

Supplementary Appendix;

Figures S1-S16.

Supplementary Appendix; Figure S1. FACS-Purified reporter⁺ T cells reveal greater transcriptional resolution than bulk CD4 cells. CD4 T cells were purified and polarised under Th1, Th2, Th9, Th17 and iTreg conditions *in-vitro*. Either all cells (Bulk) or FACS-purified *Ifnγ^{yfp+}*, *Il4^{gfp+}*, *Il9^{Cre}R26^{eYFP+}* *Il17a^{Cre}R26^{eFP635}* reporter positive cells were isolated, RNA extracted and used for miRNA and mRNA transcriptional analysis. The mean of 3-5 biological replicates per T cell subset are represented in each heat map.

a, Hallmark Th and Treg genes are shown.

b, Venn diagrams (top) depicting numbers of common and exclusive mRNA and miRNAs expressed in bulk and purified Th2 cells (2-fold change). Bottom: Heat maps showing expression of mRNA and miRNAs in Th2 cells, relative to un-polarised cells.

Supplementary Appendix; Figure S2. FACS-Purified reporter⁺ T cells reveal significant IL-4-signaling resolution. CD4 T cells were purified and polarised under Th1, Th2, Th9, Th17 and iTreg conditions *in vitro*, using cytokine reporter cells. Either all cells (Bulk) or FACS-purified *Ifnγ^{yfp+}*, *Il4^{gfp+}*, *Il9^{Cre}R26^{eYFP+}* *Il17a^{Cre}R26^{eFP635}* reporter positive cells were isolated (**a**). Using Ingenuity pathways analysis, the IL-4 signaling pathway was overlaid with the gene expression profile of bulk, or cytokine-reporter purified cells (**b, c**).

Supplementary Appendix; Figure S3. Naïve CD4 T cells were polarised *in vitro*, as described in methods, with mRNA and miRNA transcriptional profiles used for comparative analysis.

a, Comparative analysis showing common and unique mRNA (left) and miRNA (right) transcripts in each T cell subset (>5 fold-change). Unique transcripts in Th2 cells highlighted in red square.

b, Selection of Th2-enriched mRNAs (left) and miRNAs (right).

Supplementary Appendix; Figure S4. Fold change filters identify more abundant, and putatively more specific *in vitro* Th2 transcripts. Comparative analysis showing common and unique mRNA (top) and miRNA (bottom) transcripts in each *in vitro* generated T cell subset, as in Figure 1, (>2 fold-change, top two

tables, >10 fold-change, lower two tables). Unique transcripts in Th2 cells in red highlighted square.

Supplementary Appendix; Figure S5. General down-regulation of miRNAs and miRNA processing pathways in cytokine⁺ or TF⁺ cells. Fold change of all miRNAs, relative to naïve T cells, identified in *in vitro* and *ex vivo* cells, showing the mean (average) and frequency of up-regulated and down-regulated miRNAs (**a**). Expression miRNA biogenesis, processing and functional partners in all T cell samples *in vitro* and *ex vivo* (**b**).

Supplementary Appendix; Figure S6. Fold change filters identify more abundant, and putatively more specific *ex vivo* Th2 transcripts. Comparative analysis showing common and unique mRNA (top) and miRNA (bottom) transcripts in each *ex vivo* isolated T cell subset, as in Figure 2, (>2 fold-change, top two tables, >10 fold-change, lower two tables). Unique transcripts in Th2 cells in red highlighted square.

Supplementary Appendix; Figure S7. Transcriptional analysis of FACS-purified reporter⁺ T cells reveals diversity between Th2 populations. From 4-way Venn diagrams showing comparative analysis of common and unique mRNA (**a**) and miRNA transcripts (**b**) between Th2 subsets (as depicted in **Figure 1i**).

In **a** and **b**, left, total number of unique (only expressed in one Th2 sample), commonly expressed in two Th2 samples (pair, middle) and transcripts differentially expressed in 3 or more Th2 samples (cluster, right).

Supplementary Appendix; Figure S8. Increasing fold change filters identify more abundant, and putatively more specific *Heligmosomoides polygyrus* 1^o-elicited Th2 transcripts. Comparative analysis showing common and unique mRNA (top) and miRNA (bottom) transcripts in each *ex vivo* isolated T cell subset, as in Figure 2, (>2 fold-change, upper left tables; >5 fold-change, lower left tables >10 fold-change, upper right two tables). Unique transcripts in Th2 cells in red highlighted square.

Supplementary Appendix; Figure S9. Increasing fold change filters identify more abundant, and putatively more specific *Heligmosomoides polygyrus* 2^o-elicited Th2 transcripts. Comparative analysis showing common and unique mRNA

(top) and miRNA (bottom) transcripts in each *ex vivo* isolated T cell subset, as in Figure 2, (>2 fold-change, upper left tables; >5 fold-change, lower left tables >10 fold-change, upper right two tables). Unique transcripts in Th2 cells in red highlighted square.

Supplementary Appendix; Figure S10. Four way comparative analyses identifies 82 common mRNA and 14 common miRNA transcripts in *ex vivo* and *in vitro*-derived Th2 cells. Using a 4-way comparative analysis on gene expression profiles from Th2 samples, 82 commonly expressed mRNA transcripts (a) and 14 commonly expressed miRNAs (b) were identified.

Supplementary Appendix; Figure S11. Expression pairing using Th2-enriched mRNA and miRNA transcripts identifies distinct candidate miRNAs from *in vitro* and *ex vivo* Th2 cells.

a-d, Using Th2-enriched gene lists, as described in figure 2, expression-pairing analysis (i.e. elevated miRNAs with predicted mRNA targets that are significantly down regulated, and vice versa) shown at various fold change filters for in vitro derived (**a**), HDM-induced (**b**), *H.p.* 1° (**c**) and *H.p.* 2° (**d**) Th2 cells. Bar charts on right showing the frequency of mRNA targets identified for each miRNA.
e, Total number of mRNAs targeted and inversely expressed in each Th2 sample by each candidate miRNA.
f, Expression of candidate miRNAs in each Th2 sample, relative to naïve T cells.

Supplementary Appendix; Figure S12. Dynamic expression of candidate miRNAs and their mRNA targets in vitro and ex vivo. Naïve T cells were cultured under Th2-polarising conditions. At indicated days post-polarization, IL4^{gfp+} cells were FACS purified for RNA analysis.

a, Expression of candidate miRNAs (top and middle, highlighting day 7 expression levels) and Th2-associated genes (bottom), expressed as relative fold change to RNU6b or HPRT, as indicated.
b, Expression of selected mRNA targets of each candidate miRNA at indicated times post polarisation.
c, Expression of miR-155, miR-146a and their target genes in Th2 cells isolated from the airspaces (bronchoalveolar lavage fluid (BAL)) or local thoracic lymph nodes (tLN) of HDM-challenged mice. Data expressed relative to RNU6b or HPRT.

Supplementary Appendix; Figure S13. Four way comparative analyses of mRNA targets of selected miRNA candidates, across all 4 Th2 samples.

Left, We used a 4-way analysis, depicted as a 4-way Venn diagram, to identify miRNAs, which target the same mRNA in each Th2 subset (**a-e**). For example, miR-146a targeted 44 mRNAs in HDM Th2 cells, but none of these mRNAs were predicted targets of miR-146a in other Th2 samples. In contrast miR-146a was predicted to target, and had inverse expression, with the same 14 mRNAs in HDM Th2 cells and both *H. polygyrus*-elicited Th2 cells. Right, Selected mRNA targets and expression in each Th2 subset, relative to naïve T cells. Fold change is relative to naïve CD4⁺ T cells.

Supplementary Appendix; Figure S14. Baseline Th and Treg cell responses in chimera systems. a, Schematic representation of the generation of miR-146a mixed T cell bone marrow chimeric mice.

b. Frequency of CD4⁺CD25⁺Foxp3⁺ cells in the spleen of naïve chimeric mice after 6-8 weeks of re-constitution.

c. Frequency of Th1 (IFN γ ⁺), Th2 (IL-5⁺ or IL-13⁺) and Th17 (IL-17⁺) cells in the spleen of naïve chimeric mice after 6-8 weeks of re-constitution.

d. Schematic representation of the generation of miR-155 mixed T cell bone marrow chimeric mice.

e. Frequency of CD4⁺CD25⁺Foxp3⁺ cells in the spleen of naïve chimeric mice after 6-8 weeks of re-constitution.

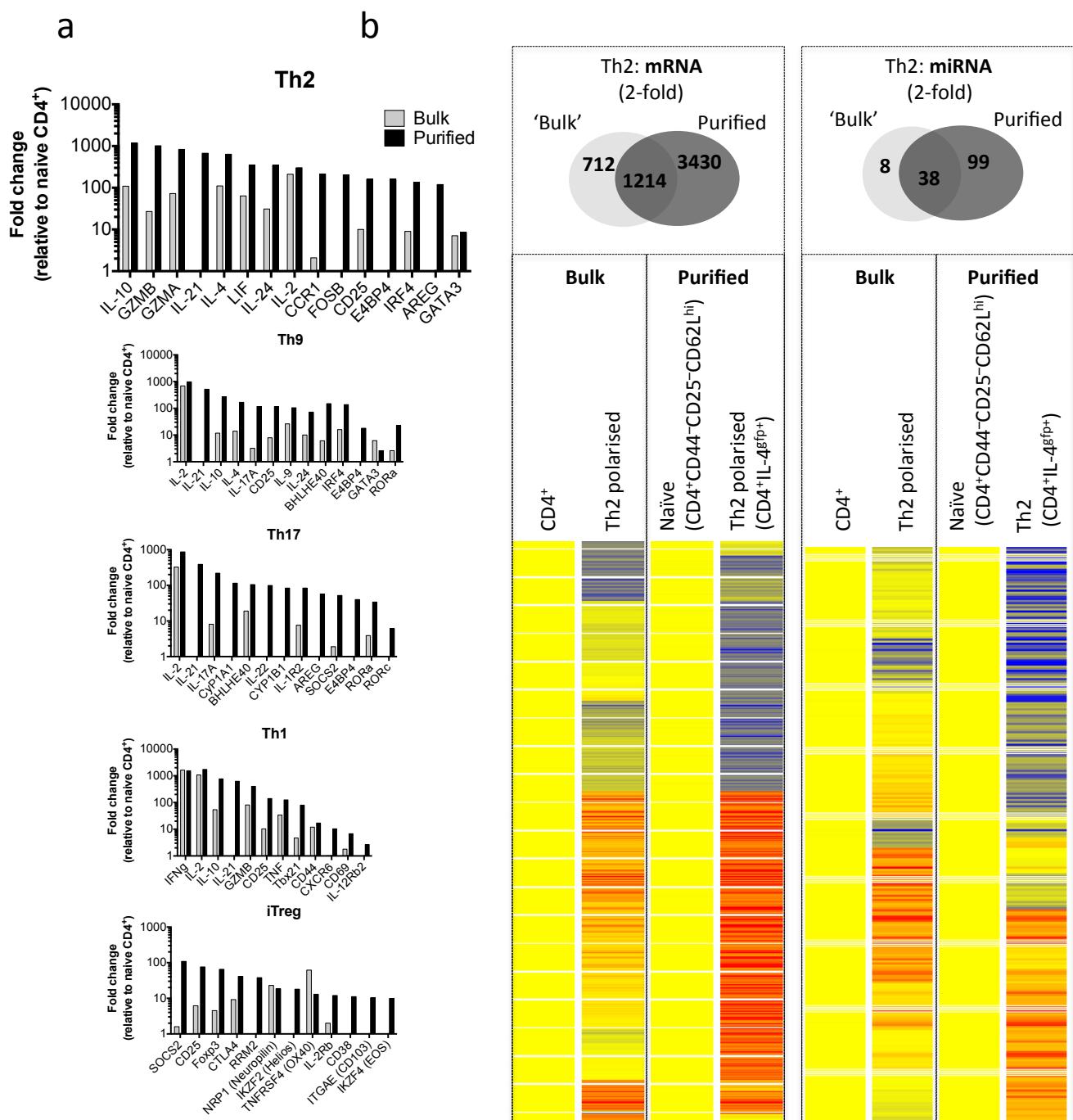
f. Frequency of Th1 (IFN γ ⁺), Th2 (IL-5⁺ or IL-13⁺) and Th17 (IL-17⁺) cells in the spleen of naïve chimeric mice after 6-8 weeks of re-constitution.

Supplementary Appendix; Figure S15. miR-155 is not required for anti-malarial Th1 response. WT and miR-155^{-/-} mice were infected (i.p.) with 10⁵ *P. chabaudi* infected RBCs.

a, Total splenocytes were counted at day 8 following infection. **b,** Whole blood was recovered with hematology assessed using a vetscan system. **c,** Splenic Th1 cells were assessed following PMA and ionomycin stimulation and intracellular cytokine staining. **d,** The percentage of infected red blood cells were enumerated on fresh blood smears.

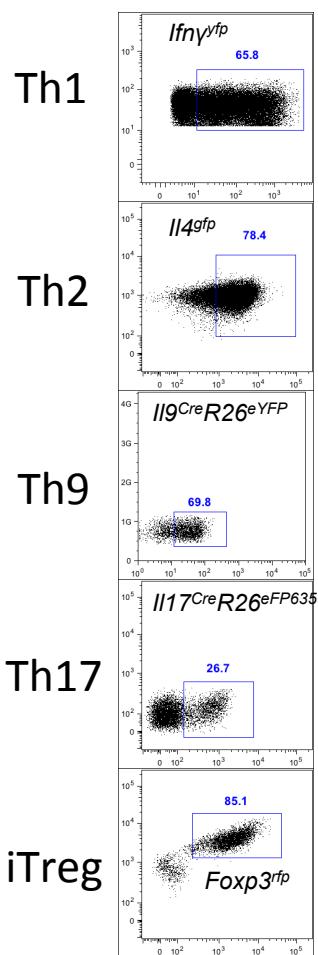
Supplementary Appendix; Figure S16. S1pr1 siRNA. a, Naïve WT T cells were treated with S1pr1 siRNA (nM) or with scrambled control siRNA. Cells were incubated for 24 hours before S1pr1 was determined by qRT-PCR.

Supplementary Appendix; Figure S1.



Supplementary Appendix; Figure S2

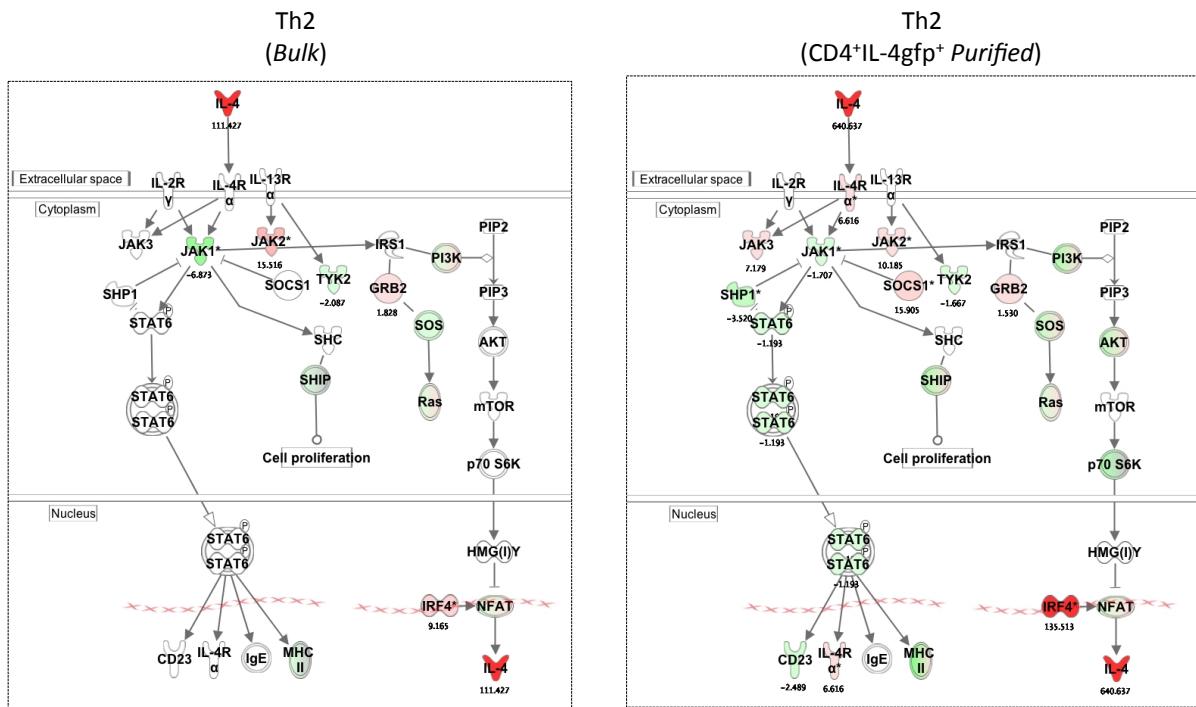
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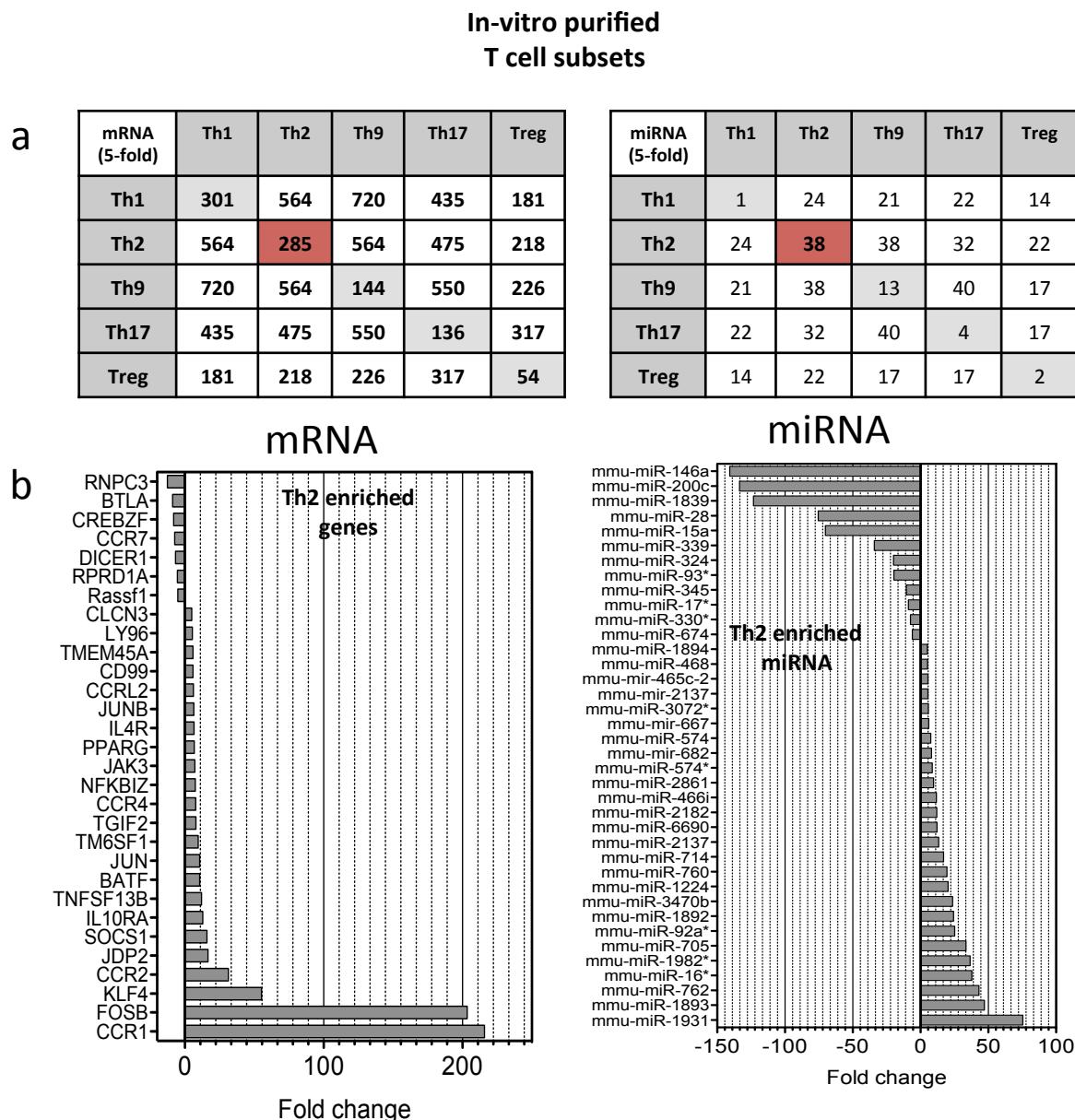
c.

Symbol	IL-4 signaling pathway		Type(s)	Entrez ID
	Th2 (Bulk)	Th2 (Purified)		
	Fold change			
IL4	111.427	640.637	cytokine	16189
IRF4	9.165	135.513	transcription regulator	16364
SOCS1	-	15.905	other	12703
JAK2	15.516	10.185	kinase	16452
JAK3	-	7.179	kinase	16453
IL4R	-	6.616	transmembrane receptor	16190
NFATC1	4.585	4.592	transcription regulator	18018
NFAT5	1.448	2.709	transcription regulator	54446
INPPL1	-	2.577	phosphatase	16332
RRAS	-	2.095	enzyme	20130
AKT2	-	2.008	kinase	11652
NRAS	-1.236	-2.002	enzyme	18176
NFATC3	-1.736	-2.117	transcription regulator	18021
RRAS2	1.664	-2.172	enzyme	66922
KRAS	1.704	-2.327	enzyme	16653
FCER2	-	-2.489	transmembrane receptor	14128
NR3C1	1.124	-2.503	ligand-dependent nuclear receptor	14815
ATM	-	-2.832	kinase	11920
PIK3CD	-1.395	-3.032	kinase	18707
PIK3R5	-	-3.205	kinase	320207
PTPN6	-	-3.520	phosphatase	15170
SOS1	-2.284	-3.582	other	20662
AKT3	-	-3.867	kinase	23797
RPS6KB1	-	-4.471	kinase	72508
PIK3R1	-2.049	-4.650	kinase	18708

b.



Supplementary Appendix; Figure S3



Supplementary Appendix; Figure S4.

In-vitro purified
T cell subsets

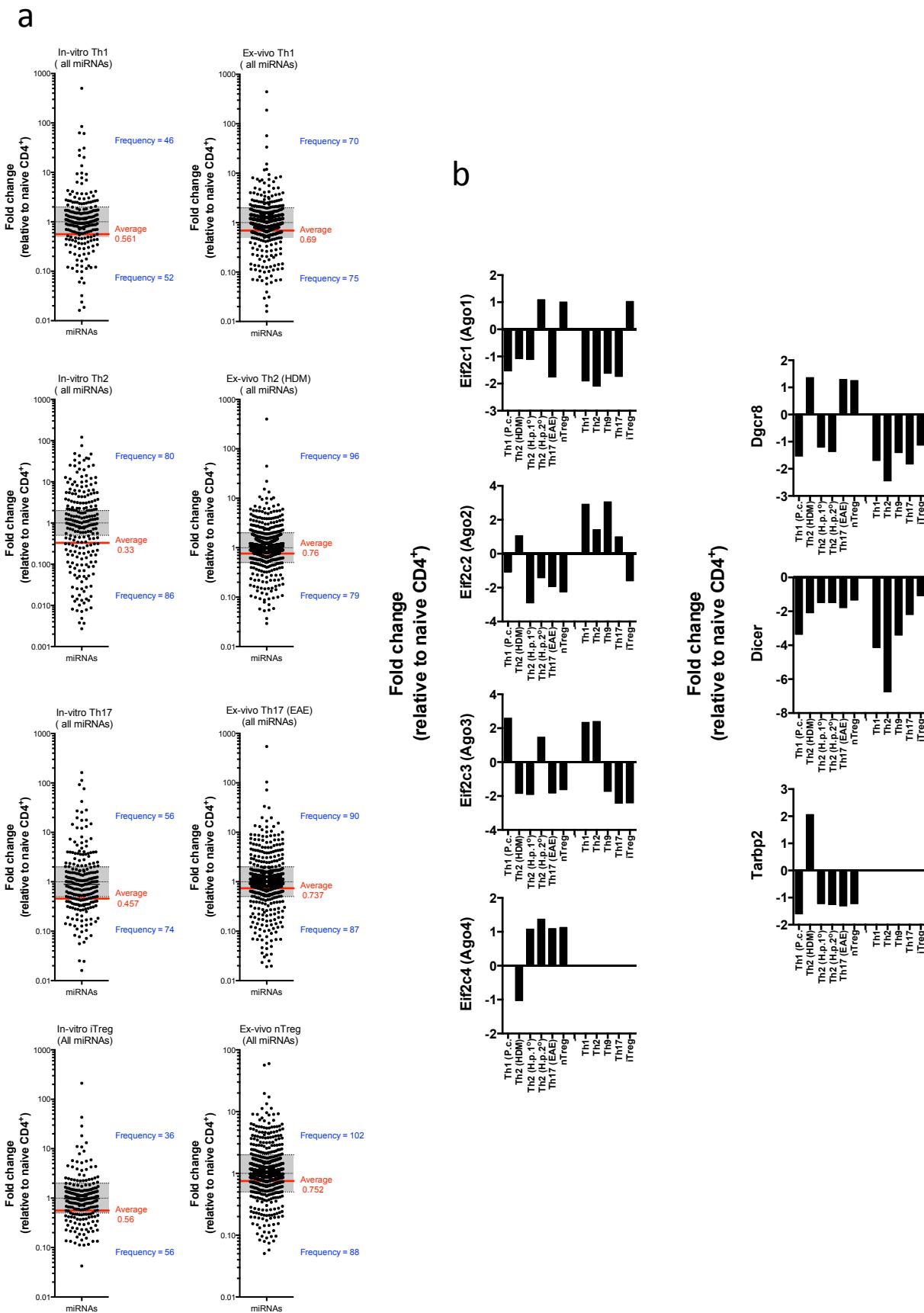
2-fold change					
mRNA (2-fold)	Th1	Th2	Th9	Th17	Treg
Th1	593	3119	3615	2772	1422
Th2	3119	613	3073	2935	1461
Th9	3615	3073	317	3023	1494
Th17	2772	2935	3023	347	1758
iTreg	1422	1461	1494	1758	99

miRNA (2-fold)	Th1	Th2	Th9	Th17	Treg
Th1	3	81	78	77	69
Th2	81	27	92	94	80
Th9	78	92	12	105	72
Th17	77	94	105	8	73
iTreg	69	80	72	73	2

10-fold change					
mRNA (10-fold)	Th1	Th2	Th9	Th17	Treg
Th1	93	222	272	154	55
Th2	222	124	231	179	73
Th9	272	231	74	239	88
Th17	154	179	239	42	104
iTreg	55	73	88	104	30

miRNA (10-fold)	Th1	Th2	Th9	Th17	Treg
Th1	1	15	10	11	6
Th2	15	35	17	15	5
Th9	10	17	11	18	8
Th17	11	15	18	2	6
iTreg	6	5	8	6	1

Supplementary Appendix; Figure S5



Supplementary Appendix; Figure S6

Ex-vivo isolated
T cell subsets

2-fold change				
mRNA (2-fold)	Th1 P.C	Th2 HDM	Th17 E.A.E.	nTreg
Th1 P.C	734	1798	2059	678
Th2 HDM	1798	1278	1811	690
Th17 E.A.E.	2059	1811	569	845
nTreg	678	690	845	84

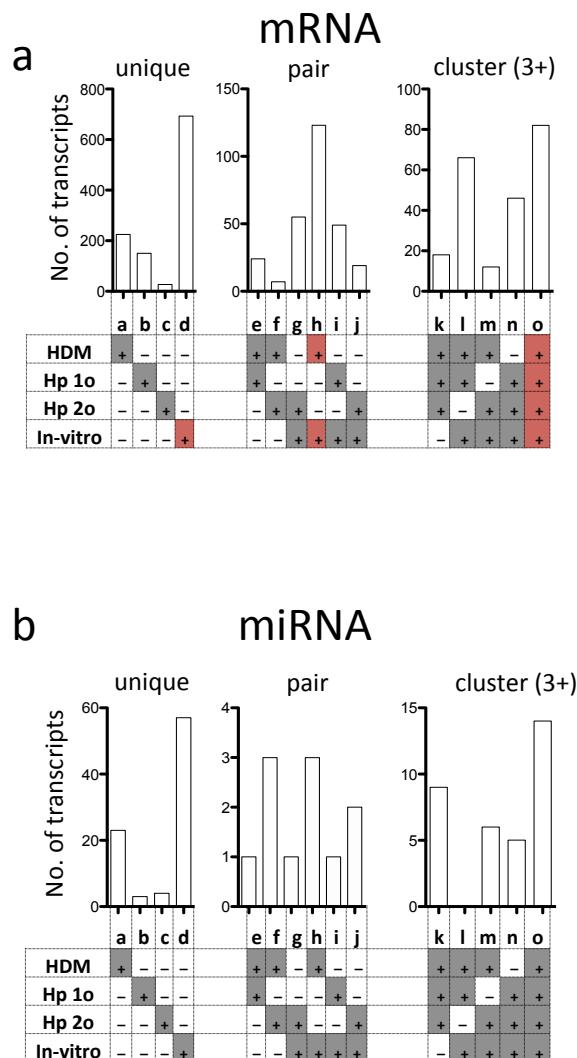
miRNA (2-fold)	Th1 P.C	Th2 HDM	Th17 E.A.E.	nTreg
Th1 P.C	7	106	114	101
Th2 HDM	106	10	126	126
Th17 E.A.E.	114	126	9	131
nTreg	101	126	131	20

10-fold change				
mRNA (10-fold)	Th1 P.C	Th2 HDM	Th17 E.A.E.	nTreg
Th1 P.C	76	86	129	0
Th2 HDM	86	70	86	0
Th17 E.A.E.	129	86	111	2
nTreg	0	0	2	0

miRNA (10-fold)	Th1 P.C	Th2 HDM	Th17 E.A.E.	nTreg
Th1 P.C	3	14	19	12
Th2 HDM	14	3	16	12
Th17 E.A.E.	19	16	15	14
nTreg	12	12	14	2

Supplementary Appendix; Figure S7

Ex-vivo isolated Th2 subsets



Supplementary Appendix; Figure S8

Hp 1° (Th2-enriched mRNA and miRNA)

2-fold change

mRNA (2-fold)	Th1 P.C.	Th2 Hp 1°	Th17 E.A.E.	nTreg
Th1 P.C.	927	1610	2059	678
Th2 Hp 1°	1610	281	1854	892
Th17 E.A.E.	2059	1854	626	845
nTreg	678	892	845	58

miRNA (2-fold)	Th1 P.C.	Th2 Hp 1°	Th17 E.A.E.	nTreg
Th1 P.C.	8	83	114	101
Th2 Hp 1°	83	4	82	72
Th17 E.A.E.	114	82	10	131
nTreg	101	72	131	32

10-fold change

mRNA (10-fold)	Th1 P.C.	Th2 Hp 1°	Th17 E.A.E.	nTreg
Th1 P.C.	79	66	129	0
Th2 Hp 1°	66	36	73	1
Th17 E.A.E.	129	73	112	2
nTreg	0	1	2	0

miRNA (10-fold)	Th1 P.C.	Th2 Hp 1°	Th17 E.A.E.	nTreg
Th1 P.C.	1	16	19	12
Th2 Hp 1°	16	0	16	9
Th17 E.A.E.	19	16	14	14
nTreg	12	9	14	3

5-fold change

mRNA (5-fold)	Th1 P.C.	Th2 Hp 1°	Th17 E.A.E.	nTreg
Th1 P.C.	186	215	310	9
Th2 Hp 1°	215	146	277	33
Th17 E.A.E.	310	277	192	23
nTreg	9	33	23	3

miRNA (5-fold)	Th1 P.C.	Th2 Hp 1°	Th17 E.A.E.	nTreg
Th1 P.C.	2	30	50	31
Th2 Hp 1°	30	1	30	22
Th17 E.A.E.	50	30	18	45
nTreg	31	22	45	12

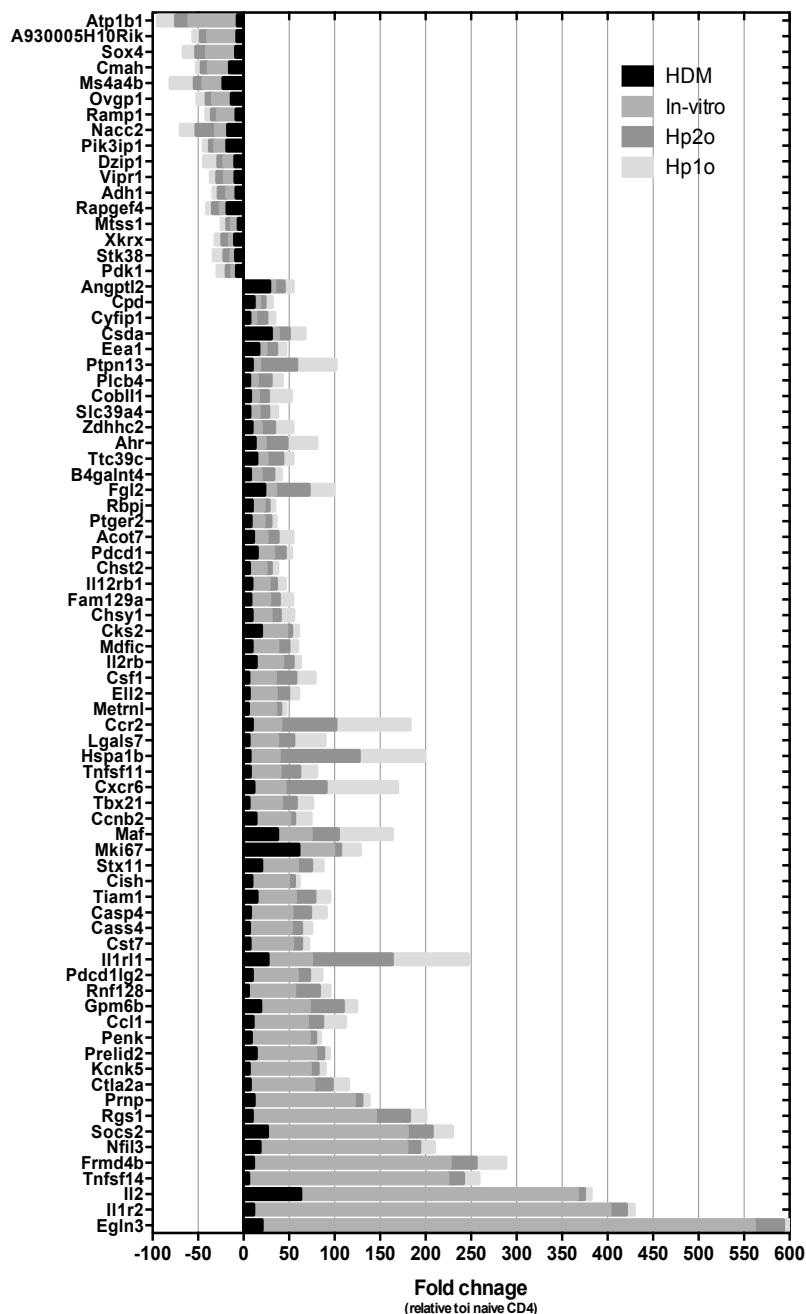
Supplementary Appendix; Figure S9

Hp 2° (Th2-enriched mRNA and miRNA)

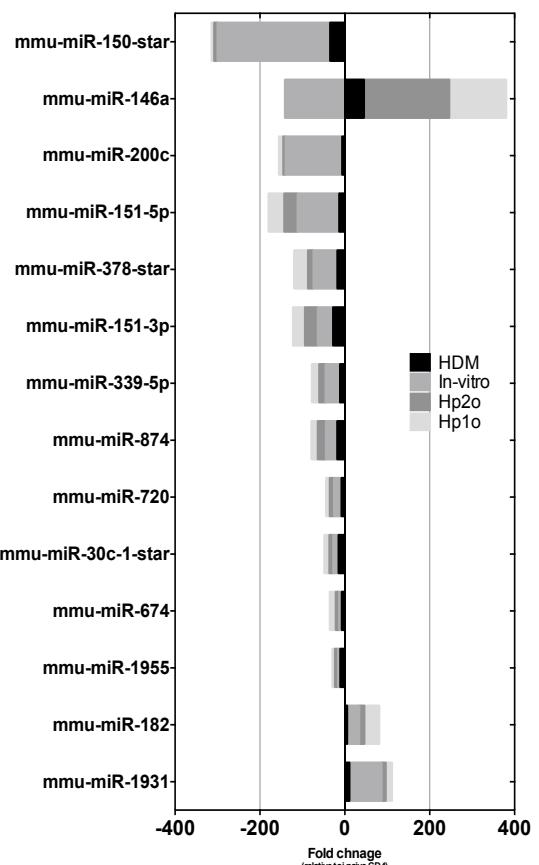
		2-fold change						10-fold change				
		mRNA (2-fold)	Th1 P.C.	Th2 Hp 2°	Th17 E.A.E.	nTreg	mRNA (2-fold)	Th1 P.C.	Th2 Hp 2°	Th17 E.A.E.	nTreg	
mRNA	miRNA (2-fold)	Th1 P.C.	954	1144	2059	678	miRNA (2-fold)	Th1 P.C.	79	46	129	0
	Th1 P.C.	1144	214	1201	468	468	Th1 P.C.	46	31	52	0	
	Th17 E.A.E.	2059	1201	697	845	845	Th17 E.A.E.	129	52	112	2	
	nTreg	678	468	845	103	103	nTreg	0	0	2	0	
		miRNA (2-fold)	Th1 P.C.	Th2 Hp 2°	Th17 E.A.E.	nTreg	miRNA (2-fold)	Th1 P.C.	Th2 Hp 2°	Th17 E.A.E.	nTreg	
miRNA	Th1 P.C.	8	97	114	101	101	Th1 P.C.	2	15	19	12	
	Th2 Hp 2°	97	3	106	100	100	Th2 Hp 2°	15	2	14	10	
	Th17 E.A.E.	114	106	11	131	131	Th17 E.A.E.	19	14	16	14	
	nTreg	101	100	131	30	30	nTreg	12	10	14	3	
		5-fold change										
mRNA	mRNA (10-fold)	Th1 P.C.	Th2 Hp 2°	Th17 E.A.E.	nTreg	mRNA	miRNA (10-fold)	Th1 P.C.	Th2 Hp 2°	Th17 E.A.E.	nTreg	
	Th1 P.C.	170	145	310	9		Th1 P.C.	2	34	50	31	
	Th2 Hp 2°	145	62	142	8		Th2 Hp 2°	34	3	37	26	
	Th17 E.A.E.	310	142	229	23		Th17 E.A.E.	50	37	15	45	
		miRNA (10-fold)	Th1 P.C.	Th2 Hp 2°	Th17 E.A.E.	nTreg	miRNA (10-fold)	Th1 P.C.	Th2 Hp 2°	Th17 E.A.E.	nTreg	
miRNA	Th1 P.C.	2	34	50	31	31	Th1 P.C.	2	34	50	31	
	Th2 Hp 2°	34	3	37	26	26	Th2 Hp 2°	34	3	37	26	
	Th17 E.A.E.	50	37	15	45	45	Th17 E.A.E.	50	37	15	45	
	nTreg	31	26	45	12	12	nTreg	31	26	45	12	

Supplementary Appendix; Figure S10

a. mRNA transcripts

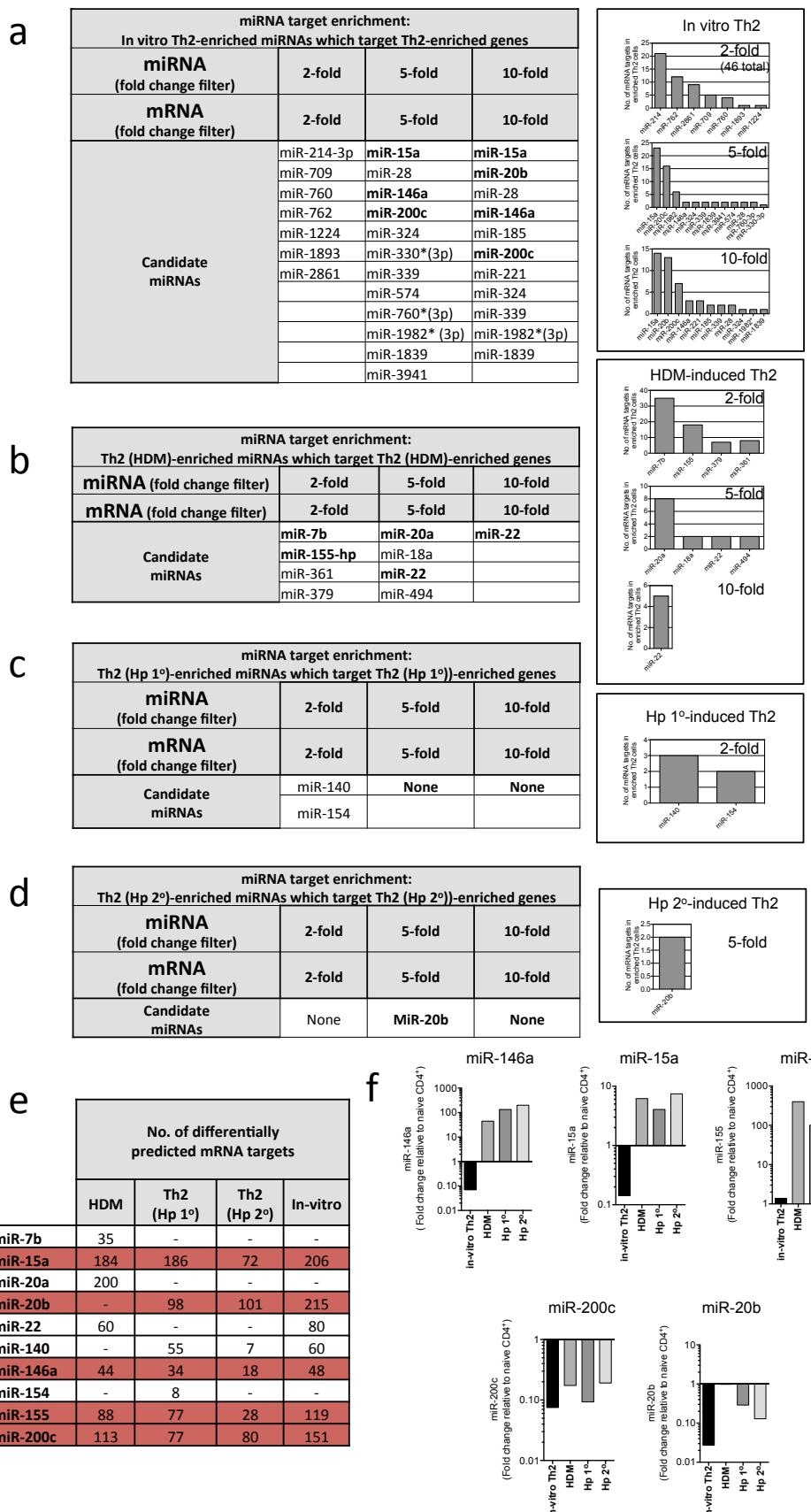


b. miRNAs

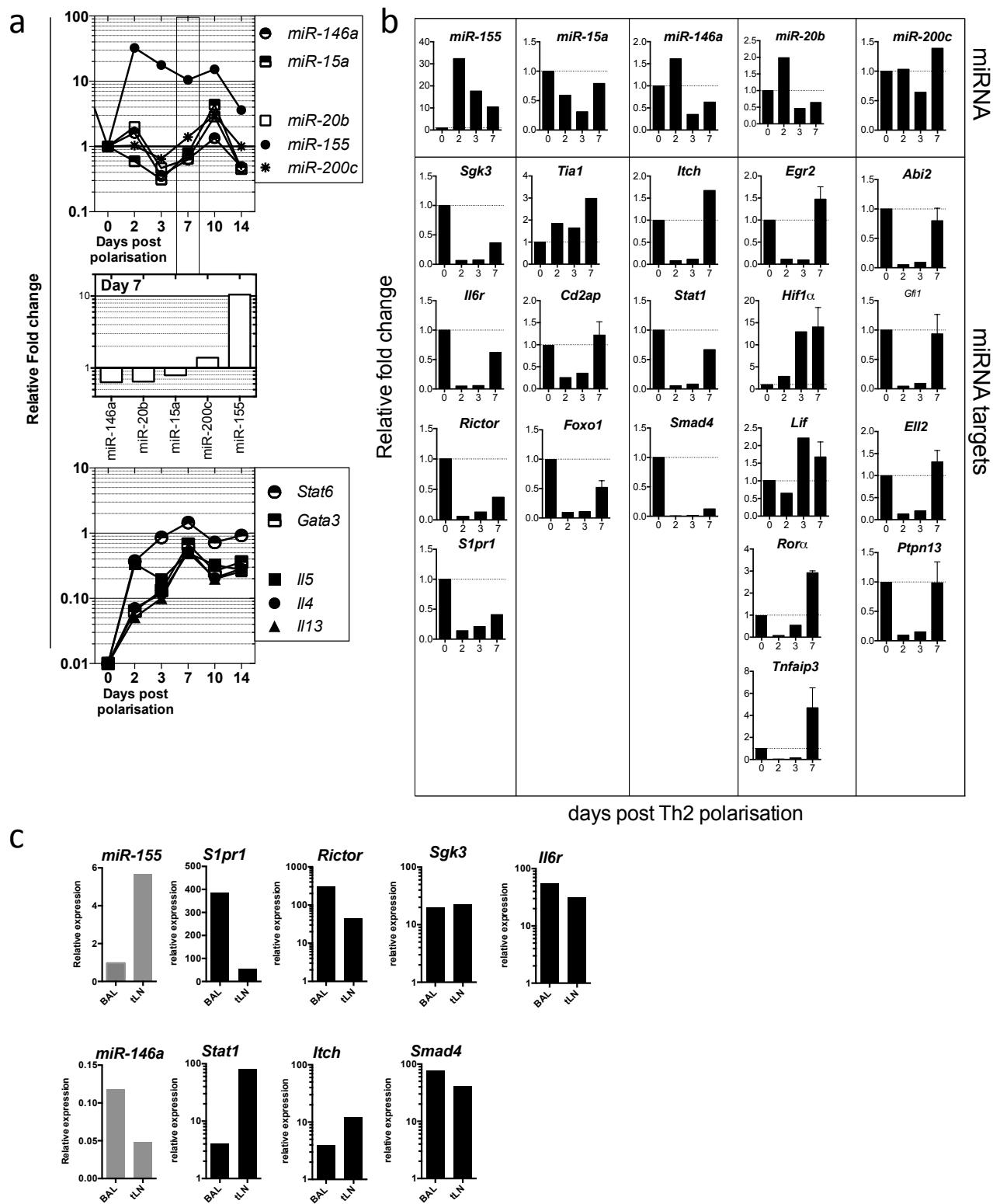


Fold chnage
(relative to naive CD4)

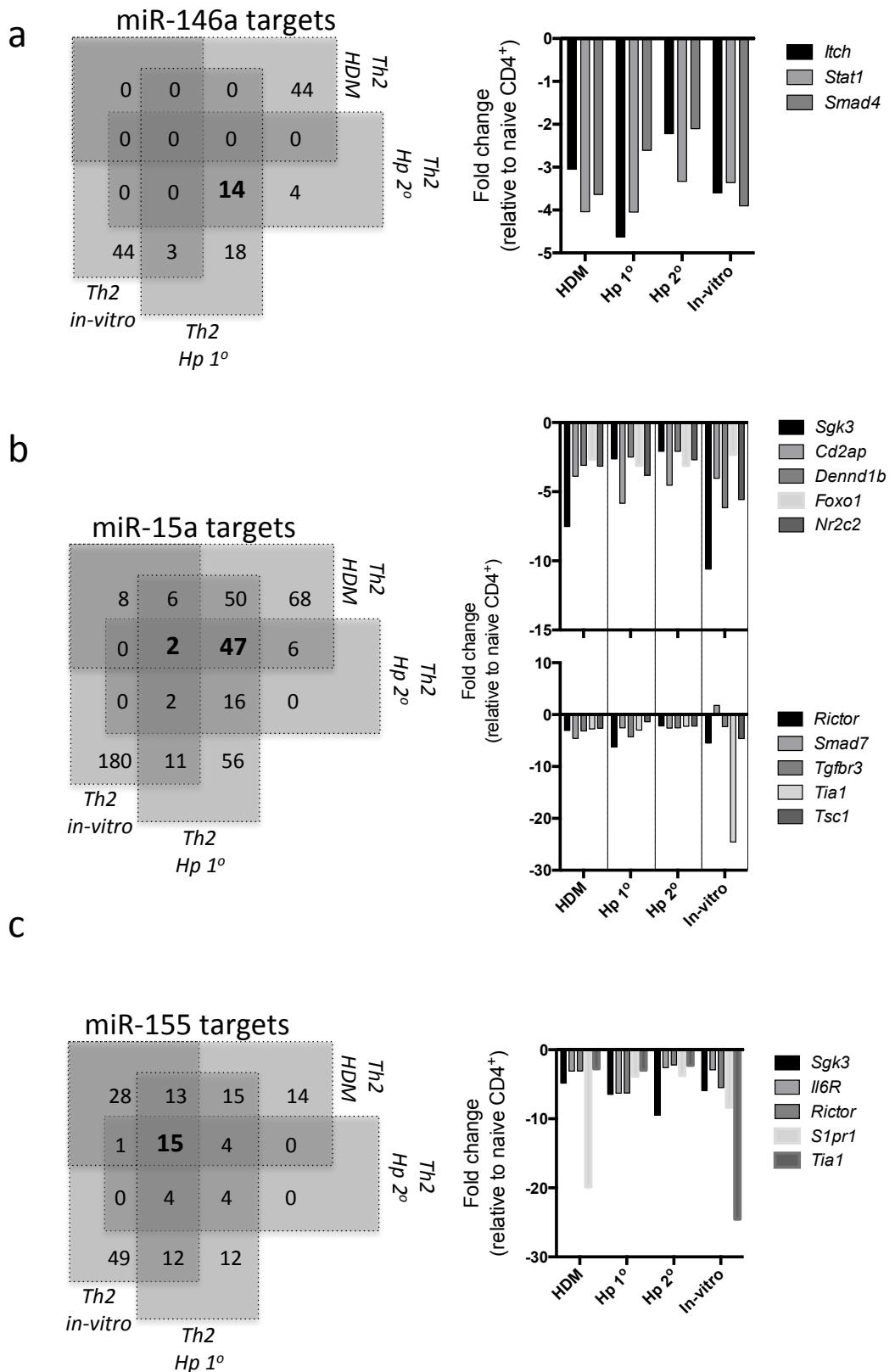
Supplementary Appendix; Figure S11



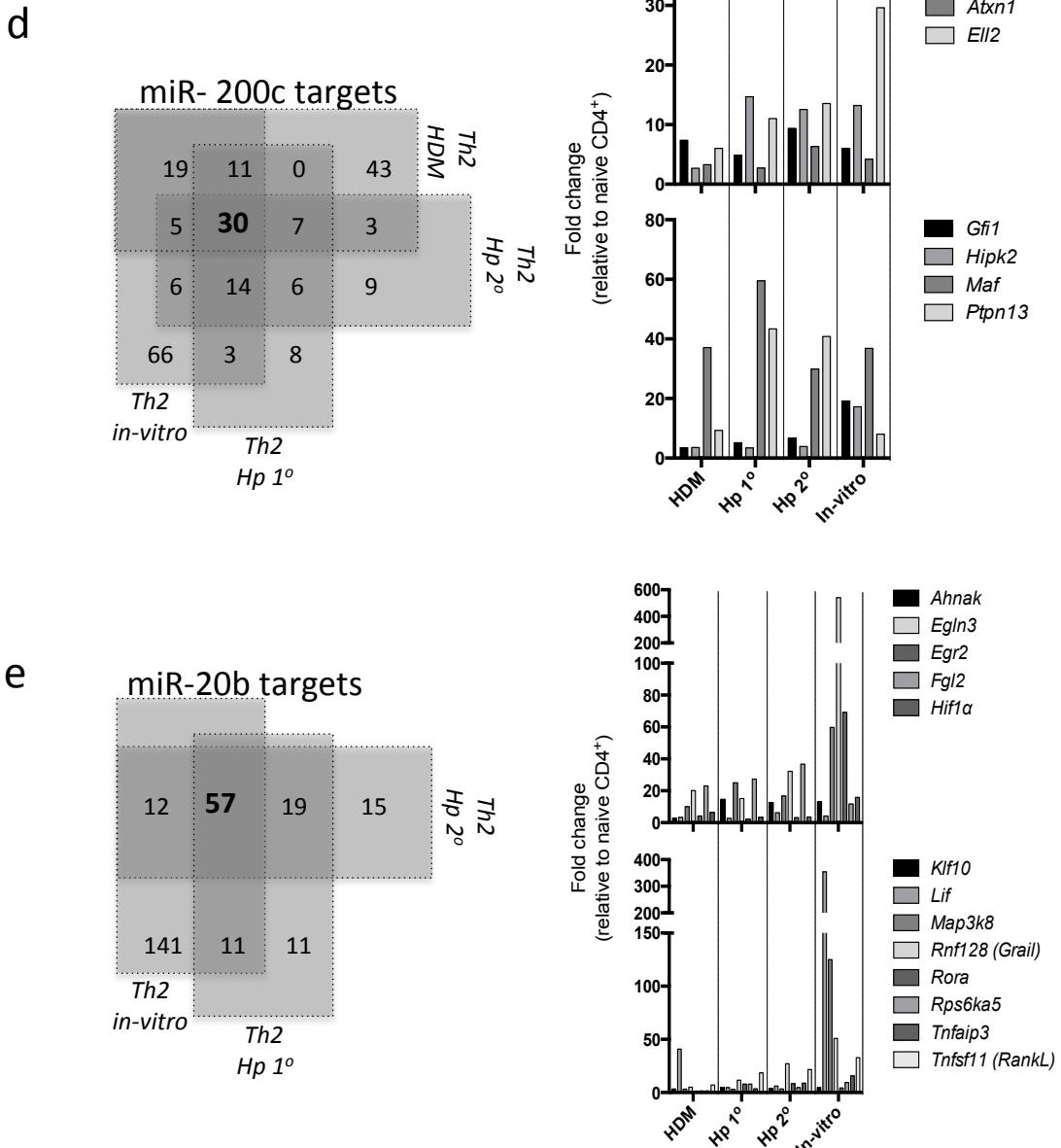
Supplementary Appendix; Figure S12



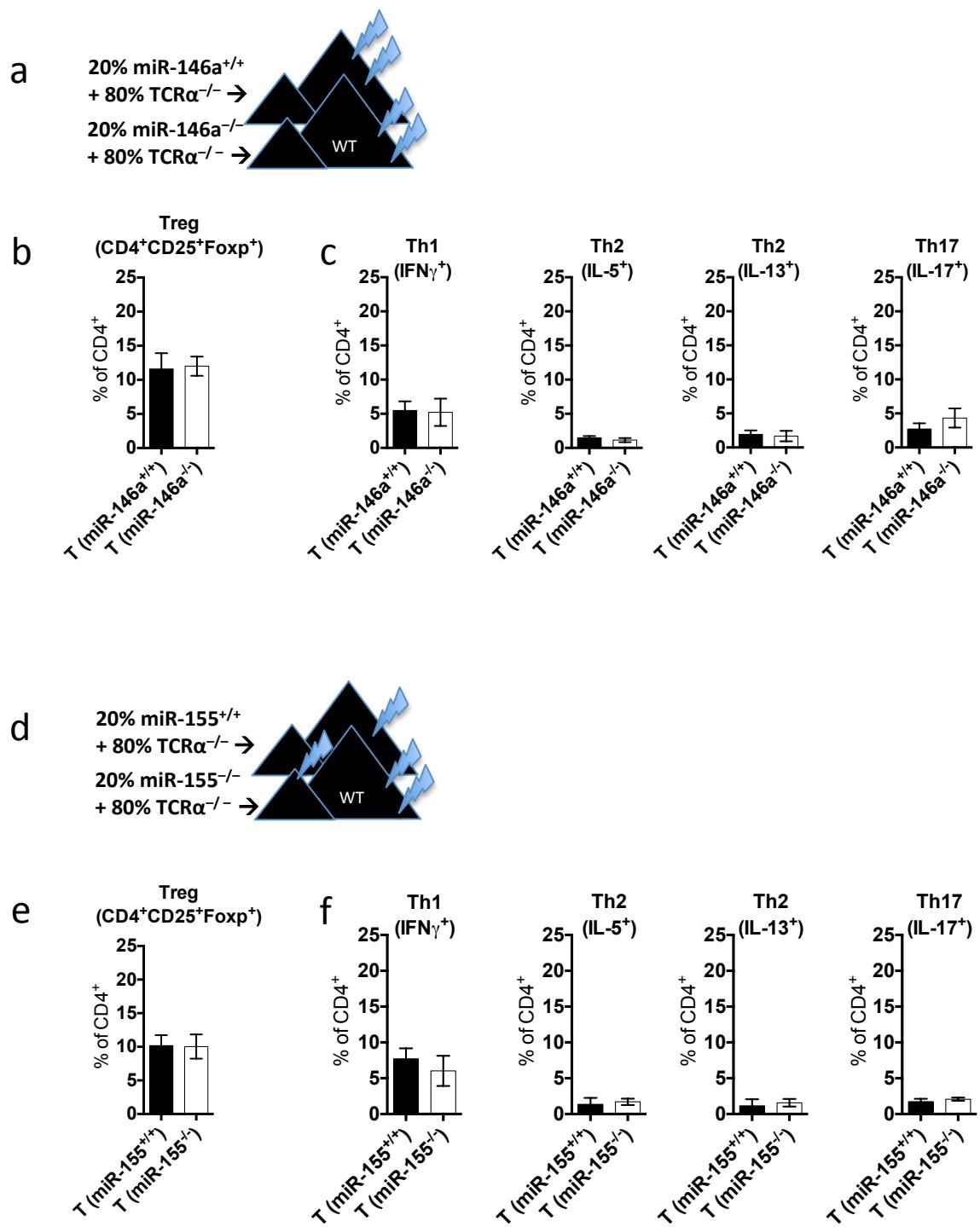
Supplementary Appendix; Figure S13



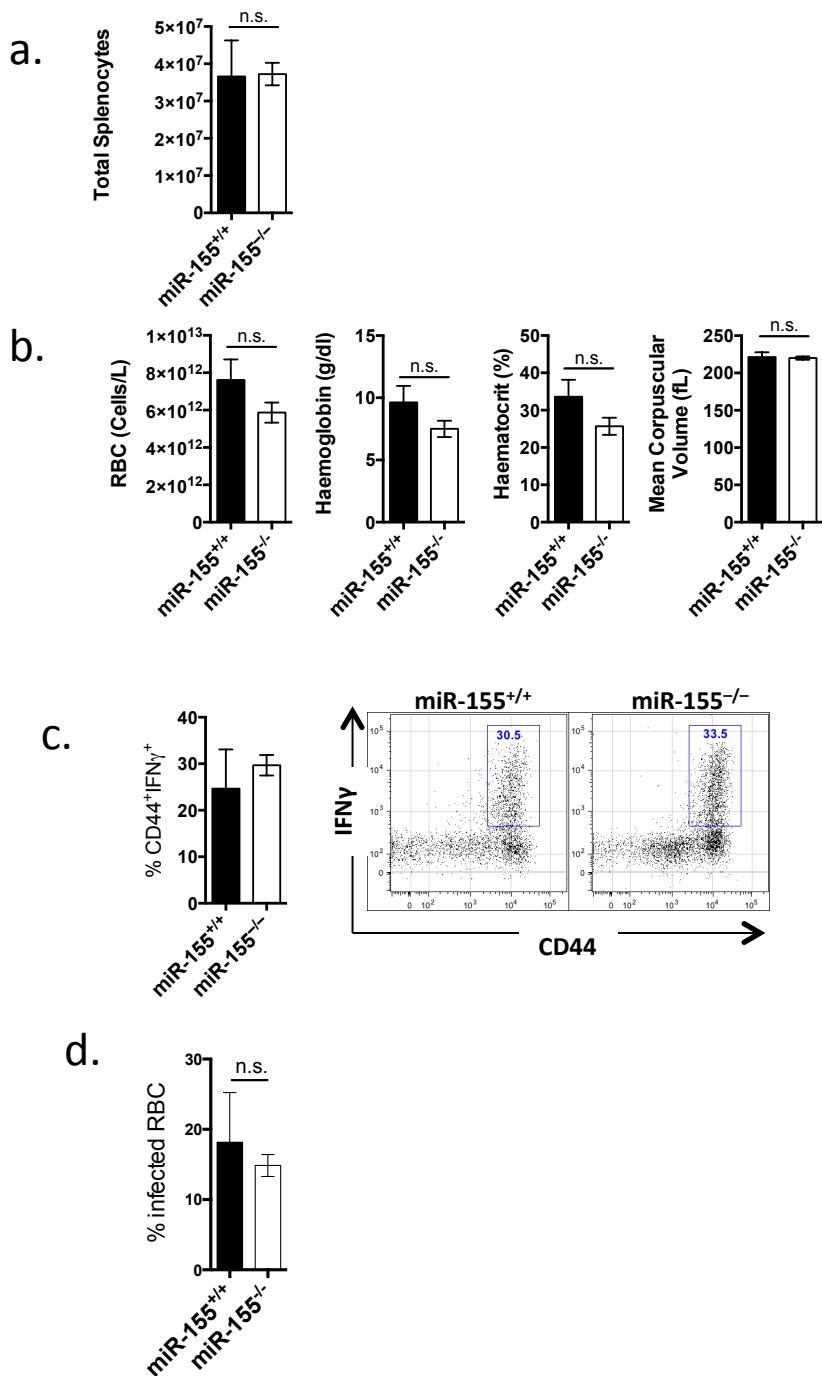
Supplementary Appendix; Figure S13



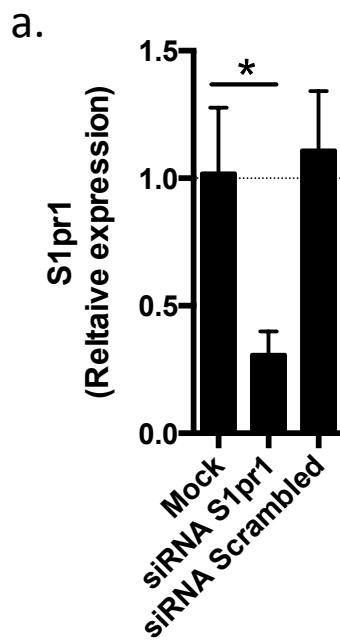
Supplementary Appendix; Figure S14.



Supplementary Appendix; Figure S15



Supplementary Appendix; Figure S16



Supplementary Appendix;

Tables 1-4.

Supplementary Appendix; Tables 1.

Gene expression data of bulk and purified Th2 cells. Bulk cells represent the whole well, while purified cells represent FACS purified IL4^{gfp+} cells. Fold change relative to naïve (CD4⁺CD44⁻CD62L^{hi}CD25⁻ cells). Data expressed as mean of 3 or 4 biological replicates.

Supplementary Appendix; Tables 2.

In-vitro Th2-enriched genes using a >2fold cut off. Genes that were differentially regulated greater than or equal to 2 fold and were not differentially regulated in other T cell populations. Fold change relative to naïve (CD4⁺CD44⁻CD62L^{hi}CD25⁻ cells). Data expressed as mean of 3 or 4 biological replicates.

Supplementary Appendix; Tables 3.

Ex-vivo Th2-enriched miRNAs using a 5-fold cut off. miRNAs that were differentially regulated greater than or equal to 2, 5 or 10-fold and were not differentially regulated in other ex-vivo T cell populations. Fold change relative to naïve (CD4⁺CD44⁻CD62L^{hi}CD25⁻ cells). Data expressed as mean of 3 or 4 biological replicates.

Supplementary Appendix; Tables 3.

Ex-vivo Th2-enriched genes using a 5-fold cut off. Genes that were differentially regulated greater than or equal to 2, 5 or 10-fold and were not differentially regulated in other ex-vivo T cell populations. Fold change relative to naïve (CD4⁺CD44⁻CD62L^{hi}CD25⁻ cells). Data expressed as mean of 3 or 4 biological replicates.

TABLE 1

Symbol	Th2 (Bulk)	Th2 (purified)	Entrez Gene ID for Mouse
	Fold change (relative to Naïve T cell)		
IL10	109.286	1189.948	16153
Gp49a/Lilrb4		1025.661	14728 14727
GZMB	27.525	1023.549	14939
GZMA	73.923	833.090	14938
IL21		671.029	60505
IL4 (includes EG:16189)	111.427	640.637	16189
EGLN3	30.310	540.958	112407
IL1R2	18.688	391.564	16178
LIF	64.486	354.345	16878
IL24	31.814	349.508	93672
ATF3	2.630	347.892	11910
MT1E	10.374	329.205	17748
IL2	212.026	304.081	16183
LGALS3	30.111	275.607	16854
IER3	23.929	269.416	15937
TNFSF14	1.754	218.951	50930
FRMD4B	2.098	216.173	232288
CCR1	8.424	215.947	12768
FOSB	-2.130	203.458	14282
BHLHE40	4.153	175.366	20893
EMP1		164.032	13730
IL2RA	10.505	162.680	16184
TNFSF9	3.683	161.702	21950
NFIL3		161.321	18030
EG665536/lftm1	1.574	155.768	
SOCS2	20.044	153.502	216233
IRF4	9.165	135.513	16364
RGS1	25.782	135.458	50778
MT2A	14.291	132.371	
CCL4	106.316	130.960	20303
Ctla2a	29.270	126.671	
MAP3K8	12.924	125.018	26410
ECM1 (includes EG:100332249)	37.447	123.434	13601
AREG/AREGB		120.668	11839
PRNP	7.131	110.125	19122
PLSCR1	13.791	109.591	22038
CTLA4	16.817	106.116	12477
SERPINF1	10.365	100.710	20317
CDKN1A	4.610	97.549	12575
HBEGF	17.668	84.699	15200
TNFRSF9	5.216	81.034	21942
Trim16	1.194	80.480	
GCH1	14.173	74.223	14528
MAFF	1.334	73.927	17133
IFITM2	3.937	73.189	80876
IL13	81.104	72.320	16163
ARL5B	2.665	70.947	75869
FOSL2	1.438	69.641	14284
DUSP4	7.488	69.456	319520

EGR2	55.631	69.177	13654
SRXN1	6.926	67.835	76650
KCNK5		67.159	16529
NR4A3	50.784	67.106	18124
CCR5	10.060	66.832	12774
SEMA7A	13.655	65.675	20361
PRELID2	1.896	65.623	77619
Gm14005	9.586	64.044	100043424
PENK	71.260	63.825	18619
HK2	11.059	63.364	15277
CCL1	10.825	59.778	20290
S100A6	45.133	58.914	20200
EFNA5	2.028	58.845	13640
EMILIN2		57.721	246707
ERRFI1	2.187	55.849	74155
ANXA1	1.465	55.300	16952
KLF4		55.229	16600
TNFRSF4	39.701	54.074	22163
GPM6B	9.704	53.644	
TNF	14.348	53.117	21926
RNF128		50.849	66889
STC2	2.179	50.735	20856
MCF2L		50.420	17207
1810009J06Rik/LOC100044143	44.532	50.280	73626 100040208
ERO1L	34.542	50.253	50527
Ctla2b	1.589	49.939	13025 13024
ALDOC		49.574	11676
PDCD1LG2	3.134	49.466	58205
ENTPD1		48.633	12495
IL1RL1	5.997	47.906	17082
ANXA2	8.991	47.742	12306
RNF19B	4.435	47.584	75234
PHLDA1	6.620	47.406	21664
UBE2C	2.314	47.143	68612
CST7	15.908	46.844	13011
CASP4	7.497	45.609	12363
SLAMF7		43.344	75345
TIAM1	10.497	42.409	21844
NUSAP1		41.722	108907
RRM2	21.100	40.965	20135
SLCO4A1	64.116	40.895	108115
NDRG1	30.843	40.615	17988
TRIB1	2.291	40.323	211770
CISH	3.442	40.268	12700
AQP9		39.501	64008
STX11	4.695	39.413	74732
KCTD12		38.870	239217
PLK3	2.228	38.779	12795
RGS16	4.142	38.392	19734
MKI67		38.212	17345
ADAM8	4.438	37.959	11501
C6orf225	2.119	37.923	66337
ASNS	2.845	37.510	27053

BIRC5		37.391	11799
MGARP	1.182	37.159	67749
PLK2	4.645	37.007	20620
MAF	13.537	36.848	17132
CCNB2		36.637	12442
REL	2.867	36.180	19696
2210403K04Rik	5.463	36.110	100042498
SV2C	2.573	36.083	75209
EHD1	49.820	35.768	13660
TBX21	2.827	35.768	57765
GADD45B	3.561	35.534	17873
NFKBID	8.115	35.249	243910
SPRY1	18.630	35.197	24063
KIAA0101	13.246	35.175	68026
NR4A2	3.776	35.073	18227
SLAMF1	14.677	34.628	27218
Crem	2.244	34.567	
CXCR6	2.040	34.150	80901
SYTL3	4.172	33.832	83672
Bnip3	4.679	33.787	
CEP55		33.738	74107
SDC4	2.211	33.664	20971
GADD45G		33.508	23882
TNFSF11	67.771	32.778	21943
SELENBP1		32.599	20341 20342
STC1		32.443	20855
HSPA1A/HSPA1B	-2.496	31.869	193740 15511
LGALS7/LGALS7B		31.519	16858
DUSP16	3.638	31.491	70686
CCNA2	3.046	31.444	12428
CCR2		31.320	12772
SERPINE1	2.119	31.300	18787
ASPM		30.143	12316
SLA	11.607	30.099	20491
BUB1		30.096	12235
METRN1L		29.810	210029
KLF9	2.472	29.764	16601
ELL2	46.991	29.613	192657
LTB4R		29.495	16995
CSF1	39.918	29.266	12977
IL2RB	3.703	29.076	16185
VLDLR		28.991	22359
TEX15		28.559	104271
KRT18		28.403	16668
MDFIC	46.380	28.238	16543
TUBE1	1.879	27.639	71924
CKS2	12.854	27.585	66197
PTPRK	2.737	27.494	19272
INHBA	65.105	27.107	16323
NR4A1	1.638	26.936	15370
TOP2A		26.522	21973
PROS1		26.447	19128
GPLD1	2.423	26.400	14756

EPAS1		26.399	13819
F2R	10.053	26.362	14062
RILPL2	5.033	26.034	80291
P4HA2		25.117	18452
IGHG1	3.502	24.761	16017
ACVR2A		24.623	11480
CDK1	2.056	24.031	12534
PLXDC2		23.954	67448
AI790276	1.651	23.439	
EBI3		23.084	50498
CENPE		22.949	229841
PLA2G12A	3.953	22.716	66350
AURKB		22.626	20877
IL22		22.368	
CENPF		21.672	108000
Ccnb1/Gm5593	2.075	21.412	268697 434175
SERPINE2	11.436	21.274	20720
SAMSN1	2.450	20.957	67742
TGM2	12.542	20.886	21817
CHSY1	16.689	20.867	269941
FAM129A	2.380	20.803	63913
PLEK	21.882	20.687	56193
TPI1	13.611	20.667	
PPP2R3A		20.589	235542
S100A1		20.456	20193
CDCA8	6.691	20.351	52276
CSRNP1	1.784	19.830	215418
PBK		19.701	52033
TGIF1	2.901	19.445	21815
CYSTM1	3.561	19.443	66060
CST6	2.301	19.402	73720
GFI1	3.571	19.170	14581
CD40LG	2.761	18.985	21947
IL12RB1	6.537	18.876	16161
EGR3	14.525	18.661	13655
CTSE	3.225	18.428	13034
NKG7	5.064	18.410	72310
MZB1	8.173	18.336	69816
DUSP6	13.433	18.318	67603
ICOS	8.223	18.191	54167
SPC25		18.061	66442
CHST2	7.218	18.032	54371
PDCD1	3.396	18.002	18566
AKR1C3	29.035	17.911	105349
C3		17.811	12266
CDCA5		17.806	67849
ADM		17.746	11535
IL18RAP	1.306	17.520	16174
ACSL4	5.004	17.473	50790
IFITM3	4.159	17.271	
HIPK2	5.853	17.199	15258
SPAG5		16.988	54141
ASB2		16.945	65256

JDP2		16.740	81703
AK4		16.434	11639
SLC41A1	3.320	16.411	98396
CASP3	9.277	16.381	12367
CDC20	14.961	16.291	107995
EHD4		16.278	98878
FOS	-8.818	16.271	14281
ESM1	4.227	16.257	71690
SKIL	-1.778	16.257	20482
CCR8		16.179	12776
FASLG	4.343	16.155	14103
F2RL2	1.530	16.059	14064
GPRIN3	1.458	16.030	243385
FFAR2		15.952	233079
PIM1	2.462	15.941	18712
SOCS1		15.905	12703
HIF1A	5.366	15.857	15251
MMP10	3.735	15.770	17384
ECT2		15.677	13605
TMEM176A	2.089	15.641	66058
CXCR4	-1.939	15.510	12767
SAP30	4.732	15.488	60406
TNFAIP3	-1.887	15.485	21929
IGHA1		15.474	16061
C9orf152		15.391	242484
PRC1		15.376	233406
PLCD1		15.372	18799
OIT3		15.363	18302
SLC2A3	-1.107	15.293	20527
NEK2		15.284	18005
PMEPA1	15.721	15.266	65112
MST1R		14.981	19882
SFT2D2	2.757	14.944	108735
NUPR1	1.526	14.938	56312
ITGA7		14.908	16404
GPR171	4.851	14.906	229323
EGR1	2.210	14.849	13653
ACOT7	3.255	14.789	70025
GNA13	2.620	14.730	14674
TK1	2.160	14.704	21877
TTC39B	4.424	14.651	69863
MYO6		14.618	17920
BCL2A1	17.760	14.539	12044 12045 120
PTGER2	4.359	14.496	19217
PSRC1	2.050	14.416	56742
RUNX2		14.184	12393
ODC1	11.678	14.175	18263
CDCA3		14.111	14793
NCAPG2		13.871	76044
GCM2		13.839	107889
AGPAT9		13.791	231510
PLP2	6.628	13.745	18824
FAM132A	2.824	13.698	67389

FABP5	30.223	13.656	16592
ADAMTSL3		13.581	269959
GABPB1		13.455	14391
GLIPR2		13.414	384009
DCUN1D3	1.117	13.275	233805
AHNAK	11.333	13.225	66395
CAMK2N1	1.775	13.224	66259
Pmaip1	1.505	13.177	58801
RBPJ	5.146	13.150	19664
CD8A		12.956	12525
IL10RA		12.949	16154
HLA-A		12.946	
HSPA4L	2.996	12.916	18415
LGALS1	14.415	12.781	16852
TACC3		12.763	21335
CACNB3		12.741	12297
mir-155		12.734	387173
CDK6	11.652	12.719	12571
TUBB6	-1.036	12.701	67951
CSRP1	1.980	12.694	13007
IGHM	-3.210	12.638	16019
PRDM1		12.579	12142
LAMA5		12.511	16776
NFKBIE		12.490	18037
Serpina3g (includes others)	3.485	12.442	238393 628900 2
MAPKAPK2	5.882	12.420	17164
DIAPH3		12.315	56419
RACGAP1		12.273	26934
RAD54L		12.104	19366
BUB1B		12.101	12236
TNFSF13B		12.040	24099
ORC1		12.013	18392
ATL3	2.458	11.883	109168
HILPDA		11.868	69573
FAM107B	19.173	11.818	66540
FGL2		11.811	14190
MYO1F	-1.730	11.800	17916
TRAF6		11.739	22034
B4GALNT4		11.596	330671
SYCE2		11.589	71846
MGLL		11.578	23945
TMEM176B		11.504	65963
PLAC8	-1.245	11.501	231507
FURIN	15.566	11.459	18550
BZRAP1	1.221	11.449	207777
CXCR3	2.145	11.433	12766
ZC3H12C	3.134	11.406	244871
MAP2K3	19.802	11.403	26397
KIF20A		11.331	19348
TTC39C	1.202	11.299	72747
MYC	8.288	11.264	17869
TPX2		11.241	72119
PYGL		11.184	110095

CD44	16.775	11.130	12505
AHR		11.128	11622
EVI2A	-3.523	11.105	14017
ERMN	1.257	11.004	77767
UHRF1		10.983	18140
MXD1	1.785	10.903	17119
TG		10.892	21819
GLRX	3.075	10.890	93692
SPC24		10.811	67629
BATF	2.654	10.740	53314
GOT1	5.563	10.737	14718
CASP6	5.710	10.724	12368
STARD4	3.487	10.724	170459
JUN	-4.433	10.692	16476
BASP1	1.822	10.645	70350
OSBPL3		10.634	71720
GBP4	2.456	10.633	55932
CKS1B	14.315	10.622	54124
FADS2		10.613	56473
MLLT4		10.567	17356
EIF4EBP1	3.452	10.549	13685
DUSP14	2.012	10.532	56405
BRCA1		10.478	12189
RAD51		10.469	19361
C13orf15	8.847	10.435	66214
ZC3H12A		10.233	230738
SEPT7	2.180	10.214	235072
RNF157		10.192	217340
JAK2	15.516	10.185	16452
KIF3A		10.168	16568
CD69	1.264	10.092	12515
MELK		10.084	17279
ZDHHC2		10.077	70546
TRIP13		10.073	69716
TYMS		10.026	22171
SLC39A4		10.020	72027
ETV6	5.235	9.993	14011
MIS18BP1		9.990	217653
AHCYL2	2.516	9.945	74340
ISG20	2.976	9.865	57444
PIWIL2		9.837	57746
HSD17B7	6.024	9.821	15490
GNA15		9.775	14676
CHST11	1.732	9.740	58250
Gm9895		9.739	100503337
TM6SF1	1.871	9.682	107769
NEDD4		9.677	17999
RNF19A	1.704	9.667	30945
MYADM		9.656	50918
GABARAPL1	2.009	9.646	57436
PKIG		9.555	18769
PPP1R15A	-3.723	9.531	17872
CENPK		9.479	60411

TIPARP	2.385	9.434	99929
RNF152		9.410	320311
CASP1	3.282	9.393	12362
OBFC2A	2.857	9.376	109019
MARCKSL1	5.238	9.368	17357
MAPRE2	10.419	9.264	212307
DNAJB1	-1.441	9.259	81489
RPS6KA5		9.256	73086
VEGFA		9.223	22339
STIL		9.172	20460
RAD51AP1		9.166	19362
RSAD2	-1.344	9.101	58185
CKAP2		9.101	80986
SLC4A7	5.694	9.100	218756
BTG3	9.835	9.098	12228
LMNA		9.034	16905
BCL2L11	1.046	8.998	12125
SOAT1	11.331	8.922	20652
SHROOM3	1.921	8.901	27428
FIGNL1		8.886	60530
NFIA		8.873	18027
ID2	6.705	8.859	15902
KIF4A		8.840	16571
KNTC1		8.822	208628
TMEM158		8.817	72309
GZMK		8.757	14945
VIM	11.658	8.756	22352
HMMR		8.720	15366
RRAGD		8.720	52187
COBLL1		8.714	319876
FES		8.656	14159
CD274	3.753	8.629	60533
E2F8		8.589	108961
GATA3	7.085	8.576	14462
N4BP1		8.574	80750
PLCB4		8.553	18798
AURKA		8.549	20878
TNFSF8	23.222	8.513	21949
TANC2	2.762	8.411	77097
CLDND1	3.121	8.395	224250
SLC39A8	1.566	8.363	67547
LAG3	2.714	8.361	16768
RLIM	2.329	8.353	19820
CCL20		8.318	20297
ESPL1		8.306	105988
FAM110A		8.270	73847
BCAT1	5.046	8.240	12035
CLSPN		8.236	269582
ORAI1	3.112	8.171	109305
CCDC99		8.157	70385
CDC45		8.145	12544
S100A4	2.120	8.140	20198
HIP1		8.137	215114

HEMK1	3.293	8.078	69536
KDM6B	2.535	8.077	216850
ENPP2		8.042	18606
CD93		8.032	17064
SESN2	3.001	8.025	230784
PTPN13		8.024	19249
CTTN		8.010	13043
TGIF2	2.400	7.961	228839
EEA1	2.459	7.955	216238
CFLAR	2.599	7.936	12633
CSDA	28.278	7.928	56449
KLRC1		7.912	16641
ZNF703	2.270	7.892	353310
ARHGAP21	1.386	7.890	71435
C21orf91		7.885	67102
TRPM6	1.425	7.883	225997
SDF4	4.366	7.828	20318
CCR4		7.821	12773
PIM3	2.284	7.812	223775
FOCAD		7.810	230393
GINS2		7.748	272551
CDKN3		7.745	72391
PIK3AP1		7.714	83490
AUH		7.696	11992
TNFRSF18	4.106	7.657	21936
PGAM1	6.556	7.655	18648
CHAC1	3.001	7.642	69065
HGF		7.639	15234
ITGB5		7.632	16419
SH2D2A	3.480	7.604	27371
ANLN		7.508	68743
ATXN7L1	2.149	7.473	380753
NFKBIZ	-3.664	7.473	80859
SCPEP1	2.622	7.461	74617
ICAM1	1.693	7.436	15894
GPR68	6.027	7.393	238377
NEDD9	1.794	7.393	18003
CLCN5	3.697	7.379	12728
CLIC4	9.808	7.326	29876
NCAPH		7.316	215387
PPP3CC	2.730	7.253	19057
MLKL		7.245	74568
GNG2	4.486	7.236	14702
DUSP5	-1.177	7.203	240672
MSC	4.976	7.180	17681
JAK3		7.179	16453
TMEM107		7.162	66910
PKM2	4.879	7.157	18746
ATP2B4		7.157	381290
S100A13	2.356	7.139	20196
GLA	-1.729	7.124	11605
IMPA2		7.112	114663
ALDOA	4.047	7.103	11674

CAPG	5.727	7.085	12332
Gapdh (includes others)	4.563	7.062	
ARRDC4		7.035	66412
Med7	2.528	6.990	
NAMPT	3.042	6.975	59027
CRK	-1.677	6.971	12928
MYO1C	4.113	6.954	17913
PTPN2	2.160	6.898	19255
ARIH2	1.945	6.895	23807
FAM46A	4.992	6.890	212943
HIST1H2AB/HIST1H2AE	4.050	6.865	319164 319170 3
4930486L24Rik		6.844	214639
Cd24a	5.599	6.799	12484
ZFX		6.798	22764
PLK4	3.138	6.784	20873
PPARG		6.755	19016
CITED2	7.748	6.747	17684
CARHSP1		6.707	52502
PC		6.706	18563
PAG1		6.702	94212
CENPH		6.700	26886
CA7		6.698	12354
PGK1	6.951	6.661	18655
IL4R		6.616	16190
NEIL3		6.614	234258
LPXN	7.929	6.599	107321
GPT2		6.596	108682
MED14		6.595	26896
OPTN		6.587	71648
NFKB2	2.577	6.583	18034
SDF2L1	2.352	6.582	64136
ENC1	2.854	6.573	13803
RHOQ	1.487	6.563	104215
TSC22D2	3.077	6.559	72033
IRF8	1.562	6.558	15900
MAPK6	13.956	6.542	50772
FOXM1		6.537	14235
GPR183		6.533	321019
DGAT1	1.475	6.528	13350
CYFIP1	4.570	6.514	20430
JUNB	-1.965	6.489	16477
SPTY2D1		6.481	101685
IFRD1	1.943	6.458	15982
XBP1	4.475	6.423	22433
USP2	-1.642	6.414	53376
LXN		6.403	17035
H1F0		6.393	14958
NCOA2	3.200	6.348	17978
DTL		6.315	76843
ST3GAL1		6.303	20442
ING5		6.278	66262
CGGBP1	2.238	6.254	106143
CENPP		6.252	66336

CCRL2		6.232	54199
COQ10B	3.784	6.124	67876
ANXA4		6.086	11746
PRDX4	4.966	6.083	53381
EZH2	5.219	6.076	14056
MED13		6.065	327987
LMAN1	2.921	6.032	70361
TMEM2	3.056	6.022	83921
SLC2A1	2.445	6.013	20525
EPS8	1.094	5.993	13860
ABI2		5.991	329165
GRN	1.791	5.979	14824
ALCAM	3.454	5.976	11658
ZAK		5.972	65964
CSRP2		5.962	13008
ATG9B		5.944	213948
NET1		5.920	56349
Cd99 (mouse)	4.330	5.917	673094
CPD	2.506	5.911	12874
MCM10 (includes EG:307126)		5.907	70024
TMEM45A	2.146	5.906	56277
MBNL3	-1.337	5.902	171170
AFF1		5.892	17355
DAPP1		5.871	26377
CCRN4L	20.143	5.852	12457
CD83	2.017	5.851	12522
LAMC2		5.808	16782
IRS2		5.793	384783
CENPN		5.775	72155
NUCB2		5.748	53322
LYST		5.745	17101
CKB		5.743	12709
SCD		5.741	20249
ZNF295	1.064	5.737	114565
LARGE		5.735	16795
MMS22L		5.729	212377
FNIP1	1.783	5.717	216742
PTGER4	2.000	5.692	19219
DDX6	-1.834	5.679	13209
KIF22		5.672	110033
CDH17		5.615	12557
RND3		5.605	74194
GOLPH3	2.078	5.586	66629
DKKL1		5.568	50722
BMPR1A		5.563	12166
NRN1	4.280	5.557	68404
LAMP2	2.514	5.554	16784
SGOL1		5.554	72415
GEMIN8		5.546	237221
MARCKS	3.950	5.506	17118
CCDC109B	3.056	5.499	66815
LY96		5.498	17087
GPNMB		5.466	93695

CD38		5.465	12494
CDC6 (includes EG:23834)		5.464	23834
CHD7	2.677	5.417	320790
ARHGAP18		5.417	73910
ITK	-2.285	5.406	16428
ANGPTL2		5.406	26360
IL23A	-1.014	5.396	83430
Ly6a (includes others)	6.700	5.395	57248 546644 11
ARHGAP11A		5.393	228482
CREB3L2	4.653	5.390	208647
GSTK1	2.413	5.382	76263
RRM1	2.145	5.344	20133
SIAH2	2.263	5.342	20439
SMOX	1.984	5.314	228608
CYP51A1	7.620	5.305	13121
OXSM		5.266	71147
FNBP1	1.528	5.254	14269
HELLS		5.248	15201
LRP8	2.083	5.225	16975
DAPK2		5.216	13143
PRR13		5.215	66151
SLC37A3		5.207	72144
SEC61A1	2.608	5.203	53421
RALGDS		5.200	19730
FBXO33	5.530	5.176	70611
CDC25C		5.166	12532
SERINC3	2.125	5.163	26943
CHD1	2.750	5.144	12648
NCKAP1	2.832	5.127	50884
PFKP	4.109	5.123	56421
WASL		5.114	73178
LITAF	2.552	5.113	56722
PPAP2C		5.103	50784
GALK1	2.279	5.101	14635
CEBPB	1.411	5.095	12608
UNC13A		5.094	382018
TWF1	2.220	5.091	19230
KIAA1524		5.088	224171
ACSBG1		5.082	94180
ACPP		5.057	56318
CDCA2		5.031	108912
GNAQ		5.023	14682
INSIG1	2.550	5.021	231070
CTNNA1	5.865	5.014	12385
PPP2CB	4.146	5.008	19053
FHL2		5.007	14200
SLC39A6	3.773	5.004	106957
CLCN3		5.002	12725
ATP9A		4.999	11981
SMAD5		4.994	17129
LIG1		4.965	16881
AIM1		4.951	11630
GLS2		4.947	216456

ANKRD11	-2.007	4.935	77087
Scd2	2.675	4.926	20250
HLA-DMA		4.924	14998
DYRK3		4.916	226419
FAIM3		4.906	69169
STK39		4.906	53416
BCL2	-1.441	4.900	12043
KIF2C		4.894	73804
APBB1		4.891	11785
PTPRV		4.890	13924
TMEM180		4.856	75146
EMR1		4.852	13733
PLK1		4.840	18817
ARF4	2.420	4.815	11843
VMP1	3.438	4.810	75909
ITPR2		4.804	16439
CCDC41	3.496	4.803	77048
TSPAN9		4.798	109246
KPNA2	5.977	4.796	16647
NCAPD2		4.794	68298
TLCD2		4.792	380712
RCAN1	1.288	4.788	54720
NUCB1	2.839	4.787	18220
ASF1B		4.787	66929
TSPAN31	1.671	4.780	67125
XCL1	1.238	4.773	16963
A630033H20Rik		4.759	213438
DUSP1	-12.705	4.743	19252
GKAP1		4.724	56278
SYNE3	3.023	4.690	212073
HSPA5	3.450	4.681	14828
ATF5		4.679	107503
DUSP8		4.678	18218
DNAJB9	1.116	4.676	27362
BCL2L2		4.676	12050
BSG	2.227	4.667	12215
UBL3		4.666	24109
POLA1		4.657	18968
SETD5		4.656	72895
C9orf3	2.317	4.646	72061
NFKBIB	2.454	4.645	18036
LONRF3		4.636	74365
CCL22		4.630	20299
PAFAH1B3		4.628	18476
CAMK2D	1.473	4.624	108058
WISP1		4.613	22402
ME1	1.214	4.612	17436
Tagap1	1.208	4.607	380608
ACAT2	1.550	4.605	
ENDOD1		4.598	71946
SLC16A3		4.594	80879
NFATC1	4.585	4.592	18018
GM2A		4.592	14667

CENPM		4.568	66570
RNF4	4.567	4.567	19822
FUT8		4.565	53618
DOCK5		4.563	68813
ZFP36L1	3.325	4.556	12192
PGM1		4.546	72157
H2-Q8		4.545	15019
NFKBIA	1.936	4.543	18035
Rrbp1	2.493	4.542	81910
Nup98	2.081	4.536	269966
HMGCR	3.757	4.534	15357
ST8SIA4		4.523	20452
Tcrg-V4		4.521	21638
TJP2	2.108	4.517	21873
HMOX1		4.509	15368
KLF10		4.501	21847
SURF4	1.391	4.494	20932
TP53INP2		4.491	68728
SDR39U1	3.166	4.475	654795
CORO2A		4.471	107684
ADAM9		4.470	11502
CD81	3.692	4.468	12520
INCENP	1.671	4.461	16319
TFRC	10.730	4.451	22042
Zfp948		4.451	
COX7A1		4.427	12865
WHSC1		4.404	107823
AGPAT4	7.915	4.399	68262
SMC2	2.491	4.376	14211
HMGB2	5.330	4.371	97165
ARID5B	1.613	4.371	71371
TMEM248	3.102	4.366	71667
SKAP2	-1.906	4.365	54353
ETF1	7.734	4.362	225363
RORA	1.398	4.353	19883
GMDS		4.347	218138
DCXR		4.346	67880
HCCS	9.301	4.344	15159
FEM1C		4.336	240263
STK32C		4.334	57740
CD82	3.786	4.330	12521
SQLE	5.088	4.315	20775
EPCAM	3.382	4.311	17075
PTPN22	3.516	4.307	19260
LMNB1		4.301	16906
BCL10		4.300	12042
SLC25A24		4.299	229731
FDPS	2.406	4.296	110196
FBXO27		4.292	
PFKL	-1.982	4.288	18641
TNFRSF1B		4.273	21938
MEFV		4.261	54483
FEM1B		4.249	14155

ZFP106		4.246	20402
RELB	2.384	4.230	19698
PLOD2	1.216	4.230	26432
AFG3L2		4.230	69597
BBX		4.228	70508
BARD1		4.218	12021
ZBP1	-2.536	4.213	58203
CTSF		4.213	56464
EVI5		4.207	14020
RRAD	1.507	4.201	56437
CYB561		4.186	13056
DST	1.427	4.181	13518
ARFGAP3		4.181	66251
LCP2	3.301	4.173	16822
ARF6	1.958	4.160	11845
HMGN3	2.104	4.147	94353
HHEX		4.144	15242
MYL10		4.144	59310
DDC		4.136	13195
SNAP23	1.193	4.135	20619
PBX3		4.133	18516
CCDC82	-1.698	4.132	66396
PFN2		4.132	18645
MAN1A1	8.084	4.130	17155
ZNF608	1.910	4.129	269023
ATXN1	2.419	4.128	20238
DMWD		4.124	13401
C17orf61	3.704	4.121	69186
DEPDC1B		4.104	218581
Timd2	1.777	4.100	171284
SRGN	13.516	4.099	19073
CKAP4	2.948	4.086	216197
TSPAN5	1.761	4.077	56224
TLK2	1.568	4.073	24086
ZCCHC6	-2.130	4.063	214290
ZWINT	2.659	4.054	52696
GFPT1	3.569	4.052	14583
ARL6		4.047	56297
PLAGL2	2.583	4.045	54711
GPC1		4.038	14733
HMGCS1	5.758	4.035	208715
TOLLIP		4.028	54473
TEP1	-1.162	4.024	21745
TMEM97		4.021	69071
MTMR7		4.020	54384
TRAF1	1.338	4.012	22029
PTPN3		4.012	545622
CIT		4.009	12704
PDCD6IP		4.005	18571
RDH10	2.887	4.003	98711
SORD		3.999	20322
HIST1H3A (includes others)	2.148	3.996	
SLC31A1		3.991	20529

BCL3	-1.844	3.989	12051
ID1		3.972	15901
MMP9		3.968	17395
MCM3	2.252	3.962	17215
SLC25A1	2.165	3.961	13358
CDKN2C		3.959	12580
STX6	11.921	3.957	58244
ADAM19		3.956	11492
MCM5	3.197	3.954	17218
Gm9790/Higd1a	2.330	3.950	
RYK		3.950	20187
POU2AF1	13.830	3.947	18985
KCNQ5		3.932	226922
FAR1	4.134	3.930	67420
2310010J17Rik	2.018	3.930	78329
FNDC3B		3.924	72007
HRH2		3.922	15466
ABCC1	3.134	3.918	17250
IPMK		3.916	69718
MCL1	-5.510	3.914	17210
SEC24D		3.910	69608
GMFB	3.297	3.907	63985
ATP2B1	9.674	3.896	67972
GNG12		3.896	14701
MAFG	3.533	3.884	17134
CXADR		3.884	13052
PLEKHA8		3.884	231999
UCP2	2.263	3.882	22228
RAPH1	7.060	3.881	
MAP2K6		3.880	26399
CYSLTR2		3.878	70086
IL1R1		3.874	16177
GORASP2	2.204	3.873	70231
PRKRA		3.861	23992
COL18A1		3.859	12822
MID1IP1	4.390	3.858	68041
PRR11		3.855	270906
GCNT2	2.050	3.848	14538
LAT2		3.847	56743
AXL		3.846	26362
POLE		3.840	18973
GPI	1.532	3.838	14751
SNX9		3.837	66616
ZNF25		3.837	22750
SYNGR1		3.834	20972
MTMR3	-1.048	3.831	74302
LGALSL		3.831	216551
SWAP70		3.831	20947
ATF6		3.829	226641
LGALS3BP		3.824	19039
MAP9		3.821	213582
CSNK1D	2.287	3.820	104318
DCP2 (includes EG:167227)		3.807	70640

SLC35B2		3.807	73836
IKZF3	8.233	3.803	22780
SLC3A2	2.630	3.802	17254
C15orf23		3.802	51944
PGLYRP1		3.789	21946
HPSE		3.788	15442
GCAT		3.777	26912
TASP1	1.340	3.776	75812
ABHD4	3.551	3.775	105501
GSN	8.838	3.765	227753
UGT1A6		3.749	94284 394435
NUDT4	1.314	3.745	71207
PIP5K1B	2.170	3.739	18719
APLP1		3.733	11803
GOSR2	2.566	3.731	56494
ITGAV	18.213	3.714	16410
GRHPR		3.711	76238
DERL1		3.707	67819
CLPB		3.705	20480
GRINA	-1.048	3.699	66168
LOC620306	1.404	3.697	
RNF217		3.695	268291
GINS1		3.691	69270
NOL10		3.689	217431
ARL4A		3.671	11861
EIF1AY	10.755	3.666	13664
SLC7A3		3.665	11989
VTI1A		3.664	53611
SUCO	2.388	3.651	226551
ERCC6L2		3.651	76251
ARIH1	1.633	3.649	23806
GBP2 (includes EG:14469)	4.226	3.645	
DNAJC5	-1.293	3.629	13002
MAP6		3.625	17760
RAB1A	3.868	3.624	19324
CNOT7	2.323	3.624	18983
HLA-DOA		3.620	15001
C11orf75		3.619	170748
PURB	1.841	3.617	19291
P2RX7		3.612	18439
HSPA2		3.610	15512
ARHGAP19		3.609	71085
NSMCE1	-1.700	3.605	67711
UBE2S	2.321	3.603	77891
GPR15		3.598	71223
PILRB		3.597	170741 545812
MBOAT2		3.596	67216
IQGAP3		3.595	404710
Cyp4f16/Gm9705		3.594	70101 677156
NCOA3	-1.803	3.585	17979
DCTN4	1.850	3.574	67665
CHCHD6		3.574	66098
GMNN		3.573	57441

NEK6	3.105	3.562	59126
VPS54 (includes EG:245944)	2.904	3.561	245944
P4HA1		3.561	18451
FAM162A	2.154	3.559	70186
Gm2695		3.559	100040297
SSR1	3.161	3.557	107513
ANG		3.546	11727
MALT1	4.105	3.544	240354
HLA-DMB	-1.271	3.542	14999 15000
KCTD17		3.538	72844
KIF23		3.535	71819
NUP50		3.529	18141
Calm1 (includes others)	2.245	3.523	12315 12313 123
ADIPOR2		3.520	68465
RNASE4		3.519	58809
SGOL2		3.519	68549 244495
TRPM4		3.519	68667
KIF18B		3.506	70218
SPAG9	1.690	3.503	70834
Egln1		3.487	
ARHGEF10		3.486	234094
HDLBP	2.700	3.474	110611
TCN2	1.355	3.474	21452
CDV3	4.592	3.469	
NEK1		3.466	18004
SOCS4		3.463	67296
ABCB10		3.460	56199
DNAJB6		3.456	23950
MATK		3.449	17179
PPP1R15B		3.449	108954
ATL2		3.442	56298
BIRC3		3.439	11796
MYL4		3.436	17896
CCNF		3.430	12449
MASTL		3.429	67121
SDCBP2	1.301	3.423	228765
SELP		3.419	20344
DNAJC18		3.418	76594
TRIM25	-2.178	3.411	217069
CELA1		3.410	109901
KDELR2	3.142	3.409	68137
RAPSN		3.409	19400
RTN3		3.409	20168
ST3GAL4		3.408	20443
PAFAH1B2	2.296	3.404	18475
TGFB1 (includes EG:21803)	4.486	3.401	21803
RHOC	-1.107	3.401	11853
Gm8369	-4.684	3.396	666926
CCNO		3.396	218630
RAMP3		3.393	56089
HK1		3.391	15275
SPEF2		3.381	320277
PQLC3		3.379	217430

SLC12A4	1.854	3.376	20498
PYCR1		3.373	209027
SH3GL3		3.370	20408
DYNLT3	1.655	3.369	67117
HSPA13	3.829	3.367	110920
E2F1		3.366	13555
EXOC4		3.365	20336
TOB2	-1.033	3.354	57259
AHCY	2.792	3.342	269378
E2F7		3.341	52679
RAB8B	3.783	3.328	235442
CTSB	1.501	3.327	13030
NOS3		3.325	18127
INSL6	2.013	3.324	27356
ZCCHC18		3.320	66995
FUCA2		3.317	66848
TCEB3		3.304	27224
TRAPPC6A		3.300	67091
GFOD1	3.120	3.297	328232
FKBP2		3.296	14227
TMBIM4	2.028	3.293	68212
MXI1	1.179	3.292	17859
LAIR1		3.292	52855
PHLPP1	1.356	3.288	98432
IER5		3.287	15939
SYK		3.286	20963
ADC	2.259	3.279	242669
DOK2		3.278	13449
PGCP		3.277	54381
DNAJC1	1.844	3.276	13418
Klra4 (includes others)		3.269	16640 16638 166
MYO5A		3.266	17918
FAM72A		3.263	108900
LRP12		3.261	239393
INHA		3.257	16322
CD160	2.682	3.254	54215
TRIP10		3.252	106628
PDK3		3.251	236900
UAP1	2.964	3.247	107652
DLGAP5		3.247	218977
SMO		3.244	319757
UCK2	2.855	3.239	80914
C1QTNF4		3.237	67445
COX6B2		3.237	333182
ITIH5		3.237	209378
ZFAND5	1.246	3.232	22682
OAS3		3.230	246727
SAR1A	3.166	3.228	20224
SLC25A36	1.987	3.226	192287
DNAJA4		3.220	58233
ELOVL6		3.219	170439
LSS		3.218	16987
IFIH1	5.671	3.213	71586

C11orf82		3.212	74041
WSB1	1.126	3.209	78889
KRTCAP2	1.119	3.207	66059
SAMD11	2.242	3.206	231004
CPEB4	1.368	3.203	67579
LANCL2		3.202	71835
SCARB1	1.650	3.201	20778
EPS8L3		3.200	99662
SLC7A1	2.339	3.198	11987
IRAK2		3.196	108960
HSPH1	2.794	3.194	15505
ZFP36	-2.696	3.193	22695
SGMS2	2.667	3.192	74442
RAB11FIP1		3.189	75767
FAM213A	3.194	3.183	70564
GBE1		3.178	74185
B9D2		3.164	232987
MAD2L1		3.162	56150
THOP1		3.161	50492
MLEC	2.877	3.160	109154
PTGS2		3.160	19225
BACH1	2.310	3.155	12013
YKT6		3.151	56418
STMN1	3.147	3.147	16765
AP2B1		3.144	71770
RAPGEF5		3.143	217944
RAB11FIP3	2.498	3.140	215445
NDFIP1	5.201	3.138	65113
IMMT		3.136	76614
NUS1	3.091	3.135	52014
UBE2A	8.285	3.131	22209
GPR137B		3.129	83924
SLC16A6		3.128	104681
THEMIS	3.002	3.124	210757
MVP		3.123	78388
GOSR1	-2.241	3.122	53334
PLTP		3.117	18830
DUT	4.215	3.116	110074
SPHK1	2.672	3.111	20698
PPP1R16B	1.080	3.110	228852
GLIS2		3.108	83396
GSTO1	2.254	3.106	14873
1810014B01Rik	2.763	3.105	66263
LTBP3		3.105	16998
SLC22A15		3.099	242126
TMEM38B	1.566	3.096	52076
ACVRL1		3.093	11482
CYB5B	4.784	3.091	66427
RAB7A	2.239	3.087	19349
SPSB1		3.087	74646
TRAFD1	1.340	3.085	231712
LTA	2.395	3.083	16992
SMPD1		3.077	20597

AEBP2	2.642	3.075	11569
TMEM30A	3.473	3.074	69981
RND2		3.074	11858
SULT2B1		3.073	54200
ARID5A	1.174	3.072	214855
CRYZ		3.069	12972
REEP3	4.726	3.067	28193
TPD52		3.057	21985
DACH2		3.053	93837
STAT5A	3.208	3.051	20850
CDC42EP3	1.467	3.045	260409
TBL1XR1	2.251	3.043	81004
WEE1	1.631	3.036	22390
RIPK4		3.035	72388
SEMA4D	1.407	3.033	20354
Akr1c12/Akr1c13		3.032	622402 27384
CRLF2	2.120	3.030	57914
TRIM8		3.021	93679
QKI		3.020	19317
TBCD	-1.684	3.019	108903
IL3RA		3.016	16188
RAP1GAP2		3.016	380711
SKAP1	-1.668	3.015	78473
BMP7		3.015	12162
TSPAN2		3.014	70747
ETV1		3.011	14009
GALE		3.007	74246
SREBF2		3.007	20788
MORF4L2	2.992	3.005	56397
ADK		3.000	11534
POLR1D	2.748	2.996	20018
GVIN1	-2.688	2.995	
STAU2		2.991	29819
TPM3	1.285	2.989	59069
IFNGR1	-2.018	2.987	15979
P2RY10		2.986	78826
S100A11	1.328	2.984	100502897 20195
ITPRIP		2.984	414801
SLC38A1	2.766	2.976	105727
PLEKHF1		2.976	72287
NF2	2.461	2.973	18016
PTPLA	2.388	2.973	30963
2500002B13Rik		2.972	78353
AIFM2		2.972	71361
ZWILCH		2.971	68014
SERP1	5.928	2.969	28146
ALDH7A1		2.967	110695
RELA	2.078	2.966	19697
FAM188A	1.700	2.965	66960
ZNF655		2.965	72611
FANCD2		2.960	211651
PREP		2.960	19072
TAX1BP1	3.087	2.958	52440

LRRC59	3.423	2.955	98238
FBXW11	2.487	2.955	103583
PKIB		2.945	18768
RBMX	2.762	2.944	19655
ANP32E	6.565	2.940	66471
CTSC		2.931	13032
RBBP8	1.347	2.930	225182
CASC5		2.928	76464
IVNS1ABP	1.270	2.927	117198
SQSTM1		2.924	18412
ITGB3	-2.694	2.921	16416
ABHD14A	2.576	2.920	68644
SLC48A1		2.920	67739
ZNHIT1	1.571	2.917	70103
IDI1	3.433	2.915	319554
USP38		2.912	74841
EGR4		2.910	13656
PEX11A		2.910	18631
LDHA	2.722	2.907	16828
TRAT1	-1.185	2.902	77647
UHMK1		2.898	16589
HOOK2		2.895	170833
SLC43A3	1.475	2.894	58207
ISG15	1.047	2.893	100038882
XPNPEP1		2.891	170750
SLC25A51	2.564	2.890	230125
SLC2A6		2.890	227659
RASGRP1	-7.315	2.888	19419
CST3	3.168	2.887	13010
TFDP2		2.882	211586
SPECC1	2.654	2.880	432572
PPM1H	-17.817	2.880	319468
LDLR	1.714	2.879	16835
TMED7	1.059	2.876	66676
CD8B		2.872	12526
PCBP4		2.869	59092
Gm5547		2.867	433637
ASAHI	2.299	2.865	11886
ARL5A	1.647	2.863	75423
ZAP70	2.718	2.862	22637
PRSS12		2.861	19142
CYFIP2	-2.115	2.859	76884
PTGR1		2.853	67103
SSH1 (includes EG:231637)	-2.521	2.851	231637
DHX58		2.849	80861
NAB2	2.411	2.848	17937
MUL1		2.848	68350
UBTD2		2.847	327900
NCF2		2.844	17970
BACE2		2.843	56175
AGFG1	3.408	2.839	15463
MAP1LC3A		2.839	66734
Tdg (includes others)	4.662	2.838	

VCL		2.837	22330
MAPKAPK3	2.782	2.834	102626
Tnfrsf22/Tnfrsf23		2.833	79201 79202
DEPTOR	-1.492	2.832	97998
MUC1		2.832	17829
LNX2	1.904	2.830	140887
SYNCRIP	4.652	2.826	56403
NFE2L2		2.825	18024
PSAT1	7.577	2.823	107272
DIP2C		2.822	208440
FLOT1		2.822	14251
SOAT2		2.822	223920
HOOK3		2.820	320191
SELK	1.991	2.819	80795
UPP1	1.123	2.816	22271
PHLDB1		2.811	102693
SUV39H2		2.808	64707
ADORA2B	2.617	2.807	11541
C16orf87	1.407	2.806	66714
MCM6		2.800	17219
ATF4	2.239	2.796	11911
NENF		2.796	66208
SYNGR2	3.435	2.795	20973
AR		2.795	11835
PDIA5		2.792	72599
M6PR	5.922	2.790	17113
AW112010	1.494	2.789	107350
IER2	-1.592	2.787	15936
IL6ST	-1.724	2.787	16195
CTSZ	4.621	2.781	64138
RASGRP4		2.779	233046
GCFC1	-1.174	2.773	67367
DSCC1		2.772	72107
KIF18A		2.769	228421
PADI2		2.769	18600
GMPPB	2.558	2.765	331026
CENPA	-1.191	2.757	12615
SEMA4F	1.756	2.749	20355
PTPN1	-1.473	2.749	19246
ENO1		2.749	13806 433182
CRELD2		2.748	76737
TMBIM1	1.285	2.744	69660
PLIN2	2.577	2.741	11520
ACSL3		2.740	74205
NDC80		2.735	67052
CAPN2	2.409	2.734	12334
MTMR9		2.734	210376
KRT80		2.725	74127
SGMS1	-3.013	2.721	208449
STAT5B	3.749	2.718	20851
TMED10	3.057	2.717	100042773 68581
Runx1	-1.308	2.713	
WSB2	3.908	2.712	59043

FBLN1		2.712	14114
BMP2K	1.455	2.710	140780
TGFBR2	-5.495	2.710	21813
NFAT5	1.448	2.709	54446
GOLT1B	3.208	2.706	66964
TM9SF4		2.706	99237
BIK		2.703	12124
CA13		2.694	71934
SLC30A4	2.586	2.690	22785
TNFSF4		2.690	22164
TNS1		2.689	21961
SEPN1		2.686	74777
CDS2	-2.250	2.685	110911
AVPI1		2.685	69534
C14orf169		2.685	71952
RDBP	1.975	2.677	27632
PRF1	-1.443	2.677	18646
CD200R1		2.677	57781
PLXNA1	2.001	2.676	18844
CYB5R3	-1.072	2.673	109754
PAQR4		2.673	76498
CLSTN1		2.672	65945
SLC7A5	7.003	2.671	20539
KIF13A		2.671	16553
TOX2		2.671	269389
UBE2T		2.671	67196
LRPAP1	2.092	2.668	16976
TMEM64	-1.725	2.668	100201
CRADD		2.667	12905
SIK1		2.667	17691
PPAPDC1B		2.666	71910
WWC1		2.664	211652
HUNK		2.660	26559
CHTF18		2.655	214901
Nptn	2.104	2.649	20320
OAS1		2.649	23960 246730
PPP1R11	2.012	2.648	76497
TRAK1		2.643	67095
CDK13	-1.398	2.641	69562
RABL5		2.640	67286
GPR114		2.639	382045
MTF1		2.637	17764
HMGB3	3.108	2.635	15354
PTAR1	1.642	2.635	72351
DOCK7		2.633	67299
ABHD5		2.632	67469
ELMO2		2.632	140579
GUCA1A		2.630	14913
ZNF263	1.371	2.625	74120
C3orf58		2.625	68861
MPP7		2.623	75739
UBXN8		2.620	108159
KIAA0284	1.657	2.616	217882

SYNPO		2.615	104027
TMLHE		2.613	192289
GCC1		2.612	74375
MGAT1	1.079	2.608	17308
RAB4A	-1.246	2.607	19341
GBP6	-6.126	2.603	
AFF4		2.600	93736
CLYBL		2.591	69634
BCL2L1	2.364	2.590	12048
MTPN	3.185	2.588	14489
RAD18		2.588	58186
FAM125A		2.585	73711
RAB19		2.584	19331
MLLT3		2.583	70122
MANF	5.883	2.582	74840
FBXO30		2.582	71865
EIF4E	2.927	2.581	13684
AFTPH	-1.356	2.580	216549
SLK	1.772	2.579	20874
GGTA1P		2.579	14594
RALB	2.394	2.578	64143
SLC37A2	2.370	2.578	56857
INPPL1		2.577	16332
TSPAN4		2.576	64540
ABL2	2.496	2.575	11352
B9D1		2.574	27078
CRTAP	2.755	2.572	56693
DDX24		2.572	27225
RHOF		2.572	23912
FOXO3	-1.570	2.571	56484
POC1A		2.570	70235
LARP4	8.281	2.568	207214
ARC		2.566	11838
Cycs/Gm10053	4.644	2.564	13063
SPRED2		2.561	114716
ATG16L2		2.560	73683
SERTAD1		2.560	55942
TCF19		2.559	106795
APAF1		2.557	11783
HSP90AA1	2.508	2.556	15519
DYNLL2	2.983	2.554	68097
TNIP2		2.554	231130
VWA5A		2.553	67776
TRIB3		2.551	228775
CALCRL	5.458	2.550	54598
REEP5	2.071	2.548	13476
ROM1		2.546	19881
YPEL4		2.545	241525
FAM129B	1.213	2.544	227737
DCTN3	2.626	2.542	53598
ERCC6L		2.541	236930
HOPX	-1.375	2.539	74318
LAMC1	2.370	2.537	226519

AZIN1	3.751	2.535	54375
PNP		2.532	667034 18950
GYS1		2.531	14936
INTS6		2.530	18130
ST3GAL5		2.528	20454
SLC9A6		2.524	236794
MEX3C	3.451	2.523	240396
SCAMP1		2.523	107767
OCIAD2		2.519	433904
DDX21	5.561	2.517	56200
SPTBN1	-9.725	2.517	20742
TWSG1	2.267	2.516	65960
CACUL1	-1.706	2.515	78832
HPGDS		2.514	54486
FKBP11		2.513	66120
SNRNP35		2.509	76167
NDRG4		2.508	234593
HDAC6		2.506	15185
COL6A2	1.088	2.505	12834
PSPC1	3.851	2.504	66645
UBE2N	3.767	2.498	
C14orf159		2.497	217830
UXS1	1.556	2.492	67883
ITGAE		2.492	16407
MANSC1		2.489	67729
AKR1B15		2.488	
TXN	4.082	2.485	22166
AARS	2.119	2.484	234734
ZNF622	-1.469	2.484	52521
HBS1L		2.483	56422
ARMCX3	2.088	2.482	71703
PDE12	2.061	2.481	211948
Gm2027/Naf1	5.881	2.480	234344 10003906
GCNT1		2.480	14537
VKORC1	1.401	2.477	27973
ABHD2	-1.345	2.474	54608
CLN6		2.473	76524
ARRB1	-1.867	2.471	109689
TM7SF3		2.470	67623
ACOT11		2.464	329910
BTD		2.462	26363
ENTPD4		2.460	67464
MXD3		2.460	17121
DNAJC2	2.950	2.458	22791
STK3		2.457	56274
LUM	1.630	2.454	17022
Gstt3		2.454	
IGF2BP3		2.454	140488
PTPN4		2.451	19258
PRRC1	2.828	2.449	73137
TFE3		2.446	209446
CNTF		2.445	12803
MCM2	1.240	2.442	17216

DYRK1A	-1.175	2.440	13548
DDA1	-1.493	2.438	66498
XPR1		2.437	19775
MGMT		2.430	17314
DUSP2	2.312	2.429	13537
ARL15		2.427	218639
TRAIP		2.427	22036
GPR107		2.426	277463
WWOX		2.426	80707
PRKX	-1.013	2.424	19108
DDOST	2.014	2.422	13200
VAMP2		2.422	22318
GRAMD1B	2.466	2.420	235283
KLF6	-2.443	2.419	23849
UBE2E3	2.795	2.416	22193
ARL6IP5	-1.170	2.416	65106
SLPI	2.169	2.415	20568
WBP5	-1.060	2.415	22381
ZYX	2.524	2.412	22793
GABBR1		2.412	54393
D13Ertd787e		2.409	52680
GLIPR1	3.230	2.408	73690
MDM2		2.408	17246
EFEMP2		2.406	58859
HAGHL		2.406	68977
E2F3	2.009	2.404	13557
EIF2C3		2.404	214150
SPCS3		2.403	76687
AGPAT5	2.774	2.401	52123
RIPK3		2.400	56532
Eif4e2	1.967	2.399	
EIF6	3.387	2.398	16418
C19orf42		2.394	66818
NMRAL1		2.393	67824
SLMO2	3.034	2.391	66390
FAM102A	-5.092	2.390	98952
LPCAT3	2.900	2.389	14792
EDEM1	2.501	2.387	192193
CHAF1B		2.387	110749
SAMHD1	-2.098	2.386	56045
POLD3		2.386	67967
CDC25B		2.383	12531
SLC35A2		2.382	22232
SYNJ1		2.379	104015
BAIAP2		2.377	108100
ISCA1		2.377	69046
USP49		2.376	224836
PLCG2		2.375	234779
PLEKHB2		2.374	226971
DCTPP1	2.192	2.373	66422
DAP	1.241	2.372	223453
VAMP3	-1.421	2.372	22319
C10orf35		2.372	69894

EIF3J	3.009	2.369	78655 100042807
SMC5	1.792	2.368	226026
POMC		2.368	18976
6530402F18Rik		2.366	76220
TUBA3C/TUBA3D		2.366	
TNPO1	-1.312	2.364	238799
C6orf108		2.364	381101
LRRC8C	-2.823	2.362	100604
DERL3		2.362	70377
VAT1		2.361	26949
AGPAT3	1.690	2.360	28169
ARHGEF25		2.360	52666
Rheb (mouse)		2.360	
SMAD3		2.359	17127
ATPIF1	2.763	2.358	11983
CRMP1		2.357	12933
IRG1		2.357	16365
SRGAP3		2.357	259302
ATP13A3		2.354	224088
AK2	3.252	2.351	11637
C16orf48		2.346	102124
LCMT1		2.346	30949
KCNK7		2.343	16530
CD47	-4.227	2.340	16423
PDLIM7		2.340	67399
PDZK1IP1	4.031	2.339	67182
ARHGAP26		2.339	71302
DHFR		2.338	13361
DHRS1		2.333	52585
SLC2A9		2.330	117591
KCNA3		2.329	16491
TAF1D	1.773	2.328	75316
MIF	2.572	2.323	17319
SIK3	4.564	2.321	70661
GSR		2.321	14782
SCCPDH		2.321	109232
C1orf35	1.086	2.317	67862
PIM2		2.317	18715
FAM83G	1.148	2.314	69640
DUSP10		2.314	63953
METTL7A		2.309	70152
NLRX1		2.309	270151
SLC11A2		2.308	18174
POLE3		2.307	59001
Igl-V1		2.304	16142
FAM54A		2.303	71804
SNX6	-1.596	2.301	72183
FAH		2.300	14085
FAM216A		2.300	68948
PANK3	1.677	2.299	211347
PRIM2		2.299	19076
UFM1	2.225	2.298	67890
NPLOC4		2.298	217365

DBI	2.748	2.294	13167
SIVA1	2.914	2.293	30954
ATP6V1A		2.290	11964
RHOB		2.290	11852
STX8		2.290	55943
NDUFV3	-1.103	2.289	78330
LSM12 (includes EG:124801)	1.971	2.288	268490
IL18		2.288	16173
GHITM	3.956	2.287	66092
JARID2	2.714	2.287	16468
SIL1		2.285	81500
CERCAM		2.284	99151
MCM8		2.281	66634
IFI27	-1.133	2.279	
ALYREF		2.274	21681
GNB5		2.274	14697
ARF1	1.965	2.271	11841
C1GALT1		2.271	94192
IFT122		2.270	81896
DDR1	1.114	2.268	12305
SH3BGRL	2.430	2.267	56726
GNGT2		2.266	14710
FAM20B		2.265	215015
LPGAT1		2.265	226856
ABCB1		2.264	18671
TCEA1		2.264	21399
CACFD1	-1.532	2.263	381356
KIF11		2.262	16551
ACBD6		2.258	72482
RFK	1.479	2.253	54391
NSDHL		2.252	18194
PPHLN1	1.493	2.251	223828
CMIP		2.251	74440
LIME1		2.250	72699
BRE		2.249	107976
Enah		2.249	13800
RNH1	5.328	2.246	107702
NRM		2.246	106582
SIRT2		2.246	64383
EIF5A	2.481	2.241	276770
FBXW8	1.323	2.241	231672
GATA1		2.241	14460
STX7		2.241	53331
FAM100B		2.240	319370
ANKRD28	2.364	2.238	105522
DSN1		2.237	66934
MAP4K5		2.237	399510
FBXO2		2.236	230904
MTHFD2	2.429	2.234	17768
ADARB1	2.380	2.234	110532
CCL5	3.265	2.232	20304
GTF2B		2.231	229906
POLD4		2.231	69745

NEO1		2.230	18007
SECISBP2		2.229	75420
AGL		2.227	77559
NQO2		2.227	18105
PXMP2		2.227	19301
SSR3	4.113	2.223	67437
C14orf43	-2.390	2.223	238317
ATP2A2	5.369	2.221	11938
NOTCH1	2.083	2.219	18128
FBXO42		2.219	213499
MTDH	2.509	2.218	67154
SFPQ	-6.616	2.217	71514
MCPH1 (includes EG:244329)		2.216	244329
Neb1		2.216	74103
SGCB		2.216	24051
MOCOS		2.214	68591
BSCL2	2.087	2.213	14705
SNRNP25		2.213	78372
CBWD2		2.212	226043
MYEF2		2.212	17876
RAB31		2.210	106572
RCN1		2.210	19672
CLTB		2.209	74325
SERPINB9	1.646	2.207	20723
CCR10		2.207	12777
RAD23B	2.107	2.206	19359
BRIP1		2.203	237911
TNFAIP8	2.391	2.202	106869
SH2B3	-1.046	2.202	16923
ACACA		2.202	107476
BRI3BP		2.202	76809
EML2		2.199	72205
FAM114A1		2.198	68303
FHIT		2.198	14198
H2AFX	2.056	2.195	15270
SEL1L	1.301	2.195	20338
BBS5		2.195	72569
PASK		2.193	269224
RILPL1		2.193	75695
EXOC6	-1.822	2.192	107371
ACADL	1.422	2.191	11363
IGF1R	1.216	2.191	16001
SAT1	2.442	2.190	20229
BRD2	-1.413	2.190	14312
CTSL2		2.189	13039
HIAT1	2.979	2.186	15247
AMMECR1L	1.379	2.185	225339
MYBL2		2.185	17865
UVRAG		2.185	78610
RYBP		2.184	56353
RABGEF1		2.183	56715
P4HB	3.728	2.181	18453
NXN		2.181	18230

Larp1b	5.082	2.180	214048
TCF4		2.178	21413
KPNA3	1.580	2.177	16648
ZNF367		2.177	238673
FGGY		2.176	75578
NLRP3		2.176	216799
FAM127A		2.175	
FAM190B		2.175	72972
GOT2		2.174	14719
MGAT4A		2.172	269181
NCF1		2.172	17969
NETO2		2.171	74513
FDFT1	3.619	2.170	14137
AQP3		2.170	11828
Gm885		2.169	380732
ITPR1	4.346	2.168	16438
HCFC1R1	-1.141	2.166	353502
AGTRAP		2.166	11610
OS9	-1.274	2.163	216440
NICN1		2.163	66257
DCLRE1A		2.162	55947
GTSE1		2.162	29870
PRELID1		2.161	66494
RFC3		2.161	69263
TAGLN		2.160	21345
MCM4	1.596	2.159	17217
PLD3		2.159	18807
PPFIBP1		2.159	67533
COMMD10		2.158	69456
SFR1	2.105	2.157	67788
GNL3	2.556	2.156	30877
KDM2B	5.324	2.155	30841
TMPO	2.001	2.153	21917
DSTN		2.153	56431
RAB33A		2.152	19337
SND1		2.152	56463
TAPBP	-1.166	2.151	21356
RSPH3		2.151	66832 100037282
TSPAN3	1.376	2.150	56434
SERPINB6	1.305	2.150	20719
PKD2		2.149	18764
NRP1	4.365	2.148	18186
HYOU1	2.271	2.148	12282
APH1A		2.148	226548
GPX7		2.145	67305
TMEM48		2.145	72787
IRF2BP2	-1.888	2.144	270110
KLK8		2.143	259277
RORC		2.142	19885
DESI1		2.141	28075
CANX	3.437	2.140	12330
Aph1c		2.139	68318
PRKAR1A	2.421	2.138	19084

PI4K2B		2.137	67073
STT3B	2.601	2.136	68292
ATMIN	1.547	2.136	234776
SSR2		2.136	66256
DPAGT1		2.135	13478
HSPA14		2.133	50497
SPATS2		2.132	72572
ASRGL1	-1.032	2.131	66514
API5		2.130	11800
GLG1	-1.711	2.127	20340
SDC3		2.127	20970
SLC16A1	5.378	2.121	20501
DDX25		2.120	30959
C8G		2.115	69379
ZNF593	1.930	2.113	68040
SELS	2.456	2.111	109815
ADSSL1		2.111	11565
MTHFD1L		2.110	270685
CSTF2	-1.575	2.108	108062
HNRNPC		2.108	15381
SKA3		2.108	219114
NDEL1		2.107	83431
MKRN1	-3.141	2.106	54484
MSMO1	1.237	2.105	66234
BBS9		2.105	319845
UFD1L		2.105	22230
HEXIM2		2.104	71059
SSTR2	1.325	2.103	20606
PPME1		2.103	72590
D430020J02Rik (includes others)	2.106	2.101	
ETS2	-1.051	2.100	23872
VEGFB		2.100	
FBXO34	1.980	2.099	78938
SSX2IP		2.099	99167
ZFAND3	-2.588	2.096	21769
RRAS		2.095	20130
STRAP	3.974	2.093	20901
IRGM	-1.514	2.092	15944
PCK2		2.089	74551
TREML2		2.089	328833
TRIM27		2.088	19720
C14orf1	3.226	2.087	58520
RIOK1	-1.349	2.087	71340
C21orf56		2.086	76573
GGT7		2.086	207182
NAA38		2.085	76522
OTUD7B	2.061	2.083	229603
UBC	-1.679	2.083	22190
BCR		2.081	110279
EIF3C/EIF3CL	3.081	2.080	56347
DDX3X	2.520	2.080	13205
GAS2	1.668	2.080	14453
KATNB1		2.080	74187

DDX19B		2.079	234733
HSP90B1	3.239	2.078	22027
CMC2	2.427	2.078	66531
HSPBP1		2.078	66245
CAPNS1		2.077	12336
DHCR24		2.075	74754
LGMN		2.071	19141
LACTB2		2.069	212442
NEDD4L	-2.503	2.068	83814
SIGMAR1		2.068	18391
SMAP2	-2.094	2.066	69780
TFDP1	3.541	2.065	21781
FOSL1		2.064	14283
CA9		2.063	230099
GSTM5		2.061	14862
SLC25A13		2.061	50799
SLC35B4	-1.376	2.058	58246
FLI1	-2.864	2.057	14247
KLK3		2.056	18048 16622 166
RB1	-1.187	2.055	19645
TBC1D7		2.052	67046
CDC34	1.869	2.051	216150
ZCCHC24		2.050	71918
YWHAE	2.311	2.049	22627
PTPN9		2.049	56294
SNRPD1	2.933	2.048	20641
SDCBP	2.107	2.047	53378
DEGS1	2.235	2.046	13244
PAPD7	1.589	2.046	210106
CNNM2		2.044	94219
SLC35A3	4.830	2.043	229782
PLBD2	1.446	2.043	71772
HIPK1		2.043	15257
ERN1	2.348	2.042	78943
BATF3	1.535	2.042	381319
CCDC92		2.042	215707
IL15RA		2.042	16169
PSMD9		2.041	67151
RNF180		2.041	71816
TIPIN		2.039	66131
OLFM1		2.038	56177
STON2		2.037	108800
TNFRSF8		2.036	21941
TMEM160	1.136	2.035	69094
UNC119		2.035	22248
IFIT1B		2.034	15957
PDE8A		2.034	18584
EIF4A1	4.085	2.033	13681
DTX4		2.033	207521
CNDP2	1.515	2.032	66054
ALDH1L2		2.032	216188
PEX7		2.032	18634
SLC1A5	2.946	2.031	20514

CBX5		2.031	12419
SLC25A4	5.175	2.030	11739
PTPMT1		2.029	66461
SRGAP2		2.029	14270
BST2		2.028	69550
NKRF		2.027	77286
ANAPC15		2.026	75430
PPP1R10		2.026	52040
TMED5	2.379	2.024	73130
ADIPOR1		2.024	72674
E2F6	1.789	2.023	50496
C17orf79		2.022	66423
ST14		2.021	19143
FGD1		2.020	14163
DYM	-2.168	2.019	69190
CCDC34		2.019	68201
STIP1		2.018	20867
CRYBG3		2.017	224273
MBOAT1	2.704	2.016	218121
PTOV1		2.016	84113
GLUL		2.014	14645
GPR65	2.210	2.013	14744
PRAF2		2.013	54637
RNF31		2.011	268749
PRKAR1B		2.010	19085
VDR		2.010	22337
RTP4	-3.867	2.008	67775
AKT2		2.008	11652
HIST1H2BJ/HIST1H2BK		2.007	319190
RTKN2		2.006	170799
TMED3		2.006	66111
TOR1AIP2	2.290	2.005	240832
GALM	1.318	2.003	319625
C1orf85		2.002	56700
INPP5A		2.002	212111
CLIC1	2.775	2.000	114584
NOP58		2.000	55989
PDIA6	2.063	1.998	71853
SLC39A14	2.059	1.998	213053
GSPT1	5.586	1.987	14852
PIK3CA	2.317	1.987	18706
CD2BP2	-2.095	1.985	70233
CLTC	3.785	1.977	67300
BZW1	2.334	1.976	66882
TIMM8A	3.408	1.962	30058
HSPA9	3.656	1.961	15526
FZR1	-2.030	1.961	56371
CCNE1		1.955	12447
NFKB1	3.250	1.954	18033
SHMT1	2.033	1.954	20425
PSME3	2.127	1.949	19192
HNRNPAB	4.606	1.948	15384
CCND2	5.373	1.940	12444

MPP6	2.204	1.935	56524
NCOR1	-3.059	1.935	20185
NUDT5	2.042	1.934	53893
FKBP1A	2.808	1.932	14225
SLC39A1	2.533	1.926	30791
Srp54c	2.375	1.921	100101806
SPTLC1	4.690	1.920	268656
TAF4B	1.804	1.914	72504
JUND	-2.167	1.912	16478
Trim30a/Trim30d	-2.269	1.901	209387 20128
STT3A	4.184	1.881	16430
NELF	2.277	1.871	56876
BRCA2		1.858	12190
SUB1	2.063	1.857	20024
SMAD7	-4.449	1.841	17131
PICALM	2.000	1.836	233489
ETFB	2.492	1.833	110826
TXNL1	2.386	1.828	53382
RCL1	2.860	1.826	59028
TMEM33	2.115	1.818	67878
WDR26	-4.033	1.813	226757
RNF11	3.286	1.812	29864
MST4	2.008	1.808	70415
EAF1	2.953	1.805	74427
UBE2J1	-2.115	1.805	56228
PHF6	-3.265	1.801	70998
S100A10	3.633	1.796	20194
NDFIP2	4.639	1.785	76273
UBE2L3	3.390	1.779	22195
ZC3H15	3.137	1.770	69082
HSD17B11	-4.024	1.765	114664
PTMS	2.210	1.759	69202
TET2	2.921	1.758	214133
HIST1H1C	-3.367	1.757	50708
Rbbp6	2.118	1.756	
EPRS	2.173	1.754	107508
TOP1	5.938	1.741	21969
SOD2	2.424	1.729	20656
PPM1A	2.114	1.720	19042
B3GNT2	4.525	1.719	53625
MAT2A	2.335	1.715	232087
YTHDF2	2.560	1.712	213541
CCNG1	5.404	1.710	12450
CDK17	3.213	1.710	237459
UBA3	2.019	1.694	22200
ELK3	2.258	1.692	13713
STAT4	-2.045	1.691	20849
NOC4L	5.766	1.689	100608
TRIB2	-3.936	1.688	217410
PLEKHA2	2.175	1.686	83436
SEPT11	3.204	1.683	52398
CHM	2.763	1.679	12662
ACLY	5.873	1.672	104112

PPA1	5.156	1.671	67895
IRF7		1.665	54123
FOXK2		1.664	68837
PGLYRP2	-2.497	1.660	57757
ALDH18A1	2.311	1.658	56454
GARS	3.436	1.653	353172
MMD	2.599	1.652	67468
TXNRD1	2.493	1.648	50493
ZNF330	2.192	1.642	30932
Refbp2	2.148	1.640	56009
OAZ2	2.023	1.633	18247
INTS12	2.126	1.632	71793
HLA-C	-3.635	1.623	
DTYMK	2.433	1.618	21915
BAZ1A	4.379	1.613	217578
RRP1B	4.665	1.608	72462
RAN	4.453	1.607	19384
AI504432	3.832	1.607	229694
CDK4	2.364	1.606	12567
NDUFAB1	2.627	1.601	70316
ABTB2	2.573	1.595	99382
ELP5	2.092	1.589	54351
UBA1	2.262	1.584	22201
FYB	-2.956	1.578	23880
BAX	3.360	1.576	12028
MIS18A	3.036	1.571	66578
TOB1		1.570	22057
Ncl	4.301	1.569	
PWP1	2.521	1.564	103136
CCT3	3.143	1.559	12462
PPAN	2.656	1.557	235036
HSD17B12	11.535	1.554	56348
RRS1	4.026	1.553	59014
HMGA1		1.552	
ADSS	2.589	1.551	11566
MBNL2	2.351	1.543	105559
RAPGEF2	-2.803	1.541	76089
GALNT6	-5.202	1.537	207839
SLC25A33	2.093	1.536	70556
SMYD2	2.273	1.534	226830
ADAM10	3.738	1.532	11487
UBXN2A	2.942	1.532	217379
TMEM185B	2.117	1.532	226351
ECE1	2.012	1.532	230857
PLA2G16	-2.408	1.532	225845
C19orf10	2.575	1.518	28106
C4orf43	3.479	1.514	66282
HSP90AB1	2.240	1.509	15516
GLUD1	2.609	1.506	14661
ATP10A	4.825	1.502	11982
FAM108C1	8.641	1.501	70178
NAA20	2.004	1.495	67877
XPOT	6.206	1.494	73192

PGRMC2	2.369	1.492	70804
C4orf32	2.954	1.485	70617
METAP2	2.782	1.483	56307
RNF149	4.687	1.480	67702
IPO5	7.207	1.478	70572
NAA50	3.499	1.476	72117
LAP3	3.448	1.473	66988
MYO10	2.730	1.471	17909
SHMT2	2.096	1.471	108037
CA2	8.040	1.465	12349
FNDC3A	2.380	1.462	319448
E2F2	-1.748	1.461	242705
EIF5	2.430	1.460	217869
INPP4B	-2.408	1.460	234515
HDGF	2.247	1.458	15191
NCS1	2.067	1.458	14299
SLC03A1	2.628	1.446	108116
MXD4		1.438	17122
RDX	2.935	1.436	19684
KARS	2.534	1.431	85305
HNRPLL	3.958	1.427	72692
EIF2C2	2.689	1.420	239528
ADRB2	-2.006	1.418	11555
NARS	4.320	1.417	70223
RCC1	2.547	1.416	100088
AKAP1	4.293	1.411	11640
RPS27L	5.611	1.407	67941
TESC	-2.098	1.398	57816
HTATSF1	-2.104	1.398	72459
DDT	2.855	1.394	13202
NFE2L1	2.255	1.393	18023
CSNK2A2	4.012	1.391	13000
MYBL1		1.390	17864
CNST	-2.064	1.387	226744
WNK1	-2.087	1.385	232341
BTG2	-2.416	1.381	12227
UQCRFS1	2.210	1.380	66694
SOCS3	-2.693	1.376	12702
TMEM65	4.199	1.372	74868
PDPN	3.599	1.368	14726
PA2G4	4.216	1.365	18813
SGK1	-2.361	1.364	20393
AES	-2.028	1.363	14797
RAI14	2.679	1.356	75646
RANBP1	3.089	1.354	19385
SRM	4.861	1.343	20810
POU4F1		1.340	18996
PPP2R1B	2.371	1.338	73699
EIF3A	2.219	1.336	13669
SELPLG	-3.212	1.336	20345
GSTT2/GSTT2B	2.198	1.332	14872
HAX1	2.095	1.330	23897
GZF1	2.327	1.323	74533

RGS2	-3.658	1.318	19735
AMPD2	3.174	1.314	109674
KIAA1551	-3.548	1.314	67246
ST13	2.861	1.310	70356
CDK2AP1	2.255	1.305	13445
CRABP2	6.603	1.302	12904
CAPN1	-2.842	1.297	12333
PSMD12	2.376	1.296	66997
ELOVL5	-3.978	1.285	68801
PLAGL1	3.875	1.283	22634
FASTKD3	5.247	1.265	69577
MYBBP1A	2.195	1.262	18432
PABPC1	-5.583	1.252	18458
NOP56	2.108	1.251	67134
AHCYL1	5.138	1.225	229709
TUBB	-2.255	1.213	22154
DFNA5	2.221	1.212	54722
UBR5	2.081	1.206	70790
NHP2	2.969	1.204	52530
NRIP1	-2.832	1.202	268903
KDM5B		1.201	75605
NOP2	2.001	1.198	110109
EEF1E1	5.516	1.195	66143
GTPBP4	3.458	1.190	69237
ALG9	2.244	1.186	102580
TMEM206	-2.058	1.186	66950
NT5DC3	2.137	1.181	103466
PPP3CA	2.337	1.180	19055
PIN1	2.678	1.170	23988
LARP1	2.698	1.163	73158
RUNX3	-1.318	1.163	12399
CDKN2D	-5.135	1.147	100043858 12581
GBP7	-6.985	1.146	229900
CD200	8.896	1.145	17470
DNAJC7	-2.594	1.143	56354
MLLT11	5.178	1.135	56772
SEPT9	-2.572	1.135	53860
TRIOBP	-2.332	1.129	110253
TAP1	-2.101	1.128	21354
USP39	2.792	1.127	28035
WDR7	-2.342	1.127	104082
IRF9		1.126	16391
DIS3	2.570	1.120	72662
RAB3GAP2	2.301	1.120	98732
EID1	-4.874	1.119	58521
STOML2	2.588	1.118	66592
LYAR	2.983	1.113	17089
NOP16	3.470	1.111	28126
DENND3	2.078	1.105	105841
FOXP3		1.102	20371
PNO1	3.365	1.101	66249
CHCHD4	5.287	1.096	72170
HARS	2.269	1.093	15115

RUND C3B	-3.953	1.090	242819
TAF9	2.051	1.089	108143
SEC23A	2.006	1.089	20334
CAB39	2.106	1.083	12283
EBNA1BP2	4.629	1.073	69072
POMP	2.093	1.059	66537
RPL7L1	2.196	1.055	66229
RUVBL2	1.804	1.049	20174
TARS	3.530	1.032	110960
Snhg6	2.222	1.032	73824
IRF5		1.028	27056
HCST	-2.447	1.027	23900
TCP1	2.155	1.015	21454
TAP2	-2.309	1.014	21355
UBXN7	2.405	1.011	224111
GCSH	2.081	1.009	68133
ATRAID	-2.915	1.009	381629
NPC2	-2.170	-1.004	67963
CD96	-2.709	-1.004	84544
GK	2.781	-1.008	14933
FLOT2	-3.145	-1.010	14252
PDAP1	2.131	-1.019	231887
LBR	-2.339	-1.022	98386
SRF	-1.882	-1.028	20807
RNF213	-2.978	-1.028	672511
CAD	2.149	-1.035	69719
ACSL5	2.837	-1.039	433256
DHCR7	-2.156	-1.041	13360
HEXA	-2.052	-1.050	15211
UTP15	2.250	-1.058	105372
FBL	2.300	-1.066	14113
BTG1	-8.135	-1.072	12226
CTPS	4.005	-1.073	51797
WAS	-2.508	-1.080	22376
STK24	-2.454	-1.095	223255
CINP	2.535	-1.097	67236
MRPL12	2.442	-1.102	56282
GRWD1	2.416	-1.102	101612
PFDN4	2.172	-1.104	109054
LFNG	-4.564	-1.107	16848
YWHAG	2.229	-1.111	22628
CCNL2	-2.309	-1.111	56036
TRA2B	-3.426	-1.119	20462
MKNK2	-2.774	-1.121	17347
PRIC285	-3.285	-1.122	229003
PINK1	-3.541	-1.126	68943
TMSB10/TMSB4X	-2.821	-1.129	19240 399591 78
BNIP3L	-2.644	-1.134	100043324 12177
MYO18A	-2.025	-1.136	360013
TXNRD3	2.430	-1.143	232223
BTAF1	3.794	-1.146	107182
SHKBP1	-2.475	-1.149	192192
SPTSSA	-3.819	-1.150	104725

HSPD1	4.189	-1.161	15510
NCAPD3	-2.089	-1.172	78658
HIVEP2	1.279	-1.180	15273
ARID4A	1.464	-1.184	238247
PDE3B	-6.520	-1.193	18576
STAT6		-1.193	20852
DTX3L	-3.350	-1.203	209200
PSAP	-3.367	-1.208	19156
ITGB7	-4.928	-1.214	16421
PPP1R3F	-2.314	-1.219	54646
REST		-1.219	19712
ACP5	-3.997	-1.223	11433
VRK3	-2.767	-1.224	101568
UROD	-5.668	-1.229	22275
ATF6B		-1.234	12915
LSP1	-2.888	-1.237	16985
RUVBL1	1.492	-1.238	56505
MAP4K4	-2.746	-1.239	26921
NOMO1 (includes others)	2.758	-1.240	211548
C1QBP	3.956	-1.242	12261
SMARCA4	-1.042	-1.243	20586
TUBA4A	-3.127	-1.248	22145
PREX1	-3.891	-1.252	277360
PRMT2	-2.038	-1.261	15468
RRP15	2.981	-1.263	67223
AKAP13	-3.252	-1.263	75547
NUDCD2	3.402	-1.277	52653
UBA7	-3.611	-1.290	74153
ARID4B	-2.470	-1.291	94246
NSUN2	3.176	-1.292	28114
YWHAZ	-2.250	-1.293	22631
MYST3	-2.185	-1.294	244349
PDE1B	-2.233	-1.294	18574
DCTN6	-2.204	-1.301	22428
CLK1	-5.042	-1.301	12747
METTL1	2.247	-1.304	17299
CCDC12	-2.014	-1.306	72654
LAMTOR2	-2.406	-1.312	83409
KIAA0664	2.146	-1.314	74148
WDR61	3.278	-1.318	66317
PACS1	-2.674	-1.325	107975
FOXN3	-2.573	-1.330	71375
IARS	2.412	-1.337	105148
IFI35	-2.322	-1.350	70110
TCF3	-1.206	-1.354	21423
DNM2	-3.044	-1.354	13430
GAR1	2.124	-1.355	68147
PSMA3	2.097	-1.355	19167
KLF13	-2.158	-1.358	50794
RLF	-3.042	-1.359	109263
ESRP2	-4.236	-1.362	77411
TUBA1A	-2.829	-1.363	22142
RCOR1	-2.184	-1.365	217864

FLNA	-2.263	-1.375	192176
MITF		-1.375	17342
ETV3	-3.135	-1.378	27049
EMP3	-3.731	-1.383	13732
CSK	-4.052	-1.386	12988
USE1	-2.286	-1.393	67023
GPSM3	-3.909	-1.393	106512
PRKCB	-4.346	-1.393	18751
SHISA5	-2.562	-1.397	66940
PDPK1	-2.213	-1.398	18607
CD164	-3.398	-1.398	53599
SP2	-2.260	-1.399	78912
DDX1	2.564	-1.407	104721
RPS21	-2.462	-1.412	66481
HEATR1	2.782	-1.417	217995
SMARCD2	-3.722	-1.419	83796
DCTN1	-2.043	-1.424	13191
LPIN2	2.349	-1.426	64898
C12orf5	2.186	-1.433	319801
ADRBK1	-2.773	-1.437	110355
B230354K17Rik	2.042	-1.444	
RFC1		-1.447	19687
TRAPPC4	2.315	-1.448	60409
EP300	-2.065	-1.448	328572
ZBTB7A		-1.450	16969
HN1	-2.331	-1.451	15374
WDR75	2.583	-1.454	73674
GIMAP6	-12.489	-1.455	231931
SAMD9L	-9.836	-1.457	209086
EIF2S2	3.106	-1.461	
UNC13D	-2.241	-1.464	70450
FBRSL1	-2.220	-1.470	381668
SRRM2	-2.121	-1.471	
EMB	-3.458	-1.471	13723
EIF2S1	2.419	-1.473	13665
SKIV2L	-2.136	-1.475	108077
CNP	-15.525	-1.480	12799
B4GALT1	-2.837	-1.481	14595
Tgtp1	-13.838	-1.485	
Jakmip1	-42.175	-1.487	
TSPAN13	-2.944	-1.489	66109
SLC9A3R1	-9.462	-1.491	26941
PPP2R5C	-6.555	-1.497	
RNF123	-2.522	-1.504	84585
WDR6	-3.192	-1.522	83669
WDR3	2.305	-1.523	269470
SASH3	-3.610	-1.529	74131
NIN	-2.978	-1.531	18080
RPS15A	-2.071	-1.534	267019
ATP11B	-3.345	-1.535	76295
CAT	-3.359	-1.536	12359
IK	-2.374	-1.538	24010
UBFD1	2.649	-1.542	28018

Ifi204 (includes others)	-2.203	-1.543	100504287 5453E
TNFRSF1A	-2.202	-1.544	21937
TLR1	-2.489	-1.545	21897
ADD1	-5.210	-1.545	11518
DCAF11	-2.250	-1.550	28199
GBAS	-2.123	-1.558	14467
RPL3	-2.008	-1.561	27367
ARL2BP	-2.794	-1.569	107566
MYL12B	-2.392	-1.570	67938
HIVEP3	9.663	-1.575	16656
HSD11B1	-5.419	-1.576	15483
BDH1	-2.025	-1.585	71911
PRDM2	-2.843	-1.588	110593
PPM1M	-2.460	-1.593	67905
PHC3	-3.604	-1.594	241915
YTHDC1	-4.507	-1.595	231386
APEX1	2.382	-1.600	11792
CDIPT	-2.282	-1.603	52858
E4F1	-2.012	-1.605	13560
ARHGAP17	2.258	-1.609	70497
HSD17B8	-2.548	-1.611	14979
PPID	2.496	-1.614	67738
MAPK1	2.408	-1.618	26413
TMX4	-2.961	-1.620	52837
PNPLA7	-4.284	-1.620	241274
STX1A	-4.921	-1.621	20907
FOXO4	1.523	-1.623	54601
PIGO	-2.308	-1.623	56703
SLC5A3	3.687	-1.629	53881
SLC12A6	-2.106	-1.635	107723
TSPAN14	-3.376	-1.640	52588
SLC12A2	3.046	-1.641	20496
SH3BP1	-4.023	-1.641	20401
ADI1	-2.112	-1.646	104923
MTM1	2.817	-1.651	17772
CDC42SE1	-2.367	-1.652	57912
KLF7	-3.939	-1.663	93691
BBIP1	-11.235	-1.666	
TYK2	-2.087	-1.667	54721
ADAM17	-2.142	-1.668	11491
PRKACB	-4.037	-1.671	18749
MCCC2	-2.041	-1.678	78038
PHF12	-2.257	-1.682	268448
C1orf86	-2.561	-1.685	67513
MLL5	-3.007	-1.685	69188
SRRT	-2.379	-1.688	83701
HNRNPDL		-1.689	11991
UCKL1	-2.672	-1.695	68556
SOD1	-3.299	-1.697	20655
PSMB10	-2.644	-1.702	19171
JAK1	-6.873	-1.707	16451
ATRX	-4.214	-1.711	22589
BIRC2	-3.426	-1.716	11797

ZMYND11	-6.524	-1.719	66505
CHFR	-2.203	-1.722	231600
ITPR3	-2.464	-1.733	16440
PLEC	-2.926	-1.737	18810
PBXIP1	-5.495	-1.741	229534
ARHGAP15	-4.591	-1.742	76117
ZNHIT6	2.044	-1.752	229937
ATP6V1D	-2.160	-1.752	73834
TRIP12	-3.414	-1.754	14897
MAP3K7	2.252	-1.757	26409
DAXX		-1.758	13163
SHARPIN	-2.197	-1.761	106025
UBA6	2.171	-1.762	231380
RNF187	-2.381	-1.771	108660
PPP3CB	-3.176	-1.773	19056
CTDSP2	-2.284	-1.780	52468
CNN2	-5.088	-1.792	12798
PYCARD	-3.254	-1.793	66824
USP19	-2.168	-1.794	71472
PRKAG1	-2.233	-1.794	19082
PEX6	-2.062	-1.799	224824
ARNT		-1.802	11863
BRD4	-2.331	-1.804	57261
NCLN	-2.911	-1.804	103425
DHX16	-2.410	-1.806	69192
COTL1	-3.386	-1.809	72042
PPP2R5A	-3.446	-1.810	226849
IL17RA	-2.672	-1.812	16172
BCL9L	-2.881	-1.814	80288
TBC1D14	-2.996	-1.815	100855
KHDRBS1	2.145	-1.829	20218
CYTH1	-3.193	-1.833	19157
LASP1	-5.528	-1.834	16796
ZZEF1	-2.188	-1.838	195018
SCP2	-4.246	-1.838	20280
RTN4	2.403	-1.844	68585
COMMD8	-2.677	-1.848	27784
MTCP1	-2.276	-1.850	
TACC1	-2.307	-1.851	320165
ZNF292	-2.131	-1.853	30046
VKORC1L1	2.064	-1.856	69568
IFNGR2	-3.598	-1.857	15980
MED1	-2.145	-1.859	19014
PIP4K2B	-3.882	-1.859	108083
SIN3B	2.602	-1.860	20467
NXPE3	-3.087	-1.866	385658
UBE2D3	2.512	-1.868	66105
MGST2	-5.617	-1.878	211666
RPA1	-4.403	-1.883	68275
USF1	-2.189	-1.886	22278
IPO4	4.526	-1.888	75751
IBTK	2.241	-1.893	108837
PDLIM1	-3.282	-1.894	54132

DKC1	2.723	-1.900	245474
SPPL2A	-2.181	-1.908	66552
CPSF3	-2.832	-1.912	54451
Gm20559	-4.672	-1.913	330256
MPPE1	-7.472	-1.922	225651
VPS37B	-4.412	-1.924	330192
SERINC1	4.188	-1.931	56442
IRF2	-1.571	-1.933	16363
GGNBP2	-2.022	-1.937	217039
FAM3C	-3.217	-1.958	27999
TP53INP1	2.896	-1.959	60599
PDCD4	-15.516	-1.962	18569
IRF1	-4.922	-1.965	16362
DHX33	2.468	-1.966	216877
ATAD3A/ATAD3B	2.120	-1.967	108888
ENY2	2.617	-1.968	223527
MAST3	-2.260	-1.969	546071
ABCE1	2.014	-1.976	24015
TMEM66	-3.119	-1.977	67887
THRAP3	-3.589	-1.977	230753
SRSF6	-3.791	-1.978	67996
RFX1	-4.646	-1.978	19724
SF3B2	-2.042	-1.985	319322
NRAS	-1.236	-2.002	18176
CD22		-2.002	12483
PTPRF		-2.002	19268
USP36		-2.002	72344
SMARCE1		-2.004	57376
SPEN		-2.004	56381
YWHAB	-1.602	-2.005	54401
ABCB7	-2.300	-2.006	11306
AGTPBP1		-2.006	67269
L2HGDH		-2.007	217666
INPP5K	-1.256	-2.008	19062
ARMC6		-2.008	76813
C4orf33		-2.008	73852
RNF141		-2.008	67150
LOC375690/WASH1		-2.010	68767
GLO1		-2.012	109801
HDAC10		-2.012	170787
MPP1		-2.012	17524
OAS2		-2.012	246728
Neat1	1.632	-2.015	66961
CR2		-2.016	12902
DDX51		-2.016	69663
METTL20		-2.016	320204
Nlrc5	-2.670	-2.017	
POLR3E		-2.017	26939
SENP5		-2.017	320213
INO80 (includes EG:296084)	1.399	-2.018	68142
CLK4		-2.019	12750
MYL6		-2.021	17904
WARS2		-2.021	70560

GPD2	2.106	-2.022	14571
EHMT1	-2.562	-2.022	77683
HELQ		-2.022	191578
CD1D	-2.271	-2.023	12479 12480
LEMD2		-2.023	224640
CASD1	-4.279	-2.024	213819
BRIX1	1.639	-2.025	67832
WDR73	1.528	-2.025	71968
MCTP2		-2.025	244049
SIPA1		-2.026	20469
ZBTB48		-2.026	100090
NDUFA4	1.123	-2.027	17992
IGFLR1	-3.933	-2.028	101883
PEX19		-2.028	19298
POLG2	-3.345	-2.029	50776
BRAF		-2.029	109880
ERGIC2		-2.029	67456
FTSJ3		-2.029	56095
N6AMT1		-2.029	67768
ULK2		-2.029	29869
YTHDF1	-1.467	-2.030	228994
BTF3L4		-2.030	70533
ENO3		-2.030	13808
IDH2		-2.030	269951
DCTN5	-1.706	-2.031	59288
TXLNG	-2.155	-2.031	353170
GRK6	-5.790	-2.031	26385
RAD17		-2.031	19356
PML		-2.032	18854
ZHX3		-2.033	320799
PYROXD2	1.903	-2.034	74580
KDSR		-2.034	70750
SKP2 (includes EG:27401)		-2.037	27401
NUCKS1	3.565	-2.038	98415
ESYT2	-1.669	-2.038	52635
CBX2		-2.038	12416
ZNF14		-2.039	236193
DNAJC6		-2.040	72685
GABPB2		-2.040	213054
COX8A		-2.043	12868
TCHP		-2.043	77832
TUBGCP6		-2.044	328580
TYW1		-2.044	100929
ING4		-2.045	28019
MITD1		-2.045	69028
TROVE2		-2.045	20822
ZNF800		-2.045	627049
Lyz1/Lyz2		-2.046	17110 17105
TIMM9		-2.046	30056
ATIC	-1.569	-2.047	108147
USP48	-1.988	-2.048	170707
SPATA5L1		-2.048	214616
STRN	-2.283	-2.049	268980

ARL4C	-23.223	-2.050	320982
GNL1	1.390	-2.051	14670
DEAF1		-2.053	54006
ZNRD1-AS1		-2.053	
ATG2B		-2.054	76559
CIAO1		-2.054	26371
TTC5		-2.054	219022
WWP1		-2.054	107568
MRPL51		-2.057	66493
RCBTB2	1.496	-2.058	105670
SSH2	-3.852	-2.059	237860
SLC36A1		-2.060	215335
MBP	1.005	-2.061	17196
5730453C05Rik		-2.061	70563
IKZF5	-1.358	-2.062	67143
BAZ2A	-2.661	-2.063	116848
CLN8		-2.063	26889
DOLK		-2.064	227697
LRRC1		-2.064	71710
COX15	-1.587	-2.066	226139
FBXL3		-2.066	50789
MKS1		-2.066	380718
HRSP12		-2.067	15473
KIAA0415	-1.496	-2.068	231855
ANKZF1		-2.069	52231
NFIX		-2.070	18032
SQRDL		-2.070	59010
RPL22	-1.605	-2.073	19934
1810026B05Rik	-6.344	-2.074	69170
SMPD4		-2.074	77626
UNG		-2.075	22256
RABEP2	-3.054	-2.076	70314
Angptl1		-2.077	
PLCG1		-2.078	18803
TTI1		-2.078	75425
TMEM127		-2.080	69470
RASA3		-2.082	19414
Gm4076	-1.542	-2.083	100042862
SRPK3		-2.083	56504
TRMT11		-2.083	73681
FRYL	-2.525	-2.084	72313
PRMT7		-2.084	214572
MON1B		-2.085	270096
SLC31A2		-2.085	20530
EIF2B4	-1.635	-2.086	13667
RASAL3	-5.092	-2.087	320484
CHST10		-2.088	98388
ACTR8		-2.089	56249
MTIF2	-2.133	-2.090	76784
FANCF		-2.090	100040608
DDX31		-2.092	227674
NUDT16L1	-1.281	-2.093	66911
CARD11	-2.753	-2.094	108723

PRPF38A		-2.094	230596
LMO4		-2.095	16911
EIF2C1	-2.394	-2.096	236511
Zfp52	3.262	-2.097	22710
4930428B01Rik		-2.097	73854
HNRNPH1	-1.564	-2.098	59013
ABCA1		-2.098	11303
RASSF7		-2.098	66985
METTL8		-2.099	228019
GCC2	-1.422	-2.100	70297
SFXN3	-1.878	-2.100	94280
PIKFYVE		-2.103	18711
QSER1		-2.103	99003
SMEK1	-1.454	-2.104	68734
SESN3	-4.474	-2.104	75747
ELF2		-2.104	69257
ZEB1		-2.106	21417
ESF1	1.621	-2.107	66580
CBLB	-2.894	-2.108	208650
TUBGCP3		-2.108	259279
SMEK2	-1.643	-2.109	104570
CTNNB1		-2.109	12387
TLR7		-2.112	170743
ASB7		-2.114	117589
DNAJC11		-2.116	230935
MUT		-2.116	17850
NFATC3	-1.736	-2.117	18021
TAOK1		-2.117	216965
ZNF235		-2.117	56525
USP25		-2.118	30940
DNAJC3	-2.425	-2.119	100037258
CD7		-2.119	12516
DHX30	-1.112	-2.121	72831
HIBCH		-2.123	227095
C16orf5		-2.125	66626
TBCE		-2.126	70430
RASA2		-2.128	114713
ZMIZ1		-2.128	328365
WDR46	1.384	-2.129	57315
DCLRE1B	1.101	-2.129	140917
TMTCA4		-2.129	70551
PDE2A	-19.049	-2.131	207728
MFAP3		-2.131	216760
CTSO	-2.922	-2.132	229445
ANKRD32		-2.133	105377
ATP6V1H		-2.133	108664
CDK5RAP1		-2.134	66971
DEPDC5		-2.134	277854
MLH1		-2.134	17350
Spg11		-2.134	
THEM4		-2.134	75778
ZNF124		-2.135	
TATDN1		-2.137	69694

KAT2B	-2.389	-2.138	18519
USP30		-2.138	100756
CNOT2	-2.352	-2.139	72068
ABCF3		-2.142	27406
ARSK		-2.144	77041
SRR		-2.144	27364
HNRNPA2B1	1.762	-2.146	53379
LLGL2		-2.146	217325
OMA1		-2.146	67013
AP3M1		-2.147	55946
IL27RA	-2.738	-2.150	50931
OCRL		-2.150	320634
TAF4		-2.150	228980
TFAP4		-2.150	83383
RNF111		-2.152	93836
SESTD1		-2.152	228071
TWF2	-2.662	-2.153	23999
NOC3L	3.445	-2.156	57753
Adam1a		-2.156	280668
MARK2	-1.724	-2.157	13728
TRIM17		-2.157	56631
MDH1	1.267	-2.158	17449
SETD7	-2.780	-2.158	73251
SLC46A3		-2.158	71706
MRPL22		-2.159	216767
INTS5	-1.006	-2.160	109077
CASP9 (includes EG:100140945)		-2.161	12371
KAT8		-2.161	67773
SCYL2		-2.161	213326
C1orf21		-2.162	69399
ZKSCAN5		-2.162	22757
EXOSC10	1.363	-2.164	50912
UBR3	-1.632	-2.164	68795
TTC27		-2.164	74196
PPP1R7		-2.166	66385
ACP2	-2.182	-2.169	11432
DDX23		-2.169	74351
TAOK3		-2.170	330177
RNPEPL1	-2.641	-2.171	108657
Gimap3	-3.438	-2.171	
INVS		-2.171	16348
RRAS2	1.664	-2.172	66922
MMP11		-2.172	17385
ABLIM1	-17.205	-2.173	226251
TRIT1		-2.173	66966
HAUS6		-2.174	230376
MARK1		-2.174	226778
ATG12	-1.681	-2.176	67526
DAG1	-2.371	-2.176	13138
STAP1		-2.177	56792
PTCD3		-2.178	69956
ZMYM6		-2.178	100177
CAMK4	-2.906	-2.180	12326

EIF4EBP2	-1.655	-2.181	13688
NSF		-2.181	18195
DBP		-2.183	13170
STRADB		-2.183	227154
PTGFRN	1.643	-2.184	19221
FAM120B	-1.600	-2.184	67544
PARS2		-2.184	230577
UTP23	2.420	-2.186	78581
SLU7 (includes EG:10569)		-2.187	193116
SLC25A37	-2.662	-2.188	67712
RDH13		-2.189	108841
ECE2		-2.191	107522
MSL2	-2.181	-2.192	77853
CDK10		-2.192	234854
MTERFD2		-2.192	69821
ZRANB2		-2.192	53861
MAN1C1		-2.193	230815
GART	2.842	-2.194	14450
PKN2		-2.194	109333
ANAPC1/ANAPC1P1		-2.195	17222
PDE4D		-2.195	
TAZ		-2.195	66826
KREMEN1	-1.602	-2.197	84035
IKZF2		-2.197	22779
WDR37		-2.198	207615
TMEM63A	-2.410	-2.200	208795
FBXO3		-2.201	57443
LTB	-8.589	-2.202	16994
CYBB		-2.202	13058
SREK1		-2.203	218543
PHYHD1		-2.204	227696
SRI	1.293	-2.206	109552
C1orf50		-2.206	230696
CPSF1		-2.206	94230
ANKLE2	-1.503	-2.207	71782
CCDC132		-2.207	73288
SP3	-2.794	-2.208	20687
HSH2D		-2.208	209488
CEP57L1		-2.209	103268
FAM53A		-2.209	74504
WDR43	2.487	-2.210	72515
PBX2	-1.802	-2.211	18515
ERCC6		-2.211	319955
BCL6	1.552	-2.213	12053
GPAM		-2.213	14732
C5orf30		-2.214	52392
Kctd12b		-2.215	207474
FAM177A1	1.749	-2.217	73385 100101807
SETD1A		-2.217	233904
LOC676974	-1.867	-2.218	
ACTR5		-2.218	109275
HPS5		-2.220	246694
POLR3G		-2.220	67486

C12orf49		-2.221	76792
HDAC2		-2.221	15182
HDGFRP3		-2.222	29877
LIMK2		-2.222	16886
PRPF4		-2.222	70052
C20orf111	-2.312	-2.223	66680
PHF14	-1.620	-2.224	75725
COIL		-2.224	12812
OSGEPL1		-2.224	72085
RIT1		-2.225	19769
LPCAT1	-2.415	-2.226	210992
GLTSCR1		-2.226	243842
WDR20		-2.227	69641
RGS10	-4.324	-2.229	67865
MGRN1		-2.231	17237
RPL12	-1.796	-2.232	269261
SGPP1	-2.655	-2.232	81535
DPM2		-2.232	13481
NAT10		-2.233	98956
SH3KBP1	-1.728	-2.234	58194
AIDA		-2.234	108909
ZBTB45		-2.234	232879
WAC	-1.591	-2.236	225131
ATP5S		-2.236	68055
THNSL1		-2.236	208967
MAP4K3		-2.237	225028
SCAPER		-2.238	244891
RPL23	-1.984	-2.239	65019
POLG	-1.990	-2.239	18975
PTTG1	-2.050	-2.239	30939
TFCP2		-2.241	21422
CDKN2AIPNL		-2.242	52626
NCBP2		-2.242	68092
SATB1	-4.994	-2.243	20230
CLCN7		-2.243	26373
Gh		-2.246	14599
DDX55		-2.247	67848
NDUFS1		-2.247	227197
AW552393		-2.248	99922
PKNOX1		-2.248	18771
ZNF212	-2.001	-2.249	232784
ZKSCAN1		-2.249	74570
PDHB	1.070	-2.250	68263
TTL		-2.250	69737
RPS9		-2.251	
UCK1		-2.252	22245
UNC5CL		-2.253	76589
PCMTD1	-2.007	-2.254	319263
XPO5		-2.254	72322
NBR1	-2.052	-2.255	17966
DMXL1		-2.255	240283
CBX8		-2.256	30951
PLCXD2	-1.317	-2.257	433022

PDF		-2.257	68023
CXorf40A/CXorf40B		-2.258	68618
SMARCAD1		-2.258	13990
WDYHV1	-2.554	-2.259	76773
SEC62 (includes EG:294912)		-2.259	69276
SAYSD1	-1.738	-2.262	67509
DNAJB14		-2.263	70604
TRIM44		-2.263	80985
SDHA	-1.944	-2.264	66945
DNMT3B		-2.265	13436
ARHGAP9	-10.651	-2.266	216445
PCYOX1		-2.268	66881
CRBN	-1.258	-2.269	58799
TOP2B	-1.919	-2.269	21974
NEK7		-2.269	59125
PPM1L		-2.269	242083
CUTC		-2.270	66388
THOC1	1.170	-2.271	225160
EXOSC7		-2.271	66446
FCRL1		-2.271	229499
KBTBD3		-2.271	69149
PJA2		-2.271	224938
SLC44A1		-2.271	100434
PITPNM1	-3.385	-2.272	18739
DNAJC19		-2.272	100503724 67713
ZMAT2		-2.273	66492
PIGP	-1.279	-2.275	56176
ETS1	-5.508	-2.275	23871
C130068B02Rik		-2.275	402752
POP5	-1.217	-2.278	117109
SLA2	-2.847	-2.278	77799
NUMA1	-3.172	-2.278	101706
ZNF276		-2.278	57247
CD27	-1.848	-2.279	21940
RBM41		-2.279	237073
CHDH		-2.280	218865
TAF3		-2.280	209361
EMC9	-1.247	-2.281	85308
RPS17/RPS17L	-1.610	-2.281	
UBP1	-1.868	-2.281	22221
DDB2	-2.841	-2.281	107986
TMEM110		-2.281	69179
HEATR6		-2.282	217026
VPS29 (includes EG:288666)	2.250	-2.283	56433
C230085N15Rik	-7.439	-2.283	320556
PRDX2		-2.283	21672
UBE2D1		-2.284	216080
PPAT	2.463	-2.287	231327
KLHL17	-1.641	-2.287	231003
FIBP		-2.287	58249
GBF1		-2.287	107338
PSMF1		-2.288	228769
LRRC23		-2.289	16977

CRLS1		-2.290	66586
REV3L	-2.027	-2.291	19714
MOB4		-2.291	19070
ZNF512B	-1.536	-2.292	269401
DDX50	-1.961	-2.292	94213
STAG2	-2.101	-2.292	20843
PEX12		-2.292	103737
PHB2	1.797	-2.293	12034
AAK1	-6.525	-2.293	
COL4A3BP	-1.691	-2.294	68018
PTCD2		-2.295	68927
APOBEC1		-2.296	11810
GNE	-1.590	-2.297	50798
MKL1		-2.297	223701
ATG4B		-2.298	66615
USP46		-2.298	69727
ERAL1		-2.299	57837
CCDC77		-2.300	67200
Kcnip2		-2.301	80906
SIAH1		-2.301	20437
LRIF1		-2.302	321000
KLHL25		-2.305	207952
KLHL2		-2.306	77113
SOCS6		-2.306	54607
FOXJ2	-2.765	-2.308	60611
TERF2	-1.961	-2.309	21750
WDR82	-2.030	-2.309	77305
KLHL9	-2.987	-2.309	242521
ACAP2	-3.506	-2.309	78618
LZTFL1		-2.309	93730
XPC		-2.309	22591
Cstad		-2.310	78617
XYLT2		-2.310	217119
C6orf70		-2.312	381062
ZC3H13	1.661	-2.313	67302
RPL17	-1.717	-2.314	319195
CHST15		-2.314	77590
USP33		-2.315	170822
NDUFB8		-2.318	67264
KAT2A		-2.319	14534
NDUFAF1		-2.320	69702
PPP6R3		-2.322	52036
ALS2CL	-2.766	-2.324	235633
AP1G2		-2.324	11766
MKLN1		-2.324	27418
NOL7		-2.324	70078
DIAPH1	-1.428	-2.325	13367
COBRA1		-2.325	58202
KRAS	1.704	-2.327	16653
RPL5	-1.407	-2.328	668936
KAT7		-2.328	217127
App	-1.613	-2.329	11820
HERC1	-3.339	-2.329	235439

ZCCHC2	1.285	-2.330	227449
INSR		-2.330	16337
Pot1b		-2.331	72836
FOXO1	-3.485	-2.332	56458
TBPL1		-2.332	237336
EYA3		-2.333	14050
PPP1R12A	-2.362	-2.334	17931
MINA		-2.334	67014
RABIF		-2.334	98710
GSK3B	-1.434	-2.335	56637
NMT1	-2.041	-2.337	18107
ABHD11		-2.337	68758
IGF2R		-2.338	16004
SLC35A1		-2.338	24060
TGFBTR3	-5.976	-2.341	21814
PGGT1B		-2.342	225467
ZNF410		-2.342	52708
TNFAIP1	2.399	-2.346	21927
EDEM3		-2.346	66967
OSBPL8		-2.346	237542
SPATA13	-3.209	-2.347	219140
DDX11/DDX12P		-2.348	320209
BUB3	1.257	-2.350	12237
LOC100505793/SRSF10	1.116	-2.351	
AGER		-2.353	11596
HSF1		-2.354	15499
MARCH2		-2.356	224703
MED20	-1.194	-2.357	56771
PDS5B		-2.357	100710
CSRNP2		-2.360	207785
MAPK8IP3		-2.361	30957
TTC38		-2.361	239570
ZFP90		-2.362	22751
PARP14	-2.100	-2.363	547253
C19orf66		-2.363	319278
FBXL5		-2.363	242960
ACTL6A		-2.365	56456
CLOCK		-2.365	12753
FNTB		-2.367	110606
C7orf23	-1.841	-2.369	652925
RHOBTB2		-2.369	246710
TRIM65		-2.372	338364
KIAA0930		-2.373	223739
STAG1	-1.518	-2.374	20842
TGFBRAP1	-2.463	-2.374	73122
CD72		-2.375	12517
ZBTB5		-2.375	230119
DNAJC13	-1.192	-2.379	235567
RAB2A	-1.196	-2.379	59021
ATXN10	-1.585	-2.379	54138
SSBP1		-2.380	381760
MED13L	1.029	-2.381	76199
DDX58	-1.690	-2.381	230073

DGUOK		-2.381	27369
RPP30		-2.381	54364
ACTR2	-1.039	-2.382	66713
PRDX6	-2.078	-2.382	11758
TSPY26P	-2.089	-2.385	241732
CENPJ		-2.385	219103
TIMELESS	-1.517	-2.386	21853
COMM5D		-2.386	66398
PRRC2B	-4.806	-2.388	227723
ZNF182		-2.388	319535
NEURL4	-1.582	-2.389	216860
ERI2		-2.389	71151
CDC73	-4.125	-2.391	214498
MYSM1		-2.391	320713
RNF138		-2.391	56515
ADAMTS10		-2.392	224697
CERS4		-2.392	67260
THAP1		-2.396	73754
MFNG	-2.699	-2.398	17305
NOLC1	4.988	-2.402	70769
PUM1	-1.268	-2.402	80912
TTC7A		-2.402	225049
UTP18	1.666	-2.403	217109
FAM118A		-2.403	73225
SNX27		-2.403	76742
STX16	-3.161	-2.404	228960
BMS1	-1.099	-2.405	213895
RAD9A	-1.704	-2.405	19367
ESD	1.443	-2.408	13885
CYHR1	-2.105	-2.408	54151
UBE2I	-2.376	-2.410	22196
ANKRD26		-2.410	232339
CNN3	-1.161	-2.413	71994
CLASP1		-2.413	76707
METTL13		-2.413	71449
POC1B		-2.414	382406
TRIM23		-2.418	81003
RNF219		-2.419	72486
CD4	-1.557	-2.421	12504
COL11A2		-2.421	12815
DDHD2		-2.421	72108
GPNAT1		-2.421	54342
OGDH		-2.421	18293
TRMT10B		-2.422	69934
ARRB2	-6.204	-2.423	216869
DSTYK		-2.424	213452
SIRT5		-2.425	68346
MLLT6	-2.854	-2.426	246198
AQR		-2.426	11834
DCAF7	-1.186	-2.427	71833
USP42		-2.427	76800
ZNF436	-1.653	-2.428	22704
FARSA	2.133	-2.429	66590

ARPP19		-2.429	59046
DDHD1		-2.429	114874
THRA		-2.429	21833
PTCH1	1.177	-2.430	19206
ZNF317		-2.431	244713
BIN1	-2.373	-2.432	30948
AKNA	-4.516	-2.432	100182
NAA16		-2.432	66897
PARP16		-2.432	214424
KLHL6	-3.767	-2.436	239743
BC028789		-2.437	407802
APOE		-2.438	11816
RSBN1	-1.654	-2.440	229675
EIF4A2	-2.378	-2.440	13682
KLHDC1		-2.440	271005
TOPBP1		-2.441	235559
DMTF1	-2.091	-2.443	23857
CD6	-2.015	-2.444	12511
H2-T10/H2-T22	-2.362	-2.445	15024 15039
ACTR6	-2.648	-2.445	67019
CSTF3		-2.445	228410
MFAP1	-2.616	-2.447	67532 100034361
DGCR8		-2.447	94223
MBD4		-2.447	17193
USP15		-2.447	14479
FAM21A	-4.233	-2.448	28006
BPGM		-2.448	12183
EDC3 (includes EG:315708)		-2.449	353190
TP53 (includes EG:22059)		-2.451	22059
ATF2		-2.452	11909
DOCK11	1.163	-2.454	75974
KIAA1267	-2.990	-2.455	76719
LIN9		-2.455	72568
PFKFB2		-2.455	18640
PRPF40A	2.514	-2.456	56194
LRRC1		-2.456	214345
THAP3	-1.906	-2.457	69876
MLL2	-4.847	-2.457	381022
LZTR1		-2.458	66863
SNX30		-2.459	209131
OVCA2		-2.460	246257
PAQR8		-2.460	74229
FASTKD2		-2.462	75619
MRPS10		-2.462	64657
SMPD2	-4.688	-2.463	20598
COG4		-2.463	102339
GNS		-2.463	75612
PPP1R8		-2.464	100336
UBE2J2	-1.864	-2.466	140499
ELK4	-2.902	-2.466	13714
UBASH3B	2.239	-2.467	72828
RNPS1	1.420	-2.467	19826
NR1D2		-2.471	353187

MRPL15	2.916	-2.472	27395
DTNB		-2.472	13528
CHD2	-4.468	-2.473	244059
N4BP2		-2.473	333789
RNF10		-2.474	50849
TRAF3IP1		-2.474	74019
RBM39	-4.866	-2.475	170791
SLC26A2		-2.475	13521
Zfp386		-2.475	
YME1L1		-2.476	27377
Rps24	-2.670	-2.477	
RGS19		-2.477	56470
MYH9	-3.508	-2.478	17886
NIPBL	-3.437	-2.480	71175
SLC38A2	-5.435	-2.480	67760
ACER3		-2.481	66190
C19orf26		-2.482	100503659
DBT		-2.482	13171
TRPM1		-2.482	17364
ARID1A	-3.604	-2.485	93760
ZNF81		-2.485	
HES6		-2.486	55927
HP1BP3	-3.188	-2.488	15441
FCER2		-2.489	14128
GTF3C2		-2.490	71752
SLC25A32	1.841	-2.492	69906
ACAD9	-1.388	-2.492	229211
RPL30	-2.007	-2.493	19946 666899
NOSIP		-2.493	66394
Gm19270		-2.495	100502594
CBLL1		-2.499	104836
LY75		-2.500	17076
DNTT		-2.502	21673
NR3C1	1.124	-2.503	14815
BRF1	-2.321	-2.503	72308
DET1 (includes EG:308775)		-2.503	76375
MPHOSPH9		-2.503	269702
ZNF665 (includes others)		-2.503	
C16orf53	-1.448	-2.505	67278
KIFC2		-2.508	16581
KPNA4		-2.508	16649
ATP1B3	-3.750	-2.509	11933
HUWE1		-2.509	59026
TOMM70A	2.450	-2.511	28185
DGKQ		-2.512	110524
SUPT7L		-2.514	72195
AHSA1	1.822	-2.515	217737
SGK223	1.252	-2.516	244418
ATXN2	1.172	-2.519	20239
C1QA		-2.520	12259
IP6K1		-2.520	27399
PACS2		-2.520	217893
RNF8	-1.307	-2.522	58230

CBL	-2.938	-2.523	12402
ACRBP		-2.523	54137
PHF17		-2.523	269424
RAB23		-2.523	19335
BNIP2	2.248	-2.524	12175
MESDC2	-1.129	-2.524	67943
G3BP2	-1.560	-2.525	23881
CAMKK2		-2.525	207565
PRPS2	-1.533	-2.526	110639
UTP20	1.627	-2.527	70683
AP5M1	-1.853	-2.527	74385
C10orf2		-2.528	226153
WBSCR27		-2.528	79565
ASH1L	-2.200	-2.530	192195
SERPINI1		-2.530	20713
UBE2H	-15.519	-2.531	22214
BFAR	-1.333	-2.532	67118
CAST	-3.240	-2.533	12380
ERMP1		-2.533	226090
UBXN4	1.974	-2.536	67812
CREBL2		-2.536	232430
MBLAC2		-2.537	72852
USP8		-2.537	84092
PATZ1	-3.590	-2.538	56218
PHF1	-3.326	-2.539	21652
PLA2G4B		-2.539	211429
HLA-DRB1	-1.699	-2.543	14969
C1orf159		-2.543	230996
CAMTA1		-2.543	100072
SDAD1	1.011	-2.545	231452
ZW10	-1.300	-2.545	26951
FRAT2	-1.249	-2.547	212398
LTN1	-1.389	-2.552	78913
TRIAP1		-2.552	69076
MATR3	1.851	-2.554	17184
SUSD1		-2.555	634731
F2RL1	-1.813	-2.557	14063
PANK4	-2.685	-2.559	269614
Ylpm1		-2.560	
EMC8		-2.563	18117
CLDN10		-2.565	58187
BACH2	-2.431	-2.566	12014
RCBTB1		-2.567	71330
GALNT7	-1.636	-2.568	108150
HABP4		-2.568	56541
KDM5A	-1.978	-2.571	214899
mir-142		-2.572	387160
LRRC20		-2.574	216011
MRPL11		-2.575	66419
FGFR1OP		-2.576	75296
SLFN13		-2.577	237886
EIF1AX	2.250	-2.579	237887
GIN1		-2.579	252876

AP4E1		-2.582	108011
MAT2B	-1.752	-2.583	108645
EXOSC1	1.076	-2.586	66583
PITRM1		-2.589	69617
TSEN34		-2.589	66078
FAM203A/FAM203B	1.185	-2.590	59053
TTBK2		-2.590	140810
MPHOSPH8	-1.685	-2.591	75339
GET4	-1.934	-2.591	67604
VEZT		-2.592	215008
MALAT1	-3.318	-2.596	72289
PIP4K2A	-3.878	-2.596	18718
RAB11FIP2		-2.598	74998
IL11RA		-2.599	100042555 16158
GTF2IRD1		-2.600	57080
SNAPC4		-2.600	227644
AMBRA1	-1.621	-2.601	228361
NPRL2		-2.601	56032
PPP4R2		-2.602	232314
TPCN1		-2.602	252972
SYNJ2BP		-2.604	24071
UBE3C		-2.604	100763
PAFAH1B1	-3.066	-2.605	18472
RBM33	-2.328	-2.606	381626
S100PBP		-2.606	74648
PPAPDC2	-1.447	-2.607	74411
RPP40		-2.607	208366
CRKL	-1.486	-2.609	12929
AASDHPPPT		-2.610	67618
KIAA0368		-2.610	230249
CBR1	-1.949	-2.613	12408
OXR1	-1.337	-2.615	170719
CEBPG		-2.615	12611
FAM63B	-2.469	-2.617	235461
CD5	-2.048	-2.618	12507
A830091e24		-2.618	
D030036P13Rik		-2.618	320105
Fcna		-2.620	14133
RFXAP		-2.621	170767
KIAA1715		-2.622	69605
DGKD		-2.623	227333
CTCF	-2.700	-2.626	13018
NUTF2	1.927	-2.628	100043462
NUP153	-2.112	-2.630	218210
C19orf29		-2.630	70312
CCDC51		-2.630	66658
DPP4		-2.630	13482
Clec2d (includes others)	-2.161	-2.632	
ADNP	-1.943	-2.635	11538
ABCD3		-2.635	19299
GID4	-1.842	-2.637	66771
PRKD3	-2.504	-2.637	75292
DSCR3	-2.774	-2.637	13185

MAVS		-2.638	228607
ZNF398		-2.640	272347
NUDT13		-2.641	67725
RCAN3		-2.641	53902
2810001A02Rik	-1.592	-2.642	
MLL3	-6.339	-2.642	231051
NMNAT3		-2.642	74080
MCOLN3		-2.643	171166
ZNF830		-2.643	66983
NLRC3		-2.644	268857
TRIP11		-2.645	109181
B2M	1.682	-2.647	12010
PPIG	1.421	-2.648	228005
ZNF274	-2.631	-2.649	
RSF1		-2.650	233532
Ppp4r1l-ps		-2.651	100043911
IPO8		-2.652	320727
SLC25A27		-2.653	74011
HSPBAP1		-2.654	66667
RBL1		-2.654	19650
TDP2	-2.135	-2.656	56196
Zfp87		-2.657	170763
BPNT1		-2.658	23827
CARNS1	-2.534	-2.659	107239
PAN2	-2.574	-2.659	103135
CHD3	-3.912	-2.659	216848
TAF8	-2.265	-2.660	63856
TTC4		-2.661	72354
REXO4	-1.372	-2.662	227656
JHDM1D	-2.608	-2.664	338523
GOLPH3L		-2.665	229593
TCF25		-2.665	66855
DNAH8		-2.667	13417
NCK1		-2.667	17973
ORMDL1		-2.667	227102
TSC22D1		-2.667	21807
RWDD4	5.020	-2.668	192174
Art2a-ps/Art2b		-2.668	11872 11871
ZNF346	-1.328	-2.671	26919
GIMAP4	-4.395	-2.671	107526
PHF20		-2.671	228829
AHCTF1	1.496	-2.672	226747
LUC7L2	-2.120	-2.675	192196
DUSP12		-2.676	80915
IPO9		-2.676	226432
APPBP2		-2.679	66884
C1orf123		-2.679	74098
PPM1F		-2.679	68606
KIAA0528	-2.229	-2.680	74741
BC003965	-1.024	-2.681	
IKZF1	-1.674	-2.681	22778
TACC2	2.406	-2.682	57752
CAMLG		-2.682	12328

9330161A08Rik	-1.520	-2.684	
ACSS2	-9.781	-2.684	60525
ITPKC		-2.685	233011
TRMT6	1.699	-2.689	66926
FBXL20	-2.472	-2.689	72194
ZMYM4		-2.689	67785
ZC3H6		-2.690	78751
MICALL1	-2.269	-2.698	27008
SMPDL3A		-2.698	57319
FBXO22	-2.144	-2.699	71999
STAM		-2.699	20844
HLCS		-2.701	110948
ZNF775		-2.703	243372
SLC7A6	1.872	-2.704	330836
ATAD2B	-2.317	-2.704	320817
DOPEY1		-2.704	320615
TRIM14		-2.704	74735
AFP		-2.705	11576
RNF135		-2.705	71956
MAPK8		-2.707	26419
MAN2C1	-1.579	-2.710	73744
CYTIP	-6.774	-2.712	227929
RCOR3		-2.716	214742
BCLAF1	-1.387	-2.717	72567
RERE	-3.086	-2.718	68703
C5orf24	-1.092	-2.721	78521
PCNX		-2.721	54604
UPF2	-1.665	-2.724	326622
TIMM21		-2.725	67105
RBM38	-3.051	-2.727	56190
METTL2B	1.476	-2.732	52686
D130062J21Rik	-1.815	-2.732	100038651
Slfn1	-4.748	-2.732	20555
LAX1		-2.732	240754
TMEM126B		-2.734	68472
CDYL2		-2.735	75796
TRIM39		-2.735	79263
MRE11A		-2.739	17535
TFB2M		-2.739	15278
TRIM35		-2.739	66854
TFAM	-2.074	-2.740	21780
STRADA		-2.745	72149
EG667449 (includes others)		-2.748	
DDX5	-16.333	-2.749	13207
LPHN1		-2.749	330814
ASXL2		-2.751	75302
STX12		-2.751	100226
DDX26B	-1.388	-2.752	236790
YY1	-3.473	-2.752	22632
GEMIN5		-2.752	216766
CD247	1.820	-2.753	12503
ANKHD1	-2.177	-2.754	
CSAD		-2.756	246277

TRIM5		-2.759	667823 319236
KLHL20	-1.796	-2.763	226541
ADCY6		-2.763	11512
PRKCA		-2.763	18750
SPIN1	-2.290	-2.764	20729
MEF2D	-2.479	-2.765	17261
CLIP1		-2.765	56430
CELF2	-1.501	-2.767	14007
CSPP1		-2.767	211660
C7orf60	-2.795	-2.771	101148
TERF1		-2.772	21749
ZNF24		-2.772	59057
TNFSF10		-2.773	22035
BRAT1		-2.774	231841
USP10	1.311	-2.775	22224
TCF20	-2.068	-2.775	21411
STK10	-2.523	-2.776	20868
BID		-2.778	12122
CREB1	-3.669	-2.779	12912
MLH3 (includes EG:217716)		-2.779	217716
GANC		-2.781	76051
TLE4		-2.782	21888
RBM26		-2.783	74213
KRR1	2.162	-2.784	52705
GPKOW	1.162	-2.785	209416
SCARB2	-1.746	-2.788	12492
KLHL7	-1.576	-2.789	52323
IKBKAP	3.500	-2.793	230233
ARHGEF4		-2.793	226970
PTPRC	-2.256	-2.795	19264
PRKD2	-4.983	-2.797	101540
PIGC		-2.800	67292
SEPHS1		-2.803	109079
LETM2		-2.804	270035
METTL16		-2.806	67493
ZMYND8	-5.115	-2.807	228880
ADD3	-6.158	-2.807	27360
SEC11C	1.421	-2.809	66286
STXBP3		-2.809	20912
ZNF22		-2.809	67255
UTRN	-1.644	-2.810	22288
RFESD		-2.811	218341
D830012I24Rik		-2.813	320070
DDX17	-2.779	-2.814	67040
RPS6KA3	2.553	-2.817	110651
SEMA4B	-1.753	-2.817	20352
PTPN12	-3.687	-2.817	19248
ADAR	-2.102	-2.818	56417
C22orf25	-1.412	-2.819	27883
GCFC2	-2.058	-2.819	330361
SDHAF1	-1.689	-2.824	68332
LIG3		-2.824	16882
ZDHHC6	1.449	-2.827	66980

FBXO45		-2.828	268882
CEP350	-2.200	-2.829	74081
RUFY1		-2.831	216724
DYNLT1	-1.019	-2.832	100040531 10004
ATM		-2.832	11920
Snord104	-1.794	-2.834	100216537
SH3PXD2A	-3.065	-2.835	14218
EPB41		-2.835	269587
TERF2IP		-2.835	57321
CRTAM	-1.055	-2.837	54698
QARS		-2.839	97541
KCNMB4		-2.840	58802
SMURF2		-2.840	66313
FAM111A		-2.841	107373
ADAT1		-2.842	30947
HTT		-2.842	15194
MRPL44		-2.842	69163
THUMPD3		-2.842	14911
POU2F1		-2.844	18986
PUM2	-1.699	-2.848	80913
Sp100	-4.477	-2.848	20684
ACSS1		-2.849	68738
AKR1B1	-4.326	-2.851	11677
ATE1 (includes EG:100037311)		-2.851	11907
CSNK1G3	2.819	-2.852	70425
GPD1L	-1.505	-2.853	333433
C5orf22	-1.076	-2.854	77877
DHODH		-2.855	56749
NEK3		-2.855	23954
TTF1	-1.508	-2.856	22130
ZBTB8A		-2.857	73680
ICAM2	-1.726	-2.858	15896
SLC35C1		-2.858	228368
SPTLC2		-2.859	20773
UPF3B	-2.927	-2.864	68134
RANBP6		-2.865	240614
SEPSECS		-2.867	211006
LCK	-3.607	-2.868	16818
NMT2		-2.869	18108
PNRC2	-1.819	-2.870	52830
PCGF5	-1.888	-2.870	76073
B4GALNT1	-4.052	-2.871	14421
ZNF652		-2.876	268469
C11orf61		-2.879	235184
Bptf	-4.524	-2.880	207165
PTRH2		-2.880	217057
ZNF420	-1.212	-2.882	
UROS	-2.209	-2.882	22276
DNMBP		-2.884	71972
POLR2J	1.015	-2.889	20022
NCSTN		-2.890	59287
REV1		-2.890	56210
SMC4	-4.167	-2.891	70099

ABCD4		-2.892	19300
ZNF597		-2.892	71063
ANKRD52		-2.893	237615
SOCS5		-2.896	56468
IGFBP4	-19.115	-2.900	16010
IL6R	-7.320	-2.901	16194
ACAP1	-3.143	-2.906	216859
GPR174	5.935	-2.913	213439
PUS3		-2.915	67049
RPL22L1	-2.315	-2.916	68028
Kdm1b		-2.916	218214
CDC14B	-1.566	-2.921	218294
PTBP2		-2.921	56195
EIF2AK1		-2.927	15467
CD151	-1.960	-2.928	12476
ZFR		-2.930	22763
IL10RB	-3.606	-2.931	16155
NIF3L1		-2.931	65102
EARS2		-2.932	67417
RBM18		-2.933	67889
FAM175A		-2.935	70681
RPP14		-2.935	67053
C6orf211		-2.936	73419
KCTD20		-2.936	66989
ZHX2		-2.939	387609
KPNB1	1.568	-2.940	16211
UBR1	-2.328	-2.940	22222
BZW2	-2.268	-2.941	66912
SF3B1	-2.271	-2.941	81898
PPIL2		-2.941	66053
SUPT4H1		-2.941	20922
CCNJ		-2.943	240665
SUGP2	-1.783	-2.945	234373
SEPT6		-2.945	56526
TCP11L2	-2.542	-2.946	216198
PSIP1	-3.757	-2.946	101739
RNF170		-2.947	77733
CHD9	-1.979	-2.951	109151
ENPP4		-2.952	224794
MYL6B		-2.955	216459
TMC6	-1.410	-2.960	217353
Oas1b		-2.961	23961
ZNF688		-2.962	69234
GGCT	2.718	-2.965	110175
PDPR	-2.864	-2.968	319518
PDZD8		-2.968	107368
SETX	-3.423	-2.969	269254
MTHFR		-2.972	17769
CLTA	-1.780	-2.979	12757
DNASE2		-2.980	13423
CEP68		-2.982	216543
DRAM2		-2.982	67171
SLC35B3		-2.982	108652

USP40		-2.982	227334
EXOSC4		-2.990	109075
DGKA	-3.452	-2.991	13139
PAC SIN1		-2.995	23969
C9orf91	-1.735	-2.996	230279
SMAD1		-3.003	17125
GTF3C4		-3.008	269252
SOLH		-3.010	50817
SIRT7	-4.129	-3.011	209011
CCNH		-3.014	66671
FAM126B	-1.645	-3.015	213056
LEPROTL1	-2.039	-3.015	68192
RPS10	-2.065	-3.015	67097
POLR3F		-3.018	70408
JKAMP		-3.022	104771
ETNK1	-3.039	-3.025	75320
CDKN1B	-4.699	-3.025	12576
HNRPDL	-1.874	-3.026	50926
LRRC8A		-3.026	241296
ARRDC3		-3.027	105171
NAP1L1	2.310	-3.029	53605
MYB	-2.664	-3.029	17863
TNFAIP8L2		-3.030	69769
PIK3CD	-1.395	-3.032	18707
USP47	-1.712	-3.035	74996
KIAA1310		-3.036	226976
UBE2D2	-2.948	-3.038	56550
TTC13	-9.851	-3.038	234875
DVL1	-2.177	-3.040	13542
ARHGAP12		-3.040	75415
IL18R1	-1.800	-3.043	16182
WDR48		-3.043	67561
HMGXB3		-3.047	106894
RDH5		-3.048	19682
S1PR4	-3.007	-3.049	13611
CAND1		-3.050	71902
ARGEF2		-3.051	99371
ABCG1	-4.834	-3.053	11307
RBAK		-3.053	57782
DGKZ	-2.579	-3.054	104418
BAG4	1.931	-3.056	67384
IFFO1		-3.057	320678
ZMYM2	-2.579	-3.062	76007
CNKS R3	-2.322	-3.066	215748
SNRNP70	-2.720	-3.066	20637
CCDC125		-3.066	76041
KIAA0922		-3.068	229473
PRMT6	1.290	-3.069	99890
TTLL4		-3.071	67534
ZNF99		-3.075	
GUCA1B		-3.076	107477
MIS12		-3.077	67139
ITPKB	-9.628	-3.080	320404

RBM48		-3.080	269623
MON2		-3.081	67074
NUDT6	2.027	-3.092	229228
GPRASP1	-1.718	-3.092	67298
GNA11		-3.092	14672
RAE1		-3.092	66679
LNPEP	-8.164	-3.093	240028
HSDL2		-3.093	72479
ISOC1	-1.591	-3.097	66307
HLA-DQA1	-2.211	-3.098	14960
RBBP9		-3.098	26450
TCTA		-3.098	102791
WDR85		-3.098	67228
RABGAP1	-1.763	-3.099	227800
SEMA4A	-2.469	-3.100	20351
LACTB		-3.103	80907
ACAD8		-3.106	66948
FNTA	-1.288	-3.108	14272
MID1		-3.109	17318
let-7		-3.114	387251 723965 7
ZBTB40		-3.117	230848
PHF15	-2.144	-3.119	76901
AASDH		-3.121	231326
KLRD1	-1.874	-3.123	16643
CNOT6L	-1.721	-3.124	231464
NBEAL1		-3.124	269198
ARFGEF1		-3.127	211673
VPS18		-3.128	228545
ALKBH8		-3.129	67667
C15orf29		-3.129	72425
RNF146	-1.419	-3.131	68031
GATAD2B		-3.132	229542
DCTD		-3.135	320685
PDRG1		-3.138	68559
STK4	-9.302	-3.139	58231
CAPN3		-3.140	12335
EPC1	-2.561	-3.142	13831
KIAA1737		-3.143	217732
ZFP28		-3.144	22690
PROSER1		-3.147	212127
CHUK		-3.149	12675
RABEPK		-3.150	227746
NIP7	2.747	-3.151	66164
ZNRF1	-2.375	-3.153	170737
NEU1		-3.154	18010
AGPS	-1.290	-3.158	228061
POLR3B		-3.158	70428
FAM189B		-3.161	68521
MTF2	-1.428	-3.162	17765
GPR155		-3.162	68526
ASS1		-3.163	11898
SLC35A5		-3.163	74102
EPT1	5.503	-3.166	28042

C5orf44		-3.168	66975
RANBP10	-2.650	-3.171	74334
RIOK2		-3.173	67045
Epsti1		-3.179	108670
IVD		-3.180	56357
TBX6		-3.180	21389
ZDHHC17		-3.180	320150
STK17B	-13.586	-3.182	98267
ARHGAP25	-2.611	-3.187	232201
TBXA2R		-3.187	21390
LPAR6	-2.271	-3.189	67168
PAQR7	-1.700	-3.192	71904
MPG		-3.192	268395
5730458M16Rik	-1.862	-3.199	66638
CREBBP	-1.831	-3.200	12914
FAM105A	-2.462	-3.203	223433
PIK3R5		-3.205	320207
C20orf43		-3.206	66404
C16orf88		-3.207	66356
Zfp94		-3.213	22756
PLAA	2.416	-3.216	18786
R3HDM1	-1.078	-3.219	226412
ZNF507		-3.219	668501
ERCC4		-3.221	50505
RIN3		-3.224	217835
SLC14A1		-3.229	108052
RHOH		-3.230	74734
GPATCH4	-1.065	-3.232	66614
NOL8	1.664	-3.234	70930
SRSF7	-1.729	-3.234	225027
UBXN2B		-3.235	68053
C6orf130		-3.237	106821
VPS33A		-3.237	77573
PCGF6	1.786	-3.238	71041
ROBO3		-3.240	19649
PABPN1	-1.052	-3.244	54196
ZBTB24	-2.013	-3.244	268294
C12orf41	-1.159	-3.245	69612
ORC5 (includes EG:26429)		-3.245	26429
SRSF1	1.922	-3.248	110809
CYLD	-2.917	-3.249	74256
RASSF3		-3.252	192678
H2-T24		-3.254	15042
DUSP11	-2.861	-3.256	72102
ANXA7	1.591	-3.257	11750
PSMD1	3.000	-3.258	70247
YEATS2	-2.126	-3.258	208146
CEP95		-3.259	320162
PARP3	-1.249	-3.261	235587
KBTBD11	-14.968	-3.262	74901
RBM4B		-3.262	66704
ACYP1	-2.451	-3.263	66204
DDX46	-1.877	-3.264	212880

KDM6A	-3.068	-3.267	22289
ARHGEF6	1.111	-3.271	73341
5730408K05Rik	1.160	-3.272	67531
PDP1		-3.280	381511
MDC1		-3.283	240087
MTIF3		-3.287	76366
MCCC1		-3.289	72039
NFRKB	-1.170	-3.291	235134
CELF1	-1.295	-3.294	13046
KIAA0494	-1.339	-3.298	230648
TXK		-3.298	22165
MARCH7	-2.163	-3.302	57438
ITM2A	-1.873	-3.308	16431
FKBP15	-1.312	-3.309	338355
KIAA1033	-1.454	-3.310	319277
METTL3	-2.014	-3.312	56335
CCDC93		-3.314	70829
CNOT10		-3.316	78893
RINT1		-3.316	72772
C17orf108		-3.320	66274
RAB33B	-2.186	-3.321	19338
LENEP		-3.323	57275
OGT	2.489	-3.324	108155
HJURP	-2.938	-3.324	381280
SLC38A9		-3.324	268706
UBE2B	-1.597	-3.325	22210
IQCB1		-3.327	320299
ZFYVE27		-3.327	319740
WDR5B		-3.333	69544
NXF1	-1.808	-3.334	53319
SETD1B	-4.393	-3.334	208043
DHX36		-3.335	72162
GAS5 (includes EG:14455)	-2.459	-3.337	14455
PHF3	-1.718	-3.343	213109
CDKN2AIP		-3.343	70925
PNPT1		-3.343	71701
ESR1		-3.346	13982
RBBP4	-2.367	-3.347	19646
Brd1	-2.803	-3.347	
ZNF281		-3.352	226442
OTUD1	-1.700	-3.354	71198
ZNF451		-3.354	98403
6330564D18Rik	-1.497	-3.358	109045
GPATCH2		-3.363	67769
PIGK		-3.368	329777
USP7	-3.020	-3.369	252870
UBE3A		-3.369	22215
Gnas (mouse)		-3.376	
SBNO2		-3.380	216161
NAPG		-3.381	108123
PITPNC1	-5.195	-3.383	71795
POGZ	-1.702	-3.389	229584
UTP6	2.058	-3.393	216987

BCL9		-3.395	77578
ZBED4		-3.396	223773 10004324
FUK		-3.399	234730
SLC44A2	-5.112	-3.400	68682
DDX42		-3.402	72047
DTWD1		-3.403	69185
TRIM34	-3.964	-3.406	
SACM1L		-3.406	83493
SLBP	-1.974	-3.408	20492
ATXN3		-3.418	110616
CCAR1	-1.509	-3.421	67500
FAM13B	-10.172	-3.422	225358
CUL5		-3.422	75717
ZNF250		-3.422	239546
NUDT16	-1.767	-3.423	75686
AP3M2		-3.425	64933
KIAA0020	2.706	-3.428	52874
RPGRIP1	-1.008	-3.431	77945
ELF1	-1.427	-3.433	13709
NAA25	1.771	-3.437	231713
ADCY7	-6.906	-3.437	11513
PANK2	-1.327	-3.440	74450
SS18	2.285	-3.443	268996
MGA		-3.443	29808
SNRNP48		-3.445	67797
ZNF141		-3.447	
HELZ	-1.544	-3.449	78455
TBC1D10C	-6.758	-3.452	108995
CDC37L1		-3.456	67072
ARGLU1	-1.730	-3.470	234023
UBR2	-3.108	-3.470	224826
ZBTB1	2.545	-3.475	268564
DLGAP4	-1.324	-3.478	228836
ATP11C	-1.984	-3.478	320940
HBP1		-3.479	73389
TRAF5	-1.413	-3.485	22033
CASP2		-3.487	12366
ZNF764		-3.488	233893
GPRC5B		-3.491	64297
MAU2	-1.658	-3.492	74549
FAM82B		-3.494	66302
KXD1		-3.495	75620
PHF20L1	-2.063	-3.497	239510
RGS14	-4.300	-3.499	51791
GIGYF1		-3.499	57330
H3F3C	-10.672	-3.501	625328
CLK2	-1.666	-3.504	12748
CCM2	-7.615	-3.504	216527
C2orf42		-3.505	232196
ATR		-3.510	245000
SSBP3	-1.965	-3.512	72475
ARAF		-3.519	11836
PTPN6		-3.520	15170

USP4		-3.521	22258
MFHAS1	-4.049	-3.529	52065
GTF2I	-5.556	-3.529	14886
AKAP8L	-1.809	-3.536	54194
TNRC6B	-5.256	-3.536	213988
PRMT3	1.407	-3.538	71974
B3GALT4		-3.538	54218
LTA4H		-3.539	16993
LUC7L		-3.539	66978
USP24	-2.208	-3.545	329908
IFIT3		-3.545	
SS18L1		-3.545	269397
KRBA1	-1.254	-3.549	77827
CRAMP1L	-2.171	-3.549	57354
NAGK		-3.552	56174
PPP1R13B		-3.552	21981
NKTR	-2.030	-3.553	18087
ANKRD44	-4.989	-3.556	329154
KCTD2	-3.659	-3.558	70382
SFXN2		-3.562	94279
Mndal	-36.462	-3.566	
LY6D	-1.816	-3.575	17068
PAN3 (includes EG:100126012)	-1.952	-3.578	72587
BCL11B	-18.269	-3.581	58208
SOS1	-2.284	-3.582	20662
RAB40C		-3.582	224624
TMEM87B		-3.585	72477
CRLF3	-6.071	-3.587	54394
TBC1D23		-3.589	67581
HNRNPR	-1.592	-3.591	74326
MDM4	-1.718	-3.591	17248
ZNF394	-1.554	-3.593	67235
LIPA	-13.020	-3.595	16889
RBM10	-2.526	-3.596	236732
Erdr1	-3.469	-3.597	170942
AP1S2		-3.601	108012
EP400	-1.667	-3.602	75560
ITCH		-3.603	16396
MORC3		-3.603	338467
ZNF91		-3.605	
ZNF638		-3.605	18139
APC		-3.606	11789
DUSP7		-3.611	235584
CARD6	-3.268	-3.614	239319
FUS	-6.792	-3.619	233908
C19orf38		-3.619	382062
ALKBH3		-3.622	69113
IDNK	-2.821	-3.624	75731
C3orf70		-3.627	72190
CAMK1D		-3.628	227541
SPO11		-3.630	26972
RNF38	-4.793	-3.632	73469
Zfp945	-1.651	-3.633	

Hmgm1	-1.389	-3.636	15312
RBM25	-1.903	-3.639	67039
MOB3B		-3.641	214944
RAD52 (includes EG:19365)		-3.641	19365
SAP18	-2.079	-3.642	
QTRTD1	2.697	-3.643	106248
B3GAT3		-3.643	72727
SLC12A7	-1.947	-3.644	20499
MAP1LC3B	-3.225	-3.653	67443
PRKAG2		-3.660	108099
C19orf12		-3.663	72244
MAP4		-3.668	17758
KIF21B	-8.639	-3.669	16565
RPRD2	-2.851	-3.671	75137
HADHB	-2.184	-3.674	231086
GRAMD4	-5.182	-3.677	223752
MSL1 (includes EG:303514)	-2.341	-3.678	
NISCH	-3.797	-3.682	
RBBP5		-3.682	213464
TTLL3		-3.682	101100
FGF13		-3.684	14168
IKBKE	-10.899	-3.689	56489
GPATCH8	-2.024	-3.690	237943
TRMT1L		-3.691	98685
MPEG1		-3.697	17476
IL1RL2		-3.698	107527
SPG20		-3.700	229285
C2orf43	-1.266	-3.716	68832
HIST1H2BB		-3.716	
D530037H12Rik		-3.718	96893
SH2D3C		-3.719	27387
TCF12	-4.038	-3.726	21406
MBTD1		-3.729	103537
KIAA0947	-1.339	-3.732	218333
RNF144A		-3.737	108089
SEPP1	-21.329	-3.742	20363
RRM2B		-3.742	382985
MAP3K2		-3.743	26405
ZNF770		-3.743	228491
IFNAR2		-3.745	15976
ZNF654		-3.748	72020
PGM2L1		-3.752	70974
POLR3C	-1.664	-3.753	74414
RNF167	-3.714	-3.754	70510
LEF1	-7.262	-3.754	16842
HIST2H3C (includes others)		-3.758	
MAN1A2		-3.761	17156
TBC1D16		-3.766	207592
IWS1		-3.768	73473
FBXL12	-3.114	-3.771	30843
FERMT3	-1.501	-3.773	108101
TMEM19	-1.262	-3.775	67226
IRF6		-3.778	54139

RHEBL1		-3.781	69159
AI448984		-3.782	100124
RASA1	-1.523	-3.801	218397
SLC9A8		-3.807	77031
PDS5A		-3.810	71521
STRBP		-3.810	20744
CTU1		-3.817	233189
CCDC167		-3.820	68597
LOC100504229		-3.826	
C16orf52	-1.280	-3.828	233812
GALNT4	-1.745	-3.835	14426
CDC23		-3.836	52563
DDIT4	-2.687	-3.837	74747
TUBB2B		-3.837	73710
MBNL1	-3.083	-3.838	56758
INPP1		-3.839	16329
PIGH		-3.849	110417
POLRMT		-3.850	216151
KCTD18	-1.927	-3.852	51960
SPAST	-2.035	-3.853	50850
SLC15A2	-2.127	-3.858	57738
FGFR1OP2	-1.664	-3.859	67529
RB1CC1	-1.869	-3.860	12421
FIP1L1	2.000	-3.861	66899
AKT3		-3.867	23797
TMEM184C		-3.867	234463
GGPS1		-3.877	14593
KDM2A	-1.594	-3.881	225876
BOD1L1		-3.882	665775
PARP1	-2.469	-3.884	11545
RBX1	-2.438	-3.886	56438
Znrf2	-2.723	-3.886	
PHTF2		-3.886	68770
APOBEC2		-3.888	11811
TMEM57		-3.890	66146
LOC100503146	-2.004	-3.892	100503146
IFIT2	-3.972	-3.895	15958
MRPS11		-3.897	67994
ESYT1	-1.206	-3.901	23943
SRPK2		-3.904	20817
MAP4K2	-2.956	-3.909	26412
FBXO28	-1.999	-3.911	67948
SMAD4	-7.184	-3.914	17128
IREB2		-3.919	64602
HNRNPA1	2.590	-3.926	15382
HS3ST3B1		-3.932	54710
FAM210A		-3.934	108654
XPNPEP3		-3.934	321003
SMCHD1	-3.765	-3.936	74355
COMMID9	-2.281	-3.938	76501
RAB22A		-3.939	19334
CBX7		-3.942	52609
LATS2	-3.066	-3.943	50523

LDHB	-1.853	-3.947	
YOD1		-3.947	226418
HMHA1	-9.871	-3.948	70719
NANP	-1.026	-3.950	67311
FKTN		-3.951	246179
TRIM21	-3.865	-3.956	20821
RASAL1		-3.958	19415
SMG1	-2.319	-3.959	233789
BCL2L12		-3.961	75736
STRN3	1.071	-3.965	94186
HM13	-2.390	-3.969	14950
IPO7	4.522	-3.975	233726
FOXK1	-2.132	-3.987	17425
STAT3	-1.514	-3.988	20848
ZADH2		-3.988	225791
ACTR1A		-3.992	54130
TAF1C		-3.993	21341
ACPL2		-4.000	235534
TUBGCP5		-4.002	233276
NCAPH2		-4.003	52683
POU6F1		-4.004	19009
PSMA1		-4.013	26440
CDK12		-4.015	69131
Ifnz (includes others)		-4.017	319146 545654 5.
TMEM71	-36.934	-4.025	213068
CD2AP	-1.903	-4.026	12488
Zfp68		-4.030	24135
ZBTB44	-3.092	-4.031	235132
RBM28	1.335	-4.033	68272
NR2C1		-4.033	22025
CLPX		-4.038	270166
CCDC58		-4.039	381045
APOPT1		-4.042	68020
ARMC8	-1.765	-4.046	74125
Zfp826		-4.048	414758
SFI1 (includes EG:305467)	-1.801	-4.050	78887
ESRRA		-4.050	26379
PNN	-1.227	-4.052	18949
ZNF426		-4.053	235028
DPF2		-4.056	19708
GMPS	3.649	-4.057	229363
DYNC1LI2		-4.060	234663
CHERP		-4.062	27967
TSPAN32	-2.207	-4.064	27027
DOCK8	-2.086	-4.067	76088
MYLIP	-4.223	-4.068	218203
NDRG3	-2.101	-4.070	29812
GRAMD3	-5.906	-4.082	107022
SCRN3		-4.087	74616
1700020I14Rik	-1.388	-4.088	66602
TNRC6C	-3.993	-4.092	217351
DLST		-4.094	78920
ZSCAN12		-4.094	22758

ASXL1	-1.547	-4.104	228790
ORAI2		-4.104	269717
RNF32		-4.106	56874
PPARGC1B		-4.114	170826
SLC20A1	-1.502	-4.115	20515
OSBPL9	-1.829	-4.115	100273
ZNF217	-2.374	-4.115	228913
AP1AR	1.245	-4.119	211556
CCND1	-1.876	-4.121	12443
BTBD1	-2.988	-4.123	83962
SENP6		-4.123	215351
FBXW2		-4.125	30050
FYCO1		-4.126	17281
MCOLN1		-4.129	94178
DFFB		-4.130	13368
OSBPL11	-2.050	-4.131	106326
TNRC6A	12.047	-4.132	233833
Zfp952	-1.489	-4.132	
PUS7L	-1.034	-4.134	78895
CBX4	-17.933	-4.134	12418
TRIM32		-4.138	69807
GMPR2	1.569	-4.139	105446
PRPF38B	-2.379	-4.144	66921
FTSJ2		-4.145	68017
ZNF467		-4.145	68910
G2E3		-4.158	217558
ME2		-4.177	107029
SETD6		-4.177	66083
MARVELD1	-2.344	-4.187	277010
GABRR2		-4.193	14409
Xlr3c (includes others)		-4.198	22446 22445 574
HSPA4	2.110	-4.200	15525
NONO	-1.175	-4.200	53610
ZDHHC20	1.497	-4.212	75965
KBTBD8		-4.213	243574
YIPF4	-2.472	-4.216	67864
CDK7		-4.227	12572
CDC7		-4.230	12545
GUF1		-4.238	231279
DIDO1	-1.707	-4.240	23856
MECP2		-4.244	17257
LIAS		-4.249	79464
DENND2D	-2.500	-4.256	72121
SLC30A1		-4.265	22782
RABL6		-4.266	227624
SFSWAP		-4.270	231769
OGFOD1		-4.276	270086
USP32		-4.286	237898
DOCK2	-2.093	-4.299	94176
RNMT		-4.299	67897
POLB		-4.300	18970
LRIG2		-4.302	269473
TMEM154		-4.305	320782

TRIM56		-4.309	384309
WHSC1L1	-4.824	-4.315	234135
BANK1		-4.323	242248
TRA@	-4.872	-4.331	21473
FASTKD1		-4.340	320720
VAPB		-4.345	56491
USP53		-4.352	99526
ACVR1B	-1.971	-4.355	11479
SLTM	-1.355	-4.362	66660
PDLIM5		-4.363	56376
BCL7A	-1.093	-4.372	77045
C6orf136	-1.238	-4.377	69662
Zfp119a (includes others)		-4.384	240120 224893 2
ZDHHC14		-4.398	224454
MS4A6A	-11.553	-4.400	
LIG4		-4.402	319583
MDP1		-4.408	67881
IRF3	-2.784	-4.410	54131
CPSF6	-2.270	-4.413	432508
AP2A2	-2.935	-4.416	11772
RCSD1	-5.952	-4.425	226594
PPP3R1	-1.065	-4.430	19058
CDK16	-2.603	-4.431	18555
ARPC5L	-3.118	-4.435	74192
L3MBTL3		-4.445	237339
ALDH6A1		-4.447	104776
PRPF4B		-4.453	19134
BAZ2B		-4.457	407823
SLFN5		-4.457	327978
PDE4B	-9.333	-4.459	18578
VPS41		-4.460	218035
SLC30A7	2.195	-4.463	66500
ZNF236	-2.002	-4.471	329002
RPS6KB1		-4.471	72508
TRAF3IP3		-4.473	215243
RPL41	-2.437	-4.481	67945
G0S2		-4.487	14373
SSBP2		-4.488	66970
CHIC2	-1.147	-4.490	74277
ZBTB4	-5.243	-4.498	75580
PPM1K		-4.500	243382
DCAF12		-4.507	68970
ZNF799		-4.511	240064
GPR146	-2.204	-4.519	80290
KIF5B		-4.531	16573
RMND1		-4.532	66084
ZNF592	-6.918	-4.537	233410
FAM117A	-2.740	-4.538	215512
ZNF845		-4.539	626848 668620 4
SLC28A2	-7.098	-4.542	269346
FCHO2		-4.545	218503
TLK1	-4.030	-4.550	
PDE4DIP		-4.550	83679

DUS4L		-4.568	71916
PPCDC		-4.570	66812
PHIP	-4.926	-4.571	83946
BC094916/Pyhin1	-7.293	-4.573	
RAD1		-4.580	19355
TNFRSF25	-3.557	-4.590	85030
RUFY2		-4.595	70432
PIAS1	-1.540	-4.598	56469
ITGA6	-2.911	-4.605	16403
AGXT2L2		-4.608	72947
MLL	-2.484	-4.610	214162
MYO9B		-4.623	17925
ZNF277		-4.633	246196
TSC1		-4.634	64930
CTDSPL2		-4.638	329506
MADD	-1.921	-4.640	228355
PARP11		-4.641	101187
HMBOX1		-4.644	219150
PIK3R1	-2.049	-4.650	18708
UBE2V2		-4.664	70620
ZNF143		-4.664	20841
CD9	-1.200	-4.675	12527
H2AFJ	-1.144	-4.682	232440
NGRN	-1.954	-4.685	83485
C8orf58		-4.685	268759
ZNF7		-4.691	223669
PEX10		-4.694	668173
PISD	-1.290	-4.696	320951
DCP1B		-4.696	319618
RFX3		-4.701	19726
TTC3	-3.117	-4.704	22129
LSM1		-4.709	67207
GLCCI1		-4.711	170772
ADAMTS6		-4.752	108154
SNRK	-3.352	-4.758	20623
QRSL1	-1.748	-4.763	76563
MDN1		-4.768	100019
ZBTB20	-2.151	-4.773	56490
MRPL49		-4.778	18120
PI4KB		-4.778	107650
ARHGEF18	-7.911	-4.783	102098
AKAP8	-4.012	-4.786	56399
MTCH2	1.697	-4.790	56428
WDR92		-4.794	103784
TMCC3		-4.796	319880
CEP192		-4.800	70799
UGCG	-5.525	-4.807	22234
DGKE		-4.833	56077
SMC6	-9.194	-4.836	67241
ZNF267		-4.849	668572
LRCH4		-4.852	231798
ZNF157		-4.859	235050
MRM1		-4.863	217038

CLCF1	-1.592	-4.864	56708
FAM178A	-2.052	-4.868	226151
TSNAX		-4.868	53424
RGL2		-4.871	19732
INPP5F		-4.873	101490
SCYL3		-4.873	240880
SH3GLB1	1.867	-4.883	54673
BIRC6	-2.123	-4.887	12211
IKBKB	-5.844	-4.915	16150
Aim		-4.919	104103
RREB1	-1.412	-4.924	68750
NTRK3		-4.929	18213
NUDT21		-4.938	68219
AKTIP		-4.945	14339
RPAP1	-1.684	-4.950	68925
TMEM181	-2.161	-4.953	77106
KLHDC2	-1.699	-4.955	69554
Zfp961	-1.634	-4.957	
ZKSCAN3	-3.160	-4.961	
Macf1	-5.796	-4.967	
MSRB2		-4.975	76467
ZNF148	-2.935	-4.977	22661
BRMS1L	-1.729	-4.978	52592
MTMR4	-6.041	-4.980	170749
NDUFAF4	2.102	-4.997	68493
2810455D13Rik		-4.999	72810
DCAF17		-4.999	75763
ZC3H8		-5.000	57432
PMM2	-1.697	-5.006	54128
HNRNPA3	-4.301	-5.008	229279
SIPA1L1		-5.011	217692
COG8		-5.012	97484
Rassf1		-5.027	56289
TBC1D1	-1.862	-5.032	57915
ZCCHC11	-2.099	-5.037	230594
C4orf34	-2.823	-5.043	68552
LUC7L3		-5.043	67684
C9orf80		-5.049	66209
RALA	1.137	-5.053	56044
BRD3		-5.059	67382
TRIM33		-5.066	94093
Zfp229/Zfp760		-5.067	240034 381067
PEX26		-5.075	74043
CNR2		-5.083	12802
MTAP	-1.118	-5.090	66902
GGT5		-5.091	23887
USP3	-3.244	-5.097	235441
TRIM59	-2.270	-5.121	66949
ARRDC2		-5.126	70807
GLB1		-5.135	12091
Zfp949		-5.148	
ZNF187		-5.154	432731
PLEKHG2	-3.957	-5.166	101497

PDK1	-6.898	-5.169	228026
WDR77	3.663	-5.174	70465
TRIM41		-5.176	211007
B3GNT5		-5.182	108105
BRWD1	-1.538	-5.184	93871
ZNF318		-5.194	57908
TMEM219		-5.217	68742
ASAP1		-5.223	13196
ATP10D	-2.883	-5.228	231287
B4GALT7		-5.234	218271
ZC3HAV1	-2.778	-5.243	78781
TRUB2	1.244	-5.254	227682
SLC40A1		-5.254	53945
SC5DL	2.710	-5.257	235293
TOR4A		-5.270	227612
NLK	-2.915	-5.293	
BC046401		-5.309	
STK38	-12.002	-5.313	106504
ZNF841		-5.344	
GIT2	-2.583	-5.352	26431
TSPYL4		-5.364	72480
EHD3		-5.368	57440
RAB5B		-5.389	
DPH5	-2.404	-5.404	69740
TCF7	-49.164	-5.416	21414
DNMT3A	2.538	-5.421	13435
SIT1		-5.422	54390
DEM1		-5.425	73172
MAN2B1	-2.562	-5.442	17159
TOX		-5.449	252838
MGEA5	-2.623	-5.483	76055
RICTOR	-2.632	-5.490	78757
DYRK2	-7.243	-5.492	69181
PTS		-5.492	19286
EXOC8		-5.511	102058
PMS2		-5.516	18861
C1orf31	-2.097	-5.529	67892
LIMD2	-7.851	-5.546	67803
SETD4	-1.770	-5.564	224440
NR2C2	-1.970	-5.571	22026
GLE1	-2.374	-5.576	74412
SCAI		-5.579	320271
Cd55/Daf2	-1.780	-5.587	13136 13137
ANKRD12	-2.770	-5.616	106585
SMUG1		-5.621	71726
CFL2		-5.651	
VEZF1	-2.406	-5.652	22344
JMY		-5.666	57748
UBL4A	1.235	-5.671	27643
HERC4	-2.306	-5.697	67345
ZNF157		-5.702	
SPCS1	1.478	-5.720	69019
TIAL1	1.281	-5.740	21843

ST6GAL1	-6.532	-5.761	20440
AW011738		-5.770	100382
FAM214A		-5.775	235493
CNOT3		-5.784	232791
GALNT10	-2.189	-5.794	171212
TET1		-5.803	52463
MECR		-5.811	26922
RGMB		-5.811	68799
GOLGA1		-5.827	76899
EPHX1		-5.835	13849
FUBP1	1.676	-5.836	51886
ST8SIA1	-6.123	-5.840	20449
SCLY		-5.841	50880
RASSF2	-3.116	-5.867	215653
ZNF12		-5.870	231866
CDC40		-5.881	71713
CSNK2A1	-1.725	-5.882	12995
SGK3		-5.901	170755
HCFC2		-5.908	67933
BRD8	-1.948	-5.915	78656
DERL2		-5.928	116891
SNX13		-5.954	217463
TMEM245		-5.957	242474
SUN2	-7.209	-5.959	223697
MTERFD3		-5.970	74238
CR1L	-1.069	-5.987	
PNISR	-2.287	-6.016	66625
PCMTD2		-6.039	245867
HPS3		-6.045	12807
FAM65B	-3.960	-6.049	193385
LETMD1		-6.079	68614
ST3GAL6		-6.136	54613
TYROBP		-6.154	22177
DENND1B	-3.482	-6.163	329260
RIF1	1.354	-6.191	51869
TARDBP	2.248	-6.198	230908
ITSN2	-2.859	-6.226	20403
CACNA2D4		-6.243	319734
TPP2		-6.267	22019
PDE7A	-3.418	-6.273	18583
LIMS1	-1.431	-6.278	110829
HECA	-9.785	-6.327	380629
LDLRAP1		-6.343	100017
MLLT10	-3.434	-6.360	17354
METTL18		-6.382	69962
NOD1		-6.483	107607
LCOR	-2.197	-6.489	212391
ZFP161	-2.442	-6.489	22666
CCDC88C		-6.533	68339
EPS15	-3.781	-6.572	13858
CKLF	-1.436	-6.613	75458
KLF2		-6.620	16598
TRPM7	-2.281	-6.621	58800

NHSL1		-6.636	215819
SLAMF6	1.114	-6.657	30925
TRMT13		-6.747	229780
DICER1		-6.758	192119
VAMP1		-6.805	22317
ZYG11B	-2.555	-6.814	414872
HARS2		-6.873	70791
NUFIP2		-6.884	68564
CCDC53		-6.907	67282
ATP8A1		-6.910	11980
TRUB1	-1.106	-6.933	72133
C22orf13	-2.293	-6.934	68778
FAM208A		-6.971	218850
HLTF	-2.762	-7.016	20585
AFF3	-2.406	-7.020	16764
NSD1		-7.026	18193
FGD3		-7.034	30938
SETD3		-7.047	52690
LY6E		-7.051	17069
Ifi203	-1.890	-7.063	
THAP2		-7.075	66816
MTERF		-7.091	545725 208595
GIMAP8	-8.211	-7.110	243374
HLA-DOB		-7.126	15002
GPCPD1	-1.818	-7.136	74182
ZNF287	-2.657	-7.223	170740
C15orf63		-7.224	67693
CCR7	-7.619	-7.260	12775
ITGA4	-12.697	-7.290	16401
FAM8A1	-1.543	-7.297	97863
SHPRH	1.188	-7.298	268281
PIGL	-6.574	-7.359	327942
RABGAP1L	-2.001	-7.361	29809
SNAPC3		-7.364	77634
MTSS1	-2.071	-7.376	211401
RAPGEF4		-7.398	56508
FAM53B		-7.417	77938
ATF7IP	-5.357	-7.509	54343
TAF15		-7.516	
C12orf57	-2.380	-7.540	14790
C920006O11Rik		-7.554	320295
RDH14		-7.598	105014
TNIK		-7.607	665113
SELL	-11.890	-7.612	20343
PURA	-2.048	-7.642	19290
KLHL24	-2.189	-7.660	75785
PLEKHA1		-7.734	101476
4930523C07Rik	-3.151	-7.753	
KIF1B	-2.773	-7.783	16561
AMN1		-7.797	232566
ERLEC1		-7.877	66753
TECPR1	-5.521	-7.899	70381
FBXO32		-7.919	67731

FAM76B	-2.467	-7.970	72826
IFT80	-2.805	-8.004	68259
PIAS2		-8.037	17344
KIAA0430	-3.063	-8.041	223989
CREBZF		-8.091	233490
TIMP2	-2.637	-8.180	21858
ZMYM5	-1.870	-8.195	219105
C79468	-3.312	-8.204	
ATPAF1		-8.266	230649
LRIG1	-1.826	-8.288	16206
PTEN	-4.746	-8.316	19211
S1PR1	-7.384	-8.325	13609
TXNIP	-4.698	-8.467	56338
USP28	-1.937	-8.533	235323
UBASH3A		-8.549	328795
MCMBP	-3.276	-8.584	210711
SNN		-8.615	20621
PPCS		-8.619	106564
SUV420H1	-2.659	-8.638	225888
FAM78A	-8.269	-8.676	241303
IFNAR1	-2.091	-8.725	15975
PHF21A	-6.562	-8.776	192285
RAB6B		-8.810	270192
BTLA		-8.837	208154
FOXP1	-5.147	-8.923	108655
GMCL1	-3.216	-8.979	23885
RNF166	-4.338	-8.983	68718
TLN1	-1.988	-9.010	21894
STX17		-9.062	67727
HINT3		-9.099	66847
C5orf41	-2.676	-9.235	77128
ATP5C1		-9.316	11949
ZNF322		-9.400	218100
TTC14	-2.513	-9.419	67120
MS4A1	-1.754	-9.467	12482
CORO1A	-5.442	-9.473	12721
ANXA6		-9.498	11749
MYCBP2	-3.580	-9.508	105689
CSF1R		-9.555	12978
TTC28	-3.283	-9.596	209683
KRIT1	-1.037	-9.822	79264
SP110		-9.846	109032
SBK1		-9.878	104175
ZNF329		-9.899	67230
PTPN18	-2.277	-9.953	19253
ASB13		-10.024	142688
ADH1C		-10.120	11522
RBM5	-2.108	-10.152	83486
PARP8		-10.231	52552
GRAP2		-10.254	17444
FAM101B	-13.108	-10.295	76566
CCNT2	-1.928	-10.333	72949
AGFG2		-10.469	231801

CCND3	-2.818	-10.590	12445
RALGPS2	-2.082	-10.594	78255
EPM2AIP1	-1.395	-10.607	77781
OSBPL7		-10.767	71240
PRPF39	-1.471	-10.787	328110
HIST3H2A		-10.888	319162
D230019N24Rik		-10.929	399607
RASGRP2		-11.090	19395
ZNF238	-7.137	-11.121	30928
C1orf63	-3.568	-11.589	27981
HBA1/HBA2	-2.283	-11.630	110257 15122
VIPR1	-2.213	-11.699	22354
WDR12		-11.935	57750
DZIP1		-11.995	66573
XIST	-3.248	-12.033	213742
ZER1		-12.191	227693
CPM		-12.501	70574
STAT1	-4.380	-12.519	20846
RNPC3	1.305	-12.618	67225
HMP19	-13.786	-12.653	18197
TSC22D3		-12.951	14605
CD37	-1.998	-13.186	12493
LYPD6B		-13.266	71897
PIK3IP1	-3.864	-13.313	216505
KLHDC5		-13.498	232539
SIKE1		-13.717	66641
RAB3IP	-2.080	-13.898	216363
APBB1IP		-13.947	54519
RBM3	1.802	-14.465	100043257 19652
ST8SIA6	-21.010	-15.124	241230
CHD8	-2.491	-15.137	67772
TRPC2		-15.171	22064
ACTN1	-19.005	-16.276	109711
CERS6	-1.440	-16.346	241447
2310035P21Rik		-17.513	75683
IL16	-5.515	-17.866	16170
C16orf54		-19.493	101602
ID3		-19.829	15903
RAMP1		-20.462	51801
Zfp53		-20.660	
OVGP1		-20.762	12659
Ms4a4b (includes others)	-22.926	-21.941	64380 66607 603
ARHGEF1	-4.293	-22.161	16801
ZNF192		-23.214	93681
C8orf42	-3.544	-23.397	72148
CMAH	-3.032	-23.556	12763
IPCEF1	-16.017	-23.766	320495
KLF3		-24.439	16599
TIA1	-2.362	-24.534	21841
EVL	-2.491	-27.022	14026
DTX1	-3.685	-27.362	14357
SESN1	-18.398	-30.159	140742
SOX4	2.232	-31.892	20677

SLC16A5		-31.997	217316
A930005H10Rik	-5.001	-32.009	68161
ATP1B1	-4.965	-53.429	11931

TABLE 2

2-fold Th2 enriched		
Fold Change	Symbol	Entrez Gene Name
18.336	MZB1	marginal zone B and B1 cell-specific protein
16.059	F2RL2	coagulation factor II (thrombin) receptor-like 2
15.363	OIT3	oncoprotein induced transcript 3
12.040	TNFSF13B	tumor necrosis factor (ligand) superfamily, member 13b
11.811	FGL2	fibrinogen-like 2
9.259	DNAJB1	DnaJ (Hsp40) homolog, subfamily B, member 1
8.873	NFIA	nuclear factor I/A
8.553	PLCB4	phospholipase C, beta 4
7.810	FOCAD	focadhesin
7.639	HGF	hepatocyte growth factor (hepapoitin A; scatter factor)
7.139	S100A13	S100 calcium binding protein A13
6.698	CA7	carbonic anhydrase VII
6.414	USP2	ubiquitin specific peptidase 2
6.303	ST3GAL1	ST3 beta-galactoside alpha-2,3-sialyltransferase 1
6.232	CCRL2	chemokine (C-C motif) receptor-like 2
5.972	ZBTB41	zinc finger and BTB domain containing 41
5.615	CDH17	cadherin 17, LI cadherin (liver-intestine)
5.605	RND3	Rho family GTPase 3
4.890	PTPRVP	protein tyrosine phosphatase, receptor type, V, pseudogene
4.798	TSPAN9	tetraspanin 9
4.678	DUSP8	dual specificity phosphatase 8
4.612	ME1	malic enzyme 1, NADP(+)-dependent, cytosolic
4.475	SDR39U1	short chain dehydrogenase/reductase family 39U, member 1
4.334	STK32C	serine/threonine kinase 32C
4.292	FBXO27	F-box protein 27
4.261	MEFV	Mediterranean fever
4.186	CYB561	cytochrome b561
3.968	MMP9	matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)
3.884	CXADR	coxsackie virus and adenovirus receptor
3.880	MAP2K6	mitogen-activated protein kinase kinase 6
3.848	GCNT2	glucosaminyl (N-acetyl) transferase 2, I-branching enzyme (I blood group)
3.847	LAT2	linker for activation of T cells family, member 2
3.807	SLC35B2	solute carrier family 35, member B2
3.739	PIP5K1B	phosphatidylinositol-4-phosphate 5-kinase, type I, beta
3.705	CLPB	ClpB caseinolytic peptidase B homolog (E. coli)
3.695	RNF217	ring finger protein 217
3.671	ARL4A	ADP-ribosylation factor-like 4A
3.625	MAP6	microtubule-associated protein 6
3.597	PILRB	paired immunoglobulin-like type 2 receptor beta
3.519	RNASE4	ribonuclease, RNase A family, 4
3.486	ARHGEF10	Rho guanine nucleotide exchange factor (GEF) 10
3.459	PXDC1	PX domain containing 1
3.444	FILIP1	filamin A interacting protein 1
3.409	RAPSN	receptor-associated protein of the synapse

3.396	CCNO	cyclin O
3.381	SPEF2	sperm flagellar 2
3.278	DOK2	docking protein 2, 56kDa
3.237	C1QTNF4	C1q and tumor necrosis factor related protein 4
3.230	OAS3	2'-5'-oligoadenylate synthetase 3, 100kDa
3.203	CPEB4	cytoplasmic polyadenylation element binding protein 4
3.200	EPS8L3	EPS8-like 3
3.183	FAM213A	family with sequence similarity 213, member A
3.164	B9D2	B9 protein domain 2
3.141	TOX4	TOX high mobility group box family member 4
3.136	IMMT	inner membrane protein, mitochondrial
3.123	MVP	major vault protein
3.117	PLTP	phospholipid transfer protein
3.085	TRAFD1	TRAF-type zinc finger domain containing 1
3.078	NSUN6	NOP2/Sun domain family, member 6
3.074	RND2	Rho family GTPase 2
3.065	FLYWCH2	FLYWCH family member 2
3.053	LMF1	lipase maturation factor 1
3.045	SLN	sarcolipin
3.033	SEMA4D	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D
3.030	CRLF2	cytokine receptor-like factor 2
3.019	TBCD	tubulin folding cofactor D
3.016	RAP1GAP2	RAP1 GTPase activating protein 2
3.015	BMP7	bone morphogenetic protein 7
3.012	1700109H08Rik	
3.006	D730045B01Rik	RIKEN cDNA 1700109H08 gene
2.991	STAU2	staufen, RNA binding protein, homolog 2 (<i>Drosophila</i>)
2.935	Zfp954	zinc finger protein 954
2.918	ZRSR2	zinc finger (CCCH type), RNA-binding motif and serine/arginine rich 2
2.912	USP38	ubiquitin specific peptidase 38
2.910	EGR4	early growth response 4
2.887	CST3	cystatin C
2.879	LDLR	low density lipoprotein receptor
2.861	PRSS12	protease, serine, 12 (neurotrypsin, motopsin)
2.849	SLC52A3	solute carrier family 52, riboflavin transporter, member 3
2.848	C21orf62	chromosome 21 open reading frame 62
2.832	DEPTOR	DEP domain containing MTOR-interacting protein
2.832	MUC1	mucin 1, cell surface associated
2.819	SELK	selenoprotein K
2.806	C16orf87	chromosome 16 open reading frame 87
2.789	AW112010	expressed sequence AW112010
2.787	IER2	immediate early response 2
2.761	Fcrls	Fc receptor-like S, scavenger receptor
2.749	PTPN1	protein tyrosine phosphatase, non-receptor type 1
2.734	CAPN2	calpain 2, (m/lI) large subunit
2.725	KRT80	keratin 80
2.717	RIBC1	RIB43A domain with coiled-coils 1
2.712	FBLN1	fibulin 1
2.686	SEPN1	selenoprotein N, 1

2.676	PLXNA1	plexin A1
2.673	PAQR4	progestin and adipoQ receptor family member IV
2.667	CRADD	CASP2 and RIPK1 domain containing adaptor with death domain
2.660	HUNK	hormonally up-regulated Neu-associated kinase
2.649	Nptn	neuroplastin
2.646	CHID1	chitinase domain containing 1
2.632	ELMO2	engulfment and cell motility 2
2.632	WDR78	WD repeat domain 78
2.625	ZNF263	zinc finger protein 263
2.612	GCC1	GRIP and coiled-coil domain containing 1
2.608	MGAT1	mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase
2.600	AFF4	AF4/FMR2 family, member 4
2.572	DDX24	DEAD (Asp-Glu-Ala-Asp) box polypeptide 24
2.566	ARC	activity-regulated cytoskeleton-associated protein
2.560	ATG16L2	autophagy related 16-like 2 (S. cerevisiae)
2.560	SERTAD1	SERTA domain containing 1
2.528	ST3GAL5	ST3 beta-galactoside alpha-2,3-sialyltransferase 5
2.514	HPGDS	hematopoietic prostaglandin D synthase
2.506	HDAC6	histone deacetylase 6
2.505	COL6A2	collagen, type VI, alpha 2
2.497	C14orf159	chromosome 14 open reading frame 159
2.477	VKORC1	vitamin K epoxide reductase complex, subunit 1
2.473	CLN6	ceroid-lipofuscinosis, neuronal 6, late infantile, variant
2.462	BTD	biotinidase
2.446	TFE3	transcription factor binding to IGHM enhancer 3
2.440	DYRK1A	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1A
2.422	DDOST	dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit (non-catalytic)
2.415	SLPI	secretory leukocyte peptidase inhibitor
2.408	MDM2	MDM2 oncogene, E3 ubiquitin protein ligase
2.400	RIPK3	receptor-interacting serine-threonine kinase 3
2.394	SMIM7	small integral membrane protein 7
2.389	LPCAT3	lysophosphatidylcholine acyltransferase 3
2.387	CHAF1B	chromatin assembly factor 1, subunit B (p60)
2.387	EDEM1	ER degradation enhancer, mannosidase alpha-like 1
2.383	AI956758	expressed sequence AI956758
2.382	SLC35A2	solute carrier family 35 (UDP-galactose transporter), member A2
2.377	BAIAP2	BAI1-associated protein 2
2.368	POMC	proopiomelanocortin
2.362	DERL3	derlin 3
2.359	SMAD3	SMAD family member 3
2.346	LCMT1	leucine carboxyl methyltransferase 1
2.309	NLRX1	NLR family member X1
2.303	FLYWCH1	FLYWCH-type zinc finger 1
2.295	ABHD12	abhydrolase domain containing 12
2.290	STX8	syntaxin 8
2.284	C2CD4B	C2 calcium-dependent domain containing 4B
2.284	CERCAM	cerebral endothelial cell adhesion molecule
2.276	Npcd	neuronal pentraxin chromo domain
2.269	IQSEC2	IQ motif and Sec7 domain 2
2.265	TTC7B	tetratricopeptide repeat domain 7B
2.251	CMIP	c-Maf inducing protein

2.250	LIME1	Lck interacting transmembrane adaptor 1
2.249	BRE	brain and reproductive organ-expressed (TNFRSF1A modulator)
2.246	NRM	nurim (nuclear envelope membrane protein)
2.243	Naip2	NLR family, apoptosis inhibitory protein 2
2.233	BSPRY	B-box and SPRY domain containing
2.231	GTF2B	general transcription factor IIB
2.214	MOCOS	molybdenum cofactor sulfurase
2.213	BSCL2	Berardinelli-Seip congenital lipodystrophy 2 (seipin)
2.209	CLTB	clathrin, light chain B
2.207	CCR10	chemokine (C-C motif) receptor 10
2.205	CATSPERD	catisper channel auxiliary subunit delta
2.199	EML2	echinoderm microtubule associated protein like 2
2.198	FHIT	fragile histidine triad
2.195	SEL1L	sel-1 suppressor of lin-12-like (C. elegans)
2.190	SAT1	spermidine/spermine N1-acetyltransferase 1
2.185	4833441D16Rik	RIKEN cDNA 4833441D16 gene
2.176	NLRP3	NLR family, pyrin domain containing 3
2.175	FAM127A	family with sequence similarity 127, member A
2.168	ITPR1	inositol 1,4,5-trisphosphate receptor, type 1
2.166	AGTRAP	angiotensin II receptor-associated protein
2.160	TAGLN	transgelin
2.159	PLD3	phospholipase D family, member 3
2.158	COMM10	COMM domain containing 10
2.148	APH1A	anterior pharynx defective 1 homolog A (C. elegans)
2.143	KLK8	kallikrein-related peptidase 8
2.123	C6orf132	chromosome 6 open reading frame 132
2.120	DDX25	DEAD (Asp-Glu-Ala-Asp) box helicase 25
2.108	HNRNPC	heterogeneous nuclear ribonucleoprotein C (C1/C2)
2.092	SNX25	sorting nexin 25
2.090	PRSS41	protease, serine, 41
2.088	9030619P08Rik	RIKEN cDNA 9030619P08 gene
2.086	SPATC1L	spermatogenesis and centriole associated 1-like
2.085	NAA38	N(alpha)-acetyltransferase 38, NatC auxiliary subunit
2.083	UBC	ubiquitin C
2.080	DDX3X	DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, X-linked
2.080	KATNB1	katanin p80 (WD repeat containing) subunit B 1
2.078	HSPBP1	HSPA (heat shock 70kDa) binding protein, cytoplasmic cochaperone 1
2.077	CAPNS1	calpain, small subunit 1
2.065	PQLC1	PQ loop repeat containing 1
2.047	SDCBP	syndecan binding protein (syntenin)
2.043	HIPK1	homeodomain interacting protein kinase 1
2.043	PLBD2	phospholipase B domain containing 2
2.042	CCDC92	coiled-coil domain containing 92
2.041	RNF180	ring finger protein 180
2.040	FUOM	fucose mutarotase
2.039	Wdr95	WD40 repeat domain 95
2.038	FBXL17	F-box and leucine-rich repeat protein 17
2.036	TNFRSF8	tumor necrosis factor receptor superfamily, member 8
2.035	TMEM160	transmembrane protein 160
2.028	KHNYN	KH and NYN domain containing

2.026	PPP1R10	protein phosphatase 1, regulatory subunit 10
2.018	SLC25A30	solute carrier family 25, member 30
2.014	GLUL	glutamate-ammonia ligase
2.006	RTKN2	rhotekin 2
	6030460B20Rik	
2.004		RIKEN cDNA 6030460B20 gene
2.002	C1orf85	chromosome 1 open reading frame 85
-2.004	LRRC14	leucine rich repeat containing 14
-2.004	SPEN	spen homolog, transcriptional regulator (<i>Drosophila</i>)
	2810405F17Rik	
-2.005		RIKEN cDNA 2810405F17 gene
-2.007	L2HGDH	L-2-hydroxyglutarate dehydrogenase
-2.007	PPWD1	peptidylprolyl isomerase domain and WD repeat containing 1
-2.008	ARMC6	armadillo repeat containing 6
-2.012	MPP1	membrane protein, palmitoylated 1, 55kDa
-2.016	DDX51	DEAD (Asp-Glu-Ala-Asp) box polypeptide 51
-2.016	KIAA2018	KIAA2018
-2.021	WARS2	tryptophanyl tRNA synthetase 2, mitochondrial
-2.023	C1orf74	chromosome 1 open reading frame 74
-2.023	LEMD2	LEM domain containing 2
-2.026	TMEM167A	transmembrane protein 167A
-2.029	ERGIC2	ERGIC and golgi 2
-2.031	SLC30A6	solute carrier family 30 (zinc transporter), member 6
-2.034	PSMG3	proteasome (prosome, macropain) assembly chaperone 3
-2.038	CBX2	chromobox homolog 2
-2.039	Fam169b	family with sequence similarity 169, member B
-2.043	COX8A	cytochrome c oxidase subunit VIIIA (ubiquitous)
-2.048	RMND5A	required for meiotic nuclear division 5 homolog A (<i>S. cerevisiae</i>)
-2.048	SPATA5L1	spermatogenesis associated 5-like 1
-2.054	CIAO1	cytosolic iron-sulfur protein assembly 1
		ceroid-lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation)
-2.063	CLN8	
-2.064	DOLK	dolichol kinase
-2.064	Scarna13	small Cajal body-specific RNA 1
-2.066	COX15	cytochrome c oxidase assembly homolog 15 (yeast)
-2.067	HRSP12	heat-responsive protein 12
-2.071	FEM1A	fem-1 homolog a (<i>C. elegans</i>)
-2.075	UNG	uracil-DNA glycosylase
-2.077	ANGPTL1	angiopoietin-like 1
-2.083	TRMT11	tRNA methyltransferase 11 homolog (<i>S. cerevisiae</i>)
-2.084	PRMT7	protein arginine methyltransferase 7
-2.085	MON1B	MON1 homolog B (yeast)
-2.086	EIF2B4	eukaryotic translation initiation factor 2B, subunit 4 delta, 67kDa
-2.090	GGNBP1	gametogenitin binding protein 1 (pseudogene)
-2.093	NUDT16L1	nudix (nucleoside diphosphate linked moiety X)-type motif 16-like 1
	7030407E18Rik	
-2.095		RIKEN cDNA 7030407E18 gene
-2.096	AGO1	argonaute RISC catalytic component 1
-2.098	HNRNPH1	heterogeneous nuclear ribonucleoprotein H1 (H)
-2.109	CTNNB1	catenin (cadherin-associated protein), beta 1, 88kDa
	9530067D14Rik	
-2.110		Riken cDNA 9530067D14 gene
-2.111	KIAA0753	KIAA0753

-2.114	2610002J23Rik	RIKEN cDNA 2610002J23 gene
-2.117	ZNF235	zinc finger protein 235
-2.121	DHX30	DEAH (Asp-Glu-Ala-His) box polypeptide 30
-2.124	C17orf85	chromosome 17 open reading frame 85
-2.124	PHF23	PHD finger protein 23
-2.125	CDIP1	cell death-inducing p53 target 1
-2.126	TBCE	tubulin folding cofactor E
-2.128	RASA2	RAS p21 protein activator 2
-2.129	TMTC4	transmembrane and tetratricopeptide repeat containing 4
-2.131	MFAP3	microfibrillar-associated protein 3
-2.131	ZDHHC23	zinc finger, DHHC-type containing 23
-2.133	ATP6V1H	ATPase, H ⁺ transporting, lysosomal 50/57kDa, V1 subunit H
-2.133	KCTD5	potassium channel tetramerisation domain containing 5
-2.134	DEPDC5	DEP domain containing 5
-2.134	THEM4	thioesterase superfamily member 4
-2.135	ZNF124	zinc finger protein 124
	2310029O18Rik	
-2.137		RIKEN cDNA 2310029O18 gene
-2.138	USP30	ubiquitin specific peptidase 30
-2.139	CNOT2	CCR4-NOT transcription complex, subunit 2
-2.142	LIPT2	lipoyl(octanoyl) transferase 2 (putative)
-2.144	D5Ert255e	DNA segment, Chr 5, ERATO Doi 255, expressed
-2.146	RUND C1	RUN domain containing 1
-2.147	AP3M1	adaptor-related protein complex 3, mu 1 subunit
-2.150	TFAP4	transcription factor AP-4 (activating enhancer binding protein 4)
-2.152	RNF111	ring finger protein 111
-2.158	C80012	expressed sequence C80012
-2.158	COQ2	coenzyme Q2 homolog, prenyltransferase (yeast)
-2.160	INTS5	integrator complex subunit 5
-2.160	PAPOLG	poly(A) polymerase gamma
-2.161	KAT8	K(lysine) acetyltransferase 8
-2.162	ZKSCAN5	zinc finger with KRAB and SCAN domains 5
-2.164	TTC27	tetratricopeptide repeat domain 27
-2.170	TAOK3	TAO kinase 3
-2.171	ZBTB6	zinc finger and BTB domain containing 6
-2.173	TRIT1	tRNA isopentenyltransferase 1
-2.178	PTCD3	pentatricopeptide repeat domain 3
-2.181	NSF	N-ethylmaleimide-sensitive factor
	1500004A13Rik	
-2.183		RIKEN cDNA 1500004A13 gene
-2.184	PARS2	prolyl-tRNA synthetase 2, mitochondrial (putative)
-2.185	PTCD1	pentatricopeptide repeat domain 1
-2.188	SLC25A37	solute carrier family 25 (mitochondrial iron transporter), member 37
-2.189	RDH13	retinol dehydrogenase 13 (all-trans/9-cis)
-2.192	MTERFD2	MTERF domain containing 2
-2.192	ZRANB2	zinc finger, RAN-binding domain containing 2
	2310008B10Rik	
-2.201		RIKEN cDNA 2310008B10 gene
-2.203	SREK1	splicing regulatory glutamine/lysine-rich protein 1
-2.206	C1orf50	chromosome 1 open reading frame 50
-2.206	SRI	sorcin
-2.207	CCDC132	coiled-coil domain containing 132

-2.208	SP3	Sp3 transcription factor
-2.209	TYSND1	trypsin domain containing 1
-2.210	NAA40	N(alpha)-acetyltransferase 40, NatD catalytic subunit, homolog (S. cerevisiae)
-2.213	BCL6	B-cell CLL/lymphoma 6
-2.213	OXLD1	oxidoreductase-like domain containing 1
-2.213	GPAM	glycerol-3-phosphate acyltransferase, mitochondrial
-2.214	C5orf30	chromosome 5 open reading frame 30
-2.218	ACTR5	ARP5 actin-related protein 5 homolog (yeast)
-2.222	PRPF4	PRP4 pre-mRNA processing factor 4 homolog (yeast)
-2.223	C20orf111	chromosome 20 open reading frame 111
	6330575P09Rik	
-2.224	COIL	coilin
-2.232	DPM2	dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit
-2.232	HNRNPH3	heterogeneous nuclear ribonucleoprotein H3 (2H9)
-2.234	AIDA	axin interactor, dorsalization associated
-2.239	C2orf68	chromosome 2 open reading frame 68
-2.239	RPL23	ribosomal protein L23
-2.247	CARKD	carbohydrate kinase domain containing
-2.247	NDUFS1	NADH dehydrogenase (ubiquinone) Fe-S protein 1, 75kDa (NADH-coenzyme Q reductase)
-2.248	AW552393	expressed sequence AW552393
	C920008N22Rik	
-2.248	ZNF212	RIKEN cDNA C920008N22 gene
-2.249	FAM58A	zinc finger protein 212
-2.251	UCK1	family with sequence similarity 58, member A
-2.252	DMXL1	uridine-cytidine kinase 1
-2.255	PDF	Dmx-like 1
-2.257	SMARCAD1	peptide deformylase (mitochondrial)
-2.258	C76798	SWI/SNF-related, matrix-associated actin-dependent regulator of chromatin, subfamily a, containing DEAD/H box 1
-2.263	DNMT3B	expressed sequence C76798
-2.265	D230040A04Rik	DNA (cytosine-5-)methyltransferase 3 beta
-2.269	HARBI1	RIKEN cDNA D230040A04 gene
-2.270	EXOSC7	harbinger transposase derived 1
-2.271	TMCO3	exosome component 7
-2.273	ZMAT2	transmembrane and coiled-coil domains 3
-2.273	DCUN1D4	zinc finger, matrin-type 2
-2.275	9230108I15Rik	DCN1, defective in cullin neddylation 1, domain containing 4 (S. cerevisiae)
-2.276	RBM41	negative elongation factor complex member A
-2.279	PTCD2	autophagy related 4B, cysteine peptidase
-2.291	USP46	kelch-like family member 2
-2.295	ATG4B	ubiquitin specific peptidase 46
-2.298	NELFA	telomeric repeat binding factor 2

-2.309	WDR82	WD repeat domain 82
-2.312	C6orf70	chromosome 6 open reading frame 70
-2.314	RPL17	ribosomal protein L17
-2.315	USP33	ubiquitin specific peptidase 33
-2.318	NDUFB8	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8, 19kDa
-2.320	NDUFAF1	NADH dehydrogenase (ubiquinone) complex I, assembly factor 1
-2.324	MKLN1	muskelin 1, intracellular mediator containing kelch motifs
-2.325	NELFB	negative elongation factor complex member B
-2.325	DIAPH1	diaphanous homolog 1 (<i>Drosophila</i>)
-2.328	PCED1A	PC-esterase domain containing 1A
-2.330	RPUSD4	RNA pseudouridylate synthase domain containing 4
-2.331	Pot1b	protection of telomeres 1B
-2.332	TBPL1	TBP-like 1
-2.333	EYA3	eyes absent homolog 3 (<i>Drosophila</i>)
-2.334	MINA	MYC induced nuclear antigen
-2.334	PPP1R12A	protein phosphatase 1, regulatory subunit 12A
-2.337	ABHD11	abhydrolase domain containing 11
-2.340	THUMPD1	THUMP domain containing 1
-2.342	ZNF410	zinc finger protein 410
-2.346	OSBPL8	oxysterol binding protein-like 8
-2.348	2900064B18Rik	RIKEN cDNA 2900064B18 gene
-2.357	MED20	mediator complex subunit 20
-2.357	PDS5B	PDS5, regulator of cohesion maintenance, homolog B (<i>S. cerevisiae</i>)
-2.359	UNKL	unkempt homolog (<i>Drosophila</i>)-like
-2.361	CLUAP1	clusterin associated protein 1
-2.363	FBXL5	F-box and leucine-rich repeat protein 5
-2.365	ACTL6A	actin-like 6A
-2.365	CLOCK	clock circadian regulator
-2.375	C17orf75	chromosome 17 open reading frame 75
-2.379	ATXN10	ataxin 10
-2.380	SSBP1	single-stranded DNA binding protein 1, mitochondrial
-2.381	MED13L	mediator complex subunit 13-like
-2.383	SPRTN	SprT-like N-terminal domain
-2.386	COMM5	COMM domain containing 5
-2.389	ERI2	ERI1 exoribonuclease family member 2
-2.391	RNF138	ring finger protein 138, E3 ubiquitin protein ligase
-2.396	THAP1	THAP domain containing, apoptosis associated protein 1
-2.403	FAM118A	family with sequence similarity 118, member A
-2.403	SNX27	sorting nexin family member 27
-2.403	ZFC3H1	zinc finger, C3H1-type containing
-2.405	BMS1	BMS1 homolog, ribosome assembly protein (yeast)
-2.407	Zfp35	zinc finger protein 35
-2.418	TRIM23	tripartite motif containing 23
-2.427	USP42	ubiquitin specific peptidase 42
-2.428	ZNF436	zinc finger protein 436
-2.430	PTCH1	patched 1
-2.432	NAA16	N(alpha)-acetyltransferase 16, NatA auxiliary subunit
-2.433	GEMIN6	gem (nuclear organelle) associated protein 6
-2.434	ZNF280B	zinc finger protein 280B
-2.436	KLHL6	kelch-like family member 6
-2.441	TOPBP1	topoisomerase (DNA) II binding protein 1

-2.445	ACTR6	ARP6 actin-related protein 6 homolog (yeast)
-2.446	TRMT1	tRNA methyltransferase 1 homolog (S. cerevisiae)
-2.447	ACBD5	acyl-CoA binding domain containing 5
-2.447	DGCR8	DiGeorge syndrome critical region gene 8
-2.447	USP15	ubiquitin specific peptidase 15
-2.455	LIN9	lin-9 homolog (C. elegans)
-2.460	OVCA2	ovarian tumor suppressor candidate 2
-2.464	PPP1R8	protein phosphatase 1, regulatory subunit 8
-2.467	A830039H05Rik	RIKEN cDNA A830039H05 gene
-2.470	5830435N06Rik	RIKEN cDNA 5830435N06 gene
-2.471	PPIL4	peptidylprolyl isomerase (cyclophilin)-like 4
-2.472	DTNB	dystrobrevin, beta
-2.473	N4BP2	NEDD4 binding protein 2
-2.474	RNF10	ring finger protein 10
-2.474	TRAF3IP1	TNF receptor-associated factor 3 interacting protein 1
-2.477	RPS24	ribosomal protein S24
-2.482	C19orf26	chromosome 19 open reading frame 26
-2.482	DBT	dihydrolipoamide branched chain transacylase E2
-2.489	MIOS	missing oocyte, meiosis regulator, homolog (Drosophila)
-2.492	ACAD9	acyl-CoA dehydrogenase family, member 9
-2.499	CBLL1	Cbl proto-oncogene, E3 ubiquitin protein ligase-like 1
-2.514	SUPT7L	suppressor of Ty 7 (S. cerevisiae)-like
-2.515	AHSA1	AHA1, activator of heat shock 90kDa protein ATPase homolog 1 (yeast)
-2.519	ATXN2	ataxin 2
-2.522	C130034I24Rik	RIKEN cDNA C130034I24 gene
-2.522	RNF8	ring finger protein 8, E3 ubiquitin protein ligase
-2.524	MESDC2	mesoderm development candidate 2
-2.525	CAMKK2	calcium/calmodulin-dependent protein kinase kinase 2, beta
-2.527	UTP20	UTP20, small subunit (SSU) processome component, homolog (yeast)
-2.528	C10orf2	chromosome 10 open reading frame 2
-2.548	Gm13152	predicted gene 13152
-2.552	TRIAP1	TP53 regulated inhibitor of apoptosis 1
-2.553	METTL14	methyltransferase like 14
-2.556	C230091D08Rik	RIKEN cDNA C230091D08 gene
-2.560	YLPM1	YLP motif containing 1
-2.566	BACH2	BTB and CNC homology 1, basic leucine zipper transcription factor 2
-2.572	LYSMD4	LysM, putative peptidoglycan-binding, domain containing 4
-2.576	FGFR1OP	FGFR1 oncogene partner
-2.582	AP4E1	adaptor-related protein complex 4, epsilon 1 subunit
-2.588	C19orf52	chromosome 19 open reading frame 52
-2.589	IRGQ	immunity-related GTPase family, Q
-2.589	PITRM1	pitrilysin metallopeptidase 1
-2.589	TSEN34	tRNA splicing endonuclease 34 homolog (S. cerevisiae)
-2.590	TTBK2	tau tubulin kinase 2
-2.591	MPHOSPH8	M-phase phosphoprotein 8
-2.592	TECPR2	tectonin beta-propeller repeat containing 2

-2.599	MRPS31	mitochondrial ribosomal protein S31
-2.604	SYNJ2BP	synaptojanin 2 binding protein
-2.606	S100PBP	S100P binding protein
-2.609	CRKL	v-crk sarcoma virus CT10 oncogene homolog (avian)-like
-2.618	CD5	CD5 molecule
-2.620	A130010C12Rik	RIKEN cDNA A130010C12 gene
-2.624	2700079J08Rik	RIKEN cDNA 2700079J08 gene
-2.625	TSTD2	thiosulfate sulfurtransferase (rhodanese)-like domain containing 2
-2.630	CCDC51	coiled-coil domain containing 51
-2.631	Zfp81	zinc finger protein 81
-2.633	D5Ert301e	DNA segment, Chr 5, ERATO Doi 301, expressed
-2.635	ABCD3	ATP-binding cassette, sub-family D (ALD), member 3
-2.635	ADNP	activity-dependent neuroprotector homeobox
-2.638	MAVS	mitochondrial antiviral signaling protein
-2.643	ZNF830	zinc finger protein 830
-2.647	YTHDF3	YTH domain family, member 3
-2.651	TMEM69	transmembrane protein 69
-2.654	HSPBAP1	HSPB (heat shock 27kDa) associated protein 1
-2.656	TDP2	tyrosyl-DNA phosphodiesterase 2
-2.657	ZNF90	zinc finger protein 90
-2.661	TTC4	tetratricopeptide repeat domain 4
-2.662	REXO4	REX4, RNA exonuclease 4 homolog (S. cerevisiae)
-2.665	GOLPH3L	golgi phosphoprotein 3-like
-2.667	ORMDL1	ORM1-like 1 (S. cerevisiae)
-2.671	ZNF346	zinc finger protein 346
-2.676	LYSMD2	LysM, putative peptidoglycan-binding, domain containing 2
-2.679	PPM1F	protein phosphatase, Mg2+/Mn2+ dependent, 1F
-2.681	C16orf91	chromosome 16 open reading frame 91
-2.682	CAMLG	calcium modulating ligand
-2.690	SERAC1	serine active site containing 1
-2.695	6330417A16Rik	RIKEN cDNA 6330417A16 gene
-2.699	STAM	signal transducing adaptor molecule (SH3 domain and ITAM motif) 1
-2.703	ZNF775	zinc finger protein 775
-2.704	COQ5	coenzyme Q5 homolog, methyltransferase (S. cerevisiae)
-2.712	6030438J01	uncharacterized protein 6030438J01
-2.721	C5orf24	chromosome 5 open reading frame 24
-2.724	UPF2	UPF2 regulator of nonsense transcripts homolog (yeast)
-2.727	9330151L19Rik	RIKEN cDNA 9330151L19 gene
-2.727	NHLRC2	NHL repeat containing 2
-2.735	CDYL2	chromodomain protein, Y-like 2
-2.739	TFB2M	transcription factor B2, mitochondrial
-2.740	TFAM	transcription factor A, mitochondrial
-2.767	CSPP1	centrosome and spindle pole associated protein 1
-2.772	ZNF24	zinc finger protein 24
-2.775	USP10	ubiquitin specific peptidase 10
-2.776	ZSWIM1	zinc finger, SWIM-type containing 1
-2.789	KLHL7	kelch-like family member 7
-2.791	AU041474	expressed sequence AU041474

-2.801	RNF145	ring finger protein 145
-2.809	STXBP3	syntaxin binding protein 3
-2.809	ZNF22	zinc finger protein 22
-2.817	PTPN12	protein tyrosine phosphatase, non-receptor type 12
-2.824	SDHAF1	succinate dehydrogenase complex assembly factor 1
	2310068C19Rik	RIKEN cDNA 2310068C19 gene
-2.825	LIN52	lin-52 homolog (C. elegans)
-2.835	TERF2IP	telomeric repeat binding factor 2, interacting protein
-2.844	POU2F1	POU class 2 homeobox 1
-2.852	CSNK1G3	casein kinase 1, gamma 3
-2.855	DHODH	dihydroorotate dehydrogenase (quinone)
-2.867	SEPSECS	Sep (O-phosphoserine) tRNA:Sec (selenocysteine) tRNA synthase
-2.873	CCDC66	coiled-coil domain containing 66
-2.884	DNMBP	dynamin binding protein
	2210015D19Rik	RIKEN cDNA 2210015D19 gene
-2.885	B3GALNT2	beta-1,3-N-acetylgalactosaminyltransferase 2
-2.890	LRRC42	leucine rich repeat containing 42
-2.895	RRNAD1	ribosomal RNA adenine dimethylase domain containing 1
-2.916	KDM1B	lysine (K)-specific demethylase 1B
-2.916	RPL22L1	ribosomal protein L22-like 1
-2.927	EIF2AK1	eukaryotic translation initiation factor 2-alpha kinase 1
-2.931	NIF3L1	NIF3 NGG1 interacting factor 3-like 1 (S. cerevisiae)
-2.935	RPP14	ribonuclease P/MRP 14kDa subunit
-2.937	STARD5	StAR-related lipid transfer (START) domain containing 5
	8430437O03Rik	RIKEN cDNA 8430437O03 gene
-2.942	CCNJ	cyclin J
-2.943	SUGP2	SURP and G patch domain containing 2
-2.945	CCDC137	coiled-coil domain containing 137
-2.964	MTHFR	methylenetetrahydrofolate reductase (NAD(P)H)
-2.972	USP40	ubiquitin specific peptidase 40
-2.982	EXOSC4	exosome component 4
-2.990	SMAD1	SMAD family member 1
-3.003	ZNF506	zinc finger protein 506
-3.014	EXOG	endo/exonuclease (5'-3'), endonuclease G-like
-3.024	KANSL3	KAT8 regulatory NSL complex subunit 3
-3.036	CAND1	cullin-associated and neddylation-dissociated 1
-3.050	BAG4	BCL2-associated athanogene 4
-3.056	MIS12	MIS12, MIND kinetochore complex component, homolog (S. pombe)
-3.077	GNA11	guanine nucleotide binding protein (G protein), alpha 11 (Gq class)
-3.092	RBBP9	retinoblastoma binding protein 9
-3.098	WDR85	WD repeat domain 85
-3.103	LACTB	lactamase, beta
-3.128	VPS18	vacuolar protein sorting 18 homolog (S. cerevisiae)
-3.178	ORAOV1	oral cancer overexpressed 1
-3.191	FAM206A	family with sequence similarity 206, member A
-3.212	GRPEL2	GrpE-like 2, mitochondrial (E. coli)
-3.213	ARHGAP31	Rho GTPase activating protein 31
-3.213	Zfp94	zinc finger protein 94
-3.218	FAM219B	family with sequence similarity 219, member B

-3.219	ZNF507	zinc finger protein 507
-3.235	UBXN2B	UBX domain protein 2B
-3.245	KANSL2	KAT8 regulatory NSL complex subunit 2
-3.248	SRSF1	serine/arginine-rich splicing factor 1
-3.262	RBM4B	RNA binding motif protein 4B
-3.287	MTIF3	mitochondrial translational initiation factor 3
-3.308	AMER1	APC membrane recruitment protein 1
-3.308	ITM2A	integral membrane protein 2A
-3.308	RSAD1	radical S-adenosyl methionine domain containing 1
	D630030B22Rik	RIKEN cDNA D630030B22 gene
-3.319	UBE2B	ubiquitin-conjugating enzyme E2B
-3.327	IQCB1	IQ motif containing B1
-3.343	CDKN2AIP	CDKN2A interacting protein
-3.354	C16orf70	chromosome 16 open reading frame 70
-3.390	SMIM20	small integral membrane protein 20
-3.396	ZBED4	zinc finger, BED-type containing 4
-3.403	DTWD1	DTW domain containing 1
-3.406	SACM1L	SAC1 suppressor of actin mutations 1-like (yeast)
-3.447	ZNF141	zinc finger protein 141
	4933411D12Rik	RIKEN cDNA 4933411D12 gene
-3.480	CASP2	caspase 2, apoptosis-related cysteine peptidase
-3.487	TSEN15	tRNA splicing endonuclease 15 homolog (S. cerevisiae)
-3.537	Prps1I3	phosphoribosyl pyrophosphate synthetase 1-like 3
-3.539	C17orf80	chromosome 17 open reading frame 80
-3.545	SS18L1	synovial sarcoma translocation gene on chromosome 18-like 1
-3.549	CRAMP1L	Crm, cramped-like (Drosophila)
	2900009J20Rik	RIKEN cDNA 2900009J20 gene
-3.558	Zfp568	zinc finger protein 568
-3.582	RAB40C	RAB40C, member RAS oncogene family
-3.605	ZNF91	zinc finger protein 91
-3.636	Hmgn1	high mobility group nucleosomal binding domain 1
-3.682	RBBP5	retinoblastoma binding protein 5
-3.690	GPATCH8	G patch domain containing 8
-3.691	PCGF3	polycomb group ring finger 3
	D530037H12Rik	RIKEN cDNA D530037H12 gene
-3.718	ZNF770	zinc finger protein 770
-3.743	RHEBL1	Ras homolog enriched in brain like 1
-3.781	CXorf23	chromosome X open reading frame 23
-3.800	CTU1	cytosolic thiouridylase subunit 1 homolog (S. pombe)
-3.817	CDC23	cell division cycle 23
-3.836	PIGH	phosphatidylinositol glycan anchor biosynthesis, class H
-3.849	SPAST	spastin
-3.867	TMEM184C	transmembrane protein 184C
-3.880	SGK196	protein kinase-like protein SgK196
-3.885	ZNF2	zinc finger protein 2
-3.893	ABHD13	abhydrolase domain containing 13
-3.919	IREB2	iron-responsive element binding protein 2
-3.947	LDHB	lactate dehydrogenase B
-3.950	NANP	N-acetylneuraminic acid phosphatase

-3.965	STRN3	striatin, calmodulin binding protein 3
-4.013	PSMA1	proteasome (prosome, macropain) subunit, alpha type, 1
-4.118	C8orf59	chromosome 8 open reading frame 59
-4.119	AP1AR	adaptor-related protein complex 1 associated regulatory protein
-4.131	OSBPL11	oxysterol binding protein-like 11
-4.138	TRIM32	tripartite motif containing 32
-4.144	KCTD3	potassium channel tetramerisation domain containing 3
-4.261	B830007D08Rik	RIKEN cDNA B830007D08 gene
-4.266	RABL6	RAB, member RAS oncogene family-like 6
-4.274	Zfp60 (includes others)	zinc finger protein 60
-4.276	OGFOD1	2-oxoglutarate and iron-dependent oxygenase domain containing 1
-4.324	ZNF623	zinc finger protein 623
-4.336	Zfp748	zinc finger protein 748
-4.355	9030419F21Rik	RIKEN cDNA 9030419F21 gene
-4.377	C6orf136	chromosome 6 open reading frame 136
-4.511	ZNF799	zinc finger protein 799
-4.541	ZBTB34	zinc finger and BTB domain containing 34
-4.580	RAD1	RAD1 homolog (S. pombe)
-4.590	TNFRSF25	tumor necrosis factor receptor superfamily, member 25
-4.644	HMBOX1	homeobox containing 1
-4.685	NGRN	neugrin, neurite outgrowth associated
-4.689	6030422H21Rik	RIKEN cDNA 6030422H21 gene
-4.691	ZNF7	zinc finger protein 7
-4.794	WDR92	WD repeat domain 92
-4.849	ZNF267	zinc finger protein 267
-4.951	ZBTB26	zinc finger and BTB domain containing 26
-5.066	ZNF280D	zinc finger protein 280D
-5.176	TRIM41	tripartite motif containing 41
-5.254	TRUB2	TruB pseudouridine (psi) synthase homolog 2 (E. coli)
-5.425	EXO5	exonuclease 5
-5.511	EXOC8	exocyst complex component 8
-5.529	COA6	cytochrome c oxidase assembly factor 6 homolog (S. cerevisiae)
-5.960	C79242	expressed sequence C79242
-6.267	TPP2	tripeptidyl peptidase II
-6.305	D130084N16Rik	RIKEN cDNA D130084N16 gene
-8.837	BTLA	B and T lymphocyte associated

5-fold Th2 enriched

Fold Change	Symbol	Entrez Gene Name
215.947	CCR1	chemokine (C-C motif) receptor 1
203.458	FOSB	FBJ murine osteosarcoma viral oncogene homolog B
57.721	EMILIN2	elastin microfibril interfacer 2
55.229	KLF4	Kruppel-like factor 4 (gut)

47.406	PHLDA1	pleckstrin homology-like domain, family A, member 1
45.990	CASS4	Cas scaffolding protein family member 4
38.870	KCTD12	potassium channel tetramerisation domain containing 12
31.320	CCR2	chemokine (C-C motif) receptor 2
29.810	METRNL	meteorin, glial cell differentiation regulator-like
24.761	IGHG1	immunoglobulin heavy constant gamma 1 (G1m marker)
24.180	1700071A11Rik	RIKEN cDNA 1700071A11 gene
23.954	PLXDC2	plexin domain containing 2
23.723	C3orf18	chromosome 3 open reading frame 18
20.589	PPP2R3A	protein phosphatase 2, regulatory subunit B'', alpha
19.830	CSRNP1	cysteine-serine-rich nuclear protein 1
18.428	CTSE	cathepsin E
18.336	MZB1	marginal zone B and B1 cell-specific protein
16.740	JDP2	Jun dimerization protein 2
16.271	FOS	FBJ murine osteosarcoma viral oncogene homolog
16.059	F2RL2	coagulation factor II (thrombin) receptor-like 2
15.952	FFAR2	free fatty acid receptor 2
15.905	SOCS1	suppressor of cytokine signaling 1
15.474	IGHA1	immunoglobulin heavy constant alpha 1
15.363	OIT3	oncoprotein induced transcript 3
15.123	A130038J17Rik	RIKEN cDNA A130038J17 gene
14.906	GPR171	G protein-coupled receptor 171
13.581	ADAMTSL3	ADAMTS-like 3
13.275	DCUN1D3	DCN1, defective in cullin neddylation 1, domain containing 3 (S. cerevisiae)
12.956	CD8A	CD8a molecule
12.949	IL10RA	interleukin 10 receptor, alpha
12.741	CACNB3	calcium channel, voltage-dependent, beta 3 subunit
12.694	CSRP1	cysteine and glycine-rich protein 1
12.579	PRDM1	PR domain containing 1, with ZNF domain
12.511	LAMA5	laminin, alpha 5
12.490	NFKBIE	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon
12.040	TNFSF13B	tumor necrosis factor (ligand) superfamily, member 13b
11.811	FGL2	fibrinogen-like 2
11.406	ZC3H12C	zinc finger CCCH-type containing 12C
11.105	EVI2A	ecotropic viral integration site 2A
10.808	FAM19A3	family with sequence similarity 19 (chemokine (C-C motif)-like), member A3
10.740	BATF	basic leucine zipper transcription factor, ATF-like
10.692	JUN	jun proto-oncogene
10.233	ZC3H12A	zinc finger CCCH-type containing 12A
10.214	SEPT7	septin 7
9.865	ISG20	interferon stimulated exonuclease gene 20kDa
9.775	GNA15	guanine nucleotide binding protein (G protein), alpha 15 (Gq class)

9.682	TM6SF1	transmembrane 6 superfamily member 1
9.656	MYADM	myeloid-associated differentiation marker
9.531	PPP1R15A	protein phosphatase 1, regulatory subunit 15A
9.410	RNF152	ring finger protein 152
9.376	OBFC2A	nucleic acid binding protein 1
9.342	C9orf40	chromosome 9 open reading frame 40
9.259	DNAJB1	DnaJ (Hsp40) homolog, subfamily B, member 1
9.256	RPS6KA5	ribosomal protein S6 kinase, 90kDa, polypeptide 5
9.075	CENPL	centromere protein L
8.922	SOAT1	sterol O-acyltransferase 1
8.873	NFIA	nuclear factor I/A
8.859	ID2	inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
8.574	N4BP1	NEDD4 binding protein 1
8.553	PLCB4	phospholipase C, beta 4
8.411	TANC2	tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 2
8.353	RLIM	ring finger protein, LIM domain interacting
8.270	FAM110A	family with sequence similarity 110, member A
8.120	FAM122A	family with sequence similarity 122A
8.077	KDM6B	lysine (K)-specific demethylase 6B
8.004	FBXO17	F-box protein 17
7.961	TGIF2	TGFB-induced factor homeobox 2
7.885	C21orf91	chromosome 21 open reading frame 91
7.883	TRPM6	transient receptor potential cation channel, subfamily M, member 6
7.821	CCR4	chemokine (C-C motif) receptor 4
7.810	KIAA1797	focadhesin
7.696	AUH	AU RNA binding protein/enoyl-CoA hydratase
7.639	HGF	hepatocyte growth factor (heparoietin A; scatter factor)
7.473	NFKBIZ	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta
7.379	CLCN5	chloride channel, voltage-sensitive 5
7.253	PPP3CC	protein phosphatase 3, catalytic subunit, gamma isozyme
7.180	MSC	musculin
7.179	JAK3	Janus kinase 3
7.157	ATP2B4	ATPase, Ca++ transporting, plasma membrane 4
7.139	S100A13	S100 calcium binding protein A13
6.990	Med7	mediator complex subunit 7
6.975	NAMPT	nicotinamide phosphoribosyltransferase
6.844	4930486L24Rik	RIKEN cDNA 4930486L24 gene
6.755	PPARG	peroxisome proliferator-activated receptor gamma
6.747	CITED2	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2
6.698	CA7	carbonic anhydrase VII
6.616	IL4R	interleukin 4 receptor
6.573	ENC1	ectodermal-neural cortex 1 (with BTB domain)
6.559	TSC22D2	TSC22 domain family, member 2
6.489	JUNB	jun B proto-oncogene
6.481	SPTY2D1	SPT2, Suppressor of Ty, domain containing 1 (S. cerevisiae)

6.477	C77027	expressed sequence C77027
6.458	IFRD1	interferon-related developmental regulator 1
6.414	USP2	ubiquitin specific peptidase 2
6.393	H1F0	H1 histone family, member 0
6.348	NCOA2	nuclear receptor coactivator 2
6.303	ST3GAL1	ST3 beta-galactoside alpha-2,3-sialyltransferase 1
6.232	CCRL2	chemokine (C-C motif) receptor-like 2
6.076	EZH2	enhancer of zeste homolog 2 (Drosophila)
6.065	MED13	mediator complex subunit 13
6.017	LOC73899	uncharacterized LOC73899
5.979	GRN	granulin
5.972	ZBTB41	zinc finger and BTB domain containing 41
5.962	Utp14b	UTP14, U3 small nucleolar ribonucleoprotein, homolog B (yeast)
5.928	ARL13B	ADP-ribosylation factor-like 13B
5.906	TMEM45A	transmembrane protein 45A
5.892	AFF1	AF4/FMR2 family, member 1
5.871	DAPP1	dual adaptor of phosphotyrosine and 3-phosphoinositides
5.839	Fam46c	family with sequence similarity 46, member C
5.808	LAMC2	laminin, gamma 2
5.793	IRS2	insulin receptor substrate 2
5.748	NUCB2	nucleobindin 2
5.745	LYST	lysosomal trafficking regulator
5.737	ZNF295	zinc finger and BTB domain containing 21
5.735	LARGE	like-glycosyltransferase
5.717	FNIP1	folliculin interacting protein 1
5.615	CDH17	cadherin 17, LI cadherin (liver-intestine)
5.605	RND3	Rho family GTPase 3
5.563	BMPR1A	bone morphogenetic protein receptor, type IA
5.506	MARCKS	myristoylated alanine-rich protein kinase C substrate
5.466	GPNMB	glycoprotein (transmembrane) nmb
5.417	CHD7	chromodomain helicase DNA binding protein 7
5.382	GSTK1	glutathione S-transferase kappa 1
5.266	OXSM	3-oxoacyl-ACP synthase, mitochondrial
5.215	PRR13	proline rich 13
5.207	SLC37A3	solute carrier family 37 (glycerol-3-phosphate transporter), member 3
5.200	RALGDS	ral guanine nucleotide dissociation stimulator
5.176	FBXO33	F-box protein 33
5.163	SERINC3	serine incorporator 3
5.144	CHD1	chromodomain helicase DNA binding protein 1
5.114	WASL	Wiskott-Aldrich syndrome-like
5.094	UNC13A	unc-13 homolog A (C. elegans)
5.057	ACPP	acid phosphatase, prostate
5.021	INSIG1	insulin induced gene 1
5.008	PPP2CB	protein phosphatase 2, catalytic subunit, beta isozyme
5.004	SLC39A6	solute carrier family 39 (zinc transporter), member 6
5.002	CLCN3	chloride channel, voltage-sensitive 3
-5.000	ZC3H8	zinc finger CCCH-type containing 8

-5.027	Rassf1	Ras association (RalGDS/AF-6) domain family member 1
-5.032	TBC1D1	TBC1 (tre-2/USP6, BUB2, cdc16) domain family, member 1
-5.037	ZCCHC11	zinc finger, CCHC domain containing 11
-5.043	LUC7L3	LUC7-like 3 (<i>S. cerevisiae</i>)
-5.049	C9orf80	INTS3 and NABP interacting protein
-5.059	BRD3	bromodomain containing 3
-5.066	METAP1D	methionyl aminopeptidase type 1D (mitochondrial)
-5.066	TRIM33	tripartite motif containing 33
-5.066	ZNF280D	zinc finger protein 280D
-5.067	ZNF229	zinc finger protein 229
-5.090	MTAP	methylthioadenosine phosphorylase
-5.112	ZNF526	zinc finger protein 526
-5.121	TRIM59	tripartite motif containing 59
-5.126	ARRDC2	arrestin domain containing 2
-5.135	GLB1	galactosidase, beta 1
-5.148	Zfp949	zinc finger protein 949
-5.154	ZNF187	zinc finger and SCAN domain containing 26
-5.174	WDR77	WD repeat domain 77
-5.176	TRIM41	tripartite motif containing 41
-5.184	BRWD1	bromodomain and WD repeat domain containing 1
-5.194	ZNF318	zinc finger protein 318
-5.217	TMEM219	transmembrane protein 219
-5.234	B4GALT7	xylosylprotein beta 1,4-galactosyltransferase, polypeptide 7
-5.254	TRUB2	TruB pseudouridine (psi) synthase homolog 2 (<i>E. coli</i>)
-5.257	SC5DL	sterol-C5-desaturase
-5.270	C9orf167	torsin family 4, member A
-5.298	5830453J16Rik	RIKEN cDNA 5830453J16 gene
-5.316	RPRD1A	regulation of nuclear pre-mRNA domain containing 1A
-5.317	CDADC1	cytidine and dCMP deaminase domain containing 1
-5.344	ZNF841	zinc finger protein 841
-5.357	4930518I15Rik	RIKEN cDNA 4930518I15 gene
-5.378	A430106A12Rik	RIKEN cDNA A430106A12 gene
-5.389	RAB5B	RAB5B, member RAS oncogene family
-5.401	LYRM2	LYR motif containing 2
-5.425	DEM1	exonuclease 5
-5.483	MGEA5	meningioma expressed antigen 5 (hyaluronidase)
-5.492	DYRK2	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2
-5.511	EXOC8	exocyst complex component 8
-5.516	PMS2	PMS2 postmeiotic segregation increased 2 (<i>S. cerevisiae</i>)
-5.529	C1orf31	cytochrome c oxidase assembly factor 6 homolog (<i>S. cerevisiae</i>)
-5.621	SMUG1	single-strand-selective monofunctional uracil-DNA glycosylase 1
-5.633	2900056M20Rik	RIKEN cDNA 2900056M20 gene

-5.651	CFL2	cofilin 2 (muscle)
-5.666	JMY	junction mediating and regulatory protein, p53 cofactor
-5.671	UBL4A	ubiquitin-like 4A
-5.697	HERC4	HECT and RLD domain containing E3 ubiquitin protein ligase 4
-5.702	ZNF157	zinc finger protein 157
-5.720	SPCS1	signal peptidase complex subunit 1 homolog (S. cerevisiae)
-5.725	GTPBP5	GTP binding protein 5 (putative)
-5.784	CNOT3	CCR4-NOT transcription complex, subunit 3
-5.792	4933415E08Rik	RIKEN cDNA 4933415E08 gene
-5.841	SCLY	selenocysteine lyase
-5.870	ZNF12	zinc finger protein 12
-5.894	THUMPD2	THUMP domain containing 2
-5.915	BRD8	bromodomain containing 8
-5.928	DERL2	derlin 2
-5.954	SNX13	sorting nexin 13
-5.957	C9orf5	transmembrane protein 245
-5.959	SUN2	Sad1 and UNC84 domain containing 2
-5.960	C79242	expressed sequence C79242
-5.970	MTERFD3	MTERF domain containing 3
-5.991	D19Ertd409e	DNA segment, Chr 19, ERATO Doi 409, expressed
-6.045	HPS3	Hermansky-Pudlak syndrome 3
-6.079	LETM1	LETM1 domain containing 1
-6.163	DENND1B	DENN/MADD domain containing 1B
-6.198	TARDBP	TAR DNA binding protein
-6.222	ZSCAN22	zinc finger and SCAN domain containing 22
-6.259	Zfp58	zinc finger protein 58
-6.267	TPP2	tripeptidyl peptidase II
-6.273	PDE7A	phosphodiesterase 7A
-6.284	Zfp39	zinc finger protein 717
-6.299	AU015680	expressed sequence AU015680
-6.305	D130084N16Rik	RIKEN cDNA D130084N16 gene
-6.323	RSRC2	arginine-serine-rich coiled-coil 2
-6.360	MLLT10	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 10
-6.382	METTL18	methyltransferase like 18
-6.482	E430024I08Rik	RIKEN cDNA E430024I08 gene
-6.486	B230117O15Rik	RIKEN cDNA B230117O15 gene
-6.489	LCOR	ligand dependent nuclear receptor corepressor
-6.533	CCDC88C	coiled-coil domain containing 88C
-6.553	2810043O03Rik	RIKEN cDNA 2810043O03 gene
-6.621	TRPM7	transient receptor potential cation channel, subfamily M, member 7
-6.645	2610319H10Rik	RIKEN cDNA 2610319H10 gene
-6.657	SLAMF6	SLAM family member 6
-6.709	2610202C22Rik	RIKEN cDNA 2610202C22 gene
-6.716	ZNF790	zinc finger protein 790
-6.747	CCDC76	tRNA methyltransferase 13 homolog (S. cerevisiae)

-6.758	DICER1	dicer 1, ribonuclease type III
-6.873	HARS2	histidyl-tRNA synthetase 2, mitochondrial
-6.884	NUFIP2	nuclear fragile X mental retardation protein interacting protein 2
-6.907	CCDC53	coiled-coil domain containing 53
-6.933	TRUB1	TruB pseudouridine (psi) synthase homolog 1 (E. coli)
-7.016	HLTF	helicase-like transcription factor
-7.020	AFF3	AF4/FMR2 family, member 3
-7.033	FUT11	fucosyltransferase 11 (alpha (1,3)fucosyltransferase)
-7.034	FGD3	FYVE, RhoGEF and PH domain containing 3
-7.047	SETD3	SET domain containing 3
-7.068	ZNF431	zinc finger protein 431
-7.075	THAP2	THAP domain containing, apoptosis associated protein 2
-7.091	MTERF	mitochondrial transcription termination factor
-7.114	KIAA1731	KIAA1731
-7.146	Zfp160	zinc finger protein 160
-7.184	ANKRD39	ankyrin repeat domain 39
-7.260	CCR7	chemokine (C-C motif) receptor 7
-7.287	6720418B01Rik	RIKEN cDNA 6720418B01 gene
-7.297	FAM8A1	family with sequence similarity 8, member A1
-7.298	SHPRH	SNF2 histone linker PHD RING helicase, E3 ubiquitin protein ligase
-7.364	SNAPC3	small nuclear RNA activating complex, polypeptide 3, 50kDa
-7.376	MTSS1	metastasis suppressor 1
-7.417	FAM53B	family with sequence similarity 53, member B
-7.440	SPOPL	speckle-type POZ protein-like
-7.516	TAF15	TAF15 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 68kDa
-7.554	C920006O11Rik	RIKEN cDNA C920006O11 gene
-7.598	RDH14	retinol dehydrogenase 14 (all-trans/9-cis/11-cis)
-7.732	ZNF260	zinc finger protein 260
-7.734	PLEKHA1	pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 1
-7.783	KIF1B	kinesin family member 1B
-7.874	ANGEL2	angel homolog 2 (Drosophila)
-7.877	ERLEC1	endoplasmic reticulum lectin 1
-7.892	MTX3	metaxin 3
-7.970	FAM76B	family with sequence similarity 76, member B
-8.041	KIAA0430	KIAA0430
-8.091	CREBF	CREB/ATF bZIP transcription factor
-8.266	ATPAF1	ATP synthase mitochondrial F1 complex assembly factor 1
-8.288	LRIG1	leucine-rich repeats and immunoglobulin-like domains 1
-8.316	PTEN	phosphatase and tensin homolog
-8.533	USP28	ubiquitin specific peptidase 28
-8.541	ZNF566	zinc finger protein 566
-8.619	PPCS	phosphopantethenoylcysteine synthetase
-8.837	BTLA	B and T lymphocyte associated

-8.912	ALKBH4	alkB, alkylation repair homolog 4 (E. coli)
-9.198	ZNF565	zinc finger protein 565
-9.316	ATP5C1	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, gamma polypeptide 1
-9.400	ZNF322	zinc finger protein 322
-9.498	ANXA6	annexin A6
-9.508	MYCBP2	MYC binding protein 2, E3 ubiquitin protein ligase
-9.796	NARG2	NMDA receptor regulated 2
-9.899	ZNF329	zinc finger protein 329
-10.231	PARP8	Poly (ADP-ribose) polymerase family, member 8
-10.317	ZNF708	zinc finger protein 708
-10.929	D230019N24Ri	RIKEN cDNA D230019N24 gene
-11.463	AI451458	expressed sequence AI451458
-12.618	RNPC3	RNA-binding region (RNP1, RRM) containing 3
-14.465	RBM3	RNA binding motif (RNP1, RRM) protein 3
-15.171	TRPC2	transient receptor potential cation channel, subfamily C, member 2, pseudogene
-20.660	Zfp53	zinc finger protein 571
-23.214	ZNF192	zinc finger with KRAB and SCAN domains 8

10-fold enriched

Fold Change	Symbol	Entrez Gene Name
215.947	CCR1	chemokine (C-C motif) receptor 1
203.458	FOSB	FBJ murine osteosarcoma viral oncogene homolog B
67.159	KCNK5	potassium channel, subfamily K, member 5
58.845	EFNA5	ephrin-A5
57.721	EMILIN2	elastin microfibril interfacer 2
55.300	ANXA1	annexin A1
55.229	KLF4	Kruppel-like factor 4 (gut)
53.246	ADAMTSL4	ADAMTS-like 4
50.849	RNF128	ring finger protein 128, E3 ubiquitin protein ligase
50.420	MCF2L	MCF.2 cell line derived transforming sequence-like
47.906	IL1RL1	interleukin 1 receptor-like 1
47.406	PHLDA1	pleckstrin homology-like domain, family A, member 1
45.990	CASS4	Cas scaffolding protein family member 4
38.870	KCTD12	potassium channel tetramerisation domain containing 12
37.959	ADAM8	ADAM metallopeptidase domain 8
37.923	C6orf225	family with sequence similarity 229, member B
36.083	SV2C	synaptic vesicle glycoprotein 2C
34.526	MOXD1	monooxygenase, DBH-like 1
32.443	STC1	stanniocalcin 1
31.320	CCR2	chemokine (C-C motif) receptor 2
30.099	SLA	Src-like-adaptor
29.810	METRNL	meteorin, glial cell differentiation regulator-like
27.494	PTPRK	protein tyrosine phosphatase, receptor type, K
26.362	F2R	coagulation factor II (thrombin) receptor

24.761	IGHG1	immunoglobulin heavy constant gamma 1 (G1m marker)
24.623	ACVR2A	activin A receptor, type IIA
24.180	1700071A11Rik	RIKEN cDNA 1700071A11 gene
23.954	PLXDC2	plexin domain containing 2
23.723	C3orf18	chromosome 3 open reading frame 18
20.957	SAMSN1	SAM domain, SH3 domain and nuclear localization signals 1
20.589	PPP2R3A	protein phosphatase 2, regulatory subunit B", alpha
19.830	CSRNP1	cysteine-serine-rich nuclear protein 1
19.443	C5orf32	cysteine-rich transmembrane module containing 1
18.985	CD40LG	CD40 ligand
18.661	EGR3	early growth response 3
18.428	CTSE	cathepsin E
18.336	MZB1	marginal zone B and B1 cell-specific protein
18.318	DUSP6	dual specificity phosphatase 6
17.746	ADM	adrenomedullin
16.740	JDP2	Jun dimerization protein 2
16.271	FOS	FBJ murine osteosarcoma viral oncogene homolog
16.257	SKIL	SKI-like oncogene
16.179	CCR8	chemokine (C-C motif) receptor 8
16.155	FASLG	Fas ligand (TNF superfamily, member 6)
16.059	F2RL2	coagulation factor II (thrombin) receptor-like 2
15.952	FFAR2	free fatty acid receptor 2
15.941	PIM1	pim-1 oncogene
15.905	SOCS1	suppressor of cytokine signaling 1
15.770	MMP10	matrix metallopeptidase 10 (stromelysin 2)
15.485	TNFAIP3	tumor necrosis factor, alpha-induced protein 3
15.474	IGHA1	immunoglobulin heavy constant alpha 1
15.372	PLCD1	phospholipase C, delta 1
15.363	OIT3	oncoprotein induced transcript 3
15.123	A130038J17Rik	RIKEN cDNA A130038J17 gene
14.944	SFT2D2	SFT2 domain containing 2
14.908	ITGA7	integrin, alpha 7
14.906	GPR171	G protein-coupled receptor 171
14.849	EGR1	early growth response 1
14.730	GNA13	guanine nucleotide binding protein (G protein), alpha 13
14.618	MYO6	myosin VI
13.839	GCM2	glial cells missing homolog 2 (Drosophila)
13.581	ADAMTSL3	ADAMTS-like 3
13.414	GLIPR2	GLI pathogenesis-related 2
13.275	DCUN1D3	DCN1, defective in cullin neddylation 1, domain containing 3 (S. cerevisiae)
13.224	CAMK2N1	calcium/calmodulin-dependent protein kinase II inhibitor 1
13.177	Pmaip1	phorbol-12-myristate-13-acetate-induced protein 1
12.956	CD8A	CD8a molecule
12.949	IL10RA	interleukin 10 receptor, alpha
12.781	LGALS1	lectin, galactoside-binding, soluble, 1

12.741	CACNB3	calcium channel, voltage-dependent, beta 3 subunit
12.694	CSRP1	cysteine and glycine-rich protein 1
12.579	PRDM1	PR domain containing 1, with ZNF domain
12.511	LAMA5	laminin, alpha 5
12.490	NFKBIE	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon
12.040	TNFSF13B	tumor necrosis factor (ligand) superfamily, member 13b
11.868	C7orf68	hypoxia inducible lipid droplet-associated
11.811	FGL2	fibrinogen-like 2
11.739	TRAF6	TNF receptor-associated factor 6, E3 ubiquitin protein ligase
11.596	B4GALNT4	beta-1,4-N-acetyl-galactosaminyl transferase 4
11.578	MGLL	monoglyceride lipase
11.449	BZRAP1	benzodiazapine receptor (peripheral) associated protein 1
11.406	ZC3H12C	zinc finger CCCH-type containing 12C
11.264	MYC	v-myc myelocytomatisis viral oncogene homolog (avian)
11.105	EVI2A	ecotropic viral integration site 2A
10.903	MXD1	MAX dimerization protein 1
10.890	GLRX	glutaredoxin (thioltransferase)
10.808	FAM19A3	family with sequence similarity 19 (chemokine (C-C motif)-like), member A3
10.740	BATF	basic leucine zipper transcription factor, ATF-like
10.724	CASP6	caspase 6, apoptosis-related cysteine peptidase
10.692	JUN	jun proto-oncogene
10.567	MLLT4	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, <i>Drosophila</i>); translocated to, 4
10.435	C13orf15	regulator of cell cycle
10.233	ZC3H12A	zinc finger CCCH-type containing 12A
10.214	SEPT7	septin 7
10.092	CD69	CD69 molecule
10.026	TYMS	thymidylate synthetase
10.020	SLC39A4	solute carrier family 39 (zinc transporter), member 4
-10.231	PARP8	poly (ADP-ribose) polymerase family, member 8
-10.254	GRAP2	GRB2-related adaptor protein 2
-10.317	ZNF708	zinc finger protein 708
-10.469	AGFG2	ArfGAP with FG repeats 2
-10.607	EPM2AIP1	EPM2A (laforin) interacting protein 1
-10.767	OSBPL7	oxysterol binding protein-like 7
-10.787	PRPF39	PRP39 pre-mRNA processing factor 39 homolog (<i>S. cerevisiae</i>)
-10.929	D230019N24Ri	RIKEN cDNA D230019N24 gene
-11.121	ZNF238	zinc finger and BTB domain containing 18
-11.128	C130098B18Ri	RIKEN cDNA C130098B18 gene
-11.463	AI451458	expressed sequence AI451458
-11.589	C1orf63	chromosome 1 open reading frame 63
-11.935	WDR12	WD repeat domain 12
-12.570	ARHGAP29	Rho GTPase activating protein 29
-12.618	RNPC3	RNA-binding region (RNP1, RRM) containing 3

-13.498	KLHDC5	kelch-like family member 42
-13.898	RAB3IP	RAB3A interacting protein
-14.465	RBM3	RNA binding motif (RNP1, RRM) protein 3
-15.137	CHD8	chromodomain helicase DNA binding protein 8
-15.171	TRPC2	transient receptor potential cation channel, subfamily C, member 2, pseudogene
-16.276	ACTN1	actinin, alpha 1
-17.866	IL16	interleukin 16
-20.462	RAMP1	receptor (G protein-coupled) activity modifying protein 1
-20.660	Zfp53	zinc finger protein 571
-22.161	ARHGEF1	Rho guanine nucleotide exchange factor (GEF) 1
-23.214	ZNF192	zinc finger with KRAB and SCAN domains 8
-24.534	TIA1	TIA1 cytotoxic granule-associated RNA binding protein

TABLE 3

2-fold enriched	
Fold Change	ID
47.133	mmu-miR-1893_st
43.131	mmu-miR-762_st
33.499	mmu-miR-705_st
24.373	mmu-miR-1892_st
20.357	mmu-miR-1224_st
19.538	mmu-miR-760_st
9.688	mmu-miR-2861_st
8.119	hp_mmu-mir-682_st
6.046	hp_mmu-mir-667_st
5.697	mmu-miR-3072-star_st
5.463	hp_mmu-mir-465c-2_s_st
5.145	mmu-miR-468_st
4.398	mmu-miR-667_st
3.632	mmu-miR-214_st
3.378	hp_mmu-mir-346_st
3.211	mmu-miR-3474_st
2.373	mmu-miR-1897-5p_st
2.263	mmu-miR-1967_st
2.208	mmu-miR-200b-star_st
2.167	mmu-miR-466l_st
2.149	hp_mmu-mir-1894_st
2.121	hp_mmu-mir-449b_st
2.044	mmu-miR-327_st
-2.183	mmu-miR-532-5p_st
-2.413	mmu-miR-709_st
-2.423	mmu-miR-1941-5p_st
5-fold enriched	
Fold Change	ID
47.133	mmu-miR-1893_st
43.131	mmu-miR-762_st
37.865	mmu-miR-16-star_st
36.605	mmu-miR-1982-star_st
33.499	mmu-miR-705_st
25.264	mmu-miR-92a-star_st
24.373	mmu-miR-1892_st
23.690	mmu-miR-3470b_st
20.357	mmu-miR-1224_st
19.538	mmu-miR-760_st
17.077	mmu-miR-714_st
13.412	mmu-miR-2137_st
12.092	mmu-miR-669o_st
11.698	mmu-miR-466i_st

9.688	mmu-miR-2861_st
8.663	mmu-miR-574-3p_st
8.119	hp_mmu-mir-682_st
7.575	mmu-miR-574-5p_st
6.046	hp_mmu-mir-667_st
5.697	mmu-miR-3072-star_st
5.508	hp_mmu-mir-2137_st
5.463	hp_mmu-mir-465c-2_s_st
5.145	mmu-miR-468_st
5.130	mmu-miR-1894-5p_st
-6.023	mmu-miR-674_st
-7.444	mmu-miR-330-star_st
-8.895	mmu-miR-17-star_st
-10.434	mmu-miR-345-5p_st
-19.719	mmu-miR-93-star_st
-19.870	mmu-miR-324-5p_st
-34.118	mmu-miR-339-5p_st
-70.249	mmu-miR-15a_st
-75.451	mmu-miR-28_st
-123.215	mmu-miR-1839-5p_st
-133.542	mmu-miR-200c_st
-140.700	mmu-miR-146a_st

10-fold enriched

Fold Change	ID
47.133	mmu-miR-1893_st
43.131	mmu-miR-762_st
37.865	mmu-miR-16-star_st
36.605	mmu-miR-1982-star_st
33.499	mmu-miR-705_st
33.304	mmu-miR-669l_st
25.264	mmu-miR-92a-star_st
24.373	mmu-miR-1892_st
23.690	mmu-miR-3470b_st
20.357	mmu-miR-1224_st
19.538	mmu-miR-760_st
17.077	mmu-miR-714_st
14.221	mmu-miR-877_st
13.412	mmu-miR-2137_st
12.092	mmu-miR-669o_st
11.698	mmu-miR-466i_st
-10.434	mmu-miR-345-5p_st
-11.313	mmu-miR-484_st
-11.485	hp_mmu-mir-142_st
-15.819	mmu-miR-28-star_st
-19.719	mmu-miR-93-star_st
-19.870	mmu-miR-324-5p_st
-22.400	mmu-miR-1198_st
-34.118	mmu-miR-339-5p_st
-36.295	mmu-miR-151-3p_st

-39.700	mmu-miR-221_st
-70.249	mmu-miR-15a_st
-75.451	mmu-miR-28_st
-123.215	mmu-miR-1839-5p_st
-133.542	mmu-miR-200c_st
-140.700	mmu-miR-146a_st
-206.081	mmu-miR-185_st
-369.644	mmu-miR-20b_st

TABLE 4

5-fold Th2 enriched mRNA		
Fold Change	Symbol	Entrez Gene Name
62.489	Il2	interleukin 2
22.488	Pros1	protein S (alpha)
21.831	Orc1	origin recognition complex, subunit 1
18.273	Dhfr	dihydrofolate reductase
17.927	Ak4	adenylate kinase 4
15.668	Gins1	GINS complex subunit 1 (Psf1 homolog)
15.391	Lig1	ligase I, DNA, ATP-dependent
15.340	Nefh	neurofilament, heavy polypeptide
15.262	Mcm3	minichromosome maintenance complex component 3
14.672	Ercc6l	excision repair cross-complementing rodent repair deficiency, complementation group 6-like
14.268	Pole	polymerase (DNA directed), epsilon, catalytic subunit
14.049	Atf3	activating transcription factor 3
13.703	Dscc1	defective in sister chromatid cohesion 1 homolog (<i>S. cerevisiae</i>)
13.630	Apitd1	apoptosis-inducing, TAF9-like domain 1
13.363	Mybl2	v-myb myeloblastosis viral oncogene homolog (avian)-like 2
13.119	Syce2	synaptonemal complex central element protein 2
12.776	Mcm5	minichromosome maintenance complex component 5
12.335	Il13	interleukin 13
11.566	Mcm8	minichromosome maintenance complex component 8
11.364	Prnp	prion protein
10.925	Fen1	flap structure-specific endonuclease 1
10.632	Gmnn	geminin, DNA replication inhibitor
10.443	Cdca7	cell division cycle associated 7
10.317	Rfc4	replication factor C (activator 1) 4, 37kDa
10.211	Selp	selectin P (granule membrane protein 140kDa, antigen CD62)
10.112	Shmt1	serine hydroxymethyltransferase 1 (soluble)
10.109	Odc1	ornithine decarboxylase 1
10.089	Kcnq5	potassium voltage-gated channel, KQT-like subfamily, member 5
10.070	Ezh2	enhancer of zeste homolog 2 (<i>Drosophila</i>)
9.989	Padi4	peptidyl arginine deiminase, type IV
9.862	Traip	TRAF interacting protein
9.836	Chtf18	CTF18, chromosome transmission fidelity factor 18 homolog (<i>S. cerevisiae</i>)
9.812	E2f3	E2F transcription factor 3
9.656	Ccne1	cyclin E1

9.644	Idi1	isopentenyl-diphosphate delta isomerase 1
9.641	Crabp2	cellular retinoic acid binding protein 2
9.625	Psat1	phosphoserine aminotransferase 1
9.452	BC055324	chromosome 1 open reading frame 112
9.451	Lad1	ladinin 1
9.267	Vdr	vitamin D (1,25- dihydroxyvitamin D3) receptor
9.227	Rbpj	recombination signal binding protein for immunoglobulin kappa J region
9.166	Mlf1ip	MLF1 interacting protein
8.918	Ccdc34	coiled-coil domain containing 34
8.827	Tfrc	transferrin receptor (p90, CD71)
8.801	Hemk1	HemK methyltransferase family member 1
8.747	Whsc1	Wolf-Hirschhorn syndrome candidate 1
8.738	Ung	uracil-DNA glycosylase
8.729	Fads2	fatty acid desaturase 2
8.594	Chchd6	coiled-coil-helix-coiled-coil-helix domain containing 6
8.534	Psmc3ip	PSMC3 interacting protein
8.448	Dut	deoxyuridine triphosphatase
8.409	Nsl1	NSL1, MIND kinetochore complex component, homolog (<i>S. cerevisiae</i>)
8.379	Wee1	WEE1 homolog (<i>S. pombe</i>)
8.191	Tmem107	transmembrane protein 107
8.086	Dusp4	dual specificity phosphatase 4
7.881	Slc9a5	solute carrier family 9, subfamily A (NHE5, cation proton antiporter 5), member 5
7.702	Plagl1	pleiomorphic adenoma gene-like 1
7.683	Thop1	thimet oligopeptidase 1
7.621	Sap30	Sin3A-associated protein, 30kDa
7.590	Rragd	Ras-related GTP binding D
7.567	E2f1	E2F transcription factor 1
7.567	Rfc3	replication factor C (activator 1) 3, 38kDa
7.524	D630039A03R	chromosome 9 open reading frame 152
7.487	2010204K13Ri	RIKEN cDNA 2010204K13 gene
7.414	Pmepa1	prostate transmembrane protein, androgen induced 1
7.408	Atad5	ATPase family, AAA domain containing 5
7.385	4930579G24R	chromosome 4 open reading frame 46
7.372	Mcm2	minichromosome maintenance complex component 2
7.335	Tlcd1	TLC domain containing 1
7.236	Nt5dc2	5'-nucleotidase domain containing 2
7.123	Mcm7	minichromosome maintenance complex component 7
7.121	Nmr1	NmrA-like family domain containing 1
7.092	Cd200	CD200 molecule
7.081	Prkca	protein kinase C, alpha
7.063	Tmem97	transmembrane protein 97
7.062	Sostdc1	sclerostin domain containing 1
7.028	Ccdc50	coiled-coil domain containing 50
6.996	Akr1c18	aldo-keto reductase family 1, member C3

6.941	Ptprs	protein tyrosine phosphatase, receptor type, S
6.819	Fancd2	Fanconi anemia, complementation group D2
6.809	Snhg3	small nucleolar RNA host gene 3 (non-protein coding)
6.800	Eme1	essential meiotic endonuclease 1 homolog 1 (<i>S. pombe</i>)
6.798	Zfp367	zinc finger protein 367
6.796	Ascl2	achaete-scute complex homolog 2 (<i>Drosophila</i>)
6.777	Dynll2	dynein, light chain, LC8-type 2
6.723	Cenpm	centromere protein M
6.715	Psrc1	proline/serine-rich coiled-coil 1
6.703	Mcm4	minichromosome maintenance complex component 4
6.688	Gemin8	gem (nuclear organelle) associated protein 8
6.672	Pa2g4	proliferation-associated 2G4, 38kDa
6.669	Tipin	TIMELESS interacting protein
6.641	2610201A13Rik	RIKEN cDNA 2610201A13 gene
6.578	Prim2	DNA primase, p58 subunit
6.537	4930506M07Rik	KIAA1598
6.525	Tube1	tubulin, epsilon 1
6.492	Recql4	RecQ protein-like 4
6.444	Pim2	pim-2 oncogene
6.440	Mtm1	myotubularin 1
6.423	Gcat	glycine C-acetyltransferase
6.419	Arl6	ADP-ribosylation factor-like 6
6.409	Ccr8	chemokine (C-C motif) receptor 8
6.401	Cd83	CD83 molecule
6.353	Skp2	S-phase kinase-associated protein 2, E3 ubiquitin protein ligase
6.285	Prim1	primase, DNA, polypeptide 1 (49kDa)
6.284	Cad	carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotate
6.262	Galk1	galactokinase 1
6.229	Hdc	histidine decarboxylase
6.222	Akap1	A kinase (PRKA) anchor protein 1
6.212	Stard4	StAR-related lipid transfer (START) domain containing 4
6.211	Pgam1	phosphoglycerate mutase 1 (brain)
6.204	4632434I11Rik	chromosome 11 open reading frame 82
6.194	Spata24	spermatogenesis associated 24
6.152	Fnip2	folliculin interacting protein 2
6.132	Cetn4	centrin 4
6.106	Pfkl	phosphofructokinase, liver
6.011	Orc6	origin recognition complex, subunit 6
5.989	Pla2g12a	phospholipase A2, group XIIA
5.986	9430037O13Rik	RIKEN cDNA 9430037O13 gene
5.961	Bard1	BRCA1 associated RING domain 1
5.951	Cbx5	chromobox homolog 5

5.852	Senp1	SUMO1/sentrin specific peptidase 1
5.844	BC048355	2'-deoxynucleoside 5'-phosphate N-hydrolase 1
5.836	Brca2	breast cancer 2, early onset
5.822	B230120H23R	sterile alpha motif and leucine zipper containing kinase AZK
5.803	A030009H04R	uncharacterized LOC284023
5.801	Repin1	replication initiator 1
5.792	Scarb1	scavenger receptor class B, member 1
5.757	Dctpp1	dCTP pyrophosphatase 1
5.723	Rfc5	replication factor C (activator 1) 5, 36.5kDa
5.715	Mfsd2a	major facilitator superfamily domain containing 2A
5.692	Hmgn3	high mobility group nucleosomal binding domain 3
5.691	Rcc1	regulator of chromosome condensation 1
5.685	Siva1	SIVA1, apoptosis-inducing factor
5.649	Hmgb3	high mobility group box 3
5.629	Shmt2	serine hydroxymethyltransferase 2 (mitochondrial)
5.605	Bcl2l1	BCL2-like 1
5.594	Tmem48	transmembrane protein 48
5.591	Cebpa	CCAAT/enhancer binding protein (C/EBP), alpha
5.588	Irak1bp1	interleukin-1 receptor-associated kinase 1 binding protein 1
5.578	Scd2	stearoyl-Coenzyme A desaturase 2
5.505	Xrcc3	X-ray repair complementing defective repair in Chinese hamster cells 3
5.495	3110082I17Rik	chromosome 7 open reading frame 50
5.492	Pfas	phosphoribosylformylglycinamidine synthase
5.474	Bag2	BCL2-associated athanogene 2
5.473	Ergic1	endoplasmic reticulum-golgi intermediate compartment (ERGIC) 1
5.412	Rapsn	receptor-associated protein of the synapse
5.383	Tex15	testis expressed 15
5.374	Alms1	Alstrom syndrome 1
5.360	Kif18b	kinesin family member 18B
5.358	Hivep3	human immunodeficiency virus type I enhancer binding protein 3
5.357	Nudt5	nudix (nucleoside diphosphate linked moiety X)-type motif 5
5.322	Tfdp1	transcription factor Dp-1
5.311	Synpo	synaptopodin
5.309	Plekha8	pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 8
5.248	Srm	spermidine synthase
5.237	Cenpv	centromere protein V
5.233	Smyd2	SET and MYND domain containing 2
5.229	Dcp2	DCP2 decapping enzyme homolog (S. cerevisiae)

5.202	Mthfd1	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase
5.181	Armcx6	armadillo repeat containing, X-linked 6
5.174	Cyp51	cytochrome P450, family 51, subfamily A, polypeptide 1
5.170	Dkc1	dyskeratosis congenita 1, dyskerin
5.162	Hspd1	heat shock 60kDa protein 1 (chaperonin)
5.156	Plagl2	pleiomorphic adenoma gene-like 2
5.122	Anp32e	acidic (leucine-rich) nuclear phosphoprotein 32 family, member E
5.121	Etf1	eukaryotic translation termination factor 1
5.092	Fam72a	family with sequence similarity 72, member A
5.087	Hat1	histone acetyltransferase 1
5.039	Rnf128	ring finger protein 128, E3 ubiquitin protein ligase
5.017	Pold1	polymerase (DNA directed), delta 1, catalytic subunit
-5.020	Sike1	suppressor of IKBKE 1
-5.021	Tcrb-J	T cell receptor beta, joining region
-5.026	Sepp1	selenoprotein P, plasma, 1
-5.027	Klhdc1	kelch domain containing 1
-5.043	Dennd1c	DENN/MADD domain containing 1C
-5.060	Acp5	acid phosphatase 5, tartrate resistant
-5.092	Lemt2	leucine zipper-EF-hand containing transmembrane protein 2
-5.111	Emp3	epithelial membrane protein 3
-5.174	Pik3r5	phosphoinositide-3-kinase, regulatory subunit 5
-5.187	Epsti1	epithelial stromal interaction 1 (breast)
-5.206	Lipa	lipase A, lysosomal acid, cholesterol esterase
-5.211	Lpar6	lysophosphatidic acid receptor 6
-5.235	Nlrc3	NLR family, CARD domain containing 3
-5.241	Atp10d	ATPase, class V, type 10D
-5.252	Cflar	CASP8 and FADD-like apoptosis regulator
-5.257	Prf1	perforin 1 (pore forming protein)
-5.275	2610507I01Rik	RIKEN cDNA 2610507I01 gene
-5.282	Cpm	carboxypeptidase M
-5.308	2810474O19R	KIAA1551
-5.317	Trib2	tribbles homolog 2 (Drosophila)
-5.333	Sit1	signaling threshold regulating transmembrane adaptor 1
-5.344	H2-Eb1	major histocompatibility complex, class II, DR beta 1
-5.431	Pycard	PYD and CARD domain containing
-5.528	D730035F11Ri	RIKEN cDNA D730035F11 gene
-5.551	Armc3	armadillo repeat containing 3
-5.591	Hist3h2a	histone cluster 3, H2a
-5.640	Dgka	diacylglycerol kinase, alpha 80kDa
-5.654	Dtx1	deltex homolog 1 (Drosophila)

-5.800	Hbp1	HMG-box transcription factor 1
-5.812	Cd1d1	CD1d molecule
-5.860	Rtp4	receptor (chemosensory) transporter protein 4
-6.059	Arl4c	ADP-ribosylation factor-like 4C
-6.064	Appl2	adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 2
-6.102	Tecpr1	tectonin beta-propeller repeat containing 1
-6.175	Hist1h1c	histone cluster 1, H1c
-6.183	Ctso	cathepsin O
-6.363	Fbxl12	F-box and leucine-rich repeat protein 12
-6.395	Mylip	myosin regulatory light chain interacting protein
-6.472	Gbp8	guanylate-binding protein 8
-6.627	Txnip	thioredoxin interacting protein
-6.678	Orai2	ORAI calcium release-activated calcium modulator 2
-6.748	5830428M24R	RIKEN cDNA 5830428M24 gene
-6.832	Arhgef18	Rho/Rac guanine nucleotide exchange factor (GEF) 18
-7.081	App	amyloid beta (A4) precursor protein
-7.169	2810001G20R	RIKEN cDNA 2810001G20 gene
-7.237	Clcf1	cardiotrophin-like cytokine factor 1
-7.270	Carns1	carnosine synthase 1
-7.344	A630033H20R	RIKEN cDNA A630033H20 gene
-7.359	Add3	adducin 3 (gamma)
-7.369	Hsd11b1	hydroxysteroid (11-beta) dehydrogenase 1
-7.400	Rasa3	RAS p21 protein activator 3
-7.433	Arglu1	arginine and glutamate rich 1
-7.464	Cd97	CD97 molecule
-7.656	H2-Ab1	major histocompatibility complex, class II, DQ beta 1
-7.664	Tsc22d3	TSC22 domain family, member 3
-7.721	Fam65b	family with sequence similarity 65, member B
-7.863	H2-Aa	major histocompatibility complex, class II, DQ alpha 1
-7.916	Adrb2	adrenoceptor beta 2, surface
-7.930	Ccnd1	cyclin D1
-8.630	H2-T24	histocompatibility 2, T region locus 24
-8.703	2310035P21Ri	RIKEN cDNA 2310035P21 gene
-8.986	Tcp11I2	t-complex 11, testis-specific-like 2
-9.013	Klf2	Kruppel-like factor 2 (lung)
-9.217	Ifi203	interferon activated gene 204
-9.553	Txk	TXK tyrosine kinase
-11.076	Samd9l	sterile alpha motif domain containing 9-like
-11.108	Rasgrp2	RAS guanyl releasing protein 2 (calcium and DAG-regulated)
-12.745	Sgk1	serum/glucocorticoid regulated kinase 1
-14.208	Tmem71	transmembrane protein 71
-19.863	S1pr1	sphingosine-1-phosphate receptor 1

-30.818	Klrd1	killer cell lectin-like receptor subfamily D, member 1
-31.967	Gm11346	X-linked lymphocyte-regulated 5 pseudogene