

SI table 1a Expression of T cell genes per cluster

patient cluster	T cell genes											
	CD8A	CCL2	CCL3	CCL4	CXCL9	CXCL10	ICOS	GZMK	IRF1	HLA.DMB	HLA.DOA	HLA.DOB
1	3.6832892	6.7974173	4.9118746	3.6613659	5.732672	4.5320176	1.7417058	1.6812545	7.4759804	7.2386176	5.9046982	2.0607796
2	5.1084714	7.5883482	4.8880919	4.4454526	6.2238186	5.3956948	1.3435597	3.2719023	8.0765369	8.0911727	6.9252198	1.8994957
3	6.6411908	7.9663054	6.2838387	6.1201209	8.7025521	7.7625235	3.7485523	5.020754	9.1398091	8.8210711	7.8880852	3.528072
4	7.9235616	8.0912995	6.7430475	6.7544776	9.5272179	7.8309947	4.4497914	6.2910339	9.9084662	9.6180791	8.6923901	5.0735598
5	7.6240597	9.7935093	6.9192491	6.7733453	9.6442421	8.3030227	4.4099426	6.4579512	9.872659	10.668164	9.9402751	4.8154232
6	9.7118658	9.3139028	7.9077056	8.2940909	11.792568	10.133145	6.1419973	7.9934483	11.200976	10.96238	10.403972	6.3327112
7	9.7473151	10.102753	7.4481061	7.8474628	11.573752	9.2284892	7.1801463	8.9996547	11.237634	11.451084	11.036138	8.8900534
8	11.694389	10.308451	9.1280928	9.9910829	13.785616	11.805183	7.6875757	10.146852	12.255512	11.92455	11.494422	7.5359383

SI table 1b gene clusters after unsupervised clustering

Gene ID	cluster number
ABCD2	1
AKAP5	1
BCL11B	1
BLNK	1
C3	1
CCL22	1
CCR2	1
CCR4	1
CCR5	1
CCR8	1
CD226	1
CD69	1
CD96	1
CLECL1	1
CYTIP	1
DAPP1	1
FOXP3	1
FUT7	1
GATA3	1
GVIN1	1
IL2RB	1
IL7R	1
IPCEF1	1
ITGAD	1
KCNA3	1
KLRB1	1
LRMP	1
LY75	1
MIAT	1
NAPSB	1
NCR3	1
PLD4	1
PTPN22	1
PTPRC	1
RASGRP1	1
S1PR4	1
1-Sep	1
SIGLEC8	1
SLFN12L	1
SPN	1
SPNS3	1
STAT4	1
TAGAP	1
TMEM156	1
TNFRSF18	1
ZNF80	1
ZNF831	1

AOAH	1
APBB1IP	1
APOL1	1
APOL3	1
APOL4	1
ARHGAP9	1
BIN2	1
C17orf87	1
CCL8	1
CD180	1
CD274	1
CD37	1
CD53	1
CD72	1
CD74	1
CD80	1
CIITA	1
CLEC12A	1
CLEC4E	1
CORO1A	1
CR1	1
CSF2RB	1
DOCK2	1
EBI3	1
EMR1	1
EPSTI1	1
ETV7	1
EVI2B	1
FAM113B	1
FGD2	1
GIMAP7	1
HCG26	1
HCP5	1
HLA-DMA	1
HLA-DMB	1
HLA-DOA	1
HLA-DPA1	1
HLA-DPB1	1
HLA-DPB2	1
HLA-DQA1	1
HLA-DQA2	1
HLA-DQB1	1
HLA-DQB2	1
HLA-DRA	1
HLA-DRB1	1
HLA-DRB5	1
HLA-DRB6	1
HSD11B1	1
IKZF1	1

IL10RA	1
IL12RB1	1
IL18	1
IL21R	1
IL2RA	1
IL32	1
IRF1	1
IRF8	1
KLHDC7B	1
LILRB1	1
LILRB2	1
LOC606724	1
MYO1G	1
NCF1	1
NCF1B	1
NCF1C	1
NCKAP1L	1
NLRC3	1
P2RY13	1
PDCD1LG2	1
PLEK	1
PSTPIP1	1
PTPN6	1
PTPN7	1
RARRES3	1
RASAL3	1
SASH3	1
SIGLEC10	1
SIGLEC14	1
SIGLEC5	1
SLA	1
SNX20	1
SPOCK2	1
TLR8	1
VAV1	1
VNN2	1
WAS	1
WDFY4	1
ZC3H12D	1
ACAP1	1
ADAM6	1
ADAMDEC1	1
ANKRD22	1
BANK1	1
BLK	1
BTLA	1
C16orf54	1
C4orf7	1
C5orf20	1

C8orf80	1
CARD11	1
CCL19	1
CCL21	1
CCL5	1
CCR6	1
CCR7	1
CD19	1
CD2	1
CD247	1
CD27	1
CD38	1
CD3D	1
CD3E	1
CD3G	1
CD40LG	1
CD48	1
CD5	1
CD52	1
CD6	1
CD7	1
CD79A	1
CD8A	1
CD8B	1
CLEC17A	1
CRTAM	1
CST7	1
CTSW	1
CXCL10	1
CXCL11	1
CXCL13	1
CXCL9	1
CXCR2P1	1
CXCR3	1
CXCR5	1
CXCR6	1
DNASE1L3	1
DTHD1	1
FAM129C	1
FAM26F	1
FASLG	1
FCER2	1
FCRL2	1
FCRL3	1
FCRL5	1
FCRL6	1
FLT3	1
GBP1	1
GBP4	1

GBP5	1
GNLY	1
GPR114	1
GPR171	1
GPR174	1
GPR18	1
GZMA	1
GZMB	1
GZMH	1
GZMK	1
HLA-DOB	1
HSH2D	1
ICOS	1
IDO1	1
IFNG	1
IGJ	1
IKZF3	1
IL2RG	1
ITGAL	1
ITK	1
JAKMIP1	1
KIAA0125	1
KIAA0748	1
KIR2DL4	1
KLRC1	1
KLRD1	1
KLRK1	1
LAG3	1
LAX1	1
LCK	1
LGALS2	1
LILRA4	1
LOC100233	1
LOC400759	1
LOC96610	1
LTA	1
LTB	1
LY9	1
MGC29506	1
MS4A1	1
NKG7	1
P2RY10	1
PARP15	1
PAX5	1
PDCD1	1
PLA2G2D	1
PLAC8	1
PNOC	1
POU2AF1	1

PRF1	1
PRKCQ	1
PTPRCAP	1
PYHIN1	1
RHOH	1
RLTPR	1
SAMD3	1
SELL	1
SH2D1A	1
SIRPG	1
SIT1	1
SLA2	1
SLAMF1	1
SLAMF6	1
SLC27A2	1
SP140	1
SPIB	1
STAP1	1
TARP	1
TBC1D10C	1
TBX21	1
TCL1A	1
THEMIS	1
TIFAB	1
TIGIT	1
TIMD4	1
TLR10	1
TMEM155	1
TNFRSF13B	1
TNFRSF17	1
TNFRSF9	1
TNIP3	1
TOX	1
TRAF3IP3	1
TRAT1	1
TREML2	1
UBASH3A	1
UBD	1
VPREB3	1
XCL1	1
XCL2	1
ZAP70	1
ZBED2	1
ZBP1	1
ZNF683	1
ANO9	1
BCL2L14	1
C14orf64	1
C14orf73	1

CD244	1
CLEC9A	1
DENND2D	1
GCET2	1
GP1BA	1
IL18R1	1
IL18RAP	1
ITGB7	1
PRKCB	1
RAB37	1
RASGRP2	1
RBP5	1
SLAMF7	1
SLC12A3	1
XCR1	1
ABI3	2
ADAM28	2
ADAP2	2
AIF1	2
ARHGAP30	2
ARL11	2
ASCL2	2
BATF	2
BTK	2
C10orf128	2
C1orf162	2
C1QA	2
C1QB	2
C1QC	2
C3AR1	2
CASP5	2
CCL3	2
CCL3L1	2
CCL4	2
CCL4L2	2
CCRL2	2
CD14	2
CD163	2
CD200R1	2
CD28	2
CD300A	2
CD300C	2
CD300LF	2
CD33	2
CD84	2
CD86	2
CLEC4A	2
CLEC7A	2
CMKLR1	2

CSF1R	2
CXorf21	2
CYBB	2
CYSLTR1	2
CYTH4	2
DOCK8	2
DOK2	2
DPEP2	2
FCER1G	2
FCGR1A	2
FCGR1B	2
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FMNL1	2
FPR1	2
FPR2	2
FPR3	2
GAPT	2
GGTA1	2
GIMAP1	2
GIMAP4	2
GIMAP5	2
GIMAP6	2
GIMAP8	2
GNA15	2
GNGT2	2
GPBAR1	2
GPR65	2
GPR82	2
HAVCR2	2
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HK3	2
IFI30	2
IGSF6	2
IL10	2
IL15RA	2
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INPP5D	2
ITGB2	2
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LILRA2	2
LILRA3	2
LILRA5	2
LILRA6	2

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LILRB4	2
LRRC25	2
LSP1	2
LST1	2
LY86	2
MEFV	2
MFNG	2
MNDA	2
MPEG1	2
MS4A4A	2
MS4A6A	2
MSR1	2
MYO1F	2
NCF2	2
NCF4	2
NFAM1	2
P2RY6	2
P2RY8	2
PARVG	2
PIK3CG	2
PIK3R5	2
PILRA	2
PTAFR	2
RCSD1	2
RGS18	2
SAMSN1	2
SECTM1	2
SELPLG	2
SIGLEC1	2
SIGLEC11	2
SIGLEC16	2
SIGLEC7	2
SIGLEC9	2
SLAMF8	2
SLCO2B1	2
SPI1	2
STAC3	2
TFEC	2
TLR7	2
TMEM150B	2
TNFAIP8L2	2
TNFRSF1B	2
TNFSF8	2
TYROBP	2
VSIG4	2
ACSL5	2
ADORA3	2
ALOX5	2

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AMICA1	2
APOB48R	2
APOBEC3H	2
ARHGAP15	2
ARHGAP25	2
ARHGDIB	2
ATP8B4	2
BIRC3	2
C2	2
C4A	2
C6orf97	2
CARD9	2
CASS4	2
CCDC69	2
CCND2	2
CCR1	2
CD1D	2
CD4	2
CEACAM21	2
CECR1	2
CFB	2
CLIC2	2
CMAH	2
CRYBB1	2
CSF1	2
CSF3R	2
CTSS	2
DPYD	2
EVI2A	2
FAM105A	2
FAM49A	2
FBP1	2
FGL2	2
FGR	2
FLI1	2
FLVCR2	2
FYB	2
GAB3	2
GBP2	2
GCH1	2
GFI1	2
GLIPR1	2
GPR141	2
GPR183	2
GPR34	2
GPR84	2
GRIN3A	2
IL15	2

IL18BP	2
ITGAM	2
ITM2A	2
KCNK13	2
KLHL6	2
LCP1	2
LGALS9	2
LGALS9C	2
LOC100272	2
LPAR5	2
MAN1A1	2
1-Mar	2
MIR155HG	2
MS4A14	2
MS4A7	2
NAIP	2
NLRC4	2
NLRP1	2
NLRP3	2
NOD2	2
OSCAR	2
P2RY14	2
PIK3AP1	2
PIK3R6	2
PRAM1	2
PRDM1	2
PSTPIP2	2
PTGDR	2
PTGER2	2
PTGER4	2
PTPRO	2
RASGEF1B	2
RASSF4	2
RASSF5	2
RIPK3	2
RNASE2	2
RNASE6	2
RSPO3	2
RUFY4	2
SERPINA1	2
SIRPB2	2
SLC15A3	2
SLC2A5	2
SLC7A7	2
SLC8A1	2
SOCS1	2
SRGN	2
ST8SIA4	2
STX11	2

SUCNR1	2
SYK	2
TLR4	2
TMEM176A	2
TMEM176B	2
TNF	2
TNFAIP8	2
TNFSF10	2
TNFSF13B	2
TREM2	2
VCAM1	2
ANKRD58	2
ATP2A3	2
C1orf200	2
C9orf139	2
CBFA2T3	2
CCDC141	2
CCDC88B	2
CCDC88C	2
CCNI2	2
CLIC3	2
DBH	2
DEF6	2
DENND1C	2
DOK3	2
DUSP2	2
EPHA1	2
FAAH2	2
FAM159A	2
FAM179A	2
FAM18A	2
FCHO1	2
FGD3	2
FLT3LG	2
GHRL	2
GPA33	2
GPR132	2
GRAP	2
GRAP2	2
GZMM	2
HVCN1	2
IL34	2
IL9R	2
ILDR1	2
INSL3	2
JAK3	2
KIAA1324	2
KIF21B	2
LAMP3	2

LAT	2
LIME1	2
MAP4K1	2
MMP25	2
NLRP6	2
NUAK2	2
PACSIN1	2
PIM2	2
PLCG2	2
PLCH2	2
POU2F2	2
PPP1R16B	2
PSD4	2
PVRIG	2
RAC2	2
REC8	2
RHOF	2
SEMA4A	2
SERPINF2	2
SGPP2	2
SH2D2A	2
SH2D3A	2
SIDT1	2
SPATC1	2
SUSD3	2
SYTL1	2
TMC8	2
TMIGD2	2
TNFSF14	2
TTC16	2
TTC9	2
TUBA4A	2
UCP2	2
UNC13D	2
WNT1	2
WNT10A	2
ACOXL	3
ACSL6	3
ACTR3C	3
ACY3	3
ALDH2	3
ALOX15B	3
AMIGO2	3
ANKRD55	3
ASB2	3
ATP1A3	3
BCL11A	3
BEX5	3
BFSP2	3

BHLHA15	3
BIK	3
BSPRY	3
BTN1A1	3
BZRAP1	3
C11orf92	3
C11orf93	3
C1orf228	3
C7	3
C7orf29	3
CACNA1I	3
CADM3	3
CAMK4	3
CAPG	3
CCDC64	3
CCL17	3
CCL18	3
CD1A	3
CD1C	3
CD1E	3
CD22	3
CD24	3
CD5L	3
CD79B	3
CDH17	3
CES8	3
CETP	3
CGNL1	3
CHI3L1	3
CHI3L2	3
CHIT1	3
CLU	3
CNKSR1	3
CNR1	3
CNTNAP2	3
COCH	3
COL27A1	3
COL4A3	3
COL4A4	3
CP	3
CXorf65	3
DACT2	3
DERL3	3
DPEP1	3
DUSP26	3
EPHX2	3
FA2H	3
FAIM3	3
FAM46C	3

FAM65B	3
FCER1A	3
FOXF1	3
GFRA1	3
GNA14	3
GPAT2	3
GPM6A	3
HCG22	3
HOOK1	3
HS3ST2	3
IL24	3
ITIH3	3
KCNJ10	3
KCNN3	3
KEL	3
KIF19	3
KLHL14	3
KLRC2	3
KLRC3	3
KLRF1	3
LAMC2	3
LCN10	3
LIPG	3
LOC283663	3
LOC284749	3
LOC389634	3
LRRC61	3
LRRN2	3
MAL	3
MAP1LC3C	3
MCTP2	3
MEF2B	3
MEI1	3
MST4	3
MYBPC2	3
MYO7B	3
NAP1L2	3
NELL2	3
NLRP2	3
NLRP7	3
NMNAT3	3
NOG	3
NPY1R	3
ODZ1	3
P2RX1	3
P2RX5	3
PADI2	3
PDE6G	3
PIP5K1B	3

PKP2	3
PLCXD3	3
PRSS16	3
PTGDS	3
RAB39B	3
RASGEF1A	3
RGS9	3
RIC3	3
SAMD12	3
SCNN1B	3
SDR42E1	3
SERPINB9	3
SH2D1B	3
SHISA3	3
SLC1A2	3
SLC22A3	3
SLC24A4	3
SLC38A1	3
SLC38A5	3
SLC6A12	3
SLCO5A1	3
SMOC1	3
SMPDL3B	3
SV2B	3
TAS1R3	3
TC2N	3
TCEAL2	3
TFF3	3
TLR9	3
TMPRSS13	3
TMPRSS3	3
TNFRSF11B	3
TNFRSF13C	3
TSHR	3
TSTD1	3
VSIG1	3
VTN	3
ABCC3	4
ADAM8	4
AMPD3	4
ARHGAP27	4
ASGR2	4
B3GNT8	4
BCAS4	4
C10orf54	4
C12orf59	4
C19orf35	4
C1orf54	4
C5AR1	4

CAMK1D	4
CCL13	4
CCL2	4
CCL23	4
CD163L1	4
CD209	4
CD300LB	4
CD40	4
CEACAM4	4
CEBPA	4
CEBPE	4
CFD	4
CFP	4
CHST13	4
CLEC10A	4
CX3CR1	4
CXCL16	4
CXCR4	4
CYP2S1	4
DHRS9	4
DNAJC5B	4
EPHB2	4
EYA2	4
F13A1	4
FCAR	4
FCGR2B	4
FCN1	4
FOLR2	4
GBGT1	4
GMFG	4
GPR120	4
HAMP	4
ICAM2	4
IRF5	4
ITGAX	4
KCNK6	4
KCNMB1	4
LAT2	4
LCP2	4
LILRB5	4
LMO2	4
LOC283070	4
LTC4S	4
LYN	4
LYZ	4
MAPK13	4
MLXIPL	4
MRC1	4
NLRP12	4

OLR1	4
OSM	4
PLA2G7	4
PLXDC2	4
PROC	4
PTGS1	4
PTPRN2	4
SDS	4
SLC9A9	4
SPINT2	4
ST14	4
ST18	4
STAC	4
TMSL3	4
TNFAIP2	4
TNFSF12-TN	4
TNNI2	4
VENTX	4
VNN1	4
VOPP1	4
ZMYND15	4
ABCB1	4
ABCG1	4
ABLIM1	4
ACRBP	4
ACSM5	4
ADAMTS14	4
ADAP1	4
ADCY7	4
AGMAT	4
AIM1	4
AIM1L	4
ALDH1A1	4
ALPK2	4
ALPL	4
AMZ1	4
ANKRD29	4
ANKRD35	4
ANUBL1	4
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APOBEC3B	4
APOBEC3D	4
APOBEC3F	4
APOBEC3G	4
AQP3	4
AQP9	4
ARAP2	4
ARHGAP22	4
ARHGAP4	4

ARHGEF6	4
ARL4C	4
ASGR1	4
ATG16L2	4
ATHL1	4
ATP8A1	4
AURKC	4
BACH2	4
BATF3	4
BIN1	4
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BTG2	4
C10orf105	4
C11orf45	4
C11orf75	4
C12orf35	4
C14orf72	4
C15orf48	4
C17orf28	4
C17orf44	4
C17orf60	4
C18orf1	4
C19orf59	4
C1R	4
C1RL	4
C1S	4
C20orf118	4
C20orf197	4
C22orf15	4
C2orf48	4
C2orf89	4
C5orf39	4
C6orf105	4
C6orf27	4
C9orf167	4
CAPN11	4
CARNS1	4
CBLN3	4
CBX7	4
CCBP2	4
CCDC109B	4
CCDC65	4
CCDC81	4
CCL7	4
CD101	4
CD160	4
CD207	4
CD70	4
CDA	4

CDH23	4
CDHR1	4
CDYL2	4
CH25H	4
CHRM4	4
CITED4	4
CLEC4F	4
CLEC5A	4
CLSTN3	4
COLQ	4
CPM	4
CPT1A	4
CRB3	4
CRHBP	4
CSF2RA	4
CSTA	4
CTLA4	4
CTSC	4
CXCL2	4
CXCL3	4
CXCL5	4
CXCR1	4
CXCR2	4
CYFIP2	4
CYP27B1	4
CYP4F22	4
DAPK2	4
DDX26B	4
DEGS2	4
DGKE	4
DHRS3	4
DLEC1	4
DLEU7	4
DOCK11	4
DRD4	4
DSC2	4
EAF2	4
EFCAB4A	4
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ELL3	4
ELMO1	4
EMB	4
EMR4P	4
EPPK1	4
ERMN	4
ESR1	4
ETS2	4
F2R	4
FAIM2	4

FAM107B	4
FAM115C	4
FAM167A	4
FAM20A	4
FAS	4
FCGR3B	4
FCHSD2	4
FCN3	4
FFAR2	4
FGD6	4
FGF1	4
FGF11	4
FKBP5	4
FLJ45445	4
FMO2	4
FOXP1	4
FXYD2	4
G0S2	4
GADD45G	4
GALM	4
GALNT6	4
GCNT1	4
GGT1	4
GGT3P	4
GGTLC2	4
GIPR	4
GLRX	4
GLT1D1	4
GLUL	4
GPCPD1	4
GPR109A	4
GPR109B	4
GPR113	4
GPR172B	4
GPR21	4
GPR55	4
GPR97	4
GRAMD1B	4
GRAPL	4
GRIK5	4
GSDMA	4
GSDMC	4
HAAO	4
HAPLN3	4
HGF	4
HNMT	4
HOPX	4
HPSE	4
HS3ST3A1	4

HS3ST3B1	4
HTRA4	4
ICOSLG	4
IKZF2	4
IL1B	4
IL1R2	4
IL1RN	4
IL23A	4
IL33	4
IL6	4
IQGAP2	4
IQSEC3	4
ISG20	4
JAK2	4
JAKMIP3	4
KAL1	4
KBTBD8	4
KCNE3	4
KCNJ5	4
KCNMA1	4
KCNQ3	4
KIAA0040	4
KIAA1274	4
KIAA1683	4
KLF1	4
KLRG1	4
KMO	4
KSR1	4
KYNU	4
LAMA3	4
LBH	4
LOC100130	4
LOC100132	4
LOC100240	4
LOC153684	4
LOC154761	4
LOC283314	4
LOC389333	4
LOC440461	4
LOC643008	4
LOC647121	4
LOC653786	4
LQK1	4
LRIG1	4
LRRK2	4
LYPD3	4
MACC1	4
MADCAM1	4
MAP3K5	4

MARCO	4
MATK	4
MDGA1	4
METTL7A	4
MFSD7	4
MGAT4A	4
MGC12916	4
MICB	4
MLKL	4
MMP12	4
MMP9	4
MPO	4
MSX2P1	4
MTTP	4
MYB	4
MYCL1	4
MYO1A	4
MYO7A	4
NAPSA	4
NAT8B	4
NEK8	4
NEURL3	4
NFKBID	4
NFKBIZ	4
NINJ2	4
NMI	4
NTRK1	4
NUDT16P1	4
OTOA	4
OXER1	4
P2RY12	4
P2RY2	4
P4HTM	4
PARM1	4
PARP8	4
PDE6B	4
PDE7A	4
PHF11	4
PIK3IP1	4
PIPOX	4
PKD2L1	4
PLB1	4
PLBD1	4
PLCB2	4
PLCXD2	4
PLEKHA7	4
PPP1R3G	4
PRDM8	4
PROCA1	4

PTGS2	4
PTPLAD2	4
PTPRE	4
RAB39	4
RARRES1	4
RASGRP3	4
RBM47	4
RDH10	4
RGL1	4
RIMBP3	4
RIMBP3C	4
RNF112	4
RPGRIP1	4
RRN3P1	4
RRN3P2	4
RTN1	4
RUNDC2C	4
S100A8	4
S100A9	4
SAMHD1	4
SARDH	4
SEL1L3	4
SEPP1	4
6-Sep	4
SFMBT2	4
SH3TC1	4
SIGLEC12	4
SIGLEC15	4
SLC16A11	4
SLC16A13	4
SLC1A3	4
SLC22A20	4
SLC23A1	4
SLC25A45	4
SLC2A9	4
SLC31A2	4
SLC40A1	4
SLC46A3	4
SLC4A8	4
SLC5A5	4
SLFN13	4
SMPD3	4
SOX30	4
SQRDL	4
STK17B	4
STX1B	4
STYK1	4
SYT15	4
TBXAS1	4

TEC	4
TGM2	4
THEM5	4
TIAM1	4
TICAM2	4
TLR1	4
TLR2	4
TLR5	4
TLR6	4
TM6SF1	4
TMEM154	4
TMPRSS6	4
TNFRSF25	4
TNFRSF4	4
TNFRSF6B	4
TNFRSF8	4
TNFSF11	4
TNFSF15	4
TNFSF4	4
TNS4	4
TOX2	4
TP53INP1	4
TP63	4
TPK1	4
TPRG1	4
TRAF1	4
TRAF5	4
TREM1	4
TREML1	4
TRERF1	4
TRPC2	4
TRPM2	4
TSC22D3	4
TSPAN33	4
TTBK1	4
TTC39B	4
TTC39C	4
TXK	4
TXNIP	4
VAMP5	4
VAMP8	4
VAV3	4
VIPR2	4
VMO1	4
WDR66	4
WNT9A	4
XKRX	4
ZC3H12A	4
ZNF804A	4

APOL6	5
B2M	5
BATF2	5
BST2	5
BTN3A1	5
BTN3A2	5
BTN3A3	5
C5orf56	5
CMPK2	5
DDX58	5
DDX60	5
DDX60L	5
DTX3L	5
HERC5	5
HERC6	5
HLA-A	5
HLA-B	5
HLA-C	5
HLA-E	5
HLA-F	5
HLA-H	5
HLA-J	5
HLA-L	5
IFI27	5
IFI44	5
IFI44L	5
IFI6	5
IFIH1	5
IFIT1	5
IFIT2	5
IFIT3	5
IFITM1	5
IFITM2	5
IFITM3	5
IRF7	5
ISG15	5
LAP3	5
MX1	5
NLRC5	5
OAS1	5
OAS2	5
OAS3	5
OASL	5
PARP12	5
PARP14	5
PARP9	5
PRIC285	5
PSMB8	5
PSMB9	5

RSAD2	5
SAMD9	5
SAMD9L	5
SERPING1	5
STAT1	5
TAP1	5
TAP2	5
TAPBP	5
TLR3	5
TRIM22	5
UBA7	5
UBE2L6	5
USP18	5
WARS	5
XAF1	5

SI table 1c Differentially regulated genes

Gene	p-value(cold vs. hot)	qvalue(p-value(cold vs. hot))	Ratio(cold vs. hot)	Fold-Change(cold vs. hot)	Fold-Change(cold vs. hot) (Description)
SYTL5	0.000353296	0.000716992	3.9397	3.9397	cold up vs hot
NEFM	0.000190583	0.000413384	3.78381	3.78381	cold up vs hot
FERMT1	1.07E-05	3.04E-05	3.59365	3.59365	cold up vs hot
FAM184B	4.77E-06	1.43E-05	3.49316	3.49316	cold up vs hot
DNAH2	0.00012082	0.000278639	3.48188	3.48188	cold up vs hot
SOX11	0.000218221	0.000466205	3.30592	3.30592	cold up vs hot
MIPOL1	4.84E-11	2.43E-10	3.21524	3.21524	cold up vs hot
DLGAP1	4.76E-05	0.000119775	3.21014	3.21014	cold up vs hot
PCSK2	0.00149569	0.00253978	3.19959	3.19959	cold up vs hot
EFNB3	2.18E-07	7.85E-07	3.12068	3.12068	cold up vs hot
SOX2	0.00123733	0.00215984	3.05983	3.05983	cold up vs hot
ROBO2	0.000910857	0.00165733	3.03742	3.03742	cold up vs hot
MEX3A	1.30E-10	6.29E-10	2.95495	2.95495	cold up vs hot
ST8SIA5	0.00105409	0.0018833	2.93468	2.93468	cold up vs hot
STAC2	0.000127856	0.00029249	2.86226	2.86226	cold up vs hot
DGKI	1.62E-06	5.22E-06	2.84233	2.84233	cold up vs hot
ST8SIA2	0.00338736	0.00512119	2.82561	2.82561	cold up vs hot
CASKIN1	5.85E-05	0.000144481	2.80787	2.80787	cold up vs hot
FLRT3	0.000884589	0.00161686	2.80518	2.80518	cold up vs hot
CGREF1	1.05E-07	3.93E-07	2.75898	2.75898	cold up vs hot
DNAH5	0.000116791	0.000270496	2.75616	2.75616	cold up vs hot
WNT7B	0.00284112	0.00440243	2.72518	2.72518	cold up vs hot
PITX2	0.000885463	0.00161789	2.72289	2.72289	cold up vs hot
PRKAA2	0.00160696	0.00270312	2.68972	2.68972	cold up vs hot
PRKG1	9.31E-08	3.49E-07	2.67881	2.67881	cold up vs hot
LPPR5	0.00058094	0.00111583	2.66343	2.66343	cold up vs hot
APC2	6.59E-07	2.25E-06	2.6455	2.6455	cold up vs hot
HAPLN4	8.58E-05	0.000203812	2.64211	2.64211	cold up vs hot
COL25A1	9.59E-05	0.000225771	2.62426	2.62426	cold up vs hot
PAX9	0.000118422	0.000273788	2.61921	2.61921	cold up vs hot
MSI1	0.00184155	0.00303745	2.60369	2.60369	cold up vs hot
SPTBN2	6.19E-05	0.000151825	2.60312	2.60312	cold up vs hot
TMEM59L	0.00122564	0.00214173	2.60203	2.60203	cold up vs hot
NDST3	0.00207417	0.00336585	2.55501	2.55501	cold up vs hot
FOXP2	0.000239004	0.000504823	2.53931	2.53931	cold up vs hot
FOXF2	4.72E-05	0.000118802	2.53642	2.53642	cold up vs hot
GRIK2	0.00746203	0.00990082	2.53339	2.53339	cold up vs hot
NTSR1	0.00398609	0.00587133	2.5218	2.5218	cold up vs hot
F12	6.50E-06	1.90E-05	2.5151	2.5151	cold up vs hot
VAT1L	0.00056697	0.0078532	2.51018	2.51018	cold up vs hot
VSNL1	0.000344902	0.00070214	2.48492	2.48492	cold up vs hot
CA9	0.00386474	0.005721	2.47875	2.47875	cold up vs hot
HOXD13	0.0052489	0.00736252	2.47422	2.47422	cold up vs hot
GDF1	1.81E-05	4.92E-05	2.46799	2.46799	cold up vs hot
SCUBE3	0.00172726	0.00287583	2.44804	2.44804	cold up vs hot
GPR98	0.00155461	0.00262725	2.43757	2.43757	cold up vs hot
FAM86B2	2.32E-06	7.32E-06	2.42092	2.42092	cold up vs hot
HS6ST2	0.00497731	0.00705894	2.41384	2.41384	cold up vs hot
B4GALNT4	0.00282425	0.0043794	2.40389	2.40389	cold up vs hot
CECR2	0.000235669	0.000498459	2.40218	2.40218	cold up vs hot
DLX2	0.00182811	0.00302062	2.39194	2.39194	cold up vs hot
RGR	9.27E-05	0.000218869	2.36127	2.36127	cold up vs hot
GRB14	0.00101305	0.00181894	2.3423	2.3423	cold up vs hot
FOXL2	0.00598085	0.00821189	2.34157	2.34157	cold up vs hot
CTXN1	1.76E-06	5.67E-06	2.32255	2.32255	cold up vs hot
RCOR2	0.000223741	0.000475508	2.32242	2.32242	cold up vs hot
MSX2	2.66E-05	7.02E-05	2.31618	2.31618	cold up vs hot
CHRN2	0.00104769	0.00187289	2.3104	2.3104	cold up vs hot
KCNK2	7.87E-05	0.000188845	2.30221	2.30221	cold up vs hot
SOX2OT	0.00327201	0.00497793	2.30048	2.30048	cold up vs hot
KIAA1549	0.000305187	0.000628345	2.28787	2.28787	cold up vs hot
DKFZp686C	5.59E-06	1.66E-05	2.27941	2.27941	cold up vs hot
SLC6A15	0.000240089	0.000506622	2.27842	2.27842	cold up vs hot
C5orf38	0.00596977	0.00820095	2.27335	2.27335	cold up vs hot
GAS2	0.000523554	0.00102002	2.2219	2.2219	cold up vs hot
JPH1	0.003819	0.00566485	2.21425	2.21425	cold up vs hot
LOC286467	1.11E-06	3.66E-06	2.21338	2.21338	cold up vs hot
SYN2	0.00150106	0.00254731	2.21026	2.21026	cold up vs hot
GRM1	0.000860213	0.00157977	2.20004	2.20004	cold up vs hot
ESYT3	0.000286248	0.000594605	2.19993	2.19993	cold up vs hot
NEK5	5.02E-07	1.74E-06	2.19605	2.19605	cold up vs hot
FOXD1	0.00191157	0.00313867	2.18712	2.18712	cold up vs hot
CDH15	0.00307342	0.00471759	2.17891	2.17891	cold up vs hot
FLG	0.000482903	0.000948293	2.17458	2.17458	cold up vs hot
PALM2	0.000295949	0.000612027	2.1701	2.1701	cold up vs hot

DDN	4.23E-07	1.48E-06	2.16187	2.16187	cold up vs hot
LOC150197	2.81E-05	7.36E-05	2.15196	2.15196	cold up vs hot
IGSF9	0.00327583	0.00498108	2.15193	2.15193	cold up vs hot
KLF5	2.22E-06	7.01E-06	2.14681	2.14681	cold up vs hot
KCNQ1	0.00428561	0.00623234	2.144	2.144	cold up vs hot
TM6SF2	0.000577025	0.00110864	2.14338	2.14338	cold up vs hot
RAB3B	0.00386663	0.0057225	2.12791	2.12791	cold up vs hot
LINGO2	0.00384805	0.00570016	2.12333	2.12333	cold up vs hot
ANKRD13B	6.66E-14	3.85E-13	2.12222	2.12222	cold up vs hot
DLX3	0.00129301	0.00224382	2.11943	2.11943	cold up vs hot
DPY19L2P4	0.000347832	0.000707222	2.11802	2.11802	cold up vs hot
IGSF9B	0.000671667	0.00126808	2.11019	2.11019	cold up vs hot
HOXA6	0.000105847	0.000247167	2.09942	2.09942	cold up vs hot
C1orf114	0.00626655	0.00853678	2.09722	2.09722	cold up vs hot
HOXA11AS	0.000404506	0.000810337	2.09188	2.09188	cold up vs hot
PALM3	0.00493149	0.00701545	2.08507	2.08507	cold up vs hot
CAMKV	0.00523728	0.0073478	2.08176	2.08176	cold up vs hot
ICAM5	0.00116365	0.00205208	2.07457	2.07457	cold up vs hot
GJA3	0.00341125	0.00515372	2.0722	2.0722	cold up vs hot
HOXA11	0.0006462	0.00122577	2.06609	2.06609	cold up vs hot
HERC2P4	0.000219549	0.000468199	2.06333	2.06333	cold up vs hot
ZNF488	0.000588098	0.00112825	2.06081	2.06081	cold up vs hot
NKAIN1	0.00277751	0.00431616	2.05853	2.05853	cold up vs hot
USH2A	3.29E-05	8.51E-05	2.04838	2.04838	cold up vs hot
PPFIA4	7.24E-06	2.11E-05	2.04812	2.04812	cold up vs hot
GDAP1L1	0.00146727	0.0024984	2.03503	2.03503	cold up vs hot
B3GALT1	0.00122679	0.00214259	2.02647	2.02647	cold up vs hot
FAM171A2	7.84E-05	0.000188238	2.02465	2.02465	cold up vs hot
DPYSL4	0.00499183	0.00707338	2.02233	2.02233	cold up vs hot
B4GALNT3	0.000864673	0.00158657	2.02204	2.02204	cold up vs hot
DUSP9	0.0043736	0.00633771	2.02201	2.02201	cold up vs hot
TPRXL	0.00164984	0.0027674	2.01086	2.01086	cold up vs hot
C19orf26	8.45E-09	3.51E-08	2.00346	2.00346	cold up vs hot
KCNA2	0.0061299	0.00838386	1.99706	1.99706	cold up vs hot
MPP4	0.00232821	0.00371074	1.99469	1.99469	cold up vs hot
GPC1	0.000166309	0.000367449	1.98392	1.98392	cold up vs hot
C2orf72	0.0051532	0.00725479	1.98315	1.98315	cold up vs hot
SNX32	0.000148808	0.000334326	1.97928	1.97928	cold up vs hot
RASL10B	0.00616175	0.00841508	1.97885	1.97885	cold up vs hot
ACTN2	0.00570062	0.0078793	1.97144	1.97144	cold up vs hot
SPEG	0.00238016	0.00377785	1.96909	1.96909	cold up vs hot
SMYD1	0.000584636	0.00112227	1.96319	1.96319	cold up vs hot
FOXA1	0.00166666	0.00278917	1.96314	1.96314	cold up vs hot
HOXC10	0.00365204	0.00546063	1.96187	1.96187	cold up vs hot
HOMER1	1.70E-06	5.48E-06	1.9512	1.9512	cold up vs hot
ESM1	0.000314845	0.000646802	1.9489	1.9489	cold up vs hot
TTPA	0.00118879	0.00208627	1.94554	1.94554	cold up vs hot
IRX3	9.58E-05	0.000225517	1.93215	1.93215	cold up vs hot
RPL21	7.51E-05	0.000181143	1.92293	1.92293	cold up vs hot
SLC10A4	0.00441741	0.00638984	1.92102	1.92102	cold up vs hot
PDE4C	0.0038176	0.00566406	1.91684	1.91684	cold up vs hot
PNMA6A	0.00483469	0.00689865	1.91227	1.91227	cold up vs hot
PIP5KL1	1.49E-05	4.12E-05	1.90982	1.90982	cold up vs hot
PNCK	0.00146322	0.00249345	1.89991	1.89991	cold up vs hot
STK32B	0.000434945	0.000865411	1.89785	1.89785	cold up vs hot
SHC2	0.00307432	0.00471786	1.891	1.891	cold up vs hot
NLGN1	0.00336057	0.00508657	1.88412	1.88412	cold up vs hot
VTCN1	0.00110122	0.00195946	1.88358	1.88358	cold up vs hot
ENKUR	0.000454096	0.000899191	1.87656	1.87656	cold up vs hot
LASS1	0.000432293	0.00086098	1.87546	1.87546	cold up vs hot
STEAP1	3.46E-06	1.06E-05	1.86711	1.86711	cold up vs hot
SOX5	2.97E-06	9.21E-06	1.86704	1.86704	cold up vs hot
COL24A1	0.00500672	0.00708679	1.8628	1.8628	cold up vs hot
RAC3	1.55E-05	4.26E-05	1.8624	1.8624	cold up vs hot
NXPH4	0.00329229	0.00500411	1.86097	1.86097	cold up vs hot
B3GNT4	0.000165553	0.000366236	1.85754	1.85754	cold up vs hot
RPSAP52	0.00715153	0.00956993	1.85526	1.85526	cold up vs hot
MYH15	0.00349091	0.00525684	1.85389	1.85389	cold up vs hot
CBX2	3.50E-05	8.99E-05	1.8535	1.8535	cold up vs hot
RGS17	0.00571618	0.00789579	1.85208	1.85208	cold up vs hot
SLC4A3	0.00373595	0.00556272	1.84855	1.84855	cold up vs hot
SAMD5	0.0028341	0.00439364	1.84708	1.84708	cold up vs hot
TPTE2P1	0.00106491	0.00190055	1.84643	1.84643	cold up vs hot
TACC2	0.000618646	0.001182	1.84463	1.84463	cold up vs hot
HSD11B1L	5.41E-12	2.86E-11	1.83596	1.83596	cold up vs hot
ACCN2	0.00028757	0.000596971	1.83311	1.83311	cold up vs hot
PTPRS	5.14E-07	1.77E-06	1.83137	1.83137	cold up vs hot

IGLON5	0.00495739	0.00704366	1.83111	1.83111	cold up vs hot
ZBTB8B	0.00609963	0.00834946	1.82856	1.82856	cold up vs hot
C1orf229	0.000536846	0.00104265	1.81346	1.81346	cold up vs hot
DIRAS1	9.96E-05	0.000233539	1.81175	1.81175	cold up vs hot
GPSM1	9.12E-08	3.43E-07	1.81063	1.81063	cold up vs hot
ACAN	0.00705917	0.00946249	1.80701	1.80701	cold up vs hot
GCSH	2.57E-06	8.04E-06	1.80668	1.80668	cold up vs hot
ZNF697	4.30E-07	1.50E-06	1.80058	1.80058	cold up vs hot
GLT25D2	0.000536293	0.00104204	1.79797	1.79797	cold up vs hot
HIST3H2A	2.01E-05	5.43E-05	1.79582	1.79582	cold up vs hot
LOC100130	2.81E-05	7.36E-05	1.78799	1.78799	cold up vs hot
MGC87042	0.00163093	0.00273973	1.77515	1.77515	cold up vs hot
LOC100270	3.74E-05	9.58E-05	1.76816	1.76816	cold up vs hot
SIM2	0.00215271	0.00347686	1.76665	1.76665	cold up vs hot
SCML2	0.00251188	0.00395326	1.766	1.766	cold up vs hot
LINGO1	0.00316053	0.00483652	1.76515	1.76515	cold up vs hot
RNF144A	3.42E-10	1.61E-09	1.76006	1.76006	cold up vs hot
CCNB1P1	1.84E-11	9.48E-11	1.75934	1.75934	cold up vs hot
C7orf41	2.47E-05	6.55E-05	1.75765	1.75765	cold up vs hot
PTK7	0.00011129	0.000258305	1.75679	1.75679	cold up vs hot
DYNC2H1	1.75E-07	6.39E-07	1.75298	1.75298	cold up vs hot
C10orf47	0.000258366	0.000541685	1.7522	1.7522	cold up vs hot
TMEM233	0.00277299	0.0043112	1.7518	1.7518	cold up vs hot
C13orf38	0.0068784	0.00926202	1.74551	1.74551	cold up vs hot
TET1	4.18E-06	1.27E-05	1.74525	1.74525	cold up vs hot
C4orf47	0.000290384	0.000601855	1.74427	1.74427	cold up vs hot
GPR125	2.98E-11	1.52E-10	1.7425	1.7425	cold up vs hot
EFNA3	3.27E-05	8.46E-05	1.73983	1.73983	cold up vs hot
ADAM32	0.00640797	0.00871124	1.7359	1.7359	cold up vs hot
VEGFA	3.94E-05	0.000100552	1.73575	1.73575	cold up vs hot
KDEL1	2.09E-06	6.65E-06	1.73389	1.73389	cold up vs hot
NCRNA001	3.41E-10	1.61E-09	1.72921	1.72921	cold up vs hot
FAM57B	0.00495973	0.00704366	1.7264	1.7264	cold up vs hot
LOC646851	6.59E-05	0.000161038	1.72337	1.72337	cold up vs hot
GRM8	0.00262575	0.00410477	1.71945	1.71945	cold up vs hot
FKBP7	2.18E-08	8.67E-08	1.71724	1.71724	cold up vs hot
AADAT	0.000252429	0.00053043	1.71605	1.71605	cold up vs hot
KLHL23	0.000393889	0.000790523	1.71144	1.71144	cold up vs hot
VN1R1	0.000119461	0.000275799	1.7048	1.7048	cold up vs hot
FLJ22536	0.000656161	0.00124168	1.70186	1.70186	cold up vs hot
MPP6	0.000340115	0.000693239	1.7003	1.7003	cold up vs hot
SLC29A4	0.00698915	0.00937826	1.69957	1.69957	cold up vs hot
DACT3	0.00204136	0.00332334	1.69956	1.69956	cold up vs hot
RPL9	0.00370206	0.00552025	1.69704	1.69704	cold up vs hot
CCDC144B	0.00155978	0.00263461	1.69507	1.69507	cold up vs hot
JAM3	0.00141808	0.0024254	1.69479	1.69479	cold up vs hot
RNF39	0.000249668	0.000525307	1.69328	1.69328	cold up vs hot
PGAP1	4.34E-05	0.000110107	1.69198	1.69198	cold up vs hot
LRP3	0.00411219	0.0060231	1.6917	1.6917	cold up vs hot
SEPT5	0.000407676	0.000815936	1.69133	1.69133	cold up vs hot
RTN4RL2	0.00030501	0.000628345	1.6905	1.6905	cold up vs hot
NT5DC2	7.75E-09	3.24E-08	1.68908	1.68908	cold up vs hot
GPR156	0.00422187	0.00615198	1.68817	1.68817	cold up vs hot
SLC6A10P	0.00314852	0.00482265	1.68741	1.68741	cold up vs hot
CHRNA5	1.24E-05	3.47E-05	1.68693	1.68693	cold up vs hot
ZNF214	0.00702107	0.00941722	1.68557	1.68557	cold up vs hot
LOC374491	0.00205363	0.00333833	1.68378	1.68378	cold up vs hot
HOXB5	0.007246	0.00966331	1.6837	1.6837	cold up vs hot
SLC19A1	2.83E-08	1.12E-07	1.68275	1.68275	cold up vs hot
DPF1	0.00193037	0.00316476	1.67855	1.67855	cold up vs hot
SOCS7	1.45E-08	5.92E-08	1.67534	1.67534	cold up vs hot
FBXO17	0.00114023	0.00201669	1.6698	1.6698	cold up vs hot
AMOTL1	2.96E-06	9.19E-06	1.66848	1.66848	cold up vs hot
C17orf104	2.52E-05	6.69E-05	1.66702	1.66702	cold up vs hot
ASTN2	0.000502865	0.000982645	1.66561	1.66561	cold up vs hot
DAGLA	0.000650728	0.00123247	1.663	1.663	cold up vs hot
ANKRD7	0.00281292	0.00436392	1.66175	1.66175	cold up vs hot
SH2D5	0.00615315	0.00841039	1.66101	1.66101	cold up vs hot
C8orf45	2.03E-05	5.47E-05	1.65748	1.65748	cold up vs hot
MYC	1.08E-06	3.57E-06	1.65104	1.65104	cold up vs hot
KIAA1715	5.20E-08	2.01E-07	1.65076	1.65076	cold up vs hot
DNAH14	1.92E-06	6.14E-06	1.65035	1.65035	cold up vs hot
PAR5	0.00390375	0.00577084	1.64276	1.64276	cold up vs hot
STX1A	2.21E-05	5.93E-05	1.64234	1.64234	cold up vs hot
CECR4	0.000139628	0.000316097	1.64106	1.64106	cold up vs hot
AFARP1	2.75E-05	7.22E-05	1.64037	1.64037	cold up vs hot
SLC39A10	6.77E-08	2.59E-07	1.63869	1.63869	cold up vs hot

IL17RD	0.00681958	0.009198	1.63808	1.63808	cold up vs hot
GASS	5.54E-06	1.64E-05	1.63697	1.63697	cold up vs hot
CHML	0.000142046	0.000321125	1.62986	1.62986	cold up vs hot
PLEKHG4	5.90E-05	0.000145425	1.62606	1.62606	cold up vs hot
C2orf77	2.78E-05	7.30E-05	1.62595	1.62595	cold up vs hot
UCKL1AS	4.55E-05	0.00011501	1.62559	1.62559	cold up vs hot
CHD5	0.00178503	0.00295503	1.62024	1.62024	cold up vs hot
C14orf33	3.40E-11	1.72E-10	1.61978	1.61978	cold up vs hot
SLC10A5	9.69E-05	0.000227783	1.61942	1.61942	cold up vs hot
PRAME	0.00131634	0.00228067	1.61849	1.61849	cold up vs hot
KIAA0802	0.00206604	0.00335636	1.61346	1.61346	cold up vs hot
FAM78B	0.000435048	0.000865411	1.61271	1.61271	cold up vs hot
IMPDH2	1.45E-10	7.04E-10	1.61213	1.61213	cold up vs hot
CMTM4	3.51E-08	1.37E-07	1.61183	1.61183	cold up vs hot
CC2D2A	2.04E-09	8.98E-09	1.61059	1.61059	cold up vs hot
SOCS2	6.73E-05	0.000163884	1.60985	1.60985	cold up vs hot
FNDC8	1.74E-06	5.58E-06	1.60979	1.60979	cold up vs hot
WLS	0.000634317	0.00120699	1.60813	1.60813	cold up vs hot
LOC642852	6.09E-08	2.33E-07	1.60625	1.60625	cold up vs hot
RYS3	0.00270557	0.00421843	1.60509	1.60509	cold up vs hot
MEX3D	3.53E-09	1.52E-08	1.60363	1.60363	cold up vs hot
AGAP1	1.99E-10	9.53E-10	1.60324	1.60324	cold up vs hot
VPS37D	0.00140623	0.00241019	1.60281	1.60281	cold up vs hot
MYADML2	0.00219541	0.00353568	1.60119	1.60119	cold up vs hot
BOP1	5.87E-06	1.73E-05	1.59605	1.59605	cold up vs hot
MCM3APA5	1.53E-06	4.95E-06	1.59466	1.59466	cold up vs hot
WASF1	8.68E-07	2.91E-06	1.59382	1.59382	cold up vs hot
ARHGAP32	2.03E-07	7.36E-07	1.59379	1.59379	cold up vs hot
ADORA2B	0.00517077	0.00726855	1.58772	1.58772	cold up vs hot
C14orf128	5.11E-06	1.52E-05	1.58768	1.58768	cold up vs hot
ZRANB3	9.93E-06	2.83E-05	1.5871	1.5871	cold up vs hot
ZNF749	0.000184151	0.000400498	1.58701	1.58701	cold up vs hot
IRX5	0.00169518	0.00283037	1.5858	1.5858	cold up vs hot
MAPK8IP1	0.00143076	0.00244644	1.58576	1.58576	cold up vs hot
C6orf124	0.00695776	0.00934383	1.58528	1.58528	cold up vs hot
DOCK6	2.76E-09	1.20E-08	1.58104	1.58104	cold up vs hot
CNIH2	0.00225578	0.00361471	1.58085	1.58085	cold up vs hot
UBE2Q2P2	0.000166044	0.000366988	1.58058	1.58058	cold up vs hot
SLC25A15	3.06E-11	1.55E-10	1.57915	1.57915	cold up vs hot
GAS2L3	0.000574845	0.00110575	1.57865	1.57865	cold up vs hot
RSPH10B2	0.00292505	0.00451879	1.57855	1.57855	cold up vs hot
ZNF74	3.11E-12	1.67E-11	1.57824	1.57824	cold up vs hot
ANO7	7.23E-05	0.000175127	1.57807	1.57807	cold up vs hot
SOX15	0.00166385	0.00278518	1.57776	1.57776	cold up vs hot
C5orf13	0.00598403	0.00821189	1.5765	1.5765	cold up vs hot
TLN2	4.89E-08	1.89E-07	1.57637	1.57637	cold up vs hot
PRKD1	1.31E-06	4.28E-06	1.57572	1.57572	cold up vs hot
SGK196	4.63E-05	0.00011675	1.57482	1.57482	cold up vs hot
PVRL1	2.14E-07	7.70E-07	1.57382	1.57382	cold up vs hot
SLC43A1	7.03E-05	0.000170723	1.57351	1.57351	cold up vs hot
FAM86B1	0.000949394	0.00171883	1.57336	1.57336	cold up vs hot
C12orf24	3.09E-06	9.57E-06	1.57226	1.57226	cold up vs hot
CCDC78	0.00118559	0.00208156	1.57079	1.57079	cold up vs hot
MEX3B	0.000290719	0.000602357	1.56947	1.56947	cold up vs hot
WWTR1	0.000560458	0.00108223	1.56901	1.56901	cold up vs hot
C22orf36	0.00195306	0.00319873	1.56722	1.56722	cold up vs hot
BSG	8.34E-09	3.46E-08	1.56562	1.56562	cold up vs hot
ARHGAP39	1.53E-05	4.21E-05	1.56534	1.56534	cold up vs hot
UGGT2	8.58E-08	3.24E-07	1.56357	1.56357	cold up vs hot
LRP5	0.00721538	0.00963035	1.56287	1.56287	cold up vs hot
SNORD116	0.00291267	0.00450368	1.56259	1.56259	cold up vs hot
RGAG1	0.00695399	0.0093422	1.5622	1.5622	cold up vs hot
LOC400931	0.00403848	0.00592709	1.56204	1.56204	cold up vs hot
ZNF121	9.63E-07	3.22E-06	1.56159	1.56159	cold up vs hot
ARL10	0.00470987	0.00675005	1.5615	1.5615	cold up vs hot
RAB3A	3.00E-05	7.81E-05	1.56128	1.56128	cold up vs hot
NCRNA001	0.000109539	0.000254602	1.55887	1.55887	cold up vs hot
HPDL	0.00708631	0.00949301	1.55494	1.55494	cold up vs hot
HCG2P7	0.00184002	0.00303706	1.55407	1.55407	cold up vs hot
ZBTB12	3.02E-06	9.34E-06	1.55326	1.55326	cold up vs hot
EEF2	3.57E-10	1.68E-09	1.55316	1.55316	cold up vs hot
RPGRIP1L	3.81E-07	1.34E-06	1.55167	1.55167	cold up vs hot
RNF152	0.00268528	0.00419209	1.55115	1.55115	cold up vs hot
CCDC148	0.00339132	0.00512598	1.55049	1.55049	cold up vs hot
IPO4	1.08E-10	5.28E-10	1.54943	1.54943	cold up vs hot
ATP7B	0.000165251	0.000365855	1.54777	1.54777	cold up vs hot
HILS1	0.00372911	0.00555677	1.54558	1.54558	cold up vs hot

LOC645166	0.000640346	0.00121633	1.54538	1.54538	cold up vs hot
AKR7L	7.29E-05	0.000176446	1.54518	1.54518	cold up vs hot
MDH1B	0.00246782	0.00389425	1.54471	1.54471	cold up vs hot
LRFN4	0.000528812	0.00102919	1.54316	1.54316	cold up vs hot
HOXD3	0.00684594	0.00922593	1.54306	1.54306	cold up vs hot
CHST5	0.00189837	0.00311855	1.54131	1.54131	cold up vs hot
FARP1	1.38E-05	3.83E-05	1.54102	1.54102	cold up vs hot
ATF3	0.00103542	0.000532625	1.64974	1.53908	cold up vs hot
FBXW9	3.42E-08	1.34E-07	1.53898	1.53898	cold up vs hot
SCARF2	0.00099855	0.00179687	1.53884	1.53884	cold up vs hot
SLC16A1	8.49E-10	3.86E-09	1.53862	1.53862	cold up vs hot
IQGAP3	2.78E-05	7.28E-05	1.5346	1.5346	cold up vs hot
KIAA0754	0.000839613	0.00154624	1.53346	1.53346	cold up vs hot
LOC388152	1.32E-05	3.69E-05	1.53313	1.53313	cold up vs hot
DLEU1	1.72E-08	6.96E-08	1.53308	1.53308	cold up vs hot
RASSF8	0.000121571	0.000280075	1.53174	1.53174	cold up vs hot
LOC100128	0.000627561	0.00119588	1.52953	1.52953	cold up vs hot
OTUB2	5.45E-05	0.000135381	1.52949	1.52949	cold up vs hot
SNAI2	0.00383842	0.00568978	1.52872	1.52872	cold up vs hot
HYAL3	1.34E-05	3.73E-05	1.52806	1.52806	cold up vs hot
CDON	0.000117103	0.000271025	1.52523	1.52523	cold up vs hot
ADCY6	8.73E-06	2.52E-05	1.52468	1.52468	cold up vs hot
TAS2R5	0.00572211	0.00790231	1.52329	1.52329	cold up vs hot
HSF2BP	0.00015899	0.000354233	1.52207	1.52207	cold up vs hot
ELOVL6	0.000550606	0.00106604	1.52179	1.52179	cold up vs hot
C14orf176	0.000336392	0.000686958	1.52055	1.52055	cold up vs hot
LRP12	7.29E-05	0.000176537	1.5195	1.5195	cold up vs hot
C11orf95	2.19E-07	7.89E-07	1.51918	1.51918	cold up vs hot
BZW2	4.04E-08	1.57E-07	1.51748	1.51748	cold up vs hot
PSIMCT-1	2.12E-06	6.73E-06	1.51544	1.51544	cold up vs hot
HOXD8	2.72E-05	7.17E-05	1.51526	1.51526	cold up vs hot
NCRNA002	7.50E-05	0.000180995	1.51467	1.51467	cold up vs hot
FAM57A	5.79E-06	1.71E-05	1.51326	1.51326	cold up vs hot
RAB40A	7.67E-05	0.000184468	1.5132	1.5132	cold up vs hot
TRIM45	3.99E-05	0.000101755	1.5089	1.5089	cold up vs hot
MPP3	0.00457474	0.00658385	1.50551	1.50551	cold up vs hot
PTPN14	6.48E-06	1.90E-05	1.50549	1.50549	cold up vs hot
HSPA12A	0.00376217	0.00559581	1.5051	1.5051	cold up vs hot
TMEM97	2.76E-06	8.62E-06	1.50408	1.50408	cold up vs hot
SLC9A5	0.00543649	0.00758489	1.50348	1.50348	cold up vs hot
LRP6	7.18E-07	2.44E-06	1.50267	1.50267	cold up vs hot
WDR3	5.54E-08	2.13E-07	1.50228	1.50228	cold up vs hot
EEF1DP3	0.00140812	0.00241216	1.50151	1.50151	cold up vs hot
SOX4	0.000129001	0.000294696	1.50079	1.50079	cold up vs hot
RAB40A	0.000294465	0.000609538	1.49897	1.49897	cold up vs hot
FAT1	0.000598901	0.00114763	1.49891	1.49891	cold up vs hot
IRS2	1.34E-05	3.72E-05	1.49863	1.49863	cold up vs hot
TMEM231	3.02E-07	1.07E-06	1.49798	1.49798	cold up vs hot
KCTD15	1.57E-10	7.59E-10	1.4961	1.4961	cold up vs hot
KCNJ14	1.78E-05	4.85E-05	1.49541	1.49541	cold up vs hot
ETV3	6.44E-05	0.000157602	1.49489	1.49489	cold up vs hot
POMT2	2.22E-10	1.06E-09	1.49356	1.49356	cold up vs hot
MAP1D	3.37E-07	1.19E-06	1.49194	1.49194	cold up vs hot
C14orf79	2.72E-10	1.29E-09	1.49093	1.49093	cold up vs hot
CCDC138	0.000960442	0.00173787	1.48914	1.48914	cold up vs hot
JAG1	0.00212203	0.00343496	1.48841	1.48841	cold up vs hot
JRK	9.79E-06	2.79E-05	1.48801	1.48801	cold up vs hot
LTBP4	0.000310927	0.000639558	1.48777	1.48777	cold up vs hot
ZC3HAV1L	0.00366228	0.00547343	1.48582	1.48582	cold up vs hot
FKBP14	5.60E-05	0.000138747	1.48482	1.48482	cold up vs hot
C22orf23	3.60E-10	1.69E-09	1.48461	1.48461	cold up vs hot
SERPINH1	4.93E-05	0.000123656	1.48413	1.48413	cold up vs hot
LPHN1	0.000450245	0.00089292	1.48304	1.48304	cold up vs hot
RBM9	9.17E-09	3.79E-08	1.48288	1.48288	cold up vs hot
NR2F6	1.35E-08	5.52E-08	1.48151	1.48151	cold up vs hot
TANC2	0.00135641	0.00233769	1.4809	1.4809	cold up vs hot
WDR35	8.34E-08	3.15E-07	1.48069	1.48069	cold up vs hot
TIMM13	5.65E-09	2.40E-08	1.4805	1.4805	cold up vs hot
LOC643677	0.00520844	0.00731206	1.47988	1.47988	cold up vs hot
TEAD1	1.67E-06	5.37E-06	1.47936	1.47936	cold up vs hot
SAMD13	0.00454909	0.00655128	1.4783	1.4783	cold up vs hot
EXTL2	8.92E-07	2.98E-06	1.47801	1.47801	cold up vs hot
TMTC4	3.64E-07	1.28E-06	1.4775	1.4775	cold up vs hot
SNHG7	0.000199246	0.000430172	1.47746	1.47746	cold up vs hot
CFLP1	0.00215097	0.00347492	1.4774	1.4774	cold up vs hot
SNHG8	2.42E-06	7.60E-06	1.47715	1.47715	cold up vs hot
KBTBD6	9.27E-08	3.48E-07	1.47427	1.47427	cold up vs hot

CHST10	9.73E-07	3.24E-06	1.47419	1.47419	cold up vs hot
DPY19L3	6.81E-05	0.000165803	1.47364	1.47364	cold up vs hot
SATB2	0.00125412	0.00218448	1.47338	1.47338	cold up vs hot
PANK1	2.00E-05	5.41E-05	1.47247	1.47247	cold up vs hot
FBXL2	0.000129418	0.000295545	1.47243	1.47243	cold up vs hot
SOX12	5.06E-07	1.75E-06	1.47221	1.47221	cold up vs hot
FRMD6	0.000616632	0.00117884	1.47205	1.47205	cold up vs hot
SACS	5.91E-05	0.000145706	1.47122	1.47122	cold up vs hot
CSDAP1	0.000736988	0.00137785	1.47001	1.47001	cold up vs hot
ALKBH2	3.34E-10	1.57E-09	1.46988	1.46988	cold up vs hot
FKBP4	2.20E-08	8.77E-08	1.46933	1.46933	cold up vs hot
DBN1	4.47E-05	0.000113202	1.46907	1.46907	cold up vs hot
GPM6B	0.00369766	0.00551494	1.46871	1.46871	cold up vs hot
PIK3R2	1.03E-10	5.01E-10	1.46848	1.46848	cold up vs hot
PUS7	1.64E-07	6.01E-07	1.46637	1.46637	cold up vs hot
PTGFRN	0.00352948	0.0053041	1.46621	1.46621	cold up vs hot
LOC100130	0.000859046	0.00157846	1.46607	1.46607	cold up vs hot
LOC401127	0.000255874	0.000536979	1.46571	1.46571	cold up vs hot
CCNT1	0.000760635	0.00141598	1.46571	1.46571	cold up vs hot
KCTD3	2.19E-06	6.93E-06	1.46501	1.46501	cold up vs hot
TOP1MT	1.99E-07	7.22E-07	1.46458	1.46458	cold up vs hot
ZNF496	7.24E-07	2.46E-06	1.46396	1.46396	cold up vs hot
C9orf43	0.00454406	0.00654548	1.46262	1.46262	cold up vs hot
KDM5B	7.10E-07	2.42E-06	1.46244	1.46244	cold up vs hot
PLD6	9.72E-05	0.000228338	1.46086	1.46086	cold up vs hot
GTF2IRD1	5.46E-07	1.88E-06	1.46039	1.46039	cold up vs hot
WDR90	1.66E-05	4.54E-05	1.45993	1.45993	cold up vs hot
DLG5	2.53E-06	7.93E-06	1.45966	1.45966	cold up vs hot
ZNF221	0.000124818	0.000286645	1.45939	1.45939	cold up vs hot
FBXL18	6.32E-07	2.16E-06	1.4584	1.4584	cold up vs hot
C7orf10	0.00421933	0.00614966	1.45472	1.45472	cold up vs hot
ZMAT3	0.00015687	0.00035027	1.45462	1.45462	cold up vs hot
PHLDA1	1.93E-05	5.21E-05	1.45456	1.45456	cold up vs hot
SLC2A1	0.00062469	0.00119145	1.45274	1.45274	cold up vs hot
C10orf2	2.27E-07	8.15E-07	1.45148	1.45148	cold up vs hot
ENAH	0.000817967	0.00151192	1.45141	1.45141	cold up vs hot
OBSL1	0.00113037	0.0020018	1.45098	1.45098	cold up vs hot
MSTO2P	1.59E-05	4.36E-05	1.45044	1.45044	cold up vs hot
C4orf12	0.00257225	0.00403175	1.44958	1.44958	cold up vs hot
C7orf68	8.06E-07	2.72E-06	1.44951	1.44951	cold up vs hot
OTUD3	5.80E-06	1.71E-05	1.44914	1.44914	cold up vs hot
FAM83H	0.00661653	0.00895932	1.44758	1.44758	cold up vs hot
TOMM20	1.47E-07	5.42E-07	1.44752	1.44752	cold up vs hot
PRR22	0.00207168	0.00336264	1.44749	1.44749	cold up vs hot
IPO5	2.07E-09	9.10E-09	1.44737	1.44737	cold up vs hot
LRRC49	0.00688319	0.00926656	1.447	1.447	cold up vs hot
ASPH	3.94E-05	0.000100461	1.44609	1.44609	cold up vs hot
ACVR2B	0.000114706	0.000265855	1.44582	1.44582	cold up vs hot
ZFP112	2.16E-05	5.80E-05	1.4453	1.4453	cold up vs hot
APP	0.00358425	0.00537033	1.44435	1.44435	cold up vs hot
CCDC149	0.00484419	0.00690918	1.44427	1.44427	cold up vs hot
RP55	6.98E-08	2.66E-07	1.44418	1.44418	cold up vs hot
GNA11	1.54E-08	6.25E-08	1.44321	1.44321	cold up vs hot
JUB	0.000422402	0.000843153	1.4428	1.4428	cold up vs hot
PTPN21	0.000219585	0.000468199	1.44196	1.44196	cold up vs hot
CCDC122	0.0009282	0.0016856	1.44152	1.44152	cold up vs hot
HK2	0.000190886	0.000413904	1.4405	1.4405	cold up vs hot
LRRC56	0.000771472	0.00143574	1.43943	1.43943	cold up vs hot
UNC119B	1.85E-07	6.73E-07	1.43923	1.43923	cold up vs hot
ARHGAP5	2.75E-05	7.22E-05	1.43921	1.43921	cold up vs hot
C2orf63	0.0055477	0.0077091	1.43891	1.43891	cold up vs hot
TNPO2	7.71E-15	4.64E-14	1.43856	1.43856	cold up vs hot
NBPF9	3.37E-05	8.67E-05	1.43828	1.43828	cold up vs hot
XPNPEP3	2.67E-07	9.51E-07	1.43423	1.43423	cold up vs hot
PPFIA3	0.00137112	0.00235869	1.43376	1.43376	cold up vs hot
CDR2L	0.00414888	0.00606594	1.43357	1.43357	cold up vs hot
KHDRBS3	0.00676873	0.00914157	1.4324	1.4324	cold up vs hot
LOC646762	0.000359378	0.000727306	1.43185	1.43185	cold up vs hot
BTBD3	0.000296082	0.00061211	1.43161	1.43161	cold up vs hot
NAT14	4.58E-06	1.38E-05	1.43108	1.43108	cold up vs hot
GPR153	0.00239193	0.00379376	1.43081	1.43081	cold up vs hot
ZDHHC8	1.88E-06	6.02E-06	1.42936	1.42936	cold up vs hot
TRIO	7.35E-05	0.00017768	1.42768	1.42768	cold up vs hot
CSNK1E	2.64E-09	1.15E-08	1.4274	1.4274	cold up vs hot
LRIG3	0.00650126	0.00882153	1.42651	1.42651	cold up vs hot
C19orf44	2.18E-12	1.18E-11	1.42634	1.42634	cold up vs hot
LCA5	0.00133671	0.00231211	1.42599	1.42599	cold up vs hot

ZNF643	0.00221362	0.00356026	1.42445	1.42445	cold up vs hot
KCNE2	0.00188197	0.00309317	1.42427	1.42427	cold up vs hot
PACRGL	1.40E-06	4.54E-06	1.42426	1.42426	cold up vs hot
TDRD3	0.00576372	0.00795162	1.42418	1.42418	cold up vs hot
GEFT	0.00121706	0.00212902	1.42328	1.42328	cold up vs hot
CBX6	0.000220816	0.000469903	1.42286	1.42286	cold up vs hot
ISYNA1	0.00155605	0.002629	1.42261	1.42261	cold up vs hot
PRMT5	3.80E-10	1.78E-09	1.42234	1.42234	cold up vs hot
NUFIP1	1.04E-09	4.69E-09	1.42151	1.42151	cold up vs hot
HDAC4	1.95E-06	6.23E-06	1.42126	1.42126	cold up vs hot
HOOK2	1.09E-06	3.59E-06	1.42074	1.42074	cold up vs hot
SCRIB	1.49E-05	4.12E-05	1.41946	1.41946	cold up vs hot
LAPTM4B	8.48E-05	0.000201745	1.41914	1.41914	cold up vs hot
ZNF470	0.00323099	0.00492324	1.41854	1.41854	cold up vs hot
THSD1P1	1.34E-05	3.74E-05	1.41831	1.41831	cold up vs hot
WIZ	7.49E-10	3.42E-09	1.41822	1.41822	cold up vs hot
NLE1	2.03E-08	8.14E-08	1.41739	1.41739	cold up vs hot
LAMC1	0.000219687	0.000468264	1.417	1.417	cold up vs hot
LYSMD1	1.78E-07	6.50E-07	1.41693	1.41693	cold up vs hot
DOT1L	1.48E-06	4.80E-06	1.41664	1.41664	cold up vs hot
MIB1	6.20E-05	0.000152088	1.41656	1.41656	cold up vs hot
LAMA4	0.0059237	0.00814451	1.41608	1.41608	cold up vs hot
LAMB1	0.00275316	0.00428444	1.41581	1.41581	cold up vs hot
DPH3B	0.000239482	0.000505668	1.41548	1.41548	cold up vs hot
FZD3	0.000112355	0.000260591	1.41541	1.41541	cold up vs hot
NMB	0.000190552	0.000413384	1.41533	1.41533	cold up vs hot
SHMT2	2.13E-07	7.68E-07	1.41423	1.41423	cold up vs hot
BYSL	7.33E-08	2.79E-07	1.4141	1.4141	cold up vs hot
TMEM198	0.00096889	0.00175073	1.41287	1.41287	cold up vs hot
PPFIBP1	0.000266563	0.000556904	1.41246	1.41246	cold up vs hot
YES1	0.000107792	0.000251427	1.4124	1.4124	cold up vs hot
ZNF177	0.00438859	0.00635661	1.41193	1.41193	cold up vs hot
ZNF670	0.00146241	0.00249338	1.41187	1.41187	cold up vs hot
DDX21	0.000103787	0.000242616	1.41129	1.41129	cold up vs hot
PIBF1	0.00356947	0.00535188	1.41098	1.41098	cold up vs hot
SORD	0.000383774	0.000771409	1.41096	1.41096	cold up vs hot
ProSAP1P1	0.00118569	0.00208156	1.41061	1.41061	cold up vs hot
CECR5	4.93E-09	2.10E-08	1.41032	1.41032	cold up vs hot
C1orf192	0.000412563	0.000825211	1.40976	1.40976	cold up vs hot
FKBP10	0.00589025	0.00810364	1.40953	1.40953	cold up vs hot
SNHG3	0.00156602	0.0026438	1.40912	1.40912	cold up vs hot
MEGF8	1.54E-05	4.23E-05	1.40897	1.40897	cold up vs hot
PYCR1	0.000165249	0.000365855	1.40813	1.40813	cold up vs hot
AHCY	4.04E-06	1.23E-05	1.40798	1.40798	cold up vs hot
TMEM20	1.11E-05	3.15E-05	1.40739	1.40739	cold up vs hot
MAML3	0.000379121	0.000763466	1.40729	1.40729	cold up vs hot
FAM119B	3.46E-06	1.06E-05	1.40721	1.40721	cold up vs hot
SLC7A1	0.00012263	0.000282416	1.40675	1.40675	cold up vs hot
C18orf45	4.33E-09	1.85E-08	1.40665	1.40665	cold up vs hot
SH3BGR	0.00129713	0.00224978	1.40648	1.40648	cold up vs hot
NELF	6.37E-05	0.000156033	1.40627	1.40627	cold up vs hot
CENPF	0.000757059	0.00141012	1.40423	1.40423	cold up vs hot
SLC25A23	0.000120263	0.000277454	1.40415	1.40415	cold up vs hot
SNHG1	0.000148626	0.000334032	1.40401	1.40401	cold up vs hot
DPY19L4	8.10E-05	0.000193982	1.4035	1.4035	cold up vs hot
LOC441208	0.000188186	0.000408728	1.40325	1.40325	cold up vs hot
SNRNP48	0.000152594	0.000341774	1.40289	1.40289	cold up vs hot
C22orf29	5.47E-09	2.32E-08	1.40281	1.40281	cold up vs hot
LOC654342	0.00205354	0.00333833	1.40266	1.40266	cold up vs hot
B4GALT2	1.46E-08	5.93E-08	1.40154	1.40154	cold up vs hot
TRIP6	0.000278329	0.000579815	1.40069	1.40069	cold up vs hot
FOXK1	1.41E-06	4.58E-06	1.40049	1.40049	cold up vs hot
C19orf48	1.94E-05	5.23E-05	1.3992	1.3992	cold up vs hot
GSTA4	0.00541522	0.00756169	1.39907	1.39907	cold up vs hot
PARD3	0.00198808	0.00325119	1.39883	1.39883	cold up vs hot
PFAS	7.71E-08	2.93E-07	1.39842	1.39842	cold up vs hot
ACPL2	0.000339543	0.000692744	1.39745	1.39745	cold up vs hot
CHPF	0.000907673	0.00165292	1.39644	1.39644	cold up vs hot
CYTH3	0.00196515	0.00321773	1.39624	1.39624	cold up vs hot
CCDC86	2.13E-09	9.33E-09	1.39593	1.39593	cold up vs hot
GOLGA6L1	0.00400763	0.00589375	1.3951	1.3951	cold up vs hot
ZNF473	1.82E-08	7.30E-08	1.39498	1.39498	cold up vs hot
CAD	4.61E-07	1.60E-06	1.39404	1.39404	cold up vs hot
NPM3	1.18E-06	3.87E-06	1.39386	1.39386	cold up vs hot
INTS4L1	0.000453474	0.000898233	1.39371	1.39371	cold up vs hot
FAM60A	0.000259447	0.000543604	1.39315	1.39315	cold up vs hot
TUBB1	0.00516509	0.0072637	1.3929	1.3929	cold up vs hot

NUDT15	3.55E-07	1.25E-06	1.39238	1.39238	cold up vs hot
PRKDC	9.31E-07	3.11E-06	1.39227	1.39227	cold up vs hot
FLJ14107	0.00598674	0.00821388	1.39222	1.39222	cold up vs hot
ETV2	0.00390549	0.00577084	1.39201	1.39201	cold up vs hot
EIF3E	1.25E-05	3.51E-05	1.392	1.392	cold up vs hot
CUL7	5.53E-06	1.64E-05	1.39155	1.39155	cold up vs hot
ZNRF3	9.67E-05	0.000227537	1.39155	1.39155	cold up vs hot
LOC729020	3.94E-07	1.38E-06	1.39146	1.39146	cold up vs hot
URB1	8.93E-08	3.36E-07	1.39144	1.39144	cold up vs hot
SC65	0.000268594	0.000560789	1.3914	1.3914	cold up vs hot
HIC2	3.76E-05	9.63E-05	1.39102	1.39102	cold up vs hot
PVR	0.000111009	0.000257836	1.39028	1.39028	cold up vs hot
HAS3	0.00689483	0.00927457	1.38834	1.38834	cold up vs hot
NDFIP2	0.000106234	0.000247981	1.38747	1.38747	cold up vs hot
ARVCF	0.000991731	0.00178667	1.38669	1.38669	cold up vs hot
TRIM16L	0.00137555	0.00236505	1.38657	1.38657	cold up vs hot
CLCN3	7.92E-05	0.000190008	1.3865	1.3865	cold up vs hot
RAVER2	0.00380318	0.00564716	1.38618	1.38618	cold up vs hot
RRP15	1.30E-06	4.23E-06	1.38569	1.38569	cold up vs hot
LOC148189	8.97E-08	3.38E-07	1.38507	1.38507	cold up vs hot
LOC80154	0.000889121	0.00162276	1.38456	1.38456	cold up vs hot
KIAA0114	0.000908201	0.00165342	1.38402	1.38402	cold up vs hot
ISPD	0.00664652	0.00899618	1.38338	1.38338	cold up vs hot
C20orf199	0.000100117	0.000234457	1.38148	1.38148	cold up vs hot
CSDA	0.00330063	0.00501212	1.38111	1.38111	cold up vs hot
GTPBP3	1.27E-08	5.17E-08	1.38012	1.38012	cold up vs hot
SNORD1C	0.00546701	0.00761177	1.37923	1.37923	cold up vs hot
LMNB2	2.43E-06	7.65E-06	1.37849	1.37849	cold up vs hot
ANKRD26	0.00499079	0.00707338	1.37845	1.37845	cold up vs hot
RPL13AP6	0.00146311	0.00249345	1.37829	1.37829	cold up vs hot
KLHL11	0.00228195	0.00364859	1.37663	1.37663	cold up vs hot
NANP	5.68E-07	1.95E-06	1.37631	1.37631	cold up vs hot
PAICS	5.32E-08	2.05E-07	1.37572	1.37572	cold up vs hot
PFKM	6.19E-07	2.12E-06	1.37497	1.37497	cold up vs hot
C1orf53	0.00247271	0.00390008	1.37486	1.37486	cold up vs hot
BIVM	0.00246279	0.00388725	1.37479	1.37479	cold up vs hot
UBA2	1.94E-06	6.19E-06	1.37466	1.37466	cold up vs hot
CSNK2A1P	6.79E-07	2.31E-06	1.37448	1.37448	cold up vs hot
CEP170	0.000232108	0.000491529	1.37409	1.37409	cold up vs hot
TMEM99	0.000281345	0.00058535	1.37409	1.37409	cold up vs hot
RNF207	0.0038923	0.00575917	1.37377	1.37377	cold up vs hot
LONP1	8.67E-07	2.91E-06	1.37356	1.37356	cold up vs hot
CDK4	8.86E-06	2.55E-05	1.37324	1.37324	cold up vs hot
TLL12	0.000187461	0.000407289	1.37287	1.37287	cold up vs hot
EXO1	0.00182927	0.00302177	1.37276	1.37276	cold up vs hot
ZNF696	2.04E-06	6.49E-06	1.37239	1.37239	cold up vs hot
PELI2	0.00429222	0.00623917	1.37213	1.37213	cold up vs hot
ZNF778	3.05E-05	7.94E-05	1.37156	1.37156	cold up vs hot
SLMO1	0.000135971	0.000308997	1.37146	1.37146	cold up vs hot
MGC23270	0.00278118	0.00432083	1.3714	1.3714	cold up vs hot
ZNF519	0.00354579	0.00532313	1.3713	1.3713	cold up vs hot
SEC16B	0.00617462	0.00842575	1.37104	1.37104	cold up vs hot
ERF	8.62E-05	0.000204629	1.36968	1.36968	cold up vs hot
SLC19A2	0.00331888	0.00503281	1.36874	1.36874	cold up vs hot
TTC28	0.00181542	0.00300117	1.36855	1.36855	cold up vs hot
PDZD8	0.000124305	0.000285667	1.36845	1.36845	cold up vs hot
ZNF462	5.15E-05	0.000128829	1.36749	1.36749	cold up vs hot
SLC25A37	0.000260173	0.000544775	1.36661	1.36661	cold up vs hot
RGMB	0.00444578	0.00642518	1.3665	1.3665	cold up vs hot
AGRN	0.00330877	0.00502098	1.3662	1.3662	cold up vs hot
ASB1	9.71E-07	3.24E-06	1.36547	1.36547	cold up vs hot
RPS18	0.000130408	0.000297389	1.36495	1.36495	cold up vs hot
MEIS3P1	0.000865026	0.00158677	1.36462	1.36462	cold up vs hot
LOC284023	9.75E-06	2.78E-05	1.36437	1.36437	cold up vs hot
ZDHH9	1.10E-07	4.09E-07	1.36356	1.36356	cold up vs hot
PDP2	4.25E-05	0.000107783	1.36323	1.36323	cold up vs hot
MYBBP1A	2.41E-06	7.60E-06	1.36257	1.36257	cold up vs hot
TTC25	0.00609855	0.00834946	1.36255	1.36255	cold up vs hot
SPATA6	0.0023563	0.00374635	1.36209	1.36209	cold up vs hot
BRWD3	0.000815287	0.00150768	1.36202	1.36202	cold up vs hot
XYLB	0.00254299	0.00399069	1.36171	1.36171	cold up vs hot
GGH	0.000676391	0.00127589	1.36162	1.36162	cold up vs hot
ACACA	2.20E-07	7.92E-07	1.36148	1.36148	cold up vs hot
NPHP4	0.000575621	0.00110692	1.36111	1.36111	cold up vs hot
CCDC41	0.00259551	0.00406334	1.36109	1.36109	cold up vs hot
ZNF426	0.000576841	0.00110861	1.36027	1.36027	cold up vs hot
CD3EAP	1.77E-08	7.15E-08	1.36017	1.36017	cold up vs hot

GAN	0.000541107	0.00104952	1.35989	1.35989	cold up vs hot
TRMT5	3.70E-08	1.45E-07	1.35973	1.35973	cold up vs hot
ZNF8	1.07E-06	3.53E-06	1.35948	1.35948	cold up vs hot
ZC3H8	3.96E-05	0.000100935	1.3593	1.3593	cold up vs hot
PPP1R14B	9.10E-05	0.000215343	1.35922	1.35922	cold up vs hot
ILVBL	0.000749657	0.00139993	1.35913	1.35913	cold up vs hot
LOC388796	5.30E-05	0.000132256	1.35911	1.35911	cold up vs hot
ESF1	0.000188352	0.000408953	1.3587	1.3587	cold up vs hot
PRKCE	8.28E-05	0.000197851	1.35794	1.35794	cold up vs hot
FAM129B	0.000229916	0.000487204	1.35726	1.35726	cold up vs hot
LOC284232	0.00197931	0.00323848	1.35694	1.35694	cold up vs hot
ZNF286A	0.000362156	0.000732694	1.35662	1.35662	cold up vs hot
FITM2	0.00010798	0.000251518	1.35645	1.35645	cold up vs hot
SNAPC1	0.000337195	0.000688383	1.35635	1.35635	cold up vs hot
RPL36	5.03E-05	0.00012596	1.35604	1.35604	cold up vs hot
MTSS1L	0.00373131	0.00555878	1.35589	1.35589	cold up vs hot
GNG12	0.000212101	0.000455215	1.35567	1.35567	cold up vs hot
FAM10A4	2.13E-06	6.76E-06	1.35552	1.35552	cold up vs hot
EBPL	0.00516002	0.0072597	1.35523	1.35523	cold up vs hot
NFYA	3.07E-05	7.99E-05	1.35517	1.35517	cold up vs hot
FAM189B	2.97E-05	7.76E-05	1.35502	1.35502	cold up vs hot
ANKS6	0.000681367	0.00128306	1.35487	1.35487	cold up vs hot
GPATCH4	9.16E-08	3.45E-07	1.3547	1.3547	cold up vs hot
MAP4K4	1.37E-05	3.80E-05	1.35457	1.35457	cold up vs hot
BNIP3	0.000662919	0.00125337	1.35449	1.35449	cold up vs hot
MTFR1	2.14E-05	5.74E-05	1.35431	1.35431	cold up vs hot
ACTR3B	0.00053697	0.00104265	1.354	1.354	cold up vs hot
HEATR2	5.24E-07	1.81E-06	1.35396	1.35396	cold up vs hot
FBXW8	3.67E-08	1.43E-07	1.35389	1.35389	cold up vs hot
TCF12	0.000537248	0.00104265	1.35366	1.35366	cold up vs hot
DST	0.00452104	0.00651807	1.35324	1.35324	cold up vs hot
HEATR1	9.04E-06	2.60E-05	1.35289	1.35289	cold up vs hot
MTHFD1L	0.000108401	0.000252226	1.35153	1.35153	cold up vs hot
P4HA1	0.000126205	0.000289103	1.35148	1.35148	cold up vs hot
MUM1	1.36E-06	4.42E-06	1.35139	1.35139	cold up vs hot
KIAA1430	4.78E-05	0.000120082	1.35135	1.35135	cold up vs hot
LOC100190	0.000838674	0.00154538	1.35103	1.35103	cold up vs hot
RAD54L2	0.000319898	0.000655944	1.35057	1.35057	cold up vs hot
C6orf48	0.00115311	0.0020357	1.35035	1.35035	cold up vs hot
CCT3	2.90E-07	1.03E-06	1.34995	1.34995	cold up vs hot
ZNF623	1.83E-06	5.87E-06	1.34981	1.34981	cold up vs hot
ST13	1.77E-06	5.70E-06	1.3493	1.3493	cold up vs hot
TMEM161A	1.34E-05	3.72E-05	1.34911	1.34911	cold up vs hot
HMGCR	0.000140821	0.000318686	1.34888	1.34888	cold up vs hot
NBPF15	0.00051629	0.00100737	1.3485	1.3485	cold up vs hot
RPL10A	1.79E-06	5.73E-06	1.3482	1.3482	cold up vs hot
C16orf52	0.00138315	0.00237691	1.3475	1.3475	cold up vs hot
LOC100130	0.00528385	0.00739883	1.34748	1.34748	cold up vs hot
PLCD3	0.00117288	0.00206335	1.34713	1.34713	cold up vs hot
RAD54B	0.000185335	0.000402938	1.34701	1.34701	cold up vs hot
ZBED4	5.97E-07	2.05E-06	1.3469	1.3469	cold up vs hot
TFAP4	3.13E-06	9.67E-06	1.34651	1.34651	cold up vs hot
HSPD1	2.36E-06	7.44E-06	1.34635	1.34635	cold up vs hot
C14orf147	0.000121476	0.000280053	1.34619	1.34619	cold up vs hot
WWC2	0.00186475	0.00307183	1.34597	1.34597	cold up vs hot
C1orf163	3.22E-07	1.13E-06	1.34595	1.34595	cold up vs hot
THNSL1	0.000286015	0.000594309	1.3459	1.3459	cold up vs hot
C1orf107	4.06E-06	1.23E-05	1.34582	1.34582	cold up vs hot
NEK3	0.00412981	0.00604213	1.34582	1.34582	cold up vs hot
ZNF77	3.80E-05	9.73E-05	1.34485	1.34485	cold up vs hot
KLHL17	0.001239	0.00216138	1.34457	1.34457	cold up vs hot
WDR27	0.00247617	0.0039046	1.34457	1.34457	cold up vs hot
HES1	0.00107838	0.00192249	1.34456	1.34456	cold up vs hot
QSER1	8.87E-05	0.00021053	1.34392	1.34392	cold up vs hot
RRS1	3.45E-06	1.06E-05	1.3438	1.3438	cold up vs hot
ALG10B	0.000709976	0.00133193	1.34311	1.34311	cold up vs hot
NFKBIL2	0.00232505	0.00370751	1.34301	1.34301	cold up vs hot
ZC3H13	0.00460515	0.00662178	1.34242	1.34242	cold up vs hot
GGT7	6.56E-05	0.000160474	1.34225	1.34225	cold up vs hot
RFC3	0.000211259	0.000453856	1.34169	1.34169	cold up vs hot
YAP1	0.000220559	0.000469816	1.34141	1.34141	cold up vs hot
XPOS	1.43E-05	3.95E-05	1.34102	1.34102	cold up vs hot
FAM83D	0.00430518	0.00625489	1.34097	1.34097	cold up vs hot
LRPPRC	2.66E-07	9.47E-07	1.34085	1.34085	cold up vs hot
FAM168B	2.76E-09	1.20E-08	1.34051	1.34051	cold up vs hot
ZNF283	0.000123458	0.000284122	1.34032	1.34032	cold up vs hot
SH3GL1	3.21E-06	9.91E-06	1.34004	1.34004	cold up vs hot

DSCC1	0.00151932	0.00257628	1.33995	1.33995	cold up vs hot
CKAP2	0.000366576	0.000740948	1.3395	1.3395	cold up vs hot
C9orf117	0.000724223	0.00135632	1.33893	1.33893	cold up vs hot
WDR18	3.04E-05	7.91E-05	1.33892	1.33892	cold up vs hot
E1F3L	2.03E-05	5.47E-05	1.33847	1.33847	cold up vs hot
TATDN1	4.74E-05	0.00011922	1.33785	1.33785	cold up vs hot
ZNF562	1.31E-06	4.27E-06	1.33772	1.33772	cold up vs hot
MLF1	0.00226723	0.00363039	1.33744	1.33744	cold up vs hot
C8orf33	5.80E-06	1.71E-05	1.33739	1.33739	cold up vs hot
LETM2	0.0027989	0.00434471	1.33708	1.33708	cold up vs hot
SUN1	1.52E-06	4.93E-06	1.33697	1.33697	cold up vs hot
PRPF40B	0.000169019	0.000372427	1.33684	1.33684	cold up vs hot
TMEM5	2.29E-05	6.11E-05	1.33628	1.33628	cold up vs hot
C8orf39	0.005191	0.00729542	1.33626	1.33626	cold up vs hot
ZNF828	3.23E-05	8.35E-05	1.33584	1.33584	cold up vs hot
RPL7L1	7.15E-06	2.08E-05	1.33564	1.33564	cold up vs hot
PPP1R16A	0.000994288	0.00179067	1.33508	1.33508	cold up vs hot
RAB3GAP2	0.000201443	0.000434629	1.33462	1.33462	cold up vs hot
PPP2R3A	0.00149585	0.00253978	1.33462	1.33462	cold up vs hot
PRKAB2	0.00154462	0.0026124	1.33458	1.33458	cold up vs hot
ZNF605	0.00144861	0.00247372	1.33457	1.33457	cold up vs hot
POLD2	4.44E-06	1.34E-05	1.33456	1.33456	cold up vs hot
NFIC	0.000195333	0.000422423	1.33454	1.33454	cold up vs hot
KIAA0895L	0.000179659	0.000392559	1.3344	1.3344	cold up vs hot
SPATA2L	0.000206043	0.000443527	1.33392	1.33392	cold up vs hot
SMARCA4	9.34E-08	3.50E-07	1.33331	1.33331	cold up vs hot
CD276	0.000165592	0.000366236	1.33319	1.33319	cold up vs hot
PAQR3	0.00145196	0.00247877	1.33317	1.33317	cold up vs hot
NEU3	0.00456207	0.00656852	1.33265	1.33265	cold up vs hot
RPRD1A	0.000942364	0.00170705	1.33257	1.33257	cold up vs hot
DHX33	0.000335987	0.000686345	1.33211	1.33211	cold up vs hot
ZKSCAN2	6.84E-06	2.00E-05	1.33202	1.33202	cold up vs hot
PVT1	0.00100193	0.00180244	1.33184	1.33184	cold up vs hot
ETV3L	0.00500259	0.00708248	1.33177	1.33177	cold up vs hot
AMMECR1L	1.41E-07	5.20E-07	1.33108	1.33108	cold up vs hot
C1orf69	2.93E-06	9.12E-06	1.33085	1.33085	cold up vs hot
MAP4K5	0.000570935	0.00109888	1.33078	1.33078	cold up vs hot
KCTD1	3.22E-05	8.33E-05	1.33034	1.33034	cold up vs hot
KLF16	9.16E-05	0.000216707	1.33006	1.33006	cold up vs hot
SMARCC1	2.51E-06	7.87E-06	1.32945	1.32945	cold up vs hot
TMCO3	2.77E-05	7.27E-05	1.32914	1.32914	cold up vs hot
ZKSCAN1	0.00243046	0.0038494	1.32911	1.32911	cold up vs hot
PKD1	0.000109393	0.000254353	1.32893	1.32893	cold up vs hot
OXR1	0.00450956	0.00650296	1.32867	1.32867	cold up vs hot
PTK2	4.23E-07	1.48E-06	1.32824	1.32824	cold up vs hot
CAMSAP1L	0.000237126	0.000501179	1.32745	1.32745	cold up vs hot
ZNF581	2.89E-05	7.55E-05	1.32729	1.32729	cold up vs hot
POLR1B	0.000188561	0.000409269	1.3272	1.3272	cold up vs hot
PES1	7.86E-06	2.27E-05	1.3271	1.3271	cold up vs hot
CBX8	7.15E-05	0.000173468	1.32657	1.32657	cold up vs hot
TOM1L1	0.00292324	0.00451788	1.3264	1.3264	cold up vs hot
SMOX	0.00323238	0.00492337	1.32592	1.32592	cold up vs hot
TNKS	9.21E-06	2.64E-05	1.32583	1.32583	cold up vs hot
TULP3	4.59E-06	1.38E-05	1.3258	1.3258	cold up vs hot
RNF24	0.000135311	0.000307818	1.32577	1.32577	cold up vs hot
ZNF555	1.33E-05	3.72E-05	1.32519	1.32519	cold up vs hot
MEIS1	0.00287394	0.00444802	1.32488	1.32488	cold up vs hot
RPLP0	5.88E-06	1.73E-05	1.32466	1.32466	cold up vs hot
TCTN1	0.00149261	0.00253755	1.32452	1.32452	cold up vs hot
HSP90AB2F	0.005067	0.00715659	1.32443	1.32443	cold up vs hot
RAD52	3.90E-06	1.19E-05	1.32426	1.32426	cold up vs hot
ABI2	6.99E-06	2.04E-05	1.32337	1.32337	cold up vs hot
ZNF507	8.56E-05	0.000203539	1.32336	1.32336	cold up vs hot
BEND3	2.59E-05	6.85E-05	1.32326	1.32326	cold up vs hot
TMEM48	0.000174464	0.000383003	1.32264	1.32264	cold up vs hot
ZNF616	1.98E-05	5.35E-05	1.32259	1.32259	cold up vs hot
UST	0.00458201	0.00659142	1.32253	1.32253	cold up vs hot
NCKAP1	7.47E-06	2.17E-05	1.32226	1.32226	cold up vs hot
FUT2	0.00278346	0.00432334	1.32212	1.32212	cold up vs hot
RPL18A	7.80E-05	0.00018739	1.32193	1.32193	cold up vs hot
RPL7	0.00048256	0.000948268	1.32172	1.32172	cold up vs hot
UTP14C	4.57E-05	0.000115344	1.32158	1.32158	cold up vs hot
WARS2	8.42E-05	0.000200531	1.32085	1.32085	cold up vs hot
GPHN	8.94E-05	0.000211943	1.32064	1.32064	cold up vs hot
RPL5	0.000197497	0.000426679	1.3206	1.3206	cold up vs hot
UTP20	6.36E-06	1.86E-05	1.32053	1.32053	cold up vs hot
FAM186B	0.00744522	0.00988053	1.31976	1.31976	cold up vs hot

RUVBL2	3.90E-05	9.96E-05	1.31968	1.31968	cold up vs hot
ABCB6	0.00165067	0.00276794	1.31962	1.31962	cold up vs hot
TRAP1	1.87E-06	5.99E-06	1.31943	1.31943	cold up vs hot
FLVCR1	0.000851298	0.00156599	1.3193	1.3193	cold up vs hot
SIX5	5.54E-05	0.00013745	1.31886	1.31886	cold up vs hot
GPATCH2	0.000301764	0.000622476	1.31869	1.31869	cold up vs hot
FLJ10357	0.00283833	0.00439916	1.31869	1.31869	cold up vs hot
ZNF146	4.05E-05	0.00010307	1.31845	1.31845	cold up vs hot
PANK3	0.00211211	0.0034206	1.31841	1.31841	cold up vs hot
NCLN	9.28E-06	2.66E-05	1.31837	1.31837	cold up vs hot
TFB2M	6.95E-05	0.000169011	1.31774	1.31774	cold up vs hot
DPCD	0.000178736	0.000390673	1.31772	1.31772	cold up vs hot
PDCD11	4.86E-06	1.45E-05	1.31757	1.31757	cold up vs hot
WDR43	1.47E-05	4.07E-05	1.3175	1.3175	cold up vs hot
SSFA2	0.00495917	0.00704366	1.31748	1.31748	cold up vs hot
URB2	2.51E-05	6.67E-05	1.31731	1.31731	cold up vs hot
NUBPL	1.74E-05	4.74E-05	1.31728	1.31728	cold up vs hot
RIC8B	9.12E-07	3.05E-06	1.317	1.317	cold up vs hot
RECQL4	0.00465833	0.00668647	1.31697	1.31697	cold up vs hot
DOCK1	5.31E-05	0.000132334	1.31683	1.31683	cold up vs hot
EPN2	9.05E-05	0.000214432	1.31678	1.31678	cold up vs hot
ZNF192	0.00449206	0.00648202	1.31649	1.31649	cold up vs hot
FAM172A	0.000718575	0.00134651	1.31637	1.31637	cold up vs hot
TRIM28	9.11E-06	2.61E-05	1.31542	1.31542	cold up vs hot
PPAN	1.59E-05	4.36E-05	1.31487	1.31487	cold up vs hot
TXNRD3IT1	0.00133356	0.00230807	1.31411	1.31411	cold up vs hot
POLR3D	2.95E-06	9.17E-06	1.31357	1.31357	cold up vs hot
FAM13A	0.00733318	0.00975963	1.3135	1.3135	cold up vs hot
BPHL	0.000175412	0.000384566	1.31327	1.31327	cold up vs hot
ZNF771	0.000511009	0.000997662	1.31315	1.31315	cold up vs hot
KIAA0564	1.16E-05	3.28E-05	1.31202	1.31202	cold up vs hot
MGC2752	1.46E-08	5.94E-08	1.31183	1.31183	cold up vs hot
TTC21B	0.000326068	0.000667757	1.31157	1.31157	cold up vs hot
RARG	0.000692815	0.00130198	1.31128	1.31128	cold up vs hot
C20orf117	7.22E-05	0.000174987	1.31091	1.31091	cold up vs hot
GEMIN4	2.12E-06	6.73E-06	1.31057	1.31057	cold up vs hot
TMEM117	0.00629368	0.00857015	1.31037	1.31037	cold up vs hot
C16orf88	8.34E-07	2.81E-06	1.31028	1.31028	cold up vs hot
ARG2	0.00126576	0.0022018	1.31019	1.31019	cold up vs hot
TCFL5	0.000517976	0.00101006	1.31009	1.31009	cold up vs hot
TGDS	0.00733838	0.00976355	1.30991	1.30991	cold up vs hot
CHD7	0.00123283	0.00215255	1.3097	1.3097	cold up vs hot
SLC4A7	0.00676634	0.00914131	1.30954	1.30954	cold up vs hot
AKT1S1	7.27E-06	2.11E-05	1.30951	1.30951	cold up vs hot
RPL8	0.000487238	0.000955828	1.30939	1.30939	cold up vs hot
TRIB2	0.00489957	0.00697597	1.30936	1.30936	cold up vs hot
ZFP41	0.000170907	0.000376081	1.30925	1.30925	cold up vs hot
ADSL	6.71E-06	1.96E-05	1.3087	1.3087	cold up vs hot
SLC23A2	0.000547433	0.00106084	1.30867	1.30867	cold up vs hot
FOXRED2	0.00209567	0.00339819	1.30853	1.30853	cold up vs hot
C15orf41	0.000617217	0.00117961	1.3085	1.3085	cold up vs hot
UBXN8	6.62E-05	0.000161431	1.30772	1.30772	cold up vs hot
C3orf39	4.20E-05	0.000106788	1.30712	1.30712	cold up vs hot
VAR5	4.31E-05	0.000109273	1.30703	1.30703	cold up vs hot
SYNGAP1	7.34E-05	0.000177477	1.30639	1.30639	cold up vs hot
CLCN2	0.00645967	0.0087724	1.30602	1.30602	cold up vs hot
HNF1A	0.000177459	0.000388271	1.306	1.306	cold up vs hot
MORN4	0.00129675	0.00224973	1.30596	1.30596	cold up vs hot
ZNF260	0.00256217	0.00401692	1.30577	1.30577	cold up vs hot
ANKRD50	0.00235369	0.00374312	1.30541	1.30541	cold up vs hot
POLR1A	2.17E-05	5.83E-05	1.30533	1.30533	cold up vs hot
EXTL3	5.58E-05	0.000138329	1.30493	1.30493	cold up vs hot
STRAP	6.49E-08	2.49E-07	1.30474	1.30474	cold up vs hot
ITLL11	0.000237699	0.000502229	1.30462	1.30462	cold up vs hot
PAK1IP1	0.000562003	0.00108422	1.30437	1.30437	cold up vs hot
SETD6	6.14E-06	1.80E-05	1.30426	1.30426	cold up vs hot
SSRP1	9.43E-08	3.53E-07	1.30417	1.30417	cold up vs hot
RPL13AP3	0.00141349	0.00242009	1.30372	1.30372	cold up vs hot
HSP90AB1	1.81E-05	4.92E-05	1.30368	1.30368	cold up vs hot
ZSCAN22	4.06E-08	1.58E-07	1.30346	1.30346	cold up vs hot
TBC1D24	9.81E-05	0.000230479	1.3034	1.3034	cold up vs hot
ZNF512B	0.000129687	0.000295952	1.30306	1.30306	cold up vs hot
ZNF205	0.000130053	0.000296685	1.30299	1.30299	cold up vs hot
ZNF333	3.55E-05	9.11E-05	1.30235	1.30235	cold up vs hot
DCAF16	0.000156235	0.000348972	1.30222	1.30222	cold up vs hot
ZNF692	0.000439724	0.000873647	1.30214	1.30214	cold up vs hot
MTA1	5.60E-06	1.66E-05	1.30204	1.30204	cold up vs hot

ZNF324B	1.47E-06	4.78E-06	1.30201	1.30201	cold up vs hot
SLC39A6	0.00222404	0.00357351	1.30195	1.30195	cold up vs hot
PUF60	3.22E-06	9.93E-06	1.30156	1.30156	cold up vs hot
ZNF566	0.00139679	0.0023959	1.30144	1.30144	cold up vs hot
SYDE1	0.00129085	0.00224068	1.30079	1.30079	cold up vs hot
CHERP	5.81E-08	2.23E-07	1.30067	1.30067	cold up vs hot
GPA1	0.00153215	0.00259332	1.30064	1.30064	cold up vs hot
KBTBD7	0.00473826	0.00678032	1.30064	1.30064	cold up vs hot
TOR1AIP2	0.00134288	0.00231928	1.30037	1.30037	cold up vs hot
CCDC15	0.00228591	0.00365401	1.30031	1.30031	cold up vs hot
ALS2CR4	0.00115588	0.00204003	1.30003	1.30003	cold up vs hot
MMS19	6.65E-07	2.27E-06	1.29984	1.29984	cold up vs hot
NPHP1	0.00392502	0.00579708	1.29976	1.29976	cold up vs hot
ATP5D	0.0033034	0.005014	1.29952	1.29952	cold up vs hot
NAB2	3.21E-05	8.32E-05	1.29913	1.29913	cold up vs hot
C12orf11	0.000192415	0.000416941	1.29911	1.29911	cold up vs hot
THAP10	0.00170371	0.00284242	1.29905	1.29905	cold up vs hot
LOC348926	0.00016323	0.000362411	1.29879	1.29879	cold up vs hot
RDH13	0.000461478	0.000912701	1.29834	1.29834	cold up vs hot
ZNF395	0.00034947	0.000709889	1.29827	1.29827	cold up vs hot
NPM1	0.00012835	0.000293311	1.29806	1.29806	cold up vs hot
RBK1	0.00166031	0.00277997	1.29805	1.29805	cold up vs hot
RPL37A	0.000108793	0.000253049	1.29766	1.29766	cold up vs hot
IRGQ	2.95E-07	1.05E-06	1.29759	1.29759	cold up vs hot
ZHX3	0.000382794	0.000769929	1.29721	1.29721	cold up vs hot
NT5C3L	3.44E-05	8.84E-05	1.29707	1.29707	cold up vs hot
POLRMT	8.22E-05	0.000196588	1.29695	1.29695	cold up vs hot
AKT3	0.00174815	0.00290469	1.29682	1.29682	cold up vs hot
MTBP	0.00628617	0.00856172	1.29639	1.29639	cold up vs hot
PEMT	0.0010705	0.00190949	1.29584	1.29584	cold up vs hot
SUCLA2	4.68E-05	0.000117862	1.29553	1.29553	cold up vs hot
APEX1	1.26E-07	4.69E-07	1.29509	1.29509	cold up vs hot
CDC44	0.000133008	0.000302684	1.29478	1.29478	cold up vs hot
TEX10	9.90E-05	0.000232287	1.29473	1.29473	cold up vs hot
GUF1	3.14E-05	8.15E-05	1.29472	1.29472	cold up vs hot
CD320	0.00139781	0.00239702	1.29373	1.29373	cold up vs hot
EEF1G	0.000239918	0.000506424	1.29364	1.29364	cold up vs hot
METTL12	0.00525031	0.00736292	1.29348	1.29348	cold up vs hot
DEAF1	0.00176692	0.00292916	1.29345	1.29345	cold up vs hot
WDR4	0.000125783	0.000288454	1.29325	1.29325	cold up vs hot
C8orf37	0.00617472	0.00842575	1.29283	1.29283	cold up vs hot
UCK2	0.000102463	0.000239607	1.29277	1.29277	cold up vs hot
GTF3C4	0.000716091	0.00134297	1.29276	1.29276	cold up vs hot
EARS2	1.10E-06	3.62E-06	1.29247	1.29247	cold up vs hot
FARSA	6.05E-06	1.78E-05	1.29166	1.29166	cold up vs hot
ALDH7A1	0.00295922	0.00456161	1.2916	1.2916	cold up vs hot
MARS2	3.32E-05	8.57E-05	1.29118	1.29118	cold up vs hot
ISG20L2	1.82E-05	4.93E-05	1.29083	1.29083	cold up vs hot
LOC221710	0.000485138	0.000952035	1.2908	1.2908	cold up vs hot
OSTCL	0.00199161	0.00325616	1.29069	1.29069	cold up vs hot
L2HGDH	0.000974748	0.00176082	1.29046	1.29046	cold up vs hot
WDR12	1.91E-05	5.18E-05	1.29037	1.29037	cold up vs hot
SPPL2B	0.00132188	0.00228906	1.29031	1.29031	cold up vs hot
EXD2	3.77E-06	1.15E-05	1.29028	1.29028	cold up vs hot
DVL1	0.000807488	0.00149509	1.29027	1.29027	cold up vs hot
C19orf23	0.00395815	0.00583941	1.29004	1.29004	cold up vs hot
ZKSCAN3	0.000626617	0.00119443	1.28992	1.28992	cold up vs hot
DDX49	1.41E-05	3.90E-05	1.28983	1.28983	cold up vs hot
SREBF2	0.00173113	0.00288081	1.28916	1.28916	cold up vs hot
NTHL1	0.000472061	0.000930966	1.28908	1.28908	cold up vs hot
CRAMP1L	1.00E-06	3.34E-06	1.28907	1.28907	cold up vs hot
ANKRD52	5.82E-05	0.000143806	1.28899	1.28899	cold up vs hot
EI24	3.85E-06	1.17E-05	1.28852	1.28852	cold up vs hot
ZCCHC14	4.48E-05	0.000113379	1.28844	1.28844	cold up vs hot
MTR	0.000220669	0.000469897	1.2884	1.2884	cold up vs hot
EIF2C2	8.31E-05	0.000198254	1.28837	1.28837	cold up vs hot
SS18L1	0.00276889	0.00430585	1.28785	1.28785	cold up vs hot
ANAPC1	6.96E-05	0.000169106	1.28775	1.28775	cold up vs hot
GRWD1	1.77E-06	5.69E-06	1.28688	1.28688	cold up vs hot
KIAA1737	0.000123873	0.000284856	1.28685	1.28685	cold up vs hot
POGK	2.23E-06	7.03E-06	1.28663	1.28663	cold up vs hot
G2E3	0.00561358	0.00778206	1.28651	1.28651	cold up vs hot
TRAF4	0.000860481	0.00157977	1.28631	1.28631	cold up vs hot
ERCC1	7.97E-05	0.000191035	1.28617	1.28617	cold up vs hot
RNF160	0.00505967	0.00714778	1.28542	1.28542	cold up vs hot
ZNF124	0.00542944	0.00757669	1.28521	1.28521	cold up vs hot
FEM1A	9.23E-08	3.46E-07	1.28444	1.28444	cold up vs hot

ZBTB8A	0.00667558	0.00902804	1.28429	1.28429	cold up vs hot
IPO7	0.000642803	0.00121994	1.28422	1.28422	cold up vs hot
COMT	0.00416047	0.0060788	1.28386	1.28386	cold up vs hot
ZNF669	0.0016819	0.00280962	1.28368	1.28368	cold up vs hot
AIMP2	2.12E-05	5.70E-05	1.28338	1.28338	cold up vs hot
BTBD2	0.00113307	0.00200574	1.28288	1.28288	cold up vs hot
GALNT2	0.00245768	0.00388201	1.28283	1.28283	cold up vs hot
C1orf131	0.00051947	0.00101267	1.28271	1.28271	cold up vs hot
MARVELD1	0.00515439	0.0072549	1.2827	1.2827	cold up vs hot
KIAA0090	0.000176003	0.000385603	1.28269	1.28269	cold up vs hot
PAK4	0.000901161	0.00164382	1.28269	1.28269	cold up vs hot
SAMD1	0.000386222	0.000776091	1.28265	1.28265	cold up vs hot
C14orf104	0.000167306	0.000369026	1.28262	1.28262	cold up vs hot
RIOK1	0.000178736	0.000390673	1.28247	1.28247	cold up vs hot
ADNP	1.69E-06	5.44E-06	1.28206	1.28206	cold up vs hot
ZNF614	0.0068362	0.0092147	1.28197	1.28197	cold up vs hot
PRKCSH	9.08E-06	2.61E-05	1.28192	1.28192	cold up vs hot
LOC344595	0.00653857	0.00886377	1.28191	1.28191	cold up vs hot
ATRN	3.01E-06	9.33E-06	1.28187	1.28187	cold up vs hot
LDOC1L	0.00340343	0.0051431	1.28176	1.28176	cold up vs hot
RPS2	0.000716275	0.00134297	1.28145	1.28145	cold up vs hot
USP22	1.20E-05	3.38E-05	1.28143	1.28143	cold up vs hot
PRMT1	5.11E-06	1.52E-05	1.28086	1.28086	cold up vs hot
ALDH6A1	0.00576603	0.00795162	1.28051	1.28051	cold up vs hot
GNL3	0.000163401	0.000362497	1.28049	1.28049	cold up vs hot
HSPH1	0.00139179	0.00238857	1.28045	1.28045	cold up vs hot
P DPR	0.000941123	0.00170542	1.28032	1.28032	cold up vs hot
POLR1C	5.38E-05	0.000133833	1.28004	1.28004	cold up vs hot
CDC34	8.12E-05	0.000194382	1.28001	1.28001	cold up vs hot
NOP56	1.20E-06	3.93E-06	1.27983	1.27983	cold up vs hot
SNAPC2	0.000253176	0.000531831	1.27979	1.27979	cold up vs hot
UTP23	0.0013383	0.0023132	1.27979	1.27979	cold up vs hot
NAA16	0.00397565	0.00585887	1.27953	1.27953	cold up vs hot
TSR1	9.38E-06	2.68E-05	1.27916	1.27916	cold up vs hot
COG6	0.00404829	0.00594016	1.27876	1.27876	cold up vs hot
CIRH1A	3.30E-06	1.01E-05	1.27849	1.27849	cold up vs hot
SLC25A13	0.00474857	0.0067921	1.27838	1.27838	cold up vs hot
TIMM44	8.51E-07	2.86E-06	1.27809	1.27809	cold up vs hot
RPL13AP20	0.000796848	0.00147791	1.27802	1.27802	cold up vs hot
ZNF559	0.00100283	0.00180356	1.27802	1.27802	cold up vs hot
CBX5	0.000206972	0.000445233	1.27794	1.27794	cold up vs hot
DUS3L	0.000186864	0.000406128	1.27726	1.27726	cold up vs hot
EIF4B	6.60E-05	0.000161154	1.27693	1.27693	cold up vs hot
ZNF629	0.000821246	0.00151709	1.27673	1.27673	cold up vs hot
HSBP1	0.000278868	0.000580752	1.2767	1.2767	cold up vs hot
CLK2P	0.000813968	0.00150581	1.27646	1.27646	cold up vs hot
ZNF250	0.000162187	0.000360539	1.27638	1.27638	cold up vs hot
TROVE2	0.00380272	0.00564716	1.27546	1.27546	cold up vs hot
TCF7L2	0.000192128	0.000416458	1.27538	1.27538	cold up vs hot
LOC645332	0.00114945	0.00203017	1.27528	1.27528	cold up vs hot
PPPDE1	2.23E-05	5.95E-05	1.27516	1.27516	cold up vs hot
IQCE	0.00137334	0.00236189	1.27506	1.27506	cold up vs hot
DIS3	0.000228113	0.00048354	1.2749	1.2749	cold up vs hot
RPS15	0.000869943	0.00159445	1.2749	1.2749	cold up vs hot
MAPK8	0.00251771	0.00396053	1.27471	1.27471	cold up vs hot
C18orf55	4.38E-06	1.32E-05	1.27468	1.27468	cold up vs hot
RPL17	0.000582984	0.00111943	1.27456	1.27456	cold up vs hot
AKAP1	5.61E-05	0.000138944	1.27429	1.27429	cold up vs hot
BBS10	0.00248112	0.00391009	1.27412	1.27412	cold up vs hot
KIAA0753	0.000566752	0.00109244	1.27405	1.27405	cold up vs hot
ZNF584	7.98E-07	2.69E-06	1.27393	1.27393	cold up vs hot
CDC42BPA	0.00402297	0.00591232	1.27365	1.27365	cold up vs hot
LPPR2	0.00513415	0.00723735	1.27349	1.27349	cold up vs hot
NOMO1	0.000468737	0.000925375	1.27335	1.27335	cold up vs hot
PHC1	0.000892194	0.00162792	1.27321	1.27321	cold up vs hot
VPS37B	0.000152921	0.000342352	1.2732	1.2732	cold up vs hot
LLGL1	0.000144932	0.000326857	1.27294	1.27294	cold up vs hot
ACVR2A	0.00191908	0.00314941	1.27279	1.27279	cold up vs hot
TRMT1	1.24E-05	3.48E-05	1.27267	1.27267	cold up vs hot
OTUD6B	0.0055867	0.00774973	1.27267	1.27267	cold up vs hot
POLI	0.00727769	0.00969566	1.27267	1.27267	cold up vs hot
TTC5	1.01E-05	2.86E-05	1.27252	1.27252	cold up vs hot
NOTCH2	0.00303276	0.00466176	1.27252	1.27252	cold up vs hot
RPL29	0.000801908	0.00148603	1.2725	1.2725	cold up vs hot
SUPT3H	0.00462489	0.00664724	1.27218	1.27218	cold up vs hot
EFHC1	0.00503896	0.00712624	1.27208	1.27208	cold up vs hot
CRY1	0.000687071	0.0012923	1.2719	1.2719	cold up vs hot

PABPC3	0.00171191	0.00285392	1.27185	1.27185	cold up vs hot
MKI67IP	1.10E-05	3.11E-05	1.27176	1.27176	cold up vs hot
POLR1E	0.000212377	0.000455659	1.27163	1.27163	cold up vs hot
PDE8A	0.000962244	0.00174064	1.27161	1.27161	cold up vs hot
CSNK2A1	1.70E-06	5.48E-06	1.27156	1.27156	cold up vs hot
POP1	0.000863197	0.00158431	1.27118	1.27118	cold up vs hot
KLHDC5	2.77E-05	7.27E-05	1.27111	1.27111	cold up vs hot
PPM1F	0.000153028	0.000342395	1.27109	1.27109	cold up vs hot
RANBP1	9.82E-05	0.000230542	1.27097	1.27097	cold up vs hot
USP13	0.00211587	0.00342584	1.27091	1.27091	cold up vs hot
RPL4	0.000467287	0.00092363	1.27082	1.27082	cold up vs hot
RPL23P8	0.000884649	0.00161686	1.27073	1.27073	cold up vs hot
HSPBP1	0.000758747	0.00141286	1.27018	1.27018	cold up vs hot
ALDH18A1	1.21E-06	3.96E-06	1.2699	1.2699	cold up vs hot
MBD3	0.00322284	0.00491439	1.26944	1.26944	cold up vs hot
ZNF561	3.82E-05	9.78E-05	1.2693	1.2693	cold up vs hot
IFRD2	2.57E-05	6.81E-05	1.26916	1.26916	cold up vs hot
RPL3	0.000163151	0.000362411	1.26864	1.26864	cold up vs hot
EXOSC5	0.00136038	0.0023433	1.26854	1.26854	cold up vs hot
CCT2	0.000195852	0.000423406	1.26842	1.26842	cold up vs hot
GNPNAT1	0.000155513	0.000347477	1.26823	1.26823	cold up vs hot
CTBP2	0.000149467	0.000335692	1.26771	1.26771	cold up vs hot
LDHB	0.00128274	0.00222838	1.26735	1.26735	cold up vs hot
SMARCAD1	0.00583032	0.00803135	1.26719	1.26719	cold up vs hot
MED20	9.14E-05	0.000216322	1.26711	1.26711	cold up vs hot
PRMT3	0.00135295	0.00233317	1.267	1.267	cold up vs hot
RRP1B	5.99E-06	1.76E-05	1.26672	1.26672	cold up vs hot
SNHG6	0.00618675	0.00843847	1.26653	1.26653	cold up vs hot
MRPL45	2.94E-06	9.13E-06	1.26635	1.26635	cold up vs hot
AGPAT5	0.00187502	0.00308278	1.26565	1.26565	cold up vs hot
SGTA	3.32E-05	8.56E-05	1.2655	1.2655	cold up vs hot
ZSCAN20	5.99E-05	0.000147528	1.26548	1.26548	cold up vs hot
AEN	0.00282122	0.00437575	1.26539	1.26539	cold up vs hot
CAPN2	0.000482961	0.000948293	1.26534	1.26534	cold up vs hot
LSM11	0.00111483	0.00197775	1.26534	1.26534	cold up vs hot
RPS3	0.00265816	0.00415345	1.26531	1.26531	cold up vs hot
PREPL	0.000492555	0.000965679	1.26516	1.26516	cold up vs hot
MYL6B	0.000219111	0.000467645	1.26502	1.26502	cold up vs hot
AASDHPTT	0.000313425	0.000644291	1.26478	1.26478	cold up vs hot
IARS	6.06E-05	0.000149018	1.26477	1.26477	cold up vs hot
IARS2	3.07E-05	8.00E-05	1.26465	1.26465	cold up vs hot
ADNP2	1.37E-05	3.81E-05	1.26462	1.26462	cold up vs hot
NAV1	0.0072049	0.0096203	1.26459	1.26459	cold up vs hot
ZNF324	1.06E-06	3.51E-06	1.26456	1.26456	cold up vs hot
TRAF7	1.10E-05	3.10E-05	1.26454	1.26454	cold up vs hot
DDX31	5.34E-06	1.59E-05	1.26452	1.26452	cold up vs hot
SCFD2	0.000276851	0.000577103	1.2644	1.2644	cold up vs hot
TOMM34	0.000194302	0.000420582	1.2642	1.2642	cold up vs hot
MYO19	0.000112154	0.000260216	1.26408	1.26408	cold up vs hot
PSMB5	2.83E-06	8.81E-06	1.26402	1.26402	cold up vs hot
EIF3CL	0.0072222	0.0096355	1.26368	1.26368	cold up vs hot
NAA25	5.04E-05	0.000126197	1.26347	1.26347	cold up vs hot
KIAA1704	0.00323154	0.00492324	1.26336	1.26336	cold up vs hot
POLR3A	0.000137118	0.00031117	1.26319	1.26319	cold up vs hot
MCM4	0.00185383	0.00305538	1.26299	1.26299	cold up vs hot
PHF20L1	0.00160904	0.00270522	1.26261	1.26261	cold up vs hot
INTS1	0.00153685	0.00260059	1.26242	1.26242	cold up vs hot
OSBPL1A	0.00300241	0.00461945	1.26202	1.26202	cold up vs hot
IFT140	0.00055837	0.00107915	1.26181	1.26181	cold up vs hot
ZNF497	0.00357192	0.00535413	1.2617	1.2617	cold up vs hot
FBL	0.000439538	0.000873543	1.26157	1.26157	cold up vs hot
VKORC1	0.000165387	0.000366031	1.26142	1.26142	cold up vs hot
TCF3	0.00041526	0.000830095	1.26101	1.26101	cold up vs hot
C2orf3	0.00101956	0.00182862	1.26069	1.26069	cold up vs hot
LOC90784	0.000218675	0.000467022	1.26037	1.26037	cold up vs hot
KIAA0664	0.00141753	0.0024251	1.26037	1.26037	cold up vs hot
SPRED2	5.25E-05	0.000130927	1.26015	1.26015	cold up vs hot
CAMSAP1	1.56E-05	4.29E-05	1.25976	1.25976	cold up vs hot
MLLT1	0.000143575	0.000324245	1.25889	1.25889	cold up vs hot
MRPL4	0.000234341	0.000496097	1.25887	1.25887	cold up vs hot
C1QBP	0.000167259	0.000369026	1.2588	1.2588	cold up vs hot
UBQLN4	5.06E-05	0.000126601	1.25863	1.25863	cold up vs hot
ZNF197	0.0050531	0.00714159	1.25846	1.25846	cold up vs hot
BICD1	0.00631427	0.0085964	1.25838	1.25838	cold up vs hot
RRP1	6.34E-05	0.00015534	1.25804	1.25804	cold up vs hot
STK36	0.000136891	0.000310763	1.25799	1.25799	cold up vs hot
QSOX2	8.43E-05	0.000200743	1.2564	1.2564	cold up vs hot

CTU1	0.00361716	0.00541303	1.25623	1.25623	cold up vs hot
C1orf109	9.38E-05	0.000221251	1.25613	1.25613	cold up vs hot
NOLC1	6.98E-05	0.000169641	1.25596	1.25596	cold up vs hot
ZNF599	0.00111679	0.00198069	1.25562	1.25562	cold up vs hot
PHF14	0.000933481	0.00169331	1.25523	1.25523	cold up vs hot
SLC35E1	2.68E-09	1.17E-08	1.25513	1.25513	cold up vs hot
C20orf27	0.00201878	0.00329233	1.25508	1.25508	cold up vs hot
SMCR7L	1.08E-05	3.07E-05	1.25501	1.25501	cold up vs hot
ZFYVE9	0.00109711	0.00195429	1.25489	1.25489	cold up vs hot
RPL6	7.97E-05	0.000191035	1.25484	1.25484	cold up vs hot
ZNF664	0.000197198	0.000426173	1.25484	1.25484	cold up vs hot
TMX2	7.20E-06	2.09E-05	1.25474	1.25474	cold up vs hot
ZNF598	0.000474828	0.000935271	1.2545	1.2545	cold up vs hot
ASH1L	0.00038176	0.000768544	1.25449	1.25449	cold up vs hot
PHB2	3.28E-06	1.01E-05	1.25443	1.25443	cold up vs hot
ITSN1	0.000123908	0.000284856	1.25364	1.25364	cold up vs hot
CARS2	0.000776577	0.00144442	1.25337	1.25337	cold up vs hot
SUPT16H	1.36E-05	3.77E-05	1.2532	1.2532	cold up vs hot
ZNHIT6	0.000202161	0.000435746	1.25316	1.25316	cold up vs hot
BCS1L	2.44E-06	7.68E-06	1.25306	1.25306	cold up vs hot
ILF3	1.72E-10	8.32E-10	1.25297	1.25297	cold up vs hot
GART	1.17E-05	3.28E-05	1.25296	1.25296	cold up vs hot
CDC42BPB	0.000150516	0.000337795	1.25286	1.25286	cold up vs hot
SAMD4B	8.40E-06	2.42E-05	1.25279	1.25279	cold up vs hot
PPAT	0.00176855	0.00293112	1.25278	1.25278	cold up vs hot
WDR74	4.85E-05	0.000121706	1.25262	1.25262	cold up vs hot
LOC653113	0.00398982	0.00587418	1.25241	1.25241	cold up vs hot
LYRM4	0.000129514	0.000295662	1.2524	1.2524	cold up vs hot
CCDC77	0.000244227	0.000514356	1.2522	1.2522	cold up vs hot
ZNF295	0.0042612	0.00620417	1.25212	1.25212	cold up vs hot
PRR3	0.00271196	0.00422537	1.2518	1.2518	cold up vs hot
PHLDB1	0.00669209	0.00904849	1.2518	1.2518	cold up vs hot
ZNF7	6.22E-05	0.000152477	1.25169	1.25169	cold up vs hot
SLC39A9	4.95E-06	1.48E-05	1.25129	1.25129	cold up vs hot
KHSRP	1.20E-05	3.38E-05	1.2512	1.2512	cold up vs hot
CRK	9.81E-06	2.79E-05	1.25054	1.25054	cold up vs hot
CFDP1	0.000181831	0.000396244	1.2504	1.2504	cold up vs hot
RRP12	0.000695348	0.00130636	1.25034	1.25034	cold up vs hot
ESRRA	0.0019381	0.00317663	1.25032	1.25032	cold up vs hot
ABCD3	0.00385377	0.00570604	1.25032	1.25032	cold up vs hot
IMPACT	0.00148529	0.0025271	1.25015	1.25015	cold up vs hot
EIF3B	6.15E-05	0.000151072	1.24999	1.24999	cold up vs hot
METAP2	5.34E-05	0.000132854	1.2499	1.2499	cold up vs hot
TMEM201	0.00232066	0.00370412	1.24973	1.24973	cold up vs hot
ATP5B	0.000164781	0.000365061	1.24959	1.24959	cold up vs hot
PPME1	8.21E-05	0.000196297	1.24954	1.24954	cold up vs hot
TWISTNB	0.0017126	0.00285433	1.24906	1.24906	cold up vs hot
RABGGTB	0.000839123	0.00154577	1.24844	1.24844	cold up vs hot
CTPS	0.0011458	0.00202443	1.24838	1.24838	cold up vs hot
GNB2L1	0.00112413	0.00199208	1.24802	1.24802	cold up vs hot
POLR3B	0.00021258	0.000455795	1.24799	1.24799	cold up vs hot
TMEM181	0.00436949	0.00633316	1.24778	1.24778	cold up vs hot
RSL1D1	1.41E-05	3.90E-05	1.24759	1.24759	cold up vs hot
TSHZ1	0.000625023	0.00119174	1.24759	1.24759	cold up vs hot
TYW3	0.000501076	0.000980323	1.24751	1.24751	cold up vs hot
MTMR2	0.000870509	0.00159504	1.24736	1.24736	cold up vs hot
ZCCHC3	0.00010102	0.00181431	1.24711	1.24711	cold up vs hot
KIAA1609	9.73E-05	0.000228711	1.24698	1.24698	cold up vs hot
RCBTB1	0.00325785	0.00495755	1.24691	1.24691	cold up vs hot
C8orf38	0.00177307	0.00293711	1.24651	1.24651	cold up vs hot
PLA2G12A	0.00131611	0.00228067	1.24622	1.24622	cold up vs hot
NMD3	0.00329687	0.00500758	1.24579	1.24579	cold up vs hot
ZNF445	4.86E-05	0.000121939	1.2457	1.2457	cold up vs hot
NEIL2	0.000744689	0.00139145	1.24556	1.24556	cold up vs hot
ZNF57	0.000413863	0.000827557	1.24544	1.24544	cold up vs hot
MRPS2	0.00726232	0.00967913	1.24532	1.24532	cold up vs hot
C19orf55	0.000152336	0.000341431	1.24526	1.24526	cold up vs hot
TTC8	0.00210983	0.00341841	1.2448	1.2448	cold up vs hot
LIG3	0.000181674	0.000396035	1.24438	1.24438	cold up vs hot
C21orf57	0.00416369	0.00608214	1.24429	1.24429	cold up vs hot
MAK16	0.0072747	0.00969366	1.24424	1.24424	cold up vs hot
AP3D1	2.02E-06	6.43E-06	1.24408	1.24408	cold up vs hot
NCL	4.99E-07	1.73E-06	1.24344	1.24344	cold up vs hot
YLPM1	1.16E-05	3.28E-05	1.24337	1.24337	cold up vs hot
NME7	0.00116127	0.00204844	1.2431	1.2431	cold up vs hot
ZBTB45	0.000824344	0.00152154	1.24296	1.24296	cold up vs hot
CCDC123	2.73E-05	7.17E-05	1.24287	1.24287	cold up vs hot

C13orf37	0.00545299	0.00760305	1.2428	1.2428	cold up vs hot
RPS10	0.00231191	0.00369197	1.24267	1.24267	cold up vs hot
FERMT2	0.00744265	0.00987913	1.24198	1.24198	cold up vs hot
LRRC58	0.00234594	0.00373354	1.24181	1.24181	cold up vs hot
CDYL	0.00192496	0.00315747	1.24172	1.24172	cold up vs hot
ZNF16	6.68E-05	0.0001627	1.24141	1.24141	cold up vs hot
ERC1	0.00237003	0.00376452	1.24141	1.24141	cold up vs hot
NFKBIL1	0.00087397	0.00160048	1.24123	1.24123	cold up vs hot
C4orf14	3.10E-05	8.05E-05	1.24073	1.24073	cold up vs hot
TAF11	0.00099113	0.00178646	1.24069	1.24069	cold up vs hot
DHX34	0.00063504	0.00120801	1.24014	1.24014	cold up vs hot
RPL27	0.000726553	0.0013599	1.24014	1.24014	cold up vs hot
SLC25A3	6.18E-06	1.81E-05	1.23998	1.23998	cold up vs hot
KAT2A	0.00114292	0.00201989	1.2399	1.2399	cold up vs hot
ZNF397	0.00695512	0.0093422	1.23976	1.23976	cold up vs hot
LSM7	0.00173717	0.00288938	1.23968	1.23968	cold up vs hot
RAD18	0.0037897	0.00563034	1.23956	1.23956	cold up vs hot
JARID2	0.00496963	0.00705265	1.2395	1.2395	cold up vs hot
RBM26	0.000750557	0.00140121	1.23941	1.23941	cold up vs hot
ZNF517	0.00368692	0.00550144	1.23925	1.23925	cold up vs hot
C2orf86	0.00138317	0.00237691	1.2392	1.2392	cold up vs hot
SMYD3	0.00184147	0.00303745	1.23919	1.23919	cold up vs hot
AGBL5	0.000434766	0.000865378	1.23909	1.23909	cold up vs hot
SETDB1	0.000453217	0.000897995	1.23889	1.23889	cold up vs hot
DYM	1.21E-05	3.39E-05	1.23885	1.23885	cold up vs hot
TNKS1BP1	0.00128052	0.0022263	1.23876	1.23876	cold up vs hot
TMEM33	9.05E-05	0.000214432	1.23874	1.23874	cold up vs hot
MRPL15	0.000663159	0.00125347	1.23864	1.23864	cold up vs hot
C16orf55	0.000934908	0.00169542	1.23847	1.23847	cold up vs hot
KDM4B	0.000153843	0.0003441	1.23813	1.23813	cold up vs hot
SRD5A1	0.00352567	0.00530049	1.23811	1.23811	cold up vs hot
ZNF579	0.00359316	0.00538245	1.23801	1.23801	cold up vs hot
LEPRE1	0.00449658	0.0064871	1.23783	1.23783	cold up vs hot
VARS2	0.00101838	0.0018275	1.23771	1.23771	cold up vs hot
TASP1	0.00096808	0.00174975	1.23769	1.23769	cold up vs hot
CCDC51	0.000265126	0.000554613	1.23747	1.23747	cold up vs hot
C11orf57	0.00125275	0.00218267	1.23744	1.23744	cold up vs hot
DCAF13	0.00202132	0.00329483	1.23724	1.23724	cold up vs hot
CEBPZ	0.00586124	0.00806714	1.23671	1.23671	cold up vs hot
PCGF2	0.00232779	0.00371074	1.23664	1.23664	cold up vs hot
RPS7	0.0029782	0.00458761	1.23635	1.23635	cold up vs hot
LOC728643	0.000319557	0.000655449	1.23634	1.23634	cold up vs hot
C4orf43	0.000359381	0.000727306	1.23621	1.23621	cold up vs hot
POFUT1	1.51E-05	4.15E-05	1.23614	1.23614	cold up vs hot
RSL24D1	0.00571562	0.00789579	1.23596	1.23596	cold up vs hot
NOB1	9.22E-06	2.64E-05	1.23566	1.23566	cold up vs hot
ATF2	0.00514654	0.00724707	1.23562	1.23562	cold up vs hot
XPOT	0.00344789	0.00520065	1.23556	1.23556	cold up vs hot
RPS17	0.00403653	0.00592557	1.23508	1.23508	cold up vs hot
DCAF4	0.00163518	0.00274564	1.23464	1.23464	cold up vs hot
IDI2	0.00243055	0.0038494	1.2345	1.2345	cold up vs hot
GANAB	0.000180667	0.000394365	1.23448	1.23448	cold up vs hot
ESD	3.70E-05	9.49E-05	1.2342	1.2342	cold up vs hot
RPE	0.000322746	0.00066116	1.23416	1.23416	cold up vs hot
MBTPS2	0.00313774	0.00480728	1.23363	1.23363	cold up vs hot
TSEN2	1.00E-05	2.86E-05	1.23354	1.23354	cold up vs hot
SDCCAG3	0.000159682	0.000355576	1.23347	1.23347	cold up vs hot
UBFD1	4.64E-06	1.39E-05	1.23327	1.23327	cold up vs hot
TUBGCP4	0.00069982	0.00131439	1.23287	1.23287	cold up vs hot
POLDIP3	0.00034724	0.00070646	1.23283	1.23283	cold up vs hot
RPL18	0.00361439	0.00541116	1.23268	1.23268	cold up vs hot
PDDC1	0.00110254	0.00196127	1.23249	1.23249	cold up vs hot
MICALL1	0.00155433	0.00262725	1.23241	1.23241	cold up vs hot
MPP5	0.00694322	0.00933006	1.23221	1.23221	cold up vs hot
RPL13A	0.00201194	0.00328501	1.23218	1.23218	cold up vs hot
ZBTB39	0.000903201	0.00164616	1.23215	1.23215	cold up vs hot
POLR3E	3.38E-06	1.04E-05	1.23214	1.23214	cold up vs hot
RPSAP58	0.0010461	0.00187107	1.23204	1.23204	cold up vs hot
TMED10P1	0.000908518	0.00165354	1.23187	1.23187	cold up vs hot
HN1L	3.29E-06	1.01E-05	1.23181	1.23181	cold up vs hot
PSKH1	0.00301558	0.00463753	1.23139	1.23139	cold up vs hot
CLPB	0.00496434	0.00704666	1.23099	1.23099	cold up vs hot
MLST8	0.00266209	0.00415858	1.23098	1.23098	cold up vs hot
MSI2	0.00461638	0.00663648	1.23067	1.23067	cold up vs hot
TMED1	0.000108336	0.000252166	1.2305	1.2305	cold up vs hot
LRRC8A	0.00345955	0.00521343	1.22996	1.22996	cold up vs hot
IFT46	0.00164677	0.00276366	1.22994	1.22994	cold up vs hot

SRPK1	0.00268743	0.00419316	1.22993	1.22993	cold up vs hot
RNMT	0.0023234	0.00370649	1.22988	1.22988	cold up vs hot
TMEM68	0.00149486	0.00253941	1.22982	1.22982	cold up vs hot
ELP2	0.000172919	0.000380123	1.22978	1.22978	cold up vs hot
AFG3L2	0.00418857	0.00611301	1.22943	1.22943	cold up vs hot
TAF1B	0.00540261	0.00754844	1.22932	1.22932	cold up vs hot
RNASEH2A	0.00293619	0.00453253	1.22916	1.22916	cold up vs hot
BRMS1L	0.00244356	0.00386345	1.22893	1.22893	cold up vs hot
PABPC4	0.00043835	0.000871715	1.22868	1.22868	cold up vs hot
NUP133	0.000291016	0.000602781	1.22859	1.22859	cold up vs hot
ARMC6	0.00110622	0.00196622	1.22834	1.22834	cold up vs hot
ZNF317	1.02E-08	4.21E-08	1.22828	1.22828	cold up vs hot
ERCC2	0.00118528	0.00208156	1.22826	1.22826	cold up vs hot
RNF219	0.00219694	0.00353693	1.22824	1.22824	cold up vs hot
SLC35B2	0.00433217	0.00628609	1.22823	1.22823	cold up vs hot
ZNF768	0.000266543	0.000556904	1.22776	1.22776	cold up vs hot
PARVA	0.00351751	0.00529099	1.22768	1.22768	cold up vs hot
PA2G4P4	0.00070421	0.00132225	1.22753	1.22753	cold up vs hot
KIF9	0.0038453	0.00569868	1.22749	1.22749	cold up vs hot
RBM8A	2.62E-06	8.19E-06	1.22746	1.22746	cold up vs hot
PTOV1	0.000846471	0.00155843	1.22744	1.22744	cold up vs hot
BBS1	0.00646819	0.00877848	1.22738	1.22738	cold up vs hot
MRPS26	0.00109769	0.00195477	1.22736	1.22736	cold up vs hot
HNRNPA1L	0.000167571	0.000369362	1.2273	1.2273	cold up vs hot
ZNF543	0.000498262	0.00097628	1.22711	1.22711	cold up vs hot
INCENP	0.00533563	0.00746172	1.22707	1.22707	cold up vs hot
GCN1L1	5.42E-05	0.000134686	1.22688	1.22688	cold up vs hot
VPS36	0.00563673	0.0078125	1.22687	1.22687	cold up vs hot
GATC	0.00312482	0.00478973	1.22683	1.22683	cold up vs hot
C14orf118	0.00165917	0.00277877	1.22661	1.22661	cold up vs hot
THOP1	0.00245733	0.00388201	1.22648	1.22648	cold up vs hot
CCT6A	3.87E-05	9.89E-05	1.22604	1.22604	cold up vs hot
KIAA1429	0.000348398	0.000708152	1.22595	1.22595	cold up vs hot
GYS1	0.0060183	0.00825025	1.22564	1.22564	cold up vs hot
TTL	0.00261376	0.00408897	1.2253	1.2253	cold up vs hot
SH3BP5L	0.00041949	0.000837782	1.22529	1.22529	cold up vs hot
DDB1	0.000167221	0.000369026	1.22514	1.22514	cold up vs hot
SBF2	0.0020385	0.00331951	1.22514	1.22514	cold up vs hot
POFUT2	0.00176587	0.00292817	1.22491	1.22491	cold up vs hot
AHCTF1	0.00268546	0.00419209	1.22486	1.22486	cold up vs hot
TPI1	0.00162168	0.00272507	1.2248	1.2248	cold up vs hot
FUZ	0.00501078	0.007091	1.22467	1.22467	cold up vs hot
ITFG3	0.00214726	0.00346978	1.22456	1.22456	cold up vs hot
ZNF2	4.31E-06	1.30E-05	1.22453	1.22453	cold up vs hot
EEF1E1	0.00120604	0.00211314	1.22413	1.22413	cold up vs hot
RPS19	0.00555815	0.00771669	1.22412	1.22412	cold up vs hot
FBXO45	0.00104091	0.00186282	1.22394	1.22394	cold up vs hot
GTF3C3	8.29E-05	0.000198013	1.2235	1.2235	cold up vs hot
VAPB	0.000200252	0.000432202	1.22343	1.22343	cold up vs hot
PMS2CL	0.00205135	0.00333794	1.22343	1.22343	cold up vs hot
MIPEP	0.00150097	0.00254731	1.22341	1.22341	cold up vs hot
BMP1	0.00716817	0.00958693	1.22327	1.22327	cold up vs hot
EPRS	0.000528894	0.00102919	1.22282	1.22282	cold up vs hot
HERC2	0.00203437	0.00331444	1.22282	1.22282	cold up vs hot
FAM109A	0.0062197	0.00847649	1.22271	1.22271	cold up vs hot
ANKRD54	0.0040298	0.00591887	1.22258	1.22258	cold up vs hot
GRLF1	0.000146561	0.000330073	1.2223	1.2223	cold up vs hot
HLC5	0.00409272	0.00599861	1.22207	1.22207	cold up vs hot
VGLL4	0.00227097	0.00363481	1.22195	1.22195	cold up vs hot
SENP3	1.17E-05	3.31E-05	1.22191	1.22191	cold up vs hot
BOD1	0.0006774	0.00127706	1.2218	1.2218	cold up vs hot
GSTCD	0.00717123	0.00958906	1.22164	1.22164	cold up vs hot
POLR1D	0.000136535	0.000310062	1.22126	1.22126	cold up vs hot
C16orf46	0.00572958	0.00791095	1.22088	1.22088	cold up vs hot
FOXO3B	0.00364598	0.00545282	1.22085	1.22085	cold up vs hot
NME1	0.0042118	0.00614143	1.22081	1.22081	cold up vs hot
PIAS4	0.000147615	0.000332218	1.22072	1.22072	cold up vs hot
ZFP1	0.00232384	0.00370649	1.22052	1.22052	cold up vs hot
B3GALNT2	0.00520375	0.00730861	1.2205	1.2205	cold up vs hot
RAB11FIP3	0.000340211	0.000693239	1.21984	1.21984	cold up vs hot
C14orf126	0.00103529	0.00185479	1.21982	1.21982	cold up vs hot
KIFC3	0.00651318	0.00883403	1.21973	1.21973	cold up vs hot
KATNB1	0.00253223	0.00397858	1.21966	1.21966	cold up vs hot
ACBD6	7.61E-05	0.000183368	1.21955	1.21955	cold up vs hot
TMEM168	0.0034558	0.00520897	1.21946	1.21946	cold up vs hot
PLEKHM3	0.00141349	0.00242009	1.21944	1.21944	cold up vs hot
ERGIC3	0.000354253	0.000718486	1.21941	1.21941	cold up vs hot

ALS2	0.00067678	0.00127626	1.2194	1.2194	cold up vs hot
DHX30	2.53E-05	6.70E-05	1.21933	1.21933	cold up vs hot
DNAL4	0.00121534	0.00212714	1.21926	1.21926	cold up vs hot
C20orf11	1.63E-05	4.46E-05	1.21908	1.21908	cold up vs hot
C13orf1	0.000490055	0.000961066	1.21889	1.21889	cold up vs hot
FANCE	0.00548081	0.00763042	1.21886	1.21886	cold up vs hot
RRP9	0.00130089	0.0022557	1.21877	1.21877	cold up vs hot
SYNJ2BP	0.00167162	0.00279531	1.21854	1.21854	cold up vs hot
HMG20A	0.00398972	0.00587418	1.21822	1.21822	cold up vs hot
ZNF565	0.00327637	0.00498108	1.21813	1.21813	cold up vs hot
BRD3	0.00341399	0.00515547	1.21755	1.21755	cold up vs hot
PARS2	0.00110488	0.00196476	1.21752	1.21752	cold up vs hot
USP46	0.00160379	0.00269917	1.21749	1.21749	cold up vs hot
INPP5A	0.000549064	0.00106337	1.21748	1.21748	cold up vs hot
CUL4A	0.000629564	0.00119864	1.21748	1.21748	cold up vs hot
DCUN1D5	0.0056854	0.00786827	1.21743	1.21743	cold up vs hot
GTF2F1	6.86E-06	2.00E-05	1.21732	1.21732	cold up vs hot
TRMT6	0.00272685	0.00424654	1.21718	1.21718	cold up vs hot
CCDC43	0.00125727	0.00218937	1.21712	1.21712	cold up vs hot
PPIL1	0.00218488	0.00352447	1.21703	1.21703	cold up vs hot
PIAS2	0.000612002	0.00117067	1.21691	1.21691	cold up vs hot
SETMAR	0.000610521	0.00116887	1.21687	1.21687	cold up vs hot
ARHGGEF7	0.000307224	0.00063214	1.21666	1.21666	cold up vs hot
STIP1	0.00057065	0.00109865	1.21663	1.21663	cold up vs hot
EEF1B2	0.00243436	0.00385357	1.21648	1.21648	cold up vs hot
COPS8	0.0011408	0.00201669	1.21638	1.21638	cold up vs hot
MAP2K7	4.13E-05	0.000104958	1.21637	1.21637	cold up vs hot
ILF2	2.09E-05	5.63E-05	1.21632	1.21632	cold up vs hot
NOL10	2.99E-05	7.78E-05	1.2161	1.2161	cold up vs hot
SLC30A9	0.00098975	0.00178447	1.21605	1.21605	cold up vs hot
DHX15	3.94E-05	0.000100572	1.21595	1.21595	cold up vs hot
PSMG1	0.00133732	0.00231211	1.21582	1.21582	cold up vs hot
ARHGGEF12	0.00444395	0.00642465	1.21579	1.21579	cold up vs hot
EIF3H	0.00136272	0.0023467	1.21571	1.21571	cold up vs hot
CTU2	0.00529461	0.00740912	1.21554	1.21554	cold up vs hot
HIRA	8.33E-05	0.000198669	1.21543	1.21543	cold up vs hot
IRF2BP1	0.00396537	0.00584609	1.21529	1.21529	cold up vs hot
MEN1	0.000393437	0.00078986	1.21518	1.21518	cold up vs hot
ZNF621	0.00341963	0.00516281	1.21516	1.21516	cold up vs hot
DCTPP1	9.99E-05	0.000234008	1.21515	1.21515	cold up vs hot
MECR	0.000405254	0.000811337	1.21509	1.21509	cold up vs hot
WBP11P1	0.00330232	0.00501353	1.21509	1.21509	cold up vs hot
CLASP1	5.53E-05	0.000137264	1.21502	1.21502	cold up vs hot
SNRPE	0.0016585	0.00277877	1.21496	1.21496	cold up vs hot
PLCB3	0.00258851	0.00405367	1.21492	1.21492	cold up vs hot
RPS16	0.00279921	0.00434471	1.21492	1.21492	cold up vs hot
TAF2	0.00487407	0.00694421	1.21481	1.21481	cold up vs hot
ATIC	0.000125712	0.000288454	1.21448	1.21448	cold up vs hot
RPSA	0.00248145	0.00391009	1.21407	1.21407	cold up vs hot
C14orf101	0.00401675	0.00590451	1.21379	1.21379	cold up vs hot
NUP35	0.000917951	0.00166838	1.21336	1.21336	cold up vs hot
KIAA1143	0.00253777	0.0039844	1.21335	1.21335	cold up vs hot
CHAF1A	0.00487291	0.00694407	1.21325	1.21325	cold up vs hot
DMWD	0.0012047	0.00211134	1.21298	1.21298	cold up vs hot
EXOSC2	0.000355304	0.000720396	1.21296	1.21296	cold up vs hot
TRUB2	0.000786024	0.00146032	1.21288	1.21288	cold up vs hot
HDAC2	0.00170574	0.00284508	1.21287	1.21287	cold up vs hot
ZBTB9	0.00222038	0.0035699	1.21286	1.21286	cold up vs hot
NOP14	2.25E-05	6.02E-05	1.21282	1.21282	cold up vs hot
EIF4A1	0.000206732	0.000444863	1.21263	1.21263	cold up vs hot
DGKD	0.00531312	0.00743183	1.2122	1.2122	cold up vs hot
PIGN	0.00444443	0.00642465	1.21211	1.21211	cold up vs hot
RMND5A	0.000998559	0.00179687	1.21202	1.21202	cold up vs hot
ECSIT	0.00136578	0.00235136	1.21189	1.21189	cold up vs hot
ANKRD57	0.00742999	0.00986634	1.21182	1.21182	cold up vs hot
POLG2	0.00180176	0.00298161	1.21176	1.21176	cold up vs hot
FARSB	9.53E-05	0.000224452	1.21154	1.21154	cold up vs hot
PTPN11	0.00122371	0.00213892	1.21133	1.21133	cold up vs hot
ANKRD17	0.000127173	0.00029103	1.21124	1.21124	cold up vs hot
TADA1	0.00288081	0.00445758	1.21114	1.21114	cold up vs hot
WDR46	0.00329356	0.00500489	1.21112	1.21112	cold up vs hot
CCDC124	0.00568965	0.0078716	1.211	1.211	cold up vs hot
BCL9	0.00555619	0.00771562	1.21069	1.21069	cold up vs hot
CNTR0B	0.000203047	0.000437367	1.21067	1.21067	cold up vs hot
UBXN7	0.0073274	0.00975392	1.21032	1.21032	cold up vs hot
TRMT61A	0.0051111	0.00721107	1.21025	1.21025	cold up vs hot
RPUSD4	0.000315849	0.00064866	1.20998	1.20998	cold up vs hot

NGAMT1	0.00527308	0.0073885	1.20974	1.20974	cold up vs hot
FKTN	0.00425877	0.00620299	1.20952	1.20952	cold up vs hot
IP09	0.000304361	0.000627237	1.20948	1.20948	cold up vs hot
C3orf26	0.00148625	0.00252808	1.20945	1.20945	cold up vs hot
ASAP2	0.00697531	0.00936354	1.20944	1.20944	cold up vs hot
ANKRD11	7.68E-05	0.000184587	1.20941	1.20941	cold up vs hot
DNMBP	0.00394523	0.00582298	1.20938	1.20938	cold up vs hot
DNAJB1	0.000810213	0.00149929	1.20905	1.20905	cold up vs hot
PFDN2	0.00301149	0.00463233	1.20895	1.20895	cold up vs hot
TMEM184C	0.000223379	0.000474892	1.20894	1.20894	cold up vs hot
CCT8	3.40E-05	8.74E-05	1.20866	1.20866	cold up vs hot
TXNRD2	0.00483015	0.00689518	1.20851	1.20851	cold up vs hot
CYB5D1	0.00271755	0.00423306	1.20791	1.20791	cold up vs hot
ZADH2	0.00168565	0.00281517	1.20782	1.20782	cold up vs hot
YARS2	1.76E-05	4.78E-05	1.2078	1.2078	cold up vs hot
TIMM9	0.000164423	0.000364392	1.20775	1.20775	cold up vs hot
FBXL19	0.00485802	0.00692739	1.20769	1.20769	cold up vs hot
SCAP	0.000502131	0.000981798	1.20749	1.20749	cold up vs hot
DHX40	0.00258791	0.00405367	1.20747	1.20747	cold up vs hot
TP53BP2	0.000780438	0.00145119	1.20686	1.20686	cold up vs hot
MTX2	0.000241631	0.00050971	1.20652	1.20652	cold up vs hot
GIT1	0.00332132	0.00503535	1.20648	1.20648	cold up vs hot
PIP5K1A	0.00024681	0.00051946	1.20626	1.20626	cold up vs hot
FAM20B	0.00245702	0.00388201	1.20626	1.20626	cold up vs hot
NHP2	0.00121693	0.00212902	1.20598	1.20598	cold up vs hot
CKS1B	0.00338577	0.00511998	1.20571	1.20571	cold up vs hot
MRP535	0.000556279	0.00107575	1.20564	1.20564	cold up vs hot
ABCE1	0.00223061	0.00358054	1.20556	1.20556	cold up vs hot
PABPC1	0.00707132	0.00947683	1.20543	1.20543	cold up vs hot
ATXN7L3B	0.000301662	0.000622461	1.20519	1.20519	cold up vs hot
SIK2	0.00469645	0.00673378	1.20496	1.20496	cold up vs hot
C16orf91	0.000482185	0.00094791	1.20488	1.20488	cold up vs hot
MCAT	0.00509462	0.00719094	1.20474	1.20474	cold up vs hot
FDX1L	0.00258872	0.00405367	1.20466	1.20466	cold up vs hot
DPH5	0.000654278	0.00123883	1.20452	1.20452	cold up vs hot
LETM1	0.00068137	0.00128306	1.20434	1.20434	cold up vs hot
TTC19	0.00277713	0.00431616	1.20428	1.20428	cold up vs hot
KIAA0831	0.00270853	0.00422103	1.20421	1.20421	cold up vs hot
ZMYND8	0.00547898	0.0076295	1.20376	1.20376	cold up vs hot
WRB	0.000675161	0.00127431	1.2034	1.2034	cold up vs hot
GPR89A	0.000295292	0.000611056	1.20327	1.20327	cold up vs hot
POLR3H	0.00234652	0.00373354	1.20324	1.20324	cold up vs hot
ZNF343	0.000614481	0.00117507	1.2029	1.2029	cold up vs hot
WRNIP1	8.28E-05	0.000197779	1.20265	1.20265	cold up vs hot
ZNF785	0.00559672	0.00776199	1.20236	1.20236	cold up vs hot
CS	0.000158434	0.000353203	1.2022	1.2022	cold up vs hot
BRD4	0.000146153	0.000329383	1.20217	1.20217	cold up vs hot
PIP4K2B	6.18E-05	0.000151783	1.20199	1.20199	cold up vs hot
OLA1	0.000398126	0.000798291	1.20198	1.20198	cold up vs hot
PLEKHA9	0.00183125	0.00302428	1.20183	1.20183	cold up vs hot
FRG1B	0.00329516	0.00500614	1.20171	1.20171	cold up vs hot
KDM3A	0.000475247	0.000935412	1.20168	1.20168	cold up vs hot
NAF1	2.82E-05	7.38E-05	1.20164	1.20164	cold up vs hot
MUTED	0.00710144	0.00950939	1.20145	1.20145	cold up vs hot
SEH1L	0.00206627	0.00335636	1.20127	1.20127	cold up vs hot
NAE1	0.00121904	0.00213191	1.20113	1.20113	cold up vs hot
TRIM13	0.00134023	0.00231591	1.20113	1.20113	cold up vs hot
ATG9A	0.000161006	0.000358158	1.20107	1.20107	cold up vs hot
HNRNPA1	0.00167782	0.00280425	1.20047	1.20047	cold up vs hot
C20orf20	0.00166813	0.00279018	1.20018	1.20018	cold up vs hot
NKIRAS2	0.00013775	0.000312495	1.20017	1.20017	cold up vs hot
ACLY	0.000175324	0.000384566	1.19995	1.19995	cold up vs hot
PKP4	0.00176271	0.00292366	1.19983	1.19983	cold up vs hot
ZNF416	0.00198448	0.00324613	1.19981	1.19981	cold up vs hot
TMEM120B	0.000283306	0.000589121	1.19928	1.19928	cold up vs hot
PEX5	9.09E-05	0.000215216	1.19924	1.19924	cold up vs hot
MDH2	0.00240692	0.00381475	1.19915	1.19915	cold up vs hot
SRRD	0.00448764	0.00647707	1.199	1.199	cold up vs hot
EIF3A	0.000791339	0.00146811	1.19895	1.19895	cold up vs hot
TCTN3	0.000107871	0.000251442	1.19892	1.19892	cold up vs hot
C19orf29	0.00100632	0.00180834	1.19891	1.19891	cold up vs hot
BTBD7	0.00230133	0.00367777	1.19867	1.19867	cold up vs hot
SFRS2B	0.00465586	0.0066844	1.19867	1.19867	cold up vs hot
FANCC	0.00286842	0.00444157	1.19864	1.19864	cold up vs hot
VKORC1L1	0.00197756	0.00323642	1.19833	1.19833	cold up vs hot
ZFP64	0.000100093	0.000234457	1.198	1.198	cold up vs hot
C3orf31	0.000241875	0.000510061	1.19788	1.19788	cold up vs hot

SETD4	0.000561457	0.00108351	1.19778	1.19778	cold up vs hot
SPNS1	0.00492721	0.00701227	1.19772	1.19772	cold up vs hot
DLST	9.09E-05	0.000215281	1.19768	1.19768	cold up vs hot
PTDSS1	0.000709876	0.00133193	1.19756	1.19756	cold up vs hot
FAM200B	0.00633845	0.00862751	1.19743	1.19743	cold up vs hot
UPF3A	0.00470982	0.00675005	1.19739	1.19739	cold up vs hot
TUBGCP3	0.000654872	0.0012396	1.19719	1.19719	cold up vs hot
MBTPS1	0.000339001	0.000691853	1.19707	1.19707	cold up vs hot
PIGW	0.00153038	0.00259234	1.197	1.197	cold up vs hot
SMYD2	0.00241275	0.00382307	1.19697	1.19697	cold up vs hot
METTL2B	0.00332988	0.00504481	1.19689	1.19689	cold up vs hot
EDC3	0.000139174	0.000315177	1.19686	1.19686	cold up vs hot
METTL2A	0.000220786	0.000469903	1.19683	1.19683	cold up vs hot
PPRC1	0.00058841	0.00112852	1.19676	1.19676	cold up vs hot
HMGXB4	0.0051466	0.00724707	1.1967	1.1967	cold up vs hot
ZNF587	0.00737288	0.00980048	1.19664	1.19664	cold up vs hot
LASS2	0.000821457	0.00151709	1.19653	1.19653	cold up vs hot
PRPF4	0.00037518	0.000756464	1.1961	1.1961	cold up vs hot
CIAPIN1	0.000330002	0.000675176	1.19591	1.19591	cold up vs hot
RPL41	0.000680756	0.00128264	1.19583	1.19583	cold up vs hot
BCL2L2	0.00440475	0.00637577	1.19521	1.19521	cold up vs hot
FAM131A	0.00516119	0.00725978	1.19517	1.19517	cold up vs hot
GRK4	0.00590105	0.00811509	1.19475	1.19475	cold up vs hot
ATN1	0.00147737	0.00251429	1.19439	1.19439	cold up vs hot
TGS1	0.00444406	0.00642465	1.19435	1.19435	cold up vs hot
PCNXL3	0.00167307	0.00279702	1.19434	1.19434	cold up vs hot
XRN2	0.00187422	0.00308278	1.19433	1.19433	cold up vs hot
MAVS	0.000662288	0.00125255	1.19394	1.19394	cold up vs hot
ZNF236	0.000481276	0.000946694	1.19371	1.19371	cold up vs hot
NUPL1	0.00227111	0.00363481	1.19365	1.19365	cold up vs hot
STT3A	0.0017466	0.00290284	1.19363	1.19363	cold up vs hot
GAS8	0.00646443	0.00877521	1.19344	1.19344	cold up vs hot
ZNF3	0.00210242	0.00340745	1.1934	1.1934	cold up vs hot
RCOR1	0.000824567	0.00152154	1.19321	1.19321	cold up vs hot
C14orf135	0.00425008	0.00619171	1.19284	1.19284	cold up vs hot
DHODH	0.00143749	0.00245603	1.19275	1.19275	cold up vs hot
CTNND1	0.0019198	0.0031498	1.19265	1.19265	cold up vs hot
C2orf44	0.000352976	0.000716566	1.19253	1.19253	cold up vs hot
GGCT	0.00206283	0.00335244	1.1919	1.1919	cold up vs hot
NOP2	0.00245909	0.00388236	1.19188	1.19188	cold up vs hot
C11orf84	0.00753223	0.00996965	1.19176	1.19176	cold up vs hot
BPTF	0.00509037	0.00718649	1.1916	1.1916	cold up vs hot
MRT04	0.000928797	0.00168622	1.19149	1.19149	cold up vs hot
LETMD1	0.00547628	0.00762737	1.1914	1.1914	cold up vs hot
ZFP91	0.00320845	0.00490065	1.19124	1.19124	cold up vs hot
YRDC	0.00304438	0.00467741	1.19123	1.19123	cold up vs hot
CCT4	0.000154773	0.000346062	1.19117	1.19117	cold up vs hot
RPL14	0.00622651	0.008484	1.19109	1.19109	cold up vs hot
KDM5A	0.00173243	0.00288224	1.191	1.191	cold up vs hot
ALG6	0.00431669	0.00626916	1.19095	1.19095	cold up vs hot
C1orf124	0.00138697	0.00238092	1.19082	1.19082	cold up vs hot
DHX37	0.00349158	0.00525684	1.19031	1.19031	cold up vs hot
ZSWIM1	0.000356491	0.000721905	1.18988	1.18988	cold up vs hot
UCKL1	0.0039775	0.00586	1.18968	1.18968	cold up vs hot
POGZ	0.00324973	0.00494635	1.18947	1.18947	cold up vs hot
HDGFRP2	0.00106354	0.00189915	1.18933	1.18933	cold up vs hot
CARM1	0.000382799	0.000769929	1.18887	1.18887	cold up vs hot
YEATS2	0.00110877	0.00196913	1.18882	1.18882	cold up vs hot
C19orf2	0.00146447	0.00249494	1.18873	1.18873	cold up vs hot
CNPY2	0.00185795	0.0030614	1.18864	1.18864	cold up vs hot
CSRP2BP	0.000339658	0.000692761	1.18851	1.18851	cold up vs hot
COG8	0.000366991	0.000741473	1.18826	1.18826	cold up vs hot
RYK	0.00719484	0.00961144	1.18766	1.18766	cold up vs hot
SUGT1	0.00152312	0.00258138	1.18761	1.18761	cold up vs hot
SMAD4	0.00389425	0.00575946	1.18753	1.18753	cold up vs hot
ZNF326	0.00157458	0.00265618	1.1871	1.1871	cold up vs hot
CSNK1G2	0.00639542	0.00869752	1.18688	1.18688	cold up vs hot
RUVBL1	0.00309117	0.00474037	1.18686	1.18686	cold up vs hot
TSC2	0.000753053	0.00140467	1.18679	1.18679	cold up vs hot
PPP2R1A	0.000265358	0.000554742	1.18608	1.18608	cold up vs hot
C16orf80	0.000243715	0.000513608	1.18606	1.18606	cold up vs hot
UBA52	0.00216274	0.00349048	1.1856	1.1856	cold up vs hot
SERBP1	0.000321952	0.000659741	1.18535	1.18535	cold up vs hot
AFMID	0.00522911	0.0073395	1.18515	1.18515	cold up vs hot
MNAT1	0.0068925	0.00927335	1.18469	1.18469	cold up vs hot
MAPK1	0.00125176	0.00218152	1.18439	1.18439	cold up vs hot
BBS7	0.00739262	0.00982271	1.18427	1.18427	cold up vs hot

RPL15	0.00243502	0.00385367	1.18424	1.18424	cold up vs hot
C14orf21	0.00744244	0.00987913	1.18409	1.18409	cold up vs hot
PDCD2L	0.00117131	0.00206169	1.18402	1.18402	cold up vs hot
HECTD1	0.00378254	0.00562227	1.18393	1.18393	cold up vs hot
PRR12	0.00377807	0.0056169	1.18381	1.18381	cold up vs hot
UBAP2L	0.000788587	0.00146425	1.1835	1.1835	cold up vs hot
BANP	0.00125098	0.00218075	1.18349	1.18349	cold up vs hot
MRPL42	0.00428692	0.00623286	1.18296	1.18296	cold up vs hot
CCDC130	0.00320118	0.00489413	1.1829	1.1829	cold up vs hot
FASTKD1	0.00610622	0.00835673	1.18285	1.18285	cold up vs hot
CDC37	7.82E-05	0.000187843	1.18282	1.18282	cold up vs hot
OCRL	0.00255787	0.00401211	1.18282	1.18282	cold up vs hot
C1orf43	0.00056023	0.00108211	1.18278	1.18278	cold up vs hot
RNMTL1	0.00227466	0.00363871	1.1822	1.1822	cold up vs hot
NIP7	0.00380361	0.00564716	1.18161	1.18161	cold up vs hot
MAZ	0.00169978	0.00283659	1.18149	1.18149	cold up vs hot
CARKD	0.00200049	0.00326903	1.18149	1.18149	cold up vs hot
PARP2	0.0022725	0.00363615	1.1808	1.1808	cold up vs hot
CYTH2	0.000951286	0.00172178	1.18077	1.18077	cold up vs hot
DNM1L	0.00465424	0.00668353	1.18065	1.18065	cold up vs hot
SLC35B4	0.00482368	0.00688746	1.18022	1.18022	cold up vs hot
DDX1	0.00114967	0.00203017	1.1799	1.1799	cold up vs hot
SIN3B	0.000183669	0.000399607	1.17985	1.17985	cold up vs hot
PIGF	0.00322157	0.00491439	1.17983	1.17983	cold up vs hot
SCAMP4	0.00557842	0.00774154	1.17981	1.17981	cold up vs hot
PA2G4	0.000482658	0.000948268	1.17923	1.17923	cold up vs hot
GEMIN5	0.00222272	0.00357226	1.17906	1.17906	cold up vs hot
PIGG	0.00149298	0.00253755	1.17881	1.17881	cold up vs hot
NDUFS2	0.00208947	0.00338898	1.17845	1.17845	cold up vs hot
TFDP1	0.00526447	0.00737961	1.17822	1.17822	cold up vs hot
CHD1L	0.00473617	0.00677973	1.17816	1.17816	cold up vs hot
KIAA0100	0.00120943	0.00211794	1.17772	1.17772	cold up vs hot
UBE2MP1	0.0058539	0.00806043	1.17754	1.17754	cold up vs hot
METTL8	0.00523466	0.00734571	1.17751	1.17751	cold up vs hot
CPSF1	0.0055809	0.00774334	1.17712	1.17712	cold up vs hot
GSK3B	0.000499525	0.000978461	1.17706	1.17706	cold up vs hot
PGAM5	0.00342264	0.00516615	1.17682	1.17682	cold up vs hot
NACA	0.00244112	0.00386145	1.17665	1.17665	cold up vs hot
CLUAP1	0.00616465	0.00841728	1.17664	1.17664	cold up vs hot
GTF2H4	0.00356695	0.00534933	1.17643	1.17643	cold up vs hot
BTF3	0.00351713	0.00529099	1.17577	1.17577	cold up vs hot
SMARCD1	0.000609055	0.0011664	1.17573	1.17573	cold up vs hot
DDX52	0.0072192	0.00963348	1.1756	1.1756	cold up vs hot
WDYHV1	0.00411065	0.00602218	1.17551	1.17551	cold up vs hot
DIP2A	0.00143191	0.00244777	1.1754	1.1754	cold up vs hot
HDLBP	0.00316983	0.00484846	1.17488	1.17488	cold up vs hot
MRPL30	0.000236665	0.000500367	1.17477	1.17477	cold up vs hot
VPS72	0.00207055	0.00336164	1.17471	1.17471	cold up vs hot
PTPRA	0.000622814	0.00118891	1.17464	1.17464	cold up vs hot
RBM18	0.00752499	0.00996411	1.17432	1.17432	cold up vs hot
FBXO21	0.000941206	0.00170542	1.17402	1.17402	cold up vs hot
DUSP12	0.00289032	0.00447125	1.17402	1.17402	cold up vs hot
FIP1L1	0.000905984	0.00165031	1.17388	1.17388	cold up vs hot
PPM1D	0.00609048	0.00834044	1.17357	1.17357	cold up vs hot
ZNF574	0.00476708	0.00681558	1.17356	1.17356	cold up vs hot
DGCR14	0.00471533	0.0067564	1.17353	1.17353	cold up vs hot
GATAD2A	0.00173805	0.00289011	1.17338	1.17338	cold up vs hot
RAE1	0.00117053	0.00206143	1.17329	1.17329	cold up vs hot
ZNF282	0.005784	0.0079726	1.17274	1.17274	cold up vs hot
ZNF304	0.0054599	0.00761106	1.17255	1.17255	cold up vs hot
PRCC	0.00165123	0.00276794	1.17219	1.17219	cold up vs hot
PCID2	0.00306101	0.00470074	1.17169	1.17169	cold up vs hot
RBM28	0.00400231	0.00588985	1.17164	1.17164	cold up vs hot
LRRC41	0.00164953	0.0027674	1.17143	1.17143	cold up vs hot
TOP3A	0.00509612	0.00719149	1.17139	1.17139	cold up vs hot
MED19	0.00135596	0.00233754	1.17124	1.17124	cold up vs hot
STK35	0.00213419	0.00345208	1.17124	1.17124	cold up vs hot
MCM3AP	0.000365539	0.000739079	1.17113	1.17113	cold up vs hot
VDAC2	0.00305059	0.00468585	1.17078	1.17078	cold up vs hot
TLL5	0.000935344	0.00169574	1.1705	1.1705	cold up vs hot
PKNOX1	0.000668574	0.00126297	1.17047	1.17047	cold up vs hot
YIPF3	0.00247844	0.00390724	1.16995	1.16995	cold up vs hot
DDX47	0.000131818	0.000300186	1.16948	1.16948	cold up vs hot
HDGF	0.00748166	0.00992284	1.16938	1.16938	cold up vs hot
YWHAE	0.000405018	0.000811113	1.16925	1.16925	cold up vs hot
CCT5	0.00414782	0.00606575	1.1692	1.1692	cold up vs hot
SEC24B	0.00607047	0.00831653	1.16917	1.16917	cold up vs hot

DKC1	0.000331257	0.000677319	1.16893	1.16893	cold up vs hot
SETD5	0.00160742	0.0027032	1.16867	1.16867	cold up vs hot
PPP5C	0.000449177	0.000891344	1.16859	1.16859	cold up vs hot
EIF3G	0.00186999	0.00307813	1.16859	1.16859	cold up vs hot
PNN	0.0048208	0.00688485	1.16779	1.16779	cold up vs hot
RRN3	0.000820021	0.00151529	1.16778	1.16778	cold up vs hot
EIF2S1	0.00207029	0.00336164	1.16749	1.16749	cold up vs hot
PMS2	0.00293206	0.00452829	1.16729	1.16729	cold up vs hot
ATXN2	0.000279201	0.00058126	1.167	1.167	cold up vs hot
NVL	0.00354622	0.00532313	1.1668	1.1668	cold up vs hot
TRMT61B	0.00568274	0.00786792	1.16645	1.16645	cold up vs hot
GTPBP5	0.00297089	0.00457743	1.16634	1.16634	cold up vs hot
CNIH	0.0049642	0.00704666	1.1662	1.1662	cold up vs hot
ZC3H14	0.000740187	0.00138344	1.16609	1.16609	cold up vs hot
SNRNP200	0.00122311	0.00213845	1.16558	1.16558	cold up vs hot
SLC25A17	0.00368304	0.00549816	1.1654	1.1654	cold up vs hot
DDX56	0.00468111	0.00671473	1.16469	1.16469	cold up vs hot
SFRS14	0.00185333	0.00305534	1.16462	1.16462	cold up vs hot
NUDCD3	0.00418348	0.00610696	1.16456	1.16456	cold up vs hot
DHP5	0.00220739	0.003552	1.16439	1.16439	cold up vs hot
PDPK1	0.000524669	0.00102189	1.16434	1.16434	cold up vs hot
DVL3	0.00552469	0.00768332	1.16425	1.16425	cold up vs hot
PRDM10	0.00544011	0.00758832	1.16403	1.16403	cold up vs hot
DGCR2	0.0034875	0.00525311	1.16388	1.16388	cold up vs hot
CRKL	0.00687336	0.00926008	1.16329	1.16329	cold up vs hot
C2orf49	0.00597997	0.00821189	1.16289	1.16289	cold up vs hot
DARS	0.00555401	0.00771422	1.16266	1.16266	cold up vs hot
KRI1	0.00141543	0.00242214	1.16263	1.16263	cold up vs hot
MLF2	0.00497581	0.00705894	1.16262	1.16262	cold up vs hot
CIZ1	0.00615951	0.00841508	1.16257	1.16257	cold up vs hot
SNRPD1	0.00542137	0.00756865	1.16225	1.16225	cold up vs hot
NAT9	0.00529645	0.00741011	1.16212	1.16212	cold up vs hot
GZF1	0.00109829	0.00195531	1.16176	1.16176	cold up vs hot
SF3B3	0.00334437	0.0050644	1.1616	1.1616	cold up vs hot
TRIT1	0.0021434	0.0034644	1.16144	1.16144	cold up vs hot
DNAJA3	0.000528397	0.00102884	1.1614	1.1614	cold up vs hot
UTP14A	0.00118375	0.00208077	1.16133	1.16133	cold up vs hot
GNL2	0.00493159	0.00701545	1.16118	1.16118	cold up vs hot
BAT1	0.00156089	0.0026358	1.16114	1.16114	cold up vs hot
EEF2K	0.00201278	0.00328501	1.16078	1.16078	cold up vs hot
DENR	0.00400558	0.00589206	1.16074	1.16074	cold up vs hot
NOL11	0.00664807	0.00899642	1.16066	1.16066	cold up vs hot
WDR5	0.00475029	0.00679307	1.16063	1.16063	cold up vs hot
EPS15L1	0.000299309	0.000617997	1.16042	1.16042	cold up vs hot
FUBP3	0.00593988	0.00816332	1.15995	1.15995	cold up vs hot
CPSF6	2.54E-05	6.73E-05	1.15968	1.15968	cold up vs hot
MOCS3	0.00687412	0.00926008	1.15944	1.15944	cold up vs hot
GFOD2	0.000886868	0.00162001	1.15921	1.15921	cold up vs hot
MRPL19	0.00040125	0.000804307	1.15917	1.15917	cold up vs hot
USP31	0.00494844	0.00703481	1.15914	1.15914	cold up vs hot
DGCR8	0.000225687	0.000479486	1.15888	1.15888	cold up vs hot
UBN1	0.000567722	0.00109334	1.1588	1.1588	cold up vs hot
WBP11	0.00161614	0.00271645	1.15851	1.15851	cold up vs hot
MNT	0.00239671	0.00380041	1.15824	1.15824	cold up vs hot
IKBKAP	0.00223954	0.00359222	1.15787	1.15787	cold up vs hot
DYNC112	0.000806994	0.0014946	1.15786	1.15786	cold up vs hot
NARS	0.00569263	0.00787326	1.15758	1.15758	cold up vs hot
ZNF133	0.00746673	0.00990506	1.15758	1.15758	cold up vs hot
MED1	0.00390517	0.00577084	1.15757	1.15757	cold up vs hot
RBMX	0.000838427	0.00154536	1.15743	1.15743	cold up vs hot
MKRN2	0.000753054	0.00140467	1.15741	1.15741	cold up vs hot
R3HDM2	0.00354772	0.00532417	1.15737	1.15737	cold up vs hot
SURF6	0.00260533	0.00407773	1.1572	1.1572	cold up vs hot
ASNSD1	0.00749689	0.00993698	1.15705	1.15705	cold up vs hot
C20orf72	0.00453034	0.00653003	1.15698	1.15698	cold up vs hot
UTP11L	0.00734062	0.00976355	1.1564	1.1564	cold up vs hot
NFRKB	0.00403311	0.00592188	1.15588	1.15588	cold up vs hot
KIAA0892	0.000256657	0.00053845	1.15581	1.15581	cold up vs hot
WDR59	0.00252467	0.00397006	1.15567	1.15567	cold up vs hot
MRPS27	0.00324008	0.0049328	1.15537	1.15537	cold up vs hot
ZNF740	0.00253483	0.00398171	1.15525	1.15525	cold up vs hot
FCF1	0.00464331	0.00667225	1.15514	1.15514	cold up vs hot
C16orf68	0.00496006	0.00704366	1.15491	1.15491	cold up vs hot
STRN4	0.00499824	0.00707786	1.15419	1.15419	cold up vs hot
PTBP1	0.000461414	0.000912701	1.15407	1.15407	cold up vs hot
TM9SF4	0.0013084	0.00226813	1.15321	1.15321	cold up vs hot
DTD1	0.00723429	0.00964966	1.15301	1.15301	cold up vs hot

PNO1	0.00294057	0.00453499	1.15219	1.15219	cold up vs hot
GTF3C2	0.00107987	0.00192409	1.15209	1.15209	cold up vs hot
NSUN4	0.000860306	0.00157977	1.15187	1.15187	cold up vs hot
UMPS	0.00120817	0.00211631	1.15181	1.15181	cold up vs hot
UQCC	0.00208066	0.00337554	1.15002	1.15002	cold up vs hot
TRIAP1	0.00619534	0.00844682	1.14925	1.14925	cold up vs hot
ZNF384	0.00117716	0.00207031	1.14873	1.14873	cold up vs hot
DDX19A	0.00243399	0.00385357	1.14851	1.14851	cold up vs hot
ELAVL1	1.83E-06	5.87E-06	1.14806	1.14806	cold up vs hot
C17orf39	0.00534098	0.0074676	1.14722	1.14722	cold up vs hot
ZNF500	0.00431814	0.00626986	1.14627	1.14627	cold up vs hot
C14orf93	0.0071776	0.00959499	1.14621	1.14621	cold up vs hot
GRSF1	0.00395943	0.00583998	1.14606	1.14606	cold up vs hot
COX10	0.00736463	0.0097915	1.14604	1.14604	cold up vs hot
MINA	0.00456679	0.00657387	1.14547	1.14547	cold up vs hot
LMAN2L	0.00641539	0.0087177	1.1454	1.1454	cold up vs hot
DHX9	0.00021768	0.000465417	1.14538	1.14538	cold up vs hot
LSM14B	0.00331357	0.00502592	1.14535	1.14535	cold up vs hot
FXR2	0.00369736	0.00551494	1.14436	1.14436	cold up vs hot
PWP1	0.00331189	0.00502455	1.14377	1.14377	cold up vs hot
EIF4G1	0.0056023	0.00776808	1.14373	1.14373	cold up vs hot
EP400	0.0020027	0.00327183	1.14354	1.14354	cold up vs hot
CASC3	0.00665077	0.0089982	1.14337	1.14337	cold up vs hot
YWHAQ	0.00287008	0.00444308	1.14275	1.14275	cold up vs hot
COX4NB	0.0030206	0.00464416	1.14211	1.14211	cold up vs hot
TRIM27	0.00725634	0.00967314	1.14206	1.14206	cold up vs hot
PUM1	0.000822675	0.0015189	1.14172	1.14172	cold up vs hot
SUDS3	0.00307911	0.00472298	1.14095	1.14095	cold up vs hot
TAF4	0.00309656	0.00474753	1.13971	1.13971	cold up vs hot
OXSM	0.00643889	0.008746	1.13939	1.13939	cold up vs hot
NDUFA10	0.00157183	0.00265223	1.13845	1.13845	cold up vs hot
NCOA5	0.00502415	0.00710838	1.1384	1.1384	cold up vs hot
MANBAL	0.00439697	0.00636592	1.1383	1.1383	cold up vs hot
CSNK2A2	0.00587046	0.00807813	1.13736	1.13736	cold up vs hot
CCT7	0.00579031	0.00797961	1.13631	1.13631	cold up vs hot
RAN	0.00601114	0.00824216	1.13544	1.13544	cold up vs hot
CHD4	0.0024563	0.00388201	1.13535	1.13535	cold up vs hot
RFT1	0.00715252	0.00956993	1.13498	1.13498	cold up vs hot
CHCHD4	0.00554795	0.0077091	1.13451	1.13451	cold up vs hot
ANKLE2	0.00222898	0.0035788	1.13368	1.13368	cold up vs hot
DCP1B	0.00642632	0.00873073	1.1334	1.1334	cold up vs hot
PRPF19	0.00599139	0.00821854	1.13316	1.13316	cold up vs hot
RNPS1	0.00245849	0.00388235	1.13227	1.13227	cold up vs hot
NSUN2	0.00733955	0.00976355	1.1322	1.1322	cold up vs hot
C20orf4	0.00459324	0.00660612	1.13199	1.13199	cold up vs hot
PRKRA	0.00407565	0.00597493	1.13193	1.13193	cold up vs hot
AKAP8L	0.00483433	0.00689865	1.12997	1.12997	cold up vs hot
RNF41	0.000725343	0.00135802	1.12994	1.12994	cold up vs hot
MORF4L2	0.00346585	0.00522172	1.12904	1.12904	cold up vs hot
MSL1	0.00750101	0.00994042	1.12639	1.12639	cold up vs hot
SAFB	0.000914781	0.00166355	1.12536	1.12536	cold up vs hot
C19orf50	0.00233083	0.00371322	1.12529	1.12529	cold up vs hot
SNW1	0.00528571	0.00739984	1.12162	1.12162	cold up vs hot
SFRS8	0.00505958	0.00714778	1.11919	1.11919	cold up vs hot
GSPT1	0.0048912	0.00696557	1.1169	1.1169	cold up vs hot
HNRNPUL1	0.00719781	0.00961279	1.11675	1.11675	cold up vs hot
C19orf52	0.00219452	0.00353564	1.11404	1.11404	cold up vs hot
SF1	0.00566909	0.0078532	1.11017	1.11017	cold up vs hot
RBM12	0.00703538	0.00943254	1.10761	1.10761	cold up vs hot
AKAP8	0.00378439	0.00562374	1.10747	1.10747	cold up vs hot
HNRNPM	0.00322248	0.00503593	1.10489	1.10489	cold up vs hot
TRA2B	0.00383409	0.00568594	1.10392	1.10392	cold up vs hot
HNRNPU	0.00261646	0.00409122	1.09894	1.09894	cold up vs hot
POP4	0.00473681	0.00677973	0.90817	-1.10112	cold down vs hot
GPKOW	0.0022207	0.0035699	0.897091	-1.11471	cold down vs hot
RNF34	0.0040555	0.0059494	0.892331	-1.12066	cold down vs hot
ISY1	0.00612974	0.00838386	0.891973	-1.12111	cold down vs hot
DERL1	0.00397583	0.00585887	0.890677	-1.12274	cold down vs hot
HARS2	0.00569773	0.00787697	0.889593	-1.12411	cold down vs hot
NFATC2IP	0.00278828	0.00432981	0.888649	-1.1253	cold down vs hot
TMBIM6	0.00390022	0.00576698	0.887465	-1.1268	cold down vs hot
CHMP4B	0.000991791	0.00178667	0.887317	-1.12699	cold down vs hot
TMUB2	0.0075222	0.00996411	0.885277	-1.12959	cold down vs hot
VTI1A	0.0075303	0.00996912	0.884869	-1.13011	cold down vs hot
ARFGAP2	0.00453295	0.00653235	0.884644	-1.1304	cold down vs hot
RHOA	0.00173856	0.00289021	0.88381	-1.13147	cold down vs hot
PSMB2	0.00373651	0.00556272	0.878837	-1.13787	cold down vs hot

TADA2B	0.00399597	0.0058819	0.878682	-1.13807	cold down vs hot
ARAF	0.00639654	0.00869752	0.878561	-1.13823	cold down vs hot
CWF19L1	0.00400317	0.00588985	0.877609	-1.13946	cold down vs hot
PIAS1	0.00306871	0.00471147	0.876334	-1.14112	cold down vs hot
PTPMT1	0.00608844	0.0083394	0.87592	-1.14166	cold down vs hot
RPN1	0.00636514	0.00866205	0.873575	-1.14472	cold down vs hot
RBM17	0.0021263	0.00344102	0.873565	-1.14473	cold down vs hot
MAP2K1	0.00513852	0.00724193	0.873179	-1.14524	cold down vs hot
PPP2CA	0.00268628	0.00419236	0.8724	-1.14626	cold down vs hot
C20orf24	0.0071786	0.00959499	0.871767	-1.1471	cold down vs hot
ARPC4	0.0017267	0.00287564	0.871347	-1.14765	cold down vs hot
PSMC2	0.00542382	0.00757046	0.870679	-1.14853	cold down vs hot
CEPT1	0.00732345	0.00975065	0.870283	-1.14905	cold down vs hot
RBM22	0.000887336	0.00162041	0.870114	-1.14927	cold down vs hot
PDZD11	0.00266711	0.00416543	0.870039	-1.14937	cold down vs hot
RAB11A	0.00188509	0.00309752	0.869963	-1.14947	cold down vs hot
TMCC1	0.0049407	0.00702534	0.869418	-1.1502	cold down vs hot
CDC42SE1	0.00729189	0.00971062	0.869109	-1.1506	cold down vs hot
GGA3	0.00728864	0.00970827	0.867545	-1.15268	cold down vs hot
NDNL2	0.00512435	0.00722509	0.867472	-1.15277	cold down vs hot
PPP6C	0.000647073	0.00122697	0.867201	-1.15313	cold down vs hot
MGEA5	0.00650355	0.0088228	0.866471	-1.15411	cold down vs hot
PGS1	0.00515816	0.00725865	0.866444	-1.15414	cold down vs hot
ATPIF1	0.00428248	0.00622917	0.865008	-1.15606	cold down vs hot
OAZ1	0.00525253	0.00736445	0.864955	-1.15613	cold down vs hot
PSMG2	0.00134082	0.00231632	0.864555	-1.15666	cold down vs hot
BLCAP	0.00177443	0.00293862	0.864472	-1.15678	cold down vs hot
UXT	0.00234622	0.00373354	0.864454	-1.1568	cold down vs hot
CXorf26	0.00486083	0.00692838	0.864416	-1.15685	cold down vs hot
IK	0.000637135	0.00121094	0.864163	-1.15719	cold down vs hot
ADAR	0.0061995	0.00845072	0.863699	-1.15781	cold down vs hot
PPP1R9B	0.00690395	0.00928301	0.863269	-1.15839	cold down vs hot
ZFAND2B	0.00285665	0.0044244	0.863134	-1.15857	cold down vs hot
DUSP28	0.007084	0.00949187	0.862539	-1.15937	cold down vs hot
SYVN1	0.00507498	0.00716631	0.862039	-1.16004	cold down vs hot
LSM10	0.00432892	0.00628413	0.861411	-1.16089	cold down vs hot
ETV6	0.000629165	0.00119823	0.860825	-1.16168	cold down vs hot
SLC9A6	0.00280204	0.00434808	0.860599	-1.16198	cold down vs hot
ARF6	0.00373967	0.00556488	0.859819	-1.16304	cold down vs hot
ACTR1A	0.0036787	0.00549294	0.859747	-1.16313	cold down vs hot
CLIC1	0.00498077	0.00706231	0.859497	-1.16347	cold down vs hot
ARHGEF18	0.00276506	0.00430092	0.85892	-1.16425	cold down vs hot
RPA2	0.00127929	0.00222475	0.858888	-1.1643	cold down vs hot
NCOA4	0.00639589	0.00869752	0.858784	-1.16444	cold down vs hot
UBAP1	0.00218734	0.00352756	0.858525	-1.16479	cold down vs hot
FAM120AO	0.00238628	0.00378665	0.857828	-1.16573	cold down vs hot
FAM50A	0.00688881	0.00927031	0.857327	-1.16642	cold down vs hot
FAM82A2	0.00199485	0.00326064	0.856829	-1.16709	cold down vs hot
SIAH2	0.0023869	0.0037867	0.856339	-1.16776	cold down vs hot
RNF135	0.00237768	0.00377574	0.856276	-1.16785	cold down vs hot
FLOT2	0.00690971	0.00928885	0.855168	-1.16936	cold down vs hot
TAF12	0.00554298	0.00770547	0.854026	-1.17092	cold down vs hot
ACTR2	0.00233091	0.00371322	0.853549	-1.17158	cold down vs hot
C2orf24	0.00680178	0.00917968	0.853475	-1.17168	cold down vs hot
VRK3	0.000455902	0.000902494	0.853185	-1.17208	cold down vs hot
C17orf95	0.00519962	0.00730439	0.852485	-1.17304	cold down vs hot
ZMAT2	0.000344764	0.000702079	0.8522	-1.17343	cold down vs hot
SDHD	0.00700579	0.00939865	0.852108	-1.17356	cold down vs hot
CXorf40A	0.000665099	0.00125677	0.851547	-1.17433	cold down vs hot
ZC3HAV1	0.00361398	0.00541116	0.850885	-1.17525	cold down vs hot
RUFY1	0.000272985	0.000569409	0.85076	-1.17542	cold down vs hot
SMAP1	0.00538748	0.0075294	0.850627	-1.1756	cold down vs hot
C9orf25	0.00446585	0.00644937	0.850523	-1.17575	cold down vs hot
PI4K2A	0.00721074	0.00962612	0.850519	-1.17575	cold down vs hot
PAIP2	0.00299	0.00460254	0.849805	-1.17674	cold down vs hot
GABARAP	0.00373475	0.00556263	0.849721	-1.17686	cold down vs hot
ATXN7	0.00514081	0.00724359	0.849523	-1.17713	cold down vs hot
CAP1	0.00158346	0.0026691	0.84951	-1.17715	cold down vs hot
PCBD2	0.00390944	0.00577538	0.849433	-1.17726	cold down vs hot
YIPF1	0.000227638	0.000482846	0.849401	-1.1773	cold down vs hot
RAB35	0.000101355	0.000237271	0.849372	-1.17734	cold down vs hot
CHMP7	0.00135073	0.00233037	0.849243	-1.17752	cold down vs hot
COMMD3	0.00201857	0.00329233	0.849025	-1.17782	cold down vs hot
YWHAH	0.00223669	0.00358853	0.84902	-1.17783	cold down vs hot
NADK	0.00153116	0.00259279	0.84843	-1.17865	cold down vs hot
RNF114	0.000637871	0.00121199	0.848318	-1.1788	cold down vs hot
KDM2A	0.000431001	0.000859193	0.848113	-1.17909	cold down vs hot

CC2D1B	0.00293586	0.00453253	0.847954	-1.17931	cold down vs hot
AP4B1	0.00292521	0.00451879	0.847525	-1.17991	cold down vs hot
IKBKB	0.000688522	0.00129466	0.847297	-1.18022	cold down vs hot
IKZF4	0.00693818	0.0093252	0.847184	-1.18038	cold down vs hot
EDEM2	0.00417952	0.0061039	0.846482	-1.18136	cold down vs hot
HMGCL	0.0048096	0.00687036	0.846315	-1.18159	cold down vs hot
WDR7	0.0020197	0.003293	0.845756	-1.18237	cold down vs hot
VPS29	0.000689653	0.00129641	0.844625	-1.18396	cold down vs hot
OTUD5	3.54E-05	9.08E-05	0.844601	-1.18399	cold down vs hot
UBE2D2	1.64E-05	4.49E-05	0.844284	-1.18444	cold down vs hot
PSMB1	0.00117023	0.00206143	0.844163	-1.18461	cold down vs hot
SERF2	0.00739668	0.0098261	0.842992	-1.18625	cold down vs hot
EPS15	0.00418135	0.0061052	0.841826	-1.18789	cold down vs hot
JMJD5	0.00270653	0.00421892	0.841699	-1.18807	cold down vs hot
USP20	0.00274112	0.00426771	0.841509	-1.18834	cold down vs hot
MAPKAPK2	0.00145877	0.00248798	0.841336	-1.18859	cold down vs hot
FYN	0.00511973	0.00722169	0.841046	-1.189	cold down vs hot
NAGA	0.00412398	0.0060363	0.840726	-1.18945	cold down vs hot
EZH1	0.00598397	0.00821189	0.840587	-1.18964	cold down vs hot
BCL7B	0.000648776	0.00122948	0.84051	-1.18975	cold down vs hot
ARAP1	0.00445166	0.00643226	0.840505	-1.18976	cold down vs hot
PLEKHM1	0.00495117	0.00703716	0.840394	-1.18992	cold down vs hot
ACOT13	0.00247185	0.00389968	0.840156	-1.19025	cold down vs hot
FBXO18	0.000118324	0.000273657	0.840151	-1.19026	cold down vs hot
C10orf76	3.32E-05	8.56E-05	0.840039	-1.19042	cold down vs hot
FAM21B	0.00478267	0.00683489	0.83982	-1.19073	cold down vs hot
CDC42	5.32E-05	0.000132541	0.839503	-1.19118	cold down vs hot
ORMDL2	0.00275617	0.0042881	0.839339	-1.19141	cold down vs hot
CUTC	0.00361772	0.00541303	0.839071	-1.19179	cold down vs hot
CRTC3	0.00499154	0.00707338	0.83899	-1.19191	cold down vs hot
MTMR1	0.00415826	0.00607693	0.838969	-1.19194	cold down vs hot
DNPEP	0.000194353	0.000420582	0.838327	-1.19285	cold down vs hot
STIM1	0.00258325	0.00404803	0.837816	-1.19358	cold down vs hot
COQ2	0.00140703	0.00241092	0.837697	-1.19375	cold down vs hot
SFRS5	0.000730215	0.00136636	0.837533	-1.19398	cold down vs hot
TFE3	0.00024257	0.000511361	0.837095	-1.19461	cold down vs hot
VCP	0.000152957	0.000342352	0.837068	-1.19465	cold down vs hot
PLEKHM1P	0.00585974	0.00806677	0.836455	-1.19552	cold down vs hot
POLR3GL	0.000320654	0.000657286	0.83586	-1.19637	cold down vs hot
ERICH1	0.00617653	0.00842645	0.835842	-1.1964	cold down vs hot
TMEM50B	0.0071167	0.00952786	0.835563	-1.1968	cold down vs hot
C18orf8	0.000108248	0.000252051	0.83536	-1.19709	cold down vs hot
MSL3	0.00430591	0.00625489	0.834975	-1.19764	cold down vs hot
CAMK2G	0.00298755	0.00459985	0.834719	-1.19801	cold down vs hot
RAP1B	0.00474696	0.00679128	0.834698	-1.19804	cold down vs hot
AAK1	0.000447283	0.000888125	0.834022	-1.19901	cold down vs hot
STX8	0.00222764	0.00357753	0.833951	-1.19911	cold down vs hot
ARHGAP17	2.61E-05	6.89E-05	0.833637	-1.19956	cold down vs hot
PSMA6	0.000157833	0.000352058	0.833422	-1.19987	cold down vs hot
ORAI3	0.00546221	0.00761265	0.833295	-1.20006	cold down vs hot
CHFR	0.00293997	0.00453499	0.832786	-1.20079	cold down vs hot
NFKBIB	0.0011051	0.00196476	0.832764	-1.20082	cold down vs hot
COMMD9	0.000299915	0.000619053	0.832677	-1.20095	cold down vs hot
CCDC115	0.000257291	0.000539605	0.832518	-1.20118	cold down vs hot
MYL6	0.000591905	0.00113489	0.832424	-1.20131	cold down vs hot
PDIA3	0.00485973	0.00692831	0.832376	-1.20138	cold down vs hot
INPP4A	0.00016754	0.000369362	0.832151	-1.20171	cold down vs hot
PPP1CA	0.00104706	0.00187228	0.832052	-1.20185	cold down vs hot
ATP6AP2	0.000306008	0.000629838	0.831544	-1.20258	cold down vs hot
NDUFB4	0.00128208	0.00222783	0.831505	-1.20264	cold down vs hot
REEP5	0.000610853	0.00116916	0.830882	-1.20354	cold down vs hot
RNF44	0.00327417	0.00498005	0.830306	-1.20438	cold down vs hot
C9orf21	0.00192587	0.00315817	0.83014	-1.20462	cold down vs hot
ABI1	0.00421017	0.00614042	0.829875	-1.205	cold down vs hot
ZCCHC2	0.00220978	0.00355497	0.829615	-1.20538	cold down vs hot
RBCK1	0.00126471	0.00220057	0.829375	-1.20573	cold down vs hot
SNAPC5	0.000119422	0.000275799	0.828727	-1.20667	cold down vs hot
HINT2	0.00547604	0.00762737	0.828242	-1.20738	cold down vs hot
C19orf12	0.00120198	0.00210715	0.828101	-1.20758	cold down vs hot
LEPROTL1	0.000735368	0.00137561	0.827113	-1.20902	cold down vs hot
SPCS3	0.00336418	0.00509086	0.826885	-1.20936	cold down vs hot
UPRT	0.000105012	0.000245391	0.82663	-1.20973	cold down vs hot
ARPC5L	0.00103836	0.00185928	0.826545	-1.20986	cold down vs hot
AFTPH	0.00118091	0.00207634	0.826118	-1.21048	cold down vs hot
TUSC2	0.000289552	0.000600321	0.825942	-1.21074	cold down vs hot
TBC1D22A	0.00088906	0.00162276	0.825761	-1.211	cold down vs hot
SURF1	0.00140504	0.00240877	0.825544	-1.21132	cold down vs hot

HAGH	0.00499517	0.00707519	0.825139	-1.21192	cold down vs hot
CCDC22	9.49E-05	0.000223662	0.82482	-1.21239	cold down vs hot
CLTB	0.00323035	0.00492324	0.82482	-1.21239	cold down vs hot
CHMP4A	6.61E-05	0.0001614	0.824251	-1.21322	cold down vs hot
COMMD1	0.000167078	0.000368899	0.823862	-1.2138	cold down vs hot
SLC35D2	0.00652714	0.00885113	0.823678	-1.21407	cold down vs hot
FAM105B	0.00117096	0.00206163	0.823668	-1.21408	cold down vs hot
FAM58A	0.00230678	0.00368467	0.823639	-1.21412	cold down vs hot
HSD17B4	3.10E-05	8.05E-05	0.822918	-1.21519	cold down vs hot
CKLF	0.000211409	0.000454031	0.822541	-1.21575	cold down vs hot
TMEM219	0.000135614	0.0003084	0.822412	-1.21593	cold down vs hot
PDE6D	0.00159025	0.000354233	0.821863	-1.21675	cold down vs hot
SHISA5	0.000255532	0.000536433	0.821575	-1.21717	cold down vs hot
PHF1	0.000865801	0.00158775	0.821337	-1.21753	cold down vs hot
CASP6	0.0013843	0.00237738	0.820782	-1.21835	cold down vs hot
TMEM66	0.0015283	0.00258948	0.820548	-1.2187	cold down vs hot
UVRAG	0.000919176	0.00167014	0.820494	-1.21878	cold down vs hot
MKRN1	0.000720139	0.00134906	0.819449	-1.22033	cold down vs hot
RIPK2	0.0012392	0.00216138	0.81926	-1.22061	cold down vs hot
IQSEC1	0.00158877	0.00267459	0.819174	-1.22074	cold down vs hot
WWP1	0.00374541	0.00557216	0.819138	-1.2208	cold down vs hot
G6PD	0.0049212	0.00700525	0.819038	-1.22094	cold down vs hot
MSL2	5.87E-05	0.000144946	0.818743	-1.22138	cold down vs hot
ABHD15	0.0057804	0.00796931	0.818419	-1.22187	cold down vs hot
MAX	4.25E-06	1.29E-05	0.818342	-1.22198	cold down vs hot
CREBL2	0.000542859	0.0010526	0.818213	-1.22218	cold down vs hot
ZNF710	0.00294033	0.00453499	0.817936	-1.22259	cold down vs hot
NT5DC1	0.00613328	0.00838673	0.817774	-1.22283	cold down vs hot
MED7	0.00107897	0.00192301	0.817708	-1.22293	cold down vs hot
KDM4C	0.00220575	0.00355024	0.817567	-1.22314	cold down vs hot
SERP1	0.000295765	0.000611842	0.817541	-1.22318	cold down vs hot
ZBTB4	0.00135307	0.00233317	0.817466	-1.22329	cold down vs hot
SRA1	0.000208453	0.000448271	0.81716	-1.22375	cold down vs hot
C12orf65	4.72E-05	0.00011891	0.817015	-1.22397	cold down vs hot
C2CD2L	0.00411664	0.0060269	0.816899	-1.22414	cold down vs hot
HS6ST1	0.00150969	0.00256128	0.81689	-1.22416	cold down vs hot
LSM6	5.75E-05	0.000142308	0.816586	-1.22461	cold down vs hot
WDR44	0.00187396	0.00308278	0.816261	-1.2251	cold down vs hot
SEC61B	0.000235686	0.000498459	0.815836	-1.22574	cold down vs hot
NDUFA1	0.00103251	0.00185032	0.815812	-1.22577	cold down vs hot
PNRC2	0.00175609	0.00291342	0.815617	-1.22607	cold down vs hot
ARPC2	6.37E-07	2.17E-06	0.815291	-1.22656	cold down vs hot
NSMCE4A	0.000877659	0.00160588	0.81524	-1.22663	cold down vs hot
IRAK4	0.00520535	0.00730929	0.815147	-1.22677	cold down vs hot
MMAA	0.00153922	0.00260393	0.814928	-1.2271	cold down vs hot
CDV3	8.87E-07	2.97E-06	0.814894	-1.22715	cold down vs hot
RNF38	0.00113785	0.00201365	0.814877	-1.22718	cold down vs hot
WIBG	4.64E-06	1.39E-05	0.814512	-1.22773	cold down vs hot
TEP1	0.000640681	0.00121662	0.81426	-1.22811	cold down vs hot
BAT5	0.000318485	0.000653456	0.813174	-1.22975	cold down vs hot
TSR2	9.67E-06	2.76E-05	0.813124	-1.22982	cold down vs hot
TNK2	0.00256133	0.00401657	0.812825	-1.23028	cold down vs hot
MPND	0.00300055	0.00461768	0.812066	-1.23143	cold down vs hot
PPP1R2	0.00034921	0.000709582	0.811813	-1.23181	cold down vs hot
EXOSC1	0.000330482	0.000675946	0.811662	-1.23204	cold down vs hot
TMEM9B	2.22E-05	5.93E-05	0.811534	-1.23223	cold down vs hot
ACAA1	0.000125778	0.000288454	0.811515	-1.23226	cold down vs hot
DTNBP1	0.00073566	0.00137576	0.811145	-1.23282	cold down vs hot
ATG3	2.18E-05	5.85E-05	0.811034	-1.23299	cold down vs hot
SNAP23	0.000686127	0.0012909	0.810959	-1.23311	cold down vs hot
CCDC12	1.34E-05	3.72E-05	0.810935	-1.23314	cold down vs hot
SMAD3	0.00575538	0.00794321	0.81092	-1.23317	cold down vs hot
DYNLT1	0.000169828	0.000373957	0.810717	-1.23348	cold down vs hot
LOC146880	0.000567106	0.0010928	0.810587	-1.23367	cold down vs hot
RAP2B	0.00149418	0.00253893	0.810263	-1.23417	cold down vs hot
LTA4H	0.000138525	0.000313818	0.810199	-1.23426	cold down vs hot
STX12	1.88E-05	5.10E-05	0.810145	-1.23435	cold down vs hot
B3GNT2	0.00589599	0.00810984	0.809674	-1.23507	cold down vs hot
HSPB11	0.000277934	0.000579177	0.809243	-1.23572	cold down vs hot
RNF19A	0.00454145	0.00654316	0.808993	-1.23611	cold down vs hot
HMG2	8.43E-05	0.000200718	0.808821	-1.23637	cold down vs hot
TRAPP2	0.00118929	0.00208659	0.808737	-1.2365	cold down vs hot
FAM21C	0.000174331	0.000382839	0.808655	-1.23662	cold down vs hot
CDKN2D	0.00478136	0.00683451	0.808468	-1.23691	cold down vs hot
H2AFY	8.20E-06	2.37E-05	0.808267	-1.23721	cold down vs hot
CHST12	0.000858396	0.00157772	0.808151	-1.23739	cold down vs hot
FBXO48	0.00576634	0.00795162	0.807734	-1.23803	cold down vs hot

NAPA	0.000212021	0.000455194	0.807188	-1.23887	cold down vs hot
CCNYL1	0.00062879	0.00119787	0.807021	-1.23912	cold down vs hot
ALAS1	0.000350544	0.000711849	0.806874	-1.23935	cold down vs hot
MYL12B	4.84E-05	0.000121597	0.806717	-1.23959	cold down vs hot
PHKG2	1.75E-05	4.78E-05	0.806557	-1.23984	cold down vs hot
LOC644936	0.000259405	0.000543604	0.806448	-1.24001	cold down vs hot
C1GALT1C1	8.52E-05	0.000202616	0.806102	-1.24054	cold down vs hot
IER5	0.00441122	0.00638371	0.806084	-1.24057	cold down vs hot
C12orf62	2.43E-05	6.47E-05	0.806017	-1.24067	cold down vs hot
NANS	0.00487791	0.00694816	0.805917	-1.24082	cold down vs hot
TLN1	0.000138407	0.000313685	0.805034	-1.24218	cold down vs hot
ZBTB8OS	0.000142945	0.000322934	0.804967	-1.24229	cold down vs hot
SELS	0.00018368	0.000399607	0.804326	-1.24328	cold down vs hot
C20orf196	0.00216215	0.00349039	0.803852	-1.24401	cold down vs hot
DIAPH1	6.37E-05	0.000156033	0.803251	-1.24494	cold down vs hot
PARP16	0.000516593	0.00100766	0.80312	-1.24514	cold down vs hot
FMNL3	0.000263948	0.000552325	0.803082	-1.2452	cold down vs hot
FIG4	0.00102938	0.00184562	0.802931	-1.24544	cold down vs hot
PSMA5	1.91E-06	6.11E-06	0.802455	-1.24618	cold down vs hot
GNG10	0.000355978	0.000721536	0.802173	-1.24661	cold down vs hot
PSMA4	3.29E-05	8.50E-05	0.801907	-1.24703	cold down vs hot
C7orf43	0.000427177	0.000852091	0.801867	-1.24709	cold down vs hot
RBL2	0.00426258	0.00620438	0.801576	-1.24754	cold down vs hot
HDAC1	5.65E-05	0.000139828	0.801497	-1.24767	cold down vs hot
DOPEY2	0.00125925	0.00219223	0.801165	-1.24818	cold down vs hot
SEPX1	0.000513372	0.00100198	0.801061	-1.24834	cold down vs hot
MAP4K2	0.0060018	0.00823109	0.800681	-1.24894	cold down vs hot
MYL12A	4.19E-05	0.000106364	0.800672	-1.24895	cold down vs hot
LAMP2	0.00139562	0.00239451	0.800599	-1.24906	cold down vs hot
PCK2	0.0068292	0.00920717	0.799754	-1.25038	cold down vs hot
ZSCAN16	0.00680688	0.00918467	0.799314	-1.25107	cold down vs hot
DCK	0.00370342	0.005521	0.799082	-1.25144	cold down vs hot
CASP3	0.000148052	0.000332973	0.798882	-1.25175	cold down vs hot
SH3BP2	7.54E-05	0.000181716	0.798848	-1.2518	cold down vs hot
C22orf27	0.00133567	0.00231111	0.798812	-1.25186	cold down vs hot
IRF3	4.36E-05	0.000110461	0.797905	-1.25328	cold down vs hot
SLC44A2	0.00411411	0.00602455	0.797785	-1.25347	cold down vs hot
CAPZA1	0.000130802	0.000298185	0.797743	-1.25354	cold down vs hot
SERTAD3	2.26E-05	6.04E-05	0.797523	-1.25388	cold down vs hot
LINS1	0.000193531	0.000419221	0.797474	-1.25396	cold down vs hot
AKIRIN2	2.62E-05	6.92E-05	0.797058	-1.25461	cold down vs hot
GABARAPL1	0.00186809	0.00307578	0.796989	-1.25472	cold down vs hot
CYB561D2	0.000171214	0.000376629	0.796886	-1.25489	cold down vs hot
STK38	4.85E-05	0.000121706	0.796753	-1.25509	cold down vs hot
FBXL5	0.000296278	0.000612321	0.796354	-1.25572	cold down vs hot
ZBTB2	8.02E-06	2.32E-05	0.796254	-1.25588	cold down vs hot
DEDD2	0.000537153	0.00104265	0.795988	-1.2563	cold down vs hot
S100A11	0.0060392	0.00827717	0.795934	-1.25639	cold down vs hot
SETX	0.000222698	0.000473753	0.795828	-1.25655	cold down vs hot
PLA2G15	0.00244461	0.00359858	0.795733	-1.2567	cold down vs hot
MCEE	0.000561057	0.00108306	0.795627	-1.25687	cold down vs hot
C3orf71	0.00244211	0.00386209	0.795615	-1.25689	cold down vs hot
CCND3	0.00204854	0.0033342	0.795086	-1.25773	cold down vs hot
PRPS2	0.00316173	0.00483721	0.794964	-1.25792	cold down vs hot
TCEAL6	0.00690357	0.00928301	0.794833	-1.25813	cold down vs hot
LOC729678	0.00320771	0.00490065	0.794624	-1.25846	cold down vs hot
SCAMP2	4.44E-06	1.34E-05	0.794465	-1.25871	cold down vs hot
ANAPC16	4.73E-06	1.42E-05	0.794376	-1.25885	cold down vs hot
KIAA1539	0.00209649	0.00339867	0.793813	-1.25974	cold down vs hot
WHAMM	1.53E-05	4.22E-05	0.793805	-1.25976	cold down vs hot
CDKN1B	2.67E-05	7.05E-05	0.793633	-1.26003	cold down vs hot
AP1B1	4.04E-05	0.000102822	0.793408	-1.26039	cold down vs hot
SELT	0.000849331	0.00156325	0.79325	-1.26064	cold down vs hot
POU6F1	0.00576529	0.00795162	0.793102	-1.26087	cold down vs hot
TMEM50A	2.11E-07	7.61E-07	0.792812	-1.26133	cold down vs hot
NAGPA	0.00032625	0.000667919	0.792564	-1.26173	cold down vs hot
RP2	0.00235754	0.00374742	0.792488	-1.26185	cold down vs hot
ANKRD49	0.00544389	0.00759198	0.792037	-1.26257	cold down vs hot
PLD3	0.00171046	0.00285223	0.791728	-1.26306	cold down vs hot
NFKB1	4.71E-05	0.00011856	0.791592	-1.26328	cold down vs hot
RASA4P	0.00698714	0.0093775	0.791552	-1.26334	cold down vs hot
ERP44	9.20E-06	2.64E-05	0.79142	-1.26355	cold down vs hot
ZDHC24	0.00334278	0.00506318	0.791395	-1.26359	cold down vs hot
KIAA0494	8.89E-06	2.55E-05	0.791155	-1.26397	cold down vs hot
LMNB1	0.00573406	0.00791545	0.790701	-1.2647	cold down vs hot
ZNF217	0.000553686	0.00107169	0.790549	-1.26494	cold down vs hot
MLLT6	7.60E-05	0.000183281	0.790359	-1.26525	cold down vs hot

WTAP	3.03E-05	7.90E-05	0.789972	-1.26587	cold down vs hot
SFI1	0.00058735	0.00112715	0.789764	-1.2662	cold down vs hot
PTP4A2	1.49E-06	4.82E-06	0.789571	-1.26651	cold down vs hot
MAN2B2	0.000555365	0.00107462	0.789522	-1.26659	cold down vs hot
FBXW4	0.000259748	0.00054406	0.789504	-1.26662	cold down vs hot
RSU1	5.89E-05	0.000145335	0.78942	-1.26675	cold down vs hot
MTO1	6.99E-05	0.000169786	0.789384	-1.26681	cold down vs hot
RAB24	0.000284796	0.000591964	0.789336	-1.26689	cold down vs hot
BLVRB	0.00187511	0.00308278	0.78918	-1.26714	cold down vs hot
PFN1	0.000143765	0.000324561	0.78917	-1.26715	cold down vs hot
DBNL	3.62E-05	9.29E-05	0.788911	-1.26757	cold down vs hot
TANK	0.00385204	0.00570478	0.788866	-1.26764	cold down vs hot
C2orf18	0.000214688	0.000459861	0.788858	-1.26766	cold down vs hot
TWF2	0.000219024	0.000467615	0.788472	-1.26828	cold down vs hot
CAST	0.000474896	0.000935271	0.78796	-1.2691	cold down vs hot
NCOA1	2.35E-05	6.25E-05	0.787664	-1.26958	cold down vs hot
RNPEPL1	0.000869237	0.0015936	0.787642	-1.26961	cold down vs hot
TMEM62	0.000286935	0.00059584	0.787365	-1.27006	cold down vs hot
UBE2A	2.52E-08	9.98E-08	0.787352	-1.27008	cold down vs hot
TSPAN17	9.98E-05	0.000233918	0.787227	-1.27028	cold down vs hot
SLC25A19	0.000183591	0.000399607	0.787217	-1.2703	cold down vs hot
ANKHD1-EI	0.000397823	0.000798122	0.787105	-1.27048	cold down vs hot
SH3KBP1	0.00450542	0.00649843	0.787016	-1.27062	cold down vs hot
TCEANC	0.000144056	0.000325105	0.786937	-1.27075	cold down vs hot
MAN2B1	0.000111185	0.000258153	0.786765	-1.27103	cold down vs hot
SYNPO	0.00581359	0.00800999	0.786531	-1.27141	cold down vs hot
PSMB3	5.81E-06	1.71E-05	0.786479	-1.27149	cold down vs hot
PXK	0.00516837	0.00726674	0.7863	-1.27178	cold down vs hot
ATG7	3.16E-09	1.37E-08	0.786196	-1.27195	cold down vs hot
CD97	0.00352626	0.00530049	0.785368	-1.27329	cold down vs hot
STK4	5.82E-06	1.71E-05	0.784819	-1.27418	cold down vs hot
SS18L2	3.82E-06	1.16E-05	0.784143	-1.27528	cold down vs hot
ANKDD1A	0.00504996	0.00713871	0.7837	-1.276	cold down vs hot
NADSYN1	0.00111355	0.00197653	0.783609	-1.27615	cold down vs hot
ECHDC1	0.00748487	0.00992508	0.783429	-1.27644	cold down vs hot
SERPINB6	0.00341392	0.00515547	0.783355	-1.27656	cold down vs hot
SPATA24	0.00201375	0.00328576	0.78276	-1.27753	cold down vs hot
OSBPL7	0.00553594	0.00769732	0.782573	-1.27784	cold down vs hot
MTM1	0.000671629	0.00126808	0.782059	-1.27868	cold down vs hot
BMP2K	0.00113839	0.00201407	0.781927	-1.27889	cold down vs hot
SHKBP1	0.000457419	0.000905221	0.781673	-1.27931	cold down vs hot
IFI16	0.00367716	0.00549189	0.781658	-1.27933	cold down vs hot
ADPGK	2.06E-08	8.25E-08	0.781564	-1.27949	cold down vs hot
TINF2	2.36E-08	9.37E-08	0.781095	-1.28025	cold down vs hot
GMPPB	0.000303233	0.000625308	0.780865	-1.28063	cold down vs hot
LASP1	4.63E-07	1.61E-06	0.780857	-1.28064	cold down vs hot
SLC25A20	0.000173997	0.000382235	0.780517	-1.2812	cold down vs hot
PASK	0.000432156	0.00086098	0.780362	-1.28146	cold down vs hot
JMJD7-PLA2	0.00047214	0.000930966	0.780051	-1.28197	cold down vs hot
MKNK2	8.39E-05	0.000200033	0.779883	-1.28224	cold down vs hot
GLA	0.00010798	0.000251518	0.779637	-1.28265	cold down vs hot
PDK3	0.00446308	0.00644733	0.779317	-1.28317	cold down vs hot
PAK1	0.00519633	0.00730134	0.779192	-1.28338	cold down vs hot
LOC100303	0.0041953	0.00612146	0.779178	-1.2834	cold down vs hot
VPS13C	0.00682349	0.00920137	0.779121	-1.2835	cold down vs hot
C3orf37	3.28E-06	1.01E-05	0.778863	-1.28392	cold down vs hot
CDR2	0.000262405	0.000549271	0.77799	-1.28536	cold down vs hot
ABHD12	2.17E-05	5.82E-05	0.777904	-1.2855	cold down vs hot
DTX2	1.73E-05	4.71E-05	0.777502	-1.28617	cold down vs hot
MAP3K3	5.49E-05	0.000136289	0.777394	-1.28635	cold down vs hot
LIMK1	0.00719533	0.00961144	0.776242	-1.28826	cold down vs hot
CCDC84	0.0023233	0.00370649	0.776208	-1.28831	cold down vs hot
NCK1	1.20E-05	3.37E-05	0.774657	-1.29089	cold down vs hot
ENG	0.000417282	0.000833627	0.773871	-1.29221	cold down vs hot
RNF181	7.60E-07	2.57E-06	0.773754	-1.2924	cold down vs hot
MKNK1	4.08E-10	1.90E-09	0.773347	-1.29308	cold down vs hot
ESRP2	0.00011421	0.0002648	0.773052	-1.29357	cold down vs hot
AKTIP	0.000166876	0.000368577	0.77278	-1.29403	cold down vs hot
GRIPAP1	2.15E-10	1.03E-09	0.772224	-1.29496	cold down vs hot
SUB1	2.05E-05	5.51E-05	0.771941	-1.29543	cold down vs hot
TDRKH	0.00320464	0.00489713	0.771612	-1.29599	cold down vs hot
TRAF5	0.00350443	0.00527375	0.77138	-1.29638	cold down vs hot
C15orf21	0.00040329	0.000808148	0.771366	-1.2964	cold down vs hot
NOD1	8.73E-08	3.29E-07	0.771285	-1.29654	cold down vs hot
TRAF3	2.25E-05	6.02E-05	0.771175	-1.29672	cold down vs hot
VASP	4.33E-06	1.31E-05	0.771116	-1.29682	cold down vs hot
TAZ	2.53E-06	7.94E-06	0.771021	-1.29698	cold down vs hot

ETS1	0.0032387	0.00493185	0.770578	-1.29773	cold down vs hot
SIDT2	0.000117709	0.000272332	0.770512	-1.29784	cold down vs hot
MSN	6.06E-05	0.00014898	0.770478	-1.2979	cold down vs hot
C9orf142	0.00205254	0.00333833	0.770239	-1.2983	cold down vs hot
ATP6V1B2	0.00117235	0.00206296	0.769932	-1.29882	cold down vs hot
PRKCD	0.000126181	0.000289103	0.769457	-1.29962	cold down vs hot
TNIP2	4.16E-07	1.45E-06	0.769377	-1.29975	cold down vs hot
ACTB	1.24E-06	4.07E-06	0.769371	-1.29976	cold down vs hot
TRIM26	1.07E-06	3.55E-06	0.769299	-1.29989	cold down vs hot
AFF1	2.39E-05	6.37E-05	0.769171	-1.3001	cold down vs hot
FAM102A	0.00420175	0.00612951	0.768898	-1.30056	cold down vs hot
TRAF2	2.63E-05	6.93E-05	0.768174	-1.30179	cold down vs hot
ISOC1	7.63E-05	0.000183787	0.767808	-1.30241	cold down vs hot
MESDC1	0.00641037	0.0087127	0.76772	-1.30256	cold down vs hot
ARL6IP5	0.000545538	0.00105748	0.767627	-1.30272	cold down vs hot
CDK2AP2	0.000605181	0.00115932	0.767488	-1.30295	cold down vs hot
HMGB2	0.00237865	0.00377636	0.767484	-1.30296	cold down vs hot
STK10	0.000804131	0.00148972	0.767467	-1.30299	cold down vs hot
USF1	7.54E-09	3.16E-08	0.767382	-1.30313	cold down vs hot
C10orf26	1.14E-07	4.21E-07	0.766878	-1.30399	cold down vs hot
OGFR	6.03E-05	0.000148456	0.766868	-1.30401	cold down vs hot
FBXO4	0.00175133	0.00290849	0.766298	-1.30498	cold down vs hot
TRIM8	7.13E-06	2.07E-05	0.76621	-1.30512	cold down vs hot
RAB8A	3.87E-10	1.81E-09	0.766084	-1.30534	cold down vs hot
SLC38A6	5.33E-05	0.000132854	0.76603	-1.30543	cold down vs hot
MTMR14	2.86E-08	1.13E-07	0.765854	-1.30573	cold down vs hot
TIPARP	0.000132906	0.000302558	0.765359	-1.30658	cold down vs hot
SYNRG	4.33E-07	1.51E-06	0.765211	-1.30683	cold down vs hot
BLOC1S2	7.32E-05	0.000177001	0.765045	-1.30711	cold down vs hot
MARCKS	0.000983402	0.00177539	0.765046	-1.30711	cold down vs hot
ACSL1	0.00252498	0.00397006	0.764764	-1.30759	cold down vs hot
NDUFA2	8.80E-06	2.54E-05	0.764558	-1.30794	cold down vs hot
WBP2	0.000382802	0.000769929	0.764552	-1.30796	cold down vs hot
NEK8	0.00138454	0.00237738	0.764077	-1.30877	cold down vs hot
PIP4K2A	0.00011228	0.00199027	0.763562	-1.30965	cold down vs hot
ROD1	3.13E-05	8.12E-05	0.763501	-1.30976	cold down vs hot
DRAM2	3.80E-06	1.16E-05	0.763133	-1.31039	cold down vs hot
PDE4DIP	0.00261585	0.00409122	0.763046	-1.31054	cold down vs hot
DDHD1	0.000883051	0.00161484	0.762977	-1.31066	cold down vs hot
ARID5B	0.00752493	0.00996411	0.762967	-1.31067	cold down vs hot
TRMT2B	5.35E-06	1.59E-05	0.762915	-1.31076	cold down vs hot
SDSL	0.00555338	0.00771422	0.762778	-1.311	cold down vs hot
SQSTM1	0.000837719	0.00154493	0.762734	-1.31107	cold down vs hot
AGTRAP	0.000158454	0.000353203	0.762666	-1.31119	cold down vs hot
ITM2B	0.000335885	0.000686345	0.76232	-1.31179	cold down vs hot
CPEB4	0.00357261	0.00535413	0.761906	-1.3125	cold down vs hot
FAM53B	0.00749037	0.00993035	0.761897	-1.31251	cold down vs hot
C17orf49	1.91E-05	5.16E-05	0.761856	-1.31258	cold down vs hot
YPEL5	1.22E-06	4.01E-06	0.761437	-1.31331	cold down vs hot
RPL13P5	0.00616169	0.00841508	0.761324	-1.3135	cold down vs hot
FOXN3	0.000678374	0.00127852	0.761189	-1.31373	cold down vs hot
ARNTL	0.000347511	0.000706791	0.76105	-1.31397	cold down vs hot
ARSA	0.00234083	0.00372811	0.760934	-1.31418	cold down vs hot
DNAJB9	0.00157847	0.00266206	0.760898	-1.31424	cold down vs hot
RBM38	0.00354156	0.00531878	0.760739	-1.31451	cold down vs hot
STAT3	6.24E-07	2.14E-06	0.760714	-1.31456	cold down vs hot
PPAPDC1B	0.00116855	0.00205905	0.760577	-1.31479	cold down vs hot
PCSK7	1.76E-05	4.78E-05	0.760542	-1.31485	cold down vs hot
CCDC53	1.79E-06	5.74E-06	0.759607	-1.31647	cold down vs hot
PTPN2	1.24E-05	3.48E-05	0.759215	-1.31715	cold down vs hot
PSMA3	4.23E-08	1.64E-07	0.758944	-1.31762	cold down vs hot
SFXN2	0.00152182	0.00257985	0.758754	-1.31795	cold down vs hot
ARPC1B	0.0015684	0.00264712	0.758096	-1.31909	cold down vs hot
TMEM2	0.00468789	0.00672298	0.757915	-1.31941	cold down vs hot
SPPL2A	5.01E-05	0.00012553	0.757282	-1.32051	cold down vs hot
CAPN12	0.000982965	0.00177518	0.756729	-1.32148	cold down vs hot
GRK5	0.000340074	0.000693239	0.75563	-1.3234	cold down vs hot
C9orf23	0.00269538	0.00420455	0.755598	-1.32345	cold down vs hot
DAZAP2	6.75E-09	2.84E-08	0.755379	-1.32384	cold down vs hot
DCLRE1C	0.000621125	0.00118638	0.755364	-1.32386	cold down vs hot
ACCS	0.0025524	0.00400449	0.754485	-1.32541	cold down vs hot
BCL2L1	1.15E-05	3.26E-05	0.754453	-1.32546	cold down vs hot
RNF130	2.07E-06	6.57E-06	0.754328	-1.32568	cold down vs hot
RBKS	0.00541045	0.00755665	0.754132	-1.32603	cold down vs hot
CSK	1.45E-05	3.99E-05	0.75357	-1.32702	cold down vs hot
NCOA3	5.47E-06	1.62E-05	0.753487	-1.32716	cold down vs hot
MYH9	1.59E-05	4.36E-05	0.753385	-1.32734	cold down vs hot

PPAP2A	0.000174614	0.000383204	0.753346	-1.32741	cold down vs hot
MAST3	2.47E-05	6.57E-05	0.753222	-1.32763	cold down vs hot
EHD1	1.08E-05	3.06E-05	0.753049	-1.32793	cold down vs hot
PNKD	1.81E-05	4.91E-05	0.752463	-1.32897	cold down vs hot
PBXIP1	0.000121534	0.000280075	0.752258	-1.32933	cold down vs hot
STAT5B	1.22E-07	4.51E-07	0.752253	-1.32934	cold down vs hot
FICD	0.00115694	0.00204135	0.752177	-1.32947	cold down vs hot
SOAT1	0.000995414	0.0017922	0.751802	-1.33014	cold down vs hot
ARPC3	9.42E-11	4.60E-10	0.751419	-1.33082	cold down vs hot
ESAM	0.00183767	0.00303411	0.751307	-1.33101	cold down vs hot
SLC25A42	0.000246372	0.000518705	0.751011	-1.33154	cold down vs hot
ZNF688	4.05E-05	0.0001031	0.750865	-1.3318	cold down vs hot
LOC541471	0.00205317	0.00333833	0.750414	-1.3326	cold down vs hot
MANBA	0.00248874	0.00392064	0.750071	-1.33321	cold down vs hot
GATS	0.00178524	0.00295503	0.750005	-1.33333	cold down vs hot
CNDP2	4.05E-06	1.23E-05	0.749877	-1.33355	cold down vs hot
F8A1	0.000288689	0.000598935	0.749005	-1.3351	cold down vs hot
SNX11	2.72E-09	1.19E-08	0.748975	-1.33516	cold down vs hot
TRIM5	0.000145523	0.000328077	0.748907	-1.33528	cold down vs hot
STX4	1.18E-10	5.72E-10	0.747711	-1.33742	cold down vs hot
SPSB2	0.000118916	0.000274735	0.747223	-1.33829	cold down vs hot
GIYD2	0.000214165	0.000458891	0.747155	-1.33841	cold down vs hot
CEBPB	0.000353868	0.00071793	0.74711	-1.33849	cold down vs hot
COX17	7.64E-05	0.000183938	0.747067	-1.33857	cold down vs hot
WWC3	0.000649821	0.00123111	0.746697	-1.33923	cold down vs hot
TESK1	4.08E-05	0.000103777	0.74662	-1.33937	cold down vs hot
SSR4	2.84E-05	7.42E-05	0.746594	-1.33942	cold down vs hot
PRKD2	1.81E-07	6.59E-07	0.746385	-1.33979	cold down vs hot
ADC	0.00145729	0.00248659	0.746047	-1.3404	cold down vs hot
KIAA0226	1.66E-07	6.07E-07	0.745529	-1.34133	cold down vs hot
SGPL1	6.16E-07	2.11E-06	0.745531	-1.34133	cold down vs hot
ACSL4	0.00153144	0.00259279	0.7453	-1.34174	cold down vs hot
AKAP13	3.05E-06	9.43E-06	0.745162	-1.34199	cold down vs hot
MMP19	0.000305125	0.000628345	0.744765	-1.3427	cold down vs hot
RNASEH2B	4.02E-05	0.000102358	0.744523	-1.34314	cold down vs hot
C9orf91	0.000574683	0.00110575	0.744209	-1.34371	cold down vs hot
RAPGEF1	1.59E-05	4.36E-05	0.743943	-1.34419	cold down vs hot
RINL	0.00427112	0.00621543	0.743425	-1.34513	cold down vs hot
MAN2A1	0.00231772	0.00370034	0.743327	-1.3453	cold down vs hot
IKBKG	1.10E-07	4.10E-07	0.742732	-1.34638	cold down vs hot
KIAA1147	0.00503455	0.00712155	0.742733	-1.34638	cold down vs hot
ZNF238	0.00457978	0.00658966	0.742494	-1.34681	cold down vs hot
OTUD1	6.15E-06	1.81E-05	0.742408	-1.34697	cold down vs hot
C5orf32	0.000623875	0.00119059	0.741535	-1.34855	cold down vs hot
LOC158376	0.00736142	0.00978922	0.741538	-1.34855	cold down vs hot
SAR1B	2.62E-05	6.93E-05	0.741401	-1.3488	cold down vs hot
IQCG	0.00236911	0.00376397	0.741066	-1.34941	cold down vs hot
SGPP1	7.16E-05	0.000173635	0.740897	-1.34971	cold down vs hot
FKBP15	1.65E-09	7.33E-09	0.740635	-1.35019	cold down vs hot
ROGDI	0.00010233	0.000239381	0.740627	-1.35021	cold down vs hot
SMAD6	0.00618792	0.00843847	0.740422	-1.35058	cold down vs hot
ACTR3	6.60E-08	2.53E-07	0.739856	-1.35162	cold down vs hot
EPB41L2	0.00122673	0.00214259	0.739742	-1.35182	cold down vs hot
C22orf26	0.0023024	0.00367859	0.739175	-1.35286	cold down vs hot
RABGAP1L	4.42E-06	1.33E-05	0.739156	-1.35289	cold down vs hot
KIAA0922	5.84E-05	0.000144323	0.739065	-1.35306	cold down vs hot
RAP2C	0.000150559	0.000337795	0.738883	-1.35339	cold down vs hot
ATG4A	2.63E-06	8.22E-06	0.738651	-1.35382	cold down vs hot
RNF122	0.000226144	0.000480144	0.73843	-1.35422	cold down vs hot
MFSD1	2.71E-07	9.65E-07	0.738372	-1.35433	cold down vs hot
LDLRAP1	0.00017056	0.000375443	0.738206	-1.35464	cold down vs hot
MBD4	2.03E-08	8.15E-08	0.738074	-1.35488	cold down vs hot
NDST2	6.21E-10	2.85E-09	0.737644	-1.35567	cold down vs hot
ZMIZ2	1.18E-06	3.87E-06	0.737179	-1.35652	cold down vs hot
SMAD7	0.000446184	0.000886213	0.736862	-1.35711	cold down vs hot
PPP3CC	3.03E-07	1.07E-06	0.736387	-1.35798	cold down vs hot
HERC3	4.97E-05	0.000124479	0.736328	-1.35809	cold down vs hot
GRK6	5.36E-06	1.59E-05	0.736149	-1.35842	cold down vs hot
SIRT7	1.33E-06	4.33E-06	0.735075	-1.36041	cold down vs hot
RALGDS	3.28E-06	1.01E-05	0.734774	-1.36096	cold down vs hot
SYNJ2	0.00383626	0.00568787	0.734744	-1.36102	cold down vs hot
SMARCA2	0.000226062	0.000480127	0.734355	-1.36174	cold down vs hot
PARD6A	0.00514302	0.00724515	0.733985	-1.36243	cold down vs hot
STK17A	0.0043322	0.00628609	0.732977	-1.3643	cold down vs hot
STAMBPL1	0.00675693	0.00913048	0.732703	-1.36481	cold down vs hot
DNASE2	1.31E-05	3.66E-05	0.732394	-1.36539	cold down vs hot
RNF149	1.78E-08	7.18E-08	0.731335	-1.36736	cold down vs hot

SLC2A8	0.00062204	0.00118778	0.731322	-1.36739	cold down vs hot
JHDM1D	0.00196872	0.00322277	0.731277	-1.36747	cold down vs hot
DAB2	0.00080017	0.00148365	0.731245	-1.36753	cold down vs hot
CTSA	0.0001271	0.000290963	0.731203	-1.36761	cold down vs hot
ARRB1	0.00224225	0.00359568	0.730981	-1.36803	cold down vs hot
ANXA11	4.52E-07	1.57E-06	0.730941	-1.3681	cold down vs hot
RAB30	0.00131833	0.00228352	0.730638	-1.36867	cold down vs hot
FCHSD1	1.94E-05	5.24E-05	0.730228	-1.36944	cold down vs hot
IL13RA1	2.70E-05	7.11E-05	0.730218	-1.36945	cold down vs hot
CALCOCO2	3.80E-09	1.64E-08	0.730208	-1.36947	cold down vs hot
ATP6V0E1	5.61E-09	2.38E-08	0.729023	-1.3717	cold down vs hot
GGA2	3.09E-07	1.09E-06	0.728723	-1.37226	cold down vs hot
C9orf46	1.80E-05	4.88E-05	0.728182	-1.37328	cold down vs hot
ISCU	7.44E-12	3.88E-11	0.727913	-1.37379	cold down vs hot
CAPZB	2.01E-13	1.13E-12	0.72781	-1.37398	cold down vs hot
EHBFP1L1	3.85E-06	1.17E-05	0.727811	-1.37398	cold down vs hot
RAB11FIP1	3.32E-05	8.56E-05	0.727778	-1.37405	cold down vs hot
ZFP36L2	7.16E-07	2.43E-06	0.727439	-1.37469	cold down vs hot
MITD1	9.72E-08	3.63E-07	0.727042	-1.37544	cold down vs hot
SIGIRR	0.00158714	0.00267339	0.726988	-1.37554	cold down vs hot
SEC14L1	9.54E-06	2.73E-05	0.726777	-1.37594	cold down vs hot
ZDHHHC12	0.000501025	0.000980323	0.726044	-1.37733	cold down vs hot
SPSB1	0.00158765	0.00267339	0.725708	-1.37796	cold down vs hot
PACS1	2.78E-07	9.90E-07	0.725412	-1.37853	cold down vs hot
EDARADD	0.00190297	0.00312532	0.72539	-1.37857	cold down vs hot
C9orf72	0.00437707	0.00634133	0.725249	-1.37884	cold down vs hot
CCDC159	1.68E-05	4.59E-05	0.724971	-1.37937	cold down vs hot
KANK3	0.000598622	0.00114743	0.724714	-1.37985	cold down vs hot
PIK3R3	0.00260897	0.00408244	0.72402	-1.38118	cold down vs hot
CCM2	5.79E-07	1.99E-06	0.723785	-1.38163	cold down vs hot
ARHGEF1	2.20E-06	6.96E-06	0.723752	-1.38169	cold down vs hot
SLC39A11	0.000500003	0.000979104	0.723705	-1.38178	cold down vs hot
NPC2	3.75E-06	1.14E-05	0.723534	-1.38211	cold down vs hot
CBR3	0.000683326	0.00128616	0.722731	-1.38364	cold down vs hot
CCDC107	5.17E-06	1.54E-05	0.722513	-1.38406	cold down vs hot
UBC	3.04E-10	1.44E-09	0.722135	-1.38478	cold down vs hot
RFX5	9.57E-10	4.34E-09	0.721673	-1.38567	cold down vs hot
U2AF1L4	9.22E-08	3.46E-07	0.721367	-1.38626	cold down vs hot
FILIP1	0.0075213	0.00996411	0.721258	-1.38647	cold down vs hot
ETS2	0.000567334	0.00109292	0.720304	-1.3883	cold down vs hot
UBE2D1	8.45E-07	2.84E-06	0.719672	-1.38952	cold down vs hot
TOR2A	1.23E-05	3.44E-05	0.719663	-1.38954	cold down vs hot
AKR1B1	0.000468039	0.000924277	0.719617	-1.38963	cold down vs hot
FCHO2	0.000902976	0.00164616	0.719591	-1.38968	cold down vs hot
PPIAL4D	0.00367551	0.00549069	0.71923	-1.39037	cold down vs hot
SLFN5	0.00227823	0.00364353	0.719205	-1.39042	cold down vs hot
MALT1	2.88E-05	7.53E-05	0.718864	-1.39108	cold down vs hot
ORMDL3	3.53E-12	1.89E-11	0.71857	-1.39165	cold down vs hot
C17orf68	3.00E-07	1.06E-06	0.717816	-1.39311	cold down vs hot
LIMK2	0.000473848	0.000933771	0.717275	-1.39417	cold down vs hot
C17orf59	6.36E-07	2.17E-06	0.717233	-1.39425	cold down vs hot
TIAF1	2.70E-05	7.11E-05	0.717204	-1.3943	cold down vs hot
IFI27L2	0.00164135	0.00275529	0.716837	-1.39502	cold down vs hot
LPCAT3	9.99E-07	3.33E-06	0.716339	-1.39599	cold down vs hot
TP53I11	0.00540342	0.00754844	0.715412	-1.3978	cold down vs hot
RAB8B	2.39E-05	6.36E-05	0.714864	-1.39887	cold down vs hot
PDGFRB	0.00467765	0.00671125	0.714221	-1.40013	cold down vs hot
FAM69A	0.00365565	0.00546478	0.714188	-1.40019	cold down vs hot
C3orf42	0.000173138	0.000380476	0.71403	-1.4005	cold down vs hot
CBLB	1.26E-05	3.53E-05	0.713695	-1.40116	cold down vs hot
GALT	4.30E-05	0.00010903	0.71356	-1.40142	cold down vs hot
CCPG1	0.00128446	0.00223018	0.71329	-1.40195	cold down vs hot
SNX29	2.10E-08	8.39E-08	0.712062	-1.40437	cold down vs hot
LOC100286	0.000986634	0.00178032	0.71202	-1.40445	cold down vs hot
C9orf150	0.0027054	0.00421843	0.711831	-1.40483	cold down vs hot
UCP3	0.00165143	0.00276794	0.711798	-1.40489	cold down vs hot
CARD8	3.09E-05	8.03E-05	0.71167	-1.40514	cold down vs hot
KCTD11	4.50E-05	0.000113657	0.711016	-1.40644	cold down vs hot
TRADD	4.89E-07	1.70E-06	0.71097	-1.40653	cold down vs hot
LBR	0.000163868	0.000363408	0.710951	-1.40657	cold down vs hot
CD47	3.94E-07	1.38E-06	0.710766	-1.40693	cold down vs hot
ADAMTSL4	0.00467011	0.00670191	0.710538	-1.40738	cold down vs hot
CMTM7	0.000755979	0.00140892	0.71032	-1.40782	cold down vs hot
CORO7	1.09E-05	3.09E-05	0.710209	-1.40804	cold down vs hot
FLJ42289	0.00429804	0.00624624	0.71006	-1.40833	cold down vs hot
OBFC2A	6.62E-05	0.000161431	0.709993	-1.40846	cold down vs hot
FAM122C	5.96E-07	2.05E-06	0.709913	-1.40862	cold down vs hot

HESX1	0.00252774	0.00397344	0.709803	-1.40884	cold down vs hot
MRAS	0.000646255	0.00122577	0.709742	-1.40896	cold down vs hot
CASP7	4.04E-06	1.23E-05	0.709386	-1.40967	cold down vs hot
CXorf38	3.07E-08	1.21E-07	0.708668	-1.4111	cold down vs hot
NFATC1	0.00368419	0.00549863	0.708408	-1.41162	cold down vs hot
JAK1	7.11E-11	3.51E-10	0.708113	-1.4122	cold down vs hot
ITSN2	2.56E-06	8.01E-06	0.707698	-1.41303	cold down vs hot
IL10RB	2.08E-11	1.07E-10	0.707672	-1.41308	cold down vs hot
CSRNP1	0.000136262	0.00030955	0.706825	-1.41478	cold down vs hot
RAB43	2.14E-06	6.79E-06	0.706195	-1.41604	cold down vs hot
NRP1	0.00471937	0.00675922	0.705683	-1.41707	cold down vs hot
DGKZ	9.21E-08	3.46E-07	0.705645	-1.41714	cold down vs hot
BCL6B	0.00218971	0.00352964	0.705497	-1.41744	cold down vs hot
FZD5	0.00015222	0.000341288	0.705469	-1.4175	cold down vs hot
TBC1D1	1.58E-06	5.10E-06	0.704723	-1.419	cold down vs hot
ST6GALNA4	1.07E-06	3.53E-06	0.704637	-1.41917	cold down vs hot
ARHGAP18	0.000311821	0.000641194	0.703378	-1.42171	cold down vs hot
AKAP7	5.26E-05	0.000131222	0.70281	-1.42286	cold down vs hot
TTL13	0.00112541	0.0019938	0.702366	-1.42376	cold down vs hot
SLC39A8	0.00145886	0.00248798	0.70183	-1.42485	cold down vs hot
CX3CL1	0.00184038	0.00303706	0.701444	-1.42563	cold down vs hot
ROBO4	0.0017534	0.00291119	0.701374	-1.42577	cold down vs hot
ZNF763	0.000660077	0.00124872	0.701208	-1.42611	cold down vs hot
TBC1D9	0.00163125	0.00273973	0.700905	-1.42673	cold down vs hot
UBE2F	7.51E-10	3.43E-09	0.700474	-1.4276	cold down vs hot
AP1G2	0.00042815	0.00085377	0.700074	-1.42842	cold down vs hot
TINAGL1	0.00678362	0.00915707	0.699344	-1.42991	cold down vs hot
TRIM38	9.07E-11	4.44E-10	0.699272	-1.43006	cold down vs hot
ANXA7	6.35E-12	3.34E-11	0.699163	-1.43028	cold down vs hot
PLVAP	6.40E-05	0.000156704	0.699155	-1.4303	cold down vs hot
MBNL1	7.50E-06	2.17E-05	0.69896	-1.4307	cold down vs hot
APOBEC3B	0.0067799	0.00915394	0.698832	-1.43096	cold down vs hot
SCARNA2	0.00737681	0.0098037	0.698784	-1.43106	cold down vs hot
FAM49B	2.31E-09	1.01E-08	0.698754	-1.43112	cold down vs hot
ATOX1	8.81E-05	0.000209075	0.698612	-1.43141	cold down vs hot
ABCD1	0.00676934	0.00914157	0.698554	-1.43153	cold down vs hot
CCDC102B	0.00319712	0.00488907	0.698254	-1.43214	cold down vs hot
C15orf57	4.93E-11	2.47E-10	0.698068	-1.43253	cold down vs hot
ZDHC18	5.66E-11	2.81E-10	0.697841	-1.43299	cold down vs hot
RASSF7	0.000212574	0.000455795	0.697449	-1.4338	cold down vs hot
ZHX2	0.00100375	0.00180473	0.697327	-1.43405	cold down vs hot
NUBP1	3.41E-13	1.90E-12	0.697237	-1.43423	cold down vs hot
LOC100130	0.000181549	0.000395893	0.697223	-1.43426	cold down vs hot
ABHD3	1.33E-07	4.92E-07	0.697123	-1.43447	cold down vs hot
KLF4	0.00479405	0.00684964	0.697105	-1.4345	cold down vs hot
DLL4	0.000557325	0.00107745	0.696772	-1.43519	cold down vs hot
CALML4	2.13E-08	8.48E-08	0.696603	-1.43554	cold down vs hot
LOC401093	0.000756855	0.00141012	0.69646	-1.43583	cold down vs hot
RAP1A	5.52E-08	2.12E-07	0.694331	-1.44024	cold down vs hot
MOBK1B	1.10E-08	4.50E-08	0.694293	-1.44031	cold down vs hot
RNF166	8.84E-09	3.67E-08	0.694149	-1.44061	cold down vs hot
ID3	0.0065824	0.00891865	0.694055	-1.44081	cold down vs hot
PALLD	0.00354037	0.00531878	0.693996	-1.44093	cold down vs hot
LOC115110	0.00569022	0.0078716	0.693976	-1.44097	cold down vs hot
MR1	0.000450224	0.00089292	0.693931	-1.44107	cold down vs hot
BLVRA	3.18E-06	9.81E-06	0.693251	-1.44248	cold down vs hot
KLHL5	2.97E-06	9.22E-06	0.692598	-1.44384	cold down vs hot
IQSEC2	4.05E-05	0.000103011	0.692426	-1.4442	cold down vs hot
MGAT1	5.05E-07	1.75E-06	0.692109	-1.44486	cold down vs hot
SNN	1.09E-08	4.45E-08	0.691543	-1.44604	cold down vs hot
C10orf11	0.00656777	0.00890067	0.69129	-1.44657	cold down vs hot
SYNE2	4.46E-05	0.000112752	0.691219	-1.44672	cold down vs hot
BTN2A2	0.000155124	0.000346727	0.691014	-1.44715	cold down vs hot
PRKCZ	0.00298585	0.00459832	0.690982	-1.44722	cold down vs hot
RGL1	0.000560097	0.00108211	0.690938	-1.44731	cold down vs hot
HDHD3	0.007146	0.00956513	0.690855	-1.44748	cold down vs hot
HIVEP2	5.19E-06	1.55E-05	0.690678	-1.44785	cold down vs hot
LOC374443	4.59E-05	0.000115776	0.690641	-1.44793	cold down vs hot
RIN3	4.99E-06	1.49E-05	0.690133	-1.449	cold down vs hot
SYNE1	4.20E-06	1.27E-05	0.690048	-1.44917	cold down vs hot
LITAF	5.32E-08	2.05E-07	0.690032	-1.44921	cold down vs hot
SRGAP3	0.00464926	0.00667785	0.689785	-1.44973	cold down vs hot
CPT1B	0.00320317	0.00489603	0.689352	-1.45064	cold down vs hot
MFSD4	0.00235943	0.00374951	0.689158	-1.45105	cold down vs hot
GNAI2	5.07E-12	2.69E-11	0.688985	-1.45141	cold down vs hot
AGFG2	7.73E-09	3.23E-08	0.688421	-1.4526	cold down vs hot
OSBPL3	0.00222512	0.00357436	0.688258	-1.45294	cold down vs hot

LOC143188	1.50E-05	4.14E-05	0.687457	-1.45464	cold down vs hot
SH3BGR1	3.70E-09	1.59E-08	0.686697	-1.45625	cold down vs hot
HIVEP3	0.000297793	0.000615257	0.686377	-1.45693	cold down vs hot
LPIN2	9.55E-08	3.57E-07	0.685914	-1.45791	cold down vs hot
ACTN3	0.00143559	0.00245342	0.685727	-1.45831	cold down vs hot
MAT2B	1.75E-09	7.73E-09	0.684892	-1.46008	cold down vs hot
FUT1	0.00181254	0.00299717	0.683745	-1.46253	cold down vs hot
HEXDC	5.22E-05	0.000130311	0.683662	-1.46271	cold down vs hot
CATSPER3	0.000641663	0.00121813	0.683087	-1.46394	cold down vs hot
CTRL	0.00118579	0.00208156	0.682804	-1.46455	cold down vs hot
CPAMD8	0.00617042	0.0084234	0.682751	-1.46466	cold down vs hot
SIPA1	3.96E-08	1.54E-07	0.682619	-1.46495	cold down vs hot
RUNDC3B	0.00436508	0.00632957	0.682452	-1.46531	cold down vs hot
AGBL2	0.00568536	0.00786827	0.682368	-1.46548	cold down vs hot
HDAC7	1.80E-08	7.26E-08	0.682288	-1.46566	cold down vs hot
C19orf66	5.27E-07	1.82E-06	0.68205	-1.46617	cold down vs hot
SOX13	0.00101786	0.00182707	0.680828	-1.4688	cold down vs hot
DKFZP586I	4.44E-05	0.000112384	0.680641	-1.4692	cold down vs hot
ARRDC1	3.73E-08	1.46E-07	0.680428	-1.46966	cold down vs hot
C1orf126	0.00472994	0.00677287	0.680404	-1.46972	cold down vs hot
FTHL3	3.40E-07	1.19E-06	0.680314	-1.46991	cold down vs hot
FTH1	1.71E-07	6.26E-07	0.680303	-1.46993	cold down vs hot
FLJ11235	0.00665344	0.00899996	0.68018	-1.4702	cold down vs hot
XRN1	7.31E-06	2.12E-05	0.67998	-1.47063	cold down vs hot
MYLK	0.0032152	0.00490867	0.679761	-1.47111	cold down vs hot
ACBD4	2.74E-05	7.20E-05	0.679615	-1.47142	cold down vs hot
RGS14	1.24E-05	3.48E-05	0.679563	-1.47153	cold down vs hot
RIMBP3C	0.00585305	0.00806043	0.679315	-1.47207	cold down vs hot
REBP	0.00109964	0.00195718	0.67919	-1.47234	cold down vs hot
TMC6	0.0061579	0.00841508	0.67827	-1.47434	cold down vs hot
ASAP3	0.00144722	0.00247201	0.67783	-1.4753	cold down vs hot
TBC1D8	0.000138397	0.000313685	0.677751	-1.47547	cold down vs hot
PBX3	2.52E-05	6.67E-05	0.677441	-1.47614	cold down vs hot
ZBTB46	0.0030782	0.00472271	0.677231	-1.4766	cold down vs hot
JUNB	0.000146247	0.00032948	0.677167	-1.47674	cold down vs hot
ZNF438	2.23E-06	7.04E-06	0.677095	-1.4769	cold down vs hot
TBC1D2B	1.65E-08	6.69E-08	0.676616	-1.47794	cold down vs hot
NCOA7	1.80E-05	4.89E-05	0.676367	-1.47849	cold down vs hot
MOV10	1.65E-11	8.52E-11	0.675373	-1.48066	cold down vs hot
FAM13AOS	0.00471692	0.00675719	0.675164	-1.48112	cold down vs hot
LPAR2	0.00166729	0.0027895	0.674797	-1.48193	cold down vs hot
CECR6	0.00106403	0.0018995	0.674103	-1.48345	cold down vs hot
MAF	6.95E-06	2.03E-05	0.673864	-1.48398	cold down vs hot
ZNF469	0.00484285	0.00690878	0.673803	-1.48411	cold down vs hot
B4GALT1	3.98E-08	1.55E-07	0.673764	-1.4842	cold down vs hot
SIPA1L1	2.21E-05	5.93E-05	0.673389	-1.48502	cold down vs hot
TJP2	0.000363168	0.000734513	0.672141	-1.48778	cold down vs hot
CRLF3	2.56E-08	1.01E-07	0.672052	-1.48798	cold down vs hot
FAM124B	0.0010532	0.00188222	0.671502	-1.4892	cold down vs hot
CIB1	7.92E-09	3.30E-08	0.671276	-1.4897	cold down vs hot
ZRSR2	1.83E-11	9.41E-11	0.671256	-1.48974	cold down vs hot
UBXN11	1.06E-06	3.51E-06	0.670873	-1.4906	cold down vs hot
COL15A1	0.00373789	0.00556351	0.670741	-1.49089	cold down vs hot
VASH2	0.00593986	0.00816332	0.67053	-1.49136	cold down vs hot
CCDC81	0.00497668	0.00705894	0.670261	-1.49196	cold down vs hot
TNFRSF14	0.00110868	0.00196913	0.670064	-1.4924	cold down vs hot
KCTD12	0.00042595	0.000849904	0.66993	-1.49269	cold down vs hot
ARHGAP26	2.43E-06	7.64E-06	0.669903	-1.49275	cold down vs hot
PNPLA7	0.00337041	0.0050991	0.669639	-1.49334	cold down vs hot
GRB2	1.79E-25	1.62E-24	0.669519	-1.49361	cold down vs hot
TMSB10	1.14E-08	4.66E-08	0.669383	-1.49391	cold down vs hot
PDE5A	0.00134605	0.00232289	0.669368	-1.49395	cold down vs hot
GALNT12	0.00289488	0.00447723	0.669338	-1.49401	cold down vs hot
MBD2	1.81E-13	1.02E-12	0.669232	-1.49425	cold down vs hot
CREG1	1.90E-06	6.08E-06	0.669187	-1.49435	cold down vs hot
TGFBR2	3.82E-05	9.78E-05	0.668479	-1.49593	cold down vs hot
MARCH2	2.36E-08	9.37E-08	0.668171	-1.49662	cold down vs hot
PRR13	5.95E-14	3.44E-13	0.667853	-1.49733	cold down vs hot
ELTD1	0.00158628	0.00267316	0.667296	-1.49859	cold down vs hot
FOXD4L6	0.00434644	0.00630535	0.667003	-1.49924	cold down vs hot
DLG3	0.00134518	0.00232201	0.666815	-1.49967	cold down vs hot
PLCL1	0.00753954	0.00997731	0.666803	-1.49969	cold down vs hot
LOC100128	0.00447909	0.00646617	0.666629	-1.50009	cold down vs hot
ARRDC2	1.18E-08	4.82E-08	0.666086	-1.50131	cold down vs hot
PPP1R3G	0.00315852	0.00483458	0.666004	-1.50149	cold down vs hot
CA2	0.00406606	0.00596221	0.665224	-1.50325	cold down vs hot
C21orf91	0.00556769	0.0077283	0.665145	-1.50343	cold down vs hot

ANUBL1	3.20E-05	8.29E-05	0.664831	-1.50414	cold down vs hot
DUSP10	0.00413078	0.00604218	0.664694	-1.50445	cold down vs hot
RHEBL1	1.15E-06	3.79E-06	0.664471	-1.50496	cold down vs hot
MICAL1	0.000916101	0.00166548	0.664085	-1.50583	cold down vs hot
MICALL2	0.00660102	0.00894202	0.66361	-1.50691	cold down vs hot
SPAG1	0.00135801	0.00233982	0.663565	-1.50701	cold down vs hot
TREX1	2.14E-06	6.79E-06	0.663534	-1.50708	cold down vs hot
GRN	6.09E-07	2.09E-06	0.662976	-1.50835	cold down vs hot
CCDC28A	2.33E-12	1.26E-11	0.662971	-1.50836	cold down vs hot
SLC25A35	7.15E-07	2.43E-06	0.662864	-1.50861	cold down vs hot
PCGF5	7.35E-07	2.49E-06	0.662819	-1.50871	cold down vs hot
ST6GAL1	0.000119837	0.000276569	0.662645	-1.5091	cold down vs hot
EPAS1	2.89E-07	1.03E-06	0.662484	-1.50947	cold down vs hot
LOC100134	0.00021771	0.000465417	0.662187	-1.51015	cold down vs hot
PSAP	1.76E-08	7.12E-08	0.662096	-1.51035	cold down vs hot
NECAP2	5.54E-21	4.27E-20	0.661901	-1.5108	cold down vs hot
GPCPD1	3.19E-05	8.26E-05	0.661613	-1.51146	cold down vs hot
NHSL2	0.00403015	0.00591887	0.661541	-1.51162	cold down vs hot
BCL6	3.14E-08	1.23E-07	0.660899	-1.51309	cold down vs hot
MOBK2A	1.38E-11	7.17E-11	0.660548	-1.51389	cold down vs hot
PPM1K	0.000481744	0.000947329	0.660369	-1.51431	cold down vs hot
STOM	5.12E-06	1.53E-05	0.660343	-1.51437	cold down vs hot
UBE2J1	2.10E-10	1.01E-09	0.659815	-1.51558	cold down vs hot
ABLIM3	0.0043969	0.00636592	0.659704	-1.51583	cold down vs hot
CD34	1.35E-05	3.75E-05	0.658508	-1.51859	cold down vs hot
ALDH3B1	0.000220037	0.000468856	0.65849	-1.51862	cold down vs hot
VASN	0.00211023	0.00341841	0.658169	-1.51937	cold down vs hot
TIMP1	0.00121421	0.00212574	0.65795	-1.51987	cold down vs hot
EXOC3L	9.37E-05	0.000221	0.657903	-1.51998	cold down vs hot
CNOT6L	4.30E-09	1.84E-08	0.657794	-1.52023	cold down vs hot
PQLC3	9.80E-09	4.05E-08	0.657775	-1.52028	cold down vs hot
RORA	0.00165898	0.00277877	0.657646	-1.52057	cold down vs hot
KIAA1949	1.35E-07	4.98E-07	0.657599	-1.52068	cold down vs hot
SH3BP1	7.35E-06	2.13E-05	0.657357	-1.52124	cold down vs hot
ARHGEF15	5.99E-05	0.000147503	0.657342	-1.52128	cold down vs hot
TPST2	3.35E-09	1.45E-08	0.657046	-1.52196	cold down vs hot
EGLN3	0.00119502	0.00209551	0.656841	-1.52244	cold down vs hot
ADA	6.02E-06	1.77E-05	0.656753	-1.52264	cold down vs hot
LOC339524	0.000707397	0.00132785	0.65649	-1.52325	cold down vs hot
POLD4	1.79E-08	7.22E-08	0.656469	-1.5233	cold down vs hot
TIE1	0.0012841	0.00223015	0.656468	-1.5233	cold down vs hot
CTSL1	0.000791257	0.00146811	0.656252	-1.5238	cold down vs hot
MIF4GD	3.54E-09	1.53E-08	0.655774	-1.52492	cold down vs hot
GALR2	0.00158246	0.00266809	0.655765	-1.52494	cold down vs hot
TAL1	0.000872782	0.00159875	0.655463	-1.52564	cold down vs hot
LGALS3	0.00274175	0.00426771	0.655283	-1.52606	cold down vs hot
LOC389333	0.000946884	0.00171476	0.65519	-1.52627	cold down vs hot
FAM70B	0.00434963	0.00630858	0.654472	-1.52795	cold down vs hot
NAT1	1.91E-05	5.17E-05	0.653288	-1.53072	cold down vs hot
TXNDC11	4.68E-18	3.28E-17	0.653068	-1.53123	cold down vs hot
SYN1	0.00110778	0.00196844	0.652994	-1.53141	cold down vs hot
N4BP3	0.00538399	0.00752613	0.652818	-1.53182	cold down vs hot
FAM111A	5.32E-06	1.58E-05	0.65203	-1.53367	cold down vs hot
C14orf159	6.12E-10	2.81E-09	0.65195	-1.53386	cold down vs hot
DTNB	5.02E-07	1.74E-06	0.651762	-1.5343	cold down vs hot
C17orf91	1.31E-05	3.66E-05	0.651271	-1.53546	cold down vs hot
TSPAN18	0.000502776	0.000982645	0.650292	-1.53777	cold down vs hot
YPEL3	6.82E-09	2.87E-08	0.649982	-1.5385	cold down vs hot
UBASH3B	0.000367177	0.000741473	0.649176	-1.54041	cold down vs hot
ACADS	0.000164385	0.000364392	0.649037	-1.54075	cold down vs hot
ZNF267	6.01E-07	2.06E-06	0.648494	-1.54203	cold down vs hot
MFSD6	7.50E-05	0.000181004	0.647759	-1.54378	cold down vs hot
CACNA1A	0.00716205	0.00958072	0.647647	-1.54405	cold down vs hot
RELT	9.85E-08	3.68E-07	0.647644	-1.54406	cold down vs hot
RNF19B	4.86E-10	2.26E-09	0.647428	-1.54457	cold down vs hot
IFNAR2	1.28E-09	5.73E-09	0.647426	-1.54458	cold down vs hot
LIMS2	0.00395741	0.00583941	0.647021	-1.54554	cold down vs hot
NANOS1	0.000788445	0.00146425	0.645217	-1.54987	cold down vs hot
C2orf48	0.00674462	0.00911574	0.645001	-1.55038	cold down vs hot
C13orf31	1.85E-07	6.74E-07	0.644912	-1.5506	cold down vs hot
FLJ35776	3.05E-05	7.94E-05	0.644739	-1.55102	cold down vs hot
CMIP	2.25E-09	9.84E-09	0.644685	-1.55114	cold down vs hot
CAMK1	5.95E-05	0.000146627	0.644012	-1.55277	cold down vs hot
NRIP2	8.59E-06	2.48E-05	0.643848	-1.55316	cold down vs hot
IFNGR1	2.06E-09	9.05E-09	0.643396	-1.55425	cold down vs hot
CYP27A1	9.82E-05	0.000230542	0.642673	-1.556	cold down vs hot
ERG	0.000135925	0.000308997	0.642203	-1.55714	cold down vs hot

ZNFX1	4.33E-13	2.41E-12	0.642199	-1.55715	cold down vs hot
FAM23A	0.00180533	0.00298676	0.641809	-1.5581	cold down vs hot
STARD8	0.000142399	0.000321811	0.641089	-1.55985	cold down vs hot
ABTB1	4.09E-09	1.76E-08	0.640984	-1.5601	cold down vs hot
SLC24A6	1.53E-11	7.93E-11	0.640942	-1.5602	cold down vs hot
PTPN18	1.67E-11	8.63E-11	0.640727	-1.56073	cold down vs hot
PALMD	0.00322267	0.00491439	0.640651	-1.56091	cold down vs hot
CYBRD1	0.00253705	0.00398423	0.639836	-1.5629	cold down vs hot
GLCC1	0.000163252	0.000362411	0.639809	-1.56297	cold down vs hot
CHST7	0.000636626	0.00121032	0.639516	-1.56368	cold down vs hot
MYD88	3.13E-15	1.92E-14	0.639515	-1.56369	cold down vs hot
RAB27A	0.000230677	0.000488658	0.639512	-1.56369	cold down vs hot
JDP2	2.43E-07	8.70E-07	0.639065	-1.56479	cold down vs hot
ADAMTS14	0.00709909	0.00950819	0.639026	-1.56488	cold down vs hot
SOX17	0.00014853	0.000333933	0.638913	-1.56516	cold down vs hot
ALDH5A1	0.00504394	0.00713175	0.638446	-1.5663	cold down vs hot
PLEKHO2	1.98E-10	9.48E-10	0.638114	-1.56712	cold down vs hot
MGLL	0.00180945	0.00299283	0.637688	-1.56817	cold down vs hot
DAPK1	0.00025032	0.000526339	0.637464	-1.56872	cold down vs hot
PFKFB1	0.000124393	0.000285769	0.636943	-1.57	cold down vs hot
ADPRH	1.07E-06	3.54E-06	0.636934	-1.57002	cold down vs hot
CORO2A	0.00223336	0.00358407	0.636846	-1.57024	cold down vs hot
RAB11FIP4	0.000467855	0.000924194	0.636551	-1.57097	cold down vs hot
COL6A3	0.00240359	0.0038104	0.636413	-1.57131	cold down vs hot
GPX1	1.18E-06	3.88E-06	0.636073	-1.57215	cold down vs hot
NTRK1	0.0072507	0.0096676	0.636006	-1.57231	cold down vs hot
CHST11	6.87E-06	2.00E-05	0.6359	-1.57257	cold down vs hot
CYP4V2	2.24E-05	6.00E-05	0.635684	-1.57311	cold down vs hot
CTSD	2.61E-05	6.91E-05	0.635574	-1.57338	cold down vs hot
CALCRL	0.00075477	0.00140707	0.635366	-1.5739	cold down vs hot
PML	8.11E-13	4.47E-12	0.635142	-1.57445	cold down vs hot
SCARNA9	0.000292199	0.00060504	0.635143	-1.57445	cold down vs hot
UBE2E2	7.72E-05	0.000185489	0.635099	-1.57456	cold down vs hot
C17orf62	4.63E-15	2.81E-14	0.634936	-1.57496	cold down vs hot
C6orf115	5.59E-10	2.58E-09	0.634612	-1.57577	cold down vs hot
LRRC8C	3.15E-07	1.11E-06	0.633989	-1.57731	cold down vs hot
SUSD1	0.000392672	0.000788808	0.633989	-1.57732	cold down vs hot
TNFRSF11A	0.00146719	0.0024984	0.633576	-1.57834	cold down vs hot
CACNA1C	0.00412769	0.00604037	0.633527	-1.57847	cold down vs hot
LRRC70	0.000198505	0.000428716	0.633102	-1.57952	cold down vs hot
NCRNA001	6.22E-06	1.82E-05	0.633092	-1.57955	cold down vs hot
GPR155	0.00662865	0.00897386	0.632489	-1.58105	cold down vs hot
HSD3B7	0.000125433	0.000287955	0.632195	-1.58179	cold down vs hot
LGALS3BP	2.32E-05	6.20E-05	0.631968	-1.58236	cold down vs hot
KLF1	0.00296589	0.00457081	0.631956	-1.58239	cold down vs hot
MARCH3	0.000532123	0.00103486	0.631948	-1.58241	cold down vs hot
SSPN	0.00355425	0.00533274	0.63189	-1.58255	cold down vs hot
GSTK1	1.21E-13	6.91E-13	0.631131	-1.58446	cold down vs hot
CASP8	1.16E-09	5.20E-09	0.62999	-1.58733	cold down vs hot
TDRD10	0.00742811	0.00986585	0.62964	-1.58821	cold down vs hot
SFTA1P	0.00332406	0.00503715	0.629444	-1.5887	cold down vs hot
SLC25A45	6.64E-08	2.54E-07	0.629092	-1.58959	cold down vs hot
STAT5A	2.34E-07	8.37E-07	0.629094	-1.58959	cold down vs hot
RAB4B	9.18E-11	4.49E-10	0.629072	-1.58964	cold down vs hot
FAM55C	2.65E-06	8.28E-06	0.628923	-1.59002	cold down vs hot
ATF5	1.31E-10	6.38E-10	0.628441	-1.59124	cold down vs hot
SLC25A28	2.77E-16	1.80E-15	0.628231	-1.59177	cold down vs hot
ACTA2	4.97E-05	0.000124479	0.628145	-1.59199	cold down vs hot
IFITM2	0.000123629	0.000284414	0.628114	-1.59207	cold down vs hot
SHE	0.000785968	0.00146032	0.627399	-1.59388	cold down vs hot
HERPUD1	2.51E-12	1.35E-11	0.627328	-1.59406	cold down vs hot
KSR1	1.02E-06	3.38E-06	0.627296	-1.59414	cold down vs hot
HECA	6.79E-11	3.36E-10	0.627141	-1.59454	cold down vs hot
BCL2L11	1.79E-07	6.53E-07	0.627085	-1.59468	cold down vs hot
C4orf34	1.30E-09	5.84E-09	0.626929	-1.59508	cold down vs hot
PROCA1	5.79E-07	1.99E-06	0.626303	-1.59667	cold down vs hot
TNFSF12	3.37E-07	1.19E-06	0.625741	-1.5981	cold down vs hot
CDH5	4.91E-07	1.70E-06	0.625442	-1.59887	cold down vs hot
PARP11	9.33E-07	3.12E-06	0.625045	-1.59988	cold down vs hot
CD302	4.55E-05	0.00011501	0.62435	-1.60166	cold down vs hot
ADRBK1	3.92E-14	2.28E-13	0.62426	-1.6019	cold down vs hot
RILP	1.08E-07	4.01E-07	0.624084	-1.60235	cold down vs hot
SIRPB1	1.97E-05	5.32E-05	0.623842	-1.60297	cold down vs hot
MMRN2	8.18E-07	2.76E-06	0.623755	-1.60319	cold down vs hot
LOC100133	0.000335292	0.000685356	0.623338	-1.60427	cold down vs hot
FUT4	2.48E-07	8.86E-07	0.623163	-1.60472	cold down vs hot
IDH2	1.52E-08	6.17E-08	0.623154	-1.60474	cold down vs hot

MLLT3	0.000160381	0.000356889	0.622538	-1.60633	cold down vs hot
STAT2	1.33E-11	6.90E-11	0.622044	-1.6076	cold down vs hot
KIAA0513	3.97E-09	1.71E-08	0.622011	-1.60769	cold down vs hot
PNRC1	1.10E-13	6.29E-13	0.621384	-1.60931	cold down vs hot
DENND1B	0.00293704	0.00453277	0.621298	-1.60953	cold down vs hot
RUNX1	3.35E-05	8.63E-05	0.620268	-1.61221	cold down vs hot
PLEKHA2	1.29E-06	4.22E-06	0.619442	-1.61436	cold down vs hot
SH3BGL3	1.45E-07	5.34E-07	0.619213	-1.61495	cold down vs hot
BGN	0.000438737	0.000872217	0.619083	-1.61529	cold down vs hot
ARID3B	2.05E-07	7.41E-07	0.61883	-1.61595	cold down vs hot
BLOC1S1	2.60E-05	6.87E-05	0.618579	-1.61661	cold down vs hot
ZNF185	1.59E-05	4.36E-05	0.618505	-1.6168	cold down vs hot
PPP1R2P1	5.71E-06	1.69E-05	0.618178	-1.61766	cold down vs hot
IGSF22	0.00014767	0.000332228	0.617938	-1.61829	cold down vs hot
FZD10	0.00499527	0.00707519	0.617618	-1.61912	cold down vs hot
STX1B	0.000675809	0.00127516	0.616924	-1.62094	cold down vs hot
MDGA1	0.00337186	0.00510012	0.616882	-1.62105	cold down vs hot
MYCT1	3.39E-05	8.72E-05	0.616508	-1.62204	cold down vs hot
KIAA1107	0.00175565	0.00291342	0.616312	-1.62256	cold down vs hot
STEAP4	0.000529996	0.00103103	0.61625	-1.62272	cold down vs hot
SLFN12	0.000227225	0.000482127	0.616092	-1.62313	cold down vs hot
KIAA1683	0.00253186	0.00397858	0.615956	-1.62349	cold down vs hot
GATA6	0.00253977	0.00398658	0.615922	-1.62358	cold down vs hot
LOC80054	0.000924691	0.0016797	0.615448	-1.62483	cold down vs hot
AQPEP	0.004368	0.00633241	0.615067	-1.62584	cold down vs hot
NINJ1	2.06E-07	7.44E-07	0.614179	-1.62819	cold down vs hot
C20orf202	1.16E-05	3.28E-05	0.614134	-1.62831	cold down vs hot
S1PR3	0.000452351	0.000896552	0.613921	-1.62888	cold down vs hot
SERPINI1	0.00315832	0.00483458	0.613688	-1.62949	cold down vs hot
IL6R	0.000147273	0.000331563	0.613284	-1.63057	cold down vs hot
ACP2	3.29E-18	2.32E-17	0.612141	-1.63361	cold down vs hot
ATOH8	0.00344893	0.00520102	0.611524	-1.63526	cold down vs hot
DSE	6.36E-09	2.69E-08	0.611365	-1.63569	cold down vs hot
APOBEC3C	2.14E-07	7.72E-07	0.610861	-1.63703	cold down vs hot
GABRE	0.00638418	0.00868614	0.61086	-1.63704	cold down vs hot
LOC643008	0.00219562	0.00353568	0.610775	-1.63726	cold down vs hot
TMCO4	2.62E-06	8.20E-06	0.610624	-1.63767	cold down vs hot
RGS19	1.73E-11	8.93E-11	0.610506	-1.63798	cold down vs hot
TMEM173	9.75E-10	4.41E-09	0.610506	-1.63799	cold down vs hot
MYO15B	0.00151897	0.00257628	0.610174	-1.63888	cold down vs hot
SEPT4	0.00119353	0.00209346	0.610017	-1.6393	cold down vs hot
FCHSD2	1.71E-09	7.58E-09	0.608824	-1.64251	cold down vs hot
RFFL	5.86E-11	2.91E-10	0.608593	-1.64313	cold down vs hot
TNIP1	2.58E-18	1.83E-17	0.6079	-1.64501	cold down vs hot
TNFRSF6B	0.000983626	0.00177539	0.607698	-1.64555	cold down vs hot
DNAH1	1.38E-05	3.82E-05	0.607627	-1.64575	cold down vs hot
FES	0.000180552	0.000394246	0.607597	-1.64583	cold down vs hot
LYSMD2	8.33E-10	3.79E-09	0.607421	-1.6463	cold down vs hot
TMEM139	0.00250395	0.00394173	0.607147	-1.64705	cold down vs hot
OLFML2B	3.48E-05	8.94E-05	0.606989	-1.64748	cold down vs hot
AKR1A1	2.02E-14	1.19E-13	0.606682	-1.64831	cold down vs hot
COLEC12	0.000987164	0.00178079	0.606399	-1.64908	cold down vs hot
DKK2	0.0052774	0.00739296	0.606292	-1.64937	cold down vs hot
SCARNA17	4.22E-05	0.000107218	0.606062	-1.65	cold down vs hot
FOXS1	0.000328117	0.000671531	0.605618	-1.6512	cold down vs hot
ABCG2	0.00149268	0.00253755	0.605482	-1.65158	cold down vs hot
DPRXP4	9.71E-06	2.77E-05	0.605453	-1.65166	cold down vs hot
HTATIP2	0.000313547	0.000644338	0.605297	-1.65208	cold down vs hot
PRR15	0.00446647	0.00644937	0.605179	-1.6524	cold down vs hot
A4GALT	0.000434205	0.000864525	0.604373	-1.65461	cold down vs hot
GUCY1B3	0.00017617	0.000385839	0.604076	-1.65542	cold down vs hot
PLSCR1	2.21E-08	8.78E-08	0.603983	-1.65568	cold down vs hot
HDAC9	0.00421311	0.00614197	0.603913	-1.65587	cold down vs hot
ITGAE	2.18E-12	1.18E-11	0.603705	-1.65644	cold down vs hot
MICALCL	0.0017181	0.00286276	0.603678	-1.65651	cold down vs hot
FLT4	2.41E-05	6.40E-05	0.603094	-1.65812	cold down vs hot
FAM110A	8.52E-10	3.87E-09	0.602988	-1.65841	cold down vs hot
PGBD5	0.00551994	0.00767835	0.602927	-1.65858	cold down vs hot
ASB9	0.000647914	0.00122821	0.602518	-1.6597	cold down vs hot
DACT1	0.000932302	0.00169211	0.602512	-1.65972	cold down vs hot
CLEC14A	1.86E-08	7.47E-08	0.601917	-1.66136	cold down vs hot
SLITRK4	0.00548235	0.00763093	0.601895	-1.66142	cold down vs hot
PRKAG2	3.12E-06	9.65E-06	0.601593	-1.66225	cold down vs hot
SMPDL3A	7.99E-08	3.03E-07	0.601263	-1.66317	cold down vs hot
FRAT1	2.61E-09	1.14E-08	0.601168	-1.66343	cold down vs hot
TMPRSS6	0.00128087	0.00222632	0.60021	-1.66608	cold down vs hot
FITM1	0.000107718	0.000251356	0.600191	-1.66614	cold down vs hot

KCNE3	1.70E-06	5.48E-06	0.600007	-1.66665	cold down vs hot
SLC44A4	0.00406139	0.00595671	0.599664	-1.6676	cold down vs hot
HNMT	1.62E-06	5.24E-06	0.599543	-1.66794	cold down vs hot
FGD5	2.87E-06	8.94E-06	0.599368	-1.66843	cold down vs hot
NEIL1	0.00106065	0.00189451	0.598878	-1.66979	cold down vs hot
TMEM86A	8.77E-09	3.64E-08	0.59855	-1.6707	cold down vs hot
NFKBIE	6.78E-12	3.56E-11	0.598338	-1.67129	cold down vs hot
CST3	9.05E-10	4.10E-09	0.598213	-1.67164	cold down vs hot
THY1	3.37E-05	8.67E-05	0.598209	-1.67166	cold down vs hot
VWF	1.34E-06	4.37E-06	0.59809	-1.67199	cold down vs hot
TRAFD1	6.40E-24	5.47E-23	0.597951	-1.67238	cold down vs hot
ZNRF2	7.18E-12	3.76E-11	0.597901	-1.67252	cold down vs hot
MGST2	5.82E-05	0.000143806	0.597901	-1.67252	cold down vs hot
C20orf107	7.39E-05	0.000178616	0.59788	-1.67258	cold down vs hot
CALHM2	8.43E-07	2.84E-06	0.597433	-1.67383	cold down vs hot
MAN1C1	2.10E-05	5.65E-05	0.597431	-1.67383	cold down vs hot
NUB1	3.70E-20	2.80E-19	0.597375	-1.67399	cold down vs hot
SGMS1	3.62E-06	1.11E-05	0.597034	-1.67495	cold down vs hot
C9orf103	3.15E-09	1.37E-08	0.596907	-1.6753	cold down vs hot
RRAS	9.83E-08	3.67E-07	0.596634	-1.67607	cold down vs hot
LOC100132	1.34E-07	4.96E-07	0.596568	-1.67625	cold down vs hot
P2RX4	1.01E-09	4.54E-09	0.596282	-1.67706	cold down vs hot
IFIT5	1.04E-08	4.26E-08	0.596167	-1.67738	cold down vs hot
ZNF737	0.000447728	0.000888738	0.59592	-1.67808	cold down vs hot
NLRP12	0.00102961	0.00184562	0.595659	-1.67881	cold down vs hot
IGFBP4	3.42E-05	8.80E-05	0.595608	-1.67896	cold down vs hot
NUDT18	3.04E-09	1.32E-08	0.59554	-1.67915	cold down vs hot
FBLN7	0.00335815	0.0050841	0.595365	-1.67964	cold down vs hot
CD93	1.90E-07	6.91E-07	0.595097	-1.6804	cold down vs hot
PCDHGA9	0.00528378	0.00739883	0.594964	-1.68077	cold down vs hot
RNASE1	0.00315339	0.00482899	0.594862	-1.68106	cold down vs hot
BEX2	0.00376781	0.00560292	0.594864	-1.68106	cold down vs hot
ZFPM2	0.00111243	0.00197509	0.594818	-1.68119	cold down vs hot
SULF2	0.000211063	0.000453585	0.594703	-1.68151	cold down vs hot
LOC645431	6.16E-06	1.81E-05	0.594577	-1.68187	cold down vs hot
CXorf36	3.06E-07	1.08E-06	0.594238	-1.68283	cold down vs hot
PRIC285	1.01E-05	2.88E-05	0.594113	-1.68318	cold down vs hot
LOC284233	0.00441351	0.00638561	0.594077	-1.68328	cold down vs hot
LEPR	0.000109936	0.000255435	0.594028	-1.68342	cold down vs hot
AGXT2L2	1.84E-13	1.04E-12	0.594003	-1.68349	cold down vs hot
DLEC1	0.000510402	0.000996776	0.593613	-1.6846	cold down vs hot
LOC91450	1.38E-05	3.83E-05	0.593583	-1.68468	cold down vs hot
GPR1	0.0061445	0.00840032	0.593483	-1.68497	cold down vs hot
KLKB1	0.00718964	0.00960778	0.593446	-1.68507	cold down vs hot
RPH3AL	0.000126242	0.000289103	0.59295	-1.68648	cold down vs hot
EPB41	5.95E-09	2.51E-08	0.59293	-1.68654	cold down vs hot
KLF8	0.00133714	0.00231211	0.592365	-1.68815	cold down vs hot
CATSPER1	0.00349474	0.00526038	0.592347	-1.6882	cold down vs hot
ODZ4	0.00181868	0.00300581	0.592152	-1.68876	cold down vs hot
RASA4	5.59E-07	1.93E-06	0.5918	-1.68976	cold down vs hot
GRRP1	2.57E-06	8.05E-06	0.591734	-1.68995	cold down vs hot
SPAG4	0.00187517	0.00308278	0.591727	-1.68997	cold down vs hot
DLL1	0.000116836	0.000270503	0.591525	-1.69054	cold down vs hot
SLC11A1	0.00174973	0.00290657	0.590499	-1.69348	cold down vs hot
CLEC2D	6.03E-11	2.98E-10	0.590401	-1.69377	cold down vs hot
PHF15	1.19E-09	5.36E-09	0.58978	-1.69555	cold down vs hot
IFITM3	8.33E-07	2.81E-06	0.589419	-1.69659	cold down vs hot
MN1	4.91E-05	0.000123057	0.589321	-1.69687	cold down vs hot
LYPD3	0.00218879	0.00352904	0.589152	-1.69736	cold down vs hot
TES	1.07E-05	3.04E-05	0.589135	-1.6974	cold down vs hot
LOC149837	0.00304019	0.00467208	0.588754	-1.6985	cold down vs hot
CTSO	7.70E-08	2.92E-07	0.588723	-1.69859	cold down vs hot
ECM2	0.00103902	0.00185995	0.588622	-1.69888	cold down vs hot
SLC41A2	1.41E-05	3.90E-05	0.588077	-1.70046	cold down vs hot
LY6E	0.000194308	0.000420582	0.587946	-1.70084	cold down vs hot
PTCH2	0.000181285	0.000395451	0.587432	-1.70232	cold down vs hot
KIAA1618	4.58E-10	2.13E-09	0.587045	-1.70345	cold down vs hot
CDRT4	1.48E-06	4.79E-06	0.586654	-1.70458	cold down vs hot
F2RL3	0.00077459	0.00144113	0.585319	-1.70847	cold down vs hot
BOC	0.00185299	0.00305534	0.585273	-1.70861	cold down vs hot
F10	0.000216212	0.000462669	0.585253	-1.70866	cold down vs hot
LACTB	1.33E-11	6.91E-11	0.585084	-1.70915	cold down vs hot
PRKX	5.59E-06	1.66E-05	0.584881	-1.70975	cold down vs hot
NTN4	0.00550123	0.00765558	0.584832	-1.70989	cold down vs hot
MBOAT4	4.99E-05	0.0001249	0.584275	-1.71152	cold down vs hot
C12orf75	0.000157377	0.000351161	0.584235	-1.71164	cold down vs hot
ADM2	0.00361481	0.00541116	0.584201	-1.71174	cold down vs hot

SP100	5.04E-12	2.67E-11	0.584006	-1.71231	cold down vs hot
MYL9	0.000107826	0.000251427	0.583897	-1.71263	cold down vs hot
NPNT	0.00017651	0.000386326	0.583401	-1.71409	cold down vs hot
C2CD4C	0.00114055	0.00201669	0.58327	-1.71447	cold down vs hot
USHBP1	3.35E-06	1.03E-05	0.582614	-1.7164	cold down vs hot
KCNE1L	9.69E-05	0.000227783	0.582443	-1.7169	cold down vs hot
JAM2	0.000128103	0.000292849	0.582409	-1.71701	cold down vs hot
PDGFB	2.86E-08	1.13E-07	0.582022	-1.71815	cold down vs hot
C13orf18	0.00172111	0.00286705	0.581996	-1.71822	cold down vs hot
FLJ43663	1.63E-07	5.97E-07	0.581359	-1.72011	cold down vs hot
S100A3	0.00321479	0.00490867	0.580978	-1.72124	cold down vs hot
ABCA7	9.24E-06	2.65E-05	0.580903	-1.72146	cold down vs hot
PMFBP1	0.00136653	0.00235203	0.580846	-1.72163	cold down vs hot
NR5A2	8.11E-05	0.000194121	0.580686	-1.7221	cold down vs hot
SLC12A7	8.01E-05	0.000191956	0.580601	-1.72235	cold down vs hot
CCL26	0.00203648	0.00331705	0.580417	-1.7229	cold down vs hot
RIMBP3	0.000182077	0.000396647	0.580237	-1.72343	cold down vs hot
ELL3	4.44E-10	2.06E-09	0.579565	-1.72543	cold down vs hot
MADCAM1	0.00155114	0.00262274	0.579337	-1.72611	cold down vs hot
DOK1	3.70E-10	1.73E-09	0.578987	-1.72715	cold down vs hot
GPIHBP1	0.000471997	0.000930966	0.578864	-1.72752	cold down vs hot
SH2B2	4.56E-05	0.000115104	0.578854	-1.72755	cold down vs hot
IQCA1	0.00132294	0.00229029	0.578302	-1.7292	cold down vs hot
C6orf132	0.000966557	0.00174748	0.57825	-1.72936	cold down vs hot
FBLN2	0.00111384	0.00197653	0.578096	-1.72982	cold down vs hot
PIK3C2B	1.80E-08	7.23E-08	0.577695	-1.73102	cold down vs hot
TCEA3	0.00646178	0.00877343	0.576609	-1.73428	cold down vs hot
KLHL3	1.03E-05	2.93E-05	0.576542	-1.73448	cold down vs hot
CYYR1	5.39E-08	2.08E-07	0.575784	-1.73676	cold down vs hot
NMUR1	0.000749268	0.00139961	0.575734	-1.73691	cold down vs hot
TMEM140	2.11E-11	1.08E-10	0.575187	-1.73857	cold down vs hot
UNC13A	0.00688815	0.00927031	0.57518	-1.73859	cold down vs hot
FKBP11	1.07E-06	3.54E-06	0.575057	-1.73896	cold down vs hot
C21orf7	2.36E-05	6.27E-05	0.57497	-1.73922	cold down vs hot
C4orf32	2.05E-06	6.52E-06	0.574658	-1.74017	cold down vs hot
F2RL1	0.00167954	0.0028064	0.574575	-1.74042	cold down vs hot
GPR172B	0.00123834	0.00216102	0.574178	-1.74162	cold down vs hot
ZDHHHC2	0.0024994	0.00393553	0.573864	-1.74257	cold down vs hot
CPEB3	2.06E-09	9.05E-09	0.573631	-1.74328	cold down vs hot
C10orf125	7.57E-08	2.88E-07	0.57335	-1.74413	cold down vs hot
GPR97	0.00175395	0.00291135	0.573171	-1.74468	cold down vs hot
PRDX1	1.08E-07	4.00E-07	0.57303	-1.74511	cold down vs hot
KCTD17	0.000172869	0.000380123	0.572519	-1.74667	cold down vs hot
ATP1B1	0.000500716	0.000980205	0.57246	-1.74685	cold down vs hot
OSTF1	6.57E-19	4.82E-18	0.572252	-1.74748	cold down vs hot
KCNK5	0.00160645	0.00270295	0.572239	-1.74752	cold down vs hot
RDH10	8.56E-08	3.23E-07	0.571715	-1.74912	cold down vs hot
ENTPD1	3.90E-11	1.97E-10	0.571681	-1.74923	cold down vs hot
SLC12A8	0.000283338	0.000589121	0.571646	-1.74933	cold down vs hot
TCF4	0.000216026	0.000462425	0.571209	-1.75067	cold down vs hot
NEU4	0.00661245	0.00895565	0.57037	-1.75325	cold down vs hot
FAM3B	0.00696564	0.00935248	0.57021	-1.75374	cold down vs hot
ALPK1	6.86E-11	3.39E-10	0.570203	-1.75376	cold down vs hot
ZNF296	5.88E-05	0.000145053	0.569754	-1.75514	cold down vs hot
ASPHD2	7.44E-10	3.40E-09	0.569386	-1.75628	cold down vs hot
PYGM	0.00020969	0.000450783	0.568752	-1.75824	cold down vs hot
PDE7A	1.41E-09	6.27E-09	0.568643	-1.75857	cold down vs hot
MOBK12C	2.16E-21	1.69E-20	0.568498	-1.75902	cold down vs hot
ANGPTL6	2.47E-05	6.56E-05	0.567907	-1.76085	cold down vs hot
HIC1	1.79E-05	4.86E-05	0.56723	-1.76295	cold down vs hot
KIAA0664P	0.00291905	0.00451248	0.567223	-1.76298	cold down vs hot
LOC728855	7.04E-05	0.000170913	0.567053	-1.7635	cold down vs hot
FLJ45445	0.000105508	0.000246463	0.566741	-1.76447	cold down vs hot
CARD6	1.85E-07	6.74E-07	0.566512	-1.76519	cold down vs hot
KIAA0247	7.07E-19	5.18E-18	0.566405	-1.76552	cold down vs hot
PGR	0.00173011	0.00287982	0.56633	-1.76576	cold down vs hot
LHPP	2.04E-09	8.98E-09	0.566155	-1.7663	cold down vs hot
GCA	3.38E-12	1.81E-11	0.565905	-1.76708	cold down vs hot
ZNF702P	0.00370672	0.00552467	0.564949	-1.77007	cold down vs hot
EPHX3	0.00212715	0.00344154	0.564905	-1.77021	cold down vs hot
SLC1A7	0.000496463	0.000973048	0.564848	-1.77039	cold down vs hot
HSD17B14	0.000269939	0.000563417	0.564648	-1.77101	cold down vs hot
CCDC3	0.000244013	0.000514072	0.564561	-1.77129	cold down vs hot
CC2D2B	0.000223258	0.000474791	0.564446	-1.77165	cold down vs hot
C14orf72	0.00322335	0.00491439	0.564403	-1.77178	cold down vs hot
CFI	0.00596016	0.00818947	0.564252	-1.77226	cold down vs hot
PRSS36	5.97E-11	2.96E-10	0.564241	-1.77229	cold down vs hot

RHBDL2	0.00037904	0.000763466	0.564167	-1.77253	cold down vs hot
TCEAL7	0.000855782	0.00157335	0.564015	-1.773	cold down vs hot
C14orf181	9.66E-07	3.22E-06	0.563763	-1.7738	cold down vs hot
CTSB	2.06E-07	7.44E-07	0.563603	-1.7743	cold down vs hot
ID2	1.61E-07	5.92E-07	0.563593	-1.77433	cold down vs hot
SDPR	0.000219193	0.000467669	0.563175	-1.77565	cold down vs hot
THEM5	0.002515	0.00395722	0.563133	-1.77578	cold down vs hot
SLCO3A1	8.29E-06	2.39E-05	0.562528	-1.77769	cold down vs hot
EZR	3.09E-07	1.09E-06	0.562498	-1.77778	cold down vs hot
DOCK10	1.18E-08	4.81E-08	0.56227	-1.77851	cold down vs hot
ROR2	0.00116504	0.00205366	0.562261	-1.77853	cold down vs hot
C9orf167	2.87E-05	7.49E-05	0.561757	-1.78013	cold down vs hot
C22orf15	0.000176374	0.000386157	0.561316	-1.78153	cold down vs hot
ANXA6	3.66E-10	1.72E-09	0.561305	-1.78156	cold down vs hot
EMR2	1.09E-06	3.62E-06	0.561288	-1.78162	cold down vs hot
CHN2	0.00177148	0.00293523	0.561238	-1.78178	cold down vs hot
C17orf76	3.11E-05	8.08E-05	0.561093	-1.78224	cold down vs hot
LOC728989	0.00186776	0.00307578	0.560562	-1.78392	cold down vs hot
PRRX2	0.00216928	0.00350017	0.560416	-1.78439	cold down vs hot
GPR21	0.000144463	0.000325911	0.560406	-1.78442	cold down vs hot
FAM50B	0.000432217	0.00086098	0.559255	-1.78809	cold down vs hot
KIRREL3	0.00551044	0.00766677	0.558855	-1.78937	cold down vs hot
CYB5R4	2.09E-10	1.00E-09	0.558331	-1.79105	cold down vs hot
ARHGAP22	0.000175727	0.000385128	0.558331	-1.79105	cold down vs hot
CDS1	0.000281341	0.00058535	0.558245	-1.79133	cold down vs hot
RNF112	0.000563219	0.00108595	0.557972	-1.7922	cold down vs hot
PARP10	1.96E-09	8.66E-09	0.557659	-1.79321	cold down vs hot
SATB1	0.000855061	0.00157247	0.557148	-1.79486	cold down vs hot
TRIM47	4.51E-07	1.57E-06	0.557136	-1.79489	cold down vs hot
MAP3K9	0.000299136	0.000617837	0.557132	-1.79491	cold down vs hot
HTR1D	0.00527236	0.0073885	0.556627	-1.79654	cold down vs hot
DLGAP3	0.000270031	0.000563428	0.556498	-1.79695	cold down vs hot
ATP10A	0.00249865	0.00393529	0.556455	-1.79709	cold down vs hot
CYP21A2	0.000477121	0.000938804	0.556372	-1.79736	cold down vs hot
C21orf63	0.00018244	0.000397305	0.556057	-1.79838	cold down vs hot
C9orf95	1.71E-12	9.30E-12	0.555979	-1.79863	cold down vs hot
SAT1	1.88E-10	9.03E-10	0.555136	-1.80136	cold down vs hot
KCNC3	3.52E-06	1.08E-05	0.555117	-1.80142	cold down vs hot
KCND3	0.00322125	0.00491439	0.554989	-1.80184	cold down vs hot
BMF	2.59E-08	1.02E-07	0.554624	-1.80302	cold down vs hot
CASP4	1.73E-12	9.39E-12	0.554558	-1.80324	cold down vs hot
AOC3	2.36E-07	8.44E-07	0.554442	-1.80361	cold down vs hot
MPZL2	6.36E-05	0.000155858	0.554239	-1.80427	cold down vs hot
PLEKHG1	1.28E-06	4.19E-06	0.55422	-1.80434	cold down vs hot
FCER1A	0.00493909	0.00702458	0.553567	-1.80647	cold down vs hot
OSTalpha	4.39E-10	2.05E-09	0.553081	-1.80805	cold down vs hot
HIST1H2BH	0.00158752	0.00267339	0.552892	-1.80867	cold down vs hot
SLC16A11	0.00312576	0.00479005	0.552837	-1.80885	cold down vs hot
ANKRD24	1.48E-05	4.10E-05	0.552377	-1.81036	cold down vs hot
FAM166B	0.000475254	0.000935412	0.552268	-1.81072	cold down vs hot
EBF3	0.00611058	0.00836095	0.551597	-1.81292	cold down vs hot
OGFRL1	7.97E-09	3.32E-08	0.551086	-1.8146	cold down vs hot
LOC728743	8.42E-13	4.63E-12	0.551025	-1.8148	cold down vs hot
F11R	1.23E-06	4.05E-06	0.550582	-1.81626	cold down vs hot
SLIT3	0.000874483	0.00160097	0.550302	-1.81718	cold down vs hot
ARID5A	2.81E-13	1.57E-12	0.549852	-1.81867	cold down vs hot
NCALD	0.000343902	0.000700541	0.549811	-1.81881	cold down vs hot
TRIM59	5.11E-06	1.52E-05	0.549757	-1.81898	cold down vs hot
GATM	0.000784173	0.00145772	0.549507	-1.81981	cold down vs hot
LMOD1	5.66E-06	1.67E-05	0.54928	-1.82056	cold down vs hot
MYL4	7.07E-06	2.06E-05	0.548403	-1.82348	cold down vs hot
MALL	1.21E-05	3.41E-05	0.548067	-1.8246	cold down vs hot
SUSD2	1.63E-05	4.46E-05	0.548046	-1.82466	cold down vs hot
SLC23A1	1.18E-05	3.32E-05	0.547698	-1.82582	cold down vs hot
C20orf160	4.30E-09	1.84E-08	0.547358	-1.82696	cold down vs hot
ANTXR2	5.69E-06	1.68E-05	0.547172	-1.82758	cold down vs hot
PPP1R12B	7.05E-06	2.05E-05	0.547094	-1.82784	cold down vs hot
TTC39C	4.85E-06	1.45E-05	0.546815	-1.82877	cold down vs hot
RUNX1T1	0.000367937	0.000742549	0.546372	-1.83026	cold down vs hot
DPF3	0.00100595	0.00180819	0.546199	-1.83083	cold down vs hot
SPTLC3	0.00402565	0.00591492	0.546181	-1.83089	cold down vs hot
CHDH	0.00687754	0.00926202	0.545981	-1.83157	cold down vs hot
ADAMTSL1	0.000752776	0.00140467	0.54547	-1.83328	cold down vs hot
CCR10	0.000964965	0.00174508	0.545432	-1.83341	cold down vs hot
PDLIM1	1.63E-08	6.60E-08	0.54529	-1.83389	cold down vs hot
NBEAL2	1.59E-15	9.85E-15	0.544895	-1.83522	cold down vs hot
C7orf46	0.00090283	0.00164616	0.544807	-1.83551	cold down vs hot

RASGRF2	7.43E-07	2.52E-06	0.544766	-1.83565	cold down vs hot
KIAA1804	0.00136961	0.0023567	0.544757	-1.83568	cold down vs hot
ADAMTS2	0.000376378	0.000758646	0.544704	-1.83586	cold down vs hot
AMY2B	0.000218183	0.000466205	0.544571	-1.83631	cold down vs hot
PKIA	0.00604604	0.0082848	0.544511	-1.83651	cold down vs hot
LCN12	0.000101768	0.000238152	0.544085	-1.83795	cold down vs hot
ACTR3C	0.000933322	0.00169331	0.543964	-1.83836	cold down vs hot
SLC16A14	2.34E-07	8.40E-07	0.543483	-1.83998	cold down vs hot
FAM117A	1.70E-13	9.59E-13	0.543258	-1.84075	cold down vs hot
PCDHGA10	0.00381029	0.00565449	0.542859	-1.8421	cold down vs hot
RHOG	1.50E-20	1.15E-19	0.542519	-1.84325	cold down vs hot
SLC46A2	4.41E-07	1.54E-06	0.542415	-1.84361	cold down vs hot
C2CD2	6.85E-05	0.000166784	0.542414	-1.84361	cold down vs hot
KCNJ2	1.59E-07	5.82E-07	0.542276	-1.84408	cold down vs hot
CBLN3	5.32E-11	2.65E-10	0.542142	-1.84454	cold down vs hot
SERPINB1	2.29E-13	1.29E-12	0.542099	-1.84468	cold down vs hot
SGIP1	0.000417264	0.000833627	0.541975	-1.84511	cold down vs hot
RPS6KA1	1.07E-11	5.57E-11	0.541937	-1.84523	cold down vs hot
MVP	5.15E-11	2.57E-10	0.541862	-1.84549	cold down vs hot
PLXC1	0.00265308	0.00414649	0.541578	-1.84646	cold down vs hot
CLDN23	4.18E-07	1.46E-06	0.541555	-1.84654	cold down vs hot
ABAT	7.25E-05	0.000175674	0.541145	-1.84793	cold down vs hot
MORN3	5.69E-05	0.000140719	0.540991	-1.84846	cold down vs hot
ITGB4	0.00191694	0.00314669	0.540966	-1.84855	cold down vs hot
CCBP2	2.43E-06	7.65E-06	0.54083	-1.84901	cold down vs hot
ZNF826	0.000800926	0.00148463	0.540663	-1.84958	cold down vs hot
RASL11A	1.63E-08	6.60E-08	0.540598	-1.8498	cold down vs hot
GM2A	7.53E-16	4.75E-15	0.540353	-1.85064	cold down vs hot
SH3TC1	4.44E-06	1.34E-05	0.540341	-1.85068	cold down vs hot
SPARCL1	0.000345087	0.000702297	0.540338	-1.85069	cold down vs hot
NRXN2	0.00322347	0.00491439	0.540229	-1.85107	cold down vs hot
PLXND1	1.61E-09	7.16E-09	0.540182	-1.85123	cold down vs hot
NAGK	3.21E-27	3.12E-26	0.540154	-1.85132	cold down vs hot
CXCR2	0.000367464	0.000741822	0.540058	-1.85165	cold down vs hot
C10orf55	1.33E-05	3.70E-05	0.539973	-1.85194	cold down vs hot
HIST1H2AE	0.00702719	0.0094235	0.539483	-1.85363	cold down vs hot
RNF144B	2.66E-06	8.30E-06	0.539148	-1.85478	cold down vs hot
ECHDC2	0.000138419	0.000313685	0.538853	-1.85579	cold down vs hot
GDF10	0.00294865	0.00454639	0.538808	-1.85595	cold down vs hot
FTL	5.91E-14	3.42E-13	0.538742	-1.85618	cold down vs hot
TEK	2.21E-05	5.91E-05	0.538387	-1.8574	cold down vs hot
SCARA3	0.000914554	0.00166355	0.53829	-1.85773	cold down vs hot
DUSP1	2.66E-06	8.30E-06	0.53804	-1.8586	cold down vs hot
CLEC3B	8.02E-06	2.32E-05	0.538019	-1.85867	cold down vs hot
GPRIN3	0.000251928	0.000529549	0.537946	-1.85892	cold down vs hot
ZNF101	1.68E-17	1.15E-16	0.537842	-1.85928	cold down vs hot
SLC9A3R1	1.66E-11	8.56E-11	0.537708	-1.85975	cold down vs hot
TFPI	9.82E-06	2.80E-05	0.53768	-1.85984	cold down vs hot
MUSTN1	1.49E-06	4.82E-06	0.537572	-1.86021	cold down vs hot
KCNN4	0.00669411	0.00904934	0.537121	-1.86178	cold down vs hot
INADL	0.000838	0.00154501	0.537042	-1.86205	cold down vs hot
S100B	0.00235166	0.00374081	0.536912	-1.8625	cold down vs hot
TOR3A	5.75E-13	3.18E-12	0.536334	-1.86451	cold down vs hot
KL	3.61E-06	1.10E-05	0.536291	-1.86466	cold down vs hot
PLXNA4	0.00512306	0.00722482	0.536261	-1.86476	cold down vs hot
SNCG	0.000452203	0.00089653	0.536099	-1.86533	cold down vs hot
SMAP2	8.37E-22	6.65E-21	0.535926	-1.86593	cold down vs hot
OPTN	6.21E-10	2.85E-09	0.535474	-1.86751	cold down vs hot
C2orf58	5.52E-06	1.64E-05	0.534799	-1.86986	cold down vs hot
EMID1	0.00653918	0.00886377	0.534747	-1.87004	cold down vs hot
SCN3A	0.00355869	0.00533817	0.53461	-1.87052	cold down vs hot
C8orf46	0.00203	0.00330815	0.534161	-1.87209	cold down vs hot
TMEM51	7.72E-11	3.80E-10	0.533858	-1.87316	cold down vs hot
RUNC2C2	1.45E-06	4.72E-06	0.533341	-1.87497	cold down vs hot
OLFML3	0.000466005	0.000921375	0.533282	-1.87518	cold down vs hot
FCGRT	6.76E-09	2.84E-08	0.532959	-1.87632	cold down vs hot
HTR2B	0.00284651	0.00440973	0.53272	-1.87716	cold down vs hot
ABCA1	4.52E-08	1.75E-07	0.53253	-1.87783	cold down vs hot
STAG3	0.00126196	0.00219637	0.532474	-1.87802	cold down vs hot
CYP26B1	6.60E-05	0.000161154	0.532209	-1.87896	cold down vs hot
HLA-J	2.66E-06	8.30E-06	0.532175	-1.87908	cold down vs hot
L1TD1	0.00345505	0.00520897	0.531743	-1.88061	cold down vs hot
GLUL	4.50E-12	2.40E-11	0.530944	-1.88344	cold down vs hot
COTL1	5.53E-11	2.76E-10	0.530052	-1.88661	cold down vs hot
ZNF385D	0.00107218	0.00191195	0.52999	-1.88683	cold down vs hot
VGLL3	0.000216395	0.000462909	0.529901	-1.88715	cold down vs hot
CACNA2D3	0.00366497	0.0054762	0.529858	-1.8873	cold down vs hot

GKAP1	6.69E-05	0.000163076	0.529652	-1.88803	cold down vs hot
SCN1B	1.72E-05	4.70E-05	0.52931	-1.88925	cold down vs hot
HEPH	6.62E-05	0.000161431	0.529192	-1.88967	cold down vs hot
ST6GALNA4	2.32E-07	8.32E-07	0.529173	-1.88974	cold down vs hot
C6orf174	0.00380994	0.00565449	0.529009	-1.89033	cold down vs hot
GSDMC	0.000367065	0.000741473	0.52884	-1.89093	cold down vs hot
TMEM132E	0.00134447	0.0023214	0.528788	-1.89112	cold down vs hot
PPM1M	1.89E-14	1.12E-13	0.527497	-1.89575	cold down vs hot
NFATC2	0.000850216	0.00156444	0.527261	-1.89659	cold down vs hot
H2AFY2	0.000410064	0.000820463	0.527041	-1.89739	cold down vs hot
SAMD9	7.13E-07	2.43E-06	0.526762	-1.89839	cold down vs hot
CAPN11	0.000201941	0.00043556	0.526443	-1.89954	cold down vs hot
SYBU	0.00088005	0.00160981	0.526383	-1.89976	cold down vs hot
MCOLN2	1.26E-06	4.11E-06	0.525777	-1.90195	cold down vs hot
CSPG5	0.00389422	0.00575946	0.525299	-1.90368	cold down vs hot
RGS16	1.92E-05	5.19E-05	0.525093	-1.90442	cold down vs hot
C13orf33	0.000304018	0.000626729	0.524889	-1.90516	cold down vs hot
GPR113	1.94E-10	9.33E-10	0.5248	-1.90549	cold down vs hot
LRRK1	7.04E-08	2.68E-07	0.524695	-1.90587	cold down vs hot
CTSZ	7.13E-11	3.52E-10	0.524672	-1.90595	cold down vs hot
ADD2	0.00410111	0.00600956	0.524176	-1.90776	cold down vs hot
VAMP1	6.73E-09	2.83E-08	0.523976	-1.90849	cold down vs hot
SFMBT2	4.30E-06	1.30E-05	0.523336	-1.91082	cold down vs hot
REPS2	4.40E-06	1.33E-05	0.522933	-1.91229	cold down vs hot
ACSF2	1.63E-06	5.27E-06	0.522401	-1.91424	cold down vs hot
SLIT1	0.000472476	0.000931347	0.521381	-1.91798	cold down vs hot
NFE2L3	6.86E-06	2.00E-05	0.520937	-1.91962	cold down vs hot
LRRK33	1.89E-07	6.87E-07	0.520869	-1.91987	cold down vs hot
MTMR9L	2.26E-05	6.04E-05	0.520615	-1.9208	cold down vs hot
LOC153684	3.30E-09	1.43E-08	0.520249	-1.92216	cold down vs hot
EFHD2	2.99E-17	2.02E-16	0.519563	-1.92469	cold down vs hot
EMILIN2	4.20E-08	1.64E-07	0.519475	-1.92502	cold down vs hot
GJA5	3.06E-07	1.08E-06	0.519443	-1.92514	cold down vs hot
CYTH1	3.53E-25	3.16E-24	0.519372	-1.9254	cold down vs hot
RET	2.08E-05	5.61E-05	0.519267	-1.92579	cold down vs hot
KIAA1462	1.66E-08	6.70E-08	0.519178	-1.92612	cold down vs hot
CHRD	4.35E-05	0.000110108	0.519051	-1.92659	cold down vs hot
TBX5	0.00464489	0.00667305	0.518704	-1.92788	cold down vs hot
F3	1.61E-05	4.43E-05	0.518533	-1.92852	cold down vs hot
C1orf115	0.000141294	0.000319646	0.518513	-1.92859	cold down vs hot
NUPR1	1.80E-05	4.89E-05	0.518252	-1.92956	cold down vs hot
SAMD11	0.000876093	0.00160347	0.518007	-1.93048	cold down vs hot
KCNE1	0.00138364	0.00237708	0.517241	-1.93333	cold down vs hot
PLAGL1	1.76E-05	4.78E-05	0.516659	-1.93551	cold down vs hot
IRF2	6.44E-36	8.48E-35	0.516531	-1.93599	cold down vs hot
TRIM61	0.00226497	0.00362766	0.516353	-1.93666	cold down vs hot
C12orf35	3.30E-10	1.56E-09	0.516267	-1.93698	cold down vs hot
ZMAT1	0.000393079	0.000789383	0.515644	-1.93932	cold down vs hot
GSDMD	1.43E-10	6.93E-10	0.515592	-1.93952	cold down vs hot
LRRK4	8.85E-06	2.55E-05	0.515367	-1.94036	cold down vs hot
NCRNA001	5.16E-05	0.000128903	0.51514	-1.94122	cold down vs hot
C3orf36	6.40E-06	1.87E-05	0.51513	-1.94126	cold down vs hot
ACP5	1.91E-06	6.10E-06	0.514517	-1.94357	cold down vs hot
TP53INP1	5.57E-08	2.14E-07	0.514429	-1.9439	cold down vs hot
FBLN5	0.000202505	0.000436343	0.514211	-1.94473	cold down vs hot
C5orf58	0.00396388	0.00584522	0.514187	-1.94482	cold down vs hot
DDX60L	2.12E-08	8.47E-08	0.514129	-1.94504	cold down vs hot
CBX7	1.02E-08	4.22E-08	0.513765	-1.94642	cold down vs hot
FCGBP	0.00201273	0.00328501	0.513749	-1.94648	cold down vs hot
SNX10	3.12E-06	9.65E-06	0.513543	-1.94726	cold down vs hot
EXPH5	0.000378649	0.000762988	0.513349	-1.94799	cold down vs hot
USP18	8.47E-08	3.20E-07	0.513308	-1.94815	cold down vs hot
ABC84	0.00569505	0.00787493	0.512464	-1.95136	cold down vs hot
GAS6	2.28E-07	8.19E-07	0.512201	-1.95236	cold down vs hot
ADAMTSL2	3.84E-05	9.82E-05	0.512009	-1.95309	cold down vs hot
RND1	2.23E-10	1.06E-09	0.511783	-1.95395	cold down vs hot
TIFA	1.92E-19	1.43E-18	0.51172	-1.95419	cold down vs hot
EGFL6	0.000522441	0.00101815	0.511319	-1.95573	cold down vs hot
ECSCR	1.31E-06	4.28E-06	0.511115	-1.95651	cold down vs hot
GJA4	7.03E-12	3.68E-11	0.511112	-1.95652	cold down vs hot
HERC5	2.30E-06	7.25E-06	0.510445	-1.95907	cold down vs hot
PREX1	3.64E-08	1.42E-07	0.510388	-1.95929	cold down vs hot
HSPA7	0.00113054	0.0020018	0.510068	-1.96052	cold down vs hot
SP110	2.62E-19	1.95E-18	0.509964	-1.96092	cold down vs hot
AXL	5.37E-05	0.000133661	0.509915	-1.96111	cold down vs hot
CFLAR	5.38E-24	4.61E-23	0.509761	-1.9617	cold down vs hot
MUC1	2.40E-05	6.38E-05	0.509686	-1.96199	cold down vs hot

ELL2	1.91E-10	9.18E-10	0.509591	-1.96236	cold down vs hot
TMEM25	0.0010372	0.00185769	0.509492	-1.96274	cold down vs hot
C8orf4	3.49E-05	8.98E-05	0.509428	-1.96299	cold down vs hot
ITGA8	0.00529206	0.00740714	0.50812	-1.96804	cold down vs hot
RPS2P32	0.00016331	0.000362418	0.507997	-1.96851	cold down vs hot
TNXB	0.000356468	0.000721905	0.50752	-1.97036	cold down vs hot
CACNA2D4	0.000226288	0.000480295	0.507451	-1.97063	cold down vs hot
PPP2R2B	0.00194752	0.00319047	0.506926	-1.97267	cold down vs hot
TMEM150C	4.01E-06	1.22E-05	0.506628	-1.97383	cold down vs hot
MYOF	2.56E-07	9.13E-07	0.506601	-1.97394	cold down vs hot
NCRNA000	0.000831389	0.00153369	0.506204	-1.97549	cold down vs hot
C1orf130	0.00681312	0.00919118	0.50508	-1.97988	cold down vs hot
UPB1	1.59E-05	4.36E-05	0.504732	-1.98125	cold down vs hot
PDE1B	2.70E-08	1.07E-07	0.504602	-1.98176	cold down vs hot
RLN2	0.00226013	0.0036208	0.504543	-1.98199	cold down vs hot
UNC93B1	1.18E-16	7.78E-16	0.504166	-1.98347	cold down vs hot
KCNT2	0.000611779	0.00117059	0.503872	-1.98463	cold down vs hot
FAM26E	1.75E-07	6.38E-07	0.503694	-1.98533	cold down vs hot
APOE	8.16E-05	0.000195196	0.503666	-1.98544	cold down vs hot
MEGF6	6.45E-05	0.000157749	0.503658	-1.98548	cold down vs hot
FXYD6	5.35E-06	1.59E-05	0.503202	-1.98727	cold down vs hot
PLAUR	1.29E-05	3.61E-05	0.502857	-1.98864	cold down vs hot
ATG16L2	2.02E-12	1.09E-11	0.502567	-1.98978	cold down vs hot
FOXP1	3.63E-10	1.70E-09	0.502483	-1.99012	cold down vs hot
C19orf36	3.29E-06	1.01E-05	0.502119	-1.99156	cold down vs hot
ACSM3	0.0002887	0.000598935	0.502088	-1.99168	cold down vs hot
CTF1	0.000141871	0.000320841	0.501708	-1.99319	cold down vs hot
CHODL	0.000789279	0.00146512	0.501556	-1.9938	cold down vs hot
RICH2	2.80E-09	1.22E-08	0.501292	-1.99485	cold down vs hot
CD83	1.07E-12	5.87E-12	0.500827	-1.9967	cold down vs hot
DCN	0.000506004	0.000988482	0.500681	-1.99728	cold down vs hot
FBXO27	0.00106808	0.00190569	0.500173	-1.99931	cold down vs hot
LOC441869	1.74E-05	4.75E-05	0.499805	-2.00078	cold down vs hot
LOC388242	2.26E-07	8.11E-07	0.499399	-2.00241	cold down vs hot
MPP1	8.41E-24	7.16E-23	0.498806	-2.00479	cold down vs hot
IFIT1	2.30E-05	6.14E-05	0.498731	-2.00509	cold down vs hot
MCART6	4.44E-08	1.72E-07	0.4982	-2.00723	cold down vs hot
MRGPRF	2.56E-06	8.01E-06	0.497728	-2.00913	cold down vs hot
HEG1	8.86E-14	5.09E-13	0.497652	-2.00944	cold down vs hot
STARD5	4.93E-16	3.15E-15	0.49756	-2.00981	cold down vs hot
GGT3P	1.68E-05	4.59E-05	0.496643	-2.01352	cold down vs hot
APOC4	0.000161829	0.000359864	0.496415	-2.01444	cold down vs hot
ST18	4.60E-06	1.38E-05	0.496383	-2.01457	cold down vs hot
FXYD7	0.0042756	0.00622055	0.496089	-2.01577	cold down vs hot
AMZ1	9.06E-05	0.000214557	0.495745	-2.01717	cold down vs hot
COL14A1	7.51E-05	0.000181143	0.495623	-2.01766	cold down vs hot
RGS2	2.75E-05	7.22E-05	0.495499	-2.01817	cold down vs hot
TMEM56	0.00147522	0.00251129	0.495408	-2.01854	cold down vs hot
FRZB	0.000631385	0.00120176	0.495347	-2.01879	cold down vs hot
PLEKHF1	1.07E-13	6.13E-13	0.495067	-2.01993	cold down vs hot
ELN	0.0056382	0.00781288	0.494879	-2.02069	cold down vs hot
MT1F	4.62E-05	0.000116455	0.494634	-2.0217	cold down vs hot
WISP1	5.84E-07	2.01E-06	0.494521	-2.02216	cold down vs hot
A2M	2.31E-06	7.30E-06	0.494365	-2.0228	cold down vs hot
SLC15A2	0.000131301	0.000299217	0.494247	-2.02328	cold down vs hot
RHBDP2	3.60E-12	1.92E-11	0.494184	-2.02354	cold down vs hot
ITGA11	0.000152438	0.000341541	0.494133	-2.02375	cold down vs hot
BCL2A1	9.28E-05	0.000219147	0.494006	-2.02427	cold down vs hot
DLG2	5.51E-05	0.000136672	0.494003	-2.02428	cold down vs hot
FBXL16	0.000635401	0.00120835	0.493759	-2.02528	cold down vs hot
CLEC4F	0.000316346	0.000649475	0.49362	-2.02585	cold down vs hot
FAM167A	0.00101952	0.00182862	0.493211	-2.02753	cold down vs hot
XBP1	8.12E-17	5.39E-16	0.493146	-2.0278	cold down vs hot
C2CD4B	8.28E-05	0.000197779	0.492925	-2.02871	cold down vs hot
CHST8	0.00392993	0.00580302	0.492773	-2.02933	cold down vs hot
FIBIN	0.000904087	0.00164731	0.492601	-2.03004	cold down vs hot
LAYN	1.74E-05	4.76E-05	0.492187	-2.03175	cold down vs hot
SLC47A1	0.000422438	0.000843153	0.491937	-2.03278	cold down vs hot
SYNGR2	2.81E-17	1.90E-16	0.491187	-2.03589	cold down vs hot
C13orf15	5.72E-16	3.63E-15	0.49108	-2.03633	cold down vs hot
RNF213	2.95E-24	2.57E-23	0.490834	-2.03735	cold down vs hot
GCHFR	2.55E-08	1.01E-07	0.490631	-2.03819	cold down vs hot
RAB39	3.03E-06	9.40E-06	0.490391	-2.03919	cold down vs hot
STON2	3.93E-06	1.20E-05	0.4903	-2.03957	cold down vs hot
TBC1D2	1.21E-11	6.28E-11	0.490287	-2.03962	cold down vs hot
EPB41L3	2.11E-07	7.61E-07	0.489678	-2.04216	cold down vs hot
DDX26B	2.36E-07	8.44E-07	0.489648	-2.04228	cold down vs hot

FCGR2A	2.48E-08	9.83E-08	0.489464	-2.04305	cold down vs hot
LY96	6.38E-06	1.87E-05	0.489463	-2.04306	cold down vs hot
MXRA5	0.000202069	0.000435691	0.489313	-2.04368	cold down vs hot
CISH	3.89E-16	2.50E-15	0.489293	-2.04377	cold down vs hot
SV2B	0.00219356	0.00353497	0.489159	-2.04432	cold down vs hot
LIPA	4.90E-18	3.42E-17	0.488826	-2.04572	cold down vs hot
CTAGE9	0.00244017	0.0038609	0.488778	-2.04592	cold down vs hot
CLEC2B	7.45E-07	2.53E-06	0.487638	-2.0507	cold down vs hot
OTOA	5.54E-05	0.00013745	0.487177	-2.05264	cold down vs hot
CNN2	5.96E-11	2.96E-10	0.486311	-2.0563	cold down vs hot
ELOVL7	0.000467792	0.000924194	0.485994	-2.05764	cold down vs hot
PCSK5	0.000123011	0.000283192	0.4855	-2.05973	cold down vs hot
KRT86	0.00225213	0.00360974	0.485243	-2.06082	cold down vs hot
ZNF385A	4.01E-13	2.23E-12	0.485152	-2.06121	cold down vs hot
SLC16A13	2.51E-07	8.95E-07	0.485088	-2.06148	cold down vs hot
PIK3CD	4.86E-09	2.07E-08	0.484886	-2.06234	cold down vs hot
MTTP	0.000175357	0.000384566	0.484535	-2.06384	cold down vs hot
CASZ1	7.30E-06	2.12E-05	0.484387	-2.06447	cold down vs hot
CPM	4.73E-08	1.83E-07	0.483755	-2.06716	cold down vs hot
PRRG4	0.000150529	0.000337795	0.483634	-2.06768	cold down vs hot
LRIG1	3.06E-07	1.08E-06	0.483612	-2.06777	cold down vs hot
CTSC	1.65E-16	1.08E-15	0.483488	-2.0683	cold down vs hot
KCNE4	2.21E-05	5.93E-05	0.483249	-2.06933	cold down vs hot
TEC	5.16E-09	2.20E-08	0.483088	-2.07002	cold down vs hot
CCRL1	8.63E-06	2.49E-05	0.482912	-2.07077	cold down vs hot
KCNA6	0.00567519	0.00785913	0.482908	-2.07079	cold down vs hot
TBX1	0.000807981	0.00149558	0.482725	-2.07157	cold down vs hot
LOC441294	0.00104278	0.00186565	0.482306	-2.07337	cold down vs hot
NFKB2	3.14E-21	2.44E-20	0.482279	-2.07349	cold down vs hot
TLR6	3.62E-07	1.27E-06	0.482144	-2.07407	cold down vs hot
HGF	0.000368703	0.000743864	0.481949	-2.07491	cold down vs hot
MATN2	0.000267122	0.000557894	0.481787	-2.0756	cold down vs hot
APLNR	2.81E-05	7.36E-05	0.481684	-2.07605	cold down vs hot
TMCC3	7.82E-09	3.27E-08	0.481678	-2.07608	cold down vs hot
PPARG	2.12E-09	9.30E-09	0.481638	-2.07625	cold down vs hot
SLC26A9	1.15E-05	3.24E-05	0.481354	-2.07747	cold down vs hot
SIGLECP3	4.27E-06	1.29E-05	0.480952	-2.07921	cold down vs hot
SCARF1	9.18E-14	5.27E-13	0.480625	-2.08062	cold down vs hot
RNF212	0.00598351	0.00821189	0.480589	-2.08078	cold down vs hot
HS3ST3A1	0.000683413	0.00128616	0.480441	-2.08142	cold down vs hot
THBS1	2.56E-06	8.02E-06	0.480248	-2.08226	cold down vs hot
MRV11	2.31E-10	1.10E-09	0.479726	-2.08452	cold down vs hot
SULT1A1	1.79E-05	4.86E-05	0.479495	-2.08553	cold down vs hot
LTBP2	4.09E-07	1.43E-06	0.479339	-2.0862	cold down vs hot
IKBKE	1.80E-16	1.17E-15	0.478787	-2.08861	cold down vs hot
MAP3K14	1.09E-20	8.33E-20	0.478777	-2.08865	cold down vs hot
TCIRG1	1.95E-14	1.15E-13	0.478675	-2.0891	cold down vs hot
GPSM3	5.12E-16	3.26E-15	0.478669	-2.08912	cold down vs hot
PRND	0.0011175	0.00198141	0.478519	-2.08978	cold down vs hot
PLA2G16	6.14E-07	2.10E-06	0.478051	-2.09183	cold down vs hot
FGD6	6.33E-12	3.33E-11	0.477922	-2.09239	cold down vs hot
AGMAT	2.44E-06	7.68E-06	0.477816	-2.09285	cold down vs hot
HSPB8	0.00213559	0.00345264	0.477532	-2.0941	cold down vs hot
CCDC80	1.97E-06	6.29E-06	0.477095	-2.09602	cold down vs hot
MT1L	0.00570306	0.007881	0.47696	-2.09661	cold down vs hot
VWA5A	4.97E-07	1.73E-06	0.476406	-2.09905	cold down vs hot
IL12A	6.57E-05	0.000160616	0.475988	-2.1009	cold down vs hot
SPINT1	7.49E-05	0.000180995	0.475728	-2.10204	cold down vs hot
ANKRD5	8.82E-05	0.000209298	0.475551	-2.10282	cold down vs hot
SRL	2.87E-07	1.02E-06	0.475524	-2.10294	cold down vs hot
FNBP1	3.56E-21	2.76E-20	0.475367	-2.10364	cold down vs hot
SLC37A1	1.19E-06	3.91E-06	0.475006	-2.10524	cold down vs hot
THBD	6.96E-08	2.66E-07	0.47489	-2.10575	cold down vs hot
SLC12A5	5.23E-05	0.000130515	0.474361	-2.1081	cold down vs hot
TMEM106A	1.66E-15	1.03E-14	0.473963	-2.10987	cold down vs hot
GBP6	0.00100681	0.00180872	0.47383	-2.11046	cold down vs hot
RGS10	5.41E-13	2.99E-12	0.473533	-2.11178	cold down vs hot
NKD2	0.000165662	0.000366268	0.47352	-2.11184	cold down vs hot
DMRT3	6.74E-09	2.84E-08	0.472851	-2.11483	cold down vs hot
IGFBP7	3.80E-10	1.78E-09	0.472653	-2.11572	cold down vs hot
IRF9	7.50E-23	6.15E-22	0.472181	-2.11783	cold down vs hot
CTGF	1.55E-06	5.02E-06	0.472029	-2.11852	cold down vs hot
VENTX	8.54E-07	2.86E-06	0.47136	-2.12152	cold down vs hot
ERAP1	4.52E-17	3.03E-16	0.470712	-2.12444	cold down vs hot
DDX58	8.86E-10	4.02E-09	0.469935	-2.12796	cold down vs hot
EGR2	1.36E-08	5.55E-08	0.469826	-2.12845	cold down vs hot
EN1	2.15E-05	5.78E-05	0.469524	-2.12982	cold down vs hot

IFI6	3.42E-06	1.05E-05	0.469406	-2.13035	cold down vs hot
CEACAM1	0.000815441	0.00150768	0.469229	-2.13116	cold down vs hot
TAGLN	6.84E-08	2.61E-07	0.468905	-2.13263	cold down vs hot
MMP23B	3.56E-07	1.25E-06	0.468774	-2.13322	cold down vs hot
DGKE	2.97E-11	1.51E-10	0.468656	-2.13376	cold down vs hot
ZC3H12A	1.70E-12	9.23E-12	0.4682	-2.13584	cold down vs hot
IRAK3	2.84E-06	8.85E-06	0.46809	-2.13634	cold down vs hot
PODN	1.40E-05	3.89E-05	0.467835	-2.13751	cold down vs hot
LLGL2	3.41E-08	1.34E-07	0.467802	-2.13766	cold down vs hot
FBXO2	8.44E-05	0.00020087	0.467714	-2.13806	cold down vs hot
XKR8	1.91E-06	6.11E-06	0.467463	-2.13921	cold down vs hot
PIWIL4	1.86E-07	6.76E-07	0.467007	-2.14129	cold down vs hot
WDR86	0.000126129	0.000289103	0.466597	-2.14318	cold down vs hot
TGFB1	3.41E-11	1.73E-10	0.466413	-2.14402	cold down vs hot
CASQ1	1.16E-05	3.27E-05	0.466324	-2.14443	cold down vs hot
ANPEP	7.97E-05	0.000191035	0.466156	-2.1452	cold down vs hot
N4BP2L1	6.83E-10	3.13E-09	0.466086	-2.14553	cold down vs hot
BCAT1	1.22E-05	3.42E-05	0.46597	-2.14606	cold down vs hot
FAM90A1	0.000253813	0.000532996	0.46458	-2.15248	cold down vs hot
NEBL	5.65E-05	0.000139828	0.464182	-2.15433	cold down vs hot
TSC22D3	1.60E-13	9.09E-13	0.463827	-2.15598	cold down vs hot
AURKC	1.86E-07	6.76E-07	0.463629	-2.1569	cold down vs hot
CD200	1.41E-06	4.58E-06	0.463469	-2.15764	cold down vs hot
TCN2	5.82E-11	2.89E-10	0.463316	-2.15836	cold down vs hot
ARRB2	1.21E-25	1.10E-24	0.463199	-2.1589	cold down vs hot
CRB3	1.24E-06	4.05E-06	0.463027	-2.1597	cold down vs hot
PTGER3	7.03E-06	2.05E-05	0.462765	-2.16092	cold down vs hot
TXNIP	1.20E-15	7.50E-15	0.462491	-2.16221	cold down vs hot
PLA2G4C	7.89E-08	2.99E-07	0.462114	-2.16397	cold down vs hot
IL4R	1.90E-14	1.12E-13	0.461766	-2.1656	cold down vs hot
MX2	3.77E-05	9.65E-05	0.461668	-2.16606	cold down vs hot
PSME1	2.77E-36	3.73E-35	0.461528	-2.16671	cold down vs hot
TRERF1	9.54E-09	3.94E-08	0.461325	-2.16767	cold down vs hot
SNCAIP	6.13E-05	0.000150741	0.46089	-2.16971	cold down vs hot
POPDC2	6.11E-13	3.37E-12	0.459259	-2.17742	cold down vs hot
TRIM14	7.87E-20	5.91E-19	0.45911	-2.17813	cold down vs hot
C14orf182	1.54E-07	5.65E-07	0.4589	-2.17913	cold down vs hot
ZFP36	3.03E-14	1.77E-13	0.458896	-2.17914	cold down vs hot
S100A4	0.00013153	0.000299635	0.458453	-2.18125	cold down vs hot
TFEB	1.00E-15	6.26E-15	0.458	-2.1834	cold down vs hot
TRIM34	1.33E-15	8.29E-15	0.457897	-2.1839	cold down vs hot
CYLD	6.86E-21	5.28E-20	0.457893	-2.18391	cold down vs hot
SGSM1	5.42E-05	0.000134686	0.457767	-2.18452	cold down vs hot
ZC4H2	1.03E-05	2.93E-05	0.457588	-2.18537	cold down vs hot
SYT15	5.41E-10	2.50E-09	0.457572	-2.18545	cold down vs hot
P4HTM	7.70E-07	2.60E-06	0.457313	-2.18669	cold down vs hot
LAP3	3.95E-24	3.41E-23	0.456893	-2.1887	cold down vs hot
KIAA1274	2.12E-08	8.48E-08	0.45624	-2.19183	cold down vs hot
PHF11	1.84E-15	1.13E-14	0.45583	-2.1938	cold down vs hot
INSM1	0.000485159	0.000952035	0.455568	-2.19506	cold down vs hot
SLC9A7	0.000537591	0.00104301	0.455355	-2.19609	cold down vs hot
PHOSPHO1	3.55E-10	1.67E-09	0.45512	-2.19722	cold down vs hot
LOC100132	1.41E-06	4.58E-06	0.455067	-2.19748	cold down vs hot
NHS	4.89E-06	1.46E-05	0.454965	-2.19797	cold down vs hot
CYR61	1.63E-07	5.96E-07	0.45477	-2.19892	cold down vs hot
PID1	8.59E-06	2.48E-05	0.454745	-2.19904	cold down vs hot
IL27RA	5.18E-07	1.79E-06	0.454544	-2.20001	cold down vs hot
MPZL3	9.57E-06	2.73E-05	0.454093	-2.20219	cold down vs hot
C20orf197	2.02E-08	8.08E-08	0.454055	-2.20238	cold down vs hot
C2orf55	3.18E-09	1.38E-08	0.453338	-2.20586	cold down vs hot
VEGFC	1.65E-11	8.52E-11	0.452919	-2.2079	cold down vs hot
SYNC	9.79E-06	2.79E-05	0.452742	-2.20876	cold down vs hot
ITGBL1	0.00234354	0.00373151	0.452579	-2.20956	cold down vs hot
CLCN4	0.000178081	0.000389503	0.452337	-2.21074	cold down vs hot
ST6GALNA4	0.000753984	0.001406	0.452262	-2.21111	cold down vs hot
C9orf66	2.27E-07	8.16E-07	0.452111	-2.21185	cold down vs hot
CD177	0.00215687	0.00348272	0.451857	-2.21309	cold down vs hot
GMIP	9.58E-23	7.81E-22	0.451813	-2.2133	cold down vs hot
LOC388692	3.18E-07	1.12E-06	0.451312	-2.21576	cold down vs hot
CDA	1.75E-07	6.39E-07	0.451144	-2.21659	cold down vs hot
VTN	0.000150708	0.000338013	0.450857	-2.218	cold down vs hot
LFNG	4.75E-12	2.52E-11	0.450724	-2.21865	cold down vs hot
MYH11	4.87E-05	0.000122196	0.450187	-2.2213	cold down vs hot
JAK2	1.11E-12	6.04E-12	0.449607	-2.22416	cold down vs hot
GIPR	1.71E-06	5.49E-06	0.449598	-2.22421	cold down vs hot
C7orf58	0.000205223	0.000441907	0.449459	-2.2249	cold down vs hot
GADD45B	6.45E-17	4.29E-16	0.449383	-2.22527	cold down vs hot

C17orf44	5.69E-17	3.80E-16	0.449017	-2.22709	cold down vs hot
SCUBE1	0.00354169	0.00531878	0.448948	-2.22743	cold down vs hot
ACVRL1	9.56E-16	6.00E-15	0.448942	-2.22746	cold down vs hot
IFI44	1.70E-08	6.86E-08	0.448656	-2.22888	cold down vs hot
ADAMTS10	2.25E-06	7.11E-06	0.448425	-2.23003	cold down vs hot
CRISPLD2	1.82E-09	8.04E-09	0.448045	-2.23192	cold down vs hot
ZNF366	4.08E-10	1.91E-09	0.447666	-2.23384	cold down vs hot
PARP8	4.71E-07	1.64E-06	0.447555	-2.23436	cold down vs hot
PCDHAC2	0.00384773	0.00570016	0.447233	-2.23597	cold down vs hot
SLC4A8	3.15E-06	9.71E-06	0.44666	-2.23914	cold down vs hot
MSX2P1	5.12E-07	1.77E-06	0.446224	-2.24103	cold down vs hot
PLA2G5	0.00054885	0.00106327	0.44595	-2.2424	cold down vs hot
CLSTN3	4.36E-09	1.86E-08	0.445612	-2.24411	cold down vs hot
ZNF671	3.34E-10	1.57E-09	0.445558	-2.24438	cold down vs hot
RELB	2.50E-23	2.08E-22	0.445371	-2.24532	cold down vs hot
RPH3A	0.00426149	0.00620417	0.445208	-2.24614	cold down vs hot
SCPEP1	2.10E-20	1.60E-19	0.445102	-2.24667	cold down vs hot
C1RL	2.14E-11	1.09E-10	0.444495	-2.24974	cold down vs hot
C2orf65	6.38E-08	2.44E-07	0.44446	-2.24992	cold down vs hot
C6orf27	1.47E-07	5.39E-07	0.444409	-2.25018	cold down vs hot
C17orf72	8.78E-11	4.30E-10	0.444288	-2.25079	cold down vs hot
ISLR	5.51E-06	1.64E-05	0.444042	-2.25204	cold down vs hot
LXN	8.80E-09	3.65E-08	0.444027	-2.25212	cold down vs hot
COL23A1	8.35E-07	2.81E-06	0.443134	-2.25665	cold down vs hot
CLDN5	4.37E-08	1.70E-07	0.442715	-2.25879	cold down vs hot
RAB31	6.18E-12	3.26E-11	0.442277	-2.26102	cold down vs hot
ABCA6	0.00200453	0.00327399	0.442211	-2.26136	cold down vs hot
IL23A	1.64E-14	9.71E-14	0.442008	-2.2624	cold down vs hot
ADRB2	4.58E-09	1.96E-08	0.441905	-2.26293	cold down vs hot
LCN10	0.000576802	0.00110861	0.441779	-2.26357	cold down vs hot
KCNJ15	8.44E-07	2.84E-06	0.441308	-2.26599	cold down vs hot
FATE1	8.13E-08	3.07E-07	0.441222	-2.26643	cold down vs hot
B3GNT8	1.93E-09	8.53E-09	0.440966	-2.26778	cold down vs hot
LY6H	2.04E-05	5.51E-05	0.440331	-2.27102	cold down vs hot
IRF4	0.000215187	0.000460778	0.440137	-2.27202	cold down vs hot
ZNF467	5.36E-10	2.48E-09	0.438671	-2.27961	cold down vs hot
C1orf127	5.83E-09	2.47E-08	0.438395	-2.28105	cold down vs hot
SAA1	0.00352249	0.00529727	0.438228	-2.28192	cold down vs hot
LRRC55	3.16E-05	8.19E-05	0.438133	-2.28241	cold down vs hot
EDN1	5.79E-09	2.45E-08	0.437781	-2.28425	cold down vs hot
SMOC2	2.59E-08	1.02E-07	0.43728	-2.28686	cold down vs hot
EHF	0.00124876	0.00217746	0.436691	-2.28995	cold down vs hot
METTL7B	2.71E-05	7.14E-05	0.436445	-2.29124	cold down vs hot
F13A1	1.41E-05	3.90E-05	0.436251	-2.29226	cold down vs hot
PLEKHA7	9.66E-08	3.61E-07	0.436076	-2.29318	cold down vs hot
ATHL1	4.32E-11	2.17E-10	0.435962	-2.29378	cold down vs hot
MGAT4A	1.94E-17	1.32E-16	0.435818	-2.29454	cold down vs hot
EID3	7.37E-08	2.80E-07	0.435784	-2.29471	cold down vs hot
EMID2	0.000228077	0.00048354	0.4355	-2.29621	cold down vs hot
SVPEP1	2.19E-06	6.92E-06	0.435317	-2.29718	cold down vs hot
VDR	4.52E-11	2.27E-10	0.434935	-2.29919	cold down vs hot
ADCY4	9.15E-11	4.48E-10	0.43481	-2.29985	cold down vs hot
TPK1	5.28E-13	2.93E-12	0.43464	-2.30076	cold down vs hot
C11orf45	3.15E-10	1.49E-09	0.43464	-2.30076	cold down vs hot
PBX4	1.49E-06	4.82E-06	0.43333	-2.30771	cold down vs hot
NFKBID	7.11E-16	4.49E-15	0.433328	-2.30772	cold down vs hot
XKRX	2.83E-06	8.80E-06	0.433215	-2.30832	cold down vs hot
LHFPL1	0.000472022	0.000930966	0.433079	-2.30905	cold down vs hot
TNFSF13	7.74E-16	4.88E-15	0.433008	-2.30943	cold down vs hot
BIN1	1.70E-09	7.54E-09	0.432823	-2.31041	cold down vs hot
LOC145820	1.41E-07	5.21E-07	0.432709	-2.31102	cold down vs hot
SCIN	0.00344264	0.00519394	0.43174	-2.31621	cold down vs hot
ASGR1	2.48E-08	9.82E-08	0.43156	-2.31717	cold down vs hot
BARX2	0.00116518	0.00205366	0.431135	-2.31946	cold down vs hot
NPB	9.98E-06	2.84E-05	0.430715	-2.32172	cold down vs hot
LGMN	1.86E-22	1.51E-21	0.430698	-2.32181	cold down vs hot
LRRN3	0.000118662	0.000274246	0.430489	-2.32294	cold down vs hot
MGAT3	9.83E-07	3.28E-06	0.430277	-2.32408	cold down vs hot
ME3	8.84E-06	2.54E-05	0.429473	-2.32844	cold down vs hot
SPNS2	3.98E-12	2.12E-11	0.42947	-2.32845	cold down vs hot
ARHGFB3	4.55E-20	3.44E-19	0.42898	-2.33111	cold down vs hot
SYNPO2	1.29E-06	4.22E-06	0.428637	-2.33298	cold down vs hot
EFCAB4A	4.38E-08	1.70E-07	0.428312	-2.33475	cold down vs hot
HHEX	5.62E-09	2.38E-08	0.428257	-2.33504	cold down vs hot
TRIM21	4.43E-28	4.39E-27	0.428245	-2.33511	cold down vs hot
MTMR8	5.17E-06	1.54E-05	0.427186	-2.3409	cold down vs hot
GUCY1A3	1.33E-10	6.45E-10	0.426931	-2.3423	cold down vs hot

CHST13	3.84E-08	1.50E-07	0.426764	-2.34321	cold down vs hot
SELM	3.16E-07	1.11E-06	0.426708	-2.34352	cold down vs hot
FRMPD1	0.000116741	0.000270475	0.426703	-2.34355	cold down vs hot
CDH11	1.03E-06	3.42E-06	0.426543	-2.34443	cold down vs hot
RHO	3.19E-09	1.38E-08	0.42625	-2.34604	cold down vs hot
SH3D20	9.01E-10	4.08E-09	0.426178	-2.34644	cold down vs hot
PARM1	6.38E-09	2.69E-08	0.42602	-2.34731	cold down vs hot
B3GALT4	1.89E-15	1.16E-14	0.425706	-2.34904	cold down vs hot
PHEX	2.82E-05	7.38E-05	0.425336	-2.35108	cold down vs hot
CDC42SE2	2.44E-30	2.63E-29	0.424991	-2.35299	cold down vs hot
LOC440461	5.76E-09	2.44E-08	0.424927	-2.35334	cold down vs hot
TCTEX1D1	7.63E-05	0.000183748	0.424502	-2.3557	cold down vs hot
FAS	3.67E-11	1.86E-10	0.424344	-2.35658	cold down vs hot
CDCP1	0.000249788	0.00052539	0.424325	-2.35669	cold down vs hot
BATF3	4.97E-11	2.49E-10	0.424127	-2.35778	cold down vs hot
RAB33A	3.47E-06	1.06E-05	0.424073	-2.35808	cold down vs hot
TMEM200A	1.00E-07	3.73E-07	0.423941	-2.35882	cold down vs hot
MAP3K5	1.22E-12	6.66E-12	0.422747	-2.36548	cold down vs hot
TNFSF15	6.79E-06	1.98E-05	0.422657	-2.36599	cold down vs hot
RAB42	8.30E-12	4.33E-11	0.422547	-2.3666	cold down vs hot
LYPD5	1.28E-07	4.74E-07	0.422306	-2.36795	cold down vs hot
TSHZ2	1.11E-06	3.66E-06	0.421977	-2.3698	cold down vs hot
RUNX3	7.85E-07	2.65E-06	0.421342	-2.37337	cold down vs hot
OR2A7	0.000273944	0.000571227	0.420969	-2.37547	cold down vs hot
BCL3	1.49E-17	1.03E-16	0.420492	-2.37817	cold down vs hot
PTPLAD2	6.19E-10	2.84E-09	0.42	-2.38095	cold down vs hot
TAPBP	1.31E-26	1.25E-25	0.419089	-2.38613	cold down vs hot
CYSLTR2	0.000212931	0.000456397	0.418962	-2.38685	cold down vs hot
FCGR3B	2.33E-05	6.21E-05	0.41881	-2.38772	cold down vs hot
NPL	4.40E-17	2.95E-16	0.418535	-2.38929	cold down vs hot
HIST1H2BG	1.31E-05	3.65E-05	0.418157	-2.39144	cold down vs hot
IRF7	1.11E-12	6.04E-12	0.417913	-2.39284	cold down vs hot
RTP4	1.02E-11	5.34E-11	0.417696	-2.39408	cold down vs hot
XPNPEP2	5.42E-05	0.000134712	0.417636	-2.39443	cold down vs hot
CD207	3.09E-06	9.57E-06	0.417094	-2.39754	cold down vs hot
RILPL2	2.39E-26	2.25E-25	0.41703	-2.39791	cold down vs hot
SORL1	9.17E-06	2.63E-05	0.416978	-2.39821	cold down vs hot
CXorf65	3.37E-06	1.03E-05	0.416926	-2.39851	cold down vs hot
PION	3.60E-09	1.55E-08	0.41672	-2.39969	cold down vs hot
JAKMIP2	0.00071649	0.00134299	0.416281	-2.40223	cold down vs hot
BHLHE22	9.42E-05	0.000222217	0.415638	-2.40594	cold down vs hot
SLCO2A1	7.83E-09	3.27E-08	0.415241	-2.40824	cold down vs hot
ACSS3	0.0021356	0.00345264	0.415064	-2.40927	cold down vs hot
LAMA3	1.65E-06	5.33E-06	0.414766	-2.411	cold down vs hot
KIAA1644	0.000127947	0.000292595	0.414561	-2.41219	cold down vs hot
VIPR2	9.51E-05	0.000224044	0.414509	-2.41249	cold down vs hot
GLDC	0.000383718	0.000771409	0.414121	-2.41475	cold down vs hot
LGI2	1.07E-07	3.98E-07	0.413595	-2.41782	cold down vs hot
REM1	2.93E-05	7.64E-05	0.413495	-2.41841	cold down vs hot
UBE2QL1	3.35E-06	1.03E-05	0.412766	-2.42268	cold down vs hot
FMOD	7.13E-05	0.000173041	0.412614	-2.42357	cold down vs hot
COL8A2	9.85E-09	4.06E-08	0.412323	-2.42528	cold down vs hot
HOOK1	0.00145232	0.00247877	0.412298	-2.42543	cold down vs hot
HERC6	3.92E-11	1.98E-10	0.412024	-2.42704	cold down vs hot
C18orf1	1.99E-09	8.78E-09	0.411942	-2.42753	cold down vs hot
DACT2	0.000180276	0.000393776	0.411882	-2.42788	cold down vs hot
FHAD1	0.000162875	0.000361943	0.41185	-2.42807	cold down vs hot
ENPP5	0.000501472	0.000980804	0.411834	-2.42816	cold down vs hot
RRAD	1.13E-05	3.20E-05	0.411815	-2.42828	cold down vs hot
FFAR2	3.51E-08	1.38E-07	0.411771	-2.42853	cold down vs hot
PSME2	9.90E-38	1.41E-36	0.411478	-2.43027	cold down vs hot
LOXL1	4.92E-09	2.09E-08	0.411381	-2.43084	cold down vs hot
EYA2	1.25E-07	4.63E-07	0.411297	-2.43133	cold down vs hot
ICAM1	4.08E-15	2.48E-14	0.411061	-2.43273	cold down vs hot
SFRP4	0.00194245	0.00318297	0.410924	-2.43354	cold down vs hot
LOC154761	1.88E-10	9.03E-10	0.410691	-2.43492	cold down vs hot
POMC	8.61E-05	0.000204475	0.410666	-2.43507	cold down vs hot
S1PR1	2.77E-16	1.80E-15	0.410542	-2.43581	cold down vs hot
TEKT5	0.00363242	0.00543378	0.410221	-2.43771	cold down vs hot
ALDH1A1	5.78E-06	1.71E-05	0.409815	-2.44013	cold down vs hot
SLCSA5	1.03E-08	4.25E-08	0.409681	-2.44092	cold down vs hot
CD82	3.45E-10	1.63E-09	0.409674	-2.44097	cold down vs hot
TM6SF1	2.22E-17	1.51E-16	0.409445	-2.44233	cold down vs hot
GALNTL1	1.50E-06	4.85E-06	0.409175	-2.44394	cold down vs hot
TLR1	1.57E-13	8.92E-13	0.408523	-2.44784	cold down vs hot
CABP4	6.89E-05	0.000167495	0.4084	-2.44858	cold down vs hot
NCEH1	1.71E-14	1.02E-13	0.408336	-2.44897	cold down vs hot

WNT5B	4.27E-08	1.66E-07	0.408216	-2.44969	cold down vs hot
SLC2A9	5.61E-11	2.80E-10	0.407717	-2.45268	cold down vs hot
COX7A1	9.72E-07	3.24E-06	0.407695	-2.45281	cold down vs hot
FFAR3	4.27E-09	1.83E-08	0.407686	-2.45287	cold down vs hot
CLECSA	4.26E-06	1.29E-05	0.407102	-2.45639	cold down vs hot
DTX3L	5.08E-22	4.07E-21	0.406473	-2.46019	cold down vs hot
EPHX2	3.27E-05	8.45E-05	0.406144	-2.46218	cold down vs hot
HS3ST2	0.000156995	0.000350428	0.406031	-2.46287	cold down vs hot
NAIP	5.22E-12	2.76E-11	0.405716	-2.46478	cold down vs hot
ZNF334	0.000555737	0.00107502	0.405213	-2.46784	cold down vs hot
NNMT	5.07E-07	1.75E-06	0.404934	-2.46954	cold down vs hot
GPR133	9.03E-06	2.59E-05	0.404364	-2.47302	cold down vs hot
SAMD12	5.78E-05	0.000142773	0.404267	-2.47361	cold down vs hot
OR2A9P	2.52E-05	6.68E-05	0.403621	-2.47757	cold down vs hot
TLR3	1.14E-09	5.16E-09	0.403451	-2.47861	cold down vs hot
PLAU	1.48E-09	6.60E-09	0.403358	-2.47919	cold down vs hot
DSC2	9.53E-08	3.57E-07	0.403215	-2.48007	cold down vs hot
CEBPD	1.51E-14	8.99E-14	0.403144	-2.4805	cold down vs hot
DRAM1	3.35E-25	3.00E-24	0.402853	-2.48229	cold down vs hot
LRRK2	1.72E-07	6.28E-07	0.402644	-2.48358	cold down vs hot
CXCL2	1.26E-05	3.52E-05	0.402527	-2.4843	cold down vs hot
OAS3	1.86E-12	1.01E-11	0.402364	-2.48531	cold down vs hot
CCL11	9.17E-05	0.000216803	0.402184	-2.48642	cold down vs hot
HPSE	1.89E-12	1.02E-11	0.402034	-2.48735	cold down vs hot
FOXF1	5.68E-06	1.68E-05	0.401973	-2.48773	cold down vs hot
CARNS1	4.62E-10	2.15E-09	0.401935	-2.48796	cold down vs hot
BTN3A2	8.44E-20	6.34E-19	0.401702	-2.48941	cold down vs hot
ARHGEF6	4.43E-10	2.06E-09	0.401689	-2.48949	cold down vs hot
GIPC2	1.13E-09	5.07E-09	0.401019	-2.49365	cold down vs hot
SLC29A3	2.57E-22	2.07E-21	0.400446	-2.49721	cold down vs hot
DHX58	8.21E-18	5.71E-17	0.400402	-2.49749	cold down vs hot
STRA6	0.000532727	0.00103542	0.399891	-2.50068	cold down vs hot
GPR35	2.03E-16	1.33E-15	0.399806	-2.50121	cold down vs hot
KLRG1	1.05E-16	6.95E-16	0.399716	-2.50178	cold down vs hot
L3MBTL4	8.02E-06	2.32E-05	0.398735	-2.50793	cold down vs hot
CYBA	1.85E-17	1.26E-16	0.398721	-2.50802	cold down vs hot
WIPF1	8.47E-13	4.66E-12	0.398212	-2.51122	cold down vs hot
KLF2	5.43E-16	3.46E-15	0.398159	-2.51156	cold down vs hot
MAP1LC3C	4.80E-06	1.44E-05	0.397936	-2.51297	cold down vs hot
ENPP6	4.55E-06	1.37E-05	0.397741	-2.5142	cold down vs hot
PNMAL2	5.30E-11	2.64E-10	0.397457	-2.516	cold down vs hot
ARL4C	4.60E-14	2.67E-13	0.39739	-2.51642	cold down vs hot
IL24	2.12E-05	5.71E-05	0.397141	-2.518	cold down vs hot
KIF17	0.000234606	0.000496497	0.39642	-2.52258	cold down vs hot
NCCRP1	0.000194728	0.000421254	0.396108	-2.52457	cold down vs hot
IQGAP2	9.58E-09	3.96E-08	0.395825	-2.52637	cold down vs hot
IFIT2	7.25E-14	4.17E-13	0.395499	-2.52845	cold down vs hot
TTC39B	5.52E-10	2.55E-09	0.395352	-2.52939	cold down vs hot
TAP2	4.28E-24	3.69E-23	0.395238	-2.53012	cold down vs hot
IRAK2	9.56E-13	5.24E-12	0.395117	-2.53089	cold down vs hot
CRHBP	5.28E-08	2.04E-07	0.395083	-2.53112	cold down vs hot
DGKG	1.24E-09	5.56E-09	0.395077	-2.53116	cold down vs hot
SLC37A2	2.26E-13	1.27E-12	0.395051	-2.53132	cold down vs hot
KCNQ1	4.73E-17	3.17E-16	0.394552	-2.53452	cold down vs hot
CLIC6	7.57E-07	2.56E-06	0.394429	-2.53531	cold down vs hot
GGTLC2	4.76E-09	2.03E-08	0.394257	-2.53642	cold down vs hot
NKX3-1	2.96E-05	7.72E-05	0.394226	-2.53662	cold down vs hot
BHMT2	0.000265289	0.000554742	0.394072	-2.53761	cold down vs hot
GSDMB	6.86E-10	3.14E-09	0.394009	-2.53801	cold down vs hot
PDGFRA	1.43E-07	5.26E-07	0.393541	-2.54103	cold down vs hot
ALS2CL	7.28E-10	3.33E-09	0.393508	-2.54124	cold down vs hot
RASAL1	0.00169842	0.00283505	0.39348	-2.54142	cold down vs hot
P2RY2	7.42E-08	2.82E-07	0.393275	-2.54275	cold down vs hot
HS3ST3B1	1.45E-07	5.35E-07	0.393134	-2.54366	cold down vs hot
ADAM19	3.16E-08	1.24E-07	0.393082	-2.544	cold down vs hot
TRPC2	1.30E-10	6.34E-10	0.393041	-2.54426	cold down vs hot
APOL2	3.83E-28	3.82E-27	0.392148	-2.55006	cold down vs hot
IFIT3	1.41E-13	7.99E-13	0.391949	-2.55135	cold down vs hot
PYCARD	6.90E-09	2.90E-08	0.390865	-2.55843	cold down vs hot
TICAM2	1.59E-14	9.48E-14	0.390794	-2.55889	cold down vs hot
CCDC152	7.49E-07	2.54E-06	0.390766	-2.55908	cold down vs hot
CTSH	9.97E-19	7.25E-18	0.390738	-2.55926	cold down vs hot
NFKBIA	7.65E-33	8.93E-32	0.390441	-2.56121	cold down vs hot
TXLNB	2.35E-08	9.35E-08	0.390272	-2.56231	cold down vs hot
IL6	8.73E-07	2.93E-06	0.389971	-2.56429	cold down vs hot
CDYL2	1.36E-08	5.54E-08	0.389954	-2.56441	cold down vs hot
GRAPL	5.41E-09	2.30E-08	0.389502	-2.56738	cold down vs hot

MYEOV	0.00401439	0.00590237	0.389441	-2.56779	cold down vs hot
TFCP2L1	2.51E-05	6.66E-05	0.389293	-2.56876	cold down vs hot
AGXT2L1	0.00343617	0.00518537	0.389122	-2.56989	cold down vs hot
CPNE9	1.00E-09	4.54E-09	0.388703	-2.57266	cold down vs hot
CH25H	3.59E-08	1.41E-07	0.388657	-2.57296	cold down vs hot
PLEKHO1	4.02E-20	3.04E-19	0.388094	-2.5767	cold down vs hot
TNFSF4	1.65E-12	8.96E-12	0.387273	-2.58216	cold down vs hot
RPGRIP1	2.13E-10	1.02E-09	0.387134	-2.58308	cold down vs hot
ADCY7	1.18E-18	8.56E-18	0.387036	-2.58374	cold down vs hot
POM121L9	4.19E-10	1.95E-09	0.386627	-2.58647	cold down vs hot
ASS1	1.46E-07	5.37E-07	0.386069	-2.59021	cold down vs hot
RRN3P2	7.18E-12	3.76E-11	0.385916	-2.59124	cold down vs hot
PCBP3	2.43E-07	8.70E-07	0.385776	-2.59218	cold down vs hot
DES	0.00118453	0.00208156	0.385239	-2.59579	cold down vs hot
ADAMTSL3	1.07E-08	4.38E-08	0.384572	-2.60029	cold down vs hot
ERP27	1.40E-05	3.89E-05	0.384163	-2.60306	cold down vs hot
IL1RN	1.16E-08	4.73E-08	0.383705	-2.60617	cold down vs hot
TAPBPL	9.55E-24	8.09E-23	0.382637	-2.61344	cold down vs hot
DGKA	3.77E-16	2.42E-15	0.382163	-2.61669	cold down vs hot
DHRS3	2.82E-12	1.51E-11	0.381563	-2.6208	cold down vs hot
KIAA0040	4.06E-10	1.90E-09	0.38102	-2.62453	cold down vs hot
LOC339535	0.000989089	0.00178377	0.380816	-2.62594	cold down vs hot
TRAF1	1.51E-07	5.54E-07	0.380366	-2.62905	cold down vs hot
RAI2	9.61E-14	5.51E-13	0.380318	-2.62938	cold down vs hot
ARNTL2	1.33E-05	3.71E-05	0.380143	-2.63059	cold down vs hot
TMEM163	0.00141501	0.00242206	0.379901	-2.63227	cold down vs hot
C6orf105	2.06E-08	8.25E-08	0.379725	-2.63348	cold down vs hot
CXorf42	6.31E-07	2.16E-06	0.3797	-2.63366	cold down vs hot
GPX3	8.30E-09	3.45E-08	0.379457	-2.63534	cold down vs hot
ARHGAP4	1.63E-14	9.70E-14	0.379271	-2.63664	cold down vs hot
CPXM2	3.90E-05	9.96E-05	0.378977	-2.63868	cold down vs hot
ITGA4	7.46E-07	2.53E-06	0.378477	-2.64217	cold down vs hot
NAAA	7.55E-19	5.53E-18	0.377482	-2.64913	cold down vs hot
PIGR	5.97E-06	1.76E-05	0.377472	-2.6492	cold down vs hot
MYB	2.75E-11	1.40E-10	0.377156	-2.65142	cold down vs hot
FAM101A	1.01E-06	3.36E-06	0.376972	-2.65272	cold down vs hot
LMTK3	9.01E-09	3.73E-08	0.375724	-2.66153	cold down vs hot
CYFIP2	2.42E-11	1.24E-10	0.375424	-2.66365	cold down vs hot
IGF1	4.51E-08	1.75E-07	0.37492	-2.66724	cold down vs hot
HLA-L	1.21E-16	7.97E-16	0.374594	-2.66956	cold down vs hot
CNR1	0.00039792	0.000798122	0.374577	-2.66968	cold down vs hot
GBGT1	3.01E-16	1.94E-15	0.374564	-2.66977	cold down vs hot
GPR88	8.19E-09	3.41E-08	0.374278	-2.67181	cold down vs hot
ESR1	4.19E-11	2.11E-10	0.374216	-2.67226	cold down vs hot
DDX60	9.39E-13	5.15E-12	0.373991	-2.67386	cold down vs hot
LOC653786	1.06E-08	4.35E-08	0.373814	-2.67513	cold down vs hot
SOCS3	4.66E-14	2.71E-13	0.373381	-2.67823	cold down vs hot
TTC7A	6.50E-33	7.64E-32	0.373159	-2.67982	cold down vs hot
ACHE	2.03E-09	8.95E-09	0.373115	-2.68014	cold down vs hot
TLR5	3.73E-19	2.75E-18	0.372917	-2.68156	cold down vs hot
LUM	8.03E-08	3.04E-07	0.372895	-2.68172	cold down vs hot
LPXN	1.92E-14	1.13E-13	0.372713	-2.68303	cold down vs hot
FCN3	1.77E-09	7.85E-09	0.372477	-2.68473	cold down vs hot
GPR77	5.38E-14	3.12E-13	0.37231	-2.68594	cold down vs hot
SCARA5	0.00016029	0.000356808	0.371385	-2.69262	cold down vs hot
NR1H3	4.74E-27	4.58E-26	0.371259	-2.69354	cold down vs hot
BTN3A1	3.81E-25	3.40E-24	0.370744	-2.69728	cold down vs hot
PKP2	9.32E-05	0.000220022	0.3707	-2.6976	cold down vs hot
DOCK11	6.15E-15	3.71E-14	0.369701	-2.70489	cold down vs hot
C1orf106	0.000289099	0.000599571	0.369454	-2.7067	cold down vs hot
ATP8A1	3.24E-07	1.14E-06	0.368797	-2.71152	cold down vs hot
ZNF835	1.00E-07	3.73E-07	0.368778	-2.71166	cold down vs hot
ABLIM1	2.22E-11	1.14E-10	0.368569	-2.7132	cold down vs hot
IL1R1	5.09E-14	2.96E-13	0.368546	-2.71337	cold down vs hot
GLDN	2.51E-07	8.96E-07	0.368102	-2.71664	cold down vs hot
PAPLN	1.59E-14	9.46E-14	0.367972	-2.7176	cold down vs hot
LBH	2.76E-17	1.87E-16	0.367532	-2.72085	cold down vs hot
PAOX	9.08E-24	7.72E-23	0.366778	-2.72644	cold down vs hot
FKBP5	5.03E-12	2.67E-11	0.366682	-2.72716	cold down vs hot
FCGR2C	6.98E-08	2.66E-07	0.366548	-2.72816	cold down vs hot
SCUBE2	0.000562157	0.00108422	0.366527	-2.72831	cold down vs hot
SLC17A9	4.50E-06	1.35E-05	0.366087	-2.73159	cold down vs hot
TDRD9	0.00415174	0.00606876	0.366039	-2.73195	cold down vs hot
CD101	1.01E-18	7.36E-18	0.365924	-2.7328	cold down vs hot
SSTR2	7.86E-19	5.74E-18	0.365877	-2.73316	cold down vs hot
CERKL	6.53E-09	2.75E-08	0.365556	-2.73556	cold down vs hot
PLCXD3	0.000169536	0.00037344	0.365446	-2.73638	cold down vs hot

RAMP3	2.24E-15	1.37E-14	0.365357	-2.73705	cold down vs hot
ALPL	3.79E-13	2.11E-12	0.365235	-2.73796	cold down vs hot
FAIM2	2.04E-08	8.16E-08	0.365035	-2.73946	cold down vs hot
RNASSET2	9.02E-27	8.63E-26	0.3648	-2.74123	cold down vs hot
SMPD3	4.87E-18	3.40E-17	0.364554	-2.74308	cold down vs hot
NINJ2	6.44E-15	3.88E-14	0.364263	-2.74527	cold down vs hot
ITIH4	7.95E-10	3.62E-09	0.363683	-2.74965	cold down vs hot
FILIP1L	1.54E-15	9.58E-15	0.36348	-2.75118	cold down vs hot
SYNGR3	1.62E-09	7.20E-09	0.363353	-2.75214	cold down vs hot
SLC31A2	4.07E-26	3.79E-25	0.362692	-2.75716	cold down vs hot
SLC24A4	0.000180957	0.000394866	0.362492	-2.75868	cold down vs hot
PARP9	5.80E-24	4.97E-23	0.362234	-2.76065	cold down vs hot
STAR	7.52E-10	3.43E-09	0.361995	-2.76247	cold down vs hot
FAM107A	9.58E-15	5.75E-14	0.361745	-2.76438	cold down vs hot
NMI	3.99E-21	3.10E-20	0.361459	-2.76656	cold down vs hot
GGT1	1.53E-09	6.83E-09	0.36145	-2.76664	cold down vs hot
TMEM90B	3.32E-06	1.02E-05	0.361356	-2.76735	cold down vs hot
C6orf150	1.90E-11	9.78E-11	0.360757	-2.77195	cold down vs hot
VMO1	1.94E-09	8.58E-09	0.360728	-2.77217	cold down vs hot
RASGRP3	6.20E-17	4.13E-16	0.360392	-2.77475	cold down vs hot
SOD2	2.22E-27	2.17E-26	0.360365	-2.77496	cold down vs hot
ZG16B	1.85E-07	6.73E-07	0.360359	-2.77501	cold down vs hot
TNFRSF10A	2.49E-07	8.90E-07	0.360135	-2.77673	cold down vs hot
LSR	2.27E-09	9.93E-09	0.359743	-2.77977	cold down vs hot
BMX	0.000624529	0.00119145	0.35969	-2.78017	cold down vs hot
MICB	2.60E-12	1.40E-11	0.359603	-2.78085	cold down vs hot
PGM5	7.70E-08	2.92E-07	0.359165	-2.78424	cold down vs hot
LPAR1	4.01E-06	1.22E-05	0.359156	-2.78431	cold down vs hot
SULF1	2.92E-08	1.15E-07	0.359005	-2.78547	cold down vs hot
FAM129A	1.95E-08	7.84E-08	0.359004	-2.78548	cold down vs hot
LRRC15	0.00037088	0.000748025	0.358576	-2.78881	cold down vs hot
PTGFR	1.29E-06	4.22E-06	0.358459	-2.78972	cold down vs hot
HMOX1	4.67E-16	2.99E-15	0.357651	-2.79602	cold down vs hot
NKAPL	4.58E-09	1.96E-08	0.356933	-2.80165	cold down vs hot
IL16	5.54E-15	3.35E-14	0.356729	-2.80325	cold down vs hot
C10orf10	5.23E-14	3.03E-13	0.356692	-2.80354	cold down vs hot
APOC1	9.99E-09	4.12E-08	0.356669	-2.80372	cold down vs hot
CAMK4	2.96E-06	9.19E-06	0.356593	-2.80432	cold down vs hot
CD68	3.35E-21	2.60E-20	0.356452	-2.80543	cold down vs hot
ZNF154	4.18E-12	2.23E-11	0.356211	-2.80733	cold down vs hot
UNC5A	2.77E-08	1.09E-07	0.356113	-2.8081	cold down vs hot
CLEC4G	9.79E-06	2.79E-05	0.356025	-2.80879	cold down vs hot
MS4A14	9.17E-15	5.50E-14	0.355895	-2.80982	cold down vs hot
STAB1	3.64E-19	2.69E-18	0.355731	-2.81112	cold down vs hot
RAB20	2.30E-16	1.49E-15	0.355057	-2.81645	cold down vs hot
KAL1	1.50E-09	6.67E-09	0.354674	-2.81949	cold down vs hot
FGF7	2.59E-10	1.23E-09	0.354212	-2.82317	cold down vs hot
CEBPE	2.44E-14	1.43E-13	0.354124	-2.82387	cold down vs hot
GOLGA2B	1.59E-13	8.99E-13	0.353945	-2.8253	cold down vs hot
IFIH1	2.51E-16	1.63E-15	0.353831	-2.82621	cold down vs hot
CD300LB	2.67E-14	1.57E-13	0.353495	-2.82889	cold down vs hot
CLEC1A	1.40E-07	5.18E-07	0.352827	-2.83425	cold down vs hot
ARAP2	3.91E-13	2.18E-12	0.352802	-2.83445	cold down vs hot
TP73	2.08E-07	7.52E-07	0.352173	-2.83951	cold down vs hot
F5	9.17E-05	0.000216793	0.352127	-2.83988	cold down vs hot
LYL1	3.19E-19	2.36E-18	0.352066	-2.84038	cold down vs hot
FAM115C	1.01E-14	6.05E-14	0.352049	-2.84052	cold down vs hot
GYLTL1B	2.69E-05	7.08E-05	0.351671	-2.84357	cold down vs hot
GLIPR2	1.40E-24	1.23E-23	0.351321	-2.8464	cold down vs hot
CD163L1	6.65E-08	2.54E-07	0.350868	-2.85007	cold down vs hot
COL29A1	9.23E-06	2.64E-05	0.350736	-2.85115	cold down vs hot
DTX1	9.54E-09	3.94E-08	0.350444	-2.85352	cold down vs hot
PTPRE	1.78E-14	1.06E-13	0.350287	-2.8548	cold down vs hot
NEXN	1.30E-13	7.41E-13	0.350278	-2.85487	cold down vs hot
ARHGEF5	3.25E-05	8.40E-05	0.350274	-2.85491	cold down vs hot
COLQ	1.63E-15	1.01E-14	0.350049	-2.85674	cold down vs hot
GP5	5.63E-11	2.80E-10	0.350018	-2.857	cold down vs hot
BEX5	4.41E-06	1.33E-05	0.349876	-2.85815	cold down vs hot
TMEM63C	4.85E-06	1.45E-05	0.349745	-2.85923	cold down vs hot
ELF4	9.73E-22	7.70E-21	0.3495	-2.86123	cold down vs hot
FUCA1	3.32E-24	2.88E-23	0.349403	-2.86202	cold down vs hot
FNDC1	2.01E-06	6.41E-06	0.349399	-2.86206	cold down vs hot
DYSF	5.90E-22	4.71E-21	0.348865	-2.86644	cold down vs hot
PRR5L	6.93E-26	6.43E-25	0.347678	-2.87623	cold down vs hot
ICAM3	3.89E-37	5.41E-36	0.347577	-2.87706	cold down vs hot
LIF	8.40E-05	0.000200272	0.347437	-2.87822	cold down vs hot
GPR64	1.71E-05	4.69E-05	0.34735	-2.87894	cold down vs hot

GGT5	2.83E-16	1.83E-15	0.346672	-2.88457	cold down vs hot
LOC389634	1.24E-10	6.02E-10	0.346392	-2.88691	cold down vs hot
METTL7A	3.00E-14	1.75E-13	0.346155	-2.88888	cold down vs hot
RASSF2	2.30E-15	1.41E-14	0.345881	-2.89117	cold down vs hot
HCG27	2.48E-14	1.45E-13	0.345656	-2.89305	cold down vs hot
FAM78A	1.90E-17	1.30E-16	0.345292	-2.8961	cold down vs hot
KLHL14	3.16E-05	8.20E-05	0.345235	-2.89658	cold down vs hot
ASB2	4.26E-11	2.15E-10	0.34456	-2.90225	cold down vs hot
NAPSA	1.82E-10	8.76E-10	0.34341	-2.91197	cold down vs hot
ACOXL	1.39E-09	6.22E-09	0.342931	-2.91604	cold down vs hot
TPRG1	7.76E-13	4.28E-12	0.342436	-2.92025	cold down vs hot
ST6GALNA4	8.06E-06	2.33E-05	0.342314	-2.92129	cold down vs hot
GOS2	3.92E-09	1.69E-08	0.341982	-2.92413	cold down vs hot
RGN	2.86E-10	1.35E-09	0.341393	-2.92917	cold down vs hot
ACE	1.21E-18	8.75E-18	0.341042	-2.93219	cold down vs hot
SLC43A2	1.37E-24	1.21E-23	0.340515	-2.93672	cold down vs hot
SLC1A2	4.30E-08	1.67E-07	0.340344	-2.93821	cold down vs hot
OLFM1	6.26E-16	3.97E-15	0.340079	-2.94049	cold down vs hot
CSAR1	2.78E-16	1.80E-15	0.339872	-2.94228	cold down vs hot
ARHGGEF35	1.09E-05	3.10E-05	0.339052	-2.9494	cold down vs hot
DOC2B	4.45E-08	1.72E-07	0.339039	-2.94951	cold down vs hot
CDX1	4.68E-12	2.49E-11	0.339025	-2.94963	cold down vs hot
ISG15	1.79E-11	9.24E-11	0.338893	-2.95078	cold down vs hot
DEGS2	4.61E-09	1.97E-08	0.338812	-2.95149	cold down vs hot
IFI35	1.95E-23	1.63E-22	0.338309	-2.95588	cold down vs hot
HCG22	7.66E-07	2.59E-06	0.338196	-2.95686	cold down vs hot
SP140L	1.34E-16	8.83E-16	0.338097	-2.95774	cold down vs hot
S100A9	1.39E-09	6.20E-09	0.338085	-2.95784	cold down vs hot
CNKSR1	1.00E-09	4.54E-09	0.338045	-2.95819	cold down vs hot
NAALADL1	5.49E-10	2.54E-09	0.337685	-2.96134	cold down vs hot
SLFN11	2.41E-14	1.42E-13	0.33753	-2.9627	cold down vs hot
TNFAIP8L3	3.64E-12	1.94E-11	0.337497	-2.96299	cold down vs hot
TSPAN2	2.80E-10	1.33E-09	0.337315	-2.96459	cold down vs hot
PIM1	7.57E-31	8.37E-30	0.336288	-2.97364	cold down vs hot
GREM1	1.31E-06	4.28E-06	0.336277	-2.97374	cold down vs hot
LOC647121	3.55E-12	1.90E-11	0.335791	-2.97804	cold down vs hot
BATF2	8.03E-19	5.85E-18	0.335755	-2.97837	cold down vs hot
GPR160	1.77E-21	1.39E-20	0.335721	-2.97867	cold down vs hot
CPVL	3.12E-12	1.68E-11	0.33519	-2.98338	cold down vs hot
ATF7IP2	1.52E-08	6.19E-08	0.33501	-2.98499	cold down vs hot
CCL17	2.54E-09	1.11E-08	0.33368	-2.99689	cold down vs hot
CPNE5	5.02E-10	2.33E-09	0.333672	-2.99695	cold down vs hot
MPO	5.92E-12	3.13E-11	0.333544	-2.99811	cold down vs hot
ADAP1	3.34E-12	1.79E-11	0.332269	-3.00961	cold down vs hot
RNF43	4.43E-06	1.33E-05	0.331988	-3.01216	cold down vs hot
FCAR	8.29E-11	4.08E-10	0.331077	-3.02045	cold down vs hot
FER1L4	1.16E-06	3.83E-06	0.330965	-3.02147	cold down vs hot
CD160	3.23E-18	2.27E-17	0.330162	-3.02882	cold down vs hot
SARDH	5.41E-08	2.08E-07	0.32997	-3.03058	cold down vs hot
LIMD2	7.99E-21	6.14E-20	0.329055	-3.039	cold down vs hot
DENND3	2.11E-29	2.18E-28	0.328315	-3.04585	cold down vs hot
CXCL16	3.15E-24	2.74E-23	0.327964	-3.04911	cold down vs hot
NMNAT3	1.00E-07	3.73E-07	0.32745	-3.0539	cold down vs hot
STYK1	1.01E-10	4.94E-10	0.32714	-3.0568	cold down vs hot
HAPLN3	1.81E-22	1.47E-21	0.32617	-3.06588	cold down vs hot
PSMB8	4.17E-30	4.43E-29	0.326106	-3.06648	cold down vs hot
PTGS1	1.62E-17	1.11E-16	0.325701	-3.0703	cold down vs hot
SMTNL1	1.25E-15	7.78E-15	0.325043	-3.07652	cold down vs hot
SLC2A6	5.86E-15	3.54E-14	0.324555	-3.08115	cold down vs hot
CDH1	0.00394461	0.00582298	0.324308	-3.08349	cold down vs hot
CDH23	5.85E-14	3.38E-13	0.324007	-3.08635	cold down vs hot
GLIPR1	2.27E-13	1.27E-12	0.32386	-3.08776	cold down vs hot
CHST15	7.93E-26	7.34E-25	0.323239	-3.09369	cold down vs hot
SLC35F3	3.47E-08	1.36E-07	0.322796	-3.09793	cold down vs hot
GALM	1.53E-21	1.21E-20	0.322638	-3.09945	cold down vs hot
RFTN1	3.67E-26	3.42E-25	0.322283	-3.10286	cold down vs hot
PECAM1	1.30E-34	1.62E-33	0.322261	-3.10308	cold down vs hot
DPYD	1.05E-12	5.73E-12	0.321458	-3.11083	cold down vs hot
TP63	2.15E-08	8.57E-08	0.320899	-3.11625	cold down vs hot
GSTM5	5.71E-10	2.63E-09	0.3206	-3.11916	cold down vs hot
LOC283314	1.53E-14	9.10E-14	0.320272	-3.12234	cold down vs hot
TLL1	7.89E-09	3.29E-08	0.319859	-3.12638	cold down vs hot
PRSS16	1.24E-05	3.48E-05	0.319814	-3.12681	cold down vs hot
NUP210	1.93E-10	9.27E-10	0.319728	-3.12766	cold down vs hot
HLA-A	1.69E-24	1.48E-23	0.319675	-3.12818	cold down vs hot
MLKL	9.06E-26	8.33E-25	0.319585	-3.12905	cold down vs hot
ANK1	5.68E-11	2.82E-10	0.319547	-3.12943	cold down vs hot

C1orf38	4.64E-25	4.14E-24	0.319021	-3.13459	cold down vs hot
PARP14	9.49E-31	1.05E-29	0.31831	-3.14159	cold down vs hot
DUSP26	1.72E-08	6.96E-08	0.318293	-3.14176	cold down vs hot
OSM	2.70E-11	1.38E-10	0.318159	-3.14308	cold down vs hot
FAM167B	3.66E-09	1.58E-08	0.318066	-3.144	cold down vs hot
DPP4	2.08E-09	9.13E-09	0.318064	-3.14402	cold down vs hot
TCF7	1.15E-14	6.87E-14	0.317646	-3.14816	cold down vs hot
MST4	6.54E-09	2.76E-08	0.317583	-3.14878	cold down vs hot
BTN1A1	2.70E-11	1.38E-10	0.316948	-3.15509	cold down vs hot
GPAT2	2.38E-08	9.45E-08	0.316883	-3.15574	cold down vs hot
BTN3A3	5.53E-29	5.66E-28	0.316707	-3.15749	cold down vs hot
CD1A	3.48E-07	1.22E-06	0.316457	-3.15999	cold down vs hot
C1orf54	4.39E-34	5.39E-33	0.316005	-3.16451	cold down vs hot
CSF1	1.49E-23	1.25E-22	0.315998	-3.16458	cold down vs hot
SH2D3C	3.07E-28	3.08E-27	0.315578	-3.16879	cold down vs hot
APOBEC3F	2.22E-17	1.51E-16	0.315426	-3.17031	cold down vs hot
ODF3B	9.14E-22	7.24E-21	0.315311	-3.17147	cold down vs hot
MFSD7	2.95E-14	1.72E-13	0.315127	-3.17333	cold down vs hot
TNFAIP3	2.17E-21	1.70E-20	0.31508	-3.1738	cold down vs hot
PRKCH	4.04E-28	4.03E-27	0.314906	-3.17555	cold down vs hot
GALNT6	6.57E-12	3.45E-11	0.314504	-3.17961	cold down vs hot
MAFB	7.93E-28	7.84E-27	0.314472	-3.17993	cold down vs hot
ICAM4	1.44E-09	6.44E-09	0.314126	-3.18343	cold down vs hot
CFH	4.34E-15	2.63E-14	0.314095	-3.18375	cold down vs hot
KBTD8	1.11E-16	7.33E-16	0.313455	-3.19026	cold down vs hot
ENPP4	1.04E-08	4.26E-08	0.313178	-3.19307	cold down vs hot
GLRX	6.74E-30	7.11E-29	0.312747	-3.19747	cold down vs hot
FBXO6	3.80E-25	3.40E-24	0.312712	-3.19783	cold down vs hot
EIF4E3	4.50E-16	2.88E-15	0.312526	-3.19974	cold down vs hot
GLT1D1	4.28E-11	2.15E-10	0.311827	-3.20691	cold down vs hot
TBXAS1	3.13E-15	1.92E-14	0.311581	-3.20944	cold down vs hot
IQSEC3	2.62E-11	1.34E-10	0.311404	-3.21126	cold down vs hot
STXBP2	1.15E-18	8.35E-18	0.311163	-3.21375	cold down vs hot
MYBPC2	1.01E-06	3.37E-06	0.311054	-3.21487	cold down vs hot
ABP1	3.38E-11	1.71E-10	0.311039	-3.21503	cold down vs hot
KCNMB1	1.98E-18	1.41E-17	0.310785	-3.21766	cold down vs hot
TGM2	1.53E-18	1.10E-17	0.310023	-3.22556	cold down vs hot
C17orf28	3.53E-16	2.28E-15	0.309547	-3.23052	cold down vs hot
TXK	7.74E-11	3.81E-10	0.309369	-3.23238	cold down vs hot
PLCXD2	8.87E-16	5.58E-15	0.308968	-3.23658	cold down vs hot
TREML1	1.06E-13	6.05E-13	0.30894	-3.23687	cold down vs hot
CDHR1	3.74E-07	1.31E-06	0.30892	-3.23709	cold down vs hot
TLR2	2.28E-17	1.55E-16	0.308452	-3.242	cold down vs hot
SLCO5A1	5.16E-07	1.78E-06	0.308116	-3.24553	cold down vs hot
CNTNAP2	2.34E-07	8.39E-07	0.307383	-3.25327	cold down vs hot
NAT8B	3.68E-16	2.37E-15	0.307192	-3.25529	cold down vs hot
KCNMA1	6.94E-09	2.91E-08	0.307005	-3.25727	cold down vs hot
FAM107B	2.47E-20	1.88E-19	0.30674	-3.26008	cold down vs hot
LRRC4C	1.63E-09	7.26E-09	0.30667	-3.26084	cold down vs hot
SDS	2.76E-11	1.40E-10	0.306517	-3.26246	cold down vs hot
PSMB10	8.85E-42	1.50E-40	0.306349	-3.26425	cold down vs hot
PLBD1	2.33E-11	1.19E-10	0.306315	-3.26461	cold down vs hot
MEF2B	4.17E-15	2.54E-14	0.306158	-3.26629	cold down vs hot
LRG1	9.17E-11	4.49E-10	0.30515	-3.27708	cold down vs hot
ADORA3	2.19E-20	1.67E-19	0.304784	-3.28101	cold down vs hot
BST2	2.47E-14	1.45E-13	0.304562	-3.28341	cold down vs hot
TNFRSF4	2.23E-13	1.25E-12	0.30446	-3.2845	cold down vs hot
DUSP2	7.33E-22	5.83E-21	0.303269	-3.29741	cold down vs hot
TRIM69	6.27E-21	4.83E-20	0.30288	-3.30163	cold down vs hot
PLA2G2A	0.000356216	0.000721795	0.302683	-3.30379	cold down vs hot
CYP2S1	1.66E-18	1.19E-17	0.302556	-3.30517	cold down vs hot
ICOSLG	3.21E-18	2.27E-17	0.302225	-3.3088	cold down vs hot
CCL23	5.77E-10	2.65E-09	0.302037	-3.31085	cold down vs hot
CLIC5	4.47E-22	3.59E-21	0.301752	-3.31398	cold down vs hot
PTGIR	2.05E-23	1.71E-22	0.301268	-3.3193	cold down vs hot
PLCL2	5.11E-21	3.95E-20	0.301061	-3.32159	cold down vs hot
ERMN	2.98E-11	1.52E-10	0.300625	-3.3264	cold down vs hot
PLCB2	2.62E-20	1.99E-19	0.300078	-3.33246	cold down vs hot
LOC100272	3.83E-18	2.69E-17	0.299659	-3.33713	cold down vs hot
VAV3	8.71E-11	4.28E-10	0.298796	-3.34676	cold down vs hot
SDK1	1.26E-09	5.67E-09	0.298782	-3.34692	cold down vs hot
NEURL3	2.63E-11	1.34E-10	0.298659	-3.3483	cold down vs hot
BTG2	1.26E-30	1.38E-29	0.298514	-3.34992	cold down vs hot
VOPP1	2.01E-22	1.62E-21	0.298274	-3.35262	cold down vs hot
LIPG	2.23E-10	1.06E-09	0.297671	-3.35942	cold down vs hot
NPY1R	1.79E-05	4.86E-05	0.297514	-3.36119	cold down vs hot
SEPP1	4.19E-13	2.33E-12	0.297419	-3.36225	cold down vs hot

HLA-E	2.68E-40	4.32E-39	0.29691	-3.36802	cold down vs hot
SLC1A3	9.90E-16	6.21E-15	0.295068	-3.38905	cold down vs hot
GRAMD1B	5.03E-11	2.52E-10	0.294849	-3.39157	cold down vs hot
ACRBP	1.14E-22	9.26E-22	0.294613	-3.39428	cold down vs hot
EVL	9.73E-30	1.02E-28	0.294598	-3.39445	cold down vs hot
CCDC109B	2.93E-20	2.23E-19	0.294274	-3.39819	cold down vs hot
MYO1A	3.50E-18	2.46E-17	0.293981	-3.40158	cold down vs hot
LRRN2	5.66E-09	2.40E-08	0.293067	-3.41219	cold down vs hot
HMHA1	7.15E-29	7.29E-28	0.292961	-3.41342	cold down vs hot
ME1	5.40E-10	2.50E-09	0.29277	-3.41565	cold down vs hot
MPP7	2.13E-10	1.02E-09	0.29263	-3.41729	cold down vs hot
LGR6	4.14E-11	2.09E-10	0.292596	-3.41768	cold down vs hot
RAMP1	3.28E-06	1.01E-05	0.292543	-3.4183	cold down vs hot
IL3RA	9.20E-28	9.06E-27	0.292288	-3.42128	cold down vs hot
CMPK2	3.69E-18	2.60E-17	0.291251	-3.43346	cold down vs hot
FLVCR2	1.69E-29	1.76E-28	0.290565	-3.44157	cold down vs hot
VAMP5	9.44E-24	8.02E-23	0.290387	-3.44368	cold down vs hot
C11orf75	3.35E-33	3.97E-32	0.290282	-3.44492	cold down vs hot
TMEM130	1.25E-09	5.63E-09	0.28978	-3.45089	cold down vs hot
AQP9	3.07E-09	1.33E-08	0.289562	-3.45349	cold down vs hot
ANKRD55	8.35E-15	5.02E-14	0.289172	-3.45815	cold down vs hot
CYP4F22	1.11E-08	4.56E-08	0.289084	-3.4592	cold down vs hot
BTBD11	4.78E-12	2.54E-11	0.289067	-3.4594	cold down vs hot
MAL	1.13E-05	3.20E-05	0.289052	-3.45958	cold down vs hot
WARS	7.33E-23	6.02E-22	0.288611	-3.46487	cold down vs hot
C20orf118	3.09E-24	2.69E-23	0.288528	-3.46587	cold down vs hot
SEPT6	2.64E-28	2.66E-27	0.288195	-3.46987	cold down vs hot
LMO2	1.29E-32	1.48E-31	0.288138	-3.47056	cold down vs hot
BFSF2	6.29E-07	2.15E-06	0.288046	-3.47167	cold down vs hot
IKZF2	1.36E-16	8.90E-16	0.287965	-3.47265	cold down vs hot
ANKRD35	3.67E-14	2.14E-13	0.287877	-3.47371	cold down vs hot
HLA-H	8.01E-26	7.41E-25	0.28738	-3.47972	cold down vs hot
BIK	4.24E-08	1.65E-07	0.287158	-3.48241	cold down vs hot
KCNK6	1.09E-25	9.93E-25	0.286951	-3.48492	cold down vs hot
FCGR2B	2.05E-16	1.34E-15	0.286904	-3.48549	cold down vs hot
HAR1A	9.54E-11	4.66E-10	0.286813	-3.48659	cold down vs hot
CRYBB1	2.56E-23	2.13E-22	0.285691	-3.50028	cold down vs hot
RIC3	5.66E-08	2.17E-07	0.285347	-3.5045	cold down vs hot
STK17B	5.37E-22	4.29E-21	0.285272	-3.50543	cold down vs hot
KLRC3	1.81E-08	7.29E-08	0.28428	-3.51766	cold down vs hot
CGNL1	1.31E-09	5.87E-09	0.284196	-3.5187	cold down vs hot
S100A8	2.76E-08	1.09E-07	0.284083	-3.5201	cold down vs hot
FGF1	6.31E-10	2.89E-09	0.283995	-3.52119	cold down vs hot
SLC46A3	2.79E-21	2.18E-20	0.283452	-3.52794	cold down vs hot
GCOM1	1.12E-13	6.39E-13	0.283103	-3.53228	cold down vs hot
PLB1	5.81E-17	3.87E-16	0.282573	-3.53891	cold down vs hot
TNFRSF11B	2.90E-09	1.26E-08	0.282466	-3.54025	cold down vs hot
GSDMA	4.32E-10	2.01E-09	0.282095	-3.5449	cold down vs hot
MYCL1	4.34E-23	3.59E-22	0.28132	-3.55467	cold down vs hot
PIPOX	5.38E-26	5.00E-25	0.281186	-3.55637	cold down vs hot
MYO5B	7.62E-06	2.21E-05	0.28073	-3.56214	cold down vs hot
RASGRP4	3.80E-22	3.06E-21	0.279873	-3.57305	cold down vs hot
APOBEC3A	9.72E-17	6.44E-16	0.278703	-3.58805	cold down vs hot
TMEM154	3.26E-14	1.90E-13	0.278528	-3.59031	cold down vs hot
GRAP2	4.86E-15	2.95E-14	0.278312	-3.5931	cold down vs hot
TMEM149	2.17E-38	3.15E-37	0.278298	-3.59327	cold down vs hot
TAS1R3	3.79E-15	2.31E-14	0.278134	-3.59539	cold down vs hot
SPTA1	8.45E-07	2.84E-06	0.277576	-3.60262	cold down vs hot
FAM20A	7.13E-14	4.11E-13	0.2774	-3.6049	cold down vs hot
TSPAN33	1.03E-25	9.45E-25	0.277227	-3.60715	cold down vs hot
PARP12	5.38E-31	5.97E-30	0.277015	-3.60991	cold down vs hot
CRIP1	7.16E-20	5.40E-19	0.276788	-3.61288	cold down vs hot
RGS1	4.79E-09	2.04E-08	0.276702	-3.614	cold down vs hot
VIPR1	2.24E-10	1.07E-09	0.276658	-3.61458	cold down vs hot
CARD16	4.75E-13	2.63E-12	0.276621	-3.61505	cold down vs hot
TLR4	1.80E-18	1.28E-17	0.276604	-3.61528	cold down vs hot
ZNF804A	6.17E-12	3.26E-11	0.276372	-3.61831	cold down vs hot
MAN1A1	1.63E-17	1.12E-16	0.276357	-3.61851	cold down vs hot
CFD	1.79E-16	1.17E-15	0.275227	-3.63336	cold down vs hot
UBE2L6	1.23E-33	1.48E-32	0.2752	-3.63373	cold down vs hot
PTPRN2	1.58E-21	1.25E-20	0.274363	-3.6448	cold down vs hot
CRB2	6.15E-12	3.25E-11	0.273718	-3.65339	cold down vs hot
TREM2	1.82E-18	1.30E-17	0.273372	-3.65802	cold down vs hot
LTC4S	1.49E-15	9.24E-15	0.273295	-3.65905	cold down vs hot
CX3CR1	3.39E-15	2.07E-14	0.273261	-3.65951	cold down vs hot
ITGAX	1.95E-27	1.90E-26	0.27156	-3.68243	cold down vs hot
SERPINF2	5.33E-25	4.74E-24	0.271148	-3.68802	cold down vs hot

P2RX5	1.00E-20	7.70E-20	0.270915	-3.69119	cold down vs hot
C5orf39	2.51E-32	2.85E-31	0.270748	-3.69347	cold down vs hot
GNA14	1.68E-09	7.47E-09	0.270604	-3.69544	cold down vs hot
TMEM119	1.32E-15	8.23E-15	0.270513	-3.69667	cold down vs hot
SLFN13	6.72E-18	4.68E-17	0.270333	-3.69915	cold down vs hot
PLXDC2	1.02E-18	7.38E-18	0.268941	-3.71829	cold down vs hot
ISG20	2.10E-14	1.23E-13	0.268661	-3.72216	cold down vs hot
EOMES	1.10E-15	6.91E-15	0.268627	-3.72264	cold down vs hot
ST14	8.41E-18	5.82E-17	0.268553	-3.72366	cold down vs hot
SAMHD1	1.16E-26	1.10E-25	0.268046	-3.7307	cold down vs hot
FAM70A	1.83E-06	5.86E-06	0.267911	-3.73258	cold down vs hot
KIF21B	3.24E-17	2.19E-16	0.267242	-3.74193	cold down vs hot
LAMC2	6.90E-09	2.90E-08	0.267225	-3.74217	cold down vs hot
ARHGAP27	8.25E-40	1.28E-38	0.267158	-3.74311	cold down vs hot
SIGLEC12	1.32E-07	4.88E-07	0.267047	-3.74467	cold down vs hot
MX1	1.62E-15	1.01E-14	0.266522	-3.75203	cold down vs hot
BZRAP1	5.77E-10	2.65E-09	0.266236	-3.75606	cold down vs hot
IL1R2	7.50E-14	4.31E-13	0.265638	-3.76452	cold down vs hot
PIK3IP1	1.24E-35	1.60E-34	0.265517	-3.76624	cold down vs hot
MSR1	1.50E-18	1.08E-17	0.265291	-3.76944	cold down vs hot
FERMT3	2.79E-20	2.12E-19	0.264702	-3.77783	cold down vs hot
CST2	0.000317573	0.000651791	0.264624	-3.77894	cold down vs hot
STAT1	1.10E-34	1.38E-33	0.264461	-3.78128	cold down vs hot
C6orf97	7.30E-20	5.49E-19	0.263935	-3.78881	cold down vs hot
EVI2A	5.60E-17	3.74E-16	0.263178	-3.79971	cold down vs hot
B2M	1.63E-37	2.31E-36	0.263036	-3.80176	cold down vs hot
TTBK1	4.11E-16	2.63E-15	0.262976	-3.80264	cold down vs hot
OXER1	1.15E-17	7.93E-17	0.261862	-3.8188	cold down vs hot
UBA7	1.59E-30	1.72E-29	0.261495	-3.82416	cold down vs hot
KLRF1	1.67E-13	9.43E-13	0.261263	-3.82755	cold down vs hot
IFITM1	9.73E-19	7.09E-18	0.260964	-3.83195	cold down vs hot
STAB2	8.06E-08	3.05E-07	0.260233	-3.84271	cold down vs hot
GPR34	2.61E-18	1.84E-17	0.260118	-3.84441	cold down vs hot
GPR55	2.49E-13	1.39E-12	0.260075	-3.84504	cold down vs hot
BASP1	2.78E-26	2.60E-25	0.259543	-3.85293	cold down vs hot
APOBEC3D	1.87E-25	1.68E-24	0.25945	-3.85431	cold down vs hot
C19orf35	6.83E-23	5.62E-22	0.259205	-3.85794	cold down vs hot
CCL7	8.05E-09	3.35E-08	0.258462	-3.86905	cold down vs hot
NTNG2	5.47E-16	3.48E-15	0.258347	-3.87076	cold down vs hot
CCL14	1.05E-09	4.75E-09	0.258312	-3.87129	cold down vs hot
OAS1	1.94E-22	1.58E-21	0.258141	-3.87386	cold down vs hot
NLRP3	3.12E-25	2.80E-24	0.257785	-3.8792	cold down vs hot
MGC12916	1.31E-13	7.45E-13	0.257392	-3.88513	cold down vs hot
CCR1	9.39E-28	9.23E-27	0.257316	-3.88627	cold down vs hot
FOLR2	4.80E-21	3.71E-20	0.257049	-3.89032	cold down vs hot
TNFRSF13C	7.08E-16	4.47E-15	0.255152	-3.91924	cold down vs hot
NUDT16P1	2.76E-18	1.95E-17	0.254945	-3.92241	cold down vs hot
CD22	1.87E-10	8.99E-10	0.254755	-3.92534	cold down vs hot
TRPM2	3.11E-21	2.42E-20	0.254673	-3.9266	cold down vs hot
EFEMP1	6.34E-16	4.01E-15	0.254159	-3.93454	cold down vs hot
MAP3K8	2.78E-25	2.50E-24	0.253431	-3.94584	cold down vs hot
LIPC	1.18E-12	6.43E-12	0.253084	-3.95126	cold down vs hot
ADAM8	1.88E-18	1.34E-17	0.252917	-3.95386	cold down vs hot
MYO7A	5.53E-21	4.27E-20	0.252856	-3.95482	cold down vs hot
GCNT4	1.77E-12	9.59E-12	0.252764	-3.95626	cold down vs hot
SLC40A1	9.64E-18	6.67E-17	0.252668	-3.95776	cold down vs hot
FA2H	7.99E-11	3.93E-10	0.252644	-3.95814	cold down vs hot
GPR109A	1.97E-15	1.21E-14	0.252389	-3.96214	cold down vs hot
TDO2	1.18E-14	7.08E-14	0.251989	-3.96843	cold down vs hot
PTK2B	0	0	0.251836	-3.97084	cold down vs hot
ANKRD29	9.42E-17	6.25E-16	0.251552	-3.97533	cold down vs hot
SLC6A12	4.24E-14	2.46E-13	0.251513	-3.97594	cold down vs hot
FAM65C	1.60E-15	9.90E-15	0.251227	-3.98046	cold down vs hot
CD70	1.74E-10	8.39E-10	0.251169	-3.98139	cold down vs hot
MAPK13	4.28E-30	4.55E-29	0.251105	-3.98239	cold down vs hot
VAMP8	3.64E-26	3.39E-25	0.250904	-3.98559	cold down vs hot
CYP1B1	2.95E-16	1.90E-15	0.250767	-3.98777	cold down vs hot
MACC1	1.12E-18	8.12E-18	0.250723	-3.98846	cold down vs hot
ITIH3	1.78E-09	7.86E-09	0.250388	-3.9938	cold down vs hot
BSPRY	1.01E-12	5.54E-12	0.250263	-3.9958	cold down vs hot
KLK1	8.21E-09	3.42E-08	0.2502	-3.9968	cold down vs hot
TMEM37	1.75E-32	1.99E-31	0.25009	-3.99856	cold down vs hot
TNNI2	6.04E-18	4.21E-17	0.25002	-3.99968	cold down vs hot
EMR4P	2.83E-17	1.91E-16	0.24951	-4.00786	cold down vs hot
RARRES2	1.04E-17	7.18E-17	0.249073	-4.01489	cold down vs hot
DAPK2	1.28E-27	1.25E-26	0.248843	-4.0186	cold down vs hot
TACR1	1.48E-11	7.67E-11	0.248728	-4.02046	cold down vs hot

HLA-C	7.32E-31	8.11E-30	0.248674	-4.02133	cold down vs hot
GPR120	1.28E-17	8.81E-17	0.24735	-4.04286	cold down vs hot
SIGLEC16	5.55E-17	3.71E-16	0.246925	-4.04981	cold down vs hot
BCAS4	6.55E-35	8.30E-34	0.246317	-4.05982	cold down vs hot
ST8SIA4	1.48E-25	1.34E-24	0.2462	-4.06175	cold down vs hot
CD1D	8.06E-27	7.73E-26	0.245264	-4.07723	cold down vs hot
PDE6B	8.33E-18	5.79E-17	0.244863	-4.08391	cold down vs hot
NLRC4	4.61E-36	6.13E-35	0.244661	-4.08729	cold down vs hot
GJD3	8.11E-33	9.44E-32	0.244318	-4.09303	cold down vs hot
MS4A7	1.21E-25	1.10E-24	0.244108	-4.09654	cold down vs hot
CACNA1I	8.19E-10	3.73E-09	0.243764	-4.10233	cold down vs hot
OLR1	4.46E-10	2.07E-09	0.243712	-4.10321	cold down vs hot
GCNT1	2.97E-22	2.40E-21	0.243455	-4.10754	cold down vs hot
DDO	3.55E-11	1.79E-10	0.243406	-4.10836	cold down vs hot
MMRN1	7.76E-10	3.54E-09	0.242823	-4.11823	cold down vs hot
IL9R	3.29E-19	2.43E-18	0.242053	-4.13133	cold down vs hot
CASP1	6.80E-17	4.52E-16	0.241904	-4.13387	cold down vs hot
LOC283663	5.13E-16	3.27E-15	0.241642	-4.13835	cold down vs hot
RNASE2	2.51E-18	1.78E-17	0.24161	-4.13891	cold down vs hot
VSIG1	1.19E-15	7.44E-15	0.241246	-4.14515	cold down vs hot
SUCNR1	1.09E-19	8.18E-19	0.241055	-4.14842	cold down vs hot
INMT	8.53E-16	5.37E-15	0.241006	-4.14927	cold down vs hot
C17orf60	7.35E-24	6.27E-23	0.240122	-4.16456	cold down vs hot
ADORA2A	5.94E-36	7.84E-35	0.240015	-4.1664	cold down vs hot
APOC2	1.28E-06	4.18E-06	0.239169	-4.18114	cold down vs hot
LYN	2.03E-42	3.53E-41	0.238867	-4.18644	cold down vs hot
SRGN	3.07E-34	3.78E-33	0.238767	-4.18818	cold down vs hot
GPR109B	3.31E-16	2.14E-15	0.238679	-4.18973	cold down vs hot
FAM65B	2.32E-13	1.30E-12	0.23863	-4.19059	cold down vs hot
MEOX1	8.84E-13	4.85E-12	0.237787	-4.20544	cold down vs hot
PKD2L1	3.52E-17	2.37E-16	0.237668	-4.20755	cold down vs hot
IL28RA	3.26E-11	1.65E-10	0.23759	-4.20893	cold down vs hot
MYO7B	1.80E-10	8.67E-10	0.237466	-4.21113	cold down vs hot
ITGAM	2.20E-29	2.28E-28	0.23744	-4.21158	cold down vs hot
GRAP	1.66E-29	1.73E-28	0.236801	-4.22296	cold down vs hot
CASP10	1.98E-39	3.04E-38	0.236733	-4.22417	cold down vs hot
SELE	8.33E-11	4.09E-10	0.236583	-4.22684	cold down vs hot
LOC100130	4.34E-16	2.78E-15	0.23635	-4.23101	cold down vs hot
CES1	8.16E-07	2.75E-06	0.236332	-4.23133	cold down vs hot
ABCG1	2.71E-28	2.72E-27	0.235946	-4.23826	cold down vs hot
CPZ	2.19E-12	1.18E-11	0.235882	-4.23941	cold down vs hot
LOC284749	1.89E-08	7.59E-08	0.235812	-4.24067	cold down vs hot
EPHB2	9.05E-26	8.33E-25	0.235656	-4.24348	cold down vs hot
CXCL14	4.90E-06	1.47E-05	0.234603	-4.26252	cold down vs hot
TYMP	1.73E-29	1.80E-28	0.234261	-4.26875	cold down vs hot
P2RY12	1.48E-14	8.84E-14	0.233967	-4.2741	cold down vs hot
SLC9A9	1.40E-34	1.74E-33	0.233823	-4.27675	cold down vs hot
ADAP2	4.60E-40	7.24E-39	0.233641	-4.28007	cold down vs hot
ELMO1	1.04E-27	1.02E-26	0.233634	-4.28019	cold down vs hot
CUX2	5.66E-16	3.60E-15	0.233493	-4.28279	cold down vs hot
ABCB1	1.60E-18	1.15E-17	0.233382	-4.28481	cold down vs hot
SNAI3	8.33E-40	1.29E-38	0.233304	-4.28626	cold down vs hot
AQP3	1.60E-14	9.52E-14	0.233099	-4.29002	cold down vs hot
C20orf103	1.06E-13	6.08E-13	0.232751	-4.29643	cold down vs hot
MMP9	3.20E-10	1.51E-09	0.232454	-4.30192	cold down vs hot
PADI2	5.42E-13	3.00E-12	0.231863	-4.31288	cold down vs hot
C12orf59	1.68E-17	1.15E-16	0.231591	-4.31796	cold down vs hot
AKNA	4.20E-45	8.14E-44	0.231514	-4.3194	cold down vs hot
GNA15	1.47E-32	1.69E-31	0.231264	-4.32405	cold down vs hot
TNFSF11	1.53E-11	7.93E-11	0.231225	-4.3248	cold down vs hot
C2orf89	6.91E-12	3.63E-11	0.231136	-4.32645	cold down vs hot
AGAP2	4.16E-33	4.92E-32	0.231014	-4.32875	cold down vs hot
ICAM2	1.63E-37	2.31E-36	0.230383	-4.34059	cold down vs hot
FMO3	8.34E-18	5.79E-17	0.229472	-4.35783	cold down vs hot
OAS2	1.38E-23	1.16E-22	0.229348	-4.36018	cold down vs hot
CCL13	7.80E-12	4.07E-11	0.229063	-4.36561	cold down vs hot
SEL1L3	1.53E-16	1.00E-15	0.228952	-4.36773	cold down vs hot
CSTA	2.03E-20	1.55E-19	0.228916	-4.36842	cold down vs hot
KCNJ5	7.57E-19	5.53E-18	0.228702	-4.37249	cold down vs hot
OTOF	7.76E-18	5.40E-17	0.228292	-4.38036	cold down vs hot
FLI1	4.12E-39	6.18E-38	0.227975	-4.38644	cold down vs hot
PTCRA	2.19E-13	1.23E-12	0.227682	-4.3921	cold down vs hot
ADRA2A	1.19E-16	7.86E-16	0.227419	-4.39716	cold down vs hot
BCL11A	8.53E-11	4.19E-10	0.227326	-4.39897	cold down vs hot
P2RY14	2.52E-26	2.37E-25	0.226972	-4.40583	cold down vs hot
SHISA3	2.08E-07	7.50E-07	0.226623	-4.41261	cold down vs hot
LOC100240	3.58E-17	2.41E-16	0.226559	-4.41385	cold down vs hot

C1R	1.97E-28	1.99E-27	0.226482	-4.41536	cold down vs hot
C3AR1	7.89E-33	9.20E-32	0.225915	-4.42643	cold down vs hot
PLCG2	1.95E-34	2.42E-33	0.225788	-4.42893	cold down vs hot
TMPRSS13	7.87E-08	2.99E-07	0.225337	-4.43779	cold down vs hot
PRDM8	1.12E-15	6.99E-15	0.225194	-4.44063	cold down vs hot
ARHGDIB	4.07E-39	6.12E-38	0.225192	-4.44066	cold down vs hot
TNFRSF25	3.57E-19	2.64E-18	0.224621	-4.45194	cold down vs hot
KCNK13	9.06E-26	8.33E-25	0.224355	-4.45721	cold down vs hot
AMPD3	8.26E-34	1.00E-32	0.22394	-4.46548	cold down vs hot
SEMA4D	5.51E-37	7.63E-36	0.223877	-4.46674	cold down vs hot
CCL18	5.29E-10	2.45E-09	0.223795	-4.46837	cold down vs hot
CD14	3.93E-30	4.19E-29	0.223781	-4.46866	cold down vs hot
SAMD9L	9.78E-23	7.97E-22	0.223709	-4.47008	cold down vs hot
WNT1	3.45E-22	2.78E-21	0.223667	-4.47092	cold down vs hot
TRANK1	6.70E-35	8.45E-34	0.223381	-4.47667	cold down vs hot
AMIGO2	1.84E-15	1.14E-14	0.223264	-4.47901	cold down vs hot
SDR42E1	7.38E-12	3.85E-11	0.222945	-4.48541	cold down vs hot
IRF5	4.40E-42	7.51E-41	0.22293	-4.48571	cold down vs hot
C19orf38	5.55E-36	7.37E-35	0.222905	-4.48622	cold down vs hot
PDPN	3.75E-15	2.29E-14	0.221878	-4.50698	cold down vs hot
MLC1	1.10E-08	4.50E-08	0.221811	-4.50835	cold down vs hot
NAP1L2	6.24E-12	3.28E-11	0.221686	-4.51089	cold down vs hot
FAM18A	1.04E-29	1.09E-28	0.221322	-4.51831	cold down vs hot
APOB48R	6.04E-37	8.33E-36	0.220526	-4.53461	cold down vs hot
SQRDL	4.54E-34	5.56E-33	0.220477	-4.53562	cold down vs hot
BHLHA15	6.76E-15	4.07E-14	0.220057	-4.54428	cold down vs hot
CD33	3.26E-26	3.05E-25	0.219834	-4.54888	cold down vs hot
DBH	2.57E-21	2.01E-20	0.219719	-4.55127	cold down vs hot
RORC	6.07E-09	2.57E-08	0.219638	-4.55295	cold down vs hot
SERPING1	4.67E-35	5.96E-34	0.218636	-4.57381	cold down vs hot
ERAP2	6.02E-11	2.98E-10	0.218577	-4.57505	cold down vs hot
GRIN3A	5.64E-36	7.47E-35	0.21854	-4.57583	cold down vs hot
KLRC2	5.62E-10	2.59E-09	0.218334	-4.58013	cold down vs hot
IL1B	1.48E-12	8.08E-12	0.218109	-4.58486	cold down vs hot
ZMYND15	6.36E-30	6.72E-29	0.218066	-4.58576	cold down vs hot
MEFV	2.90E-30	3.10E-29	0.217499	-4.59772	cold down vs hot
RBM47	4.23E-28	4.20E-27	0.216947	-4.60943	cold down vs hot
RASGEF1B	9.74E-33	1.12E-31	0.21636	-4.62192	cold down vs hot
FLT3LG	6.45E-34	7.85E-33	0.216252	-4.62423	cold down vs hot
RASSF4	6.10E-40	9.55E-39	0.215076	-4.64953	cold down vs hot
FAM49A	1.90E-23	1.59E-22	0.214869	-4.65401	cold down vs hot
PROC	1.46E-24	1.28E-23	0.214684	-4.65802	cold down vs hot
CD300A	1.01E-35	1.31E-34	0.214631	-4.65916	cold down vs hot
MAOB	1.85E-07	6.73E-07	0.213898	-4.67512	cold down vs hot
PTGDR	7.84E-25	6.94E-24	0.213263	-4.68904	cold down vs hot
TTC16	2.59E-23	2.15E-22	0.213141	-4.69173	cold down vs hot
C10orf54	6.14E-43	1.10E-41	0.212475	-4.70643	cold down vs hot
KCNN3	1.61E-23	1.36E-22	0.211951	-4.71807	cold down vs hot
CXCR4	7.51E-33	8.79E-32	0.211724	-4.72314	cold down vs hot
PTPRO	1.33E-24	1.17E-23	0.211592	-4.72607	cold down vs hot
ALPK2	1.38E-16	9.03E-16	0.211485	-4.72847	cold down vs hot
TAP1	2.21E-37	3.11E-36	0.211421	-4.72989	cold down vs hot
SLC8A1	3.91E-30	4.17E-29	0.211397	-4.73043	cold down vs hot
OSCAR	1.61E-27	1.57E-26	0.211208	-4.73466	cold down vs hot
TNFRSF12-TN	2.91E-21	2.27E-20	0.211098	-4.73714	cold down vs hot
AIM1	1.61E-19	1.20E-18	0.210679	-4.74655	cold down vs hot
ACSM5	1.22E-18	8.82E-18	0.210632	-4.74762	cold down vs hot
ACSL6	2.80E-15	1.72E-14	0.210053	-4.76071	cold down vs hot
EPHB6	1.02E-18	7.39E-18	0.209805	-4.76633	cold down vs hot
HAAO	1.46E-24	1.29E-23	0.209739	-4.76784	cold down vs hot
LILRB5	4.14E-22	3.32E-21	0.209693	-4.76888	cold down vs hot
CCL2	4.23E-28	4.20E-27	0.209476	-4.77382	cold down vs hot
LRRRC61	2.71E-12	1.46E-11	0.20936	-4.77647	cold down vs hot
OCIAD2	3.06E-13	1.71E-12	0.209355	-4.77656	cold down vs hot
LTF	1.94E-10	9.29E-10	0.209192	-4.7803	cold down vs hot
GBP3	4.62E-20	3.48E-19	0.208698	-4.79161	cold down vs hot
VSIG4	2.53E-25	2.28E-24	0.208537	-4.79531	cold down vs hot
C10orf105	8.58E-28	8.46E-27	0.208458	-4.79713	cold down vs hot
MFAP4	1.97E-13	1.11E-12	0.208362	-4.79935	cold down vs hot
C5orf56	1.71E-42	2.99E-41	0.208125	-4.8048	cold down vs hot
IFI44L	8.20E-15	4.93E-14	0.207993	-4.80785	cold down vs hot
MRC1	9.40E-20	7.05E-19	0.207734	-4.81384	cold down vs hot
XAF1	2.71E-23	2.25E-22	0.20764	-4.81604	cold down vs hot
DOK3	3.16E-39	4.79E-38	0.207177	-4.8268	cold down vs hot
RSAD2	1.44E-17	9.91E-17	0.20698	-4.83139	cold down vs hot
KMO	2.57E-23	2.14E-22	0.206883	-4.83365	cold down vs hot
DPEP1	3.88E-13	2.16E-12	0.206755	-4.83664	cold down vs hot

TNFRSF8	2.61E-23	2.17E-22	0.206416	-4.84459	cold down vs hot
MMP25	2.14E-24	1.87E-23	0.206121	-4.85153	cold down vs hot
ATP8B4	1.02E-25	9.33E-25	0.206046	-4.85328	cold down vs hot
EMB	1.52E-18	1.09E-17	0.205799	-4.85911	cold down vs hot
RTN1	2.56E-17	1.74E-16	0.204854	-4.88153	cold down vs hot
TNFAIP2	1.26E-44	2.41E-43	0.204708	-4.88501	cold down vs hot
CMAH	9.39E-27	8.96E-26	0.204204	-4.89707	cold down vs hot
ALDH2	1.30E-21	1.02E-20	0.204155	-4.89823	cold down vs hot
LILRA2	1.20E-28	1.21E-27	0.204014	-4.90163	cold down vs hot
EAF2	2.13E-34	2.63E-33	0.203968	-4.90273	cold down vs hot
CSF2RA	4.32E-17	2.91E-16	0.20381	-4.90652	cold down vs hot
SGPP2	9.08E-27	8.68E-26	0.203267	-4.91964	cold down vs hot
REC8	3.72E-30	3.97E-29	0.202882	-4.92898	cold down vs hot
SYTL3	1.37E-41	2.31E-40	0.202681	-4.93387	cold down vs hot
LILRA6	2.01E-30	2.18E-29	0.202153	-4.94675	cold down vs hot
SIGLEC9	8.19E-36	1.06E-34	0.201769	-4.95616	cold down vs hot
CD209	8.95E-22	7.11E-21	0.201309	-4.96749	cold down vs hot
AOX1	3.28E-15	2.01E-14	0.20103	-4.97438	cold down vs hot
RAB39B	2.06E-16	1.34E-15	0.200761	-4.98104	cold down vs hot
MCTP2	4.63E-13	2.57E-12	0.200424	-4.98943	cold down vs hot
C1orf228	2.37E-26	2.23E-25	0.200309	-4.99228	cold down vs hot
LPAR5	1.22E-36	1.66E-35	0.200235	-4.99412	cold down vs hot
SPATC1	1.71E-32	1.96E-31	0.200066	-4.99834	cold down vs hot
GAB3	2.44E-40	3.93E-39	0.199927	-5.00182	cold down vs hot
IL7	2.93E-23	2.42E-22	0.199822	-5.00445	cold down vs hot
TNFAIP8	1.40E-45	2.81E-44	0.199382	-5.01549	cold down vs hot
PIM2	0	0	0.199221	-5.01954	cold down vs hot
LILRA5	3.20E-26	2.99E-25	0.199157	-5.02117	cold down vs hot
GPR68	1.67E-25	1.52E-24	0.199092	-5.02281	cold down vs hot
CARD9	1.13E-32	1.30E-31	0.198898	-5.0277	cold down vs hot
LOC283070	7.56E-40	1.18E-38	0.198879	-5.02819	cold down vs hot
APOBEC3G	2.24E-26	2.11E-25	0.198488	-5.03809	cold down vs hot
ALOX5AP	3.10E-24	2.69E-23	0.198175	-5.04605	cold down vs hot
CADM3	8.21E-09	3.42E-08	0.197977	-5.0511	cold down vs hot
GPR82	4.20E-22	3.37E-21	0.197842	-5.05454	cold down vs hot
SLC38A1	8.12E-13	4.47E-12	0.197739	-5.05717	cold down vs hot
VNN1	6.38E-24	5.45E-23	0.197472	-5.064	cold down vs hot
GPR141	1.74E-24	1.52E-23	0.197056	-5.07469	cold down vs hot
GIMAP8	4.20E-45	8.14E-44	0.196557	-5.08759	cold down vs hot
NLRP6	2.80E-24	2.45E-23	0.196337	-5.09329	cold down vs hot
RNASE6	0	0	0.196137	-5.09847	cold down vs hot
CLIC2	3.43E-24	2.97E-23	0.196072	-5.10018	cold down vs hot
SLC38A5	9.70E-22	7.69E-21	0.196044	-5.1009	cold down vs hot
HLA-G	6.22E-16	3.95E-15	0.195546	-5.11388	cold down vs hot
SERPINB9	1.47E-21	1.16E-20	0.195472	-5.11581	cold down vs hot
CAPG	6.73E-14	3.88E-13	0.195266	-5.12121	cold down vs hot
PSTPIP2	8.27E-29	8.41E-28	0.194782	-5.13394	cold down vs hot
CCN12	6.55E-34	7.96E-33	0.194782	-5.13395	cold down vs hot
C15orf48	3.72E-19	2.74E-18	0.1944	-5.14403	cold down vs hot
CD163	1.40E-25	1.28E-24	0.194178	-5.14992	cold down vs hot
MARCH1	1.85E-29	1.91E-28	0.194025	-5.15399	cold down vs hot
APOL6	3.00E-36	4.03E-35	0.193831	-5.15914	cold down vs hot
SLC2A5	4.16E-24	3.59E-23	0.193369	-5.17146	cold down vs hot
CASS4	2.20E-28	2.22E-27	0.193357	-5.17178	cold down vs hot
NLRP1	9.56E-33	1.11E-31	0.192804	-5.18661	cold down vs hot
CHRNA1	1.18E-09	5.31E-09	0.192519	-5.1943	cold down vs hot
CETP	4.55E-11	2.28E-10	0.191646	-5.21795	cold down vs hot
LCP2	2.46E-33	2.93E-32	0.191622	-5.21861	cold down vs hot
UNC13D	3.76E-31	4.18E-30	0.19115	-5.23148	cold down vs hot
IL10	9.44E-26	8.65E-25	0.190919	-5.23783	cold down vs hot
LRRC25	1.10E-42	1.94E-41	0.190835	-5.24014	cold down vs hot
MS4A4A	2.17E-36	2.93E-35	0.190723	-5.24321	cold down vs hot
GADD45G	1.54E-19	1.15E-18	0.190602	-5.24653	cold down vs hot
TTG9	4.67E-25	4.16E-24	0.190526	-5.24863	cold down vs hot
FPR3	9.58E-35	1.20E-33	0.190193	-5.2578	cold down vs hot
IL33	1.10E-16	7.26E-16	0.189998	-5.26322	cold down vs hot
CD300C	5.54E-34	6.77E-33	0.189775	-5.2694	cold down vs hot
NLR5	0	0	0.189712	-5.27115	cold down vs hot
SH2D2A	4.55E-32	5.14E-31	0.189251	-5.284	cold down vs hot
FPR1	2.65E-26	2.49E-25	0.189246	-5.28413	cold down vs hot
LGALS9	2.52E-44	4.77E-43	0.189078	-5.28884	cold down vs hot
RIPK3	1.09E-34	1.37E-33	0.188808	-5.29638	cold down vs hot
FCHO1	8.50E-26	7.85E-25	0.188781	-5.29715	cold down vs hot
SLC7A7	0	0	0.188775	-5.2973	cold down vs hot
GHRL	1.29E-23	1.09E-22	0.188558	-5.30342	cold down vs hot
MIAT	2.70E-35	3.48E-34	0.188019	-5.31862	cold down vs hot
SH2D3A	1.19E-31	1.34E-30	0.187945	-5.3207	cold down vs hot

CCDC88C	7.46E-33	8.75E-32	0.187664	-5.32867	cold down vs hot
RGS9	1.49E-18	1.07E-17	0.186978	-5.34823	cold down vs hot
SEMA4A	0	0	0.186921	-5.34986	cold down vs hot
LIME1	8.86E-38	1.27E-36	0.186412	-5.36447	cold down vs hot
ARHGAP15	1.52E-26	1.44E-25	0.186311	-5.36736	cold down vs hot
RARRES1	3.37E-22	2.72E-21	0.186111	-5.37314	cold down vs hot
PIP5K1B	2.86E-12	1.54E-11	0.185187	-5.39995	cold down vs hot
LGALS9C	3.43E-42	5.89E-41	0.184948	-5.40691	cold down vs hot
IL34	1.19E-27	1.16E-26	0.184627	-5.41633	cold down vs hot
SPINT2	1.11E-41	1.88E-40	0.184439	-5.42184	cold down vs hot
GPBAR1	1.05E-38	1.54E-37	0.184175	-5.42963	cold down vs hot
KYNU	2.12E-18	1.51E-17	0.184135	-5.4308	cold down vs hot
TMSL3	0	0	0.184131	-5.43092	cold down vs hot
PRDM1	1.88E-40	3.05E-39	0.183719	-5.44308	cold down vs hot
STAC3	0	0	0.18341	-5.45227	cold down vs hot
CSF3R	1.01E-33	1.22E-32	0.183042	-5.46324	cold down vs hot
CES8	8.74E-23	7.15E-22	0.182986	-5.46489	cold down vs hot
KIF19	1.18E-26	1.12E-25	0.182981	-5.46504	cold down vs hot
LOC100188	8.53E-23	6.98E-22	0.182412	-5.48209	cold down vs hot
C7	1.36E-09	6.07E-09	0.182089	-5.49183	cold down vs hot
LOC254559	3.64E-15	2.22E-14	0.180719	-5.53344	cold down vs hot
PLA1A	4.02E-09	1.73E-08	0.180635	-5.53603	cold down vs hot
ASGR2	3.43E-29	3.53E-28	0.17981	-5.56142	cold down vs hot
TNS4	1.99E-15	1.23E-14	0.179272	-5.5781	cold down vs hot
FAM105A	4.99E-27	4.81E-26	0.178926	-5.5889	cold down vs hot
CD40	9.42E-39	1.39E-37	0.178818	-5.59227	cold down vs hot
LILRB3	5.61E-41	9.24E-40	0.178396	-5.60552	cold down vs hot
CSF1R	7.16E-37	9.84E-36	0.17832	-5.60789	cold down vs hot
C9orf139	9.69E-30	1.02E-28	0.178022	-5.61729	cold down vs hot
CEACAM4	8.25E-28	8.14E-27	0.177905	-5.62097	cold down vs hot
SLC15A3	6.93E-40	1.08E-38	0.177303	-5.64007	cold down vs hot
FAM46C	5.61E-29	5.73E-28	0.17713	-5.64558	cold down vs hot
ILDR1	2.03E-23	1.70E-22	0.176877	-5.65363	cold down vs hot
C15	4.99E-33	5.90E-32	0.17616	-5.67665	cold down vs hot
CCND2	2.04E-34	2.53E-33	0.176087	-5.67901	cold down vs hot
DEF6	2.32E-41	3.87E-40	0.176054	-5.68008	cold down vs hot
HLA-F	2.23E-39	3.40E-38	0.175179	-5.70846	cold down vs hot
GPR84	6.13E-25	5.45E-24	0.174922	-5.71682	cold down vs hot
SH2D1B	2.10E-19	1.56E-18	0.174231	-5.7395	cold down vs hot
JAK3	3.29E-39	4.97E-38	0.173058	-5.77842	cold down vs hot
PILRA	0	0	0.172679	-5.7911	cold down vs hot
STX11	2.19E-41	3.65E-40	0.172085	-5.81108	cold down vs hot
SIGLEC11	1.80E-23	1.51E-22	0.172074	-5.81145	cold down vs hot
SYK	7.77E-36	1.01E-34	0.170953	-5.84957	cold down vs hot
CD28	8.56E-35	1.08E-33	0.170775	-5.85567	cold down vs hot
CXCL12	6.61E-33	7.76E-32	0.170215	-5.87494	cold down vs hot
LAT2	3.54E-42	6.06E-41	0.169204	-5.91004	cold down vs hot
LAT	2.88E-29	2.97E-28	0.169088	-5.91409	cold down vs hot
TNFRSF1B	0	0	0.168379	-5.93898	cold down vs hot
C1orf200	6.20E-34	7.57E-33	0.167509	-5.96984	cold down vs hot
HVCN1	2.02E-43	3.66E-42	0.167506	-5.96992	cold down vs hot
CAMK1D	3.09E-35	3.96E-34	0.167325	-5.97638	cold down vs hot
FPR2	9.46E-23	7.73E-22	0.167217	-5.98025	cold down vs hot
FMO2	4.45E-23	3.67E-22	0.166965	-5.98926	cold down vs hot
NUAK2	1.64E-42	2.87E-41	0.166829	-5.99416	cold down vs hot
MATK	1.12E-23	9.51E-23	0.166642	-6.00088	cold down vs hot
DPT	1.21E-13	6.89E-13	0.165864	-6.02903	cold down vs hot
CMKLR1	9.14E-39	1.35E-37	0.165816	-6.03079	cold down vs hot
HLA-B	3.18E-40	5.09E-39	0.165254	-6.05128	cold down vs hot
CCDC88B	0	0	0.1648	-6.06798	cold down vs hot
MFNG	0	0	0.164611	-6.07493	cold down vs hot
IFI27	2.81E-17	1.90E-16	0.164474	-6.08	cold down vs hot
GMFG	7.01E-45	1.35E-43	0.16425	-6.08828	cold down vs hot
CCDC141	4.64E-19	3.41E-18	0.164035	-6.09624	cold down vs hot
NELL2	4.81E-18	3.37E-17	0.163775	-6.10595	cold down vs hot
SLCO2B1	2.48E-38	3.59E-37	0.163741	-6.10719	cold down vs hot
TYROBP	0	0	0.163305	-6.12349	cold down vs hot
C7orf29	1.84E-17	1.26E-16	0.163173	-6.12846	cold down vs hot
PTGER4	8.52E-43	1.52E-41	0.163168	-6.12864	cold down vs hot
HOPX	1.48E-30	1.61E-29	0.162961	-6.13644	cold down vs hot
GIMAP2	3.24E-40	5.17E-39	0.162942	-6.13716	cold down vs hot
ACY3	8.97E-16	5.64E-15	0.16258	-6.15081	cold down vs hot
TLR9	4.83E-35	6.16E-34	0.162567	-6.1513	cold down vs hot
CLEC4A	8.27E-43	1.48E-41	0.162137	-6.16762	cold down vs hot
GCH1	0	0	0.161603	-6.18799	cold down vs hot
PDE6G	6.47E-22	5.16E-21	0.161284	-6.20024	cold down vs hot
SMPDL3B	2.00E-14	1.18E-13	0.160884	-6.21564	cold down vs hot

PIK3R5	0	0	0.160746	-6.22101	cold down vs hot
CCL3L1	4.00E-27	3.87E-26	0.160631	-6.22545	cold down vs hot
GBP2	2.14E-36	2.90E-35	0.160592	-6.22696	cold down vs hot
PTGER2	2.31E-38	3.35E-37	0.160217	-6.24154	cold down vs hot
CCRL2	0	0	0.159859	-6.25551	cold down vs hot
KLHL6	9.15E-33	1.06E-31	0.159839	-6.25631	cold down vs hot
GIMAP6	0	0	0.15931	-6.27705	cold down vs hot
C4A	2.76E-30	2.96E-29	0.158938	-6.29177	cold down vs hot
CCL3	1.03E-36	1.41E-35	0.158763	-6.29868	cold down vs hot
CEBPA	1.85E-41	3.11E-40	0.158588	-6.30566	cold down vs hot
NCF2	1.15E-43	2.09E-42	0.158072	-6.32623	cold down vs hot
GPR183	5.85E-30	6.19E-29	0.157783	-6.33783	cold down vs hot
ALOX15B	1.22E-17	8.38E-17	0.15776	-6.33873	cold down vs hot
IL15	1.15E-26	1.10E-25	0.157056	-6.36714	cold down vs hot
TUBA4A	7.29E-39	1.08E-37	0.156997	-6.36954	cold down vs hot
IFI30	0	0	0.156599	-6.38574	cold down vs hot
TC2N	2.07E-18	1.47E-17	0.156423	-6.39292	cold down vs hot
OASL	3.99E-29	4.09E-28	0.15634	-6.3963	cold down vs hot
C1orf162	0	0	0.156028	-6.40912	cold down vs hot
SIGLEC7	1.02E-42	1.81E-41	0.155825	-6.41748	cold down vs hot
PIK3R6	1.58E-36	2.15E-35	0.1555	-6.43089	cold down vs hot
TRIM22	1.29E-39	1.99E-38	0.155225	-6.44225	cold down vs hot
CYSLTR1	7.07E-41	1.16E-39	0.155143	-6.44567	cold down vs hot
RUFY4	1.80E-25	1.63E-24	0.154841	-6.45825	cold down vs hot
SIDT1	2.94E-34	3.63E-33	0.154721	-6.46326	cold down vs hot
AKAP5	5.31E-32	5.99E-31	0.154527	-6.47135	cold down vs hot
FBP1	1.08E-30	1.18E-29	0.15389	-6.49815	cold down vs hot
KCNJ10	6.93E-12	3.63E-11	0.153789	-6.50242	cold down vs hot
SCNN1B	4.30E-15	2.62E-14	0.153773	-6.50309	cold down vs hot
KEL	1.67E-18	1.20E-17	0.153459	-6.51638	cold down vs hot
ABI3BP	4.83E-16	3.09E-15	0.153102	-6.53161	cold down vs hot
ABI3	0	0	0.152963	-6.53753	cold down vs hot
PSMB9	0	0	0.152323	-6.56498	cold down vs hot
CD1E	3.09E-21	2.41E-20	0.15219	-6.57073	cold down vs hot
CYTH4	0	0	0.152063	-6.57624	cold down vs hot
IL18R1	2.39E-31	2.67E-30	0.151773	-6.5888	cold down vs hot
LSP1	0	0	0.151411	-6.60453	cold down vs hot
GPA33	1.91E-24	1.67E-23	0.151298	-6.60945	cold down vs hot
CTSS	0	0	0.150988	-6.62305	cold down vs hot
LILRA1	7.58E-36	9.92E-35	0.150922	-6.62594	cold down vs hot
IL18BP	0	0	0.150853	-6.62896	cold down vs hot
ECEL1	4.03E-23	3.33E-22	0.15083	-6.62996	cold down vs hot
CD4	0	0	0.150747	-6.63362	cold down vs hot
APOBEC3H	1.10E-30	1.20E-29	0.150523	-6.64352	cold down vs hot
CD24	1.75E-14	1.04E-13	0.150516	-6.64383	cold down vs hot
COL4A4	4.67E-27	4.52E-26	0.150353	-6.651	cold down vs hot
C10orf128	7.47E-39	1.10E-37	0.150335	-6.65182	cold down vs hot
UCP2	0	0	0.149009	-6.71103	cold down vs hot
PPP1R16B	1.04E-39	1.60E-38	0.148903	-6.71576	cold down vs hot
ARHGAP25	0	0	0.148515	-6.73334	cold down vs hot
P2RY6	0	0	0.148135	-6.75061	cold down vs hot
GZMM	1.31E-23	1.11E-22	0.148097	-6.75233	cold down vs hot
FCGR3A	2.12E-33	2.53E-32	0.147903	-6.7612	cold down vs hot
SPI1	0	0	0.147635	-6.77347	cold down vs hot
IL15RA	0	0	0.147595	-6.77529	cold down vs hot
CD200R1	2.06E-35	2.66E-34	0.147347	-6.78671	cold down vs hot
TMEM176A	0	0	0.147198	-6.79358	cold down vs hot
TSPAN32	1.74E-29	1.80E-28	0.147104	-6.79791	cold down vs hot
ATP2A3	1.50E-36	2.04E-35	0.14705	-6.80043	cold down vs hot
SCML4	1.87E-13	1.06E-12	0.146946	-6.80522	cold down vs hot
DHRS9	5.38E-26	5.00E-25	0.146783	-6.81276	cold down vs hot
DARC	2.86E-14	1.67E-13	0.1466	-6.82127	cold down vs hot
CFB	3.37E-32	3.82E-31	0.14657	-6.82267	cold down vs hot
DERL3	1.22E-31	1.37E-30	0.14653	-6.82456	cold down vs hot
CHI3L1	1.01E-13	5.79E-13	0.146341	-6.83334	cold down vs hot
GTSF1	6.53E-07	2.23E-06	0.145856	-6.85606	cold down vs hot
CFP	1.99E-33	2.38E-32	0.14565	-6.8658	cold down vs hot
FYB	1.16E-38	1.69E-37	0.145584	-6.8689	cold down vs hot
RHOF	3.56E-39	5.37E-38	0.145475	-6.87402	cold down vs hot
GGTA1	3.42E-40	5.41E-39	0.145381	-6.87849	cold down vs hot
PRAM1	4.87E-38	6.98E-37	0.145168	-6.88858	cold down vs hot
TNFSF10	2.01E-40	3.26E-39	0.144789	-6.90662	cold down vs hot
TOX2	6.43E-27	6.18E-26	0.144715	-6.91013	cold down vs hot
PVRIG	0	0	0.144639	-6.91377	cold down vs hot
C2	1.59E-30	1.72E-29	0.14447	-6.92184	cold down vs hot
ANKRD58	0	0	0.144112	-6.93906	cold down vs hot
LY86	0	0	0.144041	-6.94249	cold down vs hot

NCF4	0	0	0.143696	-6.95915	cold down vs hot
TNFSF13B	2.52E-28	2.54E-27	0.143148	-6.98577	cold down vs hot
SIRPB2	3.60E-42	6.15E-41	0.142736	-7.00594	cold down vs hot
PLA2G7	2.71E-30	2.91E-29	0.14266	-7.00966	cold down vs hot
ABCC3	3.37E-28	3.38E-27	0.142371	-7.02391	cold down vs hot
MS4A6A	0	0	0.142358	-7.02455	cold down vs hot
HLA-DMA	0	0	0.142342	-7.02533	cold down vs hot
MYO1F	0	0	0.141608	-7.06177	cold down vs hot
C14orf64	4.90E-24	4.21E-23	0.141354	-7.07445	cold down vs hot
CLU	6.88E-16	4.35E-15	0.140957	-7.09436	cold down vs hot
FCN1	3.70E-29	3.80E-28	0.140952	-7.0946	cold down vs hot
MMP12	2.62E-10	1.24E-09	0.140644	-7.11013	cold down vs hot
BTK	0	0	0.14045	-7.11997	cold down vs hot
LAPTM5	0	0	0.140309	-7.12713	cold down vs hot
ARL11	0	0	0.14023	-7.13114	cold down vs hot
FGR	0	0	0.140038	-7.14094	cold down vs hot
FMNL1	0	0	0.140022	-7.14175	cold down vs hot
NFAM1	0	0	0.139863	-7.14986	cold down vs hot
LAMP3	1.81E-40	2.95E-39	0.139332	-7.1771	cold down vs hot
CTLA4	1.39E-20	1.06E-19	0.139103	-7.1889	cold down vs hot
ACSL5	9.83E-39	1.44E-37	0.13905	-7.19163	cold down vs hot
BATF	3.32E-37	4.65E-36	0.138782	-7.20554	cold down vs hot
PIK3AP1	0	0	0.138752	-7.20708	cold down vs hot
FAM179A	2.63E-33	3.13E-32	0.138396	-7.22566	cold down vs hot
HAMP	4.50E-18	3.16E-17	0.138294	-7.23099	cold down vs hot
FCER1G	6.89E-36	9.02E-35	0.13811	-7.2406	cold down vs hot
CASP5	5.70E-28	5.64E-27	0.137985	-7.24717	cold down vs hot
VCAM1	2.31E-37	3.25E-36	0.137592	-7.26788	cold down vs hot
SIGLEC1	2.80E-45	5.51E-44	0.1375	-7.27271	cold down vs hot
HAVCR2	0	0	0.137008	-7.29884	cold down vs hot
DOCK8	0	0	0.136748	-7.3127	cold down vs hot
RGS18	2.48E-32	2.82E-31	0.136713	-7.3146	cold down vs hot
ITM2A	4.52E-36	6.01E-35	0.13641	-7.33082	cold down vs hot
APOL4	1.11E-32	1.28E-31	0.136058	-7.34982	cold down vs hot
TMPRSS3	3.89E-19	2.86E-18	0.135892	-7.35876	cold down vs hot
NLRC3	0	0	0.135885	-7.35918	cold down vs hot
TNFSF8	2.10E-44	4.00E-43	0.135796	-7.36397	cold down vs hot
COL4A3	1.72E-18	1.23E-17	0.135795	-7.36402	cold down vs hot
PTAFR	0	0	0.135637	-7.37264	cold down vs hot
GIMAP1	0	0	0.135363	-7.38752	cold down vs hot
GPR132	0	0	0.135107	-7.40152	cold down vs hot
TMEM176B	0	0	0.134898	-7.41303	cold down vs hot
IL27	8.47E-33	9.84E-32	0.134869	-7.41463	cold down vs hot
RSPO3	7.09E-27	6.80E-26	0.134507	-7.43456	cold down vs hot
RASSF5	0	0	0.13396	-7.46494	cold down vs hot
INSL3	2.07E-37	2.92E-36	0.133915	-7.46741	cold down vs hot
DOK2	0	0	0.132747	-7.53313	cold down vs hot
LAIR1	0	0	0.132648	-7.53872	cold down vs hot
NOD2	2.80E-45	5.51E-44	0.132547	-7.5445	cold down vs hot
CBFA2T3	6.50E-36	8.54E-35	0.132087	-7.57077	cold down vs hot
CHI3L2	2.99E-19	2.22E-18	0.131771	-7.58891	cold down vs hot
CLEC7A	2.52E-44	4.77E-43	0.131549	-7.60175	cold down vs hot
CD86	0	0	0.131211	-7.62139	cold down vs hot
XIRP1	3.98E-19	2.93E-18	0.131112	-7.62708	cold down vs hot
AIF1	0	0	0.131075	-7.6292	cold down vs hot
SELPLG	0	0	0.131045	-7.63097	cold down vs hot
FCGR1C	1.55E-42	2.73E-41	0.131038	-7.63138	cold down vs hot
POU2F2	4.96E-40	7.78E-39	0.130963	-7.63575	cold down vs hot
SOCS1	0	0	0.130121	-7.68516	cold down vs hot
ALOX5	1.12E-43	2.05E-42	0.130085	-7.68726	cold down vs hot
FAIM3	3.58E-24	3.09E-23	0.129988	-7.69304	cold down vs hot
CD274	4.46E-31	4.96E-30	0.129875	-7.69971	cold down vs hot
HK3	4.18E-38	6.03E-37	0.129563	-7.71826	cold down vs hot
HCK	0	0	0.129495	-7.72233	cold down vs hot
PSD4	0	0	0.129263	-7.73616	cold down vs hot
ATP1A3	1.17E-17	8.05E-17	0.128918	-7.75686	cold down vs hot
TMC8	1.12E-44	2.15E-43	0.128869	-7.75981	cold down vs hot
FXYD2	7.18E-25	6.36E-24	0.127897	-7.81878	cold down vs hot
TNFSF14	3.32E-40	5.27E-39	0.127847	-7.82186	cold down vs hot
RCSD1	0	0	0.127816	-7.82374	cold down vs hot
TSHR	8.36E-34	1.01E-32	0.12739	-7.84991	cold down vs hot
LST1	0	0	0.12708	-7.86904	cold down vs hot
GPR65	1.40E-45	2.81E-44	0.126744	-7.88992	cold down vs hot
GCET2	3.56E-36	4.76E-35	0.125919	-7.94159	cold down vs hot
IL4I1	0	0	0.124893	-8.00685	cold down vs hot
IGSF6	0	0	0.124674	-8.02093	cold down vs hot
TNFAIP8L2	0	0	0.124001	-8.06448	cold down vs hot

MPEG1	0	0	0.123845	-8.07462	cold down vs hot
FLJ40330	4.97E-23	4.09E-22	0.123035	-8.12777	cold down vs hot
SELP	1.45E-19	1.08E-18	0.123009	-8.12951	cold down vs hot
MIR155HG	2.66E-30	2.86E-29	0.122585	-8.15757	cold down vs hot
SECTM1	4.20E-45	8.14E-44	0.122353	-8.17307	cold down vs hot
PACSIN1	1.52E-33	1.82E-32	0.121953	-8.19985	cold down vs hot
GP1BA	4.88E-27	4.70E-26	0.12178	-8.21153	cold down vs hot
MNDA	4.25E-43	7.68E-42	0.121771	-8.21212	cold down vs hot
CXorf21	0	0	0.121707	-8.21643	cold down vs hot
DPEP2	0	0	0.121256	-8.24703	cold down vs hot
EVI2B	0	0	0.121232	-8.24864	cold down vs hot
FAAH2	1.58E-30	1.71E-29	0.120913	-8.27043	cold down vs hot
KIAA1324	5.42E-39	8.07E-38	0.120514	-8.2978	cold down vs hot
XCR1	9.73E-32	1.09E-30	0.12044	-8.30287	cold down vs hot
P2RY8	0	0	0.120206	-8.31909	cold down vs hot
GIMAP5	0	0	0.120097	-8.32664	cold down vs hot
TMIGD2	3.50E-27	3.39E-26	0.12008	-8.3278	cold down vs hot
AIM2	2.82E-16	1.82E-15	0.119893	-8.34077	cold down vs hot
C1QC	0	0	0.119787	-8.34816	cold down vs hot
FCGR1B	1.49E-43	2.70E-42	0.119657	-8.35725	cold down vs hot
APOL1	2.80E-45	5.51E-44	0.119507	-8.3677	cold down vs hot
RASGEF1A	9.42E-26	8.65E-25	0.119456	-8.37128	cold down vs hot
MAP4K1	0	0	0.11926	-8.38504	cold down vs hot
GIMAP4	0	0	0.11896	-8.40619	cold down vs hot
GFI1	2.45E-42	4.22E-41	0.118208	-8.4597	cold down vs hot
HCLS1	0	0	0.118198	-8.46038	cold down vs hot
GAPT	5.70E-37	7.88E-36	0.117972	-8.47661	cold down vs hot
CCR6	1.32E-34	1.64E-33	0.117967	-8.47697	cold down vs hot
SIGLEC5	0	0	0.117914	-8.48073	cold down vs hot
LILRA3	1.26E-19	9.46E-19	0.11761	-8.50266	cold down vs hot
DENND1C	0	0	0.117357	-8.52104	cold down vs hot
LCP1	0	0	0.117194	-8.53284	cold down vs hot
EPST11	3.06E-39	4.65E-38	0.116871	-8.55643	cold down vs hot
PARVG	0	0	0.116489	-8.58453	cold down vs hot
SERPINA1	3.89E-37	5.41E-36	0.116163	-8.60857	cold down vs hot
FGD3	0	0	0.116048	-8.61712	cold down vs hot
CEACAM21	1.16E-37	1.65E-36	0.115556	-8.65378	cold down vs hot
TNF	1.41E-37	2.01E-36	0.115318	-8.67168	cold down vs hot
CCL8	1.01E-30	1.11E-29	0.115281	-8.67446	cold down vs hot
TFEC	1.39E-40	2.26E-39	0.11493	-8.70095	cold down vs hot
ITGB2	0	0	0.11467	-8.72064	cold down vs hot
CECR1	0	0	0.114369	-8.74362	cold down vs hot
TSTD1	6.83E-22	5.45E-21	0.113649	-8.79901	cold down vs hot
SLC12A3	4.83E-38	6.95E-37	0.113273	-8.82824	cold down vs hot
KLRC1	6.69E-25	5.93E-24	0.112905	-8.85698	cold down vs hot
HLA-DRB5	3.70E-36	4.94E-35	0.112675	-8.87509	cold down vs hot
BIRC3	4.29E-29	4.40E-28	0.112185	-8.91385	cold down vs hot
RBPS	2.43E-27	2.36E-26	0.111907	-8.93598	cold down vs hot
HTRA4	8.37E-35	1.05E-33	0.11173	-8.95014	cold down vs hot
CD84	6.17E-44	1.14E-42	0.111593	-8.9611	cold down vs hot
SLC22A3	9.08E-24	7.72E-23	0.111512	-8.96762	cold down vs hot
IRF1	0	0	0.110927	-9.01497	cold down vs hot
GIMAP7	0	0	0.110892	-9.01782	cold down vs hot
LILRB2	0	0	0.110486	-9.05095	cold down vs hot
FOXP3	0	0	0.109964	-9.09389	cold down vs hot
INPP5D	0	0	0.109953	-9.09478	cold down vs hot
CCDC64	3.63E-32	4.11E-31	0.108832	-9.18846	cold down vs hot
ARHGAP30	0	0	0.108753	-9.19512	cold down vs hot
GNGT2	0	0	0.108708	-9.19899	cold down vs hot
PTGDS	1.03E-16	6.79E-16	0.108694	-9.20012	cold down vs hot
CD180	0	0	0.108639	-9.20476	cold down vs hot
PATL2	7.69E-36	1.00E-34	0.108484	-9.21791	cold down vs hot
HLA-DMB	0	0	0.1079	-9.26782	cold down vs hot
C1QA	0	0	0.107897	-9.26809	cold down vs hot
PLCH2	1.49E-32	1.71E-31	0.107694	-9.28558	cold down vs hot
ITGB7	0	0	0.107644	-9.28986	cold down vs hot
IL2RA	5.90E-36	7.79E-35	0.107508	-9.3016	cold down vs hot
LRP2	1.38E-08	5.60E-08	0.107354	-9.31499	cold down vs hot
CD226	1.40E-45	2.81E-44	0.107169	-9.33105	cold down vs hot
CCR8	9.41E-41	1.54E-39	0.107102	-9.33692	cold down vs hot
CCDC69	0	0	0.107087	-9.3382	cold down vs hot
TLR7	0	0	0.107	-9.3458	cold down vs hot
SUSD3	3.36E-44	6.29E-43	0.106591	-9.38166	cold down vs hot
CYBB	0	0	0.106499	-9.38976	cold down vs hot
FCGR1A	5.47E-44	1.01E-42	0.105959	-9.43759	cold down vs hot
HCST	0	0	0.105041	-9.52005	cold down vs hot
HLA-DPB1	0	0	0.104936	-9.52961	cold down vs hot

CD80	0	0	0.104513	-9.56817	cold down vs hot
SLA	0	0	0.104314	-9.5864	cold down vs hot
SYTL1	1.49E-42	2.63E-41	0.104276	-9.58989	cold down vs hot
DOCK2	0	0	0.104143	-9.60215	cold down vs hot
WAS	0	0	0.103787	-9.6351	cold down vs hot
ARRDC5	0	0	0.102667	-9.74027	cold down vs hot
HLA-DRB1	0	0	0.102551	-9.75126	cold down vs hot
TMEM150B	1.82E-42	3.17E-41	0.102527	-9.7535	cold down vs hot
PIK3CG	1.53E-38	2.23E-37	0.10227	-9.77803	cold down vs hot
CD244	0	0	0.101123	-9.88895	cold down vs hot
HCG26	0	0	0.100971	-9.90383	cold down vs hot
CD300LF	0	0	0.100385	-9.96161	cold down vs hot
GBP1	2.45E-39	3.72E-38	0.100287	-9.9714	cold down vs hot
AMICA1	0	0	0.100236	-9.97641	cold down vs hot
NLRP7	2.62E-30	2.83E-29	0.0999173	-10.0083	cold down vs hot
SLAMF8	0	0	0.0998247	-10.0176	cold down vs hot
PDCD1LG2	0	0	0.0997564	-10.0244	cold down vs hot
WNT10A	3.35E-37	4.67E-36	0.0993058	-10.0699	cold down vs hot
MEI1	6.17E-43	1.11E-41	0.0993015	-10.0703	cold down vs hot
TMEM155	1.66E-28	1.68E-27	0.0988115	-10.1203	cold down vs hot
C1QB	0	0	0.0986006	-10.1419	cold down vs hot
CD79B	4.33E-30	4.59E-29	0.098288	-10.1742	cold down vs hot
DENND2D	5.00E-39	7.46E-38	0.0979127	-10.2132	cold down vs hot
FAM159A	2.01E-39	3.07E-38	0.0978778	-10.2168	cold down vs hot
SIGLEC14	0	0	0.0973297	-10.2744	cold down vs hot
CLEC12A	3.29E-35	4.20E-34	0.0972815	-10.2794	cold down vs hot
RAC2	0	0	0.097227	-10.2852	cold down vs hot
ZBTB32	0	0	0.0962828	-10.3861	cold down vs hot
NLRP2	3.20E-20	2.43E-19	0.0961951	-10.3955	cold down vs hot
CR1	6.34E-35	8.05E-34	0.0955194	-10.4691	cold down vs hot
FGL2	1.13E-33	1.36E-32	0.0954852	-10.4728	cold down vs hot
RGL4	0	0	0.0954465	-10.4771	cold down vs hot
APBB1IP	0	0	0.095248	-10.4989	cold down vs hot
CSF2RB	0	0	0.0949624	-10.5305	cold down vs hot
IL10RA	0	0	0.0946964	-10.5601	cold down vs hot
ASCL2	0	0	0.0945944	-10.5714	cold down vs hot
HLA-DPA1	0	0	0.0941592	-10.6203	cold down vs hot
STAT4	0	0	0.0938901	-10.6507	cold down vs hot
SAMSN1	2.80E-45	5.51E-44	0.0935897	-10.6849	cold down vs hot
CD37	0	0	0.0933756	-10.7094	cold down vs hot
CD72	0	0	0.09312	-10.7388	cold down vs hot
HLA-DQB1	0	0	0.0930243	-10.7499	cold down vs hot
CLIC3	6.64E-35	8.40E-34	0.0929524	-10.7582	cold down vs hot
HCP5	7.01E-45	1.35E-43	0.0925741	-10.8022	cold down vs hot
CD53	0	0	0.0921798	-10.8484	cold down vs hot
PTPN6	0	0	0.0915903	-10.9182	cold down vs hot
SLFN12L	0	0	0.0911653	-10.9691	cold down vs hot
LYZ	3.26E-40	5.19E-39	0.0909446	-10.9957	cold down vs hot
SPOCK2	0	0	0.0908518	-11.0069	cold down vs hot
NCKAP1L	0	0	0.0908444	-11.0078	cold down vs hot
SLC27A2	1.40E-34	1.74E-33	0.0908192	-11.0109	cold down vs hot
CD1C	1.17E-29	1.23E-28	0.0907552	-11.0186	cold down vs hot
P2RX1	8.77E-40	1.36E-38	0.0907242	-11.0224	cold down vs hot
CLEC9A	5.62E-35	7.14E-34	0.0904295	-11.0583	cold down vs hot
RASGRP2	8.65E-43	1.54E-41	0.0904008	-11.0618	cold down vs hot
LILRB4	0	0	0.0896077	-11.1598	cold down vs hot
EPHA1	6.98E-37	9.61E-36	0.08943	-11.1819	cold down vs hot
TTC24	1.03E-30	1.13E-29	0.0893844	-11.1876	cold down vs hot
ZNF80	8.80E-37	1.21E-35	0.0893269	-11.1948	cold down vs hot
MYO1G	0	0	0.088562	-11.2915	cold down vs hot
LOC606724	0	0	0.0884136	-11.3105	cold down vs hot
CD5L	4.97E-15	3.01E-14	0.0881761	-11.3409	cold down vs hot
TREML2	9.87E-33	1.14E-31	0.0876593	-11.4078	cold down vs hot
ADAM28	4.72E-39	7.06E-38	0.087509	-11.4274	cold down vs hot
VPREB3	2.78E-25	2.50E-24	0.0874339	-11.4372	cold down vs hot
TNFRSF18	1.40E-45	2.81E-44	0.0872626	-11.4597	cold down vs hot
MARCO	2.27E-18	1.61E-17	0.0871199	-11.4784	cold down vs hot
CCL4L2	0	0	0.0870659	-11.4855	cold down vs hot
PTPN22	0	0	0.0869871	-11.496	cold down vs hot
HSD11B1	5.69E-39	8.45E-38	0.0866146	-11.5454	cold down vs hot
RASGRP1	4.20E-45	8.14E-44	0.0864283	-11.5703	cold down vs hot
PLEK	0	0	0.0861981	-11.6012	cold down vs hot
FGD2	0	0	0.0860298	-11.6239	cold down vs hot
EMR1	5.51E-39	8.20E-38	0.0854839	-11.6981	cold down vs hot
ABCD2	4.34E-44	8.10E-43	0.0850334	-11.7601	cold down vs hot
SEPT1	0	0	0.0847992	-11.7926	cold down vs hot
FCRL6	0	0	0.0843214	-11.8594	cold down vs hot

IL18RAP	0	0	0.0841483	-11.8838	cold down vs hot
CCL22	2.06E-41	3.45E-40	0.0841293	-11.8865	cold down vs hot
VNN2	0	0	0.0840875	-11.8924	cold down vs hot
HLA-DPB2	8.13E-44	1.49E-42	0.0840634	-11.8958	cold down vs hot
PLD4	1.34E-36	1.83E-35	0.0840489	-11.8978	cold down vs hot
KCNA3	2.66E-44	5.02E-43	0.0837675	-11.9378	cold down vs hot
PRKCB	3.72E-40	5.88E-39	0.0835791	-11.9647	cold down vs hot
ARHGAP9	0	0	0.0835622	-11.9671	cold down vs hot
ZC3H12D	0	0	0.0831057	-12.0329	cold down vs hot
ZNF683	3.44E-36	4.61E-35	0.0826002	-12.1065	cold down vs hot
C11orf21	0	0	0.0825747	-12.1102	cold down vs hot
GVIN1	0	0	0.0820713	-12.1845	cold down vs hot
DNAJC5B	3.36E-44	6.29E-43	0.0819196	-12.2071	cold down vs hot
IL18	0	0	0.0812815	-12.3029	cold down vs hot
BCL2L14	0	0	0.0810738	-12.3344	cold down vs hot
IPCEF1	0	0	0.0809764	-12.3493	cold down vs hot
LILRB1	0	0	0.0805701	-12.4115	cold down vs hot
EBI3	0	0	0.0801923	-12.47	cold down vs hot
NCF1B	0	0	0.0801342	-12.4791	cold down vs hot
TAGAP	0	0	0.0794641	-12.5843	cold down vs hot
ITGAD	1.70E-31	1.90E-30	0.0791932	-12.6273	cold down vs hot
SKAP1	3.93E-28	3.93E-27	0.0791122	-12.6403	cold down vs hot
C17orf87	0	0	0.0790057	-12.6573	cold down vs hot
CLEC10A	2.82E-40	4.52E-39	0.0787569	-12.6973	cold down vs hot
CD74	0	0	0.0787517	-12.6981	cold down vs hot
BIN2	0	0	0.078749	-12.6986	cold down vs hot
SPNS3	4.20E-45	8.14E-44	0.0784221	-12.7515	cold down vs hot
IL7R	2.89E-35	3.71E-34	0.0780539	-12.8117	cold down vs hot
APOL3	0	0	0.0778776	-12.8407	cold down vs hot
FUT7	0	0	0.0774239	-12.9159	cold down vs hot
CORO1A	0	0	0.0772432	-12.9461	cold down vs hot
HLA-DRB6	2.96E-37	4.14E-36	0.077124	-12.9661	cold down vs hot
CCR4	0	0	0.0770811	-12.9733	cold down vs hot
FAM113B	0	0	0.0770356	-12.981	cold down vs hot
IRF8	0	0	0.0766733	-13.0424	cold down vs hot
TOX	1.05E-40	1.71E-39	0.0765097	-13.0702	cold down vs hot
KIR2DL4	6.08E-33	7.17E-32	0.0764477	-13.0808	cold down vs hot
LRMP	0	0	0.0760743	-13.145	cold down vs hot
KLHDC7B	0	0	0.0759105	-13.1734	cold down vs hot
SASH3	0	0	0.0757871	-13.1949	cold down vs hot
CLECL1	0	0	0.0751422	-13.3081	cold down vs hot
LOC400759	8.65E-31	9.56E-30	0.074764	-13.3754	cold down vs hot
DAPP1	0	0	0.0745726	-13.4097	cold down vs hot
IL32	0	0	0.0744937	-13.424	cold down vs hot
GBP4	5.59E-43	1.01E-41	0.0740357	-13.507	cold down vs hot
CCL4	0	0	0.0735458	-13.597	cold down vs hot
HLA-DRA	0	0	0.0730592	-13.6875	cold down vs hot
CP	1.44E-26	1.37E-25	0.0724782	-13.7973	cold down vs hot
FAM129C	1.00E-30	1.10E-29	0.0724545	-13.8018	cold down vs hot
RAB37	0	0	0.0719993	-13.889	cold down vs hot
CCR5	0	0	0.0718221	-13.9233	cold down vs hot
PTPN7	0	0	0.0717224	-13.9426	cold down vs hot
IL2RB	0	0	0.0715421	-13.9778	cold down vs hot
ETV7	3.36E-44	6.29E-43	0.0704563	-14.1932	cold down vs hot
S1PR4	0	0	0.0700592	-14.2737	cold down vs hot
P2RY13	0	0	0.0698069	-14.3252	cold down vs hot
DTHD1	6.17E-44	1.14E-42	0.0694039	-14.4084	cold down vs hot
HLA-DOA	0	0	0.0693978	-14.4097	cold down vs hot
PSTPIP1	0	0	0.068776	-14.54	cold down vs hot
SELL	0	0	0.0685024	-14.598	cold down vs hot
VAV1	0	0	0.0681992	-14.6629	cold down vs hot
RASAL3	0	0	0.0680788	-14.6889	cold down vs hot
RARRES3	0	0	0.067832	-14.7423	cold down vs hot
SIGLEC10	0	0	0.0673627	-14.845	cold down vs hot
TNIP3	2.27E-42	3.93E-41	0.0671302	-14.8964	cold down vs hot
LY75	0	0	0.0669712	-14.9318	cold down vs hot
TLR8	0	0	0.0668436	-14.9603	cold down vs hot
GNLY	3.33E-41	5.51E-40	0.0668096	-14.9679	cold down vs hot
CLEC17A	1.27E-30	1.38E-29	0.0666094	-15.0129	cold down vs hot
HLA-DQA1	0	0	0.0665828	-15.0189	cold down vs hot
GPR18	0	0	0.0664217	-15.0553	cold down vs hot
SPN	0	0	0.0661388	-15.1197	cold down vs hot
CLEC4E	2.39E-42	4.12E-41	0.0658925	-15.1762	cold down vs hot
SNX20	0	0	0.0656424	-15.234	cold down vs hot
XCL1	0	0	0.0654879	-15.27	cold down vs hot
NCR3	0	0	0.0653522	-15.3017	cold down vs hot
BLNK	0	0	0.0647746	-15.4382	cold down vs hot

AOAH	0	0	0.0646392	-15.4705	cold down vs hot
GPR174	0	0	0.0637392	-15.6889	cold down vs hot
PRKCQ	0	0	0.0634428	-15.7622	cold down vs hot
GATA3	0	0	0.0634009	-15.7727	cold down vs hot
FAM26F	0	0	0.0631753	-15.829	cold down vs hot
CYTIP	0	0	0.0631185	-15.8432	cold down vs hot
JSRP1	1.57E-28	1.60E-27	0.062735	-15.9401	cold down vs hot
C16orf54	0	0	0.0621829	-16.0816	cold down vs hot
CST7	0	0	0.06209	-16.1057	cold down vs hot
WDFY4	0	0	0.0620583	-16.1139	cold down vs hot
C3	5.08E-33	5.99E-32	0.0617164	-16.2032	cold down vs hot
IKZF1	0	0	0.0604554	-16.5411	cold down vs hot
SLAMF7	1.78E-42	3.11E-41	0.0602922	-16.5859	cold down vs hot
TRAF3IP3	0	0	0.0601782	-16.6173	cold down vs hot
CD52	0	0	0.0599499	-16.6806	cold down vs hot
CCR2	0	0	0.0599387	-16.6837	cold down vs hot
PARP15	0	0	0.059807	-16.7204	cold down vs hot
NCF1C	0	0	0.0597986	-16.7228	cold down vs hot
CD48	0	0	0.0595565	-16.7908	cold down vs hot
IL12RB1	0	0	0.05947	-16.8152	cold down vs hot
TLR10	2.80E-45	5.51E-44	0.0585734	-17.0726	cold down vs hot
TIMD4	1.88E-33	2.25E-32	0.058548	-17.08	cold down vs hot
CD69	0	0	0.0584636	-17.1047	cold down vs hot
TMEM156	0	0	0.058211	-17.1789	cold down vs hot
SP140	0	0	0.0579784	-17.2478	cold down vs hot
FLT3	0	0	0.0579679	-17.2509	cold down vs hot
KLRK1	0	0	0.0575071	-17.3892	cold down vs hot
KLRB1	0	0	0.0574358	-17.4107	cold down vs hot
CD40LG	0	0	0.0573726	-17.4299	cold down vs hot
NCF1	0	0	0.0562254	-17.7855	cold down vs hot
FCRL2	8.03E-29	8.17E-28	0.056198	-17.7942	cold down vs hot
RLTPR	0	0	0.0561514	-17.809	cold down vs hot
CD96	0	0	0.0559708	-17.8665	cold down vs hot
KLRD1	0	0	0.0558816	-17.895	cold down vs hot
CXCL11	3.39E-36	4.55E-35	0.0555685	-17.9958	cold down vs hot
C14orf73	1.87E-37	2.63E-36	0.0551884	-18.1197	cold down vs hot
PLAC8	0	0	0.0548421	-18.2342	cold down vs hot
CIITA	0	0	0.0548105	-18.2447	cold down vs hot
TIFAB	0	0	0.0547709	-18.2579	cold down vs hot
LILRA4	9.53E-44	1.75E-42	0.0544107	-18.3787	cold down vs hot
PTPRC	0	0	0.0541507	-18.467	cold down vs hot
GPR114	0	0	0.0535956	-18.6583	cold down vs hot
PRF1	0	0	0.0533842	-18.7321	cold down vs hot
CTSW	0	0	0.0532618	-18.7752	cold down vs hot
ZNF831	0	0	0.0522787	-19.1282	cold down vs hot
PYHIN1	0	0	0.0522168	-19.1509	cold down vs hot
BCL11B	0	0	0.0521061	-19.1916	cold down vs hot
ZAP70	0	0	0.051594	-19.3821	cold down vs hot
HLA-DQA2	0	0	0.0509923	-19.6108	cold down vs hot
SAMD3	0	0	0.0509599	-19.6233	cold down vs hot
HLA-DQB2	1.40E-44	2.67E-43	0.0508984	-19.647	cold down vs hot
CCL5	0	0	0.0508097	-19.6813	cold down vs hot
ANKRD22	0	0	0.0506075	-19.7599	cold down vs hot
CXCL10	1.93E-39	2.97E-38	0.0505075	-19.7991	cold down vs hot
TARP	0	0	0.0504319	-19.8287	cold down vs hot
CRTAM	0	0	0.0504003	-19.8412	cold down vs hot
ICOS	0	0	0.0502582	-19.8972	cold down vs hot
SIGLEC8	3.46E-41	5.71E-40	0.0495201	-20.1938	cold down vs hot
CARD11	0	0	0.0495147	-20.196	cold down vs hot
ANO9	0	0	0.0492285	-20.3135	cold down vs hot
BTLA	0	0	0.0492105	-20.3209	cold down vs hot
LOC100233	0	0	0.0485629	-20.5919	cold down vs hot
NAPSB	0	0	0.0485044	-20.6167	cold down vs hot
CXCR6	0	0	0.0476221	-20.9987	cold down vs hot
TBX21	0	0	0.0475147	-21.0461	cold down vs hot
PTPRCAP	0	0	0.0472964	-21.1433	cold down vs hot
LTA	0	0	0.0470939	-21.2342	cold down vs hot
HSH2D	0	0	0.0466282	-21.4463	cold down vs hot
CD6	0	0	0.0464878	-21.511	cold down vs hot
DNASE1L3	1.10E-35	1.42E-34	0.046394	-21.5545	cold down vs hot
PAX5	1.65E-23	1.39E-22	0.0460755	-21.7035	cold down vs hot
ITK	0	0	0.0460347	-21.7227	cold down vs hot
CD247	0	0	0.0460094	-21.7347	cold down vs hot
TBC1D10C	0	0	0.0458946	-21.7891	cold down vs hot
IL2RG	0	0	0.0456533	-21.9042	cold down vs hot
CHIT1	1.36E-21	1.07E-20	0.0449821	-22.2311	cold down vs hot
GPR171	0	0	0.0448568	-22.2932	cold down vs hot

IL21R	0	0	0.0447979	-22.3225	cold down vs hot
LGALS2	0	0	0.0442795	-22.5838	cold down vs hot
ITGAL	0	0	0.043971	-22.7423	cold down vs hot
XCL2	0	0	0.0437033	-22.8816	cold down vs hot
PNOC	9.06E-41	1.49E-39	0.0436813	-22.8931	cold down vs hot
BLK	2.92E-31	3.26E-30	0.043125	-23.1884	cold down vs hot
TNFRSF9	0	0	0.0430416	-23.2334	cold down vs hot
SLA2	0	0	0.0429816	-23.2658	cold down vs hot
C5orf20	0	0	0.0419615	-23.8314	cold down vs hot
HLA-DOB	0	0	0.0416069	-24.0345	cold down vs hot
C4orf7	6.43E-17	4.28E-16	0.0414584	-24.1205	cold down vs hot
TNFRSF13B	6.74E-34	8.17E-33	0.0411677	-24.2909	cold down vs hot
CD7	0	0	0.0408357	-24.4884	cold down vs hot
SPIB	0	0	0.040589	-24.6372	cold down vs hot
GZMH	0	0	0.040529	-24.6737	cold down vs hot
LOC96610	0	0	0.0405179	-24.6805	cold down vs hot
RHOH	0	0	0.0404289	-24.7348	cold down vs hot
GZMA	0	0	0.0401716	-24.8932	cold down vs hot
C8orf80	0	0	0.0399177	-25.0515	cold down vs hot
ACAP1	0	0	0.0398542	-25.0914	cold down vs hot
SLAMF1	2.80E-45	5.51E-44	0.039668	-25.2092	cold down vs hot
ZBED2	0	0	0.0395517	-25.2834	cold down vs hot
GZMB	0	0	0.0392717	-25.4636	cold down vs hot
THEMIS	0	0	0.0388858	-25.7163	cold down vs hot
NKG7	0	0	0.0385196	-25.9608	cold down vs hot
LY9	0	0	0.0383015	-26.1086	cold down vs hot
CD38	0	0	0.0382675	-26.1318	cold down vs hot
IKZF3	0	0	0.0381824	-26.19	cold down vs hot
LAG3	0	0	0.0380957	-26.2497	cold down vs hot
KIAA0748	0	0	0.0380687	-26.2683	cold down vs hot
FASLG	0	0	0.0379938	-26.3201	cold down vs hot
FCER2	4.43E-24	3.81E-23	0.0378748	-26.4028	cold down vs hot
CXCR3	0	0	0.0377251	-26.5076	cold down vs hot
STAP1	1.40E-45	2.81E-44	0.0373425	-26.7791	cold down vs hot
CCR7	0	0	0.0369675	-27.0508	cold down vs hot
LTB	0	0	0.0368599	-27.1297	cold down vs hot
CD5	0	0	0.0366003	-27.3222	cold down vs hot
IFNG	3.29E-41	5.46E-40	0.0364475	-27.4367	cold down vs hot
ZBP1	0	0	0.0363481	-27.5117	cold down vs hot
SH2D1A	0	0	0.03619	-27.632	cold down vs hot
P2RY10	0	0	0.0358502	-27.8939	cold down vs hot
CD2	0	0	0.0356606	-28.0421	cold down vs hot
CXCR2P1	0	0	0.0343226	-29.1353	cold down vs hot
JAKMIP1	0	0	0.0339375	-29.4659	cold down vs hot
GBP5	0	0	0.0339004	-29.4981	cold down vs hot
LAX1	0	0	0.0338516	-29.5407	cold down vs hot
TRAT1	0	0	0.0338415	-29.5496	cold down vs hot
TCL1A	1.80E-29	1.87E-28	0.0336607	-29.7082	cold down vs hot
CD27	0	0	0.0335531	-29.8035	cold down vs hot
IDO1	0	0	0.0334082	-29.9328	cold down vs hot
CCCL21	3.14E-19	2.33E-18	0.0331058	-30.2061	cold down vs hot
CD3G	0	0	0.0329784	-30.3229	cold down vs hot
LCK	0	0	0.0328008	-30.487	cold down vs hot
CD3E	0	0	0.0327655	-30.5199	cold down vs hot
SIT1	0	0	0.0322156	-31.0409	cold down vs hot
CD8A	0	0	0.0319912	-31.2586	cold down vs hot
SLAMF6	0	0	0.0313281	-31.9203	cold down vs hot
BANK1	5.47E-44	1.01E-42	0.0312362	-32.0141	cold down vs hot
KIAA0125	4.34E-38	6.25E-37	0.0309402	-32.3204	cold down vs hot
TNFRSF17	4.60E-40	7.24E-39	0.030686	-32.5882	cold down vs hot
TIGIT	0	0	0.0306249	-32.6532	cold down vs hot
UBASH3A	0	0	0.0290748	-34.3941	cold down vs hot
PDCC1	0	0	0.0283897	-35.224	cold down vs hot
ADAMDEC1	0	0	0.0279464	-35.7827	cold down vs hot
CXCL9	0	0	0.027291	-36.6421	cold down vs hot
UBD	0	0	0.0268218	-37.2831	cold down vs hot
CD19	1.40E-29	1.47E-28	0.0266594	-37.5102	cold down vs hot
CD3D	0	0	0.026524	-37.7017	cold down vs hot
CD8B	0	0	0.0260955	-38.3208	cold down vs hot
CXCR5	0	0	0.0254646	-39.2702	cold down vs hot
GZMK	0	0	0.0251577	-39.7492	cold down vs hot
SIRPG	0	0	0.0239428	-41.7661	cold down vs hot
FCRL3	0	0	0.0207024	-48.3035	cold down vs hot
FCRL5	1.40E-45	2.81E-44	0.0193814	-51.5959	cold down vs hot
CCL19	1.72E-41	2.90E-40	0.0192465	-51.9576	cold down vs hot
POU2AF1	0	0	0.0183461	-54.5076	cold down vs hot
CD79A	0	0	0.018171	-55.0327	cold down vs hot

MGC29506	0	0	0.0174527	-57.2978	cold down vs hot
IGJ	0	0	0.0171718	-58.2351	cold down vs hot
ADAM6	0	0	0.0168732	-59.2657	cold down vs hot
CXCL13	0	0	0.0153068	-65.3303	cold down vs hot
MS4A1	1.77E-41	2.98E-40	0.0149823	-66.7456	cold down vs hot
PLA2G2D	0	0	0.00953335	-104.895	cold down vs hot

SI table 2a Pearson correlation between gene of interest and CD8a

	R2	pearson-correlation
CTNNB1	0.03	0.0129
Axin1	0.02	0.0315
Axin2	0.0044	0.23
APC	0.005	0.19
APC2	0.06	0.0005
Wnt7b	0.034	0.028
FZD3	0.075	<0.0001
TCF1 (HNF1A)	0.07	0.0002
TCF12	0.02	0.0455
c-myc	0.16	<0.0001
CDH1	0.18	<0.0001
CDKN2A	0.052	0.0012
EFNB3	0.088	<0.0001
VEGF	0.048	0.0018
Sox2	0.026	0.0029
Sox9	0.0026	0.35

SI table 2b Pearson correlation between CTNNB1 score and gene of interest

	R2	pearson-correlation
CD8a	0.2137	<0.0001
THBD	0.1087	<0.0001
Batf3	0.2271	0.0336
IRF8	0.2374	<0.0001

SI table 3a Mutations in patients with T cell signature low

		tumor source	nt mutation	aa position	aa change	functional consequence	SIFT score	
CTNNB1	TCGA-EE-A182-06	met	G/A	25	W/*	GOF		
	TCGA-EB-A3Y7-01	prim	A/G	32	D/G	GOF	0	
	TCGA-FS-A4F9-06	met	G/A	34	G/R	GOF	0	
	TCGA-FS-A1YY-06	met	C/G	41	T/S	GOF	0	
	TCGA-EB-A42Y-01	met	C/T	44	S/C	GOF	0	
	TCGA-EE-A2M6-06	met	CT/:-	44	S/F	GOF	0	
	TCGA-EE-A180-06	met	A/G	292	K/E	GOF	0	
	TCGA-D3-A1Q5-06	met	T/G	439	C/G	GOF	0	
	TCGA-EE-A29A-06	met	C/T	606	P/L	tolerated	0.27	
	TCGA-EE-A29L-06	met	A/G	46	S/F	tolerated	0.1	
Axin1	TCGA-FS-A1ZK-06	met	C/T	342	G/E	LOF	0.06	
	TCGA-EB-A431-01	prim	G/A	478	V/G	LOF	0.06	
	TCGA-EE-A2MT-06	met	G/A	578	Y/H	tolerated	0.11	
	TCGA-FW-A3R5-06	met	G/A	649	T/I	tolerated	0.14	
	TCGA-EE-A2A2-06	met	G/A	382	R/C	tolerated	0.16	
	TCGA-EE-A3J3-06	met	G/A	275	K/R	tolerated	0.16	
Axin2	TCGA-FW-A3R5-06	met	G/A	409	L/F	tolerated	0.16	
	TCGA-D9-A4Z6-01	prim	CACT/-	298-299	-	LOF		
APC	TCGA-EE-A3JI-06	met	G/A	425	E/K	tolerated	0.5	
	TCGA-FS-A1ZG-06	met	C/G	837	S/*	LOF		
	TCGA-EE-A2GR-06	met	TG/GT	1036	L/C	harmful	0.02	
	TCGA-EE-A17X-06	met	G/T	1106	G/*	LOF		
	TCGA-GN-A268-06	met	-/A			LOF		
	TCGA-D3-A51R-06	met	A/T	1659	D/V	harmful	0.01	
	TCGA-EE-A29E-06	met	C/T	2346	P/S	LOF	0	
	TCGA-EE-A2MQ-06	met	C/T	2783	P/L	LOF	0	
	TCGA-EE-A2M5-06	met	C/T	1361	P/S	harmful	0.01	
	TCGA-FW-A3R5-06	met	G/C	508	L/F	harmful	0.01	
	TCGA-ER-A198-06	met	C/T	1067	Q/*	LOF		
	TCGA-D3-A5GU-06	met	A/T	1269	I/L	tolerated	0.26	
	TCGA-FS-A1ZA-06	met	C/T	1272	S/L	harmful	0.01	
	TCGA-FR-A3YN-06	met	C/T	1619	P/L	harmful	0.02	
	APC2	TCGA-EE-A3J7-06	met	C/T	561	S/F	harmful	0.01
		TCGA-EE-A29V-06	met	G/A	776	G/S	tolerated	0.5
		TCGA-EE-A29E-06	met	G/A	859	E/K	harmful	0
		TCGA-FW-A3R5-06	met	G/A	367	E/K	harmful	0.02
		TCGA-FS-A1ZA-06	met	A/G	459	N/S	tolerated	0.1
TCGA-ER-A3EV-06		met	C/T	658	R/C	harmful	0	
TCGA-DA-A3F3-06		met	G/A	335	R/W	harmful	0	
TCGA-EE-A2GR-06		met	CC/TT	363	S/F	harmful	0	
DVL2	TCGA-EE-A20H-06	met	C/T	530-531	AP/AS	tolerated	0.51	
	TCGA-EE-A29H-06	met	C/T	664	P/L	tolerated	0.51	
	TCGA-FW-A3R5-06	met	C/T	673	P/L	tolerated	0.69	
DVL3	TCGA-EE-A29E-06	met	CC/AA	1581-1582	EE/D*	LOF		
	TCGA-D3-A3C6-06	met	CC/AA	1545	R/L	tolerated	0.9	
LRP6	TCGA-D3-A1Q1-06	met	CC/AA	1482	P/N	harmful	0.02	
	TCGA-EE-A29E-06	met 2	CC/AA	1406	G/L	tolerated	0.37	
	TCGA-FS-A1ZJ-06	met	CG/AT	1244	G/L	harmful	0.03	
	TCGA-FW-A5DX-01	prim	G/T	1231	P/Q	harmful	0	
	TCGA-FS-A1ZR-06	met	CG/AT	1136	R/M	harmful	0	
	TCGA-EB-A24C-01	prim	CG/AT	1123	L/I	harmful	0.04	
	TCGA-D3-A1Q6-06	met	CC/AA	1081	P/S	tolerated	0.07	
	TCGA-D3-A3C6-06	met	GG/TT	1008	P/H	tolerated	0.12	
	TCGA-D9-A4Z3-01	prim	G/A	968	R/M	harmful	0.01	
	TCGA-ER-A3PL-06	met	TC/AT	889	G/L	harmful	0	
	TCGA-EE-A29B-06	met	C/T	750	P/Q	harmful	0	
	TCGA-D3-A1Q1-06	met	CC/AA	634	L/F	harmful	0.01	
	TCGA-FS-A1ZN-01	prim	CG/AT	570	D/I	harmful	0	
	TCGA-GN-A262-06	met	CC/AA	542	G/D	tolerated	0.1	
	TCGA-EE-A184-06	met	GG/TT	523	G/L	harmful	0.05	
	TCGA-EE-A2MD-06	met	GG/TT	449	R/M	harmful	0	
	TCGA-FW-A3R5-06	met	G/A	157	W/F	harmful	0	

LRP5	TCGA-BF-A1PZ-01	prim	C/T	73	S/F	tolerated	0.06
	TCGA-FS-A1ZK-06	met	G/A	96	G/R	tolerated	0.09
	TCGA-EE-A17Y-06	met	G/A	96	G/E	tolerated	0.08
	TCGA-EE-A2GR-06	met	C/T	419	D/N	harmful	0.02
	TCGA-EE-A20C-06	met	G/A	546	P/S	tolerated	0.06
	TCGA-EE-A29V-06	met	GG/AA	1094	E/K	tolerated	0.1
	TCGA-FW-A3R5-06	met	C/T	1226	H/Y	harmful	0
	TCGA-EE-A2MS-06	met	G/A	1587	E/K	harmful	0.03
	TCGA-FW-A3R5-06	met	G/A	1612-1613	TD/TN		
LRP12	TCGA-FW-A3R5-06	met	G/A	272	S/F	harmful	0
GSK3b	TCGA-EE-A2GR-06	met	CC/TT	180	R/Q	LOF	0
	TCGA-EE-A2M5-06	met	C/T	102	R/K	tolerated	0.21
Wnt7a	TCGA-EE-A2GO-06	met	G/A	78	R/C	harmful	0
	TCGA-D3-A51G-06	met	T/G	82	W/*	LOF	
	TCGA-D9-A148-06	met	G/A	93	F/L	harmful	0.1
	TCGA-EE-A29E-06	met	G/A	96	E/K	harmful	0.4
	TCGA-FS-A1ZF-06	met	GG/AA	155	D/N	harmful	0.2
	TCGA-EE-A29D-06	met	C/T	188-189	GR/G*	LOF	
	TCGA-EE-A3J7-06	met	C/T	208	S/L	harmful	0.2
	TCGA-EB-A431-01	prim	A/G	263	P/L	harmful	0.3
	TCGA-EE-A29E-06	met	C/T	297	T/P	harmful	0
	TCGA-EE-A2A2-06	met	G/A	102	R/W	harmful	0
	TCGA-FW-A3R5-06	met	G/A	189	R/*	LOF	
	TCGA-FS-A1ZK-06	met	G/A	329	H/Y	tolerated	0.11
Wnt7b	TCGA-FW-A3R5-06	met	G/A	299	P/L	tolerated	0.34
	TCGA-FW-A3R5-06	met	G/A	274	S/L	harmful	0
Wnt3	TCGA-EE-A3AG-06	met	CC/TT	270-271	TE/TK	tolerated	
	TCGA-EE-A20C-06	met	C/T	171	E/K	tolerated	0.43
	TCGA-FW-A3R5-06	met	G/A	70	A/V	harmful	0.04
	TCGA-D3-A2JG-06	met	G/A	331	G/S	harmful	0
Wnt1	TCGA-EE-A3JI-06	met	G/A	113	R/H	tolerated	0.1
Wnt10a	TCGA-EE-A2MT-06	met	C/T	325	P/L	tolerated	0.53
FZD3	TCGA-EB-A440-01	prim	C/A	166	P/H	harmful	0
	TCGA-FS-A4F0-06	met	G/T	168	E/*	LOF	
FZD9	no mutations on this cohort						
TCF1 (HNF1A)	TCGA-EE-A2GO-06	met	G/A	76	D/N	LOF	0
	TCGA-D3-A1Q6-06	met	C/A	160	A/D	LOF	0
	TCGA-EE-A2MS-06	met	G/A	292	G/E	tolerated	0.36
	TCGA-EE-A29V-06	met	G/A	200	R/Q	LOF	0.01
	TCGA-EE-A29E-06	met	G/A	234	E/K	tolerated	0.1
	TCGA-FR-A3YO-06	met	C/T	57	P/L	harmful	0.03
	TCGA-EE-A2M6-06	met	C/T	28	Q/*	LOF	
	TCGA-FW-A3R5-06	met	C/T	340	P/L	tolerated	0.36
	TCGA-EE-A2MS-06	met	C/T	347	P/S	tolerated	0.5
	TCGA-EE-A20C-06	met	C/T	68	P/S	GOF	0.46
TCF12	TCGA-EE-A2GO-06	met	C/T	68	P/L	GOF	0
	TCGA-D3-A51T-06	met	C/T	170	H/Y	GOF	0.02

SI table 3b Mutations in patients with T cell signature high

		tumor source	nt mutation	aa position	aa change	functional consequence	SIFT score
CTNNB1	TCGA-ER-A190-06	met	A/G		41 T/A	GOF	0.01
	TCGA-D3-A2JN-06	met	CC/TT		687 P/L	tolerated	0.13
	TCGA-EE-A3AC-06	met	C/T		545 Q/*	LOF	
Axin1	TCGA-D3-A2JN-06	met	G/A		805 R/*	LOF	
	TCGA-ER-A194-01	prim	A/C		77 S/F	tolerated	0.5
	TCGA-D3-A2JP-06	met	G/A		199 P/F	harmful	0.03
Axin2	TCGA-EE-A20F-06	met	G/-		494 -	tolerated	0.7
	TCGA-EE-A2GC-06	met	GG/AA		662 H/Y	tolerated	0.6
	TCGA-EE-A2MJ-06	met	AC/TT		202 S/K	harmful	0
APC	TCGA-EE-A3AE-06	met	G/A		475 S/L	tolerated	0.3
	TCGA-D3-A3C8-06	met	C/T		1189 S/L	harmful	0.03
	TCGA-EE-A3JD-06	met	AC/TT	1381-1382	PL/PF	LOF	
	TCGA-EE-A2M7-06	met	C/T		1539 S/L	tolerated	0.5
	TCGA-GN-A26C-01	prim	C/T		1758 S/F	tolerated	0.34
	TCGA-EE-A2GT-06	met	C/T		1858 R/*	LOF	
	TCGA-ER-A190-06	met	C/T		2509 P/S	tolerated	0.2
	TCGA-BF-A1Q0-01	prim	C/T		2256 P/L	tolerated	0.5
	TCGA-EE-A3J5-06	met	C/T		741 A/V	harmful	0.03
APC2	TCGA-ER-A19M-06	met	C/T		2234 P/S	harmful	0.01
	TCGA-D3-A2JD-06	met	G/A		1763 G/E	tolerated	0.86
	TCGA-ER-A19H-06	met	G/A		1026 R/Q	tolerated	0.5
DVL2	TCGA-EE-A3AE-06	met	C/T		1047 P/L	LOF	0.06
	TCGA-BF-A5EQ-01	prim	GG/AA		470 P/A	tolerated	0.74
	TCGA-EE-A2GL-06	met	G/C	245-246	PR/PC	LOF	
DVL3	TCGA-EE-A2GI-06	met	A/-		246 -	LOF	
	TCGA-D3-A3MR-06	met	C/T		531 P/S	tolerated	0.05
	TCGA-ER-A2NH-06	met	G/A		1431 S/F	harmful	0.01
LRP6	TCGA-EE-A2MR-06	met	G/A		1286 P/L	harmful	0
	TCGA-ER-A19S-06	met	G/C		1074 T/I	harmful	0.04
	TCGA-GN-A265-06	met	CC/AA		933 T/R	tolerated	0.55
	TCGA-GN-A265-06	met	CC/AA		725 G/*	LOF	
	TCGA-EE-A181-06	met	G/A		597 G/L	harmful	0
	TCGA-D9-A3Z1-06	met	G/A		465 W/C	harmful	0
	TCGA-ER-A2NH-06	met	T/G		412 W/F	harmful	0.02
	TCGA-HR-A2OG-01	prim	C/A		280 P/S	harmful	0.02
	TCGA-D3-A3C3-06	met	G/A		246 S/F	harmful	0.03
	TCGA-EE-A2ML-06	met	C/A	157-158	WG/C*	LOF	
	TCGA-D9-A149-06	met	CC/AA		115 E/D	tolerated	0.16
	TCGA-EB-A551-01	prim	G/A		112 G/D	harmful	0
LRP5	TCGA-EE-A2MR-06	met	G/A		340 A/V	tolerated	0.33
	TCGA-DA-A1HV-06	met	C/T		738 G/E	tolerated	0.27
	TCGA-EE-A2MR-06	met	G/A		844 D/N	tolerated	0.41
	TCGA-EE-A2GI-06	met	G/A		1112 I/M	tolerated	0.11
	TCGA-EE-A2MR-06	met	C/G		1305 C/Y	harmful	0
	TCGA-EE-A183-06	met	C/T		1576 P/S	harmful	0.02
LRP12	TCGA-EB-A3XD-01	prim	G/A		815 P/S	tolerated	0.51
	TCGA-EE-A2MK-06	met	G/A		746 R/Q	tolerated	0.09
	TCGA-EE-A2GI-06	met	C/T		674 P/S	tolerated	0.14
	TCGA-EE-A3AE-06	met	C/A		581 A/S	harmful	0
	TCGA-EE-A3AC-06	met	G/A		497 A/V	harmful	0
	TCGA-D3-A51E-06	met	T/C		483 E/G	tolerated	0.32
	TCGA-EE-A2MJ-06	met	C/T		282 G/E	tolerated	0.1
	TCGA-EE-A2GC-06	met	G/A		142 H/Y	tolerated	0.13
	GSK3b	no mutations in this cohort					
Wnt7a	TCGA-EE-A2MJ-06	met	A/G		159 G/D	harmful	0
	TCGA-EE-A2GI-06	met	C/T		236 V/A	tolerated	0.2
	TCGA-ER-A194-01	prim	G/A		315 T/I	harmful	0.03
Wnt7b	TCGA-D3-A3C8-06	met	C/T		193 E/K	tolerated	1
	TCGA-EE-A3J5-06	met	C/T		8 W/*	LOF	

Wnt3	TCGA-GN-A26C-01	prim	G/A		347 R/C	harmful	0.01	
	TCGA-BF-A5EQ-01	prim	T/A		297 D/N	harmful	0.01	
	TCGA-EE-A183-06	met	C/T		96 D/N	tolerated	1	
	TCGA-EE-A2MR-06	met	C/T		94 I/L	tolerated	0.37	
Wnt1	TCGA-D9-A3Z1-06	met	G/C		181 G/A	tolerated	0.15	
Wnt10a	TCGA-DA-A1HV-06	met	C/T		8 P/S	harmful	0	
	TCGA-EE-A2MR-06	met	CC/TT	359-360	GR/GC	GOF		
	TCGA-EE-A3J5-06	met	G/A		370 D/N	harmful	0.01	
FZD3		no mutations in this cohort						
FZD9	TCGA-EB-A430-01	met	C/T		480 A/V	harmful	0.03	
	TCGA-ER-A2NC-06	met	C/T		498 S/L	tolerated	0.19	
TCF1 (HNF1A)	TCGA-GF-A4EO-06	met	G/A		40 G/E	tolerated	0.6	
	TCGA-D9-A1JW-06	met	G/A		79 E/K	tolerated	0.36	
	TCGA-EB-A4OY-01	prim	C/T		174 A/V	tolerated	0.5	
	TCGA-D3-A5GS-06	met	G/A		202 M/I	LOF	0	
TCF12	TCGA-EE-A181-06	met	C/T		99 P/S	tolerated	0.76	
	TCGA-EE-A3JD-06	met	C/T		386 S/F	harmful	0	

SI table 3c Patient ID and indications for active b-catenin signalling

T cell signature low patients

	CTNNB1 mutation	APC/APC2/axin1 /axin2 mutation	elevated Wnt7b expression	elevated FZD3 expression	elevated CTNNB1 expression	listed as:
TCGA-EE-A20H-06A		1	1			Inhib
TCGA-EE-A3J7-06A		1	1			Inhib
TCGA-GN-A262-06A				1		FZD
TCGA-D3-A1QA-06A	1			1	1	CTNNB1 mut
TCGA-D3-A2JG-06A			1	1	1	Wnt
TCGA-ER-A19L-06A				1		FZD
TCGA-D3-A1Q1-06A				1	1	CTNNB1 exp
TCGA-EE-A185-06A			1	1	1	Wnt
TCGA-EE-A3AD-06A		1	1	1	1	Inhib
TCGA-ER-A2NE-06A	1				1	CTNNB1 mut
TCGA-ER-A3PL-06A			1	1	1	Wnt
TCGA-FS-A1YW-06A					1	CTNNB1 exp
TCGA-FS-A1ZK-06A		1		1	1	Inhib
TCGA-FS-A1ZU-06A	1				1	CTNNB1 mut
TCGA-FS-A4FB-06A		1		1	1	Inhib
TCGA-GN-A26D-06A				1	1	FZD
TCGA-EE-A17Z-06A			1	1		Wnt
TCGA-EE-A180-06A	1			1	1	CTNNB1 mut
TCGA-EE-A17Y-06A		1	1	1		Inhib
TCGA-EE-A29A-06A	1		1			CTNNB1 mut
TCGA-EE-A29R-06A				1		FZD
TCGA-EE-A2GO-06A		1	1	1		Inhib
TCGA-FS-A4F9-06A	1			1		CTNNB1 mut
TCGA-D3-A1Q5-06A	1		1	1		CTNNB1 mut
TCGA-DA-A1I7-06A			1	1		Wnt
TCGA-EE-A2MM-06A					1	CTNNB1 exp
TCGA-EE-A3AG-06A			1	1		Wnt
TCGA-EE-A3J4-06A				1	1	Fzd
TCGA-EE-A3JI-06A		1			1	TCF
TCGA-FS-A1ZC-06A			1			0 Wnt
TCGA-FS-A1ZD-06A			1	1	1	Wnt
TCGA-FS-A4F0-06A				1	0	FZD
TCGA-GN-A268-06A		1		1	1	Inhib
TCGA-D3-A1Q6-06A		1	1	1	0	TCF
TCGA-D3-A3ML-06A					1	CTNNB1 exp
TCGA-D3-A51G-06A			1		0	Wnt
TCGA-DA-A1I8-06A			1	1	0	Wnt
TCGA-DA-A3F5-06A			1	1	0	Wnt
TCGA-GF-A30T-06A			1		0	Wnt
TCGA-EE-A2GN-06A				1	1	Fzd
TCGA-FS-A1Z3-06A				1	1	Fzd
TCGA-FW-A3I3-06A			1	1	0	Wnt
TCGA-EE-A2GR-06A		1		1	1	Inhib
TCGA-FS-A1ZJ-06A				1	1	Fzd

T cell signature high patients

	CTNNB1 mutation	APC/APC2/axin1 /axin2 mutation	elevated Wnt7b expression	elevated FZD3 expression	elevated CTNNB1 expression	listed as:
TCGA-D3-A5GS-06		1				Inhib
TCGA-EE-A2GT-06		1				Inhib
TCGA-EE-A3AE-06		1				Inhib
TCGA-EE-A3JD-06		1				Inhib
TCGA-D3-A2J8-06			1			Wnt7b
TCGA-D3-A2JN-06		1				Inhib
TCGA-D3-A2JP-06		1				Inhib
TCGA-D3-A3BZ-06					1	CTNNB1 exp
TCGA-D3-A3C8-06		1	1			Inhib
TCGA-D9-A149-06	1			1		CTNNB1 mut
TCGA-DA-A1HW-06				1		FZD3
TCGA-DA-A1I1-06				1		FZD3
TCGA-DA-A1IB-06			1			Wnt7b
TCGA-EE-A2MC-06			1			Wnt7b
TCGA-EE-A2MR-06			1			Wnt7b
TCGA-EE-A2MU-06			1			Wnt7b
TCGA-EE-A3AE-06					1	CTNNB1 exp
TCGA-ER-A193-06			1			Wnt7b
TCGA-ER-A197-06			1			Wnt7b
TCGA-ER-A19A-06			1			Wnt7b
TCGA-ER-A19H-06				1		FZD3
TCGA-ER-A19M-06			1			Wnt7b
TCGA-ER-A19O-06	1					CTNNB1 mut
TCGA-ER-A2NG-06			1			Wnt7b
TCGA-FS-A1ZH-06			1			Wnt7b
TCGA-FS-A1ZM-06			1			Wnt7b
TCGA-FS-A1ZP-06				1		FZD3
TCGA-FS-A1ZW-06				1		FZD3

SI table 4a Gene array data mouse tumor

TargetID	ProbelID	BrafV600E/PTEN		BRafV600E/PTEN/CAT-STA			two-way ANOVA	
		mean	SD	mean	SD	FC	p-value	
UPB1	4760092		2.55	2.39	326.73	198.51	128.13 **	0.0098
UPB1	1470626		13.00	5.23	778.65	468.23	59.90 **	0.0045
KRT2	10050		10.23	8.28	610.98	832.08	59.75 **	0.0051
MET	3800192		0.85	4.13	43.13	30.78	50.74 **	0.0095
UPB1	4040376		11.88	2.96	506.85	302.15	42.68 *	0.0207
SP5	4290300		3.95	6.05	155.75	149.93	39.43 **	0.0091
OTTMUSGC	6200609		1.78	5.41	55.40	36.54	31.21 **	0.001
GLRB	1300139		1.08	3.31	33.00	22.06	30.70 *	0.05
BC020108	4040307		5.55	4.57	93.40	55.83	16.83 **	0.0041
LIX1	1030324		2.85	2.62	42.70	23.26	14.98 *	0.0145
BMP15	1850450		27.08	25.94	401.48	252.30	14.83 **	0.0029
ARSI	5270619		8.05	6.63	118.35	73.70	14.70 ***	0.0003
TAGLN3	4730474		29.55	33.87	395.53	272.28	13.38 **	0.0036
GDF15	650524		23.30	15.04	290.43	172.19	12.46 *	0.033
GPR143	3170048		24.80	20.49	292.80	197.12	11.81 *	0.0324
MLANA	1300647		839.68	565.55	9837.28	4373.53	11.72 ****	0.0001
PKD2L1	7150008		3.98	4.57	42.90	26.77	10.79 *	0.0169
CPXM2	6350053		4.93	6.09	52.80	24.89	10.72 **	0.0033
OMG	1850274		45.28	18.45	479.90	226.61	10.60 ***	0.0006
COL9A2	3420156		35.23	15.30	368.45	235.03	10.46 **	0.0079
AI593442	4230768		8.28	7.21	86.13	43.76	10.41 *	0.011
OCA2	150681		36.75	35.02	375.40	169.74	10.21 **	0.007
MC1R	2140519		34.88	18.78	354.78	250.36	10.17 *	0.0108
FRAS1	2000674		5.08	1.96	51.45	32.13	10.14 **	0.0045
GBX2	6580138		18.53	10.72	182.88	111.74	9.87 **	0.0048
GPR158	4570324		5.93	6.00	58.10	38.30	9.81 **	0.0014
2300006NC	3140327		29.68	34.89	288.53	175.31	9.72 *	0.0388
CRYBB1	6480008		4.25	3.78	40.88	19.96	9.62 *	0.0246
FAM19A4	3290731		42.80	25.14	407.55	269.50	9.52 **	0.0037
RPS6KL1	3800327		6.23	5.97	57.33	35.96	9.21 **	0.0017
P2RY12	1440050		25.13	6.53	225.83	53.90	8.99 ***	0.0006
9930021D1	540487		22.63	26.22	194.30	70.92	8.59 **	0.0032
NOTUM	1820433		7.40	2.50	60.83	37.62	8.22 **	0.0011
MCOLN3	50487		53.60	28.61	439.65	252.70	8.20 **	0.0021
NPY	160494		194.80	48.95	1578.50	785.93	8.10 **	0.0074
TYRP1	110646		112.03	73.48	869.70	448.29	7.76 **	0.0049
OTTMUSGC	6110209		88.43	113.92	678.58	413.77	7.67 **	0.006
TYR	1690379		20.50	17.45	154.40	108.90	7.53 *	0.0214
SLC45A2	1570110		120.08	118.63	875.15	633.66	7.29 **	0.005
TSPAN10	4760360		94.13	68.51	668.38	397.00	7.10 **	0.0074
A030010K2	7320386		96.35	130.84	679.85	416.43	7.06 **	0.0065
TYRP1	2260215		93.98	55.86	655.63	367.62	6.98 **	0.0088
GPNMB	4040292		24.35	17.58	167.40	91.81	6.87 *	0.014
GCG	3140524		12.45	8.71	85.38	44.05	6.86 *	0.0171
SLC45A2	780367		182.48	124.70	1250.08	528.40	6.85 *	0.0381
KCNE1	2190112		5.85	10.16	38.70	31.11	6.62 *	0.0437
SLC45A2	7330270		69.58	62.48	455.88	369.86	6.55 **	0.0021
PLA2G2E	5820768		8.50	11.05	55.63	32.22	6.54 **	0.0039
ENPP6	7000519		37.48	16.74	244.40	161.51	6.52 ***	0.0004
CAR14	5870220		156.45	103.49	981.93	481.30	6.28 **	0.0022
SYNGR1	7210114		7.08	9.04	44.00	19.01	6.22 *	0.0234
BACE2	870743		27.90	12.67	172.80	99.60	6.19 *	0.0128
UNC5C	2230603		19.75	19.89	121.28	59.88	6.14 ***	0.0009
CORIN	4830148		29.13	25.43	176.83	99.19	6.07 *	0.0112
KNDC1	6960376		17.43	9.13	105.35	63.49	6.05 **	0.0041
GPNMB	1410735		32.33	24.04	193.25	77.98	5.98 **	0.0057

TYRP1	1470133	343.53	264.73	2042.15	902.71	5.94 **	0.0011
LOC669001	580044	8.58	6.19	50.25	28.25	5.86 *	0.0106
TNFRSF19	3400215	7.28	5.86	42.43	25.00	5.83 *	0.031
PLLP	430278	6.75	2.64	38.80	16.96	5.75 *	0.0491
TRPM6	5700364	13.58	5.35	76.45	40.16	5.63 *	0.0396
MGLL	6660719	163.85	25.82	922.70	796.25	5.63 **	0.0048
TPSAB1	5130553	75.90	31.00	427.15	423.83	5.63 **	0.0051
KRT75	5810142	7.95	10.90	44.48	33.72	5.59 *	0.025
EMID2	780491	281.98	141.40	1570.63	938.79	5.57 *	0.0125
TNFRSF19	2060546	105.83	43.17	583.23	300.37	5.51 *	0.0256
SYNGR1	730315	9.95	7.58	54.18	29.90	5.44 **	0.0067
KRTAP4-7	4040703	247.95	345.44	1324.60	977.48	5.34 *	0.0365
EMID1	1430079	109.40	24.87	581.20	291.73	5.31 *	0.0274
PLXDC1	7570619	81.25	19.15	430.95	203.10	5.30 **	0.0053
AI507495	7040634	88.65	138.44	451.28	290.44	5.09 **	0.0039
KRTAP16-5	3990382	8.60	16.23	43.45	35.23	5.05 *	0.0324
AXIN2	1440630	183.15	37.91	903.00	468.81	4.93 **	0.0074
CRYBA4	7050255	204.00	252.79	992.95	568.89	4.87 **	0.0034
WNK4	1850255	11.98	3.82	58.23	26.63	4.86 **	0.0046
OTTMUSGC	5220008	93.73	129.58	454.73	289.99	4.85 **	0.004
2810003C1	3610239	349.68	27.75	1641.73	813.08	4.70 *	0.0123
SYNGR1	1240154	137.28	84.62	643.68	309.05	4.69 *	0.018
KRT84	1510301	43.15	28.11	199.25	115.28	4.62 **	0.0074
6430548M	1190167	182.58	29.68	836.38	343.60	4.58 *	0.0148
SLC25A34	1990327	38.20	44.77	174.55	100.49	4.57 *	0.0191
VTN	6770671	33.15	3.12	149.10	71.19	4.50 *	0.0462
ASPHD2	5560670	36.08	6.79	162.20	76.83	4.50 *	0.0302
2310007B0	4730202	104.90	100.18	467.70	305.44	4.46 **	0.0039
KRT26	6420070	166.38	261.36	737.95	516.76	4.44 **	0.0077
APLP1	2030435	20.30	10.07	90.03	59.04	4.43 *	0.0226
A030005K1	4880014	48.18	77.82	212.53	226.57	4.41 **	0.0048
4931406C0	630576	307.15	174.78	1342.88	602.33	4.37 *	0.0442
MGLL	2350451	915.28	262.29	3992.23	2163.13	4.36 *	0.038
KRTAP16-8	540253	213.08	320.48	927.55	585.45	4.35 **	0.0079
TRPM6	830608	11.38	6.14	49.50	28.64	4.35 *	0.0193
SLC7A8	6550687	204.45	74.11	887.35	428.03	4.34 *	0.011
CITED1	3990292	10.58	10.11	45.83	29.79	4.33 *	0.0305
KRT71	3060095	1503.40	2103.31	6389.78	3895.64	4.25 **	0.0011
FSTL4	4670719	100.68	69.48	427.13	318.72	4.24 **	0.0093
TPD52L1	3460224	55.65	30.77	234.23	109.41	4.21 **	0.0022
ALOX12	4180717	44.35	27.88	184.48	94.30	4.16 *	0.0161
RAMP3	4280224	29.85	8.91	123.50	62.29	4.14 **	0.0023
GABRP	2450093	20.68	23.19	85.30	73.55	4.13 *	0.0344
A730017C2	830358	10.60	6.68	43.50	25.01	4.10 *	0.0434
SLC6A13	830445	20.00	17.11	81.65	33.94	4.08 *	0.0436
KRT27	6200671	1558.28	2135.63	6274.48	3683.49	4.03 **	0.0016
JAM2	3840703	11.55	7.81	46.23	27.32	4.00 *	0.0333
FOXE1	2260040	13.85	22.71	55.35	45.08	4.00 *	0.0109
BACE2	3390221	500.03	150.00	1994.10	943.53	3.99 **	0.0039
SLC7A8	3870681	41.83	18.01	166.03	70.48	3.97 *	0.0327
GLT25D2	1510722	22.60	3.78	89.13	46.55	3.94 *	0.0295
ABAT	2120601	25.58	4.25	100.13	37.35	3.91 *	0.0148
GSTA2	3710465	46.43	12.05	181.15	81.24	3.90 *	0.0206
ADAMTSL4	130192	101.15	10.96	392.78	141.99	3.88 *	0.02
TRIM62	1260040	42.93	19.67	163.88	60.19	3.82 *	0.0376
CLIC6	7040471	42.58	28.07	162.38	58.83	3.81 *	0.0394
PCOLCE2	1230575	49.55	15.47	188.70	82.83	3.81 *	0.0168
2310043LO	5570608	179.85	272.20	681.43	429.60	3.79 *	0.0191
DNAJC6	2070594	89.08	31.25	335.43	149.56	3.77 *	0.0492

LOC100047	4180437	1737.85	512.67	6495.73	2576.01	3.74 **	0.0015
PIP5K1B	1090239	32.45	25.32	121.00	35.97	3.73 **	0.0039
HHATL	1940132	115.23	81.07	428.80	174.00	3.72 *	0.0124
PLXDC1	2450500	225.50	49.94	838.25	352.59	3.72 *	0.0223
RG57BP	1170709	195.35	70.72	713.73	393.91	3.65 *	0.0155
MGLL	5310328	1142.80	307.03	4140.25	2182.32	3.62 *	0.0432
MSRB2	5960341	30.95	10.33	112.08	43.79	3.62 **	0.0081
RAMP3	1740072	23.78	6.29	85.90	40.37	3.61 *	0.042
E130012A1	540398	196.45	30.81	704.30	337.20	3.59 *	0.0177
SDK1	380463	47.58	10.21	170.43	86.36	3.58 *	0.0347
KRT31	6100138	223.40	334.03	797.75	534.43	3.57 *	0.032
TPD52L1	5700433	58.85	30.02	209.05	98.16	3.55 **	0.0099
PADI3	6590504	13.95	21.00	49.55	42.16	3.55 *	0.0289
GNG13	2650743	15.28	22.72	54.18	53.25	3.55 *	0.017
TCHHL1	6760564	255.63	380.44	902.75	744.87	3.53 *	0.0159
KRT82	6560333	17.83	22.09	62.23	54.51	3.49 **	0.0065
JAM2	7570673	15.58	11.39	54.28	39.14	3.48 *	0.0176
SOX8	2450279	51.70	40.10	180.15	70.51	3.48 *	0.0273
STRA6	1300475	61.50	23.94	213.45	70.74	3.47 **	0.0091
SYTL2	3710563	246.03	100.94	851.85	305.57	3.46 *	0.0238
PRL2C4	6590435	469.15	515.90	1603.73	1752.51	3.42 *	0.0276
LAMA1	1190431	16.60	7.69	56.60	28.45	3.41 *	0.0141
GPR137B	2650768	67.83	5.49	226.53	164.24	3.34 **	0.0064
DAPL1	1570288	19.33	21.38	64.40	35.67	3.33 **	0.0057
EPHB1	1940458	55.95	17.11	185.05	74.99	3.31 *	0.0265
CCL11	830273	59.13	21.63	192.65	101.82	3.26 *	0.0218
KRT34	730255	1516.73	2234.91	4883.80	3167.99	3.22 *	0.0234
SEPP1	7160603	570.90	194.09	1810.20	840.37	3.17 *	0.0162
WWC1	130338	75.28	6.27	238.35	95.10	3.17 **	0.0051
EBF2	6940044	205.75	71.52	650.25	199.41	3.16 *	0.0375
KRT33A	6110767	622.58	962.87	1964.80	1229.10	3.16 **	0.0093
2310033E0	6380022	76.10	71.41	237.50	143.92	3.12 **	0.0056
DTX4	1300300	153.65	38.52	476.15	203.22	3.10 *	0.0101
OTOP2	4210445	22.50	28.04	69.73	61.08	3.10 **	0.0038
KRTAP9-3	6590279	157.75	235.12	488.78	308.64	3.10 **	0.0083
GJC2	2360332	19.35	6.73	59.70	29.77	3.09 *	0.0133
MSRB2	130300	59.23	23.33	181.00	68.18	3.06 *	0.0363
P2RY14	1240538	155.68	40.63	472.98	218.47	3.04 *	0.0114
GPNMB	4670228	4408.58	2500.74	13356.95	3448.95	3.03 ****	0.0001
MCF2L	4810546	319.03	52.16	960.03	386.55	3.01 *	0.0169
SYT9	6380750	63.08	13.26	189.28	75.79	3.00 *	0.0301
FGFBP3	3130661	137.15	15.09	407.98	208.99	2.97 *	0.0307
QPCT	990687	275.35	43.75	818.88	325.99	2.97 *	0.0423
MAPT	4060307	19.30	8.61	57.00	18.22	2.95 *	0.0207
WDR6	6510546	304.63	63.15	892.55	300.52	2.93 *	0.0282
TRPC3	60347	19.45	3.45	56.95	32.17	2.93 *	0.0214
PLEKHA6	2260021	77.05	15.35	223.48	93.26	2.90 *	0.0119
KRT32	1500762	37.23	45.84	105.60	68.64	2.84 *	0.0253
VAT1L	450452	75.45	4.62	213.60	114.68	2.83 *	0.0176
A030005L1	6110487	35.20	48.44	99.03	82.30	2.81 *	0.0367
P2RY14	6580379	236.53	65.46	665.20	337.05	2.81 *	0.0448
ABHD2	3800240	43.40	20.72	121.50	48.05	2.80 *	0.0107
4732456N1	6620427	34.25	24.08	94.98	49.12	2.77 *	0.0468
D730001G1	3780364	82.38	118.59	228.35	184.47	2.77 *	0.0122
RAPGEF4	2450601	38.00	31.20	105.00	30.35	2.76 *	0.0284
SPRY4	3440692	143.10	60.54	395.40	99.75	2.76 *	0.044
ABHD2	3450164	41.73	21.46	115.20	45.49	2.76 *	0.0163
LOC100044	5900438	146.08	233.50	401.85	335.85	2.75 *	0.0412
CLECSF12	1300673	35.50	13.45	97.30	79.17	2.74 *	0.0431

A830053O2	3360537	18.98	31.12	51.73	47.76	2.73 *	0.0444
MALT1	3830040	20.35	12.66	54.98	27.98	2.70 *	0.0335
SEMA6D	6510270	146.03	88.38	394.40	152.71	2.70 *	0.0474
ETV5	4860494	151.90	56.08	405.23	99.95	2.67 *	0.0431
SPG21	7570008	721.00	149.94	1915.88	953.29	2.66 *	0.0204
SDC3	6760762	2970.08	196.70	7678.38	2936.77	2.59 **	0.0016
GM484	6270192	41.03	7.53	105.50	62.09	2.57 *	0.0348
RELN	7610484	380.98	176.29	960.80	88.14	2.52 *	0.0304
GPC3	3890500	794.23	243.45	1997.18	1204.45	2.51 *	0.0196
SRXN1	2340431	21.35	6.20	53.63	43.56	2.51 *	0.0475
LOC100047	1400053	5582.08	3064.32	14006.28	3736.39	2.51 ****	0.0001
HK3	4810575	89.18	4.71	223.43	163.15	2.51 *	0.0211
CAR11	5670477	187.20	59.00	468.63	142.64	2.50 *	0.0247
CACHD1	4480152	78.90	10.72	196.53	64.55	2.49 *	0.0431
SLC11A1	1410019	26.15	6.93	64.93	64.25	2.48 *	0.0173
FBP1	3180671	44.60	34.52	110.50	50.92	2.48 *	0.031
CAR2	5290711	95.38	96.76	235.13	146.07	2.47 *	0.0163
CITED4	5490743	91.13	70.31	224.48	129.03	2.46 *	0.0219
TMEM100	1410168	81.90	23.20	201.25	73.85	2.46 *	0.0402
MKKS	7200068	43.25	17.14	104.35	5.88	2.41 *	0.0455
DCT	130392	6658.83	3882.30	15877.90	1548.89	2.38 ****	0.0001
MESDC1	6200209	50.65	9.32	120.23	47.74	2.37 *	0.0229
PODN	3290301	25.75	11.06	60.03	15.88	2.33 *	0.0354
DKK3	2680189	2289.08	391.56	5255.70	1258.71	2.30 *	0.0454
HVCN1	620646	52.53	5.64	120.48	63.84	2.29 *	0.0262
TCN2	5310133	211.18	60.58	482.95	143.57	2.29 *	0.0301
DUSP10	2000494	26.23	6.77	59.30	22.03	2.26 *	0.0423
OCIAD2	6350133	54.95	17.91	123.90	88.80	2.25 *	0.0241
HSPB8	6280209	100.30	32.81	225.25	87.04	2.25 *	0.0317
ABHD2	4540162	50.80	22.95	112.68	37.29	2.22 *	0.0428
ADI1	6420561	217.98	44.67	478.55	269.81	2.20 *	0.0375
RAPSN	3370482	32.10	8.99	70.08	38.65	2.18 *	0.0198
NHSL1	50341	112.03	22.76	244.45	81.43	2.18 *	0.0229
TSPAN12	6220273	30.53	8.13	66.20	21.42	2.17 *	0.0285
DUSP4	3610487	32.35	5.76	70.15	18.54	2.17 *	0.0203
CYP2F2	6040689	52.98	10.01	113.80	40.65	2.15 *	0.0464
CDH3	840025	30.65	9.74	65.45	15.94	2.14 *	0.0327
SCLY	3390484	227.03	54.72	479.40	110.94	2.11 *	0.0439
KRTAP5-2	2510161	104.13	146.16	218.98	198.77	2.10 *	0.0483
HPCAL1	4890735	58.53	19.12	122.63	25.05	2.10 *	0.0359
TCF7	3780471	31.30	9.17	64.98	19.00	2.08 *	0.0387
NUDT11	1170553	34.15	16.94	68.70	31.06	2.01 *	0.0339
IL28RA	4390543	121.73	31.68	244.68	70.11	2.01 *	0.0345
TRP53INP1	60291	34.35	11.85	69.03	9.07	2.01 *	0.0333
XPNPEP2	2070376	119.80	48.72	240.58	23.17	2.01 *	0.0378
NCAM1	3390731	242.95	96.11	126.38	121.42	0.52 *	0.0441
REM1	1850156	249.15	24.32	129.38	93.08	0.52 *	0.0386
RETNLA	1110709	1562.43	886.99	810.75	314.94	0.52 *	0.0248
PDK4	4120131	72.88	63.58	37.80	15.08	0.52 *	0.035
CENPK	4860600	72.48	10.56	37.38	17.37	0.52 *	0.0348
E130016E0	610039	248.75	46.75	127.48	52.37	0.51 *	0.0363
3300001PO	5700343	1494.83	281.99	746.00	286.64	0.50 *	0.0253
PDLIM4	2940615	6843.70	386.52	3341.90	2219.24	0.49 **	0.0056
OSR1	4250241	64.78	22.38	31.00	3.14	0.48 *	0.0423
CNP	6940079	1272.60	66.59	603.50	424.66	0.47 *	0.0453
NEGR1	70204	72.25	28.60	34.23	30.96	0.47 *	0.0223
MLZE	7100093	71.53	9.27	33.60	18.85	0.47 *	0.0226
CCL3	2760047	125.90	113.49	36.23	27.08	0.45 *	0.0111
ODZ3	4010524	121.98	19.31	54.83	31.73	0.45 *	0.0487

KRT16	2970392	9765.55	4261.99	4307.50	2886.79	0.44 ****	0.0001
NKAIN4	5490619	74.10	18.63	32.58	25.52	0.44 *	0.0126
CYR61	5900452	65.25	24.81	28.68	10.75	0.44 *	0.0279
MATN4	2600360	1608.93	284.55	706.28	564.03	0.44 **	0.0073
2210023G0	7100458	72.78	39.06	31.93	8.36	0.44 *	0.0141
INHBA	3060458	236.80	136.18	102.73	56.22	0.43 *	0.0207
MMP15	6370521	1416.03	94.19	605.03	480.21	0.43 *	0.0156
ZFP692	2570343	63.85	12.13	27.15	10.31	0.43 *	0.0274
HRNR	2360603	708.35	447.77	300.03	133.15	0.42 *	0.0418
GPR37L1	3130685	735.53	91.45	310.28	403.31	0.42 *	0.0342
ITGA2B	6590433	63.25	20.19	26.45	6.41	0.42 *	0.027
OTTMUSGC	2230703	64.80	53.26	27.03	14.34	0.42 *	0.0232
DTNA	1260025	67.58	4.48	28.15	19.13	0.42 *	0.0178
KLK11	1170612	115.00	38.29	47.80	10.93	0.42 *	0.0486
AQP3	3360161	1322.65	613.53	543.08	226.60	0.41 *	0.02
SIGLECH	6220164	55.78	27.80	22.65	8.28	0.41 *	0.0464
FOSB	6420520	66.78	35.87	26.65	16.30	0.40 *	0.0159
LIMS2	3180681	1491.40	173.53	585.50	252.07	0.39 **	0.0071
KRT6B	1090730	4685.95	2678.10	1828.45	869.49	0.39 *	0.0233
NSG2	2710341	247.35	37.91	95.95	145.19	0.39 **	0.0091
TUBB4	2600176	210.55	59.93	80.55	58.95	0.38 *	0.0249
MMP13	5690131	1336.38	739.17	507.15	237.58	0.38 *	0.0135
RBP2	2000273	233.75	64.36	88.25	40.97	0.38 *	0.0122
SPRR2H	6770204	62.55	51.77	23.28	2.35	0.37 *	0.0183
S100A8	1190546	7269.33	2164.62	2701.40	2436.94	0.37 ***	0.0003
EPHA3	620736	218.95	172.91	81.15	65.62	0.37 *	0.0175
D03001311t	430739	60.70	50.52	22.23	16.40	0.37 *	0.0208
KLHL30	1580168	219.13	61.75	80.13	46.38	0.37 *	0.0165
CHST3	2810315	222.13	33.76	79.73	71.73	0.36 *	0.0141
SEMA4F	1470521	322.40	48.29	114.83	36.13	0.36 *	0.0316
TCFL5	5900142	64.65	25.48	22.75	9.96	0.35 *	0.0118
TNC	5420605	109.20	63.44	37.65	23.89	0.34 *	0.0358
ALDH1L2	5810367	72.00	37.87	24.45	19.01	0.34 **	0.0043
ADAM23	3940286	5687.13	1199.18	1919.85	1787.43	0.34 **	0.003
AATK	6940196	4631.00	207.88	1561.90	1557.33	0.34 *	0.015
STFA1	3360056	11241.10	2440.06	3715.23	2094.17	0.33 ****	0.0001
SLC35F1	5890193	108.40	27.46	35.10	47.54	0.32 *	0.0316
NEURL	730754	1668.23	261.93	537.03	404.80	0.32 ***	0.0008
TMPRSS5	6040524	74.35	20.47	23.93	17.95	0.32 **	0.0025
LCE3A	1340521	60.10	51.93	19.15	8.85	0.32 *	0.0139
RASGEF1C	50440	1275.08	134.48	405.43	582.53	0.32 **	0.0096
RASGEF1C	1990086	296.65	26.22	92.93	133.98	0.31 *	0.0348
ALDH1L2	7560747	580.68	223.84	180.93	156.42	0.31 *	0.0462
4CYTL1	4050746	59.53	89.85	18.50	21.40	0.31 *	0.0137
GRIK5	3830390	49.10	11.24	15.05	13.35	0.31 *	0.0406
SERPINB2	4050762	341.55	270.68	103.90	47.43	0.30 *	0.0143
SPRR1B	6450228	3628.78	2420.42	1096.90	688.69	0.30 *	0.044
SNAPC3	6860082	53.48	10.07	16.13	10.57	0.30 *	0.0248
LOC100047	5890273	71.48	36.32	21.55	6.10	0.30 **	0.0027
DEGS2	1820592	68.90	64.39	20.53	10.46	0.30 **	0.0037
C1QTNF3	270671	118.10	129.09	34.98	9.17	0.30 *	0.0149
MDGA2	2810349	180.75	28.52	52.33	61.86	0.29 *	0.0267
GPR17	1410762	1574.43	340.96	451.13	604.28	0.29 ***	0.0009
FLRT1	4050022	56.88	15.37	15.70	15.58	0.28 *	0.0134
PSMD8	5420520	1276.58	820.86	350.35	492.09	0.27 **	0.0059
OTTMUSGC	270722	109.53	27.00	29.38	32.81	0.27 *	0.0188
SPRR2F	2760669	107.83	59.15	28.90	23.29	0.27 *	0.0207
B23031211f	1710286	94.35	57.22	25.03	35.96	0.27 *	0.0419
CNTN6	50767	347.75	64.37	91.53	108.58	0.26 **	0.0084

SLN	2030451	174.98	88.35	46.03	25.79	0.26 *	0.0261
MMP17	3440053	611.45	55.93	159.45	187.89	0.26 *	0.0245
RPTN	2690609	3337.50	2094.80	850.10	665.44	0.25 *	0.0478
KCNA1	520593	160.88	60.27	40.53	59.98	0.25 *	0.0377
APBA2	6550195	43.23	5.36	10.48	19.25	0.24 *	0.0489
KLK9	2630292	43.63	21.46	10.35	11.85	0.24 *	0.0454
KLK13	2450364	248.33	165.75	57.45	41.61	0.23 **	0.0011
IL24	6180609	111.03	59.37	24.90	21.08	0.22 *	0.0117
KLK13	7040110	71.45	43.43	15.53	8.69	0.22 ***	0.0008
ARG1	1190445	1059.08	482.12	225.95	59.92	0.21 *	0.0131
LCE3C	7040079	991.55	905.11	207.43	118.89	0.21 *	0.0198
ARTN	240608	56.28	30.91	11.55	5.05	0.21 **	0.0072
STFA2	5050047	4302.08	1497.60	879.58	910.00	0.20 **	0.0068
KLK13	4120598	212.53	132.39	43.18	35.74	0.20 **	0.0036
CCL4	6940184	595.85	348.57	119.18	71.80	0.20 **	0.0078
RPTN	2230288	979.85	704.73	195.50	157.29	0.20 *	0.0197
STK32A	2260039	181.70	113.63	33.00	15.76	0.18 *	0.0104
CXCL1	3610082	570.75	224.32	103.43	52.16	0.18 *	0.0201
LCE3B	450553	487.30	464.20	78.03	77.37	0.16 *	0.0348
2310007F0	4290446	704.88	654.77	108.70	94.65	0.15 **	0.0032
ATF4	2480692	174.98	91.70	26.10	3.33	0.15 *	0.0103
IFI202B	650601	39.28	42.38	5.53	2.22	0.14 *	0.0424
CRTAC1	1190437	205.65	123.43	28.63	32.55	0.14 **	0.0023
IL1RL1	3870291	132.35	157.86	17.93	3.52	0.14 *	0.0481
DEFB14	2320681	941.38	1158.30	125.05	75.91	0.13 *	0.0154
SPRR2I	4880070	74.43	61.52	9.45	15.48	0.13 ***	0.0001
LCE3B	1820091	145.88	177.41	15.90	15.92	0.11 *	0.0249
SPRR2K	3170121	107.75	137.80	10.15	16.08	0.09 **	0.0043
IL1B	3420754	550.08	573.16	51.38	33.35	0.09 *	0.0133
CCL4	7150500	92.95	63.07	8.60	5.84	0.09 *	0.0497
EG408196	6180735	1000.70	850.69	81.78	105.99	0.08 **	0.0063
LCE3F	1660754	866.73	781.35	60.75	77.23	0.07 *	0.0167
GZMD	3390280	98.68	57.84	4.95	3.24	0.05 **	0.0061
TOMM22	1010497	710.00	398.84	35.00	2.12	0.05 ***	0.0009
CXCL2	5390639	178.98	106.77	4.13	1.38	0.02 **	0.0026
EG433016	4260025	100.78	147.18	2.25	3.89	0.02 **	0.004
TREM1	4280504	97.75	37.79	0.63	6.33	0.01 **	0.0042

SI table 4b Chemokine expression in mouse tumors

	Probe ID	mean	SD	mean	SD	FC	Two-way ANOVA
CCL11	6060520	406.08	110.75	1190.88	543.19	3.26	< 0.05
CCL19	4220717	60.68	12.62	134.15	63.02	2.21	
CXCL10	3140209	26.00	8.25	48.40	36.39	1.86	
CCL24	7330681	36.75	12.47	48.33	26.46	1.31	
CXCL13	3060040	8.58	4.87	11.00	5.19	1.28	
CCL21A	1710612	1137.90	716.89	1454.10	128.60	1.28	
CCL5	1690768	55.45	27.10	70.20	56.62	1.27	
CCL2	110112	29.98	8.82	37.70	10.22	1.26	
CCL27	5340358	1260.90	313.78	1418.70	110.74	1.13	
CCL9	7050538	1395.73	109.47	1543.13	388.56	1.11	
CXCL16	630274	617.08	74.09	620.25	168.98	1.01	
CCL6	7040717	165.55	27.69	163.13	47.11	0.99	
CCL22	3290674	6.98	2.63	6.75	3.90	0.97	
CXCL12	7550112	1619.93	234.43	1565.35	247.28	0.97	
CXCL4	4040524	263.28	90.35	248.73	44.74	0.94	
CCL7	4670674	148.35	14.55	137.15	22.69	0.92	
CCL21C	4230315	842.13	690.55	744.38	197.33	0.88	
CCL1	1190241	55.80	17.79	49.00	35.55	0.88	
CXCL9	10598	107.45	27.19	88.55	12.65	0.82	
CCL25	6900546	109.63	10.34	74.55	21.73	0.68	
CCL17	6620437	128.65	68.12	84.43	36.60	0.66	
CXCL14	3520349	477.33	35.51	313.20	92.45	0.66	
CCL3	2760047	80.90	107.38	36.23	27.08	0.45	< 0.01
CXCL1	3610082	335.75	279.68	103.43	52.16	0.31	< 0.05
CXCL2	5390639	82.15	121.67	4.13	1.38	0.05	< 0.01
CCL4	7150500	358.35	452.48	8.60	5.84	0.02	< 0.01

	Probe ID	mean	SD	mean	SD	FC
CXCR4	160392	94.925	5.1678695	147.65	57.512542	1.5554385
CXCR3	5810576	14.4	7.7501613	21.45	13.09895	1.4895833
CCR6	1010132	55.1	11.721988	57.85	16.637683	1.0499093
CCR5	1240646	39.65	17.542306	39.325	13.941731	0.9918033
CCR7	2570291	12.025	4.4024851	8.725	3.840817	0.7255717

SI table 5a Genotyping primer

Target	5' Primer	3' Primer	3' Primer	WT product	Mut product
Tyr:Cre-ER	ccaccagcttgcgatgctc	acgttgatgccggtgaacg	n.a.	0	570
BrafV600E	tgagtattttgtggcaactgc	ctctgctgggaaagcggc	n.a.	185	308
PTEN WT	gtcaccaggatgcttctgac	gtgacatcaacatgcaacactg	n.a.	500	0
PTEN FL	gtcaccaggatgcttctgac	gaaacggccttaacgacgtag	n.a.	0	500
CAT-STA	agaatcacggtagctgggttaa	acattcataaaggacttgggaggtgt	n.a.	600	900
RosaYFP	aaagtcgctctgagttgttat	aagaccgcgaagagttgtc	ggagcgggagaaatggatag	600	320
RosaSIY	aaagtcgctctgagttgttat	aagaccgcgaagagttgtc	aaatcagagagatcctcataaagg	235	190
Batf3	tgctatgcacaaccacaacc	gttgtgagtcgaaaccacgc	gatacaggctgctgatctgag	288	600

SI table 5b Antibodies

Antigen	Fluorophore	clone	dilution	vendor
CD103	APC	2E7.	1/200	eBio
CD11b	PE	M1/70	1/200	eBio
CD11b	PerCP-Cy5.5	M1/70	1/200	BD
CD11b	PE-Cy7	M1/70	1/200	Bioleg
CD11c	APC-CY7	N418	1/200	BioLeg
CD19	PB	eBio1D3	1/200	ebioscience
CD205 (DEC205)	PE-Cy7	205yekta	1/200	ebioscience
CD207 (Langerin)	AF488	eBioRMUL.2	1/100	ebioscience
CD223 (Lag3)	APC	C9B7W	1/200	BioLeg
CD223 (Lag3)	PE	C9B7W	1/200	eBio
CD279 (PD-1)	PE-Cy7	RMP1-30	1/200	BioLeg
CD279 (PD-1)	APC	RMPI-30	1/200	Invitrogen
CD3	AX700	17A2	1/200	eBio
CD3e	Ef450	145-2C11	1/200	ebioscience
CD4	PerCP-Cy5.5	RM4-5	1/200	BioLeg
CD40	PE	3/23.	1/200	BD
CD44	FITC	IM7	1/200	BD
CD45	AX488	30-F11	1/200	BioLeg
CD45	PE	30-F11	1/200	Bioleg
CD45RA	PE	14.8	1/200	BD
CD62L	PE-Cy7	MEL-14	1/200	ebioscience
CD80	APC	16-10A1	1/200	BD
CD86	FITC	GL1	1/200	PharMingen
CD8a	APC-CY7	53-6.7	1/200	BioLeg
CD8a	PE	53-6.7	1/200	PharMingen
CD8a	PerCP	53-6.7	1/200	BD
F4/80	FITC	BM8	1/400	Abcam
F4/80	PerCP-Cy5.5	BM8	1/400	eBio
F4/80	PB	Bm8	1/400	BioLegend
FC BLOCK		93	1/200	BioLeg
Fixable Viability	eFlour 450	Amine-reactive	1/200	eBio
Foxp3	APC	FJK-16a	1/200	eBio
gdTCR	PE	GL3	1/200	BD
Gr1	APC	RB6-8C2	1/100	BD
Gr1	Ax700	RB6-8C5	1/100	ebioscience
I-A/I-E	AX700	M5/114.15.2	1/200	eBio
I-A/I-E	PE-Cy7	M5/114.15.2	1/200	Bioleg
Ly6C	PerCP-Cy5.5	HK1.4	1/200	ebioscience
Streptavidin	APC		1/500	BD
TCRbeta	AX700	H57-597	1/100	Biolegend

SI table 5c Primer Probe

Target	5' Primer	3' Primer	Probe (TaqMan)	Sybr green
ATF3	GCTGGAGTCAGTTACCGTCAA	CGCCTCCTTTTCTCTCAT		yes
Batf3	AGAAGGCTGACAAGCTCCAC	CCTTCAGCTTCGAAATCTCC		yes
CCL2	CATCCACGTGTTGGCTCA	GATCATCTTGCTGGTGAATGAGT		yes
CCL3/Mip1a	TGCCCTTGCTGTTCTTCTCT	GTGGAATCTTCCGGCTGTAG		yes
CCL4/Mip1b	GCCCTCTCTCCTCTTGCT	GGAGGGTCAGAGCCCATT		yes
CCR5	TCATGTTAGATTTGTACAGCTCTCCT	TGACCTTGAAAATCCATCC	82	no
CXCL1	AGACCATGGCTGGGATTAC	AGTGTGGCTATGACTTCGGT		yes
CXCL2	ACTGAACAAAGGCAAGGCTAAC	CTTCGGTTGAGGGACAGCAG		yes
CXCR2	CTCTGCTCACAAACAGCGTC	CAGAATAGAGGGCATGCCAGA		yes
e-catherin	ATCCTCGCCCTGCTGATT	ACCACCGTTCTCCTCCGTA	18	no
IFNb	GGAAAGATTGACGTGGGAGA	CCTTTGCACCTCCAGTAAT	108	no
IFNg	GGAGGAACTGGCAAAGGAT	TTCAAGACTTCAAAGAGTCTGAGG		yes
IL10	CAGAGCCACATGCTCCTAGA	TGTCCAGCTGGTCTTTGTT	41	no
IL2	AACCTGAAACTCCCCAGGAT	TCATCGAATTGGCACTCAA		yes
IL4	CATCGGCATTTTGAACGAG	CGAGCTCACTCTGTGGTG		yes
IL6	GCTACCAAAGTGGATATAATCAGGA	CCAGGTAGCTATGGTACTCCAGAA		yes
IRF8	CCGGCAAGCAGGATTACA	GCTTTGTCTCCCTCTTAAACTTC		yes
Itgae	GCAGAGAACCACAGGACGA	CAATGATGAGAGGCAAAGAGC		yes
PD-L1	CCATCCTGTTGTTCTCATTG	TCCACATCTAGCATTCTCACTTG		yes
TGFb	GCAGCTCCTCATCGTGTG	AGAGGTGGCAGAAACTGTAAT		yes
EFNB3 human	TGGAACCTCGGCGAATAAGAG	CGATCTGAGGGTACAGCACA		yes
APC2 human	GTGCCATGAACGAGCTAGG	TCTTGTGCATCTCATAGTCAACC		yes
TCF1 human	GTGACCCAGAGCCCCTTC	GGGCTTGTGGCTGTAGAGG		yes
myc human	GAACCAGAGAAACCTAACAGTGC	CGAAGCAGCTCTATTTCTGGA		yes
TCF12 human	GTGGTTGGATGCGGAGAC	AGCTCCTTGTGGTCCCTA		yes
VEGFA human	TGCCCGCTGCTGTCTAAT	TCTCCGCTCTGAGCAAGG		yes
CCL4 human	CTCTCCAGCGCTCTCAGC	ACCACAAAGTTGCGAGGAAG		yes
ATF3 human	CGTGAGTCCTCGGTGCTC	GCCTGGGTGTTGAAGCAT		yes

SI table 5d ChIP assay primer

Target	5' Primer	3' Primer
CCL2	GTCCTGTCATGCTTCTGGG	GGTGATATGCTGGGAAGGG
CCL4	TGTCTGCCCTCTCTCCTC	CCCCAGTTGGAAGACTGGAC
CCL4 human	CTGTACCACTTCCTTTTCTTCTC	CTGAAGCTAGCTGAGTGAGGAGTT
CCL2 human	TCTGCAGTTTTCGCTTCAGAG	GGCTGGAGGCGAGAGTGCGAGC

SI table 5e siRNA oligos

Target	5' oligo	3' oligo
ATF3	AAACAGCAUUUGAUUACAtt	UGUAUAUCAAAUGUCUGUUUct
CTNNB1	CACUUGCAAUAAUACAAAtt	UUUGUAAUUAUUGCAAGUGag
ATF3 human	GCAAAGUGCCGAAACAAGAtt	UCUUGUUUCGGCACUUUGCag
CTNNB1 human	GGAUGUUCACAACCGAAUUt	AAUUCGGUUGUGAACAUCc
control	number	4390843