342630734 | 0.90146485 | -4.786307038 | 2.87E-06 | 7.00E-06 | 3.623998161 |
| PRDX6 | -0.279496351 | 8.21862192 | -4.786304708 | 2.87E-06 | 7.00E-06 | 3.623987931 |
| NCAM2 | 0.251842988 | 0.49193042 | 4.785053316 | 2.89E-06 | 7.04E-06 | 3.618493793 |
| SH3BGR | 0.403663529 | 8.08784354 | 4.784917589 | 2.89E-06 | 7.04E-06 | 3.617897968 |
| UPK3A | -0.628607424 | 0.88444425 | -4.784850992 | 2.89E-06 | 7.04E-06 | 3.61760562 |
| WAS | 0.611338053 | 2.93226808 | 4.784338494 | 2.90E-06 | 7.06E-06 | 3.615355966 |
| WTAP | -0.309547683 | 5.43821308 | -4.783586444 | 2.91E-06 | 7.08E-06 | 3.61205514 |
| SIRPB2 | 0.324449373 | 1.0399822 | 4.783304534 | 2.91E-06 | 7.09E-06 | 3.610817917 |
| CDKN2B | 0.55015196 | 2.78421047 | 4.783288276 | 2.91E-06 | 7.09E-06 | 3.610746569 |
| SERINC3 | -0.338559254 | 6.97066398 | -4.782587079 | 2.92E-06 | 7.11E-06 | 3.607669491 |
| MYOM1 | -0.358302211 | 1.42595525 | -4.782153003 | 2.93E-06 | 7.12E-06 | 3.605764818 |
| LRRC75E | -0.544681992 | 4.66421354 | -4.782087652 | 2.93E-06 | 7.12E-06 | 3.605478076 |
| BLOC1S | -0.300290831 | 4.86959924 | -4.781124391 | 2.94E-06 | 7.15E-06 | 3.601251965 |
| CST3 | -0.360062971 | 8.3158557 | -4.779503885 | 2.96E-06 | 7.20E-06 | 3.594143925 |
| PAPLN | 0.687041991 | 4.66182347 | 4.778926992 | 2.97E-06 | 7.22E-06 | 3.591613982 |
| C19orf53 | -0.308947291 | 8.03658544 | -4.778350407 | 2.98E-06 | 7.24E-06 | 3.589085641 |
| ELAVL1 | -0.244118706 | 5.13992724 | -4.77733496 | 2.99E-06 | 7.27E-06 | 3.584633503 |
| TBC1D1( | -0.518379201 | 3.40234693 | -4.777302556 | 2.99E-06 | 7.27E-06 | 3.584491443 |
| OTUD5 | -0.273237294 | 6.33524743 | -4.775207081 | 3.02E-06 | 7.34E-06 | 3.575306568 |
| ZBED6CI | -0.364928457 | 3.4166662 | -4.775034069 | 3.03E-06 | 7.35E-06 | 3.574548375 |
| HAS3 | -0.709800634 | 3.2711542 | -4.774236667 | 3.04E-06 | 7.37E-06 | 3.571054195 |
| TMEM25 | -0.299184848 | 6.50189952 | -4.7737699 | 3.04E-06 | 7.39E-06 | 3.569009071 |
| OXCT2 | -0.389026315 | 0.88550147 | -4.773240817 | 3.05E-06 | 7.40E-06 | 3.56669111 |
| CALM2 | -0.341731543 | 7.93798139 | -4.772459432 | 3.06E-06 | 7.43E-06 | 3.563268188 |
| WDR66 | -0.393773899 | 2.18375323 | -4.772286331 | 3.06E-06 | 7.43E-06 | 3.562509968 |
| HDGF | -0.323142141 | 7.52430796 | -4.772190017 | 3.06E-06 | 7.44E-06 | 3.562088104 |
| CYB561/ | -0.305385403 | 3.14234924 | -4.771863091 | 3.07E-06 | 7.45E-06 | 3.560656181 |
| TOM1 | -0.282264025 | 5.21510565 | -4.771766953 | 3.07E-06 | 7.45E-06 | 3.560235118 |
| EHD2 | 0.436953242 | 6.55086017 | 4.771169939 | 3.08E-06 | 7.47E-06 | 3.557620484 |
| NTN3 | -0.149512744 | 0.19207363 | -4.769955051 | 3.10E-06 | 7.51E-06 | 3.552300697 |
| PLEKHF | 0.445903566 | 2.42701631 | 4.769821506 | 3.10E-06 | 7.51E-06 | 3.551715997 |
| PTBP2 | -0.352412315 | 2.44708152 | -4.769697273 | 3.10E-06 | 7.51E-06 | 3.551172075 |
| RASGRF | -0.374696658 | 1.96173835 | -4.768845266 | 3.11E-06 | 7.54E-06 | 3.547442128 |
| WWP1 | -0.33284581 | 4.30975051 | -4.768350259 | 3.12E-06 | 7.56E-06 | 3.545275326 |
| THAP12 | -0.302986578 | 3.84420836 | -4.768130104 | 3.12E-06 | 7.57E-06 | 3.544311697 |

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| FAM184E | -0.069902386 | 0.25780312 | -4.768048989 | 3.12E-06 | 7.57E-06 | 3.543956661 |
| YIPF5 | -0.373133184 | 4.99328483 | -4.767694948 | 3.13E-06 | 7.58E-06 | 3.542407107 |
| MAP2 | 0.658860159 | 4.21220168 | 4.765984527 | 3.15E-06 | 7.64E-06 | 3.534922359 |
| VAMP8 | -0.352806838 | 8.77820168 | -4.765435392 | 3.16E-06 | 7.65E-06 | 3.532519835 |
| DNAH10 | -0.088149811 | 0.19496253 | -4.763949588 | 3.18E-06 | 7.71E-06 | 3.526020451 |
| KCNC1 | -0.058792133 | 0.0788536 | -4.763624472 | 3.19E-06 | 7.72E-06 | 3.524598514 |
| PTPRC | 0.742367896 | 2.71843475 | 4.76283094 | 3.20E-06 | 7.74E-06 | 3.521128242 |
| POLR1B | -0.375417279 | 3.90849156 | -4.761952524 | 3.21E-06 | 7.77E-06 | 3.517287322 |
| STAM2 | -0.348344284 | 4.06480972 | -4.761881238 | 3.21E-06 | 7.77E-06 | 3.516975645 |
| TIGIT | 0.578688044 | 1.10888219 | 4.76152873 | 3.22E-06 | 7.79E-06 | 3.515434473 |
| ARHGAP | 0.597650139 | 3.01316395 | 4.760012823 | 3.24E-06 | 7.84E-06 | 3.508807972 |
| ZNF878 | -0.11856285 | 0.36861811 | -4.759850194 | 3.24E-06 | 7.84E-06 | 3.508097177 |
| NSD2 | -0.358628663 | 3.38763272 | -4.759543828 | 3.25E-06 | 7.85E-06 | 3.506758208 |
| IBSP | 0.423643993 | 0.50626824 | 4.758613013 | 3.26E-06 | 7.88E-06 | 3.502690537 |
| ILK | -0.446328933 | 3.39694296 | -4.75834431 | 3.26E-06 | 7.89E-06 | 3.501516427 |
| PLPPR3 | 0.208885321 | 0.32080466 | 4.757087579 | 3.28E-06 | 7.94E-06 | 3.496025819 |
| WNT9A | -0.379636427 | 2.12575452 | -4.757034899 | 3.28E-06 | 7.94E-06 | 3.495795689 |
| COL16A1 | 0.456265071 | 4.76134123 | 4.756515383 | 3.29E-06 | 7.96E-06 | 3.493526319 |
| SLC35D1 | -0.388090669 | 3.47535711 | -4.75601615 | 3.30E-06 | 7.97E-06 | 3.491345744 |
| KIF13A | -0.425931183 | 4.48279778 | -4.75598711 | 3.30E-06 | 7.97E-06 | 3.49121891 |
| PRKAA2 | -0.367580668 | 2.31230177 | -4.754602944 | 3.32E-06 | 8.02E-06 | 3.485174114 |
| CA14 | -0.349433023 | 1.3014966 | -4.753862684 | 3.33E-06 | 8.05E-06 | 3.481941929 |
| SPPL2B | -0.34189213 | 4.05701295 | -4.75371834 | 3.33E-06 | 8.05E-06 | 3.481311732 |
| RAB25 | -0.370680307 | 7.4098104 | -4.753429123 | 3.34E-06 | 8.06E-06 | 3.480049076 |
| PAIP1 | -0.32798144 | 5.46066717 | -4.753273997 | 3.34E-06 | 8.07E-06 | 3.479371854 |
| RNF39 | 0.442446599 | 1.62054844 | 4.750714914 | 3.38E-06 | 8.16E-06 | 3.468202577 |
| CPA2 | -0.085220984 | 0.12308424 | -4.750691665 | 3.38E-06 | 8.16E-06 | 3.468101125 |
| ITGB6 | 0.641026345 | 3.81014117 | 4.750156267 | 3.39E-06 | 8.18E-06 | 3.465764996 |
| YAF2 | -0.334892376 | 2.95902302 | -4.749859044 | 3.39E-06 | 8.19E-06 | 3.4644682 |
| PIK3R5 | 0.436054894 | 1.46812285 | 4.74913873 | 3.40E-06 | 8.21E-06 | 3.461325726 |
| RARRES | 0.648393807 | 1.87858487 | 4.749038771 | 3.41E-06 | 8.22E-06 | 3.460889676 |
| CT62 | -0.190362203 | 0.45018157 | -4.747814671 | 3.42E-06 | 8.26E-06 | 3.45555037 |
| PCYOX1 | -0.468719228 | 6.56114222 | -4.747682742 | 3.43E-06 | 8.26E-06 | 3.454974991 |
| SLX4IP | -0.264839122 | 2.59941257 | -4.747429894 | 3.43E-06 | 8.27E-06 | 3.453872281 |
| ASAH2B | -0.19940154 | 1.83688698 | -4.747119985 | 3.43E-06 | 8.28E-06 | 3.45252079 |
| KRR1 | -0.271883564 | 3.34845369 | -4.746838649 | 3.44E-06 | 8.29E-06 | 3.451293966 |
| DDX54 | -0.273406708 | 5.70996639 | -4.746768117 | 3.44E-06 | 8.29E-06 | 3.450986404 |
| METTL3 | -0.352719629 | 4.20021609 | -4.744632946 | 3.47E-06 | 8.37E-06 | 3.441677656 |
| NOG | -0.486009615 | 1.00359638 | -4.744527165 | 3.48E-06 | 8.38E-06 | 3.441216572 |
| POPDC3 | -0.594019368 | 0.59726699 | -4.74334409 | 3.49E-06 | 8.42E-06 | 3.436060303 |

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| MPG | -0.337818889 | 6.48756295 | -4.742635152 | 3.51E-06 | 8.45E-06 | 3.432971008 |
| SS18 | -0.272578645 | 5.63600676 | -4.741480848 | 3.52E-06 | 8.49E-06 | 3.427941802 |
| PES1 | -0.307347441 | 5.4623455 | -4.74085054 | 3.53E-06 | 8.51E-06 | 3.425196033 |
| FEZ1 | -0.293273303 | 1.30452995 | -4.73999163 | 3.55E-06 | 8.54E-06 | 3.421454916 |
| TEX19 | -0.059123178 | 0.08431274 | -4.739955736 | 3.55E-06 | 8.54E-06 | 3.421298588 |
| IL10RB | -0.272682311 | 4.9383516 | -4.739797505 | 3.55E-06 | 8.55E-06 | 3.420609452 |
| BABAM1 | -0.25071133 | 5.13518467 | -4.739657029 | 3.55E-06 | 8.55E-06 | 3.419997661 |
| TCHH | 0.097500507 | 0.18425866 | 4.738784741 | 3.57E-06 | 8.59E-06 | 3.416199079 |
| QSOX1 | 0.563530268 | 5.33370836 | 4.738150167 | 3.58E-06 | 8.61E-06 | 3.413436047 |
| AKAP8L | -0.29222713 | 4.92619025 | -4.738128875 | 3.58E-06 | 8.61E-06 | 3.413343343 |
| SLAMF1 | 0.488983636 | 0.94317061 | 4.735998098 | 3.61E-06 | 8.69E-06 | 3.404067919 |
| PPY | -0.586946764 | 0.39283696 | -4.734731722 | 3.63E-06 | 8.74E-06 | 3.398556954 |
| S100A11 | 0.503203019 | 10.2476855 | 4.734173734 | 3.64E-06 | 8.76E-06 | 3.39612911 |
| SAFB | -0.257048875 | 5.33401465 | -4.733218384 | 3.66E-06 | 8.80E-06 | 3.391972885 |
| VPS26C | -0.279369709 | 3.69218556 | -4.73156976 | 3.69E-06 | 8.86E-06 | 3.384802238 |
| SLC37A3 | -0.30191652 | 3.55731036 | -4.731565497 | 3.69E-06 | 8.86E-06 | 3.384783697 |
| GPN1 | -0.296408705 | 4.82279932 | -4.730519002 | 3.70E-06 | 8.90E-06 | 3.380233087 |
| TGFBRA | -0.354718219 | 4.28230203 | -4.728721969 | 3.73E-06 | 8.97E-06 | 3.372420779 |
| FKBP15 | -0.261056237 | 3.86919736 | -4.728042501 | 3.75E-06 | 9.00E-06 | 3.369467553 |
| GCNT4 | 0.505726639 | 1.52101519 | 4.72797686 | 3.75E-06 | 9.00E-06 | 3.369182269 |
| RPL24 | -0.35525635 | 9.75882616 | -4.726208548 | 3.78E-06 | 9.07E-06 | 3.361498271 |
| ENPP4 | -0.395943361 | 4.21447388 | -4.725344631 | 3.79E-06 | 9.11E-06 | 3.357745094 |
| B3GALT2 | -0.520856026 | 0.57550442 | -4.72321283 | 3.83E-06 | 9.19E-06 | 3.348486217 |
| AATK | -0.539270525 | 1.99875355 | -4.722102918 | 3.85E-06 | 9.24E-06 | 3.343667018 |
| BAG2 | -0.333571984 | 2.6199744 | -4.721566494 | 3.86E-06 | 9.26E-06 | 3.341338226 |
| MICB | 0.41401853 | 1.82189507 | 4.720781804 | 3.87E-06 | 9.29E-06 | 3.337932025 |
| ZNF501 | -0.314741441 | 2.03522319 | -4.720606588 | 3.87E-06 | 9.30E-06 | 3.337171507 |
| DCTN1 | -0.320427806 | 5.28846801 | -4.719949355 | 3.88E-06 | 9.32E-06 | 3.334319033 |
| HCAR2 | 0.423051978 | 0.77145387 | 4.71990111 | 3.89E-06 | 9.32E-06 | 3.334109652 |
| RAD23A | -0.278473383 | 6.76407826 | -4.719523501 | 3.89E-06 | 9.34E-06 | 3.332470947 |
| SNX24 | -0.269714882 | 4.39712388 | -4.71935794 | 3.90E-06 | 9.35E-06 | 3.331752496 |
| ABHD5 | -0.401076217 | 4.01824939 | -4.71884652 | 3.90E-06 | 9.37E-06 | 3.329533334 |
| DDB1 | -0.320115004 | 6.08917934 | -4.718312273 | 3.91E-06 | 9.39E-06 | 3.32721533 |
| MFNG | -0.375069522 | 3.30847029 | -4.718084995 | 3.92E-06 | 9.40E-06 | 3.326229279 |
| CDCP1 | 0.562774309 | 4.67260442 | 4.717858337 | 3.92E-06 | 9.40E-06 | 3.32524596 |
| LST1 | 0.624941668 | 3.1399753 | 4.71783588 | 3.92E-06 | 9.40E-06 | 3.325148536 |
| CCDC28 | -0.425132791 | 3.29679965 | -4.717242476 | 3.93E-06 | 9.43E-06 | 3.32257434 |
| EI24 | -0.26570641 | 5.96284903 | -4.717148823 | 3.93E-06 | 9.43E-06 | 3.322168093 |
| ANXA2 | 0.67391903 | 7.28595531 | 4.716654529 | 3.94E-06 | 9.45E-06 | 3.32002408 |
| RECQL5 | -0.307928543 | 4.36305353 | -4.715853508 | 3.96E-06 | 9.48E-06 | 3.316550036 |

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| DEUP1 | -0.149920746 | 0.37806704 | -4.715802369 | 3.96E-06 | 9.48E-06 | 3.31632826 |
| THADA | -0.379589559 | 3.47968557 | -4.715697327 | 3.96E-06 | 9.49E-06 | 3.315872732 |
| GPD1 | -0.473058465 | 1.8587522 | -4.715068532 | 3.97E-06 | 9.51E-06 | 3.313146056 |
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| HOOK3 | 0.413344785 | 4.34141808 | 4.714123541 | 3.99E-06 | 9.55E-06 | 3.309048815 |
| EHBP1L | 0.478874124 | 4.0892462 | 4.713979026 | 3.99E-06 | 9.55E-06 | 3.308422296 |
| JRK | -0.326992961 | 2.33023116 | -4.713916432 | 3.99E-06 | 9.56E-06 | 3.308150935 |
| REX1BD | -0.435442137 | 4.28485539 | -4.713579728 | 4.00E-06 | 9.57E-06 | 3.306691293 |
| NUPR1 | -0.878774833 | 6.05224556 | -4.71310343 | 4.01E-06 | 9.59E-06 | 3.304626647 |
| ARL8A | -0.241646401 | 6.53143022 | -4.712419666 | 4.02E-06 | 9.62E-06 | 3.301662992 |
| RRP7A | -0.374145869 | 5.08054308 | -4.711882103 | 4.03E-06 | 9.64E-06 | 3.29933327 |
| ACKR2 | -0.194938533 | 0.56617209 | -4.711360644 | 4.04E-06 | 9.66E-06 | 3.297073555 |
| TPP2 | -0.347116291 | 4.49899894 | -4.710996817 | 4.05E-06 | 9.67E-06 | 3.295497055 |
| NRG1 | -0.601513292 | 1.79337191 | -4.710918516 | 4.05E-06 | 9.68E-06 | 3.295157785 |
| PFKL | -0.307141528 | 5.69285282 | -4.710841643 | 4.05E-06 | 9.68E-06 | 3.294824701 |
| KLHL4 | -0.182848557 | 0.34148937 | -4.710396203 | 4.06E-06 | 9.70E-06 | 3.292894759 |
| GSKIP | -0.292732912 | 3.71680369 | -4.709940964 | 4.06E-06 | 9.72E-06 | 3.290922515 |
| S100A2 | 0.895420158 | 4.59143258 | 4.708832449 | 4.09E-06 | 9.76E-06 | 3.286120735 |
| GABPB2 | -0.266219726 | 2.70138129 | -4.708798646 | 4.09E-06 | 9.76E-06 | 3.285974327 |
| TNFSF13 | 0.54533899 | 2.09339378 | 4.708326844 | 4.09E-06 | 9.78E-06 | 3.283930913 |
| FPR2 | 0.251858273 | 0.29907714 | 4.707522004 | 4.11E-06 | 9.82E-06 | 3.280445478 |
| LYN | 0.434318247 | 4.83124843 | 4.70727784 | 4.11E-06 | 9.83E-06 | 3.279388202 |
| RPL10 | -0.309354619 | 9.57051093 | -4.705089717 | 4.15E-06 | 9.92E-06 | 3.269915281 |
| AASDHP | -0.332991422 | 4.24767534 | -4.703609325 | 4.18E-06 | 9.99E-06 | 3.263508399 |
| MOSPD2 | -0.409272453 | 3.73441711 | -4.702740637 | 4.20E-06 | 1.00E-05 | 3.259749657 |
| VIP | -0.308344205 | 0.76984148 | -4.702638237 | 4.20E-06 | 1.00E-05 | 3.25930662 |
| TRIM63 | 0.590344415 | 1.30405463 | 4.701839417 | 4.22E-06 | 1.01E-05 | 3.255850769 |
| GPR135 | -0.295653751 | 1.72790766 | -4.701247788 | 4.23E-06 | 1.01E-05 | 3.253291583 |
| RIPOR2 | 0.610515416 | 2.14243296 | 4.701074198 | 4.23E-06 | 1.01E-05 | 3.252540743 |
| HIC1 | -0.370355604 | 1.65846659 | -4.6997217 | 4.26E-06 | 1.02E-05 | 3.246691495 |
| GNL1 | -0.315395905 | 5.3335747 | -4.699057351 | 4.27E-06 | 1.02E-05 | 3.243818855 |
| CDC73 | -0.39420195 | 4.45667803 | -4.696858353 | 4.31E-06 | 1.03E-05 | 3.234312839 |
| SLC39A1 | -0.302446035 | 6.7681545 | -4.696417909 | 4.32E-06 | 1.03E-05 | 3.232409303 |
| APOL5 | -0.135199383 | 0.26750984 | -4.696241435 | 4.32E-06 | 1.03E-05 | 3.231646648 |
| EMP2 | 0.537781486 | 4.7432546 | 4.695120953 | 4.35E-06 | 1.04E-05 | 3.226804907 |
| OCM | -0.176828831 | 0.40305667 | -4.694995904 | 4.35E-06 | 1.04E-05 | 3.226264612 |
| TAOK3 | -0.34129155 | 3.90573148 | -4.694914668 | 4.35E-06 | 1.04E-05 | 3.225913628 |
| TRPM6 | -0.164745848 | 0.27092312 | -4.694133514 | 4.36E-06 | 1.04E-05 | 3.222538866 |
| SNRNP7 | -0.400747114 | 6.84314421 | -4.693672264 | 4.37E-06 | 1.04E-05 | 3.22054638 |
| GTF3C4 | -0.387003539 | 3.79896062 | -4.693492886 | 4.38E-06 | 1.04E-05 | 3.219771557 |

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| GLIPR1L | -0.179710471 | 0.66952289 | -4.693066222 | 4.39E-06 | 1.04E-05 | 3.217928681 |
| SLC29A2 | -0.337946607 | 3.94060083 | -4.692525646 | 4.40E-06 | 1.05E-05 | 3.215593994 |
| CITED4 | 0.541314141 | 4.7866551 | 4.691506009 | 4.42E-06 | 1.05E-05 | 3.21119091 |
| PRPH2 | -0.665428627 | 1.52169139 | -4.690561819 | 4.44E-06 | 1.06E-05 | 3.207114342 |
| PLCB2 | 0.474147212 | 2.08858261 | 4.689806054 | 4.45E-06 | 1.06E-05 | 3.203851806 |
| PIBF1 | -0.387440451 | 4.35988165 | -4.688742302 | 4.47E-06 | 1.06E-05 | 3.199260474 |
| VAMP1 | -0.571826296 | 4.34875875 | -4.688588465 | 4.48E-06 | 1.07E-05 | 3.198596563 |
| REP15 | -0.179091487 | 0.82092901 | -4.688502929 | 4.48E-06 | 1.07E-05 | 3.198227422 |
| INHA | -0.337782822 | 0.94211489 | -4.687759962 | 4.49E-06 | 1.07E-05 | 3.195021313 |
| TTI1 | -0.290974667 | 4.18450477 | -4.687420761 | 4.50E-06 | 1.07E-05 | 3.193557706 |
| MYCBPA | -0.230558642 | 0.62594194 | -4.687320348 | 4.50E-06 | 1.07E-05 | 3.193124458 |
| TSHR | -0.541603674 | 8.08516589 | -4.686296554 | 4.52E-06 | 1.08E-05 | 3.188707549 |
| PRICKLE | -0.260820286 | 0.90563928 | -4.686064345 | 4.53E-06 | 1.08E-05 | 3.187705853 |
| KLHL3 | -0.520683173 | 2.40180434 | -4.686026363 | 4.53E-06 | 1.08E-05 | 3.187542012 |
| HIST2H2 | -0.405101188 | 1.70650824 | -4.685659135 | 4.53E-06 | 1.08E-05 | 3.185957968 |
| RPS27 | -0.377157734 | 10.7685414 | -4.684368493 | 4.56E-06 | 1.08E-05 | 3.180391604 |
| RTL8A | -0.245104371 | 6.79451807 | -4.684035486 | 4.57E-06 | 1.09E-05 | 3.178955601 |
| TMEM13 | -0.287152778 | 4.4427686 | -4.683775169 | 4.57E-06 | 1.09E-05 | 3.177833113 |
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| AVEN | -0.320508003 | 4.00879951 | -4.682127612 | 4.61E-06 | 1.09E-05 | 3.170730053 |
| PPP6R1 | -0.348010101 | 5.51060358 | -4.682064651 | 4.61E-06 | 1.09E-05 | 3.170458651 |
| DHRS1 | -0.289369289 | 4.81143288 | -4.680235112 | 4.65E-06 | 1.10E-05 | 3.162573576 |
| SCYL3 | -0.30570415 | 2.9808442 | -4.679600567 | 4.66E-06 | 1.11E-05 | 3.159839374 |
| PLD4 | 0.396524191 | 1.63712466 | 4.679251136 | 4.67E-06 | 1.11E-05 | 3.158333838 |
| RPIA | -0.258998527 | 5.01461996 | -4.678738424 | 4.68E-06 | 1.11E-05 | 3.156124972 |
| ZNF565 | -0.21326069 | 1.61751854 | -4.678293429 | 4.69E-06 | 1.11E-05 | 3.154208006 |
| VAMP5 | -0.543053035 | 6.43743096 | -4.677989647 | 4.69E-06 | 1.11E-05 | 3.152899454 |
| STK38 | 0.3444984 | 4.65855911 | 4.677948546 | 4.69E-06 | 1.11E-05 | 3.152722419 |
| FRK | -0.345269358 | 0.78589963 | -4.677824878 | 4.70E-06 | 1.11E-05 | 3.152189735 |
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| RNF34 | -0.26631059 | 4.08502396 | -4.677130328 | 4.71E-06 | 1.12E-05 | 3.149198293 |
| PVALB | -0.884942673 | 1.0736226 | -4.676958165 | 4.72E-06 | 1.12E-05 | 3.148456839 |
| MOGS | -0.278662864 | 5.75752892 | -4.676934553 | 4.72E-06 | 1.12E-05 | 3.148355152 |
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| AGFG2 | -0.296062019 | 4.05168728 | -4.674663736 | 4.76E-06 | 1.13E-05 | 3.138577642 |
| GID8 | -0.307904405 | 5.7107179 | -4.674439667 | 4.77E-06 | 1.13E-05 | 3.137613078 |
| ITGA11 | 0.454347223 | 1.34417198 | 4.674316467 | 4.77E-06 | 1.13E-05 | 3.13708275 |
| GUCA1B | -0.285167812 | 1.03439142 | -4.673920404 | 4.78E-06 | 1.13E-05 | 3.135377929 |
| TMEM14 | -0.36282079 | 3.12785363 | -4.673134116 | 4.80E-06 | 1.14E-05 | 3.131993774 |
| DAPK2 | 0.858621098 | 5.90220984 | 4.672536129 | 4.81E-06 | 1.14E-05 | 3.129420381 |

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| GBA | -0.330053816 | 5.50650358 | -4.671315205 | 4.84E-06 | 1.15E-05 | 3.124167088 |
| SLC52A2 | -0.287722181 | 5.18372804 | -4.670834087 | 4.85E-06 | 1.15E-05 | 3.122097293 |
| NUP50 | -0.310775727 | 3.75432187 | -4.670199232 | 4.86E-06 | 1.15E-05 | 3.119366381 |
| HMGCS2 | -0.452343018 | 0.36848663 | -4.6697977 | 4.87E-06 | 1.15E-05 | 3.117639302 |
| GMPR | -0.37913959 | 3.72369998 | -4.669763267 | 4.87E-06 | 1.15E-05 | 3.117491207 |
| PSTPIP1 | 0.498250297 | 1.44687329 | 4.669710107 | 4.87E-06 | 1.15E-05 | 3.117262562 |
| GSG1 | -0.053697456 | 0.09950852 | -4.668032843 | 4.91E-06 | 1.16E-05 | 3.110049742 |
| SQOR | -0.284964534 | 5.41949058 | -4.667981155 | 4.91E-06 | 1.16E-05 | 3.109827499 |
| FAAP24 | -0.258077663 | 2.15692286 | -4.667916212 | 4.91E-06 | 1.16E-05 | 3.10954827 |
| GFPT1 | -0.464148391 | 5.61138408 | -4.667564668 | 4.92E-06 | 1.16E-05 | 3.108036813 |
| CACNA1 | -0.129287702 | 0.35478944 | -4.666685433 | 4.94E-06 | 1.17E-05 | 3.104256989 |
| PPIL4 | -0.377334728 | 5.4480915 | -4.666107487 | 4.95E-06 | 1.17E-05 | 3.101772727 |
| TMED6 | -0.160420381 | 0.91005241 | -4.666007851 | 4.95E-06 | 1.17E-05 | 3.101344475 |
| KRT85 | -0.478595309 | 0.29304366 | -4.665737556 | 4.96E-06 | 1.17E-05 | 3.100182741 |
| RAB11FI | -0.30618297 | 4.87921349 | -4.664554901 | 4.99E-06 | 1.18E-05 | 3.095100333 |
| TPK1 | -0.226077505 | 1.71978926 | -4.663251986 | 5.01E-06 | 1.19E-05 | 3.089502366 |
| EXOSC6 | -0.308009677 | 4.57783256 | -4.663030758 | 5.02E-06 | 1.19E-05 | 3.088551993 |
| TP53TG5 | -0.180060609 | 0.62919545 | -4.662229729 | 5.04E-06 | 1.19E-05 | 3.08511117 |
| GABRR3 | -0.038233154 | 0.0295947 | -4.662006718 | 5.04E-06 | 1.19E-05 | 3.084153311 |
| PIK3CD | 0.527809415 | 2.92038817 | 4.661821908 | 5.05E-06 | 1.19E-05 | 3.083359563 |
| TECPR1 | -0.272628085 | 3.83125119 | -4.661797804 | 5.05E-06 | 1.19E-05 | 3.083256037 |
| KLC3 | 0.457034171 | 1.53552006 | 4.660555484 | 5.08E-06 | 1.20E-05 | 3.077921047 |
| BOLA2B | -0.178583629 | 0.66985898 | -4.660174866 | 5.08E-06 | 1.20E-05 | 3.076286774 |
| IVNS1AB | -0.353499864 | 5.41366405 | -4.658388718 | 5.12E-06 | 1.21E-05 | 3.068619011 |
| RPS12 | -0.383682016 | 11.3718309 | -4.658008699 | 5.13E-06 | 1.21E-05 | 3.066987942 |
| CD302 | -0.477655162 | 2.97008045 | -4.657957451 | 5.13E-06 | 1.21E-05 | 3.066767995 |
| GPR87 | 0.436657338 | 0.58378889 | 4.65718522 | 5.15E-06 | 1.22E-05 | 3.063453904 |
| GYPC | -0.461552571 | 3.43563833 | -4.656560906 | 5.17E-06 | 1.22E-05 | 3.060774952 |
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| MPV17L | -0.361695144 | 2.28523657 | -4.654776102 | 5.21E-06 | 1.23E-05 | 3.05311797 |
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| DHX9 | -0.390468169 | 6.33158393 | -4.651719207 | 5.28E-06 | 1.25E-05 | 3.040009347 |
| MINDY4 | -0.267875321 | 1.15143733 | -4.651334091 | 5.29E-06 | 1.25E-05 | 3.038358403 |
| HS6ST1 | -0.356982892 | 3.96178005 | -4.650954534 | 5.30E-06 | 1.25E-05 | 3.036731398 |
| ZSCAN2 | -0.312996266 | 4.08889136 | -4.64989872 | 5.32E-06 | 1.25E-05 | 3.032206155 |
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| TMEM22 | -0.385949874 | 3.47093029 | -4.64922778 | 5.34E-06 | 1.26E-05 | 3.029330945 |

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| YTHDC1 | -0.316191299 | 5.19522664 | -4.64868537 | 5.35E-06 | 1.26E-05 | 3.02700678 |
| FNDC11 | 0.277817334 | 0.71868549 | 4.648593452 | 5.35E-06 | 1.26E-05 | 3.026612947 |
| C10orf14 | 0.371317609 | 0.64547232 | 4.64792226 | 5.37E-06 | 1.26E-05 | 3.023737337 |
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| NUDT4 | -0.361082139 | 3.99799965 | -4.646595169 | 5.40E-06 | 1.27E-05 | 3.018052663 |
| EPB41L5 | -0.431267008 | 3.69675801 | -4.646308708 | 5.41E-06 | 1.27E-05 | 3.016825771 |
| ARHGAP | -0.441186732 | 3.72183471 | -4.645743559 | 5.42E-06 | 1.28E-05 | 3.014405463 |
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| ZNF92 | -0.344675867 | 2.91796121 | -4.644679478 | 5.45E-06 | 1.28E-05 | 3.009849105 |
| TMEM94 | -0.286642643 | 5.0316846 | -4.644455058 | 5.45E-06 | 1.28E-05 | 3.008888255 |
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| HDLBP | -0.316874087 | 6.9505089 | -4.64329996 | 5.48E-06 | 1.29E-05 | 3.003943363 |
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| ZNF799 | -0.186171159 | 1.44960944 | -4.642780278 | 5.50E-06 | 1.29E-05 | 3.001718983 |
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| ALDH3A2 | -0.377673737 | 6.68387737 | -4.638315495 | 5.61E-06 | 1.32E-05 | 2.982617132 |
| NIPAL4 | 0.339257451 | 0.66810481 | 4.637532451 | 5.63E-06 | 1.32E-05 | 2.979268606 |
| HEATR4 | -0.138889228 | 0.62548191 | -4.637421058 | 5.63E-06 | 1.32E-05 | 2.978792295 |
| EVI2A | 0.610298671 | 2.52588182 | 4.637268992 | 5.63E-06 | 1.32E-05 | 2.978142086 |
| IFITM2 | -0.449943941 | 6.33287457 | -4.634825849 | 5.69E-06 | 1.34E-05 | 2.967698057 |
| LOXL1 | 0.577871473 | 3.31934143 | 4.634607891 | 5.70E-06 | 1.34E-05 | 2.966766546 |
| PLXNA4 | -0.651436883 | 2.02651045 | -4.63458516 | 5.70E-06 | 1.34E-05 | 2.966669403 |
| GRM3 | -0.108009878 | 0.1217374 | -4.633846676 | 5.72E-06 | 1.34E-05 | 2.963513561 |
| ODF2 | -0.273960924 | 3.96865516 | -4.633686956 | 5.72E-06 | 1.34E-05 | 2.962831067 |
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| SERP2 | -0.497308847 | 2.38816609 | -4.632577027 | 5.75E-06 | 1.35E-05 | 2.958088826 |
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| UPK2 | 0.476219799 | 0.86756725 | 4.630213405 | 5.81E-06 | 1.36E-05 | 2.9479933 |
| GALE | 0.737598904 | 5.32950676 | 4.62876723 | 5.85E-06 | 1.37E-05 | 2.941818529 |
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| PMM1 | -0.277211169 | 3.62845368 | -4.628458122 | 5.86E-06 | 1.37E-05 | 2.940498933 |
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| PRKAR1 | -0.377473403 | 7.51090245 | -4.628400543 | 5.86E-06 | 1.37E-05 | 2.940253133 |
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| WDR11 | -0.349226788 | 4.1422289 | -4.628023033 | 5.87E-06 | 1.37E-05 | 2.938641645 |
| CALHM4 | -0.219575143 | 0.14490532 | -4.628004359 | 5.87E-06 | 1.37E-05 | 2.938561934 |
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| COMT | -0.305461626 | 5.71557904 | -4.625982442 | 5.92E-06 | 1.39E-05 | 2.929932839 |
| PLGLB1 | -0.090138941 | 0.23273978 | -4.625426347 | 5.94E-06 | 1.39E-05 | 2.927560106 |
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| TSPEAR | -0.501580233 | 1.05396654 | -4.624550924 | 5.96E-06 | 1.39E-05 | 2.923825365 |
| NPEPL1 | -0.345781074 | 2.51901066 | -4.623649739 | 5.98E-06 | 1.40E-05 | 2.919981335 |
| FUBP1 | -0.351136174 | 5.68105017 | -4.623605313 | 5.99E-06 | 1.40E-05 | 2.919791852 |
| TRPM4 | -0.284980702 | 4.08645254 | -4.62345059 | 5.99E-06 | 1.40E-05 | 2.919131949 |
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| RNH1 | -0.317579264 | 6.28700575 | -4.621979735 | 6.03E-06 | 1.41E-05 | 2.912859569 |
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| COL3A1 | 0.963289228 | 6.71510541 | 4.621653658 | 6.04E-06 | 1.41E-05 | 2.911469259 |
| DFFB | -0.257973115 | 2.3463784 | -4.621346599 | 6.05E-06 | 1.41E-05 | 2.910160113 |
| PSG1 | 0.574041674 | 0.78448747 | 4.619937222 | 6.08E-06 | 1.42E-05 | 2.904152182 |
| ART5 | -0.386615809 | 0.92677175 | -4.619577613 | 6.09E-06 | 1.42E-05 | 2.902619479 |
| CHRDL2 | 0.189091625 | 0.33376854 | 4.618710014 | 6.12E-06 | 1.43E-05 | 2.898922069 |
| GPR3 | -0.447474416 | 1.72201438 | -4.618259267 | 6.13E-06 | 1.43E-05 | 2.897001374 |
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| MAGEF1 | -0.325711909 | 7.26794986 | -4.615873549 | 6.19E-06 | 1.45E-05 | 2.886838125 |
| CHUK | -0.296481064 | 3.32315223 | -4.615444098 | 6.21E-06 | 1.45E-05 | 2.885009118 |
| TTC8 | -0.359866237 | 4.12693463 | -4.614569215 | 6.23E-06 | 1.45E-05 | 2.881283491 |
| TGFBR1 | 0.584391539 | 5.19030233 | 4.61320116 | 6.27E-06 | 1.46E-05 | 2.875458918 |
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| TMEM18 | -0.367117026 | 4.90153845 | -4.612554491 | 6.29E-06 | 1.47E-05 | 2.8727062 |
| CCSER1 | -0.20070155 | 0.58994397 | -4.612135018 | 6.30E-06 | 1.47E-05 | 2.870920777 |
| NAE1 | -0.291161824 | 4.84420213 | -4.611473504 | 6.32E-06 | 1.47E-05 | 2.868105417 |
| ELAVL2 | -0.108094319 | 0.25140164 | -4.610736748 | 6.34E-06 | 1.48E-05 | 2.864970235 |
| CXorf38 | -0.265847722 | 4.03588585 | -4.610702734 | 6.34E-06 | 1.48E-05 | 2.864825504 |
| CSTF2T | -0.335860111 | 4.67064166 | -4.610582855 | 6.34E-06 | 1.48E-05 | 2.864315417 |
| MTSS1 | -0.525927158 | 3.31872488 | -4.608614928 | 6.40E-06 | 1.49E-05 | 2.855943447 |
| KIF25 | -0.058153179 | 0.10535521 | -4.608554094 | 6.40E-06 | 1.49E-05 | 2.855684693 |
| NKX2-3 | -0.471112641 | 0.57451356 | -4.607615467 | 6.43E-06 | 1.50E-05 | 2.851692688 |

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| SRSF6 | -0.340728039 | 6.68118819 | -4.605818722 | 6.48E-06 | 1.51E-05 | 2.844053005 |
| HSPA12/ | -0.536908569 | 2.77839477 | -4.605184498 | 6.50E-06 | 1.51E-05 | 2.841356914 |
| CLEC2B | 0.460207111 | 3.36195289 | 4.60364161 | 6.54E-06 | 1.52E-05 | 2.834799398 |
| PUS1 | -0.229229159 | 3.22000607 | -4.603338316 | 6.55E-06 | 1.53E-05 | 2.83351057 |
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| IKZF1 | 0.510759357 | 1.43369686 | 4.601935834 | 6.59E-06 | 1.53E-05 | 2.827551743 |
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| SMNDC1 | -0.273805938 | 4.09751417 | -4.600189421 | 6.64E-06 | 1.55E-05 | 2.820133788 |
| INSRR | 0.072011011 | 0.06845481 | 4.600166453 | 6.64E-06 | 1.55E-05 | 2.820036244 |
| USP28 | -0.322251719 | 3.66797188 | -4.5998983 | 6.65E-06 | 1.55E-05 | 2.81889747 |
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| ARID3B | -0.27470703 | 1.73701507 | -4.599314686 | 6.67E-06 | 1.55E-05 | 2.816419211 |
| SLC35B4 | -0.274105607 | 2.79775113 | -4.598335296 | 6.70E-06 | 1.56E-05 | 2.812260926 |
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| FYB1 | 0.616637572 | 2.21356319 | 4.597252996 | 6.73E-06 | 1.56E-05 | 2.80766658 |
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| DLL1 | -0.525432062 | 3.36662039 | -4.594728748 | 6.80E-06 | 1.58E-05 | 2.79695475 |
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| TDRP | -0.362803341 | 5.51822553 | -4.591218295 | 6.91E-06 | 1.60E-05 | 2.782066167 |
| MGP | -0.596496509 | 7.85344315 | -4.590304859 | 6.94E-06 | 1.61E-05 | 2.778193669 |
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| WWC1 | -0.36216201 | 4.96503607 | -4.587936117 | 7.01E-06 | 1.63E-05 | 2.768154472 |
| TRPM7 | -0.356630681 | 3.47207197 | -4.587392664 | 7.03E-06 | 1.63E-05 | 2.765851826 |
| VAV1 | 0.546795959 | 2.08697696 | 4.586603282 | 7.05E-06 | 1.64E-05 | 2.762507582 |
| MBOAT1 | 0.52576244 | 3.64486266 | 4.586490534 | 7.06E-06 | 1.64E-05 | 2.762029958 |
| FXR1 | -0.26370545 | 4.98169311 | -4.586305452 | 7.06E-06 | 1.64E-05 | 2.761245938 |
| TMCC2 | -0.395642299 | 2.11861963 | -4.586065657 | 7.07E-06 | 1.64E-05 | 2.760230191 |
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| RPL37A | -0.343991202 | 8.34866569 | -4.583727672 | 7.14E-06 | 1.66E-05 | 2.750329077 |
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| TMPRSS | 0.099637862 | 0.1066341 | 4.559698443 | 7.94E-06 | 1.83E-05 | 2.648816132 |
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| ALKBH8 | -0.285739473 | 3.02162411 | -4.548477 | 8.34E-06 | 1.92E-05 | 2.601565662 |
| NAT14 | -0.465109594 | 5.1016973 | -4.547109913 | 8.39E-06 | 1.93E-05 | 2.595815985 |
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| FAM210E | -0.247995437 | 5.88984115 | -4.546057947 | 8.43E-06 | 1.94E-05 | 2.591392642 |
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| KLHDC4 | -0.2428197 | 3.26818157 | -4.544975445 | 8.47E-06 | 1.95E-05 | 2.586841812 |
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| BICRA | -0.267352929 | 2.78779176 | -4.538911047 | 8.70E-06 | 1.99E-05 | 2.561364152 |
| FBXW2 | -0.318695659 | 4.20019853 | -4.538489321 | 8.72E-06 | 2.00E-05 | 2.559593478 |
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| JCHAIN | 1.659125638 | 4.65271583 | 4.535516593 | 8.83E-06 | 2.02E-05 | 2.547116051 |
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| CCNY | -0.284205056 | 5.64184911 | -4.531053286 | 9.01E-06 | 2.06E-05 | 2.528395285 |
| SRGAP3 | 0.353303028 | 2.11023225 | 4.530467491 | 9.03E-06 | 2.06E-05 | 2.525939404 |
| NUCKS1 | -0.305346466 | 7.5356156 | -4.529768359 | 9.06E-06 | 2.07E-05 | 2.52300873 |
| FRS3 | -0.283310487 | 3.38173885 | -4.528999191 | 9.09E-06 | 2.08E-05 | 2.519784915 |
| ATP6V1( | -0.302189112 | 5.39531539 | -4.528855807 | 9.09E-06 | 2.08E-05 | 2.519184 |
| MAK | -0.196941717 | 0.71532035 | -4.528618464 | 9.10E-06 | 2.08E-05 | 2.518189345 |
| CUL4A | -0.303540018 | 4.90476001 | -4.528525405 | 9.11E-06 | 2.08E-05 | 2.517799369 |
| FTO | -0.321220437 | 3.65683133 | -4.528334142 | 9.12E-06 | 2.08E-05 | 2.51699787 |
| LTBP2 | 0.56729183 | 6.59485604 | 4.52715843 | 9.16E-06 | 2.09E-05 | 2.512071623 |
| FOXA3 | 0.310990828 | 0.39664165 | 4.526434117 | 9.19E-06 | 2.10E-05 | 2.509037285 |
| SPPL2A | -0.31483293 | 4.36316467 | -4.526348581 | 9.20E-06 | 2.10E-05 | 2.50867898 |
| ARMC1 | -0.252293758 | 4.609368 | -4.524917959 | 9.25E-06 | 2.11E-05 | 2.502687043 |
| STAM | 0.440084678 | 4.91001661 | 4.524612353 | 9.27E-06 | 2.12E-05 | 2.501407268 |
| VIPAS39 | -0.2550384 | 4.43083075 | -4.524070045 | 9.29E-06 | 2.12E-05 | 2.499136444 |
| F2RL3 | -0.727682878 | 3.41358264 | -4.523321176 | 9.32E-06 | 2.13E-05 | 2.496001066 |
| TAP1 | 0.55658148 | 5.28479956 | 4.522785425 | 9.34E-06 | 2.13E-05 | 2.493758243 |
| EXOC2 | -0.308479255 | 4.51815353 | -4.522016227 | 9.37E-06 | 2.14E-05 | 2.490538536 |
| DUS3L | -0.27235656 | 4.06561855 | -4.520792733 | 9.42E-06 | 2.15E-05 | 2.485418197 |
| ZNHIT6 | -0.286213584 | 3.5203093 | -4.520758742 | 9.42E-06 | 2.15E-05 | 2.485275961 |
| CCDC69 | -0.539492138 | 3.64526964 | -4.520427569 | 9.44E-06 | 2.15E-05 | 2.48389021 |
| TRIM37 | -0.348857187 | 3.91680392 | -4.519060203 | 9.49E-06 | 2.17E-05 | 2.478169555 |
| TNFRSF: | 0.447458252 | 2.19569314 | 4.518905758 | 9.50E-06 | 2.17E-05 | 2.477523495 |
| RUNDC3 | -0.226640695 | 1.02647042 | -4.518789615 | 9.50E-06 | 2.17E-05 | 2.477037667 |

| TRIM47 | 0.375994343 | 5.16006064 | 4.518662096 | 9.51E-06 | 2.17E-05 | 2.476504269 |
| LRRFIP1 | -0.295291409 | 4.80014634 | -4.517678985 | 9.55E-06 | 2.18E-05 | 2.472392441 |
| MKRN1 | -0.260631316 | 6.00391547 | -4.516774819 | 9.59E-06 | 2.19E-05 | 2.468611474 |
| LANCL3 | -0.205058435 | 0.46598001 | -4.516623291 | 9.59E-06 | 2.19E-05 | 2.46797789 |
| SF1 | -0.296421427 | 6.79968535 | -4.516419904 | 9.60E-06 | 2.19E-05 | 2.467127496 |
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| ENTPD6 | -0.24997049 | 5.01750479 | -4.516306964 | 9.61E-06 | 2.19E-05 | 2.466655286 |
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| ZNF585E | -0.268374981 | 3.2105468 | -4.515618809 | 9.64E-06 | 2.19E-05 | 2.463778303 |
| GET4 | -0.20972143 | 1.49036084 | -4.515500559 | 9.64E-06 | 2.20E-05 | 2.463283968 |
| ATXN7L1 | -0.248249732 | 1.98880261 | -4.514707142 | 9.68E-06 | 2.20E-05 | 2.459967448 |
| LATS2 | -0.417188009 | 4.36228066 | -4.514159426 | 9.70E-06 | 2.21E-05 | 2.45767826 |
| TXK | 0.270559881 | 0.92293836 | 4.513860528 | 9.71E-06 | 2.21E-05 | 2.456429113 |
| OGG1 | -0.297591707 | 3.29216818 | -4.513762942 | 9.72E-06 | 2.21E-05 | 2.456021296 |
| RGS3 | -0.34087807 | 4.03067652 | -4.5132436 | 9.74E-06 | 2.22E-05 | 2.453851081 |
| OLFM4 | -0.383897878 | 0.39158432 | -4.511821285 | 9.80E-06 | 2.23E-05 | 2.447908621 |
| ASPG | -0.247108701 | 0.476451 | -4.511716325 | 9.80E-06 | 2.23E-05 | 2.447470162 |
| APOL2 | 0.423273616 | 4.94408142 | 4.511299457 | 9.82E-06 | 2.23E-05 | 2.445728817 |
| GLS2 | 0.281392523 | 1.03297361 | 4.511174745 | 9.83E-06 | 2.23E-05 | 2.445207896 |
| ANAPC4 | -0.256056982 | 3.39352649 | -4.510409414 | 9.86E-06 | 2.24E-05 | 2.44201138 |
| EFTUD2 | -0.259941386 | 4.63540017 | -4.510166552 | 9.87E-06 | 2.24E-05 | 2.440997126 |
| QTRT2 | -0.294072789 | 2.91603305 | -4.509892028 | 9.88E-06 | 2.25E-05 | 2.439850704 |
| DYSF | -0.444719023 | 4.27115288 | -4.509701776 | 9.89E-06 | 2.25E-05 | 2.439056238 |
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| SMG7 | -0.260166487 | 5.04387428 | -4.508451209 | 9.94E-06 | 2.26E-05 | 2.433834758 |
| LRRC56 | -0.463602973 | 2.65129221 | -4.508377515 | 9.95E-06 | 2.26E-05 | 2.433527103 |
| KCNJ16 | -0.564913454 | 7.68850619 | -4.508309601 | 9.95E-06 | 2.26E-05 | 2.433243582 |
| UTP23 | -0.322132065 | 3.45836451 | -4.507681392 | 9.98E-06 | 2.27E-05 | 2.430621164 |
| PKDCC | -0.435269214 | 1.55287419 | -4.507672648 | 9.98E-06 | 2.27E-05 | 2.430584664 |
| TMEM88 | 0.337068215 | 0.48017494 | 4.507489531 | 9.99E-06 | 2.27E-05 | 2.429820315 |
| SH2D2A | 0.487742681 | 1.34700991 | 4.506941455 | 1.00E-05 | 2.27E-05 | 2.427532743 |
| WNT2 | 0.267866978 | 0.32050256 | 4.506676339 | 1.00E-05 | 2.27E-05 | 2.426426278 |
| BTNL3 | -0.103646518 | 0.11519204 | -4.505016066 | 1.01E-05 | 2.29E-05 | 2.419498392 |
| TMEM25 | -0.308312826 | 4.36195172 | -4.504485487 | 1.01E-05 | 2.30E-05 | 2.417284882 |
| KIF3B | -0.32180412 | 5.12629306 | -4.503560744 | 1.02E-05 | 2.30E-05 | 2.413427498 |
| TMEM16 | -0.29796823 | 2.50507507 | -4.503286006 | 1.02E-05 | 2.31E-05 | 2.412281616 |
| WDR7 | -0.28466156 | 2.74705529 | -4.503021155 | 1.02E-05 | 2.31E-05 | 2.411177022 |
| EIF3G | -0.304949702 | 7.00705621 | -4.501153578 | 1.03E-05 | 2.33E-05 | 2.403389654 |
| GRAMD2 | -0.543826549 | 2.01114495 | -4.499648961 | 1.03E-05 | 2.34E-05 | 2.397117745 |

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|--------|--------------|------------|--------------|----------|----------|-------------|
| TWSG1 | -0.420975867 | 5.6137259 | -4.498090595 | 1.04E-05 | 2.36E-05 | 2.390623673 |
| CCR2 | 0.530246705 | 1.54988979 | 4.497330436 | 1.04E-05 | 2.37E-05 | 2.387456613 |
| NECTIN2 | -0.341040326 | 6.5283304 | -4.49685923 | 1.05E-05 | 2.37E-05 | 2.38549365 |
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| RANGRF | -0.344410858 | 4.61049509 | -4.49341821 | 1.06E-05 | 2.41E-05 | 2.37116427 |
| LAMP1 | -0.316389327 | 7.75354882 | -4.49282388 | 1.06E-05 | 2.41E-05 | 2.368690262 |
| NCAPH2 | -0.269386012 | 5.22771732 | -4.491194634 | 1.07E-05 | 2.43E-05 | 2.361909649 |
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| SEC23IP | -0.337608512 | 4.23875549 | -4.491066671 | 1.07E-05 | 2.43E-05 | 2.361377181 |
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| SERTAD | -0.30462618 | 5.48613611 | -4.489998986 | 1.08E-05 | 2.44E-05 | 2.356934929 |
| CDK1 | -0.336721143 | 2.32417295 | -4.4896916 | 1.08E-05 | 2.44E-05 | 2.35565617 |
| GPR158 | -0.28863969 | 0.3835639 | -4.488785221 | 1.08E-05 | 2.45E-05 | 2.351885982 |
| JPH3 | 0.319800018 | 0.44369079 | 4.488275122 | 1.09E-05 | 2.46E-05 | 2.349764451 |
| RASGRF | 0.201918196 | 0.76366598 | 4.487422204 | 1.09E-05 | 2.47E-05 | 2.346217575 |
| PFKP | -0.420021106 | 6.43096203 | -4.486450044 | 1.09E-05 | 2.48E-05 | 2.342175532 |
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| NCOA7 | 0.583689935 | 4.0302985 | 4.486109443 | 1.10E-05 | 2.48E-05 | 2.340759559 |
| EHMT1 | -0.302007083 | 3.55091481 | -4.485159173 | 1.10E-05 | 2.49E-05 | 2.336809507 |
| TBL3 | -0.23213094 | 4.4093423 | -4.484471443 | 1.10E-05 | 2.50E-05 | 2.33395122 |
| CCDC12 | -0.262397464 | 2.07440059 | -4.483988334 | 1.11E-05 | 2.50E-05 | 2.331943584 |
| PIP4P1 | -0.26045357 | 4.85287111 | -4.483481798 | 1.11E-05 | 2.51E-05 | 2.329838795 |
| TMEM13 | -0.816792745 | 2.28890655 | -4.483087617 | 1.11E-05 | 2.51E-05 | 2.328201009 |
| HOXD1 | 0.378352759 | 0.47923847 | 4.479899857 | 1.13E-05 | 2.54E-05 | 2.31496068 |
| FOXN3 | 0.35070625 | 3.26998118 | 4.479122268 | 1.13E-05 | 2.55E-05 | 2.311732192 |
| SLC35C2 | -0.263160028 | 5.07808428 | -4.478155074 | 1.13E-05 | 2.56E-05 | 2.307717144 |
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| PDK4 | -0.994352157 | 7.03930962 | -4.47558699 | 1.15E-05 | 2.59E-05 | 2.29706003 |
| CHD7 | -0.324608781 | 2.31761028 | -4.475250959 | 1.15E-05 | 2.59E-05 | 2.295665946 |
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| SIN3A | -0.333468403 | 4.4223066 | -4.473866383 | 1.16E-05 | 2.61E-05 | 2.289922726 |
| CLHC1 | -0.301155916 | 1.90397263 | -4.473857445 | 1.16E-05 | 2.61E-05 | 2.289885655 |

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| NRP2 | 0.695225251 | 4.73021989 | 4.473307269 | 1.16E-05 | 2.61E-05 | 2.287603953 |
| AQP3 | 0.577071456 | 1.76431809 | 4.472408418 | 1.16E-05 | 2.62E-05 | 2.283876729 |
| GMFG | -0.447737055 | 4.84785229 | -4.471961143 | 1.17E-05 | 2.63E-05 | 2.282022274 |
| NXT2 | -0.273385818 | 3.3284538 | -4.471904882 | 1.17E-05 | 2.63E-05 | 2.281789021 |
| C11orf45 | -0.264315645 | 1.68558839 | -4.471315851 | 1.17E-05 | 2.63E-05 | 2.279347093 |
| TRUB1 | -0.373934029 | 4.26597413 | -4.471151788 | 1.17E-05 | 2.64E-05 | 2.278666993 |
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| CCSAP | 0.274559131 | 2.22226804 | 4.470061378 | 1.18E-05 | 2.65E-05 | 2.274147389 |
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| NCDN | -0.352461553 | 5.18721127 | -4.46635764 | 1.19E-05 | 2.69E-05 | 2.258802915 |
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| EYA1 | -0.120535064 | 0.16984191 | -4.46499284 | 1.20E-05 | 2.70E-05 | 2.253151332 |
| COL4A2 | -0.485911802 | 6.99742304 | -4.464943806 | 1.20E-05 | 2.70E-05 | 2.252948312 |
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| APEX2 | -0.230193672 | 4.49240081 | -4.464827424 | 1.20E-05 | 2.70E-05 | 2.252466454 |
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| FERMT3 | 0.588581275 | 3.57402435 | 4.462404339 | 1.21E-05 | 2.73E-05 | 2.242436511 |
| TOB1 | -0.543646831 | 5.96023402 | -4.461616331 | 1.22E-05 | 2.74E-05 | 2.239175692 |
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| XKRX | 0.81271591 | 2.50101464 | 4.460778336 | 1.22E-05 | 2.75E-05 | 2.235708563 |
| TOMM20 | -0.319231347 | 8.03009422 | -4.45906177 | 1.23E-05 | 2.77E-05 | 2.228608164 |
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| VGLL3 | 0.318551847 | 0.69918484 | 4.457085861 | 1.24E-05 | 2.79E-05 | 2.220437916 |
| COL6A3 | 0.730549408 | 3.83422478 | 4.455613139 | 1.25E-05 | 2.81E-05 | 2.214350328 |
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| G0S2 | 1.007584872 | 4.82365102 | 4.455233692 | 1.25E-05 | 2.81E-05 | 2.212782139 |
| MAF | -0.37993138 | 5.08866082 | -4.454548908 | 1.26E-05 | 2.82E-05 | 2.209952332 |
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| TP63 | 0.518105859 | 0.88839448 | 4.453768645 | 1.26E-05 | 2.83E-05 | 2.206728424 |
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| RAB39B | -0.436931725 | 2.36657596 | -4.452834153 | 1.27E-05 | 2.84E-05 | 2.2028679 |
| PIK3C3 | -0.277860312 | 3.05299531 | -4.452730259 | 1.27E-05 | 2.84E-05 | 2.202438743 |
| SHC3 | 0.483325907 | 1.86137052 | 4.452679983 | 1.27E-05 | 2.84E-05 | 2.202231067 |

| | | | | | | |
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| CCR6 | 0.082445402 | 0.10963575 | 4.45045388 | 1.28E-05 | 2.87E-05 | 2.193037782 |
| DHCR7 | -0.391256221 | 4.95198146 | -4.450065057 | 1.28E-05 | 2.87E-05 | 2.191432438 |
| GNLY | 0.818200008 | 2.86114891 | 4.44951152 | 1.28E-05 | 2.88E-05 | 2.189147239 |
| FAM83A | 0.600488154 | 1.16721261 | 4.448578314 | 1.29E-05 | 2.89E-05 | 2.185295184 |
| CAPN8 | 0.336093323 | 0.61448565 | 4.447991494 | 1.29E-05 | 2.90E-05 | 2.182873282 |
| TRIL | -0.456368594 | 3.53510754 | -4.447429895 | 1.30E-05 | 2.91E-05 | 2.18055573 |
| PSG4 | 0.283466117 | 0.21895269 | 4.447298629 | 1.30E-05 | 2.91E-05 | 2.18001407 |
| RPGR | -0.278479624 | 2.15807451 | -4.447117299 | 1.30E-05 | 2.91E-05 | 2.179265848 |
| ANXA3 | 0.755834222 | 5.13353523 | 4.446230676 | 1.30E-05 | 2.92E-05 | 2.175607744 |
| CCDC88 | 0.466221786 | 2.12394472 | 4.445821891 | 1.31E-05 | 2.92E-05 | 2.173921358 |
| PLIN1 | -0.353678249 | 0.77009301 | -4.44549657 | 1.31E-05 | 2.93E-05 | 2.172579384 |
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| WEE2 | -0.062183191 | 0.13551128 | -4.444647147 | 1.31E-05 | 2.94E-05 | 2.169075843 |
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| ZNF431 | 0.465322305 | 3.34935992 | 4.442441555 | 1.32E-05 | 2.97E-05 | 2.159981319 |
| SPAG1 | -0.320285086 | 2.18103331 | -4.442371369 | 1.32E-05 | 2.97E-05 | 2.159691975 |
| ZNF772 | -0.359858812 | 3.26562302 | -4.442132908 | 1.33E-05 | 2.97E-05 | 2.158708951 |
| REV1 | -0.362474873 | 3.68402375 | -4.439661093 | 1.34E-05 | 3.00E-05 | 2.14852188 |
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| C2CD2L | -0.186981073 | 2.64109559 | -4.438808233 | 1.35E-05 | 3.01E-05 | 2.145008124 |
| CKS1B | -0.334631826 | 3.66970933 | -4.438565176 | 1.35E-05 | 3.01E-05 | 2.14400684 |
| ANKRD2 | 0.636689783 | 1.70497955 | 4.438214307 | 1.35E-05 | 3.02E-05 | 2.142561509 |
| AP1M1 | -0.191062536 | 3.30689074 | -4.438027429 | 1.35E-05 | 3.02E-05 | 2.141791743 |
| PCBP4 | -0.343237393 | 4.49799815 | -4.436602752 | 1.36E-05 | 3.04E-05 | 2.135924289 |
| ZIM2 | -0.063981171 | 0.11399378 | -4.436171065 | 1.36E-05 | 3.04E-05 | 2.134146729 |
| AP3M1 | -0.357054605 | 4.52521776 | -4.435813455 | 1.36E-05 | 3.05E-05 | 2.132674307 |
| MIEF1 | -0.329360047 | 3.9598345 | -4.435405741 | 1.37E-05 | 3.05E-05 | 2.130995712 |
| NSUN7 | -0.3573691 | 3.05537928 | -4.435286235 | 1.37E-05 | 3.05E-05 | 2.130503721 |
| POGLUT | -0.258281056 | 2.82454181 | -4.433791705 | 1.37E-05 | 3.07E-05 | 2.124351882 |
| UBE2A | -0.3038853 | 5.28674756 | -4.432852149 | 1.38E-05 | 3.08E-05 | 2.120485356 |
| NUDT3 | -0.234100717 | 3.77840549 | -4.432232847 | 1.38E-05 | 3.09E-05 | 2.117937145 |
| AMTN | 0.24886673 | 0.29146622 | 4.431827023 | 1.39E-05 | 3.10E-05 | 2.116267487 |
| CYP4X1 | -0.385421238 | 2.08930553 | -4.431734296 | 1.39E-05 | 3.10E-05 | 2.115886006 |
| MASP1 | -0.133544969 | 0.16379188 | -4.431379617 | 1.39E-05 | 3.10E-05 | 2.114426906 |
| AGA | -0.328913509 | 5.26227294 | -4.42986756 | 1.40E-05 | 3.12E-05 | 2.10820763 |
| FGR | 0.480582694 | 3.06606729 | 4.428884445 | 1.40E-05 | 3.14E-05 | 2.104164933 |
| S100A8 | 0.66067368 | 2.76666489 | 4.428831618 | 1.40E-05 | 3.14E-05 | 2.103947724 |
| OVOL2 | -0.345797578 | 3.47708114 | -4.428630895 | 1.41E-05 | 3.14E-05 | 2.103122426 |
| TMEM67 | -0.310138325 | 2.39320624 | -4.427699447 | 1.41E-05 | 3.15E-05 | 2.099293089 |
| ZSCAN3 | -0.20744256 | 1.17460559 | -4.427599793 | 1.41E-05 | 3.15E-05 | 2.098883435 |

| | | | | | | |
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| NFRKB | -0.322356538 | 4.29141514 | -4.42696657 | 1.42E-05 | 3.16E-05 | 2.096280599 |
| CNOT8 | -0.299897783 | 5.60878795 | -4.426629109 | 1.42E-05 | 3.16E-05 | 2.094893605 |
| ATP6V0( | -0.359983729 | 6.24304074 | -4.426465307 | 1.42E-05 | 3.17E-05 | 2.094220398 |
| MTHFD2 | -0.275216838 | 2.66571917 | -4.426136495 | 1.42E-05 | 3.17E-05 | 2.092869088 |
| LIG3 | -0.263989765 | 2.82011009 | -4.426045053 | 1.42E-05 | 3.17E-05 | 2.092493303 |
| SORBS3 | -0.298612218 | 5.6605012 | -4.425910536 | 1.42E-05 | 3.17E-05 | 2.091940517 |
| DOCK1 | -0.41394684 | 5.13048725 | -4.425602654 | 1.42E-05 | 3.18E-05 | 2.090675353 |
| TRMT6 | -0.242925053 | 3.6575349 | -4.42514752 | 1.43E-05 | 3.18E-05 | 2.088805233 |
| B4GALT2 | -0.257569659 | 4.82303539 | -4.423597304 | 1.44E-05 | 3.20E-05 | 2.082436719 |
| MUS81 | -0.245758097 | 4.24905397 | -4.423013958 | 1.44E-05 | 3.21E-05 | 2.08004074 |
| CORIN | 0.184543981 | 0.34267777 | 4.422392148 | 1.44E-05 | 3.22E-05 | 2.077487083 |
| UBL3 | -0.402529811 | 6.26155947 | -4.422354029 | 1.44E-05 | 3.22E-05 | 2.077330545 |
| IKBKB | -0.288043399 | 3.84574826 | -4.421983242 | 1.45E-05 | 3.22E-05 | 2.075807947 |
| TNFRSF | 0.482698239 | 5.03409426 | 4.419701522 | 1.46E-05 | 3.25E-05 | 2.066440719 |
| CSNK1D | -0.287134629 | 5.74240136 | -4.418212667 | 1.47E-05 | 3.27E-05 | 2.060330707 |
| ETNK1 | -0.344050065 | 4.54506019 | -4.418001695 | 1.47E-05 | 3.28E-05 | 2.059465056 |
| FAM199) | -0.346752325 | 4.87196516 | -4.417871346 | 1.47E-05 | 3.28E-05 | 2.05893023 |
| LIMD1 | -0.395587229 | 3.75842918 | -4.41764331 | 1.47E-05 | 3.28E-05 | 2.057994624 |
| MT3 | -0.532724966 | 0.87358696 | -4.41715899 | 1.48E-05 | 3.29E-05 | 2.056007656 |
| RNF182 | -0.347905591 | 1.27673231 | -4.417007895 | 1.48E-05 | 3.29E-05 | 2.055387812 |
| MARVEL | 0.450274079 | 4.42816704 | 4.416133517 | 1.48E-05 | 3.30E-05 | 2.051801172 |
| TMIE | -0.348990869 | 1.9708051 | -4.416032954 | 1.48E-05 | 3.30E-05 | 2.05138871 |
| CLEC4A | 0.420704673 | 2.38956424 | 4.415830583 | 1.48E-05 | 3.30E-05 | 2.050558698 |
| CAPNS1 | -0.234237922 | 8.44415266 | -4.41458803 | 1.49E-05 | 3.32E-05 | 2.045463177 |
| OGFOD1 | -0.235208312 | 4.29284397 | -4.414540447 | 1.49E-05 | 3.32E-05 | 2.045268073 |
| SYNJ2BI | -0.124642852 | 0.51455844 | -4.413143157 | 1.50E-05 | 3.34E-05 | 2.039539519 |
| MICALL1 | -0.345728646 | 4.27255418 | -4.412743109 | 1.50E-05 | 3.35E-05 | 2.037899708 |
| SLC41A1 | -0.402824495 | 5.69435882 | -4.41263141 | 1.51E-05 | 3.35E-05 | 2.03744187 |
| DCAF12 | -0.318962811 | 4.9148333 | -4.411852644 | 1.51E-05 | 3.36E-05 | 2.034250109 |
| FAM163/ | -0.337805482 | 0.34762874 | -4.41169595 | 1.51E-05 | 3.36E-05 | 2.033607962 |
| ASB7 | -0.259447176 | 3.46237111 | -4.410824297 | 1.52E-05 | 3.37E-05 | 2.030036189 |
| SHKBP1 | -0.251242001 | 5.72706587 | -4.410613177 | 1.52E-05 | 3.38E-05 | 2.029171175 |
| GSPT2 | -0.36694938 | 3.75373636 | -4.410233272 | 1.52E-05 | 3.38E-05 | 2.02761469 |
| SYTL2 | 0.378754723 | 1.93912759 | 4.408762261 | 1.53E-05 | 3.40E-05 | 2.021588995 |
| TBCB | -0.250546858 | 5.70109871 | -4.408558411 | 1.53E-05 | 3.40E-05 | 2.020754098 |
| RBAK | -0.288719751 | 2.890318 | -4.407583129 | 1.54E-05 | 3.42E-05 | 2.016760166 |
| VAMP7 | -0.311021534 | 5.45222193 | -4.406904036 | 1.54E-05 | 3.43E-05 | 2.01397962 |
| POLR2B | -0.370209442 | 5.25675924 | -4.406854674 | 1.54E-05 | 3.43E-05 | 2.013777522 |
| TMEM17 | 0.72609911 | 3.43597972 | 4.406727397 | 1.54E-05 | 3.43E-05 | 2.013256434 |
| GINS3 | -0.197593449 | 1.77235354 | -4.40662996 | 1.54E-05 | 3.43E-05 | 2.012857521 |

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|---|---|---|---|---|---|
| SLC44A3 | -0.356869038 | 3.09619226 | -4.40520731 | 1.55E-05 | 3.45E-05 | 2.007033989 |
| ZNF253 | -0.348023898 | 3.70756933 | -4.403814606 | 1.56E-05 | 3.47E-05 | 2.001334601 |
| HAUS8 | -0.20006791 | 1.87013112 | -4.403440193 | 1.57E-05 | 3.48E-05 | 1.999802646 |
| UBE2G1 | -0.311255619 | 4.54907587 | -4.403416625 | 1.57E-05 | 3.48E-05 | 1.99970622 |
| FOXJ3 | -0.32349153 | 4.54990905 | -4.403081758 | 1.57E-05 | 3.48E-05 | 1.998336174 |
| GNA11 | -0.323960129 | 5.60576685 | -4.402638614 | 1.57E-05 | 3.49E-05 | 1.996523271 |
| FAAP100 | -0.24880864 | 4.71613496 | -4.402538418 | 1.57E-05 | 3.49E-05 | 1.996113391 |
| AP1G1 | -0.315806908 | 4.80282054 | -4.402501122 | 1.57E-05 | 3.49E-05 | 1.995960822 |
| TFEC | 0.339704634 | 0.88039391 | 4.401508872 | 1.58E-05 | 3.50E-05 | 1.991902204 |
| ATF7 | -0.228526568 | 2.94906156 | -4.401183618 | 1.58E-05 | 3.51E-05 | 1.990571982 |
| ITK | 0.421860338 | 0.83869823 | 4.400405751 | 1.59E-05 | 3.52E-05 | 1.987391007 |
| CLCN3 | -0.371624417 | 4.87857609 | -4.400269855 | 1.59E-05 | 3.52E-05 | 1.98683533 |
| IL37 | 0.390041794 | 0.34956572 | 4.399361852 | 1.59E-05 | 3.53E-05 | 1.983122894 |
| ADRB3 | 0.124494366 | 0.15485943 | 4.398964663 | 1.60E-05 | 3.54E-05 | 1.981499166 |
| ANO4 | -0.147720999 | 0.18573584 | -4.398729367 | 1.60E-05 | 3.54E-05 | 1.980537325 |
| MGAT5B | -0.160374573 | 0.3234587 | -4.398669531 | 1.60E-05 | 3.54E-05 | 1.980292733 |
| PPP4R2 | -0.28182817 | 4.96361798 | -4.397944237 | 1.60E-05 | 3.55E-05 | 1.977328192 |
| UBC | -0.275417475 | 8.72435016 | -4.397720976 | 1.60E-05 | 3.55E-05 | 1.976415726 |
| ETAA1 | -0.267153782 | 3.73584039 | -4.396946285 | 1.61E-05 | 3.57E-05 | 1.97324988 |
| DGCR2 | -0.343161824 | 6.71913111 | -4.395951396 | 1.62E-05 | 3.58E-05 | 1.96918488 |
| CD3E | 0.788825514 | 2.85914994 | 4.395659027 | 1.62E-05 | 3.59E-05 | 1.967990441 |
| AKT1 | -0.279661963 | 5.38992279 | -4.395451463 | 1.62E-05 | 3.59E-05 | 1.96714251 |
| KRTAP5 | 0.175046753 | 0.43389228 | 4.394704385 | 1.63E-05 | 3.60E-05 | 1.964090854 |
| KHDRBS | -0.279755603 | 7.11421811 | -4.394602955 | 1.63E-05 | 3.60E-05 | 1.963676566 |
| CLEC11A | -0.444272976 | 4.25666178 | -4.393749361 | 1.63E-05 | 3.61E-05 | 1.960190428 |
| FETUB | -0.134454354 | 0.12447232 | -4.393453633 | 1.63E-05 | 3.62E-05 | 1.958982793 |
| TGDS | -0.335546652 | 4.12744687 | -4.391981209 | 1.64E-05 | 3.64E-05 | 1.952971024 |
| SPHK1 | 0.463745422 | 3.64044717 | 4.391755498 | 1.65E-05 | 3.64E-05 | 1.95204962 |
| CLVS1 | -0.096023118 | 0.16280108 | -4.391693102 | 1.65E-05 | 3.64E-05 | 1.951794913 |
| VPS26A | -0.295391543 | 5.67120937 | -4.391272666 | 1.65E-05 | 3.65E-05 | 1.950078729 |
| CSKMT | -0.27082879 | 2.27049693 | -4.39111546 | 1.65E-05 | 3.65E-05 | 1.949437062 |
| CAMLG | -0.251717375 | 6.08544975 | -4.390289826 | 1.66E-05 | 3.66E-05 | 1.946067406 |
| SCUBE2 | -0.493296039 | 1.63700984 | -4.390111271 | 1.66E-05 | 3.67E-05 | 1.945338742 |
| PLAG1 | 0.661071868 | 2.88501904 | 4.388187052 | 1.67E-05 | 3.70E-05 | 1.937487826 |
| QKI | -0.328266982 | 3.42080141 | -4.388126647 | 1.67E-05 | 3.70E-05 | 1.937241418 |
| PLA2G7 | -0.656438011 | 3.99241345 | -4.38769726 | 1.68E-05 | 3.70E-05 | 1.935489918 |
| CCDC14 | -0.228934486 | 1.7758478 | -4.387672484 | 1.68E-05 | 3.70E-05 | 1.935388861 |
| AFAP1L2 | -0.501634052 | 6.67490083 | -4.387169561 | 1.68E-05 | 3.71E-05 | 1.933337603 |
| RPL13A | -0.302970351 | 11.0976513 | -4.385877602 | 1.69E-05 | 3.73E-05 | 1.92806905 |
| PRSS12 | 0.476839134 | 0.95125866 | 4.385376245 | 1.69E-05 | 3.74E-05 | 1.926024899 |

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|---|---|---|---|---|---|---|
| TPPP3 | -0.598185583 | 3.95478561 | -4.384520147 | 1.70E-05 | 3.75E-05 | 1.922534845 |
| EIF3F | -0.251928383 | 5.71404697 | -4.384188191 | 1.70E-05 | 3.75E-05 | 1.921181722 |
| KIAA089 | -0.252395425 | 1.77930639 | -4.383770119 | 1.70E-05 | 3.76E-05 | 1.919477692 |
| ZNF823 | -0.251144361 | 2.54188088 | -4.38346516 | 1.71E-05 | 3.77E-05 | 1.918234791 |
| LPIN3 | -0.375464076 | 3.76001581 | -4.382510594 | 1.71E-05 | 3.78E-05 | 1.914344809 |
| ZNF627 | -0.3507335 | 4.1603979 | -4.382405582 | 1.71E-05 | 3.78E-05 | 1.913916916 |
| RBM43 | -0.405538649 | 4.03006249 | -4.381142783 | 1.72E-05 | 3.80E-05 | 1.908772074 |
| HOMEZ | -0.216719622 | 3.61741608 | -4.380748197 | 1.73E-05 | 3.81E-05 | 1.907164729 |
| TNFRSF | 0.798646315 | 7.44694688 | 4.380580402 | 1.73E-05 | 3.81E-05 | 1.906481252 |
| FAN1 | -0.385491007 | 3.10734191 | -4.380302102 | 1.73E-05 | 3.81E-05 | 1.905347713 |
| ARHGEF | -0.335025332 | 2.98376106 | -4.379153388 | 1.74E-05 | 3.83E-05 | 1.900669547 |
| ARG2 | -0.681836989 | 4.97379136 | -4.378903857 | 1.74E-05 | 3.84E-05 | 1.899653466 |
| RSU1 | -0.296975018 | 5.49099143 | -4.378812219 | 1.74E-05 | 3.84E-05 | 1.899280331 |
| MARK1 | -0.363301953 | 2.54487895 | -4.378516982 | 1.74E-05 | 3.84E-05 | 1.898078222 |
| SPAST | -0.346608496 | 3.93691241 | -4.378449706 | 1.74E-05 | 3.84E-05 | 1.897804306 |
| CNTD2 | -0.70831809 | 3.17499393 | -4.378312729 | 1.74E-05 | 3.84E-05 | 1.897246613 |
| STAT4 | 0.524566303 | 1.95508856 | 4.376233291 | 1.76E-05 | 3.88E-05 | 1.888782138 |
| DPF1 | -0.066144963 | 0.15289887 | -4.375957819 | 1.76E-05 | 3.88E-05 | 1.887661072 |
| KCTD14 | -0.394330044 | 4.26064567 | -4.375608472 | 1.76E-05 | 3.89E-05 | 1.88623945 |
| INSL5 | -0.122498673 | 0.19900431 | -4.374906612 | 1.77E-05 | 3.90E-05 | 1.883383621 |
| TMEM15 | 0.367170727 | 1.02198113 | 4.374693499 | 1.77E-05 | 3.90E-05 | 1.882516553 |
| CPE | -0.704801923 | 8.1585733 | -4.373379143 | 1.78E-05 | 3.92E-05 | 1.877169791 |
| C3orf52 | -0.504942905 | 3.00971381 | -4.371759697 | 1.79E-05 | 3.95E-05 | 1.870583835 |
| ZNF135 | -0.243599234 | 2.65444023 | -4.371284021 | 1.80E-05 | 3.96E-05 | 1.868649757 |
| ZNF24 | -0.292666767 | 5.08341581 | -4.370129297 | 1.81E-05 | 3.98E-05 | 1.863955452 |
| HLA-DPE | 0.761746419 | 7.4356803 | 4.369466722 | 1.81E-05 | 3.99E-05 | 1.861262363 |
| COMMD | -0.232692176 | 4.1044899 | -4.368824198 | 1.82E-05 | 4.00E-05 | 1.858651112 |
| TTC4 | -0.186152193 | 1.6399998 | -4.366898189 | 1.83E-05 | 4.03E-05 | 1.850825684 |
| FHDC1 | -0.468475499 | 3.98741519 | -4.365493031 | 1.84E-05 | 4.05E-05 | 1.845118366 |
| GCHFR | -0.327881827 | 3.3910617 | -4.365465762 | 1.84E-05 | 4.05E-05 | 1.845007621 |
| DNAJC1 | -0.361289953 | 3.7211174 | -4.364633386 | 1.85E-05 | 4.07E-05 | 1.84162753 |
| CCL16 | -0.105564099 | 0.25045921 | -4.364569135 | 1.85E-05 | 4.07E-05 | 1.841366646 |
| THUMPC | -0.265028367 | 4.40945341 | -4.363402231 | 1.86E-05 | 4.09E-05 | 1.836629103 |
| ZC3H12E | -0.283027214 | 1.10166979 | -4.362710497 | 1.86E-05 | 4.10E-05 | 1.833821231 |
| ALDH16 | -0.281189216 | 4.2941566 | -4.362215751 | 1.87E-05 | 4.11E-05 | 1.831813204 |
| SLC5A7 | -0.361825813 | 0.29503383 | -4.360951655 | 1.88E-05 | 4.13E-05 | 1.826683503 |
| BRAT1 | -0.259403206 | 4.65611931 | -4.360896518 | 1.88E-05 | 4.13E-05 | 1.82645979 |
| GSTP1 | -0.367234291 | 9.7289909 | -4.360846986 | 1.88E-05 | 4.13E-05 | 1.826258816 |
| FTCD | -0.228266869 | 0.36987524 | -4.359851367 | 1.89E-05 | 4.15E-05 | 1.822219579 |
| ZNF624 | -0.264856823 | 1.87907283 | -4.35931163 | 1.89E-05 | 4.15E-05 | 1.820030195 |

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|---|---|---|---|---|---|---|
| SGSH | -0.297448216 | 4.70812885 | -4.358493312 | 1.90E-05 | 4.17E-05 | 1.81671122 |
| ARL6IP1 | -0.294619955 | 7.07959295 | -4.358009862 | 1.90E-05 | 4.18E-05 | 1.814750669 |
| TPSB2 | 0.628025666 | 1.28804782 | 4.358003457 | 1.90E-05 | 4.18E-05 | 1.814724698 |
| GSAP | -0.284931271 | 3.23263576 | -4.356398388 | 1.91E-05 | 4.20E-05 | 1.808216967 |
| PPP1R1{ | 0.377544278 | 4.8113623 | 4.35575148 | 1.92E-05 | 4.22E-05 | 1.805594673 |
| IGFL4 | 0.135326057 | 0.19183858 | 4.354929071 | 1.93E-05 | 4.23E-05 | 1.802261451 |
| MAX | -0.22584318 | 5.74112412 | -4.354848428 | 1.93E-05 | 4.23E-05 | 1.801934635 |
| CYB5R3 | -0.284865419 | 6.48184898 | -4.353362051 | 1.94E-05 | 4.26E-05 | 1.795911831 |
| FCGR2B | 0.404535672 | 1.266114 | 4.352811637 | 1.94E-05 | 4.27E-05 | 1.793681999 |
| ZNF70 | -0.248461309 | 2.10862965 | -4.352164923 | 1.95E-05 | 4.28E-05 | 1.791062348 |
| FKBP1B | -0.378498042 | 2.59794937 | -4.351593297 | 1.95E-05 | 4.29E-05 | 1.788747137 |
| DUSP6 | 0.777142735 | 7.56023567 | 4.350735832 | 1.96E-05 | 4.30E-05 | 1.78527471 |
| PPP1R3( | -0.212544525 | 0.55426716 | -4.350494712 | 1.96E-05 | 4.31E-05 | 1.784298366 |
| STRN3 | -0.324532665 | 4.12855527 | -4.349902433 | 1.97E-05 | 4.32E-05 | 1.781900304 |
| SAMD4A | 0.516522175 | 3.54943757 | 4.349708796 | 1.97E-05 | 4.32E-05 | 1.781116354 |
| YME1L1 | -0.352747019 | 5.81093459 | -4.348948018 | 1.98E-05 | 4.33E-05 | 1.778036589 |
| CELSR3 | 0.183243977 | 0.81176472 | 4.348696073 | 1.98E-05 | 4.34E-05 | 1.777016774 |
| CWF19L | -0.245063003 | 4.06797141 | -4.348644412 | 1.98E-05 | 4.34E-05 | 1.776807672 |
| SMAD5 | -0.334340811 | 4.16587105 | -4.348572994 | 1.98E-05 | 4.34E-05 | 1.776518598 |
| KLHL6 | 0.417921388 | 1.14203878 | 4.348567638 | 1.98E-05 | 4.34E-05 | 1.776496919 |
| TMEM59 | 0.85543905 | 1.98347453 | 4.348338752 | 1.98E-05 | 4.34E-05 | 1.775570512 |
| MTMR14 | -0.182867881 | 4.51568177 | -4.346965218 | 1.99E-05 | 4.37E-05 | 1.770012055 |
| FXYD6 | -0.494682222 | 3.87981794 | -4.346796002 | 1.99E-05 | 4.37E-05 | 1.769327373 |
| BUB1 | 0.342472843 | 1.29480508 | 4.345975144 | 2.00E-05 | 4.38E-05 | 1.766006335 |
| TREM2 | 0.738512155 | 4.22360153 | 4.345903843 | 2.00E-05 | 4.38E-05 | 1.765717889 |
| SIGLEC1 | 0.437944832 | 1.16003516 | 4.344289992 | 2.02E-05 | 4.41E-05 | 1.75919022 |
| PI4K2A | 0.314486278 | 5.33575432 | 4.343964943 | 2.02E-05 | 4.42E-05 | 1.757875723 |
| IL18 | 0.704637177 | 3.22882051 | 4.343850725 | 2.02E-05 | 4.42E-05 | 1.757413843 |
| RASSF4 | -0.368336265 | 5.13627747 | -4.343523287 | 2.02E-05 | 4.43E-05 | 1.756089799 |
| SP140 | 0.414331212 | 0.91326699 | 4.34256949 | 2.03E-05 | 4.44E-05 | 1.752233473 |
| DLGAP2 | -0.197244679 | 0.28439691 | -4.342517391 | 2.03E-05 | 4.44E-05 | 1.752022852 |
| RTF1 | -0.256598333 | 5.25139221 | -4.342377804 | 2.03E-05 | 4.45E-05 | 1.751458551 |
| HPN | 0.940316247 | 5.80467699 | 4.342319498 | 2.03E-05 | 4.45E-05 | 1.751222843 |
| CD300LE | 0.215665603 | 0.6359598 | 4.342071166 | 2.03E-05 | 4.45E-05 | 1.750218972 |
| TACR1 | 0.175770286 | 0.44969093 | 4.341283729 | 2.04E-05 | 4.46E-05 | 1.747036127 |
| ARHGEF | -0.442898002 | 1.740581 | -4.341133547 | 2.04E-05 | 4.47E-05 | 1.746429142 |
| SEPSEC | -0.276397678 | 2.92051911 | -4.340965118 | 2.04E-05 | 4.47E-05 | 1.745748434 |
| FIG4 | -0.22241164 | 4.48343023 | -4.340219049 | 2.05E-05 | 4.48E-05 | 1.742733445 |
| AHCYL1 | -0.329056225 | 6.90932632 | -4.339808988 | 2.05E-05 | 4.49E-05 | 1.741076513 |
| GPR37L | -0.311342951 | 0.35028812 | -4.339568122 | 2.06E-05 | 4.49E-05 | 1.740103309 |

| | | | | | | |
|---|---|---|---|---|---|---|
| SCAMP2 | -0.239602728 | 6.16006325 | -4.339473437 | 2.06E-05 | 4.50E-05 | 1.739720753 |
| KIAA121 | -0.306044127 | 4.07434395 | -4.338046674 | 2.07E-05 | 4.52E-05 | 1.733957071 |
| WDR17 | -0.341917632 | 1.34150587 | -4.337709219 | 2.07E-05 | 4.53E-05 | 1.732594096 |
| CLEC6A | 0.128686357 | 0.15852489 | 4.337468877 | 2.07E-05 | 4.53E-05 | 1.731623417 |
| SECTM1 | 0.555427566 | 2.10205037 | 4.336555675 | 2.08E-05 | 4.55E-05 | 1.727935645 |
| UTP3 | -0.26382357 | 5.64970009 | -4.335977999 | 2.09E-05 | 4.56E-05 | 1.725603167 |
| PDE4D | -0.499381909 | 2.37293492 | -4.335805784 | 2.09E-05 | 4.56E-05 | 1.724907871 |
| APPL2 | -0.323389013 | 4.05959539 | -4.335408152 | 2.09E-05 | 4.57E-05 | 1.723302566 |
| GP6 | -0.153748976 | 0.37565242 | -4.334783643 | 2.10E-05 | 4.58E-05 | 1.72078158 |
| PPM1E | -0.112655256 | 0.32482369 | -4.334673709 | 2.10E-05 | 4.58E-05 | 1.720337836 |
| TTC22 | -0.246323502 | 2.99165032 | -4.334610395 | 2.10E-05 | 4.58E-05 | 1.720082278 |
| MYH10 | 0.580332664 | 5.80719253 | 4.334447052 | 2.10E-05 | 4.59E-05 | 1.719422979 |
| IMPAD1 | -0.325701163 | 5.54204693 | -4.333977847 | 2.11E-05 | 4.59E-05 | 1.717529248 |
| SIRPG | 0.564885853 | 1.1836474 | 4.333476353 | 2.11E-05 | 4.60E-05 | 1.715505396 |
| ZNF488 | -0.087376565 | 0.14843184 | -4.33315843 | 2.11E-05 | 4.61E-05 | 1.714222475 |
| LGALS1 | 0.6512062 | 8.41342284 | 4.332676863 | 2.12E-05 | 4.62E-05 | 1.712279355 |
| GOLPH3 | -0.314000855 | 6.60682789 | -4.330056155 | 2.14E-05 | 4.67E-05 | 1.701708068 |
| SRSF10 | -0.311395717 | 4.75985967 | -4.328861274 | 2.15E-05 | 4.69E-05 | 1.696890047 |
| SURF2 | -0.315024413 | 5.90779721 | -4.328756422 | 2.15E-05 | 4.69E-05 | 1.696467318 |
| CASKIN1 | -0.311945453 | 1.14026981 | -4.328494788 | 2.15E-05 | 4.70E-05 | 1.695412525 |
| ZC3H12C | -0.354927472 | 2.87123421 | -4.327526178 | 2.16E-05 | 4.72E-05 | 1.691508008 |
| BOK | -0.485699175 | 4.44212592 | -4.326905098 | 2.17E-05 | 4.73E-05 | 1.689004796 |
| FCAR | 0.107671348 | 0.14483772 | 4.326304929 | 2.17E-05 | 4.74E-05 | 1.686586162 |
| GPR142 | -0.206916135 | 0.19086458 | -4.3262354 | 2.18E-05 | 4.74E-05 | 1.686305984 |
| LGALS12 | 0.114345233 | 0.2315338 | 4.325789987 | 2.18E-05 | 4.75E-05 | 1.684511216 |
| HTR2A | 0.04804243 | 0.07163885 | 4.325648424 | 2.18E-05 | 4.75E-05 | 1.68394083 |
| CDC20 | -0.451601503 | 2.75415275 | -4.32526071 | 2.18E-05 | 4.76E-05 | 1.68237873 |
| IRX1 | -0.151943555 | 0.35053886 | -4.32498455 | 2.19E-05 | 4.76E-05 | 1.681266156 |
| NUP133 | -0.314693049 | 4.59106206 | -4.324550641 | 2.19E-05 | 4.77E-05 | 1.679518177 |
| NUTM2D | -0.121468648 | 0.55438814 | -4.324368127 | 2.19E-05 | 4.77E-05 | 1.678782972 |
| PARVG | 0.414126712 | 1.72903204 | 4.324001065 | 2.20E-05 | 4.78E-05 | 1.677304456 |
| CD33 | 0.272607511 | 0.98707185 | 4.323355791 | 2.20E-05 | 4.79E-05 | 1.674705571 |
| VSTM5 | -0.128818792 | 0.29699843 | -4.322262804 | 2.21E-05 | 4.82E-05 | 1.670304251 |
| CLEC4F | 0.264690354 | 0.53190566 | 4.32205061 | 2.21E-05 | 4.82E-05 | 1.669449885 |
| CCR7 | 0.581502442 | 1.73352628 | 4.321096922 | 2.22E-05 | 4.84E-05 | 1.665610453 |
| NFASC | -0.228571089 | 0.78509893 | -4.320696528 | 2.23E-05 | 4.85E-05 | 1.663998734 |
| TRAF5 | 0.31663204 | 1.47803367 | 4.320337707 | 2.23E-05 | 4.85E-05 | 1.662554471 |
| CASK | -0.35083882 | 3.18158321 | -4.32022919 | 2.23E-05 | 4.85E-05 | 1.662117707 |
| PTPRN | 0.086353587 | 0.09452874 | 4.318543656 | 2.25E-05 | 4.89E-05 | 1.655334919 |
| SEPTIN5 | -0.471595921 | 3.36395233 | -4.317834587 | 2.25E-05 | 4.90E-05 | 1.652482226 |

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|---|---|---|---|---|---|---|
| RYK | -0.338949635 | 4.82055027 | -4.317396235 | 2.26E-05 | 4.91E-05 | 1.650718872 |
| ARMC3 | -0.146514321 | 0.09341427 | -4.317236489 | 2.26E-05 | 4.91E-05 | 1.650076298 |
| SPAG8 | -0.342724075 | 2.39130642 | -4.316383927 | 2.27E-05 | 4.93E-05 | 1.646647258 |
| TRA2A | -0.301545327 | 5.85889929 | -4.315316794 | 2.28E-05 | 4.95E-05 | 1.642356026 |
| SH3RF2 | -0.443409328 | 2.78969085 | -4.315304639 | 2.28E-05 | 4.95E-05 | 1.642307154 |
| DDX46 | -0.318948106 | 4.06042352 | -4.31485978 | 2.28E-05 | 4.96E-05 | 1.64051853 |
| RSRC2 | -0.295063736 | 4.74421514 | -4.314811518 | 2.28E-05 | 4.96E-05 | 1.640324495 |
| ZDHHC1 | -0.269488109 | 4.64683796 | -4.314754507 | 2.28E-05 | 4.96E-05 | 1.640095284 |
| CYTIP | 0.63581622 | 2.33422621 | 4.313270251 | 2.30E-05 | 4.99E-05 | 1.634128885 |
| CD28 | 0.368528948 | 0.79657178 | 4.313194731 | 2.30E-05 | 4.99E-05 | 1.633825358 |
| RPS18 | -0.257019857 | 10.6564596 | -4.312243821 | 2.31E-05 | 5.01E-05 | 1.630003886 |
| PCDHAC | 0.349108491 | 0.91913686 | 4.312042324 | 2.31E-05 | 5.02E-05 | 1.629194215 |
| PTGIS | 0.540036375 | 1.45844802 | 4.311495598 | 2.31E-05 | 5.03E-05 | 1.626997476 |
| SLC4A7 | 0.371606677 | 2.1201898 | 4.310898202 | 2.32E-05 | 5.04E-05 | 1.624597421 |
| ZNF726 | -0.172219114 | 0.88958221 | -4.310503509 | 2.32E-05 | 5.05E-05 | 1.62301189 |
| INTS2 | -0.30175433 | 2.35321416 | -4.310088692 | 2.33E-05 | 5.05E-05 | 1.621345655 |
| XRCC4 | -0.24882937 | 2.83129148 | -4.309172343 | 2.34E-05 | 5.07E-05 | 1.617665355 |
| MATN3 | 0.397098402 | 1.17023158 | 4.307892586 | 2.35E-05 | 5.10E-05 | 1.612526646 |
| NFXL1 | -0.339855896 | 3.10391251 | -4.307072141 | 2.36E-05 | 5.12E-05 | 1.60923294 |
| TAF9B | -0.269634185 | 5.04155109 | -4.306715082 | 2.36E-05 | 5.12E-05 | 1.607799684 |
| ADAMTS | -0.318443701 | 1.60810883 | -4.306481765 | 2.36E-05 | 5.13E-05 | 1.606863191 |
| RSPH3 | -0.305766537 | 3.89202149 | -4.30638002 | 2.37E-05 | 5.13E-05 | 1.606454819 |
| PRKCD | -0.266893026 | 7.04090958 | -4.304906985 | 2.38E-05 | 5.16E-05 | 1.600543453 |
| ZNF12 | -0.305077501 | 4.15769351 | -4.304627693 | 2.38E-05 | 5.17E-05 | 1.599422837 |
| ZSWIM1 | -0.228358797 | 3.8720656 | -4.304524326 | 2.38E-05 | 5.17E-05 | 1.599008105 |
| MROH7- | -0.086511238 | 0.161197 | -4.30441177 | 2.39E-05 | 5.17E-05 | 1.598556521 |
| GPR61 | -0.368088833 | 1.10365133 | -4.304411666 | 2.39E-05 | 5.17E-05 | 1.598556105 |
| CENPV | -0.400076514 | 3.33704861 | -4.303748128 | 2.39E-05 | 5.18E-05 | 1.595894128 |
| PSG5 | 0.092803885 | 0.08072868 | 4.302849307 | 2.40E-05 | 5.20E-05 | 1.592288811 |
| TNFAIP8 | 0.542104957 | 2.82698708 | 4.302653301 | 2.40E-05 | 5.21E-05 | 1.591502683 |
| CDH26 | -0.108984618 | 0.37947839 | -4.302608803 | 2.40E-05 | 5.21E-05 | 1.591324217 |
| CD300C | -0.419964626 | 2.26465841 | -4.302336326 | 2.41E-05 | 5.21E-05 | 1.590231452 |
| TMEM43 | 0.461158012 | 6.88853746 | 4.301222799 | 2.42E-05 | 5.23E-05 | 1.585766276 |
| CCNJ | -0.329630046 | 2.7579952 | -4.301200501 | 2.42E-05 | 5.23E-05 | 1.585676871 |
| IQSEC1 | -0.242636364 | 4.64439196 | -4.300768079 | 2.42E-05 | 5.24E-05 | 1.583943164 |
| ABHD16 | -0.304700151 | 2.75645839 | -4.299802236 | 2.43E-05 | 5.26E-05 | 1.580071357 |
| SNX6 | -0.321812086 | 5.23689898 | -4.299794531 | 2.43E-05 | 5.26E-05 | 1.580040473 |
| ID2 | -0.408045035 | 8.05409765 | -4.299015884 | 2.44E-05 | 5.28E-05 | 1.576919634 |
| MAP3K5 | 0.577035938 | 5.1394242 | 4.298672791 | 2.44E-05 | 5.29E-05 | 1.575544665 |
| GBP5 | 0.606167605 | 1.44937021 | 4.298627464 | 2.44E-05 | 5.29E-05 | 1.575363022 |

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|---|---|---|---|---|---|---|
| C6orf120 | -0.32517303 | 3.95320619 | -4.298524983 | 2.44E-05 | 5.29E-05 | 1.574952342 |
| CAPNS2 | -0.147342091 | 0.39933637 | -4.297949859 | 2.45E-05 | 5.30E-05 | 1.572647775 |
| CLIP2 | 0.374917647 | 2.85428105 | 4.297395529 | 2.46E-05 | 5.31E-05 | 1.570426779 |
| EIF4ENIF | -0.283143149 | 4.12035213 | -4.296762999 | 2.46E-05 | 5.33E-05 | 1.567892771 |
| PMS1 | -0.268285871 | 3.07211237 | -4.29644315 | 2.47E-05 | 5.33E-05 | 1.566611533 |
| EGR1 | -0.800627805 | 8.77581037 | -4.296421333 | 2.47E-05 | 5.33E-05 | 1.566524142 |
| TMA16 | -0.240055801 | 3.63959103 | -4.294936702 | 2.48E-05 | 5.37E-05 | 1.560578163 |
| CCDC10 | -0.240713137 | 1.79157361 | -4.29454564 | 2.49E-05 | 5.37E-05 | 1.559012249 |
| BLVRA | -0.244740657 | 6.02065897 | -4.294295581 | 2.49E-05 | 5.38E-05 | 1.55801101 |
| DENND1 | -0.265306856 | 3.70603622 | -4.294161143 | 2.49E-05 | 5.38E-05 | 1.557472743 |
| SYCP2L | -0.19218407 | 0.50486847 | -4.293339971 | 2.50E-05 | 5.40E-05 | 1.554185209 |
| PLEK | 0.636089517 | 3.20857922 | 4.292897831 | 2.50E-05 | 5.41E-05 | 1.552415344 |
| C5orf15 | -0.339144748 | 6.61748044 | -4.292660775 | 2.51E-05 | 5.41E-05 | 1.551466482 |
| ADAM19 | 0.423805357 | 1.66678283 | 4.292559526 | 2.51E-05 | 5.41E-05 | 1.551061231 |
| SPIN3 | -0.290220027 | 2.26457426 | -4.292434233 | 2.51E-05 | 5.42E-05 | 1.550559749 |
| TUBB4B | -0.331727305 | 8.66401572 | -4.292029018 | 2.51E-05 | 5.43E-05 | 1.548937983 |
| NOS3 | -0.374408668 | 3.01224146 | -4.291197686 | 2.52E-05 | 5.44E-05 | 1.545611207 |
| ARHGAF | 0.522661334 | 1.94952427 | 4.291031815 | 2.52E-05 | 5.45E-05 | 1.544947503 |
| ESPNL | -0.587877153 | 1.57523246 | -4.290632084 | 2.53E-05 | 5.46E-05 | 1.543348135 |
| CASS4 | 0.303235457 | 0.76348655 | 4.288750478 | 2.55E-05 | 5.50E-05 | 1.535821355 |
| MEF2B | -0.193866572 | 0.96382939 | -4.288003123 | 2.56E-05 | 5.51E-05 | 1.532832586 |
| KIF21B | 0.288027723 | 0.76203557 | 4.287964821 | 2.56E-05 | 5.51E-05 | 1.532679423 |
| TGFBR3 | -0.391614026 | 2.7197051 | -4.287327716 | 2.56E-05 | 5.53E-05 | 1.530131934 |
| PSME1 | -0.282133586 | 8.24953152 | -4.287191946 | 2.56E-05 | 5.53E-05 | 1.529589094 |
| PPM1B | -0.299855778 | 4.18924454 | -4.287140202 | 2.56E-05 | 5.53E-05 | 1.529382214 |
| NYAP2 | 0.295444344 | 0.23952154 | 4.286372446 | 2.57E-05 | 5.55E-05 | 1.526312864 |
| NIFK | -0.268566723 | 5.18879795 | -4.285235912 | 2.59E-05 | 5.57E-05 | 1.521770079 |
| KCNE1 | 0.066522229 | 0.11010948 | 4.285113521 | 2.59E-05 | 5.58E-05 | 1.521280937 |
| RPL27A | -0.298768792 | 8.33578436 | -4.284028095 | 2.60E-05 | 5.60E-05 | 1.516943517 |
| DCAF1 | -0.331599287 | 4.2178287 | -4.283765699 | 2.60E-05 | 5.61E-05 | 1.515895108 |
| SIK2 | -0.324039359 | 4.15775524 | -4.283401804 | 2.61E-05 | 5.61E-05 | 1.514441255 |
| NSA2 | -0.265313063 | 5.80633563 | -4.28324745 | 2.61E-05 | 5.62E-05 | 1.513824604 |
| COL11A2 | -0.676358246 | 1.71959608 | -4.283235136 | 2.61E-05 | 5.62E-05 | 1.51377541 |
| C1orf162 | 0.458145318 | 3.30383185 | 4.282684461 | 2.61E-05 | 5.63E-05 | 1.511575598 |
| SUDS3 | -0.266506209 | 5.15426853 | -4.282142644 | 2.62E-05 | 5.64E-05 | 1.509411408 |
| KCND2 | 0.129624773 | 0.17632637 | 4.281451358 | 2.63E-05 | 5.66E-05 | 1.506650542 |
| NECAP1 | -0.282353098 | 4.62022696 | -4.280314262 | 2.64E-05 | 5.68E-05 | 1.502110029 |
| MTMR2 | -0.26370066 | 3.7906485 | -4.280096176 | 2.64E-05 | 5.69E-05 | 1.501239314 |
| NAP1L3 | -0.50389473 | 3.28306304 | -4.279572235 | 2.65E-05 | 5.70E-05 | 1.499147621 |
| C16orf54 | 0.513419462 | 1.38336374 | 4.27956977 | 2.65E-05 | 5.70E-05 | 1.499137778 |

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|---|---|---|---|---|---|---|
| BTBD1 | -0.325506695 | 5.87977215 | -4.279564502 | 2.65E-05 | 5.70E-05 | 1.499116751 |
| DOK3 | 0.404950053 | 1.77393009 | 4.279220058 | 2.65E-05 | 5.71E-05 | 1.497741772 |
| AZI2 | -0.356516592 | 3.12465383 | -4.27920687 | 2.65E-05 | 5.71E-05 | 1.497689129 |
| NOTCH2 | 0.537725728 | 4.87393033 | 4.278987694 | 2.65E-05 | 5.71E-05 | 1.496814259 |
| LHCGR | -0.231747106 | 0.24499439 | -4.278797402 | 2.66E-05 | 5.71E-05 | 1.496054713 |
| DPH7 | -0.269324041 | 3.83342937 | -4.278675267 | 2.66E-05 | 5.72E-05 | 1.49556723 |
| RAB3GA | -0.307976487 | 5.13955607 | -4.278654315 | 2.66E-05 | 5.72E-05 | 1.495483607 |
| DUSP16 | -0.335813847 | 4.85433633 | -4.278646337 | 2.66E-05 | 5.72E-05 | 1.495451763 |
| ZFP92 | -0.225402384 | 0.8128612 | -4.278411653 | 2.66E-05 | 5.72E-05 | 1.494515096 |
| CMTM1 | 0.34071283 | 1.43412967 | 4.278191003 | 2.66E-05 | 5.73E-05 | 1.493634487 |
| RCOR2 | -0.401055569 | 1.36419878 | -4.276514957 | 2.68E-05 | 5.76E-05 | 1.486946682 |
| MBLAC2 | -0.295398929 | 2.43596386 | -4.276247936 | 2.68E-05 | 5.77E-05 | 1.485881416 |
| NOP14 | -0.292586537 | 5.35005853 | -4.275879168 | 2.69E-05 | 5.78E-05 | 1.484410336 |
| NOA1 | -0.284151367 | 4.67156766 | -4.275425967 | 2.69E-05 | 5.79E-05 | 1.482602584 |
| CCR5 | 0.573341731 | 1.94641809 | 4.274782372 | 2.70E-05 | 5.80E-05 | 1.480035662 |
| ZNF594 | -0.32303917 | 2.51252996 | -4.274730927 | 2.70E-05 | 5.80E-05 | 1.479830493 |
| CDC42SI | -0.326468817 | 5.67966166 | -4.274599846 | 2.70E-05 | 5.81E-05 | 1.479307736 |
| FASN | -0.387856748 | 4.39636985 | -4.274152614 | 2.71E-05 | 5.82E-05 | 1.477524255 |
| LRP8 | -0.611100959 | 3.59560776 | -4.273888332 | 2.71E-05 | 5.82E-05 | 1.476470423 |
| ZYX | 0.4132867 | 6.81461471 | 4.273819636 | 2.71E-05 | 5.82E-05 | 1.476196505 |
| C2orf69 | -0.269741015 | 3.2997701 | -4.273415106 | 2.72E-05 | 5.83E-05 | 1.474583557 |
| TNNI2 | 0.363661879 | 0.88380928 | 4.273344734 | 2.72E-05 | 5.83E-05 | 1.474302983 |
| HLA-DM/ | 0.598616223 | 6.15440107 | 4.273015873 | 2.72E-05 | 5.84E-05 | 1.472991862 |
| NASP | -0.225084035 | 4.74542497 | -4.272601931 | 2.73E-05 | 5.85E-05 | 1.47134166 |
| RABGAP | -0.338103593 | 4.93212915 | -4.272165712 | 2.73E-05 | 5.86E-05 | 1.4696028 |
| GPR21 | -0.338103593 | 4.93212915 | -4.272165712 | 2.73E-05 | 5.86E-05 | 1.4696028 |
| PIK3R6 | 0.277927348 | 1.07140136 | 4.271493615 | 2.74E-05 | 5.88E-05 | 1.466923983 |
| NBEAL2 | 0.354008945 | 3.43822617 | 4.271390634 | 2.74E-05 | 5.88E-05 | 1.466513555 |
| MED24 | -0.238371357 | 4.8622775 | -4.271337139 | 2.74E-05 | 5.88E-05 | 1.466300358 |
| GLUL | -0.397171231 | 7.76580926 | -4.271300846 | 2.74E-05 | 5.88E-05 | 1.466155718 |
| ZNF256 | -0.224679298 | 2.99403063 | -4.271019031 | 2.74E-05 | 5.88E-05 | 1.465032621 |
| ANTXR1 | -0.528927552 | 4.9221114 | -4.270735673 | 2.75E-05 | 5.89E-05 | 1.463903444 |
| PAXIP1 | -0.24647932 | 2.24399357 | -4.270001662 | 2.76E-05 | 5.91E-05 | 1.460978717 |
| MORN5 | -0.199087725 | 0.18394857 | -4.269758326 | 2.76E-05 | 5.91E-05 | 1.460009219 |
| DAPK3 | -0.24141241 | 4.93924739 | -4.269554236 | 2.76E-05 | 5.92E-05 | 1.459196124 |
| ARSF | -0.373713626 | 0.27106591 | -4.26938019 | 2.76E-05 | 5.92E-05 | 1.458502752 |
| ABHD14/ | -0.150671057 | 0.5800595 | -4.269375684 | 2.76E-05 | 5.92E-05 | 1.458484801 |
| NUDCD1 | -0.286983944 | 3.4802507 | -4.269347808 | 2.76E-05 | 5.92E-05 | 1.45837375 |
| SOCS4 | -0.290034543 | 3.3240652 | -4.269240805 | 2.76E-05 | 5.92E-05 | 1.457947479 |
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| VASH2 | 0.148009892 | 0.39830236 | 4.266930681 | 2.79E-05 | 5.98E-05 | 1.448746867 |
| ATRIP | -0.083529305 | 0.21112895 | -4.266822873 | 2.79E-05 | 5.98E-05 | 1.448317605 |
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| VARS2 | -0.286146495 | 3.81351055 | -4.263987651 | 2.83E-05 | 6.05E-05 | 1.437031814 |
| MYBPC2 | 0.429042819 | 0.84195671 | 4.263452691 | 2.83E-05 | 6.06E-05 | 1.434903098 |
| SKOR1 | -0.118740807 | 0.38886896 | -4.261203343 | 2.86E-05 | 6.12E-05 | 1.425955017 |
| PTGER2 | 0.377807172 | 1.10417533 | 4.260642928 | 2.87E-05 | 6.13E-05 | 1.423726279 |
| PXK | -0.406858395 | 4.97093384 | -4.260512118 | 2.87E-05 | 6.14E-05 | 1.423206095 |
| RSL1D1 | -0.254139864 | 6.07015276 | -4.260370179 | 2.87E-05 | 6.14E-05 | 1.422641667 |
| MYL12A | -0.268103408 | 7.93976207 | -4.260177057 | 2.87E-05 | 6.14E-05 | 1.421873731 |
| FANCL | -0.299964881 | 4.59644091 | -4.2599041 | 2.87E-05 | 6.15E-05 | 1.420788395 |
| FITM1 | -0.287098764 | 1.26537162 | -4.259676505 | 2.88E-05 | 6.15E-05 | 1.419883469 |
| CXADR | -0.353745452 | 4.9838561 | -4.259234582 | 2.88E-05 | 6.16E-05 | 1.418126492 |
| TRIM29 | 0.754113321 | 1.7787144 | 4.258898627 | 2.89E-05 | 6.17E-05 | 1.416790927 |
| CATSPE | -0.092444327 | 0.23656176 | -4.258654649 | 2.89E-05 | 6.18E-05 | 1.415821064 |
| ZNF506 | -0.275808293 | 3.26996664 | -4.258014157 | 2.90E-05 | 6.19E-05 | 1.413275209 |
| RGS4 | 0.75082768 | 1.71410584 | 4.257534952 | 2.90E-05 | 6.20E-05 | 1.41137066 |
| SAA2 | 0.391278072 | 0.45787615 | 4.257364104 | 2.91E-05 | 6.21E-05 | 1.410691688 |
| TFAM | -0.315510735 | 4.50996061 | -4.256784653 | 2.91E-05 | 6.22E-05 | 1.408389051 |
| TRAM1 | -0.332221823 | 7.3927294 | -4.255524839 | 2.93E-05 | 6.25E-05 | 1.403383708 |
| RBBP5 | -0.270082219 | 4.38182152 | -4.255213436 | 2.93E-05 | 6.26E-05 | 1.402146675 |
| CLTRN | -0.377119435 | 2.6762695 | -4.254677651 | 2.94E-05 | 6.28E-05 | 1.400018483 |
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| ASMTL | -0.269905685 | 5.69943904 | -4.254459209 | 2.94E-05 | 6.28E-05 | 1.399150879 |
| NOC4L | -0.242847302 | 4.98948721 | -4.253845825 | 2.95E-05 | 6.29E-05 | 1.396714848 |
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| ANXA1 | 0.744605704 | 9.00163729 | 4.252743968 | 2.96E-05 | 6.32E-05 | 1.392339632 |
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| TMEM17 | -0.286019105 | 4.00422512 | -4.25142712 | 2.98E-05 | 6.36E-05 | 1.387112029 |
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| SLC25A5 | -0.065893392 | 0.11345987 | -4.249768042 | 3.00E-05 | 6.40E-05 | 1.380527846 |
| F2RL2 | 0.373140472 | 0.82393013 | 4.249342715 | 3.00E-05 | 6.41E-05 | 1.378840262 |
| MFGE8 | 0.659366605 | 6.35362122 | 4.248814144 | 3.01E-05 | 6.42E-05 | 1.376743234 |
| TMEFF2 | -0.087615161 | 0.17716315 | -4.248655179 | 3.01E-05 | 6.43E-05 | 1.376112611 |
| TMEM17 | -0.293171798 | 2.92673762 | -4.248141547 | 3.02E-05 | 6.44E-05 | 1.374075135 |
| KCNS3 | 0.475168856 | 2.93456925 | 4.248052239 | 3.02E-05 | 6.44E-05 | 1.373720891 |
| RNF125 | 0.341586733 | 2.10102235 | 4.247431743 | 3.03E-05 | 6.45E-05 | 1.371259837 |
| NEURL4 | -0.260595574 | 3.77830184 | -4.247426695 | 3.03E-05 | 6.45E-05 | 1.371239818 |
| ZFYVE1 | -0.279311252 | 4.48112539 | -4.247412185 | 3.03E-05 | 6.45E-05 | 1.371182272 |
| BORCS5 | -0.216753153 | 2.50779171 | -4.24707526 | 3.03E-05 | 6.46E-05 | 1.369846075 |

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| DMRTA1 | -0.291460542 | 2.06629704 | -4.2469533 | 3.03E-05 | 6.47E-05 | 1.369362418 |
| LRATD1 | 0.506372326 | 3.22164018 | 4.24578991 | 3.05E-05 | 6.50E-05 | 1.364749396 |
| UCHL1 | -0.593731671 | 3.1060928 | -4.245602525 | 3.05E-05 | 6.50E-05 | 1.364006489 |
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| INA | 0.235111728 | 0.428381 | 4.239984919 | 3.12E-05 | 6.64E-05 | 1.341748099 |
| BMT2 | -0.273868971 | 3.35066624 | -4.239502591 | 3.13E-05 | 6.66E-05 | 1.339838184 |
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| CSTF2 | -0.28170263 | 4.11655932 | -4.239349048 | 3.13E-05 | 6.66E-05 | 1.339230229 |
| COL4A1 | -0.514948738 | 6.78969328 | -4.238242443 | 3.15E-05 | 6.69E-05 | 1.334849162 |
| RGS9BP | -0.101445224 | 0.25785188 | -4.237873832 | 3.15E-05 | 6.70E-05 | 1.333390048 |
| GCC1 | -0.324511554 | 3.76858271 | -4.235110857 | 3.19E-05 | 6.78E-05 | 1.322456555 |
| TTLL11 | -0.240338128 | 1.83354343 | -4.234992488 | 3.19E-05 | 6.78E-05 | 1.321988289 |
| OCSTAN | 0.090410443 | 0.10167703 | 4.234905278 | 3.19E-05 | 6.78E-05 | 1.321643296 |
| CLTA | -0.279896689 | 7.94890375 | -4.234841147 | 3.19E-05 | 6.78E-05 | 1.321389608 |
| CDKN1B | -0.322469661 | 6.13563989 | -4.234230617 | 3.20E-05 | 6.80E-05 | 1.318974618 |
| TRPC4AI | -0.241717406 | 6.53906492 | -4.234187117 | 3.20E-05 | 6.80E-05 | 1.318802565 |
| PPP1R3I | -0.305141661 | 3.28691454 | -4.233066148 | 3.21E-05 | 6.83E-05 | 1.314369332 |
| CD79A | 1.25874823 | 2.50557745 | 4.232952325 | 3.22E-05 | 6.83E-05 | 1.313919241 |
| DARS2 | -0.314735969 | 3.69652145 | -4.23175407 | 3.23E-05 | 6.86E-05 | 1.309181598 |
| MEMO1 | -0.17298135 | 1.47881642 | -4.231728421 | 3.23E-05 | 6.86E-05 | 1.309080198 |
| ARHGAF | 0.419862006 | 3.45321293 | 4.230302483 | 3.25E-05 | 6.90E-05 | 1.303443894 |
| BRIX1 | -0.229907756 | 3.93703611 | -4.230124834 | 3.25E-05 | 6.91E-05 | 1.302741813 |
| SLA2 | 0.465214374 | 1.21322693 | 4.229464422 | 3.26E-05 | 6.93E-05 | 1.300132059 |
| KRT17 | 1.089493935 | 2.67649492 | 4.228511007 | 3.28E-05 | 6.95E-05 | 1.296365064 |
| SNRPB | -0.212044238 | 8.01995094 | -4.228050483 | 3.28E-05 | 6.97E-05 | 1.29454577 |
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| ZNF189 | -0.31018189 | 4.37503561 | -4.226260871 | 3.31E-05 | 7.01E-05 | 1.28747758 |
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| TAF1C | -0.297134895 | 4.25910252 | -4.221950091 | 3.37E-05 | 7.14E-05 | 1.270462539 |
| PLOD2 | -0.390665732 | 6.4874123 | -4.22174636 | 3.37E-05 | 7.14E-05 | 1.26965877 |
| SMPDL3 | -0.379364818 | 4.42586318 | -4.221551628 | 3.37E-05 | 7.15E-05 | 1.268890534 |
| HIST3H2 | 0.857402556 | 3.13705225 | 4.221262275 | 3.38E-05 | 7.16E-05 | 1.267749064 |
| BCLAF1 | -0.307912225 | 5.33987296 | -4.221093001 | 3.38E-05 | 7.16E-05 | 1.267081328 |
| PARP2 | -0.244882451 | 3.83842796 | -4.220814158 | 3.38E-05 | 7.17E-05 | 1.265981425 |
| MCM9 | -0.25729891 | 2.19930619 | -4.220311535 | 3.39E-05 | 7.18E-05 | 1.26399897 |
| SMIM24 | 0.723107338 | 1.11051275 | 4.219654117 | 3.40E-05 | 7.20E-05 | 1.261406286 |
| ENTPD5 | -0.292506588 | 2.49093438 | -4.219607336 | 3.40E-05 | 7.20E-05 | 1.261221806 |
| SLC22A5 | -0.259712535 | 2.53572638 | -4.219301611 | 3.40E-05 | 7.21E-05 | 1.260016236 |
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| RPL4 | -0.262013312 | 9.73341485 | -4.218649202 | 3.41E-05 | 7.23E-05 | 1.257443838 |
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| DOCK5 | -0.405157219 | 3.09038963 | -4.216513467 | 3.44E-05 | 7.29E-05 | 1.24902522 |
| FABP6 | -0.293107473 | 0.41737051 | -4.216476723 | 3.44E-05 | 7.29E-05 | 1.248880416 |
| ZSWIM6 | -0.323258144 | 3.2983448 | -4.216256817 | 3.45E-05 | 7.29E-05 | 1.24801381 |
| MSANTD | -0.121015615 | 0.49154676 | -4.215963364 | 3.45E-05 | 7.30E-05 | 1.24685743 |
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| DPP8 | -0.296119457 | 3.78782707 | -4.214068586 | 3.48E-05 | 7.36E-05 | 1.239392564 |
| PLP2 | 0.510583536 | 7.18465556 | 4.213457771 | 3.49E-05 | 7.37E-05 | 1.236986757 |
| RGS18 | 0.305911409 | 0.99354927 | 4.213425229 | 3.49E-05 | 7.37E-05 | 1.236858594 |
| USP14 | -0.279110044 | 4.95002085 | -4.212128671 | 3.51E-05 | 7.41E-05 | 1.231752898 |
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| HNRNPC | -0.26864068 | 7.14955446 | -4.211762706 | 3.51E-05 | 7.42E-05 | 1.230312018 |
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| HSBP1L | -0.322996632 | 4.75789623 | -4.211638224 | 3.51E-05 | 7.42E-05 | 1.229821929 |
| BBS10 | -0.333571755 | 3.85106597 | -4.210903369 | 3.52E-05 | 7.45E-05 | 1.226929058 |
| FAF1 | -0.245814799 | 4.86069796 | -4.209745087 | 3.54E-05 | 7.48E-05 | 1.222370188 |
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| LAMA1 | 0.580464109 | 2.33889334 | 4.205856921 | 3.60E-05 | 7.60E-05 | 1.207074777 |
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| MAP3K9 | -0.308707134 | 2.48982565 | -4.205022728 | 3.61E-05 | 7.62E-05 | 1.203794798 |
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| ANKDD1 | -0.332898183 | 2.34333987 | -4.202932937 | 3.64E-05 | 7.68E-05 | 1.195580403 |
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| SLC2A7 | -0.052857182 | 0.06891661 | -4.201559633 | 3.66E-05 | 7.73E-05 | 1.190184253 |
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| TSC22D3 | -0.490116291 | 6.82819126 | -4.197207429 | 3.73E-05 | 7.86E-05 | 1.173093209 |
| HNRNPH | -0.347237871 | 6.17514762 | -4.194723319 | 3.77E-05 | 7.94E-05 | 1.163345054 |
| METAP1 | -0.267709349 | 4.56956765 | -4.193540084 | 3.79E-05 | 7.98E-05 | 1.158703567 |
| DDX18 | -0.322537209 | 4.66768376 | -4.192086842 | 3.81E-05 | 8.02E-05 | 1.153004484 |
| TAS1R1 | -0.214587094 | 0.25029767 | -4.192056467 | 3.81E-05 | 8.02E-05 | 1.15288538 |
| UPF2 | -0.303480841 | 4.33896589 | -4.191793881 | 3.81E-05 | 8.03E-05 | 1.151855804 |
| SNRK | -0.332396764 | 4.6372059 | -4.190586034 | 3.83E-05 | 8.07E-05 | 1.147120666 |
| PRR14 | -0.209497343 | 4.88985724 | -4.190456149 | 3.83E-05 | 8.07E-05 | 1.146611547 |
| DISP1 | -0.287186827 | 3.66912903 | -4.190101588 | 3.84E-05 | 8.09E-05 | 1.145221818 |
| NOS1AP | 0.228090869 | 0.60180757 | 4.189247386 | 3.85E-05 | 8.11E-05 | 1.141874134 |
| MMRN1 | -0.510336703 | 1.54140598 | -4.189152457 | 3.86E-05 | 8.12E-05 | 1.141502138 |
| SF3B4 | -0.233061284 | 6.80324077 | -4.189096423 | 3.86E-05 | 8.12E-05 | 1.141282561 |
| IL17RB | -0.25824527 | 2.48930231 | -4.188333934 | 3.87E-05 | 8.14E-05 | 1.138294905 |
| ITGB7 | 0.536166796 | 2.0112322 | 4.187397469 | 3.88E-05 | 8.17E-05 | 1.134626204 |
| AP2M1 | -0.245780442 | 7.72386872 | -4.187285811 | 3.89E-05 | 8.17E-05 | 1.13418882 |
| TLR8 | 0.348598817 | 0.84267894 | 4.186610694 | 3.90E-05 | 8.20E-05 | 1.131544485 |
| TMEM33 | -0.275726555 | 4.69324011 | -4.186455999 | 3.90E-05 | 8.20E-05 | 1.130938619 |
| DICER1 | -0.342647715 | 3.84095385 | -4.186374681 | 3.90E-05 | 8.20E-05 | 1.130620143 |
| SLC46A1 | -0.251478142 | 2.10708589 | -4.186044922 | 3.91E-05 | 8.21E-05 | 1.129328722 |
| BNIP3L | -0.292290879 | 5.87817135 | -4.185890944 | 3.91E-05 | 8.22E-05 | 1.128725737 |
| PRSS23 | 0.738802534 | 5.49314378 | 4.185408691 | 3.92E-05 | 8.23E-05 | 1.12683733 |
| SOBP | -0.469627668 | 2.75345672 | -4.184228108 | 3.93E-05 | 8.27E-05 | 1.122215209 |
| TM7SF3 | -0.418634085 | 5.7629638 | -4.183647927 | 3.94E-05 | 8.29E-05 | 1.119944145 |
| FAT3 | 0.033946438 | 0.03922284 | 4.18277265 | 3.96E-05 | 8.32E-05 | 1.116518477 |
| PYGO1 | -0.340377456 | 2.89746316 | -4.182500105 | 3.96E-05 | 8.33E-05 | 1.115451918 |
| PNMA5 | -0.113008311 | 0.11720443 | -4.182493813 | 3.96E-05 | 8.33E-05 | 1.115427297 |
| GOLGA2 | -0.292077934 | 5.62562039 | -4.181391955 | 3.98E-05 | 8.36E-05 | 1.111115974 |
| SFTA3 | -0.54514905 | 6.06860888 | -4.181382905 | 3.98E-05 | 8.36E-05 | 1.111080568 |
| RBMX2 | -0.21618071 | 4.66687686 | -4.180940605 | 3.99E-05 | 8.38E-05 | 1.109350227 |
| SERPIN( | 0.605312471 | 6.84584933 | 4.179891524 | 4.01E-05 | 8.41E-05 | 1.105246715 |
| ARHGDI/ | -0.224356168 | 7.53724003 | -4.1793257 | 4.01E-05 | 8.43E-05 | 1.103033851 |
| CD3G | 0.477411493 | 1.13889345 | 4.179219832 | 4.02E-05 | 8.43E-05 | 1.102619846 |

| | | | | | |
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| GCLM | -0.413883395 | 4.44094621 | -4.178549787 | 4.03E-05 | 8.45E-05 | 1.099999779 |
| PLPPR2 | -0.343377908 | 4.75450732 | -4.178476501 | 4.03E-05 | 8.46E-05 | 1.099713236 |
| FOSB | -1.184081972 | 5.77855804 | -4.178190019 | 4.03E-05 | 8.46E-05 | 1.098593139 |
| CCAR1 | -0.268427899 | 4.92830999 | -4.177947571 | 4.04E-05 | 8.47E-05 | 1.097645259 |
| EXOG | -0.232068466 | 2.3693989 | -4.177610053 | 4.04E-05 | 8.48E-05 | 1.096325775 |
| MFSD2A | -0.766541662 | 3.9523236 | -4.177499316 | 4.05E-05 | 8.49E-05 | 1.095892883 |
| PGM3 | -0.294940433 | 3.97151427 | -4.176824758 | 4.06E-05 | 8.51E-05 | 1.093256118 |
| PGM2L1 | 0.440540409 | 2.96150028 | 4.175676701 | 4.08E-05 | 8.55E-05 | 1.088769363 |
| ZBTB24 | -0.257934526 | 3.02192879 | -4.17551085 | 4.08E-05 | 8.55E-05 | 1.088121283 |
| EMC1 | -0.296158247 | 4.16513332 | -4.175391092 | 4.08E-05 | 8.56E-05 | 1.08765333 |
| PEX26 | -0.246464928 | 3.17603474 | -4.175312786 | 4.08E-05 | 8.56E-05 | 1.087347357 |
| ZSCAN2 | -0.206623773 | 2.17382299 | -4.174935472 | 4.09E-05 | 8.57E-05 | 1.085873112 |
| HACD1 | 0.478946723 | 3.2189908 | 4.174560538 | 4.09E-05 | 8.58E-05 | 1.084408281 |
| TLE2 | -0.348754732 | 6.10021647 | -4.17390948 | 4.11E-05 | 8.60E-05 | 1.081864933 |
| LSM14A | -0.280158997 | 6.80633224 | -4.173873908 | 4.11E-05 | 8.60E-05 | 1.081725979 |
| ARHGAF | -0.353528581 | 4.97036204 | -4.173847205 | 4.11E-05 | 8.60E-05 | 1.081621672 |
| NMBR | -0.102960133 | 0.21585121 | -4.173207156 | 4.12E-05 | 8.63E-05 | 1.079121698 |
| CCDC50 | -0.27650258 | 4.55421809 | -4.17056592 | 4.16E-05 | 8.72E-05 | 1.06880881 |
| GRIPAP1 | -0.238476203 | 4.86602683 | -4.168840523 | 4.19E-05 | 8.78E-05 | 1.062074952 |
| SHOX2 | 0.180811313 | 0.3979411 | 4.16826008 | 4.20E-05 | 8.80E-05 | 1.059810152 |
| TRIM17 | 0.332312355 | 1.45163064 | 4.168106645 | 4.20E-05 | 8.80E-05 | 1.059211522 |
| ARHGEF | -0.255716892 | 3.56177559 | -4.167822324 | 4.21E-05 | 8.81E-05 | 1.05810228 |
| BRICD5 | -0.474897545 | 3.20055607 | -4.166537392 | 4.23E-05 | 8.86E-05 | 1.05309011 |
| ABCD3 | -0.334942903 | 4.63014371 | -4.165577691 | 4.25E-05 | 8.89E-05 | 1.049347459 |
| CEP112 | -0.290219039 | 2.60640331 | -4.165455403 | 4.25E-05 | 8.90E-05 | 1.048870614 |
| CEP170E | 0.362493072 | 5.37323292 | 4.165026475 | 4.26E-05 | 8.91E-05 | 1.047198162 |
| PIAS4 | -0.214461578 | 4.09531535 | -4.164741267 | 4.26E-05 | 8.92E-05 | 1.046086178 |
| METTL18 | -0.297608064 | 4.35150849 | -4.164215948 | 4.27E-05 | 8.94E-05 | 1.044038211 |
| YOD1 | -0.292384823 | 3.06991285 | -4.164183435 | 4.27E-05 | 8.94E-05 | 1.043911466 |
| NPY1R | 0.501131756 | 2.36029915 | 4.162804728 | 4.30E-05 | 8.99E-05 | 1.038537659 |
| MS4A2 | 0.142135502 | 0.20967705 | 4.161476973 | 4.32E-05 | 9.04E-05 | 1.033363915 |
| VPS4B | -0.319411326 | 5.29234298 | -4.161439265 | 4.32E-05 | 9.04E-05 | 1.033217005 |
| PLEKHA | -0.30479938 | 4.3381845 | -4.160682906 | 4.33E-05 | 9.06E-05 | 1.030270436 |
| MAGEE1 | -0.293735354 | 2.8906084 | -4.159228713 | 4.36E-05 | 9.12E-05 | 1.02460661 |
| AKAP12 | -0.629078101 | 3.8624581 | -4.159078967 | 4.36E-05 | 9.12E-05 | 1.024023472 |
| PFN1 | -0.240912439 | 9.36648768 | -4.158910368 | 4.37E-05 | 9.13E-05 | 1.02336694 |
| BASP1 | 0.699955221 | 6.108724 | 4.158119574 | 4.38E-05 | 9.15E-05 | 1.020287867 |
| STX4 | -0.206164711 | 5.15344656 | -4.15805751 | 4.38E-05 | 9.15E-05 | 1.020046234 |
| TXN | -0.268289929 | 7.86721273 | -4.157634125 | 4.39E-05 | 9.17E-05 | 1.018397957 |
| DRD1 | -0.144911411 | 0.13238893 | -4.15680325 | 4.40E-05 | 9.20E-05 | 1.0151637 |

| | | | | | |
|---|---|---|---|---|---|
| SFT2D2 | -0.269560831 | 4.00091137 | -4.156703691 | 4.41E-05 | 9.20E-05 | 1.014776198 |
| HNRNPC | -0.287003926 | 6.830491 | -4.156453496 | 4.41E-05 | 9.21E-05 | 1.013802422 |
| SPATA4( | 0.113905936 | 0.16605721 | 4.156032685 | 4.42E-05 | 9.22E-05 | 1.012164714 |
| PGBD1 | -0.274699014 | 1.92107499 | -4.156014126 | 4.42E-05 | 9.22E-05 | 1.012092489 |
| TCIRG1 | 0.404581312 | 5.60042783 | 4.155303104 | 4.43E-05 | 9.25E-05 | 1.009325682 |
| CLEC1B | 0.04263586 | 0.06354871 | 4.154223624 | 4.45E-05 | 9.29E-05 | 1.005125879 |
| KIAA023: | -0.338892422 | 4.51097339 | -4.153959142 | 4.46E-05 | 9.30E-05 | 1.004097038 |
| CTNND1 | -0.376284503 | 6.77272156 | -4.153911148 | 4.46E-05 | 9.30E-05 | 1.003910345 |
| TOB2 | -0.380697011 | 6.55510099 | -4.15333871 | 4.47E-05 | 9.32E-05 | 1.001683759 |
| ZNF423 | -0.313720205 | 1.69071301 | -4.152948967 | 4.47E-05 | 9.33E-05 | 1.000167949 |
| PHKG1 | -0.179130898 | 0.91169241 | -4.152591465 | 4.48E-05 | 9.35E-05 | 0.998777642 |
| KRBOX1 | -0.466114443 | 1.10648125 | -4.151851171 | 4.49E-05 | 9.37E-05 | 0.995899009 |
| TEDC1 | -0.261173305 | 2.23082445 | -4.151423401 | 4.50E-05 | 9.39E-05 | 0.994235828 |
| PLAT | -0.558487469 | 4.03033499 | -4.151418009 | 4.50E-05 | 9.39E-05 | 0.994214866 |
| SRPK2 | -0.305248166 | 3.93239033 | -4.151342829 | 4.50E-05 | 9.39E-05 | 0.993922581 |
| UBE2W | -0.261473392 | 3.58644489 | -4.151182557 | 4.51E-05 | 9.40E-05 | 0.99329949 |
| RUBCN | 0.302759378 | 3.77961685 | 4.150675127 | 4.52E-05 | 9.41E-05 | 0.991326884 |
| IDE | -0.290057037 | 4.20787585 | -4.15062523 | 4.52E-05 | 9.41E-05 | 0.991132922 |
| SLC25A2 | -0.245162233 | 3.58704812 | -4.150599748 | 4.52E-05 | 9.41E-05 | 0.99103387 |
| CSGALN | 0.401880841 | 4.21150458 | 4.150243128 | 4.52E-05 | 9.43E-05 | 0.989647679 |
| SPEG | -0.305720698 | 1.04572279 | -4.149409353 | 4.54E-05 | 9.46E-05 | 0.986407176 |
| GNS | -0.314764844 | 6.70004797 | -4.148992427 | 4.55E-05 | 9.47E-05 | 0.984786988 |
| PKNOX1 | -0.330220394 | 3.82213424 | -4.148888006 | 4.55E-05 | 9.48E-05 | 0.984381227 |
| IDH3A | -0.387742446 | 2.77360156 | -4.148816246 | 4.55E-05 | 9.48E-05 | 0.984102389 |
| YIPF2 | -0.274241223 | 6.4456161 | -4.148154084 | 4.56E-05 | 9.50E-05 | 0.981529594 |
| RTL9 | -0.20141463 | 0.32793288 | -4.148058087 | 4.56E-05 | 9.50E-05 | 0.981156631 |
| SCARF2 | -0.392094423 | 2.98648193 | -4.147960427 | 4.57E-05 | 9.51E-05 | 0.980777217 |
| AFMID | -0.262233379 | 3.80361229 | -4.147758128 | 4.57E-05 | 9.51E-05 | 0.9799913 |
| PIGZ | -0.350555746 | 1.88476023 | -4.14733356 | 4.58E-05 | 9.53E-05 | 0.978341989 |
| TMEM63 | 0.299886576 | 3.26379276 | 4.14559109 | 4.61E-05 | 9.60E-05 | 0.971574603 |
| CNR2 | -0.224640215 | 0.37950155 | -4.145457494 | 4.61E-05 | 9.60E-05 | 0.971055847 |
| ADAMTS | 0.128984218 | 0.36245406 | 4.145266455 | 4.62E-05 | 9.61E-05 | 0.970314063 |
| IL31RA | 0.074257783 | 0.07555053 | 4.144680181 | 4.63E-05 | 9.63E-05 | 0.968037816 |
| 1-Mar | 0.277616308 | 1.2676277 | 4.144401361 | 4.63E-05 | 9.64E-05 | 0.966955374 |
| ADAM21 | -0.103028377 | 0.26859069 | -4.144256014 | 4.64E-05 | 9.64E-05 | 0.96639113 |
| XYLB | 0.139758157 | 0.6666878 | 4.143433488 | 4.65E-05 | 9.67E-05 | 0.963198377 |
| FAM13B | -0.328663978 | 3.87775968 | -4.142761619 | 4.66E-05 | 9.70E-05 | 0.96059083 |
| EPOP | 0.442225904 | 2.03826047 | 4.142214748 | 4.67E-05 | 9.72E-05 | 0.958468675 |
| LRFN4 | 0.319580013 | 2.54415993 | 4.140986685 | 4.70E-05 | 9.77E-05 | 0.953704024 |
| MYL4 | -0.850110067 | 4.08761998 | -4.140372729 | 4.71E-05 | 9.79E-05 | 0.951322456 |

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|---|---|---|---|---|---|---|
| TSPO2 | 0.101103057 | 0.2220205 | 4.140239647 | 4.71E-05 | 9.80E-05 | 0.950806264 |
| PSMC3IF | -0.233050814 | 1.99659482 | -4.140035078 | 4.72E-05 | 9.80E-05 | 0.95001282 |
| NME6 | -0.226918197 | 3.28472366 | -4.139475141 | 4.73E-05 | 9.82E-05 | 0.947841214 |
| UBA3 | -0.261927008 | 4.8289536 | -4.138362203 | 4.75E-05 | 9.87E-05 | 0.943525674 |
| USP22 | -0.320363504 | 6.59288975 | -4.138333396 | 4.75E-05 | 9.87E-05 | 0.943413984 |
| EXO5 | -0.228141799 | 2.51919303 | -4.137845424 | 4.76E-05 | 9.89E-05 | 0.941522148 |
| CELF2 | 0.475591217 | 3.23243424 | 4.137512842 | 4.77E-05 | 9.90E-05 | 0.940232861 |
| CASQ2 | -0.423112197 | 1.58162987 | -4.13732567 | 4.77E-05 | 9.90E-05 | 0.939507308 |
| MSN | 0.386174436 | 8.69042412 | 4.137027088 | 4.77E-05 | 9.91E-05 | 0.938349948 |
| VPS36 | -0.299421465 | 4.74606348 | -4.136636313 | 4.78E-05 | 9.93E-05 | 0.936835343 |
| BCHE | -0.692688809 | 1.10992192 | -4.13662897 | 4.78E-05 | 9.93E-05 | 0.936806883 |
| INTS11 | -0.24069956 | 5.14796704 | -4.136494731 | 4.79E-05 | 9.93E-05 | 0.936286615 |
| RNF103 | -0.245076626 | 3.80449481 | -4.136340724 | 4.79E-05 | 9.94E-05 | 0.935689753 |
| TCF7 | 0.514392085 | 3.00576438 | 4.135347057 | 4.81E-05 | 9.98E-05 | 0.931839197 |
| HERC1 | -0.337318378 | 3.77657715 | -4.134845065 | 4.82E-05 | 1.00E-04 | 0.929894237 |
| RNF175 | 0.239958649 | 0.70497228 | 4.134088224 | 4.83E-05 | 0.0001 | 0.926962259 |
| DHFR | -0.299063821 | 2.55394343 | -4.133763143 | 4.84E-05 | 0.0001 | 0.925703053 |
| ZNF776 | -0.309860656 | 3.19370929 | -4.133732271 | 4.84E-05 | 0.0001 | 0.92558347 |
| ZNF37A | -0.284650344 | 3.07194137 | -4.133344068 | 4.85E-05 | 0.0001 | 0.924079881 |
| DOCK2 | 0.440835389 | 1.56541191 | 4.13323817 | 4.85E-05 | 0.0001 | 0.923669738 |
| PROSER | 0.391820135 | 3.44250065 | 4.132962608 | 4.85E-05 | 0.0001 | 0.922602527 |
| PLAA | -0.26402311 | 4.32862383 | -4.132859618 | 4.86E-05 | 0.0001 | 0.92220368 |
| FILIP1 | -0.386677293 | 1.70491988 | -4.132707097 | 4.86E-05 | 0.0001 | 0.92161303 |
| GGCT | 0.489804694 | 6.7407635 | 4.132529575 | 4.86E-05 | 0.0001 | 0.920925584 |
| FAM86B | -0.175427074 | 0.55958282 | -4.131621555 | 4.88E-05 | 0.0001 | 0.917409722 |
| UPB1 | -0.069576395 | 0.13031502 | -4.131515959 | 4.88E-05 | 0.0001 | 0.917000898 |
| PRPF40E | -0.303816636 | 2.56630892 | -4.131066429 | 4.89E-05 | 0.0001 | 0.915260603 |
| FLI1 | -0.329991322 | 2.88856009 | -4.128504552 | 4.94E-05 | 0.0001 | 0.905345804 |
| TTLL12 | -0.290897763 | 4.09955029 | -4.127904911 | 4.96E-05 | 0.0001 | 0.903025892 |
| KMO | 0.211545751 | 0.53036984 | 4.127784344 | 4.96E-05 | 0.0001 | 0.902559473 |
| MYL12B | -0.26889267 | 9.87969347 | -4.127393694 | 4.97E-05 | 0.0001 | 0.90104831 |
| UBE2Z | -0.279095693 | 6.27329581 | -4.127319633 | 4.97E-05 | 0.0001 | 0.900761832 |
| GPALPP | -0.247960642 | 2.94023491 | -4.127105188 | 4.97E-05 | 0.0001 | 0.899932351 |
| DKK2 | 0.374121247 | 1.21754865 | 4.127055321 | 4.97E-05 | 0.0001 | 0.899739472 |
| IPO4 | -0.19988714 | 2.06587057 | -4.125560086 | 5.00E-05 | 0.0001 | 0.89395698 |
| PLPP4 | 0.482816682 | 0.94740027 | 4.124428527 | 5.03E-05 | 0.0001 | 0.88958214 |
| SLC25A5 | -0.234086258 | 2.82358025 | -4.124391274 | 5.03E-05 | 0.0001 | 0.889438132 |
| POLE3 | -0.272251429 | 5.7861719 | -4.122706986 | 5.06E-05 | 0.0001 | 0.882928329 |
| ARMH4 | -0.29490765 | 1.47152397 | -4.120756135 | 5.10E-05 | 0.00011 | 0.875391162 |
| CCDC3 | -0.498978883 | 3.82532618 | -4.120392642 | 5.11E-05 | 0.00011 | 0.873987142 |

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| FAM104/ | -0.273563029 | 3.87621083 | -4.119943929 | 5.12E-05 | 0.00011 | 0.872254102 |
| HMCN2 | -0.326938966 | 0.6664622 | -4.119777132 | 5.12E-05 | 0.00011 | 0.871609933 |
| TST | -0.315662219 | 5.47417364 | -4.119596661 | 5.13E-05 | 0.00011 | 0.870912979 |
| DENND2 | -0.195539537 | 1.28487074 | -4.119594309 | 5.13E-05 | 0.00011 | 0.870903897 |
| XPOT | -0.411891056 | 5.15039576 | -4.119262773 | 5.13E-05 | 0.00011 | 0.869623626 |
| FAM229/ | -0.361495469 | 1.96994809 | -4.118535305 | 5.15E-05 | 0.00011 | 0.866814724 |
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| CLTC | -0.358642146 | 6.74665581 | -4.116729547 | 5.19E-05 | 0.00011 | 0.859844202 |
| WIPF3 | -0.418086184 | 2.51197648 | -4.116553297 | 5.19E-05 | 0.00011 | 0.859163992 |
| ZFP36L1 | 0.53828708 | 8.52122771 | 4.115616408 | 5.21E-05 | 0.00011 | 0.855548637 |
| FAM155/ | -0.394148923 | 0.94354689 | -4.11528722 | 5.22E-05 | 0.00011 | 0.854278504 |
| MRNIP | -0.315733773 | 3.2458912 | -4.115138013 | 5.22E-05 | 0.00011 | 0.853702837 |
| SLC18A3 | 0.509301462 | 0.59663692 | 4.115038482 | 5.22E-05 | 0.00011 | 0.853318838 |
| GART | -0.290787857 | 4.0449598 | -4.115034717 | 5.22E-05 | 0.00011 | 0.853304312 |
| LURAP1 | -0.392972474 | 3.39846199 | -4.113448385 | 5.26E-05 | 0.00011 | 0.847185228 |
| SNCG | 0.628770472 | 4.83468958 | 4.112329112 | 5.28E-05 | 0.00011 | 0.842869005 |
| GPR17 | -0.189238839 | 0.4886459 | -4.112284098 | 5.28E-05 | 0.00011 | 0.842695441 |
| ZNF136 | -0.278095076 | 3.32505045 | -4.112276421 | 5.28E-05 | 0.00011 | 0.842665842 |
| DENND3 | -0.237223477 | 2.76769113 | -4.111963685 | 5.29E-05 | 0.00011 | 0.841460042 |
| SGIP1 | -0.539662472 | 1.52114372 | -4.111308244 | 5.30E-05 | 0.00011 | 0.83893316 |
| MAPKAP | -0.20125912 | 2.96830278 | -4.111089074 | 5.31E-05 | 0.00011 | 0.838088286 |
| COL14A' | -0.690529102 | 5.94009617 | -4.11066751 | 5.32E-05 | 0.00011 | 0.836463316 |
| SLC2A13 | 0.351582347 | 1.95123572 | 4.110182427 | 5.33E-05 | 0.00011 | 0.834593684 |
| METTL2( | -0.300649327 | 5.95148125 | -4.110002683 | 5.33E-05 | 0.00011 | 0.833900956 |
| UBA1 | -0.251369449 | 7.77040944 | -4.109670439 | 5.34E-05 | 0.00011 | 0.832620568 |
| ZSWIM4 | 0.314367821 | 3.61650053 | 4.109485369 | 5.34E-05 | 0.00011 | 0.831907388 |
| RAD21 | -0.336585679 | 6.3087131 | -4.109396747 | 5.34E-05 | 0.00011 | 0.83156589 |
| MPL | -0.149918944 | 0.54725461 | -4.109092781 | 5.35E-05 | 0.00011 | 0.830394623 |
| TCF15 | -0.320954585 | 0.86542904 | -4.108484508 | 5.36E-05 | 0.00011 | 0.828051006 |
| ZNF366 | -0.405942107 | 1.55723156 | -4.108476396 | 5.36E-05 | 0.00011 | 0.828019754 |
| KCNJ6 | 0.04031986 | 0.03480373 | 4.106543532 | 5.41E-05 | 0.00011 | 0.820574643 |
| GPR68 | 0.463982307 | 1.63593769 | 4.105875874 | 5.42E-05 | 0.00011 | 0.818003635 |
| NAB2 | 0.600063965 | 6.7962216 | 4.105324168 | 5.43E-05 | 0.00011 | 0.815879413 |
| BRD9 | -0.218851411 | 3.50001911 | -4.104798999 | 5.44E-05 | 0.00011 | 0.813857594 |
| NEK6 | 0.539331028 | 3.32650643 | 4.104605523 | 5.45E-05 | 0.00011 | 0.813112797 |
| LSS | -0.23914777 | 3.99927738 | -4.104455967 | 5.45E-05 | 0.00011 | 0.812537097 |
| ZNF746 | -0.259726342 | 3.19291234 | -4.104140829 | 5.46E-05 | 0.00011 | 0.811324064 |
| NTNG1 | 0.04548122 | 0.05951882 | 4.104135637 | 5.46E-05 | 0.00011 | 0.811304076 |
| HNRNPL | -0.272479001 | 7.1293775 | -4.103928815 | 5.46E-05 | 0.00011 | 0.810508021 |
| CCN5 | 0.54879738 | 0.96831148 | 4.103438654 | 5.47E-05 | 0.00011 | 0.808621532 |

| | | | | | |
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| LSMEM1 | -0.256775503 | 1.16977094 | -4.101755671 | 5.51E-05 | 0.00011 | 0.802145721 |
| LACTB | -0.21755745 | 3.4002202 | -4.101402716 | 5.52E-05 | 0.00011 | 0.800787911 |
| SESTD1 | 0.293594077 | 2.20007043 | 4.101262557 | 5.52E-05 | 0.00011 | 0.800248749 |
| PMS2 | -0.308710379 | 3.06130143 | -4.099970411 | 5.55E-05 | 0.00011 | 0.79527891 |
| SPICE1 | -0.290116388 | 2.59367128 | -4.099753985 | 5.56E-05 | 0.00011 | 0.794446629 |
| PGM1 | -0.361684164 | 5.40056609 | -4.098958661 | 5.57E-05 | 0.00011 | 0.791388487 |
| VSTM2L | 0.739841672 | 3.75706989 | 4.098918104 | 5.58E-05 | 0.00011 | 0.791232553 |
| CSDE1 | -0.305397838 | 8.27820832 | -4.0984767 | 5.59E-05 | 0.00011 | 0.789535525 |
| ZYG11A | -0.363028374 | 1.58017075 | -4.097655335 | 5.60E-05 | 0.00012 | 0.786378121 |
| BMP2 | -0.534993071 | 4.2067215 | -4.096913892 | 5.62E-05 | 0.00012 | 0.783528421 |
| SAP130 | -0.271508898 | 4.21780578 | -4.096874415 | 5.62E-05 | 0.00012 | 0.783376706 |
| IFITM3 | -0.421410385 | 8.41413568 | -4.096518529 | 5.63E-05 | 0.00012 | 0.782009047 |
| CYSLTR | 0.931007208 | 3.38648134 | 4.09435984 | 5.68E-05 | 0.00012 | 0.773715506 |
| VAMP3 | -0.269585578 | 6.92269158 | -4.093629656 | 5.70E-05 | 0.00012 | 0.770911056 |
| KCTD9 | -0.334368507 | 3.82859931 | -4.093529396 | 5.70E-05 | 0.00012 | 0.77052602 |
| ZNF561 | -0.272522578 | 3.83716898 | -4.092756984 | 5.72E-05 | 0.00012 | 0.767559921 |
| AZIN1 | -0.321321124 | 5.89059624 | -4.0923639 | 5.73E-05 | 0.00012 | 0.76605065 |
| GTF2F2 | -0.209514184 | 4.51679718 | -4.091289713 | 5.75E-05 | 0.00012 | 0.761926887 |
| NCK2 | -0.321207132 | 6.22256294 | -4.090154326 | 5.78E-05 | 0.00012 | 0.757569208 |
| CCNYL1 | -0.332474992 | 3.86114895 | -4.089962453 | 5.78E-05 | 0.00012 | 0.756832894 |
| ZNF397 | -0.251957147 | 3.53606104 | -4.089709308 | 5.79E-05 | 0.00012 | 0.755861495 |
| TLR3 | -0.350013413 | 2.34662119 | -4.089022723 | 5.80E-05 | 0.00012 | 0.753227113 |
| CCDC34 | -0.26110822 | 3.10321129 | -4.08826668 | 5.82E-05 | 0.00012 | 0.75032667 |
| PRDM6 | -0.245908157 | 0.89797166 | -4.08824285 | 5.82E-05 | 0.00012 | 0.750235256 |
| ALPK2 | 0.129343265 | 0.1337199 | 4.086359598 | 5.87E-05 | 0.00012 | 0.743012537 |
| SPART | -0.308219676 | 5.03502793 | -4.085362762 | 5.89E-05 | 0.00012 | 0.739190614 |
| SLFN5 | 0.409308545 | 3.90760438 | 4.085265216 | 5.89E-05 | 0.00012 | 0.738816661 |
| PDGFRA | 0.489535694 | 1.29677498 | 4.085066941 | 5.90E-05 | 0.00012 | 0.738056578 |
| NT5DC2 | -0.390576192 | 5.00164226 | -4.084046931 | 5.92E-05 | 0.00012 | 0.7341469 |
| FAM177 | -0.29730719 | 4.789472 | -4.081058203 | 5.99E-05 | 0.00012 | 0.722696097 |
| SLC36A4 | -0.229857221 | 2.27549231 | -4.080007093 | 6.02E-05 | 0.00012 | 0.718670697 |
| MMGT1 | -0.406591964 | 4.96755543 | -4.079636832 | 6.03E-05 | 0.00012 | 0.717252936 |
| USP18 | -0.393371063 | 3.09379524 | -4.07913266 | 6.04E-05 | 0.00012 | 0.715322601 |
| CXorf21 | 0.414325187 | 1.58064135 | 4.079063496 | 6.04E-05 | 0.00012 | 0.715057807 |
| RBM22 | -0.236862193 | 5.39261607 | -4.078395112 | 6.06E-05 | 0.00012 | 0.712499112 |
| MCF2L2 | 0.080041487 | 0.20092427 | 4.078165175 | 6.06E-05 | 0.00012 | 0.711618957 |
| PLXNB3 | -0.170580686 | 0.48179102 | -4.076387582 | 6.11E-05 | 0.00013 | 0.704816136 |
| ASH2L | -0.246132468 | 4.49111004 | -4.076308695 | 6.11E-05 | 0.00013 | 0.704514295 |
| WDPCP | -0.163400875 | 1.16816606 | -4.075535382 | 6.13E-05 | 0.00013 | 0.701555701 |
| NR2E3 | -0.105139556 | 0.33606906 | -4.075180028 | 6.14E-05 | 0.00013 | 0.700196328 |

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| ACP2 | -0.232682336 | 5.35302676 | -4.074350171 | 6.16E-05 | 0.00013 | 0.697022197 |
| VPS11 | -0.2288707 | 5.33833326 | -4.074192733 | 6.16E-05 | 0.00013 | 0.696420073 |
| TCF7L2 | -0.33501644 | 4.12858586 | -4.073787665 | 6.17E-05 | 0.00013 | 0.694870981 |
| TNNI3K | -0.064729618 | 0.13555519 | -4.073671886 | 6.17E-05 | 0.00013 | 0.694428233 |
| B4GALN | -0.517846526 | 0.9575098 | -4.073447613 | 6.18E-05 | 0.00013 | 0.69357063 |
| RS1 | -0.138141323 | 0.42821248 | -4.07283585 | 6.20E-05 | 0.00013 | 0.691231507 |
| PDPR | -0.332728187 | 3.70112429 | -4.072691001 | 6.20E-05 | 0.00013 | 0.690677712 |
| DEPDC4 | -0.131707862 | 0.71202758 | -4.071857056 | 6.22E-05 | 0.00013 | 0.687489652 |
| GNG8 | 0.366731254 | 0.67419037 | 4.071664475 | 6.22E-05 | 0.00013 | 0.686753524 |
| TNFAIP6 | 0.463578592 | 1.62648743 | 4.070653893 | 6.25E-05 | 0.00013 | 0.682891134 |
| MRPL9 | -0.250907429 | 6.1572222 | -4.070633738 | 6.25E-05 | 0.00013 | 0.682814114 |
| PLA2G2/ | 0.882102687 | 1.64194652 | 4.069982375 | 6.27E-05 | 0.00013 | 0.680325096 |
| SOX7 | -0.373843776 | 2.23055059 | -4.069756602 | 6.27E-05 | 0.00013 | 0.679462446 |
| GSDMA | 0.46884465 | 1.24785444 | 4.069354036 | 6.28E-05 | 0.00013 | 0.677924394 |
| BMP5 | -0.198824446 | 0.29460721 | -4.067432148 | 6.33E-05 | 0.00013 | 0.670583424 |
| POLR2M | -0.313060595 | 4.2727292 | -4.067050031 | 6.34E-05 | 0.00013 | 0.669124228 |
| FAM222/ | -0.269086954 | 1.47669217 | -4.066302365 | 6.36E-05 | 0.00013 | 0.666269453 |
| ADPRHL | -0.219497122 | 6.43194592 | -4.064398795 | 6.41E-05 | 0.00013 | 0.659003231 |
| ALX4 | -0.152923446 | 0.16945446 | -4.062758143 | 6.45E-05 | 0.00013 | 0.652743005 |
| PGR | 0.397396275 | 0.93244961 | 4.060468558 | 6.51E-05 | 0.00013 | 0.64401036 |
| RRP12 | -0.224981887 | 3.6445121 | -4.060320636 | 6.52E-05 | 0.00013 | 0.643446322 |
| ZNF551 | -0.282202135 | 2.6462598 | -4.058878457 | 6.55E-05 | 0.00013 | 0.637948144 |
| ARAP3 | -0.349440252 | 3.6444323 | -4.058158153 | 6.57E-05 | 0.00013 | 0.635202692 |
| IMPA1 | -0.319362891 | 4.20872674 | -4.057502112 | 6.59E-05 | 0.00013 | 0.632702549 |
| AZIN2 | -0.348463213 | 2.48009148 | -4.057098929 | 6.60E-05 | 0.00013 | 0.631166217 |
| UTS2B | -0.043451717 | 0.10993225 | -4.056918066 | 6.61E-05 | 0.00013 | 0.630477078 |
| ZNF638 | -0.285259165 | 4.83958618 | -4.056539643 | 6.62E-05 | 0.00014 | 0.629035268 |
| CEP152 | -0.220415696 | 1.23244237 | -4.054660324 | 6.67E-05 | 0.00014 | 0.621876734 |
| GAK | -0.1889457 | 4.42132911 | -4.054366085 | 6.67E-05 | 0.00014 | 0.620756211 |
| SYNJ1 | -0.318736444 | 2.95172446 | -4.054046988 | 6.68E-05 | 0.00014 | 0.619541101 |
| LLGL1 | 0.416239183 | 4.05985728 | 4.053666027 | 6.69E-05 | 0.00014 | 0.618090528 |
| CYP2D6 | -0.347897015 | 1.30606025 | -4.05316758 | 6.71E-05 | 0.00014 | 0.616192785 |
| MTA2 | -0.235560697 | 5.60899912 | -4.051940566 | 6.74E-05 | 0.00014 | 0.611522038 |
| FKBP14 | -0.259021537 | 2.67932251 | -4.051119571 | 6.76E-05 | 0.00014 | 0.608397533 |
| BRINP2 | 0.466635289 | 0.92436586 | 4.050438545 | 6.78E-05 | 0.00014 | 0.605806141 |
| CYP26A | 0.236384018 | 0.33615164 | 4.049883555 | 6.79E-05 | 0.00014 | 0.603694615 |
| ENOPH1 | -0.254341348 | 6.18040716 | -4.047875824 | 6.85E-05 | 0.00014 | 0.596058084 |
| TNNI1 | 0.335575141 | 1.43186054 | 4.04565463 | 6.91E-05 | 0.00014 | 0.587613514 |
| THRSP | -0.777560773 | 5.17501987 | -4.04501134 | 6.93E-05 | 0.00014 | 0.585168606 |
| RPS28 | -0.345041347 | 8.71904189 | -4.044135 | 6.95E-05 | 0.00014 | 0.581838508 |

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| POGLUT | -0.248658707 | 2.38649389 | -4.044037555 | 6.96E-05 | 0.00014 | 0.581468257 |
| CCDC14 | -0.065065989 | 0.16680265 | -4.043874396 | 6.96E-05 | 0.00014 | 0.580848337 |
| UNK | -0.258034643 | 4.36791143 | -4.043494328 | 6.97E-05 | 0.00014 | 0.579404354 |
| TMOD2 | -0.330224836 | 2.08404454 | -4.043376979 | 6.97E-05 | 0.00014 | 0.578958537 |
| OSM | 0.471885168 | 1.4147987 | 4.043375386 | 6.97E-05 | 0.00014 | 0.578952487 |
| INTS4 | -0.214313998 | 3.50280938 | -4.043235488 | 6.98E-05 | 0.00014 | 0.578421021 |
| TRIM50 | -0.374441096 | 0.4365372 | -4.043187379 | 6.98E-05 | 0.00014 | 0.57823826 |
| S100Z | 0.087090431 | 0.22091172 | 4.041837003 | 7.02E-05 | 0.00014 | 0.573109123 |
| GGT2 | 0.501753426 | 1.863512 | 4.041022938 | 7.04E-05 | 0.00014 | 0.570017787 |
| MYOZ1 | -0.538559608 | 2.99723184 | -4.040745096 | 7.05E-05 | 0.00014 | 0.568962836 |
| NRDC | -0.195797795 | 5.58747237 | -4.039793723 | 7.08E-05 | 0.00014 | 0.565350997 |
| DNAJC1: | -0.34144093 | 4.25451748 | -4.039016968 | 7.10E-05 | 0.00014 | 0.56240264 |
| SHOC2 | -0.268192057 | 5.23432901 | -4.03895366 | 7.10E-05 | 0.00014 | 0.562162364 |
| SLC30A2 | 0.78254373 | 5.39405955 | 4.038676636 | 7.11E-05 | 0.00014 | 0.561110988 |
| REPS2 | -0.344179587 | 1.99358182 | -4.0385609 | 7.11E-05 | 0.00014 | 0.560671761 |
| KCND3 | -0.242941775 | 0.50060809 | -4.038469723 | 7.11E-05 | 0.00014 | 0.560325746 |
| PTGER1 | 0.279799353 | 0.67261313 | 4.038019316 | 7.13E-05 | 0.00014 | 0.558616551 |
| SALL1 | -0.572259464 | 5.37364483 | -4.038015287 | 7.13E-05 | 0.00014 | 0.558601263 |
| BRWD1 | -0.288239581 | 3.45763333 | -4.037860225 | 7.13E-05 | 0.00015 | 0.558012877 |
| RNF216 | -0.258801705 | 4.67463226 | -4.037723682 | 7.13E-05 | 0.00015 | 0.557494778 |
| ZNF233 | -0.3216917 | 1.70209971 | -4.037680443 | 7.14E-05 | 0.00015 | 0.557330716 |
| SLC19A: | 0.133870767 | 0.17917664 | 4.037668016 | 7.14E-05 | 0.00015 | 0.557283566 |
| SPRED3 | 0.27635413 | 1.37328551 | 4.037101328 | 7.15E-05 | 0.00015 | 0.555133514 |
| TMEM17 | 0.512138877 | 5.87587019 | 4.03661256 | 7.17E-05 | 0.00015 | 0.553279311 |
| DDX39A | -0.223774177 | 4.66125463 | -4.036381703 | 7.17E-05 | 0.00015 | 0.552403595 |
| ACTL10 | -0.292072051 | 2.28407369 | -4.035909844 | 7.19E-05 | 0.00015 | 0.550613815 |
| HSF2 | -0.228825071 | 3.78907983 | -4.035852742 | 7.19E-05 | 0.00015 | 0.550397238 |
| P2RX1 | 0.292118041 | 0.59493913 | 4.034800908 | 7.22E-05 | 0.00015 | 0.546408304 |
| RINT1 | -0.234948543 | 3.57497877 | -4.034092395 | 7.24E-05 | 0.00015 | 0.543721883 |
| ZNF473 | -0.219894761 | 2.47412322 | -4.03348714 | 7.26E-05 | 0.00015 | 0.541427306 |
| PCDHG | -0.403412174 | 1.64667246 | -4.033460165 | 7.26E-05 | 0.00015 | 0.541325047 |
| ZNF394 | -0.187785002 | 4.23810546 | -4.032746855 | 7.28E-05 | 0.00015 | 0.538621231 |
| HSPA6 | 0.577936914 | 1.82816836 | 4.03106581 | 7.33E-05 | 0.00015 | 0.532250856 |
| SNX31 | -0.147521766 | 0.2481824 | -4.029897919 | 7.36E-05 | 0.00015 | 0.527826469 |
| IL18R1 | 0.586157184 | 1.85829992 | 4.029464193 | 7.37E-05 | 0.00015 | 0.52618365 |
| TMEM12 | -0.242667884 | 5.75785823 | -4.029357213 | 7.38E-05 | 0.00015 | 0.525778467 |
| STIMATE | -0.164418264 | 1.36010774 | -4.029321668 | 7.38E-05 | 0.00015 | 0.525643842 |
| BEND7 | -0.348804986 | 3.89609759 | -4.028712748 | 7.40E-05 | 0.00015 | 0.523337776 |
| LRRC41 | -0.273260163 | 5.17350282 | -4.028195794 | 7.41E-05 | 0.00015 | 0.521380238 |
| PABPN1 | -0.287830204 | 6.34967381 | -4.028025676 | 7.42E-05 | 0.00015 | 0.520736108 |

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| THY1 | -0.473697451 | 5.337405 | -4.027812535 | 7.42E-05 | 0.00015 | 0.519929105 |
| RPS24 | -0.269370765 | 9.26812622 | -4.027715652 | 7.43E-05 | 0.00015 | 0.519562296 |
| LILRB4 | 0.524098381 | 2.140065 | 4.025734184 | 7.48E-05 | 0.00015 | 0.512061955 |
| SREK1 | -0.29567267 | 3.75290697 | -4.024916392 | 7.51E-05 | 0.00015 | 0.508967358 |
| TYROBP | 0.593324239 | 6.18878398 | 4.024039695 | 7.54E-05 | 0.00015 | 0.505650474 |
| CLEC10/ | 0.568671236 | 1.8907811 | 4.023467028 | 7.55E-05 | 0.00015 | 0.5034842 |
| DYNC2H | -0.336889073 | 2.43471865 | -4.023452294 | 7.55E-05 | 0.00015 | 0.503428469 |
| DCC | 0.081611705 | 0.07553308 | 4.023101634 | 7.56E-05 | 0.00015 | 0.502102134 |
| TGOLN2 | -0.412963303 | 7.08309446 | -4.022882909 | 7.57E-05 | 0.00015 | 0.501274884 |
| IGF2BP2 | 0.793389233 | 4.69461937 | 4.022846164 | 7.57E-05 | 0.00015 | 0.501135912 |
| POLM | -0.267189242 | 4.04987929 | -4.022559847 | 7.58E-05 | 0.00015 | 0.500053084 |
| ZNF316 | -0.245343159 | 5.04622564 | -4.021661336 | 7.61E-05 | 0.00015 | 0.496655432 |
| RHOQ | -0.249556321 | 5.36464274 | -4.019765972 | 7.67E-05 | 0.00016 | 0.489490448 |
| PCYT1A | -0.238370553 | 4.27093175 | -4.01938244 | 7.68E-05 | 0.00016 | 0.488040957 |
| AMPD1 | 0.3390393 | 0.38639854 | 4.019327436 | 7.68E-05 | 0.00016 | 0.487833089 |
| TFDP2 | -0.276901547 | 4.18585505 | -4.018546782 | 7.70E-05 | 0.00016 | 0.484883155 |
| UBXN1 | -0.253540957 | 7.51643719 | -4.018399046 | 7.71E-05 | 0.00016 | 0.484324946 |
| DCAF4L' | -0.051397894 | 0.14830259 | -4.018254553 | 7.71E-05 | 0.00016 | 0.48377901 |
| LYL1 | -0.342640113 | 2.33054756 | -4.01766576 | 7.73E-05 | 0.00016 | 0.481554559 |
| UBALD2 | -0.252659466 | 6.15872682 | -4.0168842 | 7.75E-05 | 0.00016 | 0.478602278 |
| FBXL8 | -0.273191078 | 2.66510208 | -4.016672178 | 7.76E-05 | 0.00016 | 0.477801467 |
| NETO1 | 0.468988963 | 0.69746356 | 4.0164541 | 7.77E-05 | 0.00016 | 0.476977824 |
| ROBO3 | -0.348191563 | 1.34847075 | -4.016432676 | 7.77E-05 | 0.00016 | 0.476896911 |
| ENDOD1 | 0.508878218 | 5.88200227 | 4.015979121 | 7.78E-05 | 0.00016 | 0.475184047 |
| LETM2 | -0.119109778 | 0.72091911 | -4.015953863 | 7.78E-05 | 0.00016 | 0.475088662 |
| CHD8 | -0.298008921 | 4.497063 | -4.015106204 | 7.81E-05 | 0.00016 | 0.471887926 |
| TCF20 | -0.330512794 | 4.6549123 | -4.014781004 | 7.82E-05 | 0.00016 | 0.470660134 |
| TMPRSS | 0.644461446 | 3.19226665 | 4.013090459 | 7.87E-05 | 0.00016 | 0.464278915 |
| MFSD12 | -0.230183951 | 4.27390366 | -4.011622567 | 7.92E-05 | 0.00016 | 0.458740052 |
| SCLT1 | -0.166949767 | 1.78168914 | -4.010947199 | 7.94E-05 | 0.00016 | 0.456192254 |
| PARP14 | 0.425794021 | 5.35626891 | 4.010833769 | 7.94E-05 | 0.00016 | 0.455764383 |
| LONP1 | -0.268275841 | 6.03298646 | -4.010785279 | 7.94E-05 | 0.00016 | 0.455581472 |
| S1PR2 | 0.408500815 | 3.27443403 | 4.009948622 | 7.97E-05 | 0.00016 | 0.452425859 |
| ZNF461 | -0.245718248 | 2.41162544 | -4.009927796 | 7.97E-05 | 0.00016 | 0.452347317 |
| PRSS2 | 1.153761563 | 2.61236649 | 4.009295623 | 7.99E-05 | 0.00016 | 0.449963348 |
| SBK1 | -0.346419887 | 3.37001042 | -4.00865953 | 8.01E-05 | 0.00016 | 0.447564931 |
| ZNF791 | -0.233591498 | 4.20793496 | -4.00743445 | 8.05E-05 | 0.00016 | 0.442946656 |
| SGCD | -0.722939591 | 2.22142967 | -4.005971983 | 8.10E-05 | 0.00016 | 0.43743512 |
| SLAMF9 | 0.177209709 | 0.21151479 | 4.005384775 | 8.12E-05 | 0.00016 | 0.435222631 |
| MTHFD1 | -0.248203165 | 4.28777594 | -4.005339832 | 8.12E-05 | 0.00016 | 0.435053308 |

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|---|---|---|---|---|---|---|
| RPSA | -0.297109925 | 8.47258723 | -4.005268986 | 8.12E-05 | 0.00016 | 0.434786395 |
| C5orf58 | 0.079876393 | 0.17061094 | 4.004832319 | 8.14E-05 | 0.00016 | 0.433141345 |
| MASTL | -0.235326806 | 2.95373304 | -4.004412789 | 8.15E-05 | 0.00016 | 0.431561003 |
| MDK | 0.775291332 | 7.13415654 | 4.003884718 | 8.17E-05 | 0.00016 | 0.429572003 |
| SLAMF6 | 0.601695247 | 1.55817985 | 4.002880186 | 8.20E-05 | 0.00017 | 0.425789031 |
| RNF214 | -0.272496845 | 3.50443255 | -4.002840593 | 8.20E-05 | 0.00017 | 0.425639945 |
| GALNT7 | 0.555576136 | 5.10809953 | 4.002519089 | 8.21E-05 | 0.00017 | 0.424429376 |
| SGSM2 | -0.282531205 | 4.46952698 | -4.002408182 | 8.21E-05 | 0.00017 | 0.424011796 |
| RAP2B | 0.295012891 | 4.24113568 | 4.001803408 | 8.23E-05 | 0.00017 | 0.421734914 |
| RFLNA | 0.24791566 | 0.83129984 | 4.001309913 | 8.25E-05 | 0.00017 | 0.419877207 |
| SFRP4 | 0.958656895 | 2.99466783 | 4.000092476 | 8.29E-05 | 0.00017 | 0.415295163 |
| KIF1C | -0.267927242 | 6.33684684 | -3.99972539 | 8.30E-05 | 0.00017 | 0.413913813 |
| RPL38 | -0.264233886 | 7.95623681 | -3.999648404 | 8.31E-05 | 0.00017 | 0.413624126 |
| PTK2 | -0.270001194 | 4.60333435 | -3.999199018 | 8.32E-05 | 0.00017 | 0.411933255 |
| PPIG | -0.28365733 | 5.1139665 | -3.999057069 | 8.32E-05 | 0.00017 | 0.411399193 |
| STARD5 | -0.221327472 | 1.04455892 | -3.998938072 | 8.33E-05 | 0.00017 | 0.410951493 |
| WFDC2 | -0.619469894 | 8.19303651 | -3.998855758 | 8.33E-05 | 0.00017 | 0.410641812 |
| SLC22A1 | -0.503581299 | 5.5978618 | -3.99834805 | 8.35E-05 | 0.00017 | 0.408731847 |
| ACSL6 | -0.165237743 | 0.24052599 | -3.997263309 | 8.38E-05 | 0.00017 | 0.404651834 |
| CRK | -0.25400551 | 6.11210409 | -3.997127123 | 8.39E-05 | 0.00017 | 0.404139668 |
| ZBTB47 | -0.319833246 | 4.9453806 | -3.996848136 | 8.40E-05 | 0.00017 | 0.40309051 |
| DIDO1 | -0.278600178 | 4.18355575 | -3.996658608 | 8.40E-05 | 0.00017 | 0.402377809 |
| IGFN1 | 1.166895621 | 2.4168805 | 3.996598795 | 8.41E-05 | 0.00017 | 0.402152894 |
| CD9 | -0.379931843 | 8.62355914 | -3.996537272 | 8.41E-05 | 0.00017 | 0.401921551 |
| GADD45 | -0.603706251 | 6.76743597 | -3.996181159 | 8.42E-05 | 0.00017 | 0.400582539 |
| DMRT3 | -0.827857479 | 3.30268033 | -3.996011559 | 8.43E-05 | 0.00017 | 0.399944869 |
| SETX | -0.381008856 | 4.94498089 | -3.995825416 | 8.43E-05 | 0.00017 | 0.399245024 |
| LRP1 | 0.451537325 | 4.41265684 | 3.995548126 | 8.44E-05 | 0.00017 | 0.398202547 |
| CD99 | -0.305540657 | 6.38658044 | -3.995513373 | 8.44E-05 | 0.00017 | 0.398071896 |
| TEX22 | -0.168441341 | 0.61757786 | -3.995459613 | 8.44E-05 | 0.00017 | 0.397869792 |
| LMX1B | -0.325394088 | 0.33537893 | -3.994533424 | 8.48E-05 | 0.00017 | 0.394388299 |
| PZP | -0.050128774 | 0.14773328 | -3.994394703 | 8.48E-05 | 0.00017 | 0.393866917 |
| FOSL1 | 0.684262931 | 2.90417268 | 3.994303985 | 8.48E-05 | 0.00017 | 0.393525959 |
| ADGRL1 | -0.314161985 | 5.03471476 | -3.993494533 | 8.51E-05 | 0.00017 | 0.390484012 |
| ZNF324E | -0.204080059 | 2.24333883 | -3.993216834 | 8.52E-05 | 0.00017 | 0.389440535 |
| RPS6KA | -0.140217872 | 0.6593983 | -3.991959884 | 8.56E-05 | 0.00017 | 0.384718239 |
| SIDT2 | -0.255263598 | 4.39202152 | -3.990880508 | 8.60E-05 | 0.00017 | 0.380664127 |
| RNF212E | -0.141151038 | 0.57734027 | -3.990683936 | 8.61E-05 | 0.00017 | 0.379925913 |
| LNPK | -0.265974844 | 3.20073214 | -3.99050505 | 8.61E-05 | 0.00017 | 0.379254141 |
| NCAPD3 | -0.28998713 | 3.05321223 | -3.989842117 | 8.63E-05 | 0.00017 | 0.376764868 |

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|---|---|---|---|---|---|---|
| TBX5 | -0.278140663 | 0.32788578 | -3.98920183 | 8.66E-05 | 0.00017 | 0.374360973 |
| DRP2 | 0.056772131 | 0.06641515 | 3.989193111 | 8.66E-05 | 0.00017 | 0.374328241 |
| TFE3 | -0.291682065 | 6.21872716 | -3.988637386 | 8.68E-05 | 0.00017 | 0.372242109 |
| DHRS3 | 0.61556275 | 8.35676525 | 3.988548928 | 8.68E-05 | 0.00017 | 0.37191007 |
| FAM217E | -0.272488573 | 3.53925225 | -3.988255268 | 8.69E-05 | 0.00017 | 0.370807823 |
| MAPKBP | -0.339946778 | 3.19418705 | -3.987647322 | 8.71E-05 | 0.00017 | 0.368526146 |
| WIPF1 | 0.343997093 | 3.92416458 | 3.986842078 | 8.74E-05 | 0.00018 | 0.36550446 |
| REEP6 | -0.447385828 | 4.25442602 | -3.986080361 | 8.76E-05 | 0.00018 | 0.362646605 |
| LAX1 | 0.518502316 | 0.84628941 | 3.984368628 | 8.82E-05 | 0.00018 | 0.356226184 |
| C17orf11 | -0.378486003 | 2.13069495 | -3.983855786 | 8.84E-05 | 0.00018 | 0.354303074 |
| AMBP | -0.250361793 | 0.35146274 | -3.983782967 | 8.84E-05 | 0.00018 | 0.354030027 |
| KANK2 | 0.366349469 | 5.68938397 | 3.982505499 | 8.89E-05 | 0.00018 | 0.349240667 |
| MBIP | -0.393939847 | 6.40601431 | -3.980529221 | 8.96E-05 | 0.00018 | 0.341834071 |
| TBXAS1 | 0.388200506 | 1.99974001 | 3.980331749 | 8.97E-05 | 0.00018 | 0.341094175 |
| WASHC1 | -0.342154224 | 3.38225789 | -3.979918377 | 8.98E-05 | 0.00018 | 0.339545436 |
| SPATC1 | 0.094232898 | 0.19114189 | 3.979718709 | 8.99E-05 | 0.00018 | 0.338797412 |
| ARCN1 | -0.302093573 | 6.96417816 | -3.979717241 | 8.99E-05 | 0.00018 | 0.338791913 |
| C17orf10 | -0.2652145 | 3.24036535 | -3.979515576 | 9.00E-05 | 0.00018 | 0.338036444 |
| CASC4 | -0.350867843 | 6.30107189 | -3.977527815 | 9.07E-05 | 0.00018 | 0.33059176 |
| CTPS2 | -0.248832886 | 3.59583604 | -3.976757126 | 9.09E-05 | 0.00018 | 0.327706214 |
| SLC7A5 | 0.580664976 | 3.03840458 | 3.976063329 | 9.12E-05 | 0.00018 | 0.325108982 |
| ZNF786 | -0.257422072 | 3.20254414 | -3.976017852 | 9.12E-05 | 0.00018 | 0.324938752 |
| CD69 | 0.592370005 | 2.08748498 | 3.975895003 | 9.13E-05 | 0.00018 | 0.324478913 |
| C11orf88 | -0.099772697 | 0.14907083 | -3.975809844 | 9.13E-05 | 0.00018 | 0.324160158 |
| SUCNR1 | -0.495904014 | 2.06017755 | -3.973806998 | 9.20E-05 | 0.00018 | 0.316665162 |
| DDAH1 | -0.325603831 | 5.97494626 | -3.973629851 | 9.21E-05 | 0.00018 | 0.316002407 |
| ELOA2 | -0.042977219 | 0.04088469 | -3.973595189 | 9.21E-05 | 0.00018 | 0.315872732 |
| SLC22A1 | -0.284332755 | 4.59309071 | -3.97327801 | 9.22E-05 | 0.00018 | 0.314686156 |
| SASH3 | 0.571445757 | 3.03650381 | 3.973030908 | 9.23E-05 | 0.00018 | 0.313761797 |
| LPP | -0.293128601 | 2.77823188 | -3.972977031 | 9.23E-05 | 0.00018 | 0.313560259 |
| BIVM-ER | -0.235969961 | 3.89599155 | -3.972575927 | 9.25E-05 | 0.00019 | 0.312059936 |
| ERCC5 | -0.235969961 | 3.89599155 | -3.972575927 | 9.25E-05 | 0.00019 | 0.312059936 |
| ITGA4 | 0.429517837 | 1.43534435 | 3.972553145 | 9.25E-05 | 0.00019 | 0.311974728 |
| LHFPL2 | -0.346178131 | 3.86840955 | -3.971356699 | 9.29E-05 | 0.00019 | 0.307500259 |
| CCNI | -0.342434453 | 8.90980125 | -3.971312764 | 9.29E-05 | 0.00019 | 0.307335973 |
| ZFP14 | -0.251919583 | 2.89371471 | -3.971141918 | 9.30E-05 | 0.00019 | 0.306697144 |
| CCL19 | 1.204868705 | 2.6618207 | 3.971022425 | 9.30E-05 | 0.00019 | 0.306250353 |
| DNMT3A | -0.267293378 | 2.95623378 | -3.970724723 | 9.31E-05 | 0.00019 | 0.305137275 |
| DZIP1 | 0.396211689 | 1.31184734 | 3.970493225 | 9.32E-05 | 0.00019 | 0.30427178 |
| ATP10A | 0.461351144 | 2.0254799 | 3.970147397 | 9.34E-05 | 0.00019 | 0.302978921 |

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| INTS5 | -0.241195647 | 4.93860296 | -3.969198823 | 9.37E-05 | 0.00019 | 0.299433244 |
| LIN54 | -0.292686532 | 3.41032697 | -3.969168891 | 9.37E-05 | 0.00019 | 0.299321374 |
| FOXD4L | -0.080693788 | 0.16276767 | -3.969056467 | 9.38E-05 | 0.00019 | 0.298901198 |
| BPIFB2 | -0.100668258 | 0.10584101 | -3.969010866 | 9.38E-05 | 0.00019 | 0.298730769 |
| SLC35A5 | -0.324886762 | 4.92729356 | -3.968586224 | 9.39E-05 | 0.00019 | 0.29714381 |
| DCUN1D | -0.202220726 | 2.44233137 | -3.9678284 | 9.42E-05 | 0.00019 | 0.29431206 |
| MLNR | -0.229965639 | 0.29675704 | -3.967747651 | 9.42E-05 | 0.00019 | 0.294010357 |
| RASSF5 | 0.35758938 | 3.96819631 | 3.967611882 | 9.43E-05 | 0.00019 | 0.293503091 |
| TAGLN2 | 0.404629096 | 8.53334939 | 3.967404112 | 9.44E-05 | 0.00019 | 0.292726841 |
| ARL15 | -0.297024798 | 4.16707999 | -3.966902815 | 9.46E-05 | 0.00019 | 0.290854093 |
| MSC | 0.45306563 | 1.48418053 | 3.966511087 | 9.47E-05 | 0.00019 | 0.289390819 |
| ZNF131 | -0.22816238 | 3.06110873 | -3.965967992 | 9.49E-05 | 0.00019 | 0.287362338 |
| CD7 | 0.591684412 | 1.98857487 | 3.964704381 | 9.54E-05 | 0.00019 | 0.282643644 |
| RPH3AL | -0.276378922 | 4.11273942 | -3.964626125 | 9.54E-05 | 0.00019 | 0.282351455 |
| RNASEK | -0.200839367 | 3.7264327 | -3.963145216 | 9.60E-05 | 0.00019 | 0.2768231 |
| ZNF668 | -0.20536933 | 1.6925228 | -3.962925401 | 9.61E-05 | 0.00019 | 0.276002666 |
| STON1-C | -0.082375998 | 0.11096418 | -3.962437124 | 9.62E-05 | 0.00019 | 0.274180377 |
| ZNF385E | 0.173249356 | 0.24234621 | 3.962093373 | 9.64E-05 | 0.00019 | 0.272897589 |
| PDK2 | -0.369677258 | 4.73088326 | -3.961024737 | 9.68E-05 | 0.00019 | 0.26891035 |
| LARP1 | -0.294252865 | 6.52474214 | -3.96040212 | 9.70E-05 | 0.00019 | 0.266587711 |
| HIST2H3 | -0.176723475 | 0.44314392 | -3.960310224 | 9.71E-05 | 0.00019 | 0.266244926 |
| IL12RB1 | 0.354217133 | 1.13850914 | 3.959369619 | 9.74E-05 | 0.00019 | 0.262736739 |
| C20orf19 | -0.301210934 | 3.8133668 | -3.958944107 | 9.76E-05 | 0.00019 | 0.261149942 |
| ZNF419 | -0.218590422 | 2.42323426 | -3.958815935 | 9.76E-05 | 0.00019 | 0.260671999 |
| NDC1 | -0.269264917 | 3.44824059 | -3.958761015 | 9.76E-05 | 0.00019 | 0.26046721 |
| SLCO1C | -0.22337041 | 0.78764692 | -3.958742247 | 9.77E-05 | 0.00019 | 0.260397228 |
| CCDC11 | -0.282285242 | 2.27071871 | -3.958660648 | 9.77E-05 | 0.00019 | 0.260092966 |
| S100A9 | 0.737987453 | 4.75348209 | 3.958462076 | 9.78E-05 | 0.00019 | 0.259352557 |
| BTBD16 | -0.079839966 | 0.14663116 | -3.957606382 | 9.81E-05 | 0.0002 | 0.256162351 |
| LAMC2 | 0.465805721 | 6.44212263 | 3.956821321 | 9.84E-05 | 0.0002 | 0.253236014 |
| MLIP | -0.179840602 | 0.44180488 | -3.956562993 | 9.85E-05 | 0.0002 | 0.252273198 |
| TRIM6 | -0.438034332 | 2.53844269 | -3.956213069 | 9.86E-05 | 0.0002 | 0.250969087 |
| HMSD | -0.199933025 | 0.49529992 | -3.955954274 | 9.87E-05 | 0.0002 | 0.250004665 |
| WFDC3 | -0.205072155 | 0.75223547 | -3.95578819 | 9.88E-05 | 0.0002 | 0.249385768 |
| CSF1R | 0.470140998 | 3.96246042 | 3.954648267 | 9.92E-05 | 0.0002 | 0.245138571 |
| SPRED1 | -0.376737867 | 5.30464712 | -3.954544355 | 9.93E-05 | 0.0002 | 0.244751459 |
| IZUMO4 | -0.318380577 | 1.38196624 | -3.95424222 | 9.94E-05 | 0.0002 | 0.243625954 |
| ZBTB18 | -0.229953342 | 4.36122133 | -3.954104735 | 9.95E-05 | 0.0002 | 0.243113822 |
| SPATA13 | -0.272774204 | 2.13147435 | -3.953566359 | 9.97E-05 | 0.0002 | 0.241108526 |
| SH3GLB | -0.232962393 | 5.49911668 | -3.952897044 | 9.99E-05 | 0.0002 | 0.238615857 |

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| LY6D | 0.448743231 | 0.57612781 | 3.952754964 | 1.00E-04 | 0.0002 | 0.238086768 |
| GPT | -0.457610118 | 1.93987552 | -3.952470481 | 0.0001 | 0.0002 | 0.237027438 |
| SLAMF7 | 0.758873098 | 1.90297824 | 3.951990692 | 0.0001 | 0.0002 | 0.235241005 |
| AMDHD1 | -0.202092727 | 0.59572197 | -3.951460078 | 0.0001 | 0.0002 | 0.233265551 |
| IFRD1 | -0.304608606 | 3.91885778 | -3.951099006 | 0.000101 | 0.0002 | 0.23192143 |
| ARHGAP | -0.134289112 | 0.20530439 | -3.950531421 | 0.000101 | 0.0002 | 0.229808768 |
| STRADB | 0.394794748 | 4.67743428 | 3.950358828 | 0.000101 | 0.0002 | 0.229166394 |
| PAQR5 | -0.2921024 | 0.8537522 | -3.950327895 | 0.000101 | 0.0002 | 0.22905127 |
| CDV3 | -0.337519234 | 6.87276213 | -3.950310876 | 0.000101 | 0.0002 | 0.228987927 |
| SRSF4 | -0.239082809 | 6.45236438 | -3.949533312 | 0.000101 | 0.0002 | 0.226094259 |
| KRT79 | 0.071395751 | 0.08688611 | 3.948710376 | 0.000102 | 0.0002 | 0.223032293 |
| MED28 | -0.226225787 | 4.10079039 | -3.947992273 | 0.000102 | 0.0002 | 0.220360847 |
| CSAG1 | -0.551064585 | 0.5597642 | -3.947548738 | 0.000102 | 0.0002 | 0.218711046 |
| BOC | -0.547621635 | 3.45802917 | -3.947455686 | 0.000102 | 0.0002 | 0.218364946 |
| DACH2 | -0.286412477 | 0.48682574 | -3.947364434 | 0.000102 | 0.0002 | 0.218025546 |
| HLA-F | 0.484511253 | 5.25236453 | 3.947327007 | 0.000102 | 0.0002 | 0.217886344 |
| GLOD5 | -0.4304955 | 2.55037291 | -3.946700144 | 0.000102 | 0.0002 | 0.215555024 |
| FCN1 | 0.490915538 | 1.38443477 | 3.946652149 | 0.000102 | 0.0002 | 0.215376542 |
| CBLB | -0.288257505 | 3.02229922 | -3.946464973 | 0.000102 | 0.0002 | 0.214680501 |
| RAET1E | 0.343707249 | 1.04254185 | 3.946027428 | 0.000103 | 0.0002 | 0.213053537 |
| SNRPA | -0.268571259 | 6.45016311 | -3.945794736 | 0.000103 | 0.0002 | 0.212188365 |
| PRAM1 | 0.287557171 | 1.56717394 | 3.945579104 | 0.000103 | 0.0002 | 0.211386662 |
| NLE1 | -0.23581539 | 3.32505561 | -3.945470956 | 0.000103 | 0.0002 | 0.210984591 |
| HINT3 | -0.29460855 | 5.22860881 | -3.945160689 | 0.000103 | 0.0002 | 0.209831135 |
| ZNF439 | -0.257126991 | 2.51117669 | -3.944312656 | 0.000103 | 0.00021 | 0.206678888 |
| TAFA4 | -0.067883579 | 0.08111064 | -3.944291526 | 0.000103 | 0.00021 | 0.206600353 |
| TNS2 | -0.275463033 | 5.61021915 | -3.943764781 | 0.000104 | 0.00021 | 0.204642684 |
| TMEM11 | 0.333969867 | 3.21569878 | 3.943204472 | 0.000104 | 0.00021 | 0.202560529 |
| TEX9 | -0.264068055 | 2.39195804 | -3.942731283 | 0.000104 | 0.00021 | 0.200802322 |
| PRSS21 | 0.200304984 | 0.26476757 | 3.941755254 | 0.000104 | 0.00021 | 0.197176325 |
| PISD | -0.24686563 | 4.60771165 | -3.941462351 | 0.000105 | 0.00021 | 0.196088332 |
| SCIMP | 0.336354144 | 1.16757913 | 3.940695774 | 0.000105 | 0.00021 | 0.193241205 |
| PPM1N | 0.310313901 | 0.95380301 | 3.939598604 | 0.000105 | 0.00021 | 0.189167081 |
| DESI1 | -0.201879175 | 4.31335781 | -3.9394066 | 0.000105 | 0.00021 | 0.188454214 |
| PRR3 | -0.263211996 | 3.72679936 | -3.938976289 | 0.000106 | 0.00021 | 0.186856682 |
| PRPF6 | -0.239250787 | 7.34830978 | -3.938769169 | 0.000106 | 0.00021 | 0.186087804 |
| NFKB2 | 0.285113917 | 5.06682902 | 3.938237164 | 0.000106 | 0.00021 | 0.18411304 |
| SOX8 | 0.374028306 | 1.46017838 | 3.937751492 | 0.000106 | 0.00021 | 0.182310464 |
| TLR6 | 0.232455679 | 0.72838847 | 3.936574869 | 0.000107 | 0.00021 | 0.177944241 |
| BLOC1S | -0.292827801 | 4.94922569 | -3.932154161 | 0.000108 | 0.00021 | 0.161550149 |

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| CDH1 | -0.388090088 | 8.33725045 | -3.931755668 | 0.000109 | 0.00022 | 0.160073151 |
| SNAI1 | -0.557063465 | 3.41060048 | -3.931427109 | 0.000109 | 0.00022 | 0.158855458 |
| MKI67 | 0.357431107 | 1.34577962 | 3.931221037 | 0.000109 | 0.00022 | 0.158091769 |
| RHOH | 0.411915238 | 0.99303765 | 3.930936382 | 0.000109 | 0.00022 | 0.157036912 |
| TSPAN4 | -0.279402025 | 5.5339963 | -3.930601731 | 0.000109 | 0.00022 | 0.155796871 |
| AFF2 | 0.319494815 | 0.81508173 | 3.930564087 | 0.000109 | 0.00022 | 0.155657389 |
| GPR171 | 0.416557294 | 1.03763518 | 3.930114009 | 0.000109 | 0.00022 | 0.153989799 |
| ZNF277 | -0.228973726 | 4.21991703 | -3.929356548 | 0.00011 | 0.00022 | 0.1511837 |
| QRFP | -0.155666235 | 0.70712671 | -3.929145779 | 0.00011 | 0.00022 | 0.150402967 |
| JARID2 | -0.251925635 | 3.12939058 | -3.927647283 | 0.00011 | 0.00022 | 0.144853298 |
| CNNM1 | -0.122688056 | 0.1452562 | -3.9273532 | 0.00011 | 0.00022 | 0.143764384 |
| PNMA3 | -0.378674791 | 1.22801138 | -3.9262337 | 0.000111 | 0.00022 | 0.139619822 |
| PLCG1 | -0.28965116 | 4.75543688 | -3.92566215 | 0.000111 | 0.00022 | 0.13750426 |
| PGLS | -0.253337648 | 5.98836385 | -3.925358723 | 0.000111 | 0.00022 | 0.136381253 |
| INF2 | 0.485032147 | 5.13703988 | 3.925220626 | 0.000111 | 0.00022 | 0.135870169 |
| TPSD1 | 0.232675003 | 0.27429934 | 3.925035447 | 0.000111 | 0.00022 | 0.135184866 |
| EPM2AIP | -0.290286468 | 5.03917553 | -3.923972309 | 0.000112 | 0.00022 | 0.131250999 |
| DSTYK | -0.302106187 | 3.92271815 | -3.92372492 | 0.000112 | 0.00022 | 0.130335735 |
| IARS2 | -0.331895472 | 5.97291341 | -3.923485126 | 0.000112 | 0.00022 | 0.129448619 |
| RGS20 | -0.302225892 | 0.95194952 | -3.922972329 | 0.000112 | 0.00022 | 0.127551692 |
| PIP4K2C | -0.296740252 | 5.61879016 | -3.921992603 | 0.000113 | 0.00022 | 0.123928124 |
| SMOC1 | -0.677962999 | 2.03480089 | -3.921680834 | 0.000113 | 0.00022 | 0.122775198 |
| TPPP2 | -0.045764746 | 0.05576079 | -3.921494715 | 0.000113 | 0.00022 | 0.122086968 |
| EDC3 | -0.254183609 | 4.30885256 | -3.921471573 | 0.000113 | 0.00022 | 0.122001394 |
| ACHE | -0.351508086 | 1.16724241 | -3.921421664 | 0.000113 | 0.00022 | 0.121816849 |
| ZNF620 | -0.231245569 | 2.23977127 | -3.921087688 | 0.000113 | 0.00022 | 0.120581963 |
| RDH5 | 0.597483838 | 2.1465527 | 3.920749551 | 0.000113 | 0.00022 | 0.119331786 |
| DNAJC5I | 0.229222964 | 0.49817573 | 3.920411369 | 0.000114 | 0.00022 | 0.118081542 |
| PCNA | -0.263815247 | 6.94586268 | -3.920369127 | 0.000114 | 0.00022 | 0.117925381 |
| ANGPT1 | -0.468454966 | 1.79199762 | -3.919416018 | 0.000114 | 0.00023 | 0.114402321 |
| USF1 | -0.220203694 | 5.87936433 | -3.918664708 | 0.000114 | 0.00023 | 0.111625722 |
| DCAF5 | -0.246829108 | 4.64948164 | -3.918273322 | 0.000114 | 0.00023 | 0.110179472 |
| C22orf15 | -0.096606735 | 0.17335937 | -3.916856318 | 0.000115 | 0.00023 | 0.104944435 |
| PLCD1 | 0.341355944 | 4.64505302 | 3.916672375 | 0.000115 | 0.00023 | 0.10426499 |
| ATOH7 | -0.135331028 | 0.24994238 | -3.916427981 | 0.000115 | 0.00023 | 0.103362297 |
| ACCS | -0.349336235 | 3.33427209 | -3.915825343 | 0.000116 | 0.00023 | 0.10113661 |
| CDC42EI | 0.437090733 | 6.27159847 | 3.915530715 | 0.000116 | 0.00023 | 0.10004859 |
| POMZP3 | -0.376349463 | 3.69271082 | -3.914906318 | 0.000116 | 0.00023 | 0.097743018 |
| PI15 | 0.191783731 | 0.23965965 | 3.914093858 | 0.000116 | 0.00023 | 0.094743511 |
| MRPL38 | -0.24316054 | 2.76230692 | -3.913904224 | 0.000116 | 0.00023 | 0.094043486 |

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| MRI1 | -0.303139217 | 4.03581663 | -3.913836931 | 0.000116 | 0.00023 | 0.093795081 |
| PRKACA | -0.237395953 | 5.86752522 | -3.91352478 | 0.000117 | 0.00023 | 0.092642872 |
| OSER1 | -0.234453193 | 5.74688365 | -3.913475851 | 0.000117 | 0.00023 | 0.092462274 |
| ARPP19 | -0.271815516 | 6.16465565 | -3.913190929 | 0.000117 | 0.00023 | 0.091410652 |
| FBXO43 | -0.07749067 | 0.22445189 | -3.912860794 | 0.000117 | 0.00023 | 0.090192241 |
| ANKRD4 | -0.270110853 | 4.67114292 | -3.912575585 | 0.000117 | 0.00023 | 0.089139709 |
| RHBDD1 | -0.249755525 | 3.92229159 | -3.912400719 | 0.000117 | 0.00023 | 0.088494421 |
| ZFP69 | -0.188505028 | 2.23725645 | -3.912212114 | 0.000117 | 0.00023 | 0.087798459 |
| PIK3CB | -0.340375624 | 4.9703498 | -3.911519015 | 0.000118 | 0.00023 | 0.085241147 |
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| TJP3 | -0.259826617 | 4.68581474 | -3.91067639 | 0.000118 | 0.00023 | 0.082132674 |
| NF2 | -0.2253936 | 4.68573776 | -3.910379264 | 0.000118 | 0.00023 | 0.081036707 |
| MYLK2 | -0.239044995 | 0.53995854 | -3.910270913 | 0.000118 | 0.00023 | 0.08063707 |
| SNAP23 | -0.288782064 | 4.62600938 | -3.909465769 | 0.000118 | 0.00023 | 0.077667694 |
| TRIM62 | -0.211826746 | 2.88867465 | -3.908928907 | 0.000119 | 0.00023 | 0.075688043 |
| GDI1 | -0.190097722 | 6.15737155 | -3.908834955 | 0.000119 | 0.00023 | 0.075341626 |
| RTL8B | -0.26837765 | 4.53737123 | -3.904496512 | 0.000121 | 0.00024 | 0.059353048 |
| PUM3 | -0.218497508 | 4.43217255 | -3.904476383 | 0.000121 | 0.00024 | 0.059278903 |
| PRRC1 | -0.293491203 | 4.61099675 | -3.904018858 | 0.000121 | 0.00024 | 0.057593702 |
| PPM1D | -0.261859563 | 3.40545876 | -3.903852887 | 0.000121 | 0.00024 | 0.056982424 |
| MIOS | -0.230679779 | 3.20364812 | -3.903066899 | 0.000121 | 0.00024 | 0.054087909 |
| OBSL1 | -0.364925355 | 5.73714372 | -3.902787618 | 0.000122 | 0.00024 | 0.053059543 |
| TRIM25 | -0.27802732 | 4.36690895 | -3.902742326 | 0.000122 | 0.00024 | 0.052892773 |
| CRTAC1 | -0.61733084 | 2.87287211 | -3.902678318 | 0.000122 | 0.00024 | 0.052657094 |
| CAPRIN2 | -0.265884517 | 2.73611534 | -3.90262117 | 0.000122 | 0.00024 | 0.052446678 |
| CPNE3 | -0.321425099 | 5.38946758 | -3.902306114 | 0.000122 | 0.00024 | 0.051286701 |
| ELANE | 0.33803693 | 0.45337195 | 3.902027404 | 0.000122 | 0.00024 | 0.050260613 |
| FBXO32 | 0.41316648 | 3.97336419 | 3.901941314 | 0.000122 | 0.00024 | 0.049943683 |
| GEMIN5 | -0.26931401 | 3.64557887 | -3.900815185 | 0.000123 | 0.00024 | 0.045798513 |
| SH2B3 | -0.317291319 | 4.2559147 | -3.90038916 | 0.000123 | 0.00024 | 0.044230635 |
| SLC5A1 | -0.264143638 | 0.22421886 | -3.900011711 | 0.000123 | 0.00024 | 0.042841655 |
| HMGA1 | 0.534677795 | 6.83140076 | 3.89994229 | 0.000123 | 0.00024 | 0.042586206 |
| DPF2 | -0.251607179 | 4.62156713 | -3.899763426 | 0.000123 | 0.00024 | 0.041928054 |
| AKR1B1! | -0.329650674 | 0.31721795 | -3.899740446 | 0.000123 | 0.00024 | 0.041843497 |
| NOTCH1 | -0.345084086 | 3.64677073 | -3.89956478 | 0.000123 | 0.00024 | 0.041197141 |
| LTBR | -0.21366871 | 5.72150703 | -3.898927346 | 0.000123 | 0.00024 | 0.038851948 |
| 8-Mar | -0.284067429 | 4.30289474 | -3.898721798 | 0.000124 | 0.00024 | 0.038095784 |
| SETD2 | -0.305933762 | 4.81476031 | -3.897730819 | 0.000124 | 0.00024 | 0.034450705 |
| KRT16 | 0.421594009 | 0.54486153 | 3.897168361 | 0.000124 | 0.00024 | 0.032382203 |
| ZNF524 | -0.267439506 | 5.71066271 | -3.894886583 | 0.000125 | 0.00025 | 0.023993433 |

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| HCRTR1 | -0.105220875 | 0.34229202 | -3.894183404 | 0.000126 | 0.00025 | 0.021409129 |
| RAB35 | -0.254546104 | 4.61843043 | -3.894047916 | 0.000126 | 0.00025 | 0.020911237 |
| OPA1 | -0.28264046 | 4.33484586 | -3.893794236 | 0.000126 | 0.00025 | 0.019979049 |
| FCRL5 | 0.38064487 | 0.48768273 | 3.892790903 | 0.000126 | 0.00025 | 0.016292676 |
| ZBTB8A | -0.226762447 | 2.73674251 | -3.892612632 | 0.000127 | 0.00025 | 0.015637772 |
| NEK4 | -0.34568961 | 3.49035408 | -3.89170331 | 0.000127 | 0.00025 | 0.012297672 |
| KIF12 | -0.543846207 | 4.04687058 | -3.891604082 | 0.000127 | 0.00025 | 0.011933232 |
| GTF2H3 | -0.306483968 | 4.23075263 | -3.891179073 | 0.000127 | 0.00025 | 0.010372372 |
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| FZD2 | -0.414563265 | 2.9822191 | -3.890738451 | 0.000127 | 0.00025 | 0.00875433 |
| SNX21 | -0.226282356 | 3.69812486 | -3.890695766 | 0.000127 | 0.00025 | 0.008597594 |
| SERINC5 | 0.409824523 | 3.67234006 | 3.890000869 | 0.000128 | 0.00025 | 0.006046165 |
| LDLRAD | 0.316287845 | 2.67073611 | 3.889488527 | 0.000128 | 0.00025 | 0.004165277 |
| SFTA2 | 0.651353323 | 2.6081655 | 3.888335601 | 0.000129 | 0.00025 | -6.65E-05 |
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| FNDC4 | 0.712021263 | 4.7734372 | 3.888191438 | 0.000129 | 0.00025 | -0.00059555 |
| WDR46 | -0.255817744 | 5.66977606 | -3.887989207 | 0.000129 | 0.00025 | -0.00133769 |
| CRAMP1 | -0.256777941 | 2.79739712 | -3.887910875 | 0.000129 | 0.00025 | -0.00162514 |
| RNF148 | -0.076263509 | 0.18821529 | -3.887832428 | 0.000129 | 0.00025 | -0.00191301 |
| BCL11A | -0.272470527 | 1.16769643 | -3.887802266 | 0.000129 | 0.00025 | -0.00202369 |
| UHRF1 | 0.294281381 | 1.29623002 | 3.887772285 | 0.000129 | 0.00025 | -0.00213371 |
| RASSF3 | -0.333116158 | 4.18039877 | -3.88701729 | 0.000129 | 0.00025 | -0.00490393 |
| AOPEP | -0.350879324 | 3.72283932 | -3.886830651 | 0.000129 | 0.00025 | -0.00558866 |
| NRCAM | 0.5366086 | 4.2846029 | 3.886289799 | 0.00013 | 0.00025 | -0.00757278 |
| DBF4B | -0.258569657 | 2.09213647 | -3.886077899 | 0.00013 | 0.00025 | -0.00835006 |
| SMARCA | -0.305708956 | 5.50793684 | -3.885697957 | 0.00013 | 0.00025 | -0.00974366 |
| RIPK2 | 0.252061304 | 3.803419 | 3.885523227 | 0.00013 | 0.00025 | -0.01038451 |
| SLC26A8 | -0.318320941 | 0.77403158 | -3.885403346 | 0.00013 | 0.00025 | -0.01082419 |
| ARHGEF | -0.261286917 | 4.15936169 | -3.885304333 | 0.00013 | 0.00025 | -0.01118731 |
| PCDH17 | -0.370962693 | 2.76272834 | -3.885214919 | 0.00013 | 0.00025 | -0.01151523 |
| KRT13 | 0.407767458 | 0.7485588 | 3.885155885 | 0.00013 | 0.00025 | -0.01173173 |
| ZBP1 | 0.377143094 | 0.69625426 | 3.884687549 | 0.00013 | 0.00026 | -0.01344917 |
| BECN1 | -0.358607412 | 4.49232304 | -3.884341171 | 0.000131 | 0.00026 | -0.01471926 |
| KRT83 | -0.60597936 | 2.40705552 | -3.88408859 | 0.000131 | 0.00026 | -0.01564535 |
| XG | 0.250011778 | 0.55584273 | 3.882707765 | 0.000132 | 0.00026 | -0.02070722 |
| CENPN | -0.214920153 | 1.93379888 | -3.882231484 | 0.000132 | 0.00026 | -0.02245282 |
| PDE3B | 0.175794751 | 0.41030033 | 3.881099601 | 0.000132 | 0.00026 | -0.02660048 |
| CREB1 | -0.292880744 | 3.83619823 | -3.880645697 | 0.000133 | 0.00026 | -0.02826345 |
| RNF41 | -0.262150426 | 4.69511877 | -3.880333626 | 0.000133 | 0.00026 | -0.02940669 |

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| MAP4K1 | 0.500502287 | 2.30233928 | 3.880231766 | 0.000133 | 0.00026 | -0.02977983 |
| ZNF707 | -0.224363609 | 2.70539097 | -3.879759928 | 0.000133 | 0.00026 | -0.03150816 |
| DDI2 | -0.246437823 | 3.31358705 | -3.879564778 | 0.000133 | 0.00026 | -0.03222294 |
| TMEM20 | 0.577872425 | 1.77520453 | 3.876530458 | 0.000135 | 0.00026 | -0.04333263 |
| HSD17B' | -0.279632096 | 4.79063748 | -3.875204586 | 0.000135 | 0.00026 | -0.04818468 |
| CARD17 | 0.152347298 | 0.239548 | 3.874829511 | 0.000136 | 0.00026 | -0.04955701 |
| ZNF275 | -0.331587208 | 3.34305851 | -3.873936194 | 0.000136 | 0.00027 | -0.05282501 |
| MANBA | -0.271608234 | 4.31742997 | -3.871860296 | 0.000137 | 0.00027 | -0.06041662 |
| CRISPLD | 0.494233258 | 2.90993711 | 3.871642797 | 0.000137 | 0.00027 | -0.06121181 |
| CSPP1 | -0.235853553 | 2.40974641 | -3.87163923 | 0.000137 | 0.00027 | -0.06122485 |
| IL22RA2 | 0.222714491 | 0.28048894 | 3.87077534 | 0.000138 | 0.00027 | -0.06438289 |
| PPP1R1: | 0.346358783 | 4.47551588 | 3.870432081 | 0.000138 | 0.00027 | -0.06563754 |
| SLC7A1( | -0.272964033 | 0.45201437 | -3.870168666 | 0.000138 | 0.00027 | -0.06660028 |
| LGALS2 | 0.546146334 | 1.94629053 | 3.869626599 | 0.000138 | 0.00027 | -0.06858127 |
| NOCT | -0.262777898 | 1.81097946 | -3.868578009 | 0.000139 | 0.00027 | -0.07241265 |
| LAT2 | 0.39772652 | 2.47495063 | 3.868410886 | 0.000139 | 0.00027 | -0.0730232 |
| DDB2 | 0.297353447 | 4.18994654 | 3.868140339 | 0.000139 | 0.00027 | -0.07401155 |
| SRSF12 | -0.19824962 | 1.58408044 | -3.867222727 | 0.00014 | 0.00027 | -0.07736326 |
| ECD | -0.250455168 | 4.80313914 | -3.866738759 | 0.00014 | 0.00027 | -0.07913074 |
| CALHM2 | -0.329498125 | 3.59939333 | -3.865194965 | 0.000141 | 0.00027 | -0.08476745 |
| ZNF146 | -0.303484347 | 5.71753452 | -3.864231872 | 0.000141 | 0.00028 | -0.08828289 |
| APH1B | -0.301778475 | 4.60751233 | -3.863494588 | 0.000142 | 0.00028 | -0.09097356 |
| ROR2 | -0.60242283 | 2.32036566 | -3.86336061 | 0.000142 | 0.00028 | -0.09146246 |
| MS4A4E | 0.201755571 | 0.60224031 | 3.862874654 | 0.000142 | 0.00028 | -0.09323562 |
| TRMT2A | -0.252304689 | 4.76366879 | -3.862180386 | 0.000142 | 0.00028 | -0.09576853 |
| EDEM3 | -0.315739587 | 3.88521057 | -3.861917099 | 0.000143 | 0.00028 | -0.09672898 |
| AP4M1 | -0.229764774 | 3.91295847 | -3.861868177 | 0.000143 | 0.00028 | -0.09690743 |
| DHX15 | -0.307350132 | 4.96528305 | -3.861526342 | 0.000143 | 0.00028 | -0.09815432 |
| RPL35 | -0.301527835 | 9.6954323 | -3.861144917 | 0.000143 | 0.00028 | -0.09954549 |
| KCTD11 | -0.266134359 | 5.17319228 | -3.86054006 | 0.000143 | 0.00028 | -0.10175135 |
| RECQL4 | -0.252923054 | 2.85657727 | -3.859648871 | 0.000144 | 0.00028 | -0.10500086 |
| CBFA2T: | -0.254081931 | 3.70752733 | -3.859636369 | 0.000144 | 0.00028 | -0.10504645 |
| DHX33 | -0.216995229 | 3.29521768 | -3.859318753 | 0.000144 | 0.00028 | -0.1062044 |
| PRRX2 | 0.489187394 | 2.33868038 | 3.859270352 | 0.000144 | 0.00028 | -0.10638085 |
| ELF2 | -0.256835697 | 3.62521188 | -3.859125612 | 0.000144 | 0.00028 | -0.1069085 |
| SP110 | 0.223305387 | 1.74730428 | 3.858240992 | 0.000145 | 0.00028 | -0.11013302 |
| CEP72 | -0.222059916 | 1.85436234 | -3.858125239 | 0.000145 | 0.00028 | -0.1105549 |
| BCL2L15 | -0.068585618 | 0.20067688 | -3.85732189 | 0.000145 | 0.00028 | -0.11348253 |
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| TRAM2 | -0.395254464 | 4.04043961 | -3.856868052 | 0.000145 | 0.00028 | -0.1151362 |

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| GCA | -0.250897695 | 4.1486297 | -3.856071876 | 0.000146 | 0.00028 | -0.11803685 |
| MME | 0.402946109 | 0.74738172 | 3.855094414 | 0.000146 | 0.00028 | -0.12159724 |
| PTPRZ1 | 0.058872584 | 0.0717137 | 3.85479083 | 0.000147 | 0.00028 | -0.12270287 |
| SLC7A11 | -0.50204453 | 1.82631967 | -3.854561855 | 0.000147 | 0.00029 | -0.12353673 |
| STBD1 | 0.240414288 | 1.65949426 | 3.854533924 | 0.000147 | 0.00029 | -0.12363845 |
| HCST | 0.522703619 | 3.6806127 | 3.854283273 | 0.000147 | 0.00029 | -0.12455119 |
| PPBP | 0.542000782 | 0.98412243 | 3.854127978 | 0.000147 | 0.00029 | -0.12511667 |
| ZDHHC1 | -0.152565479 | 0.46279213 | -3.854095701 | 0.000147 | 0.00029 | -0.1252342 |
| F8A1 | -0.353197546 | 4.23788677 | -3.853681583 | 0.000147 | 0.00029 | -0.12674203 |
| CD3D | 0.740719632 | 2.888877 | 3.853480499 | 0.000147 | 0.00029 | -0.12747413 |
| SLC7A9 | -0.165920343 | 0.58782961 | -3.852982808 | 0.000148 | 0.00029 | -0.12928598 |
| KRT71 | -0.116147101 | 0.13601448 | -3.85179972 | 0.000148 | 0.00029 | -0.13359218 |
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| SPAG9 | -0.35548609 | 4.89057246 | -3.85112182 | 0.000149 | 0.00029 | -0.13605907 |
| TSPAN6 | -0.327835345 | 5.2293864 | -3.850779328 | 0.000149 | 0.00029 | -0.13730525 |
| LRP5 | -0.346006861 | 5.45900416 | -3.850663684 | 0.000149 | 0.00029 | -0.13772601 |
| KPNA4 | -0.229302925 | 4.73628335 | -3.850146914 | 0.000149 | 0.00029 | -0.13960609 |
| IL3RA | -0.285075203 | 4.54569033 | -3.849333381 | 0.00015 | 0.00029 | -0.14256537 |
| GRK1 | -0.349464202 | 1.24210985 | -3.848651479 | 0.00015 | 0.00029 | -0.1450454 |
| STX7 | -0.223716719 | 3.77161569 | -3.846870605 | 0.000151 | 0.00029 | -0.15152049 |
| KLF3 | -0.331584336 | 5.05898957 | -3.846779518 | 0.000151 | 0.00029 | -0.1518516 |
| KRT2 | -0.079167999 | 0.06570918 | -3.846674318 | 0.000151 | 0.00029 | -0.152234 |
| CENPC | -0.282257108 | 3.30793168 | -3.846086851 | 0.000152 | 0.00029 | -0.1543693 |
| ILRUN | -0.245620969 | 6.74913382 | -3.845845298 | 0.000152 | 0.00029 | -0.15524719 |
| KLF8 | 0.325355784 | 2.04006313 | 3.845093687 | 0.000152 | 0.0003 | -0.15797853 |
| USP50 | -0.053464961 | 0.14447702 | -3.844538483 | 0.000152 | 0.0003 | -0.15999582 |
| APOL6 | 0.438008491 | 4.34829839 | 3.844111557 | 0.000153 | 0.0003 | -0.16154685 |
| DPY19L3 | -0.311110432 | 3.49516862 | -3.843854573 | 0.000153 | 0.0003 | -0.1624804 |
| ADAM33 | -0.321577038 | 1.01738086 | -3.842151052 | 0.000154 | 0.0003 | -0.16866742 |
| SLC35F3 | -0.555941027 | 1.76192817 | -3.841868227 | 0.000154 | 0.0003 | -0.16969437 |
| ZNF302 | -0.274067547 | 4.25182521 | -3.838905832 | 0.000156 | 0.0003 | -0.18044697 |
| ZNF214 | -0.280074789 | 2.40006125 | -3.838159216 | 0.000156 | 0.0003 | -0.18315579 |
| SOCS7 | -0.321852045 | 3.38831351 | -3.837246012 | 0.000157 | 0.0003 | -0.18646838 |
| INPP5D | 0.43775353 | 2.99565476 | 3.836766496 | 0.000157 | 0.0003 | -0.18820752 |
| SLC37A1 | -0.231087169 | 4.02083588 | -3.835980802 | 0.000158 | 0.00031 | -0.19105669 |
| ZNF257 | -0.191722732 | 1.18971168 | -3.835377586 | 0.000158 | 0.00031 | -0.19324379 |
| BRD8 | -0.269070142 | 4.59050969 | -3.834751356 | 0.000158 | 0.00031 | -0.19551401 |
| MDC1 | -0.279297552 | 3.84634628 | -3.834304902 | 0.000159 | 0.00031 | -0.1971323 |
| LSM12 | -0.24657034 | 3.29972004 | -3.834261465 | 0.000159 | 0.00031 | -0.19728974 |
| PTX4 | -0.063288011 | 0.09157056 | -3.834190384 | 0.000159 | 0.00031 | -0.19754738 |

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| PFDN2 | -0.229904677 | 7.44667003 | -3.833904691 | 0.000159 | 0.00031 | -0.19858283 |
| VSX1 | -0.21088417 | 0.28375076 | -3.833574696 | 0.000159 | 0.00031 | -0.19977876 |
| PHLPP2 | -0.289435989 | 2.39188555 | -3.8327818 | 0.000159 | 0.00031 | -0.20265192 |
| SPRY3 | -0.126763778 | 0.84714525 | -3.832748924 | 0.00016 | 0.00031 | -0.20277105 |
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| SIGLEC1 | 0.233379485 | 0.44026192 | 3.830843885 | 0.000161 | 0.00031 | -0.20967198 |
| HHATL | -0.871633595 | 5.33732259 | -3.830755555 | 0.000161 | 0.00031 | -0.20999188 |
| SMAP1 | -0.221078899 | 3.39922483 | -3.830664708 | 0.000161 | 0.00031 | -0.21032088 |
| ACSM6 | -0.245145784 | 0.53013621 | -3.8306149 | 0.000161 | 0.00031 | -0.21050126 |
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| ZNF239 | -0.264115806 | 2.59349873 | -3.830123619 | 0.000161 | 0.00031 | -0.21228032 |
| SCX | -0.632087961 | 6.41196354 | -3.829651919 | 0.000161 | 0.00031 | -0.21398827 |
| CSNK1A | -0.028970893 | 0.04640295 | -3.829637813 | 0.000161 | 0.00031 | -0.21403935 |
| RABL2A | -0.263857156 | 2.48247584 | -3.82948847 | 0.000162 | 0.00031 | -0.21458005 |
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| ARID1B | -0.304036733 | 4.31866878 | -3.827446019 | 0.000163 | 0.00031 | -0.22197303 |
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| DAZAP1 | -0.179016264 | 4.79339509 | -3.826113364 | 0.000164 | 0.00032 | -0.22679489 |
| FAM227/ | -0.209402374 | 0.97897699 | -3.825403412 | 0.000164 | 0.00032 | -0.22936305 |
| HSD17B | -0.556648753 | 5.80947709 | -3.82513238 | 0.000164 | 0.00032 | -0.23034336 |
| CDKL1 | -0.211114983 | 0.79963813 | -3.824996007 | 0.000164 | 0.00032 | -0.2308366 |
| RGS1 | 0.758695332 | 4.14783768 | 3.824975355 | 0.000164 | 0.00032 | -0.23091129 |
| DHX38 | -0.256874417 | 4.63961223 | -3.824254113 | 0.000165 | 0.00032 | -0.2335196 |
| CFI | 0.678263933 | 5.70962688 | 3.824167812 | 0.000165 | 0.00032 | -0.23383167 |
| ASAP2 | 0.594660865 | 3.69873409 | 3.824041873 | 0.000165 | 0.00032 | -0.23428706 |
| GRIN3A | -0.074384855 | 0.27862791 | -3.823945207 | 0.000165 | 0.00032 | -0.23463659 |
| BCAM | -0.437439869 | 7.51209191 | -3.823836043 | 0.000165 | 0.00032 | -0.23503131 |
| ENO1 | -0.241517063 | 8.9453128 | -3.820912388 | 0.000167 | 0.00032 | -0.24559892 |
| GPR108 | -0.268374932 | 6.53212913 | -3.820673871 | 0.000167 | 0.00032 | -0.24646073 |
| ALG10 | -0.209815427 | 1.60925698 | -3.819896022 | 0.000168 | 0.00032 | -0.24927091 |
| ADGRG6 | -0.296408212 | 1.11044705 | -3.819564348 | 0.000168 | 0.00032 | -0.25046902 |
| TNS3 | -0.413932616 | 4.42404983 | -3.81909347 | 0.000168 | 0.00032 | -0.25216981 |
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| ZKSCAN | -0.21258712 | 2.30223211 | -3.817721599 | 0.000169 | 0.00033 | -0.25712387 |
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| FNBP1L | -0.356605907 | 5.54469322 | -3.817033394 | 0.000169 | 0.00033 | -0.25960851 |
| FAM228 | -0.205234466 | 2.62740471 | -3.816794456 | 0.00017 | 0.00033 | -0.26047105 |
| COL1A2 | 0.755205286 | 6.38206622 | 3.816384627 | 0.00017 | 0.00033 | -0.26195039 |
| SEC31A | -0.275789569 | 6.09583603 | -3.815941033 | 0.00017 | 0.00033 | -0.26355145 |
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| WNT3A | -0.255568751 | 0.20025853 | -3.815409504 | 0.00017 | 0.00033 | -0.26546967 |
| SRXN1 | -0.293396981 | 1.34801787 | -3.815056899 | 0.000171 | 0.00033 | -0.26674204 |
| KLRC1 | 0.242802504 | 0.60425703 | 3.814144659 | 0.000171 | 0.00033 | -0.27003337 |
| POC5 | -0.185222315 | 3.05488025 | -3.813189788 | 0.000172 | 0.00033 | -0.27347776 |
| TMEM62 | -0.201839328 | 3.94581656 | -3.812870573 | 0.000172 | 0.00033 | -0.27462906 |
| TET1 | -0.161726671 | 0.78536067 | -3.812215028 | 0.000173 | 0.00033 | -0.2769931 |
| ADGRF2 | 0.191502681 | 0.21543762 | 3.8116434 | 0.000173 | 0.00033 | -0.27905422 |
| ZSCAN9 | -0.21940516 | 3.29253466 | -3.810039156 | 0.000174 | 0.00034 | -0.28483719 |
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| CD63 | -0.247733683 | 10.2804333 | -3.80647027 | 0.000176 | 0.00034 | -0.2976945 |
| TBC1D9E | -0.255659412 | 5.47002245 | -3.806420073 | 0.000176 | 0.00034 | -0.29787526 |
| MTRR | -0.283574317 | 3.51711759 | -3.805714182 | 0.000177 | 0.00034 | -0.300417 |
| HERPUD | -0.231013082 | 4.84355644 | -3.804988151 | 0.000177 | 0.00034 | -0.30303083 |
| C1QTNF | 0.326798916 | 2.40799175 | 3.803866494 | 0.000178 | 0.00034 | -0.3070681 |
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| DNAJC1 | -0.369147411 | 3.92619308 | -3.802675942 | 0.000179 | 0.00034 | -0.31135218 |
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| MMP25 | 0.204920993 | 0.90307941 | 3.801938287 | 0.000179 | 0.00035 | -0.31400596 |
| FAM120A | -0.255622067 | 6.29703566 | -3.801804751 | 0.00018 | 0.00035 | -0.31448632 |
| FAM71D | -0.04360536 | 0.14665606 | -3.801509614 | 0.00018 | 0.00035 | -0.31554794 |
| USP31 | 0.225062392 | 1.84975809 | 3.801259039 | 0.00018 | 0.00035 | -0.31644921 |
| GOLGA8 | -0.17799982 | 0.76520925 | -3.801239511 | 0.00018 | 0.00035 | -0.31651944 |
| NCAPD2 | -0.278149187 | 4.53937533 | -3.801130923 | 0.00018 | 0.00035 | -0.31691 |
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| ZNF766 | -0.222337499 | 3.2451006 | -3.798696836 | 0.000182 | 0.00035 | -0.32566192 |
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| TMEM10 | -0.252785306 | 4.02600702 | -3.798126696 | 0.000182 | 0.00035 | -0.32771117 |
| MPHOSF | -0.265586516 | 5.61501914 | -3.798071537 | 0.000182 | 0.00035 | -0.32790941 |
| PLPP5 | -0.298244067 | 4.91177188 | -3.797694511 | 0.000182 | 0.00035 | -0.32926438 |
| EYA2 | -0.514485394 | 3.89133694 | -3.797438586 | 0.000183 | 0.00035 | -0.33018407 |
| INSIG2 | -0.248914467 | 4.54707253 | -3.797354884 | 0.000183 | 0.00035 | -0.33048485 |
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| INVS | -0.246133913 | 2.47135341 | -3.795509831 | 0.000184 | 0.00035 | -0.33711343 |
| EHD3 | -0.307327938 | 2.72772159 | -3.7943956 | 0.000185 | 0.00035 | -0.34111505 |
| TAFA3 | -0.309942706 | 0.84587557 | -3.793762638 | 0.000185 | 0.00036 | -0.34338779 |
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| TAF3 | -0.204900783 | 3.22638001 | -3.791452424 | 0.000187 | 0.00036 | -0.35168005 |
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| TEX29 | -0.13764942 | 0.4862066 | -3.790242113 | 0.000188 | 0.00036 | -0.35602253 |
| SCN3A | -0.177173626 | 0.36698734 | -3.790140555 | 0.000188 | 0.00036 | -0.35638685 |
| GGA1 | -0.22791182 | 4.60625575 | -3.789769499 | 0.000188 | 0.00036 | -0.35771789 |
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| CTDNEP | -0.18279685 | 6.88606135 | -3.786277239 | 0.000191 | 0.00036 | -0.37023944 |
| SCNN1B | -0.524110857 | 2.46395927 | -3.784381307 | 0.000192 | 0.00037 | -0.37703301 |
| CDC40 | -0.326027641 | 3.46101032 | -3.784306305 | 0.000192 | 0.00037 | -0.3773017 |
| FNDC8 | -0.065436709 | 0.16397593 | -3.782757326 | 0.000193 | 0.00037 | -0.3828497 |
| GABRR2 | -0.12901113 | 0.37966864 | -3.782571103 | 0.000193 | 0.00037 | -0.38351656 |
| KIAA035 | -0.280551276 | 4.2640091 | -3.78246617 | 0.000193 | 0.00037 | -0.38389231 |
| SCG2 | 0.287072054 | 0.84659611 | 3.782339121 | 0.000193 | 0.00037 | -0.38434724 |
| C8A | -0.377201894 | 0.47317723 | -3.782067657 | 0.000194 | 0.00037 | -0.38531924 |
| C1orf226 | 0.441503666 | 2.55494971 | 3.781519763 | 0.000194 | 0.00037 | -0.38728084 |
| LY86 | 0.486581315 | 3.08344962 | 3.781508795 | 0.000194 | 0.00037 | -0.3873201 |
| GDAP2 | -0.198438995 | 2.61117577 | -3.781227751 | 0.000194 | 0.00037 | -0.38832621 |
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| IP6K1 | -0.242599658 | 5.04201617 | -3.780229316 | 0.000195 | 0.00037 | -0.39189995 |
| CCDC15 | -0.141924264 | 0.93344645 | -3.77878686 | 0.000196 | 0.00037 | -0.39706151 |
| GPR63 | -0.141617333 | 0.54028132 | -3.778630721 | 0.000196 | 0.00038 | -0.39762011 |
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| KRTAP2 | 0.395520113 | 0.64097001 | 3.77821473 | 0.000196 | 0.00038 | -0.39910828 |
| RNF38 | -0.336981208 | 4.86541363 | -3.7781614 | 0.000197 | 0.00038 | -0.39929905 |
| PRPF4 | -0.240464142 | 4.42732061 | -3.777839973 | 0.000197 | 0.00038 | -0.40044881 |
| LEPR | 0.380835906 | 1.90203759 | 3.777504337 | 0.000197 | 0.00038 | -0.40164929 |
| MISP3 | -0.322740182 | 3.84948805 | -3.77639442 | 0.000198 | 0.00038 | -0.40561852 |
| ENO2 | -0.345438705 | 5.37369271 | -3.776199937 | 0.000198 | 0.00038 | -0.40631391 |

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| KIAA089 | -0.388514791 | 3.23981104 | -3.776095162 | 0.000198 | 0.00038 | -0.40668853 |
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| CARD9 | 0.246435794 | 1.03637369 | 3.774061332 | 0.0002 | 0.00038 | -0.41395858 |
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| ACTR8 | -0.240114579 | 4.14470864 | -3.772038243 | 0.000201 | 0.00038 | -0.42118676 |
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| ARPC2 | -0.257677554 | 6.32060333 | -3.769991349 | 0.000203 | 0.00039 | -0.42849646 |
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| MBD5 | -0.226012194 | 2.18419689 | -3.768180623 | 0.000204 | 0.00039 | -0.43495982 |
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| ARSE | 0.235814615 | 0.66389053 | 3.767507161 | 0.000205 | 0.00039 | -0.43736303 |
| AKR7A3 | -0.295201317 | 0.98908758 | -3.76664344 | 0.000205 | 0.00039 | -0.44044459 |
| CKLF-CM | 0.169406801 | 0.75755598 | 3.766238972 | 0.000206 | 0.00039 | -0.44188743 |
| C3orf38 | -0.226561161 | 4.02470827 | -3.766067794 | 0.000206 | 0.00039 | -0.44249802 |
| RBBP6 | -0.260815299 | 4.27510112 | -3.765279126 | 0.000206 | 0.00039 | -0.44531088 |
| UBE2B | -0.221768706 | 5.86881097 | -3.765205332 | 0.000206 | 0.00039 | -0.44557405 |
| RBM39 | -0.27257213 | 6.12399277 | -3.764851559 | 0.000207 | 0.00039 | -0.44683562 |
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| ITGA5 | -0.32605429 | 4.50723675 | -3.764543463 | 0.000207 | 0.00039 | -0.44793422 |
| LTC4S | -0.123703233 | 0.35976459 | -3.764409378 | 0.000207 | 0.00039 | -0.44841231 |
| ASB14 | -0.102963733 | 0.70078447 | -3.763801359 | 0.000208 | 0.0004 | -0.45058006 |
| SLC9A7 | -0.26194721 | 3.88638451 | -3.763643811 | 0.000208 | 0.0004 | -0.45114171 |
| TBC1D22 | -0.23632146 | 4.55884227 | -3.762663848 | 0.000208 | 0.0004 | -0.45463475 |
| ZNF564 | -0.137484157 | 0.7590006 | -3.761003901 | 0.00021 | 0.0004 | -0.46054971 |
| MYT1L | -0.023911516 | 0.01942408 | -3.760890042 | 0.00021 | 0.0004 | -0.46095534 |
| NFKBIZ | 0.572103958 | 4.16195208 | 3.760530142 | 0.00021 | 0.0004 | -0.46223744 |
| DUSP4 | 0.53373395 | 3.94104367 | 3.760334784 | 0.00021 | 0.0004 | -0.46293334 |
| C1QTNF | 0.386750085 | 1.58130392 | 3.760206795 | 0.00021 | 0.0004 | -0.46338924 |
| GPR25 | 0.226242331 | 0.344016 | 3.759479808 | 0.000211 | 0.0004 | -0.46597851 |
| CMTR1 | -0.24323572 | 4.75464582 | -3.759191326 | 0.000211 | 0.0004 | -0.46700586 |

| RANBP2 | -0.315359027 | 4.97842525 | -3.759142898 | 0.000211 | 0.0004 | -0.46717831 |
|--------|--------------|------------|--------------|----------|--------|-------------|
| PPP2R2( | -0.34597888 | 0.29864256 | -3.758985195 | 0.000211 | 0.0004 | -0.46773989 |
| CLIC5 | 0.560463269 | 2.90997181 | 3.758275556 | 0.000212 | 0.0004 | -0.47026665 |
| ATG12 | -0.189863872 | 3.54576129 | -3.758274024 | 0.000212 | 0.0004 | -0.47027211 |
| RNF213 | 0.309982713 | 4.14548436 | 3.758261295 | 0.000212 | 0.0004 | -0.47031743 |
| MPZL2 | 0.552174137 | 6.92868848 | 3.7580173 | 0.000212 | 0.0004 | -0.4711861 |
| SRP72 | -0.281546635 | 5.79227557 | -3.757745242 | 0.000212 | 0.0004 | -0.47215463 |
| PYCR1 | -0.526475135 | 2.84778089 | -3.757428372 | 0.000213 | 0.0004 | -0.4732826 |
| FAM209E | -0.125392119 | 0.38609802 | -3.755998436 | 0.000214 | 0.00041 | -0.47837174 |
| IRAK4 | -0.22083225 | 3.87637281 | -3.755633484 | 0.000214 | 0.00041 | -0.47967033 |
| CNNM3 | -0.267472531 | 4.34650804 | -3.755292504 | 0.000214 | 0.00041 | -0.48088351 |
| DIMT1 | -0.211190724 | 4.44740788 | -3.755037806 | 0.000215 | 0.00041 | -0.48178965 |
| ZFR | -0.32486747 | 5.30620977 | -3.754694393 | 0.000215 | 0.00041 | -0.48301132 |
| ADGRG2 | 0.493339568 | 1.64827353 | 3.754505299 | 0.000215 | 0.00041 | -0.48368396 |
| HSH2D | 0.402349312 | 2.95805649 | 3.754166577 | 0.000215 | 0.00041 | -0.48488879 |
| PANX1 | -0.273950414 | 4.20268707 | -3.754116285 | 0.000215 | 0.00041 | -0.48506767 |
| GLS | 0.361581969 | 5.23472124 | 3.754085382 | 0.000215 | 0.00041 | -0.48517759 |
| TFR2 | 0.108304527 | 0.32985778 | 3.753344004 | 0.000216 | 0.00041 | -0.48781426 |
| DZIP1L | -0.270938553 | 1.2203285 | -3.75280306 | 0.000216 | 0.00041 | -0.48973781 |
| PDXP | -0.171439163 | 0.6769077 | -3.750019056 | 0.000219 | 0.00041 | -0.49963356 |
| CPA3 | 0.495254805 | 1.16623699 | 3.74998913 | 0.000219 | 0.00041 | -0.4997399 |
| SYT17 | -0.277286781 | 2.89285655 | -3.749711012 | 0.000219 | 0.00042 | -0.5007281 |
| TH | 0.146559041 | 0.29962546 | 3.748615142 | 0.00022 | 0.00042 | -0.50462128 |
| XRCC1 | -0.219169343 | 5.56881932 | -3.747907814 | 0.00022 | 0.00042 | -0.50713359 |
| MIGA1 | -0.287332947 | 3.42021522 | -3.747088643 | 0.000221 | 0.00042 | -0.51004262 |
| MYOCD | 0.194067849 | 0.52892214 | 3.746402899 | 0.000222 | 0.00042 | -0.51247738 |
| NDRG4 | -0.227900051 | 1.18884135 | -3.745362349 | 0.000223 | 0.00042 | -0.51617113 |
| FKBP11 | -0.434272868 | 3.3170527 | -3.745078507 | 0.000223 | 0.00042 | -0.51717856 |
| PEX5L | -0.046826297 | 0.11524139 | -3.74449535 | 0.000223 | 0.00042 | -0.51924811 |
| LIMS1 | -0.27264617 | 4.09640157 | -3.743634937 | 0.000224 | 0.00042 | -0.52230109 |
| PTPRF | 0.493076254 | 6.39014085 | 3.743396637 | 0.000224 | 0.00042 | -0.52314653 |
| ASS1 | -0.347766133 | 7.71805961 | -3.742548519 | 0.000225 | 0.00043 | -0.52615509 |
| SENP6 | -0.282599104 | 4.62852895 | -3.742367197 | 0.000225 | 0.00043 | -0.52679823 |
| LBP | 0.244610859 | 0.2400122 | 3.7422288 | 0.000225 | 0.00043 | -0.52728909 |
| ZNF614 | -0.301850747 | 3.05700802 | -3.742227679 | 0.000225 | 0.00043 | -0.52729306 |
| CSMD1 | -0.445219148 | 0.73234587 | -3.742009708 | 0.000225 | 0.00043 | -0.52806612 |
| ZNRF3 | 0.06256727 | 0.15376211 | 3.741273343 | 0.000226 | 0.00043 | -0.53067743 |
| SLC37A2 | 0.328874152 | 1.59751115 | 3.738387373 | 0.000228 | 0.00043 | -0.54090724 |
| ZNF510 | -0.268378271 | 2.77048963 | -3.73800281 | 0.000229 | 0.00043 | -0.54226986 |
| MOSPD1 | -0.199329409 | 3.87544754 | -3.73765408 | 0.000229 | 0.00043 | -0.5435054 |

| | | | | | | |
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| SCGB1D | -0.25406115 | 0.46743884 | -3.73663244 | 0.00023 | 0.00044 | -0.54712445 |
| MMP24C | -0.202330996 | 5.17522373 | -3.735545218 | 0.000231 | 0.00044 | -0.55097484 |
| BCL2L1 | 0.341089675 | 6.87969791 | 3.735120416 | 0.000231 | 0.00044 | -0.552479 |
| SNAPC4 | -0.250693136 | 3.55965549 | -3.735068197 | 0.000231 | 0.00044 | -0.55266389 |
| TRIM7 | -0.40544833 | 2.21059325 | -3.734400578 | 0.000232 | 0.00044 | -0.55502749 |
| FBXO38 | -0.257917412 | 3.75545438 | -3.7343367 | 0.000232 | 0.00044 | -0.55525362 |
| RNF128 | -0.371358691 | 6.34189834 | -3.734009529 | 0.000232 | 0.00044 | -0.55641176 |
| CPSF6 | -0.257449014 | 4.85467025 | -3.733345794 | 0.000233 | 0.00044 | -0.55876101 |
| ZSCAN4 | 0.226481064 | 0.48983949 | 3.733152032 | 0.000233 | 0.00044 | -0.55944675 |
| MED26 | -0.177192811 | 2.47136839 | -3.73282838 | 0.000233 | 0.00044 | -0.56059211 |
| IFNE | 0.541090976 | 1.16737188 | 3.732448668 | 0.000234 | 0.00044 | -0.56193574 |
| TEP1 | 0.299974412 | 3.54711347 | 3.731361198 | 0.000235 | 0.00044 | -0.56578315 |
| KANK4 | -0.400537108 | 0.65828361 | -3.731350001 | 0.000235 | 0.00044 | -0.56582276 |
| LGR5 | 0.175667444 | 0.17252275 | 3.730158316 | 0.000236 | 0.00045 | -0.5700377 |
| CLDN14 | 0.077302652 | 0.11586053 | 3.729381065 | 0.000236 | 0.00045 | -0.57278616 |
| LEFTY2 | -0.296321554 | 0.23862219 | -3.728777231 | 0.000237 | 0.00045 | -0.57492103 |
| CCDC18 | -0.11805663 | 0.39864898 | -3.725586369 | 0.00024 | 0.00045 | -0.5861973 |
| COLCA2 | -0.430314534 | 2.7679806 | -3.72557706 | 0.00024 | 0.00045 | -0.58623018 |
| ST6GALI | -0.316529219 | 4.58276558 | -3.725314269 | 0.00024 | 0.00045 | -0.58715848 |
| FXYD5 | 0.488844931 | 6.42023901 | 3.723069011 | 0.000242 | 0.00046 | -0.59508734 |
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| OFD1 | -0.235119851 | 4.87138026 | -3.722722297 | 0.000242 | 0.00046 | -0.59631134 |
| TRIM14 | 0.455041958 | 3.68655208 | 3.722462538 | 0.000243 | 0.00046 | -0.59722829 |
| RAB14 | -0.285940968 | 6.61470217 | -3.722411968 | 0.000243 | 0.00046 | -0.5974068 |
| LY6K | -0.117839163 | 0.22555611 | -3.72178932 | 0.000243 | 0.00046 | -0.5996045 |
| CEACAM | 0.057043606 | 0.10125663 | 3.721280249 | 0.000244 | 0.00046 | -0.60140107 |
| C5AR2 | -0.274334448 | 1.27195375 | -3.720487454 | 0.000244 | 0.00046 | -0.6041985 |
| ANKRD1 | -0.291416305 | 3.62879684 | -3.720196598 | 0.000245 | 0.00046 | -0.60522467 |
| DDX42 | -0.244031109 | 5.40079359 | -3.719464905 | 0.000245 | 0.00046 | -0.60780584 |
| FLT3 | 0.219344342 | 0.38090473 | 3.719326335 | 0.000245 | 0.00046 | -0.60829462 |
| ACTN1 | 0.385212244 | 4.91361282 | 3.719219486 | 0.000246 | 0.00046 | -0.6086715 |
| MED17 | -0.254423831 | 3.48319671 | -3.719155555 | 0.000246 | 0.00046 | -0.60889699 |
| ZFX | -0.285173393 | 3.61471932 | -3.71775838 | 0.000247 | 0.00047 | -0.61382413 |
| MZB1 | 1.065957251 | 2.14726697 | 3.717582529 | 0.000247 | 0.00047 | -0.61444416 |
| MRTFB | -0.304848354 | 3.21390577 | -3.717311497 | 0.000247 | 0.00047 | -0.61539972 |
| GCN1 | -0.2897616 | 5.11424134 | -3.71698474 | 0.000248 | 0.00047 | -0.61655166 |
| DUSP13 | 0.360244334 | 0.78760274 | 3.715469759 | 0.000249 | 0.00047 | -0.62189138 |
| TC2N | -0.390266289 | 3.30111665 | -3.713757154 | 0.000251 | 0.00047 | -0.62792528 |
| SH3BP4 | -0.329619083 | 4.102588 | -3.712847794 | 0.000251 | 0.00047 | -0.63112815 |
| ZNF133 | -0.226292311 | 3.44067483 | -3.71199805 | 0.000252 | 0.00048 | -0.63412041 |

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|---|---|---|---|---|---|---|
| GPR45 | -0.083732365 | 0.15804916 | -3.711885868 | 0.000252 | 0.00048 | -0.6345154 |
| C20orf20 | -0.170455369 | 0.53174189 | -3.711327155 | 0.000253 | 0.00048 | -0.63648245 |
| MBD4 | -0.229641064 | 5.05686585 | -3.711105058 | 0.000253 | 0.00048 | -0.6372643 |
| G2E3 | -0.241658584 | 2.1866199 | -3.710819486 | 0.000253 | 0.00048 | -0.63826955 |
| TSHZ3 | -0.387103501 | 3.28521268 | -3.709385881 | 0.000255 | 0.00048 | -0.64331497 |
| OXCT1 | -0.389961167 | 4.73239292 | -3.709176594 | 0.000255 | 0.00048 | -0.64405139 |
| LEXM | -0.047161233 | 0.08999962 | -3.707699324 | 0.000256 | 0.00048 | -0.64924839 |
| TRIM32 | -0.275754837 | 3.7204961 | -3.706683839 | 0.000257 | 0.00048 | -0.65281976 |
| HERC2 | -0.274773711 | 3.62806698 | -3.7064426 | 0.000258 | 0.00048 | -0.65366805 |
| TIAM1 | 0.623580684 | 3.55171445 | 3.704675509 | 0.000259 | 0.00049 | -0.6598803 |
| COL5A3 | -0.442088805 | 2.94246628 | -3.704140593 | 0.00026 | 0.00049 | -0.66176028 |
| GALNT2 | -0.296010675 | 5.0958503 | -3.703791797 | 0.00026 | 0.00049 | -0.66298601 |
| FCER1G | 0.55620433 | 5.43821584 | 3.703488286 | 0.00026 | 0.00049 | -0.66405251 |
| ZNF326 | -0.240069218 | 3.02006616 | -3.70344089 | 0.00026 | 0.00049 | -0.66421905 |
| ATP6V0A | -0.255532581 | 4.9235885 | -3.70306956 | 0.000261 | 0.00049 | -0.66552374 |
| LRP2BP | -0.282839089 | 1.87934622 | -3.702733189 | 0.000261 | 0.00049 | -0.6667055 |
| ELAVL4 | 0.043617205 | 0.09253682 | 3.701608684 | 0.000262 | 0.00049 | -0.67065548 |
| PLEKHA | -0.21201718 | 3.00344556 | -3.699841529 | 0.000264 | 0.0005 | -0.67686067 |
| CREB3L | -0.378757692 | 6.32417683 | -3.699174917 | 0.000265 | 0.0005 | -0.67920073 |
| C4orf50 | -0.054329409 | 0.09256098 | -3.699138928 | 0.000265 | 0.0005 | -0.67932705 |
| YY1AP1 | -0.232734573 | 4.79552836 | -3.699093923 | 0.000265 | 0.0005 | -0.67948502 |
| UBASH3 | 0.351754058 | 0.85418186 | 3.698846042 | 0.000265 | 0.0005 | -0.68035506 |
| ANKAR | -0.196299549 | 1.42961848 | -3.697984152 | 0.000266 | 0.0005 | -0.68337981 |
| ACVR2A | -0.259370772 | 2.92144575 | -3.697079765 | 0.000267 | 0.0005 | -0.68655301 |
| CD22 | 0.760656929 | 3.30444279 | 3.696033825 | 0.000268 | 0.0005 | -0.69022202 |
| TMEM12 | 0.131747422 | 0.49928074 | 3.695996729 | 0.000268 | 0.0005 | -0.69035213 |
| HIST1H2 | -0.219060248 | 0.43622138 | -3.6955433 | 0.000268 | 0.0005 | -0.69194238 |
| PRTN3 | 0.30674439 | 0.91034392 | 3.695008237 | 0.000269 | 0.00051 | -0.69381872 |
| GJB4 | 0.398645688 | 0.80003636 | 3.69350104 | 0.00027 | 0.00051 | -0.69910279 |
| SOWAH | -0.362078481 | 3.80242429 | -3.691488608 | 0.000272 | 0.00051 | -0.70615513 |
| ATP6V1 | -0.263404969 | 1.43403053 | -3.69095892 | 0.000273 | 0.00051 | -0.70801079 |
| FANCD2 | 0.210563937 | 1.73650476 | 3.69076955 | 0.000273 | 0.00051 | -0.70867415 |
| TMEM24 | -0.355740194 | 6.12836987 | -3.689547329 | 0.000274 | 0.00052 | -0.71295485 |
| C17orf49 | -0.193193975 | 1.68996981 | -3.688631581 | 0.000275 | 0.00052 | -0.71616133 |
| ZNF48 | -0.208001143 | 3.7047467 | -3.688207428 | 0.000276 | 0.00052 | -0.71764626 |
| TTC33 | -0.300023551 | 3.97334068 | -3.688197087 | 0.000276 | 0.00052 | -0.71768245 |
| MORN3 | -0.230710792 | 1.43302985 | -3.687979485 | 0.000276 | 0.00052 | -0.7184442 |
| HEATR5 | -0.287927393 | 2.695459 | -3.687858967 | 0.000276 | 0.00052 | -0.71886607 |
| ZNF311 | -0.245423585 | 2.23357598 | -3.687039406 | 0.000277 | 0.00052 | -0.72173461 |
| SLC6A16 | -0.237107953 | 0.71985708 | -3.686625698 | 0.000277 | 0.00052 | -0.7231824 |

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| C9orf135 | -0.194012591 | 0.19773212 | -3.685885178 | 0.000278 | 0.00052 | -0.72577353 |
| CTNND2 | -0.31891207 | 0.41307125 | -3.685661058 | 0.000278 | 0.00052 | -0.72655765 |
| SH3GL3 | -0.122264054 | 0.15935103 | -3.683938469 | 0.00028 | 0.00053 | -0.73258296 |
| WIPF2 | -0.234050708 | 4.54167151 | -3.683880233 | 0.00028 | 0.00053 | -0.73278662 |
| GLI3 | -0.342075359 | 2.33349231 | -3.683333937 | 0.000281 | 0.00053 | -0.73469691 |
| CGGBP1 | -0.249718555 | 5.51087711 | -3.683116648 | 0.000281 | 0.00053 | -0.73545666 |
| TCTE1 | -0.062014946 | 0.09887326 | -3.683024819 | 0.000281 | 0.00053 | -0.73577772 |
| CUBN | -0.339403884 | 2.07822857 | -3.683008096 | 0.000281 | 0.00053 | -0.73583619 |
| PRSS36 | -0.151183587 | 1.1524355 | -3.68293411 | 0.000281 | 0.00053 | -0.73609487 |
| PLP1 | -0.568792233 | 0.73071914 | -3.682197598 | 0.000282 | 0.00053 | -0.73866965 |
| APLF | -0.142495549 | 1.11487537 | -3.681995769 | 0.000282 | 0.00053 | -0.73937515 |
| ZNF398 | -0.208318261 | 2.99210729 | -3.681887012 | 0.000282 | 0.00053 | -0.7397553 |
| PCDHGA | -0.158010622 | 0.49916657 | -3.681879539 | 0.000282 | 0.00053 | -0.73978142 |
| IGFBP5 | 0.837509802 | 8.79013124 | 3.681364772 | 0.000283 | 0.00053 | -0.74158059 |
| KCNJ1 | -0.438296586 | 0.63568443 | -3.680633967 | 0.000284 | 0.00053 | -0.74413444 |
| CCL24 | 0.321394084 | 0.60563633 | 3.679633244 | 0.000285 | 0.00053 | -0.74763081 |
| FBXO41 | 0.373106376 | 2.06816849 | 3.679207702 | 0.000285 | 0.00053 | -0.74911733 |
| PNN | -0.27205049 | 5.91228536 | -3.678802915 | 0.000286 | 0.00053 | -0.7505312 |
| STX2 | -0.272697013 | 3.12958145 | -3.678542151 | 0.000286 | 0.00054 | -0.75144195 |
| LKAAEAI | -0.333961941 | 0.68327563 | -3.677321267 | 0.000287 | 0.00054 | -0.75570523 |
| SLC16A5 | -0.49207589 | 3.40456995 | -3.677157403 | 0.000287 | 0.00054 | -0.75627734 |
| INHBB | 0.697862996 | 6.25927809 | 3.676712189 | 0.000288 | 0.00054 | -0.75783163 |
| MAPK1IF | -0.236652967 | 5.22015262 | -3.676390859 | 0.000288 | 0.00054 | -0.75895332 |
| CEP68 | -0.262377228 | 3.33626042 | -3.67515375 | 0.000289 | 0.00054 | -0.76327098 |
| ABCA7 | -0.276229838 | 3.52684359 | -3.673975649 | 0.000291 | 0.00054 | -0.76738148 |
| MEI1 | 0.413487074 | 0.95145019 | 3.673471315 | 0.000291 | 0.00055 | -0.76914078 |
| LIPI | -0.524028609 | 0.64573446 | -3.672484263 | 0.000292 | 0.00055 | -0.77258335 |
| PPM1A | -0.246981619 | 3.9919767 | -3.671855469 | 0.000293 | 0.00055 | -0.77477598 |
| FRMD8 | -0.252886025 | 4.82408918 | -3.670924691 | 0.000294 | 0.00055 | -0.77802102 |
| NFATC1 | -0.292579062 | 2.14737283 | -3.67071441 | 0.000294 | 0.00055 | -0.77875404 |
| CCDC85 | -0.472573556 | 5.59721507 | -3.670320903 | 0.000295 | 0.00055 | -0.78012566 |
| AHNAK | 0.444959926 | 6.31120853 | 3.670255765 | 0.000295 | 0.00055 | -0.78035269 |
| NUTM2E | -0.072304364 | 0.1166648 | -3.670194618 | 0.000295 | 0.00055 | -0.78056582 |
| EAF1 | -0.27868633 | 4.0882365 | -3.670167913 | 0.000295 | 0.00055 | -0.78065889 |
| SCN3B | -0.31089552 | 1.16680659 | -3.670114238 | 0.000295 | 0.00055 | -0.78084597 |
| SLC10A5 | -0.18004322 | 1.15636995 | -3.669793153 | 0.000295 | 0.00055 | -0.78196499 |
| CCT8 | -0.203831285 | 6.99473814 | -3.669453277 | 0.000296 | 0.00055 | -0.78314942 |
| GNL3 | -0.214899387 | 5.35640484 | -3.668777521 | 0.000296 | 0.00055 | -0.78550404 |
| ATP13A5 | -0.125705684 | 0.40282431 | -3.668369253 | 0.000297 | 0.00055 | -0.78692644 |
| ABL2 | 0.257134301 | 2.88562997 | 3.667042462 | 0.000298 | 0.00056 | -0.79154795 |

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| MXD1 | -0.287718297 | 3.02917837 | -3.666912612 | 0.000298 | 0.00056 | -0.79200017 |
| ALDH3A | -0.284703574 | 0.76068646 | -3.666722182 | 0.000299 | 0.00056 | -0.79266333 |
| CYBRD1 | -0.386529384 | 7.66360356 | -3.666557308 | 0.000299 | 0.00056 | -0.79323748 |
| TMEM17 | 0.672500447 | 5.03344032 | 3.666387963 | 0.000299 | 0.00056 | -0.79382717 |
| DMRTA2 | -0.029881807 | 0.04135689 | -3.66619548 | 0.000299 | 0.00056 | -0.7944974 |
| WDR88 | -0.215061349 | 1.242017 | -3.664666432 | 0.000301 | 0.00056 | -0.79982044 |
| CLEC12E | 0.044400463 | 0.07640252 | 3.664186791 | 0.000302 | 0.00056 | -0.8014898 |
| ZNF574 | -0.19735406 | 3.74828532 | -3.664065519 | 0.000302 | 0.00056 | -0.80191185 |
| TAB2 | -0.279857387 | 4.6281726 | -3.663614468 | 0.000302 | 0.00056 | -0.80348147 |
| CRYAB | -0.553638325 | 6.8901247 | -3.663574065 | 0.000302 | 0.00056 | -0.80362206 |
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| PIK3C2A | -0.347463403 | 4.60485582 | -3.661707875 | 0.000304 | 0.00057 | -0.81011435 |
| HMGCLL | -0.108700445 | 0.19697654 | -3.661208407 | 0.000305 | 0.00057 | -0.81185144 |
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| GPRIN1 | 0.298244403 | 1.41172713 | 3.658764286 | 0.000308 | 0.00057 | -0.82034874 |
| STXBP6 | -0.581838933 | 4.70148643 | -3.658327518 | 0.000308 | 0.00057 | -0.82186668 |
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| PIAS1 | -0.297130166 | 3.72386054 | -3.657170595 | 0.000309 | 0.00058 | -0.82588667 |
| SLC9C1 | -0.208050035 | 0.57504759 | -3.655938681 | 0.000311 | 0.00058 | -0.83016596 |
| CENPB | -0.182829194 | 6.94461139 | -3.655794258 | 0.000311 | 0.00058 | -0.83066755 |
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| TBC1D1( | -0.291645483 | 3.51304822 | -3.65406959 | 0.000313 | 0.00058 | -0.83665613 |
| CORO1C | 0.306409531 | 4.77690458 | 3.653884653 | 0.000313 | 0.00058 | -0.83729814 |
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| CEACAM | 0.398206781 | 1.3941227 | 3.652317664 | 0.000315 | 0.00059 | -0.84273675 |
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| RREB1 | -0.261182428 | 3.66863845 | -3.641499161 | 0.000328 | 0.00061 | -0.88022761 |
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| NKAPL | -0.324199081 | 1.37146319 | -3.63218838 | 0.000339 | 0.00063 | -0.91241331 |
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| MMS22L | 0.131115737 | 0.85426014 | 3.627543844 | 0.000345 | 0.00064 | -0.92844086 |
| MAL | -0.51570428 | 5.94637208 | -3.627219751 | 0.000346 | 0.00064 | -0.92955856 |
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| RSAD2 | 0.402114745 | 2.83232628 | 3.624141687 | 0.00035 | 0.00065 | -0.94016942 |
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| MAML3 | -0.310171592 | 3.53024379 | -3.62101927 | 0.000354 | 0.00065 | -0.95092488 |
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| RIMBP3 | -0.11785167 | 0.38945237 | -3.619287953 | 0.000356 | 0.00066 | -0.95688495 |
| IFNAR2 | 0.275115867 | 2.30358919 | 3.619287291 | 0.000356 | 0.00066 | -0.95688723 |
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| PLSCR4 | -0.370911897 | 3.89963328 | -3.618830861 | 0.000356 | 0.00066 | -0.95845807 |
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| KIAA154 | 0.224297555 | 0.36128887 | 3.61689585 | 0.000359 | 0.00066 | -0.96511556 |
| TMEM25 | -0.210751119 | 4.93270251 | -3.616569517 | 0.000359 | 0.00066 | -0.96623801 |
| PLEKHH | -0.292887348 | 4.53078602 | -3.61619398 | 0.00036 | 0.00066 | -0.96752958 |
| TBC1D7 | -0.151371903 | 2.12348462 | -3.616071204 | 0.00036 | 0.00067 | -0.96795182 |
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| ZNF550 | -0.278380341 | 2.62586953 | -3.615360061 | 0.000361 | 0.00067 | -0.97039723 |
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| LOXHD1 | -0.070233875 | 0.1240508 | -3.61495917 | 0.000362 | 0.00067 | -0.97177558 |
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| INO80 | -0.266380303 | 4.04305641 | -3.613128652 | 0.000364 | 0.00067 | -0.97806756 |
| VWA5B2 | -0.278651742 | 0.91118848 | -3.612142788 | 0.000365 | 0.00067 | -0.98145504 |
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| PPM1J | -0.324416775 | 2.37800717 | -3.609742162 | 0.000369 | 0.00068 | -0.98970024 |

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| RSPRY1 | -0.262552886 | 4.60114418 | -3.608096005 | 0.000371 | 0.00068 | -0.99535128 |
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| TMSB4X | 0.477962378 | 10.4444238 | 3.606275829 | 0.000373 | 0.00069 | -1.00159699 |
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| WDR43 | -0.252237888 | 4.48833486 | -3.601517885 | 0.00038 | 0.0007 | -1.01790986 |
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| CR1 | 0.141780762 | 0.22482178 | 3.598143076 | 0.000385 | 0.00071 | -1.02946878 |
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| SOX30 | -0.131979357 | 0.35683015 | -3.593632381 | 0.000391 | 0.00072 | -1.04490288 |
| MAN1A2 | -0.311592569 | 4.64048722 | -3.593486501 | 0.000391 | 0.00072 | -1.04540174 |
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| WT1 | 0.109422047 | 0.12996877 | 3.580638473 | 0.00041 | 0.00075 | -1.08926592 |
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| RRS1 | -0.212081286 | 4.85476976 | -3.579376281 | 0.000412 | 0.00075 | -1.09356749 |
| MS4A6A | 0.447625921 | 3.16588827 | 3.579237245 | 0.000412 | 0.00075 | -1.09404124 |
| SLC35D3 | 0.088779554 | 0.09406577 | 3.578869889 | 0.000413 | 0.00076 | -1.09529289 |
| ZSCAN3 | -0.257447623 | 3.2048026 | -3.5781475 | 0.000414 | 0.00076 | -1.09775386 |
| EPPIN | -0.163916601 | 0.12294683 | -3.578087839 | 0.000414 | 0.00076 | -1.09795709 |
| MT1A | -0.517663898 | 2.17523736 | -3.577537808 | 0.000415 | 0.00076 | -1.09983056 |
| MSL2 | -0.248878326 | 4.43689144 | -3.577067101 | 0.000415 | 0.00076 | -1.10143364 |
| RBMS1 | -0.23669608 | 3.71102207 | -3.576801691 | 0.000416 | 0.00076 | -1.10233746 |
| MPST | -0.242625823 | 3.92421987 | -3.57403021 | 0.00042 | 0.00077 | -1.11177173 |
| WDR74 | -0.201810881 | 4.243103 | -3.573063617 | 0.000421 | 0.00077 | -1.11506051 |
| C21orf62 | -0.045633512 | 0.15356185 | -3.57275542 | 0.000422 | 0.00077 | -1.11610896 |
| SKIL | 0.298378231 | 4.46818912 | 3.572402089 | 0.000422 | 0.00077 | -1.11731085 |
| PJVK | -0.250171195 | 1.56513277 | -3.572157809 | 0.000423 | 0.00077 | -1.11814174 |
| OSGEPL | -0.195313037 | 3.00907065 | -3.570858319 | 0.000425 | 0.00078 | -1.1225609 |
| ACTRT3 | -0.276350631 | 1.96376844 | -3.570529181 | 0.000425 | 0.00078 | -1.12367996 |
| KIAA075 | -0.258440221 | 3.51971803 | -3.570305685 | 0.000426 | 0.00078 | -1.12443979 |
| SNX30 | 0.284856156 | 2.56950678 | 3.569658124 | 0.000427 | 0.00078 | -1.1266411 |
| CNTROB | -0.215302002 | 4.09337511 | -3.569022575 | 0.000428 | 0.00078 | -1.12880121 |
| SHB | -0.228468588 | 4.20128087 | -3.567032689 | 0.000431 | 0.00079 | -1.13556223 |
| TMX4 | -0.309391919 | 5.50147462 | -3.566410841 | 0.000432 | 0.00079 | -1.13767437 |

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| A3GALT2 | -0.090261866 | 0.17665051 | -3.566135302 | 0.000432 | 0.00079 | -1.13861015 |
| ANKRD3 | -0.077734105 | 0.25872568 | -3.565902213 | 0.000433 | 0.00079 | -1.13940171 |
| GPR62 | -0.204467701 | 0.49411143 | -3.565477097 | 0.000433 | 0.00079 | -1.14084527 |
| IRF2 | -0.243220639 | 5.20730286 | -3.565093659 | 0.000434 | 0.00079 | -1.14214717 |
| SLC4A1 | -0.11643063 | 0.12888548 | -3.563645902 | 0.000436 | 0.0008 | -1.14706163 |
| IL7 | 0.248989537 | 1.02026237 | 3.56364532 | 0.000436 | 0.0008 | -1.14706361 |
| RRH | -0.076338397 | 0.28728302 | -3.562833441 | 0.000437 | 0.0008 | -1.14981877 |
| SP140L | 0.252473114 | 2.2608041 | 3.562162437 | 0.000438 | 0.0008 | -1.15209543 |
| KCTD16 | -0.1746734 | 0.21812974 | -3.561024336 | 0.00044 | 0.0008 | -1.15595603 |
| CYP2C8 | -0.328673832 | 1.18621948 | -3.560303098 | 0.000441 | 0.00081 | -1.158402 |
| ZAP70 | 0.408680837 | 1.38456149 | 3.560163764 | 0.000442 | 0.00081 | -1.15887448 |
| MINDY2 | -0.297869999 | 3.60684032 | -3.559607857 | 0.000443 | 0.00081 | -1.16075938 |
| ZNF341 | -0.174340922 | 2.19460053 | -3.558915412 | 0.000444 | 0.00081 | -1.16310686 |
| IQUB | -0.247111951 | 1.54060407 | -3.557635303 | 0.000446 | 0.00081 | -1.16744551 |
| VPS35L | -0.187676121 | 4.4549747 | -3.555851704 | 0.000449 | 0.00082 | -1.17348827 |
| CDC42BI | 0.35299971 | 4.76337858 | 3.555704297 | 0.000449 | 0.00082 | -1.17398756 |
| TEX30 | -0.214468006 | 3.00216128 | -3.554635263 | 0.000451 | 0.00082 | -1.17760795 |
| SART3 | -0.251129936 | 4.62025883 | -3.554561159 | 0.000451 | 0.00082 | -1.17785888 |
| ZNF207 | -0.214594107 | 4.48795108 | -3.55364254 | 0.000452 | 0.00082 | -1.18096903 |
| SLC11A1 | 0.296748241 | 1.69945362 | 3.553608161 | 0.000452 | 0.00082 | -1.18108541 |
| SLC25A5 | -0.117519841 | 1.04984958 | -3.553304303 | 0.000453 | 0.00083 | -1.18211401 |
| PPP1R1/ | -0.334364331 | 0.8971049 | -3.553047908 | 0.000453 | 0.00083 | -1.18298188 |
| TGIF1 | 0.331784143 | 4.7730771 | 3.551685727 | 0.000455 | 0.00083 | -1.18759175 |
| ADD2 | -0.297702489 | 0.58568547 | -3.551236679 | 0.000456 | 0.00083 | -1.18911106 |
| C14orf18 | -0.135342823 | 0.12632762 | -3.55112677 | 0.000456 | 0.00083 | -1.1894829 |
| DCAF10 | -0.229420033 | 3.84454085 | -3.550427331 | 0.000458 | 0.00083 | -1.19184897 |
| NXPE4 | 0.116834029 | 0.11394137 | 3.550228314 | 0.000458 | 0.00083 | -1.19252213 |
| SLC35E4 | -0.175130193 | 1.37690629 | -3.549698284 | 0.000459 | 0.00084 | -1.19431475 |
| KLHL34 | 0.137695233 | 0.17368824 | 3.549466917 | 0.000459 | 0.00084 | -1.19509719 |
| GALR3 | -0.076743427 | 0.12205432 | -3.549214337 | 0.00046 | 0.00084 | -1.1959513 |
| UNC5D | -0.310735755 | 0.4526059 | -3.549196161 | 0.00046 | 0.00084 | -1.19601277 |
| SLC16A1 | -0.556656931 | 4.024091 | -3.549011098 | 0.00046 | 0.00084 | -1.19663853 |
| RPUSD4 | -0.206957955 | 3.80872194 | -3.547144552 | 0.000463 | 0.00084 | -1.20294836 |
| INPP5E | -0.209841983 | 4.02792829 | -3.54691889 | 0.000463 | 0.00084 | -1.203711 |
| PLK3 | 0.416115348 | 4.68949021 | 3.546379007 | 0.000464 | 0.00085 | -1.20553541 |
| BBS7 | -0.201587846 | 2.8440525 | -3.545754142 | 0.000465 | 0.00085 | -1.20764667 |
| IL1R2 | 0.37892824 | 1.04538901 | 3.54543812 | 0.000466 | 0.00085 | -1.2087143 |
| POLR1A | -0.246848999 | 3.3273508 | -3.545143018 | 0.000466 | 0.00085 | -1.20971117 |
| EFEMP2 | -0.404692483 | 6.05933068 | -3.543965687 | 0.000468 | 0.00085 | -1.21368754 |
| FRRS1 | -0.286392594 | 1.62618098 | -3.543936178 | 0.000468 | 0.00085 | -1.21378719 |

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| TBC1D5 | -0.273429772 | 4.39181411 | -3.543820636 | 0.000469 | 0.00085 | -1.21417736 |
| CDC5L | -0.258436947 | 4.55733377 | -3.543751436 | 0.000469 | 0.00085 | -1.21441103 |
| ZNF846 | -0.199688544 | 2.483311 | -3.543373341 | 0.000469 | 0.00085 | -1.2156877 |
| RNASEH | -0.219969582 | 4.50951236 | -3.542529596 | 0.000471 | 0.00086 | -1.21853624 |
| MIER3 | -0.268524771 | 3.73505135 | -3.542116474 | 0.000471 | 0.00086 | -1.21993074 |
| TENT5D | -0.038400476 | 0.04337794 | -3.542033173 | 0.000472 | 0.00086 | -1.2202119 |
| RNF123 | -0.284048258 | 3.53178211 | -3.541443482 | 0.000473 | 0.00086 | -1.22220212 |
| SYK | -0.263187536 | 5.72796819 | -3.540764374 | 0.000474 | 0.00086 | -1.22449374 |
| TTC21B | -0.215651835 | 2.65576363 | -3.540546157 | 0.000474 | 0.00086 | -1.22523002 |
| CHRNB4 | -0.19469067 | 0.40920711 | -3.540108672 | 0.000475 | 0.00086 | -1.226706 |
| LRRC25 | 0.368509553 | 2.23555817 | 3.539207478 | 0.000476 | 0.00087 | -1.22974593 |
| XRCC5 | -0.252778566 | 7.39124309 | -3.53916277 | 0.000477 | 0.00087 | -1.22989672 |
| SGK2 | 0.231854365 | 0.89020394 | 3.538513271 | 0.000478 | 0.00087 | -1.23208716 |
| ZNF827 | -0.269163653 | 3.50464361 | -3.5383854 | 0.000478 | 0.00087 | -1.23251836 |
| ANKRD3 | -0.07655889 | 0.07834738 | -3.538364512 | 0.000478 | 0.00087 | -1.2325888 |
| NME8 | -0.316134009 | 0.58255441 | -3.537024182 | 0.00048 | 0.00087 | -1.23710774 |
| ATP5MG | -0.055094754 | 0.11908146 | -3.537007718 | 0.00048 | 0.00087 | -1.23716324 |
| SYNPO | 0.354803743 | 5.13893958 | 3.536383989 | 0.000481 | 0.00087 | -1.23926562 |
| DDX60 | 0.418018773 | 3.92065452 | 3.536332776 | 0.000481 | 0.00087 | -1.23943822 |
| EFCAB1 | -0.291968338 | 6.27252051 | -3.536323454 | 0.000481 | 0.00087 | -1.23946964 |
| PTBP1 | -0.186128419 | 6.71910723 | -3.536022338 | 0.000482 | 0.00088 | -1.24048447 |
| PRMT2 | -0.201396981 | 5.11318811 | -3.534828241 | 0.000484 | 0.00088 | -1.24450804 |
| FAM161/ | -0.249457384 | 2.42360185 | -3.531286059 | 0.00049 | 0.00089 | -1.25643638 |
| HAS1 | 0.390102218 | 0.45291533 | 3.531233944 | 0.00049 | 0.00089 | -1.2566118 |
| CEP95 | -0.260888223 | 3.60021557 | -3.530647682 | 0.000491 | 0.00089 | -1.25858497 |
| PAM16 | -0.202097705 | 3.23331029 | -3.529929996 | 0.000493 | 0.00089 | -1.26100007 |
| PHF21A | -0.233253646 | 3.76718775 | -3.529726287 | 0.000493 | 0.00089 | -1.26168549 |
| CPTP | -0.206179688 | 5.48773268 | -3.529036064 | 0.000494 | 0.0009 | -1.26400763 |
| GSN | 0.457983899 | 8.19114227 | 3.527697371 | 0.000497 | 0.0009 | -1.26851027 |
| MFSD6 | -0.28478271 | 5.83864165 | -3.527229009 | 0.000497 | 0.0009 | -1.27008522 |
| STUM | -0.209680908 | 0.37896627 | -3.526940465 | 0.000498 | 0.0009 | -1.2710554 |
| PCNX4 | -0.232298682 | 2.82420515 | -3.526362593 | 0.000499 | 0.00091 | -1.27299819 |
| AP5Z1 | -0.187729486 | 3.92404262 | -3.525473293 | 0.000501 | 0.00091 | -1.27598743 |
| ZSCAN5| | -0.031224206 | 0.06446589 | -3.525301546 | 0.000501 | 0.00091 | -1.27656465 |
| DAPL1 | -0.567477482 | 6.1213567 | -3.524984015 | 0.000502 | 0.00091 | -1.27763177 |
| ZNF182 | -0.22998486 | 3.48420023 | -3.524523316 | 0.000502 | 0.00091 | -1.27917987 |
| WNT9B | 0.099332793 | 0.2652869 | 3.523595888 | 0.000504 | 0.00091 | -1.28229578 |
| ZNF575 | -0.158661118 | 2.01107544 | -3.522700698 | 0.000506 | 0.00092 | -1.28530268 |
| TAGAP | 0.419308964 | 1.91322342 | 3.522490648 | 0.000506 | 0.00092 | -1.28600812 |
| C5AR1 | 0.410075519 | 2.74514209 | 3.522117561 | 0.000507 | 0.00092 | -1.28726103 |

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|---|---|---|---|---|---|---|
| ECE1 | 0.389378818 | 7.66588174 | 3.521478799 | 0.000508 | 0.00092 | -1.28940585 |
| ADAMTS | 0.200406531 | 1.09561345 | 3.519841809 | 0.000511 | 0.00093 | -1.29490089 |
| ZC3H14 | -0.24826614 | 3.16962082 | -3.519783945 | 0.000511 | 0.00093 | -1.29509508 |
| CAGE1 | -0.030150523 | 0.06317499 | -3.519219587 | 0.000512 | 0.00093 | -1.29698895 |
| LURAP1I | 0.561155031 | 3.46059354 | 3.518990365 | 0.000512 | 0.00093 | -1.29775809 |
| CDH8 | -0.086692021 | 0.16937176 | -3.518945988 | 0.000513 | 0.00093 | -1.29790699 |
| ASIC1 | -0.237497145 | 0.81856796 | -3.518868363 | 0.000513 | 0.00093 | -1.29816744 |
| CHIC1 | -0.234682626 | 3.25614657 | -3.517528658 | 0.000515 | 0.00093 | -1.3026617 |
| GORAB | -0.251288943 | 3.07418239 | -3.51727613 | 0.000516 | 0.00093 | -1.30350867 |
| TAF5L | -0.2348965 | 3.52578598 | -3.516538776 | 0.000517 | 0.00094 | -1.30598142 |
| VWCE | 0.270977368 | 1.07654415 | 3.515838344 | 0.000518 | 0.00094 | -1.30832992 |
| ANKRD3 | -0.022202834 | 0.02384742 | -3.515583934 | 0.000519 | 0.00094 | -1.30918283 |
| IL11 | 0.162255556 | 0.25002588 | 3.515165481 | 0.00052 | 0.00094 | -1.31058558 |
| SGMS1 | 0.35847913 | 4.84892617 | 3.514618239 | 0.000521 | 0.00094 | -1.31241982 |
| RANBP3 | -0.200280759 | 5.01066369 | -3.513746334 | 0.000522 | 0.00094 | -1.31534174 |
| APOOL | -0.292664532 | 3.78561562 | -3.513416078 | 0.000523 | 0.00095 | -1.31644832 |
| FYTTD1 | -0.228247472 | 4.82648471 | -3.511886434 | 0.000526 | 0.00095 | -1.32157241 |
| TMSB10 | 0.444373194 | 12.0301923 | 3.511160846 | 0.000527 | 0.00095 | -1.32400232 |
| ZNF140 | -0.253882219 | 3.41450058 | -3.509283631 | 0.000531 | 0.00096 | -1.33028679 |
| RAPGEF | -0.33226567 | 5.20063728 | -3.508805972 | 0.000532 | 0.00096 | -1.33188539 |
| CASZ1 | -0.234922184 | 1.10130951 | -3.508609869 | 0.000532 | 0.00096 | -1.33254164 |
| C6orf163 | -0.113494771 | 0.50440328 | -3.508544888 | 0.000532 | 0.00096 | -1.33275908 |
| FAIM2 | 0.234067203 | 0.49812304 | 3.507188621 | 0.000535 | 0.00097 | -1.33729677 |
| MAP2K4 | -0.23770863 | 4.55455212 | -3.506560363 | 0.000536 | 0.00097 | -1.33939821 |
| TBL1XR1 | -0.261444846 | 5.64937337 | -3.504563572 | 0.00054 | 0.00098 | -1.34607492 |
| WDSUB1 | -0.296874589 | 4.96183842 | -3.503787553 | 0.000541 | 0.00098 | -1.34866878 |
| FAM193/ | -0.2115746 | 4.19759363 | -3.50277179 | 0.000543 | 0.00098 | -1.35206321 |
| VIRMA | -0.220901207 | 3.88643037 | -3.502460925 | 0.000544 | 0.00098 | -1.35310186 |
| STRIP1 | -0.226186986 | 3.75544469 | -3.501936721 | 0.000545 | 0.00098 | -1.35485312 |
| CST7 | 0.570185713 | 3.14195874 | 3.500937903 | 0.000547 | 0.00099 | -1.35818933 |
| CYS1 | -0.975467663 | 4.00217524 | -3.500605278 | 0.000547 | 0.00099 | -1.35930015 |
| ZNF157 | -0.138802955 | 0.55116019 | -3.500563565 | 0.000547 | 0.00099 | -1.35943945 |
| ZMAT3 | 0.372764947 | 4.79231646 | 3.500119852 | 0.000548 | 0.00099 | -1.36092109 |
| HRCT1 | -0.396047499 | 2.6012705 | -3.500030872 | 0.000548 | 0.00099 | -1.3612182 |
| NR1H2 | -0.177471276 | 6.5702324 | -3.499282564 | 0.00055 | 0.00099 | -1.3637165 |
| CXCL9 | 0.971142391 | 3.69362754 | 3.498934557 | 0.000551 | 0.00099 | -1.36487819 |
| MFAP5 | 0.593653218 | 1.44346511 | 3.497312863 | 0.000554 | 0.001 | -1.37029024 |
| MAP4K3 | -0.304570775 | 4.28021111 | -3.496665666 | 0.000555 | 0.001 | -1.37244948 |
| CABLES | -0.208895641 | 3.48112367 | -3.496397418 | 0.000556 | 0.001 | -1.37334433 |
| RPL22L1 | -0.2590312 | 4.45189999 | -3.496298135 | 0.000556 | 0.001 | -1.37367551 |

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| RIPK3 | -0.368594506 | 3.56786824 | -3.495998001 | 0.000556 | 0.001 | -1.37467663 |
| GJA3 | -0.343430028 | 0.64135523 | -3.495941206 | 0.000557 | 0.001 | -1.37486606 |
| TIGD4 | -0.2014244 | 1.14143385 | -3.495615181 | 0.000557 | 0.00101 | -1.37595344 |
| SREK1IP | -0.176241666 | 3.58045234 | -3.495458742 | 0.000558 | 0.00101 | -1.37647516 |
| TBC1D1 | -0.232527011 | 5.22661675 | -3.494996101 | 0.000558 | 0.00101 | -1.37801797 |
| PLA2G4( | -0.305110945 | 2.38215611 | -3.492900293 | 0.000563 | 0.00101 | -1.38500467 |
| CEP57 | -0.226635043 | 4.06388097 | -3.492884353 | 0.000563 | 0.00101 | -1.3850578 |
| CCDC85 | -0.239287896 | 2.70419958 | -3.492691654 | 0.000563 | 0.00102 | -1.3857 |
| STAB2 | -0.103054308 | 0.15060717 | -3.492568716 | 0.000563 | 0.00102 | -1.38610969 |
| CALML6 | -0.093141051 | 0.23678165 | -3.491927855 | 0.000565 | 0.00102 | -1.38824516 |
| SMR3B | -0.557762482 | 0.51919153 | -3.491494813 | 0.000565 | 0.00102 | -1.38968793 |
| RHPN2 | -0.300648869 | 2.79805568 | -3.491464774 | 0.000566 | 0.00102 | -1.38978801 |
| CITED1 | 1.074056485 | 7.2504957 | 3.489892001 | 0.000569 | 0.00102 | -1.39502664 |
| HIST1H2 | -0.297994079 | 1.67491498 | -3.48973055 | 0.000569 | 0.00103 | -1.39556428 |
| PCNX3 | -0.223198825 | 4.82119536 | -3.489081243 | 0.00057 | 0.00103 | -1.39772629 |
| DGCR8 | -0.215347321 | 3.80201813 | -3.488567052 | 0.000571 | 0.00103 | -1.39943814 |
| LBH | -0.334705723 | 7.21694396 | -3.488542783 | 0.000571 | 0.00103 | -1.39951894 |
| MAFG | -0.298363874 | 4.25336705 | -3.487992224 | 0.000573 | 0.00103 | -1.4013516 |
| ABHD13 | -0.251089881 | 3.66516114 | -3.48792348 | 0.000573 | 0.00103 | -1.40158041 |
| COL12A1 | 0.508146602 | 2.43907101 | 3.487223804 | 0.000574 | 0.00103 | -1.40390903 |
| ICK | -0.24888062 | 3.28747234 | -3.486911524 | 0.000575 | 0.00103 | -1.4049482 |
| PIP5KL1 | 0.432857034 | 2.11153313 | 3.486540689 | 0.000576 | 0.00104 | -1.40618211 |
| FBXO27 | -0.287290079 | 1.72003085 | -3.486339613 | 0.000576 | 0.00104 | -1.40685112 |
| LPA | -0.066869595 | 0.06021763 | -3.486200319 | 0.000576 | 0.00104 | -1.40731455 |
| TSR1 | -0.230079257 | 3.99205968 | -3.485945595 | 0.000577 | 0.00104 | -1.40816198 |
| ANKRD1 | 0.238720884 | 1.84021045 | 3.485150907 | 0.000578 | 0.00104 | -1.4108054 |
| CDH17 | 0.088127464 | 0.21670879 | 3.484873347 | 0.000579 | 0.00104 | -1.41172854 |
| MFSD14 | -0.248524064 | 5.73298616 | -3.484528463 | 0.00058 | 0.00104 | -1.4128755 |
| SOS1 | -0.268614547 | 4.09439296 | -3.484181974 | 0.00058 | 0.00104 | -1.4140277 |
| FKBP10 | -0.38624838 | 5.95621378 | -3.484002141 | 0.000581 | 0.00104 | -1.41462566 |
| ANGPTL | -0.108805682 | 0.41202053 | -3.48382079 | 0.000581 | 0.00105 | -1.41522865 |
| LRRC49 | -0.193768592 | 1.49693919 | -3.483763409 | 0.000581 | 0.00105 | -1.41541943 |
| MAP2K3 | -0.214147421 | 5.3148895 | -3.482572122 | 0.000584 | 0.00105 | -1.41937963 |
| SAP30L | -0.236023105 | 4.04324104 | -3.482355415 | 0.000584 | 0.00105 | -1.4200999 |
| PELI2 | -0.249953582 | 1.92992552 | -3.482351987 | 0.000584 | 0.00105 | -1.4201113 |
| PLPP2 | 0.553523834 | 3.19584915 | 3.481929263 | 0.000585 | 0.00105 | -1.42151618 |
| LPCAT3 | -0.396984848 | 3.18186097 | -3.481384237 | 0.000586 | 0.00105 | -1.42332731 |
| DGKB | -0.040704495 | 0.09725356 | -3.481358326 | 0.000586 | 0.00105 | -1.4234134 |
| SFPQ | -0.229122367 | 6.53777441 | -3.480194602 | 0.000589 | 0.00106 | -1.42727956 |
| RARG | 0.327841599 | 4.9819014 | 3.479862801 | 0.000589 | 0.00106 | -1.42838167 |

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| TMEM22 | -0.294332073 | 2.42261917 | -3.479232646 | 0.000591 | 0.00106 | -1.43047452 |
| KLF12 | 0.297758005 | 1.99342327 | 3.47904282 | 0.000591 | 0.00106 | -1.4311049 |
| DNAH12 | -0.042583451 | 0.0940082 | -3.478011704 | 0.000593 | 0.00107 | -1.43452849 |
| ABCC9 | -0.299502614 | 1.49412629 | -3.477848494 | 0.000594 | 0.00107 | -1.43507031 |
| ARHGEF | -0.12331089 | 0.65648572 | -3.477514023 | 0.000594 | 0.00107 | -1.4361806 |
| KLC1 | -0.203867139 | 2.6333938 | -3.47736145 | 0.000595 | 0.00107 | -1.43668704 |
| CYSLTR | -0.223997756 | 1.23378399 | -3.477205501 | 0.000595 | 0.00107 | -1.43720467 |
| CTBP1 | -0.176382343 | 5.73296351 | -3.476489948 | 0.000597 | 0.00107 | -1.43957946 |
| RABIF | -0.191468512 | 3.82125081 | -3.475996443 | 0.000598 | 0.00107 | -1.44121706 |
| LRRC71 | -0.067899892 | 0.13629064 | -3.475671996 | 0.000598 | 0.00107 | -1.44229355 |
| PJA2 | -0.331486594 | 6.74794472 | -3.47564174 | 0.000598 | 0.00107 | -1.44239394 |
| GJA4 | -0.489528638 | 6.34775583 | -3.475362491 | 0.000599 | 0.00107 | -1.44332039 |
| TREML1 | 0.206165852 | 0.68446466 | 3.474775851 | 0.0006 | 0.00108 | -1.44526644 |
| RGS11 | 0.355212089 | 1.47932904 | 3.473902373 | 0.000602 | 0.00108 | -1.44816345 |
| MAT2B | -0.279227174 | 6.06244345 | -3.473839197 | 0.000602 | 0.00108 | -1.44837296 |
| TNFSF13 | -0.371306266 | 4.79060362 | -3.473377294 | 0.000603 | 0.00108 | -1.44990464 |
| KIAA121 | 0.442997896 | 6.16197797 | 3.47273614 | 0.000605 | 0.00108 | -1.4520304 |
| NLRP3 | 0.341042612 | 1.5175993 | 3.472540797 | 0.000605 | 0.00109 | -1.452678 |
| DCTN4 | -0.213074127 | 5.24273792 | -3.472421261 | 0.000605 | 0.00109 | -1.45307426 |
| FGFR1O | -0.222286369 | 4.42232669 | -3.472383835 | 0.000605 | 0.00109 | -1.45319833 |
| YEATS2 | -0.2613832 | 3.65594688 | -3.472340502 | 0.000605 | 0.00109 | -1.45334198 |
| FZD10 | 0.240261966 | 0.81709329 | 3.471791496 | 0.000607 | 0.00109 | -1.45516175 |
| RPL8 | -0.226786633 | 10.840045 | -3.471711998 | 0.000607 | 0.00109 | -1.45542524 |
| NOL8 | -0.207202041 | 3.53225077 | -3.470435175 | 0.00061 | 0.00109 | -1.45965638 |
| ACBD3 | -0.315937479 | 5.70232348 | -3.46885546 | 0.000613 | 0.0011 | -1.4648893 |
| TRAP1 | -0.260256487 | 4.41117495 | -3.467972604 | 0.000615 | 0.0011 | -1.46781288 |
| USP12 | -0.250177421 | 4.22771367 | -3.465592545 | 0.00062 | 0.00111 | -1.47569106 |
| ZFP30 | -0.219178468 | 2.34401951 | -3.464931283 | 0.000622 | 0.00111 | -1.47787902 |
| XPO5 | -0.23456134 | 4.19719036 | -3.464701721 | 0.000622 | 0.00111 | -1.4786385 |
| GALR1 | -0.056183963 | 0.07951556 | -3.462288132 | 0.000627 | 0.00112 | -1.48662078 |
| RNASE3 | 0.080448227 | 0.15495081 | 3.46139357 | 0.000629 | 0.00113 | -1.48957801 |
| DDIAS | 0.114491662 | 0.54247513 | 3.460798688 | 0.000631 | 0.00113 | -1.49154418 |
| KLHL15 | -0.289549687 | 2.97801306 | -3.460546508 | 0.000631 | 0.00113 | -1.49237758 |
| HSF1 | -0.179072273 | 5.81070591 | -3.459256612 | 0.000634 | 0.00114 | -1.49663952 |
| PARVB | -0.254370199 | 2.62410183 | -3.458727684 | 0.000635 | 0.00114 | -1.49838674 |
| NEDD8-N | -0.081693461 | 0.27352278 | -3.458675677 | 0.000636 | 0.00114 | -1.49855852 |
| PTPN2 | -0.192904787 | 3.94149316 | -3.457749634 | 0.000638 | 0.00114 | -1.5016169 |
| MSH3 | -0.240573146 | 3.81746298 | -3.457678866 | 0.000638 | 0.00114 | -1.50185059 |
| GNE | -0.271901986 | 3.4189628 | -3.457152305 | 0.000639 | 0.00114 | -1.50358926 |
| FAM20B | -0.234265443 | 5.00925604 | -3.456941019 | 0.000639 | 0.00114 | -1.50428685 |

| | | | | | | |
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| MTRNR2 | 0.146752463 | 0.38174298 | 3.456828086 | 0.00064 | 0.00114 | -1.50465969 |
| ST20-MT | -0.114628705 | 0.40107034 | -3.456676662 | 0.00064 | 0.00115 | -1.5051596 |
| PVR | -0.236740045 | 4.47154552 | -3.456641193 | 0.00064 | 0.00115 | -1.50527669 |
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| RELT | 0.239936356 | 1.81071272 | 3.455765931 | 0.000642 | 0.00115 | -1.50816583 |
| GPRIN2 | -0.340488467 | 2.91400747 | -3.455764324 | 0.000642 | 0.00115 | -1.50817114 |
| GTF3C3 | -0.222692642 | 3.63567227 | -3.455677493 | 0.000642 | 0.00115 | -1.50845772 |
| ARHGEF | -0.283244026 | 4.40120596 | -3.455129698 | 0.000644 | 0.00115 | -1.51026555 |
| H3F3C | -0.147199251 | 0.8667016 | -3.454915248 | 0.000644 | 0.00115 | -1.5109732 |
| CLASP2 | -0.230185948 | 2.90381388 | -3.454509606 | 0.000645 | 0.00115 | -1.51231165 |
| IRAK2 | 0.388917309 | 3.4480877 | 3.454421641 | 0.000645 | 0.00115 | -1.51260188 |
| GYG1 | -0.215523259 | 4.92787157 | -3.454327805 | 0.000645 | 0.00115 | -1.51291148 |
| BZW1 | -0.254571197 | 4.7503028 | -3.454237135 | 0.000646 | 0.00115 | -1.51321061 |
| INAFM1 | -0.298330413 | 4.93768371 | -3.453973989 | 0.000646 | 0.00115 | -1.51407875 |
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| PLEKHF | -0.252131193 | 4.06668557 | -3.453817729 | 0.000647 | 0.00115 | -1.51459423 |
| GDPD2 | -0.063241442 | 0.21215815 | -3.453252573 | 0.000648 | 0.00116 | -1.51645844 |
| TAS1R3 | 0.377807888 | 1.47869715 | 3.452844181 | 0.000649 | 0.00116 | -1.51780537 |
| WDR6 | -0.275948511 | 6.89423872 | -3.452355586 | 0.00065 | 0.00116 | -1.51941664 |
| SLC9A8 | -0.240430456 | 3.85699862 | -3.452229426 | 0.00065 | 0.00116 | -1.51983265 |
| PRPF4B | -0.268082753 | 4.71359428 | -3.4505143 | 0.000654 | 0.00117 | -1.52548687 |
| ACSL5 | 0.454005641 | 3.96832246 | 3.449848922 | 0.000656 | 0.00117 | -1.52767972 |
| MEIOC | -0.035410194 | 0.1321608 | -3.449626199 | 0.000656 | 0.00117 | -1.52841366 |
| CYSRT1 | 0.422244247 | 3.14300471 | 3.449283956 | 0.000657 | 0.00117 | -1.52954135 |
| DOCK9 | 0.43356779 | 5.60770651 | 3.449045603 | 0.000658 | 0.00117 | -1.53032667 |
| ATN1 | -0.240053519 | 7.27041277 | -3.447568596 | 0.000661 | 0.00118 | -1.53519195 |
| SH2D1A | 0.413074218 | 1.06833717 | 3.445976453 | 0.000665 | 0.00119 | -1.54043437 |
| PPP1R1 | -0.188398269 | 4.58201326 | -3.445604173 | 0.000666 | 0.00119 | -1.54165985 |
| FBN3 | 0.534719486 | 2.70271862 | 3.445213701 | 0.000667 | 0.00119 | -1.54294509 |
| API5 | -0.234629312 | 5.93439378 | -3.444832586 | 0.000667 | 0.00119 | -1.5441994 |
| SERTAD | -0.318118006 | 5.41078758 | -3.444738116 | 0.000668 | 0.00119 | -1.5445103 |
| MUC4 | 0.184069401 | 0.30528868 | 3.444631929 | 0.000668 | 0.00119 | -1.54485975 |
| TMEM31 | -0.153632994 | 0.46530743 | -3.444276551 | 0.000669 | 0.00119 | -1.54602917 |
| ZSCAN5 | -0.034676184 | 0.07311788 | -3.443632214 | 0.00067 | 0.0012 | -1.54814919 |
| DDX3X | -0.312721049 | 6.53036349 | -3.443425193 | 0.000671 | 0.0012 | -1.54883026 |
| CREG2 | 0.046056007 | 0.11036224 | 3.442573952 | 0.000673 | 0.0012 | -1.55163033 |
| PARP4 | 0.398980069 | 5.80788748 | 3.441814761 | 0.000675 | 0.0012 | -1.55412708 |
| SYCE2 | -0.157347894 | 1.04520656 | -3.441736268 | 0.000675 | 0.0012 | -1.55438519 |
| HLA-A | 0.39040971 | 10.3698177 | 3.441263109 | 0.000676 | 0.0012 | -1.55594098 |
| UNC13C | -0.174211627 | 0.33961199 | -3.440722559 | 0.000677 | 0.00121 | -1.55771812 |

| | | | | | | |
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| IDUA | -0.310145479 | 3.50851799 | -3.440384337 | 0.000678 | 0.00121 | -1.55882994 |
| PCP2 | -0.408346462 | 2.36500308 | -3.440230236 | 0.000678 | 0.00121 | -1.55933648 |
| KDM6A | -0.326646888 | 3.78076757 | -3.43987498 | 0.000679 | 0.00121 | -1.56050415 |
| CLN8 | -0.242268035 | 3.19775232 | -3.439854008 | 0.000679 | 0.00121 | -1.56057308 |
| RPS5 | -0.262099137 | 8.61223412 | -3.438706562 | 0.000682 | 0.00121 | -1.56434377 |
| RBM15B | -0.203709348 | 5.13894226 | -3.43789741 | 0.000684 | 0.00122 | -1.56700208 |
| IL6R | 0.361295643 | 2.11362011 | 3.437138773 | 0.000686 | 0.00122 | -1.56949392 |
| APOC2 | 0.109425655 | 0.25825183 | 3.436996337 | 0.000686 | 0.00122 | -1.56996171 |
| CRTAP | -0.20842713 | 6.65351899 | -3.436696798 | 0.000687 | 0.00122 | -1.57094541 |
| TSPYL4 | -0.32340163 | 4.93500067 | -3.43631398 | 0.000688 | 0.00122 | -1.57220248 |
| GNB1 | -0.205190445 | 7.25768091 | -3.433887038 | 0.000694 | 0.00123 | -1.58016897 |
| TMEM26 | -0.237897438 | 3.3663718 | -3.433875037 | 0.000694 | 0.00123 | -1.58020835 |
| KCNB1 | -0.191925613 | 0.26863436 | -3.433840697 | 0.000694 | 0.00123 | -1.58032103 |
| VPS37A | -0.212392096 | 4.02525127 | -3.433645521 | 0.000694 | 0.00124 | -1.58096147 |
| NUDT21 | -0.275943097 | 5.3860029 | -3.433252971 | 0.000695 | 0.00124 | -1.58224946 |
| ENGASE | -0.278231466 | 3.56054908 | -3.431664712 | 0.000699 | 0.00124 | -1.58745929 |
| ARRDC5 | 0.121553074 | 0.26863432 | 3.431146395 | 0.0007 | 0.00125 | -1.58915901 |
| TMEM13 | 0.285698094 | 3.31449614 | 3.430254764 | 0.000703 | 0.00125 | -1.59208239 |
| NPFF | -0.138142303 | 0.60522557 | -3.429894107 | 0.000704 | 0.00125 | -1.59326467 |
| RAP1B | -0.189202568 | 2.76110373 | -3.42900329 | 0.000706 | 0.00125 | -1.59618441 |
| SLC38A1 | -0.284598284 | 1.0950741 | -3.4287434 | 0.000706 | 0.00126 | -1.59703609 |
| SNAPC3 | -0.198732309 | 3.87410634 | -3.428517044 | 0.000707 | 0.00126 | -1.59777783 |
| SLC9A6 | -0.220582448 | 3.89514845 | -3.427753798 | 0.000709 | 0.00126 | -1.60027857 |
| NR2C1 | -0.231954686 | 3.41876108 | -3.427662723 | 0.000709 | 0.00126 | -1.60057694 |
| ZNF665 | -0.157524679 | 1.47280452 | -3.426186991 | 0.000713 | 0.00127 | -1.60541055 |
| SP5 | -0.160405979 | 0.22350543 | -3.425774501 | 0.000714 | 0.00127 | -1.60676127 |
| AK1 | -0.325467454 | 5.45307969 | -3.425774025 | 0.000714 | 0.00127 | -1.60676283 |
| GLRX3 | -0.190559239 | 4.60106583 | -3.425629655 | 0.000714 | 0.00127 | -1.60723555 |
| LILRB2 | 0.309934335 | 1.45272309 | 3.425570815 | 0.000714 | 0.00127 | -1.6074282 |
| ACKR1 | 0.627492971 | 3.37643175 | 3.425457786 | 0.000715 | 0.00127 | -1.60779828 |
| GAPVD1 | -0.245669833 | 3.68588406 | -3.424723436 | 0.000717 | 0.00127 | -1.61020239 |
| KLHL9 | -0.260106243 | 4.69775708 | -3.424529658 | 0.000717 | 0.00127 | -1.6108367 |
| DPP7 | -0.24499141 | 7.7803882 | -3.424318863 | 0.000718 | 0.00127 | -1.61152668 |
| TNIP3 | 0.113426656 | 0.21742622 | 3.422646167 | 0.000722 | 0.00128 | -1.6170004 |
| ALKBH6 | -0.19628257 | 1.49837071 | -3.422424212 | 0.000722 | 0.00128 | -1.61772654 |
| POC1A | -0.218906765 | 2.49561193 | -3.422129356 | 0.000723 | 0.00128 | -1.61869111 |
| KRBA1 | -0.202574868 | 2.88479017 | -3.421942698 | 0.000724 | 0.00128 | -1.6193017 |
| SFR1 | -0.185967652 | 3.69240605 | -3.421936908 | 0.000724 | 0.00128 | -1.61932064 |
| NR4A1 | -0.716863414 | 5.31829129 | -3.421538035 | 0.000725 | 0.00129 | -1.6206253 |
| ASPN | 0.592016349 | 3.63168592 | 3.421245682 | 0.000725 | 0.00129 | -1.62158146 |

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| SAMHD1 | 0.364668679 | 5.04104941 | 3.420677156 | 0.000727 | 0.00129 | -1.62344065 |
| TSHZ1 | -0.254545701 | 3.53094224 | -3.420362946 | 0.000728 | 0.00129 | -1.62446806 |
| IL21R | 0.351367955 | 1.21364292 | 3.419865473 | 0.000729 | 0.00129 | -1.62609453 |
| ANKRD2 | -0.024155024 | 0.03723525 | -3.419436635 | 0.00073 | 0.00129 | -1.62749642 |
| TMEM91 | -0.337510405 | 3.12669608 | -3.418549073 | 0.000732 | 0.0013 | -1.6303974 |
| SLFN12L | 0.168315336 | 0.49039713 | 3.417745407 | 0.000734 | 0.0013 | -1.63302357 |
| STAP1 | 0.338415335 | 0.6350249 | 3.417729512 | 0.000734 | 0.0013 | -1.6330755 |
| CDA | -0.387783559 | 3.89594685 | -3.417535037 | 0.000735 | 0.0013 | -1.63371091 |
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| CYP8B1 | -0.036332491 | 0.07767042 | -3.415952328 | 0.000739 | 0.00131 | -1.63888086 |
| SH3PXD | 0.292272192 | 3.29481885 | 3.415247445 | 0.000741 | 0.00131 | -1.64118267 |
| ERCC4 | -0.216968844 | 2.01522289 | -3.415030007 | 0.000741 | 0.00131 | -1.64189263 |
| ADAM9 | -0.391929928 | 5.30354335 | -3.414463441 | 0.000743 | 0.00132 | -1.64374234 |
| ERVMER | -0.201773688 | 0.46790147 | -3.414284373 | 0.000743 | 0.00132 | -1.64432689 |
| FAM71E | -0.252661327 | 3.41580267 | -3.413126985 | 0.000746 | 0.00132 | -1.64810445 |
| PIM1 | 0.377226043 | 4.37675035 | 3.412974321 | 0.000747 | 0.00132 | -1.64860264 |
| PON1 | 0.047873907 | 0.09203529 | 3.412606278 | 0.000748 | 0.00132 | -1.64980359 |
| PCGF2 | -0.23218273 | 5.9138706 | -3.412567585 | 0.000748 | 0.00132 | -1.64992984 |
| TNFRSF | 0.277235886 | 5.36424128 | 3.412190919 | 0.000749 | 0.00133 | -1.65115879 |
| PALM3 | 0.74440133 | 4.69229234 | 3.41169241 | 0.00075 | 0.00133 | -1.6527851 |
| RPS3 | -0.243697028 | 8.89952872 | -3.411304803 | 0.000751 | 0.00133 | -1.65404945 |
| PCLAF | -0.302415577 | 2.43463555 | -3.411263362 | 0.000751 | 0.00133 | -1.65418462 |
| ATP1B1 | -0.308926074 | 9.22477933 | -3.410894488 | 0.000752 | 0.00133 | -1.65538773 |
| ORC3 | -0.20555008 | 4.49325214 | -3.410874491 | 0.000752 | 0.00133 | -1.65545294 |
| MMP8 | 0.051480153 | 0.04944409 | 3.410484042 | 0.000753 | 0.00133 | -1.65672629 |
| CD180 | 0.351702895 | 1.08861633 | 3.410399073 | 0.000753 | 0.00133 | -1.65700337 |
| TOR1AIF | -0.280078024 | 4.95724486 | -3.410152755 | 0.000754 | 0.00133 | -1.65780658 |
| VSIG2 | -0.558567818 | 6.25348937 | -3.41004471 | 0.000754 | 0.00133 | -1.65815889 |
| RGS9 | -0.252491598 | 0.88603821 | -3.409535946 | 0.000756 | 0.00134 | -1.65981769 |
| CRYBB2 | -0.239960228 | 0.90610998 | -3.409437925 | 0.000756 | 0.00134 | -1.66013725 |
| CPNE7 | 0.212504259 | 0.50944427 | 3.409129586 | 0.000757 | 0.00134 | -1.66114244 |
| PIK3IP1 | -0.286871883 | 6.39896597 | -3.407871544 | 0.00076 | 0.00134 | -1.66524281 |
| NEU3 | -0.203652986 | 2.62039269 | -3.40719294 | 0.000762 | 0.00135 | -1.66745402 |
| HDAC5 | -0.207197594 | 5.36627806 | -3.40716399 | 0.000762 | 0.00135 | -1.66754835 |
| ANG | 0.384175082 | 3.12454589 | 3.406900595 | 0.000763 | 0.00135 | -1.6684065 |
| SIGLEC1 | 0.375228801 | 1.62342007 | 3.406411429 | 0.000764 | 0.00135 | -1.67000006 |
| POU2F2 | 0.320427862 | 1.15818645 | 3.405414849 | 0.000767 | 0.00135 | -1.67324599 |
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| Gene | | | | | | |
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| DUSP3 | -0.222016597 | 5.71519349 | -3.40478272 | 0.000768 | 0.00136 | -1.67530442 |
| TMEM22 | -0.287050846 | 1.62701241 | -3.404492274 | 0.000769 | 0.00136 | -1.6762501 |
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| RBM26 | -0.220726087 | 4.10021753 | -3.402698743 | 0.000774 | 0.00137 | -1.68208812 |
| C1QL4 | -0.5673438 | 2.55629257 | -3.402245955 | 0.000775 | 0.00137 | -1.68356152 |
| GPR157 | -0.257186452 | 2.95247484 | -3.402238546 | 0.000775 | 0.00137 | -1.68358562 |
| UTP18 | -0.252385042 | 5.46244328 | -3.402073654 | 0.000776 | 0.00137 | -1.68412215 |
| NUDT11 | 0.576617903 | 2.05153615 | 3.401711017 | 0.000777 | 0.00137 | -1.68530201 |
| OBP2A | 0.25360217 | 0.297076 | 3.401443345 | 0.000777 | 0.00137 | -1.68617282 |
| ARHGAP | -0.27697078 | 3.61592866 | -3.401333929 | 0.000778 | 0.00137 | -1.68652876 |
| C8orf34 | 0.054230018 | 0.14125648 | 3.401332188 | 0.000778 | 0.00137 | -1.68653442 |
| KIF24 | -0.182580982 | 1.52759221 | -3.400863656 | 0.000779 | 0.00137 | -1.68805849 |
| GTPBP3 | -0.180760109 | 3.09470357 | -3.400530334 | 0.00078 | 0.00138 | -1.68914263 |
| BCO1 | -0.096348427 | 0.12379854 | -3.39973631 | 0.000782 | 0.00138 | -1.69172481 |
| HDAC9 | -0.389285931 | 1.93871975 | -3.399503202 | 0.000783 | 0.00138 | -1.69248277 |
| NECAP2 | -0.196289081 | 5.24683018 | -3.397905176 | 0.000787 | 0.00139 | -1.69767759 |
| LIPN | 0.06929533 | 0.10167552 | 3.397396221 | 0.000789 | 0.00139 | -1.69933161 |
| APOBEC | 0.330190205 | 1.93322287 | 3.397382952 | 0.000789 | 0.00139 | -1.69937473 |
| ARMCX2 | -0.331764353 | 6.98241077 | -3.396185659 | 0.000792 | 0.0014 | -1.70326485 |
| FCRL2 | 0.221978043 | 0.27123673 | 3.396159394 | 0.000792 | 0.0014 | -1.70335017 |
| USPL1 | -0.235152091 | 3.59953748 | -3.395757671 | 0.000793 | 0.0014 | -1.70465511 |
| ANKRD3 | 0.101936 | 0.45267046 | 3.394899603 | 0.000795 | 0.0014 | -1.70744197 |
| VAT1L | 0.607063218 | 2.1241148 | 3.394150765 | 0.000798 | 0.00141 | -1.70987353 |
| KPNB1 | -0.207466281 | 6.2210157 | -3.394067804 | 0.000798 | 0.00141 | -1.71014288 |
| PIP4P2 | -0.270185795 | 3.01324624 | -3.393899111 | 0.000798 | 0.00141 | -1.71069057 |
| HIST1H4 | -0.180472803 | 0.36488429 | -3.393839273 | 0.000798 | 0.00141 | -1.71088484 |
| LAG3 | 0.466212162 | 1.57686469 | 3.393529086 | 0.000799 | 0.00141 | -1.71189182 |
| RBMS3 | -0.277970855 | 4.1049588 | -3.393473238 | 0.000799 | 0.00141 | -1.71207312 |
| TTC29 | -0.105832715 | 0.09443605 | -3.39333394 | 0.0008 | 0.00141 | -1.7125253 |
| SCAF1 | -0.198554686 | 5.94282154 | -3.392848459 | 0.000801 | 0.00141 | -1.7141011 |
| FSD1L | -0.189613418 | 1.47841213 | -3.392521451 | 0.000802 | 0.00141 | -1.71516241 |
| MID1IP1 | -0.275774154 | 4.70761389 | -3.391357121 | 0.000805 | 0.00142 | -1.7189405 |
| PCGF6 | -0.166650154 | 2.69488025 | -3.390894823 | 0.000807 | 0.00142 | -1.72044026 |
| SLC52A1 | -0.306012018 | 0.94484712 | -3.390623688 | 0.000807 | 0.00142 | -1.72131977 |
| UTP14A | -0.192209577 | 4.04240405 | -3.390466058 | 0.000808 | 0.00142 | -1.72183107 |
| TMEM30 | -0.424077182 | 6.66965378 | -3.389601802 | 0.00081 | 0.00143 | -1.72463401 |
| ATP8B4 | 0.135637478 | 0.63597597 | 3.389437731 | 0.000811 | 0.00143 | -1.72516606 |
| TRAF3IP | 0.329189955 | 1.07266507 | 3.388272289 | 0.000814 | 0.00143 | -1.72894461 |
| PNMA8B | -0.32306633 | 1.48005577 | -3.387880459 | 0.000815 | 0.00143 | -1.73021471 |

| | | | | | | |
|---|---|---|---|---|---|---|
| ATR | -0.218648125 | 2.89875474 | -3.386880854 | 0.000818 | 0.00144 | -1.73345431 |
| CLU | 0.761720672 | 10.7478948 | 3.386682867 | 0.000819 | 0.00144 | -1.73409586 |
| FAM171/ | -0.492077984 | 3.54459761 | -3.386673325 | 0.000819 | 0.00144 | -1.73412677 |
| MTCP1 | -0.14511156 | 1.07278854 | -3.386147499 | 0.00082 | 0.00144 | -1.73583046 |
| SLC39A4 | -0.386605322 | 3.71550116 | -3.38420646 | 0.000826 | 0.00145 | -1.74211738 |
| LRRC3C | -0.070129591 | 0.13600285 | -3.384127715 | 0.000826 | 0.00145 | -1.74237236 |
| CXCR2 | 0.12215382 | 0.36481782 | 3.384002479 | 0.000826 | 0.00145 | -1.74277787 |
| RFK | -0.265751641 | 4.84706759 | -3.383630595 | 0.000827 | 0.00145 | -1.74398194 |
| TMEM30 | -0.284010109 | 7.18245777 | -3.382912759 | 0.000829 | 0.00146 | -1.74630578 |
| CYP4F1 | -0.13214383 | 0.27809894 | -3.382853902 | 0.00083 | 0.00146 | -1.74649629 |
| HECTD1 | -0.300029046 | 5.20012497 | -3.381479749 | 0.000834 | 0.00147 | -1.75094348 |
| TEDC2 | -0.228716229 | 1.68714981 | -3.38125642 | 0.000834 | 0.00147 | -1.75166609 |
| ATP2C1 | -0.263555059 | 5.08656957 | -3.381048189 | 0.000835 | 0.00147 | -1.7523398 |
| CBX5 | -0.24876716 | 5.04418489 | -3.37996549 | 0.000838 | 0.00147 | -1.75584218 |
| ACOX1 | -0.218716784 | 4.96402871 | -3.379815755 | 0.000838 | 0.00147 | -1.75632647 |
| NR5A2 | -0.222383705 | 0.8620114 | -3.379425831 | 0.00084 | 0.00147 | -1.75758752 |
| ATP8A2 | -0.207916823 | 0.52953219 | -3.378771171 | 0.000842 | 0.00148 | -1.75970445 |
| ATP2B4 | 0.323934467 | 5.08510337 | 3.37866185 | 0.000842 | 0.00148 | -1.76005792 |
| ACOT7 | 0.296167916 | 3.51659465 | 3.378596375 | 0.000842 | 0.00148 | -1.76026961 |
| SF3A1 | -0.296146664 | 6.11552519 | -3.378568685 | 0.000842 | 0.00148 | -1.76035914 |
| CPZ | 0.291678306 | 0.92953765 | 3.378426579 | 0.000843 | 0.00148 | -1.76081858 |
| SOAT2 | 0.12958953 | 0.2979694 | 3.377714338 | 0.000845 | 0.00148 | -1.76312106 |
| DGKA | 0.291825639 | 2.45520211 | 3.37653772 | 0.000848 | 0.00149 | -1.76692378 |
| ZNF891 | -0.136673832 | 0.96230488 | -3.376245943 | 0.000849 | 0.00149 | -1.76786658 |
| SIT1 | 0.473365763 | 1.60778871 | 3.374478603 | 0.000854 | 0.0015 | -1.77357573 |
| LZTR1 | -0.187330695 | 4.067143 | -3.374340644 | 0.000855 | 0.0015 | -1.77402127 |
| HTR1D | 0.179026668 | 0.39265378 | 3.37431261 | 0.000855 | 0.0015 | -1.7741118 |
| TDRD7 | -0.214201354 | 3.83349609 | -3.374311784 | 0.000855 | 0.0015 | -1.77411447 |
| GDF1 | 0.287918874 | 1.37831881 | 3.374287176 | 0.000855 | 0.0015 | -1.77419394 |
| CERS1 | 0.287918874 | 1.37831881 | 3.374287176 | 0.000855 | 0.0015 | -1.77419394 |
| RBMXL1 | -0.248709076 | 3.36723399 | -3.374272906 | 0.000855 | 0.0015 | -1.77424002 |
| SDR9C7 | -0.056589062 | 0.08397569 | -3.373584342 | 0.000857 | 0.0015 | -1.77646347 |
| AMN | -0.155083501 | 0.37660578 | -3.37257853 | 0.00086 | 0.00151 | -1.77971059 |
| PKN3 | -0.221183197 | 3.42423464 | -3.372272507 | 0.000861 | 0.00151 | -1.78069837 |
| IL10 | 0.178327974 | 0.45213586 | 3.372153605 | 0.000861 | 0.00151 | -1.78108214 |
| SULF1 | 0.606173786 | 4.47850509 | 3.371772921 | 0.000862 | 0.00151 | -1.78231075 |
| ZNF708 | -0.238131974 | 2.5856001 | -3.370942588 | 0.000865 | 0.00152 | -1.78499011 |
| VSIG4 | 0.456730186 | 3.68624831 | 3.370420631 | 0.000866 | 0.00152 | -1.78667409 |
| CLPX | -0.235883587 | 4.87611703 | -3.369326754 | 0.00087 | 0.00152 | -1.79020244 |
| PLAAT4 | 0.521861998 | 6.17201713 | 3.368992314 | 0.000871 | 0.00153 | -1.79128099 |

| | | | | | |
|---|---|---|---|---|---|
| PAFAH1I | -0.226728541 | 5.63409959 | -3.36897123 | 0.000871 | 0.00153 | -1.79134898 |
| KRAS | -0.217586771 | 3.79127098 | -3.368384347 | 0.000872 | 0.00153 | -1.79324139 |
| ARSA | -0.267744278 | 5.84368498 | -3.368148588 | 0.000873 | 0.00153 | -1.79400151 |
| ARHGAF | 0.257882039 | 2.31837832 | 3.368084394 | 0.000873 | 0.00153 | -1.79420847 |
| WNT5B | 0.356963505 | 1.95184396 | 3.367862142 | 0.000874 | 0.00153 | -1.79492499 |
| SIK1B | 0.46946984 | 1.9450851 | 3.366717917 | 0.000878 | 0.00154 | -1.79861316 |
| EHMT2 | -0.206158911 | 4.91554503 | -3.366451855 | 0.000878 | 0.00154 | -1.79947059 |
| ANO7 | -0.167720141 | 1.18242186 | -3.364775312 | 0.000883 | 0.00155 | -1.80487211 |
| HLA-DRE | 0.688384932 | 7.30950808 | 3.364356947 | 0.000885 | 0.00155 | -1.80621963 |
| RGL4 | 0.177988884 | 0.78425218 | 3.363970845 | 0.000886 | 0.00155 | -1.80746309 |
| LRRC29 | -0.235608243 | 3.48405006 | -3.363867062 | 0.000886 | 0.00155 | -1.80779731 |
| DNAJB1 | -0.251531357 | 3.54465683 | -3.363068598 | 0.000889 | 0.00156 | -1.81036832 |
| SLC38A3 | -0.494363409 | 1.64887821 | -3.362893922 | 0.000889 | 0.00156 | -1.81093069 |
| TRAT1 | 0.305798885 | 0.5921622 | 3.362366373 | 0.000891 | 0.00156 | -1.81262898 |
| SCNN1G | -0.523648223 | 3.50633963 | -3.362243326 | 0.000891 | 0.00156 | -1.81302506 |
| PSMB9 | 0.486943112 | 4.72493601 | 3.362220136 | 0.000891 | 0.00156 | -1.81309971 |
| PCSK6 | -0.132770956 | 0.30342196 | -3.362059524 | 0.000892 | 0.00156 | -1.81361668 |
| UBR2 | -0.22624758 | 4.37631149 | -3.361820744 | 0.000893 | 0.00156 | -1.81438522 |
| UBXN2B | -0.268231969 | 4.3165395 | -3.361670127 | 0.000893 | 0.00156 | -1.81486997 |
| MYO6 | 0.304620842 | 5.05301539 | 3.360583401 | 0.000896 | 0.00157 | -1.81836694 |
| CPN2 | 0.040725901 | 0.05811922 | 3.360383131 | 0.000897 | 0.00157 | -1.81901127 |
| TANC2 | 0.237094704 | 1.98083134 | 3.35918711 | 0.000901 | 0.00157 | -1.82285853 |
| DACT3 | -0.25418692 | 1.43446538 | -3.35794242 | 0.000905 | 0.00158 | -1.82686102 |
| VCAM1 | 0.424247917 | 2.46620958 | 3.357616536 | 0.000906 | 0.00158 | -1.82790872 |
| THEMIS | 0.24722003 | 0.63014123 | 3.357338352 | 0.000907 | 0.00158 | -1.828803 |
| NUP85 | -0.180718935 | 4.02989556 | -3.357096484 | 0.000907 | 0.00159 | -1.82958048 |
| FCRLA | 0.424411181 | 0.62410193 | 3.357027096 | 0.000907 | 0.00159 | -1.82980351 |
| DCBLD2 | 0.314894922 | 4.89995682 | 3.356108757 | 0.00091 | 0.00159 | -1.83275496 |
| INSYN1 | -0.233441455 | 0.58407131 | -3.355570093 | 0.000912 | 0.00159 | -1.83448582 |
| GAS2L3 | 0.15318642 | 0.8684207 | 3.355022497 | 0.000914 | 0.0016 | -1.83624513 |
| IMPG1 | 0.104124651 | 0.36336073 | 3.353980696 | 0.000917 | 0.0016 | -1.83959149 |
| FCRL6 | 0.24891087 | 0.88322854 | 3.353884213 | 0.000917 | 0.0016 | -1.83990135 |
| DOCK3 | 0.355352705 | 4.35683973 | 3.352804276 | 0.000921 | 0.00161 | -1.84336911 |
| ZNF98 | -0.177759126 | 0.83543487 | -3.3524952 | 0.000922 | 0.00161 | -1.84436138 |
| MSH6 | -0.233779028 | 3.80208816 | -3.352131071 | 0.000923 | 0.00161 | -1.8455303 |
| CNTD1 | -0.122948521 | 0.77416315 | -3.351833908 | 0.000924 | 0.00161 | -1.84648415 |
| MEF2D | -0.226435989 | 5.27673408 | -3.351097046 | 0.000926 | 0.00162 | -1.84884906 |
| ULBP3 | -0.465549231 | 3.0748957 | -3.349724703 | 0.000931 | 0.00162 | -1.85325222 |
| FADS6 | -0.09465344 | 0.09540216 | -3.349665144 | 0.000931 | 0.00162 | -1.85344328 |
| ZNF562 | -0.178220372 | 2.65231825 | -3.349278549 | 0.000932 | 0.00163 | -1.85468335 |

| GFRA2 | -0.565109032 | 3.77307642 | -3.349019515 | 0.000933 | 0.00163 | -1.85551417 |
|---|---|---|---|---|---|---|
| SMCO3 | -0.297662708 | 0.64690587 | -3.34893692 | 0.000933 | 0.00163 | -1.85577908 |
| FAM172/ | -0.245293543 | 4.21104254 | -3.348466442 | 0.000935 | 0.00163 | -1.8572879 |
| LGALS3E | -0.339845796 | 8.86844393 | -3.347564665 | 0.000938 | 0.00164 | -1.86017936 |
| WNK4 | -0.082637403 | 0.21137319 | -3.346953938 | 0.00094 | 0.00164 | -1.86213718 |
| CLDN11 | 0.305153425 | 1.17668426 | 3.346951268 | 0.00094 | 0.00164 | -1.86214574 |
| EXOC4 | -0.228839055 | 4.76034234 | -3.346741312 | 0.00094 | 0.00164 | -1.86281873 |
| INCENP | -0.32915194 | 3.40498227 | -3.346172438 | 0.000942 | 0.00164 | -1.86464199 |
| ZNF761 | -0.213618793 | 3.00563113 | -3.345934427 | 0.000943 | 0.00164 | -1.86540474 |
| HSP90A/ | -0.275217816 | 8.51105485 | -3.3458959 | 0.000943 | 0.00164 | -1.8655282 |
| POLD3 | -0.211117395 | 3.30902843 | -3.344984668 | 0.000946 | 0.00165 | -1.86844791 |
| AEBP1 | 0.5228636 | 5.91008911 | 3.344431152 | 0.000948 | 0.00165 | -1.8702211 |
| HIST1H2 | -0.413124223 | 2.5027641 | -3.343637395 | 0.00095 | 0.00166 | -1.87276343 |
| LGI4 | -0.291012483 | 1.5142004 | -3.342932552 | 0.000953 | 0.00166 | -1.87502052 |
| SERPINE | 0.085180404 | 0.10009139 | 3.342826427 | 0.000953 | 0.00166 | -1.87536032 |
| ZNF205 | -0.208410479 | 4.59845709 | -3.342781169 | 0.000953 | 0.00166 | -1.87550522 |
| TUBA1B | -0.353335747 | 6.3842673 | -3.342186908 | 0.000955 | 0.00166 | -1.87740778 |
| RPS20 | -0.235189276 | 9.73198742 | -3.342096436 | 0.000956 | 0.00166 | -1.8776974 |
| CARD14 | -0.155638699 | 0.44550707 | -3.341914144 | 0.000956 | 0.00167 | -1.87828094 |
| IL24 | 0.318124245 | 1.45611144 | 3.341825314 | 0.000956 | 0.00167 | -1.87856529 |
| MLXIP | -0.262002891 | 4.88541674 | -3.341514171 | 0.000957 | 0.00167 | -1.8795612 |
| PLPPR4 | 0.223302232 | 0.91825536 | 3.341431925 | 0.000958 | 0.00167 | -1.87982444 |
| NCOA4 | -0.290718167 | 7.02939073 | -3.340563392 | 0.000961 | 0.00167 | -1.88260396 |
| CLEC16/ | 0.239822117 | 3.87553875 | 3.340357764 | 0.000961 | 0.00167 | -1.88326192 |
| MAP1LC | -0.145893501 | 1.70768028 | -3.340201135 | 0.000962 | 0.00167 | -1.88376308 |
| APC | -0.264772738 | 2.78043218 | -3.339084242 | 0.000966 | 0.00168 | -1.88733608 |
| WHAMM | -0.197123719 | 3.73675858 | -3.338324366 | 0.000968 | 0.00168 | -1.88976633 |
| ZNF276 | -0.199697606 | 2.85347516 | -3.338129067 | 0.000969 | 0.00169 | -1.89039086 |
| SIRPD | 0.033331044 | 0.04972375 | 3.337910393 | 0.000969 | 0.00169 | -1.8910901 |
| ZMYM4 | -0.234166584 | 4.64726846 | -3.337733455 | 0.00097 | 0.00169 | -1.89165585 |
| ACSS3 | -0.31703077 | 3.06070297 | -3.337704387 | 0.00097 | 0.00169 | -1.89174879 |
| PLA2G6 | -0.369587584 | 3.44594576 | -3.337216364 | 0.000972 | 0.00169 | -1.89330907 |
| GPRASP | -0.360745589 | 4.44823593 | -3.336567401 | 0.000974 | 0.00169 | -1.89538357 |
| CDRT1 | -0.104663496 | 0.13485929 | -3.336099863 | 0.000976 | 0.0017 | -1.89687789 |
| PREX1 | -0.265615581 | 4.46419663 | -3.335754488 | 0.000977 | 0.0017 | -1.89798164 |
| KATNBL | -0.182651988 | 2.92115845 | -3.335492437 | 0.000978 | 0.0017 | -1.89881903 |
| SLX4 | -0.175809724 | 1.90388128 | -3.335200147 | 0.000979 | 0.0017 | -1.89975298 |
| OR2A1 | -0.08610086 | 0.18111147 | -3.334664512 | 0.00098 | 0.0017 | -1.90146429 |
| EFEMP1 | -0.579527717 | 5.25764483 | -3.334301351 | 0.000982 | 0.00171 | -1.90262441 |
| SNX18 | -0.300682709 | 5.11093078 | -3.333942923 | 0.000983 | 0.00171 | -1.90376931 |

| PBX2 | -0.252923738 | 5.81298895 | -3.33191015 | 0.00099 | 0.00172 | -1.91026027 |
|------|--------------|------------|-------------|---------|---------|-------------|
| GPR161 | 0.290523106 | 1.92233351 | 3.331890865 | 0.00099 | 0.00172 | -1.91032183 |
| ZNF567 | -0.20767173 | 2.3990042 | -3.33169318 | 0.00099 | 0.00172 | -1.91095288 |
| CD163 | 0.49433347 | 3.29843473 | 3.331605001 | 0.000991 | 0.00172 | -1.91123434 |
| GRTP1 | -0.293771556 | 2.12871491 | -3.33085717 | 0.000993 | 0.00173 | -1.91362117 |
| CMTR2 | -0.275848509 | 3.65320461 | -3.329475799 | 0.000998 | 0.00173 | -1.91802876 |
| RUNX3 | 0.432076241 | 1.84155093 | 3.329424971 | 0.000998 | 0.00173 | -1.91819091 |
| RENBP | 0.496479806 | 4.07055176 | 3.329067034 | 0.000999 | 0.00174 | -1.9193327 |
| CBR3 | 0.420433774 | 3.36302838 | 3.327521031 | 0.001005 | 0.00174 | -1.92426304 |
| SLC39A1 | -0.198146554 | 0.20053458 | -3.327246328 | 0.001006 | 0.00175 | -1.92513887 |
| PSMB8 | 0.344190254 | 6.73043002 | 3.327132106 | 0.001006 | 0.00175 | -1.92550302 |
| GTDC1 | -0.187191191 | 2.5389903 | -3.327115463 | 0.001006 | 0.00175 | -1.92555608 |
| ZNF7 | -0.183796477 | 2.71447043 | -3.326452115 | 0.001008 | 0.00175 | -1.92767068 |
| MSH4 | 0.066455997 | 0.15704865 | 3.326345734 | 0.001009 | 0.00175 | -1.92800976 |
| RBM24 | -0.210536265 | 0.54458409 | -3.326231022 | 0.001009 | 0.00175 | -1.92837539 |
| MFSD14 | -0.217129462 | 2.51081078 | -3.325920333 | 0.00101 | 0.00175 | -1.92936559 |
| ZNF426 | -0.204749705 | 3.22693974 | -3.325741892 | 0.001011 | 0.00175 | -1.92993427 |
| CARMIL2 | 0.266129745 | 0.64547739 | 3.32557679 | 0.001011 | 0.00175 | -1.93046041 |
| PMEPA1 | 0.30344285 | 4.99818538 | 3.325391683 | 0.001012 | 0.00176 | -1.93105028 |
| DCAF7 | -0.261200294 | 5.73130368 | -3.325120386 | 0.001013 | 0.00176 | -1.93191475 |
| FIGN | 0.159479355 | 0.69348814 | 3.324902468 | 0.001014 | 0.00176 | -1.93260908 |
| TOP2B | -0.284507471 | 6.49582795 | -3.324561514 | 0.001015 | 0.00176 | -1.93369534 |
| GSTT2B | -0.440699394 | 2.51091912 | -3.323720181 | 0.001018 | 0.00177 | -1.93637536 |
| ZNF184 | -0.240703413 | 3.27339891 | -3.322960166 | 0.001021 | 0.00177 | -1.93879581 |
| SMIM10L | -0.258346671 | 1.78496655 | -3.322521394 | 0.001022 | 0.00177 | -1.94019295 |
| EMX1 | -0.086938639 | 0.06835357 | -3.322343034 | 0.001023 | 0.00177 | -1.94076084 |
| AFF1 | -0.344615053 | 6.32058083 | -3.320565834 | 0.001029 | 0.00178 | -1.9464178 |
| ZNF443 | -0.183748511 | 2.23334039 | -3.320471427 | 0.001029 | 0.00178 | -1.94671823 |
| ZNF557 | -0.183369016 | 2.37628609 | -3.319766639 | 0.001032 | 0.00179 | -1.9489608 |
| RPGRIP1 | -0.180847127 | 1.66835274 | -3.319685464 | 0.001032 | 0.00179 | -1.94921906 |
| MLPH | 0.479356259 | 4.38878341 | 3.319222704 | 0.001034 | 0.00179 | -1.95069125 |
| ZC3H11A | -0.254663243 | 5.21068301 | -3.318774507 | 0.001035 | 0.00179 | -1.95211693 |
| GSDME | -0.288619502 | 3.09806778 | -3.318266542 | 0.001037 | 0.0018 | -1.95373251 |
| OMD | 0.52350256 | 1.40863828 | 3.317321324 | 0.001041 | 0.0018 | -1.95673818 |
| STX1A | -0.156882538 | 1.66083262 | -3.317161133 | 0.001041 | 0.0018 | -1.95724748 |
| CTNNA3 | -0.054451304 | 0.10095311 | -3.316624864 | 0.001043 | 0.00181 | -1.95895232 |
| KLF16 | 0.262835914 | 3.81730541 | 3.315728069 | 0.001046 | 0.00181 | -1.96180273 |
| IKBIP | -0.261246982 | 4.06014699 | -3.3153061 | 0.001048 | 0.00181 | -1.96314369 |
| EFHD1 | -0.400662865 | 4.10566561 | -3.314590039 | 0.00105 | 0.00182 | -1.96541887 |
| RASA3 | -0.284668603 | 4.66951396 | -3.314379155 | 0.001051 | 0.00182 | -1.96608884 |

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| MTMR6 | -0.265813024 | 4.26310935 | -3.314378368 | 0.001051 | 0.00182 | -1.96609134 |
| CDH23 | 0.114285205 | 0.51746016 | 3.314259544 | 0.001052 | 0.00182 | -1.96646882 |
| RASSF6 | -0.399254709 | 1.03812242 | -3.313769375 | 0.001053 | 0.00182 | -1.96802586 |
| ZNF692 | -0.297778509 | 3.975256 | -3.313721887 | 0.001054 | 0.00182 | -1.9681767 |
| SWT1 | -0.190678997 | 2.40623829 | -3.313559894 | 0.001054 | 0.00182 | -1.96869122 |
| LIX1 | -0.673785422 | 1.89153241 | -3.313460268 | 0.001054 | 0.00182 | -1.96900764 |
| TMEM53 | -0.179230132 | 3.44232942 | -3.313428549 | 0.001055 | 0.00182 | -1.96910838 |
| NRSN1 | -0.285205451 | 0.44811044 | -3.31266557 | 0.001057 | 0.00183 | -1.97153136 |
| RNF126 | -0.192731991 | 4.37261471 | -3.31208624 | 0.001059 | 0.00183 | -1.97337079 |
| ARHGAP | 0.225578036 | 2.78375583 | 3.311730807 | 0.001061 | 0.00183 | -1.97449918 |
| MAP3K1 | 0.355554942 | 5.49557863 | 3.311616011 | 0.001061 | 0.00183 | -1.9748636 |
| ABHD18 | -0.190942496 | 2.67803519 | -3.311357848 | 0.001062 | 0.00184 | -1.97568309 |
| GALR2 | 0.185845674 | 0.56582912 | 3.310409999 | 0.001066 | 0.00184 | -1.97869136 |
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| GTF2A1 | -0.306420661 | 5.10295939 | -3.310287002 | 0.001066 | 0.00184 | -1.97908167 |
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| SSTR1 | -0.13659874 | 0.41568944 | -3.308820803 | 0.001071 | 0.00185 | -1.98373335 |
| LDOC1 | -0.292967513 | 7.79377025 | -3.308741174 | 0.001072 | 0.00185 | -1.98398593 |
| SARM1 | -0.194465299 | 1.7461469 | -3.307965914 | 0.001074 | 0.00186 | -1.98644471 |
| LRRC9 | -0.039467512 | 0.04826085 | -3.30736491 | 0.001077 | 0.00186 | -1.98835047 |
| BPIFB1 | 0.222933991 | 0.28898991 | 3.306619317 | 0.001079 | 0.00186 | -1.99071427 |
| CALR3 | -0.036859752 | 0.07028895 | -3.306412119 | 0.00108 | 0.00187 | -1.99137107 |
| PAH | -0.116319697 | 0.24777682 | -3.305576519 | 0.001083 | 0.00187 | -1.99401949 |
| SEC61A2 | -0.197895186 | 2.489974 | -3.305575246 | 0.001083 | 0.00187 | -1.99402353 |
| FGFR1 | -0.3404305 | 3.49894991 | -3.305309723 | 0.001084 | 0.00187 | -1.99486497 |
| FAM43A | 0.481176686 | 5.05347745 | 3.30517326 | 0.001085 | 0.00187 | -1.9952974 |
| EPHA8 | -0.050797297 | 0.05045109 | -3.304948402 | 0.001086 | 0.00187 | -1.99600989 |
| MMP3 | 0.220344183 | 0.23199941 | 3.304558713 | 0.001087 | 0.00188 | -1.99724458 |
| MCM3AF | -0.235898845 | 4.43192251 | -3.304436453 | 0.001088 | 0.00188 | -1.99763192 |
| NT5DC3 | 0.291091059 | 2.07962028 | 3.304262033 | 0.001088 | 0.00188 | -1.99818449 |
| MTG1 | -0.207775039 | 2.37287199 | -3.303785241 | 0.00109 | 0.00188 | -1.99969485 |
| EXOSC8 | -0.192387554 | 3.96486731 | -3.30341701 | 0.001091 | 0.00188 | -2.00086117 |
| FAM83E | 0.255481238 | 0.34994047 | 3.303338657 | 0.001092 | 0.00188 | -2.00110933 |
| ZNF577 | -0.250124918 | 2.81489647 | -3.302413058 | 0.001095 | 0.00189 | -2.00404046 |
| CPNE8 | -0.245906222 | 2.66260325 | -3.302095377 | 0.001096 | 0.00189 | -2.0050463 |
| VWA2 | 0.293790371 | 1.43610049 | 3.301992915 | 0.001097 | 0.00189 | -2.0053707 |
| FAM133A | -0.144122324 | 0.34888108 | -3.300791942 | 0.001101 | 0.0019 | -2.0091723 |
| VWA8 | -0.246628214 | 3.46638327 | -3.300257672 | 0.001103 | 0.0019 | -2.01086309 |
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| NFKB1 | -0.2850998 | 4.76378383 | -3.297850739 | 0.001112 | 0.00192 | -2.01847712 |
| SLC25A3 | -0.279710276 | 2.93325887 | -3.297747904 | 0.001113 | 0.00192 | -2.01880231 |
| C2orf50 | -0.077784166 | 0.24400893 | -3.297468182 | 0.001114 | 0.00192 | -2.01968682 |
| INPP5K | -0.2268894 | 5.68181056 | -3.297185956 | 0.001115 | 0.00192 | -2.02057918 |
| PSEN1 | -0.202393729 | 4.81817505 | -3.295887102 | 0.00112 | 0.00193 | -2.02468506 |
| COTL1 | -0.269780267 | 5.32481618 | -3.295642616 | 0.001121 | 0.00193 | -2.02545775 |
| KLF5 | 0.465436214 | 5.7814681 | 3.295144933 | 0.001123 | 0.00193 | -2.0270305 |
| SLC13A3 | -0.356591767 | 1.65527659 | -3.294697984 | 0.001124 | 0.00194 | -2.02844275 |
| PPP2R2B | -0.193540816 | 0.67972254 | -3.293538259 | 0.001129 | 0.00194 | -2.03210635 |
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| PITPNM1 | -0.28121269 | 4.8249937 | -3.292118986 | 0.001134 | 0.00195 | -2.03658826 |
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| EFNB2 | -0.341195778 | 4.75810205 | -3.290940972 | 0.001139 | 0.00196 | -2.04030696 |
| TAF1B | -0.244452584 | 3.50650609 | -3.290692807 | 0.00114 | 0.00196 | -2.04109019 |
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| RELL1 | 0.494703423 | 3.14921091 | 3.288592209 | 0.001148 | 0.00198 | -2.04771776 |
| ACER3 | -0.194497216 | 2.95307193 | -3.287638444 | 0.001152 | 0.00198 | -2.05072569 |
| NME2 | -0.248118257 | 5.72197312 | -3.285555339 | 0.00116 | 0.002 | -2.05729247 |
| AFAP1 | 0.334067112 | 4.1381718 | 3.285330679 | 0.001161 | 0.002 | -2.05800046 |
| WAPL | -0.241475012 | 4.59363588 | -3.285079673 | 0.001162 | 0.002 | -2.05879143 |
| RUFY1 | -0.161797195 | 5.22065988 | -3.28492094 | 0.001162 | 0.002 | -2.0592916 |
| MZT1 | -0.218253912 | 4.41974141 | -3.284794073 | 0.001163 | 0.002 | -2.05969134 |
| BBS2 | -0.217179602 | 4.35759143 | -3.283314613 | 0.001169 | 0.00201 | -2.06435187 |
| GPRC5C | -0.23916192 | 6.04119874 | -3.282231536 | 0.001173 | 0.00202 | -2.06776252 |
| USP45 | -0.177177278 | 2.09795629 | -3.281951468 | 0.001174 | 0.00202 | -2.06864429 |
| ZNF91 | -0.240164042 | 3.02621287 | -3.281058973 | 0.001178 | 0.00202 | -2.07145379 |
| NFKBIE | 0.271708954 | 4.12271892 | 3.280954517 | 0.001178 | 0.00203 | -2.07178256 |
| LEFTY1 | -0.0510361 | 0.11701248 | -3.280757354 | 0.001179 | 0.00203 | -2.0724031 |
| NBPF3 | -0.271782763 | 2.02506245 | -3.280561848 | 0.00118 | 0.00203 | -2.07301839 |
| TTC17 | -0.248841488 | 4.64771006 | -3.280524095 | 0.00118 | 0.00203 | -2.0731372 |
| SMTNL2 | -0.203978272 | 0.42568066 | -3.28040887 | 0.00118 | 0.00203 | -2.07349982 |
| CFD | -0.420440288 | 4.33066399 | -3.279597353 | 0.001184 | 0.00203 | -2.07605333 |
| DDX6 | -0.252223752 | 5.30938232 | -3.279521918 | 0.001184 | 0.00203 | -2.07629066 |
| RASL10A | -0.162629545 | 0.69755224 | -3.278938005 | 0.001186 | 0.00204 | -2.0781276 |
| HMOX1 | 0.439508958 | 4.87603689 | 3.278867228 | 0.001187 | 0.00204 | -2.07835023 |
| P2RY13 | 0.341740378 | 1.93803247 | 3.278285024 | 0.001189 | 0.00204 | -2.08018146 |
| RMC1 | -0.152904565 | 4.23360624 | -3.278215892 | 0.001189 | 0.00204 | -2.08039888 |
| VPS33A | -0.154721741 | 3.05190598 | -3.277286304 | 0.001193 | 0.00205 | -2.08332207 |
| ZNF552 | -0.175770856 | 2.23922335 | -3.276287082 | 0.001197 | 0.00206 | -2.08646338 |

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| NANOS1 | -0.376223352 | 3.54208642 | -3.275679235 | 0.0012 | 0.00206 | -2.08837387 |
| SPHKAP | -0.186377486 | 0.14650171 | -3.274461005 | 0.001205 | 0.00207 | -2.09220184 |
| SMPD3 | -0.167127112 | 0.82942137 | -3.2737451 | 0.001207 | 0.00207 | -2.09445077 |
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| COPA | -0.257039958 | 6.90943757 | -3.273054739 | 0.00121 | 0.00208 | -2.09661904 |
| STK36 | -0.261121906 | 3.60794863 | -3.272781823 | 0.001211 | 0.00208 | -2.09747609 |
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| DGKG | -0.22381729 | 0.69291152 | -3.271608754 | 0.001216 | 0.00209 | -2.10115918 |
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| HIST1H4 | -0.27019573 | 1.22965266 | -3.270152386 | 0.001222 | 0.0021 | -2.10573005 |
| BRIP1 | 0.13202798 | 0.59949638 | 3.269852367 | 0.001223 | 0.0021 | -2.10667144 |
| SCAPER | -0.281047003 | 3.12300127 | -3.269520735 | 0.001225 | 0.0021 | -2.10771193 |
| ZNF548 | -0.194321418 | 3.07869981 | -3.268887891 | 0.001228 | 0.0021 | -2.10969721 |
| FNDC10 | -0.364565112 | 5.07405555 | -3.267281245 | 0.001234 | 0.00212 | -2.11473577 |
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| BCL2L11 | -0.289282022 | 4.01527104 | -3.267238202 | 0.001234 | 0.00212 | -2.11487073 |
| TTLL5 | -0.178353555 | 2.87488016 | -3.266736552 | 0.001236 | 0.00212 | -2.11644346 |
| ORM1 | -0.348765535 | 0.84984057 | -3.266723045 | 0.001237 | 0.00212 | -2.1164858 |
| GPR174 | 0.310936218 | 0.69433104 | 3.266712086 | 0.001237 | 0.00212 | -2.11652015 |
| TIFAB | 0.127123756 | 0.19746202 | 3.266696742 | 0.001237 | 0.00212 | -2.11656825 |
| NOS1 | -0.183516857 | 0.17204207 | -3.266340406 | 0.001238 | 0.00212 | -2.11768526 |
| MITF | -0.262845271 | 3.32287216 | -3.266259944 | 0.001238 | 0.00212 | -2.11793747 |
| EPHB2 | -0.29297722 | 2.97549343 | -3.265970276 | 0.00124 | 0.00212 | -2.11884538 |
| KLHL41 | -0.263239961 | 0.86029486 | -3.265941212 | 0.00124 | 0.00212 | -2.11893648 |
| RELB | 0.280298001 | 4.22646073 | 3.265451357 | 0.001242 | 0.00213 | -2.12047167 |
| LONP2 | -0.236027634 | 5.39710739 | -3.26413463 | 0.001247 | 0.00214 | -2.1245972 |
| CHEK1 | -0.165855715 | 2.07763318 | -3.263827245 | 0.001249 | 0.00214 | -2.12556007 |
| CDK2AP | -0.254160943 | 5.3401158 | -3.262255637 | 0.001255 | 0.00215 | -2.13048176 |
| PHLDA2 | 0.528270025 | 5.37989173 | 3.260442724 | 0.001263 | 0.00216 | -2.13615641 |
| FAM186/ | -0.045980432 | 0.18891325 | -3.260227181 | 0.001264 | 0.00216 | -2.1368309 |
| GSDMC | -0.307438535 | 0.69489856 | -3.260027213 | 0.001265 | 0.00216 | -2.13745661 |
| CD4 | 0.41784594 | 4.43609446 | 3.258880839 | 0.00127 | 0.00217 | -2.14104299 |
| SPRY2 | -0.344075751 | 4.47470103 | -3.257989423 | 0.001274 | 0.00218 | -2.14383095 |
| SNTB1 | -0.296104024 | 5.70776291 | -3.257787349 | 0.001275 | 0.00218 | -2.14446285 |
| PABPC4 | 0.274271606 | 1.99101883 | 3.257765445 | 0.001275 | 0.00218 | -2.14453134 |
| GLG1 | -0.240080175 | 5.86172797 | -3.257453511 | 0.001276 | 0.00218 | -2.14550671 |
| BACH1 | 0.295963811 | 3.82255121 | 3.256937517 | 0.001278 | 0.00219 | -2.14711994 |
| DTX1 | -0.319915153 | 3.13067576 | -3.256263249 | 0.001281 | 0.00219 | -2.14922766 |
| ARMCX4 | -0.250803093 | 2.39827612 | -3.256228407 | 0.001281 | 0.00219 | -2.14933657 |
| ABHD11 | -0.188865227 | 6.33367653 | -3.256057902 | 0.001282 | 0.00219 | -2.14986948 |

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| LMX1A | -0.034583386 | 0.0472803 | -3.255531553 | 0.001284 | 0.0022 | -2.15151444 |
| ITGA6 | -0.292418457 | 5.21522919 | -3.254795701 | 0.001287 | 0.0022 | -2.15381374 |
| CYTH4 | 0.366619213 | 2.07792658 | 3.253668929 | 0.001292 | 0.00221 | -2.1573336 |
| ECEL1 | -0.446203899 | 1.46251124 | -3.253653999 | 0.001292 | 0.00221 | -2.15738023 |
| FADS3 | 0.228154474 | 2.9908129 | 3.253563455 | 0.001293 | 0.00221 | -2.15766303 |
| PPHLN1 | -0.167978653 | 3.49735717 | -3.253443789 | 0.001293 | 0.00221 | -2.15803677 |
| THOC1 | -0.217726159 | 3.16063006 | -3.253283858 | 0.001294 | 0.00221 | -2.15853625 |
| PCDH7 | -0.507241905 | 2.77658038 | -3.253131561 | 0.001295 | 0.00221 | -2.15901186 |
| CRTAM | 0.303825537 | 0.83287654 | 3.252822877 | 0.001296 | 0.00221 | -2.1599758 |
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| CD93 | -0.359891115 | 5.09049244 | -3.250559252 | 0.001306 | 0.00223 | -2.16704193 |
| ADA | -0.238818578 | 2.59105165 | -3.250364921 | 0.001307 | 0.00223 | -2.16764835 |
| CYP2R1 | -0.193086174 | 2.47530028 | -3.249486951 | 0.001311 | 0.00224 | -2.17038765 |
| MTDH | -0.285043633 | 5.78477618 | -3.249178945 | 0.001312 | 0.00224 | -2.17134848 |
| TESPA1 | 0.273488284 | 0.89045629 | 3.248316251 | 0.001316 | 0.00225 | -2.17403922 |
| AP2B1 | -0.239288963 | 6.85641402 | -3.24804716 | 0.001317 | 0.00225 | -2.17487838 |
| LAP3 | -0.306313767 | 5.85336749 | -3.247416214 | 0.00132 | 0.00225 | -2.17684574 |
| BCOR | -0.305280222 | 4.12008166 | -3.247369072 | 0.00132 | 0.00225 | -2.17699272 |
| B4GALT! | 0.35367798 | 5.16091298 | 3.247071556 | 0.001322 | 0.00226 | -2.17792027 |
| ZXDB | -0.223069857 | 2.96553136 | -3.244599949 | 0.001333 | 0.00227 | -2.18562285 |
| FNDC1 | -0.664823345 | 5.87132271 | -3.244105893 | 0.001335 | 0.00228 | -2.18716189 |
| PCDHA1 | -0.156589884 | 0.23083976 | -3.244065348 | 0.001335 | 0.00228 | -2.18728818 |
| CAMKK1 | -0.280347254 | 3.58225755 | -3.244017608 | 0.001335 | 0.00228 | -2.18743689 |
| EHBP1 | 0.305973529 | 3.98829477 | 3.242923232 | 0.00134 | 0.00229 | -2.19084514 |
| MTMR9 | -0.191705373 | 2.70171857 | -3.242527083 | 0.001342 | 0.00229 | -2.19207862 |
| PPP3CB | -0.203292467 | 5.08924414 | -3.241874708 | 0.001345 | 0.00229 | -2.1941096 |
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| SEMA6B | -0.322451542 | 3.20507891 | -3.239523408 | 0.001356 | 0.00231 | -2.20142658 |
| TXLNB | 0.162079601 | 0.33418544 | 3.23902822 | 0.001358 | 0.00231 | -2.20296692 |
| FMO3 | 0.237314993 | 1.0584336 | 3.237603495 | 0.001364 | 0.00233 | -2.2073975 |
| ARHGAF | 0.320006501 | 3.26822004 | 3.237585956 | 0.001364 | 0.00233 | -2.20745203 |
| IRF2BPL | -0.26504991 | 5.78857553 | -3.236945046 | 0.001367 | 0.00233 | -2.20944452 |
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| BCL2L13 | -0.233311469 | 4.59331054 | -3.235687217 | 0.001373 | 0.00234 | -2.21335386 |
| MSH5 | 0.141841567 | 0.69854912 | 3.235097712 | 0.001376 | 0.00234 | -2.21518557 |
| TBRG1 | -0.20336641 | 3.72718416 | -3.233693073 | 0.001382 | 0.00235 | -2.21954881 |
| SEC14L1 | -0.269999644 | 4.8965869 | -3.233677751 | 0.001382 | 0.00235 | -2.2195964 |
| HOOK1 | -0.302084224 | 4.23445947 | -3.233471581 | 0.001383 | 0.00236 | -2.22023667 |

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| PLPP7 | -0.165445742 | 0.99807367 | -3.233279808 | 0.001384 | 0.00236 | -2.22083221 |
| ELMO2 | -0.221667916 | 4.88331041 | -3.233054154 | 0.001385 | 0.00236 | -2.22153291 |
| RNASE1 | 0.11182298 | 0.28172844 | 3.232991309 | 0.001386 | 0.00236 | -2.22172805 |
| PATL2 | 0.189998477 | 0.79618557 | 3.232609576 | 0.001387 | 0.00236 | -2.2229133 |
| TCTE3 | -0.250052237 | 1.95156638 | -3.232570856 | 0.001388 | 0.00236 | -2.22303351 |
| ATF6 | -0.265873861 | 4.75862763 | -3.232207438 | 0.001389 | 0.00236 | -2.22416176 |
| CYP1A2 | -0.360529124 | 1.46137227 | -3.231206114 | 0.001394 | 0.00237 | -2.22726979 |
| C17orf67 | -0.144482901 | 1.23749155 | -3.230776737 | 0.001396 | 0.00238 | -2.22860228 |
| IQSEC2 | -0.153400731 | 3.29339213 | -3.230069942 | 0.001399 | 0.00238 | -2.23079532 |
| MICU1 | -0.15599419 | 5.28106872 | -3.229971651 | 0.0014 | 0.00238 | -2.23110026 |
| ESRP1 | -0.279141509 | 5.56449784 | -3.229910075 | 0.0014 | 0.00238 | -2.23129129 |
| YLPM1 | -0.260500964 | 4.07595347 | -3.227900247 | 0.00141 | 0.0024 | -2.23752467 |
| PUM1 | -0.242114588 | 5.66262365 | -3.227009236 | 0.001414 | 0.0024 | -2.24028696 |
| ATP9B | -0.203845186 | 2.73897303 | -3.225857047 | 0.001419 | 0.00241 | -2.24385789 |
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| KANSL1 | -0.240088211 | 3.85979496 | -3.225058527 | 0.001423 | 0.00242 | -2.24633203 |
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| MCOLN3 | 0.340271299 | 1.78677636 | 3.223908971 | 0.001429 | 0.00243 | -2.24989282 |
| SULF2 | 0.373333038 | 5.20006621 | 3.223765901 | 0.001429 | 0.00243 | -2.2503359 |
| KISS1 | 0.268194828 | 0.61578009 | 3.223075184 | 0.001433 | 0.00243 | -2.25247477 |
| KLHL32 | 0.252820521 | 1.11392049 | 3.222862867 | 0.001434 | 0.00244 | -2.25313214 |
| OGFRL1 | 0.275604119 | 3.31056985 | 3.222733302 | 0.001434 | 0.00244 | -2.25353329 |
| FAT1 | -0.424887353 | 3.71242493 | -3.222169753 | 0.001437 | 0.00244 | -2.25527788 |
| MTRNR2 | 0.114817764 | 0.29455998 | 3.222047135 | 0.001438 | 0.00244 | -2.25565744 |
| CCZ1 | -0.176329634 | 1.79246846 | -3.22180237 | 0.001439 | 0.00244 | -2.25641505 |
| SLC6A1 | -0.291471304 | 1.00894966 | -3.219677285 | 0.001449 | 0.00246 | -2.26299054 |
| EIF3L | -0.41964821 | 6.94404283 | -3.219165419 | 0.001451 | 0.00247 | -2.26457377 |
| SNX7 | -0.27274315 | 4.49427909 | -3.218225692 | 0.001456 | 0.00247 | -2.26747979 |
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| FRMD6 | 0.287378308 | 2.06808595 | 3.216782313 | 0.001463 | 0.00248 | -2.27194179 |
| EIF3H | -0.202143284 | 6.6319938 | -3.216143941 | 0.001466 | 0.00249 | -2.27391463 |
| CEP44 | -0.198243676 | 2.77683671 | -3.215913642 | 0.001467 | 0.00249 | -2.27462627 |
| DVL1 | 0.236436847 | 6.51512118 | 3.215637205 | 0.001469 | 0.00249 | -2.27548041 |
| TRAIP | -0.183691249 | 1.80398154 | -3.214891456 | 0.001472 | 0.0025 | -2.2777843 |
| BMX | -0.314049486 | 1.33479159 | -3.214714161 | 0.001473 | 0.0025 | -2.27833196 |
| TMEM26 | -0.19510055 | 3.3153133 | -3.213185158 | 0.001481 | 0.00251 | -2.28305384 |
| LUZP1 | -0.264189436 | 3.88120835 | -3.212140159 | 0.001486 | 0.00252 | -2.28627982 |
| ANKRD3 | 0.150669281 | 0.77282049 | 3.21166513 | 0.001488 | 0.00253 | -2.28774594 |
| TRIM44 | -0.237007827 | 4.4651146 | -3.211451045 | 0.001489 | 0.00253 | -2.28840663 |
| PURA | -0.256473969 | 3.87765465 | -3.211288291 | 0.00149 | 0.00253 | -2.28890888 |

| PLEKHG | 0.24881021 | 3.07068595 | 3.209610868 | 0.001499 | 0.00254 | -2.2940839 |
|---|---|---|---|---|---|---|
| NAA15 | -0.210018583 | 3.40011163 | -3.208690537 | 0.001503 | 0.00255 | -2.29692216 |
| KRTCAP | -0.349693165 | 4.99421451 | -3.208577059 | 0.001504 | 0.00255 | -2.29727207 |
| PRKAA1 | -0.255091855 | 4.84632508 | -3.208347708 | 0.001505 | 0.00255 | -2.29797924 |
| ABCC1 | -0.296073154 | 4.75208559 | -3.208016915 | 0.001507 | 0.00255 | -2.2989991 |
| SOWAHI | 0.407515216 | 3.26371115 | 3.207821223 | 0.001508 | 0.00256 | -2.29960239 |
| TCP11L1 | 0.196152522 | 1.88289282 | 3.207748639 | 0.001508 | 0.00256 | -2.29982615 |
| ZNF365 | 0.155620816 | 0.60651876 | 3.2069677 | 0.001512 | 0.00256 | -2.30223329 |
| C1S | 0.708199696 | 4.04301122 | 3.205488835 | 0.001519 | 0.00258 | -2.30679021 |
| STK10 | -0.231244042 | 3.21933886 | -3.205390969 | 0.00152 | 0.00258 | -2.3070917 |
| BRAF | -0.213722725 | 3.75209277 | -3.205047575 | 0.001522 | 0.00258 | -2.30814952 |
| RNF122 | -0.284361619 | 2.99386784 | -3.204605411 | 0.001524 | 0.00258 | -2.30951143 |
| ERC1 | -0.281454712 | 3.90068861 | -3.203674294 | 0.001529 | 0.00259 | -2.31237882 |
| CSNK1G | -0.21159982 | 3.81069137 | -3.203475424 | 0.00153 | 0.00259 | -2.31299114 |
| ZNF765 | -0.143274125 | 1.44496013 | -3.202305365 | 0.001536 | 0.0026 | -2.31659305 |
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| XCR1 | 0.225735713 | 0.38865168 | 3.201979293 | 0.001537 | 0.0026 | -2.31759662 |
| ZRANB2 | -0.275049423 | 5.59259623 | -3.200991485 | 0.001542 | 0.00261 | -2.32063626 |
| LDLRAD | -0.377513442 | 2.47569339 | -3.200759452 | 0.001544 | 0.00261 | -2.32135013 |
| NREP | -0.294880466 | 3.01749987 | -3.200744925 | 0.001544 | 0.00261 | -2.32139483 |
| TMEM13 | -0.267968772 | 1.12532821 | -3.200624703 | 0.001544 | 0.00261 | -2.32176468 |
| GFPT2 | 0.413531694 | 1.92174037 | 3.199944634 | 0.001548 | 0.00262 | -2.32385664 |
| GAB2 | 0.319492188 | 3.71975506 | 3.198891656 | 0.001553 | 0.00263 | -2.32709489 |
| DDHD2 | -0.214707111 | 3.48424192 | -3.19879017 | 0.001554 | 0.00263 | -2.32740694 |
| C1QL1 | 0.637601522 | 2.40750596 | 3.197846438 | 0.001559 | 0.00264 | -2.3303083 |
| RCN1 | -0.212805995 | 4.94814869 | -3.196545474 | 0.001565 | 0.00265 | -2.33430662 |
| AARS2 | -0.179846065 | 3.76510553 | -3.195640702 | 0.00157 | 0.00266 | -2.33708641 |
| ZNF778 | -0.201689508 | 2.40697247 | -3.195545826 | 0.001571 | 0.00266 | -2.33737787 |
| TOPORS | -0.240951379 | 4.48537134 | -3.195425285 | 0.001571 | 0.00266 | -2.33774815 |
| DYRK1B | -0.202661048 | 5.02109265 | -3.195053714 | 0.001573 | 0.00266 | -2.33888947 |
| B3GNT5 | 0.248663289 | 1.94610039 | 3.195045129 | 0.001573 | 0.00266 | -2.33891584 |
| WDR19 | -0.244444632 | 3.80378067 | -3.194930636 | 0.001574 | 0.00266 | -2.33926749 |
| CHD1L | -0.234261567 | 4.49905477 | -3.194659811 | 0.001575 | 0.00266 | -2.34009926 |
| RNF166 | -0.177519387 | 3.3482964 | -3.194365769 | 0.001577 | 0.00267 | -2.34100225 |
| ARRB1 | -0.205681074 | 2.68237864 | -3.194300368 | 0.001577 | 0.00267 | -2.34120308 |
| MCC | -0.301182183 | 2.52487408 | -3.193866151 | 0.001579 | 0.00267 | -2.34253639 |
| NSD3 | -0.219152777 | 3.886429 | -3.19356746 | 0.001581 | 0.00267 | -2.34345345 |
| EMSY | -0.204409832 | 2.32983525 | -3.193333434 | 0.001582 | 0.00267 | -2.34417191 |
| CNTN1 | 0.201705686 | 0.35169632 | 3.193234553 | 0.001583 | 0.00267 | -2.34447547 |
| TMEM21 | -0.820903359 | 2.54922193 | -3.192930902 | 0.001584 | 0.00268 | -2.34540758 |

| | | | | | | |
|---|---|---|---|---|---|---|
| WDR35 | -0.245120076 | 3.31691363 | -3.192158311 | 0.001588 | 0.00268 | -2.34777884 |
| C12orf29 | -0.174030462 | 2.96552547 | -3.191727323 | 0.001591 | 0.00269 | -2.34910141 |
| SOCS1 | -0.403685013 | 4.40328575 | -3.191468181 | 0.001592 | 0.00269 | -2.34989656 |
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| LEMD3 | -0.23655572 | 4.01737111 | -3.191250286 | 0.001593 | 0.00269 | -2.3505651 |
| PTP4A3 | 0.301190991 | 5.6679525 | 3.190668881 | 0.001596 | 0.0027 | -2.35234874 |
| GFAP | -0.279107183 | 0.69477131 | -3.190433684 | 0.001598 | 0.0027 | -2.3530702 |
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| COL6A5 | 0.091833448 | 0.07897661 | 3.188593497 | 0.001607 | 0.00271 | -2.35871319 |
| KPNA6 | -0.222979767 | 5.27941089 | -3.188222026 | 0.001609 | 0.00272 | -2.35985196 |
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| NEGR1 | -0.255097507 | 0.71611375 | -3.18577651 | 0.001623 | 0.00274 | -2.36734576 |
| CREB3L | 0.02907285 | 0.04568167 | 3.185588982 | 0.001624 | 0.00274 | -2.36792018 |
| ZNF573 | -0.171906357 | 1.16277522 | -3.18555726 | 0.001624 | 0.00274 | -2.36801734 |
| DHX36 | -0.245532959 | 3.90556799 | -3.185494809 | 0.001624 | 0.00274 | -2.36820863 |
| PDGFA | 0.225553141 | 3.43531679 | 3.184975495 | 0.001627 | 0.00274 | -2.36979915 |
| KBTBD4 | -0.306524595 | 3.22980136 | -3.183717181 | 0.001634 | 0.00276 | -2.37365204 |
| POLR2J | 0.256989675 | 1.38797939 | 3.182969055 | 0.001638 | 0.00276 | -2.3759421 |
| TACC3 | -0.282818527 | 2.50139568 | -3.182661587 | 0.001639 | 0.00276 | -2.37688313 |
| CHP1 | -0.237196956 | 6.65107259 | -3.18058247 | 0.001651 | 0.00278 | -2.38324424 |
| SLAIN1 | -0.185872368 | 3.00420036 | -3.180452841 | 0.001651 | 0.00278 | -2.38364072 |
| ZNF66 | -0.139222456 | 1.04658481 | -3.179323834 | 0.001658 | 0.00279 | -2.38709321 |
| UCN2 | 0.100830593 | 0.12016667 | 3.178249829 | 0.001664 | 0.0028 | -2.39037645 |
| LRRC52 | 0.270604828 | 0.86096247 | 3.177322977 | 0.001669 | 0.00281 | -2.39320902 |
| UBAP1 | -0.214877998 | 5.96348758 | -3.176233272 | 0.001675 | 0.00282 | -2.39653831 |
| ZNF407 | -0.214080002 | 2.30229103 | -3.175606794 | 0.001678 | 0.00283 | -2.39845187 |
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| ABCC3 | 0.59354161 | 4.29974218 | 3.174436194 | 0.001685 | 0.00284 | -2.40202648 |
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| CLASRP | -0.213137291 | 4.41793416 | -3.173544187 | 0.00169 | 0.00285 | -2.40474955 |
| VWA5A | 0.276604051 | 4.08321588 | 3.173282301 | 0.001691 | 0.00285 | -2.40554889 |
| PSMD5 | -0.248857022 | 4.54871795 | -3.173082724 | 0.001692 | 0.00285 | -2.40615801 |
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| | | | | | | |
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| KALRN | -0.243013071 | 1.88208311 | -3.171648173 | 0.0017 | 0.00286 | -2.41053526 |
| CBWD3 | -0.054704613 | 0.23399075 | -3.170961336 | 0.001704 | 0.00287 | -2.41263035 |
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| CNTNAP | 0.288050356 | 2.02660203 | 3.166081601 | 0.001732 | 0.00291 | -2.42750322 |
| RBM6 | -0.234161867 | 5.00858916 | -3.165696326 | 0.001734 | 0.00291 | -2.4286766 |
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| KLRB1 | 0.403857967 | 1.9550479 | 3.1643096 | 0.001742 | 0.00293 | -2.43289884 |
| MFSD8 | -0.205769979 | 3.38878973 | -3.162851005 | 0.001751 | 0.00294 | -2.43733806 |
| SEMA3B | 0.456288401 | 3.62140227 | 3.162618391 | 0.001752 | 0.00294 | -2.43804585 |
| POLR2D | -0.184067328 | 4.01550726 | -3.162540641 | 0.001752 | 0.00294 | -2.43828241 |
| NEFL | -0.32901168 | 0.41256986 | -3.16208201 | 0.001755 | 0.00295 | -2.43967773 |
| CLECL1 | 0.234194576 | 0.74280693 | 3.161657752 | 0.001758 | 0.00295 | -2.44096831 |
| BTBD7 | -0.252044661 | 3.78553946 | -3.161531773 | 0.001758 | 0.00295 | -2.4413515 |
| HRNR | 0.089674161 | 0.23669142 | 3.161487709 | 0.001759 | 0.00295 | -2.44148553 |
| TPSG1 | -0.100644242 | 0.23968019 | -3.161151745 | 0.00176 | 0.00295 | -2.44250736 |
| NRG3 | -0.131749354 | 0.38233993 | -3.161132555 | 0.001761 | 0.00295 | -2.44256572 |
| RCE1 | -0.196048748 | 3.62742993 | -3.160816133 | 0.001762 | 0.00296 | -2.44352802 |
| SUZ12 | -0.219369038 | 4.30238752 | -3.159395179 | 0.001771 | 0.00297 | -2.44784828 |
| ZNF554 | -0.165016307 | 2.59112649 | -3.159043391 | 0.001773 | 0.00297 | -2.44891758 |
| CCHCR1 | -0.260418219 | 4.15004659 | -3.158562161 | 0.001776 | 0.00298 | -2.45038016 |
| VKORC1 | -0.238817228 | 4.58673061 | -3.15819342 | 0.001778 | 0.00298 | -2.45150071 |
| EMILIN2 | 0.440652799 | 4.33174502 | 3.15809132 | 0.001778 | 0.00298 | -2.45181096 |
| MYL3 | -0.278820685 | 0.56078833 | -3.158061119 | 0.001779 | 0.00298 | -2.45190272 |
| TMEM13 | -0.340282395 | 2.54386488 | -3.157826203 | 0.00178 | 0.00298 | -2.45261651 |
| POLE | 0.159745769 | 2.08345037 | 3.15619307 | 0.00179 | 0.003 | -2.45757739 |
| KRT6A | 0.476338893 | 0.80718161 | 3.155953321 | 0.001791 | 0.003 | -2.45830546 |
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| DUSP8 | 0.35585067 | 3.01491761 | 3.155703505 | 0.001792 | 0.003 | -2.45906405 |
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| PASK | -0.646942309 | 3.26456855 | -3.155083097 | 0.001796 | 0.00301 | -2.46094774 |
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| MS4A7 | 0.334377075 | 2.99676048 | 3.154742625 | 0.001798 | 0.00301 | -2.46198134 |
| KYAT3 | -0.222888661 | 5.50141201 | -3.154039837 | 0.001802 | 0.00302 | -2.46411452 |
| PIGM | -0.208532573 | 3.90138769 | -3.15334421 | 0.001806 | 0.00303 | -2.46622554 |
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| ZNF526 | -0.171737558 | 3.21252457 | -3.152594091 | 0.001811 | 0.00303 | -2.46850144 |
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| DNM2 | -0.173463757 | 4.89195856 | -3.151637036 | 0.001817 | 0.00304 | -2.47140446 |
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| FBXL13 | -0.13534135 | 0.88439635 | -3.151044974 | 0.00182 | 0.00305 | -2.47319995 |
| TRIP11 | -0.276732527 | 4.08701129 | -3.150690688 | 0.001822 | 0.00305 | -2.47427421 |
| AJAP1 | 0.304370771 | 0.96688568 | 3.149519986 | 0.001829 | 0.00306 | -2.47782319 |
| PNPLA1 | -0.056122409 | 0.10494951 | -3.149300073 | 0.001831 | 0.00306 | -2.47848972 |
| ICE1 | -0.248666706 | 3.83458732 | -3.148665168 | 0.001834 | 0.00307 | -2.4804138 |
| ZNF619 | -0.208633335 | 2.20906052 | -3.148543974 | 0.001835 | 0.00307 | -2.48078104 |
| DUSP11 | -0.18704338 | 4.20965904 | -3.148516263 | 0.001835 | 0.00307 | -2.480865 |
| CCSER2 | -0.213734774 | 4.40920839 | -3.14831647 | 0.001837 | 0.00307 | -2.48147038 |
| LIMD2 | 0.409093124 | 2.70688794 | 3.14810787 | 0.001838 | 0.00307 | -2.4821024 |
| C15orf39 | -0.231171282 | 4.73870416 | -3.147995572 | 0.001839 | 0.00308 | -2.48244262 |
| F5 | 0.600097962 | 1.50881707 | 3.147906349 | 0.001839 | 0.00308 | -2.48271293 |
| KCNMB2 | -0.116867034 | 0.17751974 | -3.147435207 | 0.001842 | 0.00308 | -2.48414018 |
| JPH4 | 0.089422178 | 0.38627721 | 3.147314196 | 0.001843 | 0.00308 | -2.48450673 |
| FAS | 0.371547304 | 4.47266681 | 3.146979147 | 0.001845 | 0.00308 | -2.48552155 |
| DNM1 | 0.234244181 | 1.00890036 | 3.146263979 | 0.001849 | 0.00309 | -2.48768736 |
| FAM160/ | -0.218026065 | 4.79891685 | -3.146092133 | 0.00185 | 0.00309 | -2.48820771 |
| RASGEF | 0.359146332 | 1.45025519 | 3.145540958 | 0.001853 | 0.0031 | -2.48987649 |
| FAM156/ | -0.032647106 | 0.12043495 | -3.145398267 | 0.001854 | 0.0031 | -2.49030847 |
| ERICH3 | 0.161707849 | 0.18538213 | 3.145215735 | 0.001855 | 0.0031 | -2.49086104 |
| MLLT11 | -0.303687801 | 2.8169776 | -3.144895701 | 0.001857 | 0.0031 | -2.49182978 |
| ZNF774 | -0.175772563 | 1.69396766 | -3.144503065 | 0.00186 | 0.00311 | -2.49301817 |
| OPTN | 0.225444104 | 5.17985303 | 3.144236995 | 0.001861 | 0.00311 | -2.4938234 |
| ARHGEF | -0.260783207 | 5.12450512 | -3.143697572 | 0.001865 | 0.00312 | -2.49545571 |
| PILRA | 0.304232175 | 2.8190584 | 3.143506155 | 0.001866 | 0.00312 | -2.49603488 |
| MSANTD | -0.262260747 | 3.62307847 | -3.143042866 | 0.001869 | 0.00312 | -2.49743653 |
| TWISTNI | -0.185583057 | 3.90952083 | -3.14296972 | 0.001869 | 0.00312 | -2.49765781 |
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| ALDH3B2 | 0.182576729 | 0.380062 | 3.141419593 | 0.001879 | 0.00314 | -2.5023461 |
| WIZ | -0.177427772 | 4.09691489 | -3.139915734 | 0.001888 | 0.00315 | -2.50689241 |
| ALKAL2 | 0.428843702 | 1.54157069 | 3.138895522 | 0.001894 | 0.00316 | -2.50997546 |
| ACMSD | -0.09871741 | 0.31669329 | -3.138437587 | 0.001897 | 0.00317 | -2.51135902 |
| CWF19L | -0.214827753 | 3.95496068 | -3.138339135 | 0.001898 | 0.00317 | -2.51165645 |
| SYTL1 | 0.400015292 | 4.92951158 | 3.138220735 | 0.001899 | 0.00317 | -2.51201414 |
| ILF3 | -0.205542315 | 6.14223375 | -3.137777749 | 0.001901 | 0.00317 | -2.51335227 |
| ATAT1 | -0.240587197 | 3.0638237 | -3.135480369 | 0.001916 | 0.0032 | -2.5202892 |
| NEK3 | -0.181723896 | 2.50840992 | -3.134518131 | 0.001922 | 0.00321 | -2.52319328 |
| CLIC4 | -0.303897993 | 5.80346941 | -3.134076403 | 0.001925 | 0.00321 | -2.52452616 |
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| CPEB4 | -0.312416063 | 4.07549295 | -3.132958152 | 0.001932 | 0.00322 | -2.52789961 |
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| GOLGA6 | -0.076620271 | 0.09942979 | -3.131903246 | 0.001938 | 0.00323 | -2.53108095 |
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| BBC3 | 0.285205024 | 3.84990439 | 3.130903251 | 0.001945 | 0.00324 | -2.53409577 |
| AGO3 | -0.192696615 | 2.21340125 | -3.130872932 | 0.001945 | 0.00324 | -2.53418717 |
| CAST | 0.26633138 | 5.98718809 | 3.130629009 | 0.001946 | 0.00324 | -2.53492242 |
| IL1RAPL | 0.092790548 | 0.12496905 | 3.13002185 | 0.00195 | 0.00325 | -2.53675232 |
| HOXD9 | 0.394114025 | 1.58298174 | 3.129318668 | 0.001955 | 0.00326 | -2.53887121 |
| UBD | 0.594000562 | 1.38225572 | 3.127639054 | 0.001966 | 0.00327 | -2.5439306 |
| EIF3D | -0.225677841 | 7.2796784 | -3.127600503 | 0.001966 | 0.00327 | -2.54404669 |
| SYNGR4 | -0.12367038 | 0.36405932 | -3.127307162 | 0.001968 | 0.00328 | -2.54493004 |
| MPZL1 | -0.248742062 | 4.65411474 | -3.127170851 | 0.001969 | 0.00328 | -2.54534049 |
| INMT-MII | 0.100779683 | 0.12047932 | 3.126832961 | 0.001971 | 0.00328 | -2.54635785 |
| FHL3 | 0.294729732 | 4.19005493 | 3.126672706 | 0.001972 | 0.00328 | -2.54684032 |
| NUTM2A | -0.072133529 | 0.30206973 | -3.126487501 | 0.001973 | 0.00329 | -2.54739789 |
| APOB | 0.040110865 | 0.04473493 | 3.126443745 | 0.001973 | 0.00329 | -2.54752961 |
| NOP53 | -0.239370085 | 7.75360093 | -3.126402348 | 0.001974 | 0.00329 | -2.54765423 |
| RPTOR | -0.180689156 | 3.65557566 | -3.123996895 | 0.001989 | 0.00331 | -2.55489298 |
| CORO2A | 0.399228061 | 3.46537678 | 3.123821392 | 0.00199 | 0.00331 | -2.55542092 |
| ZNF804A | -0.153979991 | 0.31919527 | -3.123225439 | 0.001994 | 0.00332 | -2.55721344 |
| POLR3A | -0.174653011 | 3.17133638 | -3.123103651 | 0.001995 | 0.00332 | -2.55757971 |
| COPG2 | -0.234236701 | 5.28670833 | -3.122613779 | 0.001998 | 0.00332 | -2.55905287 |
| C18orf25 | -0.214165893 | 3.60299888 | -3.122388239 | 0.002 | 0.00333 | -2.55973104 |
| JMJD7 | -0.079057604 | 0.30077495 | -3.122270838 | 0.002 | 0.00333 | -2.56008404 |
| ZNF831 | 0.175059723 | 0.35631383 | 3.122184145 | 0.002001 | 0.00333 | -2.56034469 |
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| USP53 | 0.230368715 | 2.42606638 | 3.12179388 | 0.002004 | 0.00333 | -2.561518 |

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| USP38 | -0.224971805 | 3.88869949 | -3.121685551 | 0.002004 | 0.00333 | -2.56184366 |
| PLA2G2I | 0.467334523 | 0.95885814 | 3.12133967 | 0.002007 | 0.00334 | -2.56288339 |
| FYN | 0.290302484 | 5.84067612 | 3.120579439 | 0.002012 | 0.00334 | -2.56516828 |
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| ZNF829 | -0.153921309 | 1.54951696 | -3.12034325 | 0.002013 | 0.00335 | -2.56587805 |
| HDAC6 | -0.190273182 | 4.08442415 | -3.120209185 | 0.002014 | 0.00335 | -2.5662809 |
| RNF44 | -0.217171823 | 4.89026302 | -3.120035997 | 0.002015 | 0.00335 | -2.56680129 |
| ALS2 | -0.197269028 | 2.80593755 | -3.11928576 | 0.00202 | 0.00336 | -2.56905528 |
| RPL32 | -0.211392226 | 9.1342726 | -3.118925432 | 0.002022 | 0.00336 | -2.57013766 |
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| TBC1D32 | -0.192548468 | 1.65353854 | -3.118244936 | 0.002027 | 0.00337 | -2.57218147 |
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| LRPPRC | -0.232709219 | 5.01254864 | -3.117424243 | 0.002032 | 0.00338 | -2.57464579 |
| TRPV4 | -0.229736713 | 1.54554496 | -3.117379896 | 0.002033 | 0.00338 | -2.57477894 |
| ADD1 | -0.216666931 | 5.83216718 | -3.117230829 | 0.002034 | 0.00338 | -2.57522647 |
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| PARP15 | 0.293227173 | 0.94829459 | 3.116534029 | 0.002038 | 0.00338 | -2.57731819 |
| VOPP1 | -0.199830961 | 4.07541974 | -3.115981388 | 0.002042 | 0.00339 | -2.57897685 |
| STK26 | 0.314409882 | 2.87214557 | 3.114541324 | 0.002052 | 0.00341 | -2.58329767 |
| BTG2 | -0.384477327 | 8.03794946 | -3.113721193 | 0.002057 | 0.00341 | -2.5857576 |
| SLC6A15 | -0.035008458 | 0.03191414 | -3.113386794 | 0.002059 | 0.00342 | -2.58676043 |
| ZNF260 | -0.216953413 | 3.70949261 | -3.113257512 | 0.00206 | 0.00342 | -2.58714811 |
| C1QTNF | -0.238457971 | 1.23951713 | -3.113099339 | 0.002061 | 0.00342 | -2.58762241 |
| DNAJC18 | -0.215472696 | 2.90048391 | -3.11265392 | 0.002064 | 0.00342 | -2.58895791 |
| FGFBP1 | 0.735305678 | 2.16440685 | 3.112604365 | 0.002065 | 0.00343 | -2.58910648 |
| LMAN1 | -0.29170707 | 6.46756234 | -3.112551169 | 0.002065 | 0.00343 | -2.58926597 |
| OR2A42 | -0.057027652 | 0.11009926 | -3.112224895 | 0.002067 | 0.00343 | -2.5902441 |
| SMC1B | -0.068748112 | 0.27771223 | -3.111992168 | 0.002069 | 0.00343 | -2.59094173 |
| ALG1L | -0.375731345 | 2.23100578 | -3.111401314 | 0.002073 | 0.00344 | -2.59271267 |
| UGDH | -0.282815222 | 4.76473873 | -3.11082697 | 0.002077 | 0.00344 | -2.59443383 |
| TMEM26 | -0.237020933 | 0.70636227 | -3.11063807 | 0.002078 | 0.00345 | -2.59499985 |
| PLAC1 | -0.081936241 | 0.11831974 | -3.110185542 | 0.002081 | 0.00345 | -2.59635567 |
| ZNF816 | -0.198492148 | 2.75583266 | -3.109748965 | 0.002084 | 0.00345 | -2.59766353 |
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| ZNF566 | -0.18748964 | 2.35940003 | -3.10912179 | 0.002088 | 0.00346 | -2.59954207 |
| FPGT-TN | -0.100676897 | 0.34219321 | -3.107929949 | 0.002096 | 0.00347 | -2.60311095 |
| CYP4F22 | 0.077009772 | 0.20696697 | 3.107694044 | 0.002098 | 0.00348 | -2.6038172 |
| CACNA1 | -0.136001186 | 0.26414152 | -3.107397477 | 0.0021 | 0.00348 | -2.60470499 |
| TLR10 | 0.259933339 | 0.68484527 | 3.106230944 | 0.002108 | 0.00349 | -2.6081963 |
| SLC43A2 | -0.22025335 | 3.70181228 | -3.106130969 | 0.002109 | 0.00349 | -2.60849546 |

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| ZNF451 | -0.176781758 | 2.95014681 | -3.105248957 | 0.002115 | 0.0035 | -2.61113435 |
| FYB2 | -0.275688727 | 0.62477463 | -3.104643359 | 0.002119 | 0.00351 | -2.61294583 |
| KCNK10 | -0.089601571 | 0.14278808 | -3.103783611 | 0.002125 | 0.00352 | -2.61551697 |
| MMP14 | 0.388829512 | 6.38321803 | 3.103663597 | 0.002126 | 0.00352 | -2.61587583 |
| TRIM73 | -0.089545547 | 0.27495026 | -3.103629184 | 0.002126 | 0.00352 | -2.61597873 |
| SYNC | -0.291393909 | 1.98769076 | -3.103620699 | 0.002126 | 0.00352 | -2.6160041 |
| PIEZO1 | -0.223495676 | 4.55225554 | -3.10330091 | 0.002128 | 0.00352 | -2.61696024 |
| PGAM4 | -0.057105467 | 0.19471641 | -3.103155357 | 0.002129 | 0.00352 | -2.61739539 |
| SLK | -0.250127088 | 4.97313091 | -3.102672478 | 0.002133 | 0.00353 | -2.61883892 |
| UBR1 | -0.261063293 | 3.46229971 | -3.101961682 | 0.002138 | 0.00354 | -2.6209634 |
| RABL2B | -0.218927386 | 3.30605979 | -3.101916783 | 0.002138 | 0.00354 | -2.62109759 |
| GPR37 | 0.246694607 | 0.55718363 | 3.101843456 | 0.002138 | 0.00354 | -2.62131672 |
| MAP3K1! | -0.058481843 | 0.17386902 | -3.101181173 | 0.002143 | 0.00355 | -2.62329573 |
| ZNF732 | 0.113132366 | 0.66670325 | 3.101022483 | 0.002144 | 0.00355 | -2.62376987 |
| N4BP2 | -0.266167052 | 2.43954403 | -3.100575641 | 0.002147 | 0.00355 | -2.62510482 |
| NT5C1B | -0.050564111 | 0.2013297 | -3.100004318 | 0.002151 | 0.00356 | -2.6268114 |
| NELL2 | 0.874235091 | 5.05178713 | 3.096773321 | 0.002174 | 0.0036 | -2.63645713 |
| GRIK3 | 0.278240579 | 0.72731076 | 3.095779912 | 0.002181 | 0.00361 | -2.63942095 |
| QPCT | 0.676153268 | 5.62557548 | 3.095762957 | 0.002181 | 0.00361 | -2.63947152 |
| MOXD1 | 0.411796336 | 1.68609352 | 3.095296761 | 0.002184 | 0.00361 | -2.6408621 |
| NCF1 | 0.305879016 | 1.16417628 | 3.094812306 | 0.002188 | 0.00362 | -2.64230694 |
| TTC16 | -0.077659615 | 0.27097212 | -3.093668132 | 0.002196 | 0.00363 | -2.64571848 |
| KLC2 | -0.177909434 | 3.97974499 | -3.093526153 | 0.002197 | 0.00363 | -2.64614173 |
| FAM131E | 0.098577972 | 0.39666643 | 3.092530128 | 0.002204 | 0.00364 | -2.64911046 |
| ZNF347 | -0.189963598 | 2.46602701 | -3.092459399 | 0.002205 | 0.00364 | -2.64932124 |
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| IFI16 | 0.343846199 | 4.82265315 | 3.089706037 | 0.002224 | 0.00367 | -2.65752307 |
| CHST11 | -0.335517536 | 3.63243539 | -3.089481325 | 0.002226 | 0.00368 | -2.65819215 |
| POU6F1 | -0.174476811 | 2.96842008 | -3.089424464 | 0.002226 | 0.00368 | -2.65836145 |
| DIAPH3 | 0.113221634 | 0.46464814 | 3.08930496 | 0.002227 | 0.00368 | -2.65871725 |
| OSGIN2 | 0.253163257 | 4.4226877 | 3.088776316 | 0.002231 | 0.00368 | -2.66029103 |
| ESYT2 | -0.262258148 | 5.69617502 | -3.088168425 | 0.002235 | 0.00369 | -2.66210042 |
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| TBC1D9 | 0.317379936 | 3.96344654 | 3.086348303 | 0.002249 | 0.00371 | -2.66751605 |
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| ADH1C | -0.121243167 | 0.27200649 | -3.084482802 | 0.002262 | 0.00373 | -2.67306362 |
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| PDE9A | 0.313957867 | 4.08936207 | 3.081941511 | 0.002281 | 0.00376 | -2.68061584 |
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| SCRT1 | -0.032563718 | 0.07911438 | -3.080749745 | 0.00229 | 0.00377 | -2.68415554 |
| FCMR | 0.399113734 | 2.4963365 | 3.080027784 | 0.002295 | 0.00378 | -2.68629924 |
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| HIST1H2 | -0.119256128 | 0.2179536 | -3.079663326 | 0.002298 | 0.00379 | -2.68738124 |
| KPNA3 | -0.237297907 | 4.83636336 | -3.077844679 | 0.002311 | 0.00381 | -2.69277864 |
| CHMP4C | -0.264406979 | 5.29743849 | -3.077551997 | 0.002314 | 0.00381 | -2.69364699 |
| FGF9 | 0.170622024 | 0.43091481 | 3.077198642 | 0.002316 | 0.00382 | -2.69469525 |
| DEFB124 | -0.104516066 | 0.21983873 | -3.076115333 | 0.002324 | 0.00383 | -2.69790827 |
| ADRA2A | 0.434766035 | 1.7460859 | 3.075486962 | 0.002329 | 0.00384 | -2.6997715 |
| ARID5B | 0.390799223 | 3.13789399 | 3.07544584 | 0.002329 | 0.00384 | -2.69989342 |
| SLC25A2 | -0.125519053 | 0.85155415 | -3.075393736 | 0.00233 | 0.00384 | -2.7000479 |
| LINC006 | -0.086698038 | 0.18779542 | -3.075188603 | 0.002331 | 0.00384 | -2.70065606 |
| UBE4B | -0.214637938 | 4.57548305 | -3.0750692 | 0.002332 | 0.00384 | -2.70101004 |
| SLC30A1 | -0.311398182 | 4.94250824 | -3.07473731 | 0.002335 | 0.00384 | -2.70199388 |
| TXNIP | -0.355381178 | 8.97678207 | -3.074471496 | 0.002337 | 0.00385 | -2.70278178 |
| FBXW8 | -0.268615708 | 3.69703168 | -3.074203584 | 0.002339 | 0.00385 | -2.70357584 |
| INHBE | -0.217011497 | 0.29142927 | -3.074032351 | 0.00234 | 0.00385 | -2.70408331 |
| RAPGEF | -0.23587041 | 5.18354563 | -3.072690209 | 0.00235 | 0.00387 | -2.70806006 |
| SPRN | -0.217387696 | 2.27026239 | -3.072673982 | 0.00235 | 0.00387 | -2.70810813 |
| RNF2 | -0.192451389 | 3.98569295 | -3.071911142 | 0.002356 | 0.00388 | -2.71036768 |
| TIMM23E | -0.217822852 | 2.57208401 | -3.071683613 | 0.002358 | 0.00388 | -2.71104153 |
| GBP7 | -0.049796651 | 0.1488296 | -3.071622297 | 0.002358 | 0.00388 | -2.71122312 |
| ENTHD1 | 0.05672792 | 0.08022872 | 3.071611026 | 0.002359 | 0.00388 | -2.71125649 |
| FCGR1A | 0.318615206 | 1.48420865 | 3.071290654 | 0.002361 | 0.00388 | -2.7122052 |
| MON2 | -0.229083901 | 3.3306734 | -3.070846486 | 0.002364 | 0.00389 | -2.71352035 |
| CYP3A5 | -0.059182074 | 0.34564227 | -3.070713544 | 0.002365 | 0.00389 | -2.71391395 |
| UBR4 | -0.280001595 | 4.21417885 | -3.070635765 | 0.002366 | 0.00389 | -2.71414422 |
| SMPDL3 | -0.269660732 | 5.5978605 | -3.06951816 | 0.002375 | 0.0039 | -2.71745239 |

| | | | | | | |
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| WASHC5 | -0.265354249 | 4.84877954 | -3.06948683 | 0.002375 | 0.0039 | -2.71754511 |
| RNF133 | -0.055894165 | 0.15742941 | -3.069266012 | 0.002376 | 0.00391 | -2.7181986 |
| SRRM5 | -0.111146811 | 0.78490052 | -3.069179891 | 0.002377 | 0.00391 | -2.71845346 |
| GABBR2 | 0.60324804 | 4.24659086 | 3.069135497 | 0.002377 | 0.00391 | -2.71858483 |
| OAS3 | 0.369046436 | 3.27040294 | 3.069072401 | 0.002378 | 0.00391 | -2.71877154 |
| VWA3A | -0.162148947 | 0.21692577 | -3.06900201 | 0.002378 | 0.00391 | -2.71897984 |
| SMN2 | -0.300292166 | 1.86508652 | -3.068961296 | 0.002379 | 0.00391 | -2.71910031 |
| IFIT3 | 0.379267234 | 4.774552 | 3.068786241 | 0.00238 | 0.00391 | -2.71961829 |
| LRFN5 | -0.139588022 | 0.21841367 | -3.067994814 | 0.002386 | 0.00392 | -2.72195976 |
| CTSA | 0.190953105 | 6.09315834 | 3.067894025 | 0.002387 | 0.00392 | -2.7222579 |
| NAA50 | -0.231121854 | 5.36423257 | -3.067609909 | 0.002389 | 0.00392 | -2.72309831 |
| OXSR1 | -0.220176648 | 4.56741878 | -3.067093628 | 0.002393 | 0.00393 | -2.72462526 |
| WASF1 | 0.320585789 | 2.44985829 | 3.066319516 | 0.002399 | 0.00394 | -2.72691433 |
| CDKL5 | -0.211429903 | 1.9639218 | -3.063758653 | 0.002419 | 0.00397 | -2.73448305 |
| ANKRD4 | -0.204287575 | 0.59059004 | -3.062964993 | 0.002425 | 0.00398 | -2.73682755 |
| HTRA4 | 0.230637067 | 0.70528352 | 3.062513978 | 0.002429 | 0.00399 | -2.73815961 |
| ZNF286A | -0.149492162 | 1.55608058 | -3.062128297 | 0.002432 | 0.00399 | -2.73929856 |
| RTN4RL2 | -0.503555827 | 4.45790374 | -3.061962648 | 0.002433 | 0.00399 | -2.7397877 |
| AIM2 | 0.329688497 | 0.7696886 | 3.061934595 | 0.002433 | 0.00399 | -2.73987053 |
| PABPC1 | 0.231159926 | 8.73631401 | 3.06182945 | 0.002434 | 0.00399 | -2.74018099 |
| CLPSL2 | -0.291467246 | 0.8655276 | -3.061787159 | 0.002434 | 0.00399 | -2.74030586 |
| EPS15 | -0.190974435 | 5.09780012 | -3.061642825 | 0.002436 | 0.00399 | -2.74073202 |
| MTCL1 | -0.094293337 | 0.32929205 | -3.061106695 | 0.00244 | 0.004 | -2.74231481 |
| PMCH | 0.150354285 | 0.23011374 | 3.060214417 | 0.002447 | 0.00401 | -2.74494846 |
| MAN2C1 | -0.246017117 | 4.712448 | -3.059866367 | 0.00245 | 0.00402 | -2.74597558 |
| RBP5 | -0.356856434 | 2.6328376 | -3.059693135 | 0.002451 | 0.00402 | -2.74648676 |
| BCORL1 | -0.23932072 | 3.40520071 | -3.059539678 | 0.002452 | 0.00402 | -2.74693956 |
| PHRF1 | -0.195326141 | 4.69845536 | -3.05879645 | 0.002458 | 0.00403 | -2.74913228 |
| SBNO2 | 0.210280618 | 4.70765889 | 3.058731063 | 0.002459 | 0.00403 | -2.74932517 |
| PHLDA3 | 0.29682567 | 6.09186065 | 3.058068031 | 0.002464 | 0.00404 | -2.75128084 |
| SLC28A2 | -0.072001445 | 0.23792344 | -3.057867854 | 0.002465 | 0.00404 | -2.7518712 |
| HIPK1 | -0.311337182 | 4.92887516 | -3.056407001 | 0.002477 | 0.00406 | -2.75617846 |
| SOWAHI | 0.215375768 | 0.8943291 | 3.056396002 | 0.002477 | 0.00406 | -2.75621088 |
| MTF1 | -0.221433001 | 2.87759928 | -3.056005616 | 0.00248 | 0.00406 | -2.75736159 |
| COL21A1 | -0.302990998 | 1.48275303 | -3.055777508 | 0.002482 | 0.00407 | -2.7580339 |
| TMEM74 | -0.087034979 | 0.11459747 | -3.055527639 | 0.002484 | 0.00407 | -2.75877029 |
| TM9SF4 | -0.209235728 | 5.69257272 | -3.054974749 | 0.002488 | 0.00408 | -2.76039953 |
| EIF5A2 | -0.1687174 | 1.46405871 | -3.05483416 | 0.00249 | 0.00408 | -2.76081377 |
| AMIGO2 | 0.512388519 | 4.2000448 | 3.054680486 | 0.002491 | 0.00408 | -2.76126654 |
| MAVS | -0.189381627 | 4.96427685 | -3.052823631 | 0.002506 | 0.0041 | -2.76673576 |

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| NCOA6 | -0.214532171 | 4.25589079 | -3.052638073 | 0.002507 | 0.0041 | -2.76728213 |
| IL12A | -0.149845861 | 0.37664969 | -3.052239803 | 0.00251 | 0.00411 | -2.76845473 |
| NXF5 | -0.034447113 | 0.07728724 | -3.051667061 | 0.002515 | 0.00412 | -2.77014077 |
| RANBP1 | -0.238614687 | 1.08816602 | -3.051308472 | 0.002518 | 0.00412 | -2.77119624 |
| RHBG | -0.04648581 | 0.08200493 | -3.051034626 | 0.00252 | 0.00412 | -2.7720022 |
| RTL6 | -0.315227364 | 4.23750022 | -3.050959323 | 0.002521 | 0.00412 | -2.77222381 |
| APLNR | -0.407710042 | 4.882803 | -3.050586595 | 0.002524 | 0.00413 | -2.77332066 |
| TMEM15 | -0.230122082 | 5.29498258 | -3.050420364 | 0.002525 | 0.00413 | -2.77380979 |
| GEN1 | -0.142430216 | 1.33321245 | -3.050085047 | 0.002528 | 0.00414 | -2.77479639 |
| IFT80 | -0.204986264 | 3.25718163 | -3.049792616 | 0.00253 | 0.00414 | -2.77565672 |
| ZNF208 | -0.256248312 | 1.60740241 | -3.048376883 | 0.002542 | 0.00416 | -2.77982072 |
| OXT | -0.191736286 | 0.63031473 | -3.047778749 | 0.002547 | 0.00416 | -2.78157944 |
| ADPRHL | -0.195156477 | 0.70916402 | -3.047576817 | 0.002548 | 0.00417 | -2.78217311 |
| RRP1 | -0.18172997 | 4.27845376 | -3.047196168 | 0.002551 | 0.00417 | -2.78329211 |
| MFSD4B | -0.162002937 | 1.75244234 | -3.046904334 | 0.002554 | 0.00418 | -2.78414992 |
| KISS1R | 0.236489671 | 0.8630327 | 3.046861221 | 0.002554 | 0.00418 | -2.78427664 |
| SLC25A3 | -0.19053155 | 3.7956366 | -3.046358746 | 0.002558 | 0.00418 | -2.78575343 |
| TMPRSS | 0.412432699 | 2.50983109 | 3.046179507 | 0.00256 | 0.00418 | -2.78628016 |
| OASL | 0.350422735 | 2.02522627 | 3.045168071 | 0.002568 | 0.0042 | -2.78925193 |
| HSF4 | -0.376157326 | 2.75085779 | -3.044861578 | 0.002571 | 0.0042 | -2.79015228 |
| POU4F3 | -0.047888369 | 0.14381946 | -3.044637727 | 0.002572 | 0.0042 | -2.79080981 |
| FZR1 | -0.171320065 | 4.80366006 | -3.043601976 | 0.002581 | 0.00422 | -2.79385158 |
| TNNC1 | -0.477344496 | 3.81275912 | -3.042989673 | 0.002586 | 0.00422 | -2.79564933 |
| GIGYF2 | -0.234008498 | 4.25111051 | -3.041956441 | 0.002595 | 0.00424 | -2.79868218 |
| ZNF493 | -0.238587552 | 2.53146617 | -3.041884255 | 0.002595 | 0.00424 | -2.79889403 |
| AZGP1 | 0.150145459 | 0.20051567 | 3.041227316 | 0.002601 | 0.00425 | -2.8008218 |
| KRTCAP | -0.200225334 | 4.27734405 | -3.041117813 | 0.002602 | 0.00425 | -2.8011431 |
| ZNF610 | -0.196637094 | 2.70321116 | -3.040672007 | 0.002605 | 0.00425 | -2.80245105 |
| CCDC88 | -0.233454247 | 2.32045509 | -3.039536329 | 0.002615 | 0.00427 | -2.80578219 |
| HAUS2 | -0.221506741 | 3.67348518 | -3.038888411 | 0.00262 | 0.00428 | -2.80768213 |
| DCN | 0.69498334 | 3.42711582 | 3.038570847 | 0.002623 | 0.00428 | -2.80861321 |
| CASP5 | 0.082364675 | 0.19749511 | 3.03853277 | 0.002623 | 0.00428 | -2.80872485 |
| AMMECF | -0.202244852 | 3.9697511 | -3.037463721 | 0.002632 | 0.0043 | -2.81185854 |
| ZACN | -0.088966508 | 0.40205462 | -3.037379722 | 0.002633 | 0.0043 | -2.81210472 |
| GRN | -0.228106947 | 8.3131437 | -3.036984545 | 0.002636 | 0.0043 | -2.81326281 |
| SLC12A8 | -0.324110744 | 5.22037757 | -3.035939696 | 0.002645 | 0.00432 | -2.81632412 |
| TNFSF12 | -0.186399465 | 5.60117631 | -3.035647586 | 0.002648 | 0.00432 | -2.8171798 |
| RFC5 | -0.213681301 | 4.0643839 | -3.035146077 | 0.002652 | 0.00433 | -2.81864869 |
| SOX11 | 0.236245286 | 0.43270909 | 3.033505353 | 0.002666 | 0.00435 | -2.82345272 |
| NPM1 | -0.20389417 | 8.60786688 | -3.033479025 | 0.002666 | 0.00435 | -2.82352979 |

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|---|---|---|---|---|---|---|
| MAP9 | -0.261519332 | 3.0772713 | -3.032872207 | 0.002671 | 0.00436 | -2.82530592 |
| ECRG4 | -0.634496974 | 6.91439416 | -3.03211714 | 0.002678 | 0.00437 | -2.82751551 |
| FOXD4 | -0.120927716 | 0.44095138 | -3.030197355 | 0.002694 | 0.00439 | -2.83313116 |
| REN | 0.435105546 | 1.7360679 | 3.030132551 | 0.002695 | 0.00439 | -2.83332066 |
| STN1 | -0.158063719 | 5.57049224 | -3.029323023 | 0.002702 | 0.0044 | -2.83568761 |
| KCNK5 | -0.32257331 | 5.3728422 | -3.02864122 | 0.002708 | 0.00441 | -2.83768065 |
| MGA | -0.232266715 | 2.9896272 | -3.028201855 | 0.002711 | 0.00442 | -2.83896478 |
| EXOC6B | 0.259962118 | 3.58436105 | 3.02818013 | 0.002712 | 0.00442 | -2.83902827 |
| KLRC4 | 0.108628216 | 0.20124948 | 3.027918075 | 0.002714 | 0.00442 | -2.83979409 |
| SLC25A3 | -0.255613121 | 4.40284164 | -3.027075833 | 0.002721 | 0.00443 | -2.842255 |
| CDK5R1 | 0.187138827 | 1.08219562 | 3.02656822 | 0.002726 | 0.00444 | -2.84373787 |
| ME2 | -0.185289926 | 3.27069121 | -3.026051204 | 0.00273 | 0.00445 | -2.84524796 |
| BAG3 | 0.313588121 | 6.27405634 | 3.025972729 | 0.002731 | 0.00445 | -2.84547715 |
| ANO1 | -0.298981217 | 4.78123244 | -3.025547246 | 0.002734 | 0.00445 | -2.84671969 |
| MPIG6B | 0.189203414 | 0.80920358 | 3.025221485 | 0.002737 | 0.00446 | -2.8476709 |
| SEMA5B | -0.29273961 | 1.49424421 | -3.024986644 | 0.002739 | 0.00446 | -2.84835657 |
| PPWD1 | -0.206056015 | 4.22523498 | -3.02481689 | 0.002741 | 0.00446 | -2.84885217 |
| MELK | 0.226193561 | 1.19814276 | 3.024722018 | 0.002742 | 0.00446 | -2.84912914 |
| TMEM86 | -0.251726744 | 1.97273953 | -3.023925401 | 0.002749 | 0.00447 | -2.85145447 |
| S1PR1 | -0.289532006 | 5.26521868 | -3.023735719 | 0.00275 | 0.00448 | -2.85200807 |
| NCKIPSI | -0.18191242 | 4.71973481 | -3.023599964 | 0.002751 | 0.00448 | -2.85240426 |
| UBFD1 | -0.229966603 | 4.87961748 | -3.02238922 | 0.002762 | 0.0045 | -2.85593699 |
| GUCA2A | -0.10693687 | 0.1716129 | -3.021917464 | 0.002766 | 0.0045 | -2.85731313 |
| CEP78 | -0.16291792 | 1.97192542 | -3.02162418 | 0.002769 | 0.00451 | -2.85816855 |
| GSE1 | -0.241187341 | 5.07259537 | -3.020674923 | 0.002777 | 0.00452 | -2.86093674 |
| PCNT | -0.209082349 | 3.36412842 | -3.02059636 | 0.002778 | 0.00452 | -2.8611658 |
| RNF6 | -0.22088187 | 4.37220366 | -3.020022029 | 0.002783 | 0.00453 | -2.86284021 |
| COL28A1 | -0.175857803 | 0.51412419 | -3.019947296 | 0.002784 | 0.00453 | -2.86305806 |
| IL34 | -0.35620332 | 3.64214162 | -3.019549124 | 0.002787 | 0.00453 | -2.86421869 |
| WDR47 | -0.233417053 | 3.06552968 | -3.017272797 | 0.002807 | 0.00457 | -2.87085122 |
| ATP13A3 | -0.282287021 | 5.38992817 | -3.017272347 | 0.002807 | 0.00457 | -2.87085253 |
| ZNF784 | -0.194205304 | 3.91317812 | -3.016471764 | 0.002815 | 0.00458 | -2.87318407 |
| SRMS | -0.20179434 | 0.99330757 | -3.016238302 | 0.002817 | 0.00458 | -2.87386388 |
| C11orf86 | 0.122041804 | 0.19463592 | 3.015659866 | 0.002822 | 0.00459 | -2.87554799 |
| MIDN | 0.305637049 | 5.94153759 | 3.014908439 | 0.002829 | 0.0046 | -2.87773531 |
| KLF1 | -0.046242012 | 0.14273373 | -3.014115043 | 0.002836 | 0.00461 | -2.88004424 |
| DOC2A | -0.066254674 | 0.14489583 | -3.014095577 | 0.002836 | 0.00461 | -2.88010088 |
| OR7A5 | -0.053028285 | 0.15071541 | -3.013702168 | 0.00284 | 0.00461 | -2.88124556 |
| PLCB3 | -0.147166413 | 4.28584934 | -3.013392047 | 0.002842 | 0.00462 | -2.8821478 |
| RPS15 | -0.230075825 | 8.47048388 | -3.013352607 | 0.002843 | 0.00462 | -2.88226254 |

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| THRAP3 | -0.224454816 | 6.78142359 | -3.01281281 | 0.002848 | 0.00463 | -2.88383276 |
| AGRP | 0.169212084 | 0.35487695 | 3.012803832 | 0.002848 | 0.00463 | -2.88385887 |
| ST18 | 0.02047239 | 0.04011677 | 3.012780121 | 0.002848 | 0.00463 | -2.88392784 |
| LGALS9 | 0.334125815 | 3.52566223 | 3.011892041 | 0.002856 | 0.00464 | -2.88651059 |
| TXLNA | -0.178155965 | 5.99316287 | -3.011632858 | 0.002858 | 0.00464 | -2.88726422 |
| CDYL2 | -0.187101432 | 1.70371885 | -3.011495212 | 0.00286 | 0.00464 | -2.88766443 |
| VGLL4 | -0.357967945 | 4.24581092 | -3.011265733 | 0.002862 | 0.00465 | -2.88833161 |
| HELZ | -0.224588809 | 3.06789963 | -3.010808525 | 0.002866 | 0.00465 | -2.88966075 |
| PDK3 | 0.239103476 | 2.47568581 | 3.009163552 | 0.002881 | 0.00468 | -2.89444124 |
| DNAJC1. | -0.161526143 | 0.67054507 | -3.008867947 | 0.002884 | 0.00468 | -2.89530004 |
| MYRF | 0.412646311 | 0.96710924 | 3.008850278 | 0.002884 | 0.00468 | -2.89535137 |
| TMEM18 | -0.237040202 | 5.83595196 | -3.008114419 | 0.00289 | 0.00469 | -2.89748888 |
| ZNF223 | -0.14792717 | 1.34284135 | -3.007399232 | 0.002897 | 0.0047 | -2.89956586 |
| HSPA2 | -0.254469402 | 2.15179623 | -3.006463586 | 0.002906 | 0.00471 | -2.90228239 |
| DMRTB1 | -0.224063372 | 0.24894397 | -3.00426495 | 0.002926 | 0.00475 | -2.90866276 |
| PCDH11. | -0.048312478 | 0.05167325 | -3.003141302 | 0.002936 | 0.00476 | -2.91192187 |
| SLC35E1 | -0.227860462 | 4.85977158 | -3.002850416 | 0.002939 | 0.00477 | -2.91276539 |
| PDP2 | -0.224064192 | 3.59482773 | -3.002334536 | 0.002944 | 0.00478 | -2.91426117 |
| FAM89B | 0.240947772 | 5.26767504 | 3.00194387 | 0.002948 | 0.00478 | -2.91539373 |
| FANCI | 0.20336804 | 2.05379013 | 3.001816001 | 0.002949 | 0.00478 | -2.9157644 |
| CTCFL | -0.039988699 | 0.03647233 | -3.001073693 | 0.002956 | 0.00479 | -2.91791594 |
| PTTG1IP | -0.205664777 | 8.35747477 | -3.000943406 | 0.002957 | 0.00479 | -2.91829351 |
| TFPI2 | 0.354091311 | 1.0575505 | 3.000716327 | 0.002959 | 0.0048 | -2.91895156 |
| POLA2 | -0.151410187 | 3.15544644 | -2.999870753 | 0.002967 | 0.00481 | -2.92140153 |
| PRSS37 | 0.051782691 | 0.15510298 | 2.99964065 | 0.002969 | 0.00481 | -2.92206812 |
| CD6 | 0.360237896 | 1.58130665 | 2.998803756 | 0.002977 | 0.00483 | -2.92449213 |
| ZNF518A | -0.265308143 | 3.1219875 | -2.99562507 | 0.003007 | 0.00487 | -2.93369326 |
| TNNT2 | 0.071943293 | 0.16406318 | 2.995456127 | 0.003009 | 0.00488 | -2.93418203 |
| ZNF449 | -0.192879825 | 2.24863827 | -2.99505903 | 0.003013 | 0.00488 | -2.93533078 |
| INPP4A | 0.233951821 | 3.25690519 | 2.995028813 | 0.003013 | 0.00488 | -2.93541819 |
| RALGAP | -0.203619636 | 2.39190142 | -2.994919728 | 0.003014 | 0.00488 | -2.93573373 |
| ERMAP | -0.255455334 | 4.26187661 | -2.993916657 | 0.003024 | 0.0049 | -2.93863473 |
| SOX21 | -0.040332425 | 0.06178771 | -2.992432703 | 0.003038 | 0.00492 | -2.94292483 |
| LUC7L3 | -0.240937641 | 5.55450628 | -2.992046284 | 0.003042 | 0.00493 | -2.94404164 |
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| SSX3 | -0.092739086 | 0.16674162 | -2.991337963 | 0.003048 | 0.00494 | -2.94608845 |
| DMXL1 | -0.256499944 | 3.6450059 | -2.991231419 | 0.003049 | 0.00494 | -2.94639628 |
| MSH2 | -0.245455151 | 4.58016849 | -2.99115484 | 0.00305 | 0.00494 | -2.94661754 |
| P2RY14 | -0.245769703 | 1.46252607 | -2.990784108 | 0.003054 | 0.00494 | -2.94768859 |
| CST1 | 0.58402666 | 0.87446641 | 2.99041248 | 0.003057 | 0.00495 | -2.9487621 |

| | | | | | | |
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| PLN | -0.372619848 | 2.43132509 | -2.990030133 | 0.003061 | 0.00495 | -2.94986645 |
| PARG | -0.210333562 | 3.38738744 | -2.989845313 | 0.003063 | 0.00496 | -2.95040022 |
| HSPA1A | -0.356538168 | 5.75620198 | -2.988999049 | 0.003071 | 0.00497 | -2.95284391 |
| ZNF683 | 0.430278433 | 1.75289366 | 2.988464337 | 0.003076 | 0.00498 | -2.95438762 |
| KCNK9 | -0.046278116 | 0.04966694 | -2.987719171 | 0.003083 | 0.00499 | -2.95653848 |
| CIT | -0.232996238 | 1.39867976 | -2.98709604 | 0.00309 | 0.005 | -2.95833671 |
| C6orf62 | -0.18529327 | 7.2568551 | -2.9867211 | 0.003093 | 0.005 | -2.95941854 |
| SLC16A1 | -0.193749374 | 1.9429358 | -2.986231974 | 0.003098 | 0.00501 | -2.96082965 |
| CYP2F1 | 0.021916422 | 0.03492248 | 2.984734928 | 0.003113 | 0.00503 | -2.96514724 |
| FYCO1 | -0.248924128 | 4.91784746 | -2.984501134 | 0.003115 | 0.00504 | -2.96582133 |
| LONRF1 | -0.237063914 | 3.63813627 | -2.984328499 | 0.003117 | 0.00504 | -2.96631906 |
| PCGF5 | -0.230332205 | 4.33878292 | -2.984004049 | 0.00312 | 0.00504 | -2.96725441 |
| SNX22 | 0.541845272 | 6.50326359 | 2.983430489 | 0.003125 | 0.00505 | -2.96890768 |
| RNF115 | -0.180717924 | 4.16318091 | -2.9833794 | 0.003126 | 0.00505 | -2.96905493 |
| RARRES | 0.605506225 | 4.34581966 | 2.98309299 | 0.003129 | 0.00506 | -2.96988038 |
| NELFA | -0.197432599 | 4.66133386 | -2.98305907 | 0.003129 | 0.00506 | -2.96997813 |
| SPIN2A | -0.043761416 | 0.12132762 | -2.982987922 | 0.00313 | 0.00506 | -2.97018317 |
| SLC27A1 | -0.189417128 | 4.45070677 | -2.981917621 | 0.00314 | 0.00507 | -2.97326707 |
| SSX7 | -0.044665468 | 0.07958183 | -2.981840257 | 0.003141 | 0.00508 | -2.97348994 |
| NPLOC4 | -0.16378123 | 4.84316825 | -2.98100132 | 0.00315 | 0.00509 | -2.97590642 |
| ESCO1 | -0.207756103 | 3.87646096 | -2.980763527 | 0.003152 | 0.00509 | -2.97659125 |
| GRID2IP | 0.132908822 | 1.01311355 | 2.979922573 | 0.00316 | 0.0051 | -2.97901272 |
| MFSD13 | -0.209715152 | 3.48125834 | -2.979161465 | 0.003168 | 0.00512 | -2.98120374 |
| MUCL3 | 0.067301683 | 0.2503261 | 2.978993337 | 0.00317 | 0.00512 | -2.98168766 |
| ITCH | -0.23544301 | 4.70737656 | -2.977887515 | 0.003181 | 0.00514 | -2.98486991 |
| UBQLN1 | -0.228143952 | 5.62005813 | -2.977155095 | 0.003188 | 0.00515 | -2.986977 |
| MAP4 | 0.222060023 | 5.64821711 | 2.976322173 | 0.003196 | 0.00516 | -2.98937265 |
| FBXO34 | -0.235889798 | 5.47762618 | -2.974785793 | 0.003212 | 0.00518 | -2.99378992 |
| SAMD9L | 0.302287809 | 3.57013759 | 2.974218339 | 0.003218 | 0.00519 | -2.99542088 |
| RAB43 | -0.226827003 | 1.49485372 | -2.973969266 | 0.00322 | 0.0052 | -2.99613667 |
| SERPINF | 0.504300122 | 4.55545326 | 2.97345125 | 0.003225 | 0.00521 | -2.99762517 |
| CCDC15 | -0.19818017 | 1.0554757 | -2.970987454 | 0.00325 | 0.00525 | -3.00470147 |
| CD48 | 0.447209175 | 2.38457734 | 2.969853092 | 0.003262 | 0.00526 | -3.00795765 |
| LRRC8B | -0.21164043 | 2.96429742 | -2.969783836 | 0.003263 | 0.00526 | -3.00815641 |
| SPTY2D | -0.24469951 | 3.94988774 | -2.969543517 | 0.003265 | 0.00527 | -3.00884608 |
| OGFR | -0.180717151 | 5.26329268 | -2.969218603 | 0.003269 | 0.00527 | -3.00977844 |
| NONO | -0.20569567 | 7.49019459 | -2.969062798 | 0.00327 | 0.00527 | -3.0102255 |
| NDST1 | -0.252444502 | 5.5300164 | -2.967596155 | 0.003285 | 0.0053 | -3.01443272 |
| CHORDC | -0.198103456 | 2.70672078 | -2.967310149 | 0.003288 | 0.0053 | -3.01525293 |
| SNIP1 | -0.187345741 | 3.51730037 | -2.967146503 | 0.00329 | 0.0053 | -3.01572221 |

| | | | | | | |
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| ARL2BP | -0.282710663 | 2.78699827 | -2.966485778 | 0.003297 | 0.00532 | -3.01761667 |
| BACE2 | -0.222535748 | 3.8534883 | -2.965573606 | 0.003306 | 0.00533 | -3.02023144 |
| C5orf51 | -0.205948292 | 4.31165978 | -2.964461252 | 0.003318 | 0.00535 | -3.02341902 |
| IL20RB | -0.171339023 | 0.66451236 | -2.963448083 | 0.003328 | 0.00536 | -3.02632141 |
| ZNF254 | -0.234608307 | 3.51360851 | -2.963209919 | 0.003331 | 0.00537 | -3.02700353 |
| NKAIN4 | 0.468065682 | 2.68072082 | 2.963117276 | 0.003332 | 0.00537 | -3.02726885 |
| CDC34 | -0.181409853 | 6.28483346 | -2.963004408 | 0.003333 | 0.00537 | -3.02759209 |
| ZSCAN2! | -0.208730361 | 3.12916593 | -2.961300837 | 0.003351 | 0.0054 | -3.03246948 |
| MARK4 | -0.142095584 | 4.14882271 | -2.960737563 | 0.003357 | 0.00541 | -3.03408157 |
| SCD5 | -0.335969026 | 6.60280581 | -2.960190821 | 0.003363 | 0.00542 | -3.03564608 |
| KIAA051: | -0.173692605 | 2.24147109 | -2.959550993 | 0.003369 | 0.00543 | -3.03747661 |
| SWAP70 | -0.261596265 | 5.12030741 | -2.958351487 | 0.003382 | 0.00545 | -3.04090738 |
| ZIK1 | -0.225873396 | 2.6881285 | -2.957209953 | 0.003394 | 0.00547 | -3.04417113 |
| AIF1 | 0.402182426 | 4.65763902 | 2.95675144 | 0.003399 | 0.00547 | -3.04548173 |
| KLHL26 | -0.215102743 | 4.06714398 | -2.95649175 | 0.003402 | 0.00548 | -3.04622393 |
| UFL1 | -0.23213002 | 5.11431097 | -2.956215856 | 0.003405 | 0.00548 | -3.04701238 |
| TLE3 | -0.228665666 | 4.43094043 | -2.954425101 | 0.003424 | 0.00551 | -3.05212833 |
| TLK1 | -0.189968958 | 4.3808754 | -2.954302958 | 0.003425 | 0.00551 | -3.05247718 |
| PIK3CG | 0.249390748 | 1.20034519 | 2.954301949 | 0.003425 | 0.00551 | -3.05248006 |
| FBXL6 | -0.214111601 | 3.36190274 | -2.954018651 | 0.003428 | 0.00552 | -3.05328911 |
| LZTS2 | 0.231637353 | 5.9605213 | 2.953695538 | 0.003432 | 0.00552 | -3.05421177 |
| AGTRAP | -0.184196494 | 6.16386835 | -2.95352312 | 0.003434 | 0.00552 | -3.05470408 |
| TPT1 | -0.19564794 | 10.6463216 | -2.952667273 | 0.003443 | 0.00554 | -3.0571474 |
| LIPM | 0.147240176 | 0.35021388 | 2.951834026 | 0.003452 | 0.00555 | -3.05952557 |
| ADAMDE | 0.442260506 | 1.12756307 | 2.951552258 | 0.003455 | 0.00556 | -3.06032963 |
| FUT4 | -0.154168616 | 1.74134195 | -2.951490786 | 0.003456 | 0.00556 | -3.06050503 |
| RAB39A | 0.089860188 | 0.2480202 | 2.951249317 | 0.003458 | 0.00556 | -3.06119401 |
| ACTL6A | -0.207281856 | 4.69699457 | -2.950957963 | 0.003461 | 0.00557 | -3.06202527 |
| MPZL3 | 0.300802539 | 4.65419705 | 2.950556634 | 0.003466 | 0.00557 | -3.06317016 |
| ZFPM2 | -0.297389252 | 1.51674143 | -2.950542616 | 0.003466 | 0.00557 | -3.06321014 |
| RPL3 | -0.226157577 | 10.679806 | -2.950451505 | 0.003467 | 0.00557 | -3.06347004 |
| FBXW11 | -0.234290664 | 4.88772899 | -2.950361887 | 0.003468 | 0.00557 | -3.06372567 |
| ZBTB7B | -0.198656799 | 5.46317217 | -2.95020277 | 0.00347 | 0.00558 | -3.06417952 |
| NDUFAF | -0.149943068 | 3.33697759 | -2.950010138 | 0.003472 | 0.00558 | -3.06472894 |
| MICAL1 | 0.289021338 | 3.37950952 | 2.949541404 | 0.003477 | 0.00559 | -3.0660657 |
| SLC38A! | -0.145312217 | 2.13554231 | -2.949121947 | 0.003481 | 0.00559 | -3.06726177 |
| JADE1 | -0.24531326 | 5.1916391 | -2.948955366 | 0.003483 | 0.0056 | -3.06773673 |
| ZFYVE1( | -0.195321595 | 3.3064753 | -2.948461865 | 0.003488 | 0.0056 | -3.06914365 |
| ZNF529 | -0.165547147 | 2.82837897 | -2.948407459 | 0.003489 | 0.00561 | -3.06929874 |
| ABO | -0.318228828 | 4.82237358 | -2.948008571 | 0.003493 | 0.00561 | -3.07043575 |

| | | | | | | |
|---|---|---|---|---|---|---|
| GPR162 | -0.351753882 | 1.95438402 | -2.946560094 | 0.003509 | 0.00564 | -3.07456335 |
| RBMX | -0.198202294 | 6.50119023 | -2.946416493 | 0.003511 | 0.00564 | -3.07497245 |
| ZNF654 | -0.20910778 | 3.28249583 | -2.945667357 | 0.003519 | 0.00565 | -3.07710636 |
| CHI3L2 | 0.446624804 | 4.17356386 | 2.94528809 | 0.003523 | 0.00566 | -3.07818651 |
| C3orf80 | 0.193741435 | 0.83150927 | 2.944606101 | 0.003531 | 0.00567 | -3.08012847 |
| BRINP3 | -0.140534423 | 0.35978633 | -2.944209905 | 0.003535 | 0.00568 | -3.08125645 |
| UBE3B | -0.181061038 | 4.05768149 | -2.943991922 | 0.003538 | 0.00568 | -3.08187699 |
| EFL1 | -0.204610034 | 4.02975554 | -2.943892366 | 0.003539 | 0.00568 | -3.08216038 |
| PLEKHG | -0.233354382 | 3.69904383 | -2.942058487 | 0.003559 | 0.00571 | -3.08737909 |
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| MALRD1 | -0.109373302 | 0.2638753 | -2.941677427 | 0.003563 | 0.00572 | -3.0884631 |
| CALU | -0.287332844 | 6.57243885 | -2.941653452 | 0.003563 | 0.00572 | -3.0885313 |
| DPY19L1 | 0.295548085 | 4.05095238 | 2.941084302 | 0.00357 | 0.00573 | -3.09015011 |
| SLC22A4 | 0.212860994 | 1.65708894 | 2.940277934 | 0.003579 | 0.00574 | -3.09244314 |
| TUBA4A | 0.321107852 | 4.90804395 | 2.938510158 | 0.003599 | 0.00577 | -3.09746802 |
| RANBP9 | -0.187868183 | 5.40098419 | -2.938426262 | 0.0036 | 0.00577 | -3.09770642 |
| ZNF675 | -0.264254159 | 2.35826408 | -2.938095123 | 0.003603 | 0.00578 | -3.09864734 |
| AGBL2 | -0.145849801 | 0.78742521 | -2.938026693 | 0.003604 | 0.00578 | -3.09884177 |
| SLC45A3 | 0.19990857 | 1.17617341 | 2.937289111 | 0.003612 | 0.00579 | -3.10093718 |
| DNAJB7 | -0.062567088 | 0.23029274 | -2.93477664 | 0.003641 | 0.00584 | -3.10807121 |
| BTN3A2 | 0.320095108 | 3.94306103 | 2.934574433 | 0.003643 | 0.00584 | -3.10864511 |
| ERICH5 | -0.368461761 | 1.63086276 | -2.934475799 | 0.003644 | 0.00584 | -3.10892504 |
| TNKS1BI | -0.222523489 | 6.27273683 | -2.934473099 | 0.003644 | 0.00584 | -3.10893271 |
| EIF3E | -0.194084179 | 7.11267824 | -2.934472682 | 0.003644 | 0.00584 | -3.10893389 |
| BIRC6 | -0.272152281 | 3.98659673 | -2.933817923 | 0.003652 | 0.00585 | -3.11079193 |
| PRPF39 | -0.218509559 | 3.87268667 | -2.933541906 | 0.003655 | 0.00586 | -3.11157508 |
| KLRC2 | 0.105949425 | 0.2302971 | 2.932513364 | 0.003666 | 0.00587 | -3.11449277 |
| C19orf48 | -0.244288467 | 5.56020462 | -2.931494778 | 0.003678 | 0.00589 | -3.11738128 |
| BTLA | 0.241863367 | 0.5578194 | 2.931441321 | 0.003679 | 0.00589 | -3.11753285 |
| INTS3 | -0.270918327 | 3.82693236 | -2.930680764 | 0.003687 | 0.00591 | -3.11968899 |
| FAM166/ | -0.094509719 | 0.21504695 | -2.930611567 | 0.003688 | 0.00591 | -3.11988514 |
| ANKRD1 | -0.189895333 | 3.90777406 | -2.930196777 | 0.003693 | 0.00591 | -3.1210608 |
| PIEZO2 | -0.272603671 | 1.52877806 | -2.929915911 | 0.003696 | 0.00592 | -3.12185679 |
| STXBP2 | -0.179050722 | 5.11796887 | -2.929675305 | 0.003699 | 0.00592 | -3.12253862 |
| FAM219E | -0.243486147 | 3.41457764 | -2.928892241 | 0.003708 | 0.00594 | -3.12475731 |
| IRGQ | -0.164878069 | 3.4920798 | -2.928804794 | 0.003709 | 0.00594 | -3.12500504 |
| LY96 | 0.379902496 | 3.67018351 | 2.928593343 | 0.003711 | 0.00594 | -3.12560405 |
| EGFLAM | -0.266466469 | 2.07458151 | -2.928384042 | 0.003714 | 0.00594 | -3.12619692 |
| C4orf48 | -0.528691015 | 4.86992671 | -2.926812591 | 0.003732 | 0.00597 | -3.13064698 |
| RBM15 | -0.144300522 | 2.7172089 | -2.926582161 | 0.003735 | 0.00598 | -3.13129934 |

| Gene | | | | | | |
|---|---|---|---|---|---|---|
| IL6 | 0.538911064 | 1.55815724 | 2.92624443 | 0.003739 | 0.00598 | -3.13225537 |
| TRPS1 | -0.19868655 | 2.52619505 | -2.926072191 | 0.003741 | 0.00598 | -3.13274289 |
| GFOD1 | -0.200381082 | 1.78184349 | -2.925284566 | 0.00375 | 0.006 | -3.13497194 |
| GPRC5D | -0.16830876 | 1.12996813 | -2.925012827 | 0.003753 | 0.006 | -3.13574085 |
| ATG2B | -0.217365435 | 3.14516308 | -2.924845849 | 0.003755 | 0.00601 | -3.1362133 |
| EMILIN1 | 0.4313518 | 3.51761982 | 2.923843557 | 0.003767 | 0.00602 | -3.13904866 |
| MSRB3 | -0.329712764 | 3.17792976 | -2.920856584 | 0.003802 | 0.00608 | -3.14749306 |
| HAAO | -0.267526292 | 2.99290555 | -2.920280703 | 0.003809 | 0.00609 | -3.14912019 |
| SPIRE1 | 0.344905123 | 3.05491233 | 2.92013914 | 0.00381 | 0.00609 | -3.14952012 |
| FAM170/ | -0.047001811 | 0.10464753 | -2.919965764 | 0.003812 | 0.00609 | -3.15000991 |
| SMC1A | -0.25026711 | 4.36916634 | -2.919884652 | 0.003813 | 0.0061 | -3.15023904 |
| KCNS2 | 0.034027306 | 0.06416263 | 2.918976482 | 0.003824 | 0.00611 | -3.1528041 |
| RBM7 | -0.207702055 | 3.15828074 | -2.918702283 | 0.003827 | 0.00612 | -3.15357841 |
| DLGAP4 | 0.198037044 | 5.35356523 | 2.918678134 | 0.003828 | 0.00612 | -3.15364661 |
| UPF1 | -0.192655214 | 5.86487255 | -2.917822885 | 0.003838 | 0.00613 | -3.15606128 |
| IPPK | -0.193441731 | 1.49118642 | -2.917580805 | 0.003841 | 0.00614 | -3.15674464 |
| PLCE1 | -0.364505269 | 3.24088863 | -2.91716145 | 0.003846 | 0.00614 | -3.1579283 |
| PHF21B | -0.238028754 | 0.83768877 | -2.916780567 | 0.00385 | 0.00615 | -3.15900323 |
| XPO4 | -0.209892256 | 3.07085533 | -2.916733491 | 0.003851 | 0.00615 | -3.15913608 |
| TIPARP | 0.442192895 | 5.41523914 | 2.915250929 | 0.003869 | 0.00618 | -3.16331887 |
| BTBD2 | -0.173386605 | 5.58996619 | -2.914803441 | 0.003874 | 0.00619 | -3.16458098 |
| CCDC68 | -0.203704209 | 1.13604332 | -2.914242068 | 0.003881 | 0.0062 | -3.16616405 |
| SLC38A7 | -0.148137144 | 3.51059103 | -2.913957302 | 0.003884 | 0.0062 | -3.16696698 |
| CXCR6 | 0.374943619 | 1.55057174 | 2.912441034 | 0.003902 | 0.00623 | -3.17124102 |
| SMAD1 | -0.280982455 | 2.74368204 | -2.912063639 | 0.003907 | 0.00624 | -3.17230449 |
| BNIP2 | -0.202339209 | 4.00909316 | -2.910867652 | 0.003921 | 0.00626 | -3.17567386 |
| LRMP | -0.323525295 | 2.09004271 | -2.910752488 | 0.003923 | 0.00626 | -3.17599823 |
| POLK | -0.231367294 | 3.5169869 | -2.910338922 | 0.003928 | 0.00627 | -3.17716299 |
| MFSD14/ | -0.253083525 | 5.57795418 | -2.909429339 | 0.003939 | 0.00629 | -3.17972419 |
| GPR82 | 0.14204347 | 0.5274531 | 2.908365287 | 0.003952 | 0.00631 | -3.18271939 |
| APLP1 | -0.331433099 | 1.98861481 | -2.907342727 | 0.003964 | 0.00633 | -3.18559682 |
| NDST2 | -0.10601158 | 1.17887738 | -2.906964437 | 0.003969 | 0.00633 | -3.18666107 |
| FIBCD1 | 0.483332171 | 1.4184184 | 2.906834723 | 0.003971 | 0.00633 | -3.18702597 |
| SHANK1 | -0.131048351 | 0.29032195 | -2.905012547 | 0.003993 | 0.00637 | -3.1921503 |
| ABCA4 | 0.166044705 | 0.84203862 | 2.904613364 | 0.003998 | 0.00638 | -3.19327248 |
| PLB1 | -0.164411347 | 0.97758979 | -2.904589202 | 0.003998 | 0.00638 | -3.1933404 |
| RALGAP | -0.305188982 | 4.47617211 | -2.904428917 | 0.004 | 0.00638 | -3.19379095 |
| SNX10 | 0.319367739 | 2.63758725 | 2.903306659 | 0.004014 | 0.0064 | -3.19694488 |
| CSNK2B | -0.174804951 | 5.97857882 | -2.903083528 | 0.004017 | 0.0064 | -3.19757182 |
| SDAD1 | -0.29049532 | 4.66939415 | -2.902660629 | 0.004022 | 0.00641 | -3.19875993 |

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| SNRNP2 | -0.22000189 | 5.86133709 | -2.902414832 | 0.004025 | 0.00642 | -3.1994504 |
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| OPRD1 | -0.052105504 | 0.12406081 | -2.901847678 | 0.004032 | 0.00643 | -3.20104341 |
| BCL9L | 0.351903243 | 3.28555009 | 2.901348859 | 0.004039 | 0.00644 | -3.20244423 |
| ERO1A | 0.178240688 | 4.62083212 | 2.900976692 | 0.004043 | 0.00644 | -3.20348924 |
| TSPAN8 | -0.266957674 | 0.59001713 | -2.900864631 | 0.004045 | 0.00644 | -3.20380387 |
| FHOD1 | 0.26130379 | 5.05465856 | 2.900679729 | 0.004047 | 0.00645 | -3.20432299 |
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| GOLGB1 | -0.230661157 | 5.53838115 | -2.899015839 | 0.004068 | 0.00648 | -3.20899303 |
| ULK3 | -0.220580239 | 5.16772407 | -2.89857558 | 0.004073 | 0.00649 | -3.21022828 |
| EEF1A1 | -0.253603915 | 11.6416596 | -2.898562408 | 0.004073 | 0.00649 | -3.21026524 |
| MMAA | -0.122902317 | 2.28152051 | -2.897062409 | 0.004092 | 0.00652 | -3.21447252 |
| NKRF | -0.160090523 | 3.28430619 | -2.896089194 | 0.004105 | 0.00654 | -3.21720116 |
| DCAF16 | -0.200354956 | 4.33990202 | -2.894867419 | 0.00412 | 0.00656 | -3.22062547 |
| LYPLA2 | -0.235628445 | 6.86902904 | -2.894704515 | 0.004122 | 0.00656 | -3.22108195 |
| TRPM2 | 0.235623046 | 1.48756932 | 2.894527275 | 0.004124 | 0.00657 | -3.22157857 |
| CADM3 | 0.607517118 | 1.85367057 | 2.893587333 | 0.004136 | 0.00658 | -3.22421177 |
| ADCY10 | -0.038052583 | 0.10452204 | -2.893251782 | 0.004141 | 0.00659 | -3.22515161 |
| RNGTT | -0.189976571 | 3.3916422 | -2.892694184 | 0.004148 | 0.0066 | -3.22671314 |
| MAG | 0.571018844 | 2.53864878 | 2.892384887 | 0.004152 | 0.00661 | -3.2275792 |
| COL5A2 | 0.416518368 | 4.08439138 | 2.892243935 | 0.004154 | 0.00661 | -3.22797384 |
| ZNF71 | -0.132468926 | 2.23472317 | -2.892207602 | 0.004154 | 0.00661 | -3.22807557 |
| HELLS | 0.191890815 | 1.49035569 | 2.891432598 | 0.004164 | 0.00662 | -3.23024514 |
| SETDB1 | -0.189453738 | 3.99593598 | -2.889996237 | 0.004182 | 0.00665 | -3.23426468 |
| CRABP2 | 0.742886558 | 6.82382003 | 2.88991464 | 0.004183 | 0.00665 | -3.23449297 |
| FAT4 | -0.287951397 | 2.14783424 | -2.889831741 | 0.004185 | 0.00665 | -3.23472489 |
| SLC47A2 | -0.237034988 | 0.53791973 | -2.889732464 | 0.004186 | 0.00666 | -3.23500262 |
| PANK3 | -0.250716893 | 3.99650276 | -2.889470437 | 0.004189 | 0.00666 | -3.23573562 |
| LRRC39 | -0.214709646 | 1.30910685 | -2.888577763 | 0.004201 | 0.00668 | -3.23823233 |
| TAZ | -0.180262937 | 3.94462787 | -2.888329792 | 0.004204 | 0.00668 | -3.23892575 |
| SPATA18 | -0.464449682 | 2.69243603 | -2.887591595 | 0.004214 | 0.0067 | -3.24098969 |
| MEX3D | 0.277151863 | 4.33916581 | 2.887527603 | 0.004214 | 0.0067 | -3.24116859 |
| CLIC1 | -0.20971322 | 8.89335967 | -2.887407676 | 0.004216 | 0.0067 | -3.24150384 |
| PSME2 | -0.213440909 | 6.34905579 | -2.887379553 | 0.004216 | 0.0067 | -3.24158245 |
| CEP131 | -0.170264872 | 3.70500425 | -2.88699879 | 0.004221 | 0.00671 | -3.24264677 |
| RFPL3 | -0.029909419 | 0.07184682 | -2.886425162 | 0.004229 | 0.00672 | -3.24424995 |
| TEC | 0.193476618 | 2.52724036 | 2.885941899 | 0.004235 | 0.00673 | -3.24560033 |
| TEX35 | -0.020942551 | 0.03245772 | -2.885859894 | 0.004236 | 0.00673 | -3.24582946 |
| ARSD | -0.210624909 | 5.62197838 | -2.884883745 | 0.004249 | 0.00675 | -3.24855641 |
| MBD6 | -0.250034222 | 5.60034162 | -2.88405895 | 0.00426 | 0.00677 | -3.25085986 |

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| GABRQ | -0.20525118 | 0.37030122 | -2.882878841 | 0.004275 | 0.00679 | -3.25415455 |
| BCR | -0.26640544 | 4.9385235 | -2.88266552 | 0.004278 | 0.00679 | -3.25474997 |
| TRMT44 | -0.204236741 | 3.04827128 | -2.881695325 | 0.004291 | 0.00681 | -3.25745748 |
| LNX2 | -0.250780389 | 3.82086626 | -2.881311168 | 0.004296 | 0.00682 | -3.25852931 |
| C1R | 0.546886634 | 4.53628415 | 2.879694705 | 0.004317 | 0.00685 | -3.26303788 |
| REEP2 | 0.345142018 | 2.03073061 | 2.879536805 | 0.004319 | 0.00686 | -3.26347816 |
| TMEM72 | -0.245452378 | 0.68617207 | -2.878904208 | 0.004328 | 0.00687 | -3.26524184 |
| PROSER | -0.190645249 | 3.67824054 | -2.877641149 | 0.004344 | 0.00689 | -3.26876215 |
| RAD1 | -0.188983961 | 3.55210215 | -2.876880422 | 0.004354 | 0.00691 | -3.27088171 |
| RNF138 | -0.200712365 | 3.86896293 | -2.876699329 | 0.004357 | 0.00691 | -3.27138619 |
| HLA-C | 0.363193958 | 9.89685386 | 2.875979644 | 0.004367 | 0.00693 | -3.27339079 |
| TRIM11 | -0.141477273 | 3.1612259 | -2.875832815 | 0.004369 | 0.00693 | -3.27379971 |
| SSX5 | -0.212092927 | 0.57931256 | -2.875572224 | 0.004372 | 0.00694 | -3.2745254 |
| NMI | -0.221409868 | 3.90787445 | -2.874533953 | 0.004386 | 0.00696 | -3.27741617 |
| PCSK9 | 0.074430582 | 0.1096458 | 2.87446937 | 0.004387 | 0.00696 | -3.27759595 |
| SLC2A1( | -0.295367858 | 4.97449697 | -2.874416323 | 0.004388 | 0.00696 | -3.27774362 |
| SLC38A1 | -0.316911113 | 4.85954763 | -2.874236486 | 0.00439 | 0.00696 | -3.2782442 |
| PNP | 0.510478392 | 5.16630033 | 2.873884856 | 0.004395 | 0.00697 | -3.2792229 |
| FOXO4 | -0.209880632 | 4.60247983 | -2.873854266 | 0.004395 | 0.00697 | -3.27930804 |
| PCDHB5 | -0.533050941 | 2.49595435 | -2.87340592 | 0.004401 | 0.00698 | -3.28055575 |
| FOXS1 | -0.328260922 | 2.75230161 | -2.873327488 | 0.004402 | 0.00698 | -3.280774 |
| MAP6D1 | -0.15101117 | 1.36317523 | -2.8731119 | 0.004405 | 0.00698 | -3.28137389 |
| JRKL | -0.226265347 | 3.80577122 | -2.873050047 | 0.004406 | 0.00698 | -3.28154599 |
| CROCC2 | -0.058551618 | 0.07208088 | -2.872041442 | 0.00442 | 0.007 | -3.28435186 |
| LCAT | -0.281678477 | 3.4355816 | -2.87132419 | 0.004429 | 0.00702 | -3.28634665 |
| ANXA5 | -0.221500304 | 8.56549159 | -2.87127982 | 0.00443 | 0.00702 | -3.28647004 |
| EPHA2 | 0.355455551 | 5.58252867 | 2.871096659 | 0.004432 | 0.00702 | -3.28697936 |
| PRKX | -0.330515918 | 4.80537256 | -2.870645885 | 0.004439 | 0.00703 | -3.2882327 |
| MSLN | 0.398445123 | 0.9294092 | 2.870486193 | 0.004441 | 0.00703 | -3.28867666 |
| LY9 | 0.234024908 | 0.54151748 | 2.868957252 | 0.004462 | 0.00707 | -3.29292616 |
| RGMB | -0.192300683 | 3.06109122 | -2.868809057 | 0.004464 | 0.00707 | -3.29333794 |
| VAT1 | 0.209765114 | 7.6477091 | 2.868501109 | 0.004468 | 0.00707 | -3.29419354 |
| KCNIP2 | -0.167497033 | 1.03564338 | -2.867760359 | 0.004478 | 0.00709 | -3.2962513 |
| ABCA3 | -0.241343453 | 5.44156666 | -2.86758535 | 0.00448 | 0.00709 | -3.29673738 |
| ADAM10 | -0.239466302 | 4.41995575 | -2.865623165 | 0.004507 | 0.00714 | -3.30218548 |
| ITGB3BF | -0.188043124 | 2.89825276 | -2.865171825 | 0.004514 | 0.00714 | -3.30343815 |
| TBC1D2: | -0.162207418 | 4.76867764 | -2.864918086 | 0.004517 | 0.00715 | -3.30414231 |
| RETREG | -0.169448021 | 5.68572277 | -2.864838147 | 0.004518 | 0.00715 | -3.30436414 |
| CXCL10 | 0.637738014 | 3.15409112 | 2.86466263 | 0.004521 | 0.00715 | -3.30485117 |
| RPGRIP' | -0.062104436 | 0.37481854 | -2.864505884 | 0.004523 | 0.00716 | -3.30528609 |

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| TP53BP1 | -0.295697509 | 3.83425584 | -2.863303285 | 0.004539 | 0.00718 | -3.30862222 |
| SLC8A1 | 0.128622678 | 0.69402466 | 2.861634452 | 0.004563 | 0.00722 | -3.31324954 |
| SYCP2 | -0.156634252 | 0.81932462 | -2.861232448 | 0.004568 | 0.00723 | -3.31436383 |
| MMP19 | 0.303590362 | 1.74033726 | 2.859405003 | 0.004594 | 0.00727 | -3.31942738 |
| ASCL2 | -0.255141311 | 1.2282945 | -2.859146397 | 0.004597 | 0.00727 | -3.32014369 |
| CACNA1 | -0.234698331 | 1.54980955 | -2.859106679 | 0.004598 | 0.00727 | -3.3202537 |
| PTGDR2 | -0.052435209 | 0.13996785 | -2.857110558 | 0.004626 | 0.00732 | -3.32578061 |
| CCNE1 | -0.156059415 | 2.05576946 | -2.857031102 | 0.004627 | 0.00732 | -3.32600054 |
| SAV1 | -0.193684814 | 5.25469225 | -2.856892136 | 0.004629 | 0.00732 | -3.32638516 |
| CACNB3 | -0.22142047 | 3.48331973 | -2.856745406 | 0.004631 | 0.00732 | -3.32679126 |
| SETD1A | -0.159148545 | 4.34739276 | -2.856679351 | 0.004632 | 0.00732 | -3.32697407 |
| FEM1B | -0.203243805 | 4.71205541 | -2.855275606 | 0.004652 | 0.00735 | -3.33085808 |
| ZNF718 | -0.251681614 | 2.62871293 | -2.854917213 | 0.004657 | 0.00736 | -3.33184943 |
| NPC1L1 | 0.02091559 | 0.04354778 | 2.853275486 | 0.00468 | 0.0074 | -3.3363891 |
| TYW5 | -0.144619843 | 1.72418832 | -2.853177328 | 0.004682 | 0.0074 | -3.33666045 |
| TIRAP | -0.189697367 | 2.66967852 | -2.852024898 | 0.004698 | 0.00742 | -3.33984556 |
| SGCB | -0.300830129 | 4.62538553 | -2.851333562 | 0.004708 | 0.00744 | -3.34175571 |
| ZFP91 | -0.243845109 | 5.31058733 | -2.850491237 | 0.00472 | 0.00746 | -3.34408245 |
| UNC5B | 0.349939393 | 4.42945628 | 2.850407628 | 0.004722 | 0.00746 | -3.34431337 |
| FRZB | -0.375474283 | 3.58797847 | -2.849647954 | 0.004733 | 0.00747 | -3.34641119 |
| PHF12 | -0.18285729 | 3.97485663 | -2.849259303 | 0.004738 | 0.00748 | -3.34748424 |
| RAB2B | -0.181735412 | 4.42144677 | -2.84831752 | 0.004752 | 0.0075 | -3.3500839 |
| CD209 | 0.232881918 | 1.06459119 | 2.847945876 | 0.004757 | 0.00751 | -3.35110954 |
| ZMYM2 | -0.222883637 | 4.14755852 | -2.847175691 | 0.004768 | 0.00753 | -3.35323467 |
| IFI35 | -0.244671048 | 5.36160058 | -2.846829994 | 0.004773 | 0.00754 | -3.35418835 |
| NEO1 | -0.240514944 | 4.3999497 | -2.846779391 | 0.004774 | 0.00754 | -3.35432795 |
| PRR15 | 0.938784591 | 5.84505424 | 2.846090206 | 0.004784 | 0.00755 | -3.35622887 |
| ZNF354C | -0.209979551 | 2.38104168 | -2.845716764 | 0.004789 | 0.00756 | -3.35725872 |
| IFI6 | -0.399776658 | 8.89312502 | -2.845694144 | 0.00479 | 0.00756 | -3.3573211 |
| ATP6AP | -0.151860192 | 1.79404327 | -2.844693874 | 0.004804 | 0.00758 | -3.36007893 |
| EML3 | -0.205384274 | 4.91315244 | -2.843681816 | 0.004819 | 0.0076 | -3.36286833 |
| VHL | -0.262403455 | 4.71251523 | -2.841756067 | 0.004848 | 0.00765 | -3.36817345 |
| NUDT14 | -0.202665287 | 5.83791923 | -2.840921418 | 0.00486 | 0.00767 | -3.37047173 |
| GZMK | 0.512729104 | 1.71543094 | 2.840365398 | 0.004868 | 0.00768 | -3.37200242 |
| OSBPL1 | -0.205097321 | 3.8309373 | -2.839748195 | 0.004877 | 0.00769 | -3.37370122 |
| NUMBL | 0.267326511 | 3.02710148 | 2.839366536 | 0.004883 | 0.0077 | -3.37475153 |
| DCAF12I | -0.139134629 | 0.2540879 | -2.838569634 | 0.004895 | 0.00772 | -3.37694415 |
| CCDC38 | -0.0259086 | 0.07465069 | -2.83856116 | 0.004895 | 0.00772 | -3.37696746 |
| ITPRIPL2 | 0.342303818 | 3.92470095 | 2.838358841 | 0.004898 | 0.00772 | -3.37752403 |
| GRAPL | -0.049232826 | 0.10228365 | -2.838011423 | 0.004903 | 0.00773 | -3.37847968 |

| IL32 | 0.412576684 | 3.83662673 | 2.837853133 | 0.004905 | 0.00773 | -3.37891505 |
|------|-------------|------------|-------------|----------|---------|-------------|
| GEMIN4 | -0.204987346 | 3.86941943 | -2.837846756 | 0.004905 | 0.00773 | -3.37893259 |
| WDHD1 | 0.182750306 | 1.79104131 | 2.836656717 | 0.004923 | 0.00776 | -3.38220503 |
| SERPINF | 0.266201866 | 1.5740136 | 2.836636476 | 0.004923 | 0.00776 | -3.38226068 |
| HK2 | -0.346045767 | 5.4549269 | -2.836438287 | 0.004926 | 0.00776 | -3.38280554 |
| MICALL2 | 0.235786902 | 3.19455974 | 2.836142109 | 0.004931 | 0.00777 | -3.38361974 |
| LILRB1 | 0.254794351 | 1.39050717 | 2.835249854 | 0.004944 | 0.00779 | -3.38607205 |
| UBE2V1 | -0.172797768 | 2.30298034 | -2.834502248 | 0.004955 | 0.00781 | -3.38812625 |
| APOBEC | 0.279950723 | 1.91975464 | 2.834407315 | 0.004957 | 0.00781 | -3.38838706 |
| VNN1 | 0.18949131 | 0.76305065 | 2.834395845 | 0.004957 | 0.00781 | -3.38841857 |
| CHIA | -0.260775781 | 1.09240949 | -2.834046311 | 0.004962 | 0.00781 | -3.38937877 |
| ATP13A2 | -0.180651566 | 4.83005796 | -2.833966619 | 0.004964 | 0.00782 | -3.38959768 |
| NR6A1 | -0.236799799 | 2.53434789 | -2.833412392 | 0.004972 | 0.00783 | -3.39111993 |
| MAP3K7 | -0.190867027 | 1.93813313 | -2.833376172 | 0.004972 | 0.00783 | -3.39121941 |
| HMGN4 | -0.304551906 | 6.99055217 | -2.833328235 | 0.004973 | 0.00783 | -3.39135106 |
| ENPP1 | -0.460254387 | 4.38561789 | -2.833002358 | 0.004978 | 0.00784 | -3.39224596 |
| MYO9B | 0.189291248 | 4.22111791 | 2.831157211 | 0.005006 | 0.00788 | -3.39731118 |
| UBASH3 | -0.228309563 | 1.48936814 | -2.83084595 | 0.005011 | 0.00789 | -3.39816533 |
| KRT8 | -0.238536125 | 8.94893558 | -2.829960521 | 0.005024 | 0.00791 | -3.40059462 |
| TSEN54 | -0.162584676 | 4.63275282 | -2.829391102 | 0.005033 | 0.00792 | -3.40215652 |
| SIGLEC1 | -0.134168148 | 0.47346533 | -2.828679998 | 0.005044 | 0.00794 | -3.40410664 |
| APOBEC | 0.206019875 | 0.78496213 | 2.827937087 | 0.005055 | 0.00795 | -3.40614349 |
| MAMDC2 | -0.331894697 | 2.01430571 | -2.825642752 | 0.00509 | 0.00801 | -3.41243075 |
| LRRC58 | -0.230887945 | 4.22180703 | -2.825450983 | 0.005093 | 0.00801 | -3.41295604 |
| BAG4 | -0.184122735 | 3.86265863 | -2.825093997 | 0.005099 | 0.00802 | -3.41393381 |
| HSD3B7 | 0.2493268 | 3.53409881 | 2.824753437 | 0.005104 | 0.00803 | -3.41486649 |
| ZNF304 | -0.204468137 | 3.44146188 | -2.824661321 | 0.005105 | 0.00803 | -3.41511874 |
| RAB18 | -0.223477189 | 5.79108211 | -2.824550681 | 0.005107 | 0.00803 | -3.41542171 |
| TGS1 | -0.205190274 | 3.8696191 | -2.824155605 | 0.005113 | 0.00804 | -3.41650348 |
| NKX6-2 | -0.018414494 | 0.02679843 | -2.823486938 | 0.005124 | 0.00805 | -3.41833404 |
| SH3D19 | -0.23722249 | 4.77879534 | -2.822256498 | 0.005143 | 0.00808 | -3.42170148 |
| MAT1A | -0.224921901 | 0.56175454 | -2.821818271 | 0.005149 | 0.00809 | -3.42290047 |
| LITAF | -0.231665355 | 6.94928642 | -2.821815761 | 0.00515 | 0.00809 | -3.42290734 |
| ARHGAF | -0.324415306 | 2.12839595 | -2.821455416 | 0.005155 | 0.0081 | -3.42389312 |
| CERS5 | -0.180088134 | 4.48196945 | -2.820726031 | 0.005166 | 0.00812 | -3.42588809 |
| NTRK2 | -0.345683336 | 6.08393182 | -2.818646138 | 0.005199 | 0.00817 | -3.43157425 |
| FREM3 | 0.103589217 | 0.10250899 | 2.817508008 | 0.005217 | 0.0082 | -3.43468408 |
| MED13 | 0.325403838 | 4.96217033 | 2.816583479 | 0.005232 | 0.00822 | -3.4372094 |
| LRRN3 | -0.53728516 | 3.23487389 | -2.816069373 | 0.00524 | 0.00823 | -3.43861332 |
| PI16 | -0.548249792 | 1.9756553 | -2.814643073 | 0.005262 | 0.00826 | -3.44250701 |

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| RDH10 | -0.254915392 | 3.26379269 | -2.814173903 | 0.00527 | 0.00828 | -3.44378741 |
| ATG7 | -0.143469451 | 3.09514514 | -2.813902311 | 0.005274 | 0.00828 | -3.44452851 |
| CXCL11 | 0.5013682 | 1.55783636 | 2.81381693 | 0.005275 | 0.00828 | -3.44476147 |
| LFNG | 0.251304441 | 2.94559465 | 2.812722638 | 0.005293 | 0.00831 | -3.44774673 |
| SLC23A2 | -0.264399011 | 4.93881321 | -2.811333786 | 0.005315 | 0.00834 | -3.45153398 |
| KIF23 | 0.174030191 | 0.91252407 | 2.811110814 | 0.005319 | 0.00835 | -3.45214183 |
| CENPL | -0.12487012 | 1.53740411 | -2.810816474 | 0.005323 | 0.00835 | -3.45294418 |
| PORCN | -0.258096571 | 4.51441276 | -2.810808671 | 0.005323 | 0.00835 | -3.45296545 |
| TIGD2 | -0.191391222 | 3.38147307 | -2.810590412 | 0.005327 | 0.00836 | -3.45356036 |
| CHERP | -0.189770845 | 4.48463401 | -2.810505808 | 0.005328 | 0.00836 | -3.45379095 |
| IRF4 | 0.457510213 | 1.66873033 | 2.809689808 | 0.005341 | 0.00838 | -3.45601466 |
| RBM25 | -0.225946281 | 4.63785252 | -2.808195687 | 0.005365 | 0.00842 | -3.46008476 |
| TMEM15 | -0.13656417 | 0.3841545 | -2.807993362 | 0.005369 | 0.00842 | -3.46063575 |
| MTMR3 | -0.16392842 | 2.22927543 | -2.807825659 | 0.005371 | 0.00843 | -3.46109243 |
| H2AFJ | -0.225871604 | 5.60625223 | -2.807806365 | 0.005372 | 0.00843 | -3.46114497 |
| TRPC3 | -0.062205527 | 0.17335093 | -2.807691306 | 0.005374 | 0.00843 | -3.46145828 |
| IFNG | 0.244776373 | 0.55040104 | 2.80726243 | 0.005381 | 0.00844 | -3.46262599 |
| HTRA3 | -0.514300999 | 3.41450847 | -2.807088448 | 0.005383 | 0.00844 | -3.46309966 |
| MYORG | -0.214018856 | 2.02221998 | -2.807080776 | 0.005384 | 0.00844 | -3.46312054 |
| ZNF660 | -0.186076827 | 1.69012721 | -2.807003997 | 0.005385 | 0.00844 | -3.46332956 |
| SERPINE | 0.274296953 | 3.08253633 | 2.806037439 | 0.0054 | 0.00847 | -3.46596041 |
| TRABD2 | 0.291624795 | 1.54494413 | 2.805534914 | 0.005409 | 0.00848 | -3.46732788 |
| LDLRAD | -0.148774805 | 1.19253657 | -2.805235283 | 0.005414 | 0.00848 | -3.46814313 |
| GUCY2C | -0.126968452 | 0.71119561 | -2.804468979 | 0.005426 | 0.0085 | -3.47022774 |
| UBTD1 | -0.185749123 | 5.78721302 | -2.803158202 | 0.005447 | 0.00854 | -3.47379227 |
| ZDHHC5 | -0.181072624 | 6.4122038 | -2.802330669 | 0.005461 | 0.00856 | -3.47604186 |
| TBC1D1 | -0.185622683 | 4.3084089 | -2.802306005 | 0.005461 | 0.00856 | -3.4761089 |
| ALG11 | -0.191541043 | 1.62688794 | -2.802136104 | 0.005464 | 0.00856 | -3.47657068 |
| DPP10 | -0.257018354 | 0.58548492 | -2.800996682 | 0.005483 | 0.00859 | -3.4796669 |
| PIP5K1C | -0.151816328 | 5.19668852 | -2.799846634 | 0.005502 | 0.00862 | -3.48279078 |
| ADAMTS | 0.185691702 | 0.86083286 | 2.799078733 | 0.005515 | 0.00864 | -3.48487597 |
| PLIN3 | -0.221203906 | 6.12178322 | -2.798994851 | 0.005516 | 0.00864 | -3.48510371 |
| HEXB | -0.201529336 | 6.41342669 | -2.798610593 | 0.005522 | 0.00865 | -3.4861469 |
| SMIM1 | -0.2973292 | 5.10957895 | -2.798310887 | 0.005527 | 0.00865 | -3.48696046 |
| WBP11 | -0.196749337 | 5.49988252 | -2.798099696 | 0.005531 | 0.00866 | -3.4875337 |
| CDCA4 | 0.185942815 | 3.81395505 | 2.797839081 | 0.005535 | 0.00866 | -3.48824103 |
| GPR12 | 0.062134419 | 0.06500147 | 2.796346734 | 0.00556 | 0.0087 | -3.49229017 |
| IRF8 | 0.372145769 | 2.0991919 | 2.79612689 | 0.005564 | 0.00871 | -3.49288649 |
| DDAH2 | -0.237040911 | 7.3539378 | -2.795741132 | 0.00557 | 0.00872 | -3.49393275 |
| THAP2 | -0.142500019 | 2.08119199 | -2.795069675 | 0.005581 | 0.00873 | -3.49575357 |

| | | | | | | |
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| MUC22 | 0.019999282 | 0.02439389 | 2.794207026 | 0.005596 | 0.00876 | -3.49809224 |
| ARL17A | -0.089676718 | 0.49319339 | -2.793821796 | 0.005602 | 0.00876 | -3.49913639 |
| APBB1IP | 0.347353327 | 2.29749294 | 2.792892198 | 0.005618 | 0.00879 | -3.50165547 |
| SUPT6H | -0.166281658 | 5.25257119 | -2.792860372 | 0.005619 | 0.00879 | -3.5017417 |
| HDGFL2 | -0.188911472 | 5.56450459 | -2.792393694 | 0.005626 | 0.0088 | -3.50300603 |
| CBLN4 | 0.421659587 | 1.49545258 | 2.792383754 | 0.005627 | 0.0088 | -3.50303295 |
| TMEM51 | 0.220864309 | 4.13916383 | 2.791910669 | 0.005635 | 0.00881 | -3.50431443 |
| TTC7B | -0.162649083 | 1.73104482 | -2.791663666 | 0.005639 | 0.00882 | -3.50498342 |
| FBXL4 | -0.187451591 | 3.71257952 | -2.791242471 | 0.005646 | 0.00883 | -3.50612407 |
| SLC26A1 | -0.206254747 | 4.6368241 | -2.790585387 | 0.005657 | 0.00884 | -3.50790321 |
| SOCS6 | -0.205256949 | 3.66031239 | -2.788557101 | 0.005691 | 0.0089 | -3.51339258 |
| RAPGEF | 0.286514167 | 3.18885464 | 2.78850347 | 0.005692 | 0.0089 | -3.51353768 |
| EZR | -0.252932242 | 8.60628271 | -2.787132207 | 0.005716 | 0.00893 | -3.51724669 |
| P3H3 | 0.322937958 | 5.1063997 | 2.787093856 | 0.005716 | 0.00893 | -3.51735039 |
| EFNA4 | -0.237256929 | 4.71619897 | -2.786787702 | 0.005722 | 0.00894 | -3.51817824 |
| TRIM15 | 0.025779695 | 0.03793768 | 2.786072496 | 0.005734 | 0.00896 | -3.52011182 |
| ABCC4 | -0.367307449 | 2.08189029 | -2.7859117 | 0.005737 | 0.00896 | -3.52054648 |
| MPEG1 | 0.337561451 | 3.09411974 | 2.785299802 | 0.005747 | 0.00898 | -3.52220031 |
| STEAP3 | -0.27541432 | 4.03267993 | -2.785211075 | 0.005749 | 0.00898 | -3.52244009 |
| MADCAM | -0.192397422 | 0.66882468 | -2.785129806 | 0.00575 | 0.00898 | -3.52265971 |
| SKIV2L | -0.160130637 | 4.93946722 | -2.784887882 | 0.005754 | 0.00899 | -3.52331345 |
| UBAP1L | -0.208143819 | 1.44443336 | -2.78477113 | 0.005756 | 0.00899 | -3.52362892 |
| MINAR1 | 0.084981503 | 0.53615124 | 2.784623866 | 0.005759 | 0.00899 | -3.52402683 |
| NRBP1 | -0.158866163 | 5.93198552 | -2.78356526 | 0.005777 | 0.00902 | -3.52688655 |
| HIST1H2 | -0.089944024 | 0.19494014 | -2.783441777 | 0.005779 | 0.00902 | -3.52722007 |
| HBA2 | -0.533198371 | 4.32906364 | -2.78264607 | 0.005793 | 0.00904 | -3.52936883 |
| P4HA3 | -0.246929134 | 1.88733523 | -2.782343159 | 0.005798 | 0.00905 | -3.53018668 |
| GRIN2A | 0.151522427 | 0.46114165 | 2.782315385 | 0.005799 | 0.00905 | -3.53026166 |
| RHNO1 | -0.173320899 | 5.31950122 | -2.781514494 | 0.005813 | 0.00907 | -3.5324236 |
| MS4A4A | 0.330896155 | 2.74433126 | 2.781208927 | 0.005818 | 0.00908 | -3.5332483 |
| TRIM59 | 0.181433744 | 1.53528662 | 2.780692239 | 0.005827 | 0.00909 | -3.53464261 |
| PLCG2 | -0.210159698 | 2.32222052 | -2.779615534 | 0.005846 | 0.00912 | -3.53754735 |
| ASTN2 | -0.199680656 | 1.2805579 | -2.77871671 | 0.005861 | 0.00914 | -3.5399714 |
| NHLRC2 | -0.186055362 | 3.62526434 | -2.778404313 | 0.005867 | 0.00915 | -3.54081373 |
| SMIM17 | 0.129493469 | 0.64140878 | 2.777389496 | 0.005885 | 0.00918 | -3.54354942 |
| NCKAP5 | -0.176707422 | 3.52424956 | -2.77691224 | 0.005893 | 0.00919 | -3.54483566 |
| PRRC2C | 0.218386498 | 4.86546291 | 2.776862524 | 0.005894 | 0.00919 | -3.54496964 |
| MANEA | -0.256260478 | 3.359788 | -2.776337278 | 0.005903 | 0.00921 | -3.54638495 |
| WFIKKN | -0.125753836 | 0.28207137 | -2.776076229 | 0.005908 | 0.00921 | -3.54708827 |
| PPEF1 | 0.143079829 | 0.51332422 | 2.776039923 | 0.005908 | 0.00921 | -3.54718608 |

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| OR2B6 | -0.110579405 | 0.28127852 | -2.775645924 | 0.005915 | 0.00922 | -3.54824746 |
| SAMD9 | 0.285722383 | 2.64042545 | 2.775569906 | 0.005917 | 0.00922 | -3.54845223 |
| DNAJC2₄ | -0.173037909 | 1.94046249 | -2.775047314 | 0.005926 | 0.00924 | -3.54985977 |
| CCDC14 | 0.275071498 | 2.02303456 | 2.775033039 | 0.005926 | 0.00924 | -3.54989821 |
| CD19 | 0.374863075 | 0.72938176 | 2.77414969 | 0.005942 | 0.00926 | -3.55227683 |
| ADAMTS | 0.221561454 | 1.06164337 | 2.77403155 | 0.005944 | 0.00926 | -3.5525949 |
| CD276 | 0.259937453 | 5.08669118 | 2.773757397 | 0.005949 | 0.00927 | -3.55333294 |
| CD320 | -0.235824593 | 6.59417132 | -2.772836102 | 0.005965 | 0.00929 | -3.55581265 |
| PYHIN1 | 0.251939621 | 0.78753112 | 2.772295684 | 0.005975 | 0.00931 | -3.55726685 |
| CLEC4E | -0.311061853 | 1.44349837 | -2.772238334 | 0.005976 | 0.00931 | -3.55742116 |
| SLFN12 | -0.222658553 | 2.81018046 | -2.772087305 | 0.005979 | 0.00931 | -3.5578275 |
| NFKBID | 0.23781367 | 2.63414434 | 2.77202725 | 0.00598 | 0.00931 | -3.55798908 |
| LAT | 0.090987314 | 0.38034203 | 2.771747396 | 0.005985 | 0.00932 | -3.55874195 |
| TEPSIN | -0.196012683 | 2.87656583 | -2.771189181 | 0.005995 | 0.00933 | -3.56024348 |
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| PKN2 | -0.233866607 | 4.5052557 | -2.769368495 | 0.006027 | 0.00938 | -3.56513893 |
| DTX3L | 0.216964258 | 5.07084241 | 2.767749897 | 0.006056 | 0.00943 | -3.56948845 |
| IFI27L2 | -0.295155054 | 4.92332397 | -2.767228273 | 0.006066 | 0.00944 | -3.57088966 |
| IFNAR1 | -0.182906647 | 5.5638516 | -2.767101706 | 0.006068 | 0.00944 | -3.57122961 |
| SCLY | -0.083555879 | 0.71861644 | -2.765554073 | 0.006096 | 0.00949 | -3.57538528 |
| PRMT8 | 0.488918191 | 1.04578557 | 2.765476176 | 0.006097 | 0.00949 | -3.57559439 |
| XPNPEP | 0.143055544 | 0.34505457 | 2.764744824 | 0.006111 | 0.00951 | -3.57755738 |
| HORMAD | 0.053671843 | 0.15012053 | 2.763745528 | 0.006129 | 0.00953 | -3.58023877 |
| EDRF1 | -0.181148045 | 2.65637625 | -2.762978105 | 0.006143 | 0.00956 | -3.58229736 |
| ACADL | -0.339521264 | 3.70412412 | -2.7625919 | 0.00615 | 0.00957 | -3.58333314 |
| CHKB-CI | 0.196918724 | 1.06216809 | 2.761653405 | 0.006167 | 0.00959 | -3.58584955 |
| RAI14 | 0.275057341 | 3.59679606 | 2.761597778 | 0.006168 | 0.00959 | -3.58599868 |
| LRFN2 | -0.182285017 | 0.25403642 | -2.761517678 | 0.00617 | 0.00959 | -3.58621342 |
| ZDHHC1 | -0.156213421 | 2.77676521 | -2.759773001 | 0.006202 | 0.00964 | -3.59088912 |
| VPS53 | -0.151456935 | 3.20174442 | -2.759618507 | 0.006205 | 0.00965 | -3.59130303 |
| APBA1 | -0.17467913 | 1.0391073 | -2.759268828 | 0.006211 | 0.00965 | -3.59223978 |
| TRPV1 | 0.04684432 | 0.1414698 | 2.759225928 | 0.006212 | 0.00966 | -3.59235469 |
| DENND4 | -0.22054704 | 3.39917996 | -2.758478172 | 0.006226 | 0.00968 | -3.59435744 |
| ATP6V1/ | -0.237444157 | 6.34707733 | -2.757998042 | 0.006234 | 0.00969 | -3.59564312 |
| HNRNPA | -0.194908357 | 8.24618555 | -2.757545818 | 0.006243 | 0.0097 | -3.59685388 |
| IL13RA2 | -0.225546835 | 0.87690348 | -2.756926474 | 0.006254 | 0.00972 | -3.59851178 |
| SMYD5 | -0.151012738 | 4.88188498 | -2.756890062 | 0.006255 | 0.00972 | -3.59860924 |
| CCNT1 | -0.207540732 | 3.84364219 | -2.755783804 | 0.006276 | 0.00975 | -3.60156964 |
| MMP23B | 0.044776105 | 0.10567757 | 2.754504058 | 0.006299 | 0.00979 | -3.60499289 |

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| PROK1 | -0.158049775 | 0.39944343 | -2.754377099 | 0.006302 | 0.00979 | -3.60533242 |
| LDHC | -0.214062061 | 0.38689673 | -2.754192899 | 0.006305 | 0.00979 | -3.605825 |
| APOD | 0.576252608 | 3.57072954 | 2.754090724 | 0.006307 | 0.00979 | -3.60609822 |
| HRH4 | 0.034646354 | 0.08221065 | 2.753499375 | 0.006318 | 0.00981 | -3.60767932 |
| NLRC4 | 0.160324405 | 1.25005085 | 2.752794628 | 0.006331 | 0.00983 | -3.6095632 |
| NUP43 | -0.144425318 | 4.5430533 | -2.752748703 | 0.006332 | 0.00983 | -3.60968595 |
| DAGLA | 0.222452205 | 2.14874407 | 2.752497545 | 0.006337 | 0.00984 | -3.6103572 |
| KLHL36 | -0.193847688 | 4.62897983 | -2.752132863 | 0.006344 | 0.00985 | -3.61133176 |
| PRDM4 | -0.190307939 | 4.39033623 | -2.751972868 | 0.006347 | 0.00985 | -3.61175929 |
| SCML4 | 0.137968739 | 0.33595745 | 2.751446493 | 0.006357 | 0.00987 | -3.61316566 |
| SENP5 | -0.144320344 | 3.70189662 | -2.750304441 | 0.006378 | 0.0099 | -3.61621614 |
| POU5F1 | -0.061855751 | 0.38759822 | -2.750089253 | 0.006382 | 0.0099 | -3.61679078 |
| FURIN | -0.226268183 | 7.15060865 | -2.749532611 | 0.006393 | 0.00992 | -3.61827705 |
| ANKRD6 | 0.325860674 | 2.9251188 | 2.74910361 | 0.006401 | 0.00993 | -3.61942232 |
| NPB | -0.018511527 | 0.03311966 | -2.749053742 | 0.006402 | 0.00993 | -3.61955544 |
| ZNF625 | -0.091647253 | 0.51814905 | -2.748701557 | 0.006409 | 0.00994 | -3.6204955 |
| FAM122( | -0.096132602 | 1.19712347 | -2.748116003 | 0.00642 | 0.00996 | -3.62205822 |
| LARP4 | -0.19832305 | 4.02926526 | -2.748096273 | 0.00642 | 0.00996 | -3.62211087 |
| CCL3L1 | -0.381927232 | 1.55759107 | -2.747826315 | 0.006425 | 0.00996 | -3.62283122 |
| SPARC | -0.275827236 | 9.33515435 | -2.747602157 | 0.00643 | 0.00997 | -3.62342931 |
| TLR2 | 0.291793117 | 3.35365543 | 2.747539915 | 0.006431 | 0.00997 | -3.62359537 |
| SEC23A | 0.253163437 | 4.03350913 | 2.747390295 | 0.006434 | 0.00997 | -3.62399454 |
| YTHDF3 | -0.210981122 | 4.92675442 | -2.746854475 | 0.006444 | 0.00999 | -3.6254239 |
| KCNH3 | -0.319695165 | 2.02094624 | -2.746657074 | 0.006448 | 0.00999 | -3.62595043 |
| TTC31 | -0.157136522 | 3.74981112 | -2.746595587 | 0.006449 | 0.00999 | -3.62611442 |
| OPN5 | 0.022752742 | 0.05007645 | 2.746111743 | 0.006458 | 0.01001 | -3.62740479 |
| KCNMB1 | 0.172512783 | 1.24785233 | 2.746075838 | 0.006459 | 0.01001 | -3.62750054 |
| GIMAP2 | -0.276552868 | 3.00733556 | -2.745965458 | 0.006461 | 0.01001 | -3.62779488 |
| KRT1 | 0.078873822 | 0.14146224 | 2.745485928 | 0.00647 | 0.01002 | -3.62907346 |
| KIAA114 | -0.181479755 | 4.19286063 | -2.745200981 | 0.006475 | 0.01003 | -3.62983313 |
| STEAP2 | -0.293875635 | 1.62696492 | -2.74494423 | 0.00648 | 0.01004 | -3.63051756 |
| USP9X | -0.227424796 | 4.98560136 | -2.744748819 | 0.006484 | 0.01004 | -3.63103843 |
| STAU2 | -0.172674317 | 3.49673602 | -2.743977924 | 0.006499 | 0.01006 | -3.63309293 |
| ZNF251 | -0.219525563 | 4.12348121 | -2.742795279 | 0.006522 | 0.0101 | -3.63624372 |
| PDPN | 0.320508037 | 1.49267885 | 2.742592958 | 0.006526 | 0.0101 | -3.63678262 |
| POLRMT | -0.14868782 | 4.80401013 | -2.742543464 | 0.006527 | 0.0101 | -3.63691444 |
| RPRD2 | -0.233565205 | 5.05246546 | -2.741757221 | 0.006542 | 0.01013 | -3.63900825 |
| KIAA132 | -0.135148587 | 1.49533213 | -2.740600296 | 0.006564 | 0.01016 | -3.64208818 |
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| SNX8 | 0.183300176 | 4.63395825 | 2.739291756 | 0.00659 | 0.0102 | -3.64557026 |

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| TRIM31 | -0.122711276 | 0.47387582 | -2.738744078 | 0.0066 | 0.01021 | -3.64702719 |
| NRP1 | -0.267129503 | 4.82177016 | -2.738608682 | 0.006603 | 0.01022 | -3.64738733 |
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| ATXN1L | -0.245217899 | 4.04924222 | -2.737606853 | 0.006622 | 0.01024 | -3.65005155 |
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| CA5B | -0.184127798 | 2.21285697 | -2.737141785 | 0.006632 | 0.01026 | -3.65128802 |
| SERPINE | -0.037870894 | 0.1522161 | -2.737004739 | 0.006634 | 0.01026 | -3.65165234 |
| 7-Mar | -0.205613151 | 5.21627293 | -2.73679338 | 0.006638 | 0.01026 | -3.65221419 |
| PEAK1 | 0.206334782 | 2.32388374 | 2.736444176 | 0.006645 | 0.01027 | -3.65314237 |
| NAAA | -0.227288823 | 3.62931067 | -2.736225631 | 0.00665 | 0.01028 | -3.6537232 |
| TMEM68 | -0.15001029 | 3.08190704 | -2.735600549 | 0.006662 | 0.0103 | -3.65538427 |
| EPSTI1 | 0.339030113 | 2.88909463 | 2.735084982 | 0.006672 | 0.01031 | -3.65675404 |
| NHLRC3 | -0.194639871 | 4.12258448 | -2.734398005 | 0.006685 | 0.01033 | -3.65857884 |
| RAMP1 | 0.602703967 | 3.24538902 | 2.734024575 | 0.006693 | 0.01034 | -3.65957059 |
| NSMF | -0.254397014 | 4.5704308 | -2.733928733 | 0.006695 | 0.01035 | -3.6598251 |
| HAS2 | 0.408266767 | 1.19532471 | 2.732870019 | 0.006716 | 0.01038 | -3.66263604 |
| FCRL1 | 0.179300818 | 0.24988375 | 2.732544589 | 0.006722 | 0.01039 | -3.66349986 |
| MLKL | -0.178003717 | 2.34996614 | -2.73198013 | 0.006733 | 0.0104 | -3.66499794 |
| FEM1A | -0.09895191 | 0.84390652 | -2.731837299 | 0.006736 | 0.01041 | -3.66537697 |
| KLF13 | -0.267219732 | 5.29852023 | -2.731808301 | 0.006737 | 0.01041 | -3.66545392 |
| TBC1D8 | -0.218981737 | 2.52861037 | -2.731731888 | 0.006738 | 0.01041 | -3.66565668 |
| SLC16A9 | -0.385650007 | 5.11119777 | -2.731129744 | 0.00675 | 0.01042 | -3.66725432 |
| TMED7-1 | -0.049612499 | 0.24887246 | -2.73092272 | 0.006754 | 0.01043 | -3.66780352 |
| ZNF10 | -0.232707943 | 3.67964921 | -2.728731299 | 0.006798 | 0.0105 | -3.67361467 |
| PRPF40A | -0.203007795 | 4.839606 | -2.72782758 | 0.006816 | 0.01052 | -3.67600985 |
| MYO1D | 0.310140765 | 6.32360308 | 2.727194077 | 0.006829 | 0.01054 | -3.67768841 |
| MOB3A | -0.168550642 | 5.11846892 | -2.726624833 | 0.00684 | 0.01056 | -3.67919639 |
| GRK3 | -0.207359794 | 2.91381908 | -2.725945667 | 0.006854 | 0.01058 | -3.68099518 |
| CLDN2 | 0.568986722 | 2.45235115 | 2.725719428 | 0.006859 | 0.01058 | -3.68159429 |
| SLC35A3 | -0.2522209 | 4.38169022 | -2.72474521 | 0.006878 | 0.01061 | -3.68417359 |
| TUSC3 | 0.502235981 | 4.78745235 | 2.724322187 | 0.006887 | 0.01063 | -3.6852933 |
| NFIL3 | -0.328400865 | 4.50040166 | -2.723573164 | 0.006902 | 0.01065 | -3.6872755 |
| CHAF1B | 0.199084718 | 2.26902546 | 2.723132826 | 0.006911 | 0.01066 | -3.68844057 |
| MYO3A | 0.158319683 | 0.83195214 | 2.722947451 | 0.006915 | 0.01067 | -3.68893098 |
| ZNF468 | -0.254301352 | 3.46326959 | -2.722945678 | 0.006915 | 0.01067 | -3.68893568 |
| DHX8 | -0.171251807 | 4.06821696 | -2.722203178 | 0.00693 | 0.01069 | -3.69089968 |
| SEC24D | -0.28626211 | 4.28573692 | -2.721706644 | 0.00694 | 0.0107 | -3.69221279 |
| SYN2 | -0.136441655 | 0.24142893 | -2.72133365 | 0.006948 | 0.01071 | -3.69319905 |

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| GPRC5A | 0.270262816 | 7.05552887 | 2.720503627 | 0.006965 | 0.01074 | -3.69539331 |
| KCNMA1 | 0.162951184 | 0.8107125 | 2.720376487 | 0.006967 | 0.01074 | -3.69572936 |
| TIMM29 | -0.140250348 | 4.57931753 | -2.720196832 | 0.006971 | 0.01075 | -3.69620419 |
| CNTNAP | -0.257844243 | 0.42071609 | -2.719249384 | 0.00699 | 0.01078 | -3.69870783 |
| C3AR1 | 0.368590267 | 3.22174448 | 2.717044166 | 0.007036 | 0.01084 | -3.70453196 |
| KLHL42 | -0.200489631 | 3.44535304 | -2.716995462 | 0.007037 | 0.01085 | -3.70466054 |
| CD83 | -0.265668239 | 4.54112085 | -2.716705744 | 0.007043 | 0.01085 | -3.70542536 |
| C7 | 0.680975445 | 3.06143361 | 2.716483889 | 0.007047 | 0.01086 | -3.70601098 |
| DSE | 0.197838824 | 2.05291032 | 2.716267767 | 0.007052 | 0.01087 | -3.70658142 |
| SLCO3A | -0.172146337 | 3.94043096 | -2.715838959 | 0.007061 | 0.01088 | -3.70771311 |
| AMPH | 0.096053569 | 0.36229106 | 2.715379866 | 0.00707 | 0.01089 | -3.70892453 |
| IGLL1 | 0.230390486 | 0.38877313 | 2.714704952 | 0.007084 | 0.01091 | -3.7107051 |
| SMG5 | -0.173467408 | 5.9606553 | -2.712961433 | 0.007121 | 0.01097 | -3.71530296 |
| FMNL2 | 0.327874525 | 5.34979898 | 2.712626651 | 0.007128 | 0.01098 | -3.71618549 |
| SERPINE | 0.284355193 | 3.47488175 | 2.712221973 | 0.007136 | 0.01099 | -3.71725215 |
| IFNGR2 | -0.19294578 | 6.86651431 | -2.71174241 | 0.007146 | 0.011 | -3.718516 |
| MYH14 | 0.227601554 | 6.67170643 | 2.711599097 | 0.007149 | 0.01101 | -3.71889365 |
| DRD4 | -0.225082379 | 1.20697522 | -2.710866407 | 0.007164 | 0.01103 | -3.72082408 |
| ZNF410 | -0.098502566 | 0.93246136 | -2.710149206 | 0.007179 | 0.01105 | -3.72271323 |
| FCGR3A | 0.427467885 | 4.45940724 | 2.709648171 | 0.00719 | 0.01107 | -3.72403271 |
| FBXO17 | -0.145061921 | 0.80514044 | -2.708585575 | 0.007212 | 0.0111 | -3.7268303 |
| LY6G6F- | -0.07367765 | 0.12078965 | -2.708131045 | 0.007222 | 0.01111 | -3.72802666 |
| PHF10 | -0.190452993 | 5.49498517 | -2.707834449 | 0.007228 | 0.01112 | -3.72880722 |
| RAD18 | 0.172679968 | 2.74169169 | 2.707674327 | 0.007232 | 0.01113 | -3.72922859 |
| CEMIP | 0.3536595 | 1.68545339 | 2.707421781 | 0.007237 | 0.01113 | -3.72989312 |
| SSH2 | -0.183400252 | 3.03256073 | -2.707226449 | 0.007241 | 0.01114 | -3.73040707 |
| HES7 | -0.17240167 | 0.63323268 | -2.707113477 | 0.007244 | 0.01114 | -3.7307043 |
| CERKL | 0.279679544 | 1.663886 | 2.706891021 | 0.007248 | 0.01115 | -3.73128955 |
| FBLN2 | 0.402352162 | 4.26662975 | 2.706865958 | 0.007249 | 0.01115 | -3.73135548 |
| PHACTR | -0.252668859 | 3.90423761 | -2.705370934 | 0.007281 | 0.0112 | -3.73528744 |
| IRF1 | 0.295731791 | 3.87840614 | 2.705300216 | 0.007282 | 0.0112 | -3.73547338 |
| ZFAND5 | -0.196154753 | 6.26047705 | -2.704837478 | 0.007292 | 0.01121 | -3.73668995 |
| RNF217 | -0.206461456 | 2.80719888 | -2.704161693 | 0.007306 | 0.01123 | -3.73846629 |
| GPHN | -0.210175506 | 3.76822867 | -2.703109497 | 0.007329 | 0.01127 | -3.7412312 |
| MEFV | 0.071304041 | 0.2701779 | 2.702171184 | 0.007349 | 0.0113 | -3.743696 |
| RXRG | 0.799922693 | 5.5475222 | 2.700595388 | 0.007383 | 0.01135 | -3.74783354 |
| SESN3 | -0.300885518 | 4.25331015 | -2.700422945 | 0.007387 | 0.01135 | -3.74828619 |
| PURG | -0.033379437 | 0.11662153 | -2.699132911 | 0.007415 | 0.01139 | -3.75167151 |
| CUZD1 | 0.116299204 | 0.76878091 | 2.698887946 | 0.00742 | 0.0114 | -3.75231418 |
| FOXD2 | -0.090291611 | 0.59157457 | -2.698227356 | 0.007434 | 0.01142 | -3.75404697 |

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| CYB5R2 | -0.159188596 | 1.65710175 | -2.697488078 | 0.00745 | 0.01145 | -3.75598569 |
| ST8SIA5 | -0.101144352 | 0.15359538 | -2.697428356 | 0.007452 | 0.01145 | -3.75614228 |
| BBS1 | -0.133101215 | 1.36426429 | -2.697402363 | 0.007452 | 0.01145 | -3.75621044 |
| GPR137E | -0.224097239 | 5.07482267 | -2.697302199 | 0.007454 | 0.01145 | -3.75647307 |
| CYP2U1 | -0.198080823 | 2.16875925 | -2.696962414 | 0.007462 | 0.01146 | -3.75736391 |
| ZNF865 | -0.157155843 | 4.38718208 | -2.696945051 | 0.007462 | 0.01146 | -3.75740943 |
| SERTAD | 0.245360254 | 4.56961113 | 2.696766034 | 0.007466 | 0.01146 | -3.75787873 |
| RNASE6 | 0.389379424 | 3.84769232 | 2.696566673 | 0.00747 | 0.01147 | -3.75840132 |
| LYSMD4 | -0.137987565 | 2.08740233 | -2.695665759 | 0.00749 | 0.0115 | -3.76076249 |
| RNASE1: | -0.056848795 | 0.15169784 | -2.694550096 | 0.007514 | 0.01154 | -3.76368544 |
| METTL1( | -0.173016745 | 4.12474166 | -2.693788883 | 0.007531 | 0.01156 | -3.7656791 |
| CCM2 | 0.181504868 | 4.5201727 | 2.693580424 | 0.007536 | 0.01157 | -3.76622498 |
| ADGRB2 | -0.313941577 | 3.15528853 | -2.693372545 | 0.00754 | 0.01157 | -3.7667693 |
| PPIL3 | -0.20764799 | 4.28458248 | -2.692460273 | 0.00756 | 0.0116 | -3.76915754 |
| SAMD3 | 0.116554843 | 0.37971823 | 2.692212848 | 0.007566 | 0.01161 | -3.76980515 |
| KLHL35 | -0.167242696 | 1.00015622 | -2.691193837 | 0.007588 | 0.01164 | -3.77247169 |
| NET1 | 0.291648337 | 5.48654843 | 2.690987372 | 0.007593 | 0.01165 | -3.77301186 |
| GATA3 | 0.352745499 | 3.20033934 | 2.690718885 | 0.007599 | 0.01166 | -3.77371422 |
| ORAI3 | -0.189374912 | 5.08370832 | -2.689911719 | 0.007617 | 0.01168 | -3.77582539 |
| TRPA1 | 0.016992109 | 0.02304478 | 2.689452423 | 0.007627 | 0.0117 | -3.77702642 |
| AP1S3 | -0.275412443 | 3.25431495 | -2.688936575 | 0.007638 | 0.01171 | -3.7783751 |
| CARD19 | -0.171537163 | 4.38761508 | -2.687664287 | 0.007667 | 0.01176 | -3.78170044 |
| PDGFRB | -0.338090783 | 4.93338342 | -2.686470399 | 0.007693 | 0.0118 | -3.78481953 |
| UBE2H | -0.183200576 | 6.33970146 | -2.685778315 | 0.007709 | 0.01182 | -3.78662702 |
| SLC22A1 | 0.033707503 | 0.05932335 | 2.685689528 | 0.007711 | 0.01182 | -3.78685887 |
| FMN2 | -0.16497381 | 0.24382558 | -2.685668109 | 0.007711 | 0.01182 | -3.7869148 |
| ZNF534 | -0.128431428 | 0.31996879 | -2.685222854 | 0.007721 | 0.01183 | -3.78807739 |
| AGAP1 | -0.223570983 | 3.33714869 | -2.684690957 | 0.007733 | 0.01185 | -3.78946596 |
| CES1 | -0.571523814 | 2.44616283 | -2.683048714 | 0.00777 | 0.01191 | -3.79375156 |
| CFAP10( | -0.040625495 | 0.08572197 | -2.682913568 | 0.007773 | 0.01191 | -3.79410413 |
| PLA2G4E | -0.032488378 | 0.02634344 | -2.682759691 | 0.007777 | 0.01192 | -3.79450554 |
| PM20D1 | -0.180947313 | 0.51028045 | -2.682523942 | 0.007782 | 0.01192 | -3.79512048 |
| DNAH3 | -0.020646459 | 0.04571536 | -2.681500368 | 0.007805 | 0.01196 | -3.79778986 |
| PLXNB1 | 0.237050375 | 5.7599551 | 2.681395577 | 0.007808 | 0.01196 | -3.79806309 |
| FAM118/ | -0.234546687 | 2.89806119 | -2.68027548 | 0.007833 | 0.012 | -3.80098297 |
| CPB2 | -0.125695694 | 0.32396295 | -2.680172848 | 0.007835 | 0.012 | -3.80125045 |
| IL10RA | 0.318053922 | 2.83143866 | 2.679692156 | 0.007846 | 0.01202 | -3.80250313 |
| RADX | -0.17931094 | 1.62265958 | -2.679382938 | 0.007853 | 0.01203 | -3.80330883 |
| CLEC4G | 0.099280513 | 0.23642847 | 2.678277305 | 0.007879 | 0.01206 | -3.80618897 |
| PPM1M | -0.205260372 | 4.5549086 | -2.676555327 | 0.007918 | 0.01212 | -3.81067244 |

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|---|---|---|---|---|---|---|
| CEP162 | -0.171649653 | 2.81307329 | -2.675709926 | 0.007938 | 0.01215 | -3.81287259 |
| FAM122E | -0.187039106 | 4.64948303 | -2.675635626 | 0.007939 | 0.01215 | -3.81306592 |
| RELN | -0.146109352 | 0.29441444 | -2.675582325 | 0.007941 | 0.01215 | -3.81320461 |
| ARG1 | -0.063415231 | 0.32632126 | -2.674851443 | 0.007957 | 0.01218 | -3.81510611 |
| TBC1D1( | -0.214300119 | 3.53097441 | -2.674707812 | 0.007961 | 0.01218 | -3.81547973 |
| XRCC2 | 0.113069099 | 0.77466748 | 2.674456973 | 0.007967 | 0.01219 | -3.81613218 |
| TTBK2 | -0.141272528 | 2.085291 | -2.674228789 | 0.007972 | 0.0122 | -3.81672565 |
| BST2 | -0.383041813 | 6.08933095 | -2.67421501 | 0.007972 | 0.0122 | -3.81676148 |
| NOP9 | -0.178953336 | 4.32217865 | -2.674120784 | 0.007974 | 0.0122 | -3.81700654 |
| ZNF195 | -0.14816422 | 3.44531521 | -2.673913645 | 0.007979 | 0.0122 | -3.81754521 |
| TUBA3E | -0.083224796 | 0.10828434 | -2.673105088 | 0.007998 | 0.01223 | -3.81964752 |
| GAREM1 | -0.256608595 | 1.97066139 | -2.672840459 | 0.008004 | 0.01224 | -3.82033545 |
| IDH1 | -0.235839695 | 5.46441424 | -2.672427369 | 0.008014 | 0.01225 | -3.82140918 |
| LMBRD1 | -0.245508826 | 7.33491692 | -2.672425111 | 0.008014 | 0.01225 | -3.82141505 |
| ZNF143 | -0.165501054 | 3.11667835 | -2.672342907 | 0.008016 | 0.01225 | -3.8216287 |
| FUT7 | 0.215053669 | 0.77659209 | 2.671197982 | 0.008042 | 0.01229 | -3.82460376 |
| SLC11A2 | -0.199858028 | 4.99596439 | -2.671018351 | 0.008046 | 0.0123 | -3.82507042 |
| MYB | 0.133306321 | 0.6074817 | 2.671011716 | 0.008046 | 0.0123 | -3.82508766 |
| LPO | -0.083236621 | 0.08968406 | -2.670749734 | 0.008053 | 0.01231 | -3.8257682 |
| S100A13 | -0.262529242 | 8.19073429 | -2.670260932 | 0.008064 | 0.01232 | -3.82703777 |
| GPR173 | 0.301803208 | 1.54758576 | 2.669722321 | 0.008077 | 0.01234 | -3.82843646 |
| USP1 | -0.22468625 | 4.67218152 | -2.669312068 | 0.008086 | 0.01235 | -3.82950164 |
| B3GNT2 | -0.211605021 | 5.14101019 | -2.669081286 | 0.008092 | 0.01236 | -3.83010078 |
| PPP1R2E | -0.087084698 | 0.35933895 | -2.66879075 | 0.008098 | 0.01237 | -3.83085498 |
| ZNF318 | -0.219979025 | 3.51154791 | -2.668459225 | 0.008106 | 0.01238 | -3.83171548 |
| ANKRD2 | -0.03193434 | 0.07652076 | -2.667782375 | 0.008122 | 0.01241 | -3.83347199 |
| SCAMP1 | -0.213732154 | 5.38616837 | -2.66730566 | 0.008133 | 0.01242 | -3.83470887 |
| POLD1 | 0.193015232 | 4.00824546 | 2.665990265 | 0.008164 | 0.01247 | -3.8381207 |
| SLC16A1 | 0.41517965 | 2.03238934 | 2.665758865 | 0.00817 | 0.01247 | -3.83872073 |
| AMDHD2 | -0.172395994 | 3.51069448 | -2.665756845 | 0.00817 | 0.01247 | -3.83872597 |
| GMEB1 | -0.162569991 | 3.19421379 | -2.665138812 | 0.008184 | 0.01249 | -3.84032832 |
| RALA | -0.149840639 | 5.09822464 | -2.664394962 | 0.008202 | 0.01252 | -3.84225641 |
| CSRNP3 | -0.272211403 | 1.95954554 | -2.663720141 | 0.008218 | 0.01254 | -3.84400513 |
| ASPM | 0.133805329 | 0.52099673 | 2.663562729 | 0.008222 | 0.01255 | -3.84441298 |
| COL22A1 | 0.13278974 | 0.52514666 | 2.662387467 | 0.00825 | 0.01259 | -3.84745737 |
| PNPLA7 | -0.230921789 | 3.13207374 | -2.662052061 | 0.008258 | 0.0126 | -3.84832597 |
| CYFIP1 | -0.194140021 | 5.14052852 | -2.661494557 | 0.008271 | 0.01262 | -3.8497695 |
| SPDEF | 0.117246069 | 0.34262012 | 2.661269743 | 0.008276 | 0.01263 | -3.85035153 |
| FERMT2 | -0.21421603 | 4.31294878 | -2.661251183 | 0.008277 | 0.01263 | -3.85039958 |
| ASGR2 | 0.12207275 | 0.48285759 | 2.660438223 | 0.008296 | 0.01266 | -3.85250386 |

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| PPP1R32 | -0.16629514 | 1.84754071 | -2.659926052 | 0.008309 | 0.01267 | -3.85382927 |
| CHRNA9 | -0.158902389 | 0.36180303 | -2.659158208 | 0.008327 | 0.0127 | -3.85581586 |
| RO60 | -0.233085023 | 3.26119274 | -2.65851445 | 0.008343 | 0.01272 | -3.85748099 |
| ACIN1 | -0.180427635 | 5.89094818 | -2.657407905 | 0.008369 | 0.01276 | -3.86034227 |
| MTUS2 | -0.247497397 | 0.64707848 | -2.657042626 | 0.008378 | 0.01277 | -3.86128655 |
| TNFRSF | 0.487826695 | 1.17570361 | 2.656786556 | 0.008384 | 0.01278 | -3.86194844 |
| LAMA3 | 0.190045823 | 0.72214134 | 2.656010654 | 0.008403 | 0.01281 | -3.86395363 |
| CXCR3 | 0.368217461 | 2.22540035 | 2.652726867 | 0.008483 | 0.01293 | -3.87243391 |
| NAA25 | -0.173033165 | 2.75855401 | -2.652645926 | 0.008485 | 0.01293 | -3.87264281 |
| RSPO3 | 0.206246997 | 0.72910568 | 2.651395021 | 0.008516 | 0.01298 | -3.87587053 |
| PIP4K2A | 0.207440273 | 4.38677928 | 2.65134058 | 0.008517 | 0.01298 | -3.87601097 |
| SSTR3 | 0.306688418 | 1.09403119 | 2.651286098 | 0.008518 | 0.01298 | -3.87615151 |
| TUBGCP | -0.167186463 | 3.47481099 | -2.651077221 | 0.008523 | 0.01299 | -3.87669032 |
| TKTL1 | -0.025867105 | 0.05714105 | -2.650932554 | 0.008527 | 0.01299 | -3.87706347 |
| RFX5 | -0.198301292 | 5.26690904 | -2.650789071 | 0.00853 | 0.01299 | -3.87743354 |
| HPDL | -0.313421143 | 1.46997963 | -2.650491962 | 0.008538 | 0.013 | -3.8781998 |
| GDPD5 | -0.140266977 | 1.28531801 | -2.650231477 | 0.008544 | 0.01301 | -3.87887153 |
| ATL1 | -0.191968198 | 1.93432626 | -2.648797808 | 0.00858 | 0.01307 | -3.88256753 |
| CAP1 | -0.17972704 | 7.84188314 | -2.648606344 | 0.008584 | 0.01307 | -3.88306098 |
| NMT2 | -0.153453877 | 2.86852598 | -2.648401702 | 0.008589 | 0.01308 | -3.88358836 |
| SOD2 | 0.2597603 | 4.8093965 | 2.647830896 | 0.008603 | 0.0131 | -3.88505916 |
| KRT4 | -0.084075595 | 0.10399125 | -2.647601163 | 0.008609 | 0.01311 | -3.88565103 |
| WDR36 | -0.183874079 | 3.62692233 | -2.647446588 | 0.008613 | 0.01311 | -3.88604924 |
| ACER2 | 0.36754252 | 2.33592295 | 2.646623419 | 0.008633 | 0.01314 | -3.88816949 |
| SCN11A | -0.044210503 | 0.16846191 | -2.645756208 | 0.008655 | 0.01317 | -3.8904025 |
| CCN2 | -0.514947686 | 8.23087793 | -2.645749802 | 0.008655 | 0.01317 | -3.89041899 |
| CEBPB | -0.202988104 | 6.43050906 | -2.645690323 | 0.008657 | 0.01317 | -3.89057212 |
| GRM7 | 0.02394503 | 0.03859594 | 2.645429388 | 0.008663 | 0.01318 | -3.89124386 |
| ISL2 | 0.063260571 | 0.09255828 | 2.64538551 | 0.008664 | 0.01318 | -3.89135681 |
| WARS | 0.382986212 | 7.11147768 | 2.645268008 | 0.008667 | 0.01319 | -3.89165928 |
| EIF4G1 | -0.199290196 | 6.90743969 | -2.645074637 | 0.008672 | 0.01319 | -3.89215702 |
| TUBGCP | -0.146355389 | 2.20108322 | -2.644578391 | 0.008684 | 0.01321 | -3.8934342 |
| ITPRID2 | -0.260029553 | 5.29693005 | -2.644456019 | 0.008687 | 0.01321 | -3.89374911 |
| PHF6 | -0.194117472 | 3.6288834 | -2.644111404 | 0.008696 | 0.01322 | -3.89463586 |
| DERA | -0.176572417 | 5.52060442 | -2.642109014 | 0.008746 | 0.0133 | -3.89978621 |
| BARX1 | -0.321027724 | 0.72872519 | -2.64089695 | 0.008777 | 0.01334 | -3.90290196 |
| UBE3C | -0.208037128 | 4.26161014 | -2.640776781 | 0.00878 | 0.01335 | -3.9032108 |
| SENP1 | -0.166232082 | 3.06581892 | -2.64019675 | 0.008794 | 0.01337 | -3.90470129 |
| KIAA167 | -0.300391641 | 4.35430958 | -2.639450056 | 0.008813 | 0.0134 | -3.9066196 |
| ZSCAN2 | -0.161746841 | 2.26439196 | -2.639297925 | 0.008817 | 0.0134 | -3.90701038 |

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| CLSPN | 0.150939795 | 0.75392188 | 2.637814464 | 0.008855 | 0.01346 | -3.91081976 |
| CAPN9 | -0.200020671 | 0.39502585 | -2.636776211 | 0.008881 | 0.0135 | -3.91348469 |
| AVPI1 | 0.219407415 | 4.99331703 | 2.634450128 | 0.008941 | 0.01359 | -3.91945153 |
| HTR4 | 0.023786883 | 0.03429366 | 2.634179884 | 0.008947 | 0.01359 | -3.92014444 |
| HMGXB3 | 0.1577143 | 4.76821751 | 2.634081269 | 0.00895 | 0.0136 | -3.92039727 |
| FBXL18 | -0.16861844 | 1.5823686 | -2.634052201 | 0.008951 | 0.0136 | -3.92047179 |
| ABI2 | -0.216245265 | 3.76298538 | -2.633627452 | 0.008962 | 0.01361 | -3.92156066 |
| ARL17B | -0.114231481 | 0.5807835 | -2.632943832 | 0.008979 | 0.01364 | -3.92331281 |
| TNRC6B | -0.183098871 | 2.95381587 | -2.632478424 | 0.008991 | 0.01366 | -3.92450543 |
| DRD2 | 0.036679676 | 0.06081255 | 2.632334114 | 0.008995 | 0.01366 | -3.92487518 |
| TARBP1 | -0.201103638 | 3.53526338 | -2.632257306 | 0.008997 | 0.01366 | -3.92507197 |
| RAB7B | 0.363766728 | 3.41207502 | 2.63153604 | 0.009015 | 0.01369 | -3.92691969 |
| MEGF11 | -0.220711355 | 0.30429935 | -2.631279741 | 0.009022 | 0.0137 | -3.92757615 |
| FAM163E | 0.09221182 | 0.18154715 | 2.631279257 | 0.009022 | 0.0137 | -3.92757739 |
| GPR19 | 0.096039482 | 0.46827352 | 2.63103376 | 0.009028 | 0.0137 | -3.92820613 |
| IGFBP3 | -0.456394821 | 5.5522048 | -2.630909914 | 0.009032 | 0.01371 | -3.92852329 |
| GLRX | -0.217950935 | 3.07984101 | -2.630735195 | 0.009036 | 0.01371 | -3.9289707 |
| TRIP12 | -0.211485332 | 5.31199019 | -2.629844535 | 0.009059 | 0.01375 | -3.93125105 |
| ARHGAP | 0.238907705 | 3.95777279 | 2.629225393 | 0.009075 | 0.01377 | -3.9328358 |
| MRVI1 | -0.221669818 | 2.26321794 | -2.629139326 | 0.009078 | 0.01377 | -3.93305606 |
| MYO18A | -0.241531169 | 3.45614553 | -2.628409849 | 0.009097 | 0.0138 | -3.93492271 |
| CMTM5 | -0.033771594 | 0.0867703 | -2.627712486 | 0.009115 | 0.01383 | -3.93670672 |
| IFI44 | -0.268987703 | 4.596022 | -2.627190983 | 0.009128 | 0.01385 | -3.93804056 |
| PKD2L2 | -0.035246159 | 0.14857798 | -2.626897371 | 0.009136 | 0.01386 | -3.93879141 |
| PRPF8 | -0.197184473 | 6.31696529 | -2.626721232 | 0.009141 | 0.01386 | -3.93924181 |
| SELP | 0.353313012 | 2.92454467 | 2.626458286 | 0.009147 | 0.01387 | -3.93991413 |
| IZUMO1F | -0.119566373 | 0.31024469 | -2.626409263 | 0.009149 | 0.01387 | -3.94003947 |
| CAMK4 | 0.112106455 | 0.40080687 | 2.625988618 | 0.00916 | 0.01389 | -3.94111485 |
| C5orf24 | -0.227393171 | 5.19218098 | -2.622459843 | 0.009253 | 0.01403 | -3.95012978 |
| LRRC69 | -0.138804401 | 0.75953048 | -2.620900172 | 0.009294 | 0.01409 | -3.95411059 |
| MTOR | -0.191549437 | 3.95468085 | -2.62058036 | 0.009302 | 0.0141 | -3.95492659 |
| TIGAR | -0.213693361 | 3.11542597 | -2.620336349 | 0.009309 | 0.01411 | -3.95554911 |
| GABRB1 | -0.058272045 | 0.10384959 | -2.620165646 | 0.009313 | 0.01411 | -3.95598458 |
| KIF14 | 0.086453902 | 0.3295118 | 2.618607603 | 0.009355 | 0.01418 | -3.95995794 |
| GLIPR1 | 0.227366113 | 2.52798089 | 2.618323662 | 0.009362 | 0.01419 | -3.96068182 |
| CST4 | 0.533594156 | 1.63922263 | 2.618062644 | 0.009369 | 0.0142 | -3.96134718 |
| KCNIP1 | -0.150888453 | 0.22347154 | -2.616887737 | 0.009401 | 0.01424 | -3.96434139 |
| MYO3B | 0.215548157 | 2.00743184 | 2.616688407 | 0.009406 | 0.01425 | -3.96484925 |
| ADGRG5 | 0.25039871 | 1.11220269 | 2.616345067 | 0.009415 | 0.01426 | -3.96572394 |
| ZBTB37 | -0.156825337 | 1.81356664 | -2.616293615 | 0.009417 | 0.01426 | -3.96585501 |

| | | | | | | |
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| TPRN | -0.164263742 | 3.31280925 | -2.61625904 | 0.009418 | 0.01426 | -3.96594308 |
| PAK5 | -0.035445296 | 0.07027906 | -2.615804274 | 0.00943 | 0.01428 | -3.96710143 |
| PFN4 | -0.161566068 | 1.9947451 | -2.61441479 | 0.009467 | 0.01433 | -3.97063945 |
| TK2 | -0.161121797 | 4.76850332 | -2.613762532 | 0.009485 | 0.01436 | -3.97229967 |
| M1AP | -0.340564159 | 2.28143067 | -2.61364422 | 0.009488 | 0.01436 | -3.97260077 |
| SPTLC1 | -0.301470069 | 5.53173425 | -2.613230661 | 0.009499 | 0.01438 | -3.97365317 |
| MAK16 | -0.154562973 | 3.62575766 | -2.61300878 | 0.009505 | 0.01439 | -3.97421773 |
| CHGB | 0.604633436 | 2.08298253 | 2.612085137 | 0.00953 | 0.01442 | -3.9765674 |
| ECT2L | 0.112865173 | 0.62769825 | 2.611718515 | 0.00954 | 0.01444 | -3.97749984 |
| C17orf10 | 0.325377046 | 2.77192009 | 2.611061651 | 0.009558 | 0.01446 | -3.97917015 |
| HPCAL4 | 0.519220166 | 2.43498689 | 2.610935417 | 0.009562 | 0.01447 | -3.97949109 |
| MRAP2 | -0.128595208 | 0.30983112 | -2.609671274 | 0.009596 | 0.01452 | -3.98270435 |
| ZNF549 | -0.149519243 | 2.15243586 | -2.609460647 | 0.009602 | 0.01453 | -3.98323959 |
| CCDC57 | -0.191728154 | 2.89027333 | -2.60862402 | 0.009625 | 0.01456 | -3.98536519 |
| PHF7 | -0.140697034 | 2.21340087 | -2.608163454 | 0.009637 | 0.01458 | -3.98653506 |
| SIPA1L3 | -0.209727027 | 3.9540136 | -2.608118144 | 0.009639 | 0.01458 | -3.98665015 |
| PLCB1 | -0.163897342 | 1.13022643 | -2.606493603 | 0.009683 | 0.01464 | -3.99077498 |
| ADGRF5 | -0.34320501 | 5.36166226 | -2.606216515 | 0.009691 | 0.01465 | -3.99147829 |
| SEMA6C | -0.184198604 | 1.85927074 | -2.605585951 | 0.009708 | 0.01468 | -3.99307852 |
| A2ML1 | -0.040126951 | 0.08097668 | -2.605432704 | 0.009713 | 0.01468 | -3.99346737 |
| TTC24 | 0.094221028 | 0.18324947 | 2.605311684 | 0.009716 | 0.01469 | -3.99377443 |
| SIGLEC1 | 0.245085201 | 1.73574301 | 2.60500567 | 0.009724 | 0.0147 | -3.99455082 |
| FUT9 | 0.132900189 | 0.16155428 | 2.604990253 | 0.009725 | 0.0147 | -3.99458993 |
| SFTPA2 | 0.49016526 | 1.0666687 | 2.604539797 | 0.009737 | 0.01472 | -3.99573262 |
| ZNF687 | -0.21286403 | 4.51921057 | -2.603892917 | 0.009755 | 0.01474 | -3.99737325 |
| SP4 | -0.217565789 | 3.40319628 | -2.602910707 | 0.009782 | 0.01478 | -3.99986362 |
| MDGA1 | -0.1366155 | 0.77299457 | -2.602820312 | 0.009785 | 0.01478 | -4.00009277 |
| CD47 | 0.264380509 | 6.00457148 | 2.602585083 | 0.009791 | 0.01479 | -4.00068904 |
| MCTP2 | 0.244164994 | 3.4881859 | 2.60123044 | 0.009829 | 0.01485 | -4.00412183 |
| ZNF598 | -0.158362716 | 4.07669934 | -2.601065563 | 0.009834 | 0.01485 | -4.00453952 |
| MTR | -0.208682391 | 4.39991142 | -2.600695517 | 0.009844 | 0.01487 | -4.0054769 |
| CPAMD8 | 0.63643382 | 3.52436216 | 2.600501563 | 0.009849 | 0.01487 | -4.00596817 |
| MOB3C | -0.172364534 | 3.76654064 | -2.600236348 | 0.009857 | 0.01488 | -4.00663987 |
| LRRC1 | -0.213681866 | 4.4041615 | -2.59995144 | 0.009865 | 0.0149 | -4.00736138 |
| PBLD | -0.156971595 | 2.02184875 | -2.599264726 | 0.009884 | 0.01492 | -4.00910011 |
| NADSYN | -0.138796386 | 3.44153505 | -2.599141425 | 0.009888 | 0.01493 | -4.00941226 |
| FAM124E | -0.195324459 | 1.2720819 | -2.598963799 | 0.009893 | 0.01493 | -4.00986191 |
| C11orf16 | -0.048779851 | 0.15753437 | -2.598042669 | 0.009918 | 0.01497 | -4.01219325 |
| PER2 | -0.249460773 | 3.70189385 | -2.597800083 | 0.009925 | 0.01498 | -4.01280709 |
| SLC25A1 | -0.065301398 | 0.59168811 | -2.597725445 | 0.009927 | 0.01498 | -4.01299594 |

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|---|---|---|---|---|---|---|
| CALB2 | 0.289839661 | 0.73962158 | 2.597071972 | 0.009946 | 0.01501 | -4.01464918 |
| ARHGAF | -0.250342843 | 2.36216187 | -2.597039959 | 0.009947 | 0.01501 | -4.01473016 |
| CBFA2T: | -0.20137084 | 1.5247725 | -2.596875593 | 0.009951 | 0.01501 | -4.01514593 |
| OLFML2I | 0.344813254 | 3.78859983 | 2.596849662 | 0.009952 | 0.01501 | -4.01521152 |
| DMC1 | -0.077668457 | 0.47465766 | -2.596731532 | 0.009955 | 0.01502 | -4.01551032 |
| AP1AR | -0.183082321 | 3.87816472 | -2.596618877 | 0.009959 | 0.01502 | -4.01579525 |
| C19orf71 | -0.260874121 | 3.06993212 | -2.596583275 | 0.00996 | 0.01502 | -4.01588529 |
| PWWP2/ | -0.153769465 | 3.11109685 | -2.596403774 | 0.009965 | 0.01503 | -4.01633927 |
| ULK2 | -0.16457069 | 3.0492583 | -2.59596954 | 0.009977 | 0.01504 | -4.01743736 |
| LCP2 | 0.277305942 | 2.81765007 | 2.595545963 | 0.009989 | 0.01506 | -4.01850834 |
| NFATC3 | -0.232435801 | 2.61568592 | -2.595355263 | 0.009994 | 0.01507 | -4.01899045 |
| CAPN12 | 0.16938945 | 0.80876854 | 2.594087665 | 0.01003 | 0.01512 | -4.02219425 |
| ORAI2 | -0.19397413 | 4.94395544 | -2.593386635 | 0.01005 | 0.01515 | -4.02396544 |
| SETBP1 | -0.234964008 | 2.33053863 | -2.592874371 | 0.010065 | 0.01517 | -4.0252594 |
| ACAP2 | -0.216542722 | 3.94393965 | -2.592855157 | 0.010065 | 0.01517 | -4.02530793 |
| GPX2 | -0.265929446 | 0.50208229 | -2.5928252 | 0.010066 | 0.01517 | -4.0253836 |
| UBE2J1 | -0.173532374 | 5.90843865 | -2.592117753 | 0.010086 | 0.0152 | -4.02717017 |
| CACNG8 | -0.044735246 | 0.1371267 | -2.591593412 | 0.010101 | 0.01522 | -4.02849403 |
| LIPE | -0.152930436 | 2.38125925 | -2.591580377 | 0.010102 | 0.01522 | -4.02852694 |
| FASLG | 0.23472758 | 0.81145538 | 2.591536258 | 0.010103 | 0.01522 | -4.02863831 |
| ZC3HAV | -0.188504754 | 4.27772261 | -2.591333115 | 0.010109 | 0.01523 | -4.02915113 |
| SASH1 | -0.275843654 | 5.02623858 | -2.591223948 | 0.010112 | 0.01523 | -4.0294267 |
| GPHA2 | -0.077063003 | 0.15413731 | -2.591205906 | 0.010112 | 0.01523 | -4.02947224 |
| PTH2R | 0.024918477 | 0.07458782 | 2.590850279 | 0.010123 | 0.01524 | -4.03036986 |
| XIRP1 | 0.18501358 | 0.1949439 | 2.590757799 | 0.010125 | 0.01525 | -4.03060326 |
| TWF1 | -0.213347394 | 5.81049607 | -2.590491186 | 0.010133 | 0.01526 | -4.0312761 |
| CACNG1 | 0.089771317 | 0.10108497 | 2.589813238 | 0.010152 | 0.01528 | -4.03298673 |
| SOX6 | -0.174028283 | 1.41321619 | -2.589569339 | 0.010159 | 0.01529 | -4.03360203 |
| USP41 | -0.111028844 | 0.11843386 | -2.589540081 | 0.01016 | 0.01529 | -4.03367584 |
| PCDH1 | 0.270111669 | 4.87918486 | 2.589498847 | 0.010161 | 0.01529 | -4.03377986 |
| CP | 0.349795186 | 1.27214233 | 2.589260492 | 0.010168 | 0.0153 | -4.03438112 |
| PLTP | 0.360797358 | 5.13084298 | 2.588574046 | 0.010188 | 0.01533 | -4.0361124 |
| SASS6 | -0.127575609 | 1.84868898 | -2.587938712 | 0.010206 | 0.01536 | -4.03771438 |
| GNGT2 | -0.182274827 | 1.91656738 | -2.587759698 | 0.010211 | 0.01536 | -4.03816569 |
| TMEM14 | -0.167057628 | 0.49926424 | -2.587700952 | 0.010213 | 0.01537 | -4.03831379 |
| TTC37 | -0.22264646 | 4.77012147 | -2.587375214 | 0.010223 | 0.01538 | -4.03913491 |
| OGA | -0.186270287 | 6.17036556 | -2.587098022 | 0.010231 | 0.01539 | -4.03983359 |
| APBB2 | -0.221717753 | 4.33266136 | -2.586729546 | 0.010241 | 0.0154 | -4.04076224 |
| PRDM7 | -0.019577522 | 0.03472589 | -2.586508903 | 0.010248 | 0.01541 | -4.04131825 |
| VPS37C | -0.139909409 | 4.31324384 | -2.585257999 | 0.010284 | 0.01546 | -4.04446964 |

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| DBP | -0.249760555 | 4.90130623 | -2.584608307 | 0.010303 | 0.01549 | -4.04610582 |
| SP7 | -0.134477382 | 0.34627337 | -2.58431509 | 0.010311 | 0.0155 | -4.04684413 |
| ZNF317 | -0.141287384 | 4.16912265 | -2.584134418 | 0.010317 | 0.01551 | -4.04729902 |
| NOX5 | -0.312422004 | 0.81928875 | -2.582793023 | 0.010356 | 0.01557 | -4.05067538 |
| TUBB | -0.171612083 | 8.37787758 | -2.582260018 | 0.010371 | 0.01559 | -4.05201652 |
| DNAH1 | 0.143987252 | 1.58983012 | 2.58219619 | 0.010373 | 0.01559 | -4.0521771 |
| P2RY12 | 0.242927758 | 1.30811043 | 2.581763856 | 0.010386 | 0.01561 | -4.05326472 |
| AKAP6 | -0.173129421 | 1.69881303 | -2.581749189 | 0.010386 | 0.01561 | -4.05330161 |
| BMP1 | 0.244364618 | 5.04400589 | 2.581676844 | 0.010388 | 0.01561 | -4.05348359 |
| NFX1 | -0.165794102 | 4.66519905 | -2.581664837 | 0.010389 | 0.01561 | -4.05351379 |
| MANSC4 | 0.164657616 | 0.32542189 | 2.581649131 | 0.010389 | 0.01561 | -4.0535533 |
| HAUS4 | -0.194208165 | 4.66758254 | -2.581528759 | 0.010393 | 0.01561 | -4.05385607 |
| SLC25A1 | -0.141750576 | 3.20558359 | -2.58143499 | 0.010396 | 0.01561 | -4.05409192 |
| AQP1 | -0.308674627 | 7.19768621 | -2.581097622 | 0.010405 | 0.01563 | -4.05494041 |
| TESK1 | -0.147064134 | 5.00742649 | -2.580918437 | 0.010411 | 0.01563 | -4.05539102 |
| PPP3CA | -0.17240501 | 4.9272339 | -2.580009537 | 0.010437 | 0.01567 | -4.05767624 |
| SLC16A3 | 0.317037793 | 3.80601429 | 2.579978049 | 0.010438 | 0.01567 | -4.0577554 |
| ZNF678 | -0.169218137 | 2.16332812 | -2.579359708 | 0.010457 | 0.0157 | -4.05930962 |
| ZSWIM5 | -0.30688366 | 3.74860355 | -2.579026536 | 0.010466 | 0.01571 | -4.06014692 |
| KIRREL1 | 0.247982098 | 3.67572598 | 2.578806386 | 0.010473 | 0.01572 | -4.06070012 |
| ZNF90 | 0.349969295 | 2.65353277 | 2.578669684 | 0.010477 | 0.01573 | -4.06104361 |
| GABRA5 | -0.088363577 | 0.15871057 | -2.578077739 | 0.010494 | 0.01575 | -4.06253078 |
| ZNF267 | 0.197978274 | 2.72597736 | 2.57807114 | 0.010495 | 0.01575 | -4.06254735 |
| RSPH10I | -0.01991563 | 0.05208748 | -2.576699172 | 0.010535 | 0.01581 | -4.06599295 |
| CTDSPL | -0.176765874 | 3.37894038 | -2.576411635 | 0.010544 | 0.01582 | -4.06671486 |
| AREL1 | -0.173523016 | 4.52230626 | -2.574963727 | 0.010587 | 0.01588 | -4.0703489 |
| VXN | -0.092681955 | 0.41426744 | -2.574872439 | 0.01059 | 0.01589 | -4.07057796 |
| RBBP9 | -0.248637587 | 5.90844745 | -2.574444092 | 0.010602 | 0.0159 | -4.07165264 |
| FANCA | 0.145733503 | 1.19773592 | 2.573754972 | 0.010623 | 0.01593 | -4.07338122 |
| GAPT | 0.205706941 | 1.1960597 | 2.573413325 | 0.010633 | 0.01595 | -4.07423804 |
| PPTC7 | -0.200769207 | 4.14983194 | -2.573349923 | 0.010635 | 0.01595 | -4.07439704 |
| XCL1 | 0.24509347 | 0.89086582 | 2.572609786 | 0.010657 | 0.01598 | -4.07625282 |
| PTX3 | -0.201169202 | 1.25797729 | -2.572471819 | 0.010661 | 0.01599 | -4.0765987 |
| ZNF558 | -0.176311591 | 2.93219431 | -2.570391437 | 0.010724 | 0.01608 | -4.08181197 |
| POU1F1 | -0.053763673 | 0.24648898 | -2.57037857 | 0.010724 | 0.01608 | -4.0818442 |
| TEX11 | 0.022269828 | 0.03767507 | 2.569400283 | 0.010754 | 0.01612 | -4.08429431 |
| AMOTL2 | -0.255003599 | 5.45389211 | -2.568343372 | 0.010786 | 0.01617 | -4.08694034 |
| RB1 | -0.209111255 | 4.77790172 | -2.567973965 | 0.010797 | 0.01618 | -4.08786493 |
| FCRL3 | 0.208835862 | 0.43067584 | 2.567832274 | 0.010802 | 0.01619 | -4.08821953 |
| FAM90A | -0.270682249 | 1.23885416 | -2.567792293 | 0.010803 | 0.01619 | -4.08831959 |

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| MYBPC3 | 0.031460915 | 0.09083286 | 2.567333294 | 0.010817 | 0.01621 | -4.08946816 |
| MYRFL | -0.084124652 | 0.25269389 | -2.566739877 | 0.010835 | 0.01623 | -4.0909528 |
| SGK3 | 0.24290195 | 3.8353546 | 2.56661671 | 0.010838 | 0.01624 | -4.09126091 |
| FLII | 0.188592442 | 6.32318918 | 2.565813321 | 0.010863 | 0.01627 | -4.09327026 |
| CDK11A | -0.145908583 | 2.0557277 | -2.564624636 | 0.010899 | 0.01632 | -4.09624217 |
| FAM149E | -0.149562727 | 3.60496176 | -2.564580824 | 0.010901 | 0.01633 | -4.09635168 |
| ADAT3 | -0.195473358 | 1.66672526 | -2.564042119 | 0.010917 | 0.01635 | -4.09769808 |
| LINC022 | -0.150856835 | 0.5156932 | -2.563677863 | 0.010928 | 0.01636 | -4.09860833 |
| CRHR1 | -0.150856835 | 0.5156932 | -2.563677863 | 0.010928 | 0.01636 | -4.09860833 |
| RNFT2 | -0.137399231 | 1.66356654 | -2.563532458 | 0.010933 | 0.01637 | -4.09897165 |
| SHPK | -0.146433203 | 2.52988503 | -2.563515048 | 0.010933 | 0.01637 | -4.09901515 |
| URB2 | -0.173866179 | 2.33223281 | -2.562938341 | 0.010951 | 0.01639 | -4.10045595 |
| FGF20 | 0.250961821 | 0.94064376 | 2.56288032 | 0.010953 | 0.01639 | -4.10060089 |
| RSPH14 | -0.13759876 | 1.05057314 | -2.562630835 | 0.01096 | 0.0164 | -4.10122408 |
| DGKQ | -0.156219465 | 3.69325109 | -2.562629148 | 0.010961 | 0.0164 | -4.10122829 |
| GPSM3 | 0.309370096 | 4.21642705 | 2.562252641 | 0.010972 | 0.01642 | -4.10216865 |
| ZNF430 | 0.29597165 | 3.34990819 | 2.561954664 | 0.010981 | 0.01643 | -4.10291279 |
| NLRP2B | -0.02018649 | 0.05350033 | -2.561268472 | 0.011002 | 0.01646 | -4.10462609 |
| CSPG5 | -0.153897336 | 0.96824472 | -2.560334732 | 0.011031 | 0.0165 | -4.10695678 |
| P2RX5 | 0.194649811 | 0.39411295 | 2.559734967 | 0.01105 | 0.01653 | -4.10845342 |
| CPM | -0.269812519 | 3.33921205 | -2.558949869 | 0.011074 | 0.01656 | -4.11041203 |
| HMCES | -0.160791671 | 6.00370664 | -2.55884873 | 0.011077 | 0.01657 | -4.1106643 |
| NXNL1 | -0.065291562 | 0.15507266 | -2.558119471 | 0.0111 | 0.0166 | -4.11248303 |
| ZNF165 | -0.167829139 | 2.96721622 | -2.557971256 | 0.011105 | 0.0166 | -4.1128526 |
| ITPK1 | -0.177318761 | 5.33778144 | -2.557603658 | 0.011116 | 0.01662 | -4.11376913 |
| ZNF655 | -0.185619388 | 4.25416416 | -2.556111123 | 0.011163 | 0.01669 | -4.11748917 |
| ATF1 | -0.231869984 | 4.88180601 | -2.556049295 | 0.011165 | 0.01669 | -4.11764323 |
| SIPA1L1 | 0.214667956 | 4.29089897 | 2.555740124 | 0.011174 | 0.0167 | -4.11841354 |
| NRAS | -0.187443631 | 4.73396302 | -2.555078283 | 0.011195 | 0.01673 | -4.12006224 |
| CSE1L | -0.150288937 | 5.65121419 | -2.55358474 | 0.011242 | 0.0168 | -4.1237813 |
| CD247 | 0.307093349 | 1.56175036 | 2.553332046 | 0.01125 | 0.01681 | -4.12441032 |
| EDEM1 | 0.256992487 | 5.15377746 | 2.553055997 | 0.011259 | 0.01682 | -4.12509742 |
| DOK1 | -0.187425481 | 4.02157424 | -2.552050797 | 0.01129 | 0.01687 | -4.1275988 |
| DNM3 | 0.150455385 | 1.24950281 | 2.550862473 | 0.011328 | 0.01692 | -4.13055467 |
| FBLN1 | 0.508008329 | 3.44310964 | 2.550839999 | 0.011329 | 0.01692 | -4.13061056 |
| ESYT3 | -0.28933166 | 2.90982068 | -2.55073363 | 0.011332 | 0.01693 | -4.13087508 |
| ALG1L2 | -0.104826252 | 0.53168081 | -2.550597747 | 0.011336 | 0.01693 | -4.13121298 |
| TBC1D25 | -0.149887372 | 3.91408974 | -2.550120487 | 0.011351 | 0.01695 | -4.13239964 |
| IGBP1 | -0.179473304 | 7.64151888 | -2.549330732 | 0.011376 | 0.01699 | -4.13436283 |
| CFAP97I | -0.01802644 | 0.04361812 | -2.54854961 | 0.011401 | 0.01702 | -4.136304 |

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| MAMSTR | -0.124498029 | 1.50132504 | -2.548457905 | 0.011404 | 0.01703 | -4.13653185 |
| LEPROT | -0.159873446 | 4.81404299 | -2.548300002 | 0.011409 | 0.01703 | -4.13692418 |
| NISCH | -0.193554776 | 5.34422424 | -2.548220593 | 0.011412 | 0.01704 | -4.13712146 |
| GPR65 | 0.211796098 | 1.14501574 | 2.548150145 | 0.011414 | 0.01704 | -4.13729649 |
| STRIP2 | 0.148706315 | 0.95525263 | 2.548049463 | 0.011417 | 0.01704 | -4.13754661 |
| USP6NL | 0.179338385 | 2.59041843 | 2.546072382 | 0.01148 | 0.01713 | -4.1424564 |
| ZNF385C | -0.164873191 | 1.03280004 | -2.545957101 | 0.011484 | 0.01714 | -4.14274258 |
| SYCP3 | 0.088853816 | 0.52613187 | 2.545041689 | 0.011514 | 0.01718 | -4.14501454 |
| CREBRF | -0.195434023 | 4.07273825 | -2.543828636 | 0.011553 | 0.01724 | -4.14802403 |
| RBM11 | -0.176929709 | 2.13551469 | -2.543607183 | 0.01156 | 0.01724 | -4.14857329 |
| KLK12 | 0.434930904 | 1.13779543 | 2.543599014 | 0.01156 | 0.01724 | -4.14859355 |
| GJA5 | -0.264834888 | 3.3722196 | -2.54330766 | 0.011569 | 0.01726 | -4.14931611 |
| TMCO3 | -0.203919778 | 2.59896724 | -2.543241305 | 0.011572 | 0.01726 | -4.14948066 |
| USH1G | -0.03909637 | 0.05305779 | -2.543114882 | 0.011576 | 0.01726 | -4.14979416 |
| RCC2 | 0.181112577 | 6.15208009 | 2.54236961 | 0.0116 | 0.0173 | -4.15164195 |
| NCKAP5 | -0.094601704 | 0.49164689 | -2.541548318 | 0.011626 | 0.01734 | -4.15367763 |
| PTGES | 0.299114603 | 2.13530669 | 2.54069422 | 0.011654 | 0.01738 | -4.15579395 |
| ZNF211 | -0.184589551 | 3.88968909 | -2.540666009 | 0.011655 | 0.01738 | -4.15586384 |
| LYG2 | -0.06176462 | 0.25677657 | -2.539815415 | 0.011683 | 0.01742 | -4.15797079 |
| SLC3A2 | -0.188890179 | 6.74446839 | -2.539116873 | 0.011705 | 0.01745 | -4.1597006 |
| CGAS | 0.173036727 | 2.0536667 | 2.538566814 | 0.011723 | 0.01747 | -4.1610624 |
| ASB13 | -0.141770602 | 3.60962674 | -2.538388506 | 0.011729 | 0.01748 | -4.16150379 |
| TSNARE | -0.174582304 | 3.74078305 | -2.537948282 | 0.011744 | 0.0175 | -4.16259339 |
| GOLT1A | 0.47411402 | 4.41868146 | 2.537804998 | 0.011748 | 0.0175 | -4.162948 |
| CLOCK | -0.19642268 | 3.58997099 | -2.537782281 | 0.011749 | 0.0175 | -4.16300421 |
| CNP | -0.156774496 | 5.39250745 | -2.537106873 | 0.011771 | 0.01754 | -4.16467547 |
| STAC3 | 0.190543562 | 2.52894945 | 2.536720119 | 0.011784 | 0.01755 | -4.16563228 |
| E2F3 | -0.198133473 | 4.01899197 | -2.53603494 | 0.011806 | 0.01759 | -4.16732704 |
| CDC20B | -0.053411009 | 0.10642699 | -2.535540661 | 0.011823 | 0.01761 | -4.16854934 |
| BHLHE2 | 0.177469789 | 0.37854296 | 2.534792348 | 0.011847 | 0.01764 | -4.17039942 |
| TENT4A | -0.163538047 | 3.85874215 | -2.534606538 | 0.011853 | 0.01765 | -4.17085872 |
| HSF2BP | -0.119752677 | 1.00279382 | -2.534087644 | 0.01187 | 0.01767 | -4.1721412 |
| ERCC6L | -0.199026024 | 2.3947343 | -2.533594501 | 0.011887 | 0.0177 | -4.17335981 |
| RASAL2 | 0.198630026 | 2.69470696 | 2.533334754 | 0.011895 | 0.01771 | -4.17400158 |
| TMEM24 | -0.147194368 | 1.79919312 | -2.532362652 | 0.011928 | 0.01776 | -4.17640284 |
| JPH1 | 0.277033428 | 2.7139 | 2.531396464 | 0.01196 | 0.0178 | -4.17878863 |
| SESN2 | -0.263663513 | 3.91982936 | -2.530348379 | 0.011995 | 0.01785 | -4.18137567 |
| DNASE1 | -0.340075431 | 2.47645597 | -2.528910988 | 0.012043 | 0.01792 | -4.18492199 |
| SNAI3 | -0.162288889 | 2.17211084 | -2.527228684 | 0.012099 | 0.018 | -4.18907012 |
| ABHD4 | -0.18821132 | 5.27253324 | -2.526957224 | 0.012108 | 0.01802 | -4.18973923 |

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| SPSB1 | 0.253477798 | 4.07621673 | 2.525324905 | 0.012163 | 0.0181 | -4.19376119 |
| C1QB | 0.426108382 | 6.3896712 | 2.525289677 | 0.012164 | 0.0181 | -4.19384796 |
| PDCD6IF | -0.17658208 | 5.69388613 | -2.52471628 | 0.012184 | 0.01812 | -4.19526019 |
| TAC4 | -0.108517262 | 0.57830015 | -2.524560539 | 0.012189 | 0.01813 | -4.19564371 |
| NSUN3 | -0.141553178 | 2.45451662 | -2.524383474 | 0.012195 | 0.01814 | -4.19607971 |
| RBM5 | -0.19952155 | 4.85321726 | -2.523342781 | 0.01223 | 0.01819 | -4.19864174 |
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| LRRC17 | -0.264919913 | 2.58510926 | -2.52296832 | 0.012243 | 0.0182 | -4.19956336 |
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| NUP160 | -0.197272434 | 4.11670688 | -2.521372807 | 0.012297 | 0.01828 | -4.20348875 |
| MAST3 | 0.202189494 | 3.50319709 | 2.520990691 | 0.01231 | 0.0183 | -4.20442851 |
| ANKLE2 | 0.170717283 | 3.94070652 | 2.520988817 | 0.01231 | 0.0183 | -4.20443312 |
| POLR2F | -0.038556554 | 0.17503094 | -2.520317988 | 0.012333 | 0.01833 | -4.2060826 |
| PSIP1 | -0.178635368 | 5.0127408 | -2.520185456 | 0.012338 | 0.01833 | -4.20640843 |
| ASTL | 0.143383121 | 0.24714489 | 2.5190988 | 0.012375 | 0.01839 | -4.20907935 |
| CCL5 | 0.492930601 | 4.68449367 | 2.518392456 | 0.012399 | 0.01842 | -4.2108149 |
| FKBP8 | -0.156968516 | 8.5067149 | -2.518272813 | 0.012403 | 0.01843 | -4.21110883 |
| XPO1 | -0.179692695 | 5.12899704 | -2.517801631 | 0.012419 | 0.01845 | -4.21226626 |
| SELENO | -0.327369863 | 4.42102795 | -2.51779438 | 0.01242 | 0.01845 | -4.21228407 |
| ZNF283 | -0.12296156 | 1.6038427 | -2.517789387 | 0.01242 | 0.01845 | -4.21229633 |
| TEKT5 | -0.058987901 | 0.19837385 | -2.517137476 | 0.012442 | 0.01848 | -4.21389736 |
| OCLM | 0.118710913 | 0.59236397 | 2.516726957 | 0.012456 | 0.0185 | -4.21490535 |
| ZNF418 | -0.171729771 | 2.57689421 | -2.516466672 | 0.012465 | 0.01851 | -4.21554438 |
| CLIP1 | -0.225260221 | 4.89754724 | -2.516116595 | 0.012477 | 0.01853 | -4.21640375 |
| DCLRE1( | -0.132276975 | 2.34664903 | -2.515870732 | 0.012486 | 0.01854 | -4.21700723 |
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| STRN4 | -0.138576971 | 5.14880791 | -2.515087346 | 0.012513 | 0.01857 | -4.21892971 |
| SPG11 | -0.205756215 | 4.83009906 | -2.514713124 | 0.012526 | 0.01859 | -4.21984788 |
| SH3BGR | -0.257756675 | 7.07558919 | -2.513726847 | 0.01256 | 0.01864 | -4.2222671 |
| SLC44A1 | -0.210509547 | 5.71032232 | -2.513645642 | 0.012563 | 0.01864 | -4.22246625 |
| FAM92B | 0.13952056 | 0.24614589 | 2.513472598 | 0.012569 | 0.01865 | -4.22289061 |
| SPIN1 | -0.22473757 | 6.15156544 | -2.513034619 | 0.012584 | 0.01867 | -4.22396453 |
| ETNK2 | 0.351146256 | 4.6773364 | 2.512389201 | 0.012607 | 0.0187 | -4.22554677 |
| CHP2 | -0.039851247 | 0.06177339 | -2.512372773 | 0.012607 | 0.0187 | -4.22558703 |
| PDS5B | -0.188537395 | 3.15853228 | -2.512224984 | 0.012612 | 0.01871 | -4.22594928 |
| TNFSF8 | 0.248084721 | 1.04254936 | 2.512182571 | 0.012614 | 0.01871 | -4.22605324 |
| RCN3 | 0.297511476 | 3.83475047 | 2.512077999 | 0.012618 | 0.01871 | -4.22630954 |
| IER3 | 0.409144678 | 6.05345168 | 2.511937877 | 0.012623 | 0.01872 | -4.22665295 |
| DKK3 | -0.277940542 | 4.26128314 | -2.510876828 | 0.01266 | 0.01877 | -4.22925282 |

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| ETV4 | 0.435394951 | 4.921852 | 2.509470757 | 0.012709 | 0.01884 | -4.23269648 |
| RHOV | 0.376477419 | 2.41613569 | 2.507546449 | 0.012777 | 0.01894 | -4.2374064 |
| GCKR | 0.128889818 | 0.45955819 | 2.507339885 | 0.012784 | 0.01895 | -4.23791178 |
| PLEKHG | 0.276269306 | 3.76472609 | 2.5070374 | 0.012795 | 0.01896 | -4.23865176 |
| CFAP70 | -0.242658496 | 2.35327895 | -2.507027183 | 0.012795 | 0.01896 | -4.23867676 |
| NEDD4 | -0.219349425 | 2.65261269 | -2.506690213 | 0.012807 | 0.01898 | -4.239501 |
| ADNP | -0.199698631 | 5.47362722 | -2.506649843 | 0.012808 | 0.01898 | -4.23959974 |
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| ERAP2 | 0.45903108 | 3.90008602 | 2.504603115 | 0.012881 | 0.01908 | -4.24460382 |
| TPCN1 | -0.203548058 | 5.63736323 | -2.504327328 | 0.012891 | 0.01909 | -4.24527779 |
| TUBA1A | 0.276955182 | 6.0703573 | 2.503787355 | 0.01291 | 0.01912 | -4.24659719 |
| MYD88 | 0.211389386 | 4.66523407 | 2.502304841 | 0.012963 | 0.0192 | -4.25021825 |
| BNIPL | 0.421132482 | 3.84948569 | 2.499830389 | 0.013051 | 0.01933 | -4.25625759 |
| ZBTB4 | -0.173933314 | 6.99143236 | -2.49953904 | 0.013062 | 0.01934 | -4.25696831 |
| FANCG | -0.144951554 | 3.42453828 | -2.499085632 | 0.013078 | 0.01936 | -4.25807419 |
| PBRM1 | -0.216572306 | 4.27187634 | -2.498872331 | 0.013086 | 0.01937 | -4.25859438 |
| MAB21L´ | -0.069012869 | 0.27716319 | -2.498871352 | 0.013086 | 0.01937 | -4.25859676 |
| ZNF507 | -0.178240173 | 3.12598067 | -2.49874133 | 0.01309 | 0.01938 | -4.25891383 |
| TES | -0.210467066 | 6.31843716 | -2.49845508 | 0.013101 | 0.01939 | -4.25961182 |
| PRDM12 | -0.061675257 | 0.08063671 | -2.497374925 | 0.01314 | 0.01945 | -4.26224496 |
| USP42 | -0.160695236 | 2.84196423 | -2.497305102 | 0.013142 | 0.01945 | -4.26241514 |
| TNFRSF | 0.160431341 | 0.31918555 | 2.496935736 | 0.013156 | 0.01947 | -4.26331529 |
| TINAGL1 | -0.237522514 | 5.98060747 | -2.49611687 | 0.013185 | 0.01951 | -4.26531042 |
| C1QC | 0.401181214 | 6.3815591 | 2.495947373 | 0.013191 | 0.01952 | -4.26572331 |
| PBX1 | -0.248538097 | 4.26590562 | -2.495856019 | 0.013195 | 0.01952 | -4.26594584 |
| LY6G6F | -0.07994727 | 0.25900731 | -2.495747899 | 0.013199 | 0.01952 | -4.2662092 |
| KAZN | -0.237727855 | 2.72948969 | -2.495473445 | 0.013209 | 0.01954 | -4.26687766 |
| ANKRD3 | 0.096078547 | 0.57309301 | 2.495426793 | 0.01321 | 0.01954 | -4.26699128 |
| CHAMP1 | -0.231542781 | 4.10723707 | -2.495354545 | 0.013213 | 0.01954 | -4.26716723 |
| ADGRE1 | 0.1163191 | 0.44470361 | 2.495046738 | 0.013224 | 0.01955 | -4.26791681 |
| TAF2 | -0.211144152 | 3.42880178 | -2.494067105 | 0.01326 | 0.01961 | -4.27030185 |
| MORC2 | -0.147666638 | 4.15878334 | -2.493674772 | 0.013274 | 0.01963 | -4.27125678 |
| PROM2 | -0.306544199 | 5.3164766 | -2.493121092 | 0.013294 | 0.01965 | -4.27260419 |
| TRPV2 | 0.239050183 | 3.0474113 | 2.492798806 | 0.013306 | 0.01967 | -4.27338836 |
| IRGM | 0.027579948 | 0.08999051 | 2.492328094 | 0.013323 | 0.01969 | -4.27453349 |
| BTC | -0.212601306 | 3.81833298 | -2.492290774 | 0.013325 | 0.01969 | -4.27462427 |
| ZNF202 | -0.145750551 | 3.03337582 | -2.491717562 | 0.013346 | 0.01972 | -4.27601847 |
| M6PR | -0.308521052 | 5.78474317 | -2.491498848 | 0.013354 | 0.01973 | -4.27655036 |
| ABCG1 | -0.242092139 | 3.71410538 | -2.489225913 | 0.013437 | 0.01985 | -4.28207524 |

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| CISH | -0.259274812 | 5.04544644 | -2.489174891 | 0.013439 | 0.01986 | -4.28219921 |
| GPR141 | -0.23219116 | 0.7298523 | -2.48890254 | 0.013449 | 0.01987 | -4.28286088 |
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| ZNF154 | -0.231883783 | 2.96443862 | -2.488842372 | 0.013452 | 0.01987 | -4.28300705 |
| ITIH1 | 0.039359622 | 0.05277297 | 2.487670234 | 0.013495 | 0.01993 | -4.28585391 |
| PVRIG | 0.07081836 | 0.2738629 | 2.487619249 | 0.013497 | 0.01993 | -4.28597771 |
| NDRG1 | -0.196662397 | 5.27102067 | -2.486251973 | 0.013547 | 0.02001 | -4.28929683 |
| LAIR2 | 0.181694886 | 0.58159882 | 2.486053876 | 0.013555 | 0.02001 | -4.28977757 |
| GNB4 | 0.260043459 | 3.11258448 | 2.485789323 | 0.013565 | 0.02003 | -4.29041953 |
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| TRIM9 | -0.059622804 | 0.24957312 | -2.483829575 | 0.013638 | 0.02013 | -4.29517303 |
| ASNS | -0.24434131 | 3.97036863 | -2.483445625 | 0.013652 | 0.02015 | -4.29610391 |
| HSPA13 | -0.231205041 | 4.5303086 | -2.482237863 | 0.013697 | 0.02022 | -4.2990312 |
| TMIGD2 | 0.161405122 | 0.49920865 | 2.481545092 | 0.013723 | 0.02025 | -4.30070968 |
| NFE4 | -0.045552575 | 0.14272782 | -2.480715839 | 0.013755 | 0.0203 | -4.30271825 |
| HS3ST3I | -0.167164216 | 0.97191759 | -2.480566485 | 0.01376 | 0.0203 | -4.30307994 |
| PVALEF | -0.026935096 | 0.05296083 | -2.480334067 | 0.013769 | 0.02031 | -4.30364274 |
| SPAG4 | 0.303745229 | 2.54947306 | 2.479565 | 0.013798 | 0.02036 | -4.30550468 |
| HOMER2 | -0.20405687 | 3.60988212 | -2.479518626 | 0.0138 | 0.02036 | -4.30561694 |
| TMEM15 | -0.160697107 | 4.46056024 | -2.478695568 | 0.013831 | 0.0204 | -4.30760895 |
| SCN8A | 0.125911885 | 0.52503805 | 2.477577172 | 0.013873 | 0.02046 | -4.31031475 |
| CLCN5 | -0.1422169 | 1.70657011 | -2.47722931 | 0.013886 | 0.02048 | -4.31115611 |
| PELP1 | -0.135568583 | 5.27760529 | -2.477070538 | 0.013892 | 0.02049 | -4.3115401 |
| CC2D2B | -0.229928702 | 1.02724561 | -2.476275685 | 0.013923 | 0.02053 | -4.31346204 |
| RNF111 | -0.212149614 | 3.68299204 | -2.475432805 | 0.013955 | 0.02057 | -4.31549948 |
| MID2 | -0.235497914 | 3.40383091 | -2.474675104 | 0.013984 | 0.02062 | -4.31733046 |
| PCNX1 | -0.19854314 | 3.57310692 | -2.474606367 | 0.013986 | 0.02062 | -4.31749653 |
| ARFGAP | -0.149687586 | 5.06797163 | -2.474430656 | 0.013993 | 0.02063 | -4.31792105 |
| KLHL20 | -0.215561172 | 3.62322085 | -2.473079992 | 0.014045 | 0.0207 | -4.32118328 |
| SMIM22 | -0.413659515 | 1.09643884 | -2.472894751 | 0.014052 | 0.02071 | -4.32163056 |
| TMEM98 | 0.337439782 | 6.08753608 | 2.472804451 | 0.014055 | 0.02071 | -4.32184858 |
| CCDC54 | -0.030905191 | 0.1073516 | -2.472018406 | 0.014086 | 0.02075 | -4.32374612 |
| GGT1 | -0.238539518 | 4.08626747 | -2.47140113 | 0.014109 | 0.02079 | -4.32523584 |
| GJA1 | -0.356101638 | 7.42653969 | -2.471021051 | 0.014124 | 0.02081 | -4.32615293 |
| CSRNP1 | -0.294329606 | 5.76623382 | -2.470629935 | 0.014139 | 0.02083 | -4.32709652 |
| IPP | -0.203481632 | 4.06521123 | -2.470294178 | 0.014152 | 0.02085 | -4.32790644 |
| NARF | -0.145556246 | 3.77234011 | -2.469728372 | 0.014174 | 0.02088 | -4.32927105 |
| GRAP2 | 0.162247904 | 0.69443448 | 2.4692309 | 0.014193 | 0.0209 | -4.3304706 |
| PFKFB3 | 0.303359694 | 3.7032491 | 2.467948663 | 0.014243 | 0.02097 | -4.3335614 |
| MSTN | -0.131769264 | 0.5328515 | -2.467888465 | 0.014245 | 0.02098 | -4.33370647 |

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| AKR1B1 | -0.296259419 | 5.54151257 | -2.467074753 | 0.014277 | 0.02102 | -4.33566706 |
| CFAP30( | -0.279814393 | 2.11052152 | -2.466619913 | 0.014295 | 0.02104 | -4.3367627 |
| SCMH1 | -0.147059082 | 5.21116695 | -2.466379662 | 0.014304 | 0.02106 | -4.33734135 |
| MPND | -0.148688529 | 5.23413842 | -2.466345801 | 0.014305 | 0.02106 | -4.3374229 |
| ADGRL3 | 0.14630988 | 0.26228129 | 2.466029519 | 0.014318 | 0.02107 | -4.33818458 |
| IL19 | -0.064499897 | 0.15255011 | -2.465973784 | 0.01432 | 0.02107 | -4.33831879 |
| NCLN | -0.142717522 | 5.26785944 | -2.465615365 | 0.014334 | 0.02109 | -4.33918182 |
| N4BP2L1 | 0.206323325 | 3.34223147 | 2.465562447 | 0.014336 | 0.02109 | -4.33930923 |
| SLC17A7 | -0.088748491 | 0.38133621 | -2.465545527 | 0.014336 | 0.02109 | -4.33934997 |
| SCAMP4 | -0.180630198 | 5.56694824 | -2.464916843 | 0.014361 | 0.02113 | -4.34086343 |
| IGF2R | 0.261258896 | 5.61266959 | 2.464746582 | 0.014368 | 0.02114 | -4.34127324 |
| TIMP2 | 0.24381261 | 6.53664491 | 2.464691585 | 0.01437 | 0.02114 | -4.34140561 |
| ACKR4 | 0.117085803 | 0.57350416 | 2.463974863 | 0.014398 | 0.02118 | -4.34313041 |
| ZNF33A | -0.172952147 | 4.30309877 | -2.463909803 | 0.0144 | 0.02118 | -4.34328695 |
| PDP1 | 0.207918266 | 4.6529915 | 2.463766577 | 0.014406 | 0.02118 | -4.34363156 |
| TLL1 | -0.131799192 | 0.65637933 | -2.463518354 | 0.014416 | 0.0212 | -4.34422875 |
| ANKRD5 | -0.219150347 | 3.32527945 | -2.462234929 | 0.014466 | 0.02127 | -4.34731559 |
| FAM71F2 | -0.11474122 | 0.69419706 | -2.462010201 | 0.014475 | 0.02128 | -4.34785593 |
| SPIB | 0.22521994 | 0.5122129 | 2.46196963 | 0.014477 | 0.02128 | -4.34795348 |
| PAQR8 | -0.223621549 | 2.48970094 | -2.461912584 | 0.014479 | 0.02128 | -4.34809063 |
| NGF | -0.204542592 | 1.33429107 | -2.461643051 | 0.01449 | 0.0213 | -4.34873862 |
| LGALS4 | -0.158696999 | 0.74604718 | -2.460819612 | 0.014522 | 0.02134 | -4.35071786 |
| UNKL | -0.209887598 | 2.60493915 | -2.460185427 | 0.014547 | 0.02138 | -4.35224177 |
| MGLL | 0.212696933 | 3.25663094 | 2.460171184 | 0.014548 | 0.02138 | -4.35227599 |
| RORA | -0.208236998 | 2.58406585 | -2.459408701 | 0.014578 | 0.02142 | -4.35410769 |
| GBP3 | 0.414795267 | 5.02559097 | 2.459258705 | 0.014584 | 0.02143 | -4.35446796 |
| CNGA4 | -0.075405017 | 0.29703462 | -2.458266724 | 0.014623 | 0.02148 | -4.35685002 |
| CMTM2 | -0.105096388 | 0.67708543 | -2.454832344 | 0.01476 | 0.02168 | -4.36508999 |
| CNIH3 | -0.174824852 | 2.39347817 | -2.45446145 | 0.014775 | 0.0217 | -4.3659792 |
| DCT | -0.074163941 | 0.26559848 | -2.45406617 | 0.014791 | 0.02172 | -4.36692674 |
| VPS13C | 0.229575801 | 3.87241395 | 2.452561232 | 0.014852 | 0.02181 | -4.37053294 |
| ECM2 | -0.25282308 | 2.49215829 | -2.452529046 | 0.014853 | 0.02181 | -4.37061004 |
| LINC006 | 0.127737645 | 0.79421818 | 2.452421439 | 0.014857 | 0.02181 | -4.37086781 |
| TRPM8 | 0.062955235 | 0.08550943 | 2.4522333 | 0.014865 | 0.02182 | -4.37131847 |
| GRIK1 | 0.041688297 | 0.15859311 | 2.451085803 | 0.014911 | 0.02189 | -4.37406638 |
| CEND1 | -0.14965198 | 0.61861262 | -2.450584831 | 0.014932 | 0.02192 | -4.37526568 |
| TASOR | -0.187510982 | 4.58196584 | -2.450527026 | 0.014934 | 0.02192 | -4.37540404 |
| PPARA | -0.197616246 | 2.97045543 | -2.450058641 | 0.014953 | 0.02194 | -4.37652509 |
| ABCC11 | -0.32832089 | 0.81088995 | -2.450044163 | 0.014954 | 0.02194 | -4.37655974 |
| CFLAR | 0.189797801 | 4.46950516 | 2.449505546 | 0.014975 | 0.02197 | -4.37784862 |

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| GZMA | 0.439766876 | 3.12743161 | 2.449387589 | 0.01498 | 0.02198 | -4.37813085 |
| CNOT6 | -0.177093541 | 4.09867981 | -2.449257312 | 0.014985 | 0.02198 | -4.37844254 |
| CENPE | 0.105620286 | 0.59891194 | 2.44794689 | 0.015039 | 0.02206 | -4.38157688 |
| SPERT | -0.099292891 | 0.11067585 | -2.447861004 | 0.015042 | 0.02206 | -4.38178225 |
| TRAPPC | -0.199256001 | 4.03915699 | -2.447771407 | 0.015046 | 0.02207 | -4.38199649 |
| PDZD2 | -0.164249887 | 1.20254646 | -2.44742106 | 0.01506 | 0.02209 | -4.38283414 |
| TAS2R43 | -0.035558677 | 0.08834623 | -2.447174813 | 0.01507 | 0.0221 | -4.38342283 |
| PPAN | -0.142902276 | 2.63899449 | -2.446240374 | 0.015108 | 0.02215 | -4.38565622 |
| LRCH1 | -0.167861427 | 3.00668777 | -2.445109792 | 0.015155 | 0.02222 | -4.38835732 |
| CLDND1 | -0.158699896 | 4.69524641 | -2.444358177 | 0.015186 | 0.02226 | -4.39015237 |
| GLRB | 0.265698953 | 2.40730588 | 2.442523164 | 0.015261 | 0.02237 | -4.39453262 |
| GRAMD2 | 0.318777926 | 5.76853611 | 2.441456013 | 0.015305 | 0.02244 | -4.39707852 |
| SUPT16H | -0.169975282 | 5.48878717 | -2.440908961 | 0.015328 | 0.02247 | -4.3983832 |
| COLGAL | 0.155401822 | 4.62272769 | 2.44088758 | 0.015329 | 0.02247 | -4.39843419 |
| PPP1R12 | -0.192563152 | 3.93893263 | -2.440597486 | 0.015341 | 0.02248 | -4.39912592 |
| BAX | -0.182742394 | 6.14863613 | -2.440522424 | 0.015344 | 0.02248 | -4.3993049 |
| H2AFX | -0.244511541 | 5.75752577 | -2.439871741 | 0.015371 | 0.02252 | -4.40085614 |
| SH2D3A | 0.209515922 | 3.59698614 | 2.4398045 | 0.015374 | 0.02252 | -4.40101642 |
| FBXL16 | 0.353569724 | 4.49710795 | 2.438529366 | 0.015427 | 0.0226 | -4.40405514 |
| SUCO | -0.183025823 | 4.3544461 | -2.438416103 | 0.015432 | 0.0226 | -4.40432498 |
| ZCCHC1 | 1.017115594 | 7.33976862 | 2.438094821 | 0.015445 | 0.02262 | -4.40509034 |
| C3orf49 | -0.05292364 | 0.27543919 | -2.437964066 | 0.015451 | 0.02263 | -4.4054018 |
| KIAA110 | -0.238033838 | 3.7697305 | -2.436987848 | 0.015491 | 0.02269 | -4.40772664 |
| RSPH9 | -0.140095423 | 1.21973344 | -2.436793101 | 0.0155 | 0.0227 | -4.40819033 |
| RANBP6 | -0.180867944 | 4.38067061 | -2.436594799 | 0.015508 | 0.02271 | -4.40866243 |
| CNTNAP | -0.03887334 | 0.0931985 | -2.435956478 | 0.015535 | 0.02274 | -4.41018187 |
| INTS7 | -0.164870089 | 3.61876953 | -2.435330539 | 0.015561 | 0.02278 | -4.41167146 |
| GPR1 | 0.176425791 | 0.41975512 | 2.434678338 | 0.015588 | 0.02282 | -4.41322316 |
| STK32B | -0.09323074 | 0.54428837 | -2.434029457 | 0.015616 | 0.02286 | -4.41476657 |
| SUMO4 | 0.072469571 | 0.33138552 | 2.43324669 | 0.015649 | 0.0229 | -4.41662792 |
| NT5C2 | -0.324589374 | 4.92326624 | -2.432226091 | 0.015692 | 0.02296 | -4.41905394 |
| EPC2 | -0.210353115 | 4.30792732 | -2.432086936 | 0.015698 | 0.02297 | -4.41938465 |
| DIPK1C | 0.090187752 | 0.24335995 | 2.432044117 | 0.0157 | 0.02297 | -4.41948641 |
| IPO9 | -0.161714658 | 4.35228527 | -2.431953657 | 0.015703 | 0.02297 | -4.41970137 |
| BCLAF3 | -0.142323809 | 2.6501088 | -2.431229067 | 0.015734 | 0.02302 | -4.42142299 |
| GALNT1 | -0.194283659 | 5.31892476 | -2.429823836 | 0.015794 | 0.0231 | -4.42476042 |
| SVIL | 0.266285136 | 5.49871526 | 2.429471536 | 0.015809 | 0.02312 | -4.42559684 |
| EPRS | -0.217888976 | 5.98633494 | -2.429453973 | 0.01581 | 0.02312 | -4.42563853 |
| RBM17 | -0.145598804 | 5.22445099 | -2.429153507 | 0.015822 | 0.02314 | -4.4263518 |
| WNK3 | -0.14153068 | 0.89627793 | -2.428596532 | 0.015846 | 0.02317 | -4.42767376 |

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| ZNF728 | -0.251836582 | 0.94511476 | -2.428543684 | 0.015848 | 0.02317 | -4.42779918 |
| KCNJ5 | 0.346360533 | 2.03345656 | 2.427928806 | 0.015875 | 0.02321 | -4.4292582 |
| FFAR1 | 0.147714055 | 0.3277022 | 2.42752112 | 0.015892 | 0.02323 | -4.43022538 |
| NCR3 | 0.212652927 | 0.75253591 | 2.427513646 | 0.015892 | 0.02323 | -4.43024312 |
| PRODH | 0.236979457 | 1.39316644 | 2.426542239 | 0.015934 | 0.02329 | -4.43254704 |
| C1QA | 0.378513679 | 6.82292831 | 2.426240993 | 0.015947 | 0.02331 | -4.43326133 |
| BFAR | -0.153232783 | 5.44534388 | -2.425888488 | 0.015962 | 0.02333 | -4.43409706 |
| ZDHHC9 | -0.196336598 | 4.51614469 | -2.42558483 | 0.015975 | 0.02334 | -4.4348169 |
| CHD5 | 0.094538019 | 0.29521049 | 2.425276211 | 0.015988 | 0.02336 | -4.4355484 |
| INO80B | -0.188664058 | 3.27604033 | -2.425103 | 0.015996 | 0.02337 | -4.43595891 |
| STX1B | 0.177425782 | 0.9334846 | 2.42483379 | 0.016007 | 0.02339 | -4.43659689 |
| CACNA2 | -0.101297761 | 0.80177205 | -2.423906609 | 0.016047 | 0.02344 | -4.43879362 |
| CPSF4L | -0.038721262 | 0.14378933 | -2.423595546 | 0.016061 | 0.02346 | -4.43953043 |
| PDZD3 | -0.043114959 | 0.09036357 | -2.423490741 | 0.016065 | 0.02346 | -4.43977866 |
| ZBTB1 | -0.212515523 | 4.21467846 | -2.422580013 | 0.016105 | 0.02352 | -4.44193527 |
| SMARCA | -0.204743235 | 4.00849968 | -2.42183506 | 0.016137 | 0.02356 | -4.44369875 |
| LCOR | -0.191675826 | 2.80189791 | -2.420973076 | 0.016175 | 0.02362 | -4.44573862 |
| UNC5A | -0.072986883 | 0.22643583 | -2.420786767 | 0.016183 | 0.02363 | -4.44617943 |
| ABCD2 | 0.09549971 | 0.33109323 | 2.420423349 | 0.016198 | 0.02365 | -4.44703918 |
| CDK13 | -0.164773283 | 4.32817307 | -2.420304608 | 0.016204 | 0.02365 | -4.44732007 |
| PIP4K2B | -0.162159923 | 5.56167681 | -2.420255833 | 0.016206 | 0.02365 | -4.44743544 |
| FKTN | -0.183781713 | 3.05013265 | -2.42013829 | 0.016211 | 0.02366 | -4.44771347 |
| EME2 | -0.191137958 | 2.17744515 | -2.419606122 | 0.016234 | 0.02369 | -4.44897208 |
| CRP | 0.041984702 | 0.05186406 | 2.419221888 | 0.016251 | 0.02371 | -4.44988065 |
| UBA2 | -0.15854181 | 5.69943545 | -2.419179645 | 0.016253 | 0.02371 | -4.44998053 |
| SPINT1 | 0.271040327 | 7.55226405 | 2.418800011 | 0.016269 | 0.02374 | -4.45087808 |
| PRR5-AF | 0.045874479 | 0.21786122 | 2.418457075 | 0.016284 | 0.02376 | -4.45168874 |
| BMPR1B | 0.064951293 | 0.1730717 | 2.418003809 | 0.016304 | 0.02378 | -4.45276005 |
| HEPACA | -0.025753771 | 0.04784936 | -2.417648832 | 0.01632 | 0.0238 | -4.45359891 |
| ABHD12 | -0.141687533 | 7.16668209 | -2.41714988 | 0.016341 | 0.02383 | -4.45477781 |
| GALNT4 | 0.058834541 | 0.26399006 | 2.416269057 | 0.01638 | 0.02389 | -4.4568584 |
| RNF31 | -0.209965892 | 3.41724077 | -2.41550239 | 0.016414 | 0.02394 | -4.45866876 |
| NIPBL | -0.185299211 | 4.26303796 | -2.41476522 | 0.016446 | 0.02398 | -4.46040895 |
| SLC4A2 | -0.200645986 | 4.84734403 | -2.413125711 | 0.016519 | 0.02408 | -4.46427741 |
| AHCTF1 | -0.181293331 | 3.87259588 | -2.412789266 | 0.016534 | 0.0241 | -4.46507095 |
| STIMATE | -0.059627175 | 0.30100413 | -2.41210888 | 0.016564 | 0.02415 | -4.46667539 |
| GPS2 | -0.184187291 | 2.18513632 | -2.412076662 | 0.016565 | 0.02415 | -4.46675135 |
| ACTR3 | -0.16583417 | 5.02722371 | -2.411514488 | 0.01659 | 0.02418 | -4.46807669 |
| BAIAP2L | -0.179618123 | 1.39078247 | -2.410871719 | 0.016619 | 0.02422 | -4.46959166 |
| SORBS1 | -0.206228461 | 1.80955228 | -2.410604277 | 0.016631 | 0.02424 | -4.4702219 |

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| TRIM65 | -0.146409977 | 4.66673603 | -2.410468962 | 0.016637 | 0.02424 | -4.47054074 |
| STPG3 | -0.231605165 | 1.24020516 | -2.409819069 | 0.016666 | 0.02428 | -4.47207187 |
| REC8 | 0.328160101 | 2.52905957 | 2.409614739 | 0.016675 | 0.02429 | -4.47255319 |
| P3H1 | -0.151239376 | 3.67280395 | -2.408957208 | 0.016704 | 0.02433 | -4.47410179 |
| IKBKE | -0.208770126 | 4.40507882 | -2.408766358 | 0.016713 | 0.02434 | -4.4745512 |
| ELL2 | -0.220078869 | 4.099337 | -2.408533515 | 0.016723 | 0.02436 | -4.47509944 |
| ZNF681 | -0.135578428 | 1.61674396 | -2.407806771 | 0.016756 | 0.0244 | -4.47681029 |
| ZNF622 | -0.176288813 | 6.02054832 | -2.407413776 | 0.016774 | 0.02443 | -4.47773525 |
| RAB42 | 0.189806953 | 1.30852975 | 2.406970465 | 0.016793 | 0.02445 | -4.47877846 |
| LYPD1 | 0.27404762 | 1.08553428 | 2.406953251 | 0.016794 | 0.02445 | -4.47881896 |
| LRRC75/ | -0.244707862 | 3.76727628 | -2.406807677 | 0.016801 | 0.02446 | -4.47916149 |
| RAP1GD | -0.164878676 | 4.30554613 | -2.406000243 | 0.016837 | 0.02451 | -4.48106096 |
| ARIH1 | -0.154604372 | 3.27239191 | -2.405872451 | 0.016843 | 0.02452 | -4.48136153 |
| PCOLCE | 0.32950362 | 4.51825213 | 2.404702411 | 0.016896 | 0.02459 | -4.48411281 |
| PSORS1 | 0.218613837 | 1.49644236 | 2.40468841 | 0.016896 | 0.02459 | -4.48414572 |
| NBPF11 | -0.186736112 | 2.40058499 | -2.404532957 | 0.016903 | 0.0246 | -4.48451116 |
| ARRB2 | 0.181491306 | 3.89133887 | 2.404031138 | 0.016926 | 0.02463 | -4.48569069 |
| SEMA3A | 0.189909056 | 1.05244181 | 2.403999012 | 0.016927 | 0.02463 | -4.48576619 |
| HCN3 | -0.141785488 | 1.83193691 | -2.403836222 | 0.016935 | 0.02464 | -4.48614877 |
| CYP1A1 | -0.115807491 | 0.14906032 | -2.403511715 | 0.01695 | 0.02466 | -4.48691134 |
| TUBB8P | -0.098228866 | 0.37578342 | -2.403331895 | 0.016958 | 0.02467 | -4.48733386 |
| P2RY2 | 0.240602702 | 3.95534283 | 2.402667686 | 0.016988 | 0.02471 | -4.48889429 |
| GLI2 | 0.135087563 | 0.50875272 | 2.402305758 | 0.017004 | 0.02473 | -4.48974439 |
| RAD54B | -0.054061127 | 0.3944525 | -2.402138241 | 0.017012 | 0.02474 | -4.49013782 |
| YJEFN3 | -0.267041814 | 1.67388198 | -2.402001824 | 0.017018 | 0.02475 | -4.49045818 |
| MYBL2 | 0.25933227 | 1.80986461 | 2.401194363 | 0.017055 | 0.0248 | -4.49235409 |
| MAN2A1 | -0.211824 | 3.46524189 | -2.400992794 | 0.017064 | 0.02481 | -4.49282728 |
| CLCF1 | 0.329014466 | 4.31664673 | 2.400912149 | 0.017068 | 0.02481 | -4.49301659 |
| G3BP1 | -0.160080141 | 4.73644327 | -2.400408278 | 0.017091 | 0.02484 | -4.49419923 |
| MUC13 | 0.029538127 | 0.06345717 | 2.400301519 | 0.017096 | 0.02485 | -4.49444977 |
| RPS19 | -0.187192438 | 8.94148932 | -2.399496011 | 0.017132 | 0.0249 | -4.49633982 |
| PHF13 | 0.174416301 | 4.59413642 | 2.399302818 | 0.017141 | 0.02491 | -4.49679304 |
| TPM2 | -0.295552204 | 4.93686201 | -2.397614161 | 0.017219 | 0.02502 | -4.50075303 |
| GRM2 | 0.050267016 | 0.20914943 | 2.397458819 | 0.017226 | 0.02503 | -4.50111718 |
| NSG1 | 0.284674693 | 0.82830088 | 2.3964038 | 0.017274 | 0.0251 | -4.50358976 |
| ATP6V0[ | 0.231404477 | 0.91316031 | 2.3963703 | 0.017276 | 0.0251 | -4.50366825 |
| B3GALT4 | -0.213690676 | 4.36019488 | -2.396360972 | 0.017276 | 0.0251 | -4.50369011 |
| KDM5C | -0.173062438 | 5.47110903 | -2.395506981 | 0.017316 | 0.02515 | -4.50569075 |
| SPINK7 | 0.057071501 | 0.1397093 | 2.395463576 | 0.017318 | 0.02515 | -4.50579242 |
| FAM90A: | -0.01750527 | 0.03385289 | -2.395178186 | 0.017331 | 0.02517 | -4.50646083 |

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| KCNK15 | 0.359498082 | 3.26723419 | 2.395147796 | 0.017332 | 0.02517 | -4.50653201 |
| THSD4 | 0.281425187 | 3.54503058 | 2.394782246 | 0.017349 | 0.02519 | -4.50738805 |
| SYTL4 | -0.23541917 | 2.64615175 | -2.394642067 | 0.017356 | 0.0252 | -4.50771629 |
| CAVIN4 | -0.13019051 | 0.64619572 | -2.394614182 | 0.017357 | 0.0252 | -4.50778158 |
| TMEM45 | -0.297107176 | 3.95593836 | -2.394388833 | 0.017367 | 0.02521 | -4.5083092 |
| C12orf56 | 0.121017491 | 0.40030621 | 2.393456475 | 0.017411 | 0.02527 | -4.51049168 |
| SUPT5H | -0.137520398 | 6.0687823 | -2.393221286 | 0.017421 | 0.02529 | -4.51104208 |
| MED13L | -0.206163011 | 3.63882407 | -2.392593403 | 0.017451 | 0.02532 | -4.51251125 |
| PIGR | 0.301604127 | 1.33280571 | 2.392574294 | 0.017452 | 0.02532 | -4.51255595 |
| COL9A2 | -0.328863198 | 3.24142683 | -2.392002286 | 0.017478 | 0.02536 | -4.51389405 |
| EFNA2 | 0.059055547 | 0.14011665 | 2.391907251 | 0.017483 | 0.02537 | -4.51411633 |
| SOX15 | -0.176287806 | 1.32092156 | -2.390397857 | 0.017553 | 0.02547 | -4.51764563 |
| TET3 | 0.205598623 | 2.66666841 | 2.389837475 | 0.017579 | 0.0255 | -4.51895539 |
| HBA1 | -0.170542317 | 0.50075592 | -2.389366201 | 0.017601 | 0.02553 | -4.52005665 |
| HIF1AN | -0.137395447 | 3.43549493 | -2.389155893 | 0.017611 | 0.02554 | -4.52054803 |
| RHOBTB | -0.169753489 | 5.47092591 | -2.388563708 | 0.017639 | 0.02558 | -4.52193142 |
| PRIM1 | -0.168707981 | 2.74766676 | -2.388476597 | 0.017643 | 0.02559 | -4.52213489 |
| TYW1B | -0.233786223 | 1.91512283 | -2.387864817 | 0.017672 | 0.02562 | -4.52356367 |
| ZNF700 | -0.152368723 | 3.0457178 | -2.387838891 | 0.017673 | 0.02562 | -4.52362421 |
| IL13 | 0.018635977 | 0.03037467 | 2.387826493 | 0.017673 | 0.02562 | -4.52365316 |
| CACHD1 | -0.278895634 | 3.38151352 | -2.387697482 | 0.01768 | 0.02563 | -4.52395441 |
| OR2L13 | -0.143632398 | 0.3122875 | -2.387542041 | 0.017687 | 0.02564 | -4.52431735 |
| GMFB | -0.177622945 | 4.18898738 | -2.387093233 | 0.017708 | 0.02567 | -4.52536516 |
| CDC42SI | -0.18688141 | 6.11332787 | -2.386543961 | 0.017734 | 0.0257 | -4.52664725 |
| SLITRK6 | 0.238897328 | 0.39401598 | 2.386264592 | 0.017747 | 0.02572 | -4.52729924 |
| ETS2 | -0.191887152 | 5.72964589 | -2.385821919 | 0.017768 | 0.02575 | -4.52833219 |
| NAT10 | -0.126545921 | 4.73636073 | -2.384743854 | 0.017819 | 0.02582 | -4.53084704 |
| NUP93 | -0.163041887 | 3.81914093 | -2.384743153 | 0.017819 | 0.02582 | -4.53084867 |
| ABCE1 | -0.162781875 | 4.44908924 | -2.384667697 | 0.017823 | 0.02582 | -4.53102465 |
| DOCK10 | -0.260745128 | 2.36800048 | -2.38466204 | 0.017823 | 0.02582 | -4.53103784 |
| ADAM23 | 0.1314151 | 0.3473772 | 2.383633763 | 0.017872 | 0.02589 | -4.53343545 |
| ITGA9 | 0.331374039 | 5.78971714 | 2.383004439 | 0.017901 | 0.02593 | -4.53490234 |
| IQGAP1 | 0.253828574 | 6.49785289 | 2.382615508 | 0.01792 | 0.02595 | -4.53580872 |
| SLC24A1 | -0.175699691 | 2.72902157 | -2.382305922 | 0.017935 | 0.02597 | -4.53653008 |
| MAP1S | 0.158334499 | 4.86100291 | 2.381317374 | 0.017982 | 0.02604 | -4.5388329 |
| CTNS | -0.149999262 | 4.0928001 | -2.381194678 | 0.017988 | 0.02604 | -4.53911865 |
| ELOVL5 | -0.21804797 | 5.69793063 | -2.380816708 | 0.018006 | 0.02607 | -4.53999884 |
| CPS1 | -0.191477395 | 0.73943885 | -2.379911381 | 0.018049 | 0.02613 | -4.54210657 |
| ASCL5 | 0.160072589 | 0.73042226 | 2.379543377 | 0.018067 | 0.02615 | -4.54296311 |
| CEACAM | -0.212196572 | 1.64593964 | -2.379381936 | 0.018074 | 0.02616 | -4.54333883 |

| | | | | | | |
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| HYPK | -0.097105285 | 0.8442846 | -2.379141771 | 0.018086 | 0.02617 | -4.54389772 |
| GFI1 | 0.180790455 | 0.89643369 | 2.377249697 | 0.018177 | 0.0263 | -4.54829889 |
| IL1B | 0.283093802 | 1.55066698 | 2.375832416 | 0.018245 | 0.0264 | -4.55159344 |
| ZNF432 | -0.157471934 | 3.18972469 | -2.375740211 | 0.01825 | 0.0264 | -4.55180771 |
| ZZEF1 | -0.172825542 | 3.56177211 | -2.375477941 | 0.018262 | 0.02642 | -4.55241715 |
| YTHDC2 | -0.167411218 | 3.13102596 | -2.374534675 | 0.018308 | 0.02648 | -4.55460847 |
| FNBP1 | 0.188618331 | 5.0097121 | 2.374306389 | 0.018319 | 0.0265 | -4.55513868 |
| SPACA6 | -0.26081202 | 2.98928912 | -2.374109226 | 0.018329 | 0.02651 | -4.55559657 |
| DDX60L | 0.168512235 | 2.3929953 | 2.373484565 | 0.018359 | 0.02655 | -4.55704702 |
| TAL2 | -0.053886143 | 0.17897063 | -2.373230615 | 0.018372 | 0.02657 | -4.55763659 |
| HCAR3 | 0.077776333 | 0.20517394 | 2.373171128 | 0.018374 | 0.02657 | -4.55777469 |
| PLD5 | -0.088488096 | 0.0908173 | -2.372508371 | 0.018407 | 0.02661 | -4.55931301 |
| ZNF441 | -0.194612451 | 3.24057534 | -2.371095357 | 0.018476 | 0.02671 | -4.56259138 |
| REM2 | -0.136393376 | 0.79358452 | -2.370818297 | 0.018489 | 0.02673 | -4.56323397 |
| LTA4H | -0.147994178 | 5.65527718 | -2.370289186 | 0.018515 | 0.02676 | -4.56446095 |
| ZDHHC2 | -0.17414867 | 3.28028085 | -2.370265203 | 0.018516 | 0.02676 | -4.56451656 |
| CLSTN3 | -0.209431652 | 4.78783354 | -2.369781435 | 0.01854 | 0.02679 | -4.56563816 |
| SMG9 | -0.144575397 | 3.72650479 | -2.369427131 | 0.018557 | 0.02682 | -4.56645946 |
| WBP2NL | -0.13198041 | 0.81411684 | -2.369165443 | 0.01857 | 0.02683 | -4.56706599 |
| STON2 | -0.229386857 | 3.06668824 | -2.369085336 | 0.018574 | 0.02684 | -4.56725165 |
| MARF1 | -0.178502958 | 4.67938549 | -2.368976047 | 0.01858 | 0.02684 | -4.56750493 |
| DNAJB5 | -0.265318967 | 3.84515802 | -2.368890527 | 0.018584 | 0.02685 | -4.56770312 |
| CAMSAP | 0.200247457 | 3.45806707 | 2.368810604 | 0.018588 | 0.02685 | -4.56788833 |
| RUBCNL | 0.257194724 | 1.9997159 | 2.367964119 | 0.018629 | 0.02691 | -4.56984958 |
| KRT81 | -0.196861004 | 1.55760002 | -2.367300606 | 0.018662 | 0.02695 | -4.57138642 |
| HOXB8 | -0.080216257 | 0.12211965 | -2.366830692 | 0.018685 | 0.02698 | -4.57247459 |
| CTNNA1 | -0.185071345 | 7.27622634 | -2.366268203 | 0.018713 | 0.02702 | -4.57377687 |
| TNFRSF | 0.257158065 | 0.79928091 | 2.365078635 | 0.018772 | 0.0271 | -4.57652999 |
| MAP3K2 | -0.180418252 | 1.93666324 | -2.364830212 | 0.018784 | 0.02712 | -4.57710477 |
| MGAT5 | -0.204727389 | 4.60720598 | -2.364005035 | 0.018825 | 0.02718 | -4.57901358 |
| CPSF7 | -0.170657396 | 5.5380768 | -2.363284328 | 0.018861 | 0.02722 | -4.5806802 |
| SORCS1 | -0.38415457 | 1.29697062 | -2.363267952 | 0.018862 | 0.02722 | -4.58071807 |
| RFX1 | -0.156670451 | 4.17857405 | -2.36254982 | 0.018898 | 0.02727 | -4.58237824 |
| ITPKB | -0.18707558 | 4.40080456 | -2.361620667 | 0.018944 | 0.02734 | -4.58452554 |
| HES6 | -0.407448189 | 4.10160753 | -2.361195252 | 0.018965 | 0.02736 | -4.58550841 |
| RAD50 | -0.183995363 | 4.27448035 | -2.361169815 | 0.018967 | 0.02736 | -4.58556718 |
| AEBP2 | -0.173627362 | 4.41322583 | -2.361161518 | 0.018967 | 0.02736 | -4.58558635 |
| MYO9A | -0.190330622 | 2.92046099 | -2.360956556 | 0.018977 | 0.02738 | -4.58605982 |
| VNN2 | 0.206324363 | 0.92831381 | 2.360905258 | 0.01898 | 0.02738 | -4.58617832 |
| CA8 | -0.177006402 | 0.36485967 | -2.360226488 | 0.019014 | 0.02743 | -4.58774601 |

| CCDC13 | -0.095791582 | 0.65761485 | -2.359538851 | 0.019048 | 0.02747 | -4.58933374 |
|---|---|---|---|---|---|---|
| DAAM1 | -0.144168205 | 3.1038266 | -2.359435574 | 0.019053 | 0.02748 | -4.58957216 |
| DNAJC5 | -0.112495465 | 0.22773282 | -2.359351742 | 0.019058 | 0.02748 | -4.58976569 |
| FCHSD1 | 0.234030004 | 3.47071685 | 2.357742364 | 0.019139 | 0.0276 | -4.59347967 |
| FIBIN | -0.449256703 | 2.52665471 | -2.357468674 | 0.019152 | 0.02761 | -4.59411103 |
| MIPOL1 | -0.113703511 | 1.07749431 | -2.357177917 | 0.019167 | 0.02763 | -4.59478168 |
| CLGN | 0.24598672 | 0.66011758 | 2.356146635 | 0.019219 | 0.02771 | -4.59715976 |
| PPIP5K1 | -0.131283413 | 3.05704629 | -2.355915262 | 0.019231 | 0.02772 | -4.59769316 |
| THAP10 | -0.156710045 | 2.79756727 | -2.355593513 | 0.019247 | 0.02774 | -4.59843482 |
| CCDC93 | -0.178946748 | 3.97205438 | -2.355374958 | 0.019258 | 0.02775 | -4.59893855 |
| IRF9 | 0.212762257 | 2.13198402 | 2.354977575 | 0.019279 | 0.02778 | -4.59985434 |
| NIPAL2 | 0.200633834 | 3.5703405 | 2.354849493 | 0.019285 | 0.02779 | -4.60014948 |
| MEX3C | 0.217971977 | 4.29586288 | 2.353901331 | 0.019333 | 0.02786 | -4.60233386 |
| RHCG | -0.086622675 | 0.13677585 | -2.353400818 | 0.019359 | 0.02789 | -4.60348661 |
| AKAP13 | 0.227902273 | 4.96653902 | 2.352999237 | 0.019379 | 0.02792 | -4.60441133 |
| CAMK2B | -0.22189801 | 4.19437084 | -2.352910126 | 0.019384 | 0.02792 | -4.60461651 |
| ASTN1 | -0.189640459 | 0.30249584 | -2.351955601 | 0.019432 | 0.02799 | -4.60681381 |
| YIPF7 | -0.043506428 | 0.19536365 | -2.351465675 | 0.019457 | 0.02802 | -4.60794128 |
| CAV2 | 0.327853818 | 6.2045313 | 2.350841789 | 0.019489 | 0.02807 | -4.60937671 |
| MTM1 | -0.214357379 | 4.2361724 | -2.350808955 | 0.019491 | 0.02807 | -4.60945224 |
| B3GALT | -0.041182326 | 0.13543604 | -2.350042436 | 0.01953 | 0.02812 | -4.61121531 |
| CD248 | -0.296460015 | 4.63843896 | -2.349852306 | 0.01954 | 0.02813 | -4.61165255 |
| DIP2B | -0.184013737 | 3.47310981 | -2.349277841 | 0.01957 | 0.02817 | -4.61297341 |
| TNPO2 | -0.135967187 | 5.28012837 | -2.348836485 | 0.019592 | 0.0282 | -4.61398801 |
| VPREB3 | -0.311854848 | 1.48662252 | -2.347822281 | 0.019645 | 0.02828 | -4.61631879 |
| ARHGAP | -0.156672634 | 1.46566023 | -2.347615213 | 0.019655 | 0.02829 | -4.61679455 |
| MMP21 | -0.060438056 | 0.16093625 | -2.347513153 | 0.019661 | 0.02829 | -4.61702902 |
| CCDC19 | -0.064783498 | 0.0906979 | -2.347232668 | 0.019675 | 0.02831 | -4.61767336 |
| NCAPH | 0.16642083 | 1.16664838 | 2.347054742 | 0.019684 | 0.02832 | -4.61808206 |
| CHAD | -0.253858029 | 1.63775838 | -2.346704994 | 0.019702 | 0.02835 | -4.61888536 |
| TMEM21 | -0.090863071 | 0.07137522 | -2.34619303 | 0.019729 | 0.02838 | -4.62006102 |
| SOGA1 | -0.261293722 | 4.34953235 | -2.346018666 | 0.019738 | 0.02839 | -4.62046137 |
| ITPRIP | -0.212808616 | 4.71910117 | -2.34463846 | 0.01981 | 0.02849 | -4.62362939 |
| CLEC2L | -0.106990381 | 0.20414345 | -2.34411932 | 0.019837 | 0.02853 | -4.62482053 |
| CR1L | 0.052352892 | 0.14217566 | 2.343845811 | 0.019851 | 0.02855 | -4.62544798 |
| LRRC40 | -0.169889069 | 3.58554224 | -2.343713534 | 0.019858 | 0.02855 | -4.6257514 |
| PPP2R3 | -0.153323919 | 2.32245946 | -2.343374383 | 0.019875 | 0.02858 | -4.6265293 |
| RUFY2 | -0.150451989 | 2.74391266 | -2.343023188 | 0.019894 | 0.0286 | -4.6273347 |
| CYLD | -0.165371222 | 4.12071171 | -2.34209694 | 0.019942 | 0.02867 | -4.62945834 |
| FBXL7 | -0.185470057 | 2.5912698 | -2.342054932 | 0.019944 | 0.02867 | -4.62955464 |

| | | | | | | |
|---|---|---|---|---|---|---|
| GBP6 | 0.151442812 | 0.61502868 | 2.341440008 | 0.019976 | 0.02871 | -4.63096402 |
| APELA | -0.148714205 | 0.17576093 | -2.341164242 | 0.019991 | 0.02873 | -4.63159595 |
| SCGB3A | -0.470203553 | 2.38803378 | -2.340828347 | 0.020008 | 0.02875 | -4.63236558 |
| OXTR | 0.125190313 | 0.82976176 | 2.340629035 | 0.020019 | 0.02877 | -4.6328222 |
| NLRP11 | -0.039448219 | 0.05360929 | -2.340368145 | 0.020033 | 0.02878 | -4.63341985 |
| SETD9 | -0.179301399 | 3.10709845 | -2.340200021 | 0.020041 | 0.02879 | -4.63380495 |
| GTF2IRD | 0.185673906 | 4.92753311 | 2.339986958 | 0.020053 | 0.02881 | -4.63429296 |
| SIPA1L2 | 0.252097313 | 4.35079227 | 2.339417138 | 0.020083 | 0.02885 | -4.63559788 |
| RGS22 | -0.055261613 | 0.15533801 | -2.339083571 | 0.0201 | 0.02887 | -4.63636162 |
| TCAP | -0.20452732 | 1.50229361 | -2.33905669 | 0.020102 | 0.02887 | -4.63642316 |
| F2R | -0.290726117 | 4.95888572 | -2.339026217 | 0.020103 | 0.02887 | -4.63649293 |
| CRKL | -0.173218855 | 5.20196165 | -2.338898054 | 0.02011 | 0.02888 | -4.63678634 |
| ITIH3 | -0.091731959 | 0.37583824 | -2.338726089 | 0.020119 | 0.02889 | -4.63718 |
| MAN2A2 | -0.224080875 | 4.30334241 | -2.338222146 | 0.020146 | 0.02892 | -4.63833348 |
| FFAR3 | -0.044846195 | 0.09752498 | -2.338085402 | 0.020153 | 0.02893 | -4.63864643 |
| AQP6 | -0.143162172 | 0.37441543 | -2.337757839 | 0.02017 | 0.02896 | -4.63939602 |
| HOXC8 | 0.128701902 | 0.1900336 | 2.336796346 | 0.020221 | 0.02903 | -4.6415957 |
| RBFOX2 | -0.206806297 | 4.72614787 | -2.33632835 | 0.020246 | 0.02906 | -4.64266606 |
| C1orf198 | -0.219928381 | 5.28147606 | -2.335685325 | 0.02028 | 0.0291 | -4.64413639 |
| FBLN5 | -0.27253967 | 3.88493244 | -2.335658357 | 0.020281 | 0.0291 | -4.64419805 |
| CCL21 | -0.80948599 | 3.3845882 | -2.33490213 | 0.020321 | 0.02916 | -4.64592671 |
| ERP27 | 0.443760529 | 4.2710194 | 2.33476801 | 0.020328 | 0.02917 | -4.64623324 |
| SLC25A4 | -0.174034766 | 0.82332908 | -2.334383824 | 0.020349 | 0.02919 | -4.6471112 |
| ZNF792 | -0.145944558 | 2.1299436 | -2.334270001 | 0.020355 | 0.0292 | -4.64737129 |
| C1QTNF | 0.288115329 | 4.62595223 | 2.334230451 | 0.020357 | 0.0292 | -4.64746166 |
| ETV3 | -0.189468128 | 3.58280298 | -2.334131789 | 0.020362 | 0.02921 | -4.64768709 |
| PGBD5 | -0.266602742 | 2.55791684 | -2.333668195 | 0.020387 | 0.02924 | -4.64874622 |
| VPS35 | -0.149673148 | 5.17285892 | -2.333582964 | 0.020392 | 0.02924 | -4.64894092 |
| ZNF721 | -0.143511076 | 3.47434707 | -2.332787323 | 0.020434 | 0.0293 | -4.65075811 |
| BRD1 | -0.173604495 | 4.36473532 | -2.33197108 | 0.020478 | 0.02936 | -4.65262175 |
| TGFA | 0.359887163 | 5.36294102 | 2.331882384 | 0.020482 | 0.02937 | -4.65282422 |
| MESP2 | -0.160564727 | 0.6293462 | -2.330790069 | 0.020541 | 0.02945 | -4.65531711 |
| PKD1L3 | 0.02452545 | 0.10856459 | 2.33068704 | 0.020546 | 0.02945 | -4.65555218 |
| GLYATL | 0.035842845 | 0.08697005 | 2.330582604 | 0.020552 | 0.02946 | -4.65579045 |
| OCLN | -0.312683552 | 4.16614917 | -2.33040049 | 0.020562 | 0.02947 | -4.65620593 |
| ZBED2 | -0.391110642 | 7.11364103 | -2.330211798 | 0.020572 | 0.02948 | -4.65663639 |
| RASA1 | 0.285587628 | 5.39047938 | 2.330193188 | 0.020573 | 0.02948 | -4.65667884 |
| PMM2 | -0.149993235 | 1.86805385 | -2.329508275 | 0.02061 | 0.02953 | -4.65824099 |
| ARHGAF | -0.20442398 | 5.08705227 | -2.329035294 | 0.020635 | 0.02956 | -4.65931952 |
| RAB27A | 0.340195157 | 6.04996746 | 2.329029307 | 0.020636 | 0.02956 | -4.65933317 |

| WLS | 0.237416918 | 4.77871344 | 2.32876662 | 0.02065 | 0.02958 | -4.65993207 |
|---|---|---|---|---|---|---|
| CARD10 | -0.171494503 | 3.04472375 | -2.32789838 | 0.020697 | 0.02965 | -4.66191113 |
| CENPI | 0.07346998 | 0.46670908 | 2.326287877 | 0.020784 | 0.02977 | -4.66558022 |
| ARL9 | -0.211879316 | 1.45881072 | -2.325998123 | 0.020799 | 0.02979 | -4.66624008 |
| TAS2R3 | 0.038324247 | 0.11386218 | 2.325081157 | 0.020849 | 0.02986 | -4.6683278 |
| NPAS3 | 0.190306968 | 2.14175077 | 2.325067188 | 0.02085 | 0.02986 | -4.6683596 |
| OR7C1 | -0.047709752 | 0.16673441 | -2.324327436 | 0.02089 | 0.02991 | -4.67004326 |
| ARGLU1 | -0.231584386 | 5.52110223 | -2.323968805 | 0.02091 | 0.02994 | -4.67085931 |
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| TRAF7 | -0.160950168 | 5.61346313 | -2.321554852 | 0.021042 | 0.03012 | -4.67634902 |
| TDG | -0.15155835 | 3.21233429 | -2.321272804 | 0.021057 | 0.03014 | -4.67699009 |
| TTC28 | -0.163345948 | 3.37490707 | -2.320886634 | 0.021078 | 0.03016 | -4.67786769 |
| BCL2L14 | 0.062957967 | 0.15470015 | 2.319699479 | 0.021144 | 0.03025 | -4.68056472 |
| RIN2 | -0.204218505 | 5.12615752 | -2.319679714 | 0.021145 | 0.03025 | -4.68060961 |
| LRP4 | 0.519832356 | 5.45546389 | 2.318780713 | 0.021194 | 0.03032 | -4.6826511 |
| MEIS3 | 0.166635397 | 1.39352912 | 2.31867676 | 0.0212 | 0.03033 | -4.68288712 |
| CLK2 | -0.16822738 | 5.05276526 | -2.318366392 | 0.021217 | 0.03035 | -4.68359171 |
| EXPH5 | 0.166306383 | 1.5789226 | 2.317700854 | 0.021254 | 0.0304 | -4.68510229 |
| IGFLR1 | 0.199539911 | 1.50134897 | 2.317367536 | 0.021272 | 0.03042 | -4.68585868 |
| CREBZF | -0.214905388 | 4.74384649 | -2.317186871 | 0.021282 | 0.03044 | -4.68626861 |
| MBOAT4 | -0.055951818 | 0.27588825 | -2.317065527 | 0.021289 | 0.03044 | -4.68654392 |
| LOXL3 | 0.153375672 | 1.53991747 | 2.316724325 | 0.021308 | 0.03047 | -4.68731799 |
| RBM12 | -0.188982669 | 4.81738052 | -2.316126987 | 0.021341 | 0.03051 | -4.68867288 |
| OR56B4 | -0.02942818 | 0.09110711 | -2.31582672 | 0.021358 | 0.03053 | -4.68935382 |
| PNPLA3 | 0.064970042 | 0.18926103 | 2.315426818 | 0.02138 | 0.03056 | -4.69026059 |
| EPB41L2 | -0.205742151 | 3.4882732 | -2.315200485 | 0.021392 | 0.03058 | -4.69077372 |
| SGCE | -0.303327673 | 4.67570861 | -2.314990681 | 0.021404 | 0.03059 | -4.69124934 |
| CYP4Z1 | 0.084122813 | 0.22131799 | 2.314842649 | 0.021412 | 0.0306 | -4.6915849 |
| TMEM20 | 0.046297185 | 0.15633613 | 2.31319172 | 0.021504 | 0.03073 | -4.69532582 |
| KCNG2 | -0.043805228 | 0.08784426 | -2.313084575 | 0.02151 | 0.03074 | -4.69556852 |
| LCK | 0.326263353 | 2.34244238 | 2.31296452 | 0.021517 | 0.03074 | -4.69584044 |
| TPP1 | 0.177755475 | 6.86536309 | 2.312716511 | 0.021531 | 0.03076 | -4.69640215 |
| POLQ | 0.055986892 | 0.28254585 | 2.311970975 | 0.021573 | 0.03082 | -4.69809032 |
| MSH5-S/ | -0.10488664 | 0.68417356 | -2.311321471 | 0.021609 | 0.03087 | -4.69956062 |
| RAB21 | -0.138147863 | 4.10311356 | -2.310745684 | 0.021641 | 0.03091 | -4.70086371 |
| ZNF333 | -0.135394505 | 1.94427413 | -2.310732119 | 0.021642 | 0.03091 | -4.70089441 |
| CCL15 | -0.116745216 | 0.17534173 | -2.310646568 | 0.021647 | 0.03091 | -4.701088 |
| LRRC8E | 0.088662155 | 0.48789624 | 2.310423779 | 0.02166 | 0.03093 | -4.7015921 |
| PRELP | 0.406228799 | 3.07578056 | 2.309798718 | 0.021695 | 0.03098 | -4.70300616 |

| | | | | | | |
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| RPS8 | -0.164621829 | 9.97546665 | -2.309240994 | 0.021726 | 0.03102 | -4.70426758 |
| PKDREJ | -0.029504734 | 0.13740054 | -2.308415233 | 0.021773 | 0.03108 | -4.70613469 |
| MYO1A | -0.059868221 | 0.23136086 | -2.307532322 | 0.021823 | 0.03115 | -4.70813032 |
| POGLUT | -0.175413775 | 4.05879141 | -2.307319571 | 0.021835 | 0.03117 | -4.70861108 |
| MBNL2 | -0.166077308 | 5.08472965 | -2.306302202 | 0.021892 | 0.03124 | -4.7109095 |
| KCNN1 | -0.150522924 | 0.29775395 | -2.306113975 | 0.021903 | 0.03126 | -4.71133464 |
| PRRX1 | 0.312747811 | 2.8689216 | 2.305398103 | 0.021944 | 0.03131 | -4.71295121 |
| RASGRF | -0.195390201 | 1.54241923 | -2.304663385 | 0.021985 | 0.03137 | -4.71460985 |
| NPAP1 | -0.08608743 | 0.2369341 | -2.30438503 | 0.022001 | 0.03139 | -4.71523811 |
| SHISAL2 | -0.020445084 | 0.04454554 | -2.303980471 | 0.022024 | 0.03142 | -4.71615108 |
| MED15 | 0.152685665 | 4.77784032 | 2.303965215 | 0.022025 | 0.03142 | -4.7161855 |
| HPS1 | -0.124836658 | 5.5461403 | -2.303289017 | 0.022064 | 0.03147 | -4.71771114 |
| GIPR | 0.173436535 | 1.03923413 | 2.300766609 | 0.022208 | 0.03167 | -4.72339838 |
| ABCB7 | -0.166320565 | 4.37985575 | -2.299881834 | 0.022259 | 0.03174 | -4.72539186 |
| KLF11 | -0.213150102 | 3.79087383 | -2.298693691 | 0.022328 | 0.03184 | -4.7280677 |
| LCN8 | -0.265360203 | 0.95788204 | -2.298566054 | 0.022335 | 0.03185 | -4.72835507 |
| THOC3 | -0.178412894 | 3.51136876 | -2.298242129 | 0.022354 | 0.03187 | -4.72908432 |
| MTRNR2 | 0.214606332 | 1.33191854 | 2.297162241 | 0.022416 | 0.03196 | -4.73151474 |
| DCP1A | -0.167513652 | 3.79552939 | -2.296827783 | 0.022436 | 0.03198 | -4.73226726 |
| BHLHE4 | 0.346660623 | 7.39946274 | 2.296098327 | 0.022478 | 0.03204 | -4.73390814 |
| ATXN7L2 | -0.150579711 | 2.67308354 | -2.296000841 | 0.022484 | 0.03205 | -4.73412739 |
| GPD2 | -0.201655848 | 4.55976634 | -2.295541959 | 0.02251 | 0.03208 | -4.73515933 |
| CCDC20 | -0.112356336 | 0.99839548 | -2.295284861 | 0.022525 | 0.0321 | -4.73573741 |
| PCDHGA | -0.039532779 | 0.16611975 | -2.2952743 | 0.022526 | 0.0321 | -4.73576116 |
| ATP4B | -0.146942991 | 1.03011256 | -2.293712982 | 0.022617 | 0.03222 | -4.73927039 |
| AFF3 | 0.177341517 | 0.53155116 | 2.293338882 | 0.022639 | 0.03225 | -4.74011088 |
| GPR18 | 0.178057803 | 0.64268548 | 2.292930617 | 0.022663 | 0.03228 | -4.74102798 |
| SLC5A12 | -0.035549391 | 0.09637243 | -2.291627713 | 0.022739 | 0.03239 | -4.74395368 |
| DOCK11 | 0.252804061 | 4.42465601 | 2.291509419 | 0.022746 | 0.0324 | -4.74421924 |
| STX17 | -0.202551134 | 3.20498154 | -2.291455411 | 0.022749 | 0.0324 | -4.74434047 |
| PTPRK | 0.216093846 | 4.03160102 | 2.291295607 | 0.022758 | 0.03241 | -4.74469918 |
| KCNA1 | -0.065146051 | 0.09445047 | -2.291264532 | 0.02276 | 0.03241 | -4.74476893 |
| MGAT4A | -0.157831453 | 3.45478782 | -2.291203738 | 0.022764 | 0.03241 | -4.74490539 |
| INSIG1 | -0.163780022 | 4.26863499 | -2.288947188 | 0.022897 | 0.0326 | -4.74996786 |
| DLGAP5 | 0.176269605 | 1.01283162 | 2.288877536 | 0.022901 | 0.0326 | -4.75012404 |
| HAPLN1 | -0.226922553 | 1.0612301 | -2.288197608 | 0.022941 | 0.03266 | -4.75164845 |
| CUL9 | -0.136779446 | 3.54160463 | -2.287942224 | 0.022956 | 0.03267 | -4.75222091 |
| BPIFA1 | 0.066243723 | 0.14802435 | 2.287825796 | 0.022963 | 0.03268 | -4.75248187 |
| FOXL1 | 0.122106778 | 0.73778882 | 2.287499267 | 0.022982 | 0.03271 | -4.75321368 |
| SQSTM1 | -0.168069071 | 7.50603191 | -2.287100823 | 0.023006 | 0.03274 | -4.75410654 |

| | | | | | | |
|---|---|---|---|---|---|---|
| RHOBTB | 0.246467129 | 4.9723031 | 2.286980644 | 0.023013 | 0.03275 | -4.75437581 |
| FNDC3A | -0.217498271 | 5.5001994 | -2.286360631 | 0.02305 | 0.03279 | -4.7557648 |
| CYP4B1 | 0.43804296 | 4.23700866 | 2.285653287 | 0.023092 | 0.03285 | -4.75734899 |
| DESI2 | -0.170443679 | 4.85211684 | -2.285214996 | 0.023118 | 0.03289 | -4.75833036 |
| CCL26 | 0.175878094 | 0.93714091 | 2.281613298 | 0.023333 | 0.03319 | -4.76638805 |
| PSD | -0.177176654 | 1.68676196 | -2.281544305 | 0.023337 | 0.03319 | -4.76654228 |
| KSR2 | -0.147792514 | 1.28439937 | -2.281003579 | 0.023369 | 0.03324 | -4.7677509 |
| RAET1L | 0.09827016 | 0.3255194 | 2.280777465 | 0.023383 | 0.03325 | -4.76825622 |
| HLA-DMI | -0.230964288 | 5.99094746 | -2.280283977 | 0.023413 | 0.03329 | -4.76935891 |
| FAM91A | -0.170215313 | 4.45716579 | -2.27981019 | 0.023441 | 0.03333 | -4.77041736 |
| SPATA3 | 0.077406252 | 0.4974758 | 2.279598806 | 0.023454 | 0.03334 | -4.77088953 |
| C2CD4D | -0.128985466 | 1.10412888 | -2.279576812 | 0.023455 | 0.03334 | -4.77093866 |
| MIA | 0.110508605 | 0.29819095 | 2.27945897 | 0.023462 | 0.03335 | -4.77120186 |
| CPNE6 | -0.10791773 | 0.13907659 | -2.279201748 | 0.023478 | 0.03337 | -4.77177633 |
| SLFN14 | 0.019408242 | 0.04017103 | 2.279153722 | 0.023481 | 0.03337 | -4.77188358 |
| COX8C | -0.04816553 | 0.14051861 | -2.278930583 | 0.023494 | 0.03339 | -4.77238187 |
| VSTM4 | -0.392381115 | 5.63774635 | -2.277342212 | 0.02359 | 0.03352 | -4.77592748 |
| CHST2 | 0.340227044 | 5.67706416 | 2.276730309 | 0.023627 | 0.03357 | -4.77729275 |
| BCL7C | -0.178189116 | 5.35944734 | -2.27585583 | 0.02368 | 0.03364 | -4.77924327 |
| FLG2 | 0.014791071 | 0.02419881 | 2.27573597 | 0.023688 | 0.03365 | -4.77951056 |
| KLRK1 | 0.095154043 | 0.27227851 | 2.274754364 | 0.023748 | 0.03373 | -4.78169906 |
| KLRC4-K | 0.095154043 | 0.27227851 | 2.274754364 | 0.023748 | 0.03373 | -4.78169906 |
| FAM92A | -0.122906222 | 2.88424915 | -2.274224413 | 0.02378 | 0.03377 | -4.78288021 |
| ZNF682 | -0.238352469 | 2.928579 | -2.274158114 | 0.023784 | 0.03378 | -4.78302796 |
| PCYOX1 | -0.140028641 | 2.30699414 | -2.274078694 | 0.023789 | 0.03378 | -4.78320494 |
| PIK3CA | 0.192634863 | 3.11044589 | 2.273996 | 0.023794 | 0.03379 | -4.78338921 |
| AP3S1 | -0.144504422 | 5.53664702 | -2.272540813 | 0.023883 | 0.03391 | -4.78663086 |
| GPR183 | 0.36871648 | 4.01753396 | 2.272252541 | 0.0239 | 0.03393 | -4.78727279 |
| LDHAL6I | 0.027836209 | 0.08799675 | 2.271473899 | 0.023948 | 0.034 | -4.7890063 |
| TIMELES | -0.162078075 | 3.4612442 | -2.27121721 | 0.023964 | 0.03402 | -4.78957765 |
| NUDT2 | -0.173283544 | 3.84864768 | -2.271025606 | 0.023976 | 0.03403 | -4.79000409 |
| ANKZF1 | -0.165435761 | 3.96447228 | -2.270238419 | 0.024024 | 0.0341 | -4.79175571 |
| ABCC10 | -0.137571439 | 3.31590472 | -2.269860174 | 0.024047 | 0.03412 | -4.79259716 |
| KYNU | 0.101511131 | 0.56117341 | 2.269847213 | 0.024048 | 0.03412 | -4.79262599 |
| PHF19 | 0.169150242 | 3.20969307 | 2.26946427 | 0.024072 | 0.03415 | -4.79347775 |
| ARHGDI | 0.080945911 | 0.20633829 | 2.269400106 | 0.024076 | 0.03416 | -4.79362045 |
| FOLR2 | 0.296215367 | 3.93679748 | 2.268562423 | 0.024127 | 0.03423 | -4.79548313 |
| ARSH | -0.058725725 | 0.20966167 | -2.267458661 | 0.024196 | 0.03432 | -4.79793647 |
| BMI1 | -0.158768878 | 4.86412894 | -2.267363551 | 0.024201 | 0.03433 | -4.79814781 |
| CTAGE8 | -0.09538575 | 0.40642723 | -2.267248079 | 0.024209 | 0.03433 | -4.79840439 |

| PDGFRL | -0.252650544 | 5.96101601 | -2.266000258 | 0.024286 | 0.03444 | -4.8011763 |
|---|---|---|---|---|---|---|
| EOMES | 0.216455486 | 0.68939258 | 2.265642556 | 0.024308 | 0.03447 | -4.80197062 |
| DIS3 | -0.151713778 | 3.74343036 | -2.265445488 | 0.024321 | 0.03448 | -4.80240819 |
| FLG | 0.09610028 | 0.32399194 | 2.265386965 | 0.024324 | 0.03449 | -4.80253813 |
| S1PR4 | 0.231601362 | 2.28614097 | 2.265316554 | 0.024329 | 0.03449 | -4.80269445 |
| LILRA2 | 0.122019459 | 0.84850695 | 2.263603514 | 0.024435 | 0.03464 | -4.8064963 |
| LRFN3 | -0.163294174 | 3.3102265 | -2.263471476 | 0.024444 | 0.03465 | -4.80678922 |
| H1FNT | -0.058369587 | 0.18544071 | -2.262810069 | 0.024485 | 0.0347 | -4.8082563 |
| TFPI | -0.171960773 | 1.70081142 | -2.262733604 | 0.02449 | 0.03471 | -4.80842588 |
| FMR1NB | -0.045268919 | 0.15356796 | -2.262640713 | 0.024496 | 0.03471 | -4.80863188 |
| FLVCR2 | 0.193392905 | 2.82769246 | 2.262454972 | 0.024507 | 0.03473 | -4.80904377 |
| PRDM8 | 0.107429836 | 0.46706616 | 2.262008452 | 0.024535 | 0.03476 | -4.81003382 |
| NAA80 | -0.140827532 | 4.02855535 | -2.261763541 | 0.02455 | 0.03478 | -4.81057678 |
| RPL36A | -0.171736504 | 5.3765514 | -2.261107192 | 0.024592 | 0.03484 | -4.81203158 |
| AKT3 | 0.203842299 | 4.3438789 | 2.259721789 | 0.024679 | 0.03496 | -4.81510101 |
| MCM4 | 0.208924374 | 4.09101077 | 2.259527843 | 0.024691 | 0.03497 | -4.81553056 |
| RPLP0 | -0.1716316 | 9.5700127 | -2.259053184 | 0.024721 | 0.03501 | -4.81658168 |
| ITPKC | 0.185894674 | 5.30017507 | 2.25883269 | 0.024735 | 0.03503 | -4.81706989 |
| TMEFF1 | -0.087434662 | 0.35413879 | -2.258399733 | 0.024762 | 0.03506 | -4.8180284 |
| MMP28 | -0.240140088 | 3.4776846 | -2.258111732 | 0.02478 | 0.03509 | -4.81866589 |
| ADPGK | -0.132841127 | 4.66634035 | -2.257262393 | 0.024834 | 0.03516 | -4.82054546 |
| PHF20 | -0.148934108 | 3.89014422 | -2.257157813 | 0.024841 | 0.03517 | -4.82077685 |
| ATAD3B | -0.173484556 | 2.7068357 | -2.257043547 | 0.024848 | 0.03517 | -4.82102965 |
| AURKB | 0.210454811 | 1.42628764 | 2.256862248 | 0.02486 | 0.03519 | -4.82143074 |
| CEP104 | -0.153661759 | 3.8703825 | -2.256799994 | 0.024863 | 0.03519 | -4.82156845 |
| STK32A | 0.352147437 | 4.42042204 | 2.256534324 | 0.02488 | 0.03521 | -4.82215612 |
| C1orf112 | 0.11805116 | 1.46729092 | 2.256419428 | 0.024888 | 0.03522 | -4.82241025 |
| CNFN | 0.294822673 | 3.44302866 | 2.256310346 | 0.024895 | 0.03522 | -4.82265151 |
| TSTD3 | -0.057300872 | 0.28708081 | -2.255970153 | 0.024916 | 0.03525 | -4.82340386 |
| BCL6 | 0.204294024 | 4.2195661 | 2.255627327 | 0.024938 | 0.03528 | -4.82416192 |
| ZC3H4 | -0.143197687 | 4.6611063 | -2.255538239 | 0.024944 | 0.03529 | -4.82435889 |
| TWIST1 | 0.240892061 | 1.65822186 | 2.255417548 | 0.024951 | 0.03529 | -4.82462572 |
| RFPL2 | -0.051933305 | 0.13252734 | -2.254414984 | 0.025015 | 0.03538 | -4.82684176 |
| GLIS1 | -0.179266351 | 0.66892575 | -2.254108906 | 0.025035 | 0.0354 | -4.82751812 |
| ZBBX | -0.041166681 | 0.07439362 | -2.254070215 | 0.025037 | 0.03541 | -4.82760361 |
| NPC2 | 0.281570118 | 10.8101586 | 2.252888236 | 0.025113 | 0.03551 | -4.83021462 |
| BAG6 | -0.124965605 | 7.24263366 | -2.252785105 | 0.025119 | 0.03552 | -4.83044237 |
| SRSF11 | -0.189406773 | 5.67146793 | -2.252263274 | 0.025153 | 0.03556 | -4.83159464 |
| HECW1 | -0.110898164 | 0.18051777 | -2.252256471 | 0.025153 | 0.03556 | -4.83160966 |
| FOXK2 | -0.116579883 | 4.26681445 | -2.251719212 | 0.025187 | 0.0356 | -4.83279572 |

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| GALNT1: | 0.107571067 | 0.19655971 | 2.251643535 | 0.025192 | 0.03561 | -4.83296276 |
| CEP164 | -0.149522306 | 3.23474617 | -2.251436424 | 0.025206 | 0.03562 | -4.83341989 |
| XCL2 | 0.285070079 | 1.25538326 | 2.251082991 | 0.025228 | 0.03565 | -4.83419989 |
| KDM2A | -0.159526627 | 5.2135829 | -2.250824808 | 0.025245 | 0.03567 | -4.83476961 |
| ATF5 | -0.270496691 | 5.6736442 | -2.250104681 | 0.025291 | 0.03574 | -4.83635833 |
| GLCCI1 | -0.270054347 | 4.91289796 | -2.24989533 | 0.025305 | 0.03575 | -4.83682011 |
| ADRA1A | -0.030368484 | 0.08188868 | -2.249795382 | 0.025311 | 0.03576 | -4.83704055 |
| ARPIN-A | -0.06457397 | 0.40790276 | -2.24949746 | 0.02533 | 0.03578 | -4.83769759 |
| AMER2 | -0.080110724 | 0.07040606 | -2.2488659 | 0.025371 | 0.03584 | -4.83909016 |
| ACSM3 | -0.167464239 | 1.24479245 | -2.24844462 | 0.025398 | 0.03587 | -4.84001886 |
| C2CD3 | -0.152737167 | 3.26804682 | -2.247818069 | 0.025439 | 0.03593 | -4.84139976 |
| NR0B2 | -0.184736602 | 0.40369427 | -2.247726316 | 0.025445 | 0.03593 | -4.84160195 |
| TASOR2 | -0.197538927 | 3.86057395 | -2.247703396 | 0.025446 | 0.03593 | -4.84165246 |
| RPH3A | -0.097245968 | 0.14907698 | -2.247424902 | 0.025464 | 0.03595 | -4.84226611 |
| RBP2 | -0.101338822 | 0.31619446 | -2.247095874 | 0.025485 | 0.03598 | -4.84299101 |
| ATG16L1 | -0.157438353 | 4.21981207 | -2.247061727 | 0.025488 | 0.03598 | -4.84306623 |
| CAPN1 | -0.164443499 | 6.75232246 | -2.246813967 | 0.025504 | 0.036 | -4.84361201 |
| STAT5B | -0.158698009 | 5.44647245 | -2.245934545 | 0.025561 | 0.03608 | -4.84554878 |
| CYP7A1 | -0.015305535 | 0.04302824 | -2.245629067 | 0.025581 | 0.0361 | -4.84622137 |
| TENT2 | -0.149176359 | 4.85997333 | -2.2453894 | 0.025596 | 0.03612 | -4.846749 |
| MMP1 | 0.256060104 | 1.03143445 | 2.244915203 | 0.025627 | 0.03616 | -4.84779279 |
| HS3ST3/ | 0.106380027 | 0.30168887 | 2.24407325 | 0.025682 | 0.03624 | -4.84964554 |
| CFAP73 | -0.128332873 | 0.77985129 | -2.244034701 | 0.025684 | 0.03624 | -4.84973036 |
| MEF2A | -0.201762966 | 4.3338116 | -2.243441193 | 0.025723 | 0.03629 | -4.85103598 |
| CAMK2A | 0.044461433 | 0.07748504 | 2.242703883 | 0.025771 | 0.03635 | -4.85265748 |
| NOC3L | -0.166680613 | 3.95628166 | -2.241264214 | 0.025866 | 0.03648 | -4.85582214 |
| INTS6 | -0.124487191 | 2.43501217 | -2.240044951 | 0.025946 | 0.03659 | -4.85850077 |
| FOXR1 | -0.094815712 | 0.10322996 | -2.239687247 | 0.025969 | 0.03662 | -4.85928636 |
| ANKIB1 | -0.185360994 | 4.35188493 | -2.238629436 | 0.026039 | 0.03672 | -4.8616088 |
| OSTM1 | -0.154930993 | 4.19628942 | -2.238064174 | 0.026076 | 0.03677 | -4.86284941 |
| GUCY1A | -0.145723155 | 1.09858578 | -2.237943 | 0.026084 | 0.03678 | -4.86311532 |
| KCNC3 | -0.289983684 | 4.02433743 | -2.237522877 | 0.026112 | 0.03681 | -4.86403715 |
| POMK | 0.224003215 | 1.60167528 | 2.236409637 | 0.026186 | 0.03691 | -4.86647899 |
| RNF151 | -0.035309055 | 0.1109532 | -2.236240089 | 0.026197 | 0.03693 | -4.86685078 |
| ARMCX6 | -0.244932767 | 4.79715045 | -2.235851221 | 0.026223 | 0.03696 | -4.8677034 |
| GRHL2 | -0.20352719 | 4.23425478 | -2.235125452 | 0.026271 | 0.03702 | -4.86929433 |
| LRRC31 | -0.03391915 | 0.06443965 | -2.234747393 | 0.026296 | 0.03706 | -4.87012287 |
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| SHISAL1 | 0.121090368 | 0.43273957 | 2.232700314 | 0.026433 | 0.03724 | -4.87460678 |
| SEPTIN1 | 0.228820356 | 4.5131384 | 2.23141764 | 0.026519 | 0.03736 | -4.87741433 |

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| TTC14 | -0.230108132 | 3.77922513 | -2.230676574 | 0.026569 | 0.03743 | -4.87903569 |
| OVCH1 | -0.072265467 | 0.18631957 | -2.228853734 | 0.026691 | 0.0376 | -4.88302162 |
| MFSD6L | -0.30683028 | 3.99415536 | -2.228742452 | 0.026699 | 0.0376 | -4.88326486 |
| MAP4K5 | -0.167647373 | 3.9572738 | -2.227598936 | 0.026776 | 0.03771 | -4.88576362 |
| ADAP1 | -0.169724199 | 2.88346204 | -2.227520159 | 0.026781 | 0.03771 | -4.88593572 |
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| EPDR1 | -0.274218897 | 5.44769002 | -2.22641827 | 0.026856 | 0.03781 | -4.88834227 |
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| RNF168 | -0.142782795 | 3.26155658 | -2.224374315 | 0.026995 | 0.038 | -4.89280329 |
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| ZNF155 | -0.158597267 | 1.7868095 | -2.221804851 | 0.02717 | 0.03822 | -4.89840566 |
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| GNG4 | -0.12413449 | 0.51593796 | -2.220859663 | 0.027235 | 0.03831 | -4.90046494 |
| ZNF615 | -0.165789926 | 3.00003292 | -2.220384319 | 0.027268 | 0.03835 | -4.90150026 |
| MAP3K1 | 0.155435824 | 2.32192368 | 2.219837126 | 0.027305 | 0.0384 | -4.9026918 |
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| MRLN | -0.025842145 | 0.04285416 | -2.219030172 | 0.027361 | 0.03847 | -4.90444847 |
| RSBN1 | -0.163470645 | 3.62647507 | -2.218321606 | 0.02741 | 0.03853 | -4.90599046 |
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| RPL7A | -0.153251792 | 10.6856301 | -2.217933862 | 0.027437 | 0.03856 | -4.90683407 |
| EGLN2 | -0.155028785 | 3.58302126 | -2.217779862 | 0.027447 | 0.03858 | -4.90716908 |
| BTBD8 | 0.14908632 | 1.00919207 | 2.217060572 | 0.027497 | 0.03864 | -4.90873355 |
| TNRC6A | -0.166471603 | 3.71326993 | -2.216630535 | 0.027527 | 0.03868 | -4.90966865 |
| CHST13 | 0.096423526 | 0.49469752 | 2.216289391 | 0.02755 | 0.03871 | -4.91041034 |
| SECISBF | -0.203408298 | 4.75694748 | -2.216196093 | 0.027557 | 0.03872 | -4.91061316 |
| GAREM2 | -0.157060425 | 2.06638277 | -2.216018297 | 0.027569 | 0.03873 | -4.91099965 |
| CASP3 | -0.15014475 | 4.43583392 | -2.215671017 | 0.027593 | 0.03876 | -4.91175447 |
| ZMYM1 | -0.160682697 | 2.65567891 | -2.215331351 | 0.027617 | 0.03879 | -4.91249263 |
| RNF227 | 0.133357546 | 2.44197006 | 2.21384279 | 0.027721 | 0.03893 | -4.91572629 |
| C19orf38 | 0.170598593 | 1.33429865 | 2.213731695 | 0.027728 | 0.03894 | -4.91596755 |
| TSHZ2 | 0.168584917 | 1.10177832 | 2.213380856 | 0.027753 | 0.03897 | -4.91672935 |
| PPM1K | -0.161931389 | 3.03917018 | -2.213309257 | 0.027758 | 0.03898 | -4.9168848 |

| ISOC1 | -0.17314806 | 5.45181084 | -2.213114453 | 0.027771 | 0.03899 | -4.91730773 |
| RNF112 | -0.069007341 | 0.40927796 | -2.213047975 | 0.027776 | 0.039 | -4.91745205 |
| OR51E2 | 0.078621395 | 0.23796981 | 2.212546702 | 0.027811 | 0.03904 | -4.91854014 |
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| GSTT4 | -0.022203957 | 0.04548381 | -2.212370013 | 0.027823 | 0.03905 | -4.91892361 |
| BMF | -0.277243644 | 5.05209141 | -2.211529088 | 0.027882 | 0.03913 | -4.92074829 |
| YPEL4 | 0.253329734 | 1.59724004 | 2.211518151 | 0.027883 | 0.03913 | -4.92077202 |
| C11orf91 | 0.057512264 | 0.15844491 | 2.211017324 | 0.027918 | 0.03918 | -4.92185842 |
| RPL17-C | -0.021598683 | 0.06077538 | -2.21099164 | 0.02792 | 0.03918 | -4.92191413 |
| PPP1CB | -0.155434905 | 7.15003919 | -2.210342071 | 0.027965 | 0.03924 | -4.92332281 |
| ITIH5 | -0.308993856 | 3.46902874 | -2.210179065 | 0.027977 | 0.03925 | -4.92367625 |
| SLITRK3 | -0.059326016 | 0.13028447 | -2.209086485 | 0.028054 | 0.03935 | -4.92604459 |
| PTGER4 | 0.294535833 | 2.38314979 | 2.209043292 | 0.028057 | 0.03935 | -4.9261382 |
| PTPN11 | -0.20702876 | 5.65603641 | -2.208321794 | 0.028108 | 0.03942 | -4.92770151 |
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| GAS2L2 | -0.184307174 | 0.65818478 | -2.206374611 | 0.028245 | 0.03961 | -4.93191815 |
| MKRN2C | 0.27282272 | 1.72916741 | 2.205966432 | 0.028274 | 0.03964 | -4.93280162 |
| C19orf57 | 0.110743297 | 1.19513586 | 2.20498853 | 0.028344 | 0.03974 | -4.93491754 |
| TENM3 | 0.326680561 | 2.16320913 | 2.204487816 | 0.028379 | 0.03978 | -4.93600061 |
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| RGL3 | -0.230448591 | 6.1736524 | -2.203914808 | 0.02842 | 0.03983 | -4.93723976 |
| BCL2L12 | -0.134637956 | 3.62456147 | -2.203889103 | 0.028422 | 0.03983 | -4.93729534 |
| MYO19 | -0.137688099 | 2.63839196 | -2.203252693 | 0.028467 | 0.03989 | -4.93867122 |
| SPC24 | 0.164004571 | 1.69128969 | 2.202392475 | 0.028529 | 0.03998 | -4.94053035 |
| ARHGAP | 0.284685091 | 3.29664629 | 2.202156395 | 0.028545 | 0.04 | -4.94104045 |
| NIPAL3 | -0.196047936 | 5.55768961 | -2.20048256 | 0.028665 | 0.04016 | -4.94465562 |
| EYA4 | -0.241969949 | 0.74448769 | -2.199362729 | 0.028746 | 0.04027 | -4.94707277 |
| SLC24A2 | 0.055511243 | 0.09676396 | 2.199272952 | 0.028752 | 0.04028 | -4.9472665 |
| KLHL28 | -0.170211757 | 2.60914998 | -2.199036147 | 0.028769 | 0.0403 | -4.94777747 |
| DACT2 | -0.190627153 | 0.37285433 | -2.197105 | 0.028909 | 0.04049 | -4.95194247 |
| CPT1B | 0.175735463 | 1.46969593 | 2.196543408 | 0.028949 | 0.04054 | -4.95315301 |
| ADNP2 | -0.174431242 | 3.62451925 | -2.194106192 | 0.029126 | 0.04079 | -4.95840314 |
| RHBDF1 | 0.185783805 | 4.83981368 | 2.194081457 | 0.029128 | 0.04079 | -4.9584564 |
| STAT5A | 0.160748266 | 4.49503566 | 2.193925119 | 0.029139 | 0.0408 | -4.95879298 |
| REXO2 | -0.150533839 | 4.5139399 | -2.193685402 | 0.029157 | 0.04082 | -4.95930902 |
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| GRIA4 | -0.026171888 | 0.04652358 | -2.192336607 | 0.029255 | 0.04095 | -4.96221158 |
| GCSAM | -0.195594753 | 1.48944687 | -2.191903221 | 0.029287 | 0.04099 | -4.96314384 |

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| WNT8B | 0.021875929 | 0.07071011 | 2.191431631 | 0.029321 | 0.04103 | -4.96415809 |
| CANT1 | -0.182241013 | 5.2611051 | -2.19089405 | 0.02936 | 0.04108 | -4.96531401 |
| THAP8 | -0.117219242 | 3.84454194 | -2.190238818 | 0.029408 | 0.04115 | -4.96672253 |
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| NSMAF | -0.132711187 | 4.24421725 | -2.187391767 | 0.029618 | 0.04143 | -4.97283799 |
| PHIP | 0.163824805 | 3.70086407 | 2.186564556 | 0.029679 | 0.04151 | -4.9746134 |
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| CDT1 | 0.233132235 | 3.15625699 | 2.185831324 | 0.029733 | 0.04158 | -4.97618657 |
| TANC1 | 0.242114488 | 3.94383829 | 2.185543376 | 0.029755 | 0.04161 | -4.97680423 |
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| TMEM54 | -0.180772941 | 6.81804147 | -2.185178424 | 0.029782 | 0.04164 | -4.97758695 |
| TYK2 | -0.126011627 | 4.89333517 | -2.184747704 | 0.029814 | 0.04168 | -4.97851057 |
| NTN5 | -0.168880482 | 0.89095753 | -2.184680722 | 0.029819 | 0.04168 | -4.97865419 |
| BTBD19 | -0.252861381 | 3.25378975 | -2.184668315 | 0.02982 | 0.04168 | -4.97868079 |
| EVPL | 0.253574419 | 5.44560054 | 2.184501622 | 0.029832 | 0.04169 | -4.97903818 |
| CD226 | 0.103073296 | 0.42055007 | 2.184060395 | 0.029865 | 0.04173 | -4.97998404 |
| OTX1 | -0.101353191 | 0.18334073 | -2.183435484 | 0.029911 | 0.0418 | -4.98132336 |
| RINL | -0.20750967 | 4.05817043 | -2.182916052 | 0.02995 | 0.04185 | -4.98243633 |
| DGCR6 | -0.34007133 | 3.07601641 | -2.182890443 | 0.029952 | 0.04185 | -4.98249119 |
| TRNAU1 | -0.117334352 | 3.40122738 | -2.182419343 | 0.029987 | 0.04189 | -4.98350037 |
| SAMD4B | -0.128981895 | 5.37404493 | -2.181741934 | 0.030038 | 0.04196 | -4.98495113 |
| SHROOM | -0.158580968 | 3.32819826 | -2.180077089 | 0.030162 | 0.04213 | -4.98851478 |
| HACD2 | -0.196177425 | 4.40291092 | -2.179759012 | 0.030186 | 0.04216 | -4.98919533 |
| EIF1AD | -0.114498643 | 4.60972021 | -2.178481532 | 0.030282 | 0.04229 | -4.99192765 |
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| PLXNA1 | 0.187363403 | 3.6669255 | 2.175995561 | 0.03047 | 0.04253 | -4.9972403 |
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| TMEM13 | 0.39116806 | 1.69301197 | 2.174631089 | 0.030573 | 0.04267 | -5.00015376 |
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| TRIO | 0.17856289 | 2.75177298 | 2.174096307 | 0.030613 | 0.04272 | -5.00129517 |
| VSNL1 | 0.17315585 | 0.49826368 | 2.174086731 | 0.030614 | 0.04272 | -5.0013156 |
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| LRIF1 | -0.135924788 | 3.79377768 | -2.17167077 | 0.030798 | 0.04296 | -5.00646868 |
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| LPAR4 | 0.042955709 | 0.20802168 | 2.169321917 | 0.030978 | 0.0432 | -5.01147332 |
| RSF1 | -0.173715731 | 3.65222372 | -2.169266923 | 0.030982 | 0.0432 | -5.01159043 |
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| TBL1X | -0.166601036 | 3.94105193 | -2.16386845 | 0.031399 | 0.04375 | -5.02307276 |
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| SLC18A1 | 0.024253151 | 0.05775178 | 2.161918054 | 0.031551 | 0.04395 | -5.02721439 |
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| SLC26A1 | -0.036012612 | 0.13567105 | -2.160786354 | 0.031639 | 0.04407 | -5.02961589 |
| LMTK3 | 0.215791653 | 3.01295916 | 2.160669215 | 0.031648 | 0.04408 | -5.02986439 |
| RIMBP3B | -0.012927286 | 0.03137042 | -2.160160212 | 0.031688 | 0.04413 | -5.03094405 |
| SYNE3 | -0.146598946 | 1.63391741 | -2.158198925 | 0.031842 | 0.04434 | -5.03510192 |
| TRPC5 | 0.462565706 | 1.80630001 | 2.158041854 | 0.031854 | 0.04435 | -5.03543474 |
| THEM5 | 0.354597719 | 2.25850891 | 2.156445008 | 0.03198 | 0.04453 | -5.03881708 |
| SLC25A4 | 0.169158048 | 3.0451616 | 2.155759125 | 0.032034 | 0.0446 | -5.04026913 |
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| TRIM36 | -0.354189575 | 1.3722522 | -2.153432162 | 0.032218 | 0.04485 | -5.04519211 |
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| TEN1-CD | -0.125469726 | 1.02050967 | -2.152081538 | 0.032325 | 0.04499 | -5.04804718 |
| GINS2 | -0.193686304 | 3.00374911 | -2.151830181 | 0.032345 | 0.04501 | -5.04857833 |
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| ZNF845 | -0.143545235 | 2.34562114 | -2.149790346 | 0.032508 | 0.04523 | -5.05288655 |
| EFNB1 | -0.18224912 | 5.20331397 | -2.149434669 | 0.032537 | 0.04527 | -5.05363735 |
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| BTBD9 | -0.124792735 | 3.37803804 | -2.148329203 | 0.032625 | 0.04538 | -5.05597012 |
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| SAPCD1 | 0.08141358 | 0.42329479 | 2.147764372 | 0.032671 | 0.04544 | -5.05716159 |
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| EVL | -0.152695314 | 3.81170683 | -2.146279551 | 0.03279 | 0.04559 | -5.06029227 |

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| ZNF93 | -0.140188568 | 2.33404499 | -2.145702019 | 0.032837 | 0.04565 | -5.0615094 |
| ZNF649 | -0.173950131 | 3.38012613 | -2.145458188 | 0.032856 | 0.04567 | -5.06202318 |
| DYNLT3 | -0.148262843 | 4.90021717 | -2.145298911 | 0.032869 | 0.04569 | -5.06235876 |
| SPOCK3 | 0.155193361 | 0.26764417 | 2.144389582 | 0.032943 | 0.04579 | -5.06427416 |
| ATXN2 | -0.117011974 | 3.28442392 | -2.143120271 | 0.033045 | 0.04593 | -5.06694652 |
| MAN2B1 | 0.178766515 | 4.87737096 | 2.142694388 | 0.03308 | 0.04597 | -5.06784281 |
| LMTK2 | -0.16690172 | 3.81478725 | -2.142686578 | 0.033081 | 0.04597 | -5.06785925 |
| RRM2B | -0.186095002 | 5.85783373 | -2.14257031 | 0.03309 | 0.04598 | -5.06810391 |
| IGSF9B | -0.150514916 | 1.19722368 | -2.142352373 | 0.033108 | 0.046 | -5.06856248 |
| TMEM8A | -0.141808505 | 6.08299304 | -2.142272932 | 0.033114 | 0.046 | -5.06872962 |
| FTL | -0.165972894 | 12.3854569 | -2.14190618 | 0.033144 | 0.04604 | -5.06950119 |
| TNRC6C | -0.131675782 | 2.77620767 | -2.141433235 | 0.033183 | 0.04609 | -5.07049597 |
| GNAO1 | 0.254280031 | 2.10616671 | 2.141343178 | 0.03319 | 0.0461 | -5.07068537 |
| F7 | 0.102075158 | 0.35230387 | 2.140394574 | 0.033267 | 0.0462 | -5.07267993 |
| TMEM17 | -0.108313379 | 0.28111159 | -2.139232862 | 0.033362 | 0.04633 | -5.07512142 |
| SGPP1 | -0.173750689 | 4.71401467 | -2.139053873 | 0.033377 | 0.04634 | -5.07549747 |
| PRDM2 | -0.175492086 | 4.12637066 | -2.139052108 | 0.033377 | 0.04634 | -5.07550118 |
| CLCN7 | -0.151327818 | 5.08188015 | -2.138088083 | 0.033456 | 0.04645 | -5.07752606 |
| C4BPB | -0.026406338 | 0.07744714 | -2.137991371 | 0.033464 | 0.04645 | -5.07772915 |
| TPTE2 | 0.059881883 | 0.1719825 | 2.137842453 | 0.033476 | 0.04646 | -5.07804185 |
| EQTN | -0.031922794 | 0.11023849 | -2.137833471 | 0.033477 | 0.04646 | -5.07806071 |
| PRSS1 | 0.410236833 | 1.34207181 | 2.136885353 | 0.033555 | 0.04657 | -5.0800511 |
| CDC14A | -0.209315297 | 3.17098857 | -2.135610833 | 0.03366 | 0.04671 | -5.08272536 |
| MYEF2 | 0.184282331 | 2.3890791 | 2.135473535 | 0.033671 | 0.04672 | -5.08301335 |
| USP3 | -0.130108229 | 3.52573416 | -2.134111487 | 0.033783 | 0.04687 | -5.08586938 |
| ZSWIM8 | -0.162455768 | 4.80009098 | -2.134071932 | 0.033787 | 0.04688 | -5.0859523 |
| MSMB | 0.298542938 | 0.63987772 | 2.13371599 | 0.033816 | 0.04691 | -5.08669836 |
| SMIM11A | -0.012676182 | 0.02983415 | -2.13352195 | 0.033832 | 0.04693 | -5.08710502 |
| TMEM15 | 0.200832984 | 0.99105234 | 2.132985755 | 0.033876 | 0.04699 | -5.08822857 |
| GRIK2 | -0.270815589 | 1.0947583 | -2.132818792 | 0.03389 | 0.047 | -5.08857837 |
| MOV10 | 0.133107566 | 4.42206134 | 2.132457766 | 0.03392 | 0.04704 | -5.08933465 |
| FAM180A | 0.168377827 | 0.6173117 | 2.131330935 | 0.034014 | 0.04716 | -5.09169437 |
| DVL3 | -0.125248874 | 5.58111487 | -2.131327658 | 0.034014 | 0.04716 | -5.09170123 |
| BHMT | -0.091137627 | 0.33069402 | -2.130614077 | 0.034074 | 0.04724 | -5.09319494 |
| GPC5 | 0.196701132 | 0.70731062 | 2.130173021 | 0.03411 | 0.04729 | -5.09411793 |
| COL15A1 | -0.278472457 | 4.99129016 | -2.1298606 | 0.034136 | 0.04732 | -5.09477162 |
| RRAGC | -0.118981619 | 3.87263631 | -2.129723017 | 0.034148 | 0.04733 | -5.09505947 |
| NUP205 | -0.165638991 | 3.9555514 | -2.128729424 | 0.034231 | 0.04745 | -5.09713765 |
| IHH | -0.156802774 | 0.11629086 | -2.128080392 | 0.034285 | 0.04752 | -5.09849466 |
| ALDH1A2 | -0.113903616 | 0.42981038 | -2.127789425 | 0.034309 | 0.04755 | -5.09910289 |

| Gene | | | | | | |
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| NUP155 | -0.142655897 | 3.01162521 | -2.127761465 | 0.034312 | 0.04755 | -5.09916133 |
| CTTNBP | 0.302573053 | 2.31706637 | 2.126484682 | 0.034419 | 0.04769 | -5.10182929 |
| C19orf18 | -0.17403841 | 1.8709001 | -2.126301343 | 0.034434 | 0.04771 | -5.10221227 |
| STAG2 | -0.172220234 | 5.5068304 | -2.126071408 | 0.034454 | 0.04773 | -5.10269254 |
| SETD1B | -0.152580788 | 4.05815336 | -2.124916852 | 0.034551 | 0.04786 | -5.10510331 |
| KLKB1 | -0.155177854 | 1.06205999 | -2.123666155 | 0.034656 | 0.048 | -5.10771341 |
| RHBDL2 | -0.121282364 | 1.44908512 | -2.123272848 | 0.03469 | 0.04805 | -5.1085339 |
| MICA | -0.153217696 | 4.81475764 | -2.122969257 | 0.034715 | 0.04808 | -5.10916713 |
| C3orf67 | -0.072212401 | 0.34353964 | -2.122194581 | 0.034781 | 0.04816 | -5.11078255 |
| KCTD20 | -0.151469015 | 4.49719233 | -2.122105108 | 0.034789 | 0.04817 | -5.11096909 |
| TMEM10 | -0.308293971 | 2.73557994 | -2.121665384 | 0.034826 | 0.04822 | -5.11188576 |
| KLHL5 | -0.177128455 | 3.66619638 | -2.12094478 | 0.034887 | 0.0483 | -5.11338755 |
| PCNX2 | 0.243866819 | 2.97224923 | 2.120032746 | 0.034965 | 0.0484 | -5.1152876 |
| C4B | 0.348495411 | 4.47941324 | 2.120005761 | 0.034967 | 0.0484 | -5.1153438 |
| CNIH4 | -0.114831833 | 4.27831038 | -2.119820256 | 0.034983 | 0.04842 | -5.11573017 |
| LCA5 | 0.245767816 | 3.63603262 | 2.119682537 | 0.034995 | 0.04843 | -5.11601698 |
| PPAT | -0.135995153 | 2.6257546 | -2.118871581 | 0.035064 | 0.04852 | -5.11770552 |
| ATIC | 0.185076916 | 5.77653026 | 2.118479516 | 0.035097 | 0.04857 | -5.11852164 |
| RAB37 | -0.145665255 | 1.00225086 | -2.118209835 | 0.03512 | 0.04859 | -5.11908292 |
| FAM214E | -0.117376605 | 3.72487857 | -2.117988325 | 0.035139 | 0.04862 | -5.11954389 |
| PHLDB1 | -0.182543473 | 3.3732118 | -2.117750484 | 0.035159 | 0.04864 | -5.12003879 |
| TNFRSF | 0.27854212 | 3.72545662 | 2.117527559 | 0.035179 | 0.04866 | -5.12050261 |
| CDC42E | -0.168412583 | 5.7111256 | -2.116258565 | 0.035287 | 0.04881 | -5.12314199 |
| ZNF232 | -0.153681437 | 3.24992569 | -2.116065944 | 0.035304 | 0.04883 | -5.12354248 |
| DTNA | -0.238745496 | 3.25370153 | -2.114603049 | 0.03543 | 0.049 | -5.12658299 |
| CASTOR | 0.22733104 | 2.81118077 | 2.114296329 | 0.035456 | 0.04903 | -5.12722022 |
| LGR6 | -0.328100106 | 2.66569358 | -2.114163274 | 0.035468 | 0.04904 | -5.12749663 |
| JAG1 | -0.208815655 | 4.64822474 | -2.11411776 | 0.035472 | 0.04904 | -5.12759117 |
| XKR6 | -0.135667986 | 1.54062855 | -2.113896525 | 0.035491 | 0.04907 | -5.12805071 |
| C6orf15 | 0.074601019 | 0.19048488 | 2.113508534 | 0.035524 | 0.04911 | -5.12885652 |
| TM4SF19 | 0.133029077 | 0.49657257 | 2.113446578 | 0.035529 | 0.04911 | -5.12898518 |
| TTLL10 | 0.078723234 | 0.34357897 | 2.113349709 | 0.035538 | 0.04912 | -5.12918634 |
| EIF4B | -0.174421248 | 7.67395785 | -2.113218607 | 0.035549 | 0.04913 | -5.12945857 |
| RCL1 | -0.116440691 | 2.89482938 | -2.113090712 | 0.03556 | 0.04914 | -5.12972412 |
| MB21D2 | -0.143559967 | 2.62237763 | -2.113025871 | 0.035566 | 0.04915 | -5.12985875 |
| ATG9B | 0.11962528 | 0.62788184 | 2.112825703 | 0.035583 | 0.04917 | -5.13027432 |
| ST5 | -0.179071122 | 4.26210101 | -2.11256983 | 0.035605 | 0.04919 | -5.13080549 |
| SREBF1 | 0.203840692 | 5.57953939 | 2.110656843 | 0.035771 | 0.04942 | -5.13477473 |
| ROCK2 | -0.170637495 | 3.59055625 | -2.110579109 | 0.035778 | 0.04942 | -5.13493594 |
| MEP1A | 0.032557707 | 0.07859339 | 2.109868648 | 0.035839 | 0.04951 | -5.13640913 |

| | | | | | | |
|---|---|---|---|---|---|---|
| AWAT1 | 0.044855791 | 0.10238757 | 2.109423534 | 0.035878 | 0.04955 | -5.13733186 |
| ABCA2 | -0.219123422 | 5.45013118 | -2.109253977 | 0.035893 | 0.04957 | -5.13768331 |
| WNT16 | 0.093148311 | 0.18017612 | 2.108624335 | 0.035948 | 0.04964 | -5.13898814 |
| TRHDE | 0.021181629 | 0.03643297 | 2.108091049 | 0.035994 | 0.0497 | -5.14009301 |
| KLHL17 | 0.15339187 | 2.44944122 | 2.107825798 | 0.036018 | 0.04973 | -5.14064245 |
| RNF24 | 0.203623128 | 4.52634573 | 2.107142272 | 0.036077 | 0.04981 | -5.14205801 |
| RAPH1 | 0.204170791 | 1.41757245 | 2.1066148 | 0.036123 | 0.04987 | -5.14315009 |
| RUFY3 | -0.163107366 | 4.42857058 | -2.106490994 | 0.036134 | 0.04988 | -5.14340638 |
| HMCN1 | 0.159652016 | 1.14218194 | 2.105993115 | 0.036178 | 0.04994 | -5.14443688 |
| CAVIN1 | 0.198713197 | 8.11809823 | 2.105812394 | 0.036194 | 0.04995 | -5.14481088 |
| IGSF21 | 0.180525669 | 1.25414144 | 2.103865804 | 0.036365 | 0.05019 | -5.14883731 |
| ZFP28 | -0.112825063 | 2.3288868 | -2.103441797 | 0.036402 | 0.05023 | -5.14971388 |
| XRRA1 | -0.170170836 | 2.32575801 | -2.103105507 | 0.036432 | 0.05027 | -5.15040898 |
| LMO7 | 0.221633066 | 4.9584017 | 2.101723475 | 0.036554 | 0.05043 | -5.15326447 |
| PLCXD1 | -0.149622254 | 2.22941161 | -2.101627868 | 0.036562 | 0.05044 | -5.15346195 |
| RBM12B | -0.155174077 | 2.72268352 | -2.101117309 | 0.036608 | 0.0505 | -5.15451634 |
| ZNF385A | -0.138438305 | 6.26754504 | -2.100114116 | 0.036697 | 0.05062 | -5.15658738 |
| SFSWAP | -0.117112539 | 3.65397799 | -2.100066958 | 0.036701 | 0.05062 | -5.15668471 |
| SOCS5 | -0.167521864 | 3.92073427 | -2.099727959 | 0.036731 | 0.05066 | -5.15738432 |
| TDRD5 | -0.119678304 | 0.6785654 | -2.099667828 | 0.036736 | 0.05066 | -5.15750841 |
| ANKRD5 | -0.160626362 | 4.02462085 | -2.099360195 | 0.036764 | 0.05069 | -5.15814318 |
| PKMYT1 | 0.131910723 | 1.14526636 | 2.099202707 | 0.036778 | 0.05071 | -5.15846811 |
| XRCC3 | -0.130496405 | 2.13745357 | -2.09841801 | 0.036847 | 0.0508 | -5.16008673 |
| PLA2G2F | 0.012522473 | 0.01762744 | 2.098332292 | 0.036855 | 0.05081 | -5.16026351 |
| TRIM8 | -0.124643521 | 7.56273757 | -2.097472216 | 0.036932 | 0.05091 | -5.16203687 |
| COL6A2 | 0.287117895 | 6.58797928 | 2.097279041 | 0.036949 | 0.05093 | -5.16243508 |
| MRAP | -0.103908455 | 0.1577036 | -2.095552212 | 0.037103 | 0.05114 | -5.16599314 |
| SEMA3F | -0.205972469 | 5.7927657 | -2.095486258 | 0.037109 | 0.05114 | -5.16612898 |
| WFDC10 | 0.054945832 | 0.14424504 | 2.095231153 | 0.037132 | 0.05117 | -5.16665436 |
| SMIM13 | -0.123056733 | 2.7259416 | -2.095081879 | 0.037146 | 0.05118 | -5.16696175 |
| CORO7 | -0.128650164 | 2.12211515 | -2.094489554 | 0.037199 | 0.05125 | -5.1681813 |
| NAA16 | -0.135841721 | 2.72256365 | -2.094252791 | 0.03722 | 0.05128 | -5.16866868 |
| SPACA4 | 0.029937604 | 0.08216692 | 2.093950776 | 0.037247 | 0.05131 | -5.16929031 |
| PGAP1 | -0.188073824 | 2.34236955 | -2.093926702 | 0.037249 | 0.05131 | -5.16933985 |
| PRICKLE | -0.115993552 | 3.12786395 | -2.093742642 | 0.037266 | 0.05133 | -5.16971865 |
| CCDC14 | 0.041214691 | 0.08850303 | 2.093309827 | 0.037305 | 0.05138 | -5.17060926 |
| FBXO45 | -0.113025385 | 2.82371951 | -2.091639943 | 0.037455 | 0.05158 | -5.17404374 |
| TEAD3 | 0.194523589 | 4.88205845 | 2.091297974 | 0.037486 | 0.05162 | -5.17474675 |
| PLEKHS | 0.125382602 | 0.23061234 | 2.091134168 | 0.037501 | 0.05164 | -5.17508346 |
| YAP1 | -0.219090761 | 6.30584069 | -2.090644272 | 0.037545 | 0.05169 | -5.1760903 |

| | | | | | |
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| MAB21L: | -0.029138382 | 0.06882055 | -2.089919657 | 0.037611 | 0.05178 | -5.17757912 |
| MCMBP | -0.139318191 | 4.84588052 | -2.089603192 | 0.03764 | 0.05181 | -5.17822918 |
| FGD4 | -0.154271106 | 2.68803053 | -2.08947825 | 0.037651 | 0.05183 | -5.1784858 |
| MROH1 | -0.140909432 | 5.12231101 | -2.089380792 | 0.03766 | 0.05183 | -5.17868596 |
| NHLRC4 | -0.188356351 | 1.22415502 | -2.088170783 | 0.03777 | 0.05198 | -5.18117036 |
| CCDC85 | -0.249451745 | 1.75331362 | -2.087841385 | 0.0378 | 0.05202 | -5.18184644 |
| ANGEL1 | -0.149982655 | 3.72544297 | -2.086612471 | 0.037912 | 0.05217 | -5.18436785 |
| TPH1 | -0.132377993 | 0.64376573 | -2.084568967 | 0.038099 | 0.05242 | -5.1885574 |
| JMJD7-P | -0.203536589 | 1.55113259 | -2.084055866 | 0.038146 | 0.05248 | -5.18960872 |
| BAHD1 | -0.171669263 | 5.48126869 | -2.083252453 | 0.03822 | 0.05258 | -5.19125438 |
| MTFR2 | 0.083832298 | 0.71517688 | 2.0832301 | 0.038222 | 0.05258 | -5.19130016 |
| HOXA1 | 0.048321765 | 0.22766093 | 2.083011667 | 0.038242 | 0.0526 | -5.19174748 |
| ZNF84 | -0.135200084 | 3.61958197 | -2.081766832 | 0.038356 | 0.05275 | -5.19429582 |
| MCM5 | 0.158628519 | 4.1193608 | 2.081689955 | 0.038364 | 0.05276 | -5.19445315 |
| GMIP | -0.128965109 | 4.05851366 | -2.081658403 | 0.038366 | 0.05276 | -5.19451772 |
| LARP1B | -0.142647092 | 2.97224315 | -2.081302522 | 0.038399 | 0.0528 | -5.19524595 |
| ACY3 | 0.158949879 | 0.72534245 | 2.081117514 | 0.038416 | 0.05282 | -5.19562448 |
| CCL2 | 0.353161692 | 3.79294861 | 2.080711 | 0.038454 | 0.05287 | -5.1964561 |
| GJB5 | -0.199900955 | 1.19531449 | -2.080546699 | 0.038469 | 0.05288 | -5.19679218 |
| PTK2B | 0.227153048 | 4.99727338 | 2.080172325 | 0.038504 | 0.05293 | -5.19755785 |
| SIK1 | 0.257464012 | 0.81594641 | 2.080131914 | 0.038507 | 0.05293 | -5.19764049 |
| CCDC12 | -0.110285077 | 2.7743281 | -2.079566668 | 0.03856 | 0.053 | -5.19879626 |
| NKX3-1 | -0.150548275 | 1.14330334 | -2.079210579 | 0.038593 | 0.05304 | -5.19952421 |
| C4BPA | -0.097391067 | 0.21954523 | -2.078780339 | 0.038633 | 0.05309 | -5.20040358 |
| ZBTB41 | -0.167018513 | 3.3277004 | -2.078492291 | 0.038659 | 0.05312 | -5.20099223 |
| PANO1 | -0.102986911 | 0.9244518 | -2.07803945 | 0.038701 | 0.05317 | -5.20191748 |
| E2F7 | 0.064776191 | 0.40768045 | 2.077082314 | 0.03879 | 0.05329 | -5.20387248 |
| C12orf49 | 0.253456263 | 6.46415605 | 2.076836988 | 0.038813 | 0.05332 | -5.20437343 |
| NFATC4 | 0.227208027 | 3.99673554 | 2.075754217 | 0.038914 | 0.05345 | -5.20658374 |
| KNL1 | 0.084002338 | 0.65762095 | 2.075651226 | 0.038924 | 0.05346 | -5.20679392 |
| RPS9 | -0.163437029 | 9.12396678 | -2.075158942 | 0.03897 | 0.05352 | -5.20779843 |
| ARNT | -0.14482442 | 4.62776772 | -2.074111236 | 0.039068 | 0.05365 | -5.2099355 |
| IL12B | 0.072002503 | 0.15964894 | 2.073626 | 0.039113 | 0.05371 | -5.21092492 |
| PINLYP | -0.253448422 | 2.45317595 | -2.072697752 | 0.0392 | 0.05382 | -5.21281703 |
| FGD2 | -0.224407018 | 1.46652497 | -2.072597573 | 0.03921 | 0.05383 | -5.21302118 |
| SLC26A2 | 0.189161866 | 3.14461091 | 2.071689433 | 0.039295 | 0.05394 | -5.21487143 |
| KLRG2 | -0.31441009 | 3.15442176 | -2.07148516 | 0.039314 | 0.05397 | -5.2152875 |
| MLLT10 | -0.182782913 | 4.10313796 | -2.071013386 | 0.039359 | 0.05402 | -5.21624829 |
| SIRT6 | -0.122367595 | 4.53392368 | -2.070747886 | 0.039384 | 0.05405 | -5.2167889 |
| SMC3 | -0.19059656 | 5.27098622 | -2.069316948 | 0.039519 | 0.05423 | -5.21970143 |

| | | | | | | |
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| TSSK3 | -0.104346142 | 0.64852882 | -2.068803015 | 0.039568 | 0.0543 | -5.22074701 |
| CHM | -0.190370183 | 3.23880769 | -2.067930685 | 0.03965 | 0.05441 | -5.22252116 |
| ZC3H6 | -0.131678482 | 2.71018113 | -2.067598438 | 0.039682 | 0.05444 | -5.22319669 |
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| SLC2A5 | 0.16370768 | 0.70281879 | 2.066094545 | 0.039825 | 0.05463 | -5.22625315 |
| IGSF23 | -0.019925226 | 0.0489924 | -2.065774846 | 0.039855 | 0.05467 | -5.22690262 |
| UGGT2 | -0.135282422 | 3.37181559 | -2.065398204 | 0.039891 | 0.05471 | -5.22766764 |
| ZSCAN2( | -0.104497091 | 1.27857955 | -2.064107926 | 0.040014 | 0.05488 | -5.23028738 |
| APOF | -0.024043319 | 0.07266542 | -2.064059917 | 0.040019 | 0.05488 | -5.23038483 |
| DDX47 | 0.12921136 | 1.32849286 | 2.062988398 | 0.040121 | 0.05502 | -5.23255916 |
| ABHD3 | 0.187543972 | 4.51067005 | 2.062871934 | 0.040133 | 0.05503 | -5.23279542 |
| ARL13B | 0.220731156 | 4.09264771 | 2.062836184 | 0.040136 | 0.05503 | -5.23286794 |
| FAM222E | -0.129079265 | 4.34026203 | -2.062673282 | 0.040152 | 0.05504 | -5.23319839 |
| INTS6L | 0.17388349 | 2.1639384 | 2.061847765 | 0.040231 | 0.05515 | -5.23487253 |
| PABPC1I | 0.258936891 | 3.72123811 | 2.061794512 | 0.040236 | 0.05515 | -5.23498051 |
| EDC4 | -0.19114401 | 4.04131442 | -2.060631456 | 0.040348 | 0.0553 | -5.23733803 |
| AFDN | 0.200974857 | 4.92468578 | 2.060415821 | 0.040368 | 0.05532 | -5.23777498 |
| SRRM1 | -0.157108342 | 4.89305726 | -2.060193439 | 0.04039 | 0.05535 | -5.23822556 |
| DOP1B | 0.171337194 | 3.62219128 | 2.059815182 | 0.040426 | 0.05539 | -5.23899185 |
| ARAP2 | -0.18740545 | 3.63185764 | -2.058313416 | 0.040571 | 0.05559 | -5.24203287 |
| GRPR | 0.066296804 | 0.25650589 | 2.05830453 | 0.040572 | 0.05559 | -5.24205086 |
| ALS2CL | 0.233475726 | 4.6362951 | 2.057074293 | 0.040691 | 0.05574 | -5.24454043 |
| ZNF780E | -0.151668081 | 2.8562867 | -2.056786961 | 0.040719 | 0.05578 | -5.24512168 |
| PTCH1 | -0.167149246 | 2.04676562 | -2.056193347 | 0.040777 | 0.05585 | -5.24632228 |
| B3GNT8 | 0.281475352 | 3.23261166 | 2.055998465 | 0.040796 | 0.05587 | -5.24671635 |
| HECTD3 | -0.115751295 | 5.25653746 | -2.055202811 | 0.040873 | 0.05597 | -5.2483249 |
| LINGO1 | -0.217387942 | 2.05654241 | -2.055148716 | 0.040878 | 0.05598 | -5.24843424 |
| NOVA1 | -0.289310785 | 1.47115577 | -2.054073834 | 0.040983 | 0.05612 | -5.25060628 |
| NOL6 | -0.128361165 | 4.50192154 | -2.052526769 | 0.041134 | 0.05632 | -5.25373054 |
| TGM3 | 0.064981138 | 0.22242516 | 2.052509102 | 0.041136 | 0.05632 | -5.25376621 |
| GABRG3 | -0.244611541 | 0.95349657 | -2.052105551 | 0.041176 | 0.05637 | -5.25458079 |
| SLC22A3 | -0.222110056 | 1.2623213 | -2.051968748 | 0.041189 | 0.05638 | -5.25485689 |
| FAM53C | -0.142966918 | 3.80901361 | -2.051475047 | 0.041237 | 0.05644 | -5.25585317 |
| JUND | -0.23652713 | 8.47363704 | -2.050491778 | 0.041334 | 0.05657 | -5.25783669 |
| TCTEX1I | 0.053441291 | 0.29111571 | 2.050488581 | 0.041334 | 0.05657 | -5.25784314 |
| HSPB6 | -0.296035394 | 2.7212532 | -2.050081924 | 0.041374 | 0.05662 | -5.25866321 |
| CBS | -0.126597502 | 0.77743395 | -2.049319666 | 0.041449 | 0.05671 | -5.26019996 |
| SLC12A3 | 0.03487678 | 0.081245 | 2.049099432 | 0.041471 | 0.05674 | -5.26064386 |
| MIXL1 | -0.194727538 | 0.64720697 | -2.047581865 | 0.041621 | 0.05694 | -5.26370139 |
| GUCD1 | -0.117157668 | 5.44183967 | -2.047415608 | 0.041637 | 0.05696 | -5.26403622 |

| VTN | -0.148057473 | 0.62628928 | -2.04711813 | 0.041667 | 0.05699 | -5.26463527 |
|---|---|---|---|---|---|---|
| ZNF628 | -0.122321099 | 2.79693747 | -2.046818689 | 0.041696 | 0.05703 | -5.26523818 |
| RAB8B | -0.167165225 | 4.11289732 | -2.046669305 | 0.041711 | 0.05704 | -5.26553892 |
| TGFB3 | 0.226827915 | 3.11462626 | 2.046324599 | 0.041745 | 0.05709 | -5.26623282 |
| FOXP1 | -0.147174751 | 3.94823281 | -2.046277644 | 0.04175 | 0.05709 | -5.26632733 |
| STX16-N | -0.118630029 | 0.70761587 | -2.046216496 | 0.041756 | 0.05709 | -5.2664504 |
| FAM180E | -0.220620685 | 0.633597 | -2.045888532 | 0.041788 | 0.05713 | -5.26711046 |
| TRIM54 | -0.312495954 | 2.01282306 | -2.045488994 | 0.041828 | 0.05718 | -5.26791442 |
| TAF4 | -0.106293858 | 2.39867463 | -2.04429314 | 0.041947 | 0.05734 | -5.27031985 |
| SERAC1 | -0.13452615 | 2.53341296 | -2.043889277 | 0.041987 | 0.05739 | -5.2711319 |
| FSD1 | 0.056010482 | 0.16601424 | 2.043022572 | 0.042073 | 0.0575 | -5.27287407 |
| ASB12 | -0.075518627 | 0.70928207 | -2.042785468 | 0.042097 | 0.05753 | -5.27335055 |
| MRE11 | -0.123910245 | 3.19828783 | -2.042321609 | 0.042143 | 0.05759 | -5.27428256 |
| METTL7E | 0.432819239 | 6.33040776 | 2.041887968 | 0.042187 | 0.05764 | -5.27515367 |
| ACO1 | -0.20595761 | 5.36706012 | -2.041685406 | 0.042207 | 0.05767 | -5.27556052 |
| KLK8 | 0.142281001 | 0.34251589 | 2.041044493 | 0.042271 | 0.05775 | -5.27684755 |
| LRATD2 | 0.238605707 | 4.91718415 | 2.03964599 | 0.042411 | 0.05794 | -5.27965454 |
| ZNF800 | -0.137272357 | 3.3622926 | -2.038996142 | 0.042477 | 0.05802 | -5.28095825 |
| EFCAB1 | -0.040363539 | 0.06562836 | -2.038699266 | 0.042507 | 0.05806 | -5.2815537 |
| DDR1 | -0.186014159 | 7.12144543 | -2.037998162 | 0.042577 | 0.05815 | -5.28295958 |
| BICRAL | -0.167287363 | 4.09031221 | -2.037808719 | 0.042596 | 0.05817 | -5.28333939 |
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| CAPN13 | -0.013585699 | 0.02100125 | -2.035269118 | 0.042853 | 0.05851 | -5.28842753 |
| NBN | -0.160615743 | 4.61021309 | -2.035085098 | 0.042872 | 0.05853 | -5.28879598 |
| GRM1 | -0.06358775 | 0.16250333 | -2.034872452 | 0.042893 | 0.05856 | -5.2892217 |
| WWC3 | -0.160676124 | 5.04810026 | -2.034594057 | 0.042921 | 0.05859 | -5.289779 |
| TP53I3 | -0.190116388 | 5.06855637 | -2.034471868 | 0.042934 | 0.0586 | -5.29002357 |
| TUBB6 | 0.216733701 | 5.33105857 | 2.032792048 | 0.043105 | 0.05883 | -5.29338448 |
| WWC2 | -0.213883831 | 3.78019492 | -2.032726053 | 0.043111 | 0.05884 | -5.29351646 |
| RAI2 | 0.223501258 | 5.31954165 | 2.03236706 | 0.043148 | 0.05888 | -5.29423434 |
| DERL1 | -0.154907534 | 5.25855318 | -2.032337843 | 0.043151 | 0.05888 | -5.29429277 |
| SLC22A1 | -0.133561811 | 1.46003228 | -2.032313051 | 0.043153 | 0.05888 | -5.29434234 |
| BRI3 | -0.121402954 | 5.70581639 | -2.032072273 | 0.043178 | 0.05891 | -5.29482374 |
| REST | -0.169920051 | 4.19709232 | -2.031765065 | 0.043209 | 0.05895 | -5.29543789 |
| AASS | -0.178886089 | 2.25025787 | -2.030052695 | 0.043384 | 0.05918 | -5.29885948 |
| TLR5 | 0.154707133 | 2.38747751 | 2.029824493 | 0.043408 | 0.05921 | -5.29931525 |
| LYPD5 | 0.128585269 | 1.37509942 | 2.029285023 | 0.043463 | 0.05928 | -5.3003925 |
| JSRP1 | 0.279498785 | 1.21703729 | 2.029059607 | 0.043486 | 0.0593 | -5.30084255 |
| ILDR2 | -0.068550324 | 0.21046686 | -2.028944649 | 0.043498 | 0.05932 | -5.30107204 |
| CD300A | 0.210192392 | 2.26479825 | 2.028059785 | 0.043589 | 0.05943 | -5.30283811 |

| | | | | | | |
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| VPS18 | -0.124520149 | 5.34635948 | -2.027317121 | 0.043665 | 0.05953 | -5.30431979 |
| RTL8C | -0.117798402 | 7.66441348 | -2.0271843 | 0.043679 | 0.05955 | -5.30458473 |
| ZNF142 | -0.130407014 | 3.32181558 | -2.027148726 | 0.043683 | 0.05955 | -5.30465568 |
| PPT2-EG | -0.058995656 | 0.53468444 | -2.026800756 | 0.043718 | 0.05959 | -5.30534968 |
| ZNF69 | -0.123083327 | 2.23940784 | -2.026736624 | 0.043725 | 0.0596 | -5.30547757 |
| PHEX | -0.539587771 | 2.62499186 | -2.025797646 | 0.043822 | 0.05972 | -5.30734965 |
| TUBA1C | -0.170889298 | 4.80917037 | -2.02564372 | 0.043838 | 0.05974 | -5.30765646 |
| ZC3H13 | -0.173457517 | 4.57902402 | -2.024785594 | 0.043927 | 0.05986 | -5.30936647 |
| C9orf16 | 0.177732629 | 6.72061278 | 2.02398844 | 0.044009 | 0.05996 | -5.31095436 |
| CLDN4 | 0.244973923 | 8.0610058 | 2.023895641 | 0.044019 | 0.05997 | -5.31113917 |
| PRKCI | -0.18934699 | 5.11868886 | -2.023874865 | 0.044021 | 0.05997 | -5.31118055 |
| HCLS1 | 0.234423813 | 3.89302132 | 2.022574449 | 0.044156 | 0.06015 | -5.31376946 |
| ADAMTS | 0.253687611 | 1.95079961 | 2.021453444 | 0.044272 | 0.0603 | -5.31599991 |
| ATP2B1 | -0.159561181 | 3.50694597 | -2.020743617 | 0.044346 | 0.0604 | -5.31741162 |
| WDFY3 | -0.16839736 | 3.46196184 | -2.019737023 | 0.044452 | 0.06054 | -5.31941273 |
| RAB15 | -0.21018706 | 4.30255388 | -2.019281106 | 0.044499 | 0.0606 | -5.32031877 |
| HERC6 | 0.196593729 | 3.44966863 | 2.019077887 | 0.044521 | 0.06062 | -5.32072256 |
| PTBP3 | -0.155831682 | 4.63548916 | -2.019055213 | 0.044523 | 0.06062 | -5.32076761 |
| PRR12 | -0.156607135 | 4.5208134 | -2.018806031 | 0.044549 | 0.06065 | -5.32126267 |
| PAN3 | -0.160553118 | 4.31842864 | -2.017268218 | 0.04471 | 0.06087 | -5.32431661 |
| ABCA6 | 0.091061145 | 0.48122267 | 2.016800444 | 0.044759 | 0.06093 | -5.32524511 |
| GTSE1 | 0.122541618 | 0.89162481 | 2.016247613 | 0.044818 | 0.061 | -5.32634218 |
| UTRN | 0.200908021 | 5.29368732 | 2.015901885 | 0.044854 | 0.06105 | -5.32702811 |
| CDK16 | -0.097369638 | 5.78904772 | -2.015722289 | 0.044873 | 0.06107 | -5.32738438 |
| TRIB2 | 0.177156147 | 4.31662749 | 2.015705448 | 0.044875 | 0.06107 | -5.32741779 |
| IL4 | 0.075159864 | 0.34127708 | 2.015641772 | 0.044881 | 0.06107 | -5.3275441 |
| NPR2 | -0.183521798 | 2.53167808 | -2.015095268 | 0.044939 | 0.06114 | -5.32862801 |
| MINDY4 | -0.053533569 | 0.09308099 | -2.015063792 | 0.044942 | 0.06114 | -5.32869043 |
| PSD2 | 0.146473412 | 0.57259214 | 2.014609649 | 0.04499 | 0.0612 | -5.32959093 |
| LHFPL4 | 0.105551742 | 0.23106163 | 2.013731616 | 0.045083 | 0.06132 | -5.33133137 |
| CLEC17/ | 0.108801337 | 0.31475823 | 2.013634381 | 0.045093 | 0.06133 | -5.33152406 |
| PIK3AP1 | -0.201445917 | 3.09913051 | -2.013248169 | 0.045134 | 0.06138 | -5.33228935 |
| TNS4 | -0.477527848 | 4.03856754 | -2.013135505 | 0.045146 | 0.0614 | -5.33251257 |
| EIF4A1 | 0.149281786 | 1.61475669 | 2.012696775 | 0.045193 | 0.06145 | -5.3333817 |
| TCF21 | -0.068881744 | 0.15274018 | -2.012496781 | 0.045214 | 0.06148 | -5.33377783 |
| CA10 | 0.072432171 | 0.0921594 | 2.012293018 | 0.045236 | 0.0615 | -5.33418138 |
| BIRC2 | -0.154227711 | 5.08460776 | -2.012004319 | 0.045266 | 0.06154 | -5.33475309 |
| RPL13 | -0.155914158 | 8.86341478 | -2.011625976 | 0.045306 | 0.06159 | -5.33550219 |
| NRK | 0.257032814 | 0.89440303 | 2.01140282 | 0.04533 | 0.06162 | -5.33594397 |
| CMIP | -0.134628825 | 3.22325585 | -2.011291176 | 0.045342 | 0.06163 | -5.33616497 |

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| DSG2 | 0.229556663 | 6.13772501 | 2.010820314 | 0.045392 | 0.06169 | -5.33709692 |
| ODF3B | -0.207864583 | 4.30889243 | -2.010287788 | 0.045449 | 0.06176 | -5.33815066 |
| AGAP2 | -0.156140943 | 1.40076031 | -2.010263811 | 0.045451 | 0.06176 | -5.3381981 |
| MYLK | -0.178267966 | 2.47003178 | -2.009334989 | 0.04555 | 0.06189 | -5.34003535 |
| FNDC3B | -0.173628813 | 4.68572916 | -2.008904002 | 0.045596 | 0.06195 | -5.34088758 |
| GUCY2D | 0.111807602 | 1.00822332 | 2.008597352 | 0.045629 | 0.06199 | -5.34149384 |
| NEDD1 | -0.144746168 | 3.56105298 | -2.007368794 | 0.045761 | 0.06216 | -5.34392185 |
| CKM | 0.175505562 | 0.25959082 | 2.007216499 | 0.045777 | 0.06218 | -5.34422273 |
| ARL6IP4 | -0.158862589 | 1.85649824 | -2.006068965 | 0.0459 | 0.06234 | -5.34648914 |
| ZNF274 | -0.154187173 | 4.00707225 | -2.005206698 | 0.045993 | 0.06246 | -5.34819132 |
| CCDC11 | -0.139052086 | 1.07820321 | -2.00372192 | 0.046153 | 0.06267 | -5.35112072 |
| TEX101 | 0.144968798 | 0.19331089 | 2.003529915 | 0.046173 | 0.0627 | -5.35149938 |
| SCG3 | -0.071074469 | 0.30865571 | -2.003254812 | 0.046203 | 0.06273 | -5.35204186 |
| RNF165 | -0.145468752 | 1.51698805 | -2.003236517 | 0.046205 | 0.06273 | -5.35207794 |
| RDM1 | -0.093159066 | 0.53422221 | -2.003018386 | 0.046229 | 0.06276 | -5.35250802 |
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| CTNNB1 | -0.20602056 | 7.89726842 | -2.002589452 | 0.046275 | 0.06281 | -5.35335361 |
| SMIM3 | 0.200244087 | 5.06376017 | 2.00199684 | 0.046339 | 0.06289 | -5.35452158 |
| PRAG1 | -0.269029329 | 5.01704103 | -2.001614937 | 0.046381 | 0.06294 | -5.35527409 |
| VENTX | 0.122980277 | 0.90696382 | 2.001544226 | 0.046388 | 0.06295 | -5.3554134 |
| CYFIP2 | -0.184590478 | 4.22731657 | -2.000986968 | 0.046449 | 0.06303 | -5.35651114 |
| TAF1A | -0.145823858 | 2.22004948 | -2.000474426 | 0.046504 | 0.0631 | -5.35752054 |
| TNF | 0.18744758 | 0.81261731 | 2.000163531 | 0.046538 | 0.06314 | -5.35813269 |
| MSI2 | -0.160588991 | 4.08037115 | -1.999890378 | 0.046568 | 0.06317 | -5.35867046 |
| CERS6 | -0.195934969 | 4.02031518 | -1.999611628 | 0.046598 | 0.06321 | -5.35921916 |
| ELOVL3 | 0.04961958 | 0.25604339 | 1.99927514 | 0.046635 | 0.06325 | -5.35988143 |
| FBXO6 | 0.131383421 | 4.59071437 | 1.998685907 | 0.046699 | 0.06333 | -5.36104087 |
| TMEM13 | -0.132448829 | 0.20607834 | -1.998360075 | 0.046734 | 0.06338 | -5.36168188 |
| STAB1 | -0.177157834 | 3.58968762 | -1.997191272 | 0.046862 | 0.06355 | -5.36398041 |
| C19orf12 | -0.094701734 | 3.65534627 | -1.996264954 | 0.046963 | 0.06368 | -5.36580116 |
| SAPCD2 | -0.139404979 | 1.63050506 | -1.996095629 | 0.046982 | 0.0637 | -5.36613389 |
| HASPIN | 0.081619688 | 0.4717225 | 1.995838253 | 0.04701 | 0.06373 | -5.3666396 |
| TMOD3 | 0.180551695 | 4.24291472 | 1.995792882 | 0.047015 | 0.06373 | -5.36672874 |
| EML4 | -0.158939023 | 4.97748301 | -1.994843888 | 0.047119 | 0.06387 | -5.36859278 |
| DONSON | 0.128161127 | 3.05694728 | 1.994369521 | 0.047171 | 0.06393 | -5.36952422 |
| 6-Mar | -0.142317728 | 5.33725648 | -1.993672713 | 0.047248 | 0.06403 | -5.37089205 |
| ANKRD3 | -0.1235615 | 0.68852167 | -1.99300396 | 0.047322 | 0.06413 | -5.37220437 |
| NID1 | 0.236839089 | 4.76266272 | 1.99183488 | 0.047451 | 0.0643 | -5.37449747 |
| SRPK3 | 0.077870036 | 0.35054169 | 1.991236117 | 0.047517 | 0.06438 | -5.37567142 |
| CPA4 | 0.029112867 | 0.08364564 | 1.991112428 | 0.04753 | 0.0644 | -5.37591388 |

| | | | | | | |
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| LPCAT1 | -0.14163749 | 4.41914101 | -1.990653837 | 0.047581 | 0.06446 | -5.37681272 |
| MAP3K1 | 0.180022642 | 3.1779027 | 1.990437744 | 0.047605 | 0.06449 | -5.37723619 |
| RCOR1 | -0.138155776 | 3.621273 | -1.990312039 | 0.047619 | 0.0645 | -5.37748251 |
| MAML2 | 0.222270627 | 3.82315482 | 1.990272273 | 0.047624 | 0.0645 | -5.37756043 |
| MDM2 | -0.167113416 | 4.42998286 | -1.990239082 | 0.047627 | 0.0645 | -5.37762546 |
| JMY | -0.157281755 | 4.18656438 | -1.990018253 | 0.047652 | 0.06453 | -5.37805813 |
| UBE2QL | -0.282377374 | 3.68226046 | -1.98974452 | 0.047682 | 0.06456 | -5.37859438 |
| GAL3ST | 0.044122072 | 0.13655841 | 1.988351897 | 0.047837 | 0.06477 | -5.38132148 |
| HEATR9 | 0.024825058 | 0.08967574 | 1.98766203 | 0.047914 | 0.06487 | -5.38267172 |
| HEXIM1 | -0.152380129 | 5.64656296 | -1.987511614 | 0.04793 | 0.06489 | -5.38296606 |
| PTGIR | -0.143537683 | 1.53665955 | -1.986652324 | 0.048026 | 0.06501 | -5.38464715 |
| DCAF12l | -0.147399026 | 0.58285102 | -1.98611226 | 0.048086 | 0.06509 | -5.38570336 |
| EXOC3L | 0.097213258 | 0.32807198 | 1.985788697 | 0.048123 | 0.06513 | -5.38633601 |
| ZNF730 | 0.092007411 | 0.5507316 | 1.985156455 | 0.048193 | 0.06522 | -5.38757194 |
| UBE2C | 0.248527823 | 2.40429267 | 1.984944015 | 0.048217 | 0.06525 | -5.38798714 |
| FAM71F | -0.020375696 | 0.0359885 | -1.984271166 | 0.048292 | 0.06534 | -5.38930189 |
| ANGEL2 | -0.120255118 | 3.52736892 | -1.983079487 | 0.048426 | 0.06552 | -5.39162938 |
| TNXB | 0.197003264 | 1.80030461 | 1.982826391 | 0.048455 | 0.06555 | -5.39212353 |
| PTGER3 | -0.106347421 | 0.68639956 | -1.982724856 | 0.048466 | 0.06556 | -5.39232175 |
| FGF22 | -0.027790959 | 0.13724122 | -1.982342244 | 0.048509 | 0.06562 | -5.39306862 |
| MEGF9 | 0.268621442 | 6.14644821 | 1.981540632 | 0.048599 | 0.06573 | -5.39463293 |
| UMODL1 | -0.016538529 | 0.02687753 | -1.981464765 | 0.048608 | 0.06574 | -5.39478095 |
| MERTK | -0.214444767 | 3.88661438 | -1.981336949 | 0.048622 | 0.06575 | -5.39503031 |
| KLHL30 | 0.202528959 | 1.39423349 | 1.980905605 | 0.048671 | 0.06581 | -5.39587173 |
| CPED1 | -0.163796706 | 1.27580042 | -1.980103913 | 0.048762 | 0.06593 | -5.3974351 |
| GGA2 | -0.135986259 | 6.16806749 | -1.979911577 | 0.048783 | 0.06596 | -5.39781008 |
| CDK7 | -0.118086182 | 5.0536626 | -1.97790948 | 0.04901 | 0.06626 | -5.4017113 |
| TMPRSS | 0.07034105 | 0.5583383 | 1.977872775 | 0.049014 | 0.06626 | -5.40178278 |
| FAR2 | -0.149305808 | 1.9456691 | -1.977431974 | 0.049065 | 0.06632 | -5.40264118 |
| TMPRSS | -0.046859291 | 0.29154136 | -1.977169131 | 0.049094 | 0.06635 | -5.40315295 |
| PTGFR | 0.055043969 | 0.13785888 | 1.977151632 | 0.049096 | 0.06635 | -5.40318702 |
| RASA4B | 0.024791868 | 0.10785095 | 1.977035857 | 0.04911 | 0.06637 | -5.40341241 |
| ATP8B3 | -0.136939458 | 0.75308027 | -1.976879698 | 0.049127 | 0.06638 | -5.4037164 |
| SEPTIN1 | -0.188880163 | 5.11121052 | -1.976280224 | 0.049196 | 0.06647 | -5.40488319 |
| STAG3 | 0.110384621 | 0.83661101 | 1.97604652 | 0.049222 | 0.0665 | -5.40533796 |
| GANC | -0.145209083 | 2.87220124 | -1.975533637 | 0.049281 | 0.06658 | -5.40633582 |
| PSMA8 | -0.03507357 | 0.08129199 | -1.975447112 | 0.049291 | 0.06658 | -5.40650414 |
| GNG12 | -0.179747521 | 6.34193157 | -1.975367755 | 0.0493 | 0.06659 | -5.4066585 |
| NCOA3 | -0.149496361 | 4.25923251 | -1.975201899 | 0.049319 | 0.06661 | -5.40698111 |
| LACTB2 | -0.15251251 | 4.59965732 | -1.975196693 | 0.049319 | 0.06661 | -5.40699124 |

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| ARHGAP | 0.86803182 | 4.22967695 | 1.975133383 | 0.049326 | 0.06661 | -5.40711437 |
| CAMSAP | -0.154125956 | 4.49201495 | -1.974874684 | 0.049356 | 0.06664 | -5.4076175 |
| GNAZ | 0.187653448 | 2.62170061 | 1.974754895 | 0.04937 | 0.06666 | -5.40785045 |
| EBF1 | -0.176822848 | 2.25422723 | -1.973243797 | 0.049542 | 0.06689 | -5.41078784 |
| RAB12 | -0.134526073 | 5.29016675 | -1.97320366 | 0.049547 | 0.06689 | -5.41086583 |
| MAPK6 | -0.178440101 | 4.45819733 | -1.973062568 | 0.049563 | 0.0669 | -5.41113998 |
| APC2 | -0.064636865 | 0.5995851 | -1.97296996 | 0.049574 | 0.06691 | -5.41131991 |
| NDST3 | -0.098726386 | 0.28230063 | -1.972446692 | 0.049634 | 0.06699 | -5.41233643 |
| CSNK1A | -0.202751238 | 4.70761314 | -1.971927931 | 0.049693 | 0.06706 | -5.41334394 |
| USP36 | -0.12408421 | 4.10774475 | -1.971747558 | 0.049714 | 0.06709 | -5.41369419 |
| TMEM25 | 0.250299107 | 1.3475021 | 1.970764526 | 0.049827 | 0.06723 | -5.41560251 |
| PI4KA | -0.174424008 | 4.50704502 | -1.970431024 | 0.049866 | 0.06728 | -5.41624971 |
| ZNF169 | -0.099181514 | 1.09407024 | -1.970366327 | 0.049873 | 0.06728 | -5.41637525 |
| CA13 | -0.15517127 | 3.62057903 | -1.969672311 | 0.049953 | 0.06739 | -5.41772169 |
| DMD | 0.322383281 | 2.71707179 | 1.969629762 | 0.049958 | 0.06739 | -5.41780423 |
| SETD7 | 0.188150319 | 3.40532914 | 1.969591891 | 0.049962 | 0.06739 | -5.41787768 |
| OAF | -0.169017959 | 4.67611889 | -1.969538648 | 0.049969 | 0.06739 | -5.41798096 |
| DPP9 | -0.096737137 | 4.28513954 | -1.969165208 | 0.050012 | 0.06744 | -5.41870522 |
| CTAGE1 | -0.054431978 | 0.2356785 | -1.969000749 | 0.050031 | 0.06746 | -5.41902414 |
| CHRNA1 | 0.10586279 | 0.27696786 | 1.967422932 | 0.050213 | 0.06771 | -5.42208249 |
| PTPRS | -0.185617062 | 4.79185096 | -1.966900424 | 0.050274 | 0.06778 | -5.42309477 |
| CTRB1 | -0.043902368 | 0.10617729 | -1.966108701 | 0.050366 | 0.0679 | -5.42462811 |
| NCSTN | -0.148834582 | 6.86340138 | -1.966014859 | 0.050377 | 0.06791 | -5.42480982 |
| NLRC3 | -0.132094248 | 1.85498114 | -1.965395985 | 0.050449 | 0.068 | -5.42600793 |
| U2SURP | -0.145409255 | 4.52803547 | -1.96500393 | 0.050494 | 0.06806 | -5.42676674 |
| ABCC12 | -0.094906715 | 0.11762305 | -1.964734099 | 0.050526 | 0.06809 | -5.4272889 |
| GNA12 | -0.142935085 | 4.32536959 | -1.964319951 | 0.050574 | 0.06815 | -5.42809021 |
| ARC | -0.3723701 | 2.10433931 | -1.963328506 | 0.05069 | 0.0683 | -5.43000782 |
| ATG9A | -0.119286883 | 4.64658088 | -1.963140947 | 0.050711 | 0.06833 | -5.43037048 |
| SYT16 | -0.024572345 | 0.08121207 | -1.96277309 | 0.050754 | 0.06838 | -5.43108167 |
| LHX5 | 0.02233512 | 0.05760041 | 1.96274767 | 0.050757 | 0.06838 | -5.43113081 |
| SRGAP2 | 0.114099271 | 1.55612274 | 1.962626813 | 0.050772 | 0.06839 | -5.43136443 |
| MGAT2 | -0.17141475 | 1.81810393 | -1.962279612 | 0.050812 | 0.06844 | -5.43203552 |
| TSPYL2 | -0.200751339 | 4.90256712 | -1.961987295 | 0.050846 | 0.06848 | -5.43260043 |
| STEAP4 | 0.260241124 | 3.83810954 | 1.961731697 | 0.050876 | 0.06852 | -5.43309432 |
| PALM2-A | -0.028777786 | 0.12221514 | -1.96161035 | 0.050891 | 0.06853 | -5.43332878 |
| SCYL2 | -0.149995452 | 4.26311451 | -1.961383414 | 0.050917 | 0.06856 | -5.4337672 |
| PPP1R14 | -0.282812845 | 6.93867043 | -1.960837302 | 0.050981 | 0.06864 | -5.43482205 |
| EEF1B2 | -0.153596248 | 8.28811451 | -1.960363405 | 0.051037 | 0.06871 | -5.43573718 |
| PCDHB1 | -0.020135305 | 0.0271608 | -1.960061252 | 0.051072 | 0.06875 | -5.43632055 |

| TEAD1 | 0.219718633 | 4.87446511 | 1.959737966 | 0.05111 | 0.0688 | -5.43694462 |
|---|---|---|---|---|---|---|
| GOLGA6 | -0.093119218 | 0.87074001 | -1.959266555 | 0.051166 | 0.06887 | -5.43785446 |
| MUC12 | 0.015565229 | 0.03641475 | 1.958996857 | 0.051198 | 0.06891 | -5.43837488 |
| BFSP2 | -0.129636763 | 0.41874134 | -1.958863989 | 0.051213 | 0.06892 | -5.43863125 |
| DHRS2 | -0.115745541 | 0.35284921 | -1.958755515 | 0.051226 | 0.06893 | -5.43884054 |
| BUB1B | -0.156256709 | 1.55236845 | -1.957788972 | 0.05134 | 0.06908 | -5.44070485 |
| KCND1 | 0.138252461 | 1.39384165 | 1.957599446 | 0.051362 | 0.06911 | -5.44107032 |
| CYP2A6 | 0.051068657 | 0.17842989 | 1.95743184 | 0.051382 | 0.06913 | -5.44139348 |
| ZNF320 | -0.150244273 | 3.28466435 | -1.956444132 | 0.051499 | 0.06928 | -5.44329736 |
| PDXK | -0.124762074 | 5.09814557 | -1.955678789 | 0.05159 | 0.0694 | -5.44477197 |
| DHX37 | -0.111010741 | 3.44467057 | -1.955374531 | 0.051626 | 0.06944 | -5.44535804 |
| KIRREL2 | -0.050581507 | 0.13725327 | -1.955177258 | 0.051649 | 0.06946 | -5.44573799 |
| MTHFD2 | 0.237291836 | 3.30266747 | 1.954549631 | 0.051724 | 0.06956 | -5.44694654 |
| ADCYAP | 0.072375378 | 0.16726335 | 1.952914823 | 0.051918 | 0.06982 | -5.45009275 |
| CHAC1 | -0.239884394 | 1.66221371 | -1.952289623 | 0.051993 | 0.06991 | -5.45129527 |
| SERPIN/ | -0.155670029 | 0.32094257 | -1.95152882 | 0.052084 | 0.07003 | -5.45275812 |
| ACTC1 | 0.150581623 | 0.42626694 | 1.950858658 | 0.052164 | 0.07013 | -5.45404623 |
| KCNH4 | 0.042661548 | 0.20156467 | 1.950161384 | 0.052247 | 0.07024 | -5.45538599 |
| CRACR2 | 0.168032265 | 0.81313531 | 1.950105349 | 0.052254 | 0.07024 | -5.45549364 |
| TAP2 | 0.169547362 | 3.37169091 | 1.949686618 | 0.052304 | 0.0703 | -5.45629795 |
| CSNK2A | -0.07284079 | 0.45459707 | -1.9492037 | 0.052362 | 0.07037 | -5.45722535 |
| ELF5 | 0.032403175 | 0.10578798 | 1.949033398 | 0.052383 | 0.0704 | -5.45755235 |
| ANP32E | -0.136862335 | 6.01282779 | -1.948814097 | 0.052409 | 0.07043 | -5.45797339 |
| TRIM69 | 0.180651733 | 4.00868878 | 1.948230659 | 0.052479 | 0.07051 | -5.45909332 |
| SELE | -0.330955505 | 2.23290858 | -1.946846978 | 0.052646 | 0.07073 | -5.46174803 |
| AHSG | -0.072143267 | 0.14986978 | -1.946846413 | 0.052646 | 0.07073 | -5.46174911 |
| HBE1 | -0.072249447 | 0.3641588 | -1.9449816 | 0.052871 | 0.07102 | -5.46532402 |
| TSPAN1( | -0.020742334 | 0.07752326 | -1.944810389 | 0.052892 | 0.07105 | -5.46565207 |
| SLAIN2 | -0.139523246 | 4.77002611 | -1.94471105 | 0.052904 | 0.07106 | -5.4658424 |
| HBQ1 | -0.079901414 | 0.25679026 | -1.944681721 | 0.052907 | 0.07106 | -5.46589859 |
| CPA6 | -0.044384025 | 0.13245313 | -1.944398732 | 0.052942 | 0.0711 | -5.46644072 |
| CTSF | -0.248026981 | 5.27634259 | -1.944066324 | 0.052982 | 0.07114 | -5.46707742 |
| PDLIM2 | -0.113477309 | 1.83183046 | -1.943838874 | 0.05301 | 0.07118 | -5.46751302 |
| NECTIN1 | 0.185374503 | 2.50676595 | 1.942885761 | 0.053125 | 0.07133 | -5.46933785 |
| MOGAT2 | -0.019697751 | 0.03972144 | -1.942090821 | 0.053222 | 0.07145 | -5.47085917 |
| TNFSF15 | 0.248743331 | 2.35176109 | 1.941969478 | 0.053237 | 0.07146 | -5.47109134 |
| BPI | 0.022764707 | 0.06960944 | 1.941899722 | 0.053245 | 0.07147 | -5.4712248 |
| BMPR2 | -0.173765047 | 4.74725179 | -1.941708659 | 0.053269 | 0.0715 | -5.47159032 |
| PHOSPH | -0.117607835 | 0.76401841 | -1.940998318 | 0.053355 | 0.07161 | -5.47294897 |
| HAND2 | -0.128429051 | 0.52488438 | -1.940306042 | 0.05344 | 0.07171 | -5.4742726 |

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| KLHL24 | -0.152304148 | 4.47189443 | -1.939491805 | 0.053539 | 0.07184 | -5.47582884 |
| CAMTA2 | -0.10853965 | 5.00165449 | -1.939192232 | 0.053576 | 0.07188 | -5.47640125 |
| CEP290 | -0.132584445 | 2.78414048 | -1.939020797 | 0.053597 | 0.0719 | -5.47672878 |
| AGBL3 | -0.082540069 | 1.21153855 | -1.939004028 | 0.053599 | 0.0719 | -5.47676081 |
| HUS1B | -0.071142612 | 0.34307154 | -1.938073879 | 0.053713 | 0.07205 | -5.47853738 |
| FANK1 | -0.144057458 | 3.76678613 | -1.937292839 | 0.053809 | 0.07217 | -5.48002851 |
| C6orf141 | 0.090857207 | 0.36184724 | 1.936115167 | 0.053953 | 0.07236 | -5.48227577 |
| TNFAIP1 | -0.121377016 | 5.7683411 | -1.935303931 | 0.054053 | 0.07249 | -5.48382302 |
| ZCCHC1 | 0.154421827 | 4.78261433 | 1.934697362 | 0.054128 | 0.07259 | -5.4849795 |
| HOXA13 | -0.045096799 | 0.07381025 | -1.934321715 | 0.054175 | 0.07264 | -5.48569553 |
| DNAH11 | -0.162732052 | 0.99268454 | -1.934269601 | 0.054181 | 0.07265 | -5.48579486 |
| TSTA3 | -0.136069923 | 5.91601748 | -1.933910947 | 0.054225 | 0.0727 | -5.48647835 |
| PPFIA1 | -0.148118605 | 4.21218872 | -1.932787138 | 0.054364 | 0.07288 | -5.48861923 |
| CACNA1 | -0.311157629 | 2.48777378 | -1.932350866 | 0.054419 | 0.07295 | -5.48945 |
| SDE2 | -0.172617226 | 4.29234544 | -1.932309818 | 0.054424 | 0.07295 | -5.48952816 |
| LRCH3 | -0.105519657 | 2.85998157 | -1.932194382 | 0.054438 | 0.07296 | -5.48974795 |
| RASEF | -0.212556415 | 4.92815181 | -1.931842843 | 0.054482 | 0.07301 | -5.49041719 |
| PDZD7 | 0.106867036 | 0.91021232 | 1.931801434 | 0.054487 | 0.07301 | -5.49049601 |
| KNDC1 | -0.190371163 | 2.77955309 | -1.930089184 | 0.0547 | 0.07329 | -5.49375393 |
| SLC4A11 | 0.310404467 | 4.57379514 | 1.929852321 | 0.054729 | 0.07333 | -5.49420439 |
| RMI1 | -0.147973922 | 3.12479049 | -1.929711378 | 0.054747 | 0.07335 | -5.49447241 |
| POU5F2 | 0.011762633 | 0.02900554 | 1.928876996 | 0.054851 | 0.07348 | -5.49605868 |
| MBTD1 | -0.143174637 | 3.44871497 | -1.928820892 | 0.054858 | 0.07348 | -5.49616532 |
| DRICH1 | 0.155742242 | 1.17216607 | 1.928795864 | 0.054861 | 0.07348 | -5.49621289 |
| CPNE9 | 0.043300497 | 0.16902429 | 1.928728139 | 0.054869 | 0.07349 | -5.49634161 |
| CEACAM | 0.083771406 | 0.13833035 | 1.928322644 | 0.05492 | 0.07355 | -5.49711221 |
| ERI1 | 0.110913297 | 2.68525564 | 1.928270938 | 0.054926 | 0.07355 | -5.49721046 |
| CCNF | -0.094484774 | 1.51360361 | -1.928117619 | 0.054946 | 0.07357 | -5.49750178 |
| PODN | 0.289599099 | 1.90292755 | 1.928017594 | 0.054958 | 0.07358 | -5.49769183 |
| PSCA | -0.094797454 | 0.1908434 | -1.927866918 | 0.054977 | 0.0736 | -5.49797809 |
| FBXO31 | -0.118116687 | 4.19252591 | -1.927826425 | 0.054982 | 0.0736 | -5.49805501 |
| ATAD5 | 0.077585113 | 1.06603421 | 1.927636781 | 0.055006 | 0.07363 | -5.49841527 |
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| CAPRIN1 | -0.156039317 | 6.21427272 | -1.926100655 | 0.055198 | 0.07387 | -5.50133208 |
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| SLC9B2 | 0.11495442 | 1.44531255 | 1.925834711 | 0.055232 | 0.07391 | -5.50183683 |
| PAX5 | 0.153940789 | 0.2875559 | 1.925583573 | 0.055263 | 0.07394 | -5.50231342 |
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| PNMA1 | -0.171972173 | 6.18551585 | -1.92341792 | 0.055536 | 0.07429 | -5.50642068 |
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| DNA2 | -0.083384877 | 1.06635427 | -1.92281948 | 0.055611 | 0.07437 | -5.50755485 |
| ABLIM3 | -0.187644213 | 1.99286911 | -1.921840423 | 0.055735 | 0.07453 | -5.50940964 |
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| SYNE2 | -0.192219733 | 4.47120011 | -1.92051732 | 0.055902 | 0.07471 | -5.51191476 |
| DTL | 0.169460141 | 1.7205232 | 1.920317251 | 0.055928 | 0.07474 | -5.51229342 |
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| GLDN | 0.339145754 | 1.28437625 | 1.919417933 | 0.056042 | 0.07487 | -5.51399503 |
| SEMA4C | 0.178711057 | 4.43996127 | 1.918915347 | 0.056106 | 0.07495 | -5.51494564 |
| MYMX | -0.076774559 | 0.39580642 | -1.918704062 | 0.056133 | 0.07498 | -5.5153452 |
| FRS2 | -0.160041672 | 3.67019121 | -1.918466693 | 0.056163 | 0.07502 | -5.51579404 |
| MED23 | -0.147623525 | 3.92247573 | -1.917896513 | 0.056236 | 0.07511 | -5.51687196 |
| RARA | 0.151383082 | 4.99319206 | 1.916967814 | 0.056354 | 0.07526 | -5.51862699 |
| ZNF41 | -0.159103397 | 2.89746279 | -1.916710269 | 0.056387 | 0.0753 | -5.51911355 |
| ERCC6L | 0.064121855 | 0.58190627 | 1.91643038 | 0.056423 | 0.07534 | -5.51964225 |
| PCDHB1 | -0.172435457 | 1.20195633 | -1.916223827 | 0.056449 | 0.07537 | -5.52003237 |
| IL27RA | 0.213690383 | 4.16840915 | 1.915910246 | 0.056489 | 0.07542 | -5.52062456 |
| ADAMTS | 0.16648204 | 0.61094092 | 1.91582766 | 0.0565 | 0.07543 | -5.5207805 |
| LRCH2 | 0.23914456 | 2.06223843 | 1.914861043 | 0.056624 | 0.07559 | -5.52260526 |
| SSTR2 | -0.128256496 | 1.0626805 | -1.914582733 | 0.056659 | 0.07563 | -5.52313048 |
| PKIB | 0.1699507 | 1.65553431 | 1.913118639 | 0.056847 | 0.07587 | -5.52589228 |
| GREB1L | 0.199653899 | 1.86924822 | 1.912484368 | 0.056929 | 0.07598 | -5.52708809 |
| B2M | 0.253916296 | 11.0716717 | 1.912100934 | 0.056978 | 0.07604 | -5.52781081 |
| NANOS3 | -0.18963982 | 1.97835091 | -1.91195273 | 0.056998 | 0.07606 | -5.52809012 |
| SPC25 | -0.125023715 | 0.98882795 | -1.910508023 | 0.057184 | 0.0763 | -5.53081171 |
| SLC15A3 | 0.196054807 | 2.86885507 | 1.91040266 | 0.057198 | 0.07631 | -5.53101012 |
| ZNF578 | -0.080132842 | 0.58223939 | -1.909956763 | 0.057255 | 0.07638 | -5.53184967 |
| OSGEP | -0.119498263 | 4.65848415 | -1.909943335 | 0.057257 | 0.07638 | -5.53187495 |
| FBN2 | 0.251349853 | 1.28678191 | 1.908830067 | 0.057401 | 0.07656 | -5.5339702 |
| SPESP1 | -0.297893967 | 1.61274469 | -1.908264204 | 0.057475 | 0.07666 | -5.53503474 |
| PLBD1 | 0.212235265 | 3.54815376 | 1.907275562 | 0.057603 | 0.07682 | -5.53689391 |
| SLC16A4 | -0.239477003 | 4.62882399 | -1.907214764 | 0.057611 | 0.07683 | -5.53700821 |

| | | | | | | |
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| RAD52 | -0.151964863 | 3.11871863 | -1.905757609 | 0.057801 | 0.07707 | -5.53974663 |
| TMSB15I | 0.013435607 | 0.06075409 | 1.905454032 | 0.05784 | 0.07712 | -5.54031688 |
| CDK19 | 0.133781661 | 3.42501963 | 1.904963428 | 0.057904 | 0.0772 | -5.54123827 |
| CCNG1 | -0.143915202 | 6.92731307 | -1.904263281 | 0.057996 | 0.07731 | -5.5425528 |
| TRNP1 | 0.254845085 | 3.27256653 | 1.903924811 | 0.05804 | 0.07736 | -5.54318811 |
| UBE2D1 | -0.126850091 | 3.95156975 | -1.903913946 | 0.058042 | 0.07736 | -5.5432085 |
| RNF103- | -0.022727477 | 0.11533139 | -1.90305955 | 0.058154 | 0.07751 | -5.5448117 |
| C11orf95 | -0.190864062 | 4.39176803 | -1.902978244 | 0.058164 | 0.07751 | -5.54496423 |
| SLC4A8 | 0.067430837 | 0.21121771 | 1.902399126 | 0.05824 | 0.07761 | -5.54605046 |
| CYP11A1 | -0.134830869 | 0.45408358 | -1.90217936 | 0.058269 | 0.07764 | -5.54646258 |
| NUDCD3 | -0.110663494 | 4.88900381 | -1.901989832 | 0.058294 | 0.07767 | -5.54681796 |
| STRADA | -0.113361419 | 2.14840763 | -1.90156177 | 0.05835 | 0.07774 | -5.54762048 |
| CNTLN | -0.095238971 | 1.47683586 | -1.90134315 | 0.058379 | 0.07777 | -5.54803028 |
| GPC1 | -0.150725745 | 4.37540429 | -1.901247449 | 0.058392 | 0.07778 | -5.54820965 |
| LENEP | -0.051547638 | 0.19083438 | -1.900397961 | 0.058503 | 0.07792 | -5.54980148 |
| CARF | -0.138856095 | 2.63529223 | -1.900205898 | 0.058529 | 0.07795 | -5.55016129 |
| SLC18A2 | 0.087686366 | 0.27386592 | 1.8990966 | 0.058675 | 0.07814 | -5.55223872 |
| DKKL1 | 0.066555739 | 0.28771513 | 1.898984609 | 0.05869 | 0.07815 | -5.55244838 |
| TESC | -0.422459307 | 6.23279716 | -1.898520272 | 0.058751 | 0.07823 | -5.55331757 |
| PI3 | 0.138901756 | 0.45846654 | 1.898317781 | 0.058778 | 0.07826 | -5.55369654 |
| PKP1 | 0.201681716 | 1.06936556 | 1.89743488 | 0.058895 | 0.07841 | -5.55534849 |
| KDM3B | -0.159629654 | 5.40076393 | -1.896962763 | 0.058957 | 0.07848 | -5.55623153 |
| KLK2 | -0.185493528 | 0.63874751 | -1.896260241 | 0.059051 | 0.0786 | -5.55754513 |
| NTN1 | -0.152396276 | 0.90641846 | -1.895996679 | 0.059086 | 0.07864 | -5.55803782 |
| TPBGL | -0.10117605 | 0.53229353 | -1.895774128 | 0.059115 | 0.07868 | -5.5584538 |
| UPP2 | 0.083520923 | 0.66289083 | 1.895582166 | 0.059141 | 0.0787 | -5.55881257 |
| CDK12 | -0.151034079 | 3.49813918 | -1.895450202 | 0.059158 | 0.07872 | -5.55905918 |
| TICRR | -0.058898672 | 0.53880479 | -1.894931459 | 0.059227 | 0.07881 | -5.56002843 |
| FBRS | -0.107399748 | 5.41507038 | -1.894869338 | 0.059235 | 0.07881 | -5.56014449 |
| CALCB | -0.28335982 | 0.88272669 | -1.894547591 | 0.059278 | 0.07886 | -5.56074552 |
| CCDC14 | 0.174043518 | 2.9845951 | 1.894498559 | 0.059285 | 0.07887 | -5.5608371 |
| PDCD11 | -0.128451985 | 3.98799767 | -1.894404952 | 0.059297 | 0.07888 | -5.56101193 |
| TTC13 | -0.139479814 | 3.09864233 | -1.893916995 | 0.059362 | 0.07896 | -5.56192319 |
| SCO2 | -0.124427188 | 4.79615127 | -1.893217124 | 0.059456 | 0.07907 | -5.56322978 |
| TPCN2 | -0.107868643 | 2.54668941 | -1.893196443 | 0.059459 | 0.07907 | -5.56326839 |
| ATXN3 | -0.079682646 | 1.83876252 | -1.892308319 | 0.059577 | 0.07922 | -5.56492574 |
| NKAIN2 | 0.080256129 | 0.34645343 | 1.892283394 | 0.059581 | 0.07922 | -5.56497224 |
| BAZ1B | -0.140360387 | 5.55118634 | -1.892236318 | 0.059587 | 0.07922 | -5.56506007 |
| SLC22A1 | -0.01547424 | 0.04806689 | -1.891163127 | 0.059731 | 0.07941 | -5.56706171 |
| TNMD | -0.056974826 | 0.14574415 | -1.890980502 | 0.059755 | 0.07943 | -5.56740222 |

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| CTSW | 0.307579653 | 3.07311618 | 1.890951263 | 0.059759 | 0.07943 | -5.56745673 |
| PLD3 | -0.189562913 | 7.94483007 | -1.89039125 | 0.059834 | 0.07953 | -5.56850067 |
| APOC1 | 0.495451367 | 6.24118328 | 1.890157127 | 0.059866 | 0.07956 | -5.56893702 |
| PDCL2 | 0.1257765 | 0.43705076 | 1.890089537 | 0.059875 | 0.07957 | -5.56906298 |
| KLRF2 | 0.047630611 | 0.11529555 | 1.889840296 | 0.059908 | 0.07961 | -5.56952743 |
| ZNF888 | 0.15091347 | 1.36155665 | 1.889056553 | 0.060013 | 0.07974 | -5.57098752 |
| CEP55 | 0.148394424 | 1.44602575 | 1.888810544 | 0.060047 | 0.07977 | -5.5714457 |
| CENPF | 0.153285376 | 1.14960699 | 1.888773126 | 0.060052 | 0.07977 | -5.57151539 |
| GFRA1 | -0.175048546 | 0.682638 | -1.888764107 | 0.060053 | 0.07977 | -5.57153218 |
| ART1 | -0.051725923 | 0.21903145 | -1.88865859 | 0.060067 | 0.07979 | -5.57172868 |
| OTUD1 | -0.150309131 | 5.4578332 | -1.888516847 | 0.060086 | 0.07981 | -5.57199263 |
| MMP2 | 0.282977986 | 5.70987396 | 1.888285678 | 0.060117 | 0.07984 | -5.57242305 |
| IL9R | 0.078283566 | 0.30978089 | 1.887921584 | 0.060166 | 0.0799 | -5.57310088 |
| FAM221E | -0.053920563 | 0.29606147 | -1.8878109 | 0.060181 | 0.07991 | -5.57330691 |
| ZNF334 | -0.176804785 | 2.61411258 | -1.886764473 | 0.060323 | 0.08009 | -5.5752542 |
| GIT2 | -0.131844106 | 2.73743908 | -1.886498661 | 0.060359 | 0.08014 | -5.57574868 |
| ZFR2 | -0.13322173 | 0.51115973 | -1.886312873 | 0.060384 | 0.08016 | -5.57609426 |
| PURB | -0.122854019 | 4.83792665 | -1.885810837 | 0.060452 | 0.08025 | -5.5770279 |
| B3GLCT | -0.125253434 | 3.59054332 | -1.885661074 | 0.060472 | 0.08027 | -5.57730637 |
| EIF5AL1 | -0.224816278 | 1.4538969 | -1.885521112 | 0.060491 | 0.08029 | -5.5775666 |
| CHRM5 | -0.05393517 | 0.10363094 | -1.885422639 | 0.060504 | 0.0803 | -5.57774967 |
| ACTG2 | -0.268865476 | 2.00403258 | -1.88532852 | 0.060517 | 0.08031 | -5.57792465 |
| CCER2 | -0.167100554 | 1.07413948 | -1.884613524 | 0.060614 | 0.08043 | -5.57925359 |
| PRR14L | -0.142111235 | 3.07520439 | -1.884358795 | 0.060648 | 0.08047 | -5.57972693 |
| RNMT | -0.158601664 | 4.54264293 | -1.884025034 | 0.060694 | 0.08052 | -5.58034703 |
| ARID2 | -0.128133943 | 3.17989194 | -1.883976689 | 0.0607 | 0.08053 | -5.58043684 |
| C17orf78 | -0.02470803 | 0.12923125 | -1.883901054 | 0.060711 | 0.08053 | -5.58057735 |
| F11R | -0.154440614 | 6.61070678 | -1.883549186 | 0.060758 | 0.08059 | -5.58123093 |
| NSG2 | -0.034746157 | 0.10245385 | -1.883373341 | 0.060782 | 0.08062 | -5.58155752 |
| SPATA6L | -0.102619176 | 1.48936014 | -1.883007222 | 0.060832 | 0.08068 | -5.58223739 |
| MDGA2 | -0.018987075 | 0.02552444 | -1.882139139 | 0.06095 | 0.08083 | -5.58384887 |
| ECM1 | -0.545033074 | 5.23068092 | -1.881221251 | 0.061076 | 0.08099 | -5.58555203 |
| NEURL3 | 0.066892255 | 0.19961515 | 1.881152817 | 0.061085 | 0.08099 | -5.58567898 |
| KHDRBS | 0.138718431 | 1.71411201 | 1.880908896 | 0.061118 | 0.08103 | -5.58613142 |
| PADI4 | 0.035471233 | 0.096499 | 1.880352046 | 0.061194 | 0.08113 | -5.58716411 |
| RXFP4 | -0.048547438 | 0.28742402 | -1.879971221 | 0.061247 | 0.08119 | -5.58787018 |
| AUTS2 | 0.211686005 | 3.09795487 | 1.878718885 | 0.061418 | 0.08141 | -5.5901911 |
| COL19A1 | 0.153018831 | 0.53268375 | 1.878593447 | 0.061435 | 0.08143 | -5.59042349 |
| MAP3K2 | -0.146792145 | 4.33489518 | -1.878391638 | 0.061463 | 0.08146 | -5.59079733 |
| AGAP6 | -0.161651323 | 2.57934523 | -1.877802483 | 0.061544 | 0.08156 | -5.59188849 |

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| ELL3 | 0.07801132 | 0.84687062 | 1.877035847 | 0.061649 | 0.08169 | -5.59330787 |
| SIPA1 | 0.146623387 | 4.74166207 | 1.876839595 | 0.061676 | 0.08172 | -5.59367112 |
| RANGAF | -0.139063854 | 5.47808121 | -1.875825319 | 0.061816 | 0.0819 | -5.59554793 |
| RBMS2 | 0.146586894 | 5.22819045 | 1.875655568 | 0.06184 | 0.08192 | -5.59586193 |
| UBXN4 | -0.158199267 | 6.4757991 | -1.875289074 | 0.06189 | 0.08198 | -5.59653979 |
| CX3CL1 | 0.181206256 | 5.65543075 | 1.874642998 | 0.06198 | 0.0821 | -5.59773443 |
| USB1 | -0.11661945 | 4.76270022 | -1.874258215 | 0.062033 | 0.08216 | -5.59844573 |
| PPA1 | -0.148520905 | 6.245485 | -1.874224334 | 0.062037 | 0.08216 | -5.59850836 |
| HYAL3 | -0.127005508 | 2.19887426 | -1.874150049 | 0.062048 | 0.08217 | -5.59864566 |
| HOXD10 | 0.115376058 | 0.28726359 | 1.87284898 | 0.062228 | 0.0824 | -5.6010496 |
| NT5C1A | -0.181473025 | 0.92128246 | -1.87268241 | 0.062251 | 0.08242 | -5.60135725 |
| RHEX | 0.273386033 | 2.83361993 | 1.872536664 | 0.062271 | 0.08244 | -5.60162642 |
| MX2 | 0.164269052 | 1.49899531 | 1.872524228 | 0.062273 | 0.08244 | -5.60164938 |
| FBXL19 | -0.128569871 | 3.89752019 | -1.870644984 | 0.062534 | 0.08278 | -5.60511815 |
| PLA2G1E | -0.048387016 | 0.20688165 | -1.870346328 | 0.062576 | 0.08283 | -5.60566911 |
| REPS1 | -0.111924935 | 3.62211204 | -1.86968272 | 0.062668 | 0.08294 | -5.60689301 |
| TAGLN | -0.228697545 | 5.90746791 | -1.869248919 | 0.062729 | 0.08302 | -5.60769285 |
| DAPK1 | 0.221000299 | 2.7566151 | 1.868151535 | 0.062882 | 0.08321 | -5.6097154 |
| PYGL | 0.179677334 | 3.53537587 | 1.867777211 | 0.062935 | 0.08328 | -5.61040504 |
| ADRA1B | -0.240172759 | 2.78780622 | -1.867525358 | 0.06297 | 0.08332 | -5.61086897 |
| LINGO4 | -0.157638277 | 1.24498063 | -1.867395972 | 0.062988 | 0.08333 | -5.61110728 |
| ROBO2 | -0.057599657 | 0.13888062 | -1.866678872 | 0.063089 | 0.08346 | -5.6124278 |
| DDX11 | -0.17468974 | 2.22706216 | -1.866531693 | 0.063109 | 0.08348 | -5.61269876 |
| MYO15A | -0.057358386 | 0.43582713 | -1.866439528 | 0.063122 | 0.08349 | -5.61286843 |
| HDC | 0.054098724 | 0.15539838 | 1.865627588 | 0.063236 | 0.08364 | -5.61436281 |
| HUWE1 | -0.160882661 | 5.40360776 | -1.865547548 | 0.063247 | 0.08364 | -5.61451009 |
| PDZD8 | -0.164403539 | 3.46804753 | -1.86528104 | 0.063285 | 0.08369 | -5.61500044 |
| ELF1 | -0.213321942 | 5.76925531 | -1.864068823 | 0.063456 | 0.08391 | -5.61722995 |
| ANKRD2 | -0.093934721 | 0.79721673 | -1.863285289 | 0.063566 | 0.08405 | -5.61867027 |
| SON | -0.154481987 | 5.84879161 | -1.862161412 | 0.063725 | 0.08425 | -5.6207352 |
| FCRLB | 0.182769589 | 1.4898694 | 1.861986296 | 0.06375 | 0.08428 | -5.62105684 |
| DNAJC2 | -0.132744921 | 4.25241526 | -1.861789318 | 0.063778 | 0.08431 | -5.62141859 |
| TRPC5O | 0.021157451 | 0.07616399 | 1.86120215 | 0.063861 | 0.08441 | -5.62249672 |
| CBLN2 | -0.015011263 | 0.02761291 | -1.860941909 | 0.063898 | 0.08445 | -5.62297446 |
| CRTC3 | -0.128484686 | 4.18499423 | -1.860912046 | 0.063902 | 0.08445 | -5.62302927 |
| TLCD2 | 0.164606586 | 2.57607232 | 1.86053807 | 0.063955 | 0.08451 | -5.62371567 |
| CCDC97 | -0.122757729 | 5.10814542 | -1.859852072 | 0.064052 | 0.08464 | -5.62497441 |
| ALG10B | -0.110755297 | 2.06222078 | -1.859098895 | 0.06416 | 0.08477 | -5.62635589 |
| KBTBD1: | -0.029433989 | 0.09178179 | -1.858095451 | 0.064302 | 0.08495 | -5.62819557 |
| RTL4 | 0.415754276 | 2.47402159 | 1.85663822 | 0.06451 | 0.08522 | -5.63086549 |

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| LASP1 | 0.15895522 | 6.43439836 | 1.856572569 | 0.06452 | 0.08523 | -5.63098572 |
| JCAD | -0.206794414 | 5.26525803 | -1.856373944 | 0.064548 | 0.08526 | -5.63134947 |
| CTRC | -0.126521647 | 0.34831429 | -1.856189179 | 0.064575 | 0.08529 | -5.6316878 |
| GZMB | 0.257353039 | 1.85801596 | 1.855860257 | 0.064622 | 0.08534 | -5.63229002 |
| NXF1 | -0.165156526 | 5.73072779 | -1.855690794 | 0.064646 | 0.08537 | -5.63260025 |
| NAGPA | -0.100210673 | 3.21017314 | -1.855380633 | 0.06469 | 0.08542 | -5.63316798 |
| BPTF | -0.168511766 | 3.90379349 | -1.855317766 | 0.064699 | 0.08542 | -5.63328304 |
| ZNF699 | 0.141735165 | 1.29142065 | 1.855279989 | 0.064705 | 0.08543 | -5.63335218 |
| MAATS1 | -0.164497164 | 2.66327057 | -1.854402862 | 0.06483 | 0.08558 | -5.63495711 |
| SBF2 | -0.171831612 | 3.46040764 | -1.854217337 | 0.064857 | 0.08561 | -5.63529648 |
| OR2C1 | -0.039802697 | 0.21350219 | -1.854176885 | 0.064863 | 0.08561 | -5.63537048 |
| TMEM10 | -0.150335753 | 4.35148656 | -1.853932693 | 0.064898 | 0.08565 | -5.6358171 |
| RFC3 | -0.136460288 | 3.1019549 | -1.85390953 | 0.064901 | 0.08565 | -5.63585947 |
| ZRANB1 | -0.184020927 | 3.21772491 | -1.85380004 | 0.064917 | 0.08567 | -5.6360597 |
| CCDC18 | -0.170484376 | 3.80860784 | -1.85360176 | 0.064946 | 0.0857 | -5.63642229 |
| TNNT3 | -0.128836605 | 0.46057219 | -1.852898581 | 0.065047 | 0.08582 | -5.63770786 |
| OSBPL3 | 0.156287733 | 4.03765748 | 1.852856291 | 0.065053 | 0.08582 | -5.63778516 |
| SEC24B | -0.146354484 | 4.72057354 | -1.852318463 | 0.06513 | 0.08592 | -5.6387681 |
| TSPOAP | -0.16597262 | 2.85985696 | -1.85210009 | 0.065162 | 0.08595 | -5.63916711 |
| TLR1 | 0.143131771 | 1.35138736 | 1.851782348 | 0.065207 | 0.08601 | -5.63974762 |
| SCN1A | 0.031293591 | 0.04613524 | 1.851367629 | 0.065267 | 0.08608 | -5.64050516 |
| TMEM61 | 0.159582268 | 1.10026076 | 1.850107705 | 0.065449 | 0.08631 | -5.64280555 |
| TSLP | -0.171549848 | 0.86080574 | -1.849775536 | 0.065497 | 0.08637 | -5.64341178 |
| PPP1R2( | -0.126929783 | 4.5867497 | -1.849425475 | 0.065548 | 0.08643 | -5.64405054 |
| PLK4 | 0.103072514 | 1.56422504 | 1.848815905 | 0.065636 | 0.08654 | -5.64516256 |
| ARL6IP5 | -0.141603418 | 7.70486085 | -1.848477818 | 0.065685 | 0.0866 | -5.64577916 |
| RGS2 | 0.279859651 | 3.72351548 | 1.848050673 | 0.065747 | 0.08667 | -5.64655804 |
| MTMR1 | -0.127593858 | 4.03407146 | -1.847860956 | 0.065775 | 0.0867 | -5.64690392 |
| CNNM4 | -0.164741262 | 4.08902086 | -1.847635172 | 0.065808 | 0.08674 | -5.64731551 |
| RGS19 | -0.123874904 | 4.26865862 | -1.847308347 | 0.065855 | 0.0868 | -5.64791121 |
| HEXD | -0.161087109 | 4.43724211 | -1.846447613 | 0.06598 | 0.08695 | -5.64947956 |
| HSD17B | -0.034558214 | 0.18204833 | -1.846384775 | 0.06599 | 0.08696 | -5.64959403 |
| SMAP2 | -0.154333863 | 5.25683009 | -1.845087618 | 0.066179 | 0.0872 | -5.65195618 |
| FAM168/ | -0.141996935 | 5.20078827 | -1.844821525 | 0.066218 | 0.08725 | -5.65244054 |
| MAB21L; | -0.212302702 | 1.40268373 | -1.844614997 | 0.066248 | 0.08727 | -5.65281642 |
| NAALAD | -0.079101446 | 0.46097567 | -1.84460046 | 0.06625 | 0.08727 | -5.65284288 |
| TRIP13 | 0.097551466 | 1.00253267 | 1.844040925 | 0.066332 | 0.08738 | -5.65386104 |
| SPATA2I | -0.145206296 | 4.35654643 | -1.842283129 | 0.066589 | 0.08771 | -5.65705767 |
| TOP2A | 0.219762929 | 2.43678557 | 1.841717225 | 0.066672 | 0.08781 | -5.65808615 |
| RIN3 | 0.125964646 | 2.61586261 | 1.84159208 | 0.066691 | 0.08783 | -5.65831355 |

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| GABBR1 | 0.171823311 | 2.89037229 | 1.84102788 | 0.066774 | 0.08793 | -5.65933857 |
| OTULINL | -0.215005476 | 3.22473101 | -1.840086994 | 0.066912 | 0.08811 | -5.66104726 |
| BBOX1 | -0.297991366 | 2.79864366 | -1.839699292 | 0.066969 | 0.08817 | -5.66175109 |
| LILRA5 | 0.131092899 | 0.93637137 | 1.839534376 | 0.066993 | 0.0882 | -5.66205044 |
| RELCH | -0.13006605 | 3.73643089 | -1.838908115 | 0.067086 | 0.08831 | -5.66318695 |
| UHRF1B | -0.15529542 | 3.23827685 | -1.838346056 | 0.067169 | 0.08842 | -5.66420663 |
| TNFRSF | -0.197364392 | 2.83362209 | -1.838263484 | 0.067181 | 0.08843 | -5.6643564 |
| NGFR | 0.420910033 | 3.51922739 | 1.838104499 | 0.067205 | 0.08845 | -5.66464476 |
| TTC21A | -0.107744758 | 1.74846302 | -1.837321085 | 0.067321 | 0.0886 | -5.66606533 |
| GOLGA8 | -0.010158485 | 0.01401186 | -1.836348128 | 0.067465 | 0.08878 | -5.66782878 |
| HTR7 | 0.058409254 | 0.29277546 | 1.83536098 | 0.067611 | 0.08896 | -5.66961702 |
| INPP5B | -0.132493036 | 3.07203997 | -1.83516857 | 0.06764 | 0.089 | -5.66996546 |
| ARL14 | 0.192953456 | 0.75007763 | 1.835028253 | 0.067661 | 0.08901 | -5.67021955 |
| SHOC1 | -0.024646074 | 0.14939883 | -1.835026632 | 0.067661 | 0.08901 | -5.67022248 |
| CCN6 | -0.091376561 | 0.50346615 | -1.83497569 | 0.067669 | 0.08901 | -5.67031472 |
| TSC1 | -0.127748616 | 3.71132038 | -1.834939251 | 0.067674 | 0.08901 | -5.6703807 |
| TMEM26 | -0.08836367 | 0.45488822 | -1.83464658 | 0.067717 | 0.08906 | -5.67091058 |
| AMHR2 | -0.067141434 | 0.14273066 | -1.834469199 | 0.067744 | 0.08909 | -5.67123169 |
| HIST1H3 | -0.066004017 | 0.2128808 | -1.834458711 | 0.067745 | 0.08909 | -5.67125067 |
| FGD6 | -0.156274138 | 3.14857918 | -1.834098763 | 0.067799 | 0.08915 | -5.67190218 |
| MGAT4B | 0.171617135 | 6.44280164 | 1.832303411 | 0.068067 | 0.08949 | -5.67514992 |
| MYC | 0.261498848 | 3.97834828 | 1.832010198 | 0.068111 | 0.08955 | -5.67568004 |
| GAL3ST2 | -0.071181928 | 0.23334608 | -1.831238105 | 0.068226 | 0.08968 | -5.67707556 |
| NEMF | -0.150879297 | 3.34835442 | -1.831237986 | 0.068226 | 0.08968 | -5.67707578 |
| NCBP2L | -0.037901374 | 0.16051908 | -1.831118349 | 0.068244 | 0.0897 | -5.67729196 |
| MS4A1 | 0.317094829 | 1.09204762 | 1.831081239 | 0.06825 | 0.0897 | -5.67735902 |
| VWA3B | -0.022743853 | 0.03957187 | -1.828512031 | 0.068635 | 0.0902 | -5.68199823 |
| CMTM6 | -0.165679967 | 6.66510923 | -1.826983217 | 0.068866 | 0.0905 | -5.6847558 |
| KLK15 | -0.201235743 | 0.47812726 | -1.82630255 | 0.068968 | 0.09062 | -5.68598281 |
| VEZF1 | -0.156818909 | 5.48231837 | -1.82625688 | 0.068975 | 0.09063 | -5.68606512 |
| KPNA1 | -0.115547522 | 4.11028295 | -1.825964452 | 0.069019 | 0.09068 | -5.68659212 |
| ST14 | 0.156763335 | 7.34550081 | 1.82547185 | 0.069094 | 0.09077 | -5.68747968 |
| ZAN | -0.020130081 | 0.04047683 | -1.825281677 | 0.069123 | 0.0908 | -5.68782227 |
| FCER2 | 0.184032563 | 0.42224126 | 1.824909645 | 0.069179 | 0.09087 | -5.68849237 |
| ACAP3 | -0.113165834 | 3.29312199 | -1.824683614 | 0.069213 | 0.0909 | -5.68889942 |
| ZDBF2 | 0.153793829 | 2.2879244 | 1.823729378 | 0.069358 | 0.09109 | -5.69061736 |
| CACUL1 | -0.104164283 | 3.73636288 | -1.822903447 | 0.069483 | 0.09124 | -5.69210359 |
| MTTP | -0.031208775 | 0.10466725 | -1.822592824 | 0.069531 | 0.0913 | -5.69266238 |
| PITX1 | -0.069513814 | 0.10827093 | -1.822553869 | 0.069536 | 0.0913 | -5.69273245 |
| SH2D7 | -0.033881334 | 0.12264266 | -1.822123342 | 0.069602 | 0.09138 | -5.69350676 |

| CD40 | 0.27327744 | 5.35475618 | 1.822034385 | 0.069616 | 0.09139 | -5.69366673 |
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| CARD16 | -0.162512641 | 2.50738727 | -1.821424435 | 0.069708 | 0.0915 | -5.69476339 |
| ZFP36 | -0.320551292 | 8.22094658 | -1.821416463 | 0.06971 | 0.0915 | -5.69477772 |
| AMPD3 | -0.149646472 | 2.82522377 | -1.820755285 | 0.06981 | 0.09162 | -5.69596607 |
| ADAM20 | -0.022317426 | 0.14757735 | -1.819566031 | 0.069992 | 0.09186 | -5.69810248 |
| ZNF322 | -0.122216374 | 1.97626736 | -1.819414181 | 0.070015 | 0.09188 | -5.69837517 |
| SHISA3 | 0.281043154 | 1.67961576 | 1.818711905 | 0.070123 | 0.09201 | -5.69963602 |
| PCDHB1 | -0.104047102 | 0.75522557 | -1.817433553 | 0.070319 | 0.09226 | -5.70192993 |
| EBLN2 | 0.110421465 | 0.88452637 | 1.817428796 | 0.070319 | 0.09226 | -5.70193846 |
| TCF12 | -0.152710844 | 4.27928113 | -1.816837674 | 0.07041 | 0.09237 | -5.70299865 |
| IQSEC3 | 0.217322163 | 1.08716285 | 1.816701441 | 0.070431 | 0.09239 | -5.70324294 |
| CDK5RA | 0.221259606 | 4.64120106 | 1.816667793 | 0.070436 | 0.09239 | -5.70330328 |
| SH3TC2 | 0.04801447 | 0.22605507 | 1.816235238 | 0.070503 | 0.09247 | -5.70407879 |
| ANGPTL | 0.193775773 | 4.02701239 | 1.815982184 | 0.070542 | 0.09251 | -5.7045324 |
| EZHIP | -0.033608525 | 0.1301522 | -1.815849811 | 0.070562 | 0.09253 | -5.70476966 |
| ART4 | -0.126529261 | 0.60532686 | -1.815049348 | 0.070685 | 0.09269 | -5.70620401 |
| SH2D4A | 0.180324468 | 5.26216197 | 1.814231977 | 0.070812 | 0.09284 | -5.70766802 |
| KNOP1 | -0.102172445 | 2.67511039 | -1.813221517 | 0.070968 | 0.09304 | -5.70947699 |
| MKLN1 | -0.157249695 | 3.06181218 | -1.812766128 | 0.071038 | 0.09313 | -5.71029193 |
| TRANK1 | 0.174834246 | 3.63939395 | 1.812405103 | 0.071094 | 0.09319 | -5.71093785 |
| EIF3A | -0.194264174 | 6.54851701 | -1.81227813 | 0.071114 | 0.09321 | -5.711165 |
| C7orf57 | 0.081984944 | 0.52275869 | 1.811162905 | 0.071287 | 0.09343 | -5.71315937 |
| CDKL2 | 0.209550427 | 2.27346164 | 1.810675012 | 0.071362 | 0.09352 | -5.7140315 |
| MECP2 | -0.119268056 | 3.85050698 | -1.810602931 | 0.071374 | 0.09353 | -5.71416033 |
| RUFY4 | 0.087163208 | 0.28176213 | 1.809935353 | 0.071477 | 0.09366 | -5.71535324 |
| GPR15 | 0.063837243 | 0.15693738 | 1.809913514 | 0.071481 | 0.09366 | -5.71539226 |
| HOXB4 | 0.086985075 | 0.74227146 | 1.809877011 | 0.071486 | 0.09366 | -5.71545747 |
| ATP8A1 | 0.21476687 | 5.12723252 | 1.808524957 | 0.071697 | 0.09393 | -5.71787209 |
| FOXA1 | 0.098612677 | 0.33863475 | 1.806829532 | 0.071962 | 0.09427 | -5.72089745 |
| ADORA1 | 0.267327161 | 4.51657598 | 1.805861737 | 0.072113 | 0.09446 | -5.72262317 |
| ZNF646 | -0.108778056 | 3.27200897 | -1.803798846 | 0.072437 | 0.09487 | -5.72629859 |
| APOA2 | -0.150989665 | 0.36089587 | -1.802495035 | 0.072643 | 0.09513 | -5.72861946 |
| HPGD | -0.175426277 | 1.07282504 | -1.802427382 | 0.072653 | 0.09514 | -5.72873984 |
| EFNA5 | 0.145260818 | 0.98563112 | 1.802107635 | 0.072704 | 0.0952 | -5.72930874 |
| IGF1R | 0.197028127 | 4.70934902 | 1.802062898 | 0.072711 | 0.0952 | -5.72938833 |
| CCDC80 | 0.322209095 | 4.87102921 | 1.80177026 | 0.072757 | 0.09525 | -5.7299089 |
| ZNF581 | 0.146052273 | 5.5165074 | 1.801769742 | 0.072757 | 0.09525 | -5.72990982 |
| ZBTB44 | -0.130788471 | 3.90905169 | -1.800244087 | 0.072998 | 0.09556 | -5.73262244 |
| VNN3 | 0.017204669 | 0.04714111 | 1.799766111 | 0.073074 | 0.09565 | -5.73347183 |
| GOLGA8 | -0.349442301 | 4.81821408 | -1.799706142 | 0.073083 | 0.09565 | -5.73357838 |

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| SSUH2 | -0.078855829 | 0.45029693 | -1.797093453 | 0.073498 | 0.09619 | -5.7382172 |
| CEPT1 | -0.143196704 | 3.19489169 | -1.796560033 | 0.073583 | 0.09629 | -5.73916348 |
| CDCA3 | -0.098942152 | 1.09624356 | -1.795488616 | 0.073754 | 0.09651 | -5.74106332 |
| LGR4 | -0.191811577 | 4.25190202 | -1.79531152 | 0.073782 | 0.09654 | -5.74137725 |
| SH3YL1 | -0.149365882 | 4.32961985 | -1.794657897 | 0.073887 | 0.09667 | -5.7425356 |
| VSIG10 | 0.124574187 | 4.27398372 | 1.794223755 | 0.073956 | 0.09675 | -5.74330477 |
| ZNF543 | -0.121725074 | 2.44642996 | -1.79406949 | 0.073981 | 0.09678 | -5.74357803 |
| SMURF2 | 0.14190037 | 4.35890385 | 1.793821172 | 0.074021 | 0.09682 | -5.74401785 |
| DLGAP3 | -0.158733379 | 0.88810124 | -1.79379221 | 0.074025 | 0.09682 | -5.74406915 |
| TMPO | 0.139579296 | 4.08492795 | 1.79368469 | 0.074043 | 0.09683 | -5.74425957 |
| MGST1 | -0.232003119 | 6.69154249 | -1.793441206 | 0.074082 | 0.09688 | -5.74469074 |
| THRB | 0.138629475 | 1.98878526 | 1.793299728 | 0.074104 | 0.0969 | -5.74494125 |
| FAHD2B | -0.101595832 | 1.00481629 | -1.793252268 | 0.074112 | 0.0969 | -5.74502528 |
| CHST6 | 0.109787714 | 0.51264508 | 1.793098994 | 0.074136 | 0.09693 | -5.74529665 |
| SLC35G! | -0.03595478 | 0.19648229 | -1.792255293 | 0.074272 | 0.0971 | -5.74678999 |
| FGF7 | -0.262087197 | 1.17081399 | -1.790507246 | 0.074553 | 0.09746 | -5.74988183 |
| COX6B2 | 0.060418215 | 0.13978353 | 1.790298301 | 0.074587 | 0.09749 | -5.7502512 |
| ANGPTL | 0.017314729 | 0.08185416 | 1.790148554 | 0.074611 | 0.09752 | -5.75051589 |
| SLC44A4 | -0.285245076 | 1.59189146 | -1.789865273 | 0.074656 | 0.09757 | -5.75101657 |
| HIPK2 | 0.173605258 | 4.55208882 | 1.789703879 | 0.074682 | 0.0976 | -5.75130179 |
| NXNL2 | 0.163247147 | 1.02434683 | 1.789650153 | 0.074691 | 0.0976 | -5.75139673 |
| PTK6 | 0.080312405 | 0.74978945 | 1.789495743 | 0.074716 | 0.09762 | -5.75166957 |
| PCDHB1 | -0.169189291 | 1.82188579 | -1.789124532 | 0.074776 | 0.09769 | -5.7523254 |
| GCC2 | -0.166633225 | 3.56833763 | -1.788002205 | 0.074957 | 0.09792 | -5.75430746 |
| CRACR2 | -0.192446299 | 3.06732252 | -1.787982772 | 0.07496 | 0.09792 | -5.75434177 |
| RSPO2 | -0.070000528 | 0.09340174 | -1.787538081 | 0.075032 | 0.09801 | -5.75512676 |
| PCDHA7 | 0.038307731 | 0.16137726 | 1.787344516 | 0.075064 | 0.09804 | -5.7554684 |
| NYNRIN | -0.252588395 | 4.43208271 | -1.786967295 | 0.075125 | 0.09811 | -5.75613407 |
| WASHC2 | -0.113247709 | 4.19042482 | -1.786940668 | 0.075129 | 0.09811 | -5.75618105 |
| KPNA2 | -0.141784786 | 4.69646437 | -1.786575273 | 0.075188 | 0.09818 | -5.75682571 |
| SLC44A2 | -0.128665399 | 7.09919714 | -1.786546559 | 0.075193 | 0.09818 | -5.75687637 |
| GDF5 | -0.141516259 | 0.90140224 | -1.785954566 | 0.075289 | 0.0983 | -5.75792052 |
| ING1 | -0.096953008 | 2.93749317 | -1.785238735 | 0.075405 | 0.09844 | -5.75918265 |
| CLASP1 | -0.130624133 | 4.30435014 | -1.785139311 | 0.075422 | 0.09845 | -5.75935792 |
| DR1 | -0.116218123 | 4.00626949 | -1.784981714 | 0.075447 | 0.09848 | -5.75963571 |
| PGGHG | -0.338665221 | 3.72589817 | -1.784830488 | 0.075472 | 0.09851 | -5.75990224 |
| CDH15 | 0.093801833 | 0.38934713 | 1.784495771 | 0.075526 | 0.09857 | -5.7604921 |
| S1PR3 | 0.158928843 | 2.37044868 | 1.783315954 | 0.075719 | 0.09881 | -5.7625704 |
| RP1L1 | -0.013193151 | 0.06404293 | -1.782965103 | 0.075776 | 0.09888 | -5.76318818 |
| LMNB2 | -0.132751674 | 4.67202286 | -1.782909186 | 0.075785 | 0.09888 | -5.76328663 |

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| RASSF7 | -0.161404051 | 4.52412126 | -1.782874259 | 0.075791 | 0.09888 | -5.76334812 |
| HOXB5 | -0.117580767 | 0.77579659 | -1.782738337 | 0.075813 | 0.0989 | -5.76358741 |
| HCFC1 | -0.137439643 | 4.71188449 | -1.782395597 | 0.075869 | 0.09897 | -5.76419072 |
| NHSL1 | 0.1107215 | 1.58000995 | 1.782353076 | 0.075876 | 0.09897 | -5.76426556 |
| CNN1 | -0.242942403 | 2.73108637 | -1.782342334 | 0.075877 | 0.09897 | -5.76428446 |
| MYLPF | 0.167447138 | 1.29472396 | 1.78215739 | 0.075908 | 0.099 | -5.76460995 |
| LIG4 | -0.155424142 | 3.51526784 | -1.781210081 | 0.076063 | 0.09919 | -5.76627665 |
| F8A3 | -0.013473621 | 0.04214564 | -1.781035999 | 0.076091 | 0.09922 | -5.76658284 |
| FAM110( | -0.168125991 | 4.33888107 | -1.780910617 | 0.076112 | 0.09924 | -5.76680335 |
| ZNF648 | -0.037667832 | 0.06773657 | -1.780813501 | 0.076128 | 0.09925 | -5.76697414 |
| NIBAN2 | 0.171693841 | 7.94415054 | 1.780039398 | 0.076255 | 0.09941 | -5.76833516 |
| MTF2 | -0.129547808 | 3.63634149 | -1.779392961 | 0.076361 | 0.09954 | -5.76947127 |
| CCDC16 | -0.02690884 | 0.0741303 | -1.777831376 | 0.076618 | 0.09987 | -5.77221411 |
| UTS2R | -0.293802395 | 1.40678725 | -1.77619537 | 0.076887 | 0.10021 | -5.77508514 |
| SLC10A6 | -0.136406918 | 0.94197333 | -1.775362515 | 0.077025 | 0.10039 | -5.77654573 |
| URB1 | -0.141976132 | 3.41878627 | -1.774400382 | 0.077184 | 0.10058 | -5.7782322 |
| SNX32 | -0.065959625 | 0.56269238 | -1.774393895 | 0.077185 | 0.10058 | -5.77824357 |
| DSCC1 | -0.082221304 | 1.45709236 | -1.774110776 | 0.077232 | 0.10063 | -5.77873966 |
| RNF43 | 0.147666963 | 2.02401877 | 1.77355134 | 0.077325 | 0.10075 | -5.7797197 |
| RAP1GA | 0.157536039 | 3.73089072 | 1.773135863 | 0.077394 | 0.10082 | -5.78044735 |
| ZBTB8B | -0.031848928 | 0.14850206 | -1.773118374 | 0.077397 | 0.10082 | -5.78047798 |
| OMG | 0.038977735 | 0.27955813 | 1.772520459 | 0.077496 | 0.10095 | -5.78152484 |
| TRIM23 | -0.123855036 | 3.59749246 | -1.771847837 | 0.077608 | 0.10108 | -5.7827021 |
| KCNS1 | -0.121349352 | 0.28565129 | -1.77062535 | 0.077812 | 0.10134 | -5.78484064 |
| S100A14 | -0.197211111 | 8.49263077 | -1.769729081 | 0.077962 | 0.10152 | -5.7864076 |
| SNORC | 0.116618775 | 0.96403991 | 1.769723706 | 0.077963 | 0.10152 | -5.78641699 |
| ANGPTL | 0.298594299 | 5.37973465 | 1.769027031 | 0.078079 | 0.10167 | -5.78763446 |
| NLRP14 | -0.031303467 | 0.14687279 | -1.768659996 | 0.07814 | 0.10174 | -5.78827568 |
| SST | 0.180549996 | 0.3708912 | 1.768631716 | 0.078145 | 0.10174 | -5.78832509 |
| PKP3 | -0.165473423 | 4.77230874 | -1.768415543 | 0.078181 | 0.10178 | -5.78870268 |
| RBFOX3 | -0.058461825 | 0.07003029 | -1.767655566 | 0.078309 | 0.10193 | -5.79002979 |
| STK38L | -0.134772074 | 3.52501501 | -1.76713295 | 0.078396 | 0.10204 | -5.79094209 |
| ITSN2 | -0.162851074 | 4.91650388 | -1.766299206 | 0.078536 | 0.10221 | -5.79239695 |
| PAM | 0.193581636 | 6.78268392 | 1.765800558 | 0.07862 | 0.10232 | -5.79326676 |
| ANKDD1 | -0.157161862 | 1.27422765 | -1.765680647 | 0.07864 | 0.10233 | -5.79347589 |
| CD8B | 0.275878245 | 1.80895358 | 1.765126724 | 0.078734 | 0.10245 | -5.79444178 |
| ZFP57 | 0.14929649 | 0.3759102 | 1.765005338 | 0.078754 | 0.10247 | -5.7946534 |
| TPM3 | -0.12731188 | 6.33612315 | -1.76443103 | 0.078851 | 0.10258 | -5.79565445 |
| GK3P | 0.013923498 | 0.03778632 | 1.76333028 | 0.079037 | 0.10282 | -5.79757222 |
| PPAN-P2 | -0.024753295 | 0.14159055 | -1.763126137 | 0.079071 | 0.10286 | -5.79792776 |

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| NPY | -0.264143097 | 0.79262684 | -1.762903883 | 0.079109 | 0.1029 | -5.7983148 |
| GPR55 | 0.14436942 | 0.58190727 | 1.761334308 | 0.079375 | 0.10323 | -5.80104672 |
| SHISA5 | -0.130999639 | 7.00048655 | -1.761038692 | 0.079425 | 0.10329 | -5.80156099 |
| SEMA4G | 0.191526471 | 2.96708967 | 1.760756704 | 0.079473 | 0.10335 | -5.80205147 |
| LPAR1 | -0.191764348 | 2.98344139 | -1.759280717 | 0.079723 | 0.10366 | -5.80461751 |
| TRIB3 | -0.332691148 | 3.69990176 | -1.75904724 | 0.079763 | 0.10371 | -5.80502322 |
| EPB42 | -0.02796988 | 0.1223357 | -1.758546391 | 0.079848 | 0.10381 | -5.80589337 |
| COL4A3 | 0.216536953 | 3.77948905 | 1.758276351 | 0.079894 | 0.10386 | -5.80636242 |
| HIST1H2 | -0.137829233 | 1.36797357 | -1.757608289 | 0.080008 | 0.104 | -5.80752253 |
| PPIP5K2 | -0.115714643 | 2.78485293 | -1.757540883 | 0.08002 | 0.10401 | -5.80763955 |
| GNB1L | -0.101252494 | 1.53916382 | -1.75709626 | 0.080096 | 0.1041 | -5.80841138 |
| SIGLEC7 | 0.160707653 | 1.17755203 | 1.756309052 | 0.08023 | 0.10427 | -5.80977745 |
| PLEKHO | -0.157170366 | 5.85824881 | -1.755579006 | 0.080355 | 0.10442 | -5.81104378 |
| DRGX | 0.086035096 | 0.08250883 | 1.754389742 | 0.080559 | 0.10468 | -5.81310557 |
| PRAF2 | -0.13383875 | 6.4303846 | -1.754149758 | 0.0806 | 0.10472 | -5.81352146 |
| ZNF841 | 0.123872083 | 2.76703235 | 1.754107758 | 0.080608 | 0.10472 | -5.81359424 |
| UBE2E2 | 0.147631176 | 4.77436069 | 1.753890227 | 0.080645 | 0.10477 | -5.81397116 |
| HTR3A | -0.136392632 | 0.38674357 | -1.753080971 | 0.080784 | 0.10494 | -5.81537297 |
| DNAH17 | -0.063838947 | 0.65593821 | -1.753037113 | 0.080792 | 0.10494 | -5.81544892 |
| CSNK1G | -0.107053471 | 5.34778369 | -1.752541778 | 0.080877 | 0.10503 | -5.81630662 |
| ALOX12E | -0.07546929 | 0.35979712 | -1.752522221 | 0.08088 | 0.10503 | -5.81634048 |
| DISP3 | -0.041262295 | 0.15415248 | -1.752506338 | 0.080883 | 0.10503 | -5.81636798 |
| VPS41 | -0.123277814 | 4.56853458 | -1.752419383 | 0.080898 | 0.10505 | -5.81651852 |
| DAGLB | -0.103700537 | 3.76742323 | -1.750774738 | 0.081181 | 0.10541 | -5.81936442 |
| NIPSNAF | -0.132680384 | 2.78081644 | -1.750650947 | 0.081203 | 0.10543 | -5.81957852 |
| KCNJ4 | -0.032896003 | 0.09488472 | -1.750409318 | 0.081245 | 0.10547 | -5.81999639 |
| LSR | 0.149025647 | 7.2868791 | 1.750180918 | 0.081284 | 0.10552 | -5.82039132 |
| MXD3 | -0.13223162 | 1.535755 | -1.750084866 | 0.081301 | 0.10553 | -5.8205574 |
| GAB3 | 0.11502199 | 2.43194124 | 1.750023632 | 0.081311 | 0.10553 | -5.82066327 |
| EFNA3 | -0.145517154 | 2.34855962 | -1.749851386 | 0.081341 | 0.10556 | -5.82096104 |
| RABGGT | -0.097390644 | 4.69181667 | -1.749296459 | 0.081437 | 0.10568 | -5.82192021 |
| NPHP3 | -0.138777748 | 2.2806589 | -1.749287713 | 0.081439 | 0.10568 | -5.82193532 |
| FBXO21 | -0.159808151 | 5.27895849 | -1.748044992 | 0.081654 | 0.10595 | -5.82408222 |
| CHST5 | -0.025318454 | 0.1319024 | -1.748002548 | 0.081661 | 0.10595 | -5.82415552 |
| DOK5 | -0.214858804 | 2.13994194 | -1.747848644 | 0.081688 | 0.10597 | -5.82442129 |
| DYNC1LI | -0.213966522 | 4.94884534 | -1.747170654 | 0.081806 | 0.10612 | -5.82559181 |
| SLC13A4 | -0.067430104 | 0.46665445 | -1.746644143 | 0.081897 | 0.10623 | -5.82650051 |
| ZNF26 | -0.072348864 | 1.50176308 | -1.746217266 | 0.081972 | 0.10632 | -5.82723705 |
| TMEM13 | -0.133283454 | 3.8689694 | -1.746078812 | 0.081996 | 0.10634 | -5.8274759 |
| BAG5 | -0.128984218 | 5.42460791 | -1.745392804 | 0.082115 | 0.10649 | -5.82865909 |

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| SPAG17 | -0.115570832 | 0.73724881 | -1.743343343 | 0.082473 | 0.10694 | -5.83219119 |
| NACA2 | -0.089762217 | 0.76954682 | -1.742983047 | 0.082536 | 0.10702 | -5.83281172 |
| CYP27C | 0.045399041 | 0.12988185 | 1.742923985 | 0.082547 | 0.10702 | -5.83291343 |
| CDKL4 | -0.05953068 | 0.17037311 | -1.741853266 | 0.082734 | 0.10726 | -5.83475669 |
| XKR9 | -0.099181913 | 0.63431128 | -1.741797406 | 0.082744 | 0.10726 | -5.83485283 |
| KRT3 | -0.077226955 | 0.15816602 | -1.741446813 | 0.082805 | 0.10733 | -5.83545612 |
| PLAGL1 | 0.118472823 | 1.40153444 | 1.741042126 | 0.082877 | 0.10742 | -5.83615235 |
| OIP5 | -0.081315323 | 0.96843931 | -1.740820373 | 0.082915 | 0.10746 | -5.83653379 |
| WEE1 | -0.213810658 | 4.12446989 | -1.739359191 | 0.083173 | 0.10778 | -5.83904601 |
| MKX | 0.284333035 | 1.61198602 | 1.738952596 | 0.083244 | 0.10787 | -5.8397447 |
| CSDC2 | 0.119684259 | 0.44896254 | 1.738591568 | 0.083308 | 0.10794 | -5.84036496 |
| RPL36 | -0.145368615 | 8.68607913 | -1.738560709 | 0.083313 | 0.10794 | -5.84041797 |
| LIME1 | -0.15081708 | 1.81867332 | -1.737894638 | 0.083431 | 0.10809 | -5.84156195 |
| C1QL3 | -0.150243487 | 1.18657091 | -1.737850088 | 0.083439 | 0.10809 | -5.84163845 |
| LUC7L | -0.166783573 | 4.51944368 | -1.737703921 | 0.083465 | 0.10811 | -5.84188943 |
| CEACAM | 0.054175473 | 0.08508875 | 1.737460069 | 0.083508 | 0.10816 | -5.84230809 |
| PHF24 | 0.059898932 | 0.26191254 | 1.737328425 | 0.083531 | 0.10818 | -5.84253408 |
| KLK5 | 0.308734571 | 1.06013111 | 1.736285932 | 0.083715 | 0.10841 | -5.84432314 |
| PITPNM2 | -0.112113117 | 2.02286112 | -1.73556538 | 0.083843 | 0.10857 | -5.84555909 |
| DLG5 | -0.222665608 | 4.356739 | -1.735382416 | 0.083875 | 0.1086 | -5.84587285 |
| PEG10 | 0.268800603 | 3.73742707 | 1.735149612 | 0.083917 | 0.10865 | -5.84627202 |
| CCND1 | 0.215202279 | 8.1201534 | 1.735068497 | 0.083931 | 0.10866 | -5.8464111 |
| ESPL1 | 0.069120806 | 0.51976595 | 1.734060964 | 0.08411 | 0.10888 | -5.84813798 |
| NWD2 | -0.124169436 | 0.16385003 | -1.733873025 | 0.084143 | 0.10892 | -5.84845999 |
| CBX3 | -0.114074771 | 6.34708419 | -1.733166559 | 0.084269 | 0.10907 | -5.84967014 |
| DNPEP | -0.090103651 | 4.56780356 | -1.732662951 | 0.084359 | 0.10918 | -5.85053251 |
| EGFL8 | -0.113123532 | 1.04905643 | -1.732449077 | 0.084397 | 0.10922 | -5.85089867 |
| TAS2R5 | 0.118127616 | 0.96498607 | 1.731976277 | 0.084481 | 0.10932 | -5.85170796 |
| PRH2 | -0.056958951 | 0.40562951 | -1.731400051 | 0.084584 | 0.10945 | -5.852694 |
| RPS6KA | -0.100524045 | 4.67489629 | -1.730767935 | 0.084697 | 0.10958 | -5.8537753 |
| SBSN | -0.247651842 | 0.69509563 | -1.730708091 | 0.084708 | 0.10959 | -5.85387765 |
| PTCRA | 0.09140781 | 0.46766086 | 1.730218239 | 0.084795 | 0.1097 | -5.8547153 |
| ANGPTL | 0.06885201 | 0.61988729 | 1.729452465 | 0.084933 | 0.10986 | -5.85602432 |
| RACK1 | -0.103367018 | 9.04544095 | -1.729442889 | 0.084934 | 0.10986 | -5.85604069 |
| ATAD2 | 0.150231654 | 3.29942959 | 1.729231999 | 0.084972 | 0.1099 | -5.85640108 |
| VAX2 | -0.090033035 | 0.53062981 | -1.729175831 | 0.084982 | 0.1099 | -5.85649706 |
| SLC39A2 | -0.065835241 | 0.12385866 | -1.728764718 | 0.085056 | 0.10999 | -5.85719948 |
| LILRA4 | 0.1042767 | 0.39647921 | 1.728589102 | 0.085087 | 0.11002 | -5.85749948 |
| CHD1 | 0.12780306 | 3.46208852 | 1.72839229 | 0.085123 | 0.11006 | -5.85783565 |
| NUTM1 | 0.012284925 | 0.02717117 | 1.728373718 | 0.085126 | 0.11006 | -5.85786738 |

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| CCRL2 | -0.116920853 | 1.54160476 | -1.728286947 | 0.085142 | 0.11007 | -5.85801558 |
| TWIST2 | 0.143914928 | 0.84510831 | 1.728247974 | 0.085149 | 0.11007 | -5.85808214 |
| GXYLT1 | -0.13276038 | 3.90352542 | -1.727871084 | 0.085216 | 0.11015 | -5.85872575 |
| TBC1D12 | -0.115535348 | 2.54522517 | -1.727658374 | 0.085254 | 0.11018 | -5.85908893 |
| KIF4A | 0.113227411 | 1.05646798 | 1.727647321 | 0.085256 | 0.11018 | -5.8591078 |
| ENTPD7 | -0.13113024 | 2.18606309 | -1.727640201 | 0.085258 | 0.11018 | -5.85911996 |
| VSTM1 | 0.074484536 | 0.24115084 | 1.727486287 | 0.085285 | 0.1102 | -5.85938272 |
| SUPT20H | -0.117461956 | 3.65722365 | -1.727368987 | 0.085306 | 0.11022 | -5.85958296 |
| SHFL | 0.12190794 | 4.43525764 | 1.727071564 | 0.08536 | 0.11028 | -5.86009063 |
| ZNF445 | -0.110763277 | 2.64195371 | -1.726280936 | 0.085502 | 0.11045 | -5.86143972 |
| ANKMY1 | -0.091755951 | 2.17519145 | -1.726270822 | 0.085504 | 0.11045 | -5.86145698 |
| SNCB | -0.066350952 | 0.09674152 | -1.726168651 | 0.085523 | 0.11047 | -5.86163127 |
| PPP1R3B | -0.198420861 | 5.41559551 | -1.725508692 | 0.085642 | 0.11061 | -5.86275686 |
| ACER1 | -0.038845335 | 0.18089381 | -1.724735961 | 0.085781 | 0.11078 | -5.86407426 |
| XAF1 | 0.165064686 | 1.56722417 | 1.724073568 | 0.085901 | 0.11093 | -5.86520309 |
| SLC15A4 | 0.126997783 | 4.25817095 | 1.723315612 | 0.086038 | 0.1111 | -5.86649425 |
| MED1 | -0.141649236 | 3.87670373 | -1.723169748 | 0.086064 | 0.11112 | -5.86674266 |
| SNX25 | -0.226317178 | 5.37460005 | -1.722252508 | 0.086231 | 0.11133 | -5.86830429 |
| PIKFYVE | -0.143347727 | 3.51071664 | -1.721520175 | 0.086363 | 0.11149 | -5.86955052 |
| FAM171A | -0.150241651 | 3.72070117 | -1.720687687 | 0.086515 | 0.11168 | -5.87096656 |
| RIMS1 | -0.01086063 | 0.03711264 | -1.720581245 | 0.086534 | 0.1117 | -5.87114757 |
| SLC22A1 | -0.081048788 | 0.74723096 | -1.720223814 | 0.086599 | 0.11177 | -5.87175531 |
| MOGAT1 | -0.030409707 | 0.09261933 | -1.720218958 | 0.0866 | 0.11177 | -5.87176356 |
| SEMA5A | 0.172130831 | 2.05750244 | 1.720162095 | 0.08661 | 0.11177 | -5.87186024 |
| RAB44 | 0.022549708 | 0.1075443 | 1.719423825 | 0.086745 | 0.11194 | -5.87311508 |
| SLC36A2 | 0.016712517 | 0.02456113 | 1.71883276 | 0.086853 | 0.11207 | -5.87411934 |
| TMEM74 | -0.161518025 | 1.93545601 | -1.718190759 | 0.08697 | 0.11221 | -5.87520976 |
| SHMT2 | -0.14480082 | 5.12222196 | -1.718003486 | 0.087004 | 0.11224 | -5.87552777 |
| SCHIP1 | -0.03760981 | 0.24641954 | -1.71749693 | 0.087097 | 0.11236 | -5.87638776 |
| RALGPS | 0.152521626 | 2.86575062 | 1.717399225 | 0.087115 | 0.11237 | -5.87655361 |
| HELZ2 | 0.145280791 | 3.30311316 | 1.717312012 | 0.08713 | 0.11238 | -5.87670164 |
| TTLL6 | -0.015380934 | 0.0307399 | -1.717091621 | 0.087171 | 0.11243 | -5.87707569 |
| FRMD3 | -0.351729117 | 5.75127568 | -1.716972989 | 0.087193 | 0.11244 | -5.87727702 |
| GFRA4 | -0.127079322 | 0.75984288 | -1.716571528 | 0.087266 | 0.11253 | -5.87795821 |
| TRPV5 | -0.019904797 | 0.02994182 | -1.716354661 | 0.087306 | 0.11257 | -5.87832613 |
| EFNB3 | -0.180414555 | 1.45098013 | -1.716330552 | 0.08731 | 0.11257 | -5.87836703 |
| TSPO | -0.164440395 | 7.16029838 | -1.716085592 | 0.087355 | 0.11262 | -5.87878254 |
| CHRNE | 0.122384295 | 1.13475561 | 1.715906917 | 0.087388 | 0.11265 | -5.87908558 |
| ADK | -0.139351533 | 5.85958852 | -1.715380107 | 0.087484 | 0.11277 | -5.87997889 |
| SFI1 | 0.107405913 | 2.98686385 | 1.714884099 | 0.087576 | 0.11288 | -5.88081973 |

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| CDH20 | 0.090856739 | 0.37018903 | 1.714361233 | 0.087672 | 0.11299 | -5.88170584 |
| PCDHGC | 0.234826284 | 2.55327145 | 1.71430877 | 0.087681 | 0.113 | -5.88179473 |
| SHISA6 | -0.298168317 | 1.60923786 | -1.713876834 | 0.087761 | 0.11309 | -5.88252652 |
| IL1A | 0.080234079 | 0.3459917 | 1.713560656 | 0.087819 | 0.11316 | -5.88306208 |
| ADCY3 | -0.145196984 | 2.85283449 | -1.712560052 | 0.088003 | 0.11339 | -5.88475631 |
| S100A16 | 0.139399068 | 7.44767481 | 1.71244974 | 0.088024 | 0.1134 | -5.88494303 |
| CRYBB1 | -0.102929459 | 0.92200086 | -1.712355594 | 0.088041 | 0.11342 | -5.88510238 |
| GINS1 | 0.110330464 | 1.62911248 | 1.712203051 | 0.088069 | 0.11344 | -5.88536055 |
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| HHLA2 | -0.021092439 | 0.10045889 | -1.711580432 | 0.088184 | 0.11358 | -5.88641407 |
| MTA1 | -0.114107082 | 4.64736983 | -1.711475303 | 0.088204 | 0.11359 | -5.88659192 |
| METTL27 | -0.229296881 | 3.41766472 | -1.71099105 | 0.088293 | 0.1137 | -5.88741101 |
| GMCL1 | -0.129910956 | 4.11579006 | -1.710553813 | 0.088374 | 0.1138 | -5.88815037 |
| LPIN1 | -0.111847189 | 3.23351502 | -1.709981098 | 0.08848 | 0.11392 | -5.88911856 |
| ZNF880 | -0.134624088 | 3.64607802 | -1.709524686 | 0.088565 | 0.11402 | -5.8898899 |
| ERF | -0.136887349 | 5.47267601 | -1.708868769 | 0.088686 | 0.11417 | -5.89099805 |
| ZER1 | -0.099553274 | 6.25668869 | -1.708487086 | 0.088757 | 0.11425 | -5.89164271 |
| CLCA2 | 0.124183673 | 0.28692622 | 1.707934904 | 0.08886 | 0.11438 | -5.89257508 |
| TM4SF2( | -0.010977727 | 0.02941716 | -1.707318863 | 0.088974 | 0.11452 | -5.89361493 |
| MCM7 | -0.132944772 | 5.71850887 | -1.706670103 | 0.089095 | 0.11466 | -5.89470961 |
| POC1B-( | -0.015774236 | 0.12756354 | -1.70651734 | 0.089123 | 0.11469 | -5.89496732 |
| CHST15 | 0.19218265 | 5.08260203 | 1.706393927 | 0.089146 | 0.11471 | -5.89517549 |
| MRGPRF | 0.154335881 | 1.38586242 | 1.706065168 | 0.089208 | 0.11478 | -5.89572998 |
| PCDHB8 | -0.113390012 | 0.46463639 | -1.706030788 | 0.089214 | 0.11478 | -5.89578796 |
| GFRA3 | -0.064420005 | 0.20837292 | -1.705824037 | 0.089253 | 0.11482 | -5.89613661 |
| KHDC1L | -0.055197606 | 0.16539626 | -1.705695846 | 0.089277 | 0.11484 | -5.89635276 |
| MEOX1 | 0.165809148 | 1.18074665 | 1.70486342 | 0.089432 | 0.11504 | -5.89775597 |
| TPR | -0.143151062 | 5.01079296 | -1.704189255 | 0.089558 | 0.11519 | -5.89889192 |
| BLM | 0.080734292 | 1.07115359 | 1.703704207 | 0.089649 | 0.1153 | -5.89970893 |
| LHX6 | -0.11647545 | 1.35110585 | -1.703286218 | 0.089727 | 0.11539 | -5.90041281 |
| GCGR | -0.2266793 | 0.46271728 | -1.701451478 | 0.090071 | 0.11582 | -5.90350046 |
| CCDC18 | -0.155021755 | 1.19690856 | -1.700641918 | 0.090224 | 0.11601 | -5.90486181 |
| ZNF805 | 0.122207757 | 1.66908762 | 1.700539278 | 0.090243 | 0.11603 | -5.90503437 |
| FGF18 | 0.156973712 | 1.5019549 | 1.700212242 | 0.090304 | 0.1161 | -5.9055841 |
| SS18L1 | -0.106694025 | 3.52427742 | -1.700172661 | 0.090312 | 0.1161 | -5.90565063 |
| ENOX2 | -0.12137144 | 3.20631871 | -1.700064472 | 0.090332 | 0.11611 | -5.90583246 |
| FGD3 | -0.173979809 | 2.44352185 | -1.699259146 | 0.090484 | 0.1163 | -5.90718562 |
| FOXK1 | 0.124406169 | 3.14796906 | 1.698942672 | 0.090544 | 0.11637 | -5.90771721 |
| TSSK4 | -0.134009906 | 1.32229777 | -1.698365986 | 0.090653 | 0.1165 | -5.90868563 |
| RNF19A | -0.136730561 | 4.26038252 | -1.698323098 | 0.090661 | 0.1165 | -5.90875764 |

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| FCGR1B | -0.099171954 | 0.82733483 | -1.697679541 | 0.090782 | 0.11665 | -5.90983795 |
| CCR10 | -0.104342198 | 0.95133957 | -1.697594545 | 0.090798 | 0.11665 | -5.9099806 |
| ZFHX2 | 0.092883593 | 1.4758393 | 1.697587985 | 0.0908 | 0.11665 | -5.90999161 |
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| ASCC3 | 0.156047774 | 3.60076236 | 1.696234275 | 0.091056 | 0.11696 | -5.9122626 |
| OAZ3 | -0.110601289 | 2.03228104 | -1.696149549 | 0.091072 | 0.11698 | -5.91240467 |
| LONRF3 | -0.196343764 | 2.6472157 | -1.695536217 | 0.091188 | 0.11712 | -5.91343297 |
| DPYD | 0.201442865 | 4.04313851 | 1.695294938 | 0.091234 | 0.11717 | -5.91383739 |
| CPA5 | -0.052205873 | 0.18082675 | -1.694282922 | 0.091427 | 0.11741 | -5.91553308 |
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| POLR3D | -0.111628572 | 3.77074805 | -1.693726762 | 0.091532 | 0.11752 | -5.91646453 |
| LRRC19 | -0.033347157 | 0.19000429 | -1.693352723 | 0.091604 | 0.11761 | -5.9170908 |
| TRIM67 | -0.026170128 | 0.06235615 | -1.692804903 | 0.091708 | 0.11773 | -5.91800779 |
| CLCN6 | -0.119015196 | 3.39634522 | -1.692340803 | 0.091797 | 0.11784 | -5.91878442 |
| IQCB1 | -0.121025909 | 4.20821602 | -1.692068936 | 0.091849 | 0.11789 | -5.91923927 |
| ENTPD3 | -0.230368382 | 2.85679741 | -1.691992051 | 0.091863 | 0.1179 | -5.91936789 |
| MAGEC3 | 0.069711437 | 0.29313264 | 1.691586884 | 0.091941 | 0.11799 | -5.9200456 |
| HPSE2 | 0.123591378 | 0.64510755 | 1.691143823 | 0.092025 | 0.11809 | -5.9207865 |
| UBQLNL | -0.0754849 | 0.76725429 | -1.691126174 | 0.092029 | 0.11809 | -5.92081601 |
| WHRN | -0.120441238 | 2.56919652 | -1.690875401 | 0.092077 | 0.11814 | -5.92123528 |
| CHST4 | 0.040817081 | 0.15675752 | 1.690599607 | 0.092129 | 0.1182 | -5.9216963 |
| ASF1B | 0.191132123 | 3.2103072 | 1.690334879 | 0.09218 | 0.11826 | -5.92213876 |
| PLSCR3 | 0.063025346 | 0.70215499 | 1.689136759 | 0.09241 | 0.11854 | -5.92414042 |
| TMEM21 | 0.15707471 | 2.16500962 | 1.689091353 | 0.092418 | 0.11854 | -5.92421625 |
| ZC3H12D | 0.115889864 | 1.06139935 | 1.688890397 | 0.092457 | 0.11858 | -5.92455184 |
| EGLN3 | 0.192737334 | 1.38737249 | 1.688787295 | 0.092477 | 0.1186 | -5.924724 |
| CCDC27 | -0.073444638 | 0.44236242 | -1.688515084 | 0.092529 | 0.11866 | -5.92517849 |
| CIART | 0.213383763 | 3.91873515 | 1.688024131 | 0.092623 | 0.11877 | -5.92599801 |
| SLC3A1 | -0.029500299 | 0.14725441 | -1.686118085 | 0.09299 | 0.11923 | -5.92917747 |
| OSBPL7 | -0.107475058 | 3.3316941 | -1.685437011 | 0.093122 | 0.11939 | -5.93031271 |
| POC1B | -0.097832286 | 2.83152428 | -1.684872387 | 0.093231 | 0.11952 | -5.93125351 |
| TAPBP | 0.099921626 | 7.11325014 | 1.684729655 | 0.093258 | 0.11955 | -5.93149128 |
| PCYT1B | -0.062164319 | 0.11965956 | -1.68468632 | 0.093267 | 0.11955 | -5.93156347 |
| SEC24C | -0.241736873 | 4.53825415 | -1.6846046 | 0.093283 | 0.11956 | -5.9316996 |
| ASXL1 | -0.120527053 | 4.38576152 | -1.682875267 | 0.093617 | 0.11998 | -5.93457871 |
| ZBTB9 | -0.015435333 | 0.0548771 | -1.682632542 | 0.093664 | 0.12003 | -5.93498259 |
| PLA2G4D | -0.04269314 | 0.06184413 | -1.681697791 | 0.093846 | 0.12026 | -5.9365374 |
| EPHX4 | 0.203963264 | 2.94233675 | 1.680849367 | 0.094011 | 0.12046 | -5.93794789 |
| KCNA3 | 0.139330269 | 0.76281705 | 1.679413143 | 0.09429 | 0.12081 | -5.940334 |
| RC3H2 | -0.134490917 | 3.63710553 | -1.679243038 | 0.094324 | 0.12084 | -5.94061648 |

| | | | | | |
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| CASP7 | -0.115987829 | 3.93844324 | -1.676850432 | 0.094791 | 0.12142 | -5.94458668 |
| MYBPHL | 0.151631124 | 0.8114695 | 1.676845649 | 0.094792 | 0.12142 | -5.94459461 |
| DEPP1 | 0.215264133 | 5.72480902 | 1.676462548 | 0.094867 | 0.12151 | -5.9452298 |
| IGFBP2 | -0.206843325 | 4.29202462 | -1.676444965 | 0.094871 | 0.12151 | -5.94525895 |
| CCP110 | -0.115347584 | 2.48594461 | -1.675990944 | 0.09496 | 0.12161 | -5.94601154 |
| CCDC62 | 0.035225285 | 0.25713744 | 1.67530593 | 0.095094 | 0.12177 | -5.94714663 |
| AHDC1 | -0.132340812 | 5.02231274 | -1.675275156 | 0.0951 | 0.12177 | -5.94719762 |
| CAV1 | 0.283642847 | 7.21572517 | 1.674366853 | 0.095279 | 0.12199 | -5.94870199 |
| ZFHX3 | -0.147024268 | 3.91000739 | -1.673922495 | 0.095366 | 0.12209 | -5.94943766 |
| MACROD | 0.281462483 | 2.27257948 | 1.673711084 | 0.095408 | 0.12214 | -5.9497876 |
| SUGCT | 0.163691453 | 1.91116557 | 1.673268877 | 0.095495 | 0.12224 | -5.95051944 |
| ZNF117 | 0.132216497 | 2.76335929 | 1.673145277 | 0.095519 | 0.12226 | -5.95072395 |
| UCP1 | -0.035171708 | 0.15080213 | -1.673089071 | 0.09553 | 0.12227 | -5.95081695 |
| ARSB | -0.117762677 | 2.74189268 | -1.672316276 | 0.095683 | 0.12245 | -5.95209531 |
| LRRC3 | -0.105486658 | 0.96635663 | -1.671863278 | 0.095772 | 0.12256 | -5.95284438 |
| TGFBI | 0.267759867 | 4.82943192 | 1.670883229 | 0.095966 | 0.12279 | -5.95446431 |
| RLN1 | -0.078142758 | 0.76503998 | -1.670882701 | 0.095966 | 0.12279 | -5.95446519 |
| LRAT | -0.142714801 | 2.07209352 | -1.670777907 | 0.095987 | 0.12281 | -5.95463835 |
| QSOX2 | -0.163283114 | 4.31170862 | -1.670277162 | 0.096086 | 0.12292 | -5.95546562 |
| FLT3LG | 0.104423161 | 1.68105923 | 1.668673935 | 0.096403 | 0.12332 | -5.95811266 |
| CTRB2 | -0.028767717 | 0.07600598 | -1.668145158 | 0.096508 | 0.12344 | -5.95898517 |
| TNFAIP3 | 0.203678681 | 3.44396551 | 1.667951081 | 0.096547 | 0.12349 | -5.95930533 |
| C4A | 0.286352833 | 4.01150263 | 1.666087908 | 0.096918 | 0.12395 | -5.96237714 |
| PDLIM1 | 0.209467053 | 8.64537349 | 1.664414566 | 0.097252 | 0.12437 | -5.9651331 |
| WNT1 | 0.048258383 | 0.17863052 | 1.664300839 | 0.097275 | 0.12439 | -5.96532031 |
| RIF1 | -0.126286014 | 3.04923668 | -1.664148517 | 0.097305 | 0.12442 | -5.96557103 |
| C1orf21 | -0.156555645 | 3.00796221 | -1.663882789 | 0.097358 | 0.12448 | -5.96600836 |
| MGAT4C | 0.205936878 | 2.86755912 | 1.663683525 | 0.097398 | 0.12451 | -5.96633626 |
| ANKFN1 | -0.04349238 | 0.05200041 | -1.663676775 | 0.0974 | 0.12451 | -5.96634737 |
| HRH2 | 0.090609076 | 0.42851324 | 1.663605362 | 0.097414 | 0.12452 | -5.96646488 |
| CTF1 | 0.223402117 | 4.86394682 | 1.663392458 | 0.097457 | 0.12456 | -5.96681516 |
| NXPE3 | -0.135286285 | 2.7698749 | -1.663263054 | 0.097482 | 0.12459 | -5.96702805 |
| UBE2L5 | -0.068709127 | 0.61459556 | -1.663179099 | 0.097499 | 0.1246 | -5.96716616 |
| HIP1R | -0.111271596 | 4.75571781 | -1.662560225 | 0.097623 | 0.12475 | -5.96818401 |
| ADAMTS | -0.091467952 | 0.41472922 | -1.66249283 | 0.097637 | 0.12476 | -5.96829483 |
| CEP295N | 0.021950748 | 0.07517508 | 1.661038145 | 0.097929 | 0.12512 | -5.97068576 |
| A4GNT | -0.025442474 | 0.10703601 | -1.660776422 | 0.097982 | 0.12518 | -5.97111571 |
| ZNF486 | 0.288619391 | 5.55504092 | 1.660360806 | 0.098065 | 0.12528 | -5.97179834 |
| ZNF532 | 0.145528689 | 4.28369875 | 1.659864489 | 0.098165 | 0.12539 | -5.9726133 |
| OR13C5 | -0.025645829 | 0.09561037 | -1.658694315 | 0.098401 | 0.12569 | -5.97453379 |

| | | | | | | |
|---|---|---|---|---|---|---|
| NMD3 | -0.111873647 | 4.6091628 | -1.658641077 | 0.098412 | 0.12569 | -5.97462114 |
| KDM5B | 0.142750448 | 4.03287954 | 1.658384488 | 0.098464 | 0.12575 | -5.97504206 |
| TMF1 | -0.149038394 | 4.64485235 | -1.658197863 | 0.098501 | 0.12579 | -5.97534817 |
| MSS51 | 0.103424548 | 1.26944531 | 1.657987864 | 0.098544 | 0.12583 | -5.97569258 |
| ATP11A | 0.26890467 | 5.20177571 | 1.65793794 | 0.098554 | 0.12583 | -5.97577445 |
| SCRN1 | 0.181943116 | 4.90955467 | 1.657910501 | 0.098559 | 0.12583 | -5.97581945 |
| C10orf95 | 0.18953476 | 2.99210096 | 1.657875858 | 0.098566 | 0.12583 | -5.97587626 |
| MAP3K1 | -0.098811381 | 4.79541568 | -1.657657084 | 0.098611 | 0.12588 | -5.97623499 |
| IPO5 | -0.135656663 | 5.4642485 | -1.657474819 | 0.098647 | 0.12591 | -5.97653382 |
| NAALAD | -0.119979002 | 1.47666403 | -1.657384874 | 0.098666 | 0.12593 | -5.97668128 |
| CDCA7 | -0.136494049 | 1.23320351 | -1.656729137 | 0.098798 | 0.12609 | -5.97775607 |
| COL20A | -0.01223548 | 0.02761691 | -1.656399179 | 0.098865 | 0.12616 | -5.97829673 |
| EFCAB1( | 0.063638294 | 0.64863305 | 1.655932416 | 0.09896 | 0.12628 | -5.97906138 |
| PCSK1N | 0.480038515 | 4.12106303 | 1.655529888 | 0.099041 | 0.12636 | -5.97972062 |
| TTLL3 | 0.163314985 | 2.64003895 | 1.655527996 | 0.099042 | 0.12636 | -5.97972372 |
| RAP2A | 0.139346275 | 4.24659736 | 1.65535945 | 0.099076 | 0.1264 | -5.97999971 |
| PKD1 | -0.105081112 | 2.86251004 | -1.654908063 | 0.099168 | 0.1265 | -5.98073872 |
| RAD54L | -0.088427521 | 1.16734032 | -1.654811554 | 0.099187 | 0.12652 | -5.9808967 |
| HOXC10 | 0.114163082 | 0.15871794 | 1.654649252 | 0.09922 | 0.12655 | -5.98116235 |
| EPOR | -0.229830756 | 5.62907153 | -1.654520361 | 0.099246 | 0.12657 | -5.98137331 |
| ESRP2 | -0.145388032 | 4.41536925 | -1.654110162 | 0.09933 | 0.12667 | -5.98204455 |
| CAPZA1 | -0.111024917 | 6.38302655 | -1.653731086 | 0.099407 | 0.12676 | -5.98266473 |
| FOXH1 | -0.031064267 | 0.12783326 | -1.653457027 | 0.099463 | 0.12682 | -5.98311301 |
| NR1I2 | -0.039796515 | 0.31492862 | -1.653388497 | 0.099476 | 0.12683 | -5.98322509 |
| BTBD10 | -0.118802388 | 4.42787759 | -1.652172935 | 0.099724 | 0.12714 | -5.98521243 |
| CREBBP | -0.132308356 | 4.48968496 | -1.652115874 | 0.099736 | 0.12714 | -5.98530568 |
| CA6 | 0.024108083 | 0.06343847 | 1.651801565 | 0.0998 | 0.12721 | -5.9858193 |
| PDE6A | 0.020114797 | 0.07210986 | 1.651367709 | 0.099889 | 0.12732 | -5.98652811 |
| TAS2R1( | -0.056689936 | 0.34999108 | -1.651149998 | 0.099933 | 0.12736 | -5.98688373 |
| ACSBG2 | 0.019141926 | 0.10516811 | 1.649981255 | 0.100172 | 0.12766 | -5.98879201 |
| TSKU | -0.198314233 | 5.40261667 | -1.649908939 | 0.100187 | 0.12767 | -5.98891005 |
| CARD6 | -0.122246073 | 3.45704943 | -1.649861517 | 0.100197 | 0.12767 | -5.98898745 |
| CENPK | 0.106263251 | 1.26234124 | 1.649647303 | 0.10024 | 0.12772 | -5.98933704 |
| ATP6V1E | -0.056399762 | 0.31120811 | -1.649308656 | 0.10031 | 0.1278 | -5.98988961 |
| NRBP2 | 0.157083565 | 4.473735 | 1.648806623 | 0.100413 | 0.12792 | -5.99070858 |
| PPP4R1 | -0.129598388 | 4.85848254 | -1.648650825 | 0.100445 | 0.12795 | -5.99096269 |
| HOXA5 | -0.082441647 | 0.61691006 | -1.648315978 | 0.100513 | 0.12803 | -5.99150874 |
| CYB5RL | -0.078954452 | 1.07675809 | -1.648127398 | 0.100552 | 0.12807 | -5.99181622 |
| ADAM28 | 0.175326906 | 1.2501387 | 1.646888412 | 0.100807 | 0.12838 | -5.99383553 |
| ATP6V0/ | -0.070145911 | 0.11944507 | -1.646844289 | 0.100816 | 0.12838 | -5.99390741 |

| | | | | | | |
|---|---|---|---|---|---|---|
| RAB8A | -0.078021171 | 4.11618532 | -1.645592279 | 0.101074 | 0.1287 | -5.99594638 |
| FBXO2 | 0.23624606 | 5.0452645 | 1.645578443 | 0.101077 | 0.1287 | -5.9959689 |
| SRRM3 | -0.145958879 | 1.6948981 | -1.645391357 | 0.101115 | 0.12874 | -5.99627345 |
| GDPD3 | -0.127695528 | 1.80099266 | -1.645201486 | 0.101154 | 0.12878 | -5.9965825 |
| EEF1G | -0.101366195 | 0.81774517 | -1.644956398 | 0.101205 | 0.12883 | -5.99698137 |
| ATP1A2 | -0.152815352 | 1.08658027 | -1.644733014 | 0.101251 | 0.12888 | -5.99734486 |
| PCDH20 | 0.021242613 | 0.0524623 | 1.644660482 | 0.101266 | 0.12889 | -5.99746288 |
| STXBP5 | -0.125392661 | 2.80281716 | -1.644163266 | 0.101369 | 0.12901 | -5.99827175 |
| KIF2C | -0.127797791 | 1.8682361 | -1.643736497 | 0.101457 | 0.12911 | -5.99896584 |
| LCORL | -0.091283351 | 1.9547358 | -1.643499552 | 0.101506 | 0.12917 | -5.99935112 |
| EPHA1 | -0.15417456 | 3.28815526 | -1.643060541 | 0.101597 | 0.12927 | -6.00006482 |
| CAVIN3 | -0.177636375 | 3.94303715 | -1.641194008 | 0.101984 | 0.12975 | -6.00309718 |
| GABRE | 0.206140453 | 1.93338428 | 1.641190323 | 0.101985 | 0.12975 | -6.00310316 |
| TMX3 | -0.121199779 | 4.23115156 | -1.640781674 | 0.10207 | 0.12984 | -6.0037666 |
| TRAF1 | 0.14683661 | 3.08430564 | 1.640681398 | 0.102091 | 0.12986 | -6.00392937 |
| SNCAIP | 0.121474731 | 0.66759449 | 1.640456412 | 0.102137 | 0.12991 | -6.00429454 |
| ZNF99 | -0.032105032 | 0.16964619 | -1.638628533 | 0.102518 | 0.13038 | -6.00725953 |
| ZNF106 | -0.149670888 | 4.17422913 | -1.638026371 | 0.102644 | 0.13053 | -6.00823559 |
| DPY19L4 | -0.140944736 | 4.27225568 | -1.637354317 | 0.102784 | 0.1307 | -6.00932451 |
| SMAD3 | -0.160105523 | 5.12369574 | -1.637092513 | 0.102839 | 0.13076 | -6.00974859 |
| GATD3A | -0.200023957 | 1.05662632 | -1.63675406 | 0.10291 | 0.13084 | -6.01029674 |
| CGN | 0.200485479 | 3.98969072 | 1.636241074 | 0.103017 | 0.13097 | -6.01112733 |
| ASIC4 | 0.013487123 | 0.02366952 | 1.636197627 | 0.103026 | 0.13097 | -6.01119767 |
| CCDC19 | 0.029743473 | 0.09677311 | 1.635164516 | 0.103242 | 0.13124 | -6.0128696 |
| USP35 | -0.118282802 | 3.12437181 | -1.634721388 | 0.103335 | 0.13135 | -6.01358642 |
| PROCR | -0.159523188 | 4.49321972 | -1.634364258 | 0.10341 | 0.13143 | -6.01416399 |
| LMCD1 | 0.138447688 | 2.12480944 | 1.634088078 | 0.103468 | 0.13149 | -6.01461056 |
| CMTM8 | -0.149144569 | 5.43489264 | -1.633955028 | 0.103496 | 0.13152 | -6.01482566 |
| CATSPE | -0.018971769 | 0.03950199 | -1.633871972 | 0.103514 | 0.13153 | -6.01495994 |
| CPLANE | 0.15308443 | 2.90834441 | 1.633723337 | 0.103545 | 0.13156 | -6.01520021 |
| HBG2 | -0.040210333 | 0.1765865 | -1.6331616 | 0.103663 | 0.1317 | -6.01610808 |
| FBXO11 | -0.173649885 | 3.59417438 | -1.632105029 | 0.103886 | 0.13198 | -6.01781486 |
| CACNA1 | -0.081196655 | 0.42829391 | -1.631782556 | 0.103954 | 0.13205 | -6.01833556 |
| BEND4 | 0.023305248 | 0.04552316 | 1.631702481 | 0.103971 | 0.13206 | -6.01846485 |
| DSG3 | 0.040429105 | 0.06828255 | 1.631176686 | 0.104082 | 0.13219 | -6.01931361 |
| PIP5K1A | -0.13913272 | 4.85825565 | -1.630840604 | 0.104153 | 0.13227 | -6.01985598 |
| TTK | -0.083267491 | 0.93647093 | -1.630657369 | 0.104191 | 0.13231 | -6.02015165 |
| TUFT1 | -0.126167113 | 3.62951554 | -1.630343278 | 0.104258 | 0.13239 | -6.02065838 |
| CLK4 | -0.128834731 | 3.45548269 | -1.630288343 | 0.104269 | 0.13239 | -6.020747 |
| EIF4EBP | -0.118515027 | 5.90500967 | -1.630224406 | 0.104283 | 0.1324 | -6.02085013 |

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| PRSS53 | 0.055603277 | 0.46984898 | 1.629780791 | 0.104377 | 0.13251 | -6.02156562 |
| STK4 | 0.099434624 | 3.55208984 | 1.629272476 | 0.104484 | 0.13264 | -6.02238522 |
| ADGRA2 | -0.179902274 | 3.1779539 | -1.628525254 | 0.104642 | 0.13282 | -6.02358957 |
| TBX19 | -0.090601551 | 1.56135959 | -1.628523592 | 0.104643 | 0.13282 | -6.02359225 |
| SIX1 | -0.108620383 | 0.83640603 | -1.62773578 | 0.10481 | 0.13302 | -6.02486144 |
| ZNF670- | -0.013513139 | 0.06538328 | -1.626935682 | 0.10498 | 0.13323 | -6.02614981 |
| NTN4 | 0.169695055 | 3.30021924 | 1.626524971 | 0.105067 | 0.13333 | -6.02681092 |
| NCAPG | 0.102855761 | 0.8601369 | 1.626119341 | 0.105154 | 0.13343 | -6.0274637 |
| IFFO1 | -0.132656097 | 2.21839121 | -1.625541649 | 0.105277 | 0.13357 | -6.02839309 |
| CEBPD | -0.240394795 | 6.53446593 | -1.625167412 | 0.105356 | 0.13366 | -6.02899499 |
| DDR2 | -0.191774162 | 2.47795172 | -1.624809142 | 0.105433 | 0.13375 | -6.02957108 |
| DDX17 | -0.148941913 | 7.23649953 | -1.624302953 | 0.105541 | 0.13388 | -6.03038482 |
| CLDN8 | -0.268542686 | 4.25682476 | -1.624160165 | 0.105571 | 0.1339 | -6.03061432 |
| ADCY6 | -0.131654552 | 4.07130439 | -1.624142163 | 0.105575 | 0.1339 | -6.03064325 |
| CCNI2 | 0.093416108 | 1.07509191 | 1.624040262 | 0.105597 | 0.13392 | -6.03080701 |
| CHPT1 | -0.172729833 | 5.75990788 | -1.622836012 | 0.105854 | 0.13423 | -6.03274162 |
| WFDC13 | -0.026910294 | 0.07676105 | -1.622500455 | 0.105926 | 0.13432 | -6.03328044 |
| NFYA | -0.130771524 | 4.82950245 | -1.621825595 | 0.106071 | 0.13449 | -6.03436376 |
| PAPPA2 | -0.056914867 | 0.25358777 | -1.621088242 | 0.106229 | 0.13468 | -6.03554689 |
| SLC39A8 | -0.146034706 | 3.73761007 | -1.62096491 | 0.106255 | 0.1347 | -6.03574473 |
| LMF1 | -0.112581279 | 3.21701818 | -1.620768329 | 0.106297 | 0.13475 | -6.03606005 |
| ACAD11 | -0.050346096 | 0.51001002 | -1.620657444 | 0.106321 | 0.13477 | -6.03623789 |
| DOCK6 | -0.116249745 | 4.35915766 | -1.620346676 | 0.106388 | 0.13484 | -6.03673625 |
| CASP1 | 0.156363789 | 2.68691853 | 1.61950305 | 0.106569 | 0.13506 | -6.03808865 |
| SLC6A11 | -0.031583304 | 0.05407177 | -1.619257642 | 0.106622 | 0.13512 | -6.03848193 |
| TXLNG | -0.118715684 | 4.23321554 | -1.61914922 | 0.106645 | 0.13513 | -6.03865566 |
| NHLH2 | 0.016706062 | 0.02777379 | 1.619107793 | 0.106654 | 0.13513 | -6.03872204 |
| ARL8B | -0.109432713 | 6.7233041 | -1.619084213 | 0.106659 | 0.13513 | -6.03875982 |
| PTGS1 | 0.149056231 | 2.25399682 | 1.618311813 | 0.106826 | 0.13534 | -6.03999712 |
| PRG4 | 0.118536807 | 0.42484347 | 1.617201964 | 0.107065 | 0.13563 | -6.04177397 |
| PCM1 | -0.12324371 | 5.10852406 | -1.615832226 | 0.107361 | 0.13599 | -6.04396524 |
| RAB40AI | -0.019015824 | 0.07926288 | -1.615246485 | 0.107488 | 0.13614 | -6.04490174 |
| HIST1H1 | -0.046282593 | 0.1881886 | -1.61515889 | 0.107507 | 0.13616 | -6.04504176 |
| SLC46A2 | 0.024235262 | 0.11350632 | 1.614072061 | 0.107743 | 0.13645 | -6.04677844 |
| NLGN4X | 0.077348407 | 0.57023843 | 1.613434833 | 0.107881 | 0.13661 | -6.04779615 |
| SLC29A3 | -0.114937462 | 3.64892303 | -1.61265933 | 0.10805 | 0.13681 | -6.04903418 |
| DYNC1I2 | -0.129241492 | 5.64742548 | -1.610939229 | 0.108424 | 0.13728 | -6.05177808 |
| DACH1 | -0.053152341 | 0.34027029 | -1.610636664 | 0.10849 | 0.13735 | -6.05226044 |
| AMER1 | -0.103087065 | 1.68977333 | -1.609029024 | 0.108841 | 0.13779 | -6.05482188 |
| EGFR | 0.209838842 | 4.63389265 | 1.608789208 | 0.108894 | 0.13784 | -6.05520376 |

| ZNF331 | -0.144587434 | 3.61971568 | -1.608651499 | 0.108924 | 0.13787 | -6.05542303 |
|---|---|---|---|---|---|---|
| CMTM7 | 0.141809518 | 4.35263901 | 1.603940059 | 0.109959 | 0.13917 | -6.06291357 |
| MMS19 | -0.096212265 | 5.01023266 | -1.603818911 | 0.109986 | 0.13919 | -6.0631059 |
| ANKRD6 | -0.073123524 | 0.72169401 | -1.603790674 | 0.109992 | 0.13919 | -6.06315072 |
| BHLHA1! | -0.204870907 | 1.04459231 | -1.603594916 | 0.110035 | 0.13924 | -6.06346146 |
| EPS8 | 0.219412394 | 5.68364597 | 1.603503874 | 0.110055 | 0.13925 | -6.06360596 |
| ANKRD2 | -0.098041396 | 2.0139753 | -1.60296966 | 0.110173 | 0.13939 | -6.0644537 |
| ROCK1 | 0.148680727 | 3.84099645 | 1.602887744 | 0.110191 | 0.1394 | -6.06458367 |
| PCDH19 | -0.043458577 | 0.2402052 | -1.601711129 | 0.110452 | 0.13972 | -6.06644976 |
| PTPRG | -0.179181406 | 4.41286809 | -1.60135949 | 0.110529 | 0.13981 | -6.0670072 |
| C1orf159 | -0.096222678 | 2.23607887 | -1.601305259 | 0.110541 | 0.13981 | -6.06709316 |
| CLDN18 | -0.024243544 | 0.11594023 | -1.601113398 | 0.110584 | 0.13986 | -6.06739724 |
| ZNF354E | -0.109666353 | 2.73344627 | -1.600007917 | 0.110829 | 0.14015 | -6.06914866 |
| TSPAN3: | 0.100811657 | 1.12353534 | 1.599962673 | 0.110839 | 0.14015 | -6.06922031 |
| RIPPLY3 | -0.098508523 | 0.91911942 | -1.59994459 | 0.110843 | 0.14015 | -6.06924895 |
| TNNT1 | 0.254292098 | 0.55497441 | 1.599625727 | 0.110914 | 0.14023 | -6.06975389 |
| TK1 | 0.168274503 | 3.98207801 | 1.598822436 | 0.111092 | 0.14045 | -6.0710255 |
| BROX | -0.108969064 | 4.94910287 | -1.598730877 | 0.111113 | 0.14046 | -6.0711704 |
| PRRT3 | -0.138875306 | 3.47829409 | -1.598495227 | 0.111165 | 0.14052 | -6.07154329 |
| KDM3A | -0.117601127 | 3.75325629 | -1.597866069 | 0.111305 | 0.14068 | -6.07253861 |
| ABCG4 | 0.102282259 | 1.05182348 | 1.596169946 | 0.111683 | 0.14115 | -6.07521995 |
| PITX2 | 0.024445694 | 0.03688381 | 1.593627149 | 0.112252 | 0.14186 | -6.07923454 |
| TUBB2B | -0.151010956 | 0.73251663 | -1.593422414 | 0.112298 | 0.1419 | -6.0795575 |
| HIGD1C | -0.059107963 | 0.37599005 | -1.593401501 | 0.112303 | 0.1419 | -6.07959049 |
| POLR1E | -0.109518724 | 4.65838059 | -1.592038916 | 0.112609 | 0.14228 | -6.08173886 |
| TOP3A | -0.084447209 | 3.15710524 | -1.591753762 | 0.112673 | 0.14235 | -6.08218824 |
| N4BP2L2 | -0.109174588 | 3.99251618 | -1.590880771 | 0.112869 | 0.14258 | -6.08356349 |
| TICAM1 | 0.101660672 | 4.69102929 | 1.590879639 | 0.11287 | 0.14258 | -6.08356527 |
| UHRF2 | -0.105618909 | 3.25959545 | -1.590713369 | 0.112907 | 0.14261 | -6.08382712 |
| PPIAL4A | -0.029966806 | 0.14953104 | -1.590241328 | 0.113013 | 0.14274 | -6.08457035 |
| BHMG1 | -0.01127216 | 0.03178768 | -1.589744259 | 0.113126 | 0.14287 | -6.08535276 |
| GCNT1 | 0.184250678 | 4.72947907 | 1.589332767 | 0.113218 | 0.14298 | -6.08600029 |
| A4GALT | -0.159470488 | 3.93383512 | -1.588962645 | 0.113302 | 0.14307 | -6.08658257 |
| EVA1C | 0.130313388 | 3.886337 | 1.588458908 | 0.113416 | 0.1432 | -6.08737485 |
| KRT86 | -0.124225092 | 2.680234 | -1.587408043 | 0.113654 | 0.14349 | -6.08902686 |
| ABCB9 | -0.080065786 | 1.50086598 | -1.587261295 | 0.113687 | 0.14352 | -6.08925747 |
| PCDHA4 | 0.046678192 | 0.15561642 | 1.586955519 | 0.113756 | 0.1436 | -6.08973792 |
| TWF2 | -0.120243454 | 6.0727866 | -1.586831513 | 0.113784 | 0.14363 | -6.08993274 |
| MPP3 | -0.121010694 | 1.80989675 | -1.585842272 | 0.114008 | 0.1439 | -6.09148634 |
| EMB | 0.200185948 | 5.84922731 | 1.585490564 | 0.114088 | 0.14399 | -6.09203846 |

| | | | | | | |
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| DCST1 | 0.054102867 | 0.43138378 | 1.584839557 | 0.114236 | 0.14416 | -6.09306013 |
| NUP98 | -0.127463253 | 5.02996651 | -1.584824294 | 0.11424 | 0.14416 | -6.09308408 |
| IL27 | 0.038792579 | 0.19753044 | 1.583892148 | 0.114452 | 0.14441 | -6.09454622 |
| EFHD2 | -0.191930948 | 7.93207117 | -1.583870901 | 0.114457 | 0.14441 | -6.09457954 |
| INO80D | -0.108539942 | 2.80980843 | -1.583593206 | 0.11452 | 0.14448 | -6.09501495 |
| SCRG1 | 0.044036478 | 0.17210069 | 1.58349877 | 0.114541 | 0.14449 | -6.09516301 |
| SZT2 | -0.104038003 | 3.32245777 | -1.583473312 | 0.114547 | 0.14449 | -6.09520292 |
| SLC9A4 | -0.025924857 | 0.06280543 | -1.582632341 | 0.114739 | 0.14472 | -6.09652098 |
| EXD3 | -0.119814302 | 3.14306755 | -1.579508916 | 0.115453 | 0.14561 | -6.10141034 |
| NUB1 | -0.09489077 | 5.74183933 | -1.579287712 | 0.115504 | 0.14567 | -6.10175625 |
| PROCA1 | 0.08171099 | 0.89060525 | 1.57832793 | 0.115724 | 0.14593 | -6.10325657 |
| ENTPD8 | 0.199220059 | 1.82279778 | 1.577689796 | 0.115871 | 0.14611 | -6.1042536 |
| CSMD3 | -0.018527096 | 0.02064896 | -1.577331768 | 0.115953 | 0.1462 | -6.10481282 |
| EFCAB1: | -0.207012907 | 2.76564762 | -1.577135087 | 0.115998 | 0.14625 | -6.10511997 |
| GTPBP2 | -0.110449898 | 5.09038725 | -1.576661893 | 0.116107 | 0.14637 | -6.10585878 |
| CELA2A | -0.016692862 | 0.06051119 | -1.576086443 | 0.11624 | 0.14653 | -6.10675696 |
| TNFSF1( | -0.159865488 | 4.14357484 | -1.576007293 | 0.116258 | 0.14653 | -6.10688047 |
| ZMYM5 | -0.12125871 | 3.90895973 | -1.575992158 | 0.116261 | 0.14653 | -6.10690409 |
| DNAJB1 | -0.146134651 | 6.30572547 | -1.575299334 | 0.116421 | 0.14672 | -6.10798497 |
| HVCN1 | -0.11575024 | 2.20035004 | -1.575172927 | 0.11645 | 0.14674 | -6.10818213 |
| TMEM82 | -0.046309342 | 0.08163954 | -1.575165425 | 0.116452 | 0.14674 | -6.10819383 |
| ZFAT | -0.111792652 | 2.31365553 | -1.574046946 | 0.116711 | 0.14706 | -6.10993766 |
| PARP10 | -0.111617486 | 4.97426893 | -1.573547546 | 0.116826 | 0.14719 | -6.11071589 |
| CATSPE | 0.098937798 | 1.48226725 | 1.572633816 | 0.117038 | 0.14745 | -6.11213915 |
| TRIM56 | -0.110102779 | 4.84698106 | -1.572536224 | 0.11706 | 0.14746 | -6.11229111 |
| DAB2 | -0.136011357 | 3.67205367 | -1.57198706 | 0.117188 | 0.14761 | -6.11314607 |
| KCNG1 | -0.069965365 | 0.20162685 | -1.571601857 | 0.117277 | 0.14772 | -6.11374559 |
| ATP7A | -0.124024581 | 2.90710106 | -1.57080707 | 0.117462 | 0.14794 | -6.11498212 |
| SGPL1 | 0.128158996 | 5.37067463 | 1.570584318 | 0.117513 | 0.14799 | -6.11532857 |
| ZNF319 | -0.139972858 | 4.88226684 | -1.569731145 | 0.117712 | 0.14823 | -6.11665508 |
| RNF224 | 0.158812363 | 1.84788721 | 1.569640828 | 0.117733 | 0.14825 | -6.11679546 |
| UPK1A | -0.046725239 | 0.1011321 | -1.569377281 | 0.117794 | 0.14831 | -6.11720505 |
| TEPP | 0.265346102 | 2.84929039 | 1.569333077 | 0.117804 | 0.14831 | -6.11727374 |
| SLC8B1 | 0.094420171 | 3.58720842 | 1.568223268 | 0.118063 | 0.14863 | -6.11899778 |
| AKR1B1( | -0.193867039 | 0.3159323 | -1.567996147 | 0.118116 | 0.14868 | -6.11935045 |
| UAP1 | -0.132043196 | 4.97132304 | -1.567796622 | 0.118163 | 0.14873 | -6.11966023 |
| U2AF1L5 | -0.037208552 | 0.18513229 | -1.567026358 | 0.118343 | 0.14895 | -6.12085577 |
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| PACSIN: | -0.145063732 | 5.35007405 | -1.56579036 | 0.118632 | 0.14928 | -6.12277298 |

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| DSC1 | 0.011677586 | 0.02617293 | 1.565376616 | 0.118729 | 0.14939 | -6.12341443 |
| FUT6 | 0.033786733 | 0.05030839 | 1.563867462 | 0.119083 | 0.14982 | -6.12575273 |
| IMPDH2 | -0.113488621 | 7.35452022 | -1.563812635 | 0.119096 | 0.14983 | -6.12583764 |
| SYNRG | -0.109155975 | 3.67560606 | -1.563329669 | 0.119209 | 0.14996 | -6.12658546 |
| WDR75 | -0.086786653 | 4.103601 | -1.563060757 | 0.119273 | 0.15003 | -6.12700174 |
| GPR78 | 0.023581986 | 0.09984419 | 1.562616034 | 0.119377 | 0.15015 | -6.12769003 |
| RRP9 | -0.094698079 | 5.45538128 | -1.56172849 | 0.119586 | 0.1504 | -6.12906308 |
| TNFRSF| | 0.120539844 | 0.95435843 | 1.561586523 | 0.11962 | 0.15043 | -6.12928264 |
| ZDHHC2 | -0.158998349 | 5.54171797 | -1.560576435 | 0.119858 | 0.15072 | -6.13084421 |
| ZBTB42 | -0.138154597 | 4.59759281 | -1.560384212 | 0.119903 | 0.15077 | -6.13114127 |
| DTHD1 | 0.049611372 | 0.15743991 | 1.560246647 | 0.119936 | 0.1508 | -6.13135384 |
| MINK1 | -0.115076341 | 4.91592859 | -1.559890652 | 0.12002 | 0.15089 | -6.13190384 |
| PROX2 | -0.044008298 | 0.33093022 | -1.557605719 | 0.120561 | 0.15156 | -6.1354311 |
| KRBA2 | -0.075393711 | 0.73515122 | -1.557494691 | 0.120587 | 0.15158 | -6.13560237 |
| INSM1 | 0.027725261 | 0.07689387 | 1.55611669 | 0.120915 | 0.15197 | -6.13772699 |
| ANKRD1 | -0.132319887 | 4.4403405 | -1.556084254 | 0.120922 | 0.15197 | -6.13777698 |
| ABLIM1 | 0.168454397 | 5.96045988 | 1.556068706 | 0.120926 | 0.15197 | -6.13780094 |
| FOXG1 | 0.036233929 | 0.09631862 | 1.555729584 | 0.121007 | 0.15206 | -6.13832351 |
| C12orf42 | 0.017264025 | 0.03733911 | 1.553658648 | 0.1215 | 0.15266 | -6.14151226 |
| GMNC | -0.056406203 | 0.09910607 | -1.553657439 | 0.1215 | 0.15266 | -6.14151412 |
| C8B | -0.075655024 | 0.21264055 | -1.553579332 | 0.121519 | 0.15267 | -6.1416343 |
| GDF3 | 0.056949703 | 0.42742675 | 1.55344433 | 0.121551 | 0.1527 | -6.14184202 |
| PLAC8 | 0.148289457 | 1.32045896 | 1.552982763 | 0.121662 | 0.15283 | -6.14255206 |
| CABYR | 0.116142301 | 0.67870174 | 1.552070331 | 0.12188 | 0.15309 | -6.14395507 |
| AGTPBP | -0.103585638 | 3.10679806 | -1.551676828 | 0.121974 | 0.1532 | -6.14455989 |
| HMG20A | -0.151713381 | 3.35720581 | -1.551533105 | 0.122008 | 0.15323 | -6.14478076 |
| ARPC1B | -0.113094997 | 6.63334409 | -1.55146548 | 0.122024 | 0.15324 | -6.14488468 |
| CHRNA3 | -0.032120841 | 0.12806502 | -1.551172661 | 0.122095 | 0.15331 | -6.14533459 |
| FAM169/ | -0.180349711 | 1.91296816 | -1.551140317 | 0.122102 | 0.15331 | -6.14538428 |
| TVP23A | -0.061394663 | 0.62400281 | -1.550072393 | 0.122358 | 0.15363 | -6.14702439 |
| RRM1 | -0.127790182 | 5.00109279 | -1.547716024 | 0.122925 | 0.15432 | -6.15063936 |
| APOL3 | -0.166383686 | 3.35415873 | -1.547633899 | 0.122945 | 0.15434 | -6.15076525 |
| TOP1 | -0.140490946 | 6.46357295 | -1.547560072 | 0.122962 | 0.15435 | -6.15087842 |
| UAP1L1 | -0.118460266 | 3.48647153 | -1.547506191 | 0.122975 | 0.15435 | -6.15096101 |
| ROS1 | 0.044537473 | 0.07283448 | 1.547385469 | 0.123005 | 0.15438 | -6.15114604 |
| KAT6B | -0.134127578 | 3.67627481 | -1.547330764 | 0.123018 | 0.15438 | -6.15122988 |
| MAU2 | -0.107016787 | 4.05192364 | -1.547120215 | 0.123068 | 0.15444 | -6.15155255 |
| EPB41L3 | -0.158623421 | 2.12818898 | -1.546833979 | 0.123138 | 0.15451 | -6.15199114 |
| C11orf21 | 0.101491546 | 0.77927696 | 1.546805285 | 0.123144 | 0.15451 | -6.1520351 |
| RAET1G | 0.169169199 | 2.12330824 | 1.546490028 | 0.12322 | 0.15459 | -6.15251806 |

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| MX1 | 0.167532194 | 4.73880036 | 1.545785534 | 0.123391 | 0.15479 | -6.15359695 |
| FILIP1L | -0.177670076 | 3.27168635 | -1.545685587 | 0.123415 | 0.15481 | -6.15374998 |
| HSPB2-C | -0.012816567 | 0.04804092 | -1.545226957 | 0.123526 | 0.15494 | -6.15445204 |
| PIGL | -0.110285741 | 2.74993199 | -1.544462988 | 0.12371 | 0.15516 | -6.15562106 |
| FGF10 | 0.069333291 | 0.16665077 | 1.544137018 | 0.123789 | 0.15525 | -6.15611968 |
| CHL1 | 0.177252853 | 0.6009806 | 1.544018971 | 0.123818 | 0.15527 | -6.15630023 |
| PCDHGE | -0.146290767 | 1.5693198 | -1.542919355 | 0.124084 | 0.1556 | -6.15798138 |
| ADAMTS | 0.183541491 | 2.40408277 | 1.542681262 | 0.124142 | 0.15565 | -6.15834524 |
| HYAL2 | -0.12043684 | 5.99936744 | -1.542677243 | 0.124143 | 0.15565 | -6.15835138 |
| ANKRD5 | 0.050702577 | 0.26910587 | 1.540820573 | 0.124595 | 0.1562 | -6.16118685 |
| HERC4 | -0.089045811 | 2.96184035 | -1.539529252 | 0.124909 | 0.15658 | -6.16315695 |
| ACVR1 | 0.17112938 | 6.24900235 | 1.539315413 | 0.124961 | 0.15664 | -6.16348304 |
| TDRD1 | -0.040093957 | 0.06530313 | -1.539264529 | 0.124974 | 0.15664 | -6.16356063 |
| TMC2 | -0.01780989 | 0.08442478 | -1.538559802 | 0.125146 | 0.15685 | -6.16463493 |
| JPT1 | 0.111189811 | 4.54990121 | 1.538056577 | 0.125269 | 0.15699 | -6.16540176 |
| ABI1 | -0.108770382 | 5.30782726 | -1.537901858 | 0.125307 | 0.15702 | -6.16563748 |
| LAMB1 | -0.19245722 | 6.34537148 | -1.537543831 | 0.125394 | 0.15712 | -6.16618285 |
| PLAAT5 | 0.058025806 | 0.34444182 | 1.536278091 | 0.125704 | 0.1575 | -6.16810991 |
| SPNS3 | 0.078176125 | 0.67697972 | 1.535602369 | 0.12587 | 0.1577 | -6.16913804 |
| CASQ1 | 0.081882928 | 0.32751604 | 1.534564713 | 0.126125 | 0.158 | -6.17071601 |
| PCDHA1 | -0.15937161 | 1.29808122 | -1.534185118 | 0.126218 | 0.15811 | -6.17129299 |
| SYNJ2 | 0.114217971 | 3.2946665 | 1.533281643 | 0.12644 | 0.15837 | -6.17266572 |
| GATA1 | 0.029905757 | 0.18876678 | 1.532932026 | 0.126526 | 0.15847 | -6.17319671 |
| TNKS2 | -0.137164037 | 5.38654086 | -1.532444558 | 0.126647 | 0.15861 | -6.17393687 |
| SLX1B | 0.013543574 | 0.04512306 | 1.531948812 | 0.126769 | 0.15875 | -6.17468936 |
| SMC6 | -0.098307844 | 2.80458558 | -1.531761785 | 0.126815 | 0.1588 | -6.17497318 |
| CHEK2 | 0.096457638 | 2.64295978 | 1.53132243 | 0.126923 | 0.15892 | -6.1756398 |
| CCNA2 | 0.123716751 | 1.72625516 | 1.53112172 | 0.126973 | 0.15897 | -6.17594426 |
| LDHAL6/ | -0.068912991 | 0.2277326 | -1.531103959 | 0.126977 | 0.15897 | -6.1759712 |
| GLYATL' | -0.0411111 | 0.09299655 | -1.531044836 | 0.126992 | 0.15897 | -6.17606088 |
| PTGFRN | 0.133138333 | 4.58760319 | 1.530771634 | 0.12706 | 0.15904 | -6.17647523 |
| NPIPB3 | 0.068857423 | 0.59438805 | 1.529245865 | 0.127437 | 0.15951 | -6.17878794 |
| RCSD1 | -0.154917295 | 2.55229438 | -1.528998808 | 0.127498 | 0.15957 | -6.1791622 |
| SPATA1 | -0.045013143 | 0.49859687 | -1.528521463 | 0.127617 | 0.15971 | -6.17988517 |
| DEFB13 | -0.042095334 | 0.11443135 | -1.5284543 | 0.127633 | 0.15972 | -6.17998687 |
| GPRIN3 | 0.115485262 | 1.44533383 | 1.528019282 | 0.127741 | 0.15984 | -6.18064551 |
| GOLGA3 | -0.098466894 | 4.70720227 | -1.526494937 | 0.12812 | 0.1603 | -6.18295197 |
| DMTF1 | -0.13894723 | 4.16054822 | -1.52530429 | 0.128417 | 0.16066 | -6.18475195 |
| TUBB4A | -0.106246767 | 0.38353386 | -1.524446376 | 0.128631 | 0.16092 | -6.18604806 |
| C2orf91 | 0.015974649 | 0.06050603 | 1.523820075 | 0.128787 | 0.1611 | -6.18699381 |

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| COLQ | -0.111028083 | 1.47812082 | -1.523207816 | 0.12894 | 0.16128 | -6.18791798 |
| ETS1 | -0.164056418 | 5.60416164 | -1.52286054 | 0.129027 | 0.16138 | -6.18844201 |
| RIPK4 | -0.143150172 | 4.31924965 | -1.522212918 | 0.129189 | 0.16157 | -6.18941895 |
| DNAI1 | -0.063831669 | 0.339093 | -1.522037762 | 0.129233 | 0.16161 | -6.1896831 |
| C1QTNF | -0.010237265 | 0.03583225 | -1.521232959 | 0.129434 | 0.16185 | -6.19089643 |
| KRT6B | 0.108103675 | 0.21026451 | 1.520746738 | 0.129556 | 0.16199 | -6.19162917 |
| PLA2G12 | -0.301548499 | 2.05941412 | -1.520413364 | 0.12964 | 0.16208 | -6.19213142 |
| OSBPL8 | 0.137210142 | 3.89750693 | 1.520239301 | 0.129684 | 0.16213 | -6.19239362 |
| ABL1 | -0.123188866 | 6.06524858 | -1.519954203 | 0.129756 | 0.1622 | -6.19282302 |
| ERLIN1 | -0.135009036 | 4.95835626 | -1.519859106 | 0.129779 | 0.16222 | -6.19296623 |
| SLC45A2 | -0.08112484 | 0.22421575 | -1.519810277 | 0.129792 | 0.16223 | -6.19303976 |
| TBPL2 | -0.009975146 | 0.03263868 | -1.519756476 | 0.129805 | 0.16223 | -6.19312077 |
| VWA7 | -0.175417011 | 3.04605753 | -1.519336939 | 0.129911 | 0.16235 | -6.19375242 |
| SNX1 | -0.155388957 | 6.99612749 | -1.518230102 | 0.130189 | 0.16269 | -6.19541803 |
| C5orf38 | -0.329822714 | 2.42951486 | -1.517798712 | 0.130298 | 0.1628 | -6.19606689 |
| VRK2 | -0.105359871 | 3.61897665 | -1.517796263 | 0.130299 | 0.1628 | -6.19607057 |
| TCL1A | 0.185232911 | 0.47827096 | 1.516302865 | 0.130676 | 0.16326 | -6.19831538 |
| ATP9A | -0.146728446 | 5.63597083 | -1.51498196 | 0.13101 | 0.16366 | -6.2002991 |
| ELK3 | 0.152035264 | 5.64900048 | 1.513947586 | 0.131272 | 0.16398 | -6.20185132 |
| HSPA1B | -0.168429583 | 6.51738488 | -1.513849992 | 0.131296 | 0.164 | -6.20199772 |
| PLSCR2 | -0.038971533 | 0.39390846 | -1.513615252 | 0.131356 | 0.16406 | -6.20234981 |
| FABP5 | -0.169407792 | 2.73744357 | -1.513285326 | 0.13144 | 0.16415 | -6.20284459 |
| HHIPL1 | -0.080988629 | 0.8589537 | -1.512935128 | 0.131529 | 0.16425 | -6.20336965 |
| WNT3 | 0.162405308 | 2.63042424 | 1.512139353 | 0.131731 | 0.16449 | -6.20456233 |
| NR1D2 | -0.159797937 | 5.56388418 | -1.511838191 | 0.131807 | 0.16457 | -6.20501354 |
| FAM78A | 0.134264468 | 1.83309974 | 1.51176823 | 0.131825 | 0.16458 | -6.20511834 |
| SPTB | 0.057300374 | 0.40845652 | 1.511679855 | 0.131848 | 0.1646 | -6.20525073 |
| RLN2 | -0.09547838 | 1.01973013 | -1.511520615 | 0.131888 | 0.16464 | -6.20548924 |
| C1orf146 | -0.048513066 | 0.31835584 | -1.511207616 | 0.131968 | 0.16473 | -6.205958 |
| PLA2G1( | 0.129469859 | 0.53884451 | 1.511170574 | 0.131977 | 0.16473 | -6.20601347 |
| TTC7A | -0.110766548 | 4.9777361 | -1.511103844 | 0.131994 | 0.16474 | -6.20611339 |
| FAM135E | -0.029365966 | 0.03122201 | -1.510795047 | 0.132073 | 0.16482 | -6.20657573 |
| SERPINE | -0.114803692 | 6.37414752 | -1.510499574 | 0.132148 | 0.1649 | -6.20701803 |
| NAIP | -0.061009029 | 0.30073044 | -1.509948342 | 0.132289 | 0.16507 | -6.20784295 |
| STARD6 | -0.013956421 | 0.06134056 | -1.509886366 | 0.132305 | 0.16507 | -6.20793568 |
| FLRT2 | -0.101193418 | 0.92468197 | -1.509813484 | 0.132323 | 0.16509 | -6.20804472 |
| FGF14 | 0.049014637 | 0.2098233 | 1.509619071 | 0.132373 | 0.16513 | -6.20833557 |
| PRSS3 | 0.068256805 | 0.39288454 | 1.509483119 | 0.132408 | 0.16517 | -6.20853893 |
| TMEM44 | -0.118884754 | 3.30454011 | -1.509438137 | 0.132419 | 0.16517 | -6.20860622 |
| CYP3A4 | 0.012715846 | 0.04059196 | 1.507969709 | 0.132794 | 0.16562 | -6.21080157 |

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| CHRD | -0.096234763 | 1.16599221 | -1.507857007 | 0.132823 | 0.16565 | -6.21096997 |
| KREMEN | 0.06960367 | 0.54213257 | 1.507624201 | 0.132883 | 0.16571 | -6.21131781 |
| F2RL1 | 0.186180326 | 4.29282962 | 1.507394161 | 0.132942 | 0.16577 | -6.21166146 |
| CASD1 | -0.124131423 | 4.52224867 | -1.50733678 | 0.132956 | 0.16578 | -6.21174717 |
| GRAMD1 | 0.0958248 | 5.24840835 | 1.506415843 | 0.133192 | 0.16606 | -6.21312236 |
| CIP2A | -0.079974634 | 1.34117812 | -1.506192273 | 0.13325 | 0.16612 | -6.21345608 |
| CYP24A1 | 0.352161565 | 2.1217499 | 1.506052218 | 0.133286 | 0.16615 | -6.21366512 |
| NKX6-1 | -0.321098572 | 1.93300723 | -1.505154355 | 0.133516 | 0.16642 | -6.21500475 |
| KLK3 | 0.20018111 | 0.5608832 | 1.505128398 | 0.133523 | 0.16642 | -6.21504346 |
| EIF2AK2 | -0.121341421 | 4.03147215 | -1.503599546 | 0.133916 | 0.1669 | -6.21732269 |
| HOXD3 | 0.02195376 | 0.14935217 | 1.503315265 | 0.133989 | 0.16698 | -6.21774624 |
| ZNF711 | -0.136125251 | 2.49774819 | -1.503135076 | 0.134036 | 0.16702 | -6.21801467 |
| MMP17 | 0.159299113 | 0.81837522 | 1.503099536 | 0.134045 | 0.16702 | -6.21806761 |
| DUSP9 | 0.045662175 | 0.08166049 | 1.502736599 | 0.134138 | 0.16713 | -6.21860817 |
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| IL17RA | -0.091732832 | 3.34726708 | -1.500979266 | 0.134592 | 0.16766 | -6.22122373 |
| AMER3 | -0.018659239 | 0.04351878 | -1.500485535 | 0.13472 | 0.1678 | -6.22195804 |
| PDZRN4 | 0.356398319 | 1.91517956 | 1.500231577 | 0.134786 | 0.16787 | -6.22233566 |
| NUP153 | -0.129215635 | 4.180661 | -1.499719009 | 0.134918 | 0.16803 | -6.22309761 |
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| MDFI | 0.246637009 | 3.13957915 | 1.497804168 | 0.135415 | 0.1686 | -6.22594182 |
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| SLFN13 | 0.115621451 | 3.28546018 | 1.497617901 | 0.135463 | 0.16862 | -6.2262183 |
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| VSIG8 | -0.082665073 | 0.61773842 | -1.495131966 | 0.136111 | 0.1694 | -6.22990502 |
| JAG2 | -0.123379154 | 3.94300366 | -1.49473326 | 0.136215 | 0.16952 | -6.23049575 |
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| PHF2 | -0.124087733 | 5.19170776 | -1.493450816 | 0.13655 | 0.16991 | -6.2323948 |
| CNN3 | 0.130418448 | 7.5621591 | 1.493188661 | 0.136618 | 0.16998 | -6.23278281 |
| TBX18 | 0.057450588 | 0.38463443 | 1.492341593 | 0.13684 | 0.17024 | -6.23403606 |
| JAKMIP1 | -0.096512339 | 0.68600293 | -1.492283847 | 0.136855 | 0.17025 | -6.23412147 |
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| ATG16L2 | -0.134786105 | 2.96247719 | -1.490852064 | 0.13723 | 0.17069 | -6.23623814 |
| CTSV | -0.103684923 | 1.17268344 | -1.490788565 | 0.137247 | 0.1707 | -6.23633197 |
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| PTPDC1 | 0.116407157 | 2.17514681 | 1.490280654 | 0.13738 | 0.17084 | -6.23708233 |

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| CLSTN2 | -0.099991917 | 0.48191268 | -1.489776236 | 0.137513 | 0.17099 | -6.23782727 |
| BAHCC1 | -0.121156548 | 2.97280773 | -1.489502509 | 0.137585 | 0.17107 | -6.23823142 |
| ZFP37 | -0.117919058 | 1.9341348 | -1.489424017 | 0.137606 | 0.17108 | -6.2383473 |
| AGO1 | -0.089862659 | 3.20234835 | -1.489402684 | 0.137611 | 0.17108 | -6.23837879 |
| DMP1 | 0.078819014 | 0.24396817 | 1.489335083 | 0.137629 | 0.17109 | -6.23847859 |
| SATB1 | -0.139192811 | 3.94037938 | -1.489049077 | 0.137704 | 0.17117 | -6.23890074 |
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| SRRM4 | -0.100004724 | 0.22092032 | -1.482690909 | 0.139385 | 0.17312 | -6.24826504 |
| TMEM26 | -0.056723114 | 0.74604788 | -1.482142591 | 0.139531 | 0.17329 | -6.24907075 |
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| TXNDC2 | 0.012499099 | 0.06134839 | 1.479113699 | 0.140338 | 0.17425 | -6.25351623 |
| TUT4 | -0.123467032 | 3.08234359 | -1.478883695 | 0.1404 | 0.17431 | -6.25385344 |
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| ADAMTS | 0.012054568 | 0.03179866 | 1.478223369 | 0.140576 | 0.17451 | -6.25482126 |
| PARPBP | -0.059435841 | 0.91181044 | -1.478132836 | 0.1406 | 0.17453 | -6.25495392 |
| KIR2DL4 | -0.078566472 | 0.39986758 | -1.478012456 | 0.140633 | 0.17455 | -6.2551303 |
| COL26A1 | 0.122387514 | 0.83191203 | 1.477463122 | 0.14078 | 0.17472 | -6.255935 |
| CGREF1 | 0.082960758 | 0.47943515 | 1.476810006 | 0.140955 | 0.17492 | -6.25689135 |
| AIFM3 | -0.066055329 | 0.70676812 | -1.476797728 | 0.140958 | 0.17492 | -6.25690933 |
| SLC36A1 | 0.085561714 | 2.08624559 | 1.476688869 | 0.140987 | 0.17494 | -6.25706869 |
| LRRK2 | 0.378436659 | 5.11028273 | 1.476627339 | 0.141004 | 0.17495 | -6.25715876 |
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| SEPTIN6 | 0.125733679 | 3.42078533 | 1.473500348 | 0.141844 | 0.17595 | -6.26173126 |
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| ZNF280C | -0.087821107 | 1.82241868 | -1.472650765 | 0.142073 | 0.17621 | -6.26297193 |
| AP3B2 | -0.131886615 | 1.72792045 | -1.472506723 | 0.142111 | 0.17625 | -6.26318221 |
| IGSF5 | -0.06652212 | 0.33810934 | -1.472036214 | 0.142238 | 0.17639 | -6.26386894 |
| HTR6 | 0.01147379 | 0.03584112 | 1.471888235 | 0.142278 | 0.17642 | -6.26408487 |
| SRGAP2 | 0.055252727 | 0.64213634 | 1.471870833 | 0.142283 | 0.17642 | -6.26411027 |

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| SUFU | 0.094939295 | 2.7212758 | 1.471521676 | 0.142377 | 0.17652 | -6.26461968 |
| WDR90 | -0.108458213 | 3.14932567 | -1.470244372 | 0.142722 | 0.17694 | -6.26648224 |
| RLIM | -0.108615644 | 4.46790311 | -1.470072238 | 0.142769 | 0.17698 | -6.26673312 |
| KDSR | -0.092850587 | 4.49481546 | -1.469994488 | 0.14279 | 0.177 | -6.26684643 |
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| FAM83D | -0.102268423 | 1.0523162 | -1.467641046 | 0.143428 | 0.17769 | -6.27027347 |
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| FAM187E | -0.027834676 | 0.13349594 | -1.464805347 | 0.1442 | 0.1786 | -6.27439559 |
| NOTCH2 | 0.03591332 | 0.25959142 | 1.464440805 | 0.144299 | 0.1787 | -6.27492493 |
| NOTCH2 | 0.03591332 | 0.25959142 | 1.464440805 | 0.144299 | 0.1787 | -6.27492493 |
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| CHRNA2 | -0.057914336 | 0.08096688 | -1.462378868 | 0.144863 | 0.17937 | -6.27791662 |
| PON3 | -0.180026007 | 1.87408816 | -1.462080154 | 0.144945 | 0.17946 | -6.27834968 |
| CNKSR3 | -0.076491508 | 0.97142989 | -1.461813308 | 0.145018 | 0.17954 | -6.27873647 |
| PIAS3 | 0.140039487 | 4.24584124 | 1.461306011 | 0.145157 | 0.1797 | -6.27947159 |
| ESYT1 | 0.119885086 | 6.10108372 | 1.460921391 | 0.145262 | 0.17981 | -6.28002878 |
| HEATR5I | -0.117405426 | 3.78381117 | -1.460377071 | 0.145412 | 0.17998 | -6.28081707 |
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| WDR27 | -0.128852657 | 2.21282265 | -1.456145941 | 0.146577 | 0.18132 | -6.28693482 |
| TSC22D4 | -0.091916676 | 5.656695 | -1.455485846 | 0.146759 | 0.18153 | -6.28788767 |
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| TMEM63 | 0.133236769 | 5.0914005 | 1.4549577 | 0.146905 | 0.18169 | -6.28864974 |
| RORB | 0.053733452 | 0.27503561 | 1.454304188 | 0.147086 | 0.1819 | -6.28959233 |
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| ANXA8 | 0.082061856 | 0.17785474 | 1.452238192 | 0.147659 | 0.18255 | -6.29256948 |

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| RPA4 | 0.017643549 | 0.05293461 | 1.450449798 | 0.148156 | 0.18315 | -6.29514323 |
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| TMEM13 | -0.086034918 | 0.5887542 | -1.448852835 | 0.148601 | 0.18365 | -6.29743885 |
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| HIF1A | 0.158478022 | 6.776774 | 1.446755871 | 0.149188 | 0.18434 | -6.30044944 |
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| FAM78B | -0.052427089 | 0.82082619 | -1.445836306 | 0.149445 | 0.18461 | -6.3017683 |
| SUN1 | -0.109887068 | 4.82292748 | -1.445682364 | 0.149488 | 0.18465 | -6.30198901 |
| CMYA5 | 0.159190694 | 2.89577458 | 1.445314741 | 0.149591 | 0.18477 | -6.30251597 |
| ANGPTL | 0.062099359 | 0.11774557 | 1.444238688 | 0.149894 | 0.18513 | -6.30405767 |
| TEN1 | -0.028844479 | 0.29087788 | -1.443329704 | 0.150149 | 0.18543 | -6.30535913 |
| HSPG2 | -0.223157775 | 5.32474283 | -1.442024075 | 0.150517 | 0.18587 | -6.30722707 |
| KCNK7 | 0.085616643 | 0.69381545 | 1.440848828 | 0.150848 | 0.18627 | -6.30890706 |
| STON1 | -0.117215591 | 1.64318594 | -1.440567132 | 0.150928 | 0.18635 | -6.30930954 |
| ENTPD4 | -0.09977383 | 4.12187213 | -1.439959633 | 0.1511 | 0.18655 | -6.31017725 |
| ZNF224 | -0.088978911 | 2.56269345 | -1.439338305 | 0.151275 | 0.18675 | -6.31106434 |
| PCDHGE | 0.193043336 | 2.42584406 | 1.439096482 | 0.151344 | 0.18682 | -6.3114095 |
| GNB3 | 0.131795589 | 1.45232978 | 1.438766494 | 0.151437 | 0.18692 | -6.3118804 |
| TMEM11 | 0.036290845 | 0.11522086 | 1.438735036 | 0.151446 | 0.18692 | -6.31192529 |
| CNKSR1 | -0.102812491 | 4.92571277 | -1.438591564 | 0.151487 | 0.18696 | -6.31212999 |
| ACOT12 | 0.072243932 | 0.24285312 | 1.438502325 | 0.151512 | 0.18698 | -6.31225731 |
| POM121 | -0.094254378 | 3.73071861 | -1.437349167 | 0.151839 | 0.18737 | -6.31390177 |
| MACF1 | 0.142403198 | 4.69331237 | 1.437254739 | 0.151866 | 0.18737 | -6.31403637 |
| CASP10 | -0.115134306 | 3.21714637 | -1.437247527 | 0.151868 | 0.18737 | -6.31404665 |
| ZNF358 | -0.108974093 | 6.60604291 | -1.436809912 | 0.151992 | 0.18751 | -6.31467033 |
| TOR1AIF | -0.094522305 | 3.64889437 | -1.436453941 | 0.152093 | 0.18762 | -6.31517751 |
| FZD1 | -0.176924265 | 6.40746791 | -1.436431509 | 0.152099 | 0.18762 | -6.31520947 |
| PLXNB2 | 0.149534203 | 8.01322874 | 1.435617249 | 0.152331 | 0.18789 | -6.31636914 |
| KIAA031 | 0.07318409 | 0.2827295 | 1.435529866 | 0.152356 | 0.18791 | -6.31649355 |
| GPSM1 | 0.135777511 | 3.48972881 | 1.435008753 | 0.152504 | 0.18808 | -6.31723533 |
| C20orf20 | -0.065504887 | 0.4181216 | -1.434702075 | 0.152591 | 0.18817 | -6.31767175 |
| RNF17 | -0.048339777 | 0.07202584 | -1.4344981 | 0.15265 | 0.18823 | -6.31796197 |
| OGT | 0.147776919 | 5.65756919 | 1.432750175 | 0.153148 | 0.18883 | -6.32044726 |
| SMC4 | 0.147393309 | 2.87249789 | 1.431998176 | 0.153363 | 0.18908 | -6.32151558 |
| TDRD10 | 0.151398525 | 2.86346152 | 1.431808518 | 0.153417 | 0.18913 | -6.32178492 |
| PYDC1 | 0.093779284 | 0.37396054 | 1.431456227 | 0.153518 | 0.18924 | -6.32228515 |

| HOXA2 | -0.046381086 | 0.39711713 | -1.431356878 | 0.153547 | 0.18927 | -6.32242619 |
|---|---|---|---|---|---|---|
| ZNF114 | 0.136754629 | 3.2753158 | 1.431315934 | 0.153558 | 0.18927 | -6.32248432 |
| ACTN3 | 0.015416165 | 0.05871533 | 1.431169477 | 0.1536 | 0.1893 | -6.32269222 |
| NTRK3 | -0.138715634 | 0.88988066 | -1.430909538 | 0.153675 | 0.18938 | -6.32306116 |
| KCNJ15 | -0.167695742 | 6.29287003 | -1.430636655 | 0.153753 | 0.18946 | -6.3234484 |
| CSNK2A | -0.071391767 | 5.01054157 | -1.430604072 | 0.153762 | 0.18946 | -6.32349463 |
| FAM72A | 0.02165404 | 0.17672372 | 1.429222123 | 0.154158 | 0.18994 | -6.32545455 |
| IL5RA | -0.03063154 | 0.12105105 | -1.42884212 | 0.154268 | 0.19006 | -6.32599316 |
| OSBPL1( | 0.137752775 | 2.21440167 | 1.428557822 | 0.154349 | 0.19015 | -6.32639602 |
| DGKZ | -0.079921639 | 3.70140506 | -1.428363237 | 0.154405 | 0.1902 | -6.32667171 |
| PPP1R1( | -0.148689737 | 2.30707379 | -1.428249918 | 0.154438 | 0.19023 | -6.32683225 |
| FUCA1 | -0.117144217 | 7.9399963 | -1.426920057 | 0.15482 | 0.19068 | -6.32871528 |
| FAM3C | -0.133905252 | 6.26029446 | -1.426894392 | 0.154828 | 0.19068 | -6.3287516 |
| FLNB | -0.103665833 | 6.14116654 | -1.426791308 | 0.154857 | 0.1907 | -6.32889749 |
| POLA1 | -0.092664806 | 2.80782679 | -1.426159208 | 0.15504 | 0.19091 | -6.32979183 |
| VASP | 0.10152909 | 6.18452962 | 1.42519532 | 0.155318 | 0.19124 | -6.33115487 |
| SHC4 | -0.113171432 | 0.75164751 | -1.424978758 | 0.15538 | 0.1913 | -6.33146098 |
| MAD2L1 | -0.08211778 | 1.57266934 | -1.42482166 | 0.155426 | 0.19135 | -6.33168301 |
| C1orf167 | -0.010044314 | 0.0502408 | -1.42477019 | 0.155441 | 0.19135 | -6.33175575 |
| CD244 | 0.089247045 | 0.71447931 | 1.424368524 | 0.155557 | 0.19148 | -6.33232331 |
| PAX2 | -0.088356063 | 0.10659995 | -1.424022492 | 0.155657 | 0.19159 | -6.33281214 |
| GNB5 | -0.101508245 | 3.57288701 | -1.423853402 | 0.155706 | 0.19162 | -6.33305096 |
| PLRG1 | 0.107383327 | 5.44600413 | 1.423843006 | 0.155709 | 0.19162 | -6.33306564 |
| SRPK1 | -0.097027263 | 3.67059154 | -1.423518755 | 0.155802 | 0.19173 | -6.33352353 |
| UBE2F-S | -0.01283817 | 0.08193398 | -1.423439168 | 0.155825 | 0.19174 | -6.3336359 |
| RSPH10I | -0.00833374 | 0.02419884 | -1.423363949 | 0.155847 | 0.19175 | -6.3337421 |
| NUDT10 | 0.10076099 | 0.66911601 | 1.423231445 | 0.155886 | 0.19179 | -6.33392917 |
| ZBED6 | 0.181872343 | 1.68455929 | 1.422926324 | 0.155974 | 0.19188 | -6.33435987 |
| KIF3C | -0.142579751 | 2.51462364 | -1.422851781 | 0.155995 | 0.19189 | -6.33446507 |
| NIBAN3 | 0.077157702 | 0.27488524 | 1.422599771 | 0.156069 | 0.19197 | -6.33482072 |
| SHCBP1 | -0.010725065 | 0.03181979 | -1.420712679 | 0.156616 | 0.19263 | -6.33748184 |
| SLITRK2 | -0.06708212 | 0.1510564 | -1.420476408 | 0.156685 | 0.1927 | -6.33781478 |
| LGALS9( | 0.019280178 | 0.04074943 | 1.420419053 | 0.156701 | 0.19271 | -6.33789559 |
| FKBP6 | -0.014925524 | 0.05407952 | -1.420056274 | 0.156807 | 0.19282 | -6.33840667 |
| LINGO3 | 0.051937136 | 0.30308389 | 1.41956871 | 0.156949 | 0.19298 | -6.33909334 |
| ITIH4 | -0.033681938 | 0.24643817 | -1.419148506 | 0.157071 | 0.19312 | -6.33968496 |
| MYMK | -0.064215823 | 0.14660958 | -1.417447343 | 0.157567 | 0.19372 | -6.34207831 |
| ZNF528 | -0.108215762 | 3.10982177 | -1.416575633 | 0.157822 | 0.19401 | -6.34330362 |
| ZNF724 | 0.079794191 | 0.74914838 | 1.41630497 | 0.157901 | 0.19409 | -6.34368392 |
| TMCO6 | -0.089808154 | 3.41088468 | -1.416295428 | 0.157904 | 0.19409 | -6.34369733 |

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| AVIL | 0.116759652 | 1.94928901 | 1.414975866 | 0.15829 | 0.19455 | -6.34555038 |
| BCL9 | 0.147795237 | 4.73427295 | 1.413587768 | 0.158697 | 0.19503 | -6.34749784 |
| TDP1 | 0.077366992 | 2.12309735 | 1.413558049 | 0.158705 | 0.19503 | -6.34753951 |
| WSB1 | 0.171551478 | 5.06692792 | 1.413511482 | 0.158719 | 0.19503 | -6.34760481 |
| MIP | -0.016314224 | 0.08698972 | -1.412615742 | 0.158982 | 0.19534 | -6.34886044 |
| SH3PXD: | 0.132205867 | 3.75511194 | 1.412590899 | 0.15899 | 0.19534 | -6.34889526 |
| CD46 | -0.116439549 | 6.00621163 | -1.411735852 | 0.159241 | 0.19563 | -6.35009309 |
| RBM44 | -0.026773279 | 0.2074168 | -1.411433964 | 0.15933 | 0.19573 | -6.35051584 |
| BMP4 | 0.228963725 | 2.84439955 | 1.409901382 | 0.159782 | 0.19627 | -6.3526606 |
| GJB7 | -0.017419724 | 0.04741873 | -1.409853133 | 0.159796 | 0.19627 | -6.35272808 |
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| CALHM1 | 0.03419461 | 0.10215103 | 1.409435098 | 0.159919 | 0.19639 | -6.35331268 |
| GIPC1 | -0.093333888 | 6.45653288 | -1.408823589 | 0.1601 | 0.1966 | -6.35416753 |
| RIMBP3( | -0.020157985 | 0.12162735 | -1.4087504 | 0.160121 | 0.19661 | -6.35426982 |
| ZNF266 | -0.105030588 | 4.0676897 | -1.408402625 | 0.160224 | 0.19673 | -6.3547558 |
| AKNAD1 | -0.023778405 | 0.04005228 | -1.407831112 | 0.160393 | 0.19692 | -6.35555418 |
| MAPK8IF | -0.083330847 | 0.88088636 | -1.406150404 | 0.160891 | 0.19752 | -6.35790019 |
| ZNF264 | -0.097511949 | 3.3758743 | -1.406003468 | 0.160935 | 0.19755 | -6.35810516 |
| ZNF519 | -0.046375069 | 0.66425086 | -1.405606801 | 0.161052 | 0.19768 | -6.35865839 |
| LRRC10E | 0.1136102 | 1.0339347 | 1.40445158 | 0.161395 | 0.19809 | -6.36026869 |
| LCMT1 | -0.080757359 | 5.64466403 | -1.40432678 | 0.161433 | 0.19812 | -6.36044258 |
| KANSL1L | -0.117923422 | 3.15394971 | -1.404147427 | 0.161486 | 0.19817 | -6.36069245 |
| C3orf20 | -0.020104248 | 0.12766529 | -1.403424979 | 0.161701 | 0.19842 | -6.36169861 |
| PRDM1 | 0.203601732 | 5.30928374 | 1.402949259 | 0.161843 | 0.19858 | -6.36236088 |
| KIRREL3 | -0.07384333 | 0.13367475 | -1.402463745 | 0.161987 | 0.19875 | -6.36303655 |
| NPIPA5 | -0.149774236 | 1.66894684 | -1.402197223 | 0.162067 | 0.19883 | -6.36340736 |
| NDP | -0.12168928 | 0.60353522 | -1.402096111 | 0.162097 | 0.19885 | -6.36354802 |
| C10orf10 | -0.016709858 | 0.07421128 | -1.401937277 | 0.162144 | 0.1989 | -6.36376896 |
| KIR2DL1 | 0.028665535 | 0.10600933 | 1.401700344 | 0.162215 | 0.19897 | -6.36409848 |
| HIVEP2 | 0.11581415 | 3.77436887 | 1.401511435 | 0.162271 | 0.19902 | -6.36436118 |
| DENND6 | -0.110222878 | 3.60072254 | -1.401005589 | 0.162422 | 0.19919 | -6.36506443 |
| SMIM29 | 0.098571954 | 5.74794001 | 1.400956019 | 0.162437 | 0.1992 | -6.36513333 |
| NPBWR1 | 0.052164189 | 0.13794153 | 1.400669307 | 0.162523 | 0.19929 | -6.36553181 |
| E2F2 | 0.080498615 | 0.89735755 | 1.399283957 | 0.162937 | 0.19976 | -6.36745606 |
| TEAD2 | -0.140966327 | 3.85962218 | -1.399251453 | 0.162947 | 0.19976 | -6.36750118 |
| ABCA13 | -0.13517366 | 0.89775288 | -1.399250934 | 0.162947 | 0.19976 | -6.3675019 |
| KLF14 | -0.012629567 | 0.03463394 | -1.399215116 | 0.162958 | 0.19976 | -6.36755163 |
| SGO2 | -0.063720127 | 1.14235213 | -1.397344929 | 0.163519 | 0.20042 | -6.37014621 |
| CKLF | 0.133889537 | 4.57001894 | 1.397340486 | 0.16352 | 0.20042 | -6.37015237 |
| TAC1 | -0.070441888 | 0.1780732 | -1.397045353 | 0.163609 | 0.20052 | -6.37056151 |

| | | | | | | |
|---|---|---|---|---|---|---|
| SCRIB | 0.096980146 | 5.34962085 | 1.396981652 | 0.163628 | 0.20053 | -6.37064981 |
| PPRC1 | 0.102943832 | 4.41580759 | 1.396808274 | 0.16368 | 0.20058 | -6.37089011 |
| HSFX1 | -0.015300747 | 0.07362307 | -1.396199536 | 0.163863 | 0.20079 | -6.37173358 |
| KLHL33 | -0.025131754 | 0.1309438 | -1.395991338 | 0.163925 | 0.20085 | -6.37202197 |
| CCDC18 | 0.040432919 | 0.1120799 | 1.395949382 | 0.163938 | 0.20085 | -6.37208009 |
| FBXO28 | -0.102633955 | 4.2644194 | -1.395757608 | 0.163996 | 0.20091 | -6.37234569 |
| STPG4 | 0.011430431 | 0.05608417 | 1.395669023 | 0.164022 | 0.20092 | -6.37246836 |
| KRT36 | 0.021774295 | 0.0574597 | 1.39530974 | 0.164131 | 0.20104 | -6.37296583 |
| STARD9 | 0.077793368 | 1.14626587 | 1.394805506 | 0.164282 | 0.20121 | -6.37366379 |
| CYP4F3 | -0.090425015 | 0.10259322 | -1.393773145 | 0.164594 | 0.20158 | -6.375092 |
| EXOSC1 | -0.071438379 | 4.78145865 | -1.393575448 | 0.164653 | 0.20164 | -6.37536538 |
| GAL3ST4 | 0.15538271 | 2.10738282 | 1.392964231 | 0.164838 | 0.20185 | -6.37621035 |
| AMY2B | 0.145952492 | 2.34365438 | 1.39235413 | 0.165022 | 0.20206 | -6.37705342 |
| PELI3 | 0.082347128 | 3.39373929 | 1.392123388 | 0.165092 | 0.20213 | -6.37737218 |
| KAT2A | -0.120729681 | 5.21840719 | -1.392002435 | 0.165129 | 0.20216 | -6.37753924 |
| DCP2 | -0.079957589 | 3.10414914 | -1.391255769 | 0.165355 | 0.20241 | -6.37857027 |
| SEC24A | -0.122995864 | 3.94979367 | -1.391249887 | 0.165356 | 0.20241 | -6.37857839 |
| ZDHHC2 | -0.088097588 | 0.15208143 | -1.390817883 | 0.165487 | 0.20256 | -6.37917467 |
| KCNK12 | -0.026208269 | 0.15101866 | -1.390298561 | 0.165645 | 0.20273 | -6.37989122 |
| WNT5A | 0.191806981 | 3.29870346 | 1.389974878 | 0.165743 | 0.20284 | -6.38033771 |
| AXIN1 | -0.080650396 | 4.44200152 | -1.389863781 | 0.165777 | 0.20287 | -6.38049093 |
| CXCR5 | 0.031547371 | 0.07371974 | 1.389326149 | 0.16594 | 0.20305 | -6.38123224 |
| PROKR1 | -0.031184017 | 0.0332966 | -1.389105639 | 0.166007 | 0.20312 | -6.38153621 |
| MYZAP | -0.07915054 | 0.89166348 | -1.388740587 | 0.166118 | 0.20324 | -6.38203933 |
| BGN | 0.19636807 | 8.14320388 | 1.387297753 | 0.166556 | 0.20376 | -6.38402656 |
| INTS1 | -0.081797606 | 5.35073326 | -1.387058688 | 0.166629 | 0.20384 | -6.38435563 |
| NUP214 | -0.080430136 | 3.92349299 | -1.386008149 | 0.166949 | 0.20421 | -6.38580103 |
| HS3ST4 | 0.067393704 | 0.15780899 | 1.385061557 | 0.167238 | 0.20455 | -6.38710248 |
| CBFB | 0.105654328 | 5.22476635 | 1.384996749 | 0.167258 | 0.20456 | -6.38719155 |
| VASH1 | -0.119897614 | 3.4027679 | -1.384933636 | 0.167277 | 0.20457 | -6.38727829 |
| PABPC4 | 0.089161002 | 5.95441144 | 1.384846916 | 0.167304 | 0.20459 | -6.38739746 |
| THEG | 0.084035192 | 0.1951886 | 1.384198405 | 0.167502 | 0.20482 | -6.38828845 |
| RHBDL1 | -0.097083318 | 1.21892887 | -1.383988883 | 0.167566 | 0.20488 | -6.38857622 |
| CRX | 0.009614165 | 0.02825744 | 1.383691335 | 0.167657 | 0.20498 | -6.38898483 |
| DDX43 | -0.164505187 | 0.80096119 | -1.383457351 | 0.167729 | 0.20505 | -6.38930608 |
| S100PBP | -0.08818237 | 3.12853356 | -1.383325093 | 0.167769 | 0.20508 | -6.38948764 |
| ARHGEF | 0.117422705 | 5.27664357 | 1.382721394 | 0.167954 | 0.20529 | -6.39031617 |
| HS6ST2 | -0.336850292 | 2.06953515 | -1.382561009 | 0.168003 | 0.20534 | -6.39053623 |
| CTSD | 0.112922856 | 9.5447951 | 1.382180234 | 0.16812 | 0.20547 | -6.39105858 |
| ARID5A | 0.13643672 | 3.81237325 | 1.381770689 | 0.168246 | 0.2056 | -6.39162023 |

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| NAALAD | 0.079936436 | 1.33982126 | 1.381752324 | 0.168251 | 0.2056 | -6.39164541 |
| NKAIN1 | -0.10009399 | 0.17447343 | -1.381189974 | 0.168424 | 0.20579 | -6.39241634 |
| GPLD1 | -0.118484681 | 1.42727924 | -1.380641799 | 0.168592 | 0.20599 | -6.39316754 |
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| SIDT1 | -0.115228614 | 0.76765764 | -1.379307171 | 0.169003 | 0.20641 | -6.39499525 |
| SMIM10L | -0.247947745 | 4.87059137 | -1.37909026 | 0.16907 | 0.20648 | -6.39529213 |
| TENM1 | 0.313783706 | 3.61350087 | 1.378794171 | 0.169161 | 0.20658 | -6.39569731 |
| GASK1A | -0.108268511 | 0.98394307 | -1.378721562 | 0.169183 | 0.20659 | -6.39579666 |
| DSP | 0.191100309 | 7.04867042 | 1.37799027 | 0.169409 | 0.20685 | -6.39679697 |
| PPP1R1 | -0.167640267 | 6.24393314 | -1.377855063 | 0.16945 | 0.20688 | -6.39698186 |
| ABHD2 | -0.161924761 | 4.20719611 | -1.377592714 | 0.169531 | 0.20697 | -6.39734055 |
| LOXL4 | -0.23658211 | 3.71225309 | -1.377351333 | 0.169606 | 0.20704 | -6.39767052 |
| CEP76 | -0.06822325 | 1.8833002 | -1.377293328 | 0.169624 | 0.20705 | -6.39774981 |
| APLP2 | -0.15579344 | 10.0908345 | -1.376382122 | 0.169905 | 0.20737 | -6.39899486 |
| SLC7A1 | 0.154085158 | 3.52991502 | 1.376379245 | 0.169906 | 0.20737 | -6.39899879 |
| NCKAP1 | -0.122463349 | 4.86100947 | -1.376185659 | 0.169966 | 0.20742 | -6.3992632 |
| FXYD4 | -0.044438493 | 0.13184564 | -1.375914463 | 0.17005 | 0.20751 | -6.39963355 |
| ZNF676 | -0.149964763 | 2.21915775 | -1.37575606 | 0.170099 | 0.20756 | -6.39984983 |
| KLK13 | 0.165129662 | 1.6055982 | 1.375202242 | 0.17027 | 0.20775 | -6.40060582 |
| OR5K2 | -0.024571896 | 0.13026876 | -1.375040397 | 0.17032 | 0.2078 | -6.40082669 |
| RRM2 | 0.140917781 | 1.66797477 | 1.374132821 | 0.170601 | 0.20813 | -6.40206479 |
| ST6GALl | 0.060939455 | 0.55504421 | 1.373991049 | 0.170645 | 0.20816 | -6.40225812 |
| INTU | -0.102792852 | 2.15154551 | -1.373250539 | 0.170875 | 0.20843 | -6.40326761 |
| VAMP4 | -0.102458805 | 4.28860416 | -1.37293713 | 0.170972 | 0.20853 | -6.4036947 |
| GRM8 | -0.050027636 | 0.36418484 | -1.372813053 | 0.171011 | 0.20856 | -6.40386375 |
| MRAS | -0.101069535 | 4.51243127 | -1.372794654 | 0.171017 | 0.20856 | -6.40388882 |
| NKX6-3 | -0.032325098 | 0.06798068 | -1.372594325 | 0.171079 | 0.20862 | -6.40416174 |
| CDC6 | -0.104046175 | 1.65459633 | -1.372493766 | 0.17111 | 0.20864 | -6.40429872 |
| UBE2L6 | 0.130619267 | 6.23073762 | 1.372206052 | 0.171199 | 0.20874 | -6.40469058 |
| PBK | -0.119269443 | 1.19175738 | -1.371892593 | 0.171297 | 0.20884 | -6.40511742 |
| IRF3 | -0.104359073 | 5.78959751 | -1.37178302 | 0.171331 | 0.20887 | -6.4052666 |
| MAP4K4 | 0.10598281 | 4.76328543 | 1.371679086 | 0.171363 | 0.20889 | -6.40540809 |
| RPRD1A | -0.109289697 | 4.83604597 | -1.370725884 | 0.17166 | 0.20924 | -6.40670528 |
| KIF5B | -0.100785127 | 6.31058712 | -1.370493534 | 0.171732 | 0.20931 | -6.40702134 |
| REV3L | -0.120308489 | 2.9387659 | -1.369543275 | 0.172029 | 0.20966 | -6.40831342 |
| CYP2A7 | 0.011064334 | 0.04283101 | 1.369385078 | 0.172078 | 0.2097 | -6.40852844 |
| CXCL12 | -0.203099329 | 4.18171815 | -1.368656054 | 0.172306 | 0.20996 | -6.40951899 |

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| PRR16 | -0.080773054 | 1.06221697 | -1.367211927 | 0.172757 | 0.2105 | -6.41147965 |
| ENTPD1 | -0.195382973 | 5.44022531 | -1.366717065 | 0.172912 | 0.21067 | -6.41215104 |
| BBX | -0.123365847 | 4.41364394 | -1.366520656 | 0.172974 | 0.21073 | -6.41241745 |
| CHST3 | -0.123623777 | 3.47980373 | -1.366351925 | 0.173026 | 0.21078 | -6.41264628 |
| RAB31 | 0.144303448 | 5.23025975 | 1.365258763 | 0.173369 | 0.21118 | -6.41412816 |
| ACP7 | 0.022146006 | 0.06697361 | 1.365170253 | 0.173397 | 0.2112 | -6.4142481 |
| TBC1D2: | -0.097395917 | 4.31808088 | -1.364981589 | 0.173456 | 0.21125 | -6.41450371 |
| BST1 | -0.090783345 | 1.66268003 | -1.364971877 | 0.173459 | 0.21125 | -6.41451687 |
| MYOZ2 | 0.052571398 | 0.09363679 | 1.364932855 | 0.173472 | 0.21125 | -6.41456974 |
| GRM6 | -0.037732458 | 0.30649774 | -1.364493417 | 0.17361 | 0.2114 | -6.41516497 |
| ABCC5 | -0.084338944 | 1.88426696 | -1.363958912 | 0.173777 | 0.21159 | -6.41588871 |
| ZNF384 | -0.118877561 | 3.75713529 | -1.363742407 | 0.173846 | 0.21166 | -6.41618179 |
| OPCML | 0.208359547 | 0.76225492 | 1.363571302 | 0.173899 | 0.21171 | -6.41641338 |
| DHX32 | -0.086014796 | 4.88513544 | -1.363149078 | 0.174032 | 0.21185 | -6.41698473 |
| ERFE | -0.311713406 | 4.48659095 | -1.362736581 | 0.174162 | 0.212 | -6.41754276 |
| MYO5A | 0.109262485 | 3.20387476 | 1.36203131 | 0.174384 | 0.21225 | -6.41849645 |
| PRR26 | -0.01207009 | 0.06438816 | -1.361485219 | 0.174556 | 0.21245 | -6.41923457 |
| CTXND1 | -0.305110792 | 3.11047916 | -1.361299014 | 0.174615 | 0.2125 | -6.41948618 |
| EDAR | -0.067227858 | 0.14469628 | -1.361193585 | 0.174648 | 0.21253 | -6.41962863 |
| RAD21L1 | -0.01677381 | 0.06354191 | -1.360698308 | 0.174805 | 0.2127 | -6.42029767 |
| CCDC89 | -0.0874292 | 0.5020528 | -1.360652265 | 0.174819 | 0.21271 | -6.42035986 |
| NAV1 | 0.131716422 | 3.01368394 | 1.360453517 | 0.174882 | 0.21277 | -6.42062826 |
| SLC7A7 | 0.138925396 | 2.87328115 | 1.359597531 | 0.175153 | 0.21308 | -6.42178379 |
| CDR1 | 0.011414844 | 0.04257292 | 1.359390744 | 0.175218 | 0.21314 | -6.42206283 |
| NRAP | 0.080163366 | 0.05840488 | 1.358400811 | 0.175531 | 0.2135 | -6.42339808 |
| GDNF | 0.046066238 | 0.14034796 | 1.358390842 | 0.175534 | 0.2135 | -6.42341153 |
| ATP6V1E | 0.098032906 | 5.58922015 | 1.358097589 | 0.175627 | 0.2136 | -6.42380689 |
| LTBP3 | 0.159424132 | 6.70689269 | 1.357289494 | 0.175884 | 0.21389 | -6.42489592 |
| LAMP3 | 0.257073531 | 3.26890097 | 1.356970631 | 0.175985 | 0.214 | -6.42532547 |
| RAD51AI | -0.01688364 | 0.04926394 | -1.356563508 | 0.176114 | 0.21414 | -6.42587376 |
| PLK5 | -0.039958962 | 0.0587794 | -1.356157427 | 0.176243 | 0.21428 | -6.42642049 |
| GH1 | -0.036844264 | 0.13207824 | -1.355915673 | 0.17632 | 0.21436 | -6.4267459 |
| SLC16A8 | -0.087301909 | 0.96420082 | -1.355293968 | 0.176517 | 0.21459 | -6.42758247 |
| SPDYE4 | -0.018741106 | 0.09065442 | -1.3542978 | 0.176835 | 0.21496 | -6.42892214 |
| HIST3H2 | 0.082946 | 0.50326976 | 1.35339688 | 0.177122 | 0.21529 | -6.43013288 |
| OVGP1 | -0.071350359 | 1.07177334 | -1.352936844 | 0.177268 | 0.21545 | -6.43075081 |
| PTAR1 | -0.106210225 | 3.16813304 | -1.352793139 | 0.177314 | 0.21549 | -6.4309438 |
| SERPIN( | -0.046387888 | 0.27926464 | -1.351784659 | 0.177636 | 0.21587 | -6.43229755 |
| PF4 | -0.071840522 | 0.3333796 | -1.351423672 | 0.177752 | 0.21599 | -6.43278189 |
| FAM9B | 0.007811312 | 0.01366081 | 1.350850446 | 0.177935 | 0.2162 | -6.43355073 |

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| LRRK1 | 0.107437294 | 1.91352423 | 1.350047424 | 0.178192 | 0.2165 | -6.43462723 |
| WNT2B | -0.066355811 | 0.59308181 | -1.349814216 | 0.178267 | 0.21657 | -6.43493974 |
| TNRC18 | -0.108434852 | 5.00375789 | -1.349579878 | 0.178342 | 0.21665 | -6.43525372 |
| GDAP1L | -0.057621263 | 0.22320566 | -1.34933979 | 0.178419 | 0.21673 | -6.43557534 |
| VIPR2 | -0.041077654 | 0.10858801 | -1.349184359 | 0.178469 | 0.21677 | -6.43578352 |
| IGSF10 | -0.056203087 | 0.25903806 | -1.348809406 | 0.178589 | 0.2169 | -6.43628564 |
| PPFIA2 | 0.018072791 | 0.12705709 | 1.348625419 | 0.178648 | 0.21696 | -6.43653198 |
| C8orf89 | -0.079598803 | 0.64479839 | -1.348211464 | 0.178781 | 0.2171 | -6.43708609 |
| MGAM | 0.014056538 | 0.11112192 | 1.347699447 | 0.178945 | 0.21729 | -6.43777123 |
| ZNF460 | 0.090115367 | 1.11105673 | 1.347502043 | 0.179009 | 0.21735 | -6.43803532 |
| DNASE2 | 0.066764012 | 0.61710582 | 1.347423936 | 0.179034 | 0.21737 | -6.4381398 |
| IL15 | -0.107071851 | 2.65736423 | -1.347233915 | 0.179095 | 0.21742 | -6.43839395 |
| CXCR1 | -0.052334846 | 0.21130015 | -1.346970992 | 0.17918 | 0.21751 | -6.43874556 |
| NPFFR1 | 0.10833552 | 0.66234128 | 1.346862341 | 0.179215 | 0.21754 | -6.43889084 |
| NCOR1 | -0.099682856 | 4.64918715 | -1.34643601 | 0.179352 | 0.21769 | -6.43946078 |
| CDH19 | 0.040453808 | 0.10060249 | 1.345089897 | 0.179786 | 0.2182 | -6.44125916 |
| GLUD1 | -0.09714663 | 6.91837512 | -1.344424248 | 0.18 | 0.21844 | -6.4421478 |
| SAMD1 | 0.083923589 | 5.85326184 | 1.342075461 | 0.18076 | 0.21935 | -6.44527996 |
| PXT1 | -0.01411894 | 0.10496025 | -1.34178682 | 0.180853 | 0.21945 | -6.4456645 |
| MAP3K7 | -0.090834922 | 4.4398891 | -1.341717875 | 0.180875 | 0.21946 | -6.44575634 |
| ALDOB | 0.086346562 | 0.27046038 | 1.341389499 | 0.180982 | 0.21957 | -6.44619369 |
| KIAA004 | -0.093731336 | 4.49569976 | -1.34132929 | 0.181001 | 0.21958 | -6.44627387 |
| NEIL1 | -0.122365969 | 2.82283956 | -1.340861565 | 0.181153 | 0.21975 | -6.4468966 |
| LMNA | 0.12901771 | 7.7693589 | 1.340694477 | 0.181207 | 0.21978 | -6.44711902 |
| KCNA7 | 0.016124068 | 0.03344495 | 1.340693492 | 0.181207 | 0.21978 | -6.44712033 |
| MCOLN1 | -0.065076774 | 3.92230542 | -1.340349616 | 0.181319 | 0.2199 | -6.44757798 |
| LTN1 | -0.111570563 | 3.39164555 | -1.340254298 | 0.18135 | 0.21992 | -6.44770481 |
| MIER1 | -0.092099039 | 3.90845889 | -1.340240198 | 0.181355 | 0.21992 | -6.44772357 |
| USP37 | 0.125985269 | 1.48356033 | 1.339312621 | 0.181656 | 0.22026 | -6.44895736 |
| CHKB | -0.120972864 | 2.5694285 | -1.339065898 | 0.181736 | 0.22035 | -6.44928539 |
| FSTL1 | 0.137152355 | 5.40401623 | 1.338243981 | 0.182003 | 0.22065 | -6.45037774 |
| HOXB9 | -0.03239736 | 0.06784817 | -1.338124508 | 0.182042 | 0.22069 | -6.45053647 |
| CALCR | 0.026408272 | 0.13092754 | 1.338068667 | 0.18206 | 0.22069 | -6.45061065 |
| ANXA10 | 0.013882767 | 0.05921194 | 1.337379022 | 0.182285 | 0.22095 | -6.45152658 |
| SRD5A1 | -0.069356446 | 1.95915201 | -1.337119298 | 0.18237 | 0.22104 | -6.4518714 |
| FAM221 | -0.08625093 | 1.85171006 | -1.336896777 | 0.182442 | 0.22111 | -6.45216678 |
| LPAR6 | -0.097302768 | 4.63317182 | -1.336650305 | 0.182522 | 0.22119 | -6.45249389 |
| STX11 | -0.173184613 | 3.21335996 | -1.336516963 | 0.182566 | 0.22123 | -6.45267084 |
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| CD5L | -0.077172079 | 0.19109489 | -1.336021597 | 0.182728 | 0.22139 | -6.45332803 |

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| SULT1A3 | -0.013531729 | 0.07390432 | -1.335491046 | 0.182901 | 0.22158 | -6.45403164 |
| CEP120 | -0.092503528 | 3.63880163 | -1.335288688 | 0.182967 | 0.22165 | -6.45429993 |
| HTR1F | -0.057552312 | 0.53371314 | -1.333963605 | 0.1834 | 0.22216 | -6.45605578 |
| ATXN1 | -0.098450764 | 3.21377426 | -1.333836818 | 0.183442 | 0.22219 | -6.45622369 |
| PRR32 | -0.0952622 | 0.40146585 | -1.332688872 | 0.183818 | 0.22263 | -6.45774328 |
| BEST2 | -0.009535854 | 0.03373499 | -1.331165594 | 0.184318 | 0.22322 | -6.45975772 |
| PRRG1 | 0.144166772 | 3.5940222 | 1.330876623 | 0.184413 | 0.22332 | -6.46013961 |
| PLCH2 | 0.169149196 | 1.63673527 | 1.330651583 | 0.184487 | 0.22339 | -6.46043695 |
| PLSCR1 | 0.123224405 | 4.42365848 | 1.330235165 | 0.184624 | 0.22354 | -6.46098704 |
| MEGF10 | 0.060791837 | 0.20641809 | 1.329899145 | 0.184734 | 0.22366 | -6.46143079 |
| PPFIBP1 | -0.118888702 | 4.23657793 | -1.329828002 | 0.184758 | 0.22367 | -6.46152473 |
| SLC5A9 | -0.059386197 | 0.46861733 | -1.329159995 | 0.184978 | 0.22392 | -6.46240653 |
| WDR97 | 0.07663194 | 0.81147279 | 1.328735051 | 0.185118 | 0.22407 | -6.46296726 |
| HAVCR1 | 0.016955164 | 0.05655322 | 1.328706652 | 0.185127 | 0.22407 | -6.46300472 |
| APOBEC | -0.099543909 | 0.82499978 | -1.328416517 | 0.185223 | 0.22417 | -6.46338745 |
| MCF2 | -0.054781782 | 0.30055534 | -1.327831996 | 0.185415 | 0.22439 | -6.46415827 |
| ALDOC | 0.198120929 | 2.41603145 | 1.327295314 | 0.185592 | 0.22459 | -6.4648657 |
| PCDHGC | 0.07671585 | 0.40112214 | 1.32544905 | 0.186203 | 0.22531 | -6.46729723 |
| OR13J1 | 0.020679275 | 0.09245912 | 1.324879796 | 0.186391 | 0.22552 | -6.46804627 |
| RNF169 | 0.134273242 | 2.35698162 | 1.324826029 | 0.186409 | 0.22553 | -6.468117 |
| DAB2IP | 0.134736804 | 5.47273173 | 1.324226739 | 0.186608 | 0.22575 | -6.46890518 |
| SLC2A14 | 0.018191336 | 0.0805526 | 1.324074356 | 0.186658 | 0.2258 | -6.46910553 |
| ERCC6 | 0.078938752 | 2.15347487 | 1.322533089 | 0.18717 | 0.2264 | -6.47113075 |
| ESR1 | 0.210258961 | 1.90580165 | 1.322383595 | 0.18722 | 0.22644 | -6.47132706 |
| B3GAT1 | 0.189946741 | 3.42394246 | 1.320479603 | 0.187853 | 0.22719 | -6.4738254 |
| CELSR2 | 0.136313117 | 5.11054249 | 1.320428535 | 0.18787 | 0.2272 | -6.47389236 |
| BDNF | 0.126925057 | 1.12062598 | 1.320305963 | 0.187911 | 0.22723 | -6.47405307 |
| ESF1 | -0.10200418 | 4.01431781 | -1.320210014 | 0.187943 | 0.22725 | -6.47417886 |
| ARHGAP | -0.077633624 | 4.09012677 | -1.320166165 | 0.187958 | 0.22726 | -6.47423634 |
| GLYATL2 | 0.025023796 | 0.09994049 | 1.319729271 | 0.188103 | 0.22742 | -6.47480898 |
| GRK7 | -0.010293774 | 0.05149934 | -1.319609556 | 0.188143 | 0.22745 | -6.47496586 |
| MYH7B | -0.078412206 | 1.10503804 | -1.319243446 | 0.188265 | 0.22758 | -6.47544553 |
| DEGS1 | -0.105498123 | 7.15932785 | -1.318810812 | 0.18841 | 0.22774 | -6.4760122 |
| SHISA9 | 0.089678055 | 0.318361 | 1.318290655 | 0.188584 | 0.22793 | -6.47669326 |
| PPP1R14 | -0.107689225 | 1.32725922 | -1.316243661 | 0.189269 | 0.22874 | -6.47937089 |
| PNLIPRP | -0.007770667 | 0.02404701 | -1.316022271 | 0.189343 | 0.22882 | -6.47966024 |
| GJA9 | -0.012897993 | 0.06480666 | -1.315779747 | 0.189424 | 0.2289 | -6.47997716 |
| GALNT3 | 0.166651781 | 4.87351959 | 1.315266807 | 0.189596 | 0.22907 | -6.48064725 |
| HMGB2 | -0.111719936 | 6.08757169 | -1.315252137 | 0.189601 | 0.22907 | -6.48066641 |
| PCDHB6 | -0.066823983 | 0.67775648 | -1.31519675 | 0.18962 | 0.22907 | -6.48073875 |

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| CCK | -0.026593785 | 0.07317136 | -1.315169764 | 0.189629 | 0.22907 | -6.48077399 |
| PTPN23 | -0.080511305 | 5.40130104 | -1.315147866 | 0.189636 | 0.22907 | -6.48080259 |
| RBM19 | -0.073017476 | 4.09261102 | -1.315111759 | 0.189648 | 0.22907 | -6.48084975 |
| PLIN5 | -0.128979643 | 1.88840657 | -1.314570116 | 0.18983 | 0.22927 | -6.48155697 |
| PTPRM | -0.147488108 | 6.0391139 | -1.314542644 | 0.189839 | 0.22927 | -6.48159284 |
| TAS2R31 | -0.043900021 | 0.40223493 | -1.314325058 | 0.189912 | 0.22934 | -6.48187685 |
| SMG1 | -0.116872689 | 3.45337782 | -1.313872036 | 0.190064 | 0.22951 | -6.48246803 |
| RAB3IL1 | 0.107910952 | 2.65336542 | 1.31351471 | 0.190185 | 0.22963 | -6.4829342 |
| DIRAS3 | 0.272068668 | 4.67630545 | 1.313492561 | 0.190192 | 0.22963 | -6.48296309 |
| NPIPB12 | 0.029712827 | 0.15516825 | 1.313332129 | 0.190246 | 0.22968 | -6.48317234 |
| RALGAP | -0.097623495 | 4.43289336 | -1.313016125 | 0.190352 | 0.22979 | -6.48358443 |
| LMO4 | -0.107910274 | 5.18676722 | -1.312708085 | 0.190456 | 0.2299 | -6.48398604 |
| FBXO40 | 0.023241357 | 0.02215424 | 1.312528926 | 0.190516 | 0.22996 | -6.48421958 |
| PWP2 | -0.079053416 | 0.55657345 | -1.311738827 | 0.190782 | 0.23026 | -6.48524912 |
| SPOPL | -0.115222788 | 3.56761673 | -1.311628114 | 0.19082 | 0.23029 | -6.48539334 |
| RPS10-N | 0.022009428 | 0.10843355 | 1.311557857 | 0.190843 | 0.2303 | -6.48548485 |
| SREBF2 | -0.112240315 | 5.37477002 | -1.310474621 | 0.191209 | 0.23073 | -6.48689517 |
| LLGL2 | -0.073104152 | 4.74552906 | -1.310108891 | 0.191332 | 0.23086 | -6.48737108 |
| TRIM45 | -0.124016852 | 2.29993176 | -1.309728856 | 0.191461 | 0.231 | -6.48786546 |
| F13A1 | 0.191034022 | 3.51669282 | 1.30871997 | 0.191802 | 0.23139 | -6.48917721 |
| ENPP2 | 0.199939535 | 2.95990617 | 1.30805346 | 0.192027 | 0.23165 | -6.49004326 |
| POU2F1 | -0.073635005 | 2.68280177 | -1.308019755 | 0.192039 | 0.23165 | -6.49008705 |
| ESCO2 | 0.037511965 | 0.33386697 | 1.307591078 | 0.192184 | 0.2318 | -6.49064382 |
| EXOC7 | -0.09584185 | 4.59112537 | -1.307403091 | 0.192248 | 0.23186 | -6.49088792 |
| ELMO3 | -0.134373852 | 5.93884217 | -1.307265055 | 0.192295 | 0.2319 | -6.49106714 |
| RTL5 | -0.132134492 | 5.22641179 | -1.306549221 | 0.192537 | 0.23218 | -6.49199624 |
| KLRD1 | 0.058477393 | 0.36544998 | 1.306505475 | 0.192552 | 0.23218 | -6.492053 |
| C17orf64 | -0.023024837 | 0.12961128 | -1.306424566 | 0.19258 | 0.2322 | -6.49215798 |
| NAV2 | 0.169411598 | 4.90323603 | 1.306351687 | 0.192604 | 0.23221 | -6.49225254 |
| HNRNPL | -0.08462692 | 6.95200747 | -1.305932392 | 0.192747 | 0.23237 | -6.49279644 |
| GALNT15 | -0.139060354 | 2.15370499 | -1.304673221 | 0.193175 | 0.23287 | -6.49442877 |
| RNASE7 | 0.037967937 | 0.17980053 | 1.303444691 | 0.193593 | 0.23334 | -6.49601989 |
| ZNF592 | -0.100271371 | 4.48049672 | -1.303430856 | 0.193598 | 0.23334 | -6.4960378 |
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| PRDM15 | -0.059923632 | 1.57778109 | -1.301912954 | 0.194115 | 0.23392 | -6.49800163 |
| KLK1 | 0.292562279 | 1.4328199 | 1.301911345 | 0.194116 | 0.23392 | -6.49800371 |
| ST3GAL4 | -0.134663914 | 3.29081602 | -1.301825984 | 0.194145 | 0.23394 | -6.49811408 |
| DLC1 | 0.147810424 | 4.2906121 | 1.301591723 | 0.194225 | 0.23401 | -6.49841694 |
| LRRC37 | -0.03455348 | 0.33278776 | -1.301579141 | 0.194229 | 0.23401 | -6.49843321 |
| HJURP | 0.088607105 | 0.87136509 | 1.300712365 | 0.194526 | 0.23435 | -6.49955333 |

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| GDA | 0.012060749 | 0.02583101 | 1.300023667 | 0.194761 | 0.23461 | -6.5004428 |
| HIST2H2 | -0.051231235 | 0.23809507 | -1.299914188 | 0.194799 | 0.23464 | -6.50058415 |
| DCLRE1l | -0.082663546 | 2.5952612 | -1.298911884 | 0.195142 | 0.23504 | -6.50187771 |
| CCDC74 | 0.135070048 | 2.99890755 | 1.298458639 | 0.195297 | 0.23521 | -6.50246233 |
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| TCP10L2 | -0.022140566 | 0.06831691 | -1.298224934 | 0.195377 | 0.23527 | -6.5027637 |
| MSL1 | -0.09201594 | 4.83593943 | -1.296876001 | 0.195841 | 0.23581 | -6.50450216 |
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| C1orf216 | -0.105107056 | 3.90963074 | -1.296437495 | 0.195991 | 0.23596 | -6.5050669 |
| NUP188 | 0.091001664 | 4.63509834 | 1.296313133 | 0.196034 | 0.23599 | -6.50522703 |
| NRXN3 | 0.081308715 | 0.40386779 | 1.296289781 | 0.196042 | 0.23599 | -6.5052571 |
| CEP83 | -0.080212299 | 2.78724943 | -1.295767584 | 0.196222 | 0.23619 | -6.5059293 |
| TRAK2 | 0.133036779 | 5.95981856 | 1.294896911 | 0.196521 | 0.23653 | -6.5070495 |
| LY75-CD | 0.009795145 | 0.04726833 | 1.294660561 | 0.196603 | 0.23661 | -6.50735345 |
| RNASE4 | 0.086517965 | 1.10316854 | 1.294346953 | 0.196711 | 0.23673 | -6.50775668 |
| PKD2 | -0.120339435 | 4.15207169 | -1.293515532 | 0.196998 | 0.23705 | -6.50882524 |
| MATN1 | -0.113656364 | 0.31835795 | -1.293206114 | 0.197105 | 0.23717 | -6.50922273 |
| NUMA1 | -0.104500037 | 6.02139454 | -1.292690212 | 0.197283 | 0.23736 | -6.50988528 |
| MTBP | 0.038923099 | 0.73842557 | 1.291061762 | 0.197846 | 0.23802 | -6.5119749 |
| SPINK2 | 0.164591151 | 2.60982213 | 1.289723572 | 0.19831 | 0.23857 | -6.51369011 |
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| RTP4 | 0.127441361 | 3.16646782 | 1.28895649 | 0.198576 | 0.23885 | -6.51467253 |
| DVL2 | -0.086417632 | 4.52751497 | -1.288749239 | 0.198648 | 0.23892 | -6.51493786 |
| CHN2 | -0.146410511 | 2.76312414 | -1.288082403 | 0.198879 | 0.23917 | -6.51579127 |
| ROBO1 | 0.122200312 | 2.46200043 | 1.288065555 | 0.198885 | 0.23917 | -6.51581283 |
| PLXDC2 | 0.117151372 | 3.90146913 | 1.287991824 | 0.198911 | 0.23919 | -6.51590716 |
| PMP22 | -0.168484345 | 5.76296845 | -1.287527592 | 0.199072 | 0.23936 | -6.51650099 |
| STYX | -0.073505034 | 3.44568007 | -1.287448453 | 0.1991 | 0.23938 | -6.5166022 |
| SALL3 | -0.087330176 | 0.12475449 | -1.287197127 | 0.199187 | 0.23947 | -6.51692358 |
| KIR3DL2 | 0.033271715 | 0.1027762 | 1.286775304 | 0.199334 | 0.23963 | -6.51746284 |
| FOLH1 | -0.121248396 | 1.61068366 | -1.286737526 | 0.199347 | 0.23963 | -6.51751113 |
| CCL4 | 0.205033276 | 2.62307268 | 1.286332131 | 0.199488 | 0.23978 | -6.51802921 |
| TBX1 | -0.107661933 | 0.89500497 | -1.286255181 | 0.199515 | 0.23978 | -6.51812753 |
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| ORC6 | 0.065787377 | 1.07665906 | 1.28609848 | 0.19957 | 0.23983 | -6.51832773 |
| NRIP3 | 0.108458079 | 1.45018395 | 1.285739588 | 0.199695 | 0.23996 | -6.51878616 |
| GOLGA6 | -0.034846755 | 0.28987194 | -1.285697339 | 0.199709 | 0.23996 | -6.51884012 |
| PARP9 | 0.120748089 | 4.48235166 | 1.285216821 | 0.199877 | 0.24014 | -6.5194537 |
| CD59 | -0.104921978 | 8.18279833 | -1.284469988 | 0.200138 | 0.24043 | -6.52040688 |
| NEFH | -0.117471415 | 0.83104774 | -1.284443393 | 0.200147 | 0.24043 | -6.52044081 |

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| NRGN | -0.158314588 | 4.74341649 | -1.283904187 | 0.200335 | 0.24064 | -6.52112865 |
| FAM43B | 0.101112397 | 0.88207283 | 1.28369604 | 0.200408 | 0.24071 | -6.5213941 |
| TMPPE | 0.076383453 | 1.12180172 | 1.28302861 | 0.200641 | 0.24098 | -6.52224497 |
| PCDHA1 | 0.123667021 | 0.83088383 | 1.281297155 | 0.201248 | 0.24169 | -6.52445028 |
| PKHD1 | 0.025963879 | 0.04220838 | 1.280913682 | 0.201382 | 0.24183 | -6.5249383 |
| MAP1B | -0.129050193 | 3.00562728 | -1.280825886 | 0.201413 | 0.24185 | -6.52505001 |
| MNX1 | -0.065805666 | 0.04846028 | -1.280324027 | 0.201589 | 0.24205 | -6.52568843 |
| S100A1 | 0.180266896 | 8.24563464 | 1.280223251 | 0.201624 | 0.24207 | -6.5258166 |
| RBM33 | -0.082434509 | 3.29872864 | -1.279291271 | 0.201952 | 0.24245 | -6.52700144 |
| C4orf51 | -0.028664576 | 0.09928818 | -1.279060328 | 0.202033 | 0.24253 | -6.52729491 |
| SCAF11 | -0.102785501 | 4.39187913 | -1.278249735 | 0.202318 | 0.24285 | -6.52832455 |
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| EIF3C | -0.111342372 | 2.21215673 | -1.277703826 | 0.20251 | 0.24305 | -6.52901762 |
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| PCP4 | -0.223184636 | 6.76981071 | -1.27633836 | 0.202992 | 0.24359 | -6.53074989 |
| ZNF736 | -0.086567741 | 2.37448328 | -1.276100045 | 0.203076 | 0.24368 | -6.53105204 |
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| IMPG2 | 0.014366526 | 0.13440039 | 1.273265408 | 0.204078 | 0.24483 | -6.53464164 |
| SPATA2! | -0.100102549 | 1.74755491 | -1.273206907 | 0.204099 | 0.24483 | -6.53471564 |
| SPATC1I | -0.152615511 | 2.92373536 | -1.272829819 | 0.204232 | 0.24498 | -6.53519255 |
| ACTG1 | -0.081692589 | 11.9332689 | -1.272682593 | 0.204284 | 0.24502 | -6.53537871 |
| TLE4 | -0.132426784 | 2.02719447 | -1.272456733 | 0.204364 | 0.2451 | -6.53566425 |
| MCTP1 | 0.086118941 | 1.33134683 | 1.27221213 | 0.204451 | 0.24519 | -6.53597344 |
| ANKH | 0.141968819 | 4.68679809 | 1.271605651 | 0.204666 | 0.24543 | -6.5367398 |
| GPR31 | 0.02409298 | 0.07659657 | 1.27132323 | 0.204767 | 0.24553 | -6.53709655 |
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| UBAP2 | -0.095179194 | 3.41397853 | -1.26895946 | 0.205607 | 0.24647 | -6.54007934 |
| STAG1 | -0.140263595 | 3.35781483 | -1.268828532 | 0.205654 | 0.24651 | -6.5402444 |
| TPM4 | 0.101413256 | 5.95945892 | 1.267748431 | 0.206039 | 0.24695 | -6.5416054 |
| RNF208 | -0.11618335 | 5.35225221 | -1.267336037 | 0.206186 | 0.24711 | -6.54212474 |
| ZP3 | -0.122790312 | 1.8680253 | -1.26721071 | 0.206231 | 0.24715 | -6.54228253 |
| DERL3 | -0.231472017 | 3.77241364 | -1.2660267 | 0.206653 | 0.24764 | -6.54377252 |
| CDKN1C | -0.119959547 | 3.57832924 | -1.265421783 | 0.20687 | 0.24788 | -6.54453324 |
| HNF1B | 0.087283603 | 0.23828532 | 1.262951947 | 0.207755 | 0.24892 | -6.54763545 |
| ZDHHC1 | -0.094629433 | 4.70388346 | -1.262603473 | 0.20788 | 0.24905 | -6.54807266 |
| NOMO2 | -0.13264422 | 2.25096284 | -1.261596635 | 0.208241 | 0.24946 | -6.54933523 |
| VWA5B1 | -0.084829868 | 0.49436312 | -1.261577098 | 0.208248 | 0.24946 | -6.54935972 |

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| TNK2 | -0.088102316 | 3.48066934 | -1.260867963 | 0.208503 | 0.24975 | -6.55024836 |
| MDN1 | -0.108179162 | 3.41424049 | -1.260226609 | 0.208734 | 0.25001 | -6.55105164 |
| HNF4G | 0.008719122 | 0.02185499 | 1.259524127 | 0.208987 | 0.25029 | -6.55193101 |
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| LZTS3 | -0.093860563 | 4.67387465 | -1.257032922 | 0.209886 | 0.25132 | -6.55504562 |
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| TRIM72 | 0.025697479 | 0.06228528 | 1.255895081 | 0.210298 | 0.25177 | -6.55646617 |
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| RNASEH | -0.090105984 | 3.29798251 | -1.254153862 | 0.210929 | 0.25243 | -6.55863756 |
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| KCNAB3 | -0.068525886 | 0.67910144 | -1.253389993 | 0.211206 | 0.25274 | -6.5595892 |
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| SPTSSB | 0.041094241 | 0.26090233 | 1.252707294 | 0.211454 | 0.25298 | -6.56043923 |
| SKA3 | 0.068825287 | 0.79565973 | 1.252427311 | 0.211556 | 0.25308 | -6.56078771 |
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| ANXA11 | -0.06775364 | 6.07974762 | -1.252217033 | 0.211633 | 0.25314 | -6.56104938 |
| HOXA7 | 0.032207624 | 0.09403773 | 1.252074906 | 0.211684 | 0.25318 | -6.56122622 |
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| ISLR | 0.204486827 | 7.33607836 | 1.250306291 | 0.212328 | 0.25392 | -6.56342511 |
| ABCA10 | -0.053098468 | 0.49976064 | -1.250200068 | 0.212367 | 0.25395 | -6.56355708 |
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| KL | 0.141385501 | 2.25171707 | 1.248551931 | 0.212969 | 0.25461 | -6.56560325 |
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| C1QTNF | 0.124012902 | 1.41009973 | 1.247637165 | 0.213303 | 0.25496 | -6.56673778 |
| FGL1 | 0.018514965 | 0.07336359 | 1.24745731 | 0.213369 | 0.25502 | -6.56696075 |
| PCDHB7 | -0.077335891 | 0.84074516 | -1.247332775 | 0.213414 | 0.25505 | -6.56711512 |
| ZDHHC1 | -0.069303109 | 4.9245332 | -1.246867787 | 0.213585 | 0.25524 | -6.56769137 |
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| UBL4B | 0.017691159 | 0.06111768 | 1.244247506 | 0.214545 | 0.25635 | -6.57093464 |
| GNPDA1 | -0.073791861 | 5.85592505 | -1.244173204 | 0.214573 | 0.25637 | -6.57102651 |
| LRRN1 | -0.169399419 | 3.27044112 | -1.243563395 | 0.214797 | 0.25662 | -6.57178029 |
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| TDRD12 | 0.082545421 | 0.20403128 | 1.242698906 | 0.215115 | 0.25696 | -6.57284826 |

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| WSCD1 | -0.075572911 | 1.38285142 | -1.242614427 | 0.215146 | 0.25698 | -6.57295258 |
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| NPIPB11 | 0.070889124 | 0.4603172 | 1.239737918 | 0.216207 | 0.25815 | -6.57650062 |
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| PAQR3 | -0.071958467 | 1.6859064 | -1.23743971 | 0.217057 | 0.25902 | -6.57932952 |
| CDC7 | -0.078948794 | 1.89636967 | -1.237207064 | 0.217143 | 0.25911 | -6.5796156 |
| CHTF18 | 0.093278214 | 2.51960167 | 1.236006627 | 0.217588 | 0.25962 | -6.5810909 |
| GLP1R | -0.15590844 | 0.80935394 | -1.235557716 | 0.217755 | 0.2598 | -6.58164223 |
| NPAS1 | 0.093768045 | 1.2603605 | 1.235384131 | 0.217819 | 0.25986 | -6.58185537 |
| SMIM14 | -0.110108629 | 6.25789073 | -1.235135528 | 0.217911 | 0.25995 | -6.58216057 |
| MTHFR | -0.093222202 | 4.80836305 | -1.234888283 | 0.218003 | 0.26004 | -6.58246403 |
| FAM102E | 0.115418064 | 2.58465336 | 1.233858809 | 0.218386 | 0.26048 | -6.58372697 |
| CTAGE1 | -0.006615868 | 0.01443707 | -1.233736216 | 0.218432 | 0.26052 | -6.58387729 |
| ADAM11 | -0.063149846 | 0.45030475 | -1.232241023 | 0.218989 | 0.26116 | -6.58570952 |
| TRIM35 | -0.076235987 | 3.92871581 | -1.231784957 | 0.219159 | 0.26135 | -6.58626796 |
| BTAF1 | 0.127089586 | 3.75736442 | 1.231178832 | 0.219385 | 0.2616 | -6.58700981 |
| ORC1 | 0.068887188 | 1.08600745 | 1.230748432 | 0.219546 | 0.26177 | -6.58753638 |
| LHX4 | -0.050704155 | 0.51079265 | -1.230449863 | 0.219657 | 0.26189 | -6.58790155 |
| CYP19A1 | -0.037007896 | 0.11753759 | -1.230161639 | 0.219765 | 0.262 | -6.58825398 |
| KIF21A | -0.111374425 | 2.75328432 | -1.22961625 | 0.219969 | 0.26222 | -6.58892065 |
| AP1G2 | -0.109829011 | 3.67470945 | -1.229547121 | 0.219995 | 0.26223 | -6.58900513 |
| HIST1H3 | -0.046424566 | 0.24850795 | -1.229391712 | 0.220053 | 0.26228 | -6.58919503 |
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| GLIS2 | 0.097840316 | 4.84511827 | 1.22791715 | 0.220605 | 0.26291 | -6.5909957 |
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| CTDSP2 | -0.097457776 | 6.52322364 | -1.226199365 | 0.221249 | 0.26364 | -6.5930907 |
| IL20RA | -0.082992638 | 0.74553204 | -1.226145674 | 0.22127 | 0.26364 | -6.59315613 |
| EEF1A2 | -0.269513516 | 2.01517469 | -1.225890005 | 0.221366 | 0.26374 | -6.59346768 |
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| PACSIN1 | -0.090495015 | 1.02320761 | -1.225479478 | 0.22152 | 0.26387 | -6.5939678 |

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| TAS2R19 | -0.037995883 | 0.41920189 | -1.225414444 | 0.221544 | 0.26388 | -6.59404702 |
| CLDN15 | -0.083992627 | 2.76034847 | -1.224839473 | 0.221761 | 0.26412 | -6.59474715 |
| SGO1 | 0.044675191 | 0.49512931 | 1.223571628 | 0.222238 | 0.26467 | -6.59628985 |
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| TMEM25 | -0.075403767 | 0.33063548 | -1.223087527 | 0.22242 | 0.26485 | -6.59687848 |
| DPYSL2 | -0.112837615 | 4.32002844 | -1.222403724 | 0.222678 | 0.26513 | -6.59770955 |
| SLFNL1 | -0.025890803 | 0.2263513 | -1.221640221 | 0.222967 | 0.26546 | -6.59863693 |
| DAB1 | 0.021400752 | 0.09666154 | 1.220674645 | 0.223331 | 0.26588 | -6.59980894 |
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| HOXA10 | 0.049910681 | 0.15815139 | 1.220066791 | 0.223561 | 0.26611 | -6.60054628 |
| KRT7 | 0.1452889 | 9.53748686 | 1.219367494 | 0.223826 | 0.26641 | -6.60139409 |
| FBXW12 | 0.02378362 | 0.19543246 | 1.219043995 | 0.223949 | 0.26654 | -6.60178613 |
| OTOA | -0.028925649 | 0.13831577 | -1.218999532 | 0.223965 | 0.26654 | -6.60184001 |
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| PLEKHA | -0.137819185 | 3.02124474 | -1.217596963 | 0.224497 | 0.26711 | -6.6035385 |
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| CYP4A22 | 0.008744479 | 0.02689741 | 1.215983814 | 0.22511 | 0.26777 | -6.60548961 |
| RRAGD | -0.159981573 | 4.97151432 | -1.215039301 | 0.22547 | 0.26818 | -6.60663081 |
| OPN3 | 0.126709102 | 2.67643004 | 1.214964617 | 0.225498 | 0.26819 | -6.60672101 |
| PAPSS1 | 0.105065325 | 5.81753335 | 1.214545571 | 0.225658 | 0.26836 | -6.60722701 |
| NUP58 | -0.092522565 | 3.51479719 | -1.214296532 | 0.225752 | 0.26846 | -6.60752764 |
| RFWD3 | -0.081199019 | 3.58249083 | -1.214017364 | 0.225859 | 0.26856 | -6.60786457 |
| SPATS2L | 0.124947337 | 5.18537013 | 1.213830207 | 0.22593 | 0.26863 | -6.60809041 |
| BRSK1 | -0.15824501 | 1.44126724 | -1.213545162 | 0.226039 | 0.26874 | -6.60843431 |
| AP5B1 | 0.091397691 | 3.86965647 | 1.213140044 | 0.226194 | 0.26891 | -6.60892293 |
| GRIP1 | -0.125984342 | 1.84617745 | -1.212901381 | 0.226285 | 0.26899 | -6.60921071 |
| TLR9 | 0.011841853 | 0.06602521 | 1.212252713 | 0.226532 | 0.26926 | -6.60999259 |
| NPTX1 | 0.066647799 | 0.18303199 | 1.212225953 | 0.226543 | 0.26926 | -6.61002483 |
| ASCL4 | 0.012050226 | 0.04367442 | 1.211427258 | 0.226848 | 0.26961 | -6.61098696 |
| ERVV-1 | 0.074374732 | 0.21155356 | 1.210695397 | 0.227128 | 0.26992 | -6.61186803 |
| POU6F2 | -0.017719696 | 0.04966131 | -1.209937984 | 0.227418 | 0.27025 | -6.61277931 |
| USP13 | -0.098149053 | 4.18157802 | -1.209701619 | 0.227508 | 0.27034 | -6.61306357 |
| CLDN34 | -0.019160328 | 0.10708607 | -1.205675492 | 0.229055 | 0.27215 | -6.61789717 |
| NBPF9 | 0.105592346 | 2.26924029 | 1.205515743 | 0.229116 | 0.27221 | -6.61808863 |
| HNRNPF | -0.08736399 | 7.24592078 | -1.205308143 | 0.229196 | 0.27228 | -6.6183374 |
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| TRIM33 | -0.085571644 | 4.10073532 | -1.204177513 | 0.229632 | 0.27274 | -6.61969152 |
| CHODL | -0.056984264 | 0.62766509 | -1.203798285 | 0.229779 | 0.2729 | -6.62014543 |
| SMCHD1 | 0.095141072 | 3.47690797 | 1.203683656 | 0.229823 | 0.27293 | -6.6202826 |
| AQP8 | 0.070421287 | 0.32255044 | 1.20364271 | 0.229839 | 0.27293 | -6.6203316 |
| RFTN1 | -0.11872559 | 5.88987136 | -1.203352686 | 0.229951 | 0.27303 | -6.62067859 |
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| SORCS2 | 0.233455368 | 3.61538154 | 1.201413139 | 0.2307 | 0.27382 | -6.62299702 |
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| PNISR | -0.122167621 | 5.01703293 | -1.200689872 | 0.23098 | 0.27412 | -6.62386062 |
| CHD6 | -0.106660126 | 3.96866339 | -1.199717292 | 0.231357 | 0.27454 | -6.62502111 |
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| RHPN1 | -0.105763489 | 5.51348775 | -1.199108748 | 0.231593 | 0.27479 | -6.62574675 |
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| NLRP7 | 0.032460826 | 0.12672217 | 1.197944091 | 0.232046 | 0.27528 | -6.6271345 |
| DDX21 | -0.116953605 | 4.96118387 | -1.197267885 | 0.232309 | 0.27558 | -6.62793963 |
| SEMA4D | -0.097463491 | 3.16809892 | -1.196820644 | 0.232483 | 0.27576 | -6.62847189 |
| MRPL14 | -0.102603792 | 7.03688065 | -1.196120046 | 0.232755 | 0.27605 | -6.62930527 |
| PLBD2 | 0.080696718 | 5.693817 | 1.196108133 | 0.23276 | 0.27605 | -6.62931944 |
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| TIGD3 | -0.041052325 | 0.67027656 | -1.195300627 | 0.233075 | 0.27639 | -6.63027938 |
| YY2 | 0.062253208 | 1.00155607 | 1.19508309 | 0.23316 | 0.27647 | -6.63053788 |
| CD2AP | -0.090498839 | 4.67710722 | -1.194938285 | 0.233216 | 0.27652 | -6.63070992 |
| ARL13A | -0.043069965 | 0.45607898 | -1.194034539 | 0.233569 | 0.27692 | -6.63178319 |
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| NUSAP1 | 0.123006467 | 2.43750605 | 1.193212231 | 0.23389 | 0.27726 | -6.63275905 |
| IRX5 | -0.053881351 | 0.37669155 | -1.193036856 | 0.233959 | 0.27732 | -6.63296709 |
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| SEZ6L | 0.072314528 | 0.23532325 | 1.189830899 | 0.235214 | 0.27867 | -6.6367648 |
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| CPLX2 | -0.085402001 | 0.14652198 | -1.186862247 | 0.236381 | 0.27998 | -6.6402724 |
| UNC93B | 0.101081747 | 4.99201061 | 1.186447878 | 0.236544 | 0.28015 | -6.6407613 |
| KHDC3L | -0.021903643 | 0.08853206 | -1.185729627 | 0.236828 | 0.28047 | -6.64160835 |
| PHKA2 | -0.081221176 | 3.66940941 | -1.185481832 | 0.236925 | 0.28056 | -6.64190047 |
| ARHGDII | -0.12179353 | 8.06715416 | -1.185335918 | 0.236983 | 0.28061 | -6.64207245 |
| CA9 | -0.101523595 | 0.34513267 | -1.1845224 | 0.237304 | 0.28097 | -6.64303092 |
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| MCM8 | -0.063447707 | 1.76104078 | -1.184197165 | 0.237432 | 0.28108 | -6.64341393 |
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| TAS2R13 | 0.010202224 | 0.04319814 | 1.183466013 | 0.237721 | 0.28137 | -6.64427457 |
| ETV5 | -0.144939901 | 5.38302419 | -1.183456953 | 0.237725 | 0.28137 | -6.64428523 |
| CHD9 | -0.099159508 | 3.49109075 | -1.182552386 | 0.238083 | 0.28178 | -6.64534926 |
| MAP2K7 | -0.068704362 | 4.74536039 | -1.182506754 | 0.238101 | 0.28178 | -6.64540292 |
| CEMIP2 | 0.111739254 | 3.69185073 | 1.182405939 | 0.238141 | 0.2818 | -6.64552145 |
| WNT10B | 0.070256308 | 0.49662313 | 1.181944217 | 0.238324 | 0.28198 | -6.64606419 |
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| ALPK3 | -0.106850076 | 2.41615542 | -1.181594095 | 0.238462 | 0.28213 | -6.64647562 |
| RGS7BP | -0.050082742 | 0.20682308 | -1.181146295 | 0.23864 | 0.28232 | -6.64700164 |
| ANXA8L1 | -0.043379201 | 0.19642495 | -1.1810539 | 0.238676 | 0.28234 | -6.64711015 |
| ATRX | -0.098291721 | 3.71676812 | -1.180822546 | 0.238768 | 0.28243 | -6.64738182 |
| PRSS45 | -0.121750769 | 1.51157621 | -1.180723566 | 0.238807 | 0.28246 | -6.64749803 |
| SLC23A1 | -0.03427644 | 0.34613623 | -1.180509116 | 0.238893 | 0.28254 | -6.64774978 |
| ZNF454 | -0.084784736 | 1.72110101 | -1.179949271 | 0.239115 | 0.28278 | -6.6484068 |
| SEMA4B | -0.107841775 | 5.61538965 | -1.179731504 | 0.239201 | 0.28286 | -6.64866227 |
| GNA13 | -0.094884391 | 4.85227139 | -1.179637044 | 0.239239 | 0.28289 | -6.64877308 |
| RIPPLY2 | -0.031720097 | 0.15946569 | -1.179573093 | 0.239264 | 0.2829 | -6.64884809 |
| PCDHB9 | -0.073242643 | 0.62567054 | -1.179101148 | 0.239452 | 0.28309 | -6.64940153 |
| ZC2HC1 | -0.124859019 | 4.36306963 | -1.179069524 | 0.239464 | 0.28309 | -6.64943861 |
| PTTG2 | -0.026502513 | 0.17967769 | -1.178748727 | 0.239592 | 0.28323 | -6.64981467 |
| PLGLB2 | -0.011997969 | 0.06444508 | -1.178577069 | 0.23966 | 0.28329 | -6.65001585 |
| DEPDC7 | 0.053560559 | 0.59281261 | 1.178358297 | 0.239747 | 0.28337 | -6.65027222 |
| ERBB2 | -0.118822363 | 6.39960293 | -1.177491245 | 0.240092 | 0.28376 | -6.65128779 |
| GRIN2D | -0.074049334 | 1.01287336 | -1.177147572 | 0.240229 | 0.2839 | -6.65169013 |
| BTG3 | 0.090232059 | 5.82521947 | 1.17590899 | 0.240723 | 0.28446 | -6.65313917 |
| AMIGO3 | -0.010216378 | 0.05789613 | -1.175468799 | 0.240898 | 0.28465 | -6.6536538 |
| MAST2 | 0.075396546 | 4.35234178 | 1.174910695 | 0.241121 | 0.28489 | -6.654306 |
| TTYH3 | -0.106790123 | 4.8125892 | -1.174739522 | 0.24119 | 0.28496 | -6.65450597 |
| TANK | -0.094401642 | 4.87211868 | -1.174684139 | 0.241212 | 0.28496 | -6.65457067 |
| ELK4 | 0.083342558 | 3.3318635 | 1.174338512 | 0.24135 | 0.2851 | -6.65497434 |
| KLHL29 | -0.060354768 | 0.73172019 | -1.173964575 | 0.241499 | 0.28526 | -6.65541094 |

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| ATP13A4 | 0.170273276 | 5.66479963 | 1.172897162 | 0.241926 | 0.28575 | -6.65665648 |
| C6orf58 | -0.041040282 | 0.55175599 | -1.172317625 | 0.242158 | 0.286 | -6.65733226 |
| SLC9A3 | -0.083617584 | 0.80267344 | -1.172038533 | 0.24227 | 0.28611 | -6.65765758 |
| PTPRT | -0.07249647 | 0.13668456 | -1.170072134 | 0.243059 | 0.28702 | -6.65994752 |
| POM121 | -0.10882728 | 3.09775819 | -1.170017771 | 0.243081 | 0.28703 | -6.66001078 |
| SLC39A1 | -0.064221683 | 5.18954541 | -1.168939967 | 0.243514 | 0.28752 | -6.66126425 |
| KNG1 | -0.02511605 | 0.10148431 | -1.168795195 | 0.243572 | 0.28757 | -6.66143253 |
| ARMH1 | -0.071507143 | 0.96265231 | -1.168640753 | 0.243635 | 0.28762 | -6.66161203 |
| TMEM15 | 0.045151118 | 0.25815889 | 1.168468494 | 0.243704 | 0.28769 | -6.6618122 |
| EPHA7 | -0.03160228 | 0.06209415 | -1.167922477 | 0.243924 | 0.28791 | -6.66244652 |
| CTNNAL | -0.128033525 | 7.02485719 | -1.167900792 | 0.243932 | 0.28791 | -6.66247171 |
| ZNF471 | -0.082955178 | 2.65810953 | -1.167690654 | 0.244017 | 0.28799 | -6.66271575 |
| TRMT11 | -0.092354996 | 4.22779614 | -1.166620161 | 0.244448 | 0.28848 | -6.66395827 |
| SLN | 0.092836477 | 0.21825971 | 1.165235235 | 0.245007 | 0.28912 | -6.66556408 |
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| PDIA2 | 0.030821663 | 0.15492567 | 1.165067313 | 0.245075 | 0.28916 | -6.66575866 |
| GZMM | 0.156220948 | 1.81791396 | 1.165031325 | 0.24509 | 0.28916 | -6.66580036 |
| SCN7A | 0.07056093 | 0.31562669 | 1.164759092 | 0.2452 | 0.28927 | -6.66611573 |
| FAM193E | -0.096741167 | 3.88586374 | -1.164603041 | 0.245263 | 0.28932 | -6.66629648 |
| CYP2J2 | -0.061603474 | 0.7402846 | -1.164155216 | 0.245444 | 0.28952 | -6.66681505 |
| LPAR3 | 0.079101409 | 0.35769058 | 1.163843448 | 0.24557 | 0.28965 | -6.66717595 |
| KRT31 | -0.018495971 | 0.0677346 | -1.163683788 | 0.245635 | 0.2897 | -6.66736073 |
| C9orf50 | -0.106065937 | 1.09134328 | -1.163624709 | 0.245659 | 0.2897 | -6.6674291 |
| TTLL4 | -0.057727519 | 2.15686765 | -1.163596749 | 0.24567 | 0.2897 | -6.66746146 |
| IRF6 | -0.093463186 | 5.5566504 | -1.163024723 | 0.245901 | 0.28996 | -6.66812325 |
| RTN4R | 0.12279071 | 3.58501912 | 1.162770813 | 0.246004 | 0.29006 | -6.6684169 |
| GABRP | 0.02823827 | 0.20587455 | 1.162292604 | 0.246198 | 0.29027 | -6.66896978 |
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| VPS13A | -0.085118772 | 2.64504956 | -1.161597079 | 0.24648 | 0.29056 | -6.66977351 |
| KRT5 | 0.170487164 | 0.76371807 | 1.161469863 | 0.246532 | 0.2906 | -6.66992046 |
| GPR20 | -0.061514473 | 0.47276164 | -1.159952083 | 0.247148 | 0.2913 | -6.67167253 |
| THOC5 | 0.083244829 | 3.31718532 | 1.159169892 | 0.247466 | 0.29166 | -6.67257457 |
| VWDE | 0.131390825 | 1.83527964 | 1.158541961 | 0.247722 | 0.29194 | -6.67329828 |
| NNAT | 0.079654541 | 0.74961998 | 1.158207877 | 0.247858 | 0.29208 | -6.67368317 |
| YPEL1 | 0.082810247 | 1.74946588 | 1.158083175 | 0.247908 | 0.29211 | -6.6738268 |
| ANKRD4 | 0.084513933 | 1.72081133 | 1.1580682 | 0.247915 | 0.29211 | -6.67384405 |
| SMC5 | -0.099479497 | 4.20852415 | -1.157668594 | 0.248077 | 0.29226 | -6.67430422 |
| SKAP2 | 0.104616953 | 3.38199374 | 1.157656715 | 0.248082 | 0.29226 | -6.6743179 |
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| KLF10 | -0.125117347 | 5.30481566 | -1.157217553 | 0.248261 | 0.29243 | -6.67482343 |

| NOMO3 | -0.099119247 | 1.1290272 | -1.157153899 | 0.248287 | 0.29244 | -6.67489669 |
|---|---|---|---|---|---|---|
| ARHGEF | 0.102392208 | 3.06408946 | 1.155539108 | 0.248946 | 0.29318 | -6.67675381 |
| PTPN1 | -0.081909711 | 4.99011922 | -1.155529242 | 0.24895 | 0.29318 | -6.67676514 |
| SLC2A6 | 0.087783969 | 1.70037931 | 1.155401311 | 0.249002 | 0.29323 | -6.67691216 |
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| B4GALN | -0.053453714 | 0.55478118 | -1.154250594 | 0.249473 | 0.29374 | -6.67823384 |
| GUCY1B | 0.116126432 | 3.57561233 | 1.154136773 | 0.249519 | 0.29377 | -6.6783645 |
| ITPRID1 | 0.006894333 | 0.01447915 | 1.153906073 | 0.249614 | 0.29386 | -6.67862929 |
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| GZMH | 0.178772315 | 2.49300148 | 1.152749412 | 0.250088 | 0.29436 | -6.67995609 |
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| MTRNR2 | 0.03460722 | 0.22963205 | 1.151080199 | 0.250772 | 0.29513 | -6.68186851 |
| SLC25A3 | -0.008761328 | 0.03801588 | -1.150761117 | 0.250903 | 0.29526 | -6.68223377 |
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| NOS2 | -0.088833232 | 1.01540078 | -1.150552717 | 0.250989 | 0.29532 | -6.68247228 |
| PAK2 | 0.075728899 | 5.36205339 | 1.150154355 | 0.251153 | 0.29549 | -6.68292807 |
| DCDC2B | -0.055651079 | 0.61168238 | -1.149367932 | 0.251476 | 0.29585 | -6.68382741 |
| OR51B5 | -0.016747843 | 0.12798361 | -1.148995358 | 0.251629 | 0.29601 | -6.68425326 |
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| VDR | 0.1141915 | 3.20235933 | 1.148335839 | 0.251901 | 0.29627 | -6.68500677 |
| ACVR1C | 0.046962436 | 0.45988673 | 1.148333741 | 0.251902 | 0.29627 | -6.68500916 |
| CXXC5 | -0.092083998 | 6.30329909 | -1.148024592 | 0.252029 | 0.2964 | -6.68536222 |
| EPS8L1 | -0.116385107 | 5.172106 | -1.147844129 | 0.252103 | 0.29647 | -6.68556827 |
| CAPS | -0.174309784 | 5.0686226 | -1.147670042 | 0.252175 | 0.29653 | -6.68576701 |
| FAM47E | 0.021506516 | 0.17310663 | 1.147422764 | 0.252277 | 0.29663 | -6.68604925 |
| SYT2 | -0.060963548 | 0.31197967 | -1.147337282 | 0.252312 | 0.29665 | -6.68614681 |
| IL15RA | 0.085270642 | 2.82581149 | 1.146914379 | 0.252487 | 0.29683 | -6.68662933 |
| PTPRH | 0.040718375 | 0.26461395 | 1.146707474 | 0.252572 | 0.29691 | -6.68686534 |
| LYPD3 | 0.105590611 | 1.63008894 | 1.1450003 | 0.253277 | 0.29772 | -6.68881107 |
| KIFC1 | 0.099154463 | 2.06115698 | 1.144548776 | 0.253464 | 0.29792 | -6.68932521 |
| TAC3 | -0.01784986 | 0.06965814 | -1.144458519 | 0.253502 | 0.29794 | -6.68942796 |
| HPS4 | -0.077488846 | 3.50340409 | -1.144121558 | 0.253641 | 0.29809 | -6.68981149 |
| ZDHHC8 | -0.076303904 | 4.44622173 | -1.143869822 | 0.253745 | 0.29819 | -6.69009794 |
| KAZALD | -0.093488779 | 2.24987248 | -1.143778832 | 0.253783 | 0.29821 | -6.69020146 |
| MEIS1 | -0.051617537 | 0.71104022 | -1.143613875 | 0.253851 | 0.29827 | -6.69038912 |
| XPC | -0.108195176 | 5.4729779 | -1.140833427 | 0.255004 | 0.29961 | -6.69354816 |
| NOTUM | -0.085867068 | 0.21118595 | -1.140741943 | 0.255042 | 0.29963 | -6.69365197 |
| FGF1 | -0.119325243 | 3.07799051 | -1.139525404 | 0.255548 | 0.30019 | -6.69503165 |
| DIAPH1 | 0.091571853 | 6.14295483 | 1.139514491 | 0.255553 | 0.30019 | -6.69504402 |

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| TBX15 | -0.098192363 | 1.15188454 | -1.139263047 | 0.255657 | 0.30029 | -6.695329 |
| NAV3 | 0.044465875 | 0.31795405 | 1.139179457 | 0.255692 | 0.30031 | -6.69542372 |
| RHOF | -0.075652994 | 1.63651368 | -1.138879518 | 0.255817 | 0.30044 | -6.69576356 |
| RTN2 | 0.110617007 | 2.45943355 | 1.138785804 | 0.255856 | 0.30046 | -6.69586972 |
| TGFB1I1 | 0.091381758 | 4.37237231 | 1.137878807 | 0.256234 | 0.30089 | -6.69689674 |
| SLC25A2 | -0.107956007 | 3.94220195 | -1.137779235 | 0.256275 | 0.3009 | -6.69700944 |
| MECOM | 0.122354596 | 2.40521864 | 1.137772213 | 0.256278 | 0.3009 | -6.69701739 |
| KIAA058 | -0.06457197 | 2.45397691 | -1.137652102 | 0.256329 | 0.30093 | -6.69715332 |
| E2F1 | 0.118905532 | 3.56307574 | 1.137229497 | 0.256505 | 0.30112 | -6.69763148 |
| ITGA7 | -0.122691564 | 3.84376418 | -1.135061509 | 0.25741 | 0.30216 | -6.70008169 |
| ADGRB1 | -0.078868288 | 0.48644682 | -1.134760278 | 0.257536 | 0.30229 | -6.70042176 |
| ZNF597 | -0.073827658 | 2.38467369 | -1.134519138 | 0.257637 | 0.30239 | -6.70069394 |
| ARAP1 | 0.088784376 | 5.96846885 | 1.134381389 | 0.257695 | 0.30243 | -6.70084939 |
| NR2C2 | 0.118629941 | 3.69397922 | 1.133925882 | 0.257885 | 0.30264 | -6.7013633 |
| LYPD6 | -0.025755049 | 0.09334891 | -1.13375111 | 0.257959 | 0.3027 | -6.70156042 |
| ITSN1 | -0.070114162 | 2.31596098 | -1.133287848 | 0.258153 | 0.30291 | -6.70208279 |
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| RSPO1 | 0.153086723 | 0.48670136 | 1.132728944 | 0.258387 | 0.30314 | -6.70271273 |
| PAQR7 | -0.090759408 | 4.45322587 | -1.131663705 | 0.258834 | 0.30364 | -6.70391249 |
| ZBTB38 | -0.103585307 | 4.21109297 | -1.131362288 | 0.25896 | 0.30377 | -6.70425177 |
| TBX21 | 0.092684699 | 0.90675062 | 1.131181711 | 0.259036 | 0.30384 | -6.70445499 |
| CCDC78 | -0.087001782 | 0.98151321 | -1.129743501 | 0.259641 | 0.30453 | -6.70607237 |
| CHRDL1 | -0.211327876 | 1.64854825 | -1.129542318 | 0.259725 | 0.30461 | -6.70629846 |
| N4BP3 | 0.085202749 | 2.75614448 | 1.12946012 | 0.25976 | 0.30462 | -6.70639082 |
| HEATR1 | 0.09867384 | 3.18703351 | 1.129104237 | 0.25991 | 0.30478 | -6.70679062 |
| KIF20B | 0.083336796 | 1.96066933 | 1.128838603 | 0.260022 | 0.30489 | -6.70708896 |
| RTN4 | -0.085330439 | 6.53721188 | -1.128235689 | 0.260276 | 0.30517 | -6.70776584 |
| HS3ST2 | -0.121471886 | 0.99071304 | -1.127242356 | 0.260695 | 0.30564 | -6.70888026 |
| C14orf17 | -0.034642263 | 0.26893611 | -1.126931625 | 0.260826 | 0.30577 | -6.70922867 |
| SRGN | -0.133413663 | 6.76003537 | -1.126199877 | 0.261135 | 0.30611 | -6.71004877 |
| CFAP97 | -0.102977785 | 4.68410348 | -1.125978319 | 0.261228 | 0.3062 | -6.71029697 |
| EMP1 | 0.152223279 | 6.10475257 | 1.125022412 | 0.261632 | 0.30665 | -6.71136729 |
| KLHL40 | 0.046278523 | 0.06629335 | 1.124448612 | 0.261875 | 0.30691 | -6.71200934 |
| SLC27A2 | -0.125930059 | 3.64688192 | -1.123547283 | 0.262257 | 0.30734 | -6.71301722 |
| MYOZ3 | 0.036089284 | 0.25962402 | 1.12349148 | 0.26228 | 0.30735 | -6.71307959 |
| NEFM | 0.026472105 | 0.08886209 | 1.122993865 | 0.262491 | 0.30757 | -6.71363566 |
| RABGAP | -0.072983536 | 2.87795677 | -1.122464605 | 0.262716 | 0.30781 | -6.71422683 |
| GADL1 | 0.010024986 | 0.02299147 | 1.122250583 | 0.262806 | 0.3079 | -6.7144658 |
| CTAGE9 | -0.022093616 | 0.14128625 | -1.122032529 | 0.262899 | 0.30799 | -6.71470923 |
| LYG1 | -0.075945307 | 1.47561196 | -1.120143755 | 0.263701 | 0.30891 | -6.71681587 |

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| SLC10A1 | 0.018367586 | 0.14441346 | 1.119878123 | 0.263814 | 0.30902 | -6.71711186 |
| NPL | -0.106329263 | 2.39731546 | -1.117307546 | 0.264909 | 0.31028 | -6.71997263 |
| SNX15 | -0.035346798 | 0.57535892 | -1.117060833 | 0.265015 | 0.31038 | -6.72024685 |
| CELF3 | -0.007685759 | 0.02288391 | -1.116577169 | 0.265221 | 0.3106 | -6.72078426 |
| RMI2 | 0.107615493 | 3.41935612 | 1.115759338 | 0.26557 | 0.31099 | -6.72169247 |
| C19orf67 | -0.049566028 | 0.40124538 | -1.115564431 | 0.265654 | 0.31106 | -6.72190881 |
| CHD2 | -0.088560787 | 4.55634627 | -1.115032757 | 0.265881 | 0.31131 | -6.72249878 |
| EPG5 | 0.086941893 | 3.62854741 | 1.114993874 | 0.265898 | 0.31131 | -6.72254192 |
| FAM3B | -0.156974423 | 1.67606793 | -1.114442645 | 0.266134 | 0.31156 | -6.72315327 |
| ANXA2R | -0.075563514 | 1.45894422 | -1.113159359 | 0.266683 | 0.31218 | -6.72457536 |
| CCNB2 | -0.094749408 | 2.04466778 | -1.11154334 | 0.267376 | 0.31297 | -6.72636387 |
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| DUSP23 | -0.090715903 | 6.9800854 | -1.11125074 | 0.267502 | 0.31308 | -6.72668743 |
| RPLP2 | -0.087232183 | 9.86231611 | -1.110969694 | 0.267623 | 0.3132 | -6.72699813 |
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| AMY2A | 0.023808132 | 0.0993821 | 1.110741235 | 0.267721 | 0.31327 | -6.72725064 |
| HMGXB4 | 0.085929605 | 3.45715225 | 1.110365421 | 0.267883 | 0.31344 | -6.7276659 |
| NUP210L | -0.069723156 | 0.34557249 | -1.108100761 | 0.268857 | 0.31455 | -6.73016533 |
| PRKAR1 | -0.084583627 | 4.11259584 | -1.107944711 | 0.268925 | 0.31461 | -6.73033737 |
| NEIL3 | -0.044148508 | 0.34741856 | -1.107750154 | 0.269009 | 0.31469 | -6.73055183 |
| MIER2 | -0.069476796 | 4.25425486 | -1.1074445 | 0.26914 | 0.31482 | -6.73088868 |
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| HBEGF | 0.199948465 | 4.85987024 | 1.107189467 | 0.26925 | 0.31491 | -6.73116966 |
| TUBAL3 | 0.024730758 | 0.08798076 | 1.107146277 | 0.269269 | 0.31491 | -6.73121724 |
| DOCK4 | -0.091506854 | 2.09473275 | -1.107097034 | 0.26929 | 0.31491 | -6.73127149 |
| SLC7A3 | 0.01097957 | 0.04568939 | 1.106655428 | 0.269481 | 0.31511 | -6.73175785 |
| SSBP4 | -0.099863394 | 5.67498224 | -1.106056762 | 0.269739 | 0.31539 | -6.73241688 |
| MYOC | -0.157944695 | 0.70816146 | -1.104746953 | 0.270306 | 0.31603 | -6.73385753 |
| LAMP2 | -0.095672262 | 6.83895596 | -1.104412796 | 0.27045 | 0.31618 | -6.73422479 |
| CRTC2 | -0.071505229 | 5.58863159 | -1.1035418 | 0.270827 | 0.31659 | -6.73518157 |
| DBNDD1 | 0.079665392 | 3.60783716 | 1.103507898 | 0.270842 | 0.31659 | -6.73521879 |
| CUL7 | -0.083430424 | 5.41997415 | -1.103025961 | 0.271051 | 0.31681 | -6.73574786 |
| PTPN6 | -0.064636957 | 5.02021656 | -1.102376529 | 0.271332 | 0.31712 | -6.73646043 |
| DNAH8 | -0.008361278 | 0.03850885 | -1.101216694 | 0.271836 | 0.31769 | -6.737732 |
| TGM5 | 0.011241974 | 0.057243 | 1.101073662 | 0.271898 | 0.31774 | -6.73788872 |
| FCGR3B | 0.05590573 | 0.33293036 | 1.100733506 | 0.272046 | 0.31789 | -6.73826135 |
| CCDC12 | 0.086054162 | 3.74031348 | 1.100296435 | 0.272236 | 0.31807 | -6.73873997 |
| TAF7L | -0.032883765 | 0.11355679 | -1.100294125 | 0.272237 | 0.31807 | -6.7387425 |
| GBGT1 | 0.069486712 | 2.96907701 | 1.10003583 | 0.272349 | 0.31818 | -6.73902527 |
| ZNF83 | 0.094487092 | 4.16383076 | 1.099789891 | 0.272456 | 0.31828 | -6.73929444 |

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| SV2A | -0.173583456 | 3.6437902 | -1.099745129 | 0.272475 | 0.31828 | -6.73934343 |
| HEYL | -0.133518061 | 3.66251677 | -1.098545323 | 0.272998 | 0.31885 | -6.74065568 |
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| HERC5 | 0.101321979 | 2.93536208 | 1.098437813 | 0.273044 | 0.31888 | -6.7407732 |
| PLD2 | -0.077570805 | 4.1708473 | -1.097551804 | 0.273431 | 0.31931 | -6.74174124 |
| PCSK7 | -0.064820344 | 1.65639061 | -1.097480742 | 0.273462 | 0.31932 | -6.74181885 |
| KLF6 | 0.181187851 | 6.44333506 | 1.097094849 | 0.27363 | 0.3195 | -6.7422402 |
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| TMTC4 | -0.080949005 | 3.0649506 | -1.093716395 | 0.275107 | 0.32108 | -6.74592284 |
| WDR64 | -0.00992212 | 0.08119284 | -1.093693813 | 0.275116 | 0.32108 | -6.74594742 |
| ARFGEF | -0.108839766 | 1.93346111 | -1.093683679 | 0.275121 | 0.32108 | -6.74595845 |
| MCM6 | 0.090983142 | 4.04831119 | 1.092904747 | 0.275462 | 0.32146 | -6.7468059 |
| RAB6D | -0.021470763 | 0.15671944 | -1.092316801 | 0.27572 | 0.32173 | -6.74744516 |
| PLA2G2( | 0.024765608 | 0.17221426 | 1.092269539 | 0.275741 | 0.32173 | -6.74749653 |
| SERPINE | 0.067900934 | 0.25866037 | 1.092254944 | 0.275747 | 0.32173 | -6.74751239 |
| KMT2A | 0.090206834 | 3.73743341 | 1.091353348 | 0.276143 | 0.32217 | -6.74849197 |
| STEAP1l | 0.027842842 | 0.25310084 | 1.091238267 | 0.276193 | 0.3222 | -6.74861694 |
| C2orf92 | -0.07747827 | 1.31080148 | -1.090448551 | 0.27654 | 0.32259 | -6.74947421 |
| HCAR1 | 0.15463028 | 1.83438227 | 1.089932562 | 0.276767 | 0.32281 | -6.75003401 |
| MBNL3 | -0.082242314 | 2.69299107 | -1.089915286 | 0.276774 | 0.32281 | -6.75005274 |
| PNMT | 0.157606439 | 1.89251495 | 1.089552585 | 0.276934 | 0.32298 | -6.75044607 |
| CKS2 | -0.121734234 | 5.91559258 | -1.088452162 | 0.277418 | 0.32352 | -6.75163863 |
| NBPF19 | -0.042525332 | 0.90868822 | -1.088088065 | 0.277579 | 0.32369 | -6.75203295 |
| AOAH | 0.121510267 | 1.70567723 | 1.087645797 | 0.277774 | 0.32389 | -6.75251175 |
| GNRHR | -0.02580757 | 0.27119101 | -1.086014359 | 0.278493 | 0.32471 | -6.75427628 |
| GM2A | 0.083764542 | 5.1216254 | 1.085635946 | 0.27866 | 0.32488 | -6.75468519 |
| RCC1 | 0.078542354 | 4.16865612 | 1.085491178 | 0.278724 | 0.32493 | -6.75484159 |
| HOXB6 | -0.065869974 | 0.86995665 | -1.084909939 | 0.278981 | 0.32521 | -6.75546931 |
| PRAP1 | -0.075856248 | 0.25156866 | -1.084425309 | 0.279196 | 0.32542 | -6.75599245 |
| WNT8A | 0.013167763 | 0.06183643 | 1.08441894 | 0.279198 | 0.32542 | -6.75599932 |
| RIC1 | -0.080671242 | 3.21697088 | -1.084250295 | 0.279273 | 0.32548 | -6.75618131 |
| ADAM17 | -0.113431258 | 3.49769407 | -1.083704158 | 0.279515 | 0.32574 | -6.75677047 |
| SLC5A11 | -0.015750094 | 0.13559966 | -1.083593137 | 0.279564 | 0.32578 | -6.7568902 |
| CNGA3 | -0.052805897 | 0.3546862 | -1.082329466 | 0.280124 | 0.32641 | -6.75825214 |
| CNEP1R | -0.061807475 | 2.80831975 | -1.082241182 | 0.280163 | 0.32643 | -6.75834723 |
| UCN | 0.134293392 | 2.7578541 | 1.081727793 | 0.280391 | 0.32667 | -6.75890005 |
| ALOX12 | -0.059853488 | 1.18498063 | -1.081245318 | 0.280605 | 0.3269 | -6.75941935 |

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| CCDC17 | -0.050394081 | 1.01932736 | -1.080988756 | 0.280719 | 0.32701 | -6.75969539 |
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| CHN1 | -0.094566205 | 2.79055124 | -1.080146093 | 0.281093 | 0.32738 | -6.7606016 |
| CCDC71I | 0.089384586 | 4.21234975 | 1.078976528 | 0.281613 | 0.32796 | -6.7618582 |
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| GOLGA8 | -0.201847087 | 4.97894634 | -1.078700355 | 0.281736 | 0.32804 | -6.76215473 |
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| SEPTIN8 | 0.097681298 | 4.93467093 | 1.077282576 | 0.282367 | 0.3287 | -6.76367581 |
| CASP4 | 0.09995719 | 2.65400876 | 1.077198872 | 0.282405 | 0.32871 | -6.76376556 |
| IL17RE | -0.108031803 | 3.44290852 | -1.077185764 | 0.28241 | 0.32871 | -6.76377961 |
| CRH | -0.03569102 | 0.11215466 | -1.076832101 | 0.282568 | 0.32887 | -6.7641587 |
| LGALS8 | 0.065519634 | 3.91704339 | 1.076569199 | 0.282685 | 0.32898 | -6.76444042 |
| SLC26A1 | 0.078229867 | 1.65918025 | 1.076046568 | 0.282919 | 0.32923 | -6.76500027 |
| RTN1 | -0.097653617 | 1.53704833 | -1.076009066 | 0.282935 | 0.32923 | -6.76504043 |
| SOAT1 | -0.075011835 | 3.87764441 | -1.075936956 | 0.282968 | 0.32923 | -6.76511765 |
| OR1L8 | -0.02568561 | 0.23050116 | -1.075923449 | 0.282974 | 0.32923 | -6.76513212 |
| PLXNA2 | -0.108039393 | 4.01293248 | -1.075313989 | 0.283246 | 0.32952 | -6.76578456 |
| KCNJ12 | 0.108786315 | 1.69903985 | 1.075253335 | 0.283273 | 0.32953 | -6.76584947 |
| SERTAD | 0.097937874 | 2.00483618 | 1.074706957 | 0.283517 | 0.32979 | -6.76643404 |
| OLFML2I | -0.126334393 | 5.57374797 | -1.074591262 | 0.283569 | 0.32983 | -6.76655778 |
| DSEL | -0.041615632 | 0.67732119 | -1.073964534 | 0.283849 | 0.33012 | -6.76722788 |
| DKK1 | -0.099944188 | 0.73539775 | -1.073948673 | 0.283856 | 0.33012 | -6.76724484 |
| FAM183I | -0.109696289 | 0.39848805 | -1.073913835 | 0.283872 | 0.33012 | -6.76728207 |
| MICU3 | 0.092391007 | 2.60343975 | 1.073794959 | 0.283925 | 0.33016 | -6.76740913 |
| TRPM1 | -0.006423376 | 0.02042378 | -1.073194492 | 0.284194 | 0.33045 | -6.76805068 |
| PEAK3 | 0.051541722 | 0.58459211 | 1.072882339 | 0.284333 | 0.33059 | -6.76838406 |
| OTOF | 0.014347923 | 0.08283114 | 1.072732357 | 0.284401 | 0.33064 | -6.7685442 |
| IFI44L | -0.142604769 | 2.51293563 | -1.069949754 | 0.285649 | 0.33207 | -6.77151131 |
| PPDPF | -0.082537086 | 9.52515587 | -1.069816357 | 0.285709 | 0.33212 | -6.77165336 |
| SIAH2 | 0.079868306 | 4.31313102 | 1.069515639 | 0.285844 | 0.33225 | -6.77197352 |
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| IGFBP1 | -0.050486463 | 0.25371178 | -1.069154132 | 0.286006 | 0.33237 | -6.77235829 |
| ADRB2 | 0.077803626 | 1.06070274 | 1.068612721 | 0.28625 | 0.33263 | -6.77293428 |
| SRM | -0.061337276 | 5.83498576 | -1.067247243 | 0.286865 | 0.33332 | -6.77438571 |
| LCNL1 | -0.035697145 | 0.10482903 | -1.066598317 | 0.287157 | 0.33364 | -6.77507484 |
| USF3 | -0.081144007 | 2.78501792 | -1.066431918 | 0.287232 | 0.3337 | -6.77525148 |

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| UBQLN4 | 0.085817654 | 4.74917902 | 1.066247161 | 0.287316 | 0.33378 | -6.77544757 |
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| LIMK1 | 0.080354406 | 5.0574721 | 1.063312506 | 0.288641 | 0.33523 | -6.77855782 |
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| PSAP | -0.092037328 | 10.7560169 | -1.062653501 | 0.28894 | 0.3355 | -6.77925509 |
| SEH1L | -0.062675901 | 3.43608606 | -1.06171583 | 0.289364 | 0.33597 | -6.78024647 |
| STMND1 | -0.012422615 | 0.03218475 | -1.059587448 | 0.29033 | 0.33707 | -6.78249353 |
| CREB3L | 0.135945404 | 2.39971569 | 1.05938337 | 0.290423 | 0.33716 | -6.78270876 |
| HPCA | -0.092984554 | 1.24901045 | -1.059151565 | 0.290528 | 0.33726 | -6.78295317 |
| SVOPL | -0.107080204 | 1.16537589 | -1.059097144 | 0.290553 | 0.33726 | -6.78301054 |
| ANO6 | 0.124560294 | 4.66562343 | 1.057722373 | 0.291178 | 0.33796 | -6.78445893 |
| APOBEC | 0.10844214 | 1.98550312 | 1.057458792 | 0.291298 | 0.33805 | -6.78473642 |
| ARRDC1 | 0.065679576 | 5.29472345 | 1.057432439 | 0.29131 | 0.33805 | -6.78476415 |
| ITPRIPL1 | 0.052168823 | 0.79824711 | 1.057422107 | 0.291315 | 0.33805 | -6.78477503 |
| MUSTN1 | -0.025744059 | 0.19906263 | -1.057371223 | 0.291338 | 0.33806 | -6.78482859 |
| RTL10 | -0.096296602 | 3.8780147 | -1.056199479 | 0.291872 | 0.33865 | -6.7860612 |
| IL16 | 0.104241655 | 1.63120416 | 1.054725357 | 0.292544 | 0.33941 | -6.78760998 |
| XIAP | -0.077095665 | 4.94724164 | -1.054242423 | 0.292765 | 0.33964 | -6.7881169 |
| CROCC | -0.079902713 | 3.11880198 | -1.05402822 | 0.292863 | 0.33973 | -6.78834167 |
| HEY2 | 0.140856806 | 4.17140235 | 1.053016451 | 0.293325 | 0.34025 | -6.78940274 |
| VIT | -0.079462335 | 0.33939791 | -1.052451079 | 0.293584 | 0.34052 | -6.78999522 |
| U2AF1 | 0.033561627 | 0.3301449 | 1.051973237 | 0.293803 | 0.34075 | -6.79049573 |
| INSR | -0.088417716 | 5.35628609 | -1.051794199 | 0.293885 | 0.34083 | -6.7906832 |
| TSPAN2 | -0.083163893 | 1.46795434 | -1.051195418 | 0.294159 | 0.34112 | -6.79130996 |
| CELSR1 | 0.142176518 | 3.60691494 | 1.050779132 | 0.29435 | 0.34132 | -6.79174549 |
| AGER | 0.199123443 | 5.07597068 | 1.050097834 | 0.294663 | 0.34166 | -6.79245791 |
| LIMA1 | 0.098311762 | 5.15086902 | 1.049724315 | 0.294834 | 0.34183 | -6.7928483 |
| TYRO3 | -0.101990126 | 2.16900872 | -1.049596736 | 0.294893 | 0.34188 | -6.79298161 |
| HEATR6 | -0.064221109 | 3.30847386 | -1.04936748 | 0.294998 | 0.34197 | -6.79322112 |
| MEAF6 | -0.081406498 | 6.382612 | -1.049327055 | 0.295016 | 0.34197 | -6.79326335 |
| SRC | 0.080119691 | 4.50108799 | 1.049223676 | 0.295064 | 0.34201 | -6.79337134 |
| FAM153E | 0.057403783 | 0.44658994 | 1.049135809 | 0.295104 | 0.34203 | -6.79346311 |
| POGZ | -0.085015965 | 4.95524092 | -1.047411125 | 0.295897 | 0.34293 | -6.7952629 |
| RBL2 | -0.11490035 | 5.04943658 | -1.047148849 | 0.296018 | 0.34304 | -6.79553634 |
| FFAR2 | -0.055399943 | 0.4492229 | -1.047057205 | 0.29606 | 0.34307 | -6.79563187 |
| GSTM1 | -0.275746951 | 2.45659564 | -1.046301372 | 0.296408 | 0.34345 | -6.79641942 |
| PIPOX | 0.037863564 | 0.65030687 | 1.045246015 | 0.296894 | 0.34399 | -6.79751814 |

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| CBSL | -0.067576124 | 0.45622763 | -1.044895021 | 0.297056 | 0.34414 | -6.7978833 |
| CALY | -0.065783169 | 0.2532626 | -1.044870102 | 0.297068 | 0.34414 | -6.79790923 |
| BTBD18 | -0.011118915 | 0.11088478 | -1.043819388 | 0.297553 | 0.34466 | -6.79900162 |
| CSF3R | 0.083027913 | 1.50112174 | 1.043805617 | 0.297559 | 0.34466 | -6.79901593 |
| OBP2B | 0.15249498 | 0.44171816 | 1.042840283 | 0.298005 | 0.34516 | -6.80001859 |
| COL13A′ | -0.161738057 | 2.85179436 | -1.041558229 | 0.298598 | 0.34582 | -6.80134878 |
| FLNC | 0.108443621 | 1.03430032 | 1.041498188 | 0.298626 | 0.34583 | -6.80141104 |
| SYNPO2 | 0.096149145 | 2.14425971 | 1.041292663 | 0.298721 | 0.34591 | -6.80162412 |
| NRN1L | 0.017523107 | 0.0901309 | 1.041123658 | 0.2988 | 0.34598 | -6.80179931 |
| GFI1B | 0.008303056 | 0.03596437 | 1.040535865 | 0.299072 | 0.34627 | -6.80240838 |
| ZNF710 | -0.094428476 | 3.84577243 | -1.040485841 | 0.299095 | 0.34628 | -6.8024602 |
| SLC22A1 | -0.104517464 | 1.42827042 | -1.040335528 | 0.299165 | 0.34633 | -6.80261589 |
| ATP11C | 0.08084327 | 2.61734948 | 1.039369418 | 0.299613 | 0.34683 | -6.80361604 |
| CBLC | -0.116262575 | 1.17708975 | -1.038631371 | 0.299955 | 0.3472 | -6.80437947 |
| MBOAT7 | -0.07528758 | 5.76160642 | -1.038190944 | 0.30016 | 0.34741 | -6.80483479 |
| TSTD2 | -0.111912967 | 2.60750426 | -1.038010908 | 0.300244 | 0.34749 | -6.80502086 |
| ABI3BP | -0.171778017 | 2.74638481 | -1.036875484 | 0.300771 | 0.34807 | -6.80619359 |
| VANGL2 | -0.102480485 | 4.2627092 | -1.03647101 | 0.30096 | 0.34827 | -6.80661105 |
| ALAS2 | -0.034793336 | 0.1795647 | -1.034702418 | 0.301783 | 0.3492 | -6.80843451 |
| STS | -0.086469717 | 3.28651139 | -1.034142475 | 0.302045 | 0.34948 | -6.80901118 |
| RHEBL1 | -0.056658578 | 1.37746521 | -1.033815855 | 0.302197 | 0.34963 | -6.80934741 |
| NPTX2 | 0.12058803 | 1.32867301 | 1.033683635 | 0.302259 | 0.34968 | -6.80948349 |
| NPHP4 | -0.09108107 | 2.82687887 | -1.033160183 | 0.302503 | 0.34994 | -6.81002207 |
| MYH9 | 0.090022463 | 8.10030186 | 1.0326721 | 0.302731 | 0.35018 | -6.81052401 |
| PALD1 | -0.093565415 | 3.2809134 | -1.032146436 | 0.302977 | 0.35044 | -6.81106433 |
| ISG20 | -0.110945392 | 3.13007995 | -1.031836976 | 0.303121 | 0.35058 | -6.81138229 |
| IRX3 | 0.164773662 | 3.48479112 | 1.031744573 | 0.303165 | 0.35061 | -6.81147721 |
| TMTC3 | -0.073023956 | 3.32053281 | -1.03093907 | 0.303542 | 0.35102 | -6.81230433 |
| ZNF705E | -0.009469347 | 0.08131584 | -1.03083406 | 0.303591 | 0.35105 | -6.81241211 |
| CCDC18′ | -0.102554583 | 3.00412855 | -1.030738784 | 0.303635 | 0.35106 | -6.81250989 |
| NTRK1 | 0.066037915 | 0.16858864 | 1.030722686 | 0.303643 | 0.35106 | -6.81252641 |
| SLC52A3 | -0.075989274 | 1.24479849 | -1.028890439 | 0.304501 | 0.35203 | -6.81440505 |
| NPIPB5 | 0.058606399 | 0.5864233 | 1.028691075 | 0.304595 | 0.35212 | -6.81460926 |
| PRR5 | -0.072763007 | 2.62127912 | -1.028507969 | 0.304681 | 0.35219 | -6.81479678 |
| CDX1 | 0.02769802 | 0.2066755 | 1.027781899 | 0.305022 | 0.35256 | -6.81554004 |
| OLFML1 | -0.100634177 | 2.22235682 | -1.027639404 | 0.305089 | 0.35261 | -6.81568585 |
| STAC2 | 0.074680669 | 0.34153198 | 1.027583546 | 0.305115 | 0.35262 | -6.815743 |
| MAPK13 | 0.112043075 | 5.69997916 | 1.026883818 | 0.305444 | 0.35298 | -6.81645867 |
| ADAMTS | 0.140288742 | 2.01690286 | 1.026177922 | 0.305776 | 0.35334 | -6.81718015 |
| PHYHIPL | -0.029339532 | 0.1272813 | -1.024927771 | 0.306364 | 0.35399 | -6.8184567 |

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| RASAL3 | 0.103883092 | 2.48853762 | 1.024782421 | 0.306432 | 0.35405 | -6.81860502 |
| PM20D2 | -0.091053994 | 4.21824463 | -1.024712295 | 0.306465 | 0.35406 | -6.81867657 |
| USP6 | -0.057610539 | 0.48310687 | -1.024606306 | 0.306515 | 0.35409 | -6.81878471 |
| DUSP18 | -0.04583011 | 1.77931241 | -1.023890951 | 0.306852 | 0.35446 | -6.81951425 |
| GPR39 | 0.084837524 | 1.46439354 | 1.022507164 | 0.307505 | 0.35519 | -6.82092404 |
| CKAP2 | -0.081408852 | 3.13128275 | -1.020451015 | 0.308477 | 0.35629 | -6.82301533 |
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| BMP6 | -0.1023666 | 2.06488411 | -1.019220122 | 0.30906 | 0.35691 | -6.82426527 |
| DTX2 | 0.061695939 | 3.14290964 | 1.017295918 | 0.309972 | 0.35794 | -6.82621624 |
| DPYSL4 | 0.146495323 | 1.28049052 | 1.016548832 | 0.310327 | 0.35831 | -6.82697274 |
| CAND1 | 0.093337379 | 4.92088439 | 1.016494044 | 0.310353 | 0.35831 | -6.8270282 |
| CPT1C | 0.112595918 | 1.32946585 | 1.016488603 | 0.310356 | 0.35831 | -6.8270337 |
| BCL10 | -0.073933537 | 4.20760962 | -1.014928747 | 0.311097 | 0.35914 | -6.82861133 |
| NHEJ1 | -0.025783308 | 0.48221989 | -1.01469076 | 0.31121 | 0.35925 | -6.82885182 |
| MTMR7 | 0.109211356 | 2.14218731 | 1.012980896 | 0.312025 | 0.36016 | -6.830578 |
| PAFAH1I | 0.08695439 | 5.33185931 | 1.01238789 | 0.312308 | 0.36047 | -6.831176 |
| OSR2 | 0.100706807 | 0.75311342 | 1.012296654 | 0.312351 | 0.36049 | -6.83126797 |
| KLRF1 | -0.130061126 | 1.53131179 | -1.011869213 | 0.312555 | 0.3607 | -6.83169875 |
| POLG | -0.066036227 | 4.18774297 | -1.011436222 | 0.312762 | 0.36091 | -6.83213494 |
| DDX58 | 0.08853352 | 3.64543619 | 1.011404428 | 0.312777 | 0.36091 | -6.83216696 |
| GRIN3B | 0.063262767 | 0.62327034 | 1.011307879 | 0.312823 | 0.36094 | -6.83226419 |
| BAZ2A | 0.086046169 | 4.92130054 | 1.010927964 | 0.313005 | 0.36112 | -6.83264672 |
| ADRA2C | -0.160604575 | 2.10186985 | -1.010252321 | 0.313327 | 0.36145 | -6.83332664 |
| EIF4E3 | -0.082979296 | 4.05623786 | -1.010240889 | 0.313333 | 0.36145 | -6.83333814 |
| FTH1 | -0.110172451 | 9.86037878 | -1.01010463 | 0.313398 | 0.3615 | -6.83347521 |
| SAMD10 | -0.057214178 | 3.46485737 | -1.009990659 | 0.313453 | 0.36154 | -6.83358984 |
| PTGDR | -0.049610137 | 0.55901222 | -1.009877912 | 0.313507 | 0.36158 | -6.83370323 |
| CADPS | -0.05685792 | 0.11974905 | -1.008988494 | 0.313932 | 0.36205 | -6.83459727 |
| GSG1L | -0.06800204 | 0.2552801 | -1.008562286 | 0.314136 | 0.36226 | -6.83502541 |
| KRT12 | -0.024700506 | 0.07371193 | -1.008347908 | 0.314239 | 0.36235 | -6.8352407 |
| OLIG1 | 0.023523721 | 0.1294275 | 1.007849647 | 0.314477 | 0.3626 | -6.83574089 |
| MYOM3 | 0.052986678 | 0.65178933 | 1.007491859 | 0.314649 | 0.36277 | -6.83609992 |
| AGO2 | 0.076006229 | 3.08961639 | 1.007223781 | 0.314777 | 0.3629 | -6.83636884 |
| BICD2 | -0.068941818 | 4.21676304 | -1.006896524 | 0.314934 | 0.36305 | -6.83669703 |
| RSKR | -0.065977212 | 1.11847073 | -1.006619818 | 0.315067 | 0.36318 | -6.83697444 |
| MAPKAP | -0.05728465 | 6.70543246 | -1.006477658 | 0.315135 | 0.36324 | -6.83711693 |
| OR2A7 | -0.089309752 | 1.61096407 | -1.005518 | 0.315596 | 0.36374 | -6.83807832 |
| BEST1 | 0.043824448 | 0.98670737 | 1.005371397 | 0.315667 | 0.3638 | -6.83822511 |
| SLC40A1 | -0.098931713 | 6.82851951 | -1.004287899 | 0.316187 | 0.36437 | -6.83930931 |
| GLT1D1 | 0.155170408 | 3.40723136 | 1.004013338 | 0.316319 | 0.3645 | -6.83958386 |

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| SCARB2 | -0.085090231 | 7.5679185 | -1.003797787 | 0.316423 | 0.36458 | -6.83979936 |
| ACRV1 | -0.016826493 | 0.17751077 | -1.003773037 | 0.316435 | 0.36458 | -6.8398241 |
| STK17A | 0.08594922 | 3.47755481 | 1.003120598 | 0.316749 | 0.36492 | -6.84047607 |
| TAF1 | -0.088348249 | 3.85672922 | -1.002968717 | 0.316822 | 0.36498 | -6.84062778 |
| RTEL1-T | -0.055590645 | 0.88599055 | -1.002307467 | 0.317141 | 0.36532 | -6.84128802 |
| CRB3 | -0.071309505 | 5.45021883 | -1.001836408 | 0.317368 | 0.36556 | -6.8417581 |
| VMP1 | 0.095091011 | 5.953109 | 1.001257628 | 0.317647 | 0.36586 | -6.84233538 |
| SHC1 | -0.076477244 | 6.25823353 | -1.000081478 | 0.318215 | 0.36649 | -6.84350746 |
| TMEM20 | -0.057537666 | 1.02889774 | -0.999867244 | 0.318318 | 0.36658 | -6.84372081 |
| CDC42BI | -0.079550781 | 3.35342768 | -0.999810916 | 0.318345 | 0.36659 | -6.84377689 |
| PAK3 | -0.114246584 | 1.12424798 | -0.999433792 | 0.318528 | 0.36677 | -6.84415232 |
| TUBB1 | -0.020190181 | 0.17696688 | -0.999211955 | 0.318635 | 0.36687 | -6.84437309 |
| DEFB131 | 0.074006498 | 0.84320064 | 0.999110285 | 0.318684 | 0.3669 | -6.84447426 |
| SEPTIN9 | 0.082803044 | 6.0120419 | 0.998393082 | 0.319031 | 0.36728 | -6.84518762 |
| SULT4A1 | 0.084200535 | 0.42357809 | 0.997825083 | 0.319306 | 0.36757 | -6.84575222 |
| BPGM | -0.06368068 | 4.73100259 | -0.997498421 | 0.319464 | 0.36772 | -6.84607678 |
| ALPK1 | -0.062051121 | 2.56995358 | -0.996592658 | 0.319903 | 0.3682 | -6.84697616 |
| CCNT2 | -0.078200712 | 3.79070698 | -0.996396626 | 0.319998 | 0.36829 | -6.8471707 |
| DBF4 | 0.049715741 | 1.9960537 | 0.996000903 | 0.320189 | 0.36849 | -6.84756331 |
| LBX2 | -0.05957825 | 0.89349154 | -0.995828628 | 0.320273 | 0.36856 | -6.84773418 |
| ACTA2 | -0.112749572 | 6.63767918 | -0.995339896 | 0.32051 | 0.3688 | -6.84821876 |
| POLR3C | -0.062812377 | 4.70134735 | -0.995306955 | 0.320526 | 0.3688 | -6.84825141 |
| RYR3 | -0.051951099 | 0.32060726 | -0.995141523 | 0.320606 | 0.36886 | -6.84841538 |
| ZMAT1 | -0.119369238 | 4.02829487 | -0.994865483 | 0.32074 | 0.36899 | -6.84868892 |
| ERBIN | -0.078790966 | 4.96315993 | -0.994704253 | 0.320819 | 0.36906 | -6.84884866 |
| PRIM2 | -0.05276089 | 2.46098379 | -0.994655285 | 0.320842 | 0.36906 | -6.84889716 |
| UCP2 | 0.137184929 | 7.73883396 | 0.994348953 | 0.320991 | 0.36921 | -6.84920057 |
| MUC19 | 0.005698177 | 0.01300149 | 0.993984112 | 0.321168 | 0.36937 | -6.8495618 |
| MSL3 | -0.058351617 | 3.52648229 | -0.993974837 | 0.321173 | 0.36937 | -6.84957098 |
| SLC2A12 | -0.053279996 | 0.24835074 | -0.993663267 | 0.321324 | 0.36952 | -6.84987937 |
| PHETA1 | -0.091279666 | 4.39131658 | -0.992444397 | 0.321917 | 0.37017 | -6.85108484 |
| MFAP3 | -0.119881028 | 2.79304677 | -0.992092669 | 0.322088 | 0.37034 | -6.85143243 |
| ARMCX3 | 0.1579476 | 7.27463493 | 0.992017616 | 0.322125 | 0.37036 | -6.85150659 |
| MAGEB1 | -0.01832737 | 0.09823238 | -0.991570277 | 0.322343 | 0.37059 | -6.85194845 |
| PKLR | 0.009341499 | 0.04424286 | 0.99127789 | 0.322485 | 0.37072 | -6.85223716 |
| CALHM6 | 0.151399602 | 2.44277282 | 0.991120387 | 0.322562 | 0.37079 | -6.85239264 |
| HAUS5 | 0.055677166 | 3.5797001 | 0.990273761 | 0.322975 | 0.37124 | -6.85322799 |
| MYO7A | -0.100941014 | 1.45153996 | -0.989444753 | 0.323379 | 0.37167 | -6.85404527 |
| ZG16B | 0.035451071 | 0.31587835 | 0.989408889 | 0.323397 | 0.37167 | -6.85408061 |
| NEDD9 | 0.128666012 | 4.57797742 | 0.989375284 | 0.323413 | 0.37167 | -6.85411373 |

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| DPT | -0.241412702 | 2.4776631 | -0.989319748 | 0.32344 | 0.37167 | -6.85416845 |
| IGSF8 | -0.077352232 | 6.69189025 | -0.989089237 | 0.323553 | 0.37178 | -6.85439555 |
| CYP27A | 0.12126848 | 4.24966646 | 0.988963131 | 0.323614 | 0.37182 | -6.85451977 |
| LMO3 | 0.146883358 | 6.31970488 | 0.988098424 | 0.324037 | 0.37228 | -6.85537111 |
| KCNK13 | -0.136804711 | 3.00608499 | -0.987603503 | 0.324279 | 0.37253 | -6.85585805 |
| FAM9C | -0.00553697 | 0.01599176 | -0.986835303 | 0.324654 | 0.37294 | -6.85661338 |
| MOB1A | -0.070824314 | 5.84754395 | -0.986230332 | 0.32495 | 0.37326 | -6.8572078 |
| SLC29A1 | -0.08486005 | 5.75415204 | -0.986109488 | 0.32501 | 0.37329 | -6.85732649 |
| B3GNT4 | -0.0297701 | 0.43502404 | -0.9860845 | 0.325022 | 0.37329 | -6.85735104 |
| HTT | 0.068001191 | 4.36942861 | 0.985769639 | 0.325176 | 0.37344 | -6.85766022 |
| HOXC6 | 0.056231438 | 0.32066398 | 0.985459249 | 0.325328 | 0.37359 | -6.85796492 |
| SERINC | 0.082880821 | 7.08619538 | 0.984377959 | 0.325858 | 0.37417 | -6.85902563 |
| ZNF300 | 0.106852568 | 3.12679336 | 0.983615075 | 0.326233 | 0.37458 | -6.8597733 |
| MTHFD1 | 0.084637328 | 4.2205308 | 0.982199564 | 0.326928 | 0.37535 | -6.86115906 |
| PRELID3 | 0.107120369 | 2.71977227 | 0.982004229 | 0.327024 | 0.37543 | -6.86135014 |
| CENPA | -0.061490798 | 0.74147427 | -0.981914302 | 0.327068 | 0.37546 | -6.86143809 |
| REXO5 | -0.04683083 | 1.41463398 | -0.981227045 | 0.327406 | 0.37582 | -6.86211 |
| PDS5A | -0.070083306 | 4.95707147 | -0.980605587 | 0.327712 | 0.37612 | -6.86271717 |
| AGR2 | -0.25020886 | 4.99868186 | -0.980604493 | 0.327713 | 0.37612 | -6.86271824 |
| C1orf61 | 0.006464666 | 0.02403835 | 0.979751248 | 0.328133 | 0.37656 | -6.86355125 |
| B4GALT | -0.111917141 | 2.35461813 | -0.979746384 | 0.328135 | 0.37656 | -6.863556 |
| ST3GAL | -0.119758301 | 6.70887245 | -0.97908414 | 0.328462 | 0.37691 | -6.86420204 |
| USP4 | -0.064616404 | 4.94353202 | -0.978859849 | 0.328573 | 0.37701 | -6.86442074 |
| PHYHD1 | -0.153701746 | 4.68305574 | -0.978530587 | 0.328735 | 0.37717 | -6.86474171 |
| ARHGEF | -0.06457119 | 4.69124395 | -0.978383214 | 0.328808 | 0.37723 | -6.86488534 |
| USP25 | 0.077853434 | 3.90496065 | 0.978039406 | 0.328977 | 0.3774 | -6.86522032 |
| CD96 | 0.101062659 | 1.91384202 | 0.977816304 | 0.329088 | 0.3775 | -6.86543764 |
| TDRKH | 0.088819335 | 3.82672966 | 0.977044009 | 0.329469 | 0.37791 | -6.86618952 |
| TMEM15 | -0.00922494 | 0.05208548 | -0.976592436 | 0.329692 | 0.37814 | -6.86662889 |
| THEGL | -0.016289577 | 0.07155632 | -0.976182723 | 0.329895 | 0.37834 | -6.86702735 |
| NTF3 | 0.063264532 | 0.4282808 | 0.976119776 | 0.329926 | 0.37836 | -6.86708855 |
| DPYSL5 | -0.040572763 | 0.0345625 | -0.975586624 | 0.33019 | 0.37863 | -6.86760678 |
| OGN | 0.16224124 | 1.49623933 | 0.975102403 | 0.330429 | 0.37888 | -6.8680772 |
| RHOU | -0.105969832 | 5.92384079 | -0.974443539 | 0.330755 | 0.37923 | -6.86871692 |
| EPS8L2 | -0.102985843 | 5.72335761 | -0.973883353 | 0.331033 | 0.37952 | -6.86926049 |
| PCDHGA | -0.091065165 | 0.93595204 | -0.973255088 | 0.331344 | 0.37985 | -6.86986975 |
| RASL11 | -0.1118704 | 1.06761124 | -0.972482499 | 0.331728 | 0.38027 | -6.87061844 |
| PDLIM5 | -0.072382715 | 4.47212421 | -0.971683394 | 0.332124 | 0.38068 | -6.8713922 |
| NEMP1 | 0.076836762 | 3.44652232 | 0.971673408 | 0.332129 | 0.38068 | -6.87140186 |
| RGPD2 | -0.019684973 | 0.11496886 | -0.971076843 | 0.332426 | 0.38099 | -6.87197909 |

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| WDR86 | -0.139233703 | 5.12763078 | -0.970817497 | 0.332555 | 0.38111 | -6.87222992 |
| NLRP6 | 0.033779245 | 0.18948015 | 0.970606037 | 0.33266 | 0.38121 | -6.87243438 |
| KIF3A | -0.071667507 | 3.22836056 | -0.970557773 | 0.332684 | 0.38121 | -6.87248104 |
| ZNF124 | -0.052388837 | 1.51557424 | -0.970383296 | 0.332771 | 0.38128 | -6.87264971 |
| CSTB | -0.062850302 | 7.74727808 | -0.969637808 | 0.333141 | 0.38168 | -6.87337002 |
| GPR34 | 0.109657501 | 2.45674679 | 0.969166589 | 0.333376 | 0.38192 | -6.87382505 |
| SKI | -0.075867786 | 5.46031766 | -0.968417767 | 0.333749 | 0.38233 | -6.87454768 |
| TAOK1 | -0.079521917 | 3.94854036 | -0.965990868 | 0.33496 | 0.38369 | -6.8768859 |
| ARF6 | 0.074767574 | 6.52396953 | 0.965298846 | 0.335305 | 0.38406 | -6.87755156 |
| WDTC1 | -0.067645 | 6.09728136 | -0.964634834 | 0.335637 | 0.38441 | -6.87818984 |
| PCDHA6 | 0.04262134 | 0.26049801 | 0.964586926 | 0.335661 | 0.38441 | -6.87823588 |
| CDKN1A | 0.122621764 | 7.95497906 | 0.963601984 | 0.336154 | 0.38495 | -6.8791818 |
| ASIC2 | 0.015168244 | 0.06217919 | 0.96335715 | 0.336277 | 0.38506 | -6.87941678 |
| FOXRED | -0.082589864 | 3.07437929 | -0.963327775 | 0.336291 | 0.38506 | -6.87944497 |
| MIS18BF | 0.076432575 | 2.89453562 | 0.96292968 | 0.336491 | 0.38526 | -6.87982692 |
| ADAMTS | 0.113918421 | 1.99602178 | 0.962563221 | 0.336674 | 0.38544 | -6.88017837 |
| AGAP4 | -0.053924777 | 1.18391074 | -0.96224475 | 0.336834 | 0.3856 | -6.88048369 |
| RBAK-RE | -0.017422524 | 0.13721271 | -0.961764605 | 0.337075 | 0.38583 | -6.88094382 |
| HIPK3 | -0.079509853 | 5.51194944 | -0.96174551 | 0.337084 | 0.38583 | -6.88096212 |
| SOHLH2 | -0.040997417 | 0.30203825 | -0.961448873 | 0.337233 | 0.38598 | -6.88124627 |
| SLC17A3 | -0.01258989 | 0.04062074 | -0.96074647 | 0.337585 | 0.38636 | -6.88191876 |
| SLC1A4 | -0.075185204 | 3.21689327 | -0.960537905 | 0.33769 | 0.38645 | -6.88211835 |
| MAN1A1 | 0.113602242 | 3.91786509 | 0.960287956 | 0.337816 | 0.38657 | -6.88235749 |
| DLX1 | -0.050859695 | 0.6364103 | -0.959591871 | 0.338165 | 0.38694 | -6.88302314 |
| BMP3 | 0.025972119 | 0.13880617 | 0.957678095 | 0.339128 | 0.38802 | -6.88485076 |
| C2orf66 | -0.028449827 | 0.2421826 | -0.957364776 | 0.339286 | 0.38817 | -6.88514963 |
| PXDNL | -0.062620029 | 0.70035696 | -0.957062071 | 0.339438 | 0.38832 | -6.88543828 |
| PLK1 | -0.063714983 | 1.28338708 | -0.955910121 | 0.340019 | 0.38896 | -6.88653593 |
| HSPE1-N | -0.016012611 | 0.11134406 | -0.955452884 | 0.340249 | 0.38919 | -6.88697125 |
| ANKRD6 | -0.005476744 | 0.01518131 | -0.955405577 | 0.340273 | 0.3892 | -6.88701627 |
| NUFIP2 | -0.067811024 | 4.60371024 | -0.954440547 | 0.34076 | 0.38973 | -6.88793432 |
| MAP3K3 | 0.071558079 | 4.02417829 | 0.953942367 | 0.341012 | 0.38999 | -6.88840788 |
| CRYGN | 0.172277373 | 4.85681986 | 0.953021546 | 0.341477 | 0.39049 | -6.88928256 |
| ALMS1 | -0.068841219 | 2.76608761 | -0.952918596 | 0.341529 | 0.39053 | -6.8893803 |
| CBARP | 0.067141473 | 1.24223529 | 0.952822215 | 0.341578 | 0.39056 | -6.88947179 |
| ELN | -0.12767073 | 3.52677716 | -0.952718748 | 0.34163 | 0.39059 | -6.88957 |
| SLC35G( | -0.018717314 | 0.10388411 | -0.952353213 | 0.341815 | 0.39077 | -6.88991687 |
| ZBTB20 | 0.046083217 | 0.79622127 | 0.951936864 | 0.342026 | 0.39099 | -6.89031181 |
| CLDN12 | -0.072198491 | 4.03773371 | -0.951666372 | 0.342163 | 0.39112 | -6.89056829 |
| C6orf132 | -0.091745843 | 4.26767882 | -0.951500751 | 0.342247 | 0.39119 | -6.8907253 |

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|---|---|---|---|---|---|---|
| ANKRD6 | -0.078685053 | 2.65837181 | -0.951372306 | 0.342312 | 0.39124 | -6.89084705 |
| MED14 | -0.075935569 | 4.16757346 | -0.950883791 | 0.342559 | 0.39149 | -6.89130995 |
| VARS | -0.059478713 | 5.14624968 | -0.95067374 | 0.342666 | 0.39159 | -6.89150891 |
| SEC14L2 | 0.102876472 | 3.73497374 | 0.950486216 | 0.342761 | 0.39167 | -6.8916865 |
| PRKAR2 | 0.077778844 | 1.96642876 | 0.949845937 | 0.343086 | 0.39202 | -6.89229259 |
| TTPA | -0.010389633 | 0.06312845 | -0.949521036 | 0.34325 | 0.39218 | -6.89259999 |
| PPFIA4 | 0.054418244 | 0.71139454 | 0.948618316 | 0.343709 | 0.39267 | -6.89345353 |
| FSCN3 | -0.009458734 | 0.07271911 | -0.948384198 | 0.343828 | 0.39278 | -6.89367476 |
| KIAA040 | 0.031762352 | 0.20918221 | 0.948135522 | 0.343954 | 0.3929 | -6.89390969 |
| TSPAN1 | 0.090737281 | 1.12633684 | 0.94799546 | 0.344025 | 0.39296 | -6.89404199 |
| ARHGAF | 0.126792596 | 0.75313717 | 0.947510166 | 0.344272 | 0.39321 | -6.89450021 |
| CAMKV | -0.024871641 | 0.11071445 | -0.947330177 | 0.344363 | 0.39329 | -6.8946701 |
| CYP3A7 | -0.016378649 | 0.2565273 | -0.947034823 | 0.344513 | 0.39343 | -6.89494881 |
| CHAF1A | -0.062471435 | 3.23900639 | -0.946819118 | 0.344623 | 0.39353 | -6.89515231 |
| PC | 0.113857014 | 4.7648555 | 0.94654578 | 0.344762 | 0.39367 | -6.89541011 |
| TAF1L | 0.005695747 | 0.02286256 | 0.946075964 | 0.345001 | 0.39391 | -6.89585305 |
| SLC16A1 | -0.088561474 | 2.80109444 | -0.945623741 | 0.345231 | 0.39414 | -6.8962792 |
| CSAD | -0.105840767 | 3.55574242 | -0.94558443 | 0.345251 | 0.39414 | -6.89631623 |
| ACSL4 | 0.090069435 | 4.67488107 | 0.945346293 | 0.345373 | 0.39425 | -6.89654054 |
| COX6A2 | 0.060478346 | 0.19041949 | 0.945317574 | 0.345387 | 0.39425 | -6.89656759 |
| CPXM2 | 0.124060035 | 2.39460988 | 0.944851407 | 0.345625 | 0.39449 | -6.89700653 |
| OTOGL | -0.028788913 | 0.13393801 | -0.944206416 | 0.345954 | 0.39484 | -6.89761348 |
| SLC26A6 | -0.058764682 | 2.09660052 | -0.942670172 | 0.346738 | 0.39571 | -6.89905748 |
| GRIA2 | 0.030266536 | 0.08776747 | 0.94260523 | 0.346771 | 0.39572 | -6.89911847 |
| TICAM2 | -0.010073615 | 0.10151764 | -0.941900313 | 0.347131 | 0.39608 | -6.89978023 |
| ADAMTS | 0.083170787 | 2.364066 | 0.941898082 | 0.347132 | 0.39608 | -6.89978232 |
| CHDH | -0.07495254 | 2.14012644 | -0.94179742 | 0.347183 | 0.39611 | -6.89987678 |
| SCIN | -0.100563771 | 0.97650354 | -0.941037507 | 0.347572 | 0.39653 | -6.90058954 |
| CD82 | -0.098704101 | 5.18026897 | -0.940689138 | 0.34775 | 0.3967 | -6.9009161 |
| USP43 | -0.077369153 | 2.07904335 | -0.940376425 | 0.34791 | 0.39686 | -6.90120914 |
| ZNRF2 | 0.086306027 | 4.76653329 | 0.939807032 | 0.348202 | 0.39717 | -6.90174245 |
| LACC1 | 0.072964456 | 2.65792089 | 0.939002993 | 0.348614 | 0.39761 | -6.902495 |
| SLC43A3 | 0.167803606 | 4.38866843 | 0.938692051 | 0.348773 | 0.39776 | -6.90278586 |
| KCNQ2 | -0.007255559 | 0.02449212 | -0.938276595 | 0.348986 | 0.39798 | -6.90317433 |
| PHC1 | -0.073233722 | 2.78988795 | -0.938021058 | 0.349117 | 0.3981 | -6.90341319 |
| JUNB | -0.125234576 | 8.70315221 | -0.937914588 | 0.349172 | 0.39814 | -6.90351269 |
| NEURL1 | -0.090875866 | 3.45459708 | -0.93741884 | 0.349426 | 0.3984 | -6.90397583 |
| IKZF4 | 0.083419564 | 3.77323911 | 0.937286936 | 0.349494 | 0.39845 | -6.90409902 |
| RAI1 | 0.094142377 | 4.51090709 | 0.936348054 | 0.349976 | 0.39897 | -6.90497538 |
| RPL39L | 0.103569585 | 3.17421184 | 0.936071348 | 0.350118 | 0.39911 | -6.90523349 |

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|---|---|---|---|---|---|---|
| ERVV-2 | 0.059866959 | 0.22400124 | 0.935969551 | 0.35017 | 0.39914 | -6.90532842 |
| LRRC37/ | -0.056535892 | 1.19765639 | -0.935587046 | 0.350367 | 0.39934 | -6.90568506 |
| SERPINI | -0.067546413 | 6.41378513 | -0.935095777 | 0.350619 | 0.3996 | -6.90614289 |
| ZKSCAN | -0.074306976 | 3.90814791 | -0.933936363 | 0.351216 | 0.40025 | -6.90722245 |
| CCDC10 | -0.00501914 | 0.0200248 | -0.932971696 | 0.351713 | 0.40079 | -6.90811966 |
| FANCD2 | -0.008061807 | 0.05093291 | -0.932848933 | 0.351776 | 0.40084 | -6.90823377 |
| CKAP2L | 0.046229299 | 0.58832167 | 0.932508372 | 0.351952 | 0.40101 | -6.90855026 |
| CDK18 | -0.055450145 | 3.9710222 | -0.931703945 | 0.352367 | 0.40146 | -6.90929736 |
| KATNAL | 0.058713117 | 2.29933714 | 0.931277013 | 0.352587 | 0.40166 | -6.90969361 |
| RGPD4 | -0.005727223 | 0.02461736 | -0.931270471 | 0.35259 | 0.40166 | -6.90969968 |
| ARL11 | 0.092951779 | 1.26884886 | 0.930807598 | 0.352829 | 0.4019 | -6.91012907 |
| TMEM11 | 0.152865951 | 2.6839548 | 0.930635728 | 0.352918 | 0.40198 | -6.91028846 |
| FANCE | 0.075721767 | 3.43591713 | 0.930345936 | 0.353068 | 0.40212 | -6.91055714 |
| ZNF783 | -0.056525363 | 2.81157571 | -0.930264776 | 0.35311 | 0.40214 | -6.91063237 |
| ARX | -0.138934936 | 0.8952129 | -0.930181962 | 0.353152 | 0.40216 | -6.91070913 |
| DAO | 0.007414706 | 0.03370605 | 0.930140505 | 0.353174 | 0.40216 | -6.91074755 |
| MKNK1 | -0.052396408 | 3.05527025 | -0.929872558 | 0.353312 | 0.40229 | -6.91099585 |
| TNFSF12 | 0.010671782 | 0.08070037 | 0.928780859 | 0.353877 | 0.40291 | -6.91200675 |
| EZH2 | 0.073875621 | 2.00684488 | 0.928593005 | 0.353974 | 0.40299 | -6.91218058 |
| HRG | -0.014848077 | 0.06395766 | -0.928522636 | 0.35401 | 0.403 | -6.91224568 |
| DHH | -0.050080426 | 0.80910946 | -0.928370758 | 0.354089 | 0.40307 | -6.91238619 |
| KDM7A | 0.06881614 | 2.69657038 | 0.928250783 | 0.354151 | 0.4031 | -6.91249716 |
| MUC5B | 0.022254921 | 0.04657894 | 0.928218805 | 0.354168 | 0.4031 | -6.91252674 |
| CX3CR1 | -0.112026471 | 2.37514475 | -0.927974781 | 0.354294 | 0.40322 | -6.91275241 |
| ZNF462 | -0.077483845 | 3.31185917 | -0.927368954 | 0.354608 | 0.40355 | -6.9133124 |
| PAXBP1 | -0.080200926 | 3.66179196 | -0.927118073 | 0.354738 | 0.40367 | -6.9135442 |
| ELP2 | -0.056230785 | 4.3944505 | -0.927043318 | 0.354776 | 0.40369 | -6.91361325 |
| C2orf72 | 0.032835424 | 0.19582553 | 0.925210534 | 0.355727 | 0.40474 | -6.91530458 |
| TCF23 | -0.011919733 | 0.06192154 | -0.92477825 | 0.355951 | 0.40497 | -6.91570302 |
| CCDC84 | -0.075341975 | 3.31653761 | -0.924331817 | 0.356183 | 0.40521 | -6.9161143 |
| SFMBT2 | 0.080325114 | 2.1559665 | 0.923972857 | 0.35637 | 0.40539 | -6.91644486 |
| MYH6 | -0.029336336 | 0.08546551 | -0.923811725 | 0.356454 | 0.40546 | -6.9165932 |
| NRXN1 | 0.009617885 | 0.0208279 | 0.922426579 | 0.357174 | 0.40623 | -6.91786731 |
| RRAS | 0.101687827 | 7.6696161 | 0.92238287 | 0.357197 | 0.40623 | -6.91790749 |
| RPL10L | -0.014708073 | 0.09655617 | -0.922365115 | 0.357206 | 0.40623 | -6.91792381 |
| FAM107I | 0.107106995 | 3.38573382 | 0.92176125 | 0.35752 | 0.40656 | -6.91847864 |
| IFIT1 | 0.108224475 | 4.14254769 | 0.921418037 | 0.357699 | 0.40674 | -6.91879382 |
| TMEM27 | 0.007800995 | 0.03790736 | 0.921290698 | 0.357765 | 0.40679 | -6.91891073 |
| OLFML3 | -0.145131582 | 4.2056951 | -0.920598536 | 0.358126 | 0.40717 | -6.91954592 |
| PRLR | -0.034532306 | 0.1824672 | -0.919892723 | 0.358494 | 0.40756 | -6.92019315 |

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| APAF1 | 0.085194684 | 2.59663443 | 0.919742806 | 0.358572 | 0.40762 | -6.92033056 |
| EDN1 | 0.10881154 | 2.35945809 | 0.918389746 | 0.359279 | 0.4084 | -6.92156973 |
| NPDC1 | 0.098702802 | 6.51353915 | 0.918231803 | 0.359361 | 0.40847 | -6.92171426 |
| RGS12 | -0.056293873 | 3.00527343 | -0.918047984 | 0.359457 | 0.40855 | -6.92188244 |
| ANOS1 | 0.09752782 | 4.29829772 | 0.917960053 | 0.359503 | 0.40857 | -6.92196288 |
| FRYL | -0.063227547 | 2.77898225 | -0.917624394 | 0.359678 | 0.40874 | -6.92226986 |
| BOD1L1 | -0.080665381 | 3.3885097 | -0.917352738 | 0.359821 | 0.40888 | -6.92251823 |
| GREB1 | -0.110180666 | 0.76258393 | -0.916154415 | 0.360447 | 0.40956 | -6.92361295 |
| MYOF | 0.102033102 | 6.08805878 | 0.915773413 | 0.360647 | 0.40976 | -6.92396071 |
| DCHS1 | -0.082491246 | 2.60412007 | -0.915596156 | 0.36074 | 0.40984 | -6.92412245 |
| PRRT2 | 0.089009223 | 1.51061924 | 0.913330414 | 0.361927 | 0.41116 | -6.92618717 |
| CADM1 | -0.111643702 | 5.64131261 | -0.912593872 | 0.362314 | 0.41157 | -6.92685726 |
| RBPMS | -0.065176971 | 5.58874067 | -0.912383238 | 0.362425 | 0.41167 | -6.9270488 |
| PGPEP1 | -0.058152432 | 4.89281175 | -0.911800651 | 0.362731 | 0.41199 | -6.92757833 |
| CR2 | 0.137606199 | 0.883139 | 0.910760009 | 0.363278 | 0.41259 | -6.92852336 |
| RAB3GA | -0.065921671 | 3.75862769 | -0.91057602 | 0.363375 | 0.41267 | -6.92869033 |
| CYP51A | -0.0789968 | 1.85068256 | -0.910494092 | 0.363418 | 0.41269 | -6.92876467 |
| PLAGL2 | -0.081514046 | 3.60170553 | -0.910119571 | 0.363615 | 0.41289 | -6.92910442 |
| BARD1 | 0.065384333 | 2.07603585 | 0.908902976 | 0.364255 | 0.41359 | -6.93020711 |
| CAPN11 | -0.043952993 | 0.73399388 | -0.908603604 | 0.364413 | 0.41373 | -6.93047823 |
| C12orf54 | -0.044173564 | 0.66881753 | -0.908561858 | 0.364435 | 0.41373 | -6.93051603 |
| CCDC73 | -0.015865546 | 0.15751948 | -0.908454858 | 0.364492 | 0.41377 | -6.9306129 |
| DDIT4 | -0.111957143 | 6.21436944 | -0.907735995 | 0.364871 | 0.41417 | -6.93126345 |
| AGPAT2 | -0.072276809 | 7.32695542 | -0.907314012 | 0.365093 | 0.4144 | -6.93164509 |
| ZNF292 | 0.074899687 | 3.18467836 | 0.907174752 | 0.365167 | 0.41443 | -6.931771 |
| ELK1 | 0.060711143 | 4.92835564 | 0.907169171 | 0.36517 | 0.41443 | -6.93177605 |
| GDF6 | -0.163008393 | 0.62580777 | -0.906553703 | 0.365495 | 0.41477 | -6.93233228 |
| RRAD | 0.189489059 | 3.8400589 | 0.906484031 | 0.365531 | 0.41478 | -6.93239522 |
| CLSTN1 | -0.069004598 | 7.06632326 | -0.905265416 | 0.366175 | 0.41548 | -6.93349535 |
| ADCY2 | -0.033019097 | 0.15057223 | -0.905238554 | 0.366189 | 0.41548 | -6.93351958 |
| 10-Mar | -0.036747142 | 0.34218367 | -0.904688884 | 0.36648 | 0.41578 | -6.93401531 |
| PCDHGA | -0.108713434 | 1.56633282 | -0.904459068 | 0.366602 | 0.41589 | -6.93422249 |
| SARDH | -0.087353354 | 1.73716818 | -0.904120734 | 0.366781 | 0.41603 | -6.9345274 |
| MYOT | -0.052613312 | 0.26854517 | -0.904085112 | 0.3668 | 0.41603 | -6.93455949 |
| AHSP | -0.029271406 | 0.23869679 | -0.904080366 | 0.366802 | 0.41603 | -6.93456377 |
| UBXN10 | -0.100371745 | 3.74865293 | -0.903412294 | 0.367156 | 0.4164 | -6.93516547 |
| GPX4 | -0.062751159 | 8.93539041 | -0.902644708 | 0.367562 | 0.41684 | -6.93585627 |
| ATP1A3 | -0.07631624 | 0.38961411 | -0.902514056 | 0.367632 | 0.41689 | -6.93597379 |
| PLEKHH | 0.075159912 | 1.4305103 | 0.902438745 | 0.367671 | 0.41691 | -6.93604152 |
| DMBT1 | 0.046979501 | 0.20883331 | 0.90217203 | 0.367813 | 0.41704 | -6.93628136 |

| | | | | | | |
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| HNRNPC | -0.008384174 | 0.05376804 | -0.901614061 | 0.368109 | 0.41735 | -6.93678288 |
| ZNF559-i | -0.041262127 | 0.67381613 | -0.901544593 | 0.368145 | 0.41736 | -6.9368453 |
| OTUD4 | 0.075063504 | 3.77321133 | 0.901368966 | 0.368239 | 0.41744 | -6.93700308 |
| SYNPO2 | 0.027567626 | 0.09718184 | 0.900073823 | 0.368926 | 0.41819 | -6.93816569 |
| RHBDL3 | -0.025020686 | 0.28821477 | -0.89933093 | 0.369321 | 0.41861 | -6.93883181 |
| NBPF26 | 0.06776176 | 1.1913269 | 0.89872342 | 0.369644 | 0.41895 | -6.93937614 |
| CACNA1 | 0.026663364 | 0.03893393 | 0.8984278 | 0.369801 | 0.4191 | -6.93964088 |
| MLC1 | -0.034259688 | 0.24645189 | -0.898296862 | 0.369871 | 0.41915 | -6.93975811 |
| FBXL20 | -0.0571493 | 3.11242471 | -0.897314953 | 0.370393 | 0.41971 | -6.9406367 |
| MYL2 | 0.073574952 | 0.13636902 | 0.897033668 | 0.370543 | 0.41985 | -6.94088821 |
| CARMIL1 | -0.074435185 | 3.41498395 | -0.896794509 | 0.37067 | 0.41997 | -6.941102 |
| CBLN3 | -0.079988112 | 2.85431916 | -0.896646565 | 0.370749 | 0.42003 | -6.94123422 |
| NODAL | 0.032379951 | 0.15064106 | 0.895744973 | 0.37123 | 0.42055 | -6.94203951 |
| CCDC88 | 0.081525568 | 2.20612258 | 0.895448717 | 0.371388 | 0.4207 | -6.94230394 |
| SEC14L6 | 0.085506006 | 1.03876391 | 0.893264976 | 0.372554 | 0.42199 | -6.94425045 |
| ATP2A1 | -0.050237828 | 0.76830653 | -0.893113843 | 0.372634 | 0.42205 | -6.94438499 |
| GCSAML | -0.01280634 | 0.07405001 | -0.892668652 | 0.372872 | 0.42229 | -6.94478117 |
| MYL9 | -0.088093154 | 8.2798148 | -0.892599157 | 0.372909 | 0.42231 | -6.944843 |
| CALD1 | 0.07915488 | 6.15388807 | 0.892420762 | 0.373005 | 0.42239 | -6.94500169 |
| HSPB9 | -0.045700818 | 0.49851059 | -0.891962738 | 0.37325 | 0.42264 | -6.94540897 |
| MPP4 | -0.00721547 | 0.06231601 | -0.89130361 | 0.373603 | 0.42299 | -6.94599472 |
| ZNF556 | -0.006620058 | 0.05086932 | -0.891283822 | 0.373613 | 0.42299 | -6.9460123 |
| IL18BP | -0.075380068 | 2.8876366 | -0.89091917 | 0.373808 | 0.42319 | -6.94633616 |
| KCNF1 | -0.044953742 | 0.37178683 | -0.890769966 | 0.373888 | 0.42325 | -6.94646863 |
| REXO1 | -0.051600644 | 4.01961274 | -0.890409647 | 0.374081 | 0.42344 | -6.94678846 |
| TCEAL6 | -0.062115935 | 0.27381688 | -0.890156816 | 0.374217 | 0.42356 | -6.94701281 |
| UBQLN2 | -0.081212652 | 6.00779918 | -0.890014164 | 0.374293 | 0.42362 | -6.94713936 |
| FRAS1 | 0.121611218 | 2.28917428 | 0.889741194 | 0.374439 | 0.42376 | -6.94738147 |
| NOL4L | 0.068792263 | 3.82892492 | 0.889110923 | 0.374777 | 0.42411 | -6.94794019 |
| PCSK2 | 0.302910077 | 6.04949462 | 0.889069462 | 0.3748 | 0.42411 | -6.94797693 |
| ATP6V0A | -0.049510583 | 2.6111829 | -0.888212231 | 0.37526 | 0.4246 | -6.94873618 |
| POM121I | -0.006066855 | 0.02700557 | -0.88721535 | 0.375795 | 0.42517 | -6.94961821 |
| RAB3D | -0.071218967 | 3.99781927 | -0.887176382 | 0.375816 | 0.42517 | -6.94965267 |
| TET2 | -0.063136396 | 2.22645056 | -0.886451518 | 0.376206 | 0.42559 | -6.95029337 |
| TMEM23 | 0.064932345 | 2.93405468 | 0.88601675 | 0.376439 | 0.42582 | -6.95067741 |
| GJC2 | -0.108161521 | 1.87254153 | -0.885901089 | 0.376502 | 0.42586 | -6.95077954 |
| CIZ1 | -0.058490272 | 5.81196203 | -0.885659334 | 0.376632 | 0.42598 | -6.95099298 |
| RASSF2 | 0.089632465 | 2.76644155 | 0.88548745 | 0.376724 | 0.42606 | -6.9511447 |
| KBTBD8 | 0.052677342 | 0.90977224 | 0.885027453 | 0.376972 | 0.42631 | -6.95155057 |
| CEP128 | -0.052287634 | 1.575325 | -0.88425047 | 0.37739 | 0.42676 | -6.95223567 |

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| NCR1 | 0.043540184 | 0.27599461 | 0.883968254 | 0.377542 | 0.4269 | -6.95248436 |
| ICOSLG | 0.039426836 | 0.37691077 | 0.883928727 | 0.377563 | 0.4269 | -6.95251919 |
| MFAP4 | 0.198849858 | 3.39497686 | 0.883588764 | 0.377747 | 0.42707 | -6.95281865 |
| RBPJL | 0.010182552 | 0.04283812 | 0.882729098 | 0.37821 | 0.42757 | -6.95357539 |
| USP32 | -0.076199741 | 3.68769858 | -0.882612461 | 0.378273 | 0.42761 | -6.95367801 |
| HIST1H1 | 0.069172807 | 0.62323087 | 0.881184129 | 0.379044 | 0.42845 | -6.95493354 |
| SUSD1 | -0.089916704 | 3.4869466 | -0.880747634 | 0.37928 | 0.42869 | -6.95531683 |
| MST1 | -0.100400939 | 3.24666243 | -0.879929732 | 0.379722 | 0.42916 | -6.95603452 |
| SETSIP | -0.021867034 | 0.26302032 | -0.879888849 | 0.379744 | 0.42916 | -6.95607038 |
| RB1CC1 | -0.065646092 | 4.47133222 | -0.879609106 | 0.379895 | 0.4293 | -6.95631568 |
| PCDHGA | -0.085363389 | 1.28369178 | -0.879283659 | 0.380071 | 0.42947 | -6.95660097 |
| CSF3 | 0.096490646 | 0.42775055 | 0.879024761 | 0.380211 | 0.4296 | -6.95682784 |
| ABTB1 | 0.065227529 | 3.80109477 | 0.878248672 | 0.380632 | 0.43005 | -6.95750754 |
| CYP2E1 | 0.040408871 | 0.57929313 | 0.877488631 | 0.381043 | 0.43049 | -6.9581726 |
| PRKDC | -0.086125043 | 4.46536524 | -0.876995663 | 0.381311 | 0.43076 | -6.95860365 |
| ZDHHC2 | 0.087724074 | 5.39677353 | 0.876169847 | 0.381758 | 0.43124 | -6.95932522 |
| STX16 | -0.067377294 | 5.23794454 | -0.874802288 | 0.382501 | 0.43205 | -6.96051864 |
| RHO | -0.006557948 | 0.03850901 | -0.874608541 | 0.382606 | 0.43213 | -6.96068757 |
| VGF | -0.13611077 | 0.81197855 | -0.874565089 | 0.38263 | 0.43213 | -6.96072545 |
| MYO1E | 0.066029514 | 3.94506188 | 0.874478281 | 0.382677 | 0.43216 | -6.96080112 |
| EML5 | -0.035660514 | 0.40790972 | -0.872886109 | 0.383542 | 0.43311 | -6.96218772 |
| SHF | 0.100302668 | 3.42865612 | 0.871544495 | 0.384273 | 0.43389 | -6.96335416 |
| IGSF1 | 0.286049956 | 5.9667114 | 0.871514099 | 0.384289 | 0.43389 | -6.96338057 |
| SCNN1D | 0.084660816 | 1.8064917 | 0.871475978 | 0.38431 | 0.43389 | -6.96341368 |
| RET | 0.136334121 | 0.94114659 | 0.871232293 | 0.384443 | 0.434 | -6.96362534 |
| GRIP2 | -0.02621738 | 0.30479616 | -0.87119323 | 0.384464 | 0.434 | -6.96365927 |
| NTF4 | -0.085613663 | 1.03663764 | -0.871141448 | 0.384492 | 0.43401 | -6.96370423 |
| GOLIM4 | -0.083008036 | 4.96398032 | -0.870471946 | 0.384857 | 0.43439 | -6.96428538 |
| MIEF2 | -0.063076377 | 4.93587997 | -0.870060834 | 0.385082 | 0.43461 | -6.96464202 |
| PIP5K1B | 0.075756608 | 1.1442878 | 0.869882254 | 0.385179 | 0.43469 | -6.96479689 |
| HAUS6 | 0.05142704 | 2.41426363 | 0.86864945 | 0.385852 | 0.43542 | -6.96586512 |
| IL33 | -0.106066465 | 2.70889957 | -0.868031125 | 0.38619 | 0.43578 | -6.96640034 |
| CEP192 | -0.071479966 | 3.02583569 | -0.867480835 | 0.38649 | 0.43609 | -6.96687635 |
| ADORA2 | -0.0135803 | 0.14364452 | -0.86729308 | 0.386593 | 0.43617 | -6.96703869 |
| STAMBP | 0.052759109 | 1.03695215 | 0.866833601 | 0.386844 | 0.43643 | -6.96743583 |
| SACS | -0.050635703 | 1.30099578 | -0.866387982 | 0.387088 | 0.43667 | -6.96782079 |
| CACNB1 | 0.106753637 | 2.97188581 | 0.866094123 | 0.387249 | 0.4368 | -6.96807454 |
| TRAPPC | -0.085514325 | 2.60319012 | -0.866090076 | 0.387251 | 0.4368 | -6.96807803 |
| UPK3BL2 | 0.1231384 | 1.03544328 | 0.865391157 | 0.387634 | 0.43717 | -6.96868121 |
| UPK3BL1 | 0.1231384 | 1.03544328 | 0.865391157 | 0.387634 | 0.43717 | -6.96868121 |

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| CDC25C | -0.039053708 | 0.45480832 | -0.86465165 | 0.388039 | 0.4376 | -6.96931889 |
| XPO7 | -0.057772887 | 5.45223579 | -0.863955675 | 0.38842 | 0.438 | -6.96991853 |
| ZBTB7C | -0.06155591 | 5.05200223 | -0.863913061 | 0.388444 | 0.438 | -6.96995523 |
| EIF2S3 | -0.059459076 | 7.03751119 | -0.863554706 | 0.38864 | 0.43819 | -6.97026378 |
| NMRK2 | 0.037579985 | 0.17380944 | 0.862562147 | 0.389185 | 0.43878 | -6.97111774 |
| GALNT1: | -0.093334661 | 5.2956316 | -0.861614885 | 0.389705 | 0.43933 | -6.97193181 |
| ALOX15 | 0.015736653 | 0.10150636 | 0.8613115 | 0.389872 | 0.43949 | -6.97219235 |
| ABRA | 0.031273951 | 0.05105488 | 0.860559582 | 0.390285 | 0.43993 | -6.97283768 |
| CPEB1 | 0.075380516 | 1.38259834 | 0.860500921 | 0.390317 | 0.43994 | -6.97288801 |
| MARVEL | 0.054537318 | 2.92735762 | 0.857782809 | 0.391814 | 0.44159 | -6.975216 |
| ZNF609 | -0.066117987 | 3.65288764 | -0.856148388 | 0.392716 | 0.44258 | -6.97661231 |
| SUSD3 | 0.110058188 | 3.35452849 | 0.855964939 | 0.392817 | 0.44267 | -6.97676887 |
| TRIM71 | -0.005684646 | 0.01538747 | -0.855769323 | 0.392925 | 0.44276 | -6.97693578 |
| SLC15A5 | -0.00608131 | 0.03226726 | -0.855712066 | 0.392957 | 0.44276 | -6.97698462 |
| SLC16A7 | -0.049929941 | 0.68792548 | -0.85532097 | 0.393173 | 0.44298 | -6.97731818 |
| PLXDC1 | 0.080840587 | 2.24224948 | 0.854889285 | 0.393411 | 0.4432 | -6.97768618 |
| FAM83H | -0.064059565 | 5.59255816 | -0.854873304 | 0.39342 | 0.4432 | -6.9776998 |
| S100A12 | 0.052472497 | 0.47712026 | 0.854120437 | 0.393836 | 0.44364 | -6.97834114 |
| ENPP6 | 0.017845814 | 0.15349761 | 0.852878061 | 0.394523 | 0.44438 | -6.97939826 |
| WDR44 | -0.076875973 | 3.69167818 | -0.851165406 | 0.395472 | 0.44542 | -6.98085302 |
| LAMC1 | -0.082037661 | 6.6817424 | -0.850557687 | 0.395809 | 0.44577 | -6.98136852 |
| TMEM87 | -0.06829886 | 4.75209612 | -0.850439464 | 0.395875 | 0.44582 | -6.98146877 |
| LRRC14E | 0.013389362 | 0.0803228 | 0.850260053 | 0.395974 | 0.4459 | -6.98162086 |
| PRKCB | -0.107821651 | 1.48278079 | -0.850027293 | 0.396103 | 0.44601 | -6.98181814 |
| TSNAX-C | -0.005222049 | 0.02912728 | -0.849523584 | 0.396383 | 0.4463 | -6.98224488 |
| ITGB1BF | -0.032876493 | 0.62943343 | -0.849299945 | 0.396507 | 0.44641 | -6.98243426 |
| LPXN | 0.064771034 | 4.14995045 | 0.848571492 | 0.396912 | 0.44681 | -6.98305079 |
| GRIN1 | 0.033421795 | 0.23270935 | 0.84856398 | 0.396916 | 0.44681 | -6.98305715 |
| RBM41 | -0.064290777 | 2.38960745 | -0.848250843 | 0.39709 | 0.44698 | -6.98332201 |
| ADAMTS | -0.044710917 | 0.50487691 | -0.847996029 | 0.397232 | 0.44711 | -6.98353747 |
| NXF3 | -0.035481727 | 0.16248257 | -0.847615281 | 0.397443 | 0.44731 | -6.98385929 |
| NTS | -0.059319409 | 0.39879404 | -0.847409278 | 0.397558 | 0.44741 | -6.98403335 |
| NACC1 | -0.04972134 | 5.75456875 | -0.846710836 | 0.397946 | 0.44782 | -6.98462319 |
| UBR5 | -0.073023633 | 4.34430596 | -0.846533494 | 0.398045 | 0.4479 | -6.98477287 |
| CNN2 | 0.10329522 | 7.04338584 | 0.846345954 | 0.39815 | 0.44799 | -6.98493114 |
| SERPINE | 0.15829728 | 4.83273545 | 0.846041017 | 0.398319 | 0.44815 | -6.98518839 |
| KIAA093( | 0.05762393 | 3.51194784 | 0.845426368 | 0.398662 | 0.44851 | -6.98570665 |
| SPDYE1 | 0.014504645 | 0.21966452 | 0.844725529 | 0.399052 | 0.44892 | -6.98629713 |
| NECAB2 | -0.054385143 | 0.23403611 | -0.844029752 | 0.39944 | 0.44932 | -6.98688286 |
| ZNF608 | 0.100999513 | 3.73945904 | 0.843457828 | 0.399759 | 0.44965 | -6.98736397 |

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| CBL | 0.069602735 | 3.34749221 | 0.843384556 | 0.3998 | 0.44967 | -6.98742559 |
| HBD | 0.026361286 | 0.12437304 | 0.842276161 | 0.400419 | 0.45032 | -6.98835697 |
| PDCD1 | 0.124333156 | 1.69848482 | 0.842248764 | 0.400434 | 0.45032 | -6.98837998 |
| CUL4B | -0.05228249 | 4.80101329 | -0.841491667 | 0.400857 | 0.45077 | -6.98901545 |
| BRD3 | -0.075721588 | 3.95127391 | -0.841310892 | 0.400958 | 0.45085 | -6.9891671 |
| ZNF662 | -0.071004211 | 2.41723172 | -0.839749759 | 0.401832 | 0.4518 | -6.99047537 |
| TRABD2I | 0.080859954 | 0.89818663 | 0.839238341 | 0.402118 | 0.45207 | -6.99090342 |
| HABP2 | 0.009625719 | 0.03768964 | 0.839226263 | 0.402125 | 0.45207 | -6.99091353 |
| ITPKA | -0.072850064 | 1.15458888 | -0.839007838 | 0.402247 | 0.45218 | -6.99109627 |
| ICA1L | -0.064498211 | 2.4047047 | -0.838866165 | 0.402326 | 0.45224 | -6.99121477 |
| FAM228/ | -0.05070852 | 0.42818164 | -0.838786469 | 0.402371 | 0.45226 | -6.99128142 |
| CNDP1 | -0.046148691 | 0.30392926 | -0.838620138 | 0.402464 | 0.45234 | -6.99142051 |
| DPYS | 0.011452569 | 0.08100902 | 0.838327469 | 0.402628 | 0.45249 | -6.99166518 |
| HAO2 | -0.013953231 | 0.08595339 | -0.837781444 | 0.402934 | 0.4528 | -6.99212142 |
| TBC1D1₄ | -0.104393641 | 2.98783167 | -0.837313392 | 0.403197 | 0.45307 | -6.99251227 |
| OR10AD | -0.030002332 | 0.32451592 | -0.837201569 | 0.403259 | 0.45311 | -6.99260562 |
| DLX5 | 0.098623168 | 1.4624322 | 0.835099473 | 0.40444 | 0.45441 | -6.9943581 |
| SCART1 | 0.048355669 | 0.78174125 | 0.834925274 | 0.404538 | 0.45449 | -6.99450313 |
| UBE2I | -0.052992696 | 5.43230739 | -0.834734967 | 0.404645 | 0.45458 | -6.99466154 |
| PRND | -0.063802452 | 0.42358243 | -0.834446425 | 0.404807 | 0.45473 | -6.99490164 |
| RSRP1 | -0.098219052 | 4.76665343 | -0.834378491 | 0.404845 | 0.45474 | -6.99495816 |
| RPLP1 | -0.06207901 | 9.67733167 | -0.834056737 | 0.405026 | 0.45491 | -6.99522578 |
| GCNT7 | -0.017551351 | 0.21860913 | -0.833540647 | 0.405316 | 0.45521 | -6.99565483 |
| PLK2 | -0.09117091 | 4.50773628 | -0.833271162 | 0.405468 | 0.45535 | -6.99587877 |
| KMT2C | -0.071997079 | 3.99609765 | -0.832626968 | 0.405831 | 0.45573 | -6.99641377 |
| SPDYA | 0.031380645 | 0.59404347 | 0.832576568 | 0.405859 | 0.45573 | -6.99645561 |
| KMT5C | -0.056760158 | 2.46699615 | -0.831483509 | 0.406475 | 0.45639 | -6.99736241 |
| CCBE1 | -0.026013237 | 0.13978547 | -0.831422874 | 0.406509 | 0.4564 | -6.99741268 |
| SPON2 | 0.082084836 | 1.88843109 | 0.831328439 | 0.406562 | 0.45643 | -6.99749096 |
| HOXB2 | -0.071231297 | 1.80820013 | -0.830250426 | 0.40717 | 0.45706 | -6.99838395 |
| FMC1-LL | -0.008354105 | 0.06409971 | -0.830234319 | 0.407179 | 0.45706 | -6.99839728 |
| SPINK9 | -0.037700887 | 0.35294424 | -0.830103927 | 0.407253 | 0.45711 | -6.99850521 |
| SLC13A5 | -0.037236316 | 0.12479386 | -0.829898858 | 0.407369 | 0.45721 | -6.99867492 |
| HIVEP1 | 0.078357646 | 2.93614176 | 0.828910066 | 0.407927 | 0.45781 | -6.99949265 |
| RTBDN | 0.046437321 | 0.26164331 | 0.828805752 | 0.407986 | 0.45784 | -6.99957886 |
| CHST1 | 0.116742937 | 4.89600849 | 0.828375233 | 0.408229 | 0.45808 | -6.99993455 |
| FGF13 | 0.062524132 | 0.67199574 | 0.828335108 | 0.408252 | 0.45808 | -6.99996769 |
| HEG1 | -0.095556891 | 6.38884706 | -0.82754841 | 0.408696 | 0.45855 | -7.00061714 |
| DEF8 | -0.058105791 | 4.87307111 | -0.827434408 | 0.408761 | 0.45859 | -7.0007112 |
| ZNF121 | -0.043469435 | 3.28235525 | -0.826945186 | 0.409038 | 0.45887 | -7.00111471 |

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| CACNA1 | -0.047237295 | 0.98459156 | -0.826757281 | 0.409144 | 0.45896 | -7.00126963 |
| SV2B | -0.02018104 | 0.14754738 | -0.82621416 | 0.409451 | 0.45928 | -7.00171721 |
| ZNF611 | -0.051564075 | 1.93927252 | -0.826147649 | 0.409489 | 0.45929 | -7.001772 |
| IGF1 | -0.067523883 | 0.59777479 | -0.825465354 | 0.409875 | 0.45969 | -7.00233382 |
| CLEC9A | -0.048588839 | 0.61834692 | -0.825347467 | 0.409942 | 0.45973 | -7.00243084 |
| ZBTB43 | 0.063685825 | 3.34593713 | 0.825120945 | 0.41007 | 0.45985 | -7.00261724 |
| RGS13 | 0.033725683 | 0.14000016 | 0.824643214 | 0.410341 | 0.46012 | -7.00301018 |
| CNTRL | 0.065849714 | 3.00677612 | 0.823945797 | 0.410737 | 0.46053 | -7.0035834 |
| SRFBP1 | -0.069089603 | 3.42336392 | -0.823428892 | 0.41103 | 0.46083 | -7.00400794 |
| A1CF | -0.004600634 | 0.01480232 | -0.82184442 | 0.41193 | 0.46181 | -7.00530765 |
| TLR4 | -0.075593056 | 2.60013646 | -0.821494837 | 0.412128 | 0.462 | -7.00559407 |
| TP73 | 0.046804605 | 0.79835781 | 0.821455635 | 0.41215 | 0.462 | -7.00562619 |
| TYMP | 0.108578083 | 4.73901622 | 0.821098899 | 0.412353 | 0.46219 | -7.00591833 |
| PRAME | -0.025809906 | 0.08026648 | -0.820699815 | 0.41258 | 0.46242 | -7.006245 |
| CYP4F11 | -0.153755863 | 2.02484391 | -0.820212207 | 0.412858 | 0.4627 | -7.00664392 |
| DDA1 | -0.040308172 | 4.68913035 | -0.81910786 | 0.413486 | 0.46337 | -7.00754653 |
| SIGLEC5 | 0.020079804 | 0.24705545 | 0.818658278 | 0.413742 | 0.46361 | -7.00791364 |
| PLIN2 | 0.080431686 | 4.27785969 | 0.818642371 | 0.413751 | 0.46361 | -7.00792663 |
| NCOR2 | 0.059937465 | 5.04724041 | 0.8185173 | 0.413822 | 0.46366 | -7.00802872 |
| ANGPTL | -0.034116366 | 0.29968369 | -0.818329733 | 0.413929 | 0.46375 | -7.00818179 |
| C2orf16 | -0.042784458 | 1.29555964 | -0.817864848 | 0.414194 | 0.46401 | -7.00856103 |
| TDO2 | 0.07647459 | 0.65480939 | 0.817140102 | 0.414608 | 0.46444 | -7.00915184 |
| NCAPG2 | -0.056186887 | 2.33235448 | -0.816824264 | 0.414788 | 0.46462 | -7.00940914 |
| FREM1 | -0.039631997 | 0.20204546 | -0.81665059 | 0.414887 | 0.4647 | -7.00955058 |
| KLHL2 | 0.066468997 | 5.11317649 | 0.816096532 | 0.415203 | 0.46502 | -7.01000162 |
| AP4E1 | -0.05595388 | 2.64892213 | -0.816044339 | 0.415233 | 0.46502 | -7.0100441 |
| SHISA7 | 0.005828854 | 0.03551694 | 0.815991801 | 0.415263 | 0.46503 | -7.01008685 |
| MPP7 | -0.090025123 | 4.5301214 | -0.81564262 | 0.415462 | 0.46522 | -7.01037091 |
| IL13RA1 | 0.071077174 | 6.45762738 | 0.815550091 | 0.415515 | 0.46525 | -7.01044617 |
| CERCAM | -0.097975041 | 4.67361452 | -0.815061613 | 0.415794 | 0.46553 | -7.0108433 |
| ZC3H11E | -0.008315514 | 0.08101747 | -0.814885019 | 0.415895 | 0.46561 | -7.01098682 |
| SLC5A3 | -0.104771608 | 5.76456682 | -0.814816906 | 0.415934 | 0.46562 | -7.01104216 |
| SLC34A3 | -0.060221839 | 0.68905687 | -0.814733181 | 0.415982 | 0.46565 | -7.01111019 |
| PDK1 | 0.050497327 | 1.61054163 | 0.814158 | 0.41631 | 0.46598 | -7.01157732 |
| LUZP2 | 0.014784979 | 0.07168293 | 0.8140911 | 0.416349 | 0.466 | -7.01163163 |
| ZFHX4 | 0.026512712 | 0.25293249 | 0.81389031 | 0.416464 | 0.46609 | -7.01179462 |
| PCDHA2 | 0.023634169 | 0.16336668 | 0.813345128 | 0.416775 | 0.46641 | -7.01223694 |
| CNGA1 | 0.062747762 | 0.96095743 | 0.812713173 | 0.417137 | 0.46679 | -7.0127493 |
| GALNT6 | 0.084099688 | 1.88225631 | 0.812366501 | 0.417335 | 0.46698 | -7.01303019 |
| GRK2 | -0.047032795 | 5.09532691 | -0.811837487 | 0.417638 | 0.46728 | -7.0134586 |

| | | | | | | |
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| LSM11 | 0.037778844 | 1.77671267 | 0.811515104 | 0.417823 | 0.46746 | -7.01371954 |
| PHLDB3 | -0.063896299 | 2.69209542 | -0.811127383 | 0.418045 | 0.46768 | -7.01403323 |
| NDEL1 | -0.05935613 | 3.90905798 | -0.810637394 | 0.418326 | 0.46796 | -7.01442944 |
| SLC35E2 | -0.07620547 | 4.09569176 | -0.810498919 | 0.418406 | 0.46802 | -7.01454137 |
| YWHAG | -0.058831859 | 6.29068743 | -0.810341666 | 0.418496 | 0.46809 | -7.01466846 |
| SMG6 | -0.090077361 | 3.13762096 | -0.809941861 | 0.418725 | 0.46832 | -7.01499146 |
| NPAS4 | -0.007673679 | 0.04044674 | -0.809140314 | 0.419185 | 0.4688 | -7.01563854 |
| CYB5R4 | -0.043990207 | 1.96022346 | -0.80872282 | 0.419425 | 0.46904 | -7.01597532 |
| ELOVL4 | -0.071704995 | 1.7159912 | -0.808611185 | 0.419489 | 0.46908 | -7.01606535 |
| MTUS1 | 0.088025724 | 4.81136309 | 0.8082918 | 0.419672 | 0.46925 | -7.01632284 |
| TRPV3 | 0.03649498 | 0.48735375 | 0.807773838 | 0.41997 | 0.46955 | -7.01674021 |
| GOLGA6 | 0.011704611 | 0.10851602 | 0.807724642 | 0.419998 | 0.46955 | -7.01677983 |
| FBXW7 | -0.055574947 | 3.28474184 | -0.807467038 | 0.420146 | 0.46969 | -7.0169873 |
| CC2D1B | 0.039202533 | 4.54962624 | 0.807236141 | 0.420279 | 0.46981 | -7.0171732 |
| CHPF2 | -0.060945876 | 5.77939528 | -0.806997335 | 0.420416 | 0.46993 | -7.01736541 |
| ARL6IP6 | 0.0688284 | 3.56652147 | 0.806533746 | 0.420683 | 0.47019 | -7.01773838 |
| LRP10 | -0.075167586 | 6.50565764 | -0.805811602 | 0.421099 | 0.47063 | -7.01831895 |
| RPL14 | -0.05264184 | 7.63198245 | -0.804513559 | 0.421846 | 0.47143 | -7.0193612 |
| TMPRSS | 0.007419259 | 0.05803122 | 0.803955272 | 0.422168 | 0.47176 | -7.01980896 |
| BEND3 | -0.051592423 | 1.85189435 | -0.80388158 | 0.422211 | 0.47178 | -7.01986804 |
| FOXP4 | -0.072779568 | 6.26691106 | -0.803721988 | 0.422303 | 0.47185 | -7.01999597 |
| TIAF1 | -0.030389654 | 0.64197349 | -0.802592441 | 0.422954 | 0.47255 | -7.02090069 |
| INSYN2A | 0.030470657 | 0.37775602 | 0.799184496 | 0.424924 | 0.47472 | -7.02362262 |
| AMY1B | 0.010404233 | 0.05703111 | 0.799063068 | 0.424994 | 0.47476 | -7.0237194 |
| BTN3A3 | 0.079117964 | 3.44552054 | 0.798979885 | 0.425042 | 0.47479 | -7.02378568 |
| CCL3 | 0.119931435 | 2.79945144 | 0.798590332 | 0.425268 | 0.47501 | -7.024096 |
| LRRC66 | -0.047479775 | 0.36847186 | -0.797049862 | 0.42616 | 0.47594 | -7.02532169 |
| NCR3LG | -0.063008496 | 1.05629725 | -0.797042735 | 0.426164 | 0.47594 | -7.02532736 |
| S100P | -0.044334109 | 0.42438587 | -0.795745569 | 0.426917 | 0.47675 | -7.02635762 |
| ARPC4-T | 0.021200371 | 0.43221349 | 0.795277662 | 0.427188 | 0.47703 | -7.02672885 |
| GATAD2 | -0.056215141 | 4.29545243 | -0.795009483 | 0.427344 | 0.47717 | -7.02694151 |
| TMEM35 | -0.052844503 | 0.87015408 | -0.794545776 | 0.427613 | 0.47744 | -7.02730906 |
| SAMD11 | 0.159264951 | 3.07484009 | 0.794450718 | 0.427668 | 0.47744 | -7.02738439 |
| SPTAN1 | -0.069053791 | 6.49964075 | -0.794437166 | 0.427676 | 0.47744 | -7.02739512 |
| SPDYE5 | 0.020169552 | 0.36548244 | 0.794226667 | 0.427798 | 0.47755 | -7.02756188 |
| CDK3 | -0.047747231 | 0.88353809 | -0.793076821 | 0.428467 | 0.47825 | -7.02847201 |
| PTHLH | -0.059864965 | 1.01921406 | -0.793052913 | 0.428481 | 0.47825 | -7.02849092 |
| EIF4EBP | -0.073792431 | 5.20703249 | -0.792731475 | 0.428668 | 0.47843 | -7.0287451 |
| MPDZ | -0.074933457 | 3.23514933 | -0.792544908 | 0.428776 | 0.47852 | -7.02889259 |
| MATR3 | 0.039401117 | 1.05829477 | 0.79230797 | 0.428914 | 0.47864 | -7.02907984 |

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|---|---|---|---|---|---|
| ADH1B | -0.093643203 | 0.7876937 | -0.79217554 | 0.428991 | 0.47869 | -7.02918447 |
| RPS2 | 0.06156965 | 9.6411337 | 0.790122385 | 0.430187 | 0.47999 | -7.03080449 |
| NDNF | -0.047654556 | 0.53082512 | -0.790080145 | 0.430212 | 0.47999 | -7.03083778 |
| NPIPB4 | 0.03800404 | 0.61386237 | 0.789893099 | 0.430321 | 0.48008 | -7.03098515 |
| TAF1D | 0.052206806 | 4.03912 | 0.788633841 | 0.431055 | 0.48087 | -7.03197639 |
| LTB4R2 | -0.047076098 | 1.01743798 | -0.788437928 | 0.431169 | 0.48096 | -7.03213047 |
| DIO3 | 0.044163327 | 0.31945955 | 0.78803011 | 0.431408 | 0.4812 | -7.03245107 |
| MYH11 | -0.111234927 | 2.53044788 | -0.787934918 | 0.431463 | 0.48123 | -7.03252589 |
| NUP62 | -0.051124867 | 4.70687554 | -0.787396424 | 0.431778 | 0.48153 | -7.03294892 |
| KRTAP5· | 0.012821885 | 0.1021986 | 0.787381722 | 0.431786 | 0.48153 | -7.03296046 |
| ANO9 | -0.069792494 | 2.25149812 | -0.787108084 | 0.431946 | 0.48167 | -7.03317531 |
| EVX1 | -0.011291631 | 0.09726957 | -0.786028926 | 0.432577 | 0.48234 | -7.0340219 |
| LRRC74I | -0.007460418 | 0.02083615 | -0.785941819 | 0.432628 | 0.48237 | -7.03409019 |
| TSKS | 0.018090588 | 0.22639695 | 0.784740718 | 0.433331 | 0.48312 | -7.03503098 |
| FABP7 | -0.01849536 | 0.06389275 | -0.780777412 | 0.435654 | 0.48568 | -7.03812518 |
| ACOXL | -0.03670953 | 0.70524673 | -0.779601481 | 0.436345 | 0.48642 | -7.03904024 |
| PRSS57 | 0.048508944 | 0.55978951 | 0.777538846 | 0.437558 | 0.48774 | -7.04064198 |
| RPL12 | -0.061565909 | 9.94020363 | -0.777218304 | 0.437747 | 0.48792 | -7.04089052 |
| SLC24A4 | 0.01068885 | 0.13269019 | 0.777013907 | 0.437867 | 0.48802 | -7.04104895 |
| GSDMB | 0.098588017 | 2.927481 | 0.776631663 | 0.438092 | 0.48824 | -7.04134512 |
| MC1R | -0.069549273 | 2.13807058 | -0.775973839 | 0.43848 | 0.48864 | -7.04185448 |
| OPRK1 | -0.012326059 | 0.04244668 | -0.775576354 | 0.438714 | 0.48887 | -7.04216204 |
| BAZ2B | -0.055793405 | 2.47337827 | -0.774448938 | 0.439379 | 0.48958 | -7.04303356 |
| PILRB | -0.076399222 | 1.58539155 | -0.774200134 | 0.439526 | 0.48971 | -7.04322572 |
| GCOM1 | 0.00855219 | 0.05707124 | 0.773332657 | 0.440038 | 0.49025 | -7.04389523 |
| ZNF28 | -0.068481026 | 3.14644758 | -0.77296583 | 0.440255 | 0.49045 | -7.04417811 |
| SBK3 | -0.025254213 | 0.23597958 | -0.771008547 | 0.441412 | 0.49171 | -7.04568525 |
| TBX10 | -0.025481187 | 0.13489919 | -0.769361206 | 0.442388 | 0.49277 | -7.04695079 |
| HYAL4 | 0.018010407 | 0.04623577 | 0.76765085 | 0.443401 | 0.49386 | -7.04826188 |
| CHRM4 | -0.016142996 | 0.23283752 | -0.766362459 | 0.444166 | 0.49468 | -7.0492476 |
| LONRF2 | 0.135669129 | 4.86223536 | 0.766191337 | 0.444268 | 0.49476 | -7.04937839 |
| TLDC2 | -0.077878142 | 1.77726861 | -0.76510856 | 0.444911 | 0.49545 | -7.05020534 |
| C2CD6 | -0.034762394 | 0.35389708 | -0.764471414 | 0.44529 | 0.49584 | -7.0506914 |
| WDFY1 | 0.061644088 | 5.15965402 | 0.763364836 | 0.445948 | 0.49654 | -7.05153462 |
| ANKRD3 | 0.040170454 | 0.63739734 | 0.762261019 | 0.446605 | 0.49723 | -7.05237452 |
| TF | 0.027120967 | 0.21301516 | 0.761663527 | 0.446961 | 0.4976 | -7.05282865 |
| C9orf131 | -0.007005464 | 0.05963186 | -0.760878261 | 0.447429 | 0.49809 | -7.05342497 |
| FZD7 | 0.090083249 | 3.65618713 | 0.758778941 | 0.448682 | 0.49945 | -7.05501614 |
| KIF11 | 0.056867225 | 2.20214177 | 0.758187604 | 0.449035 | 0.49981 | -7.05546355 |
| MBTPS2 | -0.061530077 | 3.10798835 | -0.757590519 | 0.449392 | 0.50017 | -7.05591496 |

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| AP2A1 | -0.047670807 | 5.02987339 | -0.756884693 | 0.449814 | 0.50061 | -7.05644812 |
| DEFB1 | -0.130282987 | 1.87607804 | -0.756644043 | 0.449958 | 0.50074 | -7.05662979 |
| PALLD | -0.086897254 | 5.55355847 | -0.756075593 | 0.450298 | 0.50108 | -7.05705868 |
| SAT1 | -0.06901887 | 9.89238816 | -0.755627298 | 0.450567 | 0.50135 | -7.05739669 |
| TMEM26 | 0.009519342 | 0.09758569 | 0.754419361 | 0.45129 | 0.50212 | -7.05830648 |
| GAPDHS | -0.032812045 | 0.08918862 | -0.75400861 | 0.451536 | 0.50236 | -7.05861552 |
| FCHSD2 | -0.050533935 | 4.65751505 | -0.752861717 | 0.452224 | 0.50309 | -7.05947752 |
| SYT4 | -0.01204947 | 0.06982042 | -0.752674789 | 0.452336 | 0.50319 | -7.05961789 |
| GRIN2B | -0.005901319 | 0.01283649 | -0.752621417 | 0.452368 | 0.50319 | -7.05965796 |
| PRPS2 | 0.060837111 | 5.27038483 | 0.752269344 | 0.45258 | 0.50339 | -7.05992223 |
| PROM1 | 0.088455528 | 0.73401493 | 0.75218584 | 0.45263 | 0.50341 | -7.05998489 |
| HOXA11 | 0.038679761 | 0.15638225 | 0.75186474 | 0.452822 | 0.50359 | -7.06022578 |
| ALOXE3 | 0.030537631 | 0.44281958 | 0.751483537 | 0.453051 | 0.50379 | -7.06051162 |
| CEL | 0.037284397 | 0.64594264 | 0.751474913 | 0.453057 | 0.50379 | -7.06051809 |
| COCH | -0.037480585 | 0.49356068 | -0.750253972 | 0.45379 | 0.50457 | -7.06143263 |
| DAG1 | -0.065768647 | 5.81747906 | -0.749818515 | 0.454052 | 0.50483 | -7.06175844 |
| DHX58 | -0.079513201 | 3.50027491 | -0.749705689 | 0.45412 | 0.50487 | -7.06184283 |
| NKG7 | 0.128342216 | 3.55070611 | 0.749362034 | 0.454326 | 0.50507 | -7.06209979 |
| ZNF701 | -0.041081759 | 2.14554511 | -0.748668965 | 0.454743 | 0.5055 | -7.06261766 |
| AFF4 | -0.073381749 | 5.09742101 | -0.748539218 | 0.454822 | 0.50555 | -7.06271455 |
| PATL1 | 0.058155367 | 4.8334454 | 0.748312957 | 0.454958 | 0.50567 | -7.06288348 |
| ZNFX1 | 0.058214683 | 4.84524117 | 0.747967716 | 0.455166 | 0.50587 | -7.06314115 |
| SYT6 | -0.013142911 | 0.12954647 | -0.747479655 | 0.45546 | 0.50616 | -7.06350521 |
| DNAJB13 | -0.02988673 | 0.214911 | -0.746346222 | 0.456143 | 0.50689 | -7.06434975 |
| NIPAL1 | 0.08149444 | 1.97171536 | 0.746106567 | 0.456287 | 0.50702 | -7.06452816 |
| CLDN7 | -0.076440865 | 7.79064518 | -0.746025798 | 0.456336 | 0.50704 | -7.06458827 |
| CNR1 | 0.079732165 | 0.75055169 | 0.745893015 | 0.456416 | 0.50707 | -7.06468708 |
| SYNGR2 | -0.047705701 | 6.80081578 | -0.745869658 | 0.45643 | 0.50707 | -7.06470446 |
| DOP1A | -0.067983489 | 3.3563647 | -0.745416443 | 0.456703 | 0.50735 | -7.06504159 |
| HAGHL | -0.078440808 | 1.80564171 | -0.745285726 | 0.456782 | 0.5074 | -7.06513879 |
| NBPF15 | 0.078359752 | 2.95758559 | 0.745240732 | 0.456809 | 0.5074 | -7.06517224 |
| ZBTB7A | -0.040658926 | 4.98419863 | -0.745122749 | 0.45688 | 0.50744 | -7.06525995 |
| KCNH7 | -0.009255282 | 0.05545277 | -0.744957803 | 0.45698 | 0.50752 | -7.06538255 |
| HPX | 0.028680285 | 0.42523331 | 0.744790726 | 0.457081 | 0.5076 | -7.0655067 |
| ULBP1 | -0.100113039 | 1.5106478 | -0.743191624 | 0.458047 | 0.50864 | -7.06669358 |
| C12orf76 | -0.04436096 | 3.20845809 | -0.74310994 | 0.458096 | 0.50866 | -7.06675414 |
| ZNF107 | -0.06442757 | 2.48041853 | -0.7430071 | 0.458158 | 0.50869 | -7.06683037 |
| SMCO1 | 0.012781073 | 0.04821792 | 0.742908276 | 0.458218 | 0.50873 | -7.06690362 |
| RNF207 | 0.065291538 | 2.29108878 | 0.742127323 | 0.45869 | 0.50919 | -7.06748211 |
| REC114 | -0.013444889 | 0.1188983 | -0.742118992 | 0.458695 | 0.50919 | -7.06748828 |

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| CADM2 | -0.036969806 | 0.19439967 | -0.742013413 | 0.458759 | 0.50923 | -7.06756644 |
| PPARGC | -0.020682094 | 0.4080291 | -0.741367964 | 0.459149 | 0.50963 | -7.06804403 |
| FBN1 | -0.124001973 | 4.21811655 | -0.741119375 | 0.4593 | 0.50976 | -7.06822786 |
| GLB1L3 | -0.09388533 | 0.79897898 | -0.741050863 | 0.459341 | 0.50977 | -7.06827851 |
| KIF20A | 0.067906995 | 1.43217442 | 0.740885638 | 0.459441 | 0.50985 | -7.06840065 |
| MAML1 | -0.055282081 | 3.85134977 | -0.740429617 | 0.459717 | 0.51013 | -7.0687376 |
| PARP6 | -0.050384211 | 4.24509653 | -0.740232202 | 0.459837 | 0.51022 | -7.06888341 |
| KCNH8 | 0.027325613 | 0.25418462 | 0.739979263 | 0.45999 | 0.51036 | -7.06907017 |
| ZNF669 | -0.057418997 | 2.77952228 | -0.73980238 | 0.460097 | 0.51045 | -7.06920073 |
| ZNF770 | -0.121119202 | 4.57795716 | -0.739300449 | 0.460401 | 0.51075 | -7.06957106 |
| AKAP9 | -0.074160898 | 3.80849878 | -0.738837276 | 0.460682 | 0.51103 | -7.06991257 |
| ADAP2 | -0.056510933 | 2.97178784 | -0.738580518 | 0.460838 | 0.51117 | -7.0701018 |
| ISM2 | 0.035417186 | 0.39244091 | 0.738478959 | 0.460899 | 0.5112 | -7.07017662 |
| SPTA1 | -0.005184888 | 0.03322188 | -0.737914619 | 0.461242 | 0.51154 | -7.07059224 |
| UVSSA | 0.059725802 | 2.26773738 | 0.737835558 | 0.46129 | 0.51154 | -7.07065044 |
| CRIPAK | 0.059725802 | 2.26773738 | 0.737835558 | 0.46129 | 0.51154 | -7.07065044 |
| SMURF1 | 0.052529887 | 3.58251313 | 0.737479882 | 0.461505 | 0.51174 | -7.07091219 |
| TP53 | -0.048413424 | 5.33351757 | -0.737117377 | 0.461725 | 0.51195 | -7.07117884 |
| CDR2L | -0.060265117 | 3.10257763 | -0.737072054 | 0.461753 | 0.51195 | -7.07121216 |
| AGRN | 0.073945285 | 6.97268781 | 0.735347165 | 0.462801 | 0.51308 | -7.07247907 |
| ATXN7 | -0.051060285 | 3.24470852 | -0.734848856 | 0.463104 | 0.51335 | -7.07284452 |
| LOXL2 | -0.076031844 | 3.29903014 | -0.73484359 | 0.463107 | 0.51335 | -7.07284838 |
| VMO1 | 0.074914083 | 2.09535059 | 0.734389147 | 0.463383 | 0.51362 | -7.07318145 |
| STIL | 0.032163203 | 1.02309646 | 0.734039836 | 0.463596 | 0.51382 | -7.07343732 |
| BACE1 | -0.074792622 | 4.41888285 | -0.732814615 | 0.464341 | 0.51462 | -7.07433384 |
| TEX48 | -0.014461003 | 0.101734 | -0.732625419 | 0.464457 | 0.51471 | -7.07447215 |
| PPIAL4C | -0.01201997 | 0.09615127 | -0.731825073 | 0.464944 | 0.51522 | -7.07505682 |
| KIF1B | -0.058155635 | 3.81367853 | -0.731648447 | 0.465052 | 0.5153 | -7.07518577 |
| PCDHGC | 0.026244701 | 0.28512414 | 0.731606074 | 0.465078 | 0.5153 | -7.0752167 |
| PNPLA6 | 0.04903401 | 5.01278666 | 0.730949494 | 0.465478 | 0.51571 | -7.07569573 |
| DCDC2 | 0.083403501 | 4.06215689 | 0.730512582 | 0.465744 | 0.51597 | -7.07601426 |
| ARMC9 | -0.048441693 | 2.84292886 | -0.729835174 | 0.466158 | 0.51637 | -7.07650774 |
| MCM10 | 0.034437352 | 0.70900516 | 0.729815241 | 0.46617 | 0.51637 | -7.07652225 |
| KIR2DL3 | 0.012168859 | 0.07781037 | 0.729211327 | 0.466538 | 0.51675 | -7.0769618 |
| ZNF385D | 0.034784446 | 0.39086266 | 0.729009282 | 0.466662 | 0.51685 | -7.07710878 |
| DOCK8 | -0.067142035 | 2.41495303 | -0.728797636 | 0.466791 | 0.51696 | -7.07726269 |
| TMPRSS | -0.010475563 | 0.0960211 | -0.728454091 | 0.467001 | 0.51716 | -7.07751243 |
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| PRB3 | 0.03209742 | 0.2778824 | 0.727172929 | 0.467784 | 0.51789 | -7.07844274 |
| NLN | 0.059186925 | 3.07502375 | 0.726919216 | 0.467939 | 0.51803 | -7.07862678 |
| KDM5A | -0.056238021 | 3.72002097 | -0.726298436 | 0.468319 | 0.51842 | -7.07907682 |
| GAL | 0.023871929 | 0.19018445 | 0.725048628 | 0.469084 | 0.51923 | -7.0799817 |
| XRN1 | 0.054506524 | 3.27149928 | 0.724720281 | 0.469285 | 0.51942 | -7.08021917 |
| C12orf75 | 0.078873681 | 2.24009808 | 0.72424406 | 0.469577 | 0.51971 | -7.0805634 |
| RCVRN | -0.009498687 | 0.05619501 | -0.723917056 | 0.469777 | 0.51989 | -7.08079964 |
| VPS13B | -0.062174667 | 2.69158598 | -0.722092912 | 0.470896 | 0.5211 | -7.08211552 |
| ANTXR2 | -0.06101418 | 2.07891409 | -0.721723857 | 0.471122 | 0.52131 | -7.08238134 |
| ATP8B2 | 0.078330616 | 3.86366207 | 0.720921414 | 0.471615 | 0.52183 | -7.08295885 |
| PLAAT3 | 0.05850679 | 6.49592041 | 0.720852487 | 0.471657 | 0.52184 | -7.08300843 |
| RALGDS | -0.053064109 | 4.78971717 | -0.720545501 | 0.471846 | 0.52201 | -7.08322918 |
| POTEF | 0.004770501 | 0.03295384 | 0.719970372 | 0.472199 | 0.52237 | -7.08364249 |
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| TRPC1 | 0.060605081 | 2.64296844 | 0.718841477 | 0.472894 | 0.52303 | -7.0844528 |
| SMARCC | -0.05793378 | 5.3191743 | -0.718808222 | 0.472914 | 0.52303 | -7.08447665 |
| UPK3B | -0.060910056 | 0.6867272 | -0.718806269 | 0.472915 | 0.52303 | -7.08447805 |
| GABRR1 | -0.006388567 | 0.0422951 | -0.718611784 | 0.473035 | 0.52312 | -7.08461751 |
| CTRL | -0.005421687 | 0.04773261 | -0.718521779 | 0.47309 | 0.52315 | -7.08468204 |
| FCAMR | 0.048411784 | 0.19539606 | 0.718155335 | 0.473316 | 0.52337 | -7.08494468 |
| CHRNB2 | -0.011191716 | 0.07925427 | -0.717799593 | 0.473535 | 0.52357 | -7.08519953 |
| TSPAN1 | -0.144797921 | 7.36029319 | -0.717325479 | 0.473827 | 0.52386 | -7.08553897 |
| FGFR3 | 0.103947561 | 2.18448584 | 0.716840535 | 0.474125 | 0.52415 | -7.08588594 |
| SUSD6 | 0.06984403 | 5.91738332 | 0.716800293 | 0.47415 | 0.52415 | -7.08591472 |
| MTRNR2 | -0.018037805 | 0.25017057 | -0.716713399 | 0.474204 | 0.52418 | -7.08597687 |
| ARID4A | -0.057084243 | 3.59717628 | -0.716002521 | 0.474642 | 0.52463 | -7.08648498 |
| ORM2 | -0.04455796 | 0.37737824 | -0.715945724 | 0.474677 | 0.52463 | -7.08652555 |
| SHC2 | -0.072175216 | 4.72017865 | -0.715757556 | 0.474793 | 0.52473 | -7.08665995 |
| PAQR4 | 0.065326828 | 3.02464655 | 0.715694836 | 0.474832 | 0.52473 | -7.08670474 |
| PCDHB2 | 0.101136513 | 1.68655579 | 0.715072903 | 0.475215 | 0.52512 | -7.08714867 |
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| SIMC1 | 0.036884957 | 2.46291774 | 0.713350314 | 0.476278 | 0.52609 | -7.08837624 |
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| CRIP1 | -0.083065557 | 2.69179758 | -0.711336144 | 0.477523 | 0.5273 | -7.08980786 |
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| SYMPK | -0.037904747 | 4.98518605 | -0.709424835 | 0.478706 | 0.52853 | -7.09116263 |
| TP53TG3 | -0.004291166 | 0.01739447 | -0.709038635 | 0.478945 | 0.52873 | -7.09143594 |
| TP53TG3 | -0.004291166 | 0.01739447 | -0.709038635 | 0.478945 | 0.52873 | -7.09143594 |
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| ST8SIA1 | -0.046861914 | 0.52272052 | -0.707753272 | 0.479742 | 0.52937 | -7.0923445 |
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| ANKHD1 | 0.027667278 | 1.20399205 | 0.704689546 | 0.481643 | 0.53126 | -7.09450347 |
| FGL2 | 0.095937079 | 3.57273749 | 0.704276705 | 0.4819 | 0.53151 | -7.09479368 |
| EEF2 | -0.053304675 | 11.0606968 | -0.703193867 | 0.482573 | 0.53221 | -7.09555406 |
| TBC1D2E | 0.058206055 | 3.84746687 | 0.702517848 | 0.482994 | 0.53264 | -7.09602818 |
| KLHL21 | -0.055716173 | 4.70440049 | -0.702352806 | 0.483097 | 0.53272 | -7.09614387 |
| ZDHHC1 | 0.00966222 | 0.09855783 | 0.701735151 | 0.483481 | 0.53309 | -7.09657656 |
| LMBR1L | 0.059331993 | 3.99127315 | 0.701718069 | 0.483492 | 0.53309 | -7.09658852 |
| DLEC1 | 0.067051617 | 1.1998236 | 0.699273636 | 0.485015 | 0.53473 | -7.09829717 |
| PCDHGA | -0.066076521 | 0.87153237 | -0.699111078 | 0.485117 | 0.53481 | -7.09841058 |
| RLF | -0.05300604 | 3.33199841 | -0.698877072 | 0.485263 | 0.53494 | -7.0985738 |
| HTR1B | 0.030177518 | 0.34775273 | 0.697630883 | 0.486041 | 0.53576 | -7.09944211 |
| SMIM18 | 0.009182262 | 0.09236909 | 0.697397417 | 0.486186 | 0.53589 | -7.09960461 |
| VCL | -0.065942273 | 5.80319352 | -0.697266973 | 0.486268 | 0.53594 | -7.09969538 |
| NOM1 | -0.037095473 | 2.77107998 | -0.697215124 | 0.4863 | 0.53594 | -7.09973145 |
| PHACTR | 0.047317509 | 1.24507493 | 0.697164464 | 0.486332 | 0.53594 | -7.0997667 |
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| FOXN1 | -0.031060477 | 0.34378996 | -0.69655078 | 0.486715 | 0.53629 | -7.10019344 |
| CLCA4 | -0.004859208 | 0.02723216 | -0.696475255 | 0.486763 | 0.53631 | -7.10024593 |
| PGPEP1 | -0.008706541 | 0.07851418 | -0.6963372 | 0.486849 | 0.53637 | -7.10034187 |
| EMX2 | 0.038964503 | 0.25689767 | 0.696085935 | 0.487006 | 0.53651 | -7.10051644 |
| BRWD3 | -0.05095408 | 2.23987529 | -0.695256671 | 0.487525 | 0.53702 | -7.10109211 |
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| MORC3 | 0.056902865 | 4.05878791 | 0.694875288 | 0.487763 | 0.53724 | -7.10135664 |

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| PKP4 | 0.058990353 | 5.75602229 | 0.693576389 | 0.488576 | 0.5381 | -7.10225647 |
| RTKN | 0.052255722 | 4.70531845 | 0.693512425 | 0.488616 | 0.53811 | -7.10230074 |
| CHFR | -0.032275687 | 2.15592131 | -0.693324003 | 0.488734 | 0.5382 | -7.10243112 |
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| IFIH1 | 0.062583386 | 3.93310131 | 0.692643406 | 0.489161 | 0.5386 | -7.10290177 |
| TMEM41 | 0.046774995 | 3.67519669 | 0.692073352 | 0.489518 | 0.53896 | -7.10329562 |
| STAT3 | 0.056439743 | 6.1238077 | 0.691946126 | 0.489598 | 0.53902 | -7.10338348 |
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| GHRL | -0.036285615 | 0.98410825 | -0.691191269 | 0.490071 | 0.53947 | -7.10390443 |
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| GCH1 | 0.04920191 | 2.69516309 | 0.690645887 | 0.490413 | 0.53977 | -7.10428045 |
| CHSY1 | -0.060062131 | 4.06933971 | -0.690585712 | 0.490451 | 0.53978 | -7.10432192 |
| NOXA1 | -0.072955112 | 5.14900186 | -0.690273284 | 0.490647 | 0.53996 | -7.10453718 |
| ANKRD1 | 0.054193635 | 5.42360002 | 0.689194749 | 0.491324 | 0.54067 | -7.10527954 |
| ST8SIA6 | -0.03658694 | 0.52533193 | -0.689107292 | 0.491379 | 0.5407 | -7.10533968 |
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| CDC45 | 0.053447477 | 1.59555274 | 0.688713997 | 0.491626 | 0.5409 | -7.10561007 |
| STRN | 0.049973104 | 3.28657224 | 0.688067744 | 0.492033 | 0.54131 | -7.10605402 |
| OAS1 | 0.085217627 | 3.21715448 | 0.687805943 | 0.492197 | 0.54146 | -7.10623375 |
| CTSG | 0.052895026 | 0.52491089 | 0.687166458 | 0.492599 | 0.54186 | -7.10667247 |
| DPEP1 | 0.058587793 | 0.68079844 | 0.687009945 | 0.492698 | 0.54194 | -7.10677979 |
| TRARG1 | 0.019215882 | 0.0881329 | 0.686636789 | 0.492933 | 0.54216 | -7.10703555 |
| CLMP | 0.085051004 | 1.58176621 | 0.686428716 | 0.493064 | 0.54227 | -7.10717811 |
| NTNG2 | -0.055378184 | 0.6220715 | -0.686322522 | 0.49313 | 0.54231 | -7.10725085 |
| ZNF296 | -0.045471613 | 1.51733131 | -0.685745405 | 0.493494 | 0.54267 | -7.10764595 |
| ACOT9 | 0.044256931 | 4.33799931 | 0.685341258 | 0.493748 | 0.54291 | -7.10792244 |
| USP9Y | 0.135782222 | 0.93306886 | 0.685194283 | 0.493841 | 0.54298 | -7.10802295 |
| ARHGAP | 0.053801409 | 1.51230584 | 0.684866785 | 0.494047 | 0.54317 | -7.10824683 |
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| STRC | 0.008942734 | 0.07766546 | 0.681717863 | 0.496033 | 0.54529 | -7.11039406 |
| DLG4 | 0.075168161 | 4.16839265 | 0.681486748 | 0.496179 | 0.54541 | -7.11055127 |
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| KCNJ3 | -0.038582994 | 0.14053293 | -0.680064095 | 0.497078 | 0.54627 | -7.11151781 |
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| ZNF492 | 0.01379172 | 0.23378444 | 0.679381397 | 0.49751 | 0.5467 | -7.11198091 |
| CASP8A | 0.050641093 | 2.72171044 | 0.679054157 | 0.497716 | 0.54689 | -7.11220273 |
| PAX9 | -0.113041216 | 1.71360667 | -0.678525855 | 0.498051 | 0.54719 | -7.11256061 |
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| KIAA082 | -0.030320175 | 0.89997318 | -0.677331544 | 0.498807 | 0.54794 | -7.11336863 |
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| LRRC63 | 0.009583611 | 0.09914516 | 0.676125371 | 0.499571 | 0.54871 | -7.11418324 |
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| NEDD4L | -0.047572477 | 3.81183088 | -0.673796525 | 0.501048 | 0.55023 | -7.11575197 |
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| PDE6G | 0.062480693 | 1.05289748 | 0.673423573 | 0.501285 | 0.55041 | -7.1160027 |
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| CELF5 | 0.034459036 | 0.31544911 | 0.672719797 | 0.501732 | 0.55084 | -7.11647544 |
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| RAP2C | -0.045497133 | 4.08875423 | -0.671739686 | 0.502355 | 0.55145 | -7.11713299 |
| TCERG1 | -0.048209567 | 3.68158927 | -0.671473936 | 0.502524 | 0.5516 | -7.11731112 |
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| POTEJ | 0.003972275 | 0.02443396 | 0.669191815 | 0.503976 | 0.55305 | -7.11883787 |
| CDCA2 | 0.028535943 | 0.56682174 | 0.668706561 | 0.504285 | 0.55335 | -7.11916184 |
| MYO5B | -0.063421003 | 4.88778716 | -0.668632551 | 0.504332 | 0.55337 | -7.11921123 |
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| KIAA152 | -0.05634897 | 6.60598412 | -0.66744745 | 0.505087 | 0.55413 | -7.12000137 |
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| ZAR1 | -0.009582575 | 0.08124944 | -0.666382203 | 0.505766 | 0.55476 | -7.12071041 |
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| SLC23A3 | 0.029638201 | 0.67620349 | 0.665880587 | 0.506086 | 0.55504 | -7.12104389 |
| SIAH3 | -0.010934083 | 0.03532242 | -0.665481397 | 0.506341 | 0.55529 | -7.12130911 |
| LDB1 | -0.065212631 | 6.42061575 | -0.664387641 | 0.50704 | 0.55602 | -7.12203497 |
| VSIG10L | 0.048166125 | 1.50413114 | 0.663070206 | 0.507882 | 0.5569 | -7.12290768 |
| TMEM13 | 0.077954518 | 1.22402675 | 0.661383588 | 0.508961 | 0.55805 | -7.12402245 |
| C1orf100 | 0.016742239 | 0.31929982 | 0.660257819 | 0.509682 | 0.5588 | -7.12476494 |
| OR51E1 | -0.033771576 | 0.72570488 | -0.659711453 | 0.510032 | 0.55915 | -7.12512484 |
| SLC25A1 | 0.039719332 | 2.445987 | 0.659076346 | 0.510439 | 0.55956 | -7.12554282 |
| FAM131/ | -0.03886616 | 2.91709948 | -0.658505641 | 0.510805 | 0.55993 | -7.12591808 |
| NDOR1 | -0.043519935 | 3.7217086 | -0.658400963 | 0.510872 | 0.55996 | -7.12598687 |
| PARP12 | 0.045547204 | 4.12152612 | 0.658343306 | 0.510909 | 0.55997 | -7.12602476 |
| LRRC37/ | -0.053913704 | 2.48387385 | -0.658276624 | 0.510951 | 0.55998 | -7.12606857 |
| GIT1 | -0.031815377 | 5.47115279 | -0.657640092 | 0.51136 | 0.56039 | -7.12648658 |
| TMEM15 | 0.064534359 | 1.45051013 | 0.657326395 | 0.511561 | 0.56057 | -7.12669244 |
| FCHO2 | 0.058058561 | 5.01741236 | 0.657275859 | 0.511594 | 0.56057 | -7.12672559 |

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| PHETA2 | 0.053894432 | 3.38056761 | 0.656346438 | 0.51219 | 0.56119 | -7.12733488 |
| ANO8 | 0.051935911 | 2.91914328 | 0.656277929 | 0.512234 | 0.5612 | -7.12737976 |
| FSIP2 | 0.03574258 | 0.39959383 | 0.654992054 | 0.51306 | 0.56207 | -7.12822122 |
| C14orf13 | -0.048000401 | 1.16555819 | -0.654471377 | 0.513395 | 0.5624 | -7.12856147 |
| TRHR | -0.049171686 | 0.40248727 | -0.653986254 | 0.513707 | 0.56271 | -7.12887825 |
| LMNB1 | 0.064238531 | 3.18701309 | 0.653869096 | 0.513783 | 0.56276 | -7.12895472 |
| SLC17A5 | 0.08285855 | 6.84097878 | 0.652877566 | 0.514421 | 0.5634 | -7.12960133 |
| CCDC19 | 0.01079085 | 0.1171705 | 0.652854065 | 0.514436 | 0.5634 | -7.12961665 |
| VCPIP1 | -0.039986132 | 3.22712144 | -0.651379447 | 0.515385 | 0.5644 | -7.13057646 |
| MSANTD | 0.007856428 | 0.10088938 | 0.651278113 | 0.515451 | 0.56444 | -7.13064234 |
| GNL3L | -0.072036187 | 3.01465358 | -0.651199844 | 0.515501 | 0.56446 | -7.13069321 |
| HOXB3 | 0.033052433 | 0.85275793 | 0.651145679 | 0.515536 | 0.56446 | -7.13072842 |
| CLDN20 | -0.02518481 | 0.41659368 | -0.651093651 | 0.51557 | 0.56446 | -7.13076223 |
| CCL4L2 | -0.104349946 | 2.07151998 | -0.650957958 | 0.515657 | 0.56452 | -7.1308504 |
| AMT | 0.072149794 | 2.92992292 | 0.649507387 | 0.516592 | 0.5655 | -7.13179184 |
| KDM5D | 0.155982458 | 1.14714289 | 0.649147613 | 0.516824 | 0.56572 | -7.13202502 |
| TPX2 | 0.067978577 | 2.2900738 | 0.647511988 | 0.51788 | 0.56684 | -7.13308346 |
| OAS2 | -0.073271293 | 3.4719287 | -0.647144099 | 0.518118 | 0.56706 | -7.13332117 |
| KRT23 | 0.014408063 | 0.08392361 | 0.647056688 | 0.518175 | 0.56709 | -7.13337762 |
| KIF15 | -0.034418033 | 0.80572179 | -0.647000453 | 0.518211 | 0.56709 | -7.13341394 |
| CHRNA6 | 0.030146732 | 0.367484 | 0.645823378 | 0.518972 | 0.56789 | -7.1341734 |
| HGS | 0.050226313 | 4.7032193 | 0.645284614 | 0.51932 | 0.56821 | -7.13452056 |
| DNER | -0.027791688 | 0.15638199 | -0.645271012 | 0.519329 | 0.56821 | -7.13452932 |
| NR3C2 | -0.062444926 | 4.24575013 | -0.644787411 | 0.519642 | 0.56851 | -7.13484068 |
| PARD3 | 0.055198424 | 4.45108215 | 0.643144428 | 0.520706 | 0.56964 | -7.13589676 |
| SUN3 | 0.008330868 | 0.11800138 | 0.643079084 | 0.520748 | 0.56965 | -7.1359387 |
| TAF4B | 0.048773941 | 1.81059079 | 0.642657355 | 0.521021 | 0.56991 | -7.13620932 |
| DDX3Y | 0.180305048 | 1.35439165 | 0.642219636 | 0.521305 | 0.57018 | -7.13649001 |
| KMT2E | 0.056506065 | 4.8007626 | 0.642107386 | 0.521378 | 0.57023 | -7.13656196 |
| NAT8L | -0.130791496 | 3.85896135 | -0.641064027 | 0.522054 | 0.57093 | -7.13723014 |
| ZNF727 | 0.07274373 | 1.52413618 | 0.640247334 | 0.522584 | 0.57147 | -7.1377524 |
| RUNDC3 | -0.061821799 | 2.05274297 | -0.639609401 | 0.522998 | 0.57189 | -7.13815989 |
| FABP3 | 0.10717724 | 3.96315319 | 0.639070833 | 0.523348 | 0.57223 | -7.13850359 |
| SYT7 | 0.092466046 | 2.81107007 | 0.638769106 | 0.523544 | 0.57241 | -7.13869602 |
| FAM120 | -0.046299345 | 3.00815821 | -0.63817921 | 0.523927 | 0.57278 | -7.13907197 |
| NOTCH3 | 0.067006386 | 5.17296395 | 0.638109369 | 0.523972 | 0.57278 | -7.13911646 |
| PLS3 | 0.058227535 | 7.41941807 | 0.638091897 | 0.523984 | 0.57278 | -7.13912759 |
| NEK7 | -0.053705514 | 4.62442403 | -0.637807719 | 0.524168 | 0.57295 | -7.13930855 |
| ADARB2 | -0.034471117 | 0.15148549 | -0.63537284 | 0.525752 | 0.57464 | -7.14085577 |
| SEMA3E | -0.097355788 | 1.46864892 | -0.635148993 | 0.525898 | 0.57476 | -7.14099772 |

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| RASD1 | 0.116650326 | 6.70415284 | 0.634615853 | 0.526245 | 0.57508 | -7.14133559 |
| ULBP2 | 0.081201043 | 2.97593965 | 0.634595807 | 0.526258 | 0.57508 | -7.14134829 |
| RAD54L2 | -0.040138718 | 3.11118125 | -0.633889656 | 0.526718 | 0.57552 | -7.14179535 |
| EVC | 0.074680376 | 3.4655444 | 0.633872914 | 0.526729 | 0.57552 | -7.14180595 |
| CCKBR | 0.052955802 | 0.68931303 | 0.633201926 | 0.527167 | 0.57596 | -7.14223028 |
| SPDYE2 | 0.011435714 | 0.15720233 | 0.633111726 | 0.527225 | 0.57599 | -7.14228729 |
| TEX45 | -0.013166054 | 0.11915715 | -0.632790564 | 0.527435 | 0.57618 | -7.14249021 |
| TTLL2 | -0.003932192 | 0.02357708 | -0.632639943 | 0.527533 | 0.57623 | -7.14258534 |
| RAB11FI | -0.044884824 | 4.27483537 | -0.632622805 | 0.527544 | 0.57623 | -7.14259616 |
| WASF2 | -0.046427652 | 6.32627997 | -0.632057409 | 0.527913 | 0.57659 | -7.14295304 |
| ZNF337 | 0.042842756 | 1.49120395 | 0.631411044 | 0.528335 | 0.57702 | -7.14336065 |
| IER5 | 0.055253348 | 4.64590024 | 0.63073759 | 0.528774 | 0.57746 | -7.14378489 |
| GLUD2 | -0.045762707 | 1.3530046 | -0.630561658 | 0.528889 | 0.57753 | -7.14389564 |
| SRPX | -0.088485123 | 3.00066737 | -0.630541953 | 0.528902 | 0.57753 | -7.14390805 |
| CCDC15 | 0.008817072 | 0.18353353 | 0.62934559 | 0.529684 | 0.57834 | -7.14466035 |
| GHRHR | -0.009219277 | 0.04486234 | -0.62878832 | 0.530048 | 0.5787 | -7.14501029 |
| TM6SF2 | -0.03078228 | 0.30931377 | -0.628357766 | 0.530329 | 0.57897 | -7.14528045 |
| IPO7 | -0.056014787 | 6.28639081 | -0.627422308 | 0.530941 | 0.5796 | -7.14586678 |
| DEPDC1 | -0.023912906 | 0.43965494 | -0.627212901 | 0.531078 | 0.57972 | -7.14599791 |
| LZTS1 | 0.072125627 | 2.44794447 | 0.626622285 | 0.531465 | 0.58006 | -7.14636753 |
| TPRG1 | 0.060515878 | 0.88482519 | 0.626620742 | 0.531466 | 0.58006 | -7.14636849 |
| FZD6 | 0.06865375 | 5.55783254 | 0.626519152 | 0.531532 | 0.5801 | -7.14643203 |
| KIAA201 | -0.004985801 | 0.02347236 | -0.626449686 | 0.531578 | 0.58011 | -7.14647548 |
| STK31 | -0.011230241 | 0.15716788 | -0.626083359 | 0.531818 | 0.58034 | -7.14670449 |
| KCNH2 | -0.032069933 | 0.22482145 | -0.62587289 | 0.531955 | 0.58045 | -7.14683601 |
| CAPN3 | 0.056339047 | 1.09877424 | 0.625803673 | 0.532001 | 0.58046 | -7.14687925 |
| SEC16A | -0.043570432 | 5.23473898 | -0.624289715 | 0.532993 | 0.58151 | -7.14782389 |
| TRIP10 | 0.04662144 | 5.81805902 | 0.623959597 | 0.533209 | 0.5817 | -7.14802957 |
| RNF19B | -0.064714816 | 5.17896588 | -0.623813516 | 0.533305 | 0.58177 | -7.14812054 |
| WNK1 | 0.052058669 | 4.85178172 | 0.623678433 | 0.533394 | 0.58183 | -7.14820465 |
| OTULIN | -0.031424119 | 2.6807339 | -0.623419851 | 0.533563 | 0.58198 | -7.14836561 |
| RBM3 | -0.03920996 | 7.17238684 | -0.623215202 | 0.533697 | 0.58209 | -7.14849295 |
| GPRC5B | 0.069283766 | 5.29722032 | 0.622917472 | 0.533893 | 0.58223 | -7.14867813 |
| RBBP8 | 0.055888908 | 4.5305066 | 0.622911444 | 0.533897 | 0.58223 | -7.14868188 |
| GPR132 | -0.083769408 | 2.15215907 | -0.622238933 | 0.534338 | 0.58267 | -7.14909984 |
| VWC2 | 0.015950742 | 0.04096309 | 0.622148275 | 0.534398 | 0.5827 | -7.14915615 |
| MAP7D1 | 0.044847493 | 6.05680623 | 0.621844141 | 0.534597 | 0.58288 | -7.14934499 |
| C10orf67 | -0.041287536 | 0.98986424 | -0.620964213 | 0.535175 | 0.58347 | -7.14989084 |
| CLNK | 0.025802612 | 0.34245864 | 0.620488481 | 0.535488 | 0.58378 | -7.15018563 |
| TAGLN3 | 0.087731668 | 0.81303627 | 0.62043472 | 0.535523 | 0.58378 | -7.15021893 |

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| PKM | 0.051264419 | 8.03809727 | 0.620263244 | 0.535636 | 0.58386 | -7.15032512 |
| SLC12A7 | -0.045893062 | 4.97827532 | -0.619982578 | 0.53582 | 0.58403 | -7.15049887 |
| MLLT6 | -0.049293282 | 5.62822815 | -0.618942194 | 0.536504 | 0.58473 | -7.15114223 |
| NPPA | -0.019997207 | 0.34865396 | -0.618897957 | 0.536533 | 0.58473 | -7.15116957 |
| TAT | -0.009343862 | 0.11146664 | -0.618492469 | 0.5368 | 0.58498 | -7.15142001 |
| CCDC18 | -0.061784452 | 1.2606304 | -0.618429282 | 0.536842 | 0.58498 | -7.15145902 |
| NDE1 | 0.038017797 | 2.39039865 | 0.61838441 | 0.536871 | 0.58498 | -7.15148672 |
| FANCM | -0.028123008 | 1.29229106 | -0.61791121 | 0.537183 | 0.58529 | -7.15177873 |
| CACNA1 | -0.04097764 | 0.35739687 | -0.617527235 | 0.537435 | 0.58552 | -7.15201551 |
| GAS6 | 0.049054606 | 7.05636582 | 0.617330091 | 0.537565 | 0.58563 | -7.15213702 |
| CYBC1 | 0.039438659 | 4.62558969 | 0.617242687 | 0.537623 | 0.58565 | -7.15219088 |
| ZNF860 | 0.063749141 | 1.68937123 | 0.617072756 | 0.537735 | 0.58574 | -7.15229558 |
| AMOTL1 | -0.057249996 | 3.83841398 | -0.616911894 | 0.537841 | 0.58582 | -7.15239466 |
| PRR22 | 0.052351577 | 2.36521054 | 0.616051154 | 0.538408 | 0.5864 | -7.15292438 |
| LRCOL1 | 0.065368454 | 0.83201376 | 0.615837015 | 0.538549 | 0.58651 | -7.15305606 |
| EZH1 | -0.040508561 | 4.77771936 | -0.615156329 | 0.538997 | 0.58696 | -7.1534743 |
| SRL | -0.094739154 | 3.81661795 | -0.614990775 | 0.539107 | 0.58704 | -7.15357596 |
| TAX1BP3 | 0.046806242 | 5.93845312 | 0.614759008 | 0.539259 | 0.58715 | -7.15371822 |
| CRIM1 | -0.070583345 | 5.20905621 | -0.614737216 | 0.539274 | 0.58715 | -7.1537316 |
| DUSP27 | -0.017418179 | 0.17476275 | -0.614610623 | 0.539357 | 0.5872 | -7.15380928 |
| BTNL2 | -0.031441054 | 0.2091074 | -0.614455341 | 0.53946 | 0.58728 | -7.15390454 |
| IL12RB2 | -0.035887472 | 0.2785222 | -0.614202048 | 0.539627 | 0.58742 | -7.15405988 |
| GAGE10 | -0.027999768 | 0.36356466 | -0.613888233 | 0.539834 | 0.58761 | -7.15425225 |
| BMERB1 | 0.072540983 | 4.84784266 | 0.61362663 | 0.540006 | 0.58776 | -7.15441254 |
| LILRA1 | 0.022809453 | 0.52765387 | 0.612838403 | 0.540527 | 0.58829 | -7.15489509 |
| SHCBP1 | 0.040668625 | 0.99711782 | 0.612778983 | 0.540566 | 0.58829 | -7.15493144 |
| ZNF525 | -0.033344554 | 1.95283435 | -0.612585269 | 0.540694 | 0.58839 | -7.15504992 |
| NMNAT2 | -0.11045468 | 2.87311016 | -0.612542775 | 0.540722 | 0.58839 | -7.15507591 |
| FAM149A | -0.030885999 | 1.57900272 | -0.61242972 | 0.540797 | 0.58843 | -7.15514504 |
| CEP97 | -0.037007332 | 2.1252076 | -0.61190158 | 0.541145 | 0.58877 | -7.1554678 |
| SLC22A1 | -0.006110156 | 0.05650631 | -0.610694877 | 0.541943 | 0.58957 | -7.15620422 |
| BBS9 | -0.043432381 | 3.88068991 | -0.610653902 | 0.54197 | 0.58957 | -7.1562292 |
| PLS1 | -0.063310294 | 3.04327275 | -0.610634747 | 0.541983 | 0.58957 | -7.15624087 |
| FAM177B | 0.021326435 | 0.34927228 | 0.610223342 | 0.542255 | 0.58983 | -7.15649158 |
| CCDC60 | 0.009747601 | 0.11947432 | 0.609506963 | 0.542729 | 0.59031 | -7.15692775 |
| HUNK | -0.044660328 | 0.70867418 | -0.609189495 | 0.542939 | 0.59049 | -7.15712087 |
| MGRN1 | 0.045745229 | 5.18222627 | 0.609142882 | 0.542969 | 0.59049 | -7.15714922 |
| CCDC6 | -0.045501135 | 5.01304013 | -0.608612882 | 0.54332 | 0.59084 | -7.15747139 |
| PHKA1 | -0.052702717 | 3.8442846 | -0.608416104 | 0.543451 | 0.59094 | -7.15759093 |
| LCN10 | 0.095562155 | 1.21898644 | 0.608175552 | 0.54361 | 0.59107 | -7.15773701 |

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| ZNF623 | -0.043360651 | 3.62873234 | -0.607197578 | 0.544258 | 0.59174 | -7.15833032 |
| APOE | 0.157281588 | 8.32898264 | 0.60715118 | 0.544288 | 0.59174 | -7.15835845 |
| REEP3 | -0.054242362 | 5.46154405 | -0.606724385 | 0.544571 | 0.59201 | -7.15861705 |
| RTP5 | 0.016926912 | 0.10134544 | 0.606465375 | 0.544743 | 0.59215 | -7.15877391 |
| GTPBP1 | 0.043006827 | 4.7476478 | 0.605839834 | 0.545157 | 0.59257 | -7.15915245 |
| ZBTB11 | -0.043166113 | 3.42532151 | -0.605016859 | 0.545703 | 0.59312 | -7.15964988 |
| TUBB2A | -0.065617788 | 2.77292052 | -0.604636612 | 0.545956 | 0.59334 | -7.15987948 |
| USP34 | 0.077068539 | 3.42161264 | 0.604606848 | 0.545975 | 0.59334 | -7.15989745 |
| STAT6 | 0.04296696 | 6.33221934 | 0.604342324 | 0.546151 | 0.59349 | -7.16005708 |
| POF1B | -0.056416525 | 0.5142715 | -0.604153684 | 0.546276 | 0.59359 | -7.16017088 |
| ADAMTS | -0.107308291 | 3.85680798 | -0.603828526 | 0.546492 | 0.59379 | -7.16036695 |
| LTB4R | -0.060007962 | 2.23977045 | -0.602995689 | 0.547045 | 0.59435 | -7.16086867 |
| CCR3 | 0.047714894 | 0.66963531 | 0.602886891 | 0.547117 | 0.59439 | -7.16093416 |
| PTPRD | 0.096020155 | 1.7090898 | 0.601102897 | 0.548303 | 0.59564 | -7.16200635 |
| AGT | 0.096964418 | 3.01587528 | 0.600746387 | 0.54854 | 0.59584 | -7.16222024 |
| ABCA9 | 0.030813379 | 0.466113 | 0.600728954 | 0.548552 | 0.59584 | -7.16223069 |
| KRTAP5· | -0.008056821 | 0.07681415 | -0.600472911 | 0.548722 | 0.59598 | -7.16238422 |
| NPIPA1 | -0.036213108 | 1.21624485 | -0.600063021 | 0.548995 | 0.59622 | -7.16262986 |
| CBX6 | -0.042685248 | 5.83561602 | -0.60004364 | 0.549007 | 0.59622 | -7.16264147 |
| FSTL4 | 0.056907097 | 0.87950404 | 0.599384608 | 0.549446 | 0.59666 | -7.16303606 |
| E2F8 | 0.027678323 | 0.50380578 | 0.599218419 | 0.549557 | 0.59674 | -7.1631355 |
| SLC7A14 | 0.005944916 | 0.01526297 | 0.599013191 | 0.549693 | 0.59685 | -7.16325825 |
| MYO1B | -0.062028874 | 4.12478521 | -0.598380809 | 0.550114 | 0.59727 | -7.16363624 |
| ERV3-1 | 0.062456529 | 3.0851675 | 0.597859442 | 0.550462 | 0.59759 | -7.16394758 |
| PLAAT2 | -0.046339493 | 1.2017276 | -0.597829811 | 0.550482 | 0.59759 | -7.16396526 |
| CNOT6L | -0.043362035 | 3.92769975 | -0.597771628 | 0.55052 | 0.59759 | -7.16399999 |
| C12orf50 | -0.00324776 | 0.01620184 | -0.597397296 | 0.55077 | 0.59782 | -7.16422332 |
| ACSM4 | -0.005140635 | 0.04371138 | -0.597331487 | 0.550814 | 0.59783 | -7.16426257 |
| ATAD2B | -0.03985889 | 2.28517573 | -0.597260566 | 0.550861 | 0.59785 | -7.16430486 |
| HES5 | -0.028973802 | 0.48441738 | -0.596986377 | 0.551044 | 0.59801 | -7.16446832 |
| PCDHGE | -0.049140689 | 0.89186198 | -0.596121503 | 0.55162 | 0.59859 | -7.16498343 |
| PARVA | 0.04244267 | 4.4287762 | 0.595680799 | 0.551914 | 0.59888 | -7.16524563 |
| UTP25 | 0.041786612 | 2.88570639 | 0.594192486 | 0.552908 | 0.59991 | -7.16612966 |
| KEL | -0.023101738 | 0.33613848 | -0.594048705 | 0.553004 | 0.59998 | -7.16621494 |
| ARFGEF | -0.0636693 | 5.22497613 | -0.592399256 | 0.554106 | 0.60114 | -7.16719187 |
| CLEC18/ | -0.007441096 | 0.07912157 | -0.592090649 | 0.554312 | 0.60132 | -7.16737435 |
| GGH | -0.053127487 | 2.36687322 | -0.59203978 | 0.554346 | 0.60132 | -7.16740442 |
| AGAP3 | -0.03488668 | 4.27674042 | -0.591770195 | 0.554526 | 0.60148 | -7.16756373 |
| GPR143 | -0.052773127 | 2.11476563 | -0.591651762 | 0.554605 | 0.60153 | -7.1676337 |
| SMCR8 | -0.05369117 | 3.62861 | -0.591145381 | 0.554944 | 0.60185 | -7.1679327 |

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| ZGRF1 | -0.027315314 | 0.96204776 | -0.590820458 | 0.555162 | 0.60205 | -7.16812442 |
| CDYL | -0.047035491 | 3.99951571 | -0.59046855 | 0.555397 | 0.60227 | -7.16833194 |
| IGLON5 | 0.023098663 | 0.12743501 | 0.590283726 | 0.555521 | 0.60236 | -7.16844088 |
| CPNE5 | 0.063797857 | 2.39032616 | 0.590116059 | 0.555633 | 0.60245 | -7.16853968 |
| RTEL1 | -0.019456529 | 0.54258011 | -0.589180821 | 0.556259 | 0.60305 | -7.16909027 |
| AGFG1 | -0.042962702 | 4.28999116 | -0.589180089 | 0.55626 | 0.60305 | -7.1690907 |
| RNF149 | -0.03608229 | 4.71462701 | -0.589089381 | 0.55632 | 0.60308 | -7.16914406 |
| GPR22 | -0.004233781 | 0.03489497 | -0.588713485 | 0.556572 | 0.60331 | -7.16936507 |
| PARD3B | -0.049045039 | 2.92705528 | -0.587520023 | 0.557372 | 0.60414 | -7.17006586 |
| SERTM2 | 0.020368213 | 0.10493192 | 0.587186771 | 0.557595 | 0.60434 | -7.17026129 |
| PP2D1 | -0.016240768 | 0.42357513 | -0.586987617 | 0.557729 | 0.60445 | -7.17037803 |
| VPS13D | 0.051907376 | 4.48191128 | 0.5863742 | 0.55814 | 0.60486 | -7.17073735 |
| GXYLT2 | 0.064911358 | 4.07145953 | 0.586275955 | 0.558206 | 0.60489 | -7.17079486 |
| IGF2BP1 | -0.025512129 | 0.07574354 | -0.585476975 | 0.558742 | 0.60543 | -7.17126223 |
| RAD51B | 0.025370163 | 1.58903825 | 0.58513785 | 0.55897 | 0.60564 | -7.17146041 |
| ITLN1 | 0.027272188 | 0.39214223 | 0.584797525 | 0.559198 | 0.60585 | -7.17165918 |
| ISLR2 | -0.037171697 | 0.8046644 | -0.584665672 | 0.559287 | 0.60591 | -7.17173616 |
| PCK1 | -0.01432035 | 0.09729314 | -0.58329343 | 0.560209 | 0.60687 | -7.17253627 |
| PLEKHG | -0.0497595 | 2.52816632 | -0.582726706 | 0.56059 | 0.60724 | -7.17286617 |
| WBP2 | 0.033810441 | 6.91443769 | 0.582350009 | 0.560843 | 0.60748 | -7.17308527 |
| SLC12A1 | 0.006775305 | 0.03141243 | 0.582196885 | 0.560946 | 0.60755 | -7.17317429 |
| SSX2IP | -0.039530557 | 2.78993089 | -0.581392061 | 0.561487 | 0.6081 | -7.17364181 |
| SCT | -0.075179288 | 1.31248008 | -0.580850868 | 0.561852 | 0.60845 | -7.17395582 |
| LRRC37I | 0.033589432 | 2.1024316 | 0.580625497 | 0.562003 | 0.60858 | -7.1740865 |
| MAGEA8 | -0.005177965 | 0.04883102 | -0.580200111 | 0.56229 | 0.60885 | -7.17433302 |
| SF3B1 | -0.046601585 | 6.52174253 | -0.579556163 | 0.562723 | 0.60928 | -7.17470586 |
| DIAPH2 | 0.047323978 | 2.11967112 | 0.579279119 | 0.56291 | 0.60944 | -7.17486614 |
| SLC12A2 | -0.058398632 | 3.7551523 | -0.578526845 | 0.563417 | 0.60995 | -7.17530096 |
| ELAVL3 | -0.037097267 | 0.15140553 | -0.578020068 | 0.563758 | 0.61028 | -7.17559357 |
| SIN3B | 0.03883288 | 4.25397582 | 0.577335494 | 0.56422 | 0.61074 | -7.17598843 |
| PIM3 | -0.044886899 | 6.07138064 | -0.576866183 | 0.564536 | 0.61105 | -7.17625886 |
| FOXI2 | -0.067252139 | 0.89349344 | -0.576160616 | 0.565012 | 0.61152 | -7.17666501 |
| CRYM | -0.018813147 | 0.1592865 | -0.57598472 | 0.565131 | 0.61161 | -7.17676618 |
| CENPU | 0.050875883 | 2.40705962 | 0.575765312 | 0.565279 | 0.61173 | -7.17689234 |
| ZNF850 | -0.019841284 | 0.78242672 | -0.57512339 | 0.565713 | 0.61216 | -7.17726117 |
| FLACC1 | -0.035019147 | 0.98148475 | -0.574900656 | 0.565863 | 0.61229 | -7.17738905 |
| RGS10 | 0.065590218 | 5.29706842 | 0.574571203 | 0.566085 | 0.61249 | -7.17757811 |
| ANKFY1 | 0.054981881 | 4.16084285 | 0.574226091 | 0.566319 | 0.6127 | -7.17777604 |
| C9orf72 | 0.04721938 | 3.41016059 | 0.574165155 | 0.56636 | 0.61271 | -7.17781098 |
| KMT2B | -0.039273586 | 3.99926372 | -0.573600615 | 0.566741 | 0.61308 | -7.17813447 |

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| AMH | 0.042972442 | 0.63872263 | 0.573358872 | 0.566905 | 0.61322 | -7.1782729 |
| KCNV1 | 0.030531715 | 0.75685006 | 0.57313335 | 0.567057 | 0.61334 | -7.17840198 |
| TXNDC5 | -0.060397797 | 1.81288171 | -0.571399543 | 0.56823 | 0.61457 | -7.17939269 |
| ALDH8A | 0.013591876 | 0.26335869 | 0.57062055 | 0.568757 | 0.6151 | -7.17983684 |
| TULP2 | -0.009476883 | 0.14032338 | -0.570062049 | 0.569135 | 0.61547 | -7.1801549 |
| RASAL1 | -0.061356921 | 4.82842616 | -0.569513705 | 0.569507 | 0.61584 | -7.18046687 |
| NLRP2 | -0.124153738 | 2.07539584 | -0.569252526 | 0.569683 | 0.61599 | -7.18061536 |
| SLC25A2 | -0.071079357 | 3.19713459 | -0.569017594 | 0.569843 | 0.61612 | -7.18074887 |
| GPCPD1 | 0.045897314 | 4.81845825 | 0.568732961 | 0.570036 | 0.61629 | -7.18091055 |
| ASMT | -0.015759883 | 0.25346758 | -0.568553538 | 0.570157 | 0.61638 | -7.18101243 |
| HCFC1R | 0.046503671 | 7.07884315 | 0.567754729 | 0.570699 | 0.61693 | -7.1814656 |
| PSMB10 | 0.050291797 | 5.30011977 | 0.56754588 | 0.57084 | 0.61704 | -7.18158398 |
| PABPC3 | -0.020487514 | 0.44733252 | -0.567365415 | 0.570963 | 0.6171 | -7.18168623 |
| MASP2 | -0.030651853 | 0.72282206 | -0.567354688 | 0.57097 | 0.6171 | -7.18169231 |
| PCGF3 | -0.041564624 | 4.2782161 | -0.566593827 | 0.571486 | 0.61762 | -7.18212306 |
| DPEP2 | -0.041089202 | 1.59528002 | -0.56625183 | 0.571718 | 0.61783 | -7.18231649 |
| ATCAY | -0.013802951 | 0.03125611 | -0.565890155 | 0.571964 | 0.61805 | -7.18252092 |
| CIDEA | 0.018663405 | 0.08658808 | 0.565855647 | 0.571987 | 0.61805 | -7.18254042 |
| TMEM27 | -0.018913803 | 0.25357356 | -0.565650798 | 0.572126 | 0.61816 | -7.18265614 |
| EEA1 | -0.046120569 | 3.26361703 | -0.56544943 | 0.572263 | 0.61827 | -7.18276986 |
| STOM | 0.052732994 | 7.2328488 | 0.565082257 | 0.572512 | 0.6185 | -7.1829771 |
| NBPF20 | -0.010070759 | 0.38994902 | -0.564913563 | 0.572627 | 0.61858 | -7.18307227 |
| R3HDM4 | 0.031878044 | 6.14710845 | 0.564782779 | 0.572716 | 0.61864 | -7.18314604 |
| PCDHGA | -0.047365891 | 1.29054429 | -0.56423806 | 0.573086 | 0.619 | -7.18345308 |
| POLN | -0.015703271 | 0.58874403 | -0.563808225 | 0.573378 | 0.61927 | -7.18369517 |
| PRRG4 | -0.055635509 | 4.22576664 | -0.563458037 | 0.573616 | 0.61949 | -7.18389225 |
| MYBPC1 | 0.035684683 | 0.14675084 | 0.562589369 | 0.574206 | 0.62002 | -7.18438062 |
| NTM | -0.088411948 | 1.87594984 | -0.562565511 | 0.574223 | 0.62002 | -7.18439402 |
| ISYNA1 | 0.070531906 | 5.67646186 | 0.562564263 | 0.574224 | 0.62002 | -7.18439472 |
| NUP210 | -0.041934041 | 3.58658872 | -0.562516724 | 0.574256 | 0.62002 | -7.18442143 |
| PCDHA8 | -0.007202474 | 0.09763599 | -0.562227849 | 0.574452 | 0.6202 | -7.18458364 |
| PPT1 | -0.039003206 | 7.05583854 | -0.562119403 | 0.574526 | 0.62024 | -7.18464452 |
| SEC14L5 | -0.021840861 | 0.26587621 | -0.561828246 | 0.574724 | 0.62041 | -7.18480791 |
| TENM4 | -0.073681561 | 2.34756496 | -0.561280667 | 0.575097 | 0.62077 | -7.18511495 |
| FKBP5 | 0.074655637 | 4.35187938 | 0.560861905 | 0.575382 | 0.62104 | -7.18534957 |
| RAD23B | 0.057267463 | 7.3358253 | 0.560369807 | 0.575717 | 0.62136 | -7.18562504 |
| SLC49A3 | 0.064276468 | 3.75242704 | 0.559382771 | 0.576389 | 0.62205 | -7.18617686 |
| NFIC | -0.034698545 | 6.14699218 | -0.559009572 | 0.576643 | 0.62228 | -7.18638525 |
| LAMA5 | -0.05505488 | 5.67232871 | -0.558825726 | 0.576769 | 0.62238 | -7.18648786 |
| CCDC19 | 0.00735602 | 0.05502361 | 0.558776301 | 0.576802 | 0.62238 | -7.18651544 |

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| SCN2B | -0.076286768 | 2.04118081 | -0.55866618 | 0.576877 | 0.62242 | -7.18657688 |
| SLC39A5 | -0.015951259 | 0.36783808 | -0.557918623 | 0.577387 | 0.62293 | -7.18699363 |
| ELMSAN | -0.045394266 | 3.29356659 | -0.557326945 | 0.577791 | 0.62332 | -7.18732309 |
| PRR19 | -0.024147794 | 1.12241767 | -0.556808783 | 0.578144 | 0.62367 | -7.18761133 |
| GALNT8 | -0.006396319 | 0.08065145 | -0.556721578 | 0.578204 | 0.62369 | -7.18765981 |
| F3 | -0.097672429 | 5.12283119 | -0.556014252 | 0.578686 | 0.62417 | -7.18805278 |
| LDHA | 0.047623641 | 7.21167934 | 0.555457926 | 0.579066 | 0.62454 | -7.18836151 |
| STMN1 | 0.053029418 | 5.07455872 | 0.55483619 | 0.579491 | 0.62496 | -7.18870617 |
| CAPG | 0.070983302 | 8.16038964 | 0.554255062 | 0.579888 | 0.62535 | -7.18902797 |
| FAM72B | 0.009856076 | 0.16507162 | 0.554126142 | 0.579976 | 0.6254 | -7.18909932 |
| ADARB1 | -0.038769548 | 2.68587083 | -0.553115587 | 0.580667 | 0.62611 | -7.18965799 |
| SCG5 | 0.126757443 | 5.31651705 | 0.552600977 | 0.581018 | 0.62645 | -7.18994209 |
| DNAJC6 | 0.04181098 | 1.36189375 | 0.552308411 | 0.581219 | 0.6266 | -7.19010349 |
| CENPW | 0.043037029 | 2.67609354 | 0.552283433 | 0.581236 | 0.6266 | -7.19011727 |
| AVL9 | 0.038318554 | 3.56690395 | 0.552150197 | 0.581327 | 0.62665 | -7.19019074 |
| SMIM6 | 0.024124235 | 0.25631668 | 0.552115846 | 0.58135 | 0.62665 | -7.19020968 |
| HCN1 | -0.004992881 | 0.02976553 | -0.55178343 | 0.581578 | 0.62685 | -7.19039289 |
| GAN | -0.026488702 | 1.47801253 | -0.551268232 | 0.58193 | 0.62719 | -7.19067664 |
| PTN | -0.077838001 | 3.27989921 | -0.551187784 | 0.581985 | 0.62721 | -7.19072092 |
| LGALS7 | 0.04309156 | 0.55232485 | 0.551032988 | 0.582091 | 0.62725 | -7.19080611 |
| LGALS7B | 0.04309156 | 0.55232485 | 0.551032988 | 0.582091 | 0.62725 | -7.19080611 |
| TCP11 | 0.007690486 | 0.11967479 | 0.55037957 | 0.582539 | 0.62769 | -7.19116544 |
| CDH24 | 0.043445488 | 3.23710634 | 0.550150163 | 0.582696 | 0.62782 | -7.1912915 |
| CEP295 | 0.036793115 | 2.13953871 | 0.54956579 | 0.583096 | 0.62821 | -7.19161237 |
| CHST8 | -0.01668427 | 0.28125885 | -0.548595932 | 0.58376 | 0.62888 | -7.19214416 |
| ARMC4 | 0.040098596 | 0.74968314 | 0.548548 | 0.583793 | 0.62888 | -7.19217041 |
| ELL | -0.032699016 | 3.62211575 | -0.54711739 | 0.584774 | 0.6299 | -7.19295305 |
| ZNF221 | 0.028479532 | 0.97294929 | 0.546966284 | 0.584878 | 0.62997 | -7.1930356 |
| CRHR2 | 0.045280297 | 0.90097449 | 0.546162161 | 0.58543 | 0.6305 | -7.19347449 |
| CDC42BP | -0.047155402 | 5.57124081 | -0.546141238 | 0.585444 | 0.6305 | -7.19348591 |
| ARID3C | -0.015758938 | 0.18225879 | -0.544635892 | 0.586478 | 0.63157 | -7.19430577 |
| RPS4Y1 | 0.24293697 | 2.27319124 | 0.543687131 | 0.58713 | 0.63223 | -7.19482133 |
| SH3GLB | -0.03738667 | 5.52394705 | -0.543147646 | 0.5875 | 0.63259 | -7.19511409 |
| TRIM38 | -0.03714604 | 3.76336029 | -0.542537834 | 0.58792 | 0.633 | -7.19544467 |
| IFNGR1 | -0.043449538 | 6.734544 | -0.54195943 | 0.588317 | 0.63339 | -7.19575788 |
| ATM | 0.041722561 | 2.89738129 | 0.541900243 | 0.588358 | 0.6334 | -7.19578991 |
| GNPTAB | -0.036247645 | 4.14074425 | -0.541571698 | 0.588584 | 0.6336 | -7.19596765 |
| ITGAV | 0.067628875 | 6.40123585 | 0.541481085 | 0.588647 | 0.63363 | -7.19601665 |
| RACGAP | 0.040634162 | 2.30968778 | 0.540764008 | 0.58914 | 0.63408 | -7.19640415 |
| CSRNP2 | 0.040411954 | 4.36822907 | 0.540760388 | 0.589143 | 0.63408 | -7.19640611 |

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| CGB7 | -0.01236475 | 0.14850458 | -0.540668456 | 0.589206 | 0.63411 | -7.19645575 |
| SPDYE6 | -0.016549912 | 0.50297377 | -0.540171048 | 0.589548 | 0.63443 | -7.19672419 |
| BCAS1 | -0.008786083 | 0.13323682 | -0.539999919 | 0.589666 | 0.63452 | -7.19681649 |
| FNDC9 | 0.004785216 | 0.03575624 | 0.539184658 | 0.590228 | 0.63509 | -7.1972558 |
| CAPN15 | -0.033027711 | 3.5537366 | -0.537915013 | 0.591103 | 0.63599 | -7.19793864 |
| TLX2 | -0.007877106 | 0.08743532 | -0.53643367 | 0.592124 | 0.63705 | -7.1987333 |
| RHOG | 0.032638571 | 6.1610556 | 0.53629702 | 0.592219 | 0.63707 | -7.1988065 |
| LBR | -0.040122021 | 3.57023267 | -0.536294096 | 0.592221 | 0.63707 | -7.19880806 |
| LEPROT | -0.043846894 | 6.18224033 | -0.535498413 | 0.59277 | 0.63758 | -7.19923389 |
| ARHGEF | -0.046548067 | 2.49288481 | -0.535491265 | 0.592775 | 0.63758 | -7.19923772 |
| CEP170 | 0.048687657 | 3.31882708 | 0.534600098 | 0.59339 | 0.6382 | -7.19971389 |
| ZGLP1 | -0.053864391 | 1.98811846 | -0.534398561 | 0.593529 | 0.63831 | -7.19982147 |
| KRTAP5 | 0.03234143 | 0.57108765 | 0.533948975 | 0.59384 | 0.63861 | -7.2000613 |
| SCML1 | 0.03994176 | 2.07837377 | 0.53380602 | 0.593939 | 0.63867 | -7.20013752 |
| PRR5L | -0.037966737 | 1.54899233 | -0.533693935 | 0.594016 | 0.63872 | -7.20019727 |
| ERRFI1 | -0.081560093 | 6.24352841 | -0.533514176 | 0.59414 | 0.63881 | -7.20029306 |
| TROAP | 0.034245434 | 0.89856279 | 0.533408758 | 0.594213 | 0.63885 | -7.20034922 |
| RHD | -0.026601401 | 0.73380025 | -0.533102553 | 0.594425 | 0.639 | -7.20051229 |
| RBM46 | -0.022000145 | 0.12292883 | -0.533091309 | 0.594432 | 0.639 | -7.20051827 |
| MUC6 | 0.007186703 | 0.06167174 | 0.532418208 | 0.594898 | 0.63945 | -7.20087639 |
| SYNGAP | 0.041439667 | 2.44110966 | 0.532383316 | 0.594922 | 0.63945 | -7.20089495 |
| BTG1 | -0.03882564 | 5.63323624 | -0.532167835 | 0.595071 | 0.63957 | -7.20100949 |
| TGM4 | 0.021978541 | 0.10364906 | 0.532066084 | 0.595141 | 0.6396 | -7.20106356 |
| POLR2J | -0.017080044 | 0.21396441 | -0.53082091 | 0.596003 | 0.64049 | -7.20172442 |
| KCNT1 | -0.021957952 | 0.07671535 | -0.530650287 | 0.596121 | 0.64057 | -7.20181486 |
| ZNF215 | 0.03746284 | 1.52731613 | 0.5297903 | 0.596716 | 0.64117 | -7.20227024 |
| ADGRE5 | 0.063451143 | 5.35853092 | 0.529211556 | 0.597117 | 0.64156 | -7.20257628 |
| SPATA2 | -0.003208736 | 0.02067823 | -0.528971656 | 0.597283 | 0.6417 | -7.20270304 |
| CILP2 | 0.063261714 | 2.5269519 | 0.528722435 | 0.597456 | 0.64184 | -7.20283467 |
| CD3EAP | 0.025972072 | 2.11888437 | 0.527131293 | 0.598559 | 0.64299 | -7.20367357 |
| DNMT1 | 0.042955373 | 4.07221009 | 0.526242791 | 0.599175 | 0.64361 | -7.20414092 |
| UNC5C | 0.069083986 | 3.95092577 | 0.525826132 | 0.599464 | 0.64388 | -7.20435981 |
| PNLDC1 | 0.043843585 | 0.2041495 | 0.525766781 | 0.599505 | 0.64388 | -7.20439098 |
| TLX1 | 0.017894616 | 0.07738098 | 0.524916517 | 0.600095 | 0.64448 | -7.20483708 |
| C1orf115 | -0.075503533 | 6.51936085 | -0.524629266 | 0.600295 | 0.64465 | -7.20498762 |
| SMARCC | 0.054885581 | 4.95211325 | 0.524139943 | 0.600634 | 0.64497 | -7.20524388 |
| FAM24B | 0.041218665 | 1.87771787 | 0.52262549 | 0.601686 | 0.64606 | -7.2060355 |
| AURKC | 0.046365609 | 1.59488093 | 0.522264297 | 0.601938 | 0.64627 | -7.20622396 |
| ATP1B3 | -0.04507009 | 6.44108603 | -0.52224404 | 0.601952 | 0.64627 | -7.20623452 |
| PLEKHM | 0.034756167 | 3.86348429 | 0.521984863 | 0.602132 | 0.64642 | -7.20636967 |

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| MS4A12 | -0.036369681 | 0.52050066 | -0.52181166 | 0.602252 | 0.64651 | -7.20645995 |
| POTEE | 0.002868864 | 0.01943693 | 0.52147409 | 0.602487 | 0.64672 | -7.20663581 |
| MALT1 | 0.033595472 | 3.21369193 | 0.520825472 | 0.602938 | 0.64716 | -7.2069734 |
| MAST4 | 0.037379717 | 3.02825879 | 0.520573176 | 0.603114 | 0.64731 | -7.20710461 |
| FUT11 | -0.032978563 | 3.66703172 | -0.520465881 | 0.603188 | 0.64735 | -7.20716038 |
| XKR5 | 0.011560333 | 0.20301921 | 0.520409006 | 0.603228 | 0.64735 | -7.20718995 |
| SVEP1 | 0.045076476 | 0.84161871 | 0.520117552 | 0.603431 | 0.64753 | -7.20734138 |
| CELA2B | -0.017760619 | 0.38169209 | -0.518883429 | 0.60429 | 0.64841 | -7.20798169 |
| LPCAT4 | 0.038216101 | 3.88858539 | 0.518442502 | 0.604597 | 0.64869 | -7.20821009 |
| TFAP4 | 0.03379557 | 2.50265541 | 0.518156797 | 0.604796 | 0.64887 | -7.20835799 |
| SOX5 | -0.024577812 | 0.60677354 | -0.517853089 | 0.605008 | 0.64905 | -7.20851511 |
| BLNK | -0.049013375 | 4.51591372 | -0.517682495 | 0.605126 | 0.64914 | -7.20860332 |
| CMKLR1 | 0.056612768 | 2.3971955 | 0.51744792 | 0.60529 | 0.64927 | -7.20872458 |
| ARHGAF | -0.037783848 | 3.56220006 | -0.515704065 | 0.606506 | 0.65051 | -7.20962427 |
| OTUD7B | 0.03760274 | 3.48011767 | 0.515683217 | 0.60652 | 0.65051 | -7.20963501 |
| KCTD13 | -0.028150163 | 3.25606104 | -0.515126079 | 0.606909 | 0.65089 | -7.2099218 |
| FAM89A | 0.041565759 | 3.1990515 | 0.514781957 | 0.607149 | 0.6511 | -7.21009878 |
| HSPB2 | -0.043147093 | 1.88054175 | -0.513060601 | 0.608351 | 0.65235 | -7.21098231 |
| ACPP | -0.049200001 | 2.08975777 | -0.5126294 | 0.608652 | 0.65263 | -7.21120318 |
| SLC1A6 | -0.003304822 | 0.01911584 | -0.512256751 | 0.608913 | 0.65287 | -7.2113939 |
| CDHR1 | 0.02576546 | 0.24262622 | 0.51213883 | 0.608995 | 0.65289 | -7.21145422 |
| CATSPE | -0.007851298 | 0.11248172 | -0.512127029 | 0.609003 | 0.65289 | -7.21146026 |
| SLC25A4 | -0.032733103 | 0.49415795 | -0.511580212 | 0.609385 | 0.65325 | -7.2117398 |
| ADAM32 | -0.00584991 | 0.13072652 | -0.511220471 | 0.609637 | 0.65348 | -7.21192354 |
| CHGA | 0.019224591 | 0.07767144 | 0.51031144 | 0.610273 | 0.65412 | -7.21238727 |
| ONECUT | 0.002645545 | 0.01266856 | 0.509858223 | 0.61059 | 0.65442 | -7.21261816 |
| FOXL2 | -0.007018842 | 0.06845305 | -0.509757126 | 0.61066 | 0.65444 | -7.21266964 |
| TCOF1 | -0.023680096 | 3.75536373 | -0.509728696 | 0.61068 | 0.65444 | -7.21268411 |
| SHH | -0.032902737 | 0.18950115 | -0.509550916 | 0.610805 | 0.65453 | -7.2127746 |
| C5 | 0.030875957 | 1.7897481 | 0.509342038 | 0.610951 | 0.65462 | -7.21288088 |
| POU3F1 | -0.03969072 | 0.53730782 | -0.509313003 | 0.610971 | 0.65462 | -7.21289565 |
| NPHS1 | 0.013899935 | 0.06661248 | 0.509175729 | 0.611067 | 0.65468 | -7.21296547 |
| SLC2A1 | 0.048632097 | 4.6491945 | 0.508062465 | 0.611847 | 0.65548 | -7.213531 |
| SLC25A2 | -0.009135194 | 0.11576769 | -0.507986211 | 0.6119 | 0.65549 | -7.21356969 |
| CENPM | -0.046459075 | 2.20913337 | -0.507555688 | 0.612202 | 0.65578 | -7.21378803 |
| CHRNG | 0.005161874 | 0.04990222 | 0.507116332 | 0.612509 | 0.65606 | -7.21401066 |
| CNTF | -0.029599512 | 0.62442008 | -0.506760722 | 0.612759 | 0.65629 | -7.21419071 |
| PIDD1 | -0.041336323 | 3.36300786 | -0.50619868 | 0.613152 | 0.65667 | -7.21447502 |
| DDC | -0.007558173 | 0.06754367 | -0.505889589 | 0.613369 | 0.65686 | -7.21463124 |
| C4orf54 | -0.008748105 | 0.03750522 | -0.505809254 | 0.613425 | 0.65688 | -7.21467183 |

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| PACS2 | -0.025189316 | 4.21967444 | -0.505478706 | 0.613657 | 0.65709 | -7.21483877 |
| CYP2C9 | 0.005314937 | 0.04276941 | 0.505334304 | 0.613758 | 0.65715 | -7.21491166 |
| ANXA13 | 0.005779 | 0.03155479 | 0.505175757 | 0.61387 | 0.65723 | -7.21499167 |
| CABP7 | -0.03778174 | 0.41527723 | -0.504919342 | 0.614049 | 0.65738 | -7.21512101 |
| ZCCHC2 | -0.033113985 | 2.74063069 | -0.504432987 | 0.614391 | 0.65771 | -7.21536616 |
| KRT14 | -0.072552751 | 1.05824488 | -0.503692778 | 0.61491 | 0.65822 | -7.21573882 |
| CCND2 | -0.058293059 | 7.13399173 | -0.503252213 | 0.615219 | 0.65851 | -7.21596037 |
| SPECC1 | -0.003078243 | 0.03261959 | -0.503058286 | 0.615355 | 0.65861 | -7.21605782 |
| MDM4 | -0.037622341 | 3.42829337 | -0.502649166 | 0.615643 | 0.65885 | -7.2162633 |
| GK5 | 0.044703572 | 2.78540221 | 0.502626237 | 0.615659 | 0.65885 | -7.21627481 |
| CD79B | -0.067676739 | 2.55391892 | -0.502141456 | 0.615999 | 0.65918 | -7.21651806 |
| GAD1 | 0.014520493 | 0.10638612 | 0.501142657 | 0.616701 | 0.65989 | -7.2170185 |
| NAP1L1 | -0.03231273 | 5.95218881 | -0.50024913 | 0.617329 | 0.66052 | -7.21746535 |
| HELB | -0.021405466 | 1.04519065 | -0.500012568 | 0.617495 | 0.66065 | -7.21758352 |
| PDGFC | -0.053246696 | 4.70303344 | -0.499334751 | 0.617972 | 0.66112 | -7.2179218 |
| LHX2 | -0.066278218 | 0.30049112 | -0.499136259 | 0.618112 | 0.66122 | -7.21802077 |
| PLEKHM | -0.050432602 | 1.652652 | -0.499063228 | 0.618163 | 0.66122 | -7.21805718 |
| DIP2A | -0.031326193 | 3.00020846 | -0.499043562 | 0.618177 | 0.66122 | -7.21806698 |
| FNIP2 | 0.041817733 | 3.41113666 | 0.497497832 | 0.619265 | 0.66231 | -7.21883626 |
| GSK3B | -0.033482356 | 4.78787759 | -0.497485393 | 0.619273 | 0.66231 | -7.21884244 |
| HECTD2 | 0.034674247 | 2.11503884 | 0.497288326 | 0.619412 | 0.66241 | -7.21894034 |
| APBB3 | -0.041994035 | 3.80923776 | -0.496845239 | 0.619724 | 0.6627 | -7.21916032 |
| ADAM15 | -0.035970807 | 5.64254319 | -0.496706021 | 0.619822 | 0.66277 | -7.2192294 |
| TMEM14 | -0.037390655 | 3.94505643 | -0.496120407 | 0.620235 | 0.66317 | -7.21951976 |
| HOXC4 | 0.034002424 | 0.54268444 | 0.495872168 | 0.62041 | 0.66331 | -7.21964274 |
| CD151 | 0.047868942 | 7.81805071 | 0.495005727 | 0.62102 | 0.6639 | -7.2200715 |
| HAMP | -0.035471819 | 0.6799192 | -0.494979921 | 0.621038 | 0.6639 | -7.22008426 |
| BNC2 | 0.057848643 | 1.1644338 | 0.493659493 | 0.62197 | 0.66484 | -7.2207362 |
| TNFRSF | 0.026603882 | 1.01364861 | 0.493621223 | 0.621997 | 0.66484 | -7.22075507 |
| ENAM | 0.004552868 | 0.03903922 | 0.493457109 | 0.622112 | 0.6649 | -7.22083598 |
| DNAH14 | 0.019270466 | 1.07007635 | 0.493424344 | 0.622135 | 0.6649 | -7.22085212 |
| PRC1 | 0.036084576 | 2.09392316 | 0.492389677 | 0.622866 | 0.66564 | -7.22136152 |
| MAS1 | 0.002498315 | 0.00901985 | 0.492276189 | 0.622946 | 0.66569 | -7.22141733 |
| HSPA4L | -0.043216261 | 1.54494372 | -0.491711691 | 0.623344 | 0.66607 | -7.22169473 |
| CDK17 | -0.034147516 | 3.62587161 | -0.491620667 | 0.623408 | 0.6661 | -7.22173943 |
| SLF1 | 0.021228701 | 1.72780141 | 0.491378307 | 0.62358 | 0.66624 | -7.22185842 |
| GBP1 | 0.067357213 | 4.76274321 | 0.491071182 | 0.623796 | 0.66643 | -7.22200911 |
| LARGE1 | 0.037524828 | 2.60968696 | 0.490868474 | 0.62394 | 0.66654 | -7.22210851 |
| ETV1 | 0.067283056 | 3.76997142 | 0.490679566 | 0.624073 | 0.66664 | -7.22220112 |
| HGSNAT | 0.036939227 | 5.51223466 | 0.49024599 | 0.624379 | 0.66692 | -7.22241352 |

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|---|---|---|---|---|---|---|
| NKTR | 0.049257532 | 3.73250936 | 0.48970864 | 0.624759 | 0.66729 | -7.22267651 |
| PIWIL4 | 0.020735709 | 0.98419863 | 0.489443426 | 0.624947 | 0.66745 | -7.2228062 |
| ANKRD1 | -0.034348765 | 3.7673578 | -0.488915318 | 0.62532 | 0.6678 | -7.22306424 |
| TBC1D2( | -0.002952377 | 0.02049513 | -0.488789664 | 0.625409 | 0.66786 | -7.22312559 |
| NAPRT | -0.054740584 | 5.25400449 | -0.488378396 | 0.6257 | 0.66812 | -7.2233263 |
| OXR1 | -0.048896773 | 4.12541458 | -0.488282088 | 0.625768 | 0.66816 | -7.22337328 |
| ZNF587 | 0.033627838 | 2.67865537 | 0.486846263 | 0.626783 | 0.6692 | -7.22407253 |
| ATP1A4 | -0.006021867 | 0.06078639 | -0.48651588 | 0.627017 | 0.66941 | -7.22423313 |
| CD8B2 | 0.032437903 | 0.20480282 | 0.486053286 | 0.627345 | 0.66971 | -7.22445783 |
| LGALS9E | 0.005704684 | 0.03460166 | 0.485974813 | 0.6274 | 0.66973 | -7.22449592 |
| TMEM24 | 0.077721587 | 1.86144666 | 0.485331237 | 0.627856 | 0.67017 | -7.22480812 |
| VWC2L | -0.002884745 | 0.02791209 | -0.485229193 | 0.627928 | 0.67021 | -7.22485758 |
| MAPK7 | -0.029031033 | 3.73855918 | -0.485171281 | 0.627969 | 0.67021 | -7.22488565 |
| ALKAL1 | -0.057901002 | 2.9025544 | -0.484956476 | 0.628122 | 0.67033 | -7.22498973 |
| GAB1 | -0.035023583 | 2.70499488 | -0.484816431 | 0.628221 | 0.67039 | -7.22505755 |
| MEX3B | -0.028224649 | 1.03276128 | -0.484589341 | 0.628382 | 0.67052 | -7.2251675 |
| WDR55 | -0.025454467 | 3.52696587 | -0.484417598 | 0.628503 | 0.67061 | -7.22525062 |
| CD72 | -0.040378146 | 1.80147913 | -0.484072155 | 0.628748 | 0.67083 | -7.2254177 |
| SDS | -0.052931636 | 1.39861045 | -0.483616359 | 0.629071 | 0.67113 | -7.22563799 |
| DCST2 | 0.03448181 | 1.25653265 | 0.482970949 | 0.629529 | 0.67158 | -7.22594956 |
| C14orf39 | 0.00559347 | 0.06521615 | 0.482820475 | 0.629635 | 0.67165 | -7.22602214 |
| CEP350 | -0.038421895 | 3.40478311 | -0.482687832 | 0.62973 | 0.67171 | -7.2260861 |
| HTR2B | 0.037417844 | 1.08927953 | 0.481529298 | 0.630551 | 0.67254 | -7.226644 |
| GJB2 | 0.063959913 | 2.54199714 | 0.48101027 | 0.63092 | 0.67289 | -7.22689352 |
| FAM72D | -0.006782835 | 0.12338078 | -0.480836227 | 0.631043 | 0.67298 | -7.22697712 |
| CCND3 | -0.03402333 | 6.18300598 | -0.480404858 | 0.631349 | 0.67327 | -7.22718421 |
| TAS2R5( | -0.005339821 | 0.0605756 | -0.48031055 | 0.631416 | 0.6733 | -7.22722946 |
| MN1 | -0.046568247 | 1.64575922 | -0.480138402 | 0.631539 | 0.67338 | -7.22731204 |
| RPS6KA: | -0.04798014 | 4.91465397 | -0.47976276 | 0.631805 | 0.67363 | -7.22749213 |
| C1QTNF | 0.036449651 | 0.75806476 | 0.479549098 | 0.631957 | 0.67375 | -7.2275945 |
| MYADM | -0.068273323 | 6.52560914 | -0.479407554 | 0.632058 | 0.67381 | -7.22766229 |
| FGF16 | -0.014501043 | 0.13866531 | -0.479079377 | 0.632291 | 0.67402 | -7.22781939 |
| CYP3A4 | 0.006573655 | 0.0706536 | 0.47878067 | 0.632503 | 0.6742 | -7.22796229 |
| PCDHA1 | 0.021844108 | 0.38440363 | 0.478219549 | 0.632902 | 0.67458 | -7.22823048 |
| TRRAP | -0.040969147 | 4.43857498 | -0.477933497 | 0.633105 | 0.67476 | -7.22836709 |
| DHCR24 | -0.068616847 | 5.05972034 | -0.476350863 | 0.63423 | 0.67591 | -7.22912139 |
| CDCA5 | -0.032378091 | 1.53479103 | -0.476247675 | 0.634304 | 0.67595 | -7.22917048 |
| HIST1H2 | -0.031562774 | 0.45291434 | -0.475721689 | 0.634678 | 0.67631 | -7.22942057 |
| GLMP | -0.035219378 | 5.04789653 | -0.4755765 | 0.634781 | 0.67635 | -7.22948955 |
| PCDHGE | -0.041406205 | 0.79647584 | -0.475550633 | 0.6348 | 0.67635 | -7.22950184 |

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| TP53AIP | -0.006898346 | 0.06767527 | -0.474983904 | 0.635203 | 0.67674 | -7.22977089 |
| GPC6 | 0.071840284 | 1.6165311 | 0.474639081 | 0.635449 | 0.67696 | -7.22993443 |
| SLCO2B | 0.051682097 | 3.20706521 | 0.474494579 | 0.635551 | 0.67702 | -7.23000293 |
| CABP4 | 0.01954744 | 0.44325681 | 0.474290961 | 0.635696 | 0.67714 | -7.23009942 |
| BRD4 | -0.026470658 | 4.46367003 | -0.473991138 | 0.63591 | 0.67732 | -7.23024142 |
| OBSCN | 0.038923404 | 2.82255425 | 0.473268015 | 0.636425 | 0.67783 | -7.23058354 |
| POGK | 0.033280695 | 4.32989369 | 0.472815676 | 0.636747 | 0.67813 | -7.23079728 |
| PTCHD1 | 0.012084704 | 0.12703027 | 0.471687564 | 0.637551 | 0.67891 | -7.23132945 |
| GIGYF1 | -0.035074769 | 5.09518145 | -0.47167459 | 0.63756 | 0.67891 | -7.23133556 |
| SLC38A5 | -0.089910344 | 5.49236372 | -0.471357321 | 0.637787 | 0.67911 | -7.231485 |
| CAMK1G | -0.04113644 | 0.55260401 | -0.470989166 | 0.638049 | 0.67934 | -7.23165827 |
| TEX15 | -0.002580949 | 0.01080819 | -0.470703849 | 0.638253 | 0.67952 | -7.23179246 |
| CCL8 | -0.053771938 | 1.59074486 | -0.47063172 | 0.638304 | 0.67953 | -7.23182638 |
| TOGARA | -0.006676599 | 0.11953365 | -0.46967159 | 0.638989 | 0.68022 | -7.23227729 |
| FAM117E | -0.039340308 | 3.23845109 | -0.469466573 | 0.639135 | 0.68033 | -7.23237346 |
| HOXD4 | 0.007066667 | 0.15085802 | 0.469408075 | 0.639177 | 0.68033 | -7.23240089 |
| DNAH2 | 0.011981381 | 0.20279658 | 0.469014453 | 0.639458 | 0.68059 | -7.23258538 |
| KIAA202 | -0.036005692 | 3.80178089 | -0.468503863 | 0.639823 | 0.68093 | -7.23282447 |
| DLX6 | -0.038176364 | 0.31963266 | -0.468118865 | 0.640098 | 0.68118 | -7.23300457 |
| CYP2W1 | 0.048397272 | 0.55582279 | 0.465148312 | 0.64222 | 0.6834 | -7.23438924 |
| GABRA2 | 0.00258146 | 0.01143097 | 0.46486689 | 0.642422 | 0.68357 | -7.23451997 |
| LSMEM2 | -0.008317789 | 0.1254013 | -0.464654428 | 0.642574 | 0.68364 | -7.2346186 |
| PACS1 | 0.031666436 | 5.82652144 | 0.464624592 | 0.642595 | 0.68364 | -7.23463245 |
| SLC1A7 | 0.013265057 | 0.17920402 | 0.464606961 | 0.642607 | 0.68364 | -7.23464063 |
| C6orf201 | -0.006978083 | 0.17048798 | -0.464480705 | 0.642698 | 0.68369 | -7.23469922 |
| MRGPRE | 0.058656941 | 1.56677143 | 0.464182629 | 0.642911 | 0.68388 | -7.23483748 |
| ANKRD2 | -0.023462155 | 0.63176743 | -0.463082448 | 0.643698 | 0.68467 | -7.23534702 |
| TIMD4 | -0.046681022 | 1.16373955 | -0.462768343 | 0.643923 | 0.68487 | -7.23549227 |
| FADS1 | -0.028935357 | 2.22917863 | -0.462262433 | 0.644285 | 0.68521 | -7.23572602 |
| ZNF490 | 0.02112562 | 0.77879312 | 0.46220331 | 0.644328 | 0.68521 | -7.23575332 |
| PRRC2A | -0.032497917 | 6.51749614 | -0.461856069 | 0.644576 | 0.68543 | -7.23591358 |
| HEPH | -0.052544947 | 2.0703967 | -0.461549276 | 0.644796 | 0.68562 | -7.23605508 |
| PLCXD2 | 0.028290046 | 0.61676528 | 0.461352149 | 0.644937 | 0.68573 | -7.23614595 |
| ZBTB39 | -0.033054582 | 2.43225778 | -0.461093005 | 0.645123 | 0.68589 | -7.23626535 |
| SPNS1 | -0.024231598 | 1.17081752 | -0.459976426 | 0.645923 | 0.68669 | -7.23677903 |
| TMEM23 | -0.080002554 | 4.85158744 | -0.459346022 | 0.646375 | 0.68713 | -7.2370685 |
| SFRP5 | 0.030497563 | 0.21020789 | 0.459236987 | 0.646453 | 0.68717 | -7.23711852 |
| GATAD2 | 0.027586314 | 5.18130572 | 0.458869137 | 0.646717 | 0.68741 | -7.23728721 |
| C6 | 0.018236037 | 0.18518406 | 0.458334094 | 0.647101 | 0.68777 | -7.23753232 |
| KAT6A | 0.037672958 | 3.93018845 | 0.456389007 | 0.648497 | 0.68921 | -7.23842101 |

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| ADGB | -0.003455571 | 0.0216128 | -0.455328378 | 0.649259 | 0.68998 | -7.238904 |
| TAS2R3( | 0.003814695 | 0.04017347 | 0.455088619 | 0.649431 | 0.69012 | -7.23901303 |
| GNAI2 | -0.030728861 | 7.04377671 | -0.454410069 | 0.649918 | 0.69059 | -7.23932128 |
| DUSP10 | -0.045114153 | 3.34188757 | -0.454009986 | 0.650206 | 0.69086 | -7.23950282 |
| HOXC5 | 0.009170411 | 0.04765374 | 0.45382838 | 0.650337 | 0.69095 | -7.23958517 |
| PLIN4 | 0.039015005 | 0.84514008 | 0.453305671 | 0.650712 | 0.69131 | -7.23982201 |
| GLIPR2 | 0.049200963 | 4.46648857 | 0.452809471 | 0.651069 | 0.69164 | -7.24004658 |
| DES | -0.083364881 | 1.62666317 | -0.452645573 | 0.651187 | 0.69173 | -7.24012071 |
| SAP25 | 0.023087836 | 0.64158417 | 0.452352098 | 0.651398 | 0.69191 | -7.24025337 |
| DLEU7 | 0.01766575 | 0.42502823 | 0.452290296 | 0.651443 | 0.69191 | -7.2402813 |
| CSNK1E | 0.033753241 | 5.49060123 | 0.451839932 | 0.651767 | 0.69221 | -7.24048468 |
| CCDC18 | -0.0201142 | 1.12736893 | -0.451503217 | 0.652009 | 0.69243 | -7.24063661 |
| RIOK3 | -0.030952165 | 5.26320414 | -0.451023225 | 0.652354 | 0.69274 | -7.24085299 |
| SLF2 | 0.027875542 | 3.50002858 | 0.450950658 | 0.652407 | 0.69274 | -7.24088569 |
| TOPBP1 | -0.032419732 | 3.58800559 | -0.450921678 | 0.652427 | 0.69274 | -7.24089874 |
| ZNF503 | -0.03298211 | 3.71291686 | -0.450797772 | 0.652517 | 0.69279 | -7.24095455 |
| MICAL3 | -0.03522396 | 1.61633066 | -0.450604178 | 0.652656 | 0.6929 | -7.24104171 |
| SHROON | -0.030827444 | 2.18114545 | -0.450175285 | 0.652965 | 0.69318 | -7.24123469 |
| SYT5 | 0.018815483 | 0.18374045 | 0.449862368 | 0.65319 | 0.69338 | -7.24137536 |
| TOP3B | -0.006082001 | 0.19896834 | -0.449769425 | 0.653257 | 0.6934 | -7.24141713 |
| TMEM71 | -0.048026245 | 1.7063672 | -0.44911709 | 0.653727 | 0.69386 | -7.24171002 |
| TRH | -0.017574782 | 0.11005507 | -0.447946278 | 0.65457 | 0.69471 | -7.24223463 |
| DDX52 | 0.030422381 | 3.24008468 | 0.447842187 | 0.654646 | 0.69475 | -7.24228121 |
| NPHP3-/ | 0.002551655 | 0.02751741 | 0.447464093 | 0.654918 | 0.69499 | -7.24245029 |
| ZEB2 | -0.033418182 | 1.84621333 | -0.447209951 | 0.655101 | 0.69514 | -7.24256387 |
| DMXL2 | 0.034797232 | 2.62149657 | 0.446791659 | 0.655403 | 0.69542 | -7.24275066 |
| TNNC2 | -0.058262398 | 2.12022716 | -0.445893473 | 0.656051 | 0.69606 | -7.24315115 |
| FBXO39 | 0.011010082 | 0.19274832 | 0.445559276 | 0.656292 | 0.69628 | -7.24329996 |
| GPAT2 | -0.042283907 | 0.84924505 | -0.44538087 | 0.656421 | 0.69637 | -7.24337936 |
| EYS | 0.005698776 | 0.21534967 | 0.44527438 | 0.656497 | 0.69641 | -7.24342674 |
| ST8SIA2 | -0.036849616 | 0.61709493 | -0.445015645 | 0.656684 | 0.69656 | -7.2435418 |
| PPP1R9/ | 0.040201969 | 3.36876202 | 0.444860698 | 0.656796 | 0.69664 | -7.24361067 |
| PUSL1 | -0.025546895 | 3.3996557 | -0.444641089 | 0.656955 | 0.69676 | -7.24370824 |
| CCDC33 | 0.012652567 | 0.1838692 | 0.44454848 | 0.657021 | 0.69679 | -7.24374938 |
| GPBAR1 | -0.018382718 | 0.60269181 | -0.444304379 | 0.657198 | 0.69693 | -7.24385775 |
| TBC1D3 | -0.01266762 | 0.342953 | -0.443700417 | 0.657634 | 0.69735 | -7.24412565 |
| L1TD1 | -0.010214691 | 0.17903597 | -0.443496984 | 0.657781 | 0.69746 | -7.2442158 |
| CHSY3 | -0.027470906 | 1.3002671 | -0.443006671 | 0.658135 | 0.69779 | -7.24443292 |
| ATL2 | -0.042075899 | 5.97048336 | -0.442359913 | 0.658602 | 0.69825 | -7.24471894 |
| PCSK5 | -0.053099349 | 2.63703532 | -0.441449045 | 0.65926 | 0.6989 | -7.24512106 |

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| SAMD8 | -0.03260172 | 3.81716403 | -0.441257625 | 0.659399 | 0.699 | -7.24520546 |
| ASAP1 | -0.040091579 | 3.77082618 | -0.441015877 | 0.659573 | 0.69915 | -7.245312 |
| RNF139 | -0.034552671 | 5.67499957 | -0.440586791 | 0.659884 | 0.69943 | -7.24550096 |
| LY6H | 0.029535186 | 0.41902228 | 0.440378733 | 0.660034 | 0.69955 | -7.24559251 |
| MKRN3 | 0.016840453 | 0.102388 | 0.439876243 | 0.660398 | 0.69989 | -7.24581346 |
| MYH7 | 0.033955554 | 0.13969416 | 0.439693038 | 0.66053 | 0.69998 | -7.24589395 |
| DDN | -0.011376407 | 0.10586182 | -0.439357337 | 0.660773 | 0.7002 | -7.24604135 |
| CENPP | 0.011974526 | 0.73173566 | 0.438603644 | 0.661318 | 0.70073 | -7.24637189 |
| UPK1B | 0.010166718 | 0.07356208 | 0.437958075 | 0.661786 | 0.70118 | -7.24665455 |
| GREM2 | 0.039298873 | 0.54483089 | 0.437868107 | 0.661851 | 0.70121 | -7.24669391 |
| FOXL2NI | -0.003340393 | 0.02212433 | -0.437307537 | 0.662257 | 0.70159 | -7.24693897 |
| PDC | -0.006399555 | 0.1107317 | -0.437140786 | 0.662377 | 0.70165 | -7.24701181 |
| GPATCH | -0.03849511 | 4.20577655 | -0.437127023 | 0.662387 | 0.70165 | -7.24701782 |
| PDE7A | -0.042368555 | 3.56876257 | -0.436689806 | 0.662704 | 0.70191 | -7.24720866 |
| ZNF852 | -0.016909721 | 0.87111762 | -0.436668883 | 0.662719 | 0.70191 | -7.24721779 |
| LRIG3 | -0.051750902 | 5.48539673 | -0.436214948 | 0.663048 | 0.70221 | -7.24741571 |
| LY75 | 0.049983808 | 3.60592835 | 0.435954151 | 0.663237 | 0.70237 | -7.24752933 |
| ITGB1 | 0.055013484 | 6.45514227 | 0.435871847 | 0.663297 | 0.70239 | -7.24756517 |
| JOSD1 | 0.036838816 | 5.13999689 | 0.435820729 | 0.663334 | 0.70239 | -7.24758743 |
| ATP11B | -0.041230217 | 3.93747856 | -0.435329557 | 0.66369 | 0.70272 | -7.24780117 |
| CA1 | 0.008937832 | 0.13189179 | 0.435137927 | 0.663829 | 0.70282 | -7.24788449 |
| SLC30A7 | -0.02866008 | 3.87464765 | -0.434773087 | 0.664093 | 0.70306 | -7.24804303 |
| COBL | 0.051118515 | 2.53986516 | 0.434304409 | 0.664433 | 0.70337 | -7.24824649 |
| HOXA3 | -0.017685885 | 0.57486741 | -0.433684023 | 0.664883 | 0.70381 | -7.24851548 |
| DMRT1 | 0.041943956 | 0.74568005 | 0.432082797 | 0.666045 | 0.70497 | -7.24920796 |
| S100A5 | 0.068325164 | 4.66408001 | 0.432050754 | 0.666068 | 0.70497 | -7.24922179 |
| ERAS | 0.013190225 | 0.13526614 | 0.431976335 | 0.666122 | 0.70499 | -7.24925391 |
| KCNH6 | -0.004986787 | 0.06716611 | -0.431913921 | 0.666167 | 0.70499 | -7.24928084 |
| VIL1 | -0.002705737 | 0.02223437 | -0.431655935 | 0.666354 | 0.70514 | -7.24939213 |
| N4BP1 | -0.025909267 | 4.45537184 | -0.431192619 | 0.666691 | 0.70546 | -7.24959183 |
| CDKN2D | -0.027216624 | 3.32250186 | -0.43082843 | 0.666955 | 0.70569 | -7.24974865 |
| SLC26A5 | -0.020888875 | 0.56576137 | -0.430663636 | 0.667075 | 0.70577 | -7.24981956 |
| HPS3 | -0.036871899 | 3.67114706 | -0.430392274 | 0.667272 | 0.70594 | -7.24993628 |
| CAMK2D | -0.036515025 | 4.74918687 | -0.430282841 | 0.667352 | 0.70598 | -7.24998333 |
| CTSB | 0.043921898 | 11.9346653 | 0.429640955 | 0.667818 | 0.70643 | -7.25025906 |
| RAB23 | -0.058600173 | 3.21721462 | -0.428575451 | 0.668592 | 0.7072 | -7.25071584 |
| ZBTB33 | -0.038042184 | 4.76616925 | -0.42823656 | 0.668839 | 0.7074 | -7.25086089 |
| NKX2-8 | -0.044051648 | 2.68354229 | -0.428207536 | 0.66886 | 0.7074 | -7.25087331 |
| PTGDS | 0.099333787 | 3.38286518 | 0.428005414 | 0.669007 | 0.70751 | -7.25095976 |
| UBA7 | -0.030854316 | 5.44392574 | -0.427172586 | 0.669612 | 0.7081 | -7.25131553 |

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| GGA3 | 0.033164502 | 4.21149373 | 0.427077212 | 0.669682 | 0.70813 | -7.25135623 |
| SUN2 | -0.037503071 | 5.40589804 | -0.426780222 | 0.669898 | 0.70831 | -7.2514829 |
| SMARCA | -0.02756526 | 5.59220187 | -0.426738606 | 0.669928 | 0.70831 | -7.25150065 |
| SYT11 | 0.052569167 | 2.95101004 | 0.425378173 | 0.670918 | 0.70931 | -7.25207973 |
| CERS3 | -0.003800217 | 0.05333403 | -0.423950132 | 0.671958 | 0.71036 | -7.25268561 |
| CCNG2 | -0.034037803 | 4.69685402 | -0.423768326 | 0.67209 | 0.71046 | -7.25276259 |
| DPPA4 | 0.00393542 | 0.0356007 | 0.423660699 | 0.672169 | 0.71046 | -7.25280816 |
| ISG15 | 0.06101225 | 6.51279884 | 0.423653099 | 0.672174 | 0.71046 | -7.25281137 |
| DNLZ | 0.010085615 | 0.29150058 | 0.423363654 | 0.672385 | 0.71064 | -7.25293384 |
| CDK14 | 0.038145653 | 4.12866024 | 0.42204539 | 0.673346 | 0.71161 | -7.25349056 |
| IFITM1 | 0.052833884 | 6.35133496 | 0.421569256 | 0.673693 | 0.71193 | -7.25369122 |
| EXO1 | 0.018294924 | 0.68153659 | 0.421346093 | 0.673856 | 0.71206 | -7.25378518 |
| DBNDD2 | -0.02229976 | 1.62340184 | -0.419323412 | 0.675331 | 0.71357 | -7.25463461 |
| PRR11 | -0.024240448 | 1.30706601 | -0.419212078 | 0.675412 | 0.71362 | -7.25468125 |
| BRDT | -0.006050533 | 0.06986788 | -0.41904356 | 0.675535 | 0.7137 | -7.25475181 |
| OVOL1 | -0.040013775 | 1.81883153 | -0.418934061 | 0.675615 | 0.7137 | -7.25479765 |
| NPIPA3 | -0.023681071 | 0.41242659 | -0.418923917 | 0.675623 | 0.7137 | -7.2548019 |
| RAB11FI | 0.03440069 | 3.37257995 | 0.41801517 | 0.676286 | 0.71436 | -7.25518183 |
| NKD1 | 0.02516098 | 0.45492413 | 0.417663167 | 0.676543 | 0.71459 | -7.25532878 |
| HR | -0.045148165 | 1.50678656 | -0.417235466 | 0.676856 | 0.71487 | -7.25550716 |
| ANKUB1 | 0.002214011 | 0.01531351 | 0.417090277 | 0.676962 | 0.71494 | -7.25556768 |
| NUF2 | 0.026335959 | 0.98180632 | 0.416938295 | 0.677073 | 0.71501 | -7.255631 |
| ZWILCH | -0.024744803 | 2.44837601 | -0.416747853 | 0.677212 | 0.71512 | -7.25571031 |
| PIK3R2 | 0.021817836 | 0.89748298 | 0.415493592 | 0.678128 | 0.71604 | -7.25623177 |
| ETV6 | -0.022507813 | 4.190808 | -0.414987749 | 0.678498 | 0.71638 | -7.25644162 |
| CPD | -0.042023327 | 5.26348717 | -0.414670199 | 0.67873 | 0.71655 | -7.25657324 |
| MED12 | -0.032176127 | 4.4695804 | -0.414656111 | 0.678741 | 0.71655 | -7.25657907 |
| RAB34 | 0.040645286 | 6.9644545 | 0.412619377 | 0.680231 | 0.71808 | -7.25742079 |
| IGSF11 | 0.026811509 | 0.41036783 | 0.412566845 | 0.680269 | 0.71808 | -7.25744245 |
| ACTA1 | -0.040334967 | 0.58761209 | -0.412404104 | 0.680388 | 0.71816 | -7.25750951 |
| TULP1 | -0.010034063 | 0.20432722 | -0.412242322 | 0.680507 | 0.71824 | -7.25757616 |
| RTTN | -0.019655179 | 1.63949681 | -0.412027336 | 0.680664 | 0.71836 | -7.25766469 |
| PLEKHO | -0.044516892 | 3.68673875 | -0.411856769 | 0.680789 | 0.71845 | -7.25773489 |
| TBC1D3I | -0.018776149 | 0.59656905 | -0.411142997 | 0.681311 | 0.71895 | -7.25802835 |
| AP1S2 | -0.027857579 | 3.60150862 | -0.410888877 | 0.681497 | 0.7191 | -7.2581327 |
| DNHD1 | -0.020836728 | 1.01454461 | -0.410464508 | 0.681808 | 0.71939 | -7.25830683 |
| GBP4 | 0.057980095 | 3.88744987 | 0.410024778 | 0.68213 | 0.71968 | -7.25848706 |
| LPIN2 | 0.03493374 | 4.64212495 | 0.409844488 | 0.682262 | 0.71978 | -7.25856091 |
| CTTN | 0.029840092 | 7.01255824 | 0.408826887 | 0.683008 | 0.72052 | -7.25897708 |
| HOXA9 | 0.017114915 | 0.11065155 | 0.408750965 | 0.683064 | 0.72053 | -7.25900809 |

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| FGD1 | -0.028076162 | 3.5442779 | -0.408680314 | 0.683116 | 0.72054 | -7.25903694 |
| TTC3 | -0.034113375 | 5.79434223 | -0.408402112 | 0.68332 | 0.72065 | -7.2591505 |
| PPP1R1( | 0.047470228 | 1.05985269 | 0.408338153 | 0.683366 | 0.72065 | -7.25917659 |
| MCU | -0.023053489 | 3.85696311 | -0.408329431 | 0.683373 | 0.72065 | -7.25918015 |
| ANP32D | -0.006038661 | 0.09632444 | -0.408305551 | 0.68339 | 0.72065 | -7.25918989 |
| RNF222 | 0.004682371 | 0.07570506 | 0.408022584 | 0.683598 | 0.72083 | -7.25930529 |
| OVOL3 | -0.00954403 | 0.22707296 | -0.407248315 | 0.684166 | 0.72137 | -7.25962063 |
| ZSCAN2: | -0.027938401 | 0.89539607 | -0.407209002 | 0.684194 | 0.72137 | -7.25963663 |
| CCNK | -0.032273078 | 1.85149146 | -0.406084157 | 0.68502 | 0.72219 | -7.26009365 |
| CTTNBP. | 0.032750702 | 3.64347411 | 0.403718245 | 0.686757 | 0.72398 | -7.26105078 |
| SATB2 | 0.021241914 | 0.89559699 | 0.403629172 | 0.686822 | 0.724 | -7.26108671 |
| DPEP3 | -0.0099932 | 0.14288161 | -0.402346895 | 0.687764 | 0.72495 | -7.26160301 |
| MED12L | -0.019990298 | 0.60312059 | -0.401627016 | 0.688293 | 0.72546 | -7.26189214 |
| SH2D1B | -0.014805225 | 0.30502026 | -0.401260873 | 0.688563 | 0.7257 | -7.262039 |
| KLHDC8, | 0.090717163 | 4.70888565 | 0.400504122 | 0.689119 | 0.72624 | -7.26234211 |
| PYGB | 0.029460322 | 7.33863363 | 0.400407242 | 0.68919 | 0.72627 | -7.26238087 |
| ZNF621 | -0.026677093 | 3.16389734 | -0.400095283 | 0.68942 | 0.72647 | -7.26250563 |
| IPMK | -0.027997315 | 2.67007245 | -0.399833476 | 0.689612 | 0.72663 | -7.26261025 |
| RICTOR | -0.029335375 | 3.0293371 | -0.399596752 | 0.689786 | 0.72677 | -7.2627048 |
| ARHGEF | -0.037374972 | 5.1205084 | -0.399363079 | 0.689958 | 0.7269 | -7.26279807 |
| RAD9B | -0.010346625 | 0.51774418 | -0.399099977 | 0.690152 | 0.72706 | -7.26290302 |
| ADAD2 | -0.006301133 | 0.08994891 | -0.398907715 | 0.690293 | 0.72716 | -7.26297966 |
| HIPK4 | -0.013308136 | 0.47701066 | -0.398262839 | 0.690768 | 0.72762 | -7.26323648 |
| FBLIM1 | 0.03804432 | 4.01442426 | 0.398109776 | 0.690881 | 0.72769 | -7.26329738 |
| PGLYRP | -0.010766377 | 0.2018086 | -0.39789192 | 0.691041 | 0.72782 | -7.26338402 |
| MTMR8 | 0.013289136 | 0.84519574 | 0.397362683 | 0.691431 | 0.72818 | -7.26359428 |
| BCL7A | -0.031636701 | 4.44840531 | -0.396156406 | 0.692319 | 0.72907 | -7.26407248 |
| IL17B | 0.009956087 | 0.21074748 | 0.39569598 | 0.692659 | 0.72938 | -7.26425462 |
| STK24 | -0.040878939 | 4.0049975 | -0.395085824 | 0.693108 | 0.72981 | -7.26449567 |
| TTBK1 | 0.007775669 | 0.20057134 | 0.394999725 | 0.693172 | 0.72981 | -7.26452965 |
| UACA | -0.045044847 | 5.39568717 | -0.394965441 | 0.693197 | 0.72981 | -7.26454318 |
| PFKFB4 | -0.027103429 | 1.79788504 | -0.394643634 | 0.693434 | 0.73002 | -7.26467013 |
| EGR4 | -0.021986154 | 0.21102537 | -0.394214933 | 0.69375 | 0.73031 | -7.26483908 |
| ARHGAF | 0.041094325 | 4.02958843 | 0.393922454 | 0.693966 | 0.73049 | -7.26495424 |
| JADE2 | -0.030174186 | 4.57511558 | -0.393177666 | 0.694515 | 0.73102 | -7.26524711 |
| FXYD2 | 0.008279401 | 0.21241332 | 0.392837497 | 0.694766 | 0.73124 | -7.26538069 |
| FER | -0.032466802 | 2.83825548 | -0.392523371 | 0.694998 | 0.73144 | -7.26550394 |
| UTF1 | 0.007660715 | 0.09303945 | 0.392238081 | 0.695208 | 0.73161 | -7.26561579 |
| LSAMP | 0.03554987 | 0.67219377 | 0.391985449 | 0.695395 | 0.73176 | -7.26571477 |
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| CATSPE | 0.020184367 | 1.34126947 | 0.391654464 | 0.695639 | 0.73193 | -7.26584435 |
| ODF2L | -0.024610546 | 3.19711922 | -0.390481409 | 0.696505 | 0.7328 | -7.26630272 |
| CKAP5 | -0.029234175 | 4.41334655 | -0.390350087 | 0.696602 | 0.73285 | -7.26635394 |
| KAAG1 | -0.020636121 | 0.75554712 | -0.389894348 | 0.696939 | 0.73313 | -7.26653159 |
| ADORA2 | 0.032555356 | 0.98873773 | 0.389873257 | 0.696954 | 0.73313 | -7.26653981 |
| SPSB4 | 0.01369879 | 0.14218584 | 0.389669847 | 0.697104 | 0.73325 | -7.26661903 |
| SKAP1 | -0.053878684 | 1.87351422 | -0.389258117 | 0.697409 | 0.73352 | -7.26677925 |
| RESF1 | -0.032087343 | 4.10040897 | -0.388822164 | 0.697731 | 0.73381 | -7.26694872 |
| TFAP2E | 0.024208299 | 0.88471447 | 0.387909224 | 0.698405 | 0.73448 | -7.26730298 |
| LATS1 | -0.030838814 | 3.68038759 | -0.387702258 | 0.698558 | 0.73459 | -7.26738318 |
| RHBDF2 | 0.023729596 | 3.52860056 | 0.386763355 | 0.699252 | 0.73528 | -7.26774646 |
| TMEM24 | -0.003932249 | 0.06104652 | -0.386607627 | 0.699368 | 0.73535 | -7.26780663 |
| NYAP1 | -0.016657058 | 0.52786873 | -0.386423162 | 0.699504 | 0.73545 | -7.26787787 |
| RBL1 | -0.025322458 | 2.38919605 | -0.386365681 | 0.699547 | 0.73545 | -7.26790006 |
| NPFFR2 | -0.046369971 | 0.83789917 | -0.386104382 | 0.69974 | 0.73561 | -7.2680009 |
| SPATA5 | -0.023249441 | 2.02900091 | -0.385982451 | 0.69983 | 0.73566 | -7.26804794 |
| ZFYVE19 | -0.029345799 | 4.46566705 | -0.385636703 | 0.700086 | 0.73588 | -7.26818122 |
| CD14 | -0.040599239 | 6.20243208 | -0.385521623 | 0.700171 | 0.73592 | -7.26822556 |
| ACVR2B | 0.024736077 | 1.96711035 | 0.385419571 | 0.700246 | 0.73596 | -7.26826487 |
| KLHL31 | 0.029859356 | 1.1039863 | 0.384660248 | 0.700808 | 0.7365 | -7.268557 |
| ABHD17( | -0.036510254 | 4.54519382 | -0.384026952 | 0.701277 | 0.73695 | -7.26880021 |
| FOXJ2 | -0.024898646 | 3.97293449 | -0.383911601 | 0.701362 | 0.73699 | -7.26884447 |
| TUBGCP | -0.030170331 | 4.50675451 | -0.383678055 | 0.701535 | 0.73713 | -7.26893403 |
| MUC15 | 0.061805589 | 7.01187666 | 0.383312357 | 0.701806 | 0.73737 | -7.26907416 |
| LAMA2 | 0.041830081 | 1.42628186 | 0.382105429 | 0.7027 | 0.73823 | -7.26953569 |
| C7orf61 | -0.034018403 | 0.9926873 | -0.382093238 | 0.702709 | 0.73823 | -7.26954035 |
| CLIC6 | -0.055050732 | 4.99114342 | -0.381901885 | 0.702851 | 0.73833 | -7.26961339 |
| DQX1 | -0.006602515 | 0.1257789 | -0.381488911 | 0.703157 | 0.7386 | -7.26977089 |
| GATA6 | -0.03617651 | 3.17336548 | -0.380985858 | 0.703529 | 0.73895 | -7.26996252 |
| PAWR | 0.029008601 | 4.1314511 | 0.379645699 | 0.704523 | 0.73995 | -7.27047181 |
| CRB1 | -0.005851086 | 0.14098468 | -0.37941765 | 0.704692 | 0.74008 | -7.27055829 |
| ZNF160 | -0.0272966 | 3.61570597 | -0.379240619 | 0.704823 | 0.74017 | -7.27062539 |
| H6PD | -0.032144194 | 5.13173985 | -0.37899378 | 0.705006 | 0.74032 | -7.2707189 |
| THPO | 0.008516919 | 0.24309466 | 0.37834114 | 0.70549 | 0.74078 | -7.27096584 |
| TMTC2 | 0.031071354 | 2.73724245 | 0.377927818 | 0.705797 | 0.74106 | -7.27112201 |
| ZBED4 | -0.02708266 | 2.99885056 | -0.377462189 | 0.706143 | 0.74137 | -7.27129774 |
| B3GALT! | -0.03059939 | 0.62897174 | -0.376618932 | 0.706769 | 0.74198 | -7.27161543 |
| CEP250 | 0.020224573 | 2.82542974 | 0.376542019 | 0.706826 | 0.742 | -7.27164437 |
| PCOLCE | -0.040906111 | 0.90487181 | -0.375739824 | 0.707421 | 0.74258 | -7.27194588 |
| PER3 | -0.041034079 | 4.36073106 | -0.373567648 | 0.709035 | 0.74423 | -7.27275906 |

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| KLF4 | 0.055350129 | 4.66890525 | 0.371168924 | 0.710818 | 0.74605 | -7.27365159 |
| PHF8 | -0.03148686 | 3.8129177 | -0.370794942 | 0.711097 | 0.7463 | -7.27379022 |
| LRRN4C | -0.028037695 | 0.50706713 | -0.369884332 | 0.711774 | 0.74696 | -7.2741272 |
| SHOX | 0.002701739 | 0.02914762 | 0.369673076 | 0.711931 | 0.74708 | -7.27420526 |
| CDKAL1 | 0.026363071 | 4.05647114 | 0.368926177 | 0.712487 | 0.74762 | -7.27448088 |
| ITGAD | 0.016231955 | 0.23870136 | 0.368865068 | 0.712533 | 0.74762 | -7.27450341 |
| NFIX | -0.033876537 | 5.6965466 | -0.36844327 | 0.712847 | 0.7479 | -7.27465879 |
| ZDHHC1 | 0.027173384 | 3.62930269 | 0.368242188 | 0.712997 | 0.74801 | -7.2747328 |
| SPIN4 | -0.026778238 | 2.2384111 | -0.368011217 | 0.713169 | 0.74815 | -7.27481776 |
| CLK1 | -0.037851052 | 5.88310741 | -0.367004668 | 0.713918 | 0.74886 | -7.2751874 |
| RAD51 | 0.021052372 | 1.28718372 | 0.366982197 | 0.713935 | 0.74886 | -7.27519564 |
| IFNLR1 | -0.036445358 | 3.55516354 | -0.36664242 | 0.714188 | 0.74903 | -7.27532018 |
| STAP2 | -0.028192817 | 5.4329763 | -0.366641087 | 0.714189 | 0.74903 | -7.27532067 |
| ZNF516 | 0.029263639 | 3.48978839 | 0.365464254 | 0.715066 | 0.74991 | -7.27575113 |
| ZFYVE26 | 0.022578699 | 2.84964424 | 0.364314259 | 0.715924 | 0.75076 | -7.27617044 |
| BTN2A2 | 0.024945525 | 2.86212023 | 0.364225349 | 0.71599 | 0.75078 | -7.2762028 |
| STK35 | 0.025702178 | 4.10192453 | 0.364106891 | 0.716078 | 0.75078 | -7.27624591 |
| MAD1L1 | 0.019544083 | 3.89836267 | 0.364104013 | 0.716081 | 0.75078 | -7.27624696 |
| FAM72C | -0.00377464 | 0.05654507 | -0.363720737 | 0.716366 | 0.75104 | -7.27638633 |
| ARL5B | 0.030048162 | 3.5600163 | 0.363586673 | 0.716466 | 0.7511 | -7.27643505 |
| KHDC4 | 0.029955583 | 4.26169664 | 0.363332538 | 0.716656 | 0.75125 | -7.27652735 |
| KLHL11 | 0.040595786 | 1.64126933 | 0.363151427 | 0.716791 | 0.75134 | -7.27659309 |
| DYNC1H | -0.024487075 | 6.23655513 | -0.36308502 | 0.716841 | 0.75135 | -7.27661718 |
| SRD5A2 | 0.00493837 | 0.05094893 | 0.36234772 | 0.717391 | 0.75184 | -7.27688442 |
| HIP1 | 0.038919809 | 5.1413196 | 0.362343923 | 0.717394 | 0.75184 | -7.27688579 |
| CDKN3 | -0.025096471 | 1.21925606 | -0.361633121 | 0.717924 | 0.75235 | -7.27714291 |
| SLX1A | 0.00261354 | 0.03226331 | 0.361227065 | 0.718227 | 0.75262 | -7.27728956 |
| ARFGEF | -0.032008589 | 4.60123142 | -0.360805006 | 0.718543 | 0.7529 | -7.27744182 |
| RGPD8 | 0.014449191 | 0.62047406 | 0.360130362 | 0.719046 | 0.75334 | -7.27768483 |
| SEPTIN3 | -0.03802859 | 1.8357866 | -0.360128242 | 0.719048 | 0.75334 | -7.27768559 |
| NLRP1 | -0.03803863 | 3.58433262 | -0.359981636 | 0.719157 | 0.75341 | -7.27773834 |
| P2RY11 | -0.027080913 | 3.26162068 | -0.359314681 | 0.719656 | 0.75388 | -7.27797803 |
| EPO | -0.00497034 | 0.08461839 | -0.358718874 | 0.720101 | 0.7543 | -7.27819178 |
| ATF7IP | -0.027961407 | 4.82307422 | -0.357617765 | 0.720924 | 0.75511 | -7.27858588 |
| TOMM34 | -0.027592231 | 6.31291536 | -0.357569338 | 0.72096 | 0.75511 | -7.27860318 |
| TMEM21 | 0.01242966 | 0.33857283 | 0.357134454 | 0.721285 | 0.7554 | -7.27875848 |
| TNKS | -0.029094992 | 3.76791292 | -0.357044747 | 0.721352 | 0.75542 | -7.27879049 |
| CACNA1 | 0.015492373 | 0.11608885 | 0.356479176 | 0.721775 | 0.75582 | -7.27899212 |
| TP53INP | 0.030578151 | 4.76204728 | 0.356423998 | 0.721816 | 0.75582 | -7.27901177 |
| APOBEC | -0.022515197 | 2.94957543 | -0.355877387 | 0.722225 | 0.7562 | -7.27920631 |

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| TTF2 | -0.022664184 | 2.20137587 | -0.355430967 | 0.722559 | 0.7565 | -7.27936496 |
| CRYBG3 | -0.061280234 | 3.46764219 | -0.354946454 | 0.722922 | 0.75683 | -7.27953694 |
| TNFAIP8 | -0.032225237 | 1.52320627 | -0.354656579 | 0.723139 | 0.75701 | -7.27963971 |
| SLC31A2 | 0.022830152 | 1.10509378 | 0.35355929 | 0.72396 | 0.75783 | -7.28002799 |
| CALCOC | 0.029448374 | 5.45966795 | 0.35310046 | 0.724303 | 0.75814 | -7.28018999 |
| CA3 | -0.034677806 | 2.5187222 | -0.352787856 | 0.724538 | 0.75834 | -7.28030025 |
| ARR3 | -0.01461946 | 0.72817512 | -0.349915335 | 0.72669 | 0.76054 | -7.2813088 |
| NOX1 | -0.019407304 | 1.21763903 | -0.349637389 | 0.726898 | 0.76072 | -7.28140595 |
| FOXD1 | 0.01334334 | 0.20716321 | 0.349507619 | 0.726995 | 0.76077 | -7.28145128 |
| TMC5 | 0.026118153 | 1.00587419 | 0.348552295 | 0.727712 | 0.76146 | -7.28178449 |
| NCCRP1 | 0.038339294 | 1.05727147 | 0.348508513 | 0.727745 | 0.76146 | -7.28179974 |
| PCDHGA | -0.045009595 | 1.72492605 | -0.348323071 | 0.727884 | 0.76156 | -7.2818643 |
| CALB1 | -0.006822847 | 0.1105823 | -0.347995675 | 0.728129 | 0.76177 | -7.28197821 |
| ZNF485 | -0.016561209 | 1.60777474 | -0.346971354 | 0.728898 | 0.76253 | -7.2823339 |
| NEUROD | -0.002285528 | 0.02892919 | -0.346744383 | 0.729068 | 0.76266 | -7.28241257 |
| SAG | 0.001841317 | 0.01495341 | 0.346655717 | 0.729135 | 0.76268 | -7.28244329 |
| LTK | 0.030247172 | 0.8900745 | 0.346022059 | 0.72961 | 0.76313 | -7.2826626 |
| RAD51AI | -0.024207242 | 1.89452017 | -0.344785709 | 0.730538 | 0.76405 | -7.28308934 |
| ZNF705A | -0.0029716 | 0.02102064 | -0.344733295 | 0.730578 | 0.76405 | -7.2831074 |
| MAGEE2 | -0.016359134 | 0.40814423 | -0.343964842 | 0.731155 | 0.7646 | -7.28337184 |
| ARHGAF | 0.03405098 | 5.41037218 | 0.343275562 | 0.731673 | 0.7651 | -7.28360852 |
| RAVER1 | -0.035024478 | 3.72952468 | -0.342920838 | 0.731939 | 0.76533 | -7.28373015 |
| KRTAP5 | -0.020035453 | 0.47453393 | -0.342628996 | 0.732158 | 0.76551 | -7.28383011 |
| SNX9 | -0.024198704 | 5.79594802 | -0.34238032 | 0.732345 | 0.76566 | -7.28391523 |
| GCNA | -0.030547477 | 1.7046051 | -0.342182009 | 0.732494 | 0.76577 | -7.28398306 |
| EDA2R | 0.037505716 | 3.68825215 | 0.342088631 | 0.732565 | 0.7658 | -7.28401499 |
| ACTN2 | 0.020378932 | 0.16800125 | 0.341662694 | 0.732885 | 0.76608 | -7.28416051 |
| POU3F2 | -0.002177807 | 0.03468464 | -0.341099761 | 0.733308 | 0.76648 | -7.28435255 |
| DOK4 | -0.028216084 | 4.33805439 | -0.34053116 | 0.733736 | 0.76688 | -7.28454621 |
| WRN | -0.025944418 | 2.55887811 | -0.340382622 | 0.733847 | 0.76695 | -7.28459674 |
| MYSM1 | 0.030282212 | 3.1479591 | 0.339548326 | 0.734475 | 0.76744 | -7.28488018 |
| SF3A2 | 0.02352715 | 5.97176585 | 0.339523231 | 0.734494 | 0.76744 | -7.2848887 |
| ADAMTS | -0.045457007 | 4.17336104 | -0.339515954 | 0.734499 | 0.76744 | -7.28489117 |
| PALB2 | -0.02161748 | 3.05181397 | -0.339513365 | 0.734501 | 0.76744 | -7.28489205 |
| PCDHA9 | -0.003058423 | 0.05779429 | -0.339219445 | 0.734722 | 0.76758 | -7.28499173 |
| RECQL | 0.039882398 | 3.56670385 | 0.33921775 | 0.734724 | 0.76758 | -7.2849923 |
| MYCBP2 | -0.031575223 | 3.66811206 | -0.338679716 | 0.735128 | 0.76795 | -7.28517454 |
| HOXB7 | -0.028407653 | 1.09365228 | -0.338555109 | 0.735222 | 0.76801 | -7.28521671 |
| PLEKHG | 0.034962543 | 3.25175908 | 0.338351998 | 0.735375 | 0.76812 | -7.28528541 |
| MAFK | -0.031504576 | 3.97771185 | -0.338270074 | 0.735437 | 0.76813 | -7.28531311 |

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| WDR26 | -0.026303058 | 5.2093409 | -0.338204275 | 0.735486 | 0.76814 | -7.28533535 |
| TOR4A | 0.033956487 | 4.35849343 | 0.335364828 | 0.737624 | 0.77032 | -7.28629099 |
| ARHGEF | 0.018720612 | 1.38003892 | 0.334022389 | 0.738636 | 0.77133 | -7.28674 |
| FARP1 | 0.02913222 | 3.7389268 | 0.333630527 | 0.738931 | 0.77159 | -7.28687073 |
| TREML4 | -0.006839379 | 0.05948015 | -0.33355424 | 0.738989 | 0.77161 | -7.28689616 |
| NPAT | 0.027657406 | 3.16951479 | 0.333417211 | 0.739092 | 0.77167 | -7.28694183 |
| SNAI2 | -0.03702673 | 2.71577244 | -0.333290006 | 0.739188 | 0.77172 | -7.2869842 |
| CCDC18 | 0.018339779 | 0.9658749 | 0.333134754 | 0.739305 | 0.77178 | -7.2870359 |
| IL5 | 0.004463359 | 0.1113696 | 0.333091938 | 0.739337 | 0.77178 | -7.28705016 |
| PRKG2 | -0.013103012 | 0.26640563 | -0.332711949 | 0.739624 | 0.77203 | -7.28717657 |
| ZFC3H1 | -0.026574668 | 3.50907269 | -0.332216425 | 0.739997 | 0.77238 | -7.28734121 |
| TAS2R2( | -0.016655526 | 0.84771868 | -0.331272862 | 0.740709 | 0.77307 | -7.28765403 |
| TSBP1 | 0.003757025 | 0.0535304 | 0.331196692 | 0.740767 | 0.77308 | -7.28767924 |
| RPS4X | -0.026046631 | 11.0452959 | -0.330837005 | 0.741038 | 0.77332 | -7.28779822 |
| HTD2 | 0.00429138 | 0.11776625 | 0.330350395 | 0.741405 | 0.77365 | -7.28795899 |
| LRRC8A | 0.028089544 | 5.78906268 | 0.330266388 | 0.741469 | 0.77367 | -7.28798672 |
| PDE3A | 0.024840966 | 1.5352784 | 0.329936607 | 0.741717 | 0.77388 | -7.28809551 |
| CLCN1 | -0.006822515 | 0.14386531 | -0.329445432 | 0.742088 | 0.77422 | -7.28825734 |
| IRF7 | -0.030965735 | 4.46275115 | -0.329224394 | 0.742255 | 0.77435 | -7.28833009 |
| DDHD1 | 0.01917502 | 1.92292304 | 0.328922839 | 0.742483 | 0.77454 | -7.28842926 |
| SIX4 | 0.026187238 | 1.66566924 | 0.328738779 | 0.742622 | 0.77464 | -7.28848975 |
| MATK | 0.029516529 | 1.5652949 | 0.327907893 | 0.743249 | 0.77524 | -7.28876237 |
| EPB41L4 | 0.030377603 | 2.99810892 | 0.327787678 | 0.74334 | 0.77526 | -7.28880176 |
| BDP1 | -0.028385051 | 3.39358286 | -0.327762866 | 0.743359 | 0.77526 | -7.28880988 |
| HIST1H1 | -0.012237036 | 0.18840555 | -0.327393887 | 0.743637 | 0.77551 | -7.28893068 |
| ARHGAF | -0.018947333 | 1.09246196 | -0.326071316 | 0.744637 | 0.7765 | -7.28936253 |
| FMR1 | -0.025386361 | 4.88291599 | -0.325552591 | 0.745029 | 0.77686 | -7.28953143 |
| FNBP4 | -0.029186662 | 4.65740306 | -0.32547264 | 0.745089 | 0.77688 | -7.28955743 |
| LEP | 0.008344621 | 0.07740126 | 0.325161416 | 0.745324 | 0.77703 | -7.28965862 |
| STX3 | 0.025965196 | 4.92327202 | 0.32515214 | 0.745331 | 0.77703 | -7.28966163 |
| CD200 | -0.032069596 | 5.00291466 | -0.324645931 | 0.745714 | 0.77736 | -7.28982599 |
| GGTLC3 | -0.013617648 | 0.21513958 | -0.3246161 | 0.745737 | 0.77736 | -7.28983567 |
| SSPN | -0.041689464 | 4.09959408 | -0.324536081 | 0.745797 | 0.77737 | -7.28986163 |
| OCIAD2 | -0.024750226 | 6.60278498 | -0.324478355 | 0.745841 | 0.77737 | -7.28988035 |
| PHC3 | 0.027366336 | 3.13574563 | 0.324328547 | 0.745954 | 0.7774 | -7.28992891 |
| SGTB | -0.023979945 | 2.25678397 | -0.324326092 | 0.745956 | 0.7774 | -7.28992971 |
| CTC1 | 0.023401193 | 3.8054651 | 0.324176255 | 0.746069 | 0.77747 | -7.28997826 |
| CAPN6 | -0.047518553 | 1.0353008 | -0.32386037 | 0.746308 | 0.77767 | -7.29008055 |
| CD160 | 0.01029979 | 0.39326335 | 0.323489792 | 0.746588 | 0.77791 | -7.29020042 |
| TJP2 | -0.031720355 | 5.93760304 | -0.322156275 | 0.747597 | 0.77892 | -7.29063064 |

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| AK5 | -0.012656949 | 0.25605479 | -0.321590345 | 0.748025 | 0.77932 | -7.29081269 |
| ZKSCAN | -0.022121562 | 4.37847256 | -0.320559383 | 0.748806 | 0.78008 | -7.29114349 |
| MORC4 | 0.029014653 | 3.91970575 | 0.320490504 | 0.748858 | 0.78009 | -7.29116556 |
| MCHR1 | 0.010337101 | 0.06889636 | 0.320405408 | 0.748922 | 0.78011 | -7.29119281 |
| C1orf54 | 0.021924978 | 4.43539167 | 0.320173691 | 0.749098 | 0.78024 | -7.29126698 |
| MBP | 0.027056051 | 3.49010965 | 0.32005642 | 0.749186 | 0.78026 | -7.2913045 |
| HECA | -0.019907851 | 4.07278633 | -0.320026735 | 0.749209 | 0.78026 | -7.29131399 |
| BICD1 | 0.026260959 | 2.9653667 | 0.319897403 | 0.749307 | 0.78032 | -7.29135535 |
| ASXL2 | -0.028636792 | 3.41540512 | -0.319203502 | 0.749832 | 0.78081 | -7.29157695 |
| SGCA | -0.025772094 | 1.02901033 | -0.31903932 | 0.749957 | 0.7809 | -7.29162931 |
| BTN1A1 | 0.006143277 | 0.12123547 | 0.318714548 | 0.750203 | 0.78107 | -7.29173281 |
| TLN1 | -0.024477989 | 6.6352282 | -0.318700172 | 0.750214 | 0.78107 | -7.29173738 |
| NOTO | 0.002592194 | 0.03713633 | 0.318053214 | 0.750704 | 0.78153 | -7.29194323 |
| ZNF236 | -0.021907641 | 2.3896456 | -0.317813909 | 0.750885 | 0.78167 | -7.29201927 |
| CCDC42 | -0.009316187 | 0.22370818 | -0.317258976 | 0.751305 | 0.78206 | -7.29219537 |
| SRCAP | -0.019092103 | 5.01875103 | -0.317073476 | 0.751446 | 0.78216 | -7.29225417 |
| OR7D2 | 0.016896877 | 0.22450986 | 0.316380284 | 0.751971 | 0.78266 | -7.29247359 |
| P4HA2 | 0.031996542 | 4.82301925 | 0.315397964 | 0.752716 | 0.78335 | -7.2927837 |
| IRX2 | 0.060364275 | 1.94526526 | 0.315383574 | 0.752727 | 0.78335 | -7.29278824 |
| ANKRD3 | 0.005179737 | 0.0468818 | 0.315241641 | 0.752835 | 0.78341 | -7.29283296 |
| SOX2 | -0.004383792 | 0.08182554 | -0.314893642 | 0.753099 | 0.78363 | -7.29294254 |
| BMPER | 0.027626069 | 0.6129326 | 0.314839224 | 0.75314 | 0.78363 | -7.29295966 |
| TSPYL6 | -0.002008677 | 0.02489364 | -0.314000714 | 0.753776 | 0.78425 | -7.29322315 |
| BLOC1S | -0.009857405 | 0.37199337 | -0.313860613 | 0.753882 | 0.78431 | -7.2932671 |
| TRPC7 | -0.006140898 | 0.04927008 | -0.313128278 | 0.754438 | 0.78484 | -7.29349655 |
| ENAH | -0.026352632 | 3.57688853 | -0.311750187 | 0.755484 | 0.78588 | -7.29392686 |
| ZNF8 | -0.018743872 | 2.08218303 | -0.310512556 | 0.756424 | 0.78681 | -7.29431169 |
| KIFC2 | -0.028400141 | 3.04075669 | -0.310269479 | 0.756608 | 0.78695 | -7.2943871 |
| CCNE2 | 0.016239066 | 0.9982053 | 0.310169372 | 0.756684 | 0.78698 | -7.29441813 |
| ASCL1 | 0.010642533 | 0.11996282 | 0.309873346 | 0.756909 | 0.78717 | -7.29450985 |
| KIF18A | 0.022894289 | 1.69818668 | 0.309528254 | 0.757171 | 0.78739 | -7.29461666 |
| CRLF3 | 0.019329382 | 3.10694267 | 0.309221063 | 0.757405 | 0.78759 | -7.29471164 |
| GUCY1A | 0.032342342 | 2.84066038 | 0.308872658 | 0.757669 | 0.78781 | -7.29481925 |
| SKA1 | 0.016109487 | 0.73193094 | 0.308776895 | 0.757742 | 0.78784 | -7.29484881 |
| CDRT4 | -0.021597979 | 1.03501296 | -0.308618737 | 0.757862 | 0.78792 | -7.2948976 |
| PRKY | 0.027489102 | 0.43347837 | 0.307477629 | 0.75873 | 0.78877 | -7.29524891 |
| WNT6 | 0.017325308 | 0.45581571 | 0.307320743 | 0.758849 | 0.78882 | -7.29529711 |
| BMP2K | 0.021842301 | 1.76938205 | 0.307299257 | 0.758865 | 0.78882 | -7.29530371 |
| CA11 | -0.037637794 | 6.0633219 | -0.307078702 | 0.759033 | 0.78894 | -7.29537142 |
| SH3D21 | -0.04662717 | 3.8824131 | -0.306949491 | 0.759131 | 0.789 | -7.29541107 |

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| MYBL1 | 0.013831451 | 0.91195493 | 0.306653745 | 0.759356 | 0.78918 | -7.29550175 |
| PXN | 0.019524994 | 5.99759261 | 0.306557957 | 0.759429 | 0.78921 | -7.2955311 |
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| DENND2 | -0.016945154 | 4.31980754 | -0.305987696 | 0.759862 | 0.78951 | -7.29570565 |
| JADE3 | 0.02399557 | 3.3371318 | 0.304834122 | 0.76074 | 0.79038 | -7.29605776 |
| DLX2 | -0.006651973 | 0.1532138 | -0.304721829 | 0.760825 | 0.79038 | -7.29609196 |
| NBPF10 | -0.008029504 | 0.44443306 | -0.304698249 | 0.760843 | 0.79038 | -7.29609915 |
| CHD4 | -0.023247662 | 7.3914873 | -0.304644462 | 0.760884 | 0.79038 | -7.29611552 |
| FEM1C | -0.02065975 | 3.76436879 | -0.303999819 | 0.761375 | 0.79084 | -7.29631159 |
| TYMS | 0.029003879 | 3.71872882 | 0.30390282 | 0.761449 | 0.79087 | -7.29634105 |
| RBP1 | 0.046897434 | 3.15417211 | 0.303744844 | 0.761569 | 0.79095 | -7.29638902 |
| FMO5 | -0.033986275 | 1.82062813 | -0.303395654 | 0.761835 | 0.79118 | -7.29649496 |
| KIDINS2 | -0.028964337 | 4.72260094 | -0.303224924 | 0.761965 | 0.79126 | -7.29654672 |
| GRID1 | 0.038545858 | 4.01987032 | 0.303165448 | 0.76201 | 0.79126 | -7.29656474 |
| SLC7A8 | -0.034599623 | 5.75044011 | -0.302965309 | 0.762162 | 0.79137 | -7.29662536 |
| DDX4 | 0.00196268 | 0.02027212 | 0.301768201 | 0.763074 | 0.79227 | -7.29698712 |
| AIRE | 0.005853556 | 0.05059551 | 0.301375735 | 0.763372 | 0.79253 | -7.2971054 |
| TNFRSF' | 0.029049211 | 2.93648193 | 0.299833643 | 0.764547 | 0.7937 | -7.2975687 |
| GABRA1 | 0.003526554 | 0.05091184 | 0.299694432 | 0.764653 | 0.79376 | -7.2976104 |
| ABHD12I | 0.006883938 | 0.19242249 | 0.299458897 | 0.764833 | 0.7939 | -7.29768093 |
| CASP2 | -0.018027608 | 3.55424558 | -0.299236788 | 0.765002 | 0.79403 | -7.29774737 |
| CLDN3 | -0.032912934 | 8.72895445 | -0.299176175 | 0.765048 | 0.79403 | -7.2977655 |
| RBMXL2 | -0.00362409 | 0.05290668 | -0.297378109 | 0.766419 | 0.7954 | -7.29830152 |
| PPP1R9I | 0.018171148 | 6.12858006 | 0.296425313 | 0.767145 | 0.79611 | -7.29858424 |
| SGSM1 | -0.02591702 | 2.2285708 | -0.296203948 | 0.767314 | 0.79618 | -7.2986498 |
| CYP26C' | 0.00870398 | 0.25820423 | 0.296203011 | 0.767315 | 0.79618 | -7.29865008 |
| KHNYN | 0.022892668 | 4.245816 | 0.295844405 | 0.767589 | 0.79642 | -7.29875617 |
| ADA2 | 0.050486439 | 4.57729131 | 0.295325326 | 0.767985 | 0.79678 | -7.29890952 |
| SFTPA1 | 0.093674999 | 1.84243667 | 0.294902003 | 0.768308 | 0.79707 | -7.29903438 |
| AKAP11 | 0.027499166 | 4.16027086 | 0.294356074 | 0.768724 | 0.79745 | -7.29919513 |
| CEP135 | -0.017405058 | 1.75497749 | -0.293338034 | 0.769501 | 0.79821 | -7.29949411 |
| BAAT | 0.002573814 | 0.04236303 | 0.29254333 | 0.770108 | 0.79879 | -7.29972678 |
| KCTD4 | -0.001987965 | 0.03038623 | -0.291957776 | 0.770555 | 0.7992 | -7.29989782 |
| LNPEP | -0.022593645 | 3.84262341 | -0.291846439 | 0.77064 | 0.79924 | -7.2999303 |
| KIF26B | -0.024845451 | 1.50519844 | -0.291669461 | 0.770775 | 0.79933 | -7.29998191 |
| POLH | 0.025121306 | 3.8958935 | 0.290929693 | 0.77134 | 0.79987 | -7.30019728 |
| PON2 | 0.028060554 | 5.70767981 | 0.290700315 | 0.771516 | 0.8 | -7.30026395 |
| C17orf99 | 0.006311959 | 0.10704827 | 0.289557159 | 0.772389 | 0.80086 | -7.30059543 |
| NTAN1 | -0.017668273 | 3.50491462 | -0.28911587 | 0.772726 | 0.80116 | -7.30072304 |

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| BATF2 | -0.035928042 | 2.3401306 | -0.288549336 | 0.77316 | 0.80156 | -7.30088658 |
| TXNDC1 | -0.020221651 | 2.38237756 | -0.288449355 | 0.773236 | 0.80159 | -7.30091541 |
| COL4A4 | 0.030309962 | 3.59023223 | 0.288218575 | 0.773412 | 0.80173 | -7.30098192 |
| SLC19A2 | -0.027514255 | 4.0168155 | -0.288028827 | 0.773558 | 0.80179 | -7.30103656 |
| ANKRD2 | -0.022090418 | 4.02108204 | -0.288020186 | 0.773564 | 0.80179 | -7.30103905 |
| ARNT2 | -0.036506888 | 3.9175561 | -0.28790083 | 0.773655 | 0.80183 | -7.3010734 |
| HACE1 | -0.018957172 | 2.10199047 | -0.287416352 | 0.774026 | 0.80217 | -7.30121269 |
| HSD17B | 0.0032339 | 0.02453194 | 0.287210627 | 0.774183 | 0.80228 | -7.30127176 |
| CNIH2 | -0.013868492 | 0.81729308 | -0.286278755 | 0.774896 | 0.80297 | -7.30153883 |
| ASIP | -0.027128812 | 1.15460198 | -0.286043762 | 0.775076 | 0.80311 | -7.30160604 |
| GTF2H4 | 0.020446108 | 2.38785311 | 0.284793716 | 0.776032 | 0.80405 | -7.30196263 |
| ANAPC1 | -0.017311687 | 1.8794325 | -0.283081097 | 0.777343 | 0.80536 | -7.30244864 |
| PIF1 | -0.012493891 | 0.51714777 | -0.282077597 | 0.778112 | 0.80611 | -7.30273206 |
| CNGB3 | -0.001739164 | 0.02667485 | -0.281265269 | 0.778734 | 0.8067 | -7.30296075 |
| FANCB | 0.006829224 | 0.40892807 | 0.281148426 | 0.778823 | 0.80674 | -7.30299359 |
| EFR3A | -0.026308198 | 6.02977067 | -0.280911969 | 0.779005 | 0.80684 | -7.30306 |
| PPP1R3 | -0.026900935 | 1.30755439 | -0.28090713 | 0.779008 | 0.80684 | -7.30306136 |
| SORL1 | -0.035423578 | 3.70750748 | -0.280375477 | 0.779416 | 0.80721 | -7.30321049 |
| CCNL2 | 0.030498331 | 5.5005186 | 0.279062139 | 0.780422 | 0.8082 | -7.30357766 |
| PCDHB3 | -0.014720474 | 0.59456344 | -0.278918369 | 0.780532 | 0.80827 | -7.30361775 |
| LILRB5 | 0.015841133 | 0.6834067 | 0.278517579 | 0.78084 | 0.80852 | -7.3037294 |
| APCDD1 | 0.027847847 | 2.48684096 | 0.278470256 | 0.780876 | 0.80852 | -7.30374257 |
| CRMP1 | -0.01805378 | 2.96073183 | -0.277918327 | 0.781299 | 0.80891 | -7.30389603 |
| PTP4A1 | -0.025126697 | 6.02300149 | -0.277635295 | 0.781516 | 0.80909 | -7.30397461 |
| FAT2 | -0.023158668 | 0.74852184 | -0.275243385 | 0.783351 | 0.81092 | -7.30463549 |
| SLC30A3 | -0.047755571 | 1.09552587 | -0.27514893 | 0.783424 | 0.81092 | -7.30466147 |
| CAD | 0.023200121 | 4.04300214 | 0.275137709 | 0.783432 | 0.81092 | -7.30466455 |
| LHB | -0.018610231 | 0.55397227 | -0.274877833 | 0.783632 | 0.81108 | -7.30473598 |
| RBPJ | -0.014846381 | 4.7909614 | -0.274491229 | 0.783928 | 0.81129 | -7.30484212 |
| SLC39A1 | -0.034730912 | 5.77069512 | -0.274483535 | 0.783934 | 0.81129 | -7.30484423 |
| GLCE | 0.024834387 | 3.12838393 | 0.27422125 | 0.784136 | 0.81145 | -7.30491615 |
| EGR3 | -0.048102746 | 2.64439679 | -0.273536698 | 0.784661 | 0.81195 | -7.30510354 |
| MREG | -0.025823859 | 3.77869017 | -0.272790247 | 0.785234 | 0.81249 | -7.30530734 |
| EFS | -0.034268456 | 3.48746797 | -0.272581684 | 0.785394 | 0.81261 | -7.30536418 |
| GPR137 | -0.016100347 | 0.98936617 | -0.272421655 | 0.785517 | 0.81268 | -7.30540777 |
| TAB3 | 0.019008088 | 2.98045161 | 0.272363376 | 0.785562 | 0.81268 | -7.30542364 |
| TLCD1 | -0.022910865 | 4.37722661 | -0.272074254 | 0.785784 | 0.81286 | -7.3055023 |
| RRP1B | 0.016917852 | 4.18866667 | 0.271295672 | 0.786382 | 0.81343 | -7.30571372 |
| CAPN2 | 0.021530301 | 6.4755414 | 0.27053801 | 0.786964 | 0.81398 | -7.30591888 |
| BICDL2 | -0.027405672 | 3.70860018 | -0.26985656 | 0.787488 | 0.81448 | -7.30610291 |

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| GPR156 | -0.005040507 | 0.15111257 | -0.26755615 | 0.789256 | 0.81625 | -7.30672074 |
| DENND1 | -0.022589631 | 3.90367509 | -0.26688685 | 0.789771 | 0.81674 | -7.3068995 |
| TNFRSF | -0.028695908 | 4.42958133 | -0.266199486 | 0.7903 | 0.81723 | -7.30708262 |
| FLCN | 0.019544125 | 3.72395111 | 0.266107944 | 0.79037 | 0.81726 | -7.30710697 |
| NTSR1 | 0.00286498 | 0.04620371 | 0.264165105 | 0.791865 | 0.81875 | -7.30762183 |
| PARD6B | -0.024471297 | 3.52515488 | -0.263903158 | 0.792067 | 0.81891 | -7.30769096 |
| GPR35 | 0.012934638 | 0.71367889 | 0.263523962 | 0.792359 | 0.81916 | -7.30779091 |
| MAP3K1 | -0.002838085 | 0.05672256 | -0.262900309 | 0.792839 | 0.81961 | -7.30795498 |
| MND1 | -0.017881284 | 1.47741265 | -0.262000882 | 0.793531 | 0.82028 | -7.30819092 |
| SLC8A3 | 0.002687884 | 0.03078713 | 0.261672099 | 0.793784 | 0.82049 | -7.30827697 |
| IZUMO2 | 0.011883877 | 0.23208642 | 0.26105061 | 0.794263 | 0.82093 | -7.30843932 |
| TMC1 | 0.004136097 | 0.09756387 | 0.260944882 | 0.794345 | 0.82097 | -7.3084669 |
| CCIN | 0.005991998 | 0.1951483 | 0.260652023 | 0.79457 | 0.82115 | -7.30854324 |
| MYO5C | -0.023223114 | 4.40345098 | -0.259568008 | 0.795405 | 0.82196 | -7.30882507 |
| GLI1 | -0.0125939 | 0.36941694 | -0.259287502 | 0.795622 | 0.82214 | -7.3088978 |
| AICDA | -0.010677194 | 0.10966657 | -0.259123719 | 0.795748 | 0.82218 | -7.30894024 |
| CHML | -0.020539245 | 2.62888424 | -0.259107144 | 0.795761 | 0.82218 | -7.30894453 |
| TACC1 | 0.024743909 | 4.54618947 | 0.258772788 | 0.796018 | 0.8224 | -7.30903106 |
| MAP7D2 | -0.017890708 | 0.56594774 | -0.2571068 | 0.797303 | 0.82367 | -7.30946058 |
| B4GALN | -0.017595818 | 0.30009888 | -0.257022278 | 0.797368 | 0.82369 | -7.3094823 |
| GRIA3 | 0.028503006 | 0.49825503 | 0.255181056 | 0.798788 | 0.82511 | -7.30995361 |
| MAST1 | -0.009891726 | 0.35401431 | -0.254139968 | 0.799591 | 0.82584 | -7.31021861 |
| SRRM2 | -0.022118218 | 6.82712446 | -0.254135641 | 0.799595 | 0.82584 | -7.31021971 |
| KIF2A | -0.025435624 | 3.29238424 | -0.253375588 | 0.800181 | 0.82639 | -7.31041249 |
| DNAH5 | 0.017236257 | 0.60519878 | 0.252465442 | 0.800884 | 0.82707 | -7.31064257 |
| KIF27 | 0.021508473 | 2.26550029 | 0.252174309 | 0.801109 | 0.82725 | -7.310716 |
| MSMO1 | -0.021542621 | 5.55021973 | -0.25133951 | 0.801753 | 0.82787 | -7.31092607 |
| NAF1 | -0.01894214 | 2.95163549 | -0.251096382 | 0.801941 | 0.82801 | -7.31098711 |
| AKAP5 | 0.013207765 | 0.98612503 | 0.250920465 | 0.802077 | 0.8281 | -7.31103125 |
| SLC4A9 | 0.010017466 | 0.20462524 | 0.250667423 | 0.802272 | 0.82821 | -7.31109468 |
| ITIH2 | 0.007617968 | 0.33397647 | 0.250652992 | 0.802283 | 0.82821 | -7.3110983 |
| CIC | 0.019798085 | 5.18219407 | 0.250010179 | 0.80278 | 0.82867 | -7.31125914 |
| ASB11 | 0.003293309 | 0.03486946 | 0.249908953 | 0.802858 | 0.8287 | -7.31128443 |
| PCDHGE | -0.020922564 | 0.71640426 | -0.24984091 | 0.802911 | 0.82871 | -7.31130142 |
| EPN2 | -0.017151221 | 3.82207088 | -0.248682313 | 0.803806 | 0.82958 | -7.31159008 |
| C5orf46 | 0.013337346 | 0.30276011 | 0.248378591 | 0.80404 | 0.82976 | -7.31166553 |
| NIN | 0.017174884 | 2.82350663 | 0.248338564 | 0.804071 | 0.82976 | -7.31167547 |
| ZNF81 | -0.01536146 | 1.38914066 | -0.247950928 | 0.804371 | 0.83001 | -7.31177161 |
| ACAP1 | -0.020303046 | 2.5882452 | -0.247892265 | 0.804416 | 0.83001 | -7.31178615 |
| FMO2 | 0.024140969 | 0.97785038 | 0.247422342 | 0.80478 | 0.83033 | -7.31190248 |

| PKD2L1 | 0.01036171 | 0.23810532 | 0.246225123 | 0.805705 | 0.83124 | -7.31219784 |
|---|---|---|---|---|---|---|
| ABRAXA | -0.016312789 | 2.20969197 | -0.246050848 | 0.80584 | 0.83133 | -7.31224072 |
| SLC22A1 | 0.002082121 | 0.04983011 | 0.24551901 | 0.806251 | 0.8317 | -7.31237138 |
| ST6GALI | -0.026656931 | 3.61402401 | -0.24538751 | 0.806353 | 0.83176 | -7.31240364 |
| SYNPR | 0.035988405 | 0.81331748 | 0.245173314 | 0.806518 | 0.83188 | -7.31245615 |
| MAPK15 | 0.037593447 | 3.32735311 | 0.244911776 | 0.806721 | 0.83203 | -7.31252021 |
| TUT7 | 0.01657016 | 3.42225412 | 0.244769026 | 0.806831 | 0.8321 | -7.31255515 |
| EFNA1 | -0.021582636 | 6.50060931 | -0.24460958 | 0.806955 | 0.83217 | -7.31259415 |
| NUTM2G | -0.003878737 | 0.18615484 | -0.243251299 | 0.808005 | 0.83321 | -7.31292532 |
| KIAA121( | -0.001843741 | 0.0163957 | -0.242780929 | 0.808369 | 0.83353 | -7.31303958 |
| NLGN3 | -0.010701032 | 0.47265378 | -0.242404199 | 0.808661 | 0.83378 | -7.31313093 |
| ANKS6 | -0.019544232 | 4.5789771 | -0.24077144 | 0.809925 | 0.83502 | -7.3135252 |
| GSTCD | 0.020276131 | 2.41813944 | 0.240721204 | 0.809964 | 0.83502 | -7.31353729 |
| ZNF703 | -0.017647632 | 3.71963411 | -0.240439704 | 0.810182 | 0.8352 | -7.31360499 |
| PIK3R1 | -0.02390896 | 4.35626108 | -0.240135198 | 0.810417 | 0.83536 | -7.31367812 |
| AQP5 | -0.061870374 | 3.67016317 | -0.240109064 | 0.810438 | 0.83536 | -7.31368439 |
| NR4A2 | 0.039472977 | 3.4925226 | 0.239868873 | 0.810624 | 0.8355 | -7.31374201 |
| CES4A | 0.026792706 | 2.78267203 | 0.238716566 | 0.811516 | 0.83637 | -7.31401763 |
| CCNL1 | -0.022457512 | 4.60490192 | -0.238477802 | 0.811701 | 0.83651 | -7.31407457 |
| ABCC2 | -0.00423613 | 0.23240171 | -0.237675803 | 0.812322 | 0.8371 | -7.31426542 |
| ZNF141 | 0.015928083 | 2.34277409 | 0.237519362 | 0.812444 | 0.83717 | -7.31430258 |
| BGLAP | 0.021074355 | 1.48774261 | 0.236744185 | 0.813044 | 0.83773 | -7.31448632 |
| DEF6 | 0.025389235 | 4.00357758 | 0.236694011 | 0.813083 | 0.83773 | -7.31449819 |
| ISY1-RAI | 0.00140636 | 0.02592416 | 0.235964634 | 0.813649 | 0.83826 | -7.31467048 |
| TMEM19 | -0.015035883 | 0.20222466 | -0.23587047 | 0.813722 | 0.83829 | -7.31469269 |
| ECT2 | -0.017733573 | 2.28864337 | -0.234189076 | 0.815025 | 0.83958 | -7.31508769 |
| EIF4EBP | 0.022078853 | 4.48313779 | 0.233962626 | 0.815201 | 0.83971 | -7.31514068 |
| SNAPC2 | 0.017060071 | 5.01795028 | 0.233873127 | 0.81527 | 0.83973 | -7.3151616 |
| C11orf42 | -0.008259043 | 0.35348586 | -0.233737044 | 0.815376 | 0.83979 | -7.31519341 |
| RAB33A | 0.017341 | 1.08953224 | 0.233427851 | 0.815616 | 0.83998 | -7.3152656 |
| MAPK8IF | 0.022453789 | 3.80985187 | 0.231922028 | 0.816784 | 0.84113 | -7.31561581 |
| ZNF738 | -0.014944528 | 2.09915185 | -0.230877345 | 0.817594 | 0.84192 | -7.31585745 |
| RIPPLY1 | 0.014210506 | 0.44043831 | 0.230675927 | 0.817751 | 0.84203 | -7.31590391 |
| C10orf11 | -0.006752346 | 0.15494732 | -0.230115252 | 0.818186 | 0.84242 | -7.31603303 |
| OSR1 | 0.01467044 | 0.49657176 | 0.22998516 | 0.818287 | 0.84248 | -7.31606295 |
| ASAH2 | 0.007641423 | 0.42165092 | 0.229755638 | 0.818465 | 0.84258 | -7.31611568 |
| PITPNM: | -0.021967646 | 2.35215815 | -0.229623414 | 0.818568 | 0.84258 | -7.31614604 |
| HP | -0.024085114 | 0.53248494 | -0.229605964 | 0.818581 | 0.84258 | -7.31615005 |
| SLC22A2 | -0.002280742 | 0.0268414 | -0.229573525 | 0.818606 | 0.84258 | -7.31615749 |
| MYO1C | 0.016297489 | 6.5429474 | 0.229530613 | 0.81864 | 0.84258 | -7.31616734 |

| ZNF213 | -0.012689983 | 3.78699497 | -0.229398383 | 0.818742 | 0.84264 | -7.31619767 |
|--------|-------------|------------|--------------|----------|---------|-------------|
| PLA1A | -0.027156057 | 2.32476703 | -0.229013822 | 0.819041 | 0.84289 | -7.31628577 |
| GPR85 | -0.010910127 | 0.46158784 | -0.228337872 | 0.819566 | 0.84338 | -7.31644028 |
| LCN12 | -0.034160764 | 6.73606932 | -0.227611542 | 0.82013 | 0.84391 | -7.3166058 |
| PTPN12 | 0.016461698 | 5.22709169 | 0.227047494 | 0.820568 | 0.84431 | -7.31673397 |
| FIGNL2 | 0.014843242 | 0.66779803 | 0.226856136 | 0.820717 | 0.84441 | -7.31677738 |
| PCSK1 | 0.006676877 | 0.22326729 | 0.226670042 | 0.820861 | 0.84451 | -7.31681956 |
| RASA4 | -0.007193403 | 0.46000344 | -0.22446748 | 0.822572 | 0.84622 | -7.31731618 |
| HSF5 | 0.002495666 | 0.05925543 | 0.223534296 | 0.823298 | 0.8469 | -7.31752512 |
| GRHL1 | 0.018970021 | 2.18902908 | 0.223486289 | 0.823335 | 0.8469 | -7.31753585 |
| PRF1 | 0.029044726 | 2.43975604 | 0.222956904 | 0.823747 | 0.84724 | -7.31765397 |
| YPEL2 | 0.016775434 | 3.91770015 | 0.222939287 | 0.82376 | 0.84724 | -7.3176579 |
| LMOD3 | 0.006916156 | 0.15540898 | 0.222385571 | 0.824191 | 0.84763 | -7.31778114 |
| L3MBTL3 | 0.020002054 | 2.95146659 | 0.22206455 | 0.824441 | 0.84783 | -7.31785245 |
| PRRC2B | 0.028234717 | 4.90838081 | 0.221037875 | 0.825239 | 0.8486 | -7.31807981 |
| MAD2L2 | 0.016197865 | 4.559971 | 0.219574319 | 0.826378 | 0.84972 | -7.31840211 |
| PIGA | 0.01748126 | 3.23597588 | 0.219299835 | 0.826591 | 0.84989 | -7.31846232 |
| ARHGAP | -0.015906628 | 6.07063811 | -0.218532321 | 0.827188 | 0.85045 | -7.31863027 |
| RGPD6 | -0.001074907 | 0.01035943 | -0.218221767 | 0.82743 | 0.85065 | -7.31869806 |
| GDPD4 | -0.009529071 | 0.09906939 | -0.217026173 | 0.828361 | 0.85156 | -7.31895815 |
| PCDHA1 | 0.018325116 | 0.94662785 | 0.216574959 | 0.828712 | 0.85187 | -7.31905593 |
| C9 | -0.002470598 | 0.07044563 | -0.21594104 | 0.829206 | 0.85232 | -7.31919296 |
| POLE2 | 0.011802712 | 1.71118422 | 0.214898317 | 0.830018 | 0.8531 | -7.3194175 |
| C18orf54 | -0.008323003 | 0.95783455 | -0.214641273 | 0.830218 | 0.85326 | -7.31947268 |
| PEA15 | 0.014314497 | 7.80594295 | 0.214545543 | 0.830292 | 0.85328 | -7.31949321 |
| IL17REL | 0.004209425 | 0.08635129 | 0.213058486 | 0.831451 | 0.85442 | -7.31981102 |
| ENC1 | -0.026934491 | 3.14796638 | -0.212773632 | 0.831673 | 0.8546 | -7.31987165 |
| GEM | -0.030479077 | 3.30019233 | -0.21220072 | 0.832119 | 0.85499 | -7.31999334 |
| C5orf67 | 0.022037587 | 1.75091597 | 0.212155581 | 0.832154 | 0.85499 | -7.32000291 |
| TOX | -0.025670495 | 1.39851621 | -0.211751786 | 0.832469 | 0.85522 | -7.32008846 |
| FUT8 | 0.017628276 | 3.66972197 | 0.211725089 | 0.83249 | 0.85522 | -7.32009411 |
| SPEN | 0.019206864 | 4.53912827 | 0.211672512 | 0.832531 | 0.85522 | -7.32010524 |
| CLDN6 | -0.016083516 | 0.67998193 | -0.210704412 | 0.833285 | 0.85594 | -7.32030961 |
| CCDC15 | 0.016658094 | 1.13907578 | 0.210617285 | 0.833353 | 0.85596 | -7.32032796 |
| MAP3K2 | 0.020070751 | 3.47870604 | 0.209700082 | 0.834068 | 0.85662 | -7.32052064 |
| CAPN5 | 0.02684638 | 2.82683642 | 0.209667997 | 0.834093 | 0.85662 | -7.32052736 |
| TCF19 | -0.016205265 | 3.14970111 | -0.209578297 | 0.834163 | 0.85664 | -7.32054616 |
| ZNF600 | -0.009974996 | 2.02746449 | -0.209497695 | 0.834226 | 0.85665 | -7.32056304 |
| TPBG | -0.01992431 | 3.38889519 | -0.208374422 | 0.835102 | 0.8575 | -7.32079764 |
| RHOXF1 | 0.018424282 | 0.94654481 | 0.208210828 | 0.83523 | 0.85758 | -7.3208317 |

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| CCL25 | -0.011905931 | 0.50900162 | -0.207575231 | 0.835726 | 0.85804 | -7.32096379 |
| SHD | -0.006141386 | 0.06098483 | -0.207153208 | 0.836055 | 0.85832 | -7.32105127 |
| GPR27 | 0.029096007 | 4.45347924 | 0.207004211 | 0.836171 | 0.85839 | -7.32108211 |
| BAIAP2 | -0.018573106 | 4.32212 | -0.206787121 | 0.83634 | 0.85851 | -7.32112701 |
| CENPH | 0.013175619 | 2.52220783 | 0.206115885 | 0.836864 | 0.85898 | -7.32126553 |
| NUDT1 | 0.01534913 | 3.65977208 | 0.206061449 | 0.836907 | 0.85898 | -7.32127674 |
| AMMECF | 0.014604341 | 2.58998929 | 0.206005961 | 0.83695 | 0.85898 | -7.32128817 |
| KIF13B | -0.017272871 | 4.42745983 | -0.205012785 | 0.837725 | 0.85972 | -7.3214922 |
| HIST1H1 | 0.019189371 | 0.93363666 | 0.204685861 | 0.83798 | 0.85991 | -7.32155914 |
| KCNG3 | -0.004292139 | 0.04491213 | -0.204650274 | 0.838008 | 0.85991 | -7.32156643 |
| PXDN | -0.022682966 | 3.08863193 | -0.20410447 | 0.838434 | 0.8603 | -7.32167793 |
| MATN4 | 0.007819822 | 0.28620315 | 0.203964426 | 0.838543 | 0.86031 | -7.3217065 |
| B4GALT | -0.018691131 | 7.21715422 | -0.20395182 | 0.838553 | 0.86031 | -7.32170907 |
| SOCS3 | 0.035526587 | 5.66443484 | 0.203755145 | 0.838707 | 0.86038 | -7.32174914 |
| ITPR2 | -0.020936173 | 3.5624281 | -0.203739164 | 0.838719 | 0.86038 | -7.3217524 |
| CRYBG1 | 0.021075135 | 3.39369163 | 0.202346662 | 0.839806 | 0.86144 | -7.32203503 |
| TNIK | -0.021643212 | 4.11767377 | -0.202104858 | 0.839995 | 0.86158 | -7.32208391 |
| MGARP | 0.011393267 | 1.03998712 | 0.201505441 | 0.840463 | 0.86201 | -7.32220483 |
| TRIM34 | -0.006185223 | 0.56589127 | -0.200143169 | 0.841527 | 0.86303 | -7.3224783 |
| ENOX1 | -0.010147382 | 0.68962231 | -0.200102993 | 0.841559 | 0.86303 | -7.32248634 |
| ERVFRD | 0.001432717 | 0.04233147 | 0.199186415 | 0.842275 | 0.86371 | -7.32266926 |
| BRPF3 | -0.019503287 | 4.74476912 | -0.198631902 | 0.842708 | 0.86408 | -7.32277951 |
| TTC39A | 0.019434408 | 3.08564461 | 0.198602356 | 0.842731 | 0.86408 | -7.32278538 |
| RPL3L | -0.007232796 | 0.1142869 | -0.198521432 | 0.842795 | 0.86409 | -7.32280144 |
| GGT6 | 0.039315573 | 2.30524747 | 0.198442445 | 0.842856 | 0.8641 | -7.32281711 |
| ANKLE1 | 0.006321974 | 0.43216855 | 0.198337426 | 0.842938 | 0.86413 | -7.32283794 |
| EEF2K | -0.012545286 | 3.70894188 | -0.198052136 | 0.843161 | 0.86431 | -7.32289446 |
| HOXC9 | -0.013192136 | 0.39005199 | -0.197737346 | 0.843407 | 0.86451 | -7.32295674 |
| SLC8A2 | 0.005526447 | 0.15548832 | 0.197566161 | 0.843541 | 0.86459 | -7.32299056 |
| FOXM1 | 0.014646063 | 1.48821343 | 0.196545044 | 0.844339 | 0.86532 | -7.3231917 |
| PNCK | -0.004303936 | 0.1142791 | -0.196532664 | 0.844349 | 0.86532 | -7.32319413 |
| LRRC74 | -0.002124352 | 0.06692581 | -0.195683444 | 0.845013 | 0.86586 | -7.32336061 |
| CPSF1 | 0.014552672 | 5.42521055 | 0.19566719 | 0.845026 | 0.86586 | -7.32336379 |
| NRROS | 0.016225482 | 2.86718635 | 0.195628653 | 0.845056 | 0.86586 | -7.32337132 |
| CDK2 | 0.013422144 | 3.89254491 | 0.195588729 | 0.845087 | 0.86586 | -7.32337913 |
| ERICH6E | -0.004518432 | 0.28821549 | -0.194960728 | 0.845578 | 0.86632 | -7.32350172 |
| ERN2 | -0.004119842 | 0.0933217 | -0.194530249 | 0.845915 | 0.86661 | -7.32358552 |
| NPW | 0.036365022 | 1.76044182 | 0.193928139 | 0.846386 | 0.86701 | -7.32370243 |
| CASP8 | 0.014872215 | 2.95106452 | 0.193896499 | 0.846411 | 0.86701 | -7.32370856 |
| PDE4DIF | 0.013775507 | 2.60899926 | 0.1937175 | 0.846551 | 0.8671 | -7.32374324 |

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| NCEH1 | -0.015510469 | 3.4475348 | -0.192531432 | 0.847478 | 0.868 | -7.32397221 |
| ACTN4 | 0.013549046 | 8.03575418 | 0.192374249 | 0.847601 | 0.86806 | -7.32400245 |
| HORMAD | -0.013997821 | 0.28273397 | -0.192319715 | 0.847644 | 0.86806 | -7.32401294 |
| ZNF514 | -0.014408687 | 3.01645227 | -0.191882273 | 0.847986 | 0.86836 | -7.32409694 |
| ZYG11B | 0.015575312 | 4.60473876 | 0.191440584 | 0.848332 | 0.86863 | -7.32418156 |
| SNX33 | 0.01365065 | 4.55532549 | 0.191414423 | 0.848353 | 0.86863 | -7.32418657 |
| TNIP1 | 0.010523189 | 6.30499707 | 0.191157996 | 0.848553 | 0.86879 | -7.3242356 |
| FBLL1 | 0.022457733 | 1.41548718 | 0.190874762 | 0.848775 | 0.86895 | -7.32428968 |
| ADAR | 0.01544971 | 6.55617357 | 0.190817651 | 0.84882 | 0.86895 | -7.32430058 |
| CALN1 | -0.010653135 | 0.10951555 | -0.190043328 | 0.849426 | 0.86952 | -7.32444798 |
| AGAP9 | -0.01627334 | 1.85139783 | -0.189094171 | 0.850169 | 0.87023 | -7.32462785 |
| BAALC | -0.01992466 | 1.1715016 | -0.188439909 | 0.850681 | 0.8707 | -7.3247513 |
| AHI1 | -0.013729378 | 2.96162919 | -0.188369541 | 0.850736 | 0.87071 | -7.32476456 |
| KCNQ4 | -0.005145883 | 0.4818629 | -0.187479942 | 0.851433 | 0.87137 | -7.32493168 |
| MTRNR2 | -0.054064723 | 1.44152307 | -0.186219687 | 0.85242 | 0.87232 | -7.32516707 |
| GNRH1 | -0.013595411 | 1.35532351 | -0.186159882 | 0.852467 | 0.87232 | -7.3251782 |
| ACTB | 0.010239011 | 11.5337984 | 0.185795019 | 0.852753 | 0.87251 | -7.32524603 |
| CNTN6 | -0.033391754 | 2.67071028 | -0.185784786 | 0.852761 | 0.87251 | -7.32524793 |
| RELA | -0.011101581 | 5.57035412 | -0.18494596 | 0.853418 | 0.87313 | -7.32540337 |
| LRRC55 | -0.006209646 | 0.30753894 | -0.184137809 | 0.854051 | 0.87373 | -7.32555245 |
| UBA6 | -0.0115637 | 3.1979969 | -0.182357312 | 0.855447 | 0.87508 | -7.32587861 |
| RGPD3 | -0.003417422 | 0.11389846 | -0.182319526 | 0.855476 | 0.87508 | -7.3258855 |
| EXTL1 | 0.0112774 | 0.82841955 | 0.18214779 | 0.855611 | 0.87517 | -7.32591678 |
| CA7 | -0.018027574 | 1.03991185 | -0.18160672 | 0.856035 | 0.87553 | -7.32601515 |
| RPL36A- | -0.004062067 | 0.2446491 | -0.18156239 | 0.85607 | 0.87553 | -7.3260232 |
| RFX2 | 0.014845701 | 2.05094754 | 0.181501069 | 0.856118 | 0.87553 | -7.32603433 |
| PIMREG | 0.011321838 | 0.86655526 | 0.181382384 | 0.856211 | 0.87557 | -7.32605586 |
| ELMOD1 | -0.00592711 | 0.11190853 | -0.181190058 | 0.856362 | 0.87564 | -7.32609071 |
| TGFB1 | -0.021026968 | 5.88769859 | -0.181161398 | 0.856384 | 0.87564 | -7.3260959 |
| XYLT1 | -0.017160722 | 2.41155435 | -0.180367662 | 0.857007 | 0.87622 | -7.32623933 |
| BLK | -0.016452473 | 0.53534673 | -0.179089091 | 0.858009 | 0.8771 | -7.32646905 |
| SEC31B | -0.014690273 | 1.61279564 | -0.179026682 | 0.858058 | 0.8771 | -7.32648022 |
| RGPD1 | 0.001829778 | 0.03753103 | 0.178978158 | 0.858096 | 0.8771 | -7.3264889 |
| MYO15B | 0.022802067 | 3.53844416 | 0.178916841 | 0.858144 | 0.8771 | -7.32649987 |
| CCDC11 | -0.011950618 | 1.14388245 | -0.178894548 | 0.858162 | 0.8771 | -7.32650385 |
| FAM160E | -0.013281321 | 4.19313546 | -0.178878666 | 0.858174 | 0.8771 | -7.32650669 |
| MCL1 | 0.016689174 | 7.98355689 | 0.178490558 | 0.858479 | 0.87736 | -7.32657602 |
| PCDHB1 | -0.012058082 | 1.05480704 | -0.177843384 | 0.858986 | 0.87783 | -7.32669128 |
| ZNF560 | -0.019987114 | 0.71409783 | -0.177000225 | 0.859648 | 0.87845 | -7.32684083 |
| RNPC3 | -0.015652865 | 3.05021415 | -0.176608401 | 0.859956 | 0.87871 | -7.32691008 |

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| ANXA4 | -0.014377638 | 4.94124583 | -0.175959464 | 0.860465 | 0.87918 | -7.32702444 |
| BCAN | -0.016100845 | 0.25785486 | -0.175527813 | 0.860804 | 0.87943 | -7.32710027 |
| FMN1 | -0.016002324 | 1.76784892 | -0.175515552 | 0.860813 | 0.87943 | -7.32710242 |
| FXYD7 | -0.00667991 | 0.36353943 | -0.175349675 | 0.860943 | 0.87951 | -7.32713151 |
| ATP12A | 0.010886747 | 0.24334241 | 0.175067671 | 0.861165 | 0.87964 | -7.32718091 |
| AWAT2 | -0.005801005 | 0.24884382 | -0.175054674 | 0.861175 | 0.87964 | -7.32718318 |
| SHISAL2 | 0.012588693 | 1.0648876 | 0.173575342 | 0.862336 | 0.88077 | -7.32744096 |
| UTS2 | 0.011341807 | 0.34073056 | 0.173441664 | 0.862441 | 0.88083 | -7.32746415 |
| EP400 | -0.012341529 | 3.42872894 | -0.173267406 | 0.862578 | 0.88091 | -7.32749435 |
| ACAN | -0.014619136 | 0.76901436 | -0.171131963 | 0.864255 | 0.88257 | -7.32786195 |
| TERB1 | 0.00286977 | 0.15781393 | 0.170802248 | 0.864514 | 0.88278 | -7.3279183 |
| FAM126/ | 0.01037847 | 1.47618633 | 0.170696627 | 0.864597 | 0.88281 | -7.32793633 |
| RBFOX1 | -0.020214138 | 0.49809126 | -0.170285165 | 0.86492 | 0.88309 | -7.32800645 |
| TCP11L2 | 0.015959425 | 2.01279325 | 0.17020014 | 0.864987 | 0.88311 | -7.32802092 |
| PCDHGA | -0.009207095 | 0.56912193 | -0.169461774 | 0.865567 | 0.88365 | -7.32814628 |
| ALDH1L2 | -0.014073491 | 1.13028515 | -0.16938334 | 0.865629 | 0.88366 | -7.32815956 |
| PRKD2 | -0.011880483 | 5.39390731 | -0.168480274 | 0.866338 | 0.88431 | -7.32831207 |
| PDE6C | 0.005184153 | 0.38430716 | 0.16843011 | 0.866378 | 0.88431 | -7.32832052 |
| INPP4B | -0.011673489 | 1.65410151 | -0.16824126 | 0.866526 | 0.88441 | -7.3283523 |
| PCBP3 | 0.005159208 | 0.24595074 | 0.167779235 | 0.866889 | 0.88473 | -7.3284299 |
| KLHL38 | 0.003551449 | 0.15301992 | 0.166887247 | 0.86759 | 0.88539 | -7.3285791 |
| NHLH1 | 0.002519939 | 0.13753473 | 0.166748668 | 0.867699 | 0.88545 | -7.32860221 |
| C21orf58 | 0.010220222 | 1.67716427 | 0.166661467 | 0.867768 | 0.88547 | -7.32861675 |
| ZBTB34 | 0.011752344 | 2.93100361 | 0.165951328 | 0.868326 | 0.88598 | -7.32873481 |
| DNMBP | -0.013281063 | 3.49007906 | -0.165820036 | 0.868429 | 0.88603 | -7.32875658 |
| NCOA2 | -0.01495305 | 3.94926689 | -0.165375472 | 0.868779 | 0.88634 | -7.32883018 |
| NAB1 | -0.014860083 | 5.45747459 | -0.164496356 | 0.86947 | 0.88694 | -7.32897513 |
| INPP5F | 0.015950855 | 4.17865812 | 0.164490403 | 0.869475 | 0.88694 | -7.3289761 |
| A1BG | -0.005149483 | 0.44093703 | -0.164249578 | 0.869664 | 0.88708 | -7.32901568 |
| KLK4 | 0.030674683 | 1.27335434 | 0.164152939 | 0.86974 | 0.8871 | -7.32903154 |
| FRG2C | -0.001766539 | 0.04850083 | -0.1639531 | 0.869897 | 0.88721 | -7.32906431 |
| OMP | 0.004437125 | 0.14702856 | 0.163434687 | 0.870305 | 0.88757 | -7.32914915 |
| AKR1D1 | -0.002691554 | 0.11749222 | -0.16303081 | 0.870623 | 0.88784 | -7.32921505 |
| FAM217/ | -0.001366549 | 0.04987404 | -0.162840093 | 0.870773 | 0.88794 | -7.32924611 |
| MPO | 0.002819085 | 0.136871 | 0.16240404 | 0.871116 | 0.88816 | -7.329317 |
| LRIT3 | -0.003872337 | 0.24435411 | -0.162403767 | 0.871116 | 0.88816 | -7.32931705 |
| UBXN7 | -0.013391469 | 3.79567805 | -0.162366073 | 0.871146 | 0.88816 | -7.32932317 |
| FAM209/ | 0.002944092 | 0.15365472 | 0.162096293 | 0.871358 | 0.88833 | -7.32936692 |
| TTC6 | -0.000997353 | 0.01299183 | -0.161722359 | 0.871652 | 0.88857 | -7.32942744 |
| SEMA4F | -0.011080209 | 2.74661787 | -0.161281559 | 0.871999 | 0.88885 | -7.32949861 |

| PCDH8 | -0.012825404 | 0.94744717 | -0.161245643 | 0.872027 | 0.88885 | -7.3295044 |
|---|---|---|---|---|---|---|
| GRAMD1 | 0.016285308 | 2.45899321 | 0.160975399 | 0.87224 | 0.88901 | -7.32954793 |
| PRKCG | -0.007033312 | 0.08829587 | -0.159942432 | 0.873052 | 0.88979 | -7.32971362 |
| DDX39B | -0.015917474 | 4.67105593 | -0.159094326 | 0.87372 | 0.89041 | -7.32984887 |
| PRPH | -0.01040927 | 0.51792152 | -0.158843347 | 0.873917 | 0.89056 | -7.32988875 |
| ERVW-1 | -0.001976384 | 0.0901031 | -0.156741115 | 0.875572 | 0.89219 | -7.33022036 |
| MFSD2B | 0.002635573 | 0.19791143 | 0.156313562 | 0.875909 | 0.89248 | -7.33028726 |
| NPEPPS | -0.012109025 | 4.62775415 | -0.155537438 | 0.87652 | 0.89305 | -7.33040824 |
| CMA1 | 0.009803879 | 0.54816144 | 0.155378397 | 0.876645 | 0.89309 | -7.33043296 |
| SSH3 | 0.012177977 | 5.65734121 | 0.155300401 | 0.876707 | 0.89309 | -7.33044507 |
| MOBP | -0.001671035 | 0.05425602 | -0.155286687 | 0.876718 | 0.89309 | -7.3304472 |
| TRIM55 | -0.011673172 | 1.16972701 | -0.154995871 | 0.876947 | 0.89327 | -7.3304923 |
| NR4A3 | -0.029055858 | 2.00211331 | -0.154193842 | 0.877578 | 0.89386 | -7.33061625 |
| LRCH4 | 0.013114484 | 3.3656257 | 0.153368014 | 0.878229 | 0.89447 | -7.33074321 |
| SLC7A2 | 0.024860304 | 5.87369683 | 0.153040784 | 0.878487 | 0.89468 | -7.33079333 |
| AKIRIN2 | 0.009995465 | 5.81995879 | 0.15294283 | 0.878564 | 0.89471 | -7.33080831 |
| SCARA5 | 0.020876411 | 0.80403029 | 0.152062261 | 0.879257 | 0.89536 | -7.33094256 |
| SPOCK1 | 0.034362961 | 3.66083368 | 0.151397115 | 0.879782 | 0.89584 | -7.33104345 |
| NBEAL1 | 0.011273396 | 1.38933318 | 0.150428549 | 0.880545 | 0.89656 | -7.33118957 |
| COBLL1 | -0.015835046 | 3.21177661 | -0.150294123 | 0.880651 | 0.89658 | -7.33120978 |
| TRIM21 | 0.012374328 | 4.93717913 | 0.150272051 | 0.880668 | 0.89658 | -7.33121309 |
| ARHGAP | -0.015206553 | 3.03134463 | -0.149715332 | 0.881107 | 0.89697 | -7.33129657 |
| ZHX2 | 0.016113811 | 5.51269866 | 0.149553594 | 0.881234 | 0.89705 | -7.33132077 |
| KDM6B | -0.011707314 | 4.37733569 | -0.148939547 | 0.881718 | 0.89749 | -7.33141238 |
| CHRND | -0.002936126 | 0.0522261 | -0.148827422 | 0.881807 | 0.89752 | -7.33142907 |
| STAR | -0.002526121 | 0.09635083 | -0.148642763 | 0.881952 | 0.89762 | -7.33145653 |
| FAM135/ | -0.008516062 | 1.8584255 | -0.148269828 | 0.882246 | 0.89786 | -7.33151187 |
| ZCCHC1 | 0.003846924 | 0.3318399 | 0.147937196 | 0.882509 | 0.89808 | -7.33156112 |
| LIG1 | 0.010489297 | 3.91726745 | 0.147870924 | 0.882561 | 0.89808 | -7.33157092 |
| MFHAS1 | -0.012202028 | 3.78257458 | -0.147618123 | 0.88276 | 0.89822 | -7.33160826 |
| CD38 | -0.016773412 | 1.11258318 | -0.147127761 | 0.883147 | 0.89856 | -7.3316805 |
| CAMK2N | 0.016974363 | 1.48544464 | 0.146985884 | 0.883259 | 0.89862 | -7.33170136 |
| ALB | 0.014185085 | 0.60850982 | 0.146515718 | 0.883629 | 0.89895 | -7.33177034 |
| TFAP2A | -0.004062583 | 0.35341132 | -0.14629982 | 0.8838 | 0.89902 | -7.33180194 |
| POTEI | -0.000738953 | 0.009254 | -0.146285661 | 0.883811 | 0.89902 | -7.33180401 |
| RGPD5 | -0.000710417 | 0.00598943 | -0.145930184 | 0.884091 | 0.89925 | -7.33185593 |
| ERC2 | -0.003784544 | 0.38872733 | -0.145260846 | 0.884619 | 0.89974 | -7.33195335 |
| FAM205/ | -0.000897819 | 0.02660354 | -0.144964805 | 0.884853 | 0.89992 | -7.3319963 |
| DENND4 | 0.015661822 | 4.08499557 | 0.144859762 | 0.884935 | 0.89992 | -7.33201152 |
| CDRT15 | -0.003058449 | 0.14111985 | -0.144827462 | 0.884961 | 0.89992 | -7.33201619 |

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|---|---|---|---|---|---|
| MGAM2 | -0.000858059 | 0.02151779 | -0.144360881 | 0.885329 | 0.90024 | -7.33208364 |
| ZNF43 | 0.010009213 | 3.07260861 | 0.14427985 | 0.885393 | 0.90025 | -7.33209533 |
| SYCE1L | -0.019062781 | 3.34522249 | -0.144096203 | 0.885538 | 0.90035 | -7.3321218 |
| KDM4E | 0.004237106 | 0.17135215 | 0.143834804 | 0.885744 | 0.9005 | -7.33215942 |
| MUSK | -0.001791023 | 0.05894271 | -0.143130524 | 0.8863 | 0.90101 | -7.33226044 |
| ATG2A | -0.009503645 | 4.31863634 | -0.143071767 | 0.886346 | 0.90101 | -7.33226885 |
| YWHAH | -0.011012731 | 6.8650804 | -0.14272053 | 0.886623 | 0.90124 | -7.33231902 |
| ARPP21 | -0.002024599 | 0.02156361 | -0.142386631 | 0.886887 | 0.90145 | -7.33236661 |
| RBSN | -0.011710919 | 4.24513791 | -0.142267644 | 0.88698 | 0.90149 | -7.33238354 |
| C5orf34 | -0.007009014 | 1.36955544 | -0.141990665 | 0.887199 | 0.90166 | -7.33242289 |
| MEP1B | -0.001046451 | 0.03341248 | -0.141437642 | 0.887635 | 0.90205 | -7.33250124 |
| CD163L1 | 0.008204933 | 0.67811082 | 0.141348261 | 0.887706 | 0.90207 | -7.33251388 |
| C12orf71 | 0.003013667 | 0.16972857 | 0.141221713 | 0.887806 | 0.90211 | -7.33253175 |
| ELOVL6 | 0.013445475 | 2.14695628 | 0.140918617 | 0.888045 | 0.90225 | -7.33257449 |
| GRK6 | 0.008655759 | 4.29349275 | 0.140915053 | 0.888048 | 0.90225 | -7.332575 |
| MNT | 0.00959757 | 3.44823742 | 0.140800647 | 0.888138 | 0.90229 | -7.33259111 |
| SH3GL1 | -0.009620785 | 6.22923276 | -0.140288754 | 0.888542 | 0.90265 | -7.33266303 |
| SEPTIN1 | 0.013240978 | 2.57633178 | 0.139905088 | 0.888845 | 0.9029 | -7.33271676 |
| TCF3 | 0.010152329 | 4.96464048 | 0.13873777 | 0.889766 | 0.90378 | -7.33287935 |
| COL17A1 | 0.028184861 | 2.63407989 | 0.138225694 | 0.890171 | 0.90414 | -7.33295024 |
| AGO4 | -0.009390005 | 3.26624024 | -0.137823147 | 0.890488 | 0.90441 | -7.33300578 |
| KMT2D | 0.012281219 | 3.86153381 | 0.137526434 | 0.890723 | 0.90455 | -7.33304662 |
| TESK2 | 0.010855529 | 2.94372543 | 0.137498885 | 0.890744 | 0.90455 | -7.33305041 |
| ZMIZ2 | 0.007852065 | 5.84951158 | 0.137436615 | 0.890794 | 0.90455 | -7.33305897 |
| TRMT1 | -0.008822768 | 4.68505975 | -0.137337129 | 0.890872 | 0.90458 | -7.33307263 |
| DCAF15 | 0.008799141 | 4.6039443 | 0.137091168 | 0.891066 | 0.90472 | -7.33310637 |
| CEBPE | -0.003637824 | 0.25077322 | -0.136249892 | 0.891731 | 0.90534 | -7.33322131 |
| AIDA | 0.01103199 | 3.7721626 | 0.135995938 | 0.891931 | 0.90549 | -7.33325587 |
| KDELR3 | 0.015683127 | 5.0244289 | 0.135818671 | 0.892071 | 0.90554 | -7.33327996 |
| HS2ST1 | -0.011111184 | 4.37618047 | -0.135802194 | 0.892084 | 0.90554 | -7.3332822 |
| ADM | 0.020657583 | 5.11808636 | 0.135185647 | 0.892571 | 0.90597 | -7.33336571 |
| ZPLD1 | 0.008365426 | 0.21903018 | 0.13512909 | 0.892616 | 0.90597 | -7.33337335 |
| PDE1C | 0.01351688 | 1.36725855 | 0.135018886 | 0.892703 | 0.906 | -7.33338823 |
| ATG14 | -0.008447762 | 4.15451494 | -0.134359862 | 0.893223 | 0.90648 | -7.33347697 |
| FNIP1 | 0.0101115 | 3.58821028 | 0.132573143 | 0.894635 | 0.90786 | -7.33371537 |
| MIB1 | -0.012548245 | 4.46400167 | -0.132327662 | 0.894829 | 0.908 | -7.33374787 |
| BCAR3 | -0.013042774 | 3.8621293 | -0.131740135 | 0.895293 | 0.90842 | -7.33382542 |
| DSCAM | 0.000950103 | 0.03360004 | 0.131466509 | 0.895509 | 0.90858 | -7.33386142 |
| KLK14 | -0.007302943 | 0.44999047 | -0.130991339 | 0.895885 | 0.90891 | -7.33392376 |
| SULT1B1 | -0.00566537 | 0.50619053 | -0.129870184 | 0.896771 | 0.90975 | -7.33406995 |

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| ZMYND8 | -0.009186913 | 4.26008435 | -0.128656641 | 0.89773 | 0.91067 | -7.33422677 |
| UBE4A | 0.010924454 | 3.8546627 | 0.127593195 | 0.898571 | 0.91147 | -7.33436299 |
| KCNV2 | -0.001349414 | 0.07845712 | -0.126305277 | 0.899589 | 0.91245 | -7.33452644 |
| MYLK3 | 0.003622646 | 0.08676165 | 0.12591889 | 0.899895 | 0.91261 | -7.33457516 |
| CALML3 | -0.007909293 | 0.18810092 | -0.125895574 | 0.899913 | 0.91261 | -7.33457809 |
| ADH6 | -0.00122549 | 0.08971546 | -0.125861968 | 0.89994 | 0.91261 | -7.33458232 |
| DLX3 | 0.017405858 | 2.79526243 | 0.125832407 | 0.899963 | 0.91261 | -7.33458604 |
| SHISA8 | 0.003870669 | 0.13087006 | 0.125619497 | 0.900132 | 0.91272 | -7.3346128 |
| ZNF395 | -0.009898742 | 4.81657031 | -0.125329838 | 0.900361 | 0.9129 | -7.33464913 |
| EIF2S3B | 0.006289961 | 0.47962178 | 0.124375743 | 0.901115 | 0.91361 | -7.33476822 |
| KLF7 | -0.010548355 | 2.97553944 | -0.123810551 | 0.901562 | 0.91401 | -7.33483834 |
| MYBBP1 | -0.007085833 | 4.77057357 | -0.123161652 | 0.902076 | 0.91448 | -7.33491845 |
| C1QTNF | -0.010908566 | 0.62710071 | -0.12275964 | 0.902394 | 0.91474 | -7.33496786 |
| FOXO3 | 0.00938845 | 4.61430373 | 0.122465468 | 0.902626 | 0.91493 | -7.33500392 |
| ZCCHC2 | -0.010432833 | 4.27209061 | -0.122184281 | 0.902849 | 0.9151 | -7.33503831 |
| PENK | 0.016233529 | 0.40912904 | 0.122042054 | 0.902961 | 0.91516 | -7.33505567 |
| ANKRD1 | 0.008150951 | 5.25976571 | 0.120490271 | 0.904189 | 0.91635 | -7.3352438 |
| TNNI3 | -0.011246202 | 0.39162374 | -0.119904809 | 0.904653 | 0.91676 | -7.33531415 |
| FAM153 | 0.008445211 | 0.51715221 | 0.119708369 | 0.904808 | 0.91686 | -7.33533768 |
| CRB2 | 0.007820635 | 0.36449543 | 0.11861069 | 0.905677 | 0.91769 | -7.33546844 |
| MOCOS | -0.009361232 | 1.27918413 | -0.118362204 | 0.905873 | 0.91783 | -7.33549788 |
| ATF3 | -0.028317584 | 5.40342956 | -0.118217851 | 0.905988 | 0.91789 | -7.33551495 |
| ARPIN | 0.00800948 | 4.24609185 | 0.118147751 | 0.906043 | 0.91789 | -7.33552323 |
| CORO7-I | -0.000896943 | 0.05429753 | -0.117302622 | 0.906712 | 0.91852 | -7.33562269 |
| OSBPL5 | 0.007579968 | 3.55093035 | 0.115703191 | 0.907978 | 0.91975 | -7.33580898 |
| PLCXD3 | -0.008477986 | 0.73281421 | -0.114038141 | 0.909297 | 0.92103 | -7.3360002 |
| CYP4A1 | 0.001600049 | 0.06963108 | 0.113711624 | 0.909555 | 0.92123 | -7.33603737 |
| RAB33B | 0.007385146 | 2.97450814 | 0.1114846 | 0.911319 | 0.92296 | -7.33628806 |
| DOCK7 | 0.009448949 | 2.85426358 | 0.110519631 | 0.912084 | 0.92368 | -7.33639514 |
| CNGB1 | 0.002414103 | 0.13298522 | 0.110286165 | 0.912269 | 0.92382 | -7.33642091 |
| SPAG6 | -0.006879974 | 0.23340377 | -0.109927658 | 0.912553 | 0.92405 | -7.33646037 |
| CDCA8 | -0.007196106 | 1.92277351 | -0.10955824 | 0.912845 | 0.92429 | -7.3365009 |
| RPEL1 | 0.000884536 | 0.05181114 | 0.109340225 | 0.913018 | 0.92441 | -7.33652476 |
| KCNQ5 | 0.014449429 | 2.21606933 | 0.10855142 | 0.913643 | 0.92494 | -7.33661067 |
| STX19 | -0.005104038 | 0.48541686 | -0.108499211 | 0.913685 | 0.92494 | -7.33661634 |
| PMFBP1 | 0.002705569 | 0.26379961 | 0.108474563 | 0.913704 | 0.92494 | -7.33661901 |
| GSTM5 | 0.007727263 | 0.66141916 | 0.108334 | 0.913816 | 0.92498 | -7.33663424 |
| OVCH2 | 0.001551173 | 0.07407342 | 0.108289291 | 0.913851 | 0.92498 | -7.33663909 |
| TSC22D | 0.019093312 | 7.40822323 | 0.107520134 | 0.91446 | 0.92554 | -7.33672206 |
| WDR81 | -0.007541306 | 3.72213245 | -0.107192349 | 0.91472 | 0.92575 | -7.33675724 |

| RPL28 | 0.008211003 | 8.31782566 | 0.107014086 | 0.914862 | 0.92583 | -7.33677633 |
| TPD52L1 | 0.012482917 | 5.58440047 | 0.106418585 | 0.915334 | 0.92626 | -7.33683986 |
| DGKK | 0.001045813 | 0.0357929 | 0.104982209 | 0.916472 | 0.92732 | -7.33699165 |
| RNPEPL | -0.005782236 | 4.89766056 | -0.104947677 | 0.916499 | 0.92732 | -7.33699527 |
| HSPH1 | 0.009644266 | 5.17783251 | 0.103568425 | 0.917593 | 0.92838 | -7.33713903 |
| DENND4 | -0.005625077 | 4.03048624 | -0.103358134 | 0.91776 | 0.92849 | -7.33716078 |
| FUOM | -0.012949944 | 3.63449766 | -0.103034362 | 0.918016 | 0.92869 | -7.33719418 |
| HS3ST6 | -0.007650632 | 0.3994186 | -0.10278661 | 0.918213 | 0.92884 | -7.33721967 |
| CELF6 | 0.000997307 | 0.06147609 | 0.102705681 | 0.918277 | 0.92885 | -7.33722799 |
| CORO6 | 0.023417951 | 4.39612463 | 0.102064791 | 0.918785 | 0.9293 | -7.33729359 |
| RDH16 | 0.00260547 | 0.34703763 | 0.101795357 | 0.918999 | 0.92947 | -7.33732104 |
| TBC1D3( | -0.000905945 | 0.05273174 | -0.101554926 | 0.919189 | 0.9296 | -7.33734548 |
| CCDC16 | -0.000505535 | 0.01075558 | -0.10135455 | 0.919348 | 0.92971 | -7.33736581 |
| RPS6KA: | -0.009568206 | 6.21774702 | -0.101076085 | 0.919569 | 0.92988 | -7.33739398 |
| ZBTB10 | -0.00736228 | 3.59567865 | -0.10092032 | 0.919693 | 0.92995 | -7.33740971 |
| OXGR1 | 0.003080346 | 0.23975898 | 0.099716395 | 0.920647 | 0.93086 | -7.33753046 |
| HES4 | -0.013134465 | 3.8417206 | -0.098644572 | 0.921498 | 0.93166 | -7.33763673 |
| PNPLA2 | -0.007464803 | 6.10929136 | -0.098478442 | 0.921629 | 0.93174 | -7.3376531 |
| PHTF2 | -0.005967461 | 2.73160824 | -0.098190046 | 0.921858 | 0.93191 | -7.33768145 |
| WASHC4 | 0.007340628 | 4.14197651 | 0.098107946 | 0.921923 | 0.93192 | -7.33768951 |
| CDK15 | 0.001464379 | 0.10244352 | 0.097052768 | 0.92276 | 0.93271 | -7.33779245 |
| QSER1 | -0.00779383 | 3.46844467 | -0.095612615 | 0.923903 | 0.93381 | -7.33793115 |
| GPR75 | -0.008275011 | 1.73469248 | -0.095157667 | 0.924264 | 0.93412 | -7.33797453 |
| UGT2B7 | 0.004766749 | 0.17246458 | 0.095089214 | 0.924318 | 0.93412 | -7.33798104 |
| MCM2 | 0.008340491 | 4.23025669 | 0.095013626 | 0.924378 | 0.93413 | -7.33798822 |
| SLC1A3 | -0.010900196 | 1.72974494 | -0.092899657 | 0.926056 | 0.93577 | -7.33818679 |
| USH2A | -0.000502426 | 0.0229973 | -0.092748224 | 0.926176 | 0.93583 | -7.33820085 |
| ATP10B | 0.010483944 | 0.67794267 | 0.092029222 | 0.926747 | 0.93635 | -7.33826726 |
| RABGGT | 0.005069309 | 5.13202373 | 0.091643634 | 0.927053 | 0.93661 | -7.33830266 |
| NFATC2I | -0.005118928 | 3.90871063 | -0.090403108 | 0.928038 | 0.93755 | -7.33841555 |
| FAAH2 | 0.007562954 | 4.45881429 | 0.089953551 | 0.928394 | 0.93785 | -7.33845608 |
| RGL1 | -0.008643732 | 3.40581394 | -0.089404813 | 0.92883 | 0.93823 | -7.33850528 |
| MTAP | -0.005226985 | 2.8280135 | -0.088466013 | 0.929575 | 0.93888 | -7.33858875 |
| NPIPB15 | 0.013983705 | 2.13632594 | 0.08845717 | 0.929582 | 0.93888 | -7.33858953 |
| SLC4A1( | -0.002078511 | 0.07627228 | -0.088323421 | 0.929689 | 0.93893 | -7.33860135 |
| GGN | -0.005991346 | 1.73067005 | -0.088012123 | 0.929936 | 0.93913 | -7.33862879 |
| AOC1 | 0.015442604 | 1.50632746 | 0.087625631 | 0.930243 | 0.93934 | -7.33866272 |
| CMPK2 | -0.007042296 | 2.4595289 | -0.087602452 | 0.930261 | 0.93934 | -7.33866475 |
| SHE | 0.010871255 | 4.52233025 | 0.086983085 | 0.930753 | 0.93978 | -7.3387188 |
| LPL | -0.015071762 | 4.20945215 | -0.085947703 | 0.931575 | 0.94056 | -7.33880831 |

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| GPR179 | -0.000641941 | 0.04807215 | -0.085479851 | 0.931947 | 0.94088 | -7.3388484 |
| GP1BA | 0.006159474 | 1.12613891 | 0.084114988 | 0.933031 | 0.94186 | -7.33896411 |
| SLC47A1 | 0.009401563 | 4.04450607 | 0.084113416 | 0.933032 | 0.94186 | -7.33896424 |
| EP300 | 0.008641418 | 5.14612671 | 0.084006705 | 0.933117 | 0.94189 | -7.33897321 |
| PCDHGA | 0.008139572 | 1.12570962 | 0.083028496 | 0.933894 | 0.94262 | -7.33905488 |
| COL6A1 | 0.010702552 | 6.13378674 | 0.082949948 | 0.933956 | 0.94263 | -7.3390614 |
| TMIGD3 | 0.007825385 | 1.58948819 | 0.082648842 | 0.934195 | 0.94281 | -7.33908632 |
| LRP5L | 0.010062691 | 3.65227471 | 0.082444374 | 0.934358 | 0.94292 | -7.3391032 |
| TSC22D2 | -0.005575078 | 3.1435755 | -0.080556554 | 0.935858 | 0.94438 | -7.33925702 |
| RGMA | 0.003750429 | 0.69251851 | 0.080267716 | 0.936087 | 0.94455 | -7.33928024 |
| TMTC1 | 0.006456703 | 1.50476116 | 0.080177725 | 0.936158 | 0.94457 | -7.33928746 |
| FOXC2 | 0.006632511 | 1.46774733 | 0.079867949 | 0.936405 | 0.94476 | -7.33931224 |
| MRPS25 | -0.005329665 | 5.32582177 | -0.078732019 | 0.937307 | 0.94561 | -7.3394023 |
| PCDH10 | -0.003799196 | 0.27867798 | -0.077572733 | 0.938228 | 0.94649 | -7.33949288 |
| PCDHA5 | 0.00120104 | 0.08567696 | 0.077110996 | 0.938595 | 0.94675 | -7.33952858 |
| ADSS | 0.006505603 | 5.89311721 | 0.077110076 | 0.938596 | 0.94675 | -7.33952865 |
| LY6G5B | 0.005651428 | 1.23314993 | 0.076217655 | 0.939305 | 0.94738 | -7.33959705 |
| WIF1 | -0.007519928 | 0.23935755 | -0.076177819 | 0.939337 | 0.94738 | -7.33960008 |
| ABCB4 | 0.002419777 | 0.49928144 | 0.075414897 | 0.939943 | 0.94794 | -7.3396579 |
| RAPGEF | -0.00610701 | 2.00304801 | -0.074961953 | 0.940303 | 0.94824 | -7.33969194 |
| DMRT2 | -0.001895426 | 0.15765534 | -0.074272734 | 0.940851 | 0.94874 | -7.33974336 |
| ZNF23 | 0.002923696 | 0.63081467 | 0.073600716 | 0.941386 | 0.94922 | -7.33979303 |
| LIPA | -0.007419704 | 5.1797822 | -0.073278581 | 0.941642 | 0.94942 | -7.33981669 |
| ZNF695 | -0.001125286 | 0.1700999 | -0.073113839 | 0.941773 | 0.94947 | -7.33982874 |
| UHMK1 | 0.005363414 | 5.00256043 | 0.073074419 | 0.941804 | 0.94947 | -7.33983162 |
| GADD45 | 0.009797451 | 6.25172567 | 0.072961622 | 0.941894 | 0.94951 | -7.33983986 |
| NUDT17 | -0.007516409 | 3.34986517 | -0.072737301 | 0.942072 | 0.94963 | -7.33985619 |
| SHROOM | -0.007919688 | 3.30998685 | -0.072476534 | 0.942279 | 0.94978 | -7.33987512 |
| SOX9 | 0.008408487 | 5.41194745 | 0.072302685 | 0.942417 | 0.94987 | -7.3398877 |
| CAPN14 | -0.000737765 | 0.07087768 | -0.072102391 | 0.942577 | 0.94997 | -7.33990216 |
| HGF | -0.004505835 | 0.81414054 | -0.071836898 | 0.942788 | 0.95013 | -7.33992127 |
| LYPD2 | 0.002964819 | 0.17835082 | 0.071284791 | 0.943227 | 0.95045 | -7.33996077 |
| PLXND1 | 0.006727812 | 5.73308821 | 0.071222301 | 0.943276 | 0.95045 | -7.33996522 |
| SLCO4C | 0.01170275 | 2.04463793 | 0.071216869 | 0.943281 | 0.95045 | -7.3399656 |
| ANKRD2 | 0.004504897 | 0.34687779 | 0.071010349 | 0.943445 | 0.95056 | -7.33998029 |
| FAM110A | 0.005945656 | 4.17365135 | 0.070799352 | 0.943613 | 0.95068 | -7.33999524 |
| RAB40A | -0.002820436 | 0.66429294 | -0.070597926 | 0.943773 | 0.95078 | -7.34000948 |
| TMEM89 | -0.001229267 | 0.10196847 | -0.069571568 | 0.944589 | 0.95155 | -7.3400814 |
| FGFRL1 | -0.006192135 | 6.77462806 | -0.06939846 | 0.944727 | 0.95163 | -7.34009342 |
| SLC38A2 | -0.005684465 | 5.55162198 | -0.069172498 | 0.944906 | 0.95175 | -7.34010907 |

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| YPEL3 | 0.005694716 | 5.74507209 | 0.068209195 | 0.945672 | 0.95247 | -7.34017523 |
| NEK2 | -0.004811169 | 0.87748883 | -0.068066046 | 0.945786 | 0.95253 | -7.34018498 |
| B3GAT2 | 0.001570774 | 0.33977268 | 0.067370131 | 0.94634 | 0.95303 | -7.34023209 |
| PPP4R4 | 0.002904424 | 0.37279365 | 0.066998566 | 0.946635 | 0.95327 | -7.34025705 |
| MBNL1 | -0.004282079 | 4.91597191 | -0.065622599 | 0.947729 | 0.95431 | -7.34034827 |
| NBPF14 | 0.003341038 | 1.36146509 | 0.064757977 | 0.948417 | 0.95494 | -7.34040462 |
| WNT7B | -0.006181356 | 1.61378108 | -0.064695678 | 0.948467 | 0.95494 | -7.34040865 |
| NLRP4 | 0.001414807 | 0.05887135 | 0.062198734 | 0.950453 | 0.95688 | -7.34056704 |
| TTN | 0.002632311 | 0.38662483 | 0.061744067 | 0.950815 | 0.95719 | -7.34059521 |
| HPR | 0.000982053 | 0.06488277 | 0.061422241 | 0.951071 | 0.95739 | -7.34061502 |
| R3HDM2 | -0.003328488 | 4.6103397 | -0.06127314 | 0.951189 | 0.95746 | -7.34062417 |
| GARS | 0.004342864 | 6.13134239 | 0.061117396 | 0.951313 | 0.95752 | -7.3406337 |
| EPB41L1 | -0.004476661 | 4.90908892 | -0.059529219 | 0.952577 | 0.95874 | -7.34072948 |
| SLC12A5 | -0.003845886 | 0.58672617 | -0.059219421 | 0.952824 | 0.95893 | -7.34074787 |
| LRRD1 | -0.000549436 | 0.07410379 | -0.058835334 | 0.953129 | 0.95918 | -7.34077054 |
| PCDHB1 | -0.007935021 | 1.57331521 | -0.058432117 | 0.95345 | 0.95945 | -7.34079417 |
| NDC80 | 0.00405982 | 1.38850281 | 0.057413686 | 0.95426 | 0.9602 | -7.34085315 |
| CARM1 | 0.004366194 | 4.1447105 | 0.057234488 | 0.954403 | 0.96027 | -7.34086342 |
| PRG2 | -0.000906425 | 0.091422 | -0.05715781 | 0.954464 | 0.96027 | -7.3408678 |
| EOGT | 0.003686775 | 3.19865761 | 0.05711601 | 0.954497 | 0.96027 | -7.34087019 |
| TULP3 | 0.004417117 | 4.46530002 | 0.056802884 | 0.954746 | 0.96047 | -7.34088802 |
| PTK7 | 0.006738156 | 5.18695525 | 0.056448292 | 0.955029 | 0.96069 | -7.3409081 |
| OXER1 | -0.004833024 | 1.47989799 | -0.056299842 | 0.955147 | 0.96075 | -7.34091646 |
| UBAP2L | 0.003687519 | 5.80803621 | 0.056198621 | 0.955227 | 0.96078 | -7.34092216 |
| CTDSPL | 0.004674489 | 4.00343183 | 0.05596995 | 0.955409 | 0.96089 | -7.34093498 |
| SRGAP1 | -0.003569333 | 2.00728688 | -0.055915999 | 0.955452 | 0.96089 | -7.34093799 |
| SEMA4A | 0.006191226 | 4.73403414 | 0.055471242 | 0.955806 | 0.96119 | -7.34096276 |
| FAM83B | -0.006327932 | 1.96416465 | -0.055355305 | 0.955899 | 0.96123 | -7.34096918 |
| TEX12 | -0.000957005 | 0.17009762 | -0.054644338 | 0.956464 | 0.96174 | -7.34100828 |
| CCN3 | 0.005507918 | 3.90826774 | 0.05360455 | 0.957292 | 0.96251 | -7.34106454 |
| MPRIP | 0.003986774 | 5.21813547 | 0.052087148 | 0.9585 | 0.96367 | -7.34114471 |
| ART3 | -0.000713128 | 0.08012963 | -0.051872056 | 0.958671 | 0.96379 | -7.34115589 |
| ALCAM | 0.005591486 | 6.065273 | 0.050842101 | 0.959491 | 0.96455 | -7.34120877 |
| SLC35E2 | -0.00334918 | 1.41272921 | -0.049764155 | 0.960349 | 0.96536 | -7.34126298 |
| HLA-E | 0.003894403 | 9.50070556 | 0.049442678 | 0.960605 | 0.96556 | -7.34127893 |
| WDR62 | -0.001885166 | 0.71727826 | -0.049132878 | 0.960852 | 0.96575 | -7.34129419 |
| ABCA1 | 0.005529287 | 3.71058662 | 0.048772672 | 0.961138 | 0.96598 | -7.34131182 |
| JAK1 | -0.004078641 | 6.30167867 | -0.048222484 | 0.961576 | 0.96631 | -7.3413385 |
| THBS3 | -0.003616122 | 3.88258188 | -0.048221731 | 0.961577 | 0.96631 | -7.34133853 |
| SGCG | 0.002877848 | 0.25770895 | 0.047777658 | 0.961931 | 0.9666 | -7.34135984 |

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| USP27X | 0.003763401 | 3.15836734 | 0.0469769 | 0.962568 | 0.96719 | -7.34139777 |
| PCDHGA | 0.005464898 | 1.50359437 | 0.046610039 | 0.96286 | 0.96742 | -7.34141494 |
| EMILIN3 | 0.005355956 | 1.0532005 | 0.045924042 | 0.963407 | 0.96791 | -7.34144667 |
| GAS7 | -0.00704951 | 2.24847421 | -0.045408566 | 0.963817 | 0.96827 | -7.3414702 |
| KHSRP | -0.002786548 | 6.48967038 | -0.044990295 | 0.96415 | 0.96855 | -7.3414891 |
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| MANEAL | 0.00425804 | 3.92419708 | 0.043555534 | 0.965293 | 0.96952 | -7.34155261 |
| SLC6A8 | -0.004162989 | 2.66286243 | -0.043025112 | 0.965715 | 0.96989 | -7.34157557 |
| FAM83G | 0.003743943 | 3.79523283 | 0.042684741 | 0.965986 | 0.9701 | -7.34159015 |
| 4-Mar | -0.002581287 | 0.47905159 | -0.042519648 | 0.966118 | 0.97018 | -7.34159718 |
| GTSF1 | -0.002873442 | 0.33831836 | -0.040841806 | 0.967454 | 0.97146 | -7.3416671 |
| CADM4 | -0.003754425 | 4.15008394 | -0.039528036 | 0.9685 | 0.97246 | -7.34171988 |
| NFATC2 | 0.003120908 | 3.1237213 | 0.039090833 | 0.968848 | 0.97275 | -7.34173706 |
| CARNS1 | -0.005338095 | 4.68528155 | -0.038756276 | 0.969115 | 0.97296 | -7.34175008 |
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| IL6ST | -0.003320324 | 6.50977129 | -0.03691639 | 0.97058 | 0.97431 | -7.34181968 |
| HMMR | -0.002349714 | 1.11818586 | -0.034969069 | 0.972132 | 0.97581 | -7.34188966 |
| NANOG | 0.000192546 | 0.01930968 | 0.03476527 | 0.972294 | 0.97592 | -7.34189676 |
| PCDHA3 | 0.002133473 | 0.47780707 | 0.034682807 | 0.97236 | 0.97593 | -7.34189962 |
| GPC2 | -0.001408137 | 0.36789063 | -0.034527053 | 0.972484 | 0.97595 | -7.34190501 |
| DYRK2 | -0.002442043 | 3.38541547 | -0.03451484 | 0.972493 | 0.97595 | -7.34190543 |
| C11orf24 | -0.001893246 | 4.41650328 | -0.034284288 | 0.972677 | 0.97607 | -7.34191336 |
| XKR7 | 0.000778355 | 0.09641335 | 0.033777146 | 0.973081 | 0.97642 | -7.34193062 |
| TMSB4Y | -0.005066682 | 0.74321691 | -0.03325719 | 0.973495 | 0.97678 | -7.34194804 |
| LYPD6B | -0.000902583 | 0.08538944 | -0.031983684 | 0.97451 | 0.97774 | -7.34198957 |
| PROSER | 0.002294854 | 2.40551346 | 0.031607917 | 0.974809 | 0.97798 | -7.34200152 |
| FXYD1 | -0.001772344 | 0.57299406 | -0.031319333 | 0.975039 | 0.97815 | -7.3420106 |
| WDR49 | 0.000340513 | 0.05010334 | 0.030699136 | 0.975533 | 0.97859 | -7.34202983 |
| HOXD8 | -0.002534779 | 1.66350276 | -0.030587928 | 0.975622 | 0.97862 | -7.34203323 |
| ACSM2B | 0.000231166 | 0.02162989 | 0.030338745 | 0.975821 | 0.97876 | -7.34204082 |
| SLC44A5 | 0.003735461 | 0.78287464 | 0.030129815 | 0.975987 | 0.97887 | -7.34204714 |
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| MAL2 | -0.002772582 | 7.61631803 | -0.029480401 | 0.976504 | 0.97928 | -7.34206649 |
| NAT8 | 0.00133134 | 0.25846414 | 0.029233763 | 0.976701 | 0.97941 | -7.34207373 |
| GON4L | -0.002120893 | 3.35640367 | -0.028827246 | 0.977025 | 0.97968 | -7.34208553 |
| GGT5 | 0.003643741 | 5.21528887 | 0.02865111 | 0.977165 | 0.97976 | -7.34209059 |
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| TCN2 | 0.002624365 | 6.10023982 | 0.025916354 | 0.979344 | 0.98172 | -7.34216518 |
| SCAI | -0.001556506 | 2.0928529 | -0.024689202 | 0.980322 | 0.98258 | -7.34219623 |
| UBN1 | -0.001885771 | 4.22823284 | -0.024582916 | 0.980407 | 0.98258 | -7.34219885 |
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| FOXN2 | 0.001866892 | 2.99056699 | 0.024551151 | 0.980432 | 0.98258 | -7.34219963 |
| CRYBA1 | 0.000381205 | 0.11918464 | 0.022424721 | 0.982127 | 0.98422 | -7.34224956 |
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| COL2A1 | 0.000303168 | 0.07496207 | 0.020864237 | 0.98337 | 0.98523 | -7.34228333 |
| KIAA184 | -0.000940815 | 1.80588452 | -0.019668295 | 0.984323 | 0.98611 | -7.34230756 |
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| TIA1 | -0.00203233 | 5.12280328 | -0.019424564 | 0.984518 | 0.9862 | -7.34231232 |
| NPIPB13 | 0.000713129 | 0.15224439 | 0.019268686 | 0.984642 | 0.98627 | -7.34231534 |
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| ADM5 | -0.001062685 | 0.90641994 | -0.017834731 | 0.985785 | 0.9873 | -7.34234194 |
| SPINK6 | 0.000692822 | 0.28340782 | 0.017647448 | 0.985934 | 0.98739 | -7.34234526 |
| AJUBA | 0.002055694 | 4.26875384 | 0.017167581 | 0.986316 | 0.98771 | -7.34235361 |
| TCERG1 | 0.004008491 | 5.05767119 | 0.016865578 | 0.986557 | 0.9879 | -7.34235875 |
| SLC5A2 | -0.001015024 | 0.8192702 | -0.016697226 | 0.986691 | 0.98797 | -7.34236157 |
| BIRC5 | -0.001534888 | 1.44445208 | -0.016509422 | 0.986841 | 0.98806 | -7.34236469 |
| SP1 | 0.000948628 | 5.12059002 | 0.014493902 | 0.988447 | 0.98961 | -7.34239593 |
| MYO18B | -0.000480984 | 0.05741888 | -0.014069786 | 0.988785 | 0.98989 | -7.34240198 |
| NR2C2A | 0.000904814 | 4.82725957 | 0.013824702 | 0.988981 | 0.99003 | -7.3424054 |
| ZNF836 | -0.000650603 | 2.52112123 | -0.012901476 | 0.989716 | 0.99071 | -7.34241773 |
| STK39 | -0.001024463 | 3.88923672 | -0.012469664 | 0.990061 | 0.991 | -7.34242321 |
| ARID3A | -0.000788763 | 2.08750727 | -0.011870189 | 0.990538 | 0.99142 | -7.3424305 |
| FRRS1L | -0.000599624 | 0.3299358 | -0.011492339 | 0.99084 | 0.99166 | -7.34243492 |
| CDHR5 | 0.000174464 | 0.13511477 | 0.010319536 | 0.991774 | 0.99254 | -7.3424477 |
| KRT18 | -0.000810249 | 8.96127855 | -0.009574762 | 0.992368 | 0.99302 | -7.34245511 |
| OOEP | 0.000745052 | 0.40359684 | 0.009570237 | 0.992372 | 0.99302 | -7.34245515 |
| SIGLEC8 | 0.000831634 | 0.7906148 | 0.009292607 | 0.992593 | 0.99317 | -7.34245777 |
| ITGB3 | 0.00150426 | 4.70189716 | 0.009225852 | 0.992646 | 0.99317 | -7.34245839 |
| CD8A | -0.00129282 | 2.75603391 | -0.00846088 | 0.993256 | 0.99371 | -7.34246515 |
| JAK2 | 0.000615046 | 2.5898583 | 0.008400896 | 0.993304 | 0.99371 | -7.34246566 |
| FAM114 | 0.000576704 | 4.75767219 | 0.006914053 | 0.994489 | 0.99484 | -7.34247704 |
| TAS2R4 | -0.00033683 | 0.76188028 | -0.006666909 | 0.994686 | 0.99498 | -7.34247872 |
| PPP1R2 | -0.000227473 | 0.13002948 | -0.00522952 | 0.995832 | 0.99607 | -7.34248727 |
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| UNC45B | 7.07E-05 | 0.10002459 | 0.002980583 | 0.997624 | 0.99774 | -7.3424965 |

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