

Supplemental Table 1. Differential expressed genes between the SRSF1^{high} and the SRSF1^{low} groups.

Gene	log ₂ FC	t	P-Value	adj.P-Value
MIR142	0.74055	6.55985	1.22E-10	6.47E-08
AC004941.5	0.71396	5.83016	9.35E-09	2.07E-06
INHBE	0.69739	3.88298	0.000115	0.003023
LINC01021	0.67628	4.57487	5.87E-06	0.000333
LOC100129917	0.66612	5.16442	3.35E-07	3.68E-05
EIF3C	0.66368	6.92083	1.23E-11	1.11E-08
SLC20A1	0.65201	6.65325	6.82E-11	4.10E-08
EMC3-AS1	0.64659	5.55547	4.28E-08	7.08E-06
LOC100134822	0.64512	5.42139	8.80E-08	1.25E-05
BC045784	0.62852	4.7656	2.40E-06	0.000167
LINC00328	0.6192	4.91313	1.18E-06	9.81E-05
HJURP	0.61576	5.21213	2.63E-07	3.14E-05
CTB-181H17.1	0.61253	6.11972	1.76E-09	5.52E-07
KIF21B	0.6001	4.01938	6.63E-05	0.002054
SKA1	0.59651	4.7375	2.74E-06	0.000182
RP11-480A16.1	0.57599	5.20026	2.79E-07	3.23E-05
RP1-102H19.8	0.5723	4.92855	1.09E-06	9.38E-05
RP11-124L9.5	0.5652	4.80539	1.99E-06	0.000147
TACC3	0.5644	4.87487	1.42E-06	0.000113
ZNF559	0.55644	3.62061	0.000321	0.00628
LOC100132352	0.55318	5.06205	5.63E-07	5.62E-05
HPDL	0.55125	4.56823	6.05E-06	0.000337
CRIM1	0.54821	2.97252	0.00308	0.031927
FOXM1	0.54518	4.02271	6.54E-05	0.002038
ZNF569	0.54448	4.43914	1.09E-05	0.000526
AZGP1	0.5317	2.80017	0.005284	0.046137
SCN3A	0.53159	2.29829	0.021912	0.120784
ZFP30	0.52842	3.32282	0.000949	0.013871
SNORA21	0.52295	5.67914	2.17E-08	3.98E-06
C1orf112	0.52197	4.07003	5.38E-05	0.001766
PHF19	0.52042	5.46346	7.03E-08	1.04E-05
LOC100134445	0.51943	6.99161	7.75E-12	8.39E-09
RPL36A	0.51435	6.08822	2.12E-09	6.55E-07
AGAP4	0.51404	7.49845	2.54E-13	6.77E-10
ASPM	0.51127	5.75884	1.40E-08	2.82E-06
PXMP2	0.5109	5.20781	2.69E-07	3.16E-05
TOP2A	0.50888	5.13185	3.96E-07	4.20E-05
ANKLE1	0.50671	4.41759	1.20E-05	0.000564
CENPM	0.5035	3.95649	8.58E-05	0.002454
RRN3P2	0.50224	4.31802	1.86E-05	0.000792
RRM2	0.50115	4.58102	5.71E-06	0.000326
LOC100271840	0.49762	3.9203	9.94E-05	0.002737
NUF2	0.49539	4.16191	3.65E-05	0.001322

HIST1H2AM	0.49446	3.77678	0.000176	0.004116
AF090939	0.49191	5.24165	2.26E-07	2.73E-05
BC032415	0.4909	5.44446	7.78E-08	1.14E-05
POLE2	0.48906	4.48479	8.86E-06	0.000449
BC022892	0.48599	4.57397	5.89E-06	0.000333
NOMO3	0.48546	5.19243	2.91E-07	3.30E-05
NVL	0.48294	3.71246	0.000226	0.004957
MGC12488	0.48066	3.71698	0.000222	0.004896
KIF14	0.47538	5.69028	2.04E-08	3.82E-06
C1orf106	0.47316	3.48509	0.00053	0.009198
PMS2P5	0.47162	7.02739	6.12E-12	6.98E-09
NCAPH	0.47161	3.91704	0.000101	0.002751
DTL	0.46913	5.31762	1.52E-07	1.95E-05
LOC101060510	0.46619	3.81719	0.00015	0.003653
NOTCH2NL	0.46593	3.96583	8.26E-05	0.0024
LOC285812	0.46504	5.27903	1.86E-07	2.28E-05
HNRNPU-AS1	0.4624	7.03058	6.00E-12	6.98E-09
AP000347.2	0.4573	4.73057	2.84E-06	0.000186
RP11-50B3.4	0.45658	6.35483	4.32E-10	1.70E-07
LINC01410	0.4558	4.85368	1.57E-06	0.000124
CENPK	0.45544	4.41397	1.22E-05	0.000569
STK11IP	0.4513	4.335	1.73E-05	0.000744
SHCBP1	0.45058	4.07536	5.26E-05	0.001743
ANKRD36B	0.45029	5.65127	2.54E-08	4.46E-06
ANKRD36C	0.44966	5.47547	6.59E-08	1.00E-05
AF131215.4	0.44867	3.75125	0.000194	0.004441
LOC100505874	0.44667	3.73932	0.000203	0.004579
GIN51	0.44436	4.75505	2.53E-06	0.000173
STC2	0.44394	4.96927	8.94E-07	8.17E-05
RP3-428L16.2	0.44273	3.44502	0.000614	0.010198
KIF4A	0.44229	4.02934	6.36E-05	0.001993
BC030152	0.44164	4.90168	1.25E-06	0.000102
ARF1	0.44065	4.17471	3.46E-05	0.001273
CTAG2	0.43857	3.48997	0.000521	0.009081
LOC101928700	0.43835	4.09683	4.81E-05	0.001636
LOC399491	0.43823	4.7415	2.69E-06	0.000181
RP11-803D5.4	0.43738	4.11082	4.53E-05	0.00156
LOC81691	0.43607	5.38268	1.08E-07	1.47E-05
KIF20A	0.43362	3.86417	0.000124	0.003213
RP11-271C24.3	0.43359	7.59838	1.26E-13	3.91E-10
AK025288	0.43302	4.63303	4.48E-06	0.000271
MYBL2	0.43271	3.2039	0.001433	0.018756
CLTC-IT1	0.42904	4.38827	1.37E-05	0.00062
LINC00403	0.42648	2.68748	0.007413	0.058452
LOC101927709	0.42513	2.98738	0.002937	0.030882
NLRC3	0.42373	2.96075	0.003199	0.032859
LOC101929004	0.42367	3.84815	0.000133	0.003376

RP5-1074L1.4	0.42367	6.15173	1.46E-09	4.71E-07
C3orf67	0.42361	3.0824	0.002154	0.024797
LOC100190986	0.4207	6.26391	7.48E-10	2.70E-07
LOC101928433	0.41937	2.81702	0.005018	0.044545
LOC284513	0.41641	6.02672	3.03E-09	8.75E-07
LRRC69	0.41549	4.56722	6.08E-06	0.000337
LOC145474	0.41518	3.43053	0.000647	0.01056
LOC100272216	0.41517	6.69007	5.41E-11	3.35E-08
RP11-138A9.1	0.41346	5.94256	4.93E-09	1.21E-06
BD495725	0.41196	3.92808	9.63E-05	0.00268
RP3-508I15.21	0.4118	3.79915	0.000161	0.003863
MIR34A	0.41049	3.14363	0.001757	0.021484
LOC102723721	0.41042	4.34998	1.62E-05	0.000712
FTX	0.41026	4.38485	1.39E-05	0.000625
STAG3L3	0.40779	5.13886	3.82E-07	4.10E-05
MSH2	0.40767	5.42739	8.52E-08	1.23E-05
DSCR8	0.40742	2.78614	0.005514	0.047626
SMAD1	0.40697	2.1019	0.036007	0.167732
ANKS3	0.4069	3.65711	0.000279	0.005715
LOC101929964	0.40653	4.09331	4.88E-05	0.001647
CCAR1	0.40531	7.71115	5.71E-14	2.06E-10
E2F8	0.40378	4.64554	4.23E-06	0.000257
SND1-IT1	0.40324	5.52618	5.02E-08	8.05E-06
ARHGEF1	0.40322	3.96778	8.20E-05	0.002385
LOC101927330	0.40192	3.5544	0.000411	0.007537
PFAS	0.40148	6.46513	2.20E-10	1.01E-07
ZNF692	0.4011	8.39844	3.71E-16	2.68E-12
HK2	0.40088	2.31511	0.020967	0.11728
AP001462.6	0.40059	3.46185	0.000577	0.009766
ASZ1	0.40037	3.19025	0.001501	0.019283
ZNF76	0.39967	3.9314	9.50E-05	0.002654
MAGEB18	0.39925	2.53127	0.011637	0.078887
NEK2	0.39879	4.29707	2.04E-05	0.000853
PLK4	0.39839	4.23606	2.66E-05	0.001041
KCNK12	0.39823	2.82275	0.00493	0.043991
ZNF883	0.39805	3.62358	0.000317	0.006217
PMS2L2	0.39725	3.97289	8.03E-05	0.002355
AGAP9	0.3972	4.14579	3.91E-05	0.001392
AX747652	0.39688	3.55886	0.000404	0.007451
PBK	0.39663	4.3019	2.00E-05	0.000841
HTR2C	0.39626	3.83169	0.000142	0.003502
MED6	0.39465	6.01636	3.22E-09	9.05E-07
SEC14L1P1	0.39337	3.60852	0.000335	0.006497
UHRF1	0.39308	3.56242	0.000399	0.007378
NUDT9P1	0.39258	3.9952	7.33E-05	0.002206
ANKZF1	0.39087	3.94122	9.13E-05	0.002581

LL22NC03- N14H11.1	0.39082	3.3983	0.000726	0.011481
BRIP1	0.38982	4.18723	3.28E-05	0.00122
HIST1H4J	0.38845	3.09707	0.002052	0.023989
STAM-AS1	0.38844	3.45385	0.000594	0.009984
C10orf40	0.38805	3.02421	0.002607	0.028561
BUB1B	0.3878	4.30258	1.99E-05	0.000841
MEST	0.38774	4.02649	6.44E-05	0.002012
DEPDC1B	0.3876	3.41309	0.000689	0.010996
RPS16P5	0.38682	3.43761	0.00063	0.010387
SSX1	0.38611	3.15723	0.001678	0.020753
TCERG1	0.38583	6.97119	8.86E-12	9.13E-09
PKD1P1	0.38567	3.6604	0.000276	0.005678
BC042590	0.38554	3.43909	0.000627	0.010352
TENM2	0.38445	3.39207	0.000743	0.011659
MINOS1P1	0.38425	4.28948	2.11E-05	0.000871
D2HGDH	0.38211	3.99538	7.32E-05	0.002206
FLJ41455	0.38199	3.09084	0.002095	0.024321
GTF2H2B	0.38144	6.04721	2.69E-09	7.98E-07
TOX2	0.38143	2.2953	0.022084	0.121268
BTBD18	0.38056	3.82717	0.000144	0.003541
LOC101927196	0.37979	3.1046	0.002001	0.023616
OIP5	0.37934	3.97103	8.09E-05	0.002366
CKAP2L	0.37932	3.65747	0.000279	0.005715
UBE2T	0.37834	4.22167	2.83E-05	0.001088
HELLS	0.37828	5.80532	1.08E-08	2.26E-06
SPC25	0.37807	4.20047	3.10E-05	0.001162
GSTP1	-0.37881	-4.31644	1.87E-05	0.000796
C10orf10	-0.37929	-2.71364	0.006859	0.055438
APOC1	-0.38108	-3.02408	0.002608	0.028561
CTC-360P9.3	-0.38133	-4.10216	4.70E-05	0.001605
CSF2RB	-0.38217	-3.04603	0.002428	0.027222
CYP26A1	-0.38227	-3.29577	0.001043	0.014882
LOC101929272	-0.38231	-3.62774	0.000312	0.006135
ST6GALNAC6	-0.38417	-3.31717	0.000968	0.014088
TNFSF8	-0.38492	-2.74531	0.006239	0.051898
RGS2	-0.38503	-3.18648	0.00152	0.019445
NCF4	-0.38933	-4.96116	9.30E-07	8.36E-05
LOC101928612	-0.39003	-3.8364	0.000139	0.003476
MAFB	-0.39134	-2.72661	0.006599	0.053855
ACP5	-0.39198	-3.72329	0.000216	0.004824
MARCKS	-0.39241	-3.46222	0.000577	0.009764
TNFSF10	-0.39277	-3.16651	0.001627	0.020381
NFKBIE	-0.3949	-4.3929	1.34E-05	0.000612
RNASE3	-0.39611	-2.74541	0.006237	0.051898
CTSH	-0.3966	-2.57015	0.010422	0.073818
ABCG2	-0.39737	-2.82498	0.004897	0.043864

SPNS3	-0.39748	-2.50982	0.012359	0.082063
UBE2QL1	-0.39831	-2.87436	0.004202	0.039282
RALYL	-0.40002	-2.39965	0.016736	0.100071
LOC100996425	-0.4001	-4.23795	2.64E-05	0.001034
LILRB5	-0.40316	-2.99682	0.002849	0.030295
FKBP1B	-0.40479	-3.50457	0.000494	0.008722
ZC3H12D	-0.40594	-2.87753	0.004161	0.039015
LOC101929143	-0.40688	-3.50752	0.000489	0.008656
MANSC1	-0.40717	-3.49664	0.000508	0.008906
CCR5	-0.40724	-2.41494	0.016056	0.097109
HOXC9	-0.40784	-3.72327	0.000217	0.004824
LOC100131662	-0.40916	-3.02879	0.002568	0.028285
CEACAM8	-0.40918	-2.76969	0.005797	0.049219
HMOX1	-0.41236	-2.95797	0.003227	0.033006
ELANE	-0.41244	-3.14164	0.001769	0.021611
FGF2	-0.41385	-3.67716	0.000259	0.005403
STAP1	-0.41388	-3.55654	0.000408	0.007497
SELM	-0.41593	-4.78862	2.15E-06	0.000154
EPX	-0.4161	-3.35863	0.000836	0.012694
PLBD1	-0.41782	-3.47443	0.000551	0.009455
IGHM	-0.41997	-3.06435	0.002286	0.025999
BC034416	-0.42158	-3.97991	7.80E-05	0.002301
GADD45A	-0.42177	-4.05066	5.83E-05	0.001874
TRPM4	-0.42324	-2.18126	0.029578	0.147666
IL18	-0.42679	-3.054	0.002365	0.026628
TMEM56	-0.43008	-3.99951	7.20E-05	0.002186
NOL4	-0.4301	-2.56508	0.010574	0.074479
P2RY6	-0.43116	-2.91405	0.00371	0.036298
SYNE4	-0.43133	-4.37416	1.45E-05	0.000652
CD74	-0.43656	-6.25883	7.71E-10	2.74E-07
SLC46A3	-0.43712	-3.39743	0.000728	0.011487
DCLK1	-0.43979	-3.10128	0.002024	0.023799
CXCL12	-0.44077	-3.78412	0.000171	0.004029
LAMP3	-0.44171	-4.49619	8.41E-06	0.000433
CD14	-0.44292	-2.9662	0.003143	0.032394
GLCE	-0.44334	-4.56923	6.02E-06	0.000337
PPAP2C	-0.44344	-2.13713	0.033019	0.158471
UNC119	-0.44425	-4.67446	3.69E-06	0.000232
TMEM45A	-0.4472	-4.12678	4.24E-05	0.001484
LOC102724362	-0.45085	-3.93395	9.40E-05	0.002636
RASGRP1	-0.454	-2.11701	0.034698	0.163858
PLA2G2D	-0.45606	-4.42679	1.15E-05	0.000548
NR3C2	-0.45668	-3.65703	0.000279	0.005715
MPEG1	-0.45832	-4.01963	6.62E-05	0.002054
PRR15	-0.45923	-2.31051	0.021222	0.118099
TUBB2A	-0.4608	-3.27971	0.001104	0.015475
CPQ	-0.46137	-5.46622	6.93E-08	1.03E-05

PPBP	-0.46141	-2.43005	0.015409	0.094838
AMIGO2	-0.46292	-3.84546	0.000134	0.0034
SCGB1A1	-0.46318	-4.21209	2.95E-05	0.001121
LINC00324	-0.46456	-4.93186	1.07E-06	9.27E-05
DPEP1	-0.46514	-2.96105	0.003196	0.032854
LOC100996286	-0.46537	-4.56974	6.01E-06	0.000337
TMCO2	-0.46589	-4.24909	2.51E-05	0.000992
LAG3	-0.46687	-2.87224	0.00423	0.039425
CD163	-0.46806	-3.57634	0.000379	0.007096
CCRL2	-0.46905	-3.28625	0.001079	0.015212
NCF2	-0.46936	-3.07592	0.002201	0.025225
SOX14	-0.46967	-4.15584	3.75E-05	0.001354
LOC100507562	-0.47165	-4.05742	5.67E-05	0.001831
CCL18	-0.47636	-3.5788	0.000375	0.007046
TIMD4	-0.47841	-3.60055	0.000346	0.006665
NOD2	-0.47855	-3.96403	8.32E-05	0.002409
APOL3	-0.48128	-3.63606	0.000302	0.006036
SIT1	-0.4834	-3.19078	0.001498	0.019263
NXPE4	-0.48907	-4.41719	1.20E-05	0.000564
GNG11	-0.49098	-3.93942	9.20E-05	0.002595
C1QC	-0.49297	-3.08768	0.002117	0.024483
PLEKHF1	-0.49379	-4.21889	2.86E-05	0.001093
IGSF11	-0.4948	-3.73233	0.000209	0.00469
IL18R1	-0.49488	-4.77634	2.28E-06	0.000161
EYA2	-0.49585	-2.73222	0.006489	0.0532
SYNGR3	-0.49633	-3.12896	0.001845	0.022264
ADTRP	-0.50134	-4.56487	6.15E-06	0.000339
GPHA2	-0.50598	-4.26091	2.39E-05	0.000956
C11orf96	-0.50907	-2.68881	0.007384	0.058306
CTGF	-0.52266	-2.32111	0.020638	0.116007
IGK	-0.52609	-4.01027	6.89E-05	0.002115
ATXN8OS	-0.5283	-4.09184	4.91E-05	0.001655
PLAT	-0.53034	-4.46601	9.64E-06	0.000479
SERPINI1	-0.53343	-4.46576	9.65E-06	0.000479
ICAM4	-0.53684	-3.64503	0.000292	0.005902
PTPRZ1	-0.54619	-2.89604	0.003926	0.037549
PRG2	-0.54916	-3.13965	0.00178	0.021722
MLIP	-0.55058	-3.68246	0.000253	0.005367
ISL2	-0.56446	-2.4467	0.014723	0.091762
CD5L	-0.56763	-4.83434	1.73E-06	0.000133
HLA-DRA	-0.57133	-3.1602	0.001662	0.020641
ELOVL7	-0.57142	-3.48718	0.000526	0.009139
LOC100293211	-0.5725	-3.74848	0.000196	0.004466
VCAM1	-0.58662	-3.85973	0.000127	0.003254
C1QB	-0.59581	-3.70087	0.000236	0.005126
IGHV3-54	-0.60398	-3.96556	8.27E-05	0.0024
MAST1	-0.60547	-4.87717	1.40E-06	0.000113

CPVL	-0.61265	-3.8819	0.000116	0.003033
QPCT	-0.62142	-3.67729	0.000258	0.005403
SULF2	-0.62303	-3.18001	0.001554	0.019711
PLEKHO1	-0.654	-3.82831	0.000144	0.00354
BIRC3	-0.65768	-4.89198	1.31E-06	0.000106
C1QA	-0.6995	-3.93926	9.20E-05	0.002595
Igk	-0.73808	-5.35038	1.28E-07	1.68E-05
GBA3	-0.74999	-4.64818	4.18E-06	0.000256
CTSW	-0.84207	-3.97868	7.84E-05	0.002309
KIT	-0.991	-4.46451	9.70E-06	0.000481

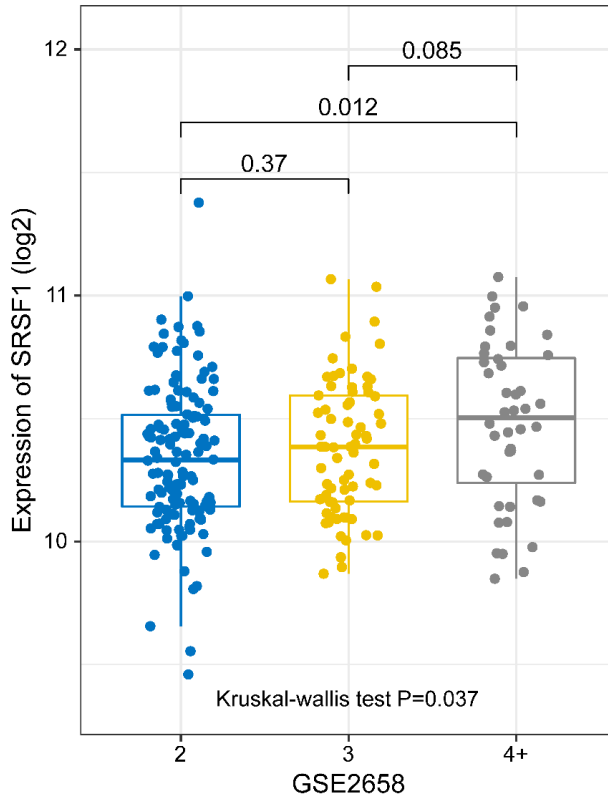
Supplementary Table 2. Top 20 terms of GO analysis of differential expressed genes.

GO	Description	logP-Value	Z-score	Gene Number	Gene Count	Gene Ratio (%)
GO:0051301	cell division	-8.9	8.3	213	22	10
GO:0006954	inflammatory response	-6.9	6.8	213	22	10
GO:0050778	positive regulation of immune response	-4.1	4.8	213	17	8
GO:0007059	chromosome segregation	-8.1	8.5	213	16	7.5
GO:0002274	myeloid leukocyte activation	-4.3	5	213	16	7.5
GO:0002366	leukocyte activation involved in immune response	-3.9	4.6	213	16	7.5
GO:0002263	cell activation involved in immune response	-3.9	4.6	213	16	7.5
GO:0046649	lymphocyte activation	-3.7	4.4	213	16	7.5
GO:0001817	regulation of cytokine production	-3.5	4.2	213	16	7.5
GO:0002697	regulation of immune effector process	-5.5	6.2	213	15	7
GO:0002250	adaptive immune response	-3.4	4.2	213	15	7
GO:0009617	response to bacterium	-3.3	4.1	213	15	7
GO:0051345	positive regulation of hydrolase activity	-3	3.8	213	15	7
GO:0045055	regulated exocytosis	-3	3.8	213	15	7
GO:0045859	regulation of protein kinase activity	-2.9	3.7	213	15	7
GO:0000280	nuclear division	-5.1	5.9	213	14	6.6
GO:0048285	organelle fission	-4.6	5.4	213	14	6.6
GO:0050900	leukocyte migration	-4.4	5.2	213	14	6.6
GO:0002694	regulation of leukocyte activation	-3.7	4.6	213	14	6.6
GO:0000226	microtubule cytoskeleton organization	-3.6	4.4	213	14	6.6

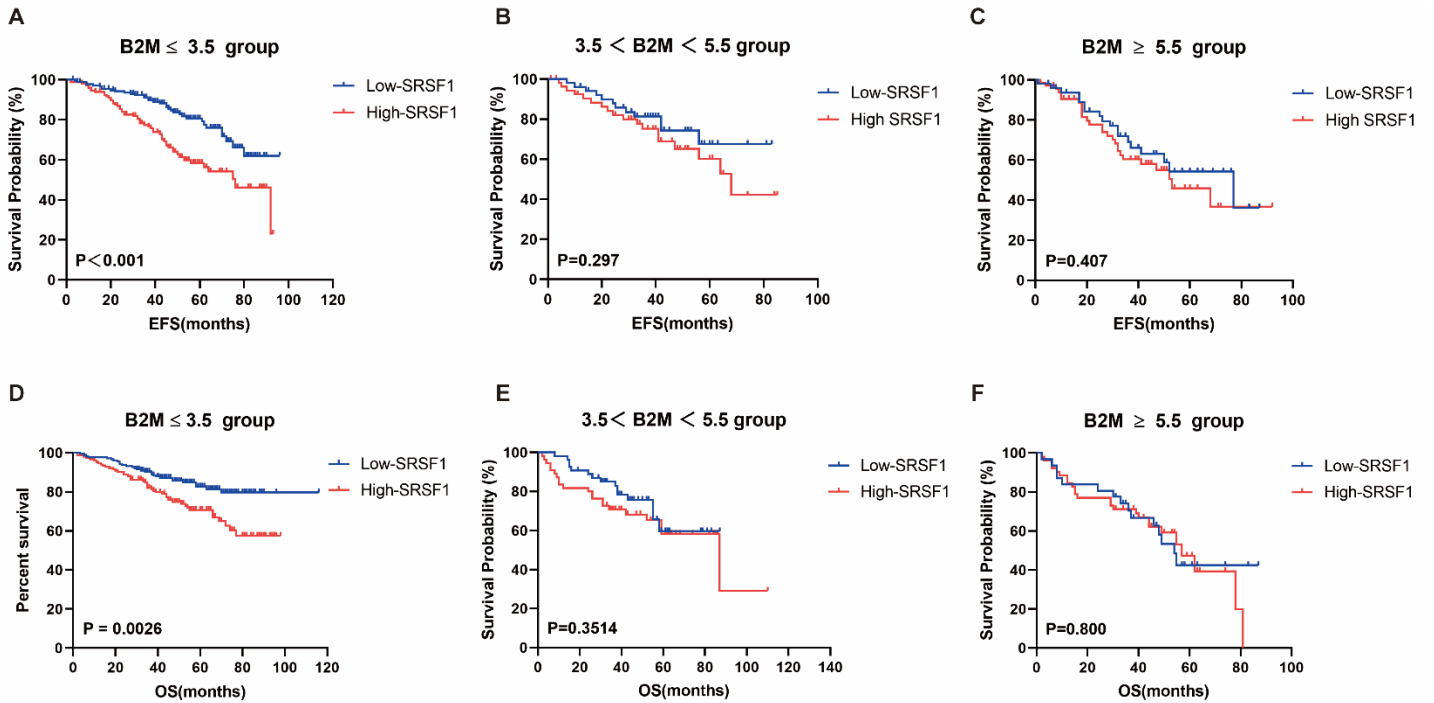
Supplementary Table 3. Top 20 terms of KEGG pathway analysis of differential expressed genes.

KEGG pathway	Description	LogP-Value	Z-score	Gene Number	Gene Count	Gene Ratio (%)
hsa04060	Cytokine-cytokine receptor interaction	-3	4.2	213	8	3.8
hsa05322	Systemic lupus erythematosus	-4.1	6	213	7	3.3
hsa05202	Transcriptional misregulation in cancer	-2.3	3.6	213	6	2.8
hsa04610	Complement and coagulation cascades	-3.5	5.7	213	5	2.3
hsa04210	Apoptosis	-2.4	3.9	213	5	2.3
hsa05418	Fluid shear stress and atherosclerosis	-2.3	3.7	213	5	2.3
hsa04145	Phagosome	-2	3.3	213	5	2.3
hsa05321	Inflammatory bowel disease (IBD)	-2.8	4.9	213	4	1.9
hsa01524	Platinum drug resistance	-2.6	4.7	213	4	1.9
hsa05150	Staphylococcus aureus infection	-2.5	4.4	213	4	1.9
hsa05133	Pertussis	-2.5	4.4	213	4	1.9
hsa05323	Rheumatoid arthritis	-2.2	3.8	213	4	1.9
hsa04064	NF-kappa B signaling pathway	-2	3.6	213	4	1.9
ko04668	TNF signaling pathway	-2	3.5	213	4	1.9
hsa05310	Asthma	-2.8	5.7	213	3	1.4
hsa05020	Prion diseases	-2.6	5.3	213	3	1.4
ko05134	Legionellosis	-2.1	4	213	3	1.4

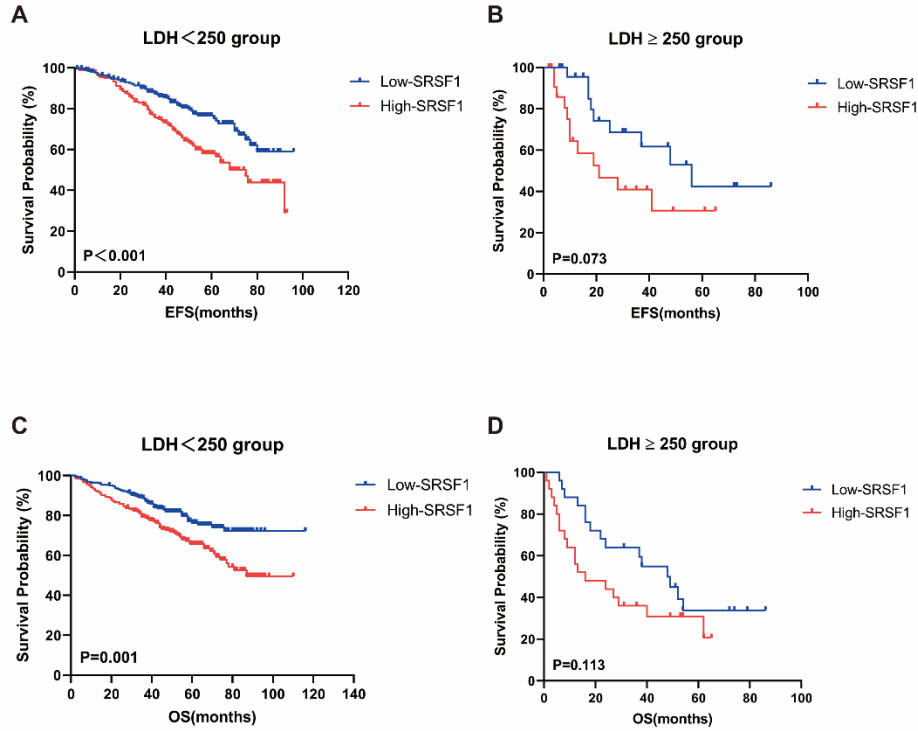
Amplification levels of 1q21 ■ 2 ■ 3 ■ 4+



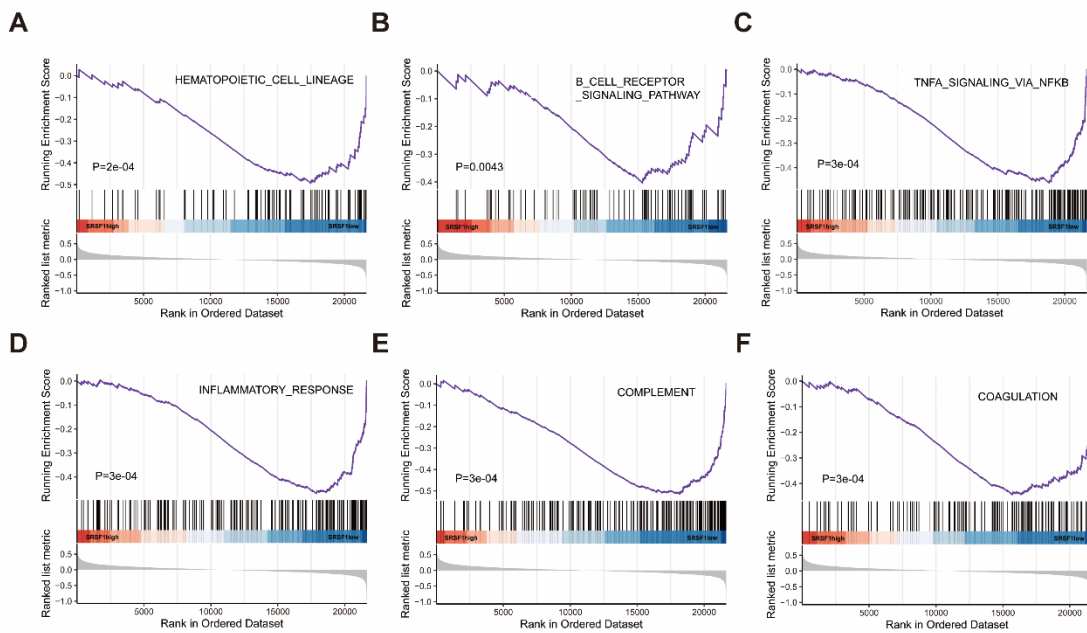
Supplementary Figure 1. SRSF1 expression levels at different 1q21 amplification in 248 MM patients of GSE2658. $p = 0.037$, Kruskal-wallis test.



Supplementary Figure 2. The Kaplan-Meier curve shows the prognostic value of the SRSF1 expression levels for MM patients categorized by $B2M \leq 3.5(\text{mg/l})$ (A, D), $3.5 < B2M < 5.5(\text{mg/l})$ (B, E), and $B2M \geq 5.5(\text{mg/l})$ (C, F). Abbreviation: B2M: beta-2 microglobulin; EFS: event free survival; OS: overall survival.



Supplementary Figure 3. The Kaplan-Meier curve shows the prognostic value of the SRSF1 expression levels for MM patients categorized by LDH < 250(U/l) (A, C) and LDH $\geq 250(\text{U/l})$ (B, D). Abbreviation: LDH: lactate dehydrogenase; EFS: event free survival; OS: overall survival.



Supplementary Figure 4. GSEA showed that hematopoietic cell lineage(**A**), B cell receptor signaling pathway(**B**), TNF α signaling via NF κ B(**C**), inflammatory response(**D**), complement(**E**), and coagulation(**F**) were significantly enriched in the SRSF1^{low} group.