

## 7. Appendix

In this appendix I present the complete data from the differential gene expression analysis for conditions discussed throughout this thesis. These analyses were performed using the Wald's Test implemented in DESeq2 version 1.16.1 with thresholds of BH-adjusted P value < 0.05 and log-fold changes > 1. The conditions for which almost no differential expression is observed, as well as the genes for which no annotated protein was found, have been omitted from this appendix.

**Supplementary table 1** Genes differentially expressed in CD4<sup>+</sup> T cells 16 hours of polarisation with IFN- $\beta$ . Gene expression was compared to stimulated, unpolarised (Th0) cells used as control. Genes are ordered by Log2-fold change.

Gene Name	Log2(Base Mean Count)	Log2FC	P adjusted
MX1	9.48	5.31	6.18E-236
IFI6	7.02	5.15	4.19E-235
OAS1	6.63	4.93	4.25E-214
IFIT2 / ISG54	7.53	4.68	1.34E-201
HERC6	7.24	4.65	5.79E-202
IFI44L	8.99	4.49	2.87E-163
MX2	8.19	4.37	3.98E-155
USP18 / ISG43	5.99	4.36	2.72E-165
IFI44	7.31	4.23	5.81E-164
IFIT3 / ISG60	9.47	4.21	2.03E-143
OAS2	9.45	4.14	0.00E+00
CXCL10	7.92	3.91	4.14E-132
ISG20	7.19	3.90	2.28E-144
HERC5 / CEBP1	6.06	3.72	7.86E-117
TNFSF10 / APO2L	7.91	3.60	9.06E-159
PLSCR1	6.95	3.52	4.06E-108
DDX60	7.23	3.49	9.63E-115
IFIT1 / ISG56	7.15	3.48	3.38E-132
CMPK2	6.99	3.47	3.40E-100
SAMD9L	8.38	3.46	2.79E-105
OAS3	8.36	3.44	1.38E-95
ISG15	6.09	3.39	8.11E-97
EIF2AK2	8.61	3.36	1.66E-185
SPATS2L	5.56	3.19	2.58E-85
HSH2D	6.29	3.12	3.57E-83
DDX60L	6.98	3.08	1.36E-94
OASL	5.39	2.99	9.29E-79
TRIM22	9.51	2.93	2.50E-146
CD38	8.40	2.92	3.91E-100
RSAD2	7.62	2.91	1.68E-73
LAMP3	8.21	2.85	1.01E-108
CD225 / IFI7	7.65	2.79	1.40E-100
DDX58	6.46	2.73	4.91E-65
TRANK1	7.10	2.69	2.98E-64

SAMD9	6.86	2.67	1.25E-63
ZBTB32	6.10	2.65	6.40E-59
IFI35	6.94	2.65	1.22E-67
DHX58	5.91	2.63	1.84E-57
HELZ2	6.94	2.61	5.18E-62
IFIH1	7.52	2.60	5.23E-81
NT5C3A	8.37	2.60	9.91E-120
XAF1	6.59	2.50	1.11E-57
SAT1	7.59	2.42	2.24E-73
NEXN	5.45	2.22	5.71E-40
EPST11	7.49	2.19	8.83E-39
IFIT5 / ISG58	7.61	2.09	3.69E-55
SSTR3	4.90	2.08	5.84E-39
TYMP / ECGF1	6.46	2.07	6.44E-38
PARP10	6.79	2.06	1.73E-37
STAT2	8.23	2.05	1.51E-62
TRIM25 / ZNF147	9.21	2.03	1.20E-83
PARP9	8.37	1.99	4.32E-62
LGALS9	6.33	1.94	3.81E-32
SP100	9.08	1.93	3.52E-71
KIAA1671	6.54	1.89	1.11E-34
DTX3L	8.55	1.84	6.21E-50
SLFN12L	6.77	1.83	3.82E-33
SP110	6.58	1.83	5.78E-33
PARP12	7.04	1.80	2.52E-30
BST2	7.11	1.79	1.13E-35
TNFSF13B / BAFF	4.77	1.79	1.46E-27
NMI	7.57	1.78	4.22E-41
RYDEN	6.50	1.76	1.07E-29
PPM1K	8.10	1.75	1.33E-45
TDRD7	5.01	1.69	1.99E-23
XIRP1	6.91	1.66	2.90E-26
LMO7 / FBX20	7.16	1.66	8.04E-26
IGFBP4	6.20	1.66	5.59E-24
PHF11	7.95	1.64	2.35E-34
PARP14 / BAL2	10.00	1.63	3.79E-30
WDFY1	8.33	1.61	3.05E-34
SP140	7.11	1.55	1.77E-27
LGALS3BP	6.88	1.54	9.54E-25
DPP4 / CD26	7.24	1.54	8.19E-22
NUB1	7.99	1.53	1.01E-38
ADAM19	7.19	1.50	3.97E-22
EHD4	8.64	1.49	9.90E-49
PI4K2B	6.83	1.45	7.72E-18
GBP1	9.85	1.44	3.23E-39
IFI16	10.45	1.40	1.93E-64
CHMP5	7.51	1.38	1.19E-20
IL18RAP / IL1R7	6.30	1.38	4.11E-17
IRF8	10.78	1.37	8.27E-53
APOL1	8.47	1.37	8.93E-23
MOV10	6.31	1.36	1.59E-16
LIF	9.90	1.36	2.29E-15

FBXO6	5.96	1.36	2.92E-15
PGAP1	7.98	1.35	1.21E-14
ZCCHC2	8.23	1.33	4.65E-31
TRAFD1	8.55	1.33	2.06E-34
SLFN13	5.06	1.32	3.71E-14
HELB	7.93	1.31	2.13E-25
TRIM5	6.52	1.31	7.50E-16
PML	7.52	1.29	5.43E-21
SIDT1	6.45	1.28	3.73E-15
TRIM21	7.33	1.27	1.70E-20
IL12RB2	9.49	1.26	9.13E-14
RASGRP3	4.50	1.25	3.69E-14
IFITM3	4.80	1.25	2.62E-13
LAP3	8.66	1.24	1.60E-32
DENND1B	6.36	1.22	7.20E-14
RP2	5.90	1.22	2.09E-12
XRN1	9.57	1.20	3.55E-22
PRDM1	5.69	1.19	1.07E-11
IL21	5.66	1.19	1.93E-11
PLAC8	5.67	1.18	2.49E-11
MYD88	7.93	1.18	1.40E-21
RNF213	11.46	1.17	7.92E-13
SPSB1	4.59	1.17	3.27E-12
UBE2L6	9.00	1.17	8.84E-28
SLFN5	7.46	1.17	4.87E-11
MIER1	9.40	1.14	1.20E-23
NCOA7	9.13	1.14	5.11E-30
MASTL	6.28	1.12	5.38E-11
KIAA0040	7.03	1.11	1.28E-12
IL10RA	6.40	1.10	6.63E-10
CTSS	7.93	1.09	1.02E-18
KLF6	10.02	1.08	5.91E-30
IFITM2	6.70	1.07	1.31E-11
ANXA1	7.03	1.07	5.91E-12
PNPT1	9.80	1.06	2.28E-32
YEATS2	8.13	1.05	8.15E-16
ANK3	8.49	1.04	2.61E-17
UBA7	6.54	1.04	1.17E-09
ADAR	11.41	1.04	4.63E-43
APOL2	8.97	1.04	7.98E-19
SYTL3	6.52	1.04	2.20E-09
UNC93B1	5.08	1.03	1.12E-08
SIPA1L2	6.61	1.02	7.12E-09
SMCHD1	10.36	1.01	6.04E-33
FAS	7.68	1.01	2.35E-12
IRF9 / ISGF3G	6.53	1.00	1.94E-08
TTC39B	6.86	1.00	7.82E-10

**Supplementary table 2** Genes differentially expressed in Th1 cells after five days of polarisation. Gene expression was compared to stimulated, unpolarised (Th0) cells used as control. Genes are ordered by Log2-fold change, and up and downregulation are separated within the table.

Gene Name	Log2( Base Mean Count)	Log2FC	P adjusted
IFNG	6.91	3.19	1.07E-20
IL12RB	5.36	1.66	1.46E-04
IL1RL1	3.59	1.65	1.80E-04
MYO1B	2.35	1.59	2.52E-06
AT2B4	4.69	1.58	1.80E-04
IL18RAP	6.99	1.54	2.21E-05
GTPB8	4.45	1.52	1.12E-03
ANXA3	4.76	1.47	1.16E-03
TBX21 / TBET	6.54	1.46	3.47E-05
AT8B4	2.68	1.39	3.27E-04
BBS12	4.72	1.39	2.00E-03
STEA1	9.74	1.39	1.67E-06
IL31R	4.81	1.37	2.43E-03
TIAM2	5.13	1.35	4.18E-03
COE4	7.31	1.33	3.47E-05
GRAH	5.16	1.29	1.05E-02
IL18R	4.82	1.26	1.97E-02
SKT	2.04	1.26	2.88E-03
IRAK3	6.62	1.24	3.47E-05
BCAP	6.99	1.21	2.73E-03
CBPM	6.66	1.20	9.44E-03
MCTP2	7.03	1.20	2.73E-03
WNT11	7.03	1.20	5.02E-03
EPS8	5.76	1.19	1.86E-02
ITA3	6.50	1.16	1.12E-03
ITAX	5.51	1.15	3.45E-02
P2RX5	7.42	1.15	4.61E-03
M3K8	7.13	1.14	4.43E-03
LAS2	8.71	1.11	1.57E-03
ITA6	6.30	1.10	8.90E-03
DMD	8.46	1.08	9.91E-06
TLR1	5.63	1.08	2.66E-02
DGKI	7.12	1.07	4.61E-03
CLMN	10.25	1.03	1.46E-05
TIFA	6.89	1.02	2.50E-03
IL21	8.31	1.00	2.82E-02
S100A4	9.06	-1.00	7.07E-06
C1orf162	6.23	-1.02	1.51E-02
STMN3	5.70	-1.04	2.06E-02
VIM	11.64	-1.07	1.65E-05
SESN3	10.13	-1.17	1.86E-02
ITM2C	7.42	-1.18	8.16E-03
LY9	6.96	-1.20	1.31E-02
NEK6	6.27	-1.30	6.99E-03
MAN1C1	7.64	-1.40	2.74E-04

**Supplementary table 3** Genes differentially expressed in Th2 after five days of polarisation. Gene expression was compared to stimulated, unpolarised (Th0) cells used as control. Genes are ordered by Log2-fold change, and up and downregulation are separated within the table.

Gene Name	Log2( Base Mean )	Log2FC	P adjusted
ENPP1	4.57	4.66	3.02E-47
MYO3B	4.22	4.43	1.57E-43
PTGIS	4.91	4.36	3.89E-40
AKAP12	6.52	4.16	4.94E-43
TPRG1	6.00	3.49	5.27E-41
DYNC2LI1	6.27	3.05	2.26E-24
IL1RA	6.28	2.88	3.04E-18
ANK1	5.21	2.87	4.71E-18
CALD1	5.14	2.72	8.56E-15
BATF3	6.95	2.61	2.72E-17
ABHD6	5.06	2.60	1.03E-16
AGAP9	4.80	2.59	4.20E-15
TNFSF11	3.50	2.58	6.44E-14
PLEKHH2	4.24	2.51	9.60E-13
MRPS26	7.40	2.50	5.70E-26
DAPK1	3.95	2.44	6.01E-12
HOMER2	5.08	2.42	1.60E-12
SLC39A14	8.14	2.38	3.11E-18
NCS1	5.99	2.38	6.44E-14
CLDN1	5.29	2.37	1.95E-11
PPP1R14A	2.55	2.36	1.68E-18
GATA3	8.79	2.35	3.04E-18
ADGRA3	5.88	2.33	1.58E-17
LIMA1	9.28	2.27	1.49E-18
HIP1	5.49	2.26	6.44E-14
TGFBR3	6.73	2.18	1.79E-14
RRS1	6.64	2.17	5.07E-11
RNF125	8.37	2.14	1.53E-18
MRC2	5.54	2.09	1.92E-10
BCAR3	4.89	2.09	8.35E-09
MYL9	3.16	2.05	3.66E-09
PIP5K1B	4.03	2.01	3.51E-08
SLIT3	3.48	1.99	2.33E-08
IGF2BP3	3.44	1.98	2.92E-08
C10orf128	4.76	1.92	1.54E-07
GAD1	4.17	1.86	6.31E-07
RNF43	4.44	1.82	3.29E-07
PLA2G4A	2.67	1.80	5.85E-08
SPINT2	7.47	1.79	1.05E-11
HRH1	2.47	1.78	4.28E-08
RBM47	5.52	1.77	6.41E-07
GPC1	4.28	1.76	1.83E-06
RXRA	5.63	1.75	7.07E-07
DUSP6	7.86	1.75	1.22E-08
ATP6V0A2	8.14	1.71	2.73E-09

IGSF3	4.20	1.69	9.77E-06
GNRH2	2.11	1.68	8.35E-09
PDE7B	4.66	1.68	7.00E-06
PPCDC	5.31	1.66	2.44E-07
FBLN5	5.58	1.65	5.44E-06
RAB6B	3.75	1.63	2.16E-05
AOAH	6.12	1.62	3.16E-07
NRP1	2.76	1.59	2.53E-06
ITPRIPL2	4.84	1.54	7.07E-05
GAB2	7.71	1.54	4.33E-06
ALDH2	3.53	1.51	0.000125207
ENPP3	3.85	1.51	9.07E-05
CDC42BPA	6.11	1.50	3.05E-06
NDFIP2	9.12	1.49	1.82E-22
EGR1	7.89	1.48	1.95E-07
KIAA1462	3.26	1.48	0.000142763
FZD3	5.12	1.45	3.11E-05
MGST3	6.89	1.43	5.14E-09
CSF1	7.80	1.43	6.10E-07
PTGS2 / COX2	3.59	1.41	0.000181351
SEMA4A	6.45	1.41	0.000315121
SLC7A8	5.12	1.40	0.000506262
KLF7	8.34	1.39	8.31E-08
ASIC1 / BNAC2	5.22	1.39	5.27E-05
NFIL3 / L3BP1	8.95	1.39	6.01E-12
LRRC32	3.82	1.38	0.00054911
NEK6	6.27	1.38	0.000180809
UBP41	2.63	1.37	0.000311074
LMNA	7.97	1.37	1.65E-06
CDC45	7.99	1.37	6.75E-11
S1PR3	2.45	1.34	0.000131901
RGS9	4.50	1.34	0.000566806
CMSS1	6.96	1.34	7.75E-06
PLAU	3.29	1.32	0.000878379
PTPN14	6.78	1.32	0.00142904
RAI14	3.30	1.32	0.001088782
TBC1D4	8.57	1.31	1.06E-12
FOXB1	4.39	1.31	0.001563392
IL17RB	3.57	1.31	0.001481053
CTH	5.78	1.31	0.000377895
EGR3	7.30	1.31	7.46E-06
EML5	5.01	1.29	0.00130589
EGR2	7.01	1.28	3.53E-05
DFNA5	6.38	1.28	0.000109718
GJB6	3.83	1.27	0.002359302
S100P	1.94	1.27	0.000180611
CTNNBIP1	5.94	1.26	0.000210807
CEP55	9.03	1.25	2.15E-09
EVI5	7.29	1.24	1.09E-06
ENTPD1	5.06	1.24	0.002939732
CHDH	2.44	1.24	0.000445207
SLC37A3	8.05	1.23	1.68E-09

ETFB	7.08	1.23	3.34E-06
ZBED3	5.11	1.23	0.001914833
MAOA	6.41	1.22	5.81E-10
SH3RF2	2.18	1.22	0.000733861
ATF5	6.50	1.22	0.000153517
TP63	2.12	1.22	0.000629179
SCPEP1	6.24	1.21	0.000129851
KCNC4	7.18	1.21	6.23E-05
CALCB	4.07	1.21	0.004258309
ABCC4	6.05	1.21	0.00030792
ITGA11	3.94	1.21	0.003963703
NTRK1	5.64	1.20	0.003082133
PHEX	4.88	1.20	0.001686029
SIGLEC10	3.05	1.19	0.004302236
TNFSF14	7.19	1.19	1.83E-05
CD86 / CD28L2	3.26	1.19	0.003882017
FAM110B	2.83	1.17	0.002292625
NKG7	5.95	1.16	0.003521039
OPLAH	4.81	1.15	0.004632217
IL10RA	8.70	1.14	6.10E-07
TUBB4A	3.89	1.14	0.008398702
IFFO2	7.81	1.13	7.93E-07
B3GNT5	5.63	1.13	0.001587811
CAPSL	2.67	1.13	0.006101939
THBS4	3.53	1.13	0.009928716
CTNS	6.84	1.12	6.23E-05
SLC26A6	7.04	1.12	0.000131856
PSTPIP2	6.73	1.12	2.16E-05
OCC1	8.13	1.12	2.53E-07
GPR35	4.93	1.11	0.006914292
VSIG10L	4.92	1.11	0.01026285
IKZF2 / HELIOS	4.30	1.11	0.0116774
ZNF697	3.09	1.11	0.010084007
PLCL1	5.42	1.11	0.007666693
KIF1A	6.45	1.11	0.003738018
PIGM	6.17	1.10	0.00039659
RNF11	7.50	1.09	3.05E-06
MAP1B	4.86	1.09	0.014619415
ZNF282	8.18	1.09	9.38E-06
CTNNAL1	7.60	1.08	0.000109718
ABCD3	7.05	1.08	1.35E-05
MICAL2	9.76	1.08	3.13E-07
PHLDA1	7.08	1.08	0.002787641
EPHB1	1.50	1.07	0.000293062
SLC26A4	4.14	1.07	0.014588392
SLC26A11	5.12	1.06	0.007443992
TNFRSF9 / CD137	6.61	1.06	0.008492994
HSPA5 / GRP78	11.65	1.06	9.78E-07
RASGRP4	7.08	1.06	0.00319166
ZFYVE28	5.50	1.06	0.002981664
REEP2	4.30	1.06	0.014344994
CTTN	6.51	1.05	0.003769034

SIGLEC12	2.25	1.05	0.00268142
CAMK1	5.69	1.04	0.004505279
CA2	5.20	1.04	0.012921107
TRAM2	6.43	1.03	0.001934363
ARG2	5.55	1.03	0.010299273
RABL2A	4.75	1.03	0.010479042
NME4	6.10	1.02	0.003660987
ADGRD1	1.23	1.02	0.000513897
HECW2	4.67	1.02	0.028010754
HLF	5.34	1.02	0.022677431
COL6A3	8.35	1.02	0.020384731
ID2	9.05	1.01	0.022803706
PALD1	3.87	1.01	0.030286777
MX1	12.15	-2.48	1.78E-21
XAF1	8.53	-2.44	3.51E-19
MX2	9.91	-2.39	4.22E-17
EPSTI1	9.65	-2.33	1.33E-26
KLF2	6.39	-2.27	8.26E-12
GBP5	11.05	-2.20	1.65E-32
GIMAP7	8.80	-2.15	2.33E-21
TRANK1	9.66	-2.09	8.22E-16
GIMAP4	10.49	-2.06	2.14E-18
TXK	7.65	-2.03	3.11E-18
LGALS9	9.25	-1.98	2.06E-13
PPFIBP1	8.85	-1.98	6.73E-11
IFIT1 / ISG56	9.15	-1.96	1.41E-08
GBP4	9.38	-1.96	1.30E-12
OAS1	10.01	-1.96	2.81E-12
ANXA3	7.31	-1.94	9.56E-12
STAT1	13.24	-1.94	8.85E-63
GIMAP8	7.39	-1.90	6.68E-13
SAMD9L	10.91	-1.90	9.97E-14
DPP4 / CD26	10.12	-1.83	9.34E-14
TCF7	10.20	-1.78	3.51E-14
ENPP2	6.89	-1.74	3.37E-09
DDX60	10.17	-1.73	3.15E-09
TRAT1	8.71	-1.73	4.98E-14
TNFSF10 / APO2L	10.11	-1.73	4.57E-07
IFIH1	9.67	-1.69	8.69E-12
ALPK1	8.36	-1.68	1.21E-08
BHLHE40	11.84	-1.67	1.35E-10
OAS2	11.99	-1.66	6.23E-16
EIF2AK2	10.84	-1.66	9.95E-12
TYMP	8.56	-1.66	1.80E-07
IFIT5 / ISG58	8.05	-1.66	2.98E-10
OASL	9.18	-1.65	2.17E-10
OAS3	11.65	-1.63	8.61E-06
G0S2	6.03	-1.63	1.45E-05
IFI44L	11.31	-1.62	5.46E-06
LGALS3BP	9.87	-1.61	3.26E-09
DDX60L	8.92	-1.60	2.24E-05
CEACAM1	7.41	-1.60	5.14E-06



SAMD9	10.08	-1.60	4.33E-12
RGS1	7.56	-1.59	3.26E-06
PARP9	9.91	-1.56	2.39E-08
SDK2	6.26	-1.56	2.95E-05
SMAD3	9.08	-1.55	8.35E-09
TNFSF13B / BAFF	6.63	-1.55	7.58E-06
FXD7	4.30	-1.54	8.81E-05
WIPF1	11.31	-1.54	6.70E-24
GBP1	9.71	-1.52	4.88E-09
KAT2B	8.28	-1.52	2.17E-12
DTX3L	9.90	-1.52	1.63E-07
RHO	7.05	-1.51	1.64E-08
IFI6	10.23	-1.51	8.26E-05
MAP3K8	7.03	-1.50	1.10E-05
SESN3	10.13	-1.50	2.23E-05
GPRIN3	9.72	-1.50	2.33E-08
CMPK2	8.91	-1.50	9.29E-05
RORA / NR1F1	9.11	-1.50	2.81E-06
PARP12	8.77	-1.49	3.12E-07
SEPT11	6.84	-1.48	4.05E-05
PITPNC1	8.69	-1.47	7.93E-07
IFI44	9.93	-1.47	7.18E-07
ADAM19	10.76	-1.46	1.18E-09
HERC5 / CEBP1	9.77	-1.46	2.86E-08
LSR	6.86	-1.44	7.65E-07
NETO2	4.96	-1.43	0.000220469
ISG15	10.32	-1.43	0.000163479
NEXN	6.55	-1.43	1.70E-06
PARP14	10.73	-1.40	2.15E-09
TRIM22	10.45	-1.40	4.83E-08
UNC93B1	7.73	-1.38	6.27E-07
PDE4B	9.18	-1.38	0.000479977
GCSAM	7.07	-1.38	3.94E-06
IGFBP4	8.75	-1.38	9.33E-08
SAT1	10.36	-1.37	9.34E-10
MAP3K5	7.03	-1.37	2.15E-07
STAT2	10.12	-1.36	9.70E-09
NUAK2	5.52	-1.35	0.000216192
SSTR3	7.77	-1.33	1.14E-05
GIMAP6	8.98	-1.33	1.59E-12
HERC6	8.41	-1.33	6.08E-05
TTC39C	7.92	-1.32	1.35E-08
GRAMD1B	8.08	-1.32	2.11E-07
IFI16	11.63	-1.31	6.81E-19
TRPS1	6.63	-1.31	0.000130175
LAMP3	8.94	-1.30	0.000709311
ENC1	4.43	-1.30	0.001372873
TSHZ2	8.54	-1.28	1.69E-06
GPR155	8.01	-1.28	0.000269855
CLEC2B	9.07	-1.28	0.002262302
IL18RAP / IL1R7	6.99	-1.28	0.000260671
SSBP3	9.18	-1.27	8.52E-10

IFITM3	8.08	-1.26	0.000143286
IFIT2 / ISG54	9.79	-1.25	6.53E-07
SPATS2L	8.65	-1.25	3.51E-08
MTSS1	6.93	-1.24	9.42E-05
ISG20	9.07	-1.24	0.000169076
HPGD	4.11	-1.23	0.003521039
CHI3L2	7.41	-1.23	7.71E-05
MYO1E	7.45	-1.22	0.000647572
IFIT3 / ISG60	10.16	-1.22	0.002787641
SLFN5	10.37	-1.21	4.51E-05
ISG43	8.61	-1.21	0.003147667
CXCR3	6.33	-1.21	0.001967548
HIC1	7.08	-1.21	0.000787761
PTPRO	5.44	-1.21	0.004162812
IPCEF1	6.13	-1.20	0.000124007
ITGA2 / CD49B	6.00	-1.20	0.0009622
GIMAP1 IMAP1	7.41	-1.20	0.00014703
DDX58	8.77	-1.19	0.003222583
DNAJC12	7.38	-1.18	0.00014703
PGAP1	9.06	-1.18	1.14E-05
TDRD7	7.86	-1.18	0.000598729
ADGRG1	6.88	-1.18	0.003598197
PLSCR1	9.00	-1.18	0.002914871
BST2	8.80	-1.18	0.000172717
IRF7	5.54	-1.18	0.0026115
SYNE2	10.08	-1.17	3.37E-06
ITM2B	9.00	-1.17	2.17E-09
MAST4	8.81	-1.17	9.85E-07
FAM110A	7.68	-1.17	0.00022615
MALT1	10.11	-1.17	1.09E-05
RIPK2	4.66	-1.16	0.003738018
NT5C3A	9.39	-1.15	0.003653008
RAB11FIP5	7.71	-1.15	0.000188105
MLLT3 AF9 YEATS3	9.40	-1.15	3.04E-05
ODF3B	6.41	-1.15	0.001063876
JAZF1	5.48	-1.14	0.002022688
GNPDA1	9.11	-1.14	2.74E-05
HHLA2	6.38	-1.14	0.000575643
KSR1	9.17	-1.14	3.79E-10
NPTX1	8.20	-1.14	7.87E-05
LGMN	4.47	-1.13	0.008349345
SLC44A1 / CD92	7.57	-1.13	3.20E-06
PRR5L	5.61	-1.12	0.007134049
TRPM2	5.88	-1.12	0.001950818
ENOX1	4.88	-1.12	0.010479042
ETV6	9.01	-1.12	1.32E-05
IFITM2	10.44	-1.11	4.70E-07
TLR1	5.76	-1.11	0.007666693
TRIM14	9.48	-1.11	4.55E-09
GADD45B	7.22	-1.11	0.000824057
PLAC8	8.84	-1.11	0.008349345
KCNA2	4.89	-1.11	0.010084007

IL12RB2	9.74	-1.10	4.51E-05
PLEKHO1	7.52	-1.10	9.68E-05
UBE2L6	9.95	-1.10	9.65E-07
SLC35F3	7.44	-1.09	0.000787761
LPAR3	4.23	-1.09	0.01401738
TBX21 / TBET	6.54	-1.09	0.002676763
ATM	9.69	-1.09	8.72E-07
DLG4	6.63	-1.09	0.000773677
CASP7	6.44	-1.08	0.001774372
SLAMF7	7.91	-1.08	0.003198506
C5orf56	6.69	-1.08	0.005155167
SCML4	6.66	-1.08	0.000711083
CD96	10.12	-1.08	1.75E-09
RAPGEF2	7.79	-1.07	0.000113105
TNFRSF1B / TNFR2	9.86	-1.07	8.09E-05
ZC3H4	9.63	-1.07	9.15E-09
IFITM1 / CD225	11.00	-1.07	1.97E-08
RARRES3	6.53	-1.07	0.003071558
B3GALNT1	5.03	-1.07	0.01425511
HAVCR2	8.81	-1.07	0.001654113
OTUD1	7.46	-1.07	0.00059722
DGKA	10.45	-1.07	3.05E-08
HBEGF	7.58	-1.06	0.002332997
MEOX1	6.08	-1.06	0.00551506
AFDN	7.94	-1.06	0.002401693
ZCCHC2	8.93	-1.05	4.09E-10
ARAP2	8.61	-1.05	0.000406173
CD38	9.83	-1.05	1.92E-05
KCNA3	7.97	-1.05	0.000299251
TRIM21	8.45	-1.05	7.03E-05
GBP2	11.09	-1.05	9.35E-08
RUFY4	5.02	-1.04	0.022618538
NOG	4.32	-1.04	0.022983569
BSPRY	7.36	-1.04	0.000289666
GPR174 / GPCR17	6.61	-1.04	0.000641376
GBP3	6.25	-1.04	0.002118448
TC2N	4.52	-1.04	0.018640979
CXorf21	5.91	-1.04	0.00551506
IRF8	7.80	-1.04	0.000684965
SP110	7.85	-1.03	0.000494367
HELZ2	9.64	-1.03	0.025236013
CYSLTR1	7.48	-1.03	0.000526103
TP53INP1	8.31	-1.02	0.025366567
SELL	11.67	-1.02	4.54E-09
IFI35	8.47	-1.01	0.003762157
SOCS2 / STAT2	8.46	-1.01	0.025890024
SP100	10.86	-1.01	3.38E-09
LIF	11.31	-1.01	0.000886745
EURL	7.28	-1.01	0.000352608
PYHIN1	6.60	-1.01	0.001676872
CHST2	7.46	-1.01	0.006626567
UBA7	9.34	-1.00	2.16E-05

PML	9.59	-1.00	4.57E-07
CTSH	6.81	-1.00	0.007443992
SAMHD1	9.40	-1.00	0.000153221
PYCARD	5.86	-1.00	0.003166189

**Supplementary table 4** Genes differentially expressed in Th17 cells after five days of polarisation. Gene expression was compared to stimulated, unpolarised (Th0) cells used as control. Genes are ordered by Log2-fold change, and up and downregulation are separated within the table.

Gene Name	Log2( Base Mean Count )	Log2FC	P adjusted
CXCL13	5.15	3.97	8.24E-32
CTSL	7.01	3.41	3.86E-23
FNBP1L	6.08	3.32	7.04E-24
NCS1	5.99	3.31	1.90E-27
EFR3B	3.96	3.25	7.82E-22
ALPK2	3.99	3.09	1.31E-19
BCAR3	4.89	3.06	5.39E-19
DSE	4.76	2.97	3.62E-18
COL15A1	4.39	2.93	1.44E-17
NIPAL4	4.96	2.92	2.86E-17
CLEC17A	3.58	2.82	3.67E-17
SEMA7A	7.83	2.81	4.11E-32
COL6A3	8.35	2.81	4.61E-17
BASP1	4.64	2.80	8.19E-16
KIF5A	6.05	2.75	2.14E-23
CSF1R	3.94	2.71	2.43E-15
SERPINA1	3.62	2.60	1.16E-14
AHCYL2	9.21	2.59	1.18E-30
PMEPA1	5.41	2.55	1.34E-15
DHRS9	4.85	2.50	1.19E-12
S100A2	3.28	2.46	1.97E-13
LYN	5.51	2.45	2.79E-14
IL1R2	5.90	2.40	1.32E-11
BARX2	5.25	2.40	1.33E-11
IL1R1	6.61	2.37	3.61E-14
GRHL3	2.66	2.35	3.08E-15
PSD3	5.46	2.31	1.47E-12
LPL	4.73	2.30	6.39E-11
GPR161	4.28	2.28	1.55E-10
RYR1	6.71	2.26	3.67E-17
MRC2	5.54	2.25	2.66E-12
MMP2	3.85	2.24	7.37E-11
TMPRSS6	6.82	2.24	6.37E-13
LMNA	7.97	2.21	4.68E-17
BATF3	6.95	2.19	3.64E-12
CCNA1	4.30	2.18	9.23E-10
CDH1	6.65	2.14	1.36E-10
GPR157	6.73	2.13	1.21E-10
MYO5B	5.64	2.09	7.23E-09
NTRK3	3.58	2.02	4.92E-09
HGNC:18790	4.03	2.00	3.75E-08
LAMB3	6.16	1.99	3.54E-09
IGFBP6	3.77	1.98	4.74E-08
TIAM2	6.50	1.97	4.90E-14
RASGRP4	7.08	1.96	8.78E-11

C1QL1	2.64	1.96	9.96E-10
CHST3	4.06	1.96	6.19E-08
AQP3	8.20	1.95	6.63E-18
TUFT1	5.33	1.95	3.71E-09
PERP	7.21	1.95	1.26E-10
IKZF3	9.26	1.95	1.63E-13
THBS1	5.54	1.95	9.56E-08
ELOVL7	4.71	1.91	1.62E-07
KCNJ10	2.72	1.91	1.02E-08
CAMSAP2	5.68	1.90	6.71E-10
KLF7	8.34	1.89	1.16E-14
NCEH1	6.13	1.87	7.16E-12
CCL22	3.86	1.87	5.39E-08
USP43	2.68	1.86	4.42E-08
FNDC9	3.54	1.86	6.19E-09
RUBCNL	5.32	1.85	1.13E-08
CDC42BPB	4.57	1.85	9.84E-08
ITGAX	7.42	1.84	2.94E-10
DHRS2	4.05	1.83	1.39E-07
CTNND1	6.72	1.81	1.23E-09
F5	9.37	1.81	9.43E-23
NAPSA	6.95	1.81	1.03E-08
EPHA4	4.60	1.80	1.10E-06
ASCL1	3.39	1.80	3.42E-07
CCL20	3.15	1.80	2.15E-08
KCNJ9	2.59	1.79	1.81E-08
APLP1	4.19	1.78	8.11E-07
PTK2	6.48	1.78	8.08E-10
ITGA3	7.13	1.75	1.83E-09
PRG4	9.49	1.74	7.30E-07
RAI14	3.30	1.72	2.73E-06
LGALS3	6.70	1.71	2.67E-08
VASH1	5.80	1.70	3.18E-07
CIITA	6.83	1.70	6.00E-07
RORC	5.53	1.70	1.13E-07
FUT7	4.80	1.70	4.14E-06
ATP6V0A4	3.39	1.70	2.92E-07
LPCAT2	4.75	1.70	2.96E-06
ABCG2	4.00	1.70	3.94E-06
MCAM	5.74	1.69	1.89E-07
SYN1	3.27	1.68	2.23E-06
FGD6	3.52	1.68	7.41E-06
RUNX1	8.65	1.67	1.90E-11
NRIP3	5.34	1.67	9.60E-07
AKAP12	6.52	1.66	1.23E-06
EBI3	5.59	1.65	2.97E-06
TNFRSF8	7.39	1.64	4.12E-06
CA12	5.06	1.64	1.38E-05
SKIL	7.23	1.63	2.54E-11
KIF1A	6.45	1.63	1.05E-06
MYO10	2.59	1.62	3.13E-07
DUSP6	7.86	1.62	1.46E-07

GALNT10	8.81	1.61	6.78E-09
DFNA5	6.38	1.61	1.52E-07
CCDC3	2.19	1.60	2.12E-07
FURIN	12.03	1.60	6.77E-17
ATP1B1	6.04	1.60	5.07E-06
HMCN1	2.10	1.59	1.13E-07
SELENON	7.91	1.59	3.68E-13
DGKG	3.87	1.58	2.61E-06
ARHGAP31	6.28	1.58	2.33E-08
IL2	7.36	1.58	3.13E-05
EHD2	3.67	1.58	2.89E-05
ZFYVE28	5.50	1.58	3.13E-07
FAM110B	2.83	1.58	4.98E-06
IVNS1ABP	10.54	1.56	2.17E-15
PFKFB3	10.40	1.56	4.62E-08
EML5	5.01	1.56	2.29E-05
TLR2	4.50	1.56	1.96E-05
HLX	3.06	1.56	1.84E-06
NRSN2	5.10	1.56	3.22E-06
TNFRSF12A	3.92	1.55	5.07E-05
SLC16A2	2.44	1.55	2.94E-06
RBPJ	10.56	1.55	6.24E-09
ZNF282	8.18	1.53	1.52E-11
QSOX1	7.75	1.53	2.00E-08
PTPN14	6.78	1.51	8.93E-05
SLC39A14	8.14	1.51	2.09E-07
GPR132	7.38	1.51	1.17E-10
ADAM19	10.76	1.50	1.17E-10
SYNGR3	5.85	1.50	1.01E-06
EPAS1	8.39	1.50	7.33E-05
ALDH7A1	4.26	1.49	7.45E-05
DIXDC1	8.17	1.48	0.000127563
ABCC4	6.05	1.48	1.88E-06
CXCL12	1.75	1.48	2.21E-09
CEP112	3.39	1.47	0.000125299
MAPK12	4.61	1.47	0.00010145
SMYD3	6.66	1.47	1.86E-09
DAPK2	2.94	1.47	5.38E-05
ATP6V0A2	8.14	1.46	5.51E-07
FLVCR2	4.36	1.46	9.22E-05
C15orf48	5.43	1.46	0.000171434
ADPRH	5.48	1.44	4.70E-05
SH3RF1	2.99	1.44	0.000155183
STRIP2	9.86	1.43	9.96E-10
TBC1D16	5.06	1.43	5.30E-05
CHRNA6	6.38	1.42	3.55E-05
S100A6	9.70	1.42	1.77E-13
RIMS3	6.93	1.42	3.08E-06
SIPA1L2	4.39	1.42	0.000198035
JAKMIP1	6.15	1.42	0.000118632
KIFC3	2.24	1.42	2.02E-05
CDC42BPA	6.11	1.41	1.23E-05

FEZ1	2.89	1.40	0.000131128
RGCC	8.68	1.40	3.97E-06
MAST4	8.81	1.39	1.79E-10
CGN	3.35	1.39	0.00028541
CACHD1	3.89	1.38	0.000430885
PNOC	2.23	1.38	2.70E-06
HECTD2	4.70	1.38	0.000239176
MAF	9.00	1.37	9.20E-06
GJC1	3.16	1.37	0.000388286
TIMP1	7.04	1.36	0.000554147
REEP2	4.30	1.36	0.00034879
CTTN	6.51	1.36	3.26E-05
THEM5	5.38	1.36	0.000271647
MAP1A	5.28	1.35	5.97E-05
DIS3L2	6.68	1.35	1.46E-07
SPEF2	6.80	1.35	3.40E-07
AHR	9.76	1.35	2.75E-10
FNIP2	8.10	1.35	3.04E-08
ITGA2	6.00	1.34	2.04E-05
SPSB1	6.89	1.34	0.000125299
CD22	6.65	1.33	6.72E-05
KCNC4	7.18	1.33	4.10E-06
SPOCD1	2.04	1.33	7.94E-06
SYP	5.44	1.32	0.000319847
RASGRP3	7.08	1.32	3.56E-05
PALLD	8.45	1.32	0.000924877
DOCK4	2.17	1.32	2.85E-05
GSN	5.21	1.32	0.000473016
PLEC	10.97	1.31	1.15E-11
TYRO3	2.33	1.31	0.000231642
EPHA10	3.31	1.30	0.000770088
GCNT4	4.70	1.30	0.000885331
CCR4	10.17	1.30	6.46E-06
MED12L	3.95	1.29	0.001365322
IL13RA1	2.80	1.29	0.000208751
ITPKC	6.15	1.29	3.56E-05
LOXL3	3.55	1.28	0.001472173
TSHZ3	3.49	1.28	0.001414569
SLC4A7	7.39	1.27	3.84E-05
SUSD6	9.64	1.26	1.46E-13
GDPD5	6.17	1.25	0.000285195
NLGN2	6.58	1.25	1.96E-05
AREG	3.36	1.25	0.002179566
PLS3	3.99	1.25	0.002035959
IFNL1	3.81	1.24	0.001729888
CAMSAP1	8.86	1.24	2.22E-07
KLF4	4.36	1.24	0.001466572
NOTCH1	9.24	1.24	1.75E-07
HAGHL	4.60	1.24	0.002363963
EVA1C	5.15	1.23	0.000687379
APOD	6.39	1.23	0.000609655
ETS2	8.79	1.23	8.74E-05



KCNN4	7.73	1.22	3.77E-09
SLC22A17	5.63	1.22	0.000198498
SHC2	1.54	1.22	9.53E-06
CYTH3	4.53	1.22	0.001856577
CARMIL3	3.63	1.22	0.002883579
POMT2	4.76	1.22	0.001358548
MYOF	7.71	1.22	1.58E-05
ATP9A	4.29	1.21	0.002268242
NCKAP1	5.32	1.21	0.000269549
SPHK1	3.94	1.21	0.003545994
CAVIN3	5.19	1.20	0.00221296
PCNX1	9.47	1.19	2.07E-09
TNFRSF25	7.91	1.19	2.04E-09
FOSL2	9.20	1.19	3.54E-09
PPARG	4.60	1.18	0.000425662
ITGB4	3.02	1.18	0.004280956
IGSF3	4.20	1.18	0.004807287
KIF5C	5.98	1.17	0.000264272
CALCB	4.07	1.17	0.005027574
GALNT2	8.73	1.16	2.09E-07
DLGAP4	7.69	1.16	6.20E-05
RORA	9.11	1.16	0.000440511
ZBED2	11.20	1.15	0.00202837
RPP30	7.83	1.15	1.76E-08
SLAMF1	8.72	1.14	3.66E-05
SH2D2A	9.25	1.14	2.16E-07
ZFP92	4.43	1.14	0.004878454
PNMA2	6.18	1.14	0.002583344
TNFSF14	7.19	1.14	3.78E-05
RYR2	1.60	1.14	6.98E-05
SMIM3	6.79	1.13	2.29E-05
HOXB9	2.38	1.13	0.001883563
TSHZ2	8.54	1.13	1.68E-05
LMCD1	4.84	1.12	0.007403074
CASKIN2	3.06	1.12	0.00527785
NFATC4	2.83	1.12	0.002551464
RNF217	4.11	1.12	0.00863
MAPK11	6.60	1.12	0.0002557
SPINT1	5.78	1.11	0.006334168
ITPR2	8.95	1.11	4.98E-08
F2RL1	3.68	1.11	0.009104566
DNMBP	5.09	1.10	0.002016945
CD226	9.29	1.10	2.10E-06
PDLIM7	6.79	1.10	0.000378639
MAML2	8.41	1.10	3.32E-07
C2CD4D	4.28	1.09	0.009708077
TMOD1	4.14	1.09	0.011151813
IL4I1	5.84	1.09	0.006749981
ATF3	8.00	1.09	3.21E-09
WDFY3	2.83	1.08	0.001942707
NACAD	2.83	1.08	0.006180211
B4GALT5	7.90	1.08	2.92E-06

AHRR	8.23	1.07	1.97E-07
KCTD15	4.03	1.07	0.012905985
SPARC	1.93	1.07	0.000278643
ACSL4	9.23	1.07	1.06E-05
GRB7	3.69	1.07	0.013483144
MCF2L2	4.78	1.07	0.007833559
SLC35E4	5.51	1.06	0.007051111
ITGA1	4.55	1.06	0.010304079
MYO7A	1.96	1.06	0.000913109
RAB13	6.41	1.06	0.001820666
RNF213	12.54	1.06	3.13E-07
SLC25A4	4.96	1.06	0.011708599
FAM83G	6.92	1.06	0.000202177
TRO	4.73	1.06	0.011126061
CKAP4	6.44	1.05	3.49E-05
BRSK1	5.06	1.05	0.006324732
BCL6	9.10	1.05	0.012275978
DYNC2H1	4.13	1.05	0.016607512
IRS2	6.66	1.04	0.000177225
ARHGEF5	5.13	1.04	0.005526584
EGR2	7.01	1.04	0.001359256
HMSD	5.30	1.04	0.011338871
ATP2B4	10.25	1.03	3.42E-07
RAVER2	4.28	1.03	0.015081849
HOPX	5.89	1.03	0.014802712
HERC6	8.41	1.03	0.002602044
PRDX1	9.05	1.02	2.47E-05
CCDC88A	6.65	1.02	0.000125299
OCIAD2	7.65	1.02	5.99E-07
CH25H	2.00	1.02	0.002929208
TNFRSF9	6.61	1.02	0.010668163
CPXM1	3.15	1.02	0.018564588
PKN3	5.73	1.02	0.00202837
DOCK6	4.84	1.01	0.016451629
USP45	5.88	1.01	0.00272293
NLRP3	3.67	1.01	0.016237165
SLC7A5	11.07	1.01	2.22E-05
C3orf67	4.24	1.01	0.019546819
NCBP3	8.38	1.01	1.61E-09
ITGAV	6.36	1.00	0.000430704
CYP1B1	7.15	1.00	0.001158647
INTS7	7.89	1.00	7.17E-05
SLC35F3	7.44	-2.96	4.79E-24
KLF2	6.39	-2.85	4.23E-18
HHLA2	6.38	-2.68	1.21E-18
SESN3	10.13	-2.45	2.94E-14
BTBD11	7.85	-2.44	1.26E-20
HS3ST3B1	6.26	-2.33	6.79E-13
HIC1	7.08	-2.26	1.64E-12
TRIB2	6.75	-2.25	1.81E-12
ANXA1	8.76	-2.19	2.43E-16
MAL	8.90	-2.17	4.46E-25

FGFR1	8.22	-2.16	1.76E-13
EGFL6	6.34	-2.16	2.27E-11
TRAT1	8.71	-2.14	7.30E-21
PIK3CG	8.31	-2.12	4.49E-17
NCALD	5.35	-2.10	2.45E-10
GATA3	8.79	-1.99	3.96E-12
RDH10	7.67	-1.97	6.48E-10
PDE3B	9.83	-1.95	3.50E-20
PLXNC1	8.04	-1.94	2.85E-17
CST7	8.00	-1.92	6.71E-15
KLF3	6.53	-1.92	2.48E-10
CYSLTR1	7.48	-1.92	8.83E-13
ST3GAL1	9.16	-1.90	2.65E-11
TC2N	4.52	-1.88	2.08E-07
MEOX1	6.08	-1.84	2.65E-08
RNF157	8.56	-1.83	2.56E-11
SDK2	6.26	-1.82	3.13E-07
PRDM1	7.65	-1.81	4.58E-09
FADS2	9.21	-1.81	1.92E-19
ADA2	6.59	-1.80	2.05E-07
MYO1F	7.53	-1.79	3.93E-10
PLEKHA7	6.67	-1.77	1.82E-07
SEPT11	6.84	-1.76	2.69E-07
NOD2	5.70	-1.76	2.09E-07
LRRN3	7.99	-1.74	8.78E-08
POU2AF1	5.89	-1.73	1.12E-07
AOAH	6.12	-1.73	3.01E-07
CD38	9.83	-1.72	3.94E-14
WIPF1	11.31	-1.69	1.66E-28
ST3GAL5	6.55	-1.68	3.10E-07
TRPM2	5.88	-1.68	3.10E-07
GBP3	6.25	-1.64	8.78E-08
DPP4	10.12	-1.64	3.42E-11
GBP5	11.05	-1.64	7.29E-18
PSTPIP2	6.73	-1.63	5.25E-09
DHRS3	8.77	-1.61	1.02E-05
SYTL2	7.15	-1.60	6.34E-10
HRH2	6.67	-1.60	1.28E-06
ANKRD55	5.73	-1.55	1.23E-05
B3GALNT1	5.03	-1.53	5.13E-05
ANXA3	7.31	-1.52	1.39E-07
CHI3L2	7.41	-1.52	2.37E-07
GSAP	4.87	-1.52	5.30E-05
PPFIBP1	8.85	-1.51	1.55E-06
CD200R1	4.97	-1.50	5.33E-05
PLAC8	8.84	-1.49	5.92E-05
NFIL3	8.95	-1.49	1.93E-12
ATP12A	4.62	-1.48	0.000105937
STX3	7.43	-1.47	7.49E-06
PTPRO	5.44	-1.45	0.000171434
ATM	9.69	-1.45	6.86E-12
CABLES1	6.43	-1.45	0.000119994

MYBL1	6.27	-1.44	1.89E-05
CD48	9.78	-1.44	3.68E-12
EGLN3	5.72	-1.43	0.000209007
WWC3	7.40	-1.43	8.22E-09
STAT4	9.59	-1.42	8.41E-08
CD59	6.99	-1.41	7.95E-06
ENPP2	6.89	-1.41	2.15E-06
SLC39A8	9.31	-1.40	1.80E-16
IL18R1	8.71	-1.40	5.17E-07
SELPLG	9.65	-1.39	1.65E-13
SNX18	6.98	-1.39	4.32E-06
KIF3A	7.90	-1.39	2.41E-05
PAG1	8.90	-1.37	3.97E-14
GPRIN3	9.72	-1.37	3.67E-07
PRF1	7.27	-1.36	0.000105784
GBP4	9.38	-1.36	2.31E-06
UBASH3A	8.27	-1.36	4.88E-08
SMAD3	9.08	-1.36	5.42E-07
AUH	7.36	-1.36	1.55E-06
HBEGF	7.58	-1.35	2.32E-05
VPS37B	6.47	-1.35	9.86E-06
ABCD2	7.48	-1.35	3.24E-08
JAZF1	5.48	-1.35	0.00010914
SOCS2	8.46	-1.35	0.000572
GPR18	6.25	-1.34	2.48E-05
GPR15	4.97	-1.32	0.000603734
GCSAM	7.07	-1.32	8.18E-06
RBM47	5.52	-1.32	0.000770088
AFF3	4.62	-1.31	0.001071251
CLMN	5.63	-1.30	0.000335903
KAT2B	8.28	-1.30	2.80E-09
OSTM1	6.36	-1.29	1.28E-05
NLRP6	4.46	-1.29	0.001211763
FHIT	7.43	-1.29	2.10E-06
PDE7B	4.66	-1.28	0.001466572
PRKX	9.29	-1.28	3.08E-15
C16orf54	7.48	-1.28	6.89E-05
KIF2A	10.61	-1.27	3.23E-10
CYLD	10.70	-1.26	2.79E-14
ADORA2B	5.09	-1.24	0.0008259
LAYN	6.82	-1.24	0.002035959
OXNAD1	8.49	-1.24	4.54E-09
PHEX	4.88	-1.24	0.001575376
CD52	8.92	-1.24	1.27E-05
GFI1	8.67	-1.23	3.74E-07
ARL4C	10.91	-1.22	2.79E-14
IL32	10.98	-1.21	1.93E-15
APOBR	6.27	-1.21	0.000913109
RASGRP2	6.85	-1.20	3.18E-05
PECAM1	6.60	-1.20	0.000320403
STRADB	7.68	-1.19	4.24E-07
HSF4	7.14	-1.19	0.000356084

HDGFL3	7.70	-1.18	0.000267137
PRKACB	8.22	-1.18	4.61E-06
STAP1	7.08	-1.18	0.000473794
FAM105A	6.93	-1.17	0.000652322
XBP1	10.10	-1.16	1.85E-11
DUSP10	7.43	-1.15	2.48E-05
TOX	4.73	-1.15	0.006156694
CPOX	8.03	-1.15	2.18E-08
HCAR1	4.28	-1.14	0.006596471
TRIB1	7.90	-1.14	0.000725556
SERTAD2	8.51	-1.14	5.19E-05
NEDD9	7.79	-1.13	1.53E-07
AXIN2	5.34	-1.13	0.004702477
SFMBT2	8.36	-1.13	8.83E-09
ACSS1	7.17	-1.13	2.41E-05
RPS6KA5	7.15	-1.13	2.25E-05
TLE4	6.85	-1.12	8.29E-05
CLEC2B	9.07	-1.12	0.008271526
L3MBTL3	6.09	-1.12	0.000549718
RAB37	6.12	-1.12	0.001627163
TMSB10	13.26	-1.12	1.09E-07
SKAP1	8.67	-1.12	4.42E-08
LPAR6	6.78	-1.12	4.44E-05
SETBP1	5.27	-1.12	0.005308143
IFT57	6.82	-1.11	7.97E-05
HAVCR2	8.81	-1.11	0.000633765
HPGD	4.11	-1.11	0.00893099
C10orf128	4.76	-1.11	0.00899212
SREBF1	9.30	-1.11	8.38E-14
TGFBR3	6.73	-1.11	0.001395947
DLG3	7.42	-1.11	0.000266579
CACNA1I	5.13	-1.10	0.008828196
MGAT5	7.53	-1.10	0.000675767
ACSBG1	3.78	-1.10	0.008210485
TRABD2A	8.42	-1.10	9.61E-09
NUCB2	8.65	-1.10	0.000103798
TMEM71	8.42	-1.10	9.07E-05
KLHL29	5.79	-1.10	0.005861522
PPP3CA	6.24	-1.10	0.000431373
TNFSF8	8.06	-1.09	3.68E-05
LRRC8C	9.36	-1.09	1.07E-07
SNRK	8.03	-1.09	2.81E-06
LPAR3	4.23	-1.09	0.011295859
CLECL1	4.09	-1.09	0.011009633
MCOLN3	3.71	-1.09	0.011344991
RFLNB	9.27	-1.08	4.52E-06
SP4	7.38	-1.08	0.00010352
RCSD1	9.72	-1.08	7.66E-09
STC1	4.75	-1.07	0.013004904
SOS1	9.43	-1.07	1.14E-05
HPSE	7.40	-1.07	5.94E-06
CASP9	6.74	-1.07	0.001190971

LYST	9.07	-1.07	0.011474345
CCNI2	4.45	-1.05	0.01243014
MLLT3	9.40	-1.05	0.00013046
RIN3	7.86	-1.05	0.002838482
HSBP1L1	5.90	-1.05	0.006334168
XYLT1	7.74	-1.05	2.33E-05
ZDHHC14	5.44	-1.05	0.006302555
CEACAM1	7.41	-1.04	0.007033897
PHTF2	8.07	-1.04	8.30E-05
PCSK6	3.37	-1.04	0.015705555
INPP4A	8.64	-1.04	3.18E-08
TMC8	9.69	-1.04	1.12E-08
PPP2R2B	3.48	-1.03	0.016212957
FCMR	6.92	-1.03	0.001137424
FXD7	4.30	-1.03	0.019998034
PIK3R1	9.50	-1.03	9.44E-08
GBP2	11.09	-1.02	1.39E-07
SPIN1	8.30	-1.02	7.39E-07
RASGRF2	6.31	-1.02	0.004866051
CDHR1	5.05	-1.02	0.019863418
KCNQ5	5.86	-1.02	0.004255084
ANTXR2	6.72	-1.01	0.008890539
PIK3R5	8.22	-1.01	0.000185235
MAP3K5	7.03	-1.01	0.000208763
CASP3	9.21	-1.01	3.20E-07
TIAM1	8.77	-1.01	0.000243103
ACTN1	9.55	-1.00	1.80E-05
GIMAP6	8.98	-1.00	2.37E-07

**Supplementary table 5** Genes differentially expressed in iTreg after five days of polarisation. Gene expression was compared to stimulated, unpolarised (Th0) cells used as control. Genes are ordered by Log2-fold change, and up and downregulation are separated within the table.

Gene Name	Log2( Base Mean Count )	Log2FC	P adjusted
FNBP1L	6.08	3.59	2.32E-27
CTSL	7.01	3.28	3.52E-21
PMEPA1	5.41	3.25	4.15E-25
MMP2	3.85	3.12	1.55E-20
MRC2	5.54	2.76	2.26E-18
CHST3	4.06	2.59	2.18E-13
COL15A1	4.39	2.57	3.50E-13
MYO5B	5.64	2.53	1.55E-12
KIF5A	6.05	2.52	2.48E-19
LPL	4.73	2.50	1.75E-12
SEMA7A	7.83	2.48	8.52E-25
ANK1	5.21	2.39	4.78E-12
VASH1	5.80	2.36	2.18E-13
HGNC:18790	4.03	2.32	1.26E-10
RYR1	6.71	2.31	9.71E-18
CAMSAP2	5.68	2.23	2.04E-13
LMNA	7.97	2.22	6.59E-17
NCS1	5.99	2.20	1.36E-11
ATP1B1	6.04	2.19	1.09E-10
TMPRSS6	6.82	2.17	1.02E-11
LPCAT2	4.75	2.15	1.33E-09
RASGRP4	7.08	2.12	2.60E-12
AHCYL2	9.21	2.10	7.82E-20
IL1A	3.53	2.05	1.32E-08
CLEC17A	3.58	2.04	9.70E-09
NR4A3	7.00	2.01	1.48E-09
BASP1	4.64	1.99	1.08E-07
SKIL	7.23	1.98	1.92E-16
RGS16	8.02	1.97	1.06E-07
CCL22	3.86	1.94	3.17E-08
NFATC4	2.83	1.88	3.85E-08
SLC14A1	4.44	1.86	8.11E-07
CAVIN3	5.19	1.85	2.56E-07
BCAR3	4.89	1.84	1.23E-06
ALPK2	3.99	1.84	1.07E-06
LMCD1	4.84	1.82	1.63E-06
PTK2	6.48	1.81	7.43E-10
COL6A1	3.96	1.81	1.46E-06
COL6A3	8.35	1.81	8.73E-07
APOD	6.39	1.79	1.31E-07
EGR2	7.01	1.79	7.47E-10
EFR3B	3.96	1.79	2.42E-06
TIAM2	6.50	1.78	4.59E-11
TNFRSF9	6.61	1.78	3.87E-07
SPTBN5	4.25	1.77	2.85E-06

SARDH	4.72	1.76	2.61E-06
F5	9.37	1.76	3.35E-21
CYTH3	4.53	1.74	1.98E-06
CCR4	10.17	1.73	6.10E-10
NIPAL4	4.96	1.71	1.12E-05
IGSF3	4.20	1.69	1.45E-05
KCNJ9	2.59	1.69	3.03E-07
KLF7	8.34	1.67	4.81E-11
IKZF4	8.02	1.67	3.70E-10
ARHGAP31	6.28	1.64	1.32E-08
EGR1	7.89	1.63	9.41E-09
ITPRIPL2	4.84	1.61	3.85E-05
CSGALNACT1	5.58	1.60	7.34E-06
SPON1	4.92	1.60	5.56E-05
IVNS1ABP	10.54	1.59	9.14E-16
LGALS3	6.70	1.58	1.05E-06
EBI3	5.59	1.57	2.44E-05
GPR157	6.73	1.57	1.58E-05
SLC39A14	8.14	1.56	1.50E-07
CCL20	3.15	1.56	4.21E-06
GCNT1	6.32	1.55	0.000114233
COL5A2	5.36	1.52	4.59E-05
PLAGL1	6.74	1.51	1.62E-06
GLT1D1	4.69	1.50	0.000156807
CA12	5.06	1.49	0.000252775
CXCL13	5.15	1.47	0.000272749
IL411	5.84	1.46	0.000122079
HECTD2	4.70	1.45	0.000160317
GPR161	4.28	1.45	0.00039296
MYH6	3.98	1.44	0.000170672
EVA1C	5.15	1.44	6.57E-05
DNAJC12	7.38	1.44	5.65E-07
CDK14	3.48	1.43	0.000483014
TUFT1	5.33	1.43	0.000110627
IL2	7.36	1.42	0.000557068
PGM2L1	7.90	1.42	3.93E-08
KIAA1522	3.86	1.41	0.000587426
FOXP3	8.60	1.40	0.000725121
IL1RN	6.28	1.40	0.000358955
RTKN	4.09	1.39	0.00085465
GPR132	7.38	1.39	1.13E-08
DFNA5	6.38	1.38	3.00E-05
CD200	7.61	1.38	3.56E-07
DSE	4.76	1.37	0.000916956
CTTN	6.51	1.37	5.88E-05
TNFRSF12A	3.92	1.36	0.001155274
DHRS2	4.05	1.35	0.00060561
CDC42BPB	4.57	1.34	0.000711746
ALDH7A1	4.26	1.34	0.001054666
NYNRIN	2.25	1.34	0.000114488
STRIP2	9.86	1.33	4.27E-08
TMPRSS3	6.63	1.33	0.000815137



CHRNA6	6.38	1.32	0.000341705
KCNJ10	2.72	1.31	0.00047695
CBLN3	5.38	1.31	7.22E-05
RASGRP3	7.08	1.31	9.17E-05
DUSP4	10.57	1.30	0.000923268
PTCHD1	1.70	1.30	4.98E-07
GPR87	2.47	1.30	0.000637832
APLP1	4.19	1.29	0.002013388
CTNND1	6.72	1.29	0.000114233
SPEF2	6.80	1.29	3.67E-06
MYO7A	1.96	1.27	7.11E-05
FUT7	4.80	1.27	0.002775638
CPM	6.99	1.27	0.000163961
EML5	5.01	1.27	0.002240677
IFNL1	3.81	1.27	0.002521307
FHL3	6.83	1.26	1.14E-06
SYP	5.44	1.26	0.001365681
THBS1	5.54	1.26	0.003503354
NCEH1	6.13	1.26	4.46E-05
NR4A1	6.90	1.26	4.68E-05
SLC35F2	7.04	1.25	1.11E-08
DMD	5.16	1.25	0.002847351
DBH	2.91	1.24	0.001756637
COL6A2	5.91	1.23	0.001097686
PRRG4	3.78	1.22	0.005515332
CD83	6.50	1.21	0.004645157
NKD1	4.87	1.21	0.003444565
TNS3	3.49	1.21	0.006246705
RUNX1	8.65	1.20	1.17E-05
ERMN	4.47	1.20	0.006067678
CCDC88A	6.65	1.20	5.90E-06
KIF1A	6.45	1.20	0.001768092
ABCG2	4.00	1.19	0.005753528
BTBD19	4.33	1.19	0.007617773
PLEC	10.97	1.18	3.60E-09
CXCR3	6.33	1.18	0.002549726
DMBX1	3.05	1.18	0.007088293
MYO1D	6.30	1.18	0.002239403
TNFAIP8L3	2.25	1.17	0.00206138
TMEM110	4.73	1.17	0.007195326
SUOX	5.43	1.16	0.004194609
MNDA	2.12	1.16	0.000207879
BMPR2	7.14	1.16	3.35E-05
RORC	5.53	1.16	0.001823582
CDS1	2.95	1.15	0.00764347
CD101	4.71	1.14	0.007256383
PLEKHA5	4.35	1.14	0.008745299
RHOU	7.05	1.13	1.43E-05
RGCC	8.68	1.13	0.00085465
DIXDC1	8.17	1.13	0.013403637
ZBTB18	6.68	1.12	0.000637155
ITPR2	8.95	1.12	8.80E-08

AFDN	7.94	1.12	0.001097686
CARMIL3	3.63	1.11	0.014278778
ZFH3	4.57	1.11	0.011854726
KIFC3	2.24	1.11	0.003154169
NRSN2	5.10	1.11	0.005220396
PLEKH1	4.29	1.10	0.016183786
RSPH3	5.67	1.10	0.007317014
RASGEF1B	5.34	1.10	0.006575772
BMP1	5.16	1.10	0.010226002
APOBEC3H	7.55	1.09	0.016712308
THEM5	5.38	1.09	0.011770904
PLXNB1	4.16	1.08	0.016920675
LDLRAD4	7.90	1.08	2.41E-06
KIAA0513	6.79	1.08	0.000233613
CSNK1G3	7.61	1.08	2.39E-06
CFLAR	10.06	1.07	3.89E-06
THUMPD2	6.68	1.07	5.23E-05
CFAP57	1.59	1.06	0.000256322
PRR5L	5.61	1.06	0.013403637
C1QL1	2.64	1.06	0.006391818
INPP5F	8.02	1.04	0.001077172
SLC22A17	5.63	1.04	0.005190745
EGR3	7.30	1.03	0.001364701
MAST4	8.81	1.03	1.77E-05
PLEKHA6	3.12	1.03	0.011687899
PLAGL2	9.25	1.03	2.15E-09
KIAA1671	8.18	1.03	0.000843242
NOTCH1	9.24	1.03	6.62E-05
CD82	8.82	1.02	1.12E-05
FOXO1	9.10	1.02	1.54E-05
RNFT1	6.26	1.02	0.001238295
ADPRH	5.48	1.01	0.018113268
PFKFB3	10.40	1.01	0.002621996
GEM	5.59	1.01	0.016828788
PLS3	3.99	1.01	0.034335218
C15orf48	5.43	1.01	0.03498595
SEMA4A	6.45	1.01	0.030524698
GDPD5	6.17	1.01	0.011481106
KLHL25	5.41	1.00	0.007127081
MELTF	4.81	1.00	0.031851784
LAMB3	6.16	1.00	0.023755225
ALPK3	2.58	1.00	0.025294538
KLF2	6.39	-2.62	2.77E-15
DPP4	10.12	-2.43	1.41E-23
SMAD3	9.08	-2.21	2.62E-17
HIC1	7.08	-2.04	5.23E-10
MAL	8.90	-2.04	3.83E-22
SNX18	6.98	-1.85	8.50E-10
TRIB2	6.75	-1.80	7.65E-08
SDK2	6.26	-1.79	1.12E-06
RNF157	8.56	-1.79	1.55E-10
ADA2	6.59	-1.78	7.71E-07

KCNA3	7.97	-1.73	1.26E-10
ENPP2	6.89	-1.71	1.13E-08
MAP3K5	7.03	-1.71	9.79E-11
TC2N	4.52	-1.62	3.00E-05
NCALD	5.35	-1.62	3.95E-06
HHLA2	6.38	-1.61	3.56E-07
HS3ST3B1	6.26	-1.58	5.60E-06
MYO1F	7.53	-1.57	1.19E-07
ABCD2	7.48	-1.57	1.63E-10
PRDM1	7.65	-1.55	1.87E-06
KCNA2	4.89	-1.53	0.000107258
TRPM2	5.88	-1.47	2.34E-05
CLMN	5.63	-1.41	0.000143509
IL32	10.98	-1.33	4.45E-18
HDGFL3	7.70	-1.32	6.19E-05
NLRP6	4.46	-1.30	0.002094263
ST3GAL1	9.16	-1.29	4.29E-05
MMP25	5.42	-1.29	0.000320214
FGFR1	8.22	-1.27	0.000107209
TNFSF8	8.06	-1.23	4.30E-06
PIK3AP1	6.89	-1.22	4.51E-05
C1orf162	6.23	-1.21	0.000145394
EGFL6	6.34	-1.21	0.001097686
STX3	7.43	-1.20	0.000856736
SYTL2	7.15	-1.19	1.43E-05
ANXA1	8.76	-1.19	6.62E-05
RPS6KA5	7.15	-1.15	3.03E-05
CDHR1	5.05	-1.14	0.010726575
GBP5	11.05	-1.14	1.66E-08
GIMAP6	8.98	-1.13	6.72E-09
AXIN2	5.34	-1.13	0.008111524
MB21D2	6.80	-1.11	0.003773835
SPNS3	6.43	-1.10	0.003154169
NOG	4.32	-1.10	0.01647488
NFIL3	8.95	-1.10	9.33E-07
CST7	8.00	-1.09	5.31E-05
VPS37B	6.47	-1.09	0.001146091
GCSAM	7.07	-1.09	0.00085465
CSTF2T	8.80	-1.07	9.56E-07
TGFBR3	6.73	-1.07	0.003959614
JAZF1	5.48	-1.07	0.006580473
MYBL1	6.27	-1.07	0.006190241
RDH10	7.67	-1.06	0.006300131
PCSK5	4.87	-1.05	0.021883712
LRRN3	7.99	-1.05	0.007119445
HBEGF	7.58	-1.05	0.003773835
CD48	9.78	-1.04	3.68E-06
F2R	6.61	-1.03	0.024724643
CASP9	6.74	-1.02	0.004036804
XBP1	10.10	-1.02	1.27E-08
PIK3R6	6.15	-1.02	0.007317014
NUCB2	8.65	-1.02	0.000874722

RFLNB	9.27	-1.02	4.92E-05
SELPLG	9.65	-1.01	5.88E-07
KLF3	6.53	-1.01	0.004627405
RASGRP2	6.85	-1.01	0.001399694
ELOVL6	6.21	-1.01	0.011054493
LGALS14	3.81	-1.00	0.039685429

**Supplementary table 6** Genes differentially expressed in macrophages after 6 hours of polarisation with IFN- $\gamma$  (M1). Gene expression was compared to unstimulated macrophages used as control. Genes are ordered by Log2-fold change.

Gene Name	Log2( Base Mean Count )	Log2FC	P adjusted
CXCL9	10.75	6.66	3.92E-62
SERPING1	7.71	5.79	1.50E-96
HAPLN3	7.42	5.76	5.44E-49
APOL4	8.25	5.64	1.42E-45
IL31RA	5.81	5.52	5.41E-49
P2RY14	5.92	5.48	1.37E-49
RARRES3	6.29	5.42	1.24E-54
ANKRD22	4.80	4.71	1.15E-32
VAMP5	5.71	4.56	4.14E-36
GBP5	11.09	4.49	4.12E-28
KREMEN1	6.18	4.39	1.26E-39
FAM26F	6.82	4.22	1.51E-25
GBP1P1	4.74	4.22	1.71E-25
BATF2	6.18	4.10	2.85E-34
GBP4	10.05	3.90	4.26E-21
IRF1	10.00	3.87	3.37E-30
STEAP4	4.96	3.72	6.13E-21
ASCL2	5.80	3.56	3.87E-25
SECTM1	8.14	3.50	2.82E-61
LMNB1	7.04	3.47	1.97E-42
SOCS1	7.00	3.45	1.36E-16
GBP1	10.97	3.44	8.52E-17
MMP25-AS1	4.90	3.30	9.68E-17
STAP1	4.74	3.30	3.15E-16
FCGR1B	6.38	3.27	1.26E-26
CD274	9.57	3.26	1.24E-20
TIFA	6.94	3.24	1.76E-31
IL27	4.18	3.23	5.00E-15
ENPP2	5.33	3.06	1.47E-15
APOL6	10.52	3.06	1.55E-81
JAK2	8.92	3.00	6.29E-49
TNFSF10	7.85	2.99	1.55E-12
IL15	5.43	2.91	9.67E-16
GBP2	8.58	2.91	1.20E-14
C4orf32	5.99	2.90	1.67E-17
FCGR1CP	5.11	2.86	9.41E-14
NFIX	4.87	2.81	4.13E-13
WARS	12.53	2.81	1.16E-56
APOL1	8.18	2.81	5.94E-51
GCNT1	7.52	2.79	5.19E-36
LAP3	10.44	2.77	3.67E-56
IFI35	7.49	2.66	2.29E-20
FCGR1A	8.23	2.64	6.81E-29
IL15RA	6.46	2.63	8.49E-10
CD226	4.14	2.62	5.46E-10
XRN1	8.97	2.61	5.65E-52

ATP10A	5.42	2.60	1.16E-11
GK	8.95	2.59	1.51E-33
APOBEC3A	7.85	2.59	2.76E-20
CFH	3.56	2.57	1.24E-09
IL2RA	4.50	2.55	2.98E-09
APOL2	9.48	2.52	4.96E-57
STAT1	11.43	2.48	7.89E-15
PSTPIP2	9.02	2.45	6.45E-10
FAM20A	6.15	2.45	8.86E-15
GCH1	8.51	2.44	1.43E-08
CYSLTR2	4.41	2.43	1.45E-08
VPS9D1	6.65	2.43	1.29E-19
STAMBPL1	4.01	2.41	1.77E-08
C21orf91	5.34	2.40	2.34E-10
ASPHD2	4.55	2.39	1.35E-08
GRIN3A	5.55	2.38	5.88E-12
RHOA	7.70	2.38	5.92E-28
PARP14	11.16	2.38	3.14E-11
HIVEP2	7.07	2.38	8.71E-13
SAMD9L	10.07	2.37	3.17E-11
C1orf228	3.78	2.36	5.79E-08
JAK3	7.04	2.35	5.29E-08
NLRC5	8.52	2.33	1.55E-39
BATF3	4.95	2.31	9.48E-09
RNF213	12.08	2.31	8.24E-44
PDCD1LG2	7.54	2.29	1.03E-17
CCL13	3.87	2.24	2.98E-07
PPA1	7.30	2.22	2.35E-18
TBX21	4.36	2.22	1.38E-07
SEPT04	5.56	2.19	2.31E-10
IFITM1	3.63	2.19	6.14E-07
CIITA	10.39	2.19	6.86E-67
FBXO6	7.29	2.18	5.15E-14
TAGAP	8.70	2.17	8.95E-38
FCRL6	5.31	2.16	4.35E-09
IL7	4.96	2.16	2.22E-07
EPSTI1	8.18	2.16	8.28E-07
LIMK2	7.00	2.16	6.24E-17
PARP9	9.01	2.15	6.05E-19
KIAA0040	7.62	2.15	6.39E-24
STX11	7.68	2.12	7.03E-14
TRIM22	9.25	2.11	3.28E-20
CXCL10	11.14	2.11	2.13E-09
AUTS2	3.82	2.10	2.03E-06
BBX	8.17	2.09	1.46E-28
FPR2	5.04	2.08	7.61E-07
DDX60	7.52	2.07	9.73E-13
TRAFD1	8.45	2.07	6.36E-22
RNF19B	8.20	2.07	2.40E-16
CSF2RB	9.47	2.06	3.79E-41
BAZ1A	9.44	2.06	3.13E-35
PML	8.17	2.06	2.27E-19

DNMT3B	3.43	2.05	4.14E-06
DTX3L	9.50	2.04	4.02E-32
GIMAP5	4.76	2.04	5.09E-07
APOL3	9.63	2.04	5.42E-06
GBP3	7.16	2.03	3.39E-15
PLSCR4	2.68	2.02	7.61E-07
CASP4	8.94	2.01	1.36E-31
GCSAM	3.24	2.01	6.18E-06
UBE2L6	8.91	2.01	2.18E-27
GUCY1A3	2.79	2.00	1.71E-06
IFIT5	6.95	2.00	1.85E-11
VCAM1	6.29	1.98	1.12E-05
APOBEC3G	6.53	1.98	3.88E-11
NOD2	6.65	1.98	4.46E-13
SDC3	8.00	1.97	2.96E-23
IFIT2	8.75	1.96	6.14E-06
DEK	9.24	1.96	1.85E-40
SNX10	9.89	1.95	1.11E-22
NEXN	3.72	1.95	1.40E-05
CXCL11	6.64	1.95	5.34E-08
CCL7	5.74	1.94	1.81E-08
AFDN	6.37	1.94	1.01E-09
CCL2	10.17	1.93	8.42E-08
CERS6	8.40	1.93	6.14E-28
AMER1	5.52	1.92	6.25E-08
EPB41L5	3.77	1.91	2.32E-05
CD69	2.54	1.91	1.51E-06
ARNTL2	7.62	1.91	5.66E-11
MOB3B	6.15	1.90	1.20E-09
C5orf56	5.34	1.90	2.42E-06
FAS	7.29	1.90	1.52E-12
BRIP1	3.76	1.89	2.96E-05
ENDOD1	6.67	1.88	3.66E-11
BATF	6.55	1.88	2.12E-09
MIR503HG	2.92	1.88	2.45E-05
IFIT3	9.26	1.87	3.13E-05
CEACAM1	2.30	1.86	1.87E-06
GIMAP7	5.95	1.86	1.13E-07
NMI	7.81	1.85	2.13E-19
FGL2	10.18	1.85	6.14E-28
ZFP36	8.53	1.85	1.00E-23
PSME2	9.08	1.84	1.64E-19
SASH1	7.93	1.84	6.86E-12
NUB1	8.44	1.83	2.74E-16
GOLM1	5.85	1.83	2.22E-08
TMEM173	5.98	1.83	8.70E-08
HCAR2	4.33	1.83	5.29E-05
GVINP1	7.19	1.83	7.61E-15
TYMP	10.13	1.82	4.96E-19
SOCS3	7.33	1.81	7.44E-05
GLS	9.46	1.79	1.05E-32
DENND1B	7.94	1.79	3.15E-16

CASP7	7.52	1.79	7.61E-15
P2RY6	7.13	1.79	9.90E-11
BANK1	3.55	1.79	9.77E-05
CD38	6.62	1.78	8.06E-05
RGS3	6.29	1.77	2.53E-09
CLEC10A	6.82	1.77	4.66E-09
GADD45B	6.89	1.75	2.70E-08
TNFSF13B	8.88	1.75	9.11E-19
B4GALT5	10.54	1.73	2.58E-20
SP110	5.95	1.72	1.81E-06
STAT3	9.97	1.72	1.38E-33
SCIN	7.87	1.72	3.71E-10
IFITM3	6.85	1.72	0.000203502
PLSCR1	8.32	1.72	6.00E-05
ICAM1	10.31	1.72	2.48E-06
USP6NL	7.83	1.70	7.63E-14
STAT2	10.27	1.69	9.85E-14
XIRP1	3.28	1.69	0.000184552
AIM2	2.24	1.68	2.14E-05
SLC40A1	7.55	1.68	6.94E-05
RCN1	8.01	1.68	1.34E-13
GIMAP4	7.45	1.68	1.76E-12
PDE4B	7.30	1.68	0.000269803
JAG1	8.03	1.68	0.000224678
HEG1	8.54	1.67	3.75E-18
TOP1	9.36	1.67	2.88E-25
RTP4	3.81	1.66	0.000325621
MB21D1	6.81	1.65	3.28E-10
SFT2D2	9.71	1.64	1.28E-23
MLLT3	4.16	1.64	0.000263399
SCN9A	2.73	1.63	0.000195633
SFMBT2	7.93	1.63	1.83E-15
RHEBL1	3.49	1.63	0.000462236
RMI2	3.42	1.63	0.000506081
PTGES3P1	3.64	1.62	0.000536344
TMEM109	8.05	1.62	2.10E-17
HCAR3	4.15	1.61	0.000546144
RHOBTB3	5.24	1.61	4.93E-05
SLAMF8	10.44	1.61	4.24E-28
IL32	5.20	1.60	0.000510509
LRRK2	8.81	1.59	1.27E-15
MUC1	2.62	1.59	0.000320588
HIVEP3	9.25	1.59	2.33E-11
NAMPT	9.68	1.59	0.000510509
MCL1	10.10	1.59	3.14E-21
RUNX3	8.06	1.58	4.01E-14
TSHZ3	5.33	1.58	2.38E-05
DAPP1	7.94	1.57	3.54E-12
RSAD2	9.05	1.57	4.37E-05
ADGRE5	9.15	1.57	2.00E-17
SIPA1L1	6.75	1.57	4.57E-07
ISOC1	7.12	1.57	3.68E-10



CSRNP1	5.72	1.56	1.03E-05
PARP12	9.03	1.56	1.87E-15
AKAP12	2.77	1.56	0.000427717
ANKRD44	7.81	1.56	8.92E-13
RALA	8.35	1.56	8.52E-17
CD40	9.02	1.55	0.000525851
NRP2	10.85	1.55	4.76E-25
ATG3	8.68	1.55	6.55E-21
HELB	5.93	1.55	5.55E-06
PDGFRA	3.73	1.54	0.001066734
CASP5	2.94	1.54	0.000734111
CASZ1	4.46	1.53	0.000666994
SLC30A4	5.49	1.53	0.000673878
USP30-AS1	3.80	1.52	0.001283654
SMCO4	7.20	1.52	1.80E-09
LINC00996	3.79	1.52	0.001415845
PTGS2	5.24	1.51	0.000497173
LONRF1	6.60	1.51	2.77E-08
HESX1	2.88	1.51	0.000525851
CLEC2B	7.07	1.51	5.87E-10
PTPN2	7.98	1.50	1.45E-13
MX1	9.48	1.50	0.001342285
IGF2BP2	6.12	1.50	5.51E-06
ATF5	9.02	1.49	4.93E-05
CCL8	7.71	1.49	7.64E-05
RALB	9.37	1.49	1.53E-20
POLR3D	6.52	1.48	2.62E-07
SLC2A3	8.62	1.48	1.56E-09
FAM92A	5.31	1.48	0.000132647
ARAP2	8.43	1.48	2.40E-14
CMPK2	7.33	1.48	0.001668183
IFIH1	8.86	1.48	0.000118475
XAF1	7.00	1.47	0.002247618
RHBDF2	9.29	1.47	9.34E-11
SCIMP	8.60	1.47	5.46E-10
SNX20	7.92	1.46	2.08E-12
CD47	9.37	1.46	1.19E-17
VRK2	7.00	1.46	1.18E-07
INSIG1	9.95	1.46	3.68E-15
RAB39A	6.60	1.45	2.98E-07
STOM	9.41	1.45	1.17E-17
ANK2	5.31	1.45	0.000252239
CCR5	9.98	1.45	3.03E-11
GALNT3	4.68	1.44	0.000815051
RAPGEF2	8.69	1.44	2.51E-12
PRR5L	6.42	1.44	6.48E-06
APOBEC3F	4.53	1.44	0.001059776
CDCP1	6.80	1.44	4.27E-08
CASP1	9.26	1.43	1.25E-15
SLC25A28	6.39	1.43	2.18E-06
DYSF	6.22	1.43	6.78E-05
CASP10	7.13	1.43	1.40E-08

MCTP2	3.43	1.42	0.003332239
C19orf12	7.27	1.42	5.46E-10
TRIM21	7.51	1.41	5.87E-10
IFI16	9.66	1.41	3.94E-21
NUDCD1	6.26	1.41	5.39E-06
KPNA5	5.31	1.41	0.000254212
C1QC	9.27	1.40	9.34E-11
PARP11	6.87	1.40	1.06E-07
C1QB	8.28	1.40	1.76E-07
CASP8	7.63	1.40	7.10E-12
SSTR2	7.37	1.40	7.18E-08
TBC1D31	5.37	1.40	0.000311412
LGALS3BP	7.47	1.40	2.08E-09
SRGAP2C	5.76	1.40	0.000101118
OAS3	9.70	1.40	0.003607739
GAREM1	2.68	1.39	0.002652242
SCO2	5.42	1.39	0.000237243
MT2A	3.18	1.39	0.002717812
OAS2	9.11	1.39	0.004532511
TMTC2	4.54	1.38	0.002112957
DTNB	5.46	1.38	0.000267462
SLC6A12	7.78	1.38	1.76E-08
IRF7	2.84	1.38	0.002558134
DYNLT1	7.74	1.38	6.10E-11
TMEM2	7.92	1.38	6.13E-10
WWC3	6.70	1.38	5.88E-07
BIRC3	9.02	1.38	0.000981822
RNF144B	8.79	1.37	0.001318616
SLC37A1	7.10	1.37	2.35E-07
IL10RA	10.19	1.37	1.81E-10
TFEC	10.51	1.37	9.01E-16
RERE	8.56	1.37	1.18E-14
P2RX7	10.95	1.36	0.0018682
FYB1	10.51	1.36	2.02E-18
ODF3B	6.20	1.36	0.000118458
IFI44L	7.59	1.36	0.001138366
PPTC7	8.36	1.35	1.76E-13
GAS6	6.51	1.35	2.26E-05
SRGAP2	8.39	1.35	9.14E-11
PLEK	12.53	1.35	9.22E-13
CISH	7.13	1.35	1.51E-06
KARS	9.11	1.34	1.55E-15
TMEM51	7.92	1.34	1.51E-09
DDX58	7.63	1.34	0.004408931
PRRG4	5.77	1.34	0.000115361
HELZ2	7.71	1.34	0.006591315
BCAR3	7.65	1.33	6.24E-09
CNTLN	6.80	1.33	2.60E-07
ZNFX1	10.07	1.33	1.77E-13
PRRT2	2.37	1.32	0.002346497
ST3GAL5	8.52	1.32	2.37E-14
UNC5A	3.51	1.32	0.007610186

TNFAIP8	8.51	1.32	4.57E-07
CDC42SE2	8.87	1.32	1.19E-13
C15orf39	6.97	1.32	1.17E-06
MAP3K7CL	2.91	1.31	0.006930568
KDELC2	6.57	1.31	6.14E-06
SWT1	5.89	1.31	9.89E-05
C3orf38	7.62	1.31	1.34E-09
FPR1	7.55	1.31	0.000153166
DSE	8.84	1.31	9.34E-11
TMEM236	4.29	1.31	0.006815622
NT5C3A	6.32	1.30	5.57E-05
FCER2	4.92	1.30	0.00440233
C5orf15	8.00	1.30	4.51E-08
NECTIN2	8.14	1.30	5.21E-06
SLC30A1	8.45	1.30	2.69E-12
SELENOI	7.63	1.30	5.08E-08
PANX1	7.11	1.29	4.57E-07
FARP2	7.50	1.29	8.42E-08
FLVCR2	6.75	1.28	0.000497173
PLA2G4A	7.02	1.28	3.41E-07
TCF7L2	5.17	1.27	0.002220157
IFI44	7.29	1.27	0.011270617
LPGAT1	9.06	1.27	1.10E-15
ISG20	3.61	1.27	0.010998713
POLB	5.64	1.26	0.000743162
RBMS1	9.26	1.26	5.38E-12
TRABD2A	4.26	1.26	0.007610186
SP140L	7.13	1.26	6.76E-07
SMCHD1	8.75	1.25	3.69E-14
TGFB1	10.49	1.25	4.83E-23
STK3	6.55	1.25	2.63E-05
INPP4B	4.06	1.25	0.012272271
TJP2	8.34	1.25	6.69E-07
CALCOCO2	8.78	1.24	3.54E-14
ZNF618	6.26	1.24	0.000118812
RB1	9.09	1.24	3.25E-15
CBR3	3.66	1.24	0.013950059
EDN1	2.35	1.24	0.004486642
SP140	5.21	1.24	0.004436532
DNAJA1	10.05	1.24	8.84E-18
MRC1	10.93	1.24	5.71E-18
SLC8A1	8.00	1.23	1.68E-09
OPTN	9.31	1.23	5.22E-11
TMEM106A	8.41	1.23	4.27E-08
ARL5B	7.22	1.23	1.19E-05
CARD16	5.62	1.23	0.001216874
TANC1	2.71	1.22	0.011412096
RBCK1	7.74	1.22	7.62E-08
MACF1	11.03	1.22	8.21E-15
SNX16	6.09	1.22	0.000261804
PHF11	7.08	1.21	8.62E-06
MAP3K8	6.97	1.21	0.000206404

TMEM144	8.14	1.21	5.88E-07
FRMD3	5.34	1.21	0.002489102
GGT5	2.70	1.21	0.010121801
GIMAP6	5.81	1.20	0.000482701
JADE2	7.43	1.20	2.12E-07
OAS1	8.05	1.20	0.012432439
LCP2	9.34	1.20	4.23E-15
ELF4	8.58	1.20	7.23E-11
VCPIP1	7.98	1.20	1.80E-09
SLC38A5	3.09	1.20	0.012337078
GNA13	10.04	1.19	9.12E-18
SMTNL1	2.76	1.19	0.011072112
SLC25A30	7.54	1.19	3.35E-08
EAF1	8.59	1.19	1.39E-08
GPR85	3.75	1.18	0.020974347
NCOA1	8.91	1.18	3.09E-11
RIPK2	8.38	1.18	3.83E-08
PIK3R3	4.68	1.17	0.011270617
ASCC3	8.57	1.17	7.36E-09
PAK1	8.54	1.17	9.36E-11
TXN	10.33	1.17	7.51E-07
ATP1B1	9.45	1.17	8.17E-12
TMEM131L	6.65	1.16	7.02E-05
LYSMD2	5.59	1.16	0.002270457
KCNJ2	6.45	1.16	0.002506706
PRLR	6.21	1.16	0.000459877
GTPBP1	7.34	1.16	1.11E-05
REEP4	6.93	1.16	1.35E-05
MIR155HG	5.18	1.16	0.011184968
LYN	10.58	1.15	0.003503481
BCL6	8.48	1.15	2.10E-08
C1GALT1	6.73	1.15	9.87E-05
MIIP	7.02	1.15	1.62E-05
RNF217	6.41	1.15	0.000257223
LRRC8C	6.58	1.15	0.00028248
PPP1R16B	3.53	1.15	0.027687338
SAMD4A	8.70	1.14	6.31E-09
PRPS2	7.11	1.14	1.16E-05
ATP10D	7.54	1.14	4.42E-06
ITPRIPL2	8.65	1.13	1.05E-10
ITGA4	7.44	1.13	5.83E-05
SLC31A2	4.70	1.13	0.013231972
NAMPTP1	3.52	1.13	0.028509454
CYLD	8.73	1.12	1.10E-07
BLOC1S6	9.04	1.12	6.60E-13
PSME1	8.42	1.12	2.65E-06
EDEM1	10.01	1.12	5.82E-11
SIGLEC12	2.26	1.12	0.012850694
TMEM229B	3.58	1.12	0.033431125
ANKRD29	4.91	1.12	0.011252848
SH3BP4	4.90	1.12	0.011814328
FAM46A	9.04	1.12	4.96E-07

CCNA1	5.24	1.11	0.008287489
LPCAT2	8.89	1.11	5.60E-12
ZFYVE28	5.83	1.11	0.003348
ZNF200	6.12	1.11	0.000734111
MX2	8.29	1.10	0.035383771
SCML1	6.61	1.10	0.000292327
DDX60L	9.06	1.10	6.80E-07
AMOTL2	3.12	1.10	0.029924952
IL1RAP	6.14	1.10	0.002153857
MSRB1	7.07	1.10	3.43E-05
CD33	7.73	1.10	2.21E-06
AP1AR	7.37	1.10	6.58E-05
ADAR	10.74	1.10	4.35E-09
MTHFD2	9.57	1.10	1.80E-09
SSB	8.51	1.09	1.17E-08
C19orf66	6.39	1.09	0.000413638
GIMAP8	7.34	1.09	8.57E-06
LACTB	9.76	1.09	1.82E-14
PDGFA	2.91	1.09	0.034663214
SNTB2	7.14	1.09	1.59E-05
BPGM	6.06	1.09	0.001427756
LINC00623	3.27	1.09	0.040138337
ZC3H3	5.90	1.09	0.002467696
GTF2F2	6.89	1.09	4.61E-05
CCDC50	7.69	1.08	7.61E-07
DTNBP1	6.34	1.08	0.001075895
AK4	7.58	1.08	0.001211998
SLAMF7	11.75	1.08	0.013421411
MMP25	5.54	1.08	0.007610186
ZHX1	8.06	1.07	2.86E-07
CCR1	10.92	1.07	1.70E-14
PTPRC	10.94	1.07	1.38E-13
SREBF1	7.70	1.07	1.17E-06
CETP	2.22	1.07	0.025560739
ARID5A	7.81	1.07	2.73E-06
SRGAP2B	4.88	1.06	0.018244763
SNHG28	4.32	1.06	0.034599559
SNX6	8.79	1.06	2.62E-08
CD209	8.02	1.06	0.000138475
GLUL	12.88	1.06	3.66E-07
DHX58	6.94	1.06	0.00503742
FBN2	5.69	1.06	0.003926903
L3MBTL3	5.54	1.06	0.007726869
STAT4	5.35	1.06	0.035097639
F3	8.64	1.05	7.68E-08
COLQ	4.87	1.05	0.034400571
GNE	6.79	1.05	0.000253638
EXPH5	2.25	1.05	0.028852702
SUCNR1	10.05	1.05	0.00474727
EIF2AK2	8.86	1.05	0.000134538
UBE2F	6.38	1.04	0.000933449
ARHGAP17	9.29	1.04	1.93E-12

SEMA4D	7.14	1.04	0.000229094
ZNF276	5.91	1.04	0.005594064
EZH2	5.95	1.04	0.005291699
UBR1	7.98	1.04	2.88E-07
AXL	5.96	1.04	0.004486642
RNF138	6.42	1.04	0.001291552
DDX21	9.47	1.04	7.33E-08
PCNX1	8.76	1.03	6.86E-08
KLF10	7.97	1.03	4.14E-07
CR1L	2.56	1.03	0.035187253
CNDP2	10.58	1.03	1.14E-15
UBA6	8.63	1.03	3.60E-09
ABCB1	2.40	1.03	0.038541489
SUB1	8.49	1.03	6.57E-07
POMP	8.85	1.03	6.61E-10
ARHGAP5	8.02	1.03	1.59E-07
GADD45G	5.09	1.02	0.021059355
DSC2	7.14	1.02	0.000453744
PMAIP1	4.49	1.02	0.038432201
GRAMD1B	6.59	1.02	0.00182412
DRAM1	10.13	1.02	0.012537881
TRIM5	6.89	1.02	0.000319783
PSMA2	4.43	1.02	0.044847233
ARRDC4	7.57	1.01	0.000142745
PHACTR2	7.96	1.01	5.12E-05
CAMK2D	7.92	1.01	2.24E-05
OSBPL6	2.41	1.01	0.04027502
RUNX1	8.55	1.01	2.12E-08
MAX	8.12	1.01	1.02E-06
CSRNP2	6.96	1.01	0.000115855
KLF3	7.94	1.01	3.26E-06
CUL1	8.44	1.01	1.76E-07
FAM177A1	6.76	1.00	0.000324205
EML4	9.61	1.00	4.90E-12
GYPC	7.09	1.00	0.00025384
TAGLN	6.43	1.00	0.000994225
XYLT1	7.26	-2.32	2.47E-14
NHSL2	7.72	-2.30	1.72E-18
TLR5	7.50	-2.29	1.57E-20
CXCR4	8.60	-2.21	1.66E-23
RASAL1	5.96	-2.16	1.88E-09
GPR183	8.16	-2.10	6.03E-18
BMF	8.32	-2.05	2.60E-23
SRGAP3	4.57	-1.96	8.85E-06
ALOX15B	7.86	-1.84	4.02E-13
PDK4	4.85	-1.78	9.42E-05
NHS	3.74	-1.78	0.000102529
NOTCH3	6.91	-1.78	4.96E-07
MERTK	6.97	-1.74	1.06E-08
IL1R1	7.63	-1.73	2.15E-09
OLR1	8.35	-1.72	1.47E-10
NAV2	5.58	-1.72	6.30E-06

CDKN2B	6.16	-1.71	1.20E-06
EEPD1	7.06	-1.71	9.80E-09
FAM13A	5.95	-1.71	3.73E-07
MYCL	5.15	-1.70	4.38E-05
IFNGR1	10.04	-1.68	4.10E-31
ZNF589	8.48	-1.68	7.75E-13
TLE3	8.41	-1.67	1.77E-16
SLIT3	5.66	-1.62	1.36E-05
KCNA2	5.77	-1.62	1.51E-05
KANK2	5.51	-1.58	6.45E-05
TRIM2	5.88	-1.57	3.24E-05
CLMN	7.64	-1.57	1.81E-10
FBXL20	6.50	-1.55	6.86E-07
CABLES1	4.70	-1.53	0.000834121
ATG16L2	7.90	-1.52	5.18E-11
CACNA2D3	2.97	-1.51	0.000745044
RAB3D	5.73	-1.51	0.000222906
NOL4L	6.40	-1.50	2.73E-05
SLC25A29	7.70	-1.49	1.89E-10
SH3PXD2A	7.26	-1.47	7.85E-06
SLC24A4	4.41	-1.46	0.001974248
AMPD3	9.55	-1.46	1.24E-11
BNC2	4.87	-1.45	0.001106148
PELI3	5.11	-1.43	0.000492313
FOXO3	7.34	-1.43	6.81E-09
C15orf52	7.17	-1.42	3.69E-07
TNS1	9.63	-1.42	9.51E-10
NLRP12	5.99	-1.42	3.67E-05
INSR	6.25	-1.41	3.67E-05
SLC27A1	8.06	-1.40	2.78E-09
ABCA1	8.17	-1.39	6.17E-09
NAV1	6.73	-1.39	3.30E-05
LDLRAD4	7.13	-1.39	1.13E-06
CERK	7.80	-1.39	8.49E-10
ZNF395	5.76	-1.38	0.000172052
ZNF704	5.12	-1.36	0.003697081
LFNG	6.56	-1.36	6.14E-06
PLIN2	10.72	-1.35	2.43E-13
RDH10	6.10	-1.35	0.000174866
YPEL3	5.64	-1.32	0.000344703
AMZ1	7.17	-1.32	2.46E-05
OLFML2B	4.81	-1.32	0.004148443
SERINC5	9.64	-1.31	1.12E-16
USP54	5.62	-1.31	0.000611307
RIN3	8.81	-1.31	1.76E-10
SH3PXD2B	7.87	-1.31	5.14E-05
MMD	7.19	-1.30	7.09E-06
AATK	5.26	-1.30	0.002463791
SYNE1	7.52	-1.30	5.42E-08
C9orf139	5.27	-1.29	0.001668391
FRMD4A	8.46	-1.29	1.44E-10
SNX21	3.69	-1.29	0.009860254

NT5DC2	5.73	-1.28	0.000940408
RGS18	5.10	-1.28	0.002829048
PRKCH	5.80	-1.28	0.000348847
FAM214A	6.66	-1.28	2.81E-05
ACACB	5.24	-1.28	0.001747665
AMPD2	8.11	-1.27	4.36E-09
ADORA2B	5.92	-1.26	0.000538084
GAPT	5.93	-1.26	0.002703925
PTX3	6.21	-1.26	0.003157806
KLHL24	7.63	-1.25	5.92E-08
HLTF	6.12	-1.24	0.000569745
ST5	6.19	-1.23	0.000550528
AVPI1	6.66	-1.23	3.21E-05
DEDD2	7.48	-1.23	1.60E-06
EEF1AKMT3	5.89	-1.23	0.000847557
TBC1D8	7.84	-1.23	1.10E-08
PRAM1	8.81	-1.22	4.00E-07
SPATA12	4.72	-1.22	0.006675185
FAM212B	4.93	-1.22	0.005667504
PID1	4.04	-1.22	0.01578692
PHACTR1	7.74	-1.22	8.72E-08
SLC16A10	6.15	-1.22	0.000208637
SLC9A1	8.47	-1.20	2.40E-09
SEC31B	4.90	-1.20	0.006534517
ARRDC3	6.96	-1.20	5.30E-05
RTL10	6.58	-1.20	0.000374626
RAPGEF3	6.35	-1.20	0.000331695
ENC1	6.10	-1.19	0.002717812
FHOD1	7.68	-1.19	7.14E-08
PTPN13	5.10	-1.19	0.008234734
NISCH	7.57	-1.19	7.19E-06
TFAP4	3.86	-1.18	0.020016744
ALK	5.55	-1.18	0.013031339
EFR3B	4.07	-1.18	0.020729428
TOM1L2	8.40	-1.17	5.42E-08
PADI2	6.84	-1.16	0.000336225
PXK	7.83	-1.16	2.11E-07
STOX2	4.26	-1.16	0.022221807
IER5L	6.49	-1.15	0.00025384
KIAA1456	3.87	-1.14	0.026660962
MMP2-AS1	6.61	-1.14	0.005842087
PDCD4	6.84	-1.14	4.83E-05
BAIAP2-AS1	6.89	-1.14	5.57E-05
ABCG1	2.60	-1.13	0.023081885
REPS2	4.83	-1.13	0.017259151
SLC16A6	7.66	-1.13	5.92E-05
KIF21B	6.36	-1.13	0.000611307
LTB4R	5.57	-1.13	0.004962631
PLEC	11.14	-1.12	7.72E-13
TMEM170B	7.79	-1.11	1.66E-05
SAMD1	6.66	-1.11	0.000178697
STK36	5.01	-1.09	0.017096637



SHMT1	5.73	-1.09	0.005648987
ASB1	6.98	-1.09	0.000112351
PNPLA3	4.68	-1.09	0.02376815
YPEL2	5.69	-1.09	0.00440233
JMY	5.38	-1.09	0.01099513
TRIM16	4.95	-1.08	0.023479986
LINC00921	3.40	-1.08	0.042178953
ABCC5	9.19	-1.08	3.40E-05
PPM1H	6.93	-1.08	0.000112351
FYN	5.98	-1.07	0.007264166
SLC46A2	3.20	-1.07	0.041566292
STMN1	6.97	-1.07	0.001133461
TRG-AS1	6.37	-1.07	0.001951188
LINC02035	5.81	-1.07	0.00495119
CASP2	6.68	-1.07	0.000484555
MXD4	6.74	-1.07	0.000618973
ADGRD1	3.22	-1.07	0.045167218
SH2D3C	6.42	-1.07	0.002180768
DPEP2	7.18	-1.06	0.000211466
ADORA3	5.15	-1.06	0.021964755
LINC01094	5.53	-1.05	0.011147327
JUP	5.82	-1.05	0.006475198
GFOD1	7.93	-1.05	1.11E-06
ALS2CL	4.49	-1.05	0.041608831
ARAP3	6.02	-1.04	0.004405163
PHLDA3	8.05	-1.04	3.63E-05
ULK1	6.53	-1.04	0.001137306
IRAK3	8.68	-1.04	7.22E-05
KLHDC8B	6.84	-1.03	0.000689189
DYRK4	7.00	-1.03	0.000132647
IQCD	2.81	-1.03	0.047364472
ZADH2	7.13	-1.03	0.000297693
TOM1	8.99	-1.03	5.20E-09
UNC119B	5.54	-1.02	0.012399089
ANKRD36C	5.93	-1.02	0.012410272
ABCG4	2.59	-1.02	0.037559733
KIFC3	7.26	-1.02	0.000124331
SLC16A5	6.09	-1.02	0.004148443
DTNA	6.61	-1.02	0.002140742
NLRP1	5.76	-1.02	0.008234734
IQGAP3	6.68	-1.02	0.00136893
CCDC57	6.96	-1.02	0.002112957
UBALD1	5.80	-1.01	0.008052809
KCTD7	7.51	-1.01	7.22E-05
MYO7A	6.82	-1.01	0.000767424
MKI67	6.45	-1.01	0.005041548
ZMIZ1-AS1	8.38	-1.01	7.33E-07
MANSC4	2.98	-1.00	0.044532629
GAS2L1	6.70	-1.00	0.003313822

**Supplementary table 7** Genes differentially expressed in macrophages after 6 hours of polarisation with IL-4 (M2). Gene expression was compared to unstimulated macrophages used as control. Genes are ordered by Log2-fold change.

Gene Name	Log2( Base Mean Count )	Log2FC	P adjusted
CD209	8.02	3.54	5.15E-50
CTNNAL1	6.21	3.48	3.25E-24
F13A1	6.21	3.10	1.04E-17
FCER2	4.92	2.97	6.59E-14
MAOA	6.48	2.92	7.11E-22
CISH	7.13	2.89	7.52E-30
PALLD	7.45	2.85	3.88E-34
WNT5B	3.76	2.69	1.70E-09
DACT1	4.87	2.60	6.82E-10
PCSK5	6.32	2.37	1.06E-14
CCL13	3.87	2.25	1.41E-06
CLEC4A	6.88	2.24	2.98E-19
MRC1	10.93	2.07	5.15E-50
MOB3B	6.15	2.05	2.10E-10
BATF3	4.95	2.02	4.92E-06
SOCS1	7.00	1.98	5.61E-05
CTSC	11.51	1.97	1.77E-33
CD200R1	5.42	1.91	1.87E-05
AKAP5	3.56	1.91	0.000111139
APOL4	8.25	1.88	0.000125411
CHCHD7	6.36	1.88	1.65E-10
CCL18	2.82	1.86	0.000100657
HOMER2	4.35	1.80	0.000173631
SLA	8.88	1.79	9.61E-20
THBD	5.21	1.77	4.54E-05
IL17RB	4.63	1.77	0.000216725
TMEM236	4.29	1.76	0.000344818
FGL2	10.18	1.75	4.80E-24
PPM1L	7.30	1.75	3.59E-11
SCIMP	8.60	1.73	5.27E-13
CLEC4G	2.16	1.72	8.28E-05
PPP1R3B	6.00	1.72	6.13E-07
ENPP2	5.33	1.72	0.000234045
SYT17	5.65	1.71	0.000119425
SPINT2	6.73	1.69	5.56E-10
DCUN1D3	5.69	1.68	5.74E-06
PDP2	6.09	1.67	4.32E-07
PLXNA2	6.19	1.66	3.75E-07
HRH1	6.15	1.65	2.14E-06
NIPAL1	4.60	1.64	0.00049252
FAR2	6.93	1.63	6.82E-10
SNAI3	6.98	1.60	4.08E-08
ARRDC4	7.57	1.58	7.15E-10
CLEC10A	6.82	1.57	1.66E-06
RNF19B	8.20	1.55	2.07E-08
CHDH	4.12	1.54	0.004968513

GAS6	6.51	1.54	3.48E-06
KREMEN1	6.18	1.52	0.000538524
ARL4C	8.02	1.50	4.03E-10
SLC5A3	9.42	1.49	2.20E-18
HR	5.05	1.49	0.002750805
FN1	7.55	1.48	7.97E-07
GGT5	2.70	1.47	0.004255567
SUCNR1	10.05	1.44	0.000125411
UST	4.04	1.43	0.010797515
DNASE1L3	2.98	1.43	0.010612365
IL1RAP	6.14	1.41	0.000111139
PDGFRB	3.01	1.41	0.011466664
NUDT16	7.70	1.39	6.82E-10
ARNTL2	7.62	1.36	4.83E-05
ERI1	7.30	1.36	4.81E-08
PTGFRN	6.96	1.36	6.40E-06
NOCT	4.65	1.35	0.010507465
SLAMF1	4.26	1.34	0.02171794
PTGS1	8.43	1.34	3.54E-13
CARD9	6.93	1.34	7.40E-07
FLVCR2	6.75	1.31	0.00129795
RAMP1	2.80	1.31	0.020639258
SDC4	9.27	1.31	4.54E-08
MTUS1	4.93	1.30	0.011647279
TGFA	5.35	1.29	0.00676972
FAM110B	3.04	1.29	0.034738266
P2RY12	2.10	1.29	0.006176114
TJP2	8.34	1.28	1.33E-06
PDGFB	6.98	1.27	1.38E-05
STK17B	7.30	1.27	1.10E-06
LIMA1	7.92	1.27	2.42E-07
BATF	6.55	1.27	0.000826352
SLC4A7	7.93	1.26	8.39E-08
AP2A2	4.49	1.26	0.021246471
CRB2	1.67	1.26	0.002862301
PRAG1	7.04	1.25	8.01E-06
P2RY14	5.92	1.25	0.040781147
QSOX1	9.33	1.24	1.53E-15
ACE	7.02	1.24	7.54E-05
FCRLB	4.62	1.24	0.027814538
SLCO4C1	6.01	1.23	0.002801491
FRMD4A	8.46	1.23	2.56E-10
CSRNP1	5.72	1.19	0.007154307
TLE1	5.32	1.19	0.022400693
SEPT3	5.70	1.17	0.007629657
PARM1	1.75	1.16	0.012412151
RGL1	10.38	1.15	1.92E-12
TIFA	6.94	1.15	0.00212155
TGM2	11.95	1.15	7.95E-19
CD274	9.57	1.15	0.022636766
SPRED2	7.13	1.15	0.000150214
CDR2	6.75	1.14	0.001270656

OCSTAMP	6.47	1.14	0.000918315
SRGAP1	6.46	1.13	0.000894051
PAPSS2	7.69	1.13	1.86E-05
EMB	8.00	1.13	1.87E-05
EPS8	6.18	1.13	0.002360558
C10orf128	7.19	1.12	8.60E-05
CAVIN1	5.47	1.11	0.019566164
AMPD2	8.11	1.11	1.01E-07
SLC7A8	8.78	1.10	7.15E-08
XXYLT1	5.27	1.10	0.027394817
MAT2A	10.27	1.09	4.00E-15
PTGER2	6.39	1.09	0.009828833
NR4A3	7.25	1.09	0.001087053
PTPRE	11.25	1.08	1.47E-08
MS4A4A	7.09	1.06	0.002378264
GGTA1P	6.43	1.06	0.007154307
ATXN1	9.14	1.06	1.16E-07
ARHGAP26	8.72	1.04	1.30E-05
IL21R	6.13	1.03	0.012617366
CTNS	8.64	1.03	2.27E-07
EPB41L2	9.12	1.03	5.93E-09
CCL22	10.94	1.03	1.46E-08
CACNB4	1.62	1.02	0.038643814
FCGR2B	8.05	1.02	7.54E-05
NLRP12	5.99	-1.57	1.73E-05
CDKN2B	6.16	-1.52	8.10E-05
TRIM2	5.88	-1.51	0.00028429
TLR7	8.16	-1.42	2.89E-07
PFKFB3	9.92	-1.39	2.41E-13
PRLR	6.21	-1.38	0.00049252
HGF	6.61	-1.35	0.000894051
NUPR1	8.73	-1.26	2.52E-07
CCDC88C	6.92	-1.26	7.40E-05
CLEC5A	5.64	-1.20	0.008654735
ABCA1	8.17	-1.16	9.10E-06
RGS1	6.55	-1.16	0.002451094
LHFPL2	11.09	-1.13	7.36E-11
TESK2	5.95	-1.11	0.026801163
SH3RF3	7.39	-1.10	0.000254977
ADORA2B	5.92	-1.09	0.013336603
DENND3	7.78	-1.09	0.000217609
TLE3	8.41	-1.09	7.97E-07
ARID3B	5.24	-1.08	0.046379566
C3AR1	8.72	-1.08	9.74E-08
FMN1	7.21	-1.07	0.000389949
MEFV	5.70	-1.06	0.049189795
SDS	10.05	-1.05	1.61E-05
PADI2	6.84	-1.00	0.010797515

**Supplementary table 8** Genes differentially expressed in macrophages after 6 hours of polarisation with IL-26. Gene expression was compared to unstimulated macrophages used as control. Genes are ordered by Log2-fold change.

Gene Name	Log2( Base Mean Count )	Log2FC	P adjusted
ADGRE1	5.92	3.33	3.16E-16
ENPP2	5.33	2.55	1.98E-09
SLAMF1	4.26	2.40	2.06E-07
JAK3	7.04	2.35	5.64E-07
HAPLN3	7.42	2.29	9.08E-07
CXCL9	10.75	2.25	2.32E-06
FPR1	7.55	2.19	8.24E-11
FPR2	5.04	2.18	1.72E-06
TIFAB	7.59	2.01	4.63E-10
CYP7B1	4.33	1.98	5.53E-05
IL2RA	4.50	1.95	8.30E-05
STEAP4	4.96	1.93	6.74E-05
IL7	4.96	1.91	4.97E-05
THBS1	4.44	1.89	0.000150936
SLC39A8	9.05	1.84	0.000254143
NAMPT	9.68	1.84	0.000166773
APOBEC3A	7.85	1.83	6.43E-09
MARCKSL1	5.70	1.80	0.000151196
IL32	5.20	1.78	0.000306065
BIRC3	9.02	1.77	4.73E-05
SOCS3	7.33	1.76	0.000585962
BATF	6.55	1.73	5.22E-07
BCL3	7.86	1.70	0.0001631
EHD1	8.82	1.64	0.000766203
NEURL3	4.63	1.63	0.001775789
MYO1G	8.26	1.63	0.000636641
IL4I1	9.32	1.63	0.000569034
SOD2	13.97	1.62	0.001942074
SGPP2	7.47	1.62	0.001775789
LRG1	3.13	1.60	0.001998455
SLC43A2	5.33	1.59	0.000978303
HIVEP2	7.07	1.59	4.75E-05
VCAN	6.32	1.59	3.89E-05
FLVCR2	6.75	1.58	3.62E-05
FAM20A	6.15	1.56	3.28E-05
P2RY6	7.13	1.55	4.65E-07
TNFAIP8	8.51	1.54	2.04E-08
APOL3	9.63	1.54	0.003960003
GPR85	3.75	1.53	0.003956175
MCOLN2	7.87	1.53	0.004088297
KREMEN1	6.18	1.53	0.000546116
NFE2L3	6.48	1.53	7.04E-05
TBC1D17	8.47	1.52	0.000826868
NECTIN2	8.14	1.52	4.65E-07
CLEC4D	4.35	1.52	0.003972184
LYN	10.58	1.51	0.000224058

DSE	8.84	1.51	9.01E-13
CHST2	8.04	1.50	0.004977629
TJP2	8.34	1.49	1.44E-08
ELOVL7	4.89	1.49	0.005264557
GK	8.95	1.48	1.60E-09
GPR132	6.61	1.48	0.005117319
ICAM1	10.31	1.48	0.000364895
GADD45B	6.89	1.48	3.71E-05
PDCD1LG2	7.54	1.47	2.13E-06
CD38	6.62	1.47	0.005276132
POU2F2	8.04	1.47	0.004615022
S100A8	5.05	1.46	0.000998003
PPA1	7.30	1.45	9.08E-07
MT2A	3.18	1.44	0.00508582
CD40	9.02	1.41	0.006195339
CD274	9.57	1.41	0.001349847
ORAI1	7.99	1.41	3.10E-05
TNIP1	9.91	1.39	0.005251679
ZSWIM4	6.08	1.39	0.00239859
ADAMTS14	3.44	1.39	0.009023338
ETV5	7.43	1.39	0.011431695
DOCK4	10.48	1.37	0.001311369
TNIP3	4.75	1.37	0.002058342
SLC2A3	8.62	1.36	4.65E-07
SH3PXD2B	7.87	1.36	3.62E-05
VCAM1	6.29	1.35	0.016364314
WTAP	9.37	1.35	0.006425896
VNN2	5.74	1.34	0.00174144
HSD11B1	5.53	1.34	0.005177667
PNRC1	9.01	1.33	2.08E-06
CD80	6.52	1.33	0.017698392
RTN1	7.06	1.33	7.90E-05
S100A9	9.25	1.33	5.20E-13
CRIM1	8.23	1.32	0.015942631
PTGIR	6.95	1.32	0.018960762
ADM	5.99	1.32	0.007615607
ATF5	9.02	1.31	0.001942074
NCF1B	6.40	1.30	0.023856634
GJB2	7.47	1.30	0.000434359
PTGER2	6.39	1.29	0.000730977
PELI1	7.00	1.29	0.000276995
NFKB2	9.45	1.29	0.00319909
RNF144B	8.79	1.29	0.009004958
PDE4B	7.30	1.28	0.024673958
FAM129A	10.31	1.28	0.001967249
RELB	8.05	1.27	1.17E-05
NFKBIZ	7.33	1.27	0.026200971
ARHGAP24	5.12	1.27	0.012636335
HIVEP3	9.25	1.27	2.28E-06
SLCO4A1	6.89	1.26	0.001809799
SLC7A11	9.73	1.26	0.00317531
MIR3142HG	7.35	1.26	0.026775027

TIMP1	7.87	1.25	2.81E-05
PTGER4	8.56	1.25	0.009004958
ZHX2	5.75	1.24	0.010349054
IL7R	6.69	1.24	0.035659221
PTPN2	7.98	1.24	4.56E-08
P2RX7	10.95	1.24	0.016425179
ACSL1	11.81	1.24	0.013383811
KYNU	10.07	1.23	0.018435127
NFKBIA	10.33	1.23	0.01505104
ARNTL2	7.62	1.23	0.000484945
DRAM1	10.13	1.22	0.004977629
PTPRJ	10.62	1.22	0.00180762
ETV3	8.01	1.21	1.29E-05
BID	8.65	1.21	2.33E-05
TNFRSF4	7.46	1.21	0.027180478
PIM2	5.78	1.21	0.006273297
VNN1	5.86	1.21	0.005424887
NFIX	4.87	1.21	0.027637175
ADA	7.47	1.21	0.045153895
CD226	4.14	1.21	0.043914411
SLAMF7	11.75	1.20	0.012548475
SLC41A2	7.95	1.20	1.17E-05
HIVEP1	8.26	1.20	7.79E-05
GPR141	6.32	1.20	0.006434773
TCF4	8.39	1.20	2.78E-05
TMEM2	7.92	1.20	1.47E-06
NAMPTP1	3.52	1.19	0.044892269
CCL2	10.17	1.19	0.008259129
CSF2RB	9.47	1.19	6.12E-12
B4GALT1	9.93	1.19	2.89E-06
MMP14	10.79	1.18	0.008885852
LINC00926	5.47	1.18	0.022385204
PSTPIP2	9.02	1.18	0.028781305
LINC00937	6.06	1.18	0.018435127
STAT4	5.35	1.18	0.036332006
PFKFB3	9.92	1.17	1.65E-09
CBX6	9.01	1.16	1.81E-05
ACSL5	8.56	1.15	0.000151196
HR	5.05	1.15	0.038738284
TNFAIP3	9.62	1.14	0.048742066
MARCKS	12.14	1.14	1.29E-08
CD44	12.19	1.13	0.008717488
BCL2	7.18	1.12	0.000166773
IL15	5.43	1.12	0.032998891
NFKB1	9.61	1.11	0.041901802
MAOA	6.48	1.11	0.005699492
ZC3H12D	6.17	1.11	0.010600013
AHR	8.98	1.10	2.26E-06
LAP3	10.44	1.10	1.03E-07
LILRB2	4.94	1.10	0.034243616
CEBPD	6.85	1.09	0.001238068
SNHG15	5.02	1.09	0.043796956

NAB1	7.13	1.09	0.000766203
TFEC	10.51	1.08	1.04E-08
KMO	8.03	1.08	0.001075683
GPR153	6.02	1.08	0.031005325
LUCAT1	5.84	1.07	0.026423056
RCN1	8.01	1.06	8.74E-05
MTHFD2	9.57	1.06	1.14E-07
CCR5	9.98	1.05	3.27E-05
ARHGAP31	10.22	1.04	3.08E-05
ICOSLG	6.05	1.04	0.031639191
CLIC4	10.13	1.04	1.93E-05
PIM3	8.82	1.03	0.000115245
TIFA	6.94	1.03	0.008259129
FCGR2A	9.25	1.03	3.69E-07
PLEKHM3	6.30	1.02	0.024587628
OGFRL1	10.28	1.02	0.000114396
PRDM1	7.58	1.02	0.002894628
ZC3H12A	7.25	1.02	0.022151949
ARHGEF10L	9.15	1.02	2.81E-05
TXN	10.33	1.00	0.000175587



**Supplementary table 9** Genes differentially expressed in macrophages after 6 hours of polarisation with TNF- $\alpha$ . Gene expression was compared to unstimulated macrophages used as control. Genes are ordered by Log2-fold change.

Gene Name	Log2( Base Mean Count )	Log2FC	P adjusted
MARCKSL1	5.70	3.11	3.58E-14
ACHE	3.60	2.92	2.27E-11
MSC	7.16	2.63	1.89E-16
ANO9	5.51	2.51	4.60E-09
LINC00937	6.06	2.45	2.48E-10
GPR153	6.02	2.42	7.06E-11
AP1S3	5.41	2.37	4.60E-09
ARNTL2	7.62	2.35	1.43E-15
VCAM1	6.29	2.31	3.53E-07
BAHCC1	5.45	2.31	6.67E-09
BIRC3	9.02	2.31	4.60E-09
OSM	5.19	2.30	7.98E-08
CYP7B1	4.33	2.29	4.18E-07
IRAK2	6.88	2.28	4.50E-07
CHST2	8.04	2.25	6.52E-07
ZSWIM4	6.08	2.20	1.35E-08
TNFRSF9	8.67	2.20	4.80E-07
ZBTB10	6.50	2.19	9.73E-11
FSCN1	9.53	2.17	1.32E-06
GP1BA	5.90	2.17	8.69E-07
SDC4	9.27	2.16	3.02E-22
PSTPIP2	9.02	2.16	2.68E-07
SGPP2	7.47	2.15	2.15E-06
HIVEP2	7.07	2.14	1.11E-09
PNRC1	9.01	2.14	3.14E-17
ICAM1	10.31	2.13	6.10E-09
EHD1	8.82	2.10	1.15E-06
JAG1	8.03	2.10	2.86E-06
RASGRP1	6.07	2.08	1.35E-08
NCF1B	6.40	2.05	8.06E-06
TNFAIP3	9.62	2.04	3.06E-06
PDE4B	7.30	2.02	9.16E-06
NFKB2	9.45	2.02	5.44E-08
HR	5.05	2.01	1.81E-06
HS3ST3B1	6.16	1.99	5.86E-06
PHLDB1	5.57	1.95	1.67E-06
GRAMD1A	9.41	1.94	2.42E-05
NFKBIA	10.33	1.94	2.72E-06
TIFAB	7.59	1.93	8.07E-10
TRAF1	8.84	1.92	3.18E-05
NBN	9.90	1.92	9.05E-08
RNF144B	8.79	1.91	3.28E-06
NEURL3	4.63	1.90	4.66E-05
TNFRSF4	7.46	1.87	1.97E-05
CRIM1	8.23	1.85	4.76E-05
ADM	5.99	1.84	9.48E-06

MCOLN2	7.87	1.84	9.24E-05
CXCL8	9.59	1.83	3.98E-05
IL32	5.20	1.83	6.84E-05
TIFA	6.94	1.82	4.85E-09
CD274	9.57	1.80	3.44E-06
APOL3	9.63	1.80	1.47E-04
PLEKHG3	6.86	1.78	1.51E-04
TBC1D9	9.21	1.78	2.46E-06
NFE2L3	6.48	1.77	4.80E-07
RELB	8.05	1.77	1.54E-11
KYNU	10.07	1.75	5.30E-05
MIR3142HG	7.35	1.74	1.67E-04
CLEC4E	7.80	1.74	2.49E-04
SLC35F2	4.52	1.74	9.85E-05
ELOVL7	4.89	1.74	2.19E-04
ANKRD33B	5.13	1.73	1.24E-04
CDC42EP2	3.82	1.73	2.52E-04
BID	8.65	1.73	1.54E-11
TNIP1	9.91	1.72	7.81E-05
FMNL3	9.39	1.72	3.22E-15
SOD2	13.97	1.72	3.29E-04
CLEC6A	4.21	1.72	2.49E-04
FAS	7.29	1.70	2.62E-09
CLEC4D	4.35	1.69	3.29E-04
TNFAIP8	8.51	1.69	1.16E-10
FAM129A	10.31	1.69	2.84E-06
CAMKK2	8.96	1.68	1.89E-16
MMP2-AS1	6.61	1.67	5.07E-06
GPR35	6.21	1.67	4.18E-06
IL15RA	6.46	1.67	5.11E-04
HIVEP1	8.26	1.67	8.42E-10
STEAP4	4.96	1.66	4.10E-04
FILIP1L	5.68	1.66	2.95E-05
NCF1	8.35	1.66	4.20E-04
WTAP	9.37	1.65	1.31E-04
SESN3	6.46	1.64	1.32E-06
TRIP10	7.61	1.63	8.64E-09
G0S2	7.39	1.63	1.38E-04
MAGI2-AS3	4.67	1.63	4.64E-04
TJP2	8.34	1.63	7.95E-11
PTGES	3.31	1.62	5.20E-04
GJB2	7.47	1.61	1.09E-06
POGLUT1	6.60	1.60	1.42E-06
IRF1	10.00	1.59	4.09E-05
B4GALT1	9.93	1.59	9.08E-12
A4GALT	3.66	1.59	1.08E-03
EREG	3.09	1.58	5.78E-04
PTGIR	6.95	1.58	1.09E-03
NCF1C	7.24	1.58	1.19E-03
SLC30A4	5.49	1.57	6.53E-04
NFKB1	9.61	1.57	3.18E-04
ACSL5	8.56	1.57	6.39E-09

AMPD3	9.55	1.57	9.25E-14
KCNJ2	6.45	1.56	2.35E-05
MMP14	10.79	1.56	4.74E-05
PLEKHM3	6.30	1.54	2.52E-05
IL411	9.32	1.54	5.71E-04
TNFAIP2	12.48	1.53	1.24E-04
KMO	8.03	1.53	1.20E-07
FPR2	5.04	1.52	1.20E-03
STX11	7.68	1.52	9.38E-07
ARID5B	7.02	1.51	4.55E-06
GPR132	6.61	1.51	1.93E-03
JAK3	7.04	1.51	2.11E-03
RUFY3	8.41	1.50	4.05E-09
SLC7A11	9.73	1.50	7.58E-05
PRKAR2B	5.45	1.50	2.31E-04
SERPINE1	4.98	1.49	8.81E-04
MYO1G	8.26	1.49	1.05E-03
AMZ1	7.17	1.49	1.74E-07
HCAR3	4.15	1.49	2.61E-03
WNT5A	4.73	1.49	8.84E-04
HSD11B1	5.53	1.47	6.36E-04
HIP1	8.09	1.47	9.34E-08
MIR155HG	5.18	1.47	8.31E-04
TRIM16L	4.11	1.47	2.98E-03
USP12	9.10	1.46	2.22E-13
NCK2	7.18	1.46	8.69E-07
PTGER2	6.39	1.45	2.57E-05
NFKBIZ	7.33	1.45	3.35E-03
SRC	10.18	1.45	1.45E-04
CD40	9.02	1.44	2.24E-03
MCTP1	8.60	1.44	2.03E-10
MSANTD3	7.72	1.44	1.35E-06
DRAM1	10.13	1.44	1.84E-04
SNX10	9.89	1.43	3.11E-11
SAMD14	3.19	1.42	4.52E-03
ADA	7.47	1.42	5.04E-03
RTN1	7.06	1.41	5.51E-06
PIM3	8.82	1.41	3.89E-09
DENND5A	9.09	1.40	1.53E-08
TBC1D17	8.47	1.40	1.19E-03
IL7	4.96	1.40	3.72E-03
DOCK4	10.48	1.39	3.81E-04
RFTN1	9.12	1.39	1.65E-08
MARCKS	12.14	1.39	1.95E-13
DTX4	8.48	1.38	2.19E-06
IFNGR2	6.99	1.38	5.86E-06
CYP27B1	6.65	1.38	3.23E-05
AK4	7.58	1.37	2.52E-05
ACVR2A	6.28	1.37	5.06E-05
SLAMF7	11.75	1.37	1.26E-03
SLC43A2	5.33	1.37	3.63E-03
ACSL1	11.81	1.37	1.96E-03

CCL3L3	3.64	1.36	7.61E-03
ICOSLG	6.05	1.36	5.79E-04
MSC-AS1	5.77	1.36	1.11E-03
CD58	7.89	1.36	4.58E-07
N4BP2L1	7.25	1.35	4.98E-07
GBP1	10.97	1.35	7.61E-03
TNIP2	7.58	1.35	1.37E-06
IL7R	6.69	1.35	8.61E-03
CERS4	5.50	1.35	9.33E-04
IL1A	4.91	1.35	8.33E-03
EBI3	6.08	1.34	1.33E-03
MTF1	8.75	1.34	1.35E-07
BCL2	7.18	1.34	8.08E-07
SLC39A8	9.05	1.34	9.65E-03
ATP2B1	9.06	1.33	9.17E-08
OAF	5.95	1.33	5.76E-04
DGKH	8.02	1.33	1.78E-06
ARHGAP31	10.22	1.33	4.60E-09
ORAI1	7.99	1.32	3.70E-05
BCL9L	7.07	1.32	4.81E-06
CD83	10.51	1.32	3.13E-10
CLINT1	9.23	1.31	7.95E-08
TNFAIP6	7.04	1.31	2.77E-03
CLIC4	10.13	1.31	3.44E-09
TNFSF9	3.80	1.31	1.21E-02
CD44	12.19	1.30	5.93E-04
N4BP3	2.18	1.29	3.00E-03
BCL3	7.86	1.29	4.64E-03
CD80	6.52	1.29	1.28E-02
RHBDF2	9.29	1.28	1.08E-07
SEMA4A	9.16	1.28	1.13E-03
NOL4L	6.40	1.27	1.57E-04
USP13	5.18	1.27	3.19E-03
ZC3H12A	7.25	1.27	7.18E-04
IL1B	7.50	1.27	9.11E-03
RILPL2	8.40	1.26	2.97E-09
BTG3	5.78	1.26	1.35E-03
RCN1	8.01	1.26	3.21E-07
TMEM119	4.03	1.26	1.46E-02
PTGS2	5.24	1.26	8.63E-03
EXOC3L4	2.34	1.25	5.97E-03
PDCD1LG2	7.54	1.25	4.19E-05
TSPAN33	7.15	1.25	9.76E-05
TNC	4.80	1.25	1.51E-02
GCH1	8.51	1.25	1.74E-02
VILL	5.07	1.25	7.26E-03
PDE4DIP	10.25	1.24	4.64E-04
PLK3	7.50	1.24	2.75E-05
P2RX7	10.95	1.24	8.12E-03
ESPL1	4.49	1.24	1.43E-02
GRAMD2B	4.02	1.24	1.83E-02
BTG1	8.38	1.23	7.19E-03

NIPAL4	6.47	1.23	1.97E-02
MB21D2	5.28	1.23	7.26E-03
TOR3A	9.25	1.23	6.55E-12
PSD3	9.78	1.23	1.19E-08
HCAR2	4.33	1.23	2.03E-02
PTPRJ	10.62	1.23	6.62E-04
SRI	7.63	1.23	6.06E-05
CXCL2	4.75	1.23	1.98E-02
JUNB	9.43	1.22	1.77E-07
ADAMTS14	3.44	1.22	1.76E-02
SYT17	5.65	1.22	8.85E-03
NFE2L2	10.19	1.22	7.26E-14
ETV3	8.01	1.21	3.28E-06
RIPK2	8.38	1.21	5.44E-08
PLAGL2	7.37	1.21	1.02E-05
GADD45B	6.89	1.21	6.52E-04
C15orf48	9.23	1.20	2.56E-02
SNHG15	5.02	1.20	9.84E-03
NBPF19	7.88	1.20	1.67E-07
DLC1	4.82	1.20	1.06E-02
SLC7A11-AS1	3.35	1.19	2.66E-02
CKB	3.64	1.19	2.47E-02
BMT2	6.46	1.19	3.44E-04
OGFRL1	10.28	1.19	9.30E-07
NINJ1	10.06	1.19	2.15E-03
ENTHD1	4.14	1.18	2.51E-02
TFEC	10.51	1.18	5.93E-11
GPR84	6.92	1.18	2.88E-02
NUB1	8.44	1.18	1.93E-06
PTX3	6.21	1.18	5.73E-03
GBP2	8.58	1.17	1.24E-02
MN1	3.16	1.17	2.25E-02
TXN	10.33	1.17	1.70E-06
PSME2	9.08	1.17	1.85E-07
ITGB8	4.16	1.16	3.24E-02
RNF19B	8.20	1.16	4.54E-05
C3	9.71	1.16	1.87E-06
ST3GAL2	8.43	1.16	2.76E-06
RDX	10.13	1.16	2.97E-09
SLC41A2	7.95	1.15	9.16E-06
LINC01268	3.52	1.15	3.09E-02
IKBKE	7.67	1.15	1.99E-05
FZD7	4.59	1.14	2.80E-02
DAPP1	7.94	1.14	3.61E-06
SRGN	9.74	1.14	6.09E-07
THBS1	4.44	1.14	3.90E-02
PKD2	7.01	1.14	9.18E-05
CBX6	9.01	1.13	8.87E-06
C17orf58	5.34	1.13	1.51E-02
PVR	6.98	1.13	1.04E-04
LRRFIP2	7.92	1.13	7.14E-07
TCF4	8.39	1.13	3.27E-05

LUCAT1	5.84	1.13	8.52E-03
IRAK3	8.68	1.12	9.14E-06
ASS1	2.81	1.12	2.86E-02
LYRM4	5.71	1.12	1.01E-02
TRIM2	5.88	1.12	3.19E-03
ATF5	9.02	1.12	6.69E-03
GCLM	7.55	1.12	3.63E-05
MOB3C	7.98	1.12	2.09E-06
RAPGEF2	8.69	1.12	4.93E-07
KDM6B	8.05	1.11	1.77E-06
TNFRSF18	4.07	1.11	1.02E-02
KANK1	6.34	1.11	2.38E-03
CCR7	5.42	1.11	3.23E-02
HCK	10.44	1.10	1.19E-06
TTYH2	7.53	1.10	6.97E-05
ARAP2	8.43	1.09	2.56E-07
STAP2	2.88	1.09	4.33E-02
UXS1	8.21	1.09	4.29E-07
PLXNA1	10.65	1.08	7.45E-09
TBC1D2B	9.10	1.08	1.67E-06
UBTD2	7.77	1.08	7.50E-05
CSF2RB	9.47	1.07	3.46E-10
ST3GAL4	6.13	1.07	2.34E-03
CFP	6.00	1.07	1.95E-02
SCN1B	4.78	1.07	4.36E-02
TMEM237	4.34	1.07	4.53E-02
PTGER4	8.56	1.07	2.21E-02
ITGAV	8.96	1.07	3.00E-06
RAP1B	9.52	1.07	1.06E-06
ZMIZ2	9.24	1.06	1.55E-07
VOPP1	9.31	1.06	9.76E-07
LPAR1	6.87	1.06	7.82E-04
MREG	10.03	1.05	2.44E-10
CCR5	9.98	1.05	7.73E-06
CFLAR	10.36	1.05	6.66E-08
DPYSL2	9.91	1.05	3.13E-06
RASSF5	8.64	1.05	1.28E-04
BTBD19	5.91	1.04	6.23E-03
TNIK	7.80	1.04	7.82E-04
UNC13A	3.93	1.04	7.93E-03
ARHGEF10L	9.15	1.03	5.05E-06
DAPK1	10.67	1.03	4.60E-09
TSC22D1	7.88	1.03	6.57E-05
CYLD	8.73	1.03	3.29E-06
MAOA	6.48	1.03	7.57E-03
IL15	5.43	1.03	3.84E-02
TANK	8.78	1.02	4.28E-06
SQSTM1	11.52	1.02	1.05E-06
RHOQ	10.19	1.02	1.67E-06
EOGT	8.49	1.02	4.83E-05
PLEK	12.53	1.02	6.09E-07
ALCAM	9.90	1.01	7.73E-06

ZC3H12C	8.80	1.01	5.86E-06
PDK4	4.85	-2.15	2.29E-06
HGF	6.61	-2.10	6.67E-09
ADORA3	5.15	-2.05	1.26E-06
CABLES1	4.70	-1.98	1.08E-05
FAM46A	9.04	-1.96	3.14E-17
ALK	5.55	-1.87	2.37E-05
MS4A6A	9.41	-1.86	1.25E-16
TMEM37	6.47	-1.83	9.76E-05
SLC40A1	7.55	-1.83	2.90E-05
ZNF704	5.12	-1.82	6.52E-05
SLC45A4	7.52	-1.79	1.19E-08
SLC46A1	5.78	-1.76	4.81E-06
PMP22	6.99	-1.74	1.55E-07
SECTM1	8.14	-1.72	2.99E-09
AXL	5.96	-1.65	1.66E-05
GPRC5B	4.27	-1.65	5.29E-04
MERTK	6.97	-1.65	2.08E-07
MGAT4A	9.07	-1.65	4.32E-12
FES	6.82	-1.63	3.00E-06
FCGR2C	6.76	-1.62	6.06E-05
RDH10	6.10	-1.61	9.14E-06
GCNT1	7.52	-1.60	9.34E-08
NREP	6.92	-1.60	6.96E-04
RHOBTB1	5.03	-1.60	3.23E-04
ABCC5	9.19	-1.58	8.45E-10
BNC2	4.87	-1.57	5.44E-04
HSPA7	5.42	-1.57	7.14E-04
KLF4	6.25	-1.56	4.41E-05
CACNA2D3	2.97	-1.56	6.20E-04
HPSE	7.86	-1.56	6.39E-09
TESK2	5.95	-1.54	1.07E-04
CORO1A	7.37	-1.53	1.81E-07
LTB4R	5.57	-1.52	1.11E-04
GPR34	6.60	-1.51	1.40E-04
C11orf21	5.60	-1.50	1.28E-04
CD180	8.06	-1.48	3.03E-07
FAM13A	5.95	-1.48	2.80E-05
LYL1	6.44	-1.47	2.29E-06
RGS18	5.10	-1.45	8.57E-04
RGS14	5.29	-1.44	8.31E-04
FOS	6.73	-1.44	3.07E-06
GLUL	12.88	-1.44	9.47E-12
SCIMP	8.60	-1.43	8.35E-08
PRR5L	6.42	-1.43	9.76E-05
RNF125	6.27	-1.42	2.45E-04
COBLL1	4.23	-1.41	4.70E-03
KANK2	5.51	-1.41	7.18E-04
JAML	8.48	-1.39	6.05E-09
SCAMP5	3.83	-1.39	6.29E-03
DPEP2	7.18	-1.39	1.42E-06
ZNF331	6.93	-1.39	8.06E-06

SPTBN4	6.04	-1.38	9.09E-05
APLN	4.28	-1.38	5.36E-03
LINC02035	5.81	-1.37	2.75E-04
IL10	5.43	-1.36	1.29E-03
PTPN22	6.82	-1.35	6.51E-05
FAM117B	4.50	-1.35	4.64E-03
SDS	10.05	-1.35	2.97E-09
DOK2	7.08	-1.35	1.30E-06
CDCA7L	5.75	-1.34	8.17E-04
HHEX	5.44	-1.34	2.47E-03
C1orf127	3.89	-1.33	9.80E-03
MYO7A	6.82	-1.33	9.05E-06
LRRC25	8.23	-1.33	2.99E-09
DIRAS1	5.21	-1.33	2.49E-03
SELENOP	7.82	-1.33	4.75E-06
ITSN1	7.19	-1.32	1.06E-04
DHRS3	6.83	-1.31	8.06E-05
ABI3	6.45	-1.31	1.46E-04
STARD4-AS1	3.99	-1.30	1.20E-02
GAS6	6.51	-1.30	5.94E-04
DISC1	6.04	-1.30	2.44E-03
FRAT2	5.71	-1.30	1.57E-03
CHST13	5.33	-1.29	2.61E-03
CYSLTR1	4.70	-1.29	1.09E-02
GPR155	5.25	-1.29	3.16E-03
PTGFRN	6.96	-1.29	6.51E-05
TAGLN	6.43	-1.28	1.20E-04
DBP	6.35	-1.27	2.40E-04
SLA	8.88	-1.26	1.40E-08
TNS1	9.63	-1.26	2.68E-07
GGA2	9.69	-1.25	1.58E-09
TRIM25	8.91	-1.25	2.24E-10
FOXRED2	6.28	-1.25	9.50E-04
TRIM58	4.25	-1.25	1.54E-02
GAL3ST4	3.86	-1.24	1.92E-02
SLC46A3	7.40	-1.23	3.93E-05
GRAMD1B	6.59	-1.23	4.70E-04
RNF166	7.67	-1.23	1.29E-06
SHMT1	5.73	-1.23	2.20E-03
SSBP2	4.13	-1.22	2.00E-02
ASRGL1	5.94	-1.22	1.77E-03
SRGAP3	4.57	-1.22	1.86E-02
HS3ST2	8.17	-1.21	2.29E-06
SKI	7.08	-1.21	3.27E-05
C15orf52	7.17	-1.21	4.56E-05
TRIM14	8.72	-1.20	3.06E-08
METTL7A	7.36	-1.20	2.26E-05
GIMAP1	5.59	-1.19	6.14E-03
KLHDC8B	6.84	-1.19	1.07E-04
SLC36A1	9.41	-1.19	1.54E-08
RAB42	8.67	-1.18	2.73E-07
SH3PXD2A	7.26	-1.18	8.36E-04



CD14	10.12	-1.18	1.25E-16
MAF	8.95	-1.17	1.51E-02
TSHZ1	5.72	-1.17	3.80E-03
PITHD1	7.91	-1.17	1.63E-05
PRAM1	8.81	-1.17	3.41E-06
ZNF703	6.16	-1.16	1.34E-03
SPATA12	4.72	-1.16	1.59E-02
FCGR1A	8.23	-1.16	8.93E-05
CD93	4.33	-1.15	2.85E-02
MXI1	6.83	-1.15	7.31E-05
PRMT7	5.56	-1.14	5.06E-03
CEBPD	6.85	-1.14	9.33E-04
ATP8B4	6.51	-1.14	3.63E-03
MNDA	9.29	-1.13	8.42E-10
MEF2C	6.69	-1.13	2.93E-03
ZCCHC24	5.12	-1.13	1.57E-02
FAM212B	4.93	-1.12	1.89E-02
GRIN3A	5.55	-1.12	2.00E-02
CORO2A	7.46	-1.12	1.04E-04
ABCG1	2.60	-1.12	3.47E-02
C19orf35	4.36	-1.12	3.47E-02
RTL10	6.58	-1.11	1.74E-03
PXMP4	4.55	-1.11	2.88E-02
FAM53B	7.17	-1.11	4.15E-05
PPM1L	7.30	-1.11	3.45E-04
ST5	6.19	-1.10	3.76E-03
MANSC4	2.98	-1.10	2.91E-02
BLNK	7.06	-1.10	3.22E-04
KLHL30	3.18	-1.10	4.84E-02
ADAMTSL4	7.40	-1.10	7.33E-05
PIK3IP1	6.68	-1.10	9.90E-04
THBD	5.21	-1.09	3.41E-02
MAML3	4.52	-1.09	4.64E-02
ARPIN	8.49	-1.09	2.43E-05
ITGA4	7.44	-1.09	5.08E-04
ID2	9.01	-1.09	3.65E-09
ZNF395	5.76	-1.09	7.18E-03
MBP	10.08	-1.08	1.75E-07
GTPBP3	4.48	-1.08	4.17E-02
TMEM71	4.68	-1.07	4.82E-02
SIDT2	9.73	-1.07	1.42E-09
REPS2	4.83	-1.07	3.78E-02
NLRC4	7.43	-1.07	1.64E-05
CD200R1	5.42	-1.07	4.94E-02
ASGR1	5.11	-1.07	2.86E-02
HMOX1	9.89	-1.07	1.95E-10
SNX29	8.79	-1.06	2.82E-06
SLFN11	9.35	-1.06	1.98E-05
STARD13	7.02	-1.06	4.39E-04
SLC37A2	10.53	-1.06	6.10E-09
TRIM32	5.63	-1.06	1.85E-02
RNASE6	8.80	-1.05	6.80E-08

SIGLEC1	10.01	-1.05	8.78E-03
TMEM65	6.23	-1.05	8.08E-03
TK2	6.71	-1.05	1.40E-03
PADI2	6.84	-1.05	2.34E-03
SDCCAG3	6.87	-1.05	1.09E-03
APBB1IP	8.69	-1.05	8.95E-07
RASGRP4	5.91	-1.04	1.31E-02
LMO2	6.91	-1.04	5.04E-04
PLA2G15	8.49	-1.04	6.48E-05
NAPSB	6.17	-1.04	8.78E-03
NUPR1	8.73	-1.03	2.42E-05
ZNF467	5.13	-1.03	3.03E-02
QPRT	6.13	-1.03	8.86E-03
LPAR6	7.80	-1.03	4.59E-04
TMEM170B	7.79	-1.03	1.34E-04
ZBTB4	8.71	-1.03	4.77E-07
HLTF	6.12	-1.03	8.45E-03
GIMAP6	5.81	-1.03	1.43E-02
MAFB	10.21	-1.02	4.25E-11
LGR4	6.84	-1.02	3.19E-03
SLC16A7	6.68	-1.02	5.22E-03
PFKFB4	6.30	-1.02	2.71E-03
TTC7A	8.25	-1.01	1.11E-04
SLC18B1	7.25	-1.01	7.91E-04
ENC1	6.10	-1.01	2.17E-02
SLC12A9	7.64	-1.00	3.62E-05
RCBTB2	8.58	-1.00	9.82E-05
XYLT1	7.26	-1.00	3.68E-03