

**S2 Table. 959 intersection differentially expressed genes between high and low scores.**

Gene	Regulation
ASS1	up
SPN	up
LRRTM2	up
ITGA4	up
ITGA5	up
SDK2	up
CHST1	up
ITGAX	up
BCL2A1	up
ITGAL	up
NOV	up
COX4I2	up
CRTAM	up
ATP1A3	up
ATP1A2	up
IL10RA	up
CFB	up
CFP	up
LOC283070	up
RUNX2	up
IGFBP2	up
IGFBP4	up
APLNR	up
CLIC2	up
CLIC3	up
FOXL1	up
HLA-DPA1	up
ZAP70	up
LILRB3	up
NDRG4	up
HLA-DQB1	up
MRC2	up
FOXS1	up
LPAR5	up
MYO1G	up
MYO1F	up
GALNTL4	up
LGALS9	up
LGALS3	up
LGALS2	up
ASAP3	up
ITGAD	up
LOC96610	up
ARHGAP25	up
C1orf38	up
RSAD2	up
CAPG	up

FCER1G	up
SLA2	up
FAM49A	up
TNFSF10	up
EVI2A	up
EVI2B	up
GNA15	up
GRIN2D	up
BCAT1	up
NOVA1	up
CCL21	up
CCL22	up
CCL26	up
FAM70A	up
FAM70B	up
UBE2L6	up
ZNF831	up
CD200R1	up
RARRES2	up
IL2RA	up
IL2RB	up
IL2RG	up
RARRES3	up
C16orf54	up
PRKCDBP	up
P2RY8	up
MMP25	up
LIF	up
NCF1	up
HLA-DRB1	up
HLA-DRB6	up
XAF1	up
HLA-DRB5	up
FN1	up
SYT5	up
LAG3	up
SASH3	up
GAL3ST4	up
HLA-DMB	up
TBX21	up
PLA2G7	up
FPR1	up
FPR3	up
NT5E	up
LGALS9C	up
MAP1A	up
MAP1B	up
VGFB	up
TMEM200B	up

TMEM156	up
C1S	up
C1R	up
PRF1	up
TMEM178	up
CD300C	up
EOMES	up
KIAA0748	up
ICOS	up
ADAM11	up
ADAM19	up
CPNE5	up
UCP2	up
PCSK2	up
SLC16A6	up
SCRG1	up
OSR2	up
ISM1	up
CDKN1A	up
MFNG	up
GJA1	up
GJA5	up
VCAM1	up
PLEKHO1	up
TIGIT	up
IFITM1	up
POU2AF1	up
TM4SF19	up
LAMB3	up
CYSLTR2	up
GPR162	up
TGFB1	up
COX7A1	up
DLL4	up
IFI6	up
STAB1	up
ABI3	up
RHOH	up
IL12RB1	up
ADCY1	up
ADCY2	up
PDLIM4	up
CLEC7A	up
CTLA4	up
KCNA3	up
IL15	up
PLA2G2D	up
HS3ST2	up
CYFIP2	up

BCL3	up
OAS2	up
TRIM22	up
OASL	up
ATP8B4	up
DES	up
FBXL7	up
HTR2B	up
TLR8	up
ACE	up
HLA-C	up
SLC7A7	up
GLIPR2	up
GLIPR1	up
GGT1	up
PTPRC	up
PTPRO	up
SIRPG	up
ABLIM3	up
MX2	up
P2RY10	up
ISG15	up
GGTLC2	up
CRIP1	up
SIGLEC1	up
SIPA1L2	up
SLC15A3	up
KLRB1	up
ALDH1L2	up
IRF1	up
IRF5	up
IRF8	up
CSF2RB	up
PANX2	up
PTPRE	up
ADAP2	up
GAB3	up
ITK	up
NPTX1	up
CYBB	up
HLA-DQB2	up
ROR2	up
SPATA18	up
GLDC	up
FCN1	up
CR1	up
TNFRSF1B	up
PTPN7	up
PTPN6	up

S100A4	up
FOXF1	up
SERPINA1	up
CD69	up
CHRD	up
GPR55	up
PAEP	up
HSPB8	up
NCRNA00152	up
IL21R	up
FAM43B	up
CMPK2	up
HPCA	up
RFTN1	up
HTATIP2	up
KCTD17	up
TNFSF13B	up
GLIS3	up
CYP2S1	up
GPBAR1	up
ELMO1	up
AIF1	up
PDCD1	up
KLRD1	up
SLC29A4	up
GPC4	up
HEPH	up
GPR183	up
PIK3CG	up
LOC541471	up
RPS6KA2	up
PTPRCAP	up
PATL2	up
LRRC25	up
ARL11	up
CLIP3	up
MNDA	up
CD48	up
CA12	up
MFSD2A	up
C10orf54	up
NLRP1	up
CSF1R	up
CDCP1	up
XCL2	up
FCGR2B	up
CYTH4	up
PTGS1	up
ACSM5	up

CDH23	up
FLRT1	up
ARHGAP9	up
SLA	up
MGC12982	up
GMFG	up
IDO1	up
CAMK1D	up
ECM1	up
LYPD1	up
RGS1	up
LOXL3	up
SECTM1	up
CD27	up
IFI30	up
PLA2R1	up
HCST	up
HTRA1	up
CCDC109B	up
MAPK10	up
FZD2	up
RASSF5	up
TOX2	up
CSF3R	up
CXCL11	up
CXCL10	up
CXCL13	up
CXCL12	up
TNFRSF4	up
FIBCD1	up
TMSL3	up
IL1RN	up
PRAM1	up
AK5	up
NCKAP1L	up
CXCR2P1	up
AOAH	up
C3AR1	up
SCN1B	up
TSC22D3	up
PLCE1	up
PTGER2	up
SMOC2	up
CYP1B1	up
S1PR4	up
TYMP	up
CTSS	up
CTSW	up
CXCL9	up

EMB	up
CARD9	up
ADAMTS2	up
GPR65	up
GPR68	up
TMEM37	up
SDS	up
SIGLEC12	up
KCNK6	up
AOC3	up
LYZ	up
SUSD4	up
LY9	up
TNIK	up
HLA-B	up
HLA-F	up
PSTPIP1	up
TFEC	up
VAV1	up
TNFAIP2	up
PRR5L	up
C5orf20	up
GF11	up
TAP1	up
AMZ1	up
SLITRK2	up
SGK1	up
LST1	up
GDF11	up
GZMA	up
GZMB	up
GZMM	up
GZMH	up
GZMK	up
LEF1	up
B4GALNT1	up
ASIP	up
CA8	up
C12orf68	up
FUT7	up
SIGLEC14	up
SIGLEC11	up
SPI1	up
CCL4L2	up
SLAMF6	up
SLAMF1	up
F13A1	up
C6orf105	up
FCRL3	up

FCRL6	up
MGAT3	up
MMP9	up
MMP2	up
AMICA1	up
DOCK2	up
ACSBG1	up
SLAMF8	up
GIMAP8	up
GIMAP4	up
GIMAP5	up
GIMAP6	up
GIMAP7	up
GIMAP1	up
WARS	up
LAX1	up
CTNND2	up
ZMYND15	up
CORO1A	up
TRIM9	up
LOC100233209	up
SLC47A1	up
TSPAN5	up
SNX20	up
FSTL4	up
TLR7	up
FCRL5	up
UBD	up
AMN	up
MEFV	up
RASL11B	up
CARD16	up
PDCD1LG2	up
COL9A2	up
COL9A3	up
SEMA6B	up
KCNJ10	up
MMP1	up
C17orf76	up
SLC6A1	up
PECAM1	up
TRPV2	up
COL22A1	up
SLC4A8	up
CIITA	up
LSP1	up
TOX	up
HMOX1	up
IGSF6	up



APOL1	up
LCP2	up
LCP1	up
SULF2	up
RASAL3	up
FGR	up
COL5A3	up
COL5A1	up
BAI2	up
HCK	up
HLA-DPB1	up
CHAC1	up
ITGA11	up
PARP8	up
DPYS	up
TUBB3	up
PSMB9	up
SLCO2B1	up
ADRA2A	up
CCR1	up
CCR2	up
CCR5	up
CCR7	up
CD84	up
CD86	up
ZBED2	up
CD8A	up
CD8B	up
RUNX3	up
HLA-DOA	up
HLA-DOB	up
CCDC74A	up
PTPN22	up
SPOCD1	up
NFAM1	up
HLA-DQA1	up
HLA-DQA2	up
SERPINB8	up
HK3	up
MLC1	up
TNF	up
BATF	up
PIK3R5	up
XCL1	up
TNFAIP8L2	up
REEP2	up
CECR1	up
CHRNA1	up
ID3	up

UBA7	up
SIGLEC8	up
CD5L	up
NBL1	up
SIGLEC7	up
FOLR2	up
LAPTM5	up
B2M	up
SIGLEC5	up
LILRB5	up
LILRB2	up
LILRB1	up
GRAP2	up
C9orf110	up
BIN2	up
DPYD	up
HLA-DMA	up
RHBDL2	up
CD300A	up
MDGA1	up
MYCN	up
IGF2	up
IGF1	up
FLJ42875	up
CD300LF	up
CD300LB	up
PRIMA1	up
NINJ2	up
ARHGAP30	up
CMKLR1	up
PTAFR	up
ATP6V0D2	up
PRDM1	up
PPM1K	up
PLD4	up
NNMT	up
SUSD2	up
PILRA	up
C3	up
KCNJ5	up
KCNJ4	up
AGPAT4	up
COL1A1	up
RCSD1	up
FLI1	up
C19orf35	up
KLHL6	up
BLNK	up
KCNMB4	up

SOCS2	up
TARP	up
CCNO	up
CCL3L1	up
IL1R2	up
ITPR2	up
CES1	up
ACAN	up
FFAR3	up
DAPP1	up
P2RX1	up
SPNS3	up
IFNG	up
ARHGAP15	up
IL7R	up
FGL2	up
ME1	up
LRMP	up
PGCP	up
SLIT1	up
CCL3	up
NFATC2	up
NFATC4	up
CCL4	up
CCL8	up
GCET2	up
MGLL	up
RASGRF1	up
TRPM2	up
GPR132	up
TBXAS1	up
INPP5D	up
TRAF3IP3	up
TGFBI	up
LCK	up
IL1B	up
LILRB4	up
ADAM23	up
ADAM28	up
IL18	up
GSTM5	up
LTB	up
SSX6	up
SSX4	up
SSX1	up
MS4A7	up
MS4A1	up
FASLG	up
SLC45A1	up

CCDC64	up
TMEM119	up
FAM105A	up
WWTR1	up
SORCS1	up
CCL13	up
CCL14	up
CCL18	up
CCL19	up
ALOX15B	up
NTNG2	up
THY1	up
MMP12	up
HLA-DRA	up
PRG2	up
KCNK13	up
SIRPB2	up
P2RY13	up
IFI44L	up
LTA	up
LTF	up
IL32	up
SAMSN1	up
MGC29506	up
EMR1	up
NCF1B	up
TMEM130	up
TMEM155	up
AIM1	up
AIM2	up
IL18BP	up
NOD2	up
HCLS1	up
RNASE6	up
TUBA4A	up
SSX5	up
P2RY6	up
SIGLEC9	up
APBB1IP	up
SYT11	up
GEM	up
GPR171	up
GPR174	up
GPR176	up
UCHL1	up
SP140	up
HSH2D	up
LOC400696	up
CASP1	up

PRDM8	up
ALOX5	up
TNFRSF10C	up
PROCR	up
NCF2	up
NCF4	up
CNTNAP1	up
APOB48R	up
PAPSS2	up
DPEP2	up
DYSF	up
PPP2R2B	up
GATA6	up
GATA3	up
SH2D1A	up
IPCEF1	up
C4A	up
SNX32	up
ANPEP	up
LAMA1	up
PLAC8	up
CASS4	up
BAALC	up
SLCO5A1	up
APOL6	up
APOL4	up
APOL3	up
C1QC	up
C1QB	up
C1QA	up
TAGAP	up
VSIG4	up
ITGB2	up
PLXDC2	up
PLXDC1	up
ST8SIA4	up
CD74	up
CD70	up
NLRP3	up
BTLA	up
ASCL2	up
LOC606724	up
CD109	up
CD247	up
LILRA5	up
APOC2	up
SELL	up
BST2	up
DOCK11	up

GPR37L1	up
C1orf162	up
NGFR	up
MCHR1	up
EPSTI1	up
GFRA2	up
FAM113B	up
ZNF385A	up
ISG20	up
CD52	up
CD53	up
KIAA1324	up
RAB31	up
DOK2	up
CD163L1	up
ARMC9	up
CD163	up
IQSEC3	up
DNASE1L3	up
CD40LG	up
TUBB2B	up
MYEOV	up
SLIT3	up
ZNF683	up
SEL1L3	up
NIPAL4	up
CCRL2	up
CHI3L2	up
CHI3L1	up
THEMIS	up
ODZ4	up
ASB2	up
GPR114	up
F2RL3	up
CCL5	up
LAMP3	up
CD38	up
IFI27	up
CD33	up
CD37	up
PSD2	up
TMEM176A	up
TMEM176B	up
CD3D	up
CD3E	up
CD3G	up
CD209	up
LAIR1	up
HCP5	up

ADAMTS14	up
IGSF21	up
RASGRP1	up
FCGR3A	up
ALDH1A1	up
LOC400759	up
CALHM2	up
FAM26F	up
HAVCR2	up
FXYD2	up
ADAM6	up
OLFML3	up
ANKRD22	up
CYTIP	up
TNFRSF9	up
S100A9	up
FHDC1	up
TBC1D10C	up
ABP1	up
TM7SF4	up
CD14	up
GGTA1	up
GADD45G	up
RIMS2	up
GRID1	up
MSR1	up
CERKL	up
BATF3	up
KLHDC7B	up
KLRK1	up
SLC1A3	up
LRRC10B	up
FCGR1B	up
FCGR1A	up
DHRS9	up
DHRS3	up
JAKMIP1	up
GNLY	up
IL15RA	up
SLC2A3	up
SLC46A3	up
LAT2	up
S1PR5	up
COBL	up
TNFSF8	up
NUDT16P1	up
MS4A6A	up
SCML4	up
PKD2L1	up

FMO3	up
GBP1	up
FRZB	up
ST8SIA1	up
CD180	up
WAS	up
DPP4	up
A4GALT	up
MPEG1	up
ADAMDEC1	up
CD7	up
SDC2	up
ELN	up
SLC8A1	up
C12orf75	up
PTGIR	up
AHNAK2	up
SQRDL	up
SCN4B	up
MS4A4A	up
ACTA2	up
TSTD1	up
PLN	up
PTGER4	up
KIR2DL4	up
NCF1C	up
HTRA3	up
C17orf87	up
SPIB	up
SLC38A5	up
RASGRP2	up
NLRC5	up
SLC38A3	up
CXCR3	up
CXCR6	up
CXCR5	up
IFI44	up
TREM2	up
THBS2	up
CADM1	up
FGD2	up
CELF2	up
PTGDS	up
NKG7	up
CARD11	up
HCG26	up
RIPK3	up
C20orf103	up
GPR34	up



AQP3	up
AQP1	up
ADORA3	up
EPHB2	up
EPHB1	up
TIFAB	up
WDFY4	up
C17orf60	up
DARC	up
PHYHIP	up
CLEC12A	up
PLEK	up
SPOCK2	up
GAD1	up
TMEM150B	up
FEZ1	up
KIF21B	up
BCL11B	up
PALM3	up
UBASH3A	up
C21orf121	up
MAN1C1	up
MYO7A	up
NAPSB	up
TYROBP	up
GPR109A	up
SAMD3	up
EGFLAM	up
GPR18	up
KCNMA1	up
IGJ	up
EBI3	up
SIT1	up
PARVG	up
CXorf21	up
PLEKHG4B	up
SELPLG	up
SPON1	up
TIMP4	up
DKK3	up
LILRA6	up
LILRA4	up
LILRA2	up
ZNF467	up
HPSE	up
OSCAR	up
SORL1	up
CD96	up
CLEC10A	up

CST7	up
SKAP1	up
CSTA	up
AMIGO2	up
SLC6A9	up
TRAT1	up
LINGO1	up
TNFRSF8	up
FCGR1C	up
RGS18	up
LY86	up
CRHBP	up
ZBP1	up
MALL	up
GBP2	up
GBP5	up
GBP4	up
CORO2B	up
CD4	up
CD5	up
CD6	up
CD2	up
STAT1	up
VCAN	up
ACY3	up
SIGLEC10	up
ARC	up
ABCC3	up
APLP1	up
GLI2	up
MAFB	up
SLCO3A1	up
SLC2A6	up
C9orf109	up
PLAU	up
ETV7	up
IKZF1	up
IKZF3	up
IL4I1	up
FOXD2	up
ACAP1	up
GNGT2	up
C4orf19	down
ZNF285	down
PCDH20	down
TMEM84	down
MPZ	down
CCL28	down
CTF1	down

FBXO17	down
KIAA1543	down
ADRA2C	down
HFE	down
CES3	down
TMEM40	down
GNAL	down
ZNF727	down
FAM132A	down
EDNRB	down
ZNF114	down
MUC7	down
IL12RB2	down
TRIM58	down
HILS1	down
LMCD1	down
ZNF676	down
ALDH1L1	down
C13orf35	down
ACSM3	down
PERP	down
ZNF229	down
SLC3A1	down
CKMT1B	down
C6orf142	down
ZNF793	down
PDE3A	down
KCNK2	down
FAM75A2	down
NR6A1	down
FUT3	down
GSTA3	down
DMRT2	down
ZNF826	down
SLC44A3	down
ZNF257	down
TDRD5	down
ASB10	down
SERPINB9	down
CHGB	down
PPAN-P2RY11	down
ABCA17P	down
EPCAM	down
GPR27	down
RNF43	down
ZNF883	down
MTUS1	down
GSTO2	down
ERBB3	down

GJB1	down
ZNF560	down
ZNF541	down
ZNF677	down
NEDD9	down
ZNF391	down
LOC100190938	down
PCOLCE2	down
SLC25A21	down
HOMER2	down
ZNF681	down
AZGP1	down
WNK4	down
LOC100270746	down
KREMEN2	down
RAPGEF3	down
ZNF208	down
ZSCAN23	down
LIPH	down
ZNF781	down
ZNF415	down
MYH7	down
CELF5	down
ZNF667	down
STEAP1	down
LINGO2	down
ACSF2	down
PEG3	down
CPS1	down
PLEKHG4	down

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