

Supplementary Table 2 The collected immune-related genes

AZGP1
B2M
CALR
CANX
CD1A
CD1B
CD1C
CD1D
CD1E
CD4
CD8A
CD8B
CD74
CREB1
CTSB
CTSE
CTSL
CTSS
FCER1G
FCGRT
PDIA3
HFE
HLA-A
HLA-B
HLA-C
HLA-DMA
HLA-DMB
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HLA-DQB1
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HLA-E
HLA-F
HLA-G
HLA-H
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HSPA4
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HSP90AB1
ICAM1
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IFNA2
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IFNA21
IFNG
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KIR3DL2
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KLRC3
KLRD1
LTA
CIITA
MICA
MICB
NFYA
NFYB
NFYC
LGMN
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PSMC2
PSMC3
PSMC4
PSMC5
PSMC6
PSMD1
PSMD2
PSMD3

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PSMD7
PSMD8
PSMD10
PSMD11
PSMD13
PSME1
PSME2
RELB
RFX5
RFXAP
SLC10A2
TAP1
TAP2
TAPBP
THBS1
SEM1
KLRC4
AP3B1
RFXANK
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PSMD14
CLEC4M
IFI30
PROCR
ADRM1
ECPAS
TRPC4AP
CD209
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ULBP2
ULBP1
KIR3DL3
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RAET1L
UBR1
RAET1G
PDIA2
HAMP
PI3
CAMP
DEFB4A
PPBP
REG3G

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SLPI
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COLEC10
BPI
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DCD
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MBL2

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LBP
RBP4
NOX4
LTF
IFNB1
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FABP5
FABP3
FABP2
FABP4
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LRP1
TRIM5
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NEDD4
ADIPOQ
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SEMG1
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IL15
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PPIA
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NLRX1
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IKBKE
ISG15
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FCN2

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LYZ
CCL5
LEP
CYLD
KLKB1
CST4
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NEO1
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MX2
FGF2
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TKFC
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NFKBIZ
LMBR1
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MPO
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SP1
SOD1
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DLL4
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STING1
SKIV2L
SEMG2
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SPINK5
MARCO
BECN1
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JAK1
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IREB2
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IL17A
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MAP2K1
HRG
NDRG1
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IFNLR1
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PIK3CG
ARRB1
RSAD2
STAB2
TBK1
PDYN
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ARG2
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APOH

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GFAP
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ALB
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UNC93B1
TNFSF4
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ACTA1
ACO1
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CXCR6
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MIF
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IGLC7
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IGLJ6

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C5
CCL3P1
CKLF
CMA1
CX3CL1
CXCL17
CCN1
EDN1
EDN2
EDN3

FGF10
LECT2
PPBPP1
PROK2
SAA1
SAA2
SBDS
SEMA3A
SEMA3B
SEMA3C
SEMA3D
SEMA3E
SEMA3F
SEMA3G
SEMA4A
SEMA4B
SEMA4C
SEMA4D
SEMA4F
SEMA4G
SEMA5A
SEMA5B
SEMA6A
SEMA6B
SEMA6C
SEMA6D
SEMA7A
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SLIT2
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TYMP
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CMKLR1
CX3CR1
CXCR3
CXCR5
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CYSLTR1
CYSLTR2
ACKR1
EDNRA
EDNRB
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FPR2
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GPR33
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C5AR2

CXCR2
LTB4R2
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PLXNA2
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PLXNA4
PLXNB1
PLXNB2
PLXNB3
PLXNC1
PLXND1
PTAFR
ROB01
ROB02
RXFP3
XCR1
ADM
ADM2
AGRP
AGT
AMBN
AMELX
AMH
ANGPTL5
ANGPTL7
APLN
AREG
MANF
CDNF
ARTN
AVP
BDNF
BMP1
BMP10
BMP15
BMP2
BMP3
BMP4
BMP5
BMP6
BMP7
BMP8A
BMP8B
BTC
MYDGF
CALCA
CALCB
CAT
CCK
CD320

CD70
ADA2
CER1
CGA
CGB3
CGB1
CGB2
CGB5
CGB7
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CHGA
CHGB
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CMTM4
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CMTM6
CMTM7
CMTM8
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CRH
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CSF2
CSF3
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CSH2
CSHL1
CSPG5
CTF1
CCN2
DKK1
EBI3
EGF
EPGN
EPO
EREG
ESM1
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FAM3D
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VEGFD
FIGNL2
FLT3LG
FSHB
GAL
GALP
GAST
GCG
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GDF2
GDF3
GDF5
GDF6
GDF7
GDF9
GDNF
GH1
GH2
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GKN1
GMFB
GMFG
GNRH1
GNRH2
GPHA2
GPHB5
GPI
GREM1
GREM2
GRP
GUCA2A
HBEGF
HDGF
HDGFL3

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IFNK
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IGF1
IGF2
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IL16
IL17B
IL17C
IL17D
IL17F
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IL36A
IL37
IL36B
IL36G
IL1RN
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IL21
IL23A
IL24
IL25
IL26
IFNL3
IL3
IL31
IL32
IL33
IL34
IL5
IL6ST
IL7
IL9
INHA
INHBA
INHBB
INHBC
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INS
INS-IGF2
INSL3
INSL4
INSL5
INSL6
JAG1
JAG2
FGF7P6

FGF7P3
KITLG
KL
LACRT
LEFTY1
LEFTY2
LHB
LIF
LRSAM1
LTB
LTBP2
LTBP3
LTBP4
MDK
MIA
MLN
MSTN
NAMPT
NDP
NENF
NGF
NMB
NODAL
CCN3
NPFF
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NPPB
NPPC
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NRG2
NRG3
NRG4
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OSTN
OXT
ENDOU
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PDGFRL
PGF
PMCH

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POMC
PPBPP2
PPY
PRL
PRLH
PROK1
PSPN
PTH
PTH2
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RABEP2
REG1A
RETN
RETNLB
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RLN2
RLN3
SCG2
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SCT
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SECTM1
SLURP1
SPP1
SST
STC1
STC2
TAC1
TDGF1
TDGF1P3
TG
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TGFB2
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THPO
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TNFSF12
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TNFSF8
TNFSF9
TOR2A
TRH

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TSLP
TXLNA
UCN
UCN2
UCN3
UTS2
UTS2B
VEGFB
VEGFC
VGF
VIP
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ACVR1C
ACVR2A
ACVR2B
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ADIPOR2
ADRB1
ADRB2
AGTR1
AGTR2
AMHR2
ANGPT1
ANGPT4
ANGPTL1
ANGPTL2
ANGPTL3
ANGPTL4
ANGPTL6
APLNR
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AVPR1B
AVPR2
BMPR1A
BMPR1B
BMPR2
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CALCR
CALCRL
CNTFR
CRHR1
CRHR2
CRIM1
CRLF1
CRLF2
CRLF3

CSF1R
CSF2RA
CSF2RB
CSF3R
EGFR
ENG
EPOR
ESR1
ESR2
ESRRA
ESRRB
ESRRG
FGFR1
FGFR2
FGFR3
FGFR4
FGFRL1
FLT1
FLT3
FLT4
FSHR
GALR2
GALR3
GCGR
GHR
GHRHR
GHSR
GIPR
GLP1R
GLP2R
GNRHR
GPER1
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HNF4G
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IGF2R
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IL12RB2
IL13RA1
IL13RA2
IL15RA
IL2RB

IL17RA
IL17RB
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IL17RD
IL17RE
IL18R1
IL18RAP
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IL1R2
IL1RAP
IL1RL1
IL1RL2
IL20RA
IL20RB
IL21R
IL22RA1
IL22RA2
IL23R
IL27RA
IL2RA
IL2RG
IL31RA
IL3RA
IL4R
IL5RA
IL6R
IL9R
INSR
KDR
LEPR
LGR4
LGR5
LGR6
LHCGR
LIFR
LTBR
MC1R
MC2R
MC3R
MC4R
MCHR1
MCHR2
MET
MLNR
MPL
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MTNR1B
NGFR
NMBR
NPR1
NPR3

NROB1
NROB2
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NR1D2
NR1H2
NR1H3
NR1H4
NR1I2
NR1I3
NR2C1
NR2C2
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NR2E3
NR2F1
NR2F2
NR2F6
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NRP2
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OPRL1
OPRM1
OSMR
OXTR
PGR
PGRMC2
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PPARD
PRLHR
PRLR
PTGER1
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PTGER4
PTGFR
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PTH2R
RARA
RARB
RARG
RORA
RORB

RORC
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RXFP2
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RXRB
RXRG
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SDC3
SDC4
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SSTR2
SSTR5
ST2
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TEK
TGFB1
TGFB2
TGFB3
THRA
THRB
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