

An analysis of Ant1-KO Differential Expression in Heart and Muscle

Jeremy Leipzig

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1 Introduction

1.1 Samples

Below are results of the STAR mapping. Conditions are M for Muscle, H for Heart, T for Treatment(ANT1), N for Normal (B6ME).

Sample	Input.reads	Uniquely.mapped	Mapped.to.multiple.loci	cond
IonXpressRNA_002...	25482089	44.12%	17.41%	MT
IonXpressRNA_004...	31826234	50.70%	19.75%	MT
IonXpressRNA_006...	29907063	51.24%	14.94%	MT
IonXpressRNA_008...	34668896	50.78%	19.78%	MT
IonXpressRNA_001...	35471247	48.76%	18.60%	MN
IonXpressRNA_003...	28749689	48.81%	18.49%	MN
IonXpressRNA_005...	27702368	50.68%	16.09%	MN
IonXpressRNA_007...	15598072	59.85%	14.62%	MN
IonXpressRNA_010...	20270224	42.32%	19.61%	HT
IonXpressRNA_012...	26586149	38.02%	22.20%	HT
IonXpressRNA_014...	32947023	51.75%	18.60%	HT
IonXpressRNA_016...	28872835	64.05%	14.46%	HT
IonXpressRNA_009...	33005189	40.90%	20.21%	HN
IonXpressRNA_011...	28163291	49.28%	22.31%	HN
IonXpressRNA_013...	27656576	38.41%	19.40%	HN
IonXpressRNA_015...	39656083	47.51%	18.79%	HN

Table 1: STAR mapping results

1.2 Alignment

After trimming, transcript counts were generated by a STAR alignment to genomic sequences.

The STAR used for the samples is as follows:

```
{STAR} --genomeDir {STARREFDIR} --outFileNamePrefix {wildcards.sample}_ --readFilesIn {input} --runThread
--genomeLoad NoSharedMemory --outSAMattributes All --outSAMstrandField intronMotif --sjdbGTFfile {GTFfile}
```

1.3 Normalization

ERCC spike-ins were downloaded from <http://tools.invitrogen.com/downloads/ERCC92.fa> and used as a reference. Total counts from all 92 sequences are below. These are used for the *sizeFactors* in DESeq such that they become divisors for each sample count.

sample	count
IonXpressRNA_002.R_2013.11.26.13.55.09_user_1PR-8-RNA-Seq_whole.transcriptome	25216131
IonXpressRNA_004.R_2013.11.26.20.48.53_user_1PR-9-RNA-Seq_whole.transcriptome	31454860
IonXpressRNA_006.R_2013.12.04.09.37.33_1PR-10-RNA-Seq_whole.transcriptome_76303	29509934
IonXpressRNA_008.R_2013.12.06.12.45.12_user_1PR-11-RNA-Seq_whole.transcriptome	34313656
IonXpressRNA_001.R_2013.11.26.13.55.09_user_1PR-8-RNA-Seq_whole.transcriptome	34958364
IonXpressRNA_003.R_2013.11.26.20.48.53_user_1PR-9-RNA-Seq_whole.transcriptome	28273488
IonXpressRNA_005.R_2013.12.04.09.37.33_1PR-10-RNA-Seq_whole.transcriptome_76303	27318394
IonXpressRNA_007.R_2013.12.06.12.45.12_user_1PR-11-RNA-Seq_whole.transcriptome	15401398
IonXpressRNA_010.R_2013.12.19.16.11.21_user_1PR-13-RNA-Seq_whole.transcriptome	20047401
IonXpressRNA_012.R_2013.12.18.20.25.40_user_1PR-12-RNA-Seq_whole.transcriptome	26273728
IonXpressRNA_014.R_2013.12.20.12.50.23_user_1PR-14-RNA-Seq_whole.transcriptome	32544990
IonXpressRNA_016.R_2013.12.21.20.34.59_user_1PR-15-RNA-Seq_whole.transcriptome	28730069
IonXpressRNA_009.R_2013.12.19.16.11.21_user_1PR-13-RNA-Seq_whole.transcriptome	32647281
IonXpressRNA_011.R_2013.12.18.20.25.40_user_1PR-12-RNA-Seq_whole.transcriptome	27830405
IonXpressRNA_013.R_2013.12.20.12.50.23_user_1PR-14-RNA-Seq_whole.transcriptome	27382176
IonXpressRNA_015.R_2013.12.21.20.34.59_user_1PR-15-RNA-Seq_whole.transcriptome	39224079

Table 2: Total ERCC read counts

1.4 DESeq

A reanalysis of the non-normalized count data was performed using the R-based RNA-Seq analysis package DESeq [1] in order to detect differential expression between normal and retinoblastoma cells.

This report uses DESeq version 1.14.0.

DESeq offers different statistical models and parameters to choose from depending on the data to be analyzed.

Empirical dispersion can be computed using a *pooled*, *per-condition*, or *blind* (no replicates) method.

The following, sharing modes, which determine how much information is used to inform the dispersion of other genes, are available:

fit-only is appropriate for only a few replicates

maximum is more conservative for three or four replicates,

gene-est-only is more aggressive, and is ideal for many replicates

For this report, we have used the per-condition method and maximum sharing mode.

Only genes with a combined count of 100 among all the samples (both conditions and tissues) 14642 hits fit this criteria.

1.5 Muscle Results

1.5.1 Significantly DE genes in muscle

Significantly differentially expressed genes (padj<0.01). Fold change is ANT1/B6ME.

gene	ensid	baseMean	bNorm	bRB	fc	log2fc	pval	padj
Rnu3a	ENSMUSG00000065870	7.18E-05	3.62E-06	1.40E-04	39	5.3	3.3e-57	4.8e-53
Mss51	ENSMUSG00000021815	3.77E-05	7.49E-05	5.54E-07	0.0074	-7.1	2.9e-52	2.1e-48
Fgl2	ENSMUSG00000039899	4.01E-05	7.52E-05	4.89E-06	0.065	-3.9	2e-44	9.9e-41
Mt1	ENSMUSG00000031765	8.88E-06	1.65E-05	1.26E-06	0.076	-3.7	3.1e-38	1.1e-34
Srxn1	ENSMUSG00000032802	8.45E-05	1.56E-04	1.28E-05	0.082	-3.6	1.7e-37	4.9e-34
Slc7a2	ENSMUSG00000031596	4.17E-05	7.50E-05	8.35E-06	0.11	-3.2	2.1e-32	5.1e-29
Hspa1a	ENSMUSG00000091971	3.79E-06	7.33E-06	2.50E-07	0.034	-4.9	9e-31	1.9e-27
Arhgap26	ENSMUSG00000036452	1.24E-05	2.23E-05	2.49E-06	0.11	-3.2	2.3e-29	4.2e-26
Mt2	ENSMUSG00000031762	3.84E-06	7.46E-06	2.14E-07	0.029	-5.1	6.8e-29	1.1e-25
Nr4a3	ENSMUSG00000028341	1.44E-05	2.79E-05	8.11E-07	0.029	-5.1	1e-28	1.5e-25
Crem	ENSMUSG00000063889	7.65E-06	1.38E-05	1.46E-06	0.11	-3.2	2e-27	2.6e-24
6430548M08Rik	ENSMUSG00000031824	3.20E-05	5.65E-05	7.57E-06	0.13	-2.9	2.8e-26	3.5e-23
Hspa1b	ENSMUSG00000090877	3.46E-06	6.57E-06	3.57E-07	0.054	-4.2	6.1e-26	6.8e-23
Pdk4	ENSMUSG00000019577	1.99E-04	3.53E-04	4.54E-05	0.13	-3	1.9e-25	1.9e-22
Glul	ENSMUSG00000026473	2.35E-04	4.10E-04	6.00E-05	0.15	-2.8	3.1e-25	3e-22
Adamts9	ENSMUSG00000030022	1.11E-05	1.98E-05	2.51E-06	0.13	-3	1.6e-24	1.5e-21
Odf3l2	ENSMUSG00000035963	2.81E-05	5.49E-05	1.42E-06	0.026	-5.3	6.9e-24	6e-21
Pim1	ENSMUSG00000024014	5.78E-06	1.04E-05	1.12E-06	0.11	-3.2	7.5e-24	6.1e-21
Frzb	ENSMUSG00000027004	4.23E-06	2.78E-07	8.19E-06	29	4.9	9.3e-24	7.2e-21
Zbtb16	ENSMUSG00000066687	5.77E-05	9.84E-05	1.70E-05	0.17	-2.5	8.2e-23	6e-20
Ell2	ENSMUSG00000001542	2.21E-05	3.78E-05	6.29E-06	0.17	-2.6	1.5e-22	1.1e-19
Lphn1	ENSMUSG00000013033	7.16E-06	1.26E-05	1.76E-06	0.14	-2.8	3.5e-22	2.4e-19
Foxo1	ENSMUSG00000044167	2.04E-05	3.61E-05	4.80E-06	0.13	-2.9	4.7e-22	3e-19
Mmp19	ENSMUSG00000025355	6.17E-06	1.14E-05	9.87E-07	0.087	-3.5	9.1e-22	5.5e-19
Smox	ENSMUSG00000027333	1.43E-04	2.48E-04	3.94E-05	0.16	-2.7	3.7e-21	2.1e-18
Tnfrsf12a	ENSMUSG00000023905	1.24E-05	2.25E-05	2.33E-06	0.1	-3.3	6.8e-21	3.8e-18
Slc38a4	ENSMUSG00000022464	2.95E-05	4.96E-05	9.46E-06	0.19	-2.4	7.6e-21	4.1e-18
Sdc4	ENSMUSG00000017009	2.75E-05	4.66E-05	8.40E-06	0.18	-2.5	9.7e-21	5.1e-18
Odc1	ENSMUSG00000011179	3.34E-05	5.90E-05	7.87E-06	0.13	-2.9	1.8e-20	9.3e-18
Clic5	ENSMUSG00000023959	4.65E-05	7.81E-05	1.49E-05	0.19	-2.4	2.9e-20	1.4e-17
Nfil3	ENSMUSG00000056749	2.80E-05	5.07E-05	5.23E-06	0.1	-3.3	8.3e-20	3.9e-17
Glms-ps1	ENSMUSG00000082100	1.93E-05	3.31E-05	5.52E-06	0.17	-2.6	1.1e-19	5.2e-17
Ppp1r3c	ENSMUSG00000067279	3.77E-04	6.86E-04	6.75E-05	0.098	-3.3	1.2e-19	5.3e-17
mt-Rnr2	ENSMUSG00000064339	4.97E-02	2.02E-02	7.91E-02	3.9	2	1.5e-19	6.4e-17
Armc2	ENSMUSG00000071324	8.57E-07	1.00E-07	1.61E-06	16	4	2.1e-19	9e-17
Cxcl13	ENSMUSG00000023078	1.56E-06	2.95E-06	1.63E-07	0.055	-4.2	3.3e-19	1.3e-16
Eya4	ENSMUSG00000010461	2.66E-05	4.46E-05	8.60E-06	0.19	-2.4	4.6e-19	1.8e-16
Ucp3	ENSMUSG00000032942	1.10E-04	1.86E-04	3.41E-05	0.18	-2.4	7e-19	2.7e-16
Itgam	ENSMUSG00000030786	5.57E-06	9.52E-06	1.63E-06	0.17	-2.5	1.2e-18	4.5e-16
Kcna10	ENSMUSG00000042861	1.65E-06	8.59E-08	3.21E-06	37	5.2	1.4e-18	5e-16
Ddit4	ENSMUSG00000020108	1.73E-05	2.95E-05	5.00E-06	0.17	-2.6	3.3e-18	1.2e-15
Sbk2	ENSMUSG00000030433	7.61E-06	1.47E-05	4.99E-07	0.034	-4.9	3.8e-18	1.3e-15
Vcan	ENSMUSG00000021614	3.26E-05	5.87E-05	6.45E-06	0.11	-3.2	4e-18	1.4e-15
Slc38a2	ENSMUSG00000022462	6.49E-05	1.07E-04	2.31E-05	0.22	-2.2	8.1e-18	2.7e-15
Wbp11	ENSMUSG00000047731	2.75E-05	4.54E-05	9.72E-06	0.21	-2.2	1.1e-17	3.4e-15
1700001O22Rik	ENSMUSG00000044320	6.61E-06	1.14E-05	1.81E-06	0.16	-2.7	1.1e-17	3.5e-15
Slc25a4	ENSMUSG00000031633	4.52E-04	9.04E-04	9.95E-08	0.00011	-13	1.2e-17	3.6e-15
Mmp3	ENSMUSG00000043613	8.49E-07	1.59E-06	1.11E-07	0.07	-3.8	1.2e-17	3.8e-15
Dkk3	ENSMUSG00000030772	7.61E-06	1.45E-05	7.06E-07	0.049	-4.4	1.7e-17	5.2e-15
Hmox1	ENSMUSG00000005413	7.58E-06	1.28E-05	2.41E-06	0.19	-2.4	1.8e-17	5.2e-15
Hsd17b7	ENSMUSG00000026675	7.48E-06	1.26E-05	2.37E-06	0.19	-2.4	2.8e-17	8e-15
mt-Rnr1	ENSMUSG00000064337	1.41E-02	5.32E-03	2.29E-02	4.3	2.1	6.5e-17	1.8e-14
Tmem100	ENSMUSG00000069763	4.66E-06	8.01E-06	1.31E-06	0.16	-2.6	1.4e-16	3.7e-14
1700071M16Rik	ENSMUSG00000090307	2.29E-06	4.21E-06	3.63E-07	0.086	-3.5	1.5e-16	4.2e-14
Gda	ENSMUSG00000058624	1.06E-05	1.74E-05	3.83E-06	0.22	-2.2	2.1e-16	5.5e-14
Pde4d	ENSMUSG00000074661	3.81E-05	6.20E-05	1.42E-05	0.23	-2.1	2.8e-16	7.2e-14
Rcan1	ENSMUSG00000022951	4.41E-05	7.33E-05	1.49E-05	0.2	-2.3	2.8e-16	7.2e-14
Slc7a8	ENSMUSG00000022180	9.53E-06	1.60E-05	3.10E-06	0.19	-2.4	3e-16	7.5e-14
Cdk19	ENSMUSG00000038481	1.95E-05	3.18E-05	7.25E-06	0.23	-2.1	3e-16	7.5e-14
Gm15833	ENSMUSG00000089703	1.50E-06	2.83E-06	1.65E-07	0.058	-4.1	3.7e-16	9.1e-14
Slc25a25	ENSMUSG00000026819	4.83E-05	8.25E-05	1.42E-05	0.17	-2.5	5.5e-16	1.3e-13

Actc1	ENSMUSG00000068614	3.26E-05	4.69E-06	6.05E-05	13	3.7	5.5e-16	1.3e-13
C130080G10Rik	ENSMUSG00000092397	4.78E-07	3.94E-08	9.16E-07	23	4.5	5.7e-16	1.3e-13
Sorbs2	ENSMUSG00000031626	2.33E-05	3.80E-05	8.68E-06	0.23	-2.1	6.4e-16	1.5e-13
Gm13091	ENSMUSG00000085213	1.30E-06	2.48E-06	1.25E-07	0.05	-4.3	9.4e-16	2.1e-13
Hnrnp1	ENSMUSG00000007850	2.37E-05	3.83E-05	9.13E-06	0.24	-2.1	1.6e-15	3.5e-13
Npnt	ENSMUSG00000040998	2.95E-06	5.22E-06	6.81E-07	0.13	-2.9	2.2e-15	4.8e-13
Pde4d	ENSMUSG00000021699	1.52E-04	2.46E-04	5.82E-05	0.24	-2.1	3.4e-15	7.3e-13
Mettl21c	ENSMUSG00000047343	2.14E-05	3.45E-05	8.39E-06	0.24	-2	4.4e-15	9.4e-13
Maf	ENSMUSG00000055435	1.02E-04	1.62E-04	4.12E-05	0.25	-2	4.9e-15	1e-12
Lep	ENSMUSG00000059201	6.95E-06	1.29E-05	1.01E-06	0.078	-3.7	5e-15	1e-12
Ttll7	ENSMUSG00000036745	1.00E-04	1.61E-04	4.03E-05	0.25	-2	5.3e-15	1.1e-12
Amd1	ENSMUSG00000075232	6.38E-05	1.17E-04	1.04E-05	0.088	-3.5	5.3e-15	1.1e-12
Chd7	ENSMUSG00000041235	2.25E-05	3.61E-05	8.98E-06	0.25	-2	7e-15	1.4e-12
Pfkfb4	ENSMUSG00000025648	6.68E-05	1.07E-04	2.68E-05	0.25	-2	7.3e-15	1.4e-12
Sik1	ENSMUSG00000024042	1.17E-05	1.93E-05	4.19E-06	0.22	-2.2	8e-15	1.5e-12
Cadm3	ENSMUSG00000005338	8.18E-06	1.40E-05	2.37E-06	0.17	-2.6	1.5e-14	2.8e-12
Snora73a	ENSMUSG00000064387	3.03E-06	5.29E-06	7.72E-07	0.15	-2.8	1.7e-14	3.1e-12
Ar	ENSMUSG00000046532	4.02E-05	6.43E-05	1.61E-05	0.25	-2	2.6e-14	4.8e-12
Nek6	ENSMUSG00000026749	8.35E-06	1.36E-05	3.07E-06	0.22	-2.2	3.4e-14	6.3e-12
Ccl9	ENSMUSG00000019122	1.10E-05	2.01E-05	1.97E-06	0.098	-3.3	5.7e-14	1e-11
Nhs	ENSMUSG00000059493	6.20E-06	1.93E-06	1.05E-05	5.4	2.4	6e-14	1.1e-11
Musk	ENSMUSG00000057280	4.24E-05	6.74E-05	1.74E-05	0.26	-2	1.2e-13	2.1e-11
Aldh9a1	ENSMUSG00000026687	8.74E-06	1.42E-05	3.26E-06	0.23	-2.1	1.2e-13	2.1e-11
Gpt2	ENSMUSG00000031700	2.39E-04	3.78E-04	1.00E-04	0.26	-1.9	1.4e-13	2.4e-11
Ms4a6d	ENSMUSG00000024679	3.24E-06	6.26E-06	2.23E-07	0.036	-4.8	1.7e-13	2.9e-11
Smtnl2	ENSMUSG00000045667	7.93E-05	1.24E-04	3.45E-05	0.28	-1.8	1.7e-13	2.9e-11
Mafg	ENSMUSG00000051510	1.97E-05	3.12E-05	8.14E-06	0.26	-1.9	1.8e-13	2.9e-11
Tlr5	ENSMUSG00000079164	2.42E-06	4.25E-06	5.83E-07	0.14	-2.9	1.9e-13	3.1e-11
R3hdm4	ENSMUSG00000035781	1.36E-05	2.16E-05	5.58E-06	0.26	-2	2e-13	3.3e-11
Myod1	ENSMUSG00000009471	1.26E-05	2.03E-05	4.97E-06	0.25	-2	2.3e-13	3.8e-11
Kcnab1	ENSMUSG00000027827	3.75E-06	6.40E-06	1.11E-06	0.17	-2.5	2.7e-13	4.3e-11
Ppargc1a	ENSMUSG00000029167	3.23E-05	5.24E-05	1.22E-05	0.23	-2.1	3.1e-13	4.9e-11
Trim63	ENSMUSG00000028834	2.10E-04	3.52E-04	6.86E-05	0.19	-2.4	3.2e-13	4.9e-11
Igfl	ENSMUSG00000020053	1.78E-05	2.95E-05	6.04E-06	0.2	-2.3	5.1e-13	7.9e-11
Mfap5	ENSMUSG00000030116	6.97E-06	1.13E-05	2.66E-06	0.24	-2.1	5.3e-13	8.1e-11
S100a10	ENSMUSG00000041959	2.02E-05	3.18E-05	8.58E-06	0.27	-1.9	6.7e-13	1e-10
Cib2	ENSMUSG00000037493	3.48E-05	5.43E-05	1.54E-05	0.28	-1.8	7.2e-13	1.1e-10
Serpinh1	ENSMUSG00000070436	3.72E-05	5.81E-05	1.63E-05	0.28	-1.8	7.3e-13	1.1e-10
Gclm	ENSMUSG00000028124	1.02E-05	1.73E-05	3.08E-06	0.18	-2.5	9e-13	1.3e-10
mt-Tf	ENSMUSG00000064336	1.14E-05	3.92E-06	1.89E-05	4.8	2.3	9.4e-13	1.4e-10
Gid4	ENSMUSG00000018415	2.05E-05	3.21E-05	8.84E-06	0.28	-1.9	1.1e-12	1.6e-10
Tmem56	ENSMUSG00000028132	1.68E-05	2.71E-05	6.45E-06	0.24	-2.1	1.2e-12	1.6e-10
Prkca	ENSMUSG00000050965	2.71E-05	4.25E-05	1.17E-05	0.27	-1.9	1.2e-12	1.7e-10
Prrc1	ENSMUSG00000024594	9.05E-06	1.48E-05	3.28E-06	0.22	-2.2	1.2e-12	1.7e-10
Tsc22d3	ENSMUSG00000031431	1.41E-04	2.38E-04	4.50E-05	0.19	-2.4	1.7e-12	2.3e-10
Klf10	ENSMUSG00000037465	1.38E-05	2.21E-05	5.52E-06	0.25	-2	1.7e-12	2.4e-10
Dusp26	ENSMUSG00000039661	2.51E-06	4.45E-06	5.62E-07	0.13	-3	1.9e-12	2.6e-10
Gm22748	ENSMUSG00000064427	1.28E-04	1.98E-04	5.90E-05	0.3	-1.7	2.1e-12	2.8e-10
Bdnf	ENSMUSG00000048482	1.47E-06	3.00E-07	2.64E-06	8.8	3.1	2.2e-12	2.9e-10
Tbl1xr1	ENSMUSG00000027630	1.67E-05	2.60E-05	7.41E-06	0.29	-1.8	2.2e-12	2.9e-10
Medag	ENSMUSG00000029659	7.13E-06	1.14E-05	2.88E-06	0.25	-2	2.3e-12	2.9e-10
Impad1	ENSMUSG00000066324	2.64E-05	4.13E-05	1.16E-05	0.28	-1.8	2.3e-12	2.9e-10
Ednrb	ENSMUSG00000022122	1.23E-05	1.95E-05	5.17E-06	0.27	-1.9	3.1e-12	4e-10
Arf3	ENSMUSG00000051853	3.41E-06	5.60E-06	1.22E-06	0.22	-2.2	4.5e-12	5.7e-10
Hipk2	ENSMUSG00000061436	1.41E-05	2.37E-05	4.55E-06	0.19	-2.4	8e-12	1e-09
Mafb	ENSMUSG00000074622	1.97E-05	3.04E-05	8.95E-06	0.29	-1.8	1e-11	1.3e-09
Gpr157	ENSMUSG00000047875	3.47E-05	5.39E-05	1.56E-05	0.29	-1.8	1.1e-11	1.4e-09
Gm16062	ENSMUSG00000087249	3.46E-06	5.86E-06	1.06E-06	0.18	-2.5	1.4e-11	1.7e-09
B4galt1	ENSMUSG00000028413	3.11E-05	4.88E-05	1.34E-05	0.27	-1.9	1.5e-11	1.8e-09
Otub2	ENSMUSG00000021203	7.08E-06	1.13E-05	2.86E-06	0.25	-2	1.7e-11	2e-09
Ldlrad4	ENSMUSG00000024544	4.01E-06	6.60E-06	1.43E-06	0.22	-2.2	1.8e-11	2.2e-09
Mthfd2	ENSMUSG00000005667	7.86E-06	2.81E-06	1.29E-05	4.6	2.2	1.9e-11	2.2e-09
Pla2g7	ENSMUSG00000023913	3.52E-05	5.41E-05	1.63E-05	0.3	-1.7	2.3e-11	2.7e-09
Lyve1	ENSMUSG00000030787	9.48E-06	1.53E-05	3.66E-06	0.24	-2.1	2.3e-11	2.7e-09
Fkbp5	ENSMUSG00000024222	4.94E-05	8.41E-05	1.47E-05	0.18	-2.5	2.4e-11	2.8e-09
Rab8b	ENSMUSG00000036943	5.71E-06	9.07E-06	2.36E-06	0.26	-1.9	2.8e-11	3.2e-09
Mpzl3	ENSMUSG00000070305	1.86E-06	3.22E-06	5.04E-07	0.16	-2.7	2.8e-11	3.2e-09
Tecpr2	ENSMUSG00000021275	1.97E-05	3.05E-05	8.88E-06	0.29	-1.8	2.9e-11	3.3e-09

Trib3	ENSMUSG00000032715	3.02E-06	5.60E-07	5.48E-06	9.8	3.3	3e-11	3.4e-09
Adam12	ENSMUSG00000054555	7.24E-07	1.38E-06	6.45E-08	0.047	-4.4	3.3e-11	3.6e-09
Lrrc58	ENSMUSG00000034158	4.15E-05	6.45E-05	1.85E-05	0.29	-1.8	3.3e-11	3.7e-09
Net1	ENSMUSG00000021215	1.15E-05	1.87E-05	4.36E-06	0.23	-2.1	3.3e-11	3.7e-09
Zcchc2	ENSMUSG00000038866	8.64E-06	1.36E-05	3.64E-06	0.27	-1.9	3.8e-11	4.2e-09
Hsp90aa1	ENSMUSG00000021270	7.90E-06	1.26E-05	3.16E-06	0.25	-2	3.9e-11	4.3e-09
Ccl6	ENSMUSG00000018927	1.27E-05	2.25E-05	2.83E-06	0.13	-3	4.2e-11	4.5e-09
Chst11	ENSMUSG00000034612	2.59E-06	4.29E-06	8.82E-07	0.21	-2.3	6e-11	6.4e-09
Mapklip1l	ENSMUSG00000021840	4.68E-06	7.52E-06	1.85E-06	0.25	-2	6.3e-11	6.7e-09
Arntl	ENSMUSG00000055116	8.80E-06	1.49E-05	2.67E-06	0.18	-2.5	6.3e-11	6.7e-09
Sorcs1	ENSMUSG00000043531	1.59E-06	2.81E-06	3.69E-07	0.13	-2.9	6.9e-11	7.2e-09
Txnrd1	ENSMUSG00000020250	5.24E-05	7.99E-05	2.50E-05	0.31	-1.7	7.3e-11	7.6e-09
Snord7	ENSMUSG00000065715	8.25E-06	1.34E-05	3.13E-06	0.23	-2.1	7.7e-11	8e-09
Cidec	ENSMUSG00000030278	5.25E-06	8.42E-06	2.09E-06	0.25	-2	8.4e-11	8.6e-09
Fat1	ENSMUSG00000070047	1.05E-05	1.62E-05	4.79E-06	0.3	-1.8	9.1e-11	9.3e-09
Gm22009	ENSMUSG00000089417	2.82E-05	4.42E-05	1.21E-05	0.27	-1.9	9.3e-11	9.3e-09
Banp	ENSMUSG00000025316	4.42E-06	7.69E-06	1.14E-06	0.15	-2.7	1e-10	1e-08
Gm8355	ENSMUSG00000093798	3.64E-06	6.01E-06	1.27E-06	0.21	-2.2	1e-10	1e-08
Mylk2	ENSMUSG00000027470	3.10E-04	4.76E-04	1.44E-04	0.3	-1.7	1.1e-10	1e-08
Larp1	ENSMUSG00000037331	2.82E-05	4.30E-05	1.35E-05	0.31	-1.7	1.1e-10	1.1e-08
Gpr133	ENSMUSG00000044017	8.20E-06	1.27E-05	3.75E-06	0.3	-1.8	1.2e-10	1.2e-08
Apbb3	ENSMUSG00000001379	5.74E-06	9.28E-06	2.21E-06	0.24	-2.1	1.3e-10	1.3e-08
P4ha1	ENSMUSG00000019916	1.93E-05	3.08E-05	7.68E-06	0.25	-2	1.3e-10	1.3e-08
Hspa1l	ENSMUSG00000007033	1.79E-06	3.10E-06	4.91E-07	0.16	-2.7	1.4e-10	1.3e-08
Tmem87a	ENSMUSG00000033808	1.81E-05	2.77E-05	8.54E-06	0.31	-1.7	1.4e-10	1.4e-08
Tfcp2l1	ENSMUSG00000026380	2.27E-05	3.81E-05	7.26E-06	0.19	-2.4	1.7e-10	1.6e-08
Tspan14	ENSMUSG00000037824	5.17E-06	8.16E-06	2.19E-06	0.27	-1.9	1.8e-10	1.7e-08
Pkp4	ENSMUSG00000026991	1.12E-05	1.72E-05	5.23E-06	0.3	-1.7	1.9e-10	1.8e-08
Cry2	ENSMUSG00000068742	1.52E-05	2.34E-05	6.94E-06	0.3	-1.8	2e-10	1.8e-08
Slc11a2	ENSMUSG00000023030	9.87E-06	1.52E-05	4.53E-06	0.3	-1.7	2.1e-10	1.9e-08
Ccdc80	ENSMUSG00000022665	2.12E-05	3.18E-05	1.05E-05	0.33	-1.6	2.1e-10	1.9e-08
Setbp1	ENSMUSG00000024548	1.08E-05	1.66E-05	4.99E-06	0.3	-1.7	2.2e-10	2e-08
Fxyd5	ENSMUSG00000009687	2.70E-06	4.38E-06	1.02E-06	0.23	-2.1	2.2e-10	2e-08
Chordc1	ENSMUSG00000001774	1.14E-05	1.75E-05	5.28E-06	0.3	-1.7	2.2e-10	2e-08
Fgf21	ENSMUSG00000030827	4.13E-07	0.00E+00	8.25E-07	Inf	Inf	2.6e-10	2.3e-08
Osgin1	ENSMUSG00000074063	1.14E-05	1.75E-05	5.26E-06	0.3	-1.7	2.7e-10	2.4e-08
Rbpms	ENSMUSG00000031586	7.82E-06	3.48E-06	1.22E-05	3.5	1.8	2.8e-10	2.5e-08
Tmem170b	ENSMUSG00000087370	1.11E-05	1.70E-05	5.27E-06	0.31	-1.7	2.9e-10	2.5e-08
Xirp1	ENSMUSG00000079243	7.42E-05	1.25E-04	2.33E-05	0.19	-2.4	3e-10	2.7e-08
2610018G03Rik	ENSMUSG00000031112	1.21E-06	2.11E-06	3.04E-07	0.14	-2.8	3.1e-10	2.7e-08
Naa50	ENSMUSG00000022698	8.45E-05	1.30E-04	3.89E-05	0.3	-1.7	3.3e-10	2.9e-08
Fos	ENSMUSG00000021250	5.02E-06	8.76E-06	1.28E-06	0.15	-2.8	3.7e-10	3.2e-08
Cadm1	ENSMUSG00000032076	6.02E-06	9.46E-06	2.58E-06	0.27	-1.9	3.9e-10	3.3e-08
Alkbh5	ENSMUSG00000042650	5.21E-05	7.79E-05	2.63E-05	0.34	-1.6	4.1e-10	3.4e-08
Phtf2	ENSMUSG00000039987	4.18E-05	6.29E-05	2.08E-05	0.33	-1.6	4.4e-10	3.7e-08
Phka1	ENSMUSG00000034055	3.82E-04	5.81E-04	1.84E-04	0.32	-1.7	4.6e-10	3.9e-08
Atp6v1b2	ENSMUSG00000006273	3.48E-05	5.23E-05	1.72E-05	0.33	-1.6	4.8e-10	3.9e-08
Wisp2	ENSMUSG00000027656	1.53E-06	2.54E-06	5.17E-07	0.2	-2.3	4.8e-10	3.9e-08
Rnf11	ENSMUSG00000028557	3.87E-05	5.75E-05	1.98E-05	0.35	-1.5	5e-10	4.1e-08
Ccdc6	ENSMUSG00000048701	2.65E-05	4.00E-05	1.30E-05	0.32	-1.6	5.1e-10	4.2e-08
Jak2	ENSMUSG00000024789	3.10E-05	4.66E-05	1.55E-05	0.33	-1.6	6.2e-10	5e-08
Enox2	ENSMUSG00000031109	6.91E-06	1.07E-05	3.08E-06	0.29	-1.8	6.8e-10	5.5e-08
Ankrd9	ENSMUSG00000037904	4.97E-05	7.38E-05	2.56E-05	0.35	-1.5	7.2e-10	5.8e-08
Mylk4	ENSMUSG00000044951	3.09E-04	4.69E-04	1.49E-04	0.32	-1.7	7.2e-10	5.8e-08
Ang	ENSMUSG00000072115	1.15E-06	2.03E-06	2.61E-07	0.13	-3	7.3e-10	5.8e-08
Asb5	ENSMUSG00000031519	1.05E-04	1.57E-04	5.34E-05	0.34	-1.6	7.6e-10	6e-08
Phc1	ENSMUSG00000040669	3.93E-06	6.69E-06	1.16E-06	0.17	-2.5	7.7e-10	6.1e-08
Plin4	ENSMUSG00000002831	1.44E-04	2.17E-04	7.08E-05	0.33	-1.6	9e-10	7e-08
Pmepa1	ENSMUSG00000038400	5.82E-06	9.02E-06	2.62E-06	0.29	-1.8	9e-10	7e-08
Lamc2	ENSMUSG00000026479	1.29E-06	2.18E-06	3.92E-07	0.18	-2.5	1e-09	7.7e-08
Gsk3b	ENSMUSG00000022812	2.29E-05	3.43E-05	1.14E-05	0.33	-1.6	1e-09	7.9e-08
Plekhb1	ENSMUSG00000030701	2.77E-05	4.16E-05	1.39E-05	0.34	-1.6	1e-09	8e-08
Hbegf	ENSMUSG00000024486	5.69E-06	9.09E-06	2.29E-06	0.25	-2	1.1e-09	8.4e-08
Kcnf1	ENSMUSG00000051726	1.03E-05	1.86E-05	2.05E-06	0.11	-3.2	1.1e-09	8.4e-08
Gm10080	ENSMUSG00000060467	1.10E-06	1.86E-06	3.29E-07	0.18	-2.5	1.3e-09	9.7e-08
Htra4	ENSMUSG00000037406	1.73E-06	3.42E-06	2.98E-08	0.0087	-6.8	1.4e-09	1.1e-07
Slc39a14	ENSMUSG00000022094	1.26E-05	1.95E-05	5.67E-06	0.29	-1.8	1.4e-09	1.1e-07
Ctxn3	ENSMUSG00000069372	1.85E-05	2.77E-05	9.19E-06	0.33	-1.6	1.5e-09	1.1e-07

Ush1c	ENSMUSG00000030838	5.52E-07	1.02E-06	8.25E-08	0.081	-3.6	1.5e-09	1.1e-07
Tppp3	ENSMUSG00000014846	1.28E-05	2.02E-05	5.33E-06	0.26	-1.9	1.5e-09	1.1e-07
Anxa1	ENSMUSG00000024659	1.16E-05	1.73E-05	5.89E-06	0.34	-1.6	1.5e-09	1.1e-07
A630007B06Rik	ENSMUSG00000035173	1.47E-05	2.20E-05	7.31E-06	0.33	-1.6	1.9e-09	1.4e-07
Dynll2	ENSMUSG00000020483	4.02E-05	5.92E-05	2.11E-05	0.36	-1.5	1.9e-09	1.4e-07
Rps6ka3	ENSMUSG00000031309	1.52E-05	2.29E-05	7.48E-06	0.33	-1.6	1.9e-09	1.4e-07
Cd163	ENSMUSG00000008845	2.20E-05	3.36E-05	1.05E-05	0.31	-1.7	2.1e-09	1.5e-07
Dnajb4	ENSMUSG00000028035	1.51E-05	2.47E-05	5.50E-06	0.22	-2.2	2.2e-09	1.5e-07
Serpinb6a	ENSMUSG00000060147	1.18E-04	1.77E-04	5.94E-05	0.34	-1.6	2.3e-09	1.6e-07
Scarna2	ENSMUSG000000088185	2.31E-05	3.51E-05	1.12E-05	0.32	-1.6	2.3e-09	1.7e-07
Klf13	ENSMUSG00000052040	1.28E-05	1.93E-05	6.39E-06	0.33	-1.6	2.9e-09	2e-07
Kcnj12	ENSMUSG00000042529	1.60E-05	2.37E-05	8.33E-06	0.35	-1.5	3.4e-09	2.4e-07
Sln	ENSMUSG00000042045	3.41E-07	6.24E-07	5.76E-08	0.092	-3.4	3.6e-09	2.5e-07
Eln	ENSMUSG00000029675	2.73E-06	4.46E-06	1.01E-06	0.23	-2.1	3.6e-09	2.5e-07
Fut10	ENSMUSG00000046152	2.99E-06	4.79E-06	1.19E-06	0.25	-2	3.6e-09	2.5e-07
Emp1	ENSMUSG00000030208	2.12E-05	3.38E-05	8.56E-06	0.25	-2	3.8e-09	2.6e-07
Nufip2	ENSMUSG00000037857	1.72E-05	2.57E-05	8.78E-06	0.34	-1.5	4e-09	2.7e-07
Nup210	ENSMUSG00000030091	2.14E-05	3.22E-05	1.05E-05	0.33	-1.6	4.2e-09	2.8e-07
BC023105	ENSMUSG00000063388	2.40E-05	3.84E-05	9.49E-06	0.25	-2	4.5e-09	3e-07
Blnk	ENSMUSG00000061132	3.29E-06	1.25E-06	5.32E-06	4.2	2.1	4.5e-09	3e-07
Snord82	ENSMUSG00000064823	1.20E-05	1.84E-05	5.63E-06	0.31	-1.7	4.6e-09	3.1e-07
Trp63	ENSMUSG00000022510	5.01E-06	7.80E-06	2.22E-06	0.28	-1.8	4.9e-09	3.2e-07
Rictor	ENSMUSG00000050310	1.85E-05	2.86E-05	8.46E-06	0.3	-1.8	5e-09	3.3e-07
6330403A02Rik	ENSMUSG00000053963	2.56E-06	6.26E-07	4.49E-06	7.2	2.8	5.1e-09	3.3e-07
Ifrd1	ENSMUSG00000001627	1.36E-05	2.08E-05	6.35E-06	0.31	-1.7	5.3e-09	3.5e-07
Mical2	ENSMUSG00000038244	7.17E-05	1.06E-04	3.78E-05	0.36	-1.5	5.3e-09	3.5e-07
Szrd1	ENSMUSG00000040842	2.30E-05	3.39E-05	1.22E-05	0.36	-1.5	5.4e-09	3.6e-07
Ppl	ENSMUSG00000039457	1.54E-05	2.45E-05	6.28E-06	0.26	-2	5.7e-09	3.7e-07
Ddr2	ENSMUSG00000026674	2.48E-05	3.67E-05	1.29E-05	0.35	-1.5	6.2e-09	4e-07
Loxl1	ENSMUSG00000032334	9.97E-06	1.47E-05	5.26E-06	0.36	-1.5	6.7e-09	4.3e-07
Arsi	ENSMUSG00000036412	2.68E-06	4.34E-06	1.01E-06	0.23	-2.1	7e-09	4.5e-07
Nek7	ENSMUSG00000026393	4.55E-05	6.68E-05	2.42E-05	0.36	-1.5	7.2e-09	4.6e-07
Dusp1	ENSMUSG00000024190	2.30E-05	3.40E-05	1.20E-05	0.35	-1.5	7.4e-09	4.7e-07
Bach1	ENSMUSG00000025612	3.04E-05	4.56E-05	1.51E-05	0.33	-1.6	7.4e-09	4.7e-07
Rev3l	ENSMUSG00000019841	2.68E-05	4.10E-05	1.25E-05	0.3	-1.7	7.7e-09	4.8e-07
C1galt1c1	ENSMUSG00000048970	3.13E-06	4.94E-06	1.32E-06	0.27	-1.9	7.7e-09	4.8e-07
Srsf3	ENSMUSG00000071172	8.24E-06	1.24E-05	4.09E-06	0.33	-1.6	7.8e-09	4.9e-07
Htatsf1	ENSMUSG00000067873	2.87E-05	4.25E-05	1.49E-05	0.35	-1.5	7.9e-09	4.9e-07
Plb1	ENSMUSG00000029134	1.33E-06	3.12E-07	2.35E-06	7.5	2.9	8.2e-09	5.1e-07
Sema3f	ENSMUSG00000034684	2.29E-06	3.72E-06	8.55E-07	0.23	-2.1	8.2e-09	5.1e-07
Irs2	ENSMUSG00000038894	1.39E-05	2.13E-05	6.49E-06	0.31	-1.7	9.4e-09	5.8e-07
Map3k7cl	ENSMUSG00000025610	1.48E-06	2.54E-06	4.27E-07	0.17	-2.6	9.4e-09	5.8e-07
Pkp2	ENSMUSG00000041957	1.81E-06	2.80E-06	8.30E-07	0.3	-1.8	9.4e-09	5.8e-07
Pvr	ENSMUSG00000040511	5.73E-06	8.79E-06	2.68E-06	0.3	-1.7	9.6e-09	5.8e-07
Prkcd	ENSMUSG00000021948	8.85E-06	1.35E-05	4.21E-06	0.31	-1.7	9.7e-09	5.9e-07
Rgcc	ENSMUSG00000022018	1.53E-05	2.39E-05	6.61E-06	0.28	-1.9	1e-08	6e-07
Adcy5	ENSMUSG00000022840	2.64E-06	3.96E-06	1.31E-06	0.33	-1.6	1e-08	6.1e-07
Fbxw11	ENSMUSG00000020271	2.18E-05	3.19E-05	1.18E-05	0.37	-1.4	1e-08	6.3e-07
Tgfb3	ENSMUSG00000021253	1.07E-05	1.60E-05	5.29E-06	0.33	-1.6	1.1e-08	6.3e-07
Lrrc30	ENSMUSG00000073375	8.62E-05	1.30E-04	4.22E-05	0.32	-1.6	1.1e-08	6.8e-07
Arih1	ENSMUSG00000025234	3.69E-05	5.43E-05	1.96E-05	0.36	-1.5	1.2e-08	6.8e-07
Srsf7	ENSMUSG00000024097	9.33E-06	1.41E-05	4.57E-06	0.32	-1.6	1.2e-08	7.3e-07
Dctn6	ENSMUSG00000031516	5.44E-06	8.21E-06	2.67E-06	0.32	-1.6	1.2e-08	7.3e-07
Bace1	ENSMUSG00000032086	2.82E-05	4.15E-05	1.49E-05	0.36	-1.5	1.4e-08	8e-07
Irf2bp2	ENSMUSG00000051495	2.14E-05	3.13E-05	1.15E-05	0.37	-1.4	1.4e-08	8.1e-07
Pttglip	ENSMUSG00000009291	1.72E-05	2.59E-05	8.54E-06	0.33	-1.6	1.5e-08	8.6e-07
Malat1	ENSMUSG00000092341	1.55E-03	2.30E-03	8.10E-04	0.35	-1.5	1.5e-08	8.7e-07
Cacna2d4	ENSMUSG00000041460	7.64E-07	1.39E-06	1.40E-07	0.1	-3.3	1.5e-08	8.9e-07
Stim2	ENSMUSG00000039156	2.39E-05	3.52E-05	1.26E-05	0.36	-1.5	1.6e-08	8.9e-07
Hnrnpul2	ENSMUSG00000071659	1.91E-05	2.81E-05	1.01E-05	0.36	-1.5	1.6e-08	9.1e-07
Uhmk1	ENSMUSG00000026667	1.38E-05	2.05E-05	7.07E-06	0.34	-1.5	1.7e-08	9.4e-07
Srek1	ENSMUSG00000032621	8.30E-06	1.26E-05	4.02E-06	0.32	-1.6	1.7e-08	9.6e-07
Rora	ENSMUSG00000032238	6.06E-05	8.87E-05	3.25E-05	0.37	-1.5	1.7e-08	9.6e-07
Neat1	ENSMUSG00000092274	1.39E-04	2.06E-04	7.25E-05	0.35	-1.5	1.7e-08	9.8e-07
Marc2	ENSMUSG00000073481	1.71E-05	2.54E-05	8.67E-06	0.34	-1.6	1.8e-08	1e-06
Gem	ENSMUSG00000028214	1.56E-06	2.54E-06	5.74E-07	0.23	-2.1	1.9e-08	1e-06
Tmem64	ENSMUSG00000043252	2.92E-05	4.26E-05	1.58E-05	0.37	-1.4	1.9e-08	1e-06
Rtn2	ENSMUSG00000030401	6.46E-05	9.30E-05	3.61E-05	0.39	-1.4	2e-08	1.1e-06

Mast4	ENSMUSG00000034751	3.62E-05	5.61E-05	1.64E-05	0.29	-1.8	2e-08	1.1e-06
Slc7a11	ENSMUSG00000027737	6.74E-07	9.64E-08	1.25E-06	13	3.7	2.1e-08	1.1e-06
Tpx2	ENSMUSG00000027469	1.13E-06	1.94E-06	3.15E-07	0.16	-2.6	2.2e-08	1.2e-06
Dnajb1	ENSMUSG00000005483	7.07E-06	1.22E-05	1.97E-06	0.16	-2.6	2.2e-08	1.2e-06
Dclk1	ENSMUSG00000027797	2.69E-06	4.31E-06	1.07E-06	0.25	-2	2.4e-08	1.3e-06
Sept9	ENSMUSG00000059248	1.35E-05	1.96E-05	7.37E-06	0.38	-1.4	2.4e-08	1.3e-06
Grin2c	ENSMUSG00000020734	3.85E-07	5.54E-08	7.15E-07	13	3.7	2.4e-08	1.3e-06
Mier1	ENSMUSG00000028522	8.56E-06	1.30E-05	4.09E-06	0.31	-1.7	2.5e-08	1.3e-06
Ash1l	ENSMUSG00000028053	2.65E-05	3.88E-05	1.41E-05	0.36	-1.5	2.6e-08	1.4e-06
Rmnd5a	ENSMUSG00000002222	5.34E-05	7.79E-05	2.88E-05	0.37	-1.4	2.6e-08	1.4e-06
Ly6a	ENSMUSG00000075602	1.84E-05	2.85E-05	8.19E-06	0.29	-1.8	2.7e-08	1.4e-06
Impact	ENSMUSG00000024423	1.48E-05	2.23E-05	7.23E-06	0.32	-1.6	2.7e-08	1.4e-06
Mat2a	ENSMUSG00000053907	6.65E-05	1.02E-04	3.13E-05	0.31	-1.7	2.8e-08	1.5e-06
Tgfbr1	ENSMUSG00000007613	1.46E-05	2.14E-05	7.66E-06	0.36	-1.5	2.9e-08	1.5e-06
Luc7l2	ENSMUSG00000029823	1.72E-05	2.51E-05	9.36E-06	0.37	-1.4	3.1e-08	1.6e-06
Prkag3	ENSMUSG00000006542	3.66E-05	5.31E-05	2.02E-05	0.38	-1.4	3.2e-08	1.6e-06
Hnrnpm	ENSMUSG00000059208	1.31E-05	1.96E-05	6.58E-06	0.34	-1.6	3.2e-08	1.7e-06
Myadm	ENSMUSG00000068566	4.87E-06	7.36E-06	2.38E-06	0.32	-1.6	3.3e-08	1.7e-06
Aldh1a2	ENSMUSG00000013584	4.46E-06	6.78E-06	2.14E-06	0.32	-1.7	3.4e-08	1.7e-06
Gpcpd1	ENSMUSG00000027346	1.21E-04	1.77E-04	6.51E-05	0.37	-1.4	3.6e-08	1.8e-06
Cbr2	ENSMUSG00000025150	7.35E-06	1.09E-05	3.80E-06	0.35	-1.5	3.6e-08	1.8e-06
Zbtb41	ENSMUSG00000033964	8.62E-06	1.28E-05	4.40E-06	0.34	-1.5	3.7e-08	1.9e-06
Fam53c	ENSMUSG00000034300	8.89E-06	1.39E-05	3.91E-06	0.28	-1.8	3.7e-08	1.9e-06
Errfi1	ENSMUSG00000028967	1.56E-05	2.38E-05	7.48E-06	0.31	-1.7	3.9e-08	2e-06
Slc39a10	ENSMUSG00000025986	6.17E-06	9.38E-06	2.95E-06	0.31	-1.7	3.9e-08	2e-06
At13	ENSMUSG00000024759	8.98E-06	1.32E-05	4.73E-06	0.36	-1.5	3.9e-08	2e-06
Ighm	ENSMUSG00000076617	2.52E-05	3.79E-05	1.25E-05	0.33	-1.6	4.2e-08	2.1e-06
Spns2	ENSMUSG00000040447	3.53E-05	5.08E-05	1.97E-05	0.39	-1.4	4.3e-08	2.2e-06
Ctla2a	ENSMUSG00000044258	3.86E-06	6.44E-06	1.29E-06	0.2	-2.3	4.6e-08	2.3e-06
Lurap1	ENSMUSG00000028701	1.65E-06	2.65E-06	6.47E-07	0.24	-2	4.7e-08	2.3e-06
Mapre2	ENSMUSG00000024277	1.15E-05	1.67E-05	6.28E-06	0.37	-1.4	4.9e-08	2.4e-06
Darc	ENSMUSG00000037872	8.59E-07	1.52E-06	2.02E-07	0.13	-2.9	4.9e-08	2.4e-06
Tm9sf3	ENSMUSG00000025016	2.76E-05	4.00E-05	1.52E-05	0.38	-1.4	5.1e-08	2.5e-06
Mstn	ENSMUSG00000026100	3.70E-05	5.32E-05	2.08E-05	0.39	-1.4	5.1e-08	2.5e-06
Golph3	ENSMUSG00000022200	1.95E-05	2.83E-05	1.07E-05	0.38	-1.4	5.2e-08	2.6e-06
Ttyh1	ENSMUSG00000030428	1.60E-06	2.78E-06	4.09E-07	0.15	-2.8	5.3e-08	2.6e-06
4921514A10Rik	ENSMUSG00000097620	5.48E-07	1.01E-06	8.75E-08	0.087	-3.5	5.4e-08	2.6e-06
Nus1	ENSMUSG00000023068	1.06E-05	1.55E-05	5.57E-06	0.36	-1.5	5.4e-08	2.6e-06
Cd82	ENSMUSG00000027215	8.96E-06	1.32E-05	4.68E-06	0.35	-1.5	5.7e-08	2.8e-06
Snhg5	ENSMUSG00000097195	1.80E-06	2.92E-06	6.72E-07	0.23	-2.1	5.8e-08	2.8e-06
Smpd3	ENSMUSG00000031906	2.81E-06	4.37E-06	1.26E-06	0.29	-1.8	5.8e-08	2.8e-06
Anxa2	ENSMUSG00000032231	1.91E-05	2.79E-05	1.02E-05	0.37	-1.4	5.9e-08	2.8e-06
Nptn	ENSMUSG00000032336	2.35E-05	3.39E-05	1.32E-05	0.39	-1.4	6.2e-08	2.9e-06
Nt5dc3	ENSMUSG00000054027	6.86E-05	9.94E-05	3.78E-05	0.38	-1.4	6.3e-08	3e-06
C2cd2	ENSMUSG00000045975	8.38E-05	1.22E-04	4.60E-05	0.38	-1.4	6.6e-08	3.1e-06
Khlh30	ENSMUSG00000026308	3.64E-05	5.42E-05	1.86E-05	0.34	-1.5	6.9e-08	3.2e-06
Atp9a	ENSMUSG00000027546	7.84E-06	1.14E-05	4.31E-06	0.38	-1.4	7e-08	3.3e-06
Serpina3n	ENSMUSG00000021091	3.52E-06	5.69E-06	1.35E-06	0.24	-2.1	7.1e-08	3.3e-06
Gse1	ENSMUSG00000031822	6.57E-06	9.89E-06	3.24E-06	0.33	-1.6	7.2e-08	3.3e-06
Tcf20	ENSMUSG00000041852	2.51E-05	3.64E-05	1.38E-05	0.38	-1.4	7.4e-08	3.4e-06
Neto2	ENSMUSG00000036902	4.51E-06	6.92E-06	2.10E-06	0.3	-1.7	8.1e-08	3.7e-06
Gpr146	ENSMUSG00000044197	3.23E-05	4.78E-05	1.68E-05	0.35	-1.5	8.2e-08	3.8e-06
Usp31	ENSMUSG00000063317	6.41E-06	9.59E-06	3.24E-06	0.34	-1.6	8.2e-08	3.8e-06
Abcc3	ENSMUSG00000020865	7.97E-07	1.34E-06	2.52E-07	0.19	-2.4	8.4e-08	3.9e-06
Dhrs3	ENSMUSG00000066026	2.32E-05	3.48E-05	1.16E-05	0.33	-1.6	8.5e-08	3.9e-06
Btaf1	ENSMUSG00000040565	8.98E-06	1.32E-05	4.76E-06	0.36	-1.5	8.6e-08	3.9e-06
Cdc73	ENSMUSG00000026361	9.47E-06	1.48E-05	4.12E-06	0.28	-1.8	8.8e-08	4e-06
Ctif	ENSMUSG00000052928	3.25E-06	4.95E-06	1.55E-06	0.31	-1.7	8.8e-08	4e-06
Gm1862	ENSMUSG00000080968	8.24E-07	1.42E-06	2.25E-07	0.16	-2.7	9e-08	4.1e-06
Slc30a2	ENSMUSG00000028836	8.75E-06	1.33E-05	4.22E-06	0.32	-1.7	9.1e-08	4.1e-06
Cep170	ENSMUSG00000057335	1.36E-05	1.98E-05	7.35E-06	0.37	-1.4	9.3e-08	4.2e-06
Camk2a	ENSMUSG00000024617	1.23E-04	1.77E-04	6.95E-05	0.39	-1.3	9.3e-08	4.2e-06
Abra	ENSMUSG00000042895	1.31E-04	1.94E-04	6.79E-05	0.35	-1.5	9.6e-08	4.3e-06
Man2a1	ENSMUSG00000024085	1.27E-05	1.89E-05	6.49E-06	0.34	-1.5	9.7e-08	4.3e-06
Gad1l	ENSMUSG00000056880	7.80E-06	1.15E-05	4.12E-06	0.36	-1.5	9.7e-08	4.3e-06
Il1r1	ENSMUSG00000026072	6.52E-06	9.93E-06	3.12E-06	0.31	-1.7	9.9e-08	4.4e-06
Atp6ap2	ENSMUSG00000031007	7.26E-06	1.08E-05	3.73E-06	0.35	-1.5	9.9e-08	4.4e-06
Shisa2	ENSMUSG00000044461	4.00E-05	5.77E-05	2.23E-05	0.39	-1.4	1e-07	4.4e-06

Npc1	ENSMUSG00000024413	7.47E-05	1.07E-04	4.19E-05	0.39	-1.4	1e-07	4.5e-06
Ppp1r15b	ENSMUSG00000046062	1.85E-05	2.71E-05	9.77E-06	0.36	-1.5	1e-07	4.6e-06
Spop	ENSMUSG00000057522	3.71E-05	5.33E-05	2.10E-05	0.39	-1.3	1.1e-07	4.6e-06
Hexim1	ENSMUSG00000048878	1.35E-05	1.96E-05	7.47E-06	0.38	-1.4	1.1e-07	4.6e-06
Prrg3	ENSMUSG00000033361	1.68E-06	2.78E-06	5.90E-07	0.21	-2.2	1.1e-07	4.8e-06
Agpat2	ENSMUSG00000026922	3.31E-06	1.52E-06	5.09E-06	3.3	1.7	1.1e-07	5e-06
Rras2	ENSMUSG00000055723	6.76E-06	1.02E-05	3.32E-06	0.33	-1.6	1.2e-07	5e-06
Jph1	ENSMUSG00000042686	8.42E-05	1.20E-04	4.83E-05	0.4	-1.3	1.2e-07	5.2e-06
Dnajb14	ENSMUSG00000074212	5.34E-06	7.96E-06	2.71E-06	0.34	-1.6	1.3e-07	5.4e-06
Zranb2	ENSMUSG00000028180	1.80E-05	2.60E-05	1.00E-05	0.38	-1.4	1.3e-07	5.6e-06
Hipk3	ENSMUSG00000027177	1.34E-04	1.92E-04	7.51E-05	0.39	-1.4	1.3e-07	5.6e-06
Cep97	ENSMUSG00000022604	2.95E-06	4.58E-06	1.32E-06	0.29	-1.8	1.3e-07	5.6e-06
Tra2b	ENSMUSG00000022858	5.67E-06	8.43E-06	2.91E-06	0.35	-1.5	1.3e-07	5.6e-06
Nrep	ENSMUSG00000042834	1.66E-05	2.43E-05	8.82E-06	0.36	-1.5	1.3e-07	5.6e-06
Gm7816	ENSMUSG00000083261	2.22E-07	4.26E-07	1.84E-08	0.043	-4.5	1.3e-07	5.7e-06
Axl	ENSMUSG00000002602	4.01E-05	5.76E-05	2.26E-05	0.39	-1.3	1.4e-07	5.7e-06
Xpr1	ENSMUSG00000026469	3.75E-05	5.36E-05	2.14E-05	0.4	-1.3	1.4e-07	5.7e-06
Gnai3	ENSMUSG00000000001	9.24E-06	1.34E-05	5.03E-06	0.37	-1.4	1.4e-07	5.7e-06
Me1	ENSMUSG00000032418	3.69E-05	5.77E-05	1.61E-05	0.28	-1.8	1.4e-07	5.8e-06
Bclaf1	ENSMUSG00000037608	2.39E-05	3.46E-05	1.33E-05	0.38	-1.4	1.4e-07	5.8e-06
Eps15	ENSMUSG00000028552	3.20E-05	4.60E-05	1.80E-05	0.39	-1.4	1.5e-07	6.1e-06
St3gal1	ENSMUSG00000013846	8.51E-06	1.24E-05	4.65E-06	0.38	-1.4	1.5e-07	6.3e-06
Sepw1	ENSMUSG00000041571	1.58E-04	2.25E-04	9.08E-05	0.4	-1.3	1.6e-07	6.5e-06
Gprc5c	ENSMUSG00000051043	2.24E-05	3.24E-05	1.23E-05	0.38	-1.4	1.6e-07	6.5e-06
Snap91	ENSMUSG00000033419	2.98E-07	3.94E-08	5.56E-07	14	3.8	1.6e-07	6.7e-06
Dcun1d1	ENSMUSG00000027708	6.93E-06	1.02E-05	3.67E-06	0.36	-1.5	1.7e-07	6.8e-06
Fam124a	ENSMUSG00000035184	4.47E-06	6.95E-06	1.99E-06	0.29	-1.8	1.7e-07	6.8e-06
Zcchc9	ENSMUSG00000021621	2.62E-06	4.06E-06	1.19E-06	0.29	-1.8	1.7e-07	6.8e-06
Nacc2	ENSMUSG00000026932	1.46E-05	2.09E-05	8.27E-06	0.39	-1.3	1.7e-07	7e-06
Twsg1	ENSMUSG00000024098	1.31E-05	1.90E-05	7.27E-06	0.38	-1.4	1.7e-07	7e-06
Tcp11l2	ENSMUSG00000020034	2.03E-05	3.09E-05	9.65E-06	0.31	-1.7	1.8e-07	7e-06
Gtf2a1	ENSMUSG00000020962	7.37E-06	1.10E-05	3.72E-06	0.34	-1.6	1.8e-07	7.4e-06
Ms4a6b	ENSMUSG00000024677	2.02E-06	3.33E-06	7.10E-07	0.21	-2.2	1.9e-07	7.6e-06
Prg4	ENSMUSG00000006014	4.29E-06	7.55E-06	1.02E-06	0.14	-2.9	1.9e-07	7.7e-06
Egln3	ENSMUSG00000035105	7.77E-06	1.25E-05	3.00E-06	0.24	-2.1	1.9e-07	7.7e-06
Ept1	ENSMUSG00000075703	5.67E-06	8.40E-06	2.93E-06	0.35	-1.5	1.9e-07	7.7e-06
Fam46a	ENSMUSG00000032265	5.62E-06	8.39E-06	2.84E-06	0.34	-1.6	2e-07	8.1e-06
Sms	ENSMUSG00000071708	1.14E-05	1.78E-05	4.95E-06	0.28	-1.8	2.1e-07	8.1e-06
Morf4l2	ENSMUSG00000031422	2.87E-05	4.12E-05	1.63E-05	0.4	-1.3	2.1e-07	8.1e-06
Slc25a36	ENSMUSG00000032449	9.93E-06	1.45E-05	5.36E-06	0.37	-1.4	2.1e-07	8.2e-06
Smad3	ENSMUSG00000032402	3.83E-05	5.61E-05	2.05E-05	0.37	-1.5	2.1e-07	8.2e-06
1700020I14Rik	ENSMUSG00000085438	1.32E-04	1.89E-04	7.46E-05	0.39	-1.3	2.1e-07	8.3e-06
Eny2	ENSMUSG00000022338	3.46E-06	5.20E-06	1.72E-06	0.33	-1.6	2.1e-07	8.3e-06
Gm13340	ENSMUSG00000083563	1.36E-05	7.80E-06	1.94E-05	2.5	1.3	2.2e-07	8.4e-06
Rc3h1	ENSMUSG00000040423	2.23E-05	3.28E-05	1.18E-05	0.36	-1.5	2.2e-07	8.7e-06
Fgd4	ENSMUSG00000022788	1.13E-05	1.64E-05	6.14E-06	0.37	-1.4	2.3e-07	8.9e-06
Foxo6	ENSMUSG00000052135	9.72E-07	2.46E-07	1.70E-06	6.9	2.8	2.3e-07	9e-06
Lox	ENSMUSG00000024529	1.05E-05	1.73E-05	3.80E-06	0.22	-2.2	2.3e-07	9e-06
Tab2	ENSMUSG00000015755	2.49E-05	3.59E-05	1.39E-05	0.39	-1.4	2.4e-07	9.1e-06
Acvr2a	ENSMUSG00000052155	1.46E-05	2.11E-05	8.16E-06	0.39	-1.4	2.4e-07	9.3e-06
Gm14928	ENSMUSG00000082718	1.22E-06	2.03E-06	4.04E-07	0.2	-2.3	2.5e-07	9.5e-06
Stk17b	ENSMUSG00000026094	4.47E-06	6.62E-06	2.31E-06	0.35	-1.5	2.6e-07	9.7e-06
Dek	ENSMUSG00000021377	3.70E-06	5.70E-06	1.71E-06	0.3	-1.7	2.6e-07	1e-05
Acsl3	ENSMUSG00000032883	8.27E-06	1.29E-05	3.65E-06	0.28	-1.8	2.7e-07	1e-05
Wnk3	ENSMUSG00000041245	1.50E-06	2.50E-06	5.04E-07	0.2	-2.3	2.9e-07	1.1e-05
Cacng7	ENSMUSG00000069806	2.16E-06	3.43E-06	8.91E-07	0.26	-1.9	2.9e-07	1.1e-05
Nudcd3	ENSMUSG00000053838	1.99E-05	2.83E-05	1.15E-05	0.41	-1.3	3.1e-07	1.1e-05
Dbp	ENSMUSG00000059824	1.56E-05	8.87E-06	2.22E-05	2.5	1.3	3.1e-07	1.2e-05
Oaz1	ENSMUSG00000035242	6.26E-06	9.10E-06	3.43E-06	0.38	-1.4	3.3e-07	1.2e-05
Cpne7	ENSMUSG00000034796	5.96E-07	1.01E-06	1.77E-07	0.17	-2.5	3.3e-07	1.2e-05
Myo5a	ENSMUSG00000034593	1.03E-05	1.54E-05	5.11E-06	0.33	-1.6	3.3e-07	1.2e-05
Zrsr1	ENSMUSG00000044068	1.30E-05	1.88E-05	7.11E-06	0.38	-1.4	3.3e-07	1.2e-05
Prickle3	ENSMUSG00000031145	6.19E-06	9.87E-06	2.52E-06	0.26	-2	3.4e-07	1.2e-05
Adcy1	ENSMUSG00000020431	1.32E-06	5.13E-07	2.12E-06	4.1	2	3.4e-07	1.3e-05
Hs3st5	ENSMUSG00000044499	2.54E-06	1.14E-06	3.94E-06	3.5	1.8	3.5e-07	1.3e-05
Plcd3	ENSMUSG00000020937	2.01E-06	3.14E-06	8.72E-07	0.28	-1.9	3.5e-07	1.3e-05
Znrf2	ENSMUSG00000058446	9.73E-06	1.41E-05	5.39E-06	0.38	-1.4	3.6e-07	1.3e-05
Far1	ENSMUSG00000030759	5.33E-06	7.96E-06	2.69E-06	0.34	-1.6	3.6e-07	1.3e-05

Fstl1	ENSMUSG00000022816	3.67E-05	5.23E-05	2.11E-05	0.4	-1.3	3.7e-07	1.3e-05
Fgf18	ENSMUSG00000057967	4.07E-07	7.19E-07	9.59E-08	0.13	-2.9	3.7e-07	1.4e-05
Gm14680	ENSMUSG00000081752	1.27E-05	1.86E-05	6.72E-06	0.36	-1.5	3.9e-07	1.4e-05
Mrc1	ENSMUSG00000026712	2.21E-05	3.18E-05	1.23E-05	0.39	-1.4	4e-07	1.4e-05
Wsb1	ENSMUSG00000017677	5.48E-06	8.43E-06	2.52E-06	0.3	-1.7	4e-07	1.4e-05
Cd53	ENSMUSG00000040747	2.09E-06	3.26E-06	9.14E-07	0.28	-1.8	4.1e-07	1.5e-05
Gm8812	ENSMUSG00000083289	5.29E-06	9.15E-06	1.43E-06	0.16	-2.7	4.1e-07	1.5e-05
Fcna	ENSMUSG00000026938	2.34E-06	3.65E-06	1.03E-06	0.28	-1.8	4.1e-07	1.5e-05
Amd2	ENSMUSG00000063953	4.03E-05	7.45E-05	6.07E-06	0.081	-3.6	4.2e-07	1.5e-05
Jmy	ENSMUSG00000021690	2.25E-05	3.21E-05	1.29E-05	0.4	-1.3	4.2e-07	1.5e-05
Cyb5d2	ENSMUSG00000057778	8.43E-06	1.23E-05	4.58E-06	0.37	-1.4	4.2e-07	1.5e-05
Lsm14a	ENSMUSG00000066568	2.26E-05	3.20E-05	1.32E-05	0.41	-1.3	4.3e-07	1.5e-05
Hnrnpa2b1	ENSMUSG00000004980	3.49E-05	4.94E-05	2.05E-05	0.41	-1.3	4.3e-07	1.5e-05
Atrnl1	ENSMUSG00000054843	6.49E-06	9.36E-06	3.62E-06	0.39	-1.4	4.4e-07	1.5e-05
Dynll1	ENSMUSG00000009013	6.82E-06	9.93E-06	3.70E-06	0.37	-1.4	4.4e-07	1.5e-05
Gnl3l	ENSMUSG00000025266	1.83E-05	2.63E-05	1.03E-05	0.39	-1.4	4.5e-07	1.6e-05
Mob1a	ENSMUSG00000043131	1.19E-05	1.72E-05	6.69E-06	0.39	-1.4	4.5e-07	1.6e-05
Htra1	ENSMUSG00000006205	1.86E-05	2.79E-05	9.24E-06	0.33	-1.6	4.5e-07	1.6e-05
D430041D05Rik	ENSMUSG00000068373	3.56E-06	5.41E-06	1.72E-06	0.32	-1.7	4.5e-07	1.6e-05
Snord70	ENSMUSG00000077345	6.18E-06	9.47E-06	2.89E-06	0.31	-1.7	4.6e-07	1.6e-05
Kcnj11	ENSMUSG00000096146	1.27E-05	1.81E-05	7.38E-06	0.41	-1.3	4.6e-07	1.6e-05
B930036N10Rik	ENSMUSG000000091993	1.33E-05	2.04E-05	6.29E-06	0.31	-1.7	4.6e-07	1.6e-05
Slc12a2	ENSMUSG00000024597	2.17E-05	3.09E-05	1.25E-05	0.4	-1.3	4.7e-07	1.6e-05
1700025G04Rik	ENSMUSG00000032666	2.40E-05	3.42E-05	1.38E-05	0.4	-1.3	4.7e-07	1.6e-05
Sertad2	ENSMUSG00000049800	7.65E-06	1.13E-05	4.02E-06	0.36	-1.5	4.7e-07	1.6e-05
Gm15935	ENSMUSG00000084940	4.04E-06	6.24E-06	1.85E-06	0.3	-1.7	4.8e-07	1.6e-05
2810407C02Rik	ENSMUSG00000075700	3.71E-05	5.28E-05	2.14E-05	0.41	-1.3	4.8e-07	1.6e-05
Syne3	ENSMUSG00000054150	4.85E-06	7.08E-06	2.61E-06	0.37	-1.4	4.9e-07	1.7e-05
Map3k6	ENSMUSG00000028862	6.19E-06	9.24E-06	3.13E-06	0.34	-1.6	4.9e-07	1.7e-05
Hspb8	ENSMUSG00000041548	2.13E-04	3.13E-04	1.14E-04	0.36	-1.5	4.9e-07	1.7e-05
Gclc	ENSMUSG00000032350	1.03E-05	1.51E-05	5.44E-06	0.36	-1.5	5e-07	1.7e-05
Piezo1	ENSMUSG00000014444	5.26E-06	7.70E-06	2.83E-06	0.37	-1.4	5e-07	1.7e-05
Ankrd6	ENSMUSG00000040183	3.59E-06	5.90E-06	1.28E-06	0.22	-2.2	5.1e-07	1.7e-05
Galnt15	ENSMUSG00000021903	2.80E-05	4.08E-05	1.51E-05	0.37	-1.4	5.1e-07	1.7e-05
Serinc2	ENSMUSG00000023232	6.47E-06	9.63E-06	3.32E-06	0.34	-1.5	5.2e-07	1.7e-05
Cd164	ENSMUSG00000019818	4.25E-05	5.99E-05	2.52E-05	0.42	-1.3	5.2e-07	1.8e-05
Zbtb6	ENSMUSG00000066798	3.24E-06	4.88E-06	1.59E-06	0.33	-1.6	5.5e-07	1.8e-05
Suv420h1	ENSMUSG00000045098	1.38E-05	1.98E-05	7.79E-06	0.39	-1.3	5.5e-07	1.8e-05
Ppp1r18	ENSMUSG00000034595	5.04E-06	7.38E-06	2.69E-06	0.37	-1.5	5.8e-07	1.9e-05
Yipf4	ENSMUSG00000024072	4.49E-06	6.55E-06	2.43E-06	0.37	-1.4	5.8e-07	1.9e-05
Erp44	ENSMUSG00000028343	8.42E-06	1.22E-05	4.64E-06	0.38	-1.4	6e-07	2e-05
4732418A04Rik	ENSMUSG00000084929	5.62E-06	2.39E-06	8.84E-06	3.7	1.9	6e-07	2e-05
Ncor2	ENSMUSG00000029478	1.60E-05	2.45E-05	7.63E-06	0.31	-1.7	6e-07	2e-05
Ppp4r2	ENSMUSG00000052144	4.51E-06	6.82E-06	2.20E-06	0.32	-1.6	6.1e-07	2e-05
Fbn1	ENSMUSG00000027204	4.82E-05	6.79E-05	2.85E-05	0.42	-1.2	6.1e-07	2e-05
Uhrf1bp1l	ENSMUSG00000019951	1.61E-05	2.36E-05	8.52E-06	0.36	-1.5	6.1e-07	2e-05
Sytl2	ENSMUSG00000030616	3.98E-06	1.74E-06	6.21E-06	3.6	1.8	6.1e-07	2e-05
Pura	ENSMUSG00000043991	2.00E-05	2.85E-05	1.16E-05	0.41	-1.3	6.3e-07	2e-05
Ddx23	ENSMUSG00000003360	2.84E-05	4.01E-05	1.67E-05	0.42	-1.3	6.3e-07	2e-05
Gm15179	ENSMUSG00000085653	2.61E-06	4.11E-06	1.12E-06	0.27	-1.9	6.5e-07	2.1e-05
Map2k3	ENSMUSG00000018932	3.04E-05	5.09E-05	9.89E-06	0.19	-2.4	6.6e-07	2.1e-05
Srp9	ENSMUSG00000026511	6.71E-06	9.75E-06	3.68E-06	0.38	-1.4	6.6e-07	2.1e-05
Pdia3	ENSMUSG00000027248	2.36E-05	3.34E-05	1.37E-05	0.41	-1.3	6.7e-07	2.2e-05
Procr	ENSMUSG00000027611	9.04E-06	1.40E-05	4.09E-06	0.29	-1.8	7e-07	2.3e-05
Peg10	ENSMUSG00000092035	2.03E-06	3.42E-06	6.40E-07	0.19	-2.4	7.2e-07	2.3e-05
Pcnxl2	ENSMUSG00000060212	8.88E-07	2.69E-07	1.51E-06	5.6	2.5	7.3e-07	2.3e-05
Slc22a3	ENSMUSG00000023828	5.39E-07	9.02E-07	1.76E-07	0.19	-2.4	7.5e-07	2.4e-05
Vcl	ENSMUSG00000021823	2.84E-05	4.03E-05	1.66E-05	0.41	-1.3	7.5e-07	2.4e-05
Ly6c1	ENSMUSG00000079018	1.54E-05	2.38E-05	7.10E-06	0.3	-1.7	7.6e-07	2.4e-05
Pdlim5	ENSMUSG00000028273	1.50E-04	2.13E-04	8.74E-05	0.41	-1.3	7.7e-07	2.4e-05
Zfp326	ENSMUSG00000029290	2.79E-06	4.27E-06	1.31E-06	0.31	-1.7	7.7e-07	2.4e-05
Tmod2	ENSMUSG00000032186	6.75E-06	1.01E-05	3.41E-06	0.34	-1.6	7.8e-07	2.5e-05
Smad5	ENSMUSG00000021540	1.78E-05	2.55E-05	1.01E-05	0.4	-1.3	8e-07	2.5e-05
Homer1	ENSMUSG00000007617	3.69E-05	5.35E-05	2.03E-05	0.38	-1.4	8.1e-07	2.5e-05
Rprd1a	ENSMUSG00000040446	5.18E-06	7.54E-06	2.82E-06	0.37	-1.4	8.1e-07	2.5e-05
Dos	ENSMUSG00000035640	1.37E-06	2.22E-06	5.17E-07	0.23	-2.1	8.3e-07	2.6e-05
mt-Co1	ENSMUSG00000064351	5.61E-03	3.29E-03	7.94E-03	2.4	1.3	8.4e-07	2.6e-05
Gcnt2	ENSMUSG00000021360	6.12E-06	9.20E-06	3.04E-06	0.33	-1.6	8.5e-07	2.6e-05

Rab27a	ENSMUSG00000032202	3.07E-06	1.38E-06	4.76E-06	3.4	1.8	8.5e-07	2.7e-05
Cacfd1	ENSMUSG00000015488	3.31E-06	5.01E-06	1.60E-06	0.32	-1.7	8.6e-07	2.7e-05
Cd24a	ENSMUSG00000047139	7.18E-05	1.07E-04	3.61E-05	0.34	-1.6	8.7e-07	2.7e-05
Tubb2a	ENSMUSG00000058672	3.11E-06	4.72E-06	1.50E-06	0.32	-1.7	8.7e-07	2.7e-05
Ubc	ENSMUSG00000008348	1.49E-04	2.18E-04	8.00E-05	0.37	-1.4	9e-07	2.8e-05
Rabgef1	ENSMUSG00000025340	3.81E-05	5.39E-05	2.22E-05	0.41	-1.3	9.2e-07	2.8e-05
Ccrn4l	ENSMUSG00000023087	9.36E-06	1.42E-05	4.52E-06	0.32	-1.7	9.3e-07	2.9e-05
Yipf6	ENSMUSG00000047694	3.51E-06	5.26E-06	1.76E-06	0.33	-1.6	9.7e-07	3e-05
Adcy4	ENSMUSG00000022220	4.28E-06	6.24E-06	2.32E-06	0.37	-1.4	9.9e-07	3e-05
Fam132b	ENSMUSG00000047443	6.74E-07	1.21E-06	1.39E-07	0.12	-3.1	9.9e-07	3e-05
D4Wsu53e	ENSMUSG00000037266	1.02E-04	1.60E-04	4.44E-05	0.28	-1.9	1e-06	3.1e-05
Cdkn2aipnl	ENSMUSG00000020392	1.21E-05	1.74E-05	6.76E-06	0.39	-1.4	1e-06	3.1e-05
Thbd	ENSMUSG00000074743	1.87E-05	2.67E-05	1.06E-05	0.4	-1.3	1e-06	3.1e-05
l7Rn6	ENSMUSG00000062797	1.01E-05	1.43E-05	5.83E-06	0.41	-1.3	1e-06	3.1e-05
Adamts12	ENSMUSG00000036040	1.29E-06	1.99E-06	5.89E-07	0.3	-1.8	1e-06	3.1e-05
Zfp131	ENSMUSG00000094870	1.03E-05	1.50E-05	5.58E-06	0.37	-1.4	1.1e-06	3.3e-05
Rab2a	ENSMUSG00000047187	6.11E-05	8.64E-05	3.59E-05	0.42	-1.3	1.2e-06	3.5e-05
Tmed5	ENSMUSG00000063406	1.09E-05	1.54E-05	6.43E-06	0.42	-1.3	1.2e-06	3.5e-05
Atcay	ENSMUSG00000034958	3.28E-06	1.42E-06	5.15E-06	3.6	1.9	1.2e-06	3.5e-05
Samd8	ENSMUSG00000021770	3.41E-05	4.81E-05	2.00E-05	0.42	-1.3	1.2e-06	3.6e-05
Synm	ENSMUSG00000030554	3.17E-04	4.46E-04	1.87E-04	0.42	-1.3	1.2e-06	3.6e-05
Prima1	ENSMUSG00000041669	5.09E-07	9.31E-07	8.81E-08	0.095	-3.4	1.2e-06	3.6e-05
Hmgcs2	ENSMUSG00000027875	9.74E-07	1.63E-06	3.20E-07	0.2	-2.3	1.2e-06	3.6e-05
Gm608	ENSMUSG00000068284	1.92E-05	2.76E-05	1.07E-05	0.39	-1.4	1.2e-06	3.6e-05
Hnrnp3	ENSMUSG00000020069	2.86E-06	4.49E-06	1.23E-06	0.27	-1.9	1.3e-06	3.7e-05
Pon2	ENSMUSG00000032667	7.57E-06	1.08E-05	4.34E-06	0.4	-1.3	1.3e-06	3.7e-05
Tram2	ENSMUSG00000041779	2.26E-06	3.48E-06	1.04E-06	0.3	-1.7	1.3e-06	3.8e-05
B4galt6	ENSMUSG00000056124	1.40E-06	2.12E-06	6.87E-07	0.32	-1.6	1.3e-06	3.8e-05
Sknk1a1	ENSMUSG00000024576	5.38E-05	8.00E-05	2.76E-05	0.34	-1.5	1.3e-06	3.9e-05
Agpat9	ENSMUSG00000029314	4.30E-06	6.50E-06	2.09E-06	0.32	-1.6	1.4e-06	4e-05
Sema3c	ENSMUSG00000028780	2.04E-05	2.89E-05	1.18E-05	0.41	-1.3	1.4e-06	4e-05
Ccn12	ENSMUSG00000029068	1.89E-05	2.76E-05	1.02E-05	0.37	-1.4	1.4e-06	4e-05
Gm16185	ENSMUSG00000084911	1.42E-06	2.40E-06	4.52E-07	0.19	-2.4	1.4e-06	4.1e-05
AL845483.1	ENSMUSG00000097837	1.99E-07	9.15E-09	3.90E-07	43	5.4	1.4e-06	4.1e-05
Snx3	ENSMUSG00000019804	2.07E-05	2.90E-05	1.24E-05	0.43	-1.2	1.4e-06	4.1e-05
Mapk1ip1	ENSMUSG00000041775	1.07E-05	1.53E-05	6.22E-06	0.41	-1.3	1.4e-06	4.1e-05
Slco2a1	ENSMUSG00000032548	2.11E-06	3.20E-06	1.02E-06	0.32	-1.7	1.4e-06	4.1e-05
Tmem230	ENSMUSG00000027341	2.98E-06	4.58E-06	1.38E-06	0.3	-1.7	1.4e-06	4.2e-05
Nr4a2	ENSMUSG00000026826	7.67E-07	1.41E-06	1.25E-07	0.089	-3.5	1.4e-06	4.2e-05
Adamts1	ENSMUSG00000022893	2.56E-05	3.62E-05	1.51E-05	0.42	-1.3	1.4e-06	4.2e-05
Slc25a51	ENSMUSG00000045973	2.18E-05	3.07E-05	1.29E-05	0.42	-1.3	1.5e-06	4.2e-05
Reep3	ENSMUSG00000019873	8.51E-06	1.20E-05	5.00E-06	0.42	-1.3	1.5e-06	4.3e-05
Fmnl2	ENSMUSG00000036053	6.77E-06	1.03E-05	3.29E-06	0.32	-1.6	1.5e-06	4.3e-05
Gm12355	ENSMUSG00000078134	4.08E-07	7.22E-07	9.49E-08	0.13	-2.9	1.5e-06	4.3e-05
Cul3	ENSMUSG00000004364	1.85E-05	2.60E-05	1.11E-05	0.43	-1.2	1.5e-06	4.4e-05
Tmcc1	ENSMUSG00000030126	2.61E-05	3.67E-05	1.55E-05	0.42	-1.2	1.6e-06	4.5e-05
Arf4	ENSMUSG00000021877	8.03E-06	1.15E-05	4.57E-06	0.4	-1.3	1.6e-06	4.5e-05
Klhl21	ENSMUSG00000073700	3.17E-05	4.47E-05	1.87E-05	0.42	-1.3	1.6e-06	4.5e-05
Fam19a5	ENSMUSG00000054863	1.67E-06	2.58E-06	7.60E-07	0.29	-1.8	1.6e-06	4.5e-05
Zhx2	ENSMUSG00000071757	1.55E-05	2.18E-05	9.15E-06	0.42	-1.3	1.6e-06	4.5e-05
Cish	ENSMUSG00000032578	1.65E-05	2.47E-05	8.39E-06	0.34	-1.6	1.7e-06	4.8e-05
Grk5	ENSMUSG00000003228	2.43E-06	3.56E-06	1.29E-06	0.36	-1.5	1.7e-06	4.9e-05
Kif3c	ENSMUSG00000020668	2.48E-05	3.50E-05	1.46E-05	0.42	-1.3	1.8e-06	4.9e-05
Iws1	ENSMUSG00000024384	9.85E-06	1.40E-05	5.70E-06	0.41	-1.3	1.8e-06	5e-05
Gdap1	ENSMUSG00000025777	3.34E-06	5.10E-06	1.59E-06	0.31	-1.7	1.8e-06	5e-05
Bptf	ENSMUSG00000040481	1.32E-05	1.87E-05	7.72E-06	0.41	-1.3	1.8e-06	5.1e-05
Man1a	ENSMUSG00000003746	1.26E-05	1.77E-05	7.61E-06	0.43	-1.2	1.8e-06	5.1e-05
Sfl	ENSMUSG00000024949	1.97E-05	2.78E-05	1.16E-05	0.42	-1.3	1.9e-06	5.2e-05
Slc20a2	ENSMUSG00000037656	3.90E-05	2.42E-05	5.38E-05	2.2	1.2	1.9e-06	5.3e-05
Cdon	ENSMUSG00000038119	7.72E-06	1.14E-05	4.02E-06	0.35	-1.5	1.9e-06	5.3e-05
Ddx3x	ENSMUSG00000000787	7.69E-05	1.10E-04	4.33E-05	0.39	-1.4	1.9e-06	5.3e-05
Stk11	ENSMUSG00000003068	3.12E-05	4.31E-05	1.92E-05	0.44	-1.2	2e-06	5.4e-05
Luc7l3	ENSMUSG00000020863	1.50E-05	2.16E-05	8.36E-06	0.39	-1.4	2e-06	5.4e-05
Cd38	ENSMUSG00000029084	3.69E-06	5.39E-06	1.99E-06	0.37	-1.4	2e-06	5.4e-05
Ube2g2	ENSMUSG00000009293	3.32E-05	4.71E-05	1.93E-05	0.41	-1.3	2e-06	5.5e-05
Pdpk1	ENSMUSG00000024122	2.10E-05	2.96E-05	1.24E-05	0.42	-1.3	2e-06	5.5e-05
Zbtb40	ENSMUSG00000060862	7.16E-06	1.05E-05	3.81E-06	0.36	-1.5	2e-06	5.6e-05
Ing2	ENSMUSG00000063049	4.01E-06	5.99E-06	2.03E-06	0.34	-1.6	2.1e-06	5.6e-05

Piwi12	ENSMUSG00000033644	1.19E-06	1.97E-06	4.06E-07	0.21	-2.3	2.1e-06	5.6e-05
Cdc42bpg	ENSMUSG00000024769	2.85E-06	4.25E-06	1.46E-06	0.34	-1.5	2.1e-06	5.7e-05
Mbtps2	ENSMUSG00000046873	3.70E-06	5.48E-06	1.91E-06	0.35	-1.5	2.1e-06	5.7e-05
Kcnn2	ENSMUSG00000054477	9.37E-07	4.13E-07	1.46E-06	3.5	1.8	2.1e-06	5.7e-05
Ndrp2	ENSMUSG00000004558	3.08E-04	4.34E-04	1.83E-04	0.42	-1.2	2.2e-06	5.8e-05
Eif4e3	ENSMUSG00000093661	8.99E-06	1.33E-05	4.65E-06	0.35	-1.5	2.2e-06	5.9e-05
Srsf6	ENSMUSG00000016921	2.20E-05	3.10E-05	1.31E-05	0.42	-1.2	2.2e-06	5.9e-05
Pde10a	ENSMUSG00000023868	2.38E-06	3.71E-06	1.05E-06	0.28	-1.8	2.2e-06	6e-05
Myoz3	ENSMUSG00000049173	1.15E-05	1.64E-05	6.65E-06	0.4	-1.3	2.2e-06	6e-05
Psd3	ENSMUSG00000030465	2.24E-05	3.15E-05	1.33E-05	0.42	-1.2	2.2e-06	6e-05
Gm10254	ENSMUSG00000069011	2.19E-06	3.45E-06	9.32E-07	0.27	-1.9	2.3e-06	6.2e-05
Chtop	ENSMUSG00000001017	2.41E-05	3.36E-05	1.46E-05	0.43	-1.2	2.3e-06	6.2e-05
Spag7	ENSMUSG00000018287	9.41E-06	1.30E-05	5.78E-06	0.44	-1.2	2.3e-06	6.2e-05
Strbp	ENSMUSG00000026915	9.40E-06	1.34E-05	5.42E-06	0.41	-1.3	2.4e-06	6.3e-05
Zzz3	ENSMUSG00000039068	1.04E-05	1.46E-05	6.12E-06	0.42	-1.3	2.4e-06	6.3e-05
Tagln2	ENSMUSG00000026547	4.41E-06	6.52E-06	2.30E-06	0.35	-1.5	2.5e-06	6.6e-05
Zfp871	ENSMUSG00000024298	7.11E-06	1.05E-05	3.71E-06	0.35	-1.5	2.5e-06	6.6e-05
Map4k4	ENSMUSG00000026074	1.26E-05	1.77E-05	7.49E-06	0.42	-1.2	2.5e-06	6.6e-05
Sestd1	ENSMUSG00000042272	5.15E-06	7.46E-06	2.83E-06	0.38	-1.4	2.6e-06	6.7e-05
Nwd1	ENSMUSG00000048148	8.35E-07	1.43E-06	2.39E-07	0.17	-2.6	2.6e-06	6.8e-05
Kbtbd8	ENSMUSG00000030031	1.79E-06	2.82E-06	7.58E-07	0.27	-1.9	2.6e-06	6.9e-05
Anapc16	ENSMUSG00000020107	1.71E-05	2.41E-05	1.02E-05	0.42	-1.2	2.7e-06	7e-05
Ccdc91	ENSMUSG00000030301	3.32E-05	4.64E-05	2.00E-05	0.43	-1.2	2.8e-06	7.2e-05
Rraga	ENSMUSG00000070934	1.56E-05	2.20E-05	9.19E-06	0.42	-1.3	2.8e-06	7.2e-05
Gas7	ENSMUSG00000033066	1.13E-05	1.69E-05	5.71E-06	0.34	-1.6	2.8e-06	7.3e-05
Cux2	ENSMUSG00000042589	1.41E-06	6.75E-07	2.15E-06	3.2	1.7	2.8e-06	7.3e-05
Yod1	ENSMUSG00000046404	2.77E-06	4.11E-06	1.44E-06	0.35	-1.5	2.9e-06	7.5e-05
Elp5	ENSMUSG00000018565	5.38E-06	7.79E-06	2.96E-06	0.38	-1.4	2.9e-06	7.5e-05
Fibin	ENSMUSG00000074971	4.18E-06	6.42E-06	1.93E-06	0.3	-1.7	2.9e-06	7.5e-05
Slc20a1	ENSMUSG00000027397	7.73E-06	1.14E-05	4.03E-06	0.35	-1.5	2.9e-06	7.6e-05
Inhbb	ENSMUSG00000037035	8.24E-07	1.41E-06	2.41E-07	0.17	-2.5	3e-06	7.6e-05
Col6a3	ENSMUSG00000048126	8.46E-05	1.19E-04	5.05E-05	0.43	-1.2	3e-06	7.7e-05
Dusp13	ENSMUSG00000021768	4.08E-05	5.73E-05	2.43E-05	0.42	-1.2	3e-06	7.7e-05
Dcbd12	ENSMUSG00000035107	5.98E-06	8.67E-06	3.29E-06	0.38	-1.4	3e-06	7.7e-05
F3	ENSMUSG00000028128	3.82E-06	5.92E-06	1.72E-06	0.29	-1.8	3e-06	7.8e-05
Slc18a1	ENSMUSG00000036330	8.72E-07	1.48E-06	2.62E-07	0.18	-2.5	3.1e-06	7.8e-05
Msl2	ENSMUSG00000066415	7.60E-06	1.10E-05	4.15E-06	0.38	-1.4	3.1e-06	7.9e-05
Fam46b	ENSMUSG00000046694	1.16E-06	2.04E-06	2.79E-07	0.14	-2.9	3.1e-06	7.9e-05
Pnn	ENSMUSG00000020994	4.53E-06	6.58E-06	2.47E-06	0.38	-1.4	3.1e-06	7.9e-05
C1galt1	ENSMUSG00000042460	4.60E-06	6.64E-06	2.55E-06	0.38	-1.4	3.1e-06	7.9e-05
Pdgfra	ENSMUSG00000029231	3.12E-05	4.33E-05	1.92E-05	0.44	-1.2	3.1e-06	8e-05
Clock	ENSMUSG00000029238	1.40E-05	1.98E-05	8.11E-06	0.41	-1.3	3.2e-06	8e-05
S100a6	ENSMUSG00000001025	2.13E-05	3.22E-05	1.04E-05	0.32	-1.6	3.2e-06	8e-05
Ptplb	ENSMUSG00000035376	1.03E-06	1.65E-06	4.17E-07	0.25	-2	3.2e-06	8e-05
Bcl6	ENSMUSG00000022508	2.99E-05	4.19E-05	1.80E-05	0.43	-1.2	3.2e-06	8.1e-05
Pcnp	ENSMUSG00000071533	4.78E-06	6.97E-06	2.58E-06	0.37	-1.4	3.2e-06	8.1e-05
D17Wsu92e	ENSMUSG00000056692	5.99E-05	8.35E-05	3.63E-05	0.44	-1.2	3.2e-06	8.1e-05
Pcnt	ENSMUSG00000001151	5.69E-05	7.94E-05	3.45E-05	0.43	-1.2	3.3e-06	8.2e-05
Elk4	ENSMUSG00000026436	2.10E-05	2.95E-05	1.24E-05	0.42	-1.2	3.3e-06	8.2e-05
Stx16	ENSMUSG00000027522	5.52E-06	7.94E-06	3.11E-06	0.39	-1.4	3.3e-06	8.3e-05
Postn	ENSMUSG00000027750	3.68E-06	5.44E-06	1.92E-06	0.35	-1.5	3.4e-06	8.3e-05
Sec24a	ENSMUSG00000036391	1.80E-05	2.53E-05	1.06E-05	0.42	-1.3	3.4e-06	8.4e-05
Pogk	ENSMUSG00000040596	1.14E-05	1.62E-05	6.52E-06	0.4	-1.3	3.4e-06	8.5e-05
Sypl	ENSMUSG00000020570	5.05E-05	7.05E-05	3.04E-05	0.43	-1.2	3.4e-06	8.5e-05
Rock1	ENSMUSG00000024290	5.85E-06	8.31E-06	3.38E-06	0.41	-1.3	3.4e-06	8.5e-05
C5ar1	ENSMUSG00000049130	1.39E-06	2.12E-06	6.56E-07	0.31	-1.7	3.5e-06	8.6e-05
Arl4a	ENSMUSG00000047446	8.82E-06	1.25E-05	5.11E-06	0.41	-1.3	3.5e-06	8.7e-05
Tecr	ENSMUSG00000031708	3.66E-05	5.11E-05	2.22E-05	0.43	-1.2	3.6e-06	8.8e-05
Cers6	ENSMUSG00000027035	1.84E-06	3.00E-06	6.72E-07	0.22	-2.2	3.6e-06	8.9e-05
Mier3	ENSMUSG00000032727	6.65E-06	9.59E-06	3.71E-06	0.39	-1.4	3.7e-06	9.1e-05
Mbnl1	ENSMUSG00000027763	1.67E-04	2.32E-04	1.02E-04	0.44	-1.2	3.7e-06	9.1e-05
Anxa7	ENSMUSG00000021814	3.73E-05	5.19E-05	2.27E-05	0.44	-1.2	3.7e-06	9.1e-05
Polk	ENSMUSG00000021668	9.35E-06	1.33E-05	5.39E-06	0.4	-1.3	3.7e-06	9.1e-05
Rrs1	ENSMUSG00000061024	5.42E-06	7.98E-06	2.86E-06	0.36	-1.5	3.8e-06	9.2e-05
Mdfi	ENSMUSG00000032717	1.90E-06	3.10E-07	3.50E-06	11	3.5	3.8e-06	9.2e-05
Cnot4	ENSMUSG00000038784	7.90E-06	1.13E-05	4.50E-06	0.4	-1.3	3.9e-06	9.4e-05
Ago2	ENSMUSG00000036698	2.63E-05	3.68E-05	1.58E-05	0.43	-1.2	3.9e-06	9.4e-05
Atg4c	ENSMUSG00000028550	3.07E-06	4.51E-06	1.62E-06	0.36	-1.5	3.9e-06	9.4e-05

Gm7278	ENSMUSG00000080950	4.11E-07	7.62E-07	5.97E-08	0.078	-3.7	3.9e-06	9.5e-05
Nckap1	ENSMUSG00000027002	2.12E-05	3.03E-05	1.21E-05	0.4	-1.3	3.9e-06	9.5e-05
Shc2	ENSMUSG00000020312	6.32E-06	9.09E-06	3.55E-06	0.39	-1.4	4.1e-06	9.8e-05
Jak1	ENSMUSG00000028530	6.51E-05	9.18E-05	3.85E-05	0.42	-1.3	4.1e-06	9.8e-05
Pcx	ENSMUSG00000024892	3.65E-05	5.06E-05	2.24E-05	0.44	-1.2	4.1e-06	9.9e-05
Hgsnat	ENSMUSG00000037260	8.31E-06	1.19E-05	4.74E-06	0.4	-1.3	4.1e-06	9.9e-05
Lats1	ENSMUSG00000040021	1.07E-05	1.51E-05	6.23E-06	0.41	-1.3	4.2e-06	9.9e-05
Cep170b	ENSMUSG00000072825	6.79E-06	9.60E-06	3.98E-06	0.41	-1.3	4.2e-06	0.0001
Sgms1	ENSMUSG00000040451	2.72E-05	3.79E-05	1.64E-05	0.43	-1.2	4.2e-06	0.0001
Ankrd27	ENSMUSG00000034867	1.25E-05	7.74E-06	1.73E-05	2.2	1.2	4.2e-06	0.0001
Usp45	ENSMUSG00000040455	9.07E-06	1.29E-05	5.26E-06	0.41	-1.3	4.3e-06	0.0001
Tmem246	ENSMUSG00000039611	1.22E-05	1.74E-05	7.03E-06	0.4	-1.3	4.4e-06	0.0001
Qser1	ENSMUSG00000074994	1.85E-05	2.60E-05	1.11E-05	0.43	-1.2	4.4e-06	0.0001
Phc3	ENSMUSG00000037652	7.11E-06	1.02E-05	4.04E-06	0.4	-1.3	4.4e-06	0.0001
Rad54l2	ENSMUSG00000040661	5.75E-06	8.29E-06	3.22E-06	0.39	-1.4	4.5e-06	0.00011
Spock2	ENSMUSG00000058297	3.85E-06	5.62E-06	2.08E-06	0.37	-1.4	4.5e-06	0.00011
Fat2	ENSMUSG00000055333	1.51E-06	2.75E-07	2.75E-06	10	3.3	4.6e-06	0.00011
Shisa5	ENSMUSG00000025647	6.16E-06	8.70E-06	3.62E-06	0.42	-1.3	4.7e-06	0.00011
Tnks2	ENSMUSG00000024811	6.06E-05	8.43E-05	3.70E-05	0.44	-1.2	4.7e-06	0.00011
Gfpt2	ENSMUSG00000020363	9.75E-06	1.38E-05	5.66E-06	0.41	-1.3	4.8e-06	0.00011
Pptc7	ENSMUSG00000038582	6.46E-05	9.03E-05	3.89E-05	0.43	-1.2	4.8e-06	0.00011
Pfkfb3	ENSMUSG00000026773	3.16E-05	4.46E-05	1.87E-05	0.42	-1.3	4.8e-06	0.00011
Nov	ENSMUSG00000037362	4.99E-06	7.18E-06	2.79E-06	0.39	-1.4	4.8e-06	0.00011
Zfp644	ENSMUSG00000049606	2.86E-05	4.05E-05	1.67E-05	0.41	-1.3	5e-06	0.00012
Mtmr10	ENSMUSG00000030522	1.38E-05	1.93E-05	8.17E-06	0.42	-1.2	5e-06	0.00012
Anp32e	ENSMUSG00000015749	2.42E-05	3.35E-05	1.50E-05	0.45	-1.2	5.1e-06	0.00012
Zfp146	ENSMUSG00000037029	1.05E-05	1.48E-05	6.20E-06	0.42	-1.3	5.2e-06	0.00012
Zfp91	ENSMUSG00000024695	9.42E-05	1.31E-04	5.78E-05	0.44	-1.2	5.3e-06	0.00012
Ccdc50	ENSMUSG00000038127	5.38E-05	7.48E-05	3.27E-05	0.44	-1.2	5.3e-06	0.00012
Tgfb2	ENSMUSG00000039239	1.16E-05	1.67E-05	6.41E-06	0.38	-1.4	5.3e-06	0.00012
Atg16l2	ENSMUSG00000047767	1.98E-06	3.01E-06	9.45E-07	0.31	-1.7	5.4e-06	0.00012
Gm12185	ENSMUSG00000048852	8.14E-07	2.45E-07	1.38E-06	5.7	2.5	5.4e-06	0.00012
Sh3d19	ENSMUSG00000028082	6.29E-06	8.97E-06	3.61E-06	0.4	-1.3	5.6e-06	0.00013
Ahnak2	ENSMUSG00000072812	6.43E-06	9.26E-06	3.61E-06	0.39	-1.4	5.6e-06	0.00013
Gzmm	ENSMUSG00000054206	1.97E-06	2.97E-06	9.68E-07	0.33	-1.6	5.6e-06	0.00013
Efemp1	ENSMUSG00000020467	4.51E-06	6.53E-06	2.49E-06	0.38	-1.4	5.7e-06	0.00013
Eif1ax	ENSMUSG00000067194	2.70E-05	3.75E-05	1.66E-05	0.44	-1.2	5.7e-06	0.00013
Adig	ENSMUSG00000044405	1.08E-06	3.59E-07	1.81E-06	5	2.3	5.7e-06	0.00013
Sigmar1	ENSMUSG00000036078	2.97E-06	4.39E-06	1.56E-06	0.35	-1.5	5.7e-06	0.00013
Amd-ps3	ENSMUSG00000060096	4.44E-06	8.34E-06	5.45E-07	0.065	-3.9	5.8e-06	0.00013
Jhdm1d	ENSMUSG00000042599	1.97E-05	2.75E-05	1.19E-05	0.43	-1.2	6e-06	0.00013
Kif26b	ENSMUSG00000026494	1.74E-06	8.01E-07	2.69E-06	3.4	1.7	6.1e-06	0.00014
Wdr44	ENSMUSG00000036769	1.03E-05	1.52E-05	5.47E-06	0.36	-1.5	6.3e-06	0.00014
Galnt16	ENSMUSG00000021130	5.04E-06	7.34E-06	2.74E-06	0.37	-1.4	6.3e-06	0.00014
Pabpc1	ENSMUSG00000022283	1.33E-05	2.00E-05	6.63E-06	0.33	-1.6	6.3e-06	0.00014
Snrnp35	ENSMUSG00000029402	4.15E-06	6.06E-06	2.24E-06	0.37	-1.4	6.3e-06	0.00014
Slc37a3	ENSMUSG00000029924	4.26E-06	6.14E-06	2.38E-06	0.39	-1.4	6.4e-06	0.00014
Xdh	ENSMUSG00000024066	2.91E-05	4.05E-05	1.77E-05	0.44	-1.2	6.4e-06	0.00014
Slc3a2	ENSMUSG00000010095	1.17E-05	1.69E-05	6.62E-06	0.39	-1.3	6.5e-06	0.00015
Rpl24	ENSMUSG00000022601	1.17E-05	1.79E-05	5.55E-06	0.31	-1.7	6.5e-06	0.00015
Msr1	ENSMUSG00000025044	1.37E-06	2.39E-06	3.58E-07	0.15	-2.7	6.5e-06	0.00015
Nfat5	ENSMUSG00000003847	1.10E-05	1.54E-05	6.54E-06	0.42	-1.2	6.6e-06	0.00015
Pacs2	ENSMUSG00000021143	1.35E-05	1.87E-05	8.27E-06	0.44	-1.2	6.6e-06	0.00015
Socs2	ENSMUSG00000020027	5.00E-06	7.06E-06	2.95E-06	0.42	-1.3	6.6e-06	0.00015
Tmem128	ENSMUSG00000067365	3.37E-06	4.89E-06	1.84E-06	0.38	-1.4	6.7e-06	0.00015
Fem1b	ENSMUSG00000032244	1.73E-05	2.42E-05	1.04E-05	0.43	-1.2	6.8e-06	0.00015
Gm22661	ENSMUSG00000077380	4.10E-07	7.06E-07	1.13E-07	0.16	-2.6	7e-06	0.00015
Dolpp1	ENSMUSG00000026856	5.41E-06	8.05E-06	2.77E-06	0.34	-1.5	7e-06	0.00015
Dpp8	ENSMUSG00000032393	4.55E-05	6.30E-05	2.80E-05	0.45	-1.2	7.1e-06	0.00016
Pank2	ENSMUSG00000037514	6.43E-06	9.68E-06	3.17E-06	0.33	-1.6	7.1e-06	0.00016
Slc25a24	ENSMUSG00000040322	2.43E-06	3.74E-06	1.12E-06	0.3	-1.7	7.1e-06	0.00016
Six2	ENSMUSG00000024134	1.53E-06	2.43E-06	6.21E-07	0.26	-2	7.2e-06	0.00016
Itgb3	ENSMUSG00000020689	1.04E-06	1.73E-06	3.54E-07	0.2	-2.3	7.2e-06	0.00016
Adpgk	ENSMUSG00000025236	5.57E-06	8.18E-06	2.96E-06	0.36	-1.5	7.3e-06	0.00016
Pias2	ENSMUSG00000025423	1.48E-05	2.09E-05	8.62E-06	0.41	-1.3	7.3e-06	0.00016
Plod2	ENSMUSG00000032374	1.16E-06	1.78E-06	5.38E-07	0.3	-1.7	7.3e-06	0.00016
Thrb	ENSMUSG00000021779	1.23E-05	1.73E-05	7.33E-06	0.42	-1.2	7.4e-06	0.00016
H6pd	ENSMUSG00000028980	3.32E-05	4.55E-05	2.09E-05	0.46	-1.1	7.4e-06	0.00016

S100a4	ENSMUSG00000001020	3.77E-06	5.94E-06	1.61E-06	0.27	-1.9	7.4e-06	0.00016
Tmpo	ENSMUSG00000019961	3.91E-05	5.42E-05	2.41E-05	0.44	-1.2	7.7e-06	0.00017
Ccp110	ENSMUSG00000033904	2.10E-06	3.22E-06	9.84E-07	0.31	-1.7	7.7e-06	0.00017
Ago3	ENSMUSG00000028842	6.73E-06	9.51E-06	3.95E-06	0.42	-1.3	7.7e-06	0.00017
Pdia4	ENSMUSG00000025823	7.93E-06	1.11E-05	4.80E-06	0.43	-1.2	7.7e-06	0.00017
Nek9	ENSMUSG00000034290	1.10E-04	1.52E-04	6.74E-05	0.44	-1.2	7.7e-06	0.00017
Serinc3	ENSMUSG00000017707	9.04E-05	1.27E-04	5.38E-05	0.42	-1.2	7.7e-06	0.00017
Prkacb	ENSMUSG00000005034	1.83E-05	2.52E-05	1.13E-05	0.45	-1.2	7.8e-06	0.00017
Nktr	ENSMUSG00000032525	1.49E-05	2.10E-05	8.86E-06	0.42	-1.2	7.8e-06	0.00017
Smarca5	ENSMUSG00000031715	5.54E-06	8.13E-06	2.95E-06	0.36	-1.5	7.8e-06	0.00017
Frat2	ENSMUSG00000047604	1.66E-06	2.59E-06	7.35E-07	0.28	-1.8	7.9e-06	0.00017
Itga5	ENSMUSG00000000555	6.78E-06	9.80E-06	3.76E-06	0.38	-1.4	8e-06	0.00017
Tmem43	ENSMUSG00000030095	2.33E-05	3.36E-05	1.30E-05	0.39	-1.4	8e-06	0.00017
Rnf103	ENSMUSG00000052656	7.33E-06	1.04E-05	4.27E-06	0.41	-1.3	8e-06	0.00017
Acad12	ENSMUSG00000042647	8.00E-06	4.65E-06	1.14E-05	2.4	1.3	8e-06	0.00017
Gm11889	ENSMUSG00000082876	1.00E-06	1.61E-06	3.96E-07	0.25	-2	8e-06	0.00017
Cblb	ENSMUSG00000022637	1.06E-05	1.53E-05	5.83E-06	0.38	-1.4	8e-06	0.00017
Sulf1	ENSMUSG00000016918	1.21E-05	1.76E-05	6.66E-06	0.38	-1.4	8e-06	0.00017
Col4a3bp	ENSMUSG00000021669	1.34E-05	2.05E-05	6.20E-06	0.3	-1.7	8.1e-06	0.00017
Mir149	ENSMUSG000000065470	1.08E-06	1.72E-06	4.41E-07	0.26	-2	8.1e-06	0.00017
Fndc3b	ENSMUSG00000039286	1.25E-05	1.74E-05	7.60E-06	0.44	-1.2	8.1e-06	0.00017
Ildr2	ENSMUSG00000040612	2.84E-06	4.25E-06	1.43E-06	0.34	-1.6	8.1e-06	0.00017
A4galt	ENSMUSG00000047878	3.12E-06	4.46E-06	1.78E-06	0.4	-1.3	8.1e-06	0.00017
Stk38	ENSMUSG00000024006	1.17E-05	1.63E-05	7.05E-06	0.43	-1.2	8.2e-06	0.00017
Ryk	ENSMUSG00000032547	2.00E-05	2.76E-05	1.24E-05	0.45	-1.1	8.2e-06	0.00017
Gm17709	ENSMUSG00000091952	1.34E-06	2.42E-06	2.53E-07	0.1	-3.3	8.2e-06	0.00017
Sgk1	ENSMUSG00000019970	1.41E-04	2.15E-04	6.73E-05	0.31	-1.7	8.2e-06	0.00017
Fgfbp1	ENSMUSG00000048373	5.75E-06	9.04E-06	2.46E-06	0.27	-1.9	8.3e-06	0.00017
Bach2	ENSMUSG00000040270	1.56E-06	2.39E-06	7.32E-07	0.31	-1.7	8.4e-06	0.00017
Azin1	ENSMUSG00000037458	1.64E-05	2.27E-05	1.01E-05	0.45	-1.2	8.4e-06	0.00017
Ifi205	ENSMUSG00000054203	3.51E-06	5.20E-06	1.83E-06	0.35	-1.5	8.6e-06	0.00018
Bves	ENSMUSG00000071317	1.27E-05	1.77E-05	7.69E-06	0.43	-1.2	8.9e-06	0.00018
Slc43a3	ENSMUSG00000027074	2.28E-05	3.24E-05	1.32E-05	0.41	-1.3	8.9e-06	0.00018
Nudt4	ENSMUSG00000020029	6.60E-05	9.11E-05	4.09E-05	0.45	-1.2	9e-06	0.00019
Npm1	ENSMUSG00000057113	2.73E-06	3.97E-06	1.48E-06	0.37	-1.4	9e-06	0.00019
Tada2a	ENSMUSG00000018651	4.84E-06	7.10E-06	2.58E-06	0.36	-1.5	9.1e-06	0.00019
Atf1	ENSMUSG00000023027	3.99E-06	6.65E-06	1.33E-06	0.2	-2.3	9.1e-06	0.00019
Gxylt1	ENSMUSG00000036197	3.16E-06	4.58E-06	1.73E-06	0.38	-1.4	9.2e-06	0.00019
Pkd2	ENSMUSG00000034462	9.84E-06	1.38E-05	5.86E-06	0.42	-1.2	9.4e-06	0.00019
mt-Tm	ENSMUSG00000064344	7.43E-03	3.33E-03	1.15E-02	3.5	1.8	9.4e-06	0.00019
Atf2	ENSMUSG00000027104	6.45E-06	9.08E-06	3.83E-06	0.42	-1.2	9.4e-06	0.00019
Atp13a3	ENSMUSG00000022533	1.70E-05	2.34E-05	1.06E-05	0.46	-1.1	9.4e-06	0.00019
Sparc	ENSMUSG00000018593	9.75E-05	1.36E-04	5.92E-05	0.44	-1.2	9.5e-06	0.00019
Angptl4	ENSMUSG00000002289	3.43E-06	5.75E-06	1.11E-06	0.19	-2.4	9.5e-06	0.00019
Spon2	ENSMUSG00000037379	6.63E-07	1.08E-06	2.44E-07	0.23	-2.2	9.5e-06	0.00019
Map1b	ENSMUSG00000052727	1.06E-05	1.51E-05	6.19E-06	0.41	-1.3	9.6e-06	0.0002
Cdkn1a	ENSMUSG00000023067	1.16E-05	1.94E-05	3.89E-06	0.2	-2.3	9.6e-06	0.0002
Rfx2	ENSMUSG00000024206	9.57E-07	1.55E-06	3.62E-07	0.23	-2.1	9.7e-06	0.0002
Rock2	ENSMUSG00000020580	5.07E-05	6.95E-05	3.19E-05	0.46	-1.1	9.8e-06	0.0002
Mdm4	ENSMUSG00000054387	4.67E-06	6.78E-06	2.56E-06	0.38	-1.4	9.8e-06	0.0002
Kdm4a	ENSMUSG00000033326	1.21E-05	1.68E-05	7.37E-06	0.44	-1.2	9.9e-06	0.0002
Rpl15	ENSMUSG00000012405	4.29E-06	6.49E-06	2.09E-06	0.32	-1.6	1e-05	0.0002
Gm22676	ENSMUSG00000080622	1.23E-06	1.90E-06	5.47E-07	0.29	-1.8	1e-05	0.0002
Pid1	ENSMUSG00000045658	3.36E-06	4.89E-06	1.83E-06	0.38	-1.4	1e-05	0.0002
Hnrnpu	ENSMUSG00000039630	4.29E-05	5.90E-05	2.67E-05	0.45	-1.1	1e-05	0.0002
Nexn	ENSMUSG00000039103	3.33E-05	4.92E-05	1.73E-05	0.35	-1.5	1e-05	0.0002
Zmynd11	ENSMUSG00000021156	1.86E-05	2.56E-05	1.16E-05	0.45	-1.1	1e-05	0.0002
Pafah1b1	ENSMUSG00000020745	7.05E-05	9.72E-05	4.38E-05	0.45	-1.2	1e-05	0.0002
Cwf19l2	ENSMUSG00000025898	7.13E-06	1.00E-05	4.22E-06	0.42	-1.3	1e-05	0.00021
Anp32b	ENSMUSG00000028333	5.07E-06	7.19E-06	2.95E-06	0.41	-1.3	1e-05	0.00021
Rhbdl3	ENSMUSG00000017692	2.29E-06	3.94E-06	6.44E-07	0.16	-2.6	1e-05	0.00021
Zfp652	ENSMUSG00000075595	4.75E-05	6.53E-05	2.97E-05	0.46	-1.1	1.1e-05	0.00021
Afap1l1	ENSMUSG00000033032	3.36E-05	2.16E-05	4.56E-05	2.1	1.1	1.1e-05	0.00021
Ric3	ENSMUSG00000048330	1.96E-06	2.96E-06	9.56E-07	0.32	-1.6	1.1e-05	0.00021
Dbn1	ENSMUSG00000034675	2.97E-06	4.28E-06	1.67E-06	0.39	-1.4	1.1e-05	0.00021
Gm7308	ENSMUSG00000081113	2.34E-06	3.53E-06	1.15E-06	0.33	-1.6	1.1e-05	0.00021
Ugdh	ENSMUSG00000029201	5.65E-06	7.98E-06	3.33E-06	0.42	-1.3	1.1e-05	0.00022
Etnk1	ENSMUSG00000030275	1.21E-05	1.68E-05	7.32E-06	0.44	-1.2	1.1e-05	0.00022

Rhoj	ENSMUSG00000046768	8.55E-06	1.20E-05	5.08E-06	0.42	-1.2	1.1e-05	0.00022
Tmem68	ENSMUSG00000028232	2.14E-06	3.28E-06	9.91E-07	0.3	-1.7	1.1e-05	0.00023
Srsf10	ENSMUSG00000028676	5.61E-06	8.10E-06	3.12E-06	0.39	-1.4	1.2e-05	0.00023
Uap1	ENSMUSG00000026670	2.04E-05	2.80E-05	1.27E-05	0.45	-1.1	1.2e-05	0.00023
Gmeb1	ENSMUSG00000028901	3.63E-06	5.24E-06	2.02E-06	0.39	-1.4	1.2e-05	0.00023
Celf2	ENSMUSG00000002107	2.29E-05	3.14E-05	1.45E-05	0.46	-1.1	1.2e-05	0.00023
Mbnl2	ENSMUSG00000022139	1.27E-04	1.76E-04	7.85E-05	0.45	-1.2	1.2e-05	0.00023
1810055G02Rik	ENSMUSG00000035372	2.62E-06	4.03E-06	1.20E-06	0.3	-1.7	1.2e-05	0.00024
Glce	ENSMUSG00000032252	6.40E-06	9.02E-06	3.78E-06	0.42	-1.3	1.2e-05	0.00024
Bche	ENSMUSG00000027792	2.68E-06	1.56E-06	3.80E-06	2.4	1.3	1.2e-05	0.00024
Kpna1	ENSMUSG00000022905	1.10E-04	1.55E-04	6.56E-05	0.42	-1.2	1.3e-05	0.00024
Ptplad1	ENSMUSG00000033629	7.14E-06	1.02E-05	4.07E-06	0.4	-1.3	1.3e-05	0.00025
Ptbp1	ENSMUSG00000006498	6.46E-06	9.10E-06	3.83E-06	0.42	-1.2	1.3e-05	0.00025
Dnajb11	ENSMUSG00000004460	1.09E-05	1.51E-05	6.71E-06	0.45	-1.2	1.3e-05	0.00025
Bms1	ENSMUSG00000030138	9.60E-06	1.35E-05	5.66E-06	0.42	-1.3	1.3e-05	0.00025
Clec4d	ENSMUSG00000030144	6.51E-07	1.27E-06	3.11E-08	0.025	-5.4	1.3e-05	0.00025
Rny1	ENSMUSG000000065701	1.25E-03	1.72E-03	7.84E-04	0.45	-1.1	1.3e-05	0.00025
Unc5a	ENSMUSG00000025876	3.28E-06	4.82E-06	1.73E-06	0.36	-1.5	1.3e-05	0.00026
Gm26293	ENSMUSG00000077358	1.36E-06	2.10E-06	6.12E-07	0.29	-1.8	1.3e-05	0.00026
Ing3	ENSMUSG00000029670	3.07E-06	4.54E-06	1.60E-06	0.35	-1.5	1.3e-05	0.00026
Ubl3	ENSMUSG00000001687	4.74E-05	6.88E-05	2.59E-05	0.38	-1.4	1.4e-05	0.00026
Dpt	ENSMUSG00000026574	3.24E-05	4.38E-05	2.09E-05	0.48	-1.1	1.4e-05	0.00026
Dtx4	ENSMUSG00000039982	4.69E-06	6.78E-06	2.60E-06	0.38	-1.4	1.4e-05	0.00027
Leo1	ENSMUSG00000042487	8.87E-06	1.25E-05	5.26E-06	0.42	-1.2	1.4e-05	0.00027
Zbtb39	ENSMUSG00000044617	4.94E-06	7.02E-06	2.86E-06	0.41	-1.3	1.4e-05	0.00027
Myl4	ENSMUSG00000061086	1.24E-06	2.05E-06	4.42E-07	0.22	-2.2	1.4e-05	0.00027
Tob2	ENSMUSG00000048546	6.67E-05	9.39E-05	3.94E-05	0.42	-1.3	1.4e-05	0.00027
Dmtf1	ENSMUSG00000042508	4.81E-06	6.94E-06	2.68E-06	0.39	-1.4	1.4e-05	0.00027
Ptp4a2	ENSMUSG00000028788	1.71E-04	2.34E-04	1.07E-04	0.46	-1.1	1.4e-05	0.00027
Ivns1abp	ENSMUSG00000023150	6.11E-05	8.48E-05	3.74E-05	0.44	-1.2	1.4e-05	0.00027
Fbxo28	ENSMUSG00000047539	1.29E-05	1.83E-05	7.56E-06	0.41	-1.3	1.4e-05	0.00027
Naa16	ENSMUSG00000022020	3.68E-06	5.39E-06	1.98E-06	0.37	-1.4	1.4e-05	0.00027
SrpX	ENSMUSG00000090084	4.71E-06	6.62E-06	2.80E-06	0.42	-1.2	1.5e-05	0.00028
Cpxm2	ENSMUSG00000030862	7.65E-06	4.94E-06	1.04E-05	2.1	1.1	1.5e-05	0.00028
Col4a1	ENSMUSG00000031502	1.04E-04	1.51E-04	5.71E-05	0.38	-1.4	1.5e-05	0.00028
4930429F24Rik	ENSMUSG00000086918	2.80E-06	4.16E-06	1.45E-06	0.35	-1.5	1.5e-05	0.00028
Pcbp2	ENSMUSG00000056851	9.67E-06	1.47E-05	4.68E-06	0.32	-1.6	1.5e-05	0.00028
Rtf1	ENSMUSG00000027304	6.79E-06	9.55E-06	4.03E-06	0.42	-1.2	1.5e-05	0.00028
Asb11	ENSMUSG00000031382	5.09E-05	7.21E-05	2.96E-05	0.41	-1.3	1.5e-05	0.00028
Aff4	ENSMUSG00000049470	3.70E-05	5.08E-05	2.31E-05	0.45	-1.1	1.5e-05	0.00028
Aldh1l1	ENSMUSG00000030088	7.29E-06	4.29E-06	1.03E-05	2.4	1.3	1.5e-05	0.00029
Iqgap2	ENSMUSG00000021676	1.89E-06	2.85E-06	9.35E-07	0.33	-1.6	1.6e-05	0.00029
Slc2a3	ENSMUSG00000003153	4.43E-06	6.37E-06	2.50E-06	0.39	-1.4	1.6e-05	0.00029
2700089E24Rik	ENSMUSG00000072704	4.42E-05	6.01E-05	2.82E-05	0.47	-1.1	1.6e-05	0.00029
Sfxn3	ENSMUSG00000025212	5.24E-06	7.48E-06	3.00E-06	0.4	-1.3	1.6e-05	0.00029
Col5a2	ENSMUSG00000026042	2.35E-05	3.46E-05	1.23E-05	0.36	-1.5	1.6e-05	0.00029
Cacul1	ENSMUSG00000033417	1.38E-05	1.93E-05	8.29E-06	0.43	-1.2	1.6e-05	0.00029
Psme3	ENSMUSG00000078652	1.38E-05	1.91E-05	8.56E-06	0.45	-1.2	1.6e-05	0.00029
Endod1	ENSMUSG00000037419	2.86E-06	4.09E-06	1.64E-06	0.4	-1.3	1.6e-05	0.00029
Itih2	ENSMUSG00000037254	5.68E-07	9.82E-07	1.54E-07	0.16	-2.7	1.6e-05	0.00029
Uhrf2	ENSMUSG00000024817	7.09E-06	9.94E-06	4.23E-06	0.43	-1.2	1.6e-05	0.00029
Tmem30a	ENSMUSG00000032328	3.31E-05	4.53E-05	2.10E-05	0.46	-1.1	1.6e-05	0.00029
Dap	ENSMUSG00000039168	2.12E-06	3.09E-06	1.16E-06	0.37	-1.4	1.6e-05	0.00029
Has2	ENSMUSG00000022367	1.09E-06	1.76E-06	4.09E-07	0.23	-2.1	1.6e-05	0.00029
Dlg1	ENSMUSG00000022770	1.97E-05	2.68E-05	1.26E-05	0.47	-1.1	1.6e-05	0.00029
Cystm1	ENSMUSG00000046727	3.03E-05	4.05E-05	2.00E-05	0.49	-1	1.6e-05	0.0003
Tpm4	ENSMUSG00000031799	1.56E-05	2.22E-05	8.95E-06	0.4	-1.3	1.7e-05	0.0003
Ube2q2	ENSMUSG00000032307	6.74E-06	9.39E-06	4.10E-06	0.44	-1.2	1.7e-05	0.0003
Slc16a9	ENSMUSG00000037762	6.43E-06	9.05E-06	3.81E-06	0.42	-1.2	1.7e-05	0.00031
Arl5a	ENSMUSG00000036093	1.54E-05	2.12E-05	9.51E-06	0.45	-1.2	1.7e-05	0.00031
Sept5	ENSMUSG00000072214	1.89E-06	2.92E-06	8.60E-07	0.29	-1.8	1.7e-05	0.00031
Cab39	ENSMUSG00000036707	8.50E-05	1.18E-04	5.24E-05	0.45	-1.2	1.7e-05	0.00031
Pnrc1	ENSMUSG00000040128	4.40E-05	6.35E-05	2.46E-05	0.39	-1.4	1.7e-05	0.00031
Fam219a	ENSMUSG00000028439	4.78E-06	7.28E-06	2.29E-06	0.31	-1.7	1.7e-05	0.00031
Insig2	ENSMUSG00000003721	2.02E-05	2.75E-05	1.28E-05	0.47	-1.1	1.7e-05	0.00031
Sorbs3	ENSMUSG00000022091	2.06E-05	2.90E-05	1.22E-05	0.42	-1.2	1.7e-05	0.00031
Evi5	ENSMUSG00000011831	8.36E-06	1.16E-05	5.08E-06	0.44	-1.2	1.7e-05	0.00031
Creb1	ENSMUSG00000025958	1.02E-05	1.43E-05	6.23E-06	0.44	-1.2	1.7e-05	0.00031

Atxn1	ENSMUSG00000046876	2.90E-05	4.02E-05	1.78E-05	0.44	-1.2	1.8e-05	0.00032
Zfml	ENSMUSG00000030016	2.24E-05	3.09E-05	1.40E-05	0.45	-1.1	1.8e-05	0.00032
Gas2l1	ENSMUSG00000034201	2.57E-06	3.77E-06	1.36E-06	0.36	-1.5	1.8e-05	0.00032
Nim1	ENSMUSG000000095930	2.05E-06	1.06E-06	3.03E-06	2.9	1.5	1.8e-05	0.00032
Rbm12b1	ENSMUSG00000046667	8.33E-07	1.35E-06	3.19E-07	0.24	-2.1	1.8e-05	0.00032
Col18a1	ENSMUSG00000001435	7.06E-06	9.79E-06	4.33E-06	0.44	-1.2	1.8e-05	0.00032
Ppargc1b	ENSMUSG00000033871	3.21E-06	1.85E-06	4.56E-06	2.5	1.3	1.8e-05	0.00032
Socs7	ENSMUSG00000038485	2.26E-05	3.10E-05	1.42E-05	0.46	-1.1	1.8e-05	0.00032
Dido1	ENSMUSG00000038914	1.91E-05	2.63E-05	1.19E-05	0.45	-1.1	1.8e-05	0.00032
Sept8	ENSMUSG00000018398	8.46E-06	1.18E-05	5.09E-06	0.43	-1.2	1.8e-05	0.00032
Sdhh	ENSMUSG00000009863	1.57E-04	9.73E-05	2.16E-04	2.2	1.2	1.8e-05	0.00032
AC121121.1	ENSMUSG000000097258	8.56E-07	1.41E-06	3.01E-07	0.21	-2.2	1.8e-05	0.00032
Crebzf	ENSMUSG000000051451	4.04E-06	5.75E-06	2.33E-06	0.41	-1.3	1.8e-05	0.00033
Camk2n1	ENSMUSG00000046447	5.36E-06	7.53E-06	3.19E-06	0.42	-1.2	1.8e-05	0.00033
Steap4	ENSMUSG00000012428	2.15E-05	2.99E-05	1.30E-05	0.44	-1.2	1.9e-05	0.00033
Gm15359	ENSMUSG000000081920	6.95E-07	1.14E-06	2.45E-07	0.21	-2.2	1.9e-05	0.00033
Fads3	ENSMUSG00000024664	3.28E-06	4.53E-06	2.03E-06	0.45	-1.2	1.9e-05	0.00033
Fam101b	ENSMUSG00000020846	6.69E-06	1.05E-05	2.91E-06	0.28	-1.8	1.9e-05	0.00033
Jmjd1c	ENSMUSG00000037876	1.93E-05	2.66E-05	1.21E-05	0.46	-1.1	1.9e-05	0.00033
Pikfyve	ENSMUSG00000025949	5.41E-06	7.66E-06	3.17E-06	0.41	-1.3	1.9e-05	0.00033
Taf15	ENSMUSG00000020680	2.41E-06	3.52E-06	1.30E-06	0.37	-1.4	1.9e-05	0.00034
Dpp4	ENSMUSG00000035000	4.19E-06	6.02E-06	2.36E-06	0.39	-1.4	1.9e-05	0.00034
Zfp26	ENSMUSG000000063108	5.61E-06	7.96E-06	3.26E-06	0.41	-1.3	1.9e-05	0.00034
Dnm3os	ENSMUSG000000078190	2.13E-06	3.16E-06	1.11E-06	0.35	-1.5	2e-05	0.00034
Hipk1	ENSMUSG000000008730	2.45E-05	3.37E-05	1.52E-05	0.45	-1.1	2e-05	0.00034
Hoxa10	ENSMUSG00000000938	4.56E-06	6.59E-06	2.52E-06	0.38	-1.4	2e-05	0.00034
Rfx7	ENSMUSG00000037674	1.17E-05	1.63E-05	7.09E-06	0.43	-1.2	2e-05	0.00034
Dhx9	ENSMUSG00000042699	1.33E-05	1.82E-05	8.36E-06	0.46	-1.1	2e-05	0.00034
Gpx8	ENSMUSG00000021760	1.36E-06	2.02E-06	6.87E-07	0.34	-1.6	2e-05	0.00035
Usp25	ENSMUSG00000022867	3.22E-05	4.43E-05	2.02E-05	0.45	-1.1	2e-05	0.00035
D17Wsu104e	ENSMUSG00000019579	4.96E-06	6.85E-06	3.07E-06	0.45	-1.2	2e-05	0.00035
Gm14492	ENSMUSG00000043795	4.76E-05	6.49E-05	3.02E-05	0.47	-1.1	2.1e-05	0.00036
Srsf1	ENSMUSG00000018379	2.25E-05	3.10E-05	1.40E-05	0.45	-1.1	2.1e-05	0.00036
Zfp521	ENSMUSG00000024420	1.29E-05	1.77E-05	8.10E-06	0.46	-1.1	2.1e-05	0.00036
9030617O03Rik	ENSMUSG00000021185	1.51E-05	9.73E-06	2.04E-05	2.1	1.1	2.1e-05	0.00036
Spty2d1	ENSMUSG00000049516	4.87E-06	6.99E-06	2.74E-06	0.39	-1.4	2.1e-05	0.00037
F830016B08Rik	ENSMUSG000000090942	3.06E-05	4.12E-05	2.00E-05	0.49	-1	2.1e-05	0.00037
Aimp2	ENSMUSG00000029610	1.86E-05	2.54E-05	1.18E-05	0.47	-1.1	2.2e-05	0.00037
Stxbp6	ENSMUSG00000046314	1.78E-06	2.70E-06	8.56E-07	0.32	-1.7	2.2e-05	0.00037
Fam160b1	ENSMUSG00000033478	1.22E-05	1.68E-05	7.59E-06	0.45	-1.1	2.2e-05	0.00037
2310015B20Rik	ENSMUSG00000019933	1.53E-05	2.19E-05	8.77E-06	0.4	-1.3	2.2e-05	0.00037
Pla2g4e	ENSMUSG00000050211	9.55E-06	1.32E-05	5.89E-06	0.45	-1.2	2.2e-05	0.00037
Exd1	ENSMUSG00000048647	2.25E-06	3.52E-06	9.84E-07	0.28	-1.8	2.2e-05	0.00037
Pias1	ENSMUSG00000032405	6.94E-06	9.65E-06	4.23E-06	0.44	-1.2	2.2e-05	0.00037
Zscan21	ENSMUSG00000037017	1.13E-05	1.57E-05	6.95E-06	0.44	-1.2	2.2e-05	0.00037
Gpr161	ENSMUSG00000040836	9.66E-07	1.59E-06	3.43E-07	0.22	-2.2	2.2e-05	0.00037
Lasp1	ENSMUSG00000038366	8.41E-06	1.16E-05	5.22E-06	0.45	-1.2	2.2e-05	0.00037
Prps2	ENSMUSG00000025742	8.56E-07	1.38E-06	3.36E-07	0.24	-2	2.2e-05	0.00038
Plod3	ENSMUSG00000004846	7.23E-06	9.99E-06	4.47E-06	0.45	-1.2	2.2e-05	0.00038
Ppp3cb	ENSMUSG00000021816	3.95E-05	5.42E-05	2.48E-05	0.46	-1.1	2.2e-05	0.00038
Trp53inp2	ENSMUSG00000038375	5.77E-05	7.89E-05	3.65E-05	0.46	-1.1	2.3e-05	0.00039
Ubn2	ENSMUSG00000038538	1.30E-05	1.85E-05	7.62E-06	0.41	-1.3	2.3e-05	0.00039
Ttll4	ENSMUSG00000033257	1.16E-05	1.60E-05	7.18E-06	0.45	-1.2	2.3e-05	0.00039
Zfp740	ENSMUSG00000046897	1.55E-05	2.15E-05	9.49E-06	0.44	-1.2	2.3e-05	0.00039
Thoc2	ENSMUSG00000037475	9.91E-06	1.39E-05	5.95E-06	0.43	-1.2	2.3e-05	0.00039
Wls	ENSMUSG00000028173	1.83E-05	2.59E-05	1.07E-05	0.41	-1.3	2.3e-05	0.00039
Cyb5r1	ENSMUSG00000026456	1.43E-05	1.94E-05	9.12E-06	0.47	-1.1	2.3e-05	0.00039
Adss	ENSMUSG00000015961	3.72E-06	5.36E-06	2.09E-06	0.39	-1.4	2.4e-05	0.0004
Il6st	ENSMUSG00000021756	6.96E-05	9.48E-05	4.44E-05	0.47	-1.1	2.4e-05	0.0004
Dse	ENSMUSG00000039497	6.56E-06	9.08E-06	4.04E-06	0.44	-1.2	2.4e-05	0.00041
Kat6b	ENSMUSG00000021767	1.33E-05	1.83E-05	8.18E-06	0.45	-1.2	2.4e-05	0.00041
Zfp568	ENSMUSG00000074221	8.43E-06	1.17E-05	5.17E-06	0.44	-1.2	2.4e-05	0.00041
Hsp90b1	ENSMUSG00000020048	4.52E-05	6.36E-05	2.67E-05	0.42	-1.3	2.5e-05	0.00042
Calm1	ENSMUSG00000001175	2.64E-04	3.62E-04	1.66E-04	0.46	-1.1	2.5e-05	0.00042
B4galt5	ENSMUSG00000017929	6.20E-06	8.98E-06	3.43E-06	0.38	-1.4	2.5e-05	0.00042
Btbd7	ENSMUSG00000041702	7.51E-06	1.03E-05	4.68E-06	0.45	-1.1	2.5e-05	0.00042
Gm12346	ENSMUSG000000083899	4.14E-06	7.15E-06	1.13E-06	0.16	-2.7	2.5e-05	0.00042
Lcor	ENSMUSG00000025019	6.44E-06	9.17E-06	3.71E-06	0.41	-1.3	2.5e-05	0.00042

Gm17224	ENSMUSG00000092085	6.95E-06	9.64E-06	4.27E-06	0.44	-1.2	2.5e-05	0.00042
Stat3	ENSMUSG00000004040	2.25E-05	3.11E-05	1.40E-05	0.45	-1.2	2.6e-05	0.00043
Gdfl1	ENSMUSG00000025352	7.39E-06	1.05E-05	4.27E-06	0.41	-1.3	2.6e-05	0.00043
Ptdss1	ENSMUSG000000021518	7.57E-06	1.05E-05	4.65E-06	0.44	-1.2	2.6e-05	0.00044
Kdelr2	ENSMUSG00000079111	1.30E-05	1.86E-05	7.49E-06	0.4	-1.3	2.6e-05	0.00044
Creb3l1	ENSMUSG000000027230	1.11E-06	1.80E-06	4.22E-07	0.23	-2.1	2.6e-05	0.00044
Dync1li2	ENSMUSG00000035770	1.95E-05	2.66E-05	1.24E-05	0.47	-1.1	2.7e-05	0.00044
BC030336	ENSMUSG00000046096	4.83E-06	6.67E-06	2.99E-06	0.45	-1.2	2.7e-05	0.00044
Plekha1	ENSMUSG00000040268	8.50E-06	1.19E-05	5.10E-06	0.43	-1.2	2.7e-05	0.00044
Cdc14a	ENSMUSG00000033502	1.33E-05	1.95E-05	7.11E-06	0.36	-1.5	2.7e-05	0.00044
Carhsp1	ENSMUSG00000008393	6.11E-06	8.44E-06	3.78E-06	0.45	-1.2	2.7e-05	0.00045
Gaa	ENSMUSG00000025579	1.11E-04	1.51E-04	7.11E-05	0.47	-1.1	2.8e-05	0.00045
Cpd	ENSMUSG00000020841	2.33E-05	3.17E-05	1.49E-05	0.47	-1.1	2.8e-05	0.00046
Pten	ENSMUSG00000013663	2.44E-05	3.32E-05	1.57E-05	0.47	-1.1	2.8e-05	0.00046
Gatad2b	ENSMUSG00000042390	4.67E-06	6.63E-06	2.71E-06	0.41	-1.3	2.8e-05	0.00046
Pf4	ENSMUSG00000029373	8.02E-06	1.23E-05	3.77E-06	0.31	-1.7	2.8e-05	0.00047
Baiap2	ENSMUSG00000025372	1.87E-06	2.72E-06	1.02E-06	0.37	-1.4	2.9e-05	0.00047
Pum2	ENSMUSG00000020594	3.63E-05	4.98E-05	2.27E-05	0.46	-1.1	2.9e-05	0.00047
Bcl10	ENSMUSG00000028191	4.45E-06	6.30E-06	2.60E-06	0.41	-1.3	2.9e-05	0.00047
Tgfb3	ENSMUSG00000029287	2.89E-05	3.91E-05	1.88E-05	0.48	-1.1	2.9e-05	0.00047
Gm5844	ENSMUSG00000082896	5.05E-07	8.53E-07	1.57E-07	0.18	-2.4	2.9e-05	0.00047
Ppp6c	ENSMUSG00000026753	1.70E-05	2.31E-05	1.09E-05	0.47	-1.1	2.9e-05	0.00047
Slc2a1	ENSMUSG00000028645	5.13E-06	7.21E-06	3.05E-06	0.42	-1.2	2.9e-05	0.00047
Egfr	ENSMUSG00000020122	2.44E-05	3.39E-05	1.49E-05	0.44	-1.2	2.9e-05	0.00048
Tgif1	ENSMUSG00000047407	3.69E-06	6.33E-06	1.06E-06	0.17	-2.6	2.9e-05	0.00048
Uspl1	ENSMUSG00000041264	1.46E-05	2.01E-05	9.01E-06	0.45	-1.2	3e-05	0.00048
Slc35e4	ENSMUSG00000048807	1.31E-05	1.81E-05	8.00E-06	0.44	-1.2	3e-05	0.00048
Tubb4b-ps1	ENSMUSG00000095159	5.64E-06	7.92E-06	3.35E-06	0.42	-1.2	3e-05	0.00048
Erl1	ENSMUSG00000031527	3.32E-06	4.73E-06	1.91E-06	0.4	-1.3	3e-05	0.00048
Zdhhc9	ENSMUSG00000036985	1.80E-06	2.65E-06	9.63E-07	0.36	-1.5	3e-05	0.00048
Smurf2	ENSMUSG00000018363	1.28E-05	1.76E-05	8.07E-06	0.46	-1.1	3e-05	0.00048
S1pr2	ENSMUSG00000043895	1.69E-06	2.56E-06	8.27E-07	0.32	-1.6	3e-05	0.00049
Ssr1	ENSMUSG00000021427	1.46E-05	2.00E-05	9.22E-06	0.46	-1.1	3e-05	0.00049
Dtnb	ENSMUSG00000071454	1.39E-06	2.07E-06	7.16E-07	0.35	-1.5	3e-05	0.00049
Fam102b	ENSMUSG00000040339	1.20E-05	1.75E-05	6.50E-06	0.37	-1.4	3.1e-05	0.00049
Dio2	ENSMUSG00000007682	1.60E-06	2.51E-06	6.96E-07	0.28	-1.8	3.1e-05	0.00049
Deaf1	ENSMUSG00000058886	2.83E-06	4.10E-06	1.56E-06	0.38	-1.4	3.1e-05	0.00049
Myh1	ENSMUSG00000056328	4.55E-04	2.16E-04	6.95E-04	3.2	1.7	3.1e-05	0.00049
Ncl	ENSMUSG00000026234	3.29E-05	4.60E-05	1.99E-05	0.43	-1.2	3.1e-05	0.00049
Xbp1	ENSMUSG00000020484	3.21E-05	4.52E-05	1.90E-05	0.42	-1.2	3.1e-05	0.00049
Rffl	ENSMUSG00000020696	4.59E-06	6.65E-06	2.53E-06	0.38	-1.4	3.1e-05	0.0005
Ylpm1	ENSMUSG00000021244	6.19E-06	8.70E-06	3.67E-06	0.42	-1.2	3.1e-05	0.0005
Eps8	ENSMUSG00000015766	6.50E-06	9.10E-06	3.90E-06	0.43	-1.2	3.2e-05	0.0005
Pcf11	ENSMUSG00000041328	1.09E-05	1.49E-05	6.82E-06	0.46	-1.1	3.2e-05	0.0005
Spen	ENSMUSG00000040761	1.32E-05	1.83E-05	8.00E-06	0.44	-1.2	3.2e-05	0.0005
Top1	ENSMUSG00000070544	1.83E-05	2.51E-05	1.14E-05	0.45	-1.1	3.2e-05	0.0005
Tardbp	ENSMUSG00000041459	2.16E-05	2.92E-05	1.41E-05	0.48	-1.1	3.2e-05	0.00051
Zfp60	ENSMUSG00000037640	3.19E-06	4.58E-06	1.79E-06	0.39	-1.4	3.2e-05	0.00051
Fgfr1	ENSMUSG00000031565	4.03E-05	5.44E-05	2.62E-05	0.48	-1.1	3.2e-05	0.00051
Zdhhc21	ENSMUSG00000028403	7.87E-06	1.10E-05	4.78E-06	0.44	-1.2	3.2e-05	0.00051
Sgms2	ENSMUSG00000050931	9.74E-07	1.54E-06	4.12E-07	0.27	-1.9	3.2e-05	0.00051
Cdk12	ENSMUSG00000003119	9.35E-06	1.29E-05	5.78E-06	0.45	-1.2	3.3e-05	0.00051
Luc7l	ENSMUSG00000024188	7.19E-06	1.06E-05	3.76E-06	0.35	-1.5	3.3e-05	0.00051
Dusp16	ENSMUSG00000030203	1.03E-05	1.53E-05	5.26E-06	0.34	-1.5	3.3e-05	0.00051
Ccdc9	ENSMUSG00000041375	3.87E-06	5.57E-06	2.17E-06	0.39	-1.4	3.3e-05	0.00052
Ptp4a1	ENSMUSG00000026064	1.60E-06	2.50E-06	6.97E-07	0.28	-1.8	3.3e-05	0.00052
5430435G22Rik	ENSMUSG00000052688	3.59E-06	5.43E-06	1.75E-06	0.32	-1.6	3.3e-05	0.00052
Gm11868	ENSMUSG00000050550	1.17E-06	1.83E-06	5.16E-07	0.28	-1.8	3.3e-05	0.00052
Rps6-ps4	ENSMUSG00000081406	4.33E-06	6.35E-06	2.31E-06	0.36	-1.5	3.4e-05	0.00052
Aspa	ENSMUSG00000020774	3.26E-06	1.67E-06	4.86E-06	2.9	1.5	3.4e-05	0.00052
Cdk8	ENSMUSG00000029635	4.74E-06	6.74E-06	2.73E-06	0.4	-1.3	3.4e-05	0.00053
4933426M11Rik	ENSMUSG00000021133	2.74E-05	3.73E-05	1.75E-05	0.47	-1.1	3.4e-05	0.00053
Prpf4b	ENSMUSG00000021413	1.33E-05	1.84E-05	8.10E-06	0.44	-1.2	3.4e-05	0.00053
Pcolce	ENSMUSG00000029718	1.46E-05	2.01E-05	9.06E-06	0.45	-1.2	3.4e-05	0.00053
Pdpx	ENSMUSG00000068221	3.72E-07	6.66E-07	7.72E-08	0.12	-3.1	3.4e-05	0.00053
Orail	ENSMUSG00000049686	1.06E-05	1.46E-05	6.68E-06	0.46	-1.1	3.4e-05	0.00053
Csdel	ENSMUSG00000068823	4.17E-04	5.70E-04	2.64E-04	0.46	-1.1	3.5e-05	0.00054
Fhl3	ENSMUSG00000032643	2.41E-05	3.65E-05	1.17E-05	0.32	-1.6	3.5e-05	0.00054

Alpk2	ENSMUSG00000032845	3.93E-05	5.47E-05	2.39E-05	0.44	-1.2	3.5e-05	0.00054
Ahnak	ENSMUSG00000069833	5.16E-04	7.07E-04	3.25E-04	0.46	-1.1	3.5e-05	0.00054
Ywhab	ENSMUSG00000018326	1.47E-05	2.00E-05	9.54E-06	0.48	-1.1	3.5e-05	0.00055
Pank3	ENSMUSG00000018846	1.30E-05	1.76E-05	8.36E-06	0.48	-1.1	3.6e-05	0.00055
Usp34	ENSMUSG00000056342	2.29E-05	3.13E-05	1.46E-05	0.47	-1.1	3.6e-05	0.00055
Atad1	ENSMUSG00000013662	1.97E-05	2.68E-05	1.27E-05	0.47	-1.1	3.6e-05	0.00055
Fbxl18	ENSMUSG00000066640	3.38E-06	4.83E-06	1.92E-06	0.4	-1.3	3.6e-05	0.00055
2610019F03Rik	ENSMUSG00000050052	8.06E-06	1.11E-05	5.00E-06	0.45	-1.2	3.6e-05	0.00056
Gemin6	ENSMUSG00000055760	1.32E-06	2.01E-06	6.19E-07	0.31	-1.7	3.6e-05	0.00056
1810013L24Rik	ENSMUSG00000022507	2.14E-05	2.89E-05	1.39E-05	0.48	-1.1	3.6e-05	0.00056
Sdf2	ENSMUSG00000002064	1.82E-05	2.48E-05	1.17E-05	0.47	-1.1	3.7e-05	0.00056
Msrp3	ENSMUSG00000051236	7.91E-05	1.07E-04	5.08E-05	0.47	-1.1	3.7e-05	0.00056
Gpbp1	ENSMUSG00000032745	1.91E-05	2.58E-05	1.24E-05	0.48	-1.1	3.7e-05	0.00056
Eda2r	ENSMUSG00000034457	8.20E-06	1.22E-05	4.23E-06	0.35	-1.5	3.7e-05	0.00056
Trim33	ENSMUSG00000033014	6.52E-06	9.03E-06	4.02E-06	0.45	-1.2	3.7e-05	0.00056
Abcc8	ENSMUSG00000040136	9.87E-07	1.49E-06	4.82E-07	0.32	-1.6	3.7e-05	0.00057
Hspb1	ENSMUSG00000004951	6.39E-06	8.75E-06	4.03E-06	0.46	-1.1	3.8e-05	0.00057
Myf6	ENSMUSG00000035923	3.74E-05	5.39E-05	2.09E-05	0.39	-1.4	3.8e-05	0.00058
Supt6	ENSMUSG00000002052	2.63E-05	3.65E-05	1.61E-05	0.44	-1.2	3.8e-05	0.00058
Amotl1	ENSMUSG00000013076	1.96E-04	2.67E-04	1.25E-04	0.47	-1.1	3.9e-05	0.00059
Srp19	ENSMUSG00000014504	6.42E-06	9.15E-06	3.68E-06	0.4	-1.3	3.9e-05	0.00059
Edem3	ENSMUSG00000043019	1.54E-05	2.11E-05	9.71E-06	0.46	-1.1	3.9e-05	0.00059
Tiam1	ENSMUSG00000002489	4.60E-06	6.60E-06	2.59E-06	0.39	-1.4	3.9e-05	0.00059
Ist1	ENSMUSG00000031729	1.27E-05	1.74E-05	8.00E-06	0.46	-1.1	3.9e-05	0.00059
Akirin1	ENSMUSG00000023075	6.74E-06	9.39E-06	4.09E-06	0.44	-1.2	3.9e-05	0.0006
Taf8	ENSMUSG00000023980	5.57E-06	7.71E-06	3.42E-06	0.44	-1.2	4e-05	0.0006
Wnk1	ENSMUSG00000045962	8.03E-05	1.21E-04	3.99E-05	0.33	-1.6	4e-05	0.0006
Cnot6l	ENSMUSG00000034724	5.85E-06	8.12E-06	3.57E-06	0.44	-1.2	4e-05	0.0006
Ptgfrn	ENSMUSG00000027864	1.20E-05	1.64E-05	7.53E-06	0.46	-1.1	4.1e-05	0.00061
Adam9	ENSMUSG00000031555	3.22E-05	4.35E-05	2.09E-05	0.48	-1.1	4.1e-05	0.00061
Sptbn1	ENSMUSG00000020315	1.35E-04	1.84E-04	8.47E-05	0.46	-1.1	4.1e-05	0.00061
Helb	ENSMUSG00000020228	2.81E-06	4.00E-06	1.62E-06	0.4	-1.3	4.1e-05	0.00062
Fam111a	ENSMUSG00000024691	1.97E-06	2.86E-06	1.07E-06	0.37	-1.4	4.1e-05	0.00062
Abce1	ENSMUSG00000058355	1.76E-05	2.39E-05	1.12E-05	0.47	-1.1	4.2e-05	0.00063
Ulk2	ENSMUSG00000004798	4.24E-05	5.74E-05	2.75E-05	0.48	-1.1	4.2e-05	0.00063
Zc3h12c	ENSMUSG00000035164	6.06E-06	8.42E-06	3.70E-06	0.44	-1.2	4.2e-05	0.00063
St3gal2	ENSMUSG00000031749	1.77E-05	2.47E-05	1.08E-05	0.44	-1.2	4.3e-05	0.00065
Scube2	ENSMUSG00000007279	8.07E-07	2.70E-07	1.34E-06	5	2.3	4.4e-05	0.00065
Prpf3	ENSMUSG00000015748	7.63E-06	1.06E-05	4.68E-06	0.44	-1.2	4.4e-05	0.00065
Lars2	ENSMUSG00000035202	4.82E-04	2.69E-04	6.95E-04	2.6	1.4	4.4e-05	0.00065
Pik3ca	ENSMUSG00000027665	2.51E-05	3.52E-05	1.51E-05	0.43	-1.2	4.4e-05	0.00066
Cnot7	ENSMUSG00000031601	1.14E-05	1.54E-05	7.39E-06	0.48	-1.1	4.4e-05	0.00066
Crybb1	ENSMUSG00000029343	6.72E-07	8.08E-08	1.26E-06	16	4	4.5e-05	0.00066
Fam178a	ENSMUSG00000036097	8.60E-06	1.18E-05	5.36E-06	0.45	-1.1	4.5e-05	0.00066
Gmfb	ENSMUSG00000062014	1.12E-05	1.52E-05	7.20E-06	0.47	-1.1	4.5e-05	0.00066
Ipo8	ENSMUSG00000040029	1.23E-05	1.68E-05	7.81E-06	0.46	-1.1	4.5e-05	0.00067
Tmem167	ENSMUSG00000012422	7.54E-06	1.04E-05	4.72E-06	0.45	-1.1	4.5e-05	0.00067
Atp8a1	ENSMUSG00000037685	7.12E-05	9.69E-05	4.56E-05	0.47	-1.1	4.5e-05	0.00067
Tmem33	ENSMUSG00000037720	7.38E-06	1.03E-05	4.42E-06	0.43	-1.2	4.5e-05	0.00067
mt-Co3	ENSMUSG00000064358	7.82E-07	3.15E-07	1.25E-06	4	2	4.6e-05	0.00067
Zfp451	ENSMUSG00000042197	7.33E-06	1.04E-05	4.28E-06	0.41	-1.3	4.6e-05	0.00067
Kdm2a	ENSMUSG00000054611	1.91E-05	2.60E-05	1.21E-05	0.47	-1.1	4.6e-05	0.00067
Tsga10	ENSMUSG00000060771	2.61E-06	3.75E-06	1.47E-06	0.39	-1.3	4.6e-05	0.00067
Whsc1l1	ENSMUSG00000054823	1.27E-05	1.73E-05	8.12E-06	0.47	-1.1	4.6e-05	0.00068
Card10	ENSMUSG00000033170	5.61E-06	7.67E-06	3.56E-06	0.46	-1.1	4.6e-05	0.00068
Agtpbp1	ENSMUSG00000021557	1.80E-05	2.43E-05	1.17E-05	0.48	-1.1	4.6e-05	0.00068
Rangap1	ENSMUSG00000022391	8.41E-06	1.21E-05	4.67E-06	0.38	-1.4	4.7e-05	0.00069
Glipr2	ENSMUSG00000028480	1.38E-06	2.06E-06	6.96E-07	0.34	-1.6	4.7e-05	0.00069
Atp2b4	ENSMUSG00000026463	1.79E-05	2.47E-05	1.10E-05	0.45	-1.2	4.8e-05	0.0007
Ino80d	ENSMUSG00000040865	1.15E-05	1.57E-05	7.26E-06	0.46	-1.1	4.8e-05	0.0007
Cachd1	ENSMUSG00000028532	3.44E-06	4.94E-06	1.93E-06	0.39	-1.4	4.8e-05	0.00071
Slc9a6	ENSMUSG00000060681	1.13E-05	1.55E-05	7.22E-06	0.47	-1.1	4.9e-05	0.00071
Dapk2	ENSMUSG00000032380	7.36E-06	1.01E-05	4.64E-06	0.46	-1.1	4.9e-05	0.00071
Etv6	ENSMUSG00000030199	7.01E-06	9.84E-06	4.18E-06	0.42	-1.2	4.9e-05	0.00071
Dok7	ENSMUSG00000044716	1.24E-05	1.76E-05	7.22E-06	0.41	-1.3	4.9e-05	0.00071
Prkrir	ENSMUSG00000030753	8.84E-05	1.20E-04	5.73E-05	0.48	-1.1	5e-05	0.00072
Ddi2	ENSMUSG00000078515	1.47E-05	2.00E-05	9.46E-06	0.47	-1.1	5e-05	0.00072
Zfp322a	ENSMUSG00000046351	4.18E-06	5.89E-06	2.47E-06	0.42	-1.3	5e-05	0.00072

Tgoln1	ENSMUSG00000056429	2.53E-05	3.44E-05	1.63E-05	0.47	-1.1	5e-05	0.00072
Capza2	ENSMUSG00000015733	1.02E-04	1.37E-04	6.72E-05	0.49	-1	5e-05	0.00072
Ripply3	ENSMUSG00000022941	6.35E-07	1.02E-06	2.51E-07	0.25	-2	5e-05	0.00072
Rap1b	ENSMUSG00000052681	1.11E-05	1.52E-05	6.98E-06	0.46	-1.1	5e-05	0.00073
Frs2	ENSMUSG00000020170	5.45E-06	7.60E-06	3.30E-06	0.43	-1.2	5e-05	0.00073
Rbm26	ENSMUSG00000022119	8.05E-06	1.10E-05	5.06E-06	0.46	-1.1	5.1e-05	0.00073
Msn	ENSMUSG00000031207	2.11E-05	2.95E-05	1.27E-05	0.43	-1.2	5.1e-05	0.00074
Zfc3h1	ENSMUSG00000034163	5.58E-06	7.75E-06	3.40E-06	0.44	-1.2	5.1e-05	0.00074
Stag2	ENSMUSG00000025862	2.70E-05	3.64E-05	1.76E-05	0.48	-1	5.2e-05	0.00074
Tmem140	ENSMUSG00000057137	5.34E-06	7.96E-06	2.72E-06	0.34	-1.5	5.2e-05	0.00075
Coa5	ENSMUSG00000026112	3.94E-05	5.30E-05	2.57E-05	0.49	-1	5.2e-05	0.00075
Lsp1	ENSMUSG00000018819	1.39E-05	1.92E-05	8.58E-06	0.45	-1.2	5.3e-05	0.00076
Zfp866	ENSMUSG00000043090	6.03E-06	8.43E-06	3.63E-06	0.43	-1.2	5.3e-05	0.00076
AC158975.1	ENSMUSG00000097141	1.38E-06	2.12E-06	6.33E-07	0.3	-1.7	5.4e-05	0.00076
Ubxn7	ENSMUSG00000053774	1.24E-05	1.69E-05	7.97E-06	0.47	-1.1	5.5e-05	0.00078
Ccdc47	ENSMUSG00000078622	1.92E-05	2.60E-05	1.24E-05	0.48	-1.1	5.5e-05	0.00078
Pomt2	ENSMUSG00000034126	6.13E-06	8.66E-06	3.59E-06	0.41	-1.3	5.5e-05	0.00078
Filip1	ENSMUSG00000034898	4.45E-05	6.16E-05	2.75E-05	0.45	-1.2	5.5e-05	0.00078
Mpp3	ENSMUSG00000052373	6.96E-06	1.06E-05	3.32E-06	0.31	-1.7	5.5e-05	0.00078
2210018M11Rik	ENSMUSG00000035401	5.55E-06	7.78E-06	3.31E-06	0.43	-1.2	5.5e-05	0.00078
Foxp1	ENSMUSG00000030067	4.29E-06	5.99E-06	2.59E-06	0.43	-1.2	5.5e-05	0.00078
Fnl1	ENSMUSG00000026193	6.30E-05	8.45E-05	4.16E-05	0.49	-1	5.5e-05	0.00078
Mdn1	ENSMUSG00000058006	1.05E-05	1.44E-05	6.55E-06	0.46	-1.1	5.5e-05	0.00078
Vgll4	ENSMUSG00000030315	7.94E-06	1.08E-05	5.04E-06	0.47	-1.1	5.6e-05	0.00078
Ahcyl1	ENSMUSG00000027893	1.72E-05	2.31E-05	1.12E-05	0.48	-1	5.6e-05	0.00078
Smg1	ENSMUSG00000030655	3.72E-05	5.08E-05	2.36E-05	0.46	-1.1	5.6e-05	0.00078
Serp1	ENSMUSG00000027808	1.02E-05	1.39E-05	6.50E-06	0.47	-1.1	5.6e-05	0.00079
Fjx1	ENSMUSG00000075012	9.15E-07	1.45E-06	3.81E-07	0.26	-1.9	5.6e-05	0.00079
Rab23	ENSMUSG00000004768	2.22E-06	3.18E-06	1.25E-06	0.39	-1.4	5.6e-05	0.00079
Tpp1	ENSMUSG00000030894	9.64E-06	1.34E-05	5.88E-06	0.44	-1.2	5.7e-05	0.00079
Hr	ENSMUSG00000022096	2.97E-05	4.33E-05	1.62E-05	0.37	-1.4	5.7e-05	0.0008
Cdc42se2	ENSMUSG00000052298	1.35E-05	1.86E-05	8.49E-06	0.46	-1.1	5.7e-05	0.0008
Spc24	ENSMUSG00000074476	1.04E-06	4.14E-07	1.67E-06	4	2	5.7e-05	0.0008
Dr1	ENSMUSG00000029265	7.25E-06	9.97E-06	4.54E-06	0.46	-1.1	5.7e-05	0.0008
Nrip1	ENSMUSG00000048490	4.27E-05	5.73E-05	2.81E-05	0.49	-1	5.7e-05	0.0008
Fsd1l	ENSMUSG00000054752	4.37E-06	5.97E-06	2.77E-06	0.46	-1.1	5.8e-05	0.0008
Zfx	ENSMUSG00000079509	8.30E-06	1.16E-05	5.00E-06	0.43	-1.2	5.8e-05	0.00081
Qtrtd1	ENSMUSG00000022704	3.31E-06	4.88E-06	1.73E-06	0.35	-1.5	5.8e-05	0.00081
mt-Tl1	ENSMUSG00000064340	4.55E-05	1.65E-05	7.45E-05	4.5	2.2	5.9e-05	0.00082
Appl1	ENSMUSG00000040760	1.36E-05	1.85E-05	8.80E-06	0.48	-1.1	5.9e-05	0.00082
Leng8	ENSMUSG00000035545	1.33E-05	1.81E-05	8.44E-06	0.47	-1.1	6e-05	0.00083
Atl2	ENSMUSG00000059811	9.28E-05	1.24E-04	6.12E-05	0.49	-1	6.1e-05	0.00085
Nap1l1	ENSMUSG00000058799	9.78E-06	1.40E-05	5.59E-06	0.4	-1.3	6.2e-05	0.00085
Rcc1	ENSMUSG00000028896	3.84E-06	5.54E-06	2.13E-06	0.38	-1.4	6.2e-05	0.00086
Smc1a	ENSMUSG00000041133	8.63E-06	1.23E-05	4.91E-06	0.4	-1.3	6.2e-05	0.00086
Hnrnp42	ENSMUSG00000045427	7.49E-06	1.03E-05	4.69E-06	0.46	-1.1	6.2e-05	0.00086
Zkscan8	ENSMUSG00000063894	5.69E-06	7.99E-06	3.40E-06	0.43	-1.2	6.2e-05	0.00086
Dcaf12	ENSMUSG00000028436	1.28E-05	1.79E-05	7.83E-06	0.44	-1.2	6.3e-05	0.00086
Kcmf1	ENSMUSG00000055239	6.40E-05	8.58E-05	4.22E-05	0.49	-1	6.3e-05	0.00087
Hnrnpc	ENSMUSG00000060373	2.03E-05	2.83E-05	1.23E-05	0.44	-1.2	6.4e-05	0.00088
Snora68	ENSMUSG00000077563	1.05E-04	1.47E-04	6.28E-05	0.43	-1.2	6.4e-05	0.00089
Zeb2	ENSMUSG00000026872	2.52E-05	3.43E-05	1.62E-05	0.47	-1.1	6.5e-05	0.00089
Cd47	ENSMUSG00000055447	8.87E-06	1.30E-05	4.73E-06	0.36	-1.5	6.5e-05	0.0009
Nfya	ENSMUSG00000023994	4.45E-06	6.36E-06	2.54E-06	0.4	-1.3	6.6e-05	0.0009
2310022B05Rik	ENSMUSG00000031983	3.31E-06	4.62E-06	2.01E-06	0.44	-1.2	6.6e-05	0.0009
Dhh	ENSMUSG00000023000	8.38E-07	1.31E-06	3.63E-07	0.28	-1.9	6.7e-05	0.00092
Sfrs18	ENSMUSG00000028248	1.62E-05	2.23E-05	1.01E-05	0.45	-1.1	6.8e-05	0.00093
Prdm2	ENSMUSG00000057637	2.55E-05	3.45E-05	1.64E-05	0.48	-1.1	6.9e-05	0.00094
Ncor1	ENSMUSG00000018501	3.35E-05	4.49E-05	2.20E-05	0.49	-1	6.9e-05	0.00094
Tbpl1	ENSMUSG00000071359	5.10E-06	7.34E-06	2.87E-06	0.39	-1.4	6.9e-05	0.00094
Atp8b1	ENSMUSG00000039529	2.27E-06	3.24E-06	1.30E-06	0.4	-1.3	7e-05	0.00095
Ccnk	ENSMUSG00000021258	2.12E-05	2.83E-05	1.40E-05	0.49	-1	7e-05	0.00095
Stt3b	ENSMUSG00000032437	4.59E-05	6.16E-05	3.02E-05	0.49	-1	7.1e-05	0.00097
Rnf38	ENSMUSG00000035696	1.98E-06	2.90E-06	1.07E-06	0.37	-1.4	7.1e-05	0.00097
Tgfb1	ENSMUSG00000035493	1.68E-05	2.24E-05	1.11E-05	0.5	-1	7.2e-05	0.00098
Sap30	ENSMUSG00000031609	2.30E-06	3.35E-06	1.24E-06	0.37	-1.4	7.3e-05	0.00098
Cpne8	ENSMUSG00000052560	1.69E-06	2.44E-06	9.36E-07	0.38	-1.4	7.3e-05	0.00099
Ccdc93	ENSMUSG00000026339	5.93E-06	8.15E-06	3.71E-06	0.45	-1.1	7.3e-05	0.00099

Plcl1	ENSMUSG00000038349	5.59E-06	7.84E-06	3.35E-06	0.43	-1.2	7.3e-05	0.00099
0610030E20Rik	ENSMUSG00000058706	4.38E-06	6.31E-06	2.44E-06	0.39	-1.4	7.3e-05	0.00099
E230001N04Rik	ENSMUSG00000066170	1.65E-06	2.59E-06	7.19E-07	0.28	-1.8	7.3e-05	0.00099
Eif1	ENSMUSG00000035530	3.99E-05	5.79E-05	2.19E-05	0.38	-1.4	7.3e-05	0.00099
Nop2	ENSMUSG00000038279	1.10E-05	1.50E-05	6.92E-06	0.46	-1.1	7.3e-05	0.00099
Wtap	ENSMUSG00000060475	9.19E-06	1.26E-05	5.79E-06	0.46	-1.1	7.4e-05	0.001
Gm6169	ENSMUSG00000057762	1.22E-06	1.92E-06	5.24E-07	0.27	-1.9	7.4e-05	0.001
Atad2b	ENSMUSG00000052812	4.21E-06	6.14E-06	2.28E-06	0.37	-1.4	7.5e-05	0.001
Anxa4	ENSMUSG00000029994	6.05E-06	8.31E-06	3.80E-06	0.46	-1.1	7.5e-05	0.001
Smad4	ENSMUSG00000024515	2.16E-05	2.92E-05	1.40E-05	0.48	-1.1	7.5e-05	0.001
Foxk2	ENSMUSG00000039275	2.14E-05	2.88E-05	1.39E-05	0.48	-1.1	7.5e-05	0.001
Galnt7	ENSMUSG00000031608	1.75E-06	2.79E-06	7.18E-07	0.26	-2	7.5e-05	0.001
Sfpq	ENSMUSG00000028820	1.90E-05	2.57E-05	1.23E-05	0.48	-1.1	7.5e-05	0.001
Cmip	ENSMUSG00000034390	2.17E-06	3.12E-06	1.22E-06	0.39	-1.4	7.5e-05	0.001
Gpc1	ENSMUSG00000034220	1.06E-04	1.49E-04	6.26E-05	0.42	-1.2	7.6e-05	0.001
Pvrl3	ENSMUSG00000022656	1.69E-06	2.45E-06	9.23E-07	0.38	-1.4	7.6e-05	0.001
Gopc	ENSMUSG00000019861	4.89E-06	6.79E-06	2.98E-06	0.44	-1.2	7.6e-05	0.001
Hp	ENSMUSG00000031722	6.92E-06	1.04E-05	3.39E-06	0.33	-1.6	7.6e-05	0.001
Zfp62	ENSMUSG00000046311	1.15E-05	1.56E-05	7.49E-06	0.48	-1.1	7.7e-05	0.001
AL663030.1	ENSMUSG00000097062	1.14E-06	1.84E-06	4.45E-07	0.24	-2	7.7e-05	0.001
Tulp4	ENSMUSG00000034377	3.50E-05	4.71E-05	2.29E-05	0.49	-1	7.7e-05	0.001
Ppp2cb	ENSMUSG00000009630	1.12E-05	1.54E-05	7.10E-06	0.46	-1.1	7.7e-05	0.001
Ntmt1	ENSMUSG00000026857	5.38E-06	7.41E-06	3.35E-06	0.45	-1.1	7.8e-05	0.001
Ttc14	ENSMUSG00000027677	7.07E-06	9.89E-06	4.26E-06	0.43	-1.2	7.8e-05	0.001
Bmper	ENSMUSG00000031963	1.05E-05	1.47E-05	6.43E-06	0.44	-1.2	7.8e-05	0.001
Phf5a	ENSMUSG00000061360	5.47E-06	7.48E-06	3.47E-06	0.46	-1.1	7.8e-05	0.001
Tug1	ENSMUSG00000056579	6.05E-06	8.72E-06	3.38E-06	0.39	-1.4	7.8e-05	0.001
Zfp85-rs1	ENSMUSG00000058331	9.21E-07	1.45E-06	3.96E-07	0.27	-1.9	7.8e-05	0.001
Alg10b	ENSMUSG00000075470	7.93E-06	1.08E-05	5.04E-06	0.47	-1.1	7.9e-05	0.001
Dnm3	ENSMUSG00000040265	1.95E-06	2.91E-06	9.91E-07	0.34	-1.6	7.9e-05	0.001
Uck2	ENSMUSG00000026558	3.33E-06	4.64E-06	2.03E-06	0.44	-1.2	8.1e-05	0.0011
Zbtb44	ENSMUSG00000047412	2.25E-05	3.13E-05	1.38E-05	0.44	-1.2	8.1e-05	0.0011
Dennd5b	ENSMUSG00000030313	5.62E-06	7.97E-06	3.26E-06	0.41	-1.3	8.1e-05	0.0011
Pak2	ENSMUSG00000022781	1.25E-05	1.69E-05	8.12E-06	0.48	-1.1	8.1e-05	0.0011
Ubxn2a	ENSMUSG00000020634	3.29E-05	4.41E-05	2.17E-05	0.49	-1	8.1e-05	0.0011
5730409E04Rik	ENSMUSG00000073755	8.33E-06	1.13E-05	5.34E-06	0.47	-1.1	8.1e-05	0.0011
Zfp189	ENSMUSG00000039634	2.94E-06	4.54E-06	1.34E-06	0.29	-1.8	8.1e-05	0.0011
Tsn	ENSMUSG00000026374	1.49E-05	2.01E-05	9.69E-06	0.48	-1	8.2e-05	0.0011
Cbll1	ENSMUSG00000020659	2.55E-06	3.72E-06	1.38E-06	0.37	-1.4	8.2e-05	0.0011
Gm9493	ENSMUSG00000044424	5.52E-06	7.92E-06	3.12E-06	0.39	-1.3	8.2e-05	0.0011
Tle4	ENSMUSG00000024642	1.03E-05	1.39E-05	6.62E-06	0.48	-1.1	8.3e-05	0.0011
Atf6b	ENSMUSG00000015461	3.13E-06	4.30E-06	1.95E-06	0.45	-1.1	8.3e-05	0.0011
Lzts1	ENSMUSG00000036306	7.15E-07	2.76E-07	1.15E-06	4.2	2.1	8.4e-05	0.0011
Stt3a	ENSMUSG00000032116	1.07E-05	1.46E-05	6.88E-06	0.47	-1.1	8.4e-05	0.0011
Osbpl5	ENSMUSG00000037606	6.68E-06	9.16E-06	4.20E-06	0.46	-1.1	8.4e-05	0.0011
Gm5637	ENSMUSG00000046993	1.37E-06	2.01E-06	7.40E-07	0.37	-1.4	8.5e-05	0.0011
Kalrn	ENSMUSG00000061751	9.99E-06	1.40E-05	5.96E-06	0.42	-1.2	8.5e-05	0.0011
Nfkbiz	ENSMUSG00000035356	1.49E-06	2.20E-06	7.80E-07	0.35	-1.5	8.5e-05	0.0011
Dlg4	ENSMUSG00000020886	1.87E-06	2.70E-06	1.04E-06	0.38	-1.4	8.5e-05	0.0011
Polr2a	ENSMUSG00000005198	1.57E-05	2.13E-05	1.02E-05	0.48	-1.1	8.5e-05	0.0011
Dnajc21	ENSMUSG00000044224	1.63E-05	2.19E-05	1.07E-05	0.49	-1	8.5e-05	0.0011
Cdadcl1	ENSMUSG00000021982	4.58E-06	6.37E-06	2.79E-06	0.44	-1.2	8.6e-05	0.0011
Tpra1	ENSMUSG00000002871	7.99E-06	1.09E-05	5.08E-06	0.47	-1.1	8.6e-05	0.0011
Erp29	ENSMUSG00000029616	1.02E-05	1.38E-05	6.59E-06	0.48	-1.1	8.6e-05	0.0011
Trmt61a	ENSMUSG00000060950	1.67E-06	2.48E-06	8.64E-07	0.35	-1.5	8.6e-05	0.0011
Lats2	ENSMUSG00000021959	1.06E-05	1.52E-05	6.01E-06	0.39	-1.3	8.7e-05	0.0011
Foxo4	ENSMUSG00000042903	2.97E-05	3.96E-05	1.98E-05	0.5	-1	8.7e-05	0.0011
Map1a	ENSMUSG00000027254	1.21E-05	1.72E-05	6.92E-06	0.4	-1.3	8.7e-05	0.0011
Itch	ENSMUSG00000027598	1.44E-05	1.97E-05	9.20E-06	0.47	-1.1	8.7e-05	0.0011
Hnrnpa3	ENSMUSG00000059005	2.19E-06	3.18E-06	1.21E-06	0.38	-1.4	8.7e-05	0.0011
Gapdh	ENSMUSG00000057666	1.86E-05	2.49E-05	1.24E-05	0.5	-1	8.7e-05	0.0011
Erbp2ip	ENSMUSG00000021709	3.93E-05	5.26E-05	2.60E-05	0.49	-1	8.8e-05	0.0011
Gm16515	ENSMUSG00000018931	3.58E-06	5.05E-06	2.12E-06	0.42	-1.3	8.8e-05	0.0011
Ttc9	ENSMUSG00000042734	9.50E-07	1.64E-06	2.57E-07	0.16	-2.7	8.8e-05	0.0011
Fbxo45	ENSMUSG00000035764	7.22E-06	1.02E-05	4.27E-06	0.42	-1.3	8.9e-05	0.0011
Ctsz	ENSMUSG00000016256	1.08E-05	1.45E-05	7.10E-06	0.49	-1	8.9e-05	0.0011
Zbtb34	ENSMUSG00000068966	1.56E-06	2.31E-06	8.06E-07	0.35	-1.5	9e-05	0.0011
Crk	ENSMUSG00000017776	2.70E-05	3.62E-05	1.79E-05	0.49	-1	9e-05	0.0011

Gnaq	ENSMUSG00000024639	5.56E-06	7.61E-06	3.50E-06	0.46	-1.1	9.1e-05	0.0012
Hdac11	ENSMUSG00000034245	3.62E-06	2.31E-06	4.94E-06	2.1	1.1	9.1e-05	0.0012
Ccnt1	ENSMUSG00000011960	1.60E-05	2.19E-05	1.01E-05	0.46	-1.1	9.1e-05	0.0012
Med13	ENSMUSG00000034297	2.97E-05	3.99E-05	1.96E-05	0.49	-1	9.1e-05	0.0012
Api5	ENSMUSG00000027193	1.17E-05	1.63E-05	7.13E-06	0.44	-1.2	9.1e-05	0.0012
Satb1	ENSMUSG00000023927	2.33E-05	3.11E-05	1.55E-05	0.5	-1	9.1e-05	0.0012
Sltm	ENSMUSG00000032212	7.34E-06	1.00E-05	4.65E-06	0.46	-1.1	9.2e-05	0.0012
Mocs2	ENSMUSG00000015536	1.01E-05	1.38E-05	6.51E-06	0.47	-1.1	9.2e-05	0.0012
Zfp592	ENSMUSG00000005621	9.70E-06	1.32E-05	6.18E-06	0.47	-1.1	9.3e-05	0.0012
Zfp106	ENSMUSG00000027288	2.13E-04	2.88E-04	1.39E-04	0.48	-1.1	9.4e-05	0.0012
Cdc14b	ENSMUSG00000033102	5.53E-06	7.49E-06	3.57E-06	0.48	-1.1	9.4e-05	0.0012
Rpn2	ENSMUSG00000027642	2.46E-05	3.29E-05	1.63E-05	0.49	-1	9.4e-05	0.0012
Hcfc2	ENSMUSG00000020246	8.46E-06	1.16E-05	5.36E-06	0.46	-1.1	9.4e-05	0.0012
Sod3	ENSMUSG00000072941	3.57E-06	4.91E-06	2.23E-06	0.45	-1.1	9.4e-05	0.0012
Gm9392	ENSMUSG00000087298	3.69E-06	5.19E-06	2.19E-06	0.42	-1.2	9.5e-05	0.0012
Zdhhc5	ENSMUSG00000034075	3.61E-05	4.81E-05	2.40E-05	0.5	-1	9.5e-05	0.0012
Ehd2	ENSMUSG00000074364	3.16E-05	4.19E-05	2.13E-05	0.51	-0.98	9.6e-05	0.0012
Cux1	ENSMUSG00000029705	3.02E-05	4.03E-05	2.00E-05	0.5	-1	9.6e-05	0.0012
Ccbp2	ENSMUSG00000044534	1.44E-06	2.19E-06	6.90E-07	0.32	-1.7	9.7e-05	0.0012
Jund	ENSMUSG00000071076	7.68E-06	1.05E-05	4.91E-06	0.47	-1.1	9.7e-05	0.0012
Utp3	ENSMUSG00000070697	9.96E-06	1.36E-05	6.30E-06	0.46	-1.1	9.8e-05	0.0012
Pnpla3	ENSMUSG00000041653	8.28E-07	1.34E-06	3.19E-07	0.24	-2.1	9.8e-05	0.0012
Pole4	ENSMUSG00000030042	4.98E-06	6.93E-06	3.04E-06	0.44	-1.2	9.8e-05	0.0012
Prpf38b	ENSMUSG00000027881	5.95E-06	8.25E-06	3.66E-06	0.44	-1.2	9.9e-05	0.0012
Tmem238	ENSMUSG00000030431	7.18E-07	1.16E-06	2.78E-07	0.24	-2.1	0.0001	0.0012
Snord16a	ENSMUSG00000094411	3.26E-05	4.52E-05	2.01E-05	0.45	-1.2	0.0001	0.0012
Fam168b	ENSMUSG00000037503	1.96E-05	2.63E-05	1.29E-05	0.49	-1	0.0001	0.0012
Kcnma1	ENSMUSG00000063142	1.79E-05	2.43E-05	1.15E-05	0.48	-1.1	0.0001	0.0012
Adi1	ENSMUSG00000020629	1.19E-05	1.89E-05	4.93E-06	0.26	-1.9	0.0001	0.0012
Itgb1	ENSMUSG00000025809	6.67E-05	9.10E-05	4.24E-05	0.47	-1.1	0.0001	0.0012
Mex3c	ENSMUSG00000037253	8.43E-06	1.15E-05	5.41E-06	0.47	-1.1	0.0001	0.0013
Gigyf2	ENSMUSG00000048000	1.67E-05	2.24E-05	1.10E-05	0.49	-1	0.0001	0.0013
Phf2011	ENSMUSG00000072501	2.32E-05	3.11E-05	1.54E-05	0.49	-1	0.0001	0.0013
Zdhhc24	ENSMUSG00000006463	1.14E-06	1.78E-06	5.12E-07	0.29	-1.8	0.0001	0.0013
Grem2	ENSMUSG00000050069	3.79E-06	5.30E-06	2.29E-06	0.43	-1.2	0.0001	0.0013
Vangl2	ENSMUSG00000026556	4.25E-07	7.28E-07	1.22E-07	0.17	-2.6	0.0001	0.0013
Dpy19l1	ENSMUSG00000043067	3.29E-06	4.74E-06	1.83E-06	0.39	-1.4	0.0001	0.0013
Gm24727	ENSMUSG00000088856	1.33E-06	2.09E-06	5.65E-07	0.27	-1.9	0.0001	0.0013
Nrm	ENSMUSG00000059791	4.22E-07	6.91E-07	1.54E-07	0.22	-2.2	0.0001	0.0013
Zfx3	ENSMUSG00000038872	9.68E-06	1.34E-05	5.96E-06	0.44	-1.2	0.0001	0.0013
Mrgprg	ENSMUSG00000050276	5.19E-07	1.02E-06	1.46E-08	0.014	-6.1	0.0001	0.0013
Fmr1	ENSMUSG00000000838	3.33E-06	4.85E-06	1.81E-06	0.37	-1.4	0.0001	0.0013
Pdpn	ENSMUSG00000028583	4.41E-06	6.36E-06	2.47E-06	0.39	-1.4	0.00011	0.0013
P4ha2	ENSMUSG00000018906	1.01E-05	1.37E-05	6.56E-06	0.48	-1.1	0.00011	0.0013
Slc35a1	ENSMUSG00000028293	4.15E-06	5.84E-06	2.47E-06	0.42	-1.2	0.00011	0.0013
C230081A13Rik	ENSMUSG00000074305	1.00E-05	1.37E-05	6.42E-06	0.47	-1.1	0.00011	0.0013
Gdf15	ENSMUSG00000038508	2.26E-07	4.11E-08	4.10E-07	10	3.3	0.00011	0.0013
Usp13	ENSMUSG00000056900	1.44E-04	1.94E-04	9.48E-05	0.49	-1	0.00011	0.0013
Zbed6	ENSMUSG00000094410	2.76E-05	3.73E-05	1.80E-05	0.48	-1.1	0.00011	0.0013
Tmem109	ENSMUSG00000034659	1.16E-04	1.55E-04	7.78E-05	0.5	-1	0.00011	0.0013
Zfp532	ENSMUSG00000042439	8.03E-06	1.12E-05	4.83E-06	0.43	-1.2	0.00011	0.0013
Eif5	ENSMUSG00000021282	4.27E-05	5.81E-05	2.73E-05	0.47	-1.1	0.00011	0.0013
Gm21992	ENSMUSG00000096370	1.11E-06	1.77E-06	4.58E-07	0.26	-1.9	0.00011	0.0013
Zbtb20	ENSMUSG00000022708	7.53E-05	1.02E-04	4.83E-05	0.47	-1.1	0.00011	0.0013
Nucks1	ENSMUSG00000026434	3.16E-05	4.35E-05	1.97E-05	0.45	-1.1	0.00011	0.0013
Kdm5c	ENSMUSG00000025332	1.48E-05	1.99E-05	9.64E-06	0.48	-1	0.00011	0.0013
Mctp1	ENSMUSG00000021596	1.42E-06	2.13E-06	7.18E-07	0.34	-1.6	0.00011	0.0014
Lmcd1	ENSMUSG00000057604	2.44E-05	1.34E-05	3.55E-05	2.7	1.4	0.00011	0.0014
Adck2	ENSMUSG00000046947	1.70E-06	2.52E-06	8.90E-07	0.35	-1.5	0.00011	0.0014
Slc25a30	ENSMUSG00000022003	5.75E-06	8.12E-06	3.39E-06	0.42	-1.3	0.00011	0.0014
Max	ENSMUSG00000059436	6.94E-06	9.57E-06	4.30E-06	0.45	-1.2	0.00011	0.0014
Pak1ip1	ENSMUSG00000038683	1.05E-05	1.42E-05	6.89E-06	0.49	-1	0.00011	0.0014
Ormdl3	ENSMUSG00000038150	8.68E-06	1.16E-05	5.78E-06	0.5	-1	0.00011	0.0014
Edn1	ENSMUSG00000021367	9.74E-07	1.55E-06	4.00E-07	0.26	-2	0.00012	0.0014
Rassf2	ENSMUSG00000027339	7.70E-06	1.05E-05	4.86E-06	0.46	-1.1	0.00012	0.0014
Adamts11	ENSMUSG00000066113	6.66E-06	9.18E-06	4.14E-06	0.45	-1.1	0.00012	0.0014
Tns3	ENSMUSG00000020422	8.49E-06	1.16E-05	5.41E-06	0.47	-1.1	0.00012	0.0014
Zfp623	ENSMUSG00000050846	5.80E-06	8.17E-06	3.42E-06	0.42	-1.3	0.00012	0.0014

Usp7	ENSMUSG00000022710	1.68E-05	2.27E-05	1.09E-05	0.48	-1.1	0.00012	0.0014
Msrp2	ENSMUSG00000023094	4.59E-06	3.06E-06	6.12E-06	2	1	0.00012	0.0014
2810474O19Rik	ENSMUSG00000032712	8.38E-06	1.21E-05	4.70E-06	0.39	-1.4	0.00012	0.0014
Zfp36	ENSMUSG00000044786	4.04E-06	5.81E-06	2.27E-06	0.39	-1.4	0.00012	0.0014
Nasp	ENSMUSG00000028693	3.88E-06	5.72E-06	2.04E-06	0.36	-1.5	0.00012	0.0014
Flnc	ENSMUSG00000068699	2.59E-04	3.50E-04	1.68E-04	0.48	-1.1	0.00012	0.0014
Bcar3	ENSMUSG00000028121	3.13E-06	1.79E-06	4.47E-06	2.5	1.3	0.00012	0.0014
Camkk2	ENSMUSG00000029471	2.91E-06	4.04E-06	1.77E-06	0.44	-1.2	0.00012	0.0014
Cxcr7	ENSMUSG00000044337	1.37E-05	1.80E-05	9.35E-06	0.52	-0.95	0.00012	0.0014
Cdkn2aip	ENSMUSG00000038069	3.96E-06	5.54E-06	2.39E-06	0.43	-1.2	0.00012	0.0014
Smad7	ENSMUSG00000025880	3.83E-06	5.34E-06	2.32E-06	0.43	-1.2	0.00012	0.0014
Hoxa11as	ENSMUSG00000086427	1.16E-06	1.83E-06	4.96E-07	0.27	-1.9	0.00012	0.0014
Arpc1b	ENSMUSG00000029622	1.21E-05	1.61E-05	8.00E-06	0.5	-1	0.00012	0.0014
Fubp1	ENSMUSG00000028034	1.16E-05	1.58E-05	7.45E-06	0.47	-1.1	0.00012	0.0014
Tial1	ENSMUSG00000030846	1.70E-05	2.28E-05	1.13E-05	0.5	-1	0.00012	0.0014
Atp11a	ENSMUSG00000031441	2.36E-05	3.17E-05	1.56E-05	0.49	-1	0.00012	0.0014
Rom1	ENSMUSG00000071648	2.04E-06	2.83E-06	1.24E-06	0.44	-1.2	0.00012	0.0014
Cul1	ENSMUSG00000029686	2.81E-05	3.77E-05	1.86E-05	0.49	-1	0.00012	0.0014
Ttc33	ENSMUSG00000022151	1.28E-05	1.73E-05	8.34E-06	0.48	-1.1	0.00012	0.0014
Slc39a9	ENSMUSG00000048833	8.44E-06	1.15E-05	5.41E-06	0.47	-1.1	0.00012	0.0014
Mtpn	ENSMUSG00000029840	9.03E-06	1.24E-05	5.67E-06	0.46	-1.1	0.00012	0.0014
Prpf39	ENSMUSG00000035597	6.68E-06	9.20E-06	4.16E-06	0.45	-1.1	0.00012	0.0014
Zfp143	ENSMUSG00000061079	5.41E-06	7.77E-06	3.05E-06	0.39	-1.4	0.00012	0.0014
Xpo1	ENSMUSG00000020290	8.86E-06	1.20E-05	5.75E-06	0.48	-1.1	0.00012	0.0015
Ulk1	ENSMUSG00000029512	2.03E-05	2.73E-05	1.33E-05	0.49	-1	0.00012	0.0015
Wdtd1	ENSMUSG00000037622	3.49E-05	4.63E-05	2.35E-05	0.51	-0.98	0.00012	0.0015
Sp1	ENSMUSG00000001280	1.52E-05	2.04E-05	9.95E-06	0.49	-1	0.00012	0.0015
F630028O10Rik	ENSMUSG00000078122	1.20E-06	1.83E-06	5.75E-07	0.31	-1.7	0.00012	0.0015
Atp11b	ENSMUSG00000037400	5.70E-06	8.33E-06	3.07E-06	0.37	-1.4	0.00012	0.0015
Alox5	ENSMUSG00000025701	1.06E-06	1.57E-06	5.52E-07	0.35	-1.5	0.00012	0.0015
Golm1	ENSMUSG00000021556	9.70E-06	1.30E-05	6.40E-06	0.49	-1	0.00013	0.0015
Sec61a2	ENSMUSG00000025816	5.62E-06	7.71E-06	3.52E-06	0.46	-1.1	0.00013	0.0015
Sun2	ENSMUSG00000042524	5.36E-05	7.31E-05	3.41E-05	0.47	-1.1	0.00013	0.0015
1700017B05Rik	ENSMUSG00000032300	2.25E-06	3.20E-06	1.30E-06	0.4	-1.3	0.00013	0.0015
Epc2	ENSMUSG00000069495	9.60E-06	1.35E-05	5.66E-06	0.42	-1.3	0.00013	0.0015
Il17rd	ENSMUSG00000040717	3.61E-06	5.11E-06	2.10E-06	0.41	-1.3	0.00013	0.0015
Fcer1a	ENSMUSG00000005339	4.51E-07	7.51E-07	1.51E-07	0.2	-2.3	0.00013	0.0015
Zfp672	ENSMUSG00000049755	1.17E-05	1.59E-05	7.53E-06	0.47	-1.1	0.00013	0.0015
D5Ertd579e	ENSMUSG00000029190	5.66E-05	7.60E-05	3.71E-05	0.49	-1	0.00013	0.0015
Wdsub1	ENSMUSG00000026988	6.87E-06	9.81E-06	3.93E-06	0.4	-1.3	0.00013	0.0015
Clip1	ENSMUSG00000049550	1.67E-04	2.24E-04	1.10E-04	0.49	-1	0.00013	0.0015
Eif3e	ENSMUSG00000022336	2.47E-05	3.34E-05	1.60E-05	0.48	-1.1	0.00013	0.0015
Nav1	ENSMUSG00000009418	1.13E-05	1.53E-05	7.40E-06	0.48	-1	0.00013	0.0015
Cd9	ENSMUSG00000030342	8.12E-06	1.20E-05	4.26E-06	0.36	-1.5	0.00013	0.0015
Atxn7	ENSMUSG00000021738	1.05E-05	1.42E-05	6.82E-06	0.48	-1.1	0.00013	0.0015
Hdac4	ENSMUSG00000073617	4.80E-06	6.56E-06	3.03E-06	0.46	-1.1	0.00013	0.0015
Wwp1	ENSMUSG00000041058	5.57E-05	7.43E-05	3.72E-05	0.5	-1	0.00013	0.0015
Ano1	ENSMUSG00000031075	2.37E-06	1.51E-06	3.24E-06	2.1	1.1	0.00013	0.0015
Nrf1	ENSMUSG00000058440	4.89E-06	6.70E-06	3.07E-06	0.46	-1.1	0.00013	0.0015
Gsn	ENSMUSG00000026879	6.82E-04	9.14E-04	4.50E-04	0.49	-1	0.00013	0.0015
Bag5	ENSMUSG00000049792	8.96E-06	1.19E-05	6.05E-06	0.51	-0.97	0.00013	0.0015
Ebf2	ENSMUSG00000022053	5.87E-06	7.98E-06	3.77E-06	0.47	-1.1	0.00013	0.0015
Lifr	ENSMUSG00000054263	4.03E-05	5.34E-05	2.72E-05	0.51	-0.97	0.00013	0.0015
Clic4	ENSMUSG00000037242	3.09E-05	4.13E-05	2.06E-05	0.5	-1	0.00013	0.0015
Ccdc73	ENSMUSG00000045106	1.29E-06	2.09E-06	4.87E-07	0.23	-2.1	0.00013	0.0015
Dclre1c	ENSMUSG00000026648	1.87E-06	2.77E-06	9.78E-07	0.35	-1.5	0.00014	0.0016
Lgmn	ENSMUSG00000021190	1.26E-05	1.72E-05	8.00E-06	0.47	-1.1	0.00014	0.0016
Rbm33	ENSMUSG00000048271	1.80E-05	2.41E-05	1.18E-05	0.49	-1	0.00014	0.0016
Bmpr2	ENSMUSG00000067336	2.53E-05	3.42E-05	1.64E-05	0.48	-1.1	0.00014	0.0016
Fam160b2	ENSMUSG00000022095	5.74E-06	7.91E-06	3.57E-06	0.45	-1.1	0.00014	0.0016
Ptpn9	ENSMUSG00000032290	2.38E-06	3.37E-06	1.39E-06	0.41	-1.3	0.00014	0.0016
Cbfb	ENSMUSG00000031885	2.24E-05	2.96E-05	1.52E-05	0.51	-0.96	0.00014	0.0016
Gngt2	ENSMUSG00000038811	8.59E-07	1.29E-06	4.23E-07	0.33	-1.6	0.00014	0.0016
Rrbp1	ENSMUSG00000027422	1.53E-05	2.03E-05	1.03E-05	0.51	-0.98	0.00014	0.0016
Clu	ENSMUSG00000022037	1.07E-05	1.42E-05	7.20E-06	0.51	-0.98	0.00014	0.0016
Lpp	ENSMUSG00000033306	1.93E-05	2.60E-05	1.27E-05	0.49	-1	0.00014	0.0016
Sav1	ENSMUSG00000021067	1.62E-05	2.20E-05	1.03E-05	0.47	-1.1	0.00014	0.0016
Fbxo40	ENSMUSG00000047746	2.62E-04	3.52E-04	1.72E-04	0.49	-1	0.00014	0.0016

Erc2	ENSMUSG00000040640	6.22E-07	1.15E-07	1.13E-06	9.8	3.3	0.00014	0.0016
Rif1	ENSMUSG00000036202	9.38E-06	1.27E-05	6.09E-06	0.48	-1.1	0.00014	0.0016
Slc23a2	ENSMUSG00000027340	7.78E-06	1.06E-05	4.97E-06	0.47	-1.1	0.00014	0.0016
Gm9762	ENSMUSG00000037096	3.31E-06	4.57E-06	2.06E-06	0.45	-1.1	0.00014	0.0016
Rnf146	ENSMUSG00000038876	1.33E-05	1.81E-05	8.48E-06	0.47	-1.1	0.00014	0.0016
Sox6	ENSMUSG00000051910	5.01E-05	6.67E-05	3.35E-05	0.5	-1	0.00014	0.0016
Ptma	ENSMUSG00000026238	3.43E-06	5.38E-06	1.48E-06	0.28	-1.9	0.00014	0.0016
Ogt	ENSMUSG00000034160	5.88E-05	7.88E-05	3.88E-05	0.49	-1	0.00014	0.0016
Ccdc117	ENSMUSG00000020482	1.30E-05	1.78E-05	8.15E-06	0.46	-1.1	0.00014	0.0016
Crebbp	ENSMUSG00000022521	2.26E-05	3.02E-05	1.51E-05	0.5	-1	0.00014	0.0016
Hyoud	ENSMUSG00000032115	2.05E-05	2.74E-05	1.35E-05	0.49	-1	0.00014	0.0016
Srsf11	ENSMUSG00000055436	1.38E-05	1.85E-05	8.95E-06	0.48	-1.1	0.00014	0.0016
BC037032	ENSMUSG00000087221	1.10E-06	5.97E-07	1.61E-06	2.7	1.4	0.00014	0.0016
Eif1b	ENSMUSG00000006941	2.03E-06	3.01E-06	1.06E-06	0.35	-1.5	0.00014	0.0016
Flna	ENSMUSG00000031328	6.31E-05	8.37E-05	4.25E-05	0.51	-0.98	0.00015	0.0016
Ermp1	ENSMUSG00000046324	7.48E-06	1.03E-05	4.63E-06	0.45	-1.2	0.00015	0.0016
Ddah1	ENSMUSG00000028194	7.00E-07	1.11E-06	2.89E-07	0.26	-1.9	0.00015	0.0016
Zc3h13	ENSMUSG00000022000	6.46E-06	8.84E-06	4.07E-06	0.46	-1.1	0.00015	0.0016
Nuak1	ENSMUSG00000020032	1.24E-05	1.65E-05	8.16E-06	0.49	-1	0.00015	0.0016
Gm4895	ENSMUSG00000044268	4.19E-06	5.95E-06	2.43E-06	0.41	-1.3	0.00015	0.0017
Adal	ENSMUSG00000027259	8.43E-06	1.15E-05	5.40E-06	0.47	-1.1	0.00015	0.0017
Fam78a	ENSMUSG00000050592	9.08E-06	5.85E-06	1.23E-05	2.1	1.1	0.00015	0.0017
Baz1a	ENSMUSG00000035021	1.15E-06	1.78E-06	5.22E-07	0.29	-1.8	0.00015	0.0017
Ccdc134	ENSMUSG00000068114	3.69E-06	5.34E-06	2.03E-06	0.38	-1.4	0.00015	0.0017
Mib1	ENSMUSG00000024294	1.06E-04	1.43E-04	6.89E-05	0.48	-1	0.00015	0.0017
Fam107a	ENSMUSG00000021750	2.27E-06	3.35E-06	1.19E-06	0.35	-1.5	0.00015	0.0017
Cbx1	ENSMUSG00000018666	1.22E-05	1.64E-05	8.06E-06	0.49	-1	0.00015	0.0017
Sfr1	ENSMUSG00000025066	1.57E-05	2.07E-05	1.07E-05	0.51	-0.96	0.00015	0.0017
Srsf5	ENSMUSG00000021134	2.00E-05	2.65E-05	1.35E-05	0.51	-0.98	0.00015	0.0017
Rnmt	ENSMUSG00000009535	1.26E-05	1.69E-05	8.26E-06	0.49	-1	0.00015	0.0017
AC171273.1	ENSMUSG00000097004	5.19E-07	8.31E-07	2.08E-07	0.25	-2	0.00015	0.0017
Dhdh	ENSMUSG00000011382	2.25E-05	3.00E-05	1.49E-05	0.5	-1	0.00015	0.0017
Cggbp1	ENSMUSG00000054604	8.72E-06	1.18E-05	5.70E-06	0.48	-1	0.00016	0.0017
Rab30	ENSMUSG00000030643	1.95E-06	2.82E-06	1.07E-06	0.38	-1.4	0.00016	0.0017
Leprotil	ENSMUSG00000031513	5.84E-06	7.94E-06	3.74E-06	0.47	-1.1	0.00016	0.0017
Chrbn1	ENSMUSG00000041189	1.03E-05	1.39E-05	6.75E-06	0.49	-1	0.00016	0.0017
B3galnt2	ENSMUSG00000039242	3.78E-05	5.06E-05	2.50E-05	0.49	-1	0.00016	0.0017
H3f3b	ENSMUSG00000016559	1.13E-05	1.51E-05	7.54E-06	0.5	-1	0.00016	0.0017
Yipf5	ENSMUSG00000024487	3.80E-06	5.32E-06	2.29E-06	0.43	-1.2	0.00016	0.0017
Ifngr1	ENSMUSG00000020009	2.50E-05	3.33E-05	1.67E-05	0.5	-0.99	0.00016	0.0017
Psmid7	ENSMUSG00000039067	4.82E-05	6.57E-05	3.07E-05	0.47	-1.1	0.00016	0.0017
Gabpb2	ENSMUSG00000038766	9.06E-06	1.23E-05	5.84E-06	0.48	-1.1	0.00016	0.0017
Taf9	ENSMUSG00000078941	5.73E-06	7.77E-06	3.69E-06	0.48	-1.1	0.00016	0.0017
Sfxn1	ENSMUSG00000021474	1.52E-06	2.20E-06	8.51E-07	0.39	-1.4	0.00016	0.0018
Mirlet7i	ENSMUSG00000065406	3.82E-07	6.51E-07	1.13E-07	0.17	-2.5	0.00016	0.0018
Csnk1d	ENSMUSG00000025162	2.00E-05	2.71E-05	1.30E-05	0.48	-1.1	0.00016	0.0018
Sec22b	ENSMUSG00000027879	9.34E-06	1.25E-05	6.15E-06	0.49	-1	0.00016	0.0018
Senp5	ENSMUSG00000022772	7.95E-06	1.11E-05	4.80E-06	0.43	-1.2	0.00016	0.0018
Parp11	ENSMUSG00000037997	1.28E-06	1.90E-06	6.61E-07	0.35	-1.5	0.00016	0.0018
Ppp3ca	ENSMUSG00000028161	5.75E-05	7.58E-05	3.92E-05	0.52	-0.95	0.00016	0.0018
1500012F01Rik	ENSMUSG00000074578	4.04E-06	5.55E-06	2.53E-06	0.46	-1.1	0.00016	0.0018
Gm4875	ENSMUSG00000082791	5.30E-07	8.45E-07	2.15E-07	0.25	-2	0.00016	0.0018
Akt3	ENSMUSG00000019699	4.87E-06	6.78E-06	2.96E-06	0.44	-1.2	0.00016	0.0018
Zmiz1	ENSMUSG00000007817	7.45E-06	1.01E-05	4.78E-06	0.47	-1.1	0.00016	0.0018
Plekha2	ENSMUSG00000031557	4.79E-06	6.49E-06	3.08E-06	0.47	-1.1	0.00016	0.0018
Krt222	ENSMUSG00000035849	1.26E-06	6.50E-07	1.87E-06	2.9	1.5	0.00017	0.0018
Rcc3	ENSMUSG00000021287	6.81E-07	1.07E-06	2.90E-07	0.27	-1.9	0.00017	0.0018
Rab7	ENSMUSG00000079477	6.65E-05	9.02E-05	4.28E-05	0.47	-1.1	0.00017	0.0018
Cd248	ENSMUSG00000056481	6.58E-06	8.96E-06	4.21E-06	0.47	-1.1	0.00017	0.0018
Dll1	ENSMUSG00000014773	3.98E-06	6.00E-06	1.95E-06	0.33	-1.6	0.00017	0.0018
Vasn	ENSMUSG00000039646	5.99E-06	8.14E-06	3.83E-06	0.47	-1.1	0.00017	0.0018
Irak3	ENSMUSG00000020227	3.25E-06	4.66E-06	1.83E-06	0.39	-1.3	0.00017	0.0018
Avil	ENSMUSG00000025432	1.36E-06	2.07E-06	6.56E-07	0.32	-1.7	0.00017	0.0018
Il15ra	ENSMUSG00000023206	9.99E-06	1.44E-05	5.58E-06	0.39	-1.4	0.00017	0.0019
Pcnx	ENSMUSG00000021140	4.06E-05	5.53E-05	2.59E-05	0.47	-1.1	0.00017	0.0019
Thnsl1	ENSMUSG00000048550	2.77E-06	3.91E-06	1.63E-06	0.42	-1.3	0.00017	0.0019
Ar15b	ENSMUSG00000017418	6.61E-06	9.38E-06	3.84E-06	0.41	-1.3	0.00017	0.0019
Btg1	ENSMUSG00000036478	5.16E-06	7.02E-06	3.30E-06	0.47	-1.1	0.00017	0.0019

Ddx17	ENSMUSG00000055065	4.19E-05	5.63E-05	2.76E-05	0.49	-1	0.00017	0.0019
Taf4b	ENSMUSG00000054321	2.39E-06	3.43E-06	1.35E-06	0.39	-1.3	0.00017	0.0019
Tinagl1	ENSMUSG00000028776	9.53E-06	1.34E-05	5.61E-06	0.42	-1.3	0.00017	0.0019
Mlst8	ENSMUSG00000024142	6.66E-06	9.15E-06	4.18E-06	0.46	-1.1	0.00017	0.0019
Meis2	ENSMUSG00000027210	7.30E-07	1.08E-06	3.80E-07	0.35	-1.5	0.00017	0.0019
Phf8	ENSMUSG00000041229	4.75E-06	6.56E-06	2.93E-06	0.45	-1.2	0.00017	0.0019
Flcn	ENSMUSG00000032633	3.03E-05	4.07E-05	1.99E-05	0.49	-1	0.00018	0.0019
Mkl2	ENSMUSG00000009569	1.41E-05	1.88E-05	9.40E-06	0.5	-1	0.00018	0.0019
Zscan18	ENSMUSG00000070822	3.73E-07	1.08E-07	6.39E-07	5.9	2.6	0.00018	0.0019
Ipo7	ENSMUSG00000066232	3.60E-05	4.79E-05	2.40E-05	0.5	-0.99	0.00018	0.0019
Sec61a1	ENSMUSG00000030082	1.47E-05	1.96E-05	9.81E-06	0.5	-1	0.00018	0.0019
Nxpe2	ENSMUSG00000032028	5.63E-07	9.29E-07	1.98E-07	0.21	-2.2	0.00018	0.002
Aebp1	ENSMUSG00000020473	4.30E-05	5.65E-05	2.94E-05	0.52	-0.94	0.00018	0.002
Ddx46	ENSMUSG00000021500	1.43E-05	1.89E-05	9.63E-06	0.51	-0.97	0.00018	0.002
9430015G10Rik	ENSMUSG00000059939	1.16E-06	1.75E-06	5.71E-07	0.33	-1.6	0.00018	0.002
Slc25a13	ENSMUSG00000015112	4.48E-07	2.07E-07	6.89E-07	3.3	1.7	0.00019	0.002
Ids	ENSMUSG00000035847	7.02E-06	9.46E-06	4.58E-06	0.48	-1	0.00019	0.002
Lrfn4	ENSMUSG00000045045	1.02E-06	1.51E-06	5.35E-07	0.35	-1.5	0.00019	0.002
Trim7	ENSMUSG00000040350	1.32E-05	9.20E-06	1.72E-05	1.9	0.9	0.00019	0.002
Bnip3	ENSMUSG00000078566	3.44E-05	4.66E-05	2.22E-05	0.48	-1.1	0.00019	0.002
Heg1	ENSMUSG00000075254	2.89E-05	4.27E-05	1.51E-05	0.35	-1.5	0.00019	0.002
Gm10123	ENSMUSG00000062933	2.56E-06	3.95E-06	1.17E-06	0.3	-1.8	0.00019	0.002
Dcaf13	ENSMUSG00000022300	3.38E-06	4.72E-06	2.05E-06	0.43	-1.2	0.00019	0.002
Abt1	ENSMUSG00000036376	4.29E-06	5.98E-06	2.61E-06	0.44	-1.2	0.00019	0.002
Naa38	ENSMUSG00000044155	1.98E-06	2.95E-06	1.00E-06	0.34	-1.6	0.00019	0.002
Dcun1d3	ENSMUSG00000048787	9.51E-06	1.40E-05	5.05E-06	0.36	-1.5	0.00019	0.002
Denr	ENSMUSG00000023106	9.22E-06	1.24E-05	6.06E-06	0.49	-1	0.00019	0.002
Arl6ip1	ENSMUSG00000030654	3.39E-06	4.63E-06	2.14E-06	0.46	-1.1	0.00019	0.0021
Gpr107	ENSMUSG00000000194	1.67E-05	2.23E-05	1.11E-05	0.5	-1	0.00019	0.0021
Tgfb1i1	ENSMUSG00000030782	1.59E-06	2.27E-06	9.17E-07	0.4	-1.3	0.0002	0.0021
Dcp2	ENSMUSG00000024472	5.41E-06	7.43E-06	3.39E-06	0.46	-1.1	0.0002	0.0021
Klhl25	ENSMUSG00000055652	3.85E-06	5.44E-06	2.25E-06	0.41	-1.3	0.0002	0.0021
Senp2	ENSMUSG00000022855	9.06E-06	1.34E-05	4.77E-06	0.36	-1.5	0.0002	0.0021
Smc3	ENSMUSG00000024974	5.98E-06	8.13E-06	3.83E-06	0.47	-1.1	0.0002	0.0021
Setd7	ENSMUSG00000037111	1.30E-04	1.74E-04	8.63E-05	0.5	-1	0.0002	0.0021
Pat11	ENSMUSG00000046139	4.89E-06	6.74E-06	3.04E-06	0.45	-1.1	0.0002	0.0021
Gm20594	ENSMUSG00000096887	3.24E-07	8.27E-08	5.64E-07	6.8	2.8	0.0002	0.0021
Lnpep	ENSMUSG00000023845	2.12E-05	2.89E-05	1.35E-05	0.47	-1.1	0.0002	0.0021
Cbx4	ENSMUSG00000039989	1.57E-06	2.26E-06	8.74E-07	0.39	-1.4	0.0002	0.0021
Ncrna00085	ENSMUSG00000080316	1.53E-06	2.38E-06	6.78E-07	0.28	-1.8	0.0002	0.0021
Fam199x	ENSMUSG00000042595	3.56E-06	5.05E-06	2.08E-06	0.41	-1.3	0.0002	0.0021
Acta2	ENSMUSG00000035783	1.43E-05	1.91E-05	9.51E-06	0.5	-1	0.0002	0.0021
Adcy9	ENSMUSG00000005580	3.14E-05	4.27E-05	2.02E-05	0.47	-1.1	0.0002	0.0021
Zfp622	ENSMUSG00000052253	6.90E-06	9.26E-06	4.55E-06	0.49	-1	0.0002	0.0021
Zfp260	ENSMUSG00000049421	1.32E-05	1.77E-05	8.74E-06	0.49	-1	0.0002	0.0021
Plin3	ENSMUSG00000024197	2.01E-05	1.27E-05	2.76E-05	2.2	1.1	0.00021	0.0021
L2hgdh	ENSMUSG00000020988	9.69E-06	1.31E-05	6.32E-06	0.48	-1	0.00021	0.0021
Mon2	ENSMUSG00000034602	2.67E-05	3.64E-05	1.70E-05	0.47	-1.1	0.00021	0.0022
Irs1	ENSMUSG00000055980	3.35E-05	4.45E-05	2.26E-05	0.51	-0.98	0.00021	0.0022
Snora69	ENSMUSG00000065642	3.36E-06	4.71E-06	2.01E-06	0.43	-1.2	0.00021	0.0022
Serping1	ENSMUSG00000023224	3.50E-05	4.77E-05	2.24E-05	0.47	-1.1	0.00021	0.0022
Myc	ENSMUSG00000022346	3.78E-06	5.22E-06	2.33E-06	0.45	-1.2	0.00021	0.0022
Epc1	ENSMUSG00000024240	1.16E-05	1.57E-05	7.56E-06	0.48	-1.1	0.00021	0.0022
Morc3	ENSMUSG00000039456	6.52E-06	8.84E-06	4.20E-06	0.48	-1.1	0.00021	0.0022
Ptges3	ENSMUSG00000071072	7.39E-06	1.07E-05	4.09E-06	0.38	-1.4	0.00021	0.0022
Rfxap	ENSMUSG00000036615	3.99E-06	5.53E-06	2.45E-06	0.44	-1.2	0.00021	0.0022
Klf11	ENSMUSG00000020653	2.30E-06	3.65E-06	9.58E-07	0.26	-1.9	0.00021	0.0022
Best3	ENSMUSG00000020169	2.27E-06	3.26E-06	1.28E-06	0.39	-1.4	0.00021	0.0022
Hnrnpab	ENSMUSG00000020358	2.61E-05	3.47E-05	1.74E-05	0.5	-0.99	0.00021	0.0022
Trim44	ENSMUSG00000027189	1.03E-05	1.39E-05	6.75E-06	0.49	-1	0.00021	0.0022
Slc25a45	ENSMUSG00000024818	1.29E-06	1.96E-06	6.17E-07	0.32	-1.7	0.00021	0.0022
Klhl28	ENSMUSG00000020948	4.36E-06	6.08E-06	2.63E-06	0.43	-1.2	0.00021	0.0022
Pom121	ENSMUSG00000053293	1.61E-06	2.39E-06	8.25E-07	0.34	-1.5	0.00021	0.0022
Swt1	ENSMUSG00000052748	4.13E-06	5.74E-06	2.53E-06	0.44	-1.2	0.00022	0.0022
Ocr1	ENSMUSG00000001173	8.55E-06	1.17E-05	5.37E-06	0.46	-1.1	0.00022	0.0022
Lonrf1	ENSMUSG00000039633	2.72E-06	3.80E-06	1.64E-06	0.43	-1.2	0.00022	0.0022
Mirlet7g	ENSMUSG00000065440	5.82E-07	9.27E-07	2.37E-07	0.26	-2	0.00022	0.0022
Nr1h3	ENSMUSG00000002108	5.52E-06	7.87E-06	3.17E-06	0.4	-1.3	0.00022	0.0023

Gmeb2	ENSMUSG00000038705	4.93E-06	6.77E-06	3.08E-06	0.46	-1.1	0.00022	0.0023
Zfp236	ENSMUSG00000041258	9.38E-06	1.26E-05	6.15E-06	0.49	-1	0.00022	0.0023
Dad1	ENSMUSG00000022174	8.65E-06	1.14E-05	5.85E-06	0.51	-0.97	0.00022	0.0023
Purb	ENSMUSG000000094483	1.38E-05	1.84E-05	9.18E-06	0.5	-1	0.00022	0.0023
Vbp1	ENSMUSG000000031197	5.97E-06	8.69E-06	3.26E-06	0.37	-1.4	0.00022	0.0023
Col4a2	ENSMUSG000000031503	6.12E-05	8.12E-05	4.12E-05	0.51	-0.98	0.00022	0.0023
Brd4	ENSMUSG00000024002	4.80E-06	6.88E-06	2.71E-06	0.39	-1.3	0.00022	0.0023
Dennd4c	ENSMUSG000000038024	2.58E-05	3.50E-05	1.66E-05	0.47	-1.1	0.00022	0.0023
Fam83g	ENSMUSG00000042377	9.71E-07	1.48E-06	4.62E-07	0.31	-1.7	0.00023	0.0023
Ccdc25	ENSMUSG00000022035	6.00E-06	8.10E-06	3.90E-06	0.48	-1.1	0.00023	0.0023
Ebna1bp2	ENSMUSG00000028729	8.25E-06	1.10E-05	5.51E-06	0.5	-1	0.00023	0.0023
Cdh4	ENSMUSG00000000305	1.95E-05	1.29E-05	2.62E-05	2	1	0.00023	0.0023
Cask	ENSMUSG000000031012	7.53E-06	1.00E-05	5.02E-06	0.5	-1	0.00023	0.0023
March6	ENSMUSG000000039100	7.86E-05	1.04E-04	5.36E-05	0.52	-0.95	0.00023	0.0023
Cdkl1	ENSMUSG000000020990	2.44E-07	7.40E-08	4.15E-07	5.6	2.5	0.00023	0.0023
Socs4	ENSMUSG00000048379	5.43E-06	7.42E-06	3.45E-06	0.46	-1.1	0.00023	0.0024
Zbtb10	ENSMUSG000000069114	2.89E-06	4.09E-06	1.68E-06	0.41	-1.3	0.00023	0.0024
Baz1b	ENSMUSG000000002748	3.07E-05	4.16E-05	1.98E-05	0.48	-1.1	0.00023	0.0024
Serpine2	ENSMUSG00000026249	3.99E-05	5.28E-05	2.70E-05	0.51	-0.97	0.00023	0.0024
Cmtm6	ENSMUSG000000032434	5.77E-06	7.77E-06	3.77E-06	0.48	-1	0.00023	0.0024
Smek2	ENSMUSG00000020463	1.03E-05	1.38E-05	6.88E-06	0.5	-1	0.00023	0.0024
Timp1	ENSMUSG000000001131	1.01E-06	1.92E-06	9.27E-08	0.048	-4.4	0.00023	0.0024
Pld5	ENSMUSG000000055214	1.53E-06	2.31E-06	7.58E-07	0.33	-1.6	0.00023	0.0024
Phkb	ENSMUSG000000036879	1.62E-04	2.13E-04	1.10E-04	0.52	-0.95	0.00023	0.0024
Ppp2ca	ENSMUSG000000020349	6.14E-05	8.15E-05	4.13E-05	0.51	-0.98	0.00024	0.0024
Pdik1l	ENSMUSG000000050890	2.73E-06	3.89E-06	1.58E-06	0.41	-1.3	0.00024	0.0024
Rcctb1	ENSMUSG000000035469	3.63E-06	5.01E-06	2.26E-06	0.45	-1.2	0.00024	0.0024
Taf13	ENSMUSG000000048100	2.62E-06	3.68E-06	1.57E-06	0.43	-1.2	0.00024	0.0024
Gm10275	ENSMUSG000000069682	1.01E-05	1.40E-05	6.19E-06	0.44	-1.2	0.00024	0.0024
Gm24233	ENSMUSG000000077505	2.18E-06	3.32E-06	1.04E-06	0.31	-1.7	0.00024	0.0024
Foxn3	ENSMUSG000000033713	2.79E-05	3.75E-05	1.83E-05	0.49	-1	0.00024	0.0024
Aebp2	ENSMUSG000000030232	1.00E-05	1.35E-05	6.55E-06	0.49	-1	0.00024	0.0024
Kat6a	ENSMUSG000000031540	1.94E-05	2.56E-05	1.31E-05	0.51	-0.96	0.00024	0.0024
Hnrnpd	ENSMUSG000000000568	4.47E-06	6.87E-06	2.07E-06	0.3	-1.7	0.00024	0.0024
Gsta4	ENSMUSG000000032348	5.04E-06	3.40E-06	6.67E-06	2	0.97	0.00024	0.0024
Erccl	ENSMUSG000000003549	5.18E-06	7.11E-06	3.25E-06	0.46	-1.1	0.00024	0.0024
Gm11730	ENSMUSG000000087057	3.12E-07	5.25E-07	9.84E-08	0.19	-2.4	0.00024	0.0024
Cct8	ENSMUSG000000025613	2.85E-05	3.76E-05	1.94E-05	0.52	-0.95	0.00024	0.0024
Zfp410	ENSMUSG000000042472	6.54E-06	9.12E-06	3.97E-06	0.43	-1.2	0.00024	0.0024
Ggnbp2	ENSMUSG000000020530	1.62E-05	2.14E-05	1.09E-05	0.51	-0.97	0.00025	0.0025
Icmt	ENSMUSG000000039662	1.29E-05	1.71E-05	8.66E-06	0.51	-0.98	0.00025	0.0025
Lingo3	ENSMUSG000000051067	3.70E-06	5.06E-06	2.34E-06	0.46	-1.1	0.00025	0.0025
Gfod2	ENSMUSG000000013150	3.44E-06	4.76E-06	2.11E-06	0.44	-1.2	0.00025	0.0025
Abhd17c	ENSMUSG000000038459	1.97E-06	2.72E-06	1.22E-06	0.45	-1.2	0.00025	0.0025
Efcc1	ENSMUSG000000068263	3.80E-07	6.40E-07	1.20E-07	0.19	-2.4	0.00025	0.0025
Cdkl2	ENSMUSG000000029403	2.65E-06	3.66E-06	1.63E-06	0.45	-1.2	0.00025	0.0025
Stx2	ENSMUSG000000029428	4.99E-06	6.79E-06	3.19E-06	0.47	-1.1	0.00025	0.0025
Zc3h15	ENSMUSG000000027091	1.14E-05	1.54E-05	7.48E-06	0.49	-1	0.00025	0.0025
Ttc7b	ENSMUSG000000033530	4.02E-05	5.31E-05	2.73E-05	0.51	-0.96	0.00025	0.0025
Cxx1a	ENSMUSG000000067925	1.05E-06	1.60E-06	4.98E-07	0.31	-1.7	0.00025	0.0025
Wdr26	ENSMUSG000000038733	4.69E-05	6.14E-05	3.25E-05	0.53	-0.92	0.00026	0.0025
Cln6	ENSMUSG000000029016	2.71E-06	3.77E-06	1.65E-06	0.44	-1.2	0.00026	0.0025
Traf3ip2	ENSMUSG000000019842	2.38E-06	3.39E-06	1.37E-06	0.4	-1.3	0.00026	0.0025
AC130214.1	ENSMUSG000000097290	8.03E-07	1.23E-06	3.71E-07	0.3	-1.7	0.00026	0.0026
Pggt1b	ENSMUSG000000024477	3.38E-06	4.79E-06	1.96E-06	0.41	-1.3	0.00026	0.0026
Atxn7l3b	ENSMUSG000000074748	8.88E-06	1.22E-05	5.53E-06	0.45	-1.1	0.00026	0.0026
Ibtk	ENSMUSG000000035941	2.33E-05	3.07E-05	1.59E-05	0.52	-0.95	0.00026	0.0026
AL844859.1	ENSMUSG000000097857	8.15E-07	1.29E-06	3.44E-07	0.27	-1.9	0.00026	0.0026
Tmx4	ENSMUSG000000034723	7.12E-06	9.85E-06	4.39E-06	0.45	-1.2	0.00026	0.0026
Esyt2	ENSMUSG000000021171	2.23E-05	2.91E-05	1.55E-05	0.53	-0.91	0.00026	0.0026
Ppplr12a	ENSMUSG000000019907	1.14E-05	1.56E-05	7.22E-06	0.46	-1.1	0.00026	0.0026
Ganc	ENSMUSG000000062646	1.21E-05	1.62E-05	8.02E-06	0.5	-1	0.00026	0.0026
Bdp1	ENSMUSG000000049658	1.19E-05	1.61E-05	7.66E-06	0.48	-1.1	0.00026	0.0026
Tbkbp1	ENSMUSG000000038517	1.80E-06	2.57E-06	1.03E-06	0.4	-1.3	0.00026	0.0026
Nek3	ENSMUSG000000031478	1.30E-06	1.94E-06	6.57E-07	0.34	-1.6	0.00026	0.0026
Fn3krp	ENSMUSG000000039253	2.92E-06	4.25E-06	1.59E-06	0.37	-1.4	0.00026	0.0026
Actr1a	ENSMUSG000000025228	2.75E-05	3.61E-05	1.89E-05	0.52	-0.94	0.00026	0.0026
Scamp1	ENSMUSG000000021687	7.28E-06	9.66E-06	4.91E-06	0.51	-0.98	0.00027	0.0026

Vamp2	ENSMUSG00000020894	8.20E-06	1.11E-05	5.35E-06	0.48	-1	0.00027	0.0026
Rab10	ENSMUSG00000020671	1.31E-04	1.77E-04	8.50E-05	0.48	-1.1	0.00027	0.0026
Dpep1	ENSMUSG00000019278	2.54E-05	3.51E-05	1.57E-05	0.45	-1.2	0.00027	0.0026
Asph	ENSMUSG00000028207	7.94E-05	1.06E-04	5.32E-05	0.5	-0.99	0.00027	0.0026
Tnfrsf11a	ENSMUSG00000026321	7.86E-07	1.21E-06	3.66E-07	0.3	-1.7	0.00027	0.0026
Tmem39a	ENSMUSG00000002845	4.48E-06	6.21E-06	2.76E-06	0.44	-1.2	0.00027	0.0026
Cmklr1	ENSMUSG00000042190	8.16E-06	1.09E-05	5.46E-06	0.5	-0.99	0.00027	0.0027
Hjulp	ENSMUSG00000044783	7.41E-06	1.04E-05	4.41E-06	0.42	-1.2	0.00027	0.0027
1700012B15Rik	ENSMUSG00000079179	6.37E-06	9.01E-06	3.73E-06	0.41	-1.3	0.00027	0.0027
Tbc1d13	ENSMUSG00000039678	6.25E-06	9.04E-06	3.47E-06	0.38	-1.4	0.00027	0.0027
Mafa	ENSMUSG00000047591	2.29E-06	3.30E-06	1.27E-06	0.39	-1.4	0.00027	0.0027
Hmgb3	ENSMUSG00000015217	5.18E-07	1.60E-07	8.77E-07	5.5	2.5	0.00027	0.0027
Ucp2	ENSMUSG00000033685	5.40E-06	7.26E-06	3.54E-06	0.49	-1	0.00028	0.0027
Naa15	ENSMUSG00000063273	2.15E-05	3.08E-05	1.22E-05	0.4	-1.3	0.00028	0.0027
Kras	ENSMUSG00000030265	9.28E-06	1.37E-05	4.82E-06	0.35	-1.5	0.00028	0.0027
Slc6a2	ENSMUSG00000055368	1.29E-06	2.21E-06	3.72E-07	0.17	-2.6	0.00028	0.0027
Mr1	ENSMUSG00000026471	7.23E-06	9.77E-06	4.68E-06	0.48	-1.1	0.00028	0.0027
Kcnk6	ENSMUSG00000046410	1.47E-06	2.12E-06	8.26E-07	0.39	-1.4	0.00028	0.0027
Cog7	ENSMUSG00000034951	7.51E-06	1.01E-05	4.92E-06	0.49	-1	0.00028	0.0027
Plce1	ENSMUSG00000024998	5.36E-06	7.04E-06	3.69E-06	0.52	-0.93	0.00028	0.0027
Gm1305	ENSMUSG00000087236	1.29E-07	7.15E-09	2.50E-07	35	5.1	0.00028	0.0027
Il4ra	ENSMUSG00000030748	6.02E-06	8.11E-06	3.93E-06	0.49	-1	0.00028	0.0028
Tshz3	ENSMUSG00000021217	2.41E-06	3.43E-06	1.39E-06	0.4	-1.3	0.00029	0.0028
Cacna1d	ENSMUSG00000015968	6.70E-07	1.09E-06	2.50E-07	0.23	-2.1	0.00029	0.0028
Ecm1	ENSMUSG000000028108	8.82E-06	1.23E-05	5.32E-06	0.43	-1.2	0.00029	0.0028
AC136008.1	ENSMUSG00000097462	8.89E-07	1.35E-06	4.31E-07	0.32	-1.6	0.00029	0.0028
Gm6088	ENSMUSG00000083646	7.51E-07	1.17E-06	3.29E-07	0.28	-1.8	0.00029	0.0028
Ckap4	ENSMUSG00000046841	6.18E-06	8.34E-06	4.02E-06	0.48	-1.1	0.00029	0.0028
Ptch1	ENSMUSG00000021466	2.51E-06	3.51E-06	1.51E-06	0.43	-1.2	0.00029	0.0028
Crim1	ENSMUSG00000024074	2.73E-05	3.58E-05	1.87E-05	0.52	-0.94	0.00029	0.0028
Eif4ebp1	ENSMUSG00000031490	1.74E-05	2.27E-05	1.21E-05	0.53	-0.9	0.00029	0.0028
Fbxo17	ENSMUSG00000030598	1.77E-06	2.57E-06	9.72E-07	0.38	-1.4	0.00029	0.0028
Gpsm2	ENSMUSG00000027883	9.25E-07	1.44E-06	4.06E-07	0.28	-1.8	0.00029	0.0028
Zfp869	ENSMUSG00000054648	5.49E-06	7.47E-06	3.50E-06	0.47	-1.1	0.00029	0.0028
Mmp17	ENSMUSG00000029436	3.37E-07	5.58E-07	1.15E-07	0.21	-2.3	0.00029	0.0028
Wdr82	ENSMUSG00000020257	1.58E-05	2.14E-05	1.03E-05	0.48	-1.1	0.0003	0.0028
Erc5	ENSMUSG00000026048	1.02E-05	1.39E-05	6.46E-06	0.46	-1.1	0.0003	0.0029
Zbtb43	ENSMUSG00000026788	1.11E-05	1.57E-05	6.44E-06	0.41	-1.3	0.0003	0.0029
Mgme1	ENSMUSG00000027424	5.88E-06	7.97E-06	3.79E-06	0.48	-1.1	0.0003	0.0029
Tagln	ENSMUSG00000032085	1.14E-05	1.50E-05	7.87E-06	0.53	-0.93	0.0003	0.0029
Psm1	ENSMUSG00000026229	3.41E-05	4.47E-05	2.36E-05	0.53	-0.92	0.0003	0.0029
Gnptg	ENSMUSG00000035521	4.86E-06	6.62E-06	3.10E-06	0.47	-1.1	0.0003	0.0029
Srgn	ENSMUSG00000020077	6.04E-06	8.53E-06	3.56E-06	0.42	-1.3	0.0003	0.0029
Tbx15	ENSMUSG00000027868	9.65E-05	1.27E-04	6.60E-05	0.52	-0.94	0.0003	0.0029
Rasa2	ENSMUSG00000032413	2.11E-06	2.98E-06	1.23E-06	0.41	-1.3	0.0003	0.0029
Timp2	ENSMUSG00000017466	5.45E-05	7.09E-05	3.82E-05	0.54	-0.89	0.0003	0.0029
Klhl11	ENSMUSG00000048732	2.56E-06	3.57E-06	1.54E-06	0.43	-1.2	0.0003	0.0029
Kbtbd2	ENSMUSG00000059486	8.38E-06	1.12E-05	5.56E-06	0.5	-1	0.0003	0.0029
Ehd1	ENSMUSG00000024772	2.08E-05	2.79E-05	1.37E-05	0.49	-1	0.0003	0.0029
Erc6	ENSMUSG00000054051	3.43E-06	4.82E-06	2.04E-06	0.42	-1.2	0.00031	0.0029
Man1c1	ENSMUSG00000037306	3.30E-06	4.52E-06	2.07E-06	0.46	-1.1	0.00031	0.0029
Cd14	ENSMUSG00000051439	1.39E-06	2.02E-06	7.62E-07	0.38	-1.4	0.00031	0.0029
P2rx5	ENSMUSG00000005950	3.09E-06	4.26E-06	1.93E-06	0.45	-1.1	0.00031	0.0029
Ets1	ENSMUSG00000032035	7.36E-06	9.83E-06	4.89E-06	0.5	-1	0.00031	0.0029
Cdh11	ENSMUSG00000031673	8.36E-07	1.24E-06	4.37E-07	0.35	-1.5	0.00031	0.0029
Rnf113a2	ENSMUSG00000045546	4.27E-06	5.84E-06	2.69E-06	0.46	-1.1	0.00031	0.0029
Thbs2	ENSMUSG00000023885	1.66E-05	2.17E-05	1.14E-05	0.53	-0.92	0.00031	0.0029
Xpa	ENSMUSG00000028329	1.16E-06	1.75E-06	5.57E-07	0.32	-1.7	0.00031	0.0029
Fndc3a	ENSMUSG00000033487	4.89E-06	6.64E-06	3.14E-06	0.47	-1.1	0.00031	0.0029
Serinc1	ENSMUSG00000019877	5.91E-05	7.76E-05	4.07E-05	0.52	-0.93	0.00031	0.003
Abl2	ENSMUSG00000026596	1.86E-05	2.49E-05	1.22E-05	0.49	-1	0.00031	0.003
Zfp81	ENSMUSG00000003929	2.55E-06	3.61E-06	1.50E-06	0.41	-1.3	0.00031	0.003
Ank3	ENSMUSG00000069601	5.63E-05	7.43E-05	3.83E-05	0.52	-0.95	0.00031	0.003
Sema4c	ENSMUSG00000026121	3.15E-06	4.73E-06	1.56E-06	0.33	-1.6	0.00032	0.003
Casp12	ENSMUSG00000025887	5.33E-06	7.23E-06	3.43E-06	0.48	-1.1	0.00032	0.003
Eif2s2	ENSMUSG00000074656	2.72E-05	3.56E-05	1.87E-05	0.53	-0.93	0.00032	0.003
Gm9938	ENSMUSG00000054178	1.72E-06	2.50E-06	9.35E-07	0.37	-1.4	0.00032	0.003
Tmed10	ENSMUSG00000021248	2.23E-05	2.93E-05	1.54E-05	0.53	-0.93	0.00032	0.003

Mcc	ENSMUSG00000071856	3.65E-06	4.93E-06	2.36E-06	0.48	-1.1	0.00032	0.003
Zbtb46	ENSMUSG00000027583	6.82E-06	9.31E-06	4.33E-06	0.46	-1.1	0.00032	0.003
Ikbke	ENSMUSG00000042349	9.88E-07	1.47E-06	5.01E-07	0.34	-1.6	0.00032	0.003
Atf4	ENSMUSG00000042406	8.04E-05	1.09E-04	5.16E-05	0.47	-1.1	0.00032	0.003
Clp1	ENSMUSG00000027079	3.48E-06	4.90E-06	2.06E-06	0.42	-1.2	0.00032	0.003
Lpcat3	ENSMUSG00000004270	4.36E-06	5.86E-06	2.85E-06	0.49	-1	0.00032	0.003
Osmr	ENSMUSG00000022146	6.08E-06	8.57E-06	3.58E-06	0.42	-1.3	0.00032	0.003
Ccdc136	ENSMUSG00000029769	3.47E-06	4.91E-06	2.04E-06	0.41	-1.3	0.00032	0.003
Dock1	ENSMUSG00000058325	8.72E-06	1.15E-05	5.96E-06	0.52	-0.95	0.00032	0.003
2510009E07Rik	ENSMUSG00000043391	1.11E-05	1.48E-05	7.39E-06	0.5	-1	0.00032	0.003
Diap1	ENSMUSG00000024456	6.26E-05	8.30E-05	4.22E-05	0.51	-0.98	0.00032	0.003
Lgr4	ENSMUSG00000050199	9.58E-06	1.31E-05	6.05E-06	0.46	-1.1	0.00032	0.003
Pafah1b2	ENSMUSG00000003131	8.16E-06	1.08E-05	5.50E-06	0.51	-0.98	0.00032	0.003
Sorcs2	ENSMUSG00000029093	2.16E-06	1.36E-06	2.97E-06	2.2	1.1	0.00032	0.003
Cdh23	ENSMUSG00000012819	2.57E-06	1.63E-06	3.50E-06	2.1	1.1	0.00032	0.003
Col24a1	ENSMUSG00000028197	2.38E-06	1.33E-06	3.43E-06	2.6	1.4	0.00033	0.003
Vps37c	ENSMUSG00000048832	7.69E-06	1.03E-05	5.06E-06	0.49	-1	0.00033	0.003
AL732311.1	ENSMUSG00000097052	1.29E-04	8.38E-05	1.75E-04	2.1	1.1	0.00033	0.003
Cog6	ENSMUSG00000027742	3.09E-05	4.16E-05	2.03E-05	0.49	-1	0.00033	0.003
Rbx1	ENSMUSG00000022400	1.25E-05	1.63E-05	8.70E-06	0.53	-0.91	0.00033	0.003
Ccar1	ENSMUSG00000020074	6.21E-06	8.62E-06	3.79E-06	0.44	-1.2	0.00033	0.003
Mtmt1	ENSMUSG00000015214	1.50E-05	2.00E-05	1.00E-05	0.5	-1	0.00033	0.0031
Xpo6	ENSMUSG00000000131	7.18E-06	9.59E-06	4.76E-06	0.5	-1	0.00033	0.0031
Galnt4	ENSMUSG00000090035	2.31E-06	3.26E-06	1.35E-06	0.42	-1.3	0.00034	0.0031
Atf3	ENSMUSG00000026628	3.21E-06	5.85E-06	5.84E-07	0.1	-3.3	0.00034	0.0031
Mlxip	ENSMUSG00000038342	2.16E-05	2.85E-05	1.46E-05	0.51	-0.97	0.00034	0.0031
Clk1	ENSMUSG00000026034	1.87E-05	2.47E-05	1.26E-05	0.51	-0.97	0.00034	0.0031
Timm10	ENSMUSG00000027076	8.73E-06	1.22E-05	5.24E-06	0.43	-1.2	0.00034	0.0031
Gm16586	ENSMUSG00000089788	3.56E-06	5.02E-06	2.10E-06	0.42	-1.3	0.00034	0.0031
Rpl39	ENSMUSG00000079641	8.92E-06	1.20E-05	5.80E-06	0.48	-1.1	0.00034	0.0031
Herc1	ENSMUSG00000038664	4.36E-05	5.79E-05	2.93E-05	0.51	-0.98	0.00034	0.0031
Pitpna	ENSMUSG00000017781	4.17E-05	5.40E-05	2.94E-05	0.55	-0.87	0.00034	0.0031
Cmya5	ENSMUSG00000047419	1.25E-03	1.67E-03	8.31E-04	0.5	-1	0.00034	0.0031
Hook1	ENSMUSG00000028572	1.46E-05	1.95E-05	9.64E-06	0.49	-1	0.00034	0.0032
Ube2d1	ENSMUSG00000019927	1.63E-05	2.16E-05	1.11E-05	0.51	-0.96	0.00034	0.0032
Fabp3-ps1	ENSMUSG00000056366	4.85E-05	2.71E-05	6.98E-05	2.6	1.4	0.00034	0.0032
Uba6	ENSMUSG00000035898	2.70E-06	3.84E-06	1.55E-06	0.4	-1.3	0.00034	0.0032
Znrd1	ENSMUSG00000036315	2.65E-06	3.65E-06	1.65E-06	0.45	-1.2	0.00035	0.0032
Siglec1	ENSMUSG00000027322	2.68E-06	3.68E-06	1.67E-06	0.45	-1.1	0.00035	0.0032
Rfk	ENSMUSG00000024712	2.38E-05	3.12E-05	1.63E-05	0.52	-0.94	0.00035	0.0032
Rfx3	ENSMUSG00000040929	1.56E-06	2.26E-06	8.71E-07	0.39	-1.4	0.00035	0.0032
Pdlim4	ENSMUSG00000020388	1.54E-06	2.25E-06	8.26E-07	0.37	-1.4	0.00035	0.0032
Bak1	ENSMUSG00000057789	6.52E-06	8.67E-06	4.36E-06	0.5	-0.99	0.00035	0.0032
Bmi1	ENSMUSG00000026739	1.20E-05	1.58E-05	8.10E-06	0.51	-0.97	0.00035	0.0032
Ube2j1	ENSMUSG00000028277	1.75E-05	2.45E-05	1.05E-05	0.43	-1.2	0.00035	0.0032
Zfp84	ENSMUSG00000046185	7.18E-06	9.74E-06	4.63E-06	0.48	-1.1	0.00035	0.0032
Hsd17b12	ENSMUSG00000027195	2.98E-06	3.97E-06	1.99E-06	0.5	-1	0.00035	0.0032
Arhgap24	ENSMUSG00000057315	9.82E-06	1.29E-05	6.70E-06	0.52	-0.95	0.00035	0.0032
Hmg20a	ENSMUSG00000032329	8.63E-06	1.15E-05	5.75E-06	0.5	-1	0.00035	0.0032
Hook3	ENSMUSG00000037234	3.74E-05	4.97E-05	2.51E-05	0.51	-0.98	0.00035	0.0032
Gm24837	ENSMUSG00000089308	9.19E-07	1.57E-06	2.72E-07	0.17	-2.5	0.00035	0.0032
Kctd11	ENSMUSG00000046731	1.48E-06	2.15E-06	8.07E-07	0.37	-1.4	0.00035	0.0032
Ecd3	ENSMUSG00000038957	7.67E-06	1.03E-05	5.05E-06	0.49	-1	0.00036	0.0032
Arrdc3	ENSMUSG00000074794	2.43E-05	3.45E-05	1.40E-05	0.4	-1.3	0.00036	0.0032
Pdlim3	ENSMUSG00000031636	1.58E-04	2.09E-04	1.08E-04	0.52	-0.95	0.00036	0.0032
Gm13422	ENSMUSG00000084098	5.67E-06	7.58E-06	3.75E-06	0.5	-1	0.00036	0.0032
Arf6	ENSMUSG00000044147	1.05E-05	1.40E-05	7.01E-06	0.5	-0.99	0.00036	0.0032
Dennd1a	ENSMUSG00000035392	5.23E-06	7.06E-06	3.39E-06	0.48	-1.1	0.00036	0.0033
Cdc123	ENSMUSG00000039128	1.07E-05	1.42E-05	7.23E-06	0.51	-0.98	0.00036	0.0033
Sphk1	ENSMUSG00000061878	3.73E-07	6.16E-07	1.30E-07	0.21	-2.2	0.00036	0.0033
Zdhhc7	ENSMUSG00000031823	8.60E-06	1.22E-05	5.03E-06	0.41	-1.3	0.00036	0.0033
Degs1	ENSMUSG00000038633	9.53E-06	1.24E-05	6.62E-06	0.53	-0.91	0.00036	0.0033
Bst1	ENSMUSG00000029082	2.35E-07	3.89E-07	8.17E-08	0.21	-2.2	0.00036	0.0033
Pisd-ps1	ENSMUSG00000082286	2.54E-06	3.69E-06	1.39E-06	0.38	-1.4	0.00036	0.0033
Cltb	ENSMUSG00000047547	3.66E-05	4.92E-05	2.40E-05	0.49	-1	0.00036	0.0033
Safb2	ENSMUSG00000042625	4.46E-06	6.04E-06	2.88E-06	0.48	-1.1	0.00037	0.0033
Zbtb18	ENSMUSG00000063659	3.13E-05	4.10E-05	2.16E-05	0.53	-0.93	0.00037	0.0033
Ino80c	ENSMUSG00000047989	8.60E-06	1.17E-05	5.49E-06	0.47	-1.1	0.00037	0.0033

Txn1	ENSMUSG00000028367	7.46E-06	9.96E-06	4.95E-06	0.5	-1	0.00037	0.0033
Smtn	ENSMUSG00000020439	2.90E-05	2.06E-05	3.74E-05	1.8	0.86	0.00037	0.0033
Atp10a	ENSMUSG00000025324	8.87E-07	1.35E-06	4.26E-07	0.32	-1.7	0.00037	0.0033
Dpf3	ENSMUSG00000021221	5.54E-06	7.45E-06	3.63E-06	0.49	-1	0.00037	0.0033
Cmpk1	ENSMUSG00000028719	5.08E-06	6.92E-06	3.24E-06	0.47	-1.1	0.00037	0.0034
Hnrnpa1	ENSMUSG00000046434	4.11E-07	6.87E-07	1.35E-07	0.2	-2.3	0.00037	0.0034
Rac1	ENSMUSG00000001847	1.79E-05	2.50E-05	1.08E-05	0.43	-1.2	0.00038	0.0034
Atp9b	ENSMUSG00000024566	9.79E-06	1.30E-05	6.56E-06	0.5	-0.99	0.00038	0.0034
Rpl4	ENSMUSG00000032399	1.25E-04	1.63E-04	8.68E-05	0.53	-0.91	0.00038	0.0034
Ltbp1	ENSMUSG00000001870	1.37E-05	1.80E-05	9.44E-06	0.52	-0.93	0.00038	0.0034
Rbm12b2	ENSMUSG00000052137	1.39E-06	2.06E-06	7.12E-07	0.35	-1.5	0.00038	0.0034
Dvl3	ENSMUSG00000003233	2.89E-06	4.06E-06	1.72E-06	0.42	-1.2	0.00038	0.0034
Simc1	ENSMUSG00000043183	2.36E-06	3.30E-06	1.42E-06	0.43	-1.2	0.00038	0.0034
Clk4	ENSMUSG00000020385	1.22E-05	1.65E-05	7.96E-06	0.48	-1.1	0.00038	0.0034
Wrn	ENSMUSG00000031583	2.37E-06	3.31E-06	1.44E-06	0.44	-1.2	0.00038	0.0034
Atxn1l	ENSMUSG00000069895	1.12E-05	1.52E-05	7.22E-06	0.48	-1.1	0.00038	0.0034
Cdk13	ENSMUSG00000041297	1.27E-05	1.68E-05	8.51E-06	0.51	-0.99	0.00038	0.0034
Dctn4	ENSMUSG00000024603	1.85E-05	2.50E-05	1.20E-05	0.48	-1.1	0.00038	0.0034
Txnip	ENSMUSG00000038393	2.96E-04	3.93E-04	1.99E-04	0.51	-0.98	0.00039	0.0034
Zkscan17	ENSMUSG00000020472	7.42E-06	1.00E-05	4.81E-06	0.48	-1.1	0.00039	0.0034
Ubxn8	ENSMUSG00000052906	2.19E-06	2.99E-06	1.39E-06	0.46	-1.1	0.00039	0.0034
Shisa4	ENSMUSG00000041889	2.90E-05	4.21E-05	1.58E-05	0.37	-1.4	0.00039	0.0034
Taf7	ENSMUSG00000051316	6.77E-06	9.17E-06	4.37E-06	0.48	-1.1	0.00039	0.0035
Papss2	ENSMUSG00000024899	5.40E-06	7.16E-06	3.65E-06	0.51	-0.97	0.00039	0.0035
Gm9900	ENSMUSG00000053218	1.32E-06	1.95E-06	6.87E-07	0.35	-1.5	0.00039	0.0035
Dusp5	ENSMUSG00000034765	5.46E-07	8.75E-07	2.17E-07	0.25	-2	0.00039	0.0035
Golgb1	ENSMUSG00000034243	1.87E-05	2.47E-05	1.26E-05	0.51	-0.97	0.0004	0.0035
Tob1	ENSMUSG00000037573	1.26E-04	1.76E-04	7.53E-05	0.43	-1.2	0.0004	0.0035
Rpl26	ENSMUSG00000060938	1.95E-05	2.62E-05	1.28E-05	0.49	-1	0.0004	0.0035
Gm6977	ENSMUSG00000084289	1.04E-05	1.38E-05	6.90E-06	0.5	-1	0.0004	0.0035
Eef1e1	ENSMUSG00000001707	3.61E-06	4.87E-06	2.34E-06	0.48	-1.1	0.0004	0.0035
Zfyve20	ENSMUSG00000014550	1.22E-05	1.62E-05	8.20E-06	0.5	-0.99	0.0004	0.0036
Ninj1	ENSMUSG00000037966	8.59E-06	1.13E-05	5.89E-06	0.52	-0.94	0.0004	0.0036
Cbx5	ENSMUSG00000009575	1.86E-05	2.44E-05	1.28E-05	0.52	-0.93	0.0004	0.0036
Nr6a1	ENSMUSG00000063972	4.23E-06	5.86E-06	2.59E-06	0.44	-1.2	0.0004	0.0036
Baz2a	ENSMUSG00000040054	8.84E-06	1.18E-05	5.85E-06	0.5	-1	0.0004	0.0036
Rab11b	ENSMUSG00000077450	6.74E-06	9.03E-06	4.45E-06	0.49	-1	0.00041	0.0036
Pip4k2a	ENSMUSG00000026737	1.77E-06	2.50E-06	1.04E-06	0.42	-1.3	0.00041	0.0036
Gprasp1	ENSMUSG00000043384	7.39E-06	1.00E-05	4.77E-06	0.48	-1.1	0.00041	0.0036
Ube2n	ENSMUSG00000074781	4.83E-06	6.40E-06	3.25E-06	0.51	-0.98	0.00041	0.0036
Mob1b	ENSMUSG00000006262	1.16E-05	1.53E-05	7.76E-06	0.51	-0.98	0.00041	0.0036
Gpx3	ENSMUSG00000018339	6.74E-05	4.61E-05	8.88E-05	1.9	0.95	0.00041	0.0036
Mtf2	ENSMUSG00000029267	5.18E-06	7.08E-06	3.28E-06	0.46	-1.1	0.00041	0.0036
Ftl1	ENSMUSG00000050708	2.48E-05	3.27E-05	1.68E-05	0.51	-0.96	0.00041	0.0036
2410016O06Rik	ENSMUSG00000046791	2.12E-06	3.07E-06	1.17E-06	0.38	-1.4	0.00041	0.0036
Csgalnact2	ENSMUSG00000042042	1.87E-05	2.44E-05	1.29E-05	0.53	-0.92	0.00041	0.0036
Tgfb2	ENSMUSG00000032440	2.63E-05	3.44E-05	1.83E-05	0.53	-0.91	0.00041	0.0036
Nop58	ENSMUSG00000026020	4.22E-06	5.76E-06	2.67E-06	0.46	-1.1	0.00041	0.0036
Lyst	ENSMUSG00000019726	8.26E-06	1.12E-05	5.34E-06	0.48	-1.1	0.00041	0.0036
Rab6a	ENSMUSG00000030704	2.51E-05	3.50E-05	1.52E-05	0.43	-1.2	0.00041	0.0036
Ap1s2	ENSMUSG00000031367	4.26E-06	6.30E-06	2.23E-06	0.35	-1.5	0.00041	0.0036
Mob4	ENSMUSG00000025979	1.68E-05	2.22E-05	1.14E-05	0.51	-0.96	0.00041	0.0036
Tmem251	ENSMUSG00000046675	2.14E-06	3.01E-06	1.28E-06	0.42	-1.2	0.00042	0.0036
Rgl1	ENSMUSG00000026482	7.70E-06	1.02E-05	5.22E-06	0.51	-0.96	0.00042	0.0036
Lamp2	ENSMUSG00000016534	3.20E-05	4.19E-05	2.22E-05	0.53	-0.92	0.00042	0.0036
Tbrg1	ENSMUSG00000011114	1.05E-05	1.39E-05	7.16E-06	0.52	-0.96	0.00042	0.0036
Syt12	ENSMUSG00000049303	1.23E-06	1.83E-06	6.39E-07	0.35	-1.5	0.00042	0.0036
Cnih4	ENSMUSG00000062169	1.11E-05	1.50E-05	7.25E-06	0.48	-1	0.00042	0.0036
Trim32	ENSMUSG00000051675	4.97E-06	6.70E-06	3.24E-06	0.48	-1	0.00042	0.0036
Adam15	ENSMUSG00000028041	9.89E-06	1.50E-05	4.76E-06	0.32	-1.7	0.00042	0.0037
Zfp790	ENSMUSG00000011427	6.19E-06	8.50E-06	3.89E-06	0.46	-1.1	0.00042	0.0037
Cast	ENSMUSG00000021585	1.86E-05	2.45E-05	1.27E-05	0.52	-0.94	0.00042	0.0037
Cyyr1	ENSMUSG00000041134	4.05E-06	5.71E-06	2.40E-06	0.42	-1.2	0.00042	0.0037
Myo5c	ENSMUSG00000033590	7.61E-06	1.02E-05	4.98E-06	0.49	-1	0.00042	0.0037
Dgat2l6	ENSMUSG00000067597	5.80E-07	9.87E-07	1.72E-07	0.17	-2.5	0.00042	0.0037
Sh3bp2	ENSMUSG00000054520	4.06E-06	5.74E-06	2.39E-06	0.42	-1.3	0.00042	0.0037
Usp36	ENSMUSG00000033909	1.24E-05	1.64E-05	8.30E-06	0.5	-0.99	0.00043	0.0037
Snord111	ENSMUSG00000080396	1.80E-05	2.46E-05	1.15E-05	0.47	-1.1	0.00043	0.0037

Ttc9c	ENSMUSG00000071660	5.83E-06	7.88E-06	3.77E-06	0.48	-1.1	0.00043	0.0037
Nelfa	ENSMUSG00000029111	4.19E-06	5.74E-06	2.64E-06	0.46	-1.1	0.00043	0.0037
Ppm1g	ENSMUSG00000029147	1.15E-05	1.52E-05	7.86E-06	0.52	-0.95	0.00043	0.0037
1110004F10Rik	ENSMUSG00000030663	8.10E-06	1.08E-05	5.37E-06	0.5	-1	0.00043	0.0037
Cep290	ENSMUSG00000019971	2.30E-06	3.33E-06	1.27E-06	0.38	-1.4	0.00043	0.0037
1110046J04Rik	ENSMUSG00000085457	1.21E-06	1.85E-06	5.78E-07	0.31	-1.7	0.00043	0.0037
Lhfp	ENSMUSG00000048332	6.74E-06	8.94E-06	4.54E-06	0.51	-0.98	0.00044	0.0038
Shox2	ENSMUSG00000027833	1.83E-06	2.71E-06	9.53E-07	0.35	-1.5	0.00044	0.0038
Clip4	ENSMUSG00000024059	3.06E-05	2.16E-05	3.96E-05	1.8	0.88	0.00044	0.0038
Thrsp	ENSMUSG00000035686	6.62E-06	4.56E-06	8.68E-06	1.9	0.93	0.00044	0.0038
Asb18	ENSMUSG00000067081	2.03E-06	1.21E-06	2.85E-06	2.4	1.2	0.00044	0.0038
Gm7887	ENSMUSG00000044211	1.84E-06	2.66E-06	1.02E-06	0.38	-1.4	0.00044	0.0038
Dlg5	ENSMUSG00000021782	3.99E-06	5.67E-06	2.30E-06	0.41	-1.3	0.00044	0.0038
Las1l	ENSMUSG00000057421	1.11E-05	1.47E-05	7.41E-06	0.5	-0.99	0.00044	0.0038
Avl9	ENSMUSG00000029787	4.49E-06	6.20E-06	2.78E-06	0.45	-1.2	0.00044	0.0038
Cst3	ENSMUSG00000027447	1.30E-04	1.73E-04	8.77E-05	0.51	-0.98	0.00044	0.0038
Scamp2	ENSMUSG00000040188	1.69E-05	2.25E-05	1.12E-05	0.5	-1	0.00044	0.0038
Pip4k2b	ENSMUSG00000018547	2.78E-05	3.64E-05	1.93E-05	0.53	-0.92	0.00044	0.0038
Pdia6	ENSMUSG00000020571	1.96E-05	2.66E-05	1.27E-05	0.48	-1.1	0.00044	0.0038
Acyp1	ENSMUSG00000008822	5.11E-06	6.99E-06	3.22E-06	0.46	-1.1	0.00044	0.0038
Mettl16	ENSMUSG00000010554	6.58E-06	8.80E-06	4.37E-06	0.5	-1	0.00045	0.0038
Mfsd4	ENSMUSG00000059149	1.20E-05	1.59E-05	8.08E-06	0.51	-0.98	0.00045	0.0038
Fus	ENSMUSG00000030795	1.08E-05	1.46E-05	6.93E-06	0.47	-1.1	0.00045	0.0038
Col3a1	ENSMUSG00000026043	9.57E-05	1.33E-04	5.86E-05	0.44	-1.2	0.00045	0.0038
Kpna4	ENSMUSG00000027782	5.95E-05	7.93E-05	3.98E-05	0.5	-1	0.00045	0.0038
9930021J03Rik	ENSMUSG00000046138	7.33E-06	9.91E-06	4.75E-06	0.48	-1.1	0.00045	0.0038
Jag1	ENSMUSG00000027276	1.04E-05	1.38E-05	7.01E-06	0.51	-0.97	0.00045	0.0038
Uggt1	ENSMUSG00000037470	2.55E-05	3.34E-05	1.76E-05	0.53	-0.93	0.00045	0.0039
4930451C15Rik	ENSMUSG00000022759	5.87E-07	9.42E-07	2.33E-07	0.25	-2	0.00045	0.0039
Fbxl14	ENSMUSG00000030019	3.59E-06	4.87E-06	2.32E-06	0.48	-1.1	0.00045	0.0039
Syncrip	ENSMUSG00000032423	1.53E-05	2.06E-05	1.00E-05	0.49	-1	0.00046	0.0039
Sra1	ENSMUSG00000006050	1.56E-05	2.02E-05	1.10E-05	0.55	-0.87	0.00046	0.0039
Cyld	ENSMUSG00000036712	1.03E-05	1.36E-05	6.99E-06	0.51	-0.96	0.00046	0.0039
Cnbp	ENSMUSG00000030057	2.50E-04	3.27E-04	1.73E-04	0.53	-0.92	0.00046	0.0039
Larp4	ENSMUSG00000023025	1.94E-05	2.62E-05	1.26E-05	0.48	-1.1	0.00046	0.0039
Aamd	ENSMUSG00000035642	2.79E-05	3.65E-05	1.94E-05	0.53	-0.91	0.00046	0.0039
Cdk11b	ENSMUSG00000029062	3.34E-06	4.81E-06	1.87E-06	0.39	-1.4	0.00046	0.0039
Dock9	ENSMUSG00000025558	2.20E-05	2.89E-05	1.52E-05	0.53	-0.92	0.00046	0.0039
Per3	ENSMUSG00000028957	1.01E-05	6.96E-06	1.32E-05	1.9	0.93	0.00046	0.0039
Hsd3b7	ENSMUSG00000042289	4.19E-06	5.66E-06	2.72E-06	0.48	-1.1	0.00047	0.0039
Ndr3	ENSMUSG00000027634	1.29E-05	1.72E-05	8.68E-06	0.5	-0.99	0.00047	0.0039
Rapgef6	ENSMUSG00000037533	7.42E-06	9.89E-06	4.95E-06	0.5	-1	0.00047	0.0039
Rab18	ENSMUSG00000073639	2.28E-05	2.99E-05	1.57E-05	0.53	-0.93	0.00047	0.0039
Top2b	ENSMUSG00000017485	1.91E-05	2.52E-05	1.30E-05	0.51	-0.96	0.00047	0.004
Map2k4	ENSMUSG00000033352	2.32E-05	3.05E-05	1.58E-05	0.52	-0.94	0.00047	0.004
Slc6a17	ENSMUSG00000027894	9.74E-07	1.43E-06	5.22E-07	0.37	-1.5	0.00047	0.004
Rap1a	ENSMUSG00000068798	7.94E-06	1.14E-05	4.43E-06	0.39	-1.4	0.00048	0.004
Nedd4l	ENSMUSG00000024589	1.03E-05	1.36E-05	6.97E-06	0.51	-0.96	0.00048	0.004
Mtmr6	ENSMUSG00000021987	2.36E-05	3.07E-05	1.64E-05	0.53	-0.9	0.00048	0.004
Rbp4	ENSMUSG00000024990	7.83E-07	1.22E-06	3.44E-07	0.28	-1.8	0.00048	0.004
Hist2h2be	ENSMUSG00000068854	2.20E-06	3.11E-06	1.29E-06	0.42	-1.3	0.00048	0.0041
Grfl1	ENSMUSG00000058230	2.73E-05	3.63E-05	1.83E-05	0.5	-0.99	0.00049	0.0041
Dffa	ENSMUSG00000028974	1.30E-05	1.74E-05	8.51E-06	0.49	-1	0.00049	0.0041
Tmcc2	ENSMUSG00000042066	2.46E-05	3.21E-05	1.71E-05	0.53	-0.91	0.00049	0.0041
Ntn1	ENSMUSG00000020902	9.48E-06	1.24E-05	6.61E-06	0.53	-0.9	0.00049	0.0041
Picalm	ENSMUSG00000039361	4.08E-05	5.33E-05	2.83E-05	0.53	-0.91	0.00049	0.0041
mt-Ta	ENSMUSG00000064347	9.81E-06	3.94E-06	1.57E-05	4	2	0.00049	0.0041
Zfp512	ENSMUSG00000062761	4.16E-06	5.54E-06	2.77E-06	0.5	-1	0.00049	0.0041
Hspa5	ENSMUSG00000026864	1.04E-04	1.37E-04	7.15E-05	0.52	-0.94	0.00049	0.0041
Clk3	ENSMUSG00000032316	5.31E-06	7.29E-06	3.33E-06	0.46	-1.1	0.00049	0.0041
Ntn3	ENSMUSG00000079662	1.06E-06	1.75E-06	3.67E-07	0.21	-2.3	0.00049	0.0041
Asah1	ENSMUSG00000031591	7.15E-06	9.40E-06	4.89E-06	0.52	-0.94	0.00049	0.0041
Pramef8	ENSMUSG00000046862	5.59E-06	7.56E-06	3.62E-06	0.48	-1.1	0.0005	0.0041
Mpp1	ENSMUSG00000031402	5.81E-06	7.74E-06	3.88E-06	0.5	-1	0.0005	0.0041
Phf20	ENSMUSG00000038116	1.28E-05	1.68E-05	8.77E-06	0.52	-0.94	0.0005	0.0041
Dcaf7	ENSMUSG00000049354	9.74E-06	1.38E-05	5.65E-06	0.41	-1.3	0.0005	0.0041
9130008F23Rik	ENSMUSG00000054951	3.01E-07	5.14E-07	8.76E-08	0.17	-2.6	0.0005	0.0042
Elavl1	ENSMUSG00000040028	1.32E-05	1.73E-05	9.18E-06	0.53	-0.91	0.0005	0.0042

Nipbl	ENSMUSG00000022141	2.15E-05	2.85E-05	1.45E-05	0.51	-0.98	0.0005	0.0042
Vim	ENSMUSG00000026728	6.50E-05	8.59E-05	4.41E-05	0.51	-0.96	0.0005	0.0042
Ust	ENSMUSG00000047712	2.23E-06	3.12E-06	1.34E-06	0.43	-1.2	0.0005	0.0042
Dnajc2	ENSMUSG00000029014	6.43E-06	8.71E-06	4.14E-06	0.48	-1.1	0.00051	0.0042
Zbtb2	ENSMUSG00000075327	1.86E-06	2.70E-06	1.02E-06	0.38	-1.4	0.00051	0.0042
Alkbh1	ENSMUSG00000079036	1.98E-06	2.92E-06	1.05E-06	0.36	-1.5	0.00051	0.0042
Ifitm10	ENSMUSG00000045777	5.13E-07	8.05E-07	2.21E-07	0.27	-1.9	0.00051	0.0042
Spag9	ENSMUSG00000020859	9.30E-05	1.22E-04	6.39E-05	0.52	-0.93	0.00051	0.0042
Ttyh2	ENSMUSG00000034714	9.80E-06	6.91E-06	1.27E-05	1.8	0.88	0.00051	0.0042
Pvalb	ENSMUSG00000005716	2.29E-03	2.97E-03	1.60E-03	0.54	-0.9	0.00051	0.0042
Nfkb1a	ENSMUSG00000021025	1.19E-05	1.56E-05	8.14E-06	0.52	-0.94	0.00051	0.0042
Scyl2	ENSMUSG00000069539	9.96E-06	1.32E-05	6.70E-06	0.51	-0.98	0.00051	0.0042
Rbms2	ENSMUSG00000040043	1.60E-05	2.11E-05	1.10E-05	0.52	-0.94	0.00051	0.0042
Cthrc1	ENSMUSG00000054196	5.43E-07	9.59E-07	1.27E-07	0.13	-2.9	0.00051	0.0042
Tubb4b	ENSMUSG00000036752	6.50E-05	9.35E-05	3.66E-05	0.39	-1.4	0.00052	0.0043
C3	ENSMUSG00000024164	9.57E-05	1.25E-04	6.68E-05	0.54	-0.9	0.00052	0.0043
Nid1	ENSMUSG00000005397	7.95E-05	1.04E-04	5.49E-05	0.53	-0.93	0.00052	0.0043
Clec16a	ENSMUSG00000068663	2.57E-05	3.37E-05	1.76E-05	0.52	-0.94	0.00052	0.0043
Tuba1c	ENSMUSG00000043091	5.34E-07	8.01E-07	2.66E-07	0.33	-1.6	0.00052	0.0043
Abhd17b	ENSMUSG00000047368	6.39E-06	8.59E-06	4.18E-06	0.49	-1	0.00052	0.0043
AC155258.1	ENSMUSG00000097494	5.64E-07	2.17E-07	9.11E-07	4.2	2.1	0.00052	0.0043
AI987944	ENSMUSG00000056383	2.49E-06	3.45E-06	1.53E-06	0.44	-1.2	0.00052	0.0043
Zfp408	ENSMUSG00000075040	1.46E-06	2.13E-06	7.92E-07	0.37	-1.4	0.00052	0.0043
Tmem245	ENSMUSG00000055296	9.97E-06	1.35E-05	6.47E-06	0.48	-1.1	0.00052	0.0043
E130308A19Rik	ENSMUSG00000045071	4.21E-06	5.75E-06	2.66E-06	0.46	-1.1	0.00053	0.0043
Ralgapa1	ENSMUSG00000021027	2.11E-05	2.77E-05	1.45E-05	0.52	-0.93	0.00053	0.0044
E130309D02Rik	ENSMUSG00000039244	4.80E-06	6.39E-06	3.22E-06	0.5	-0.99	0.00053	0.0044
Aak1	ENSMUSG00000057230	4.09E-06	5.52E-06	2.66E-06	0.48	-1.1	0.00053	0.0044
C87436	ENSMUSG00000046679	3.46E-06	4.69E-06	2.22E-06	0.47	-1.1	0.00053	0.0044
4632428N05Rik	ENSMUSG00000020101	1.09E-05	1.54E-05	6.29E-06	0.41	-1.3	0.00054	0.0044
Otud1	ENSMUSG00000043415	2.80E-06	4.00E-06	1.61E-06	0.4	-1.3	0.00054	0.0044
Rab22a	ENSMUSG00000027519	1.95E-05	2.56E-05	1.34E-05	0.52	-0.93	0.00054	0.0044
Rab21	ENSMUSG00000020132	1.01E-05	1.51E-05	5.05E-06	0.33	-1.6	0.00054	0.0044
Ece1	ENSMUSG00000057530	5.00E-05	6.48E-05	3.52E-05	0.54	-0.88	0.00054	0.0044
Hus1	ENSMUSG00000020413	3.18E-06	4.39E-06	1.98E-06	0.45	-1.2	0.00054	0.0044
Rbm27	ENSMUSG00000024491	8.66E-06	1.14E-05	5.89E-06	0.51	-0.96	0.00054	0.0044
Strn3	ENSMUSG00000020954	5.97E-05	7.73E-05	4.22E-05	0.55	-0.87	0.00055	0.0044
Hsph1	ENSMUSG00000029657	3.05E-05	4.63E-05	1.47E-05	0.32	-1.7	0.00055	0.0044
Cep350	ENSMUSG00000033671	3.01E-05	4.02E-05	2.01E-05	0.5	-1	0.00055	0.0045
Hsf4	ENSMUSG00000033249	2.40E-06	3.40E-06	1.39E-06	0.41	-1.3	0.00055	0.0045
Kirrel	ENSMUSG00000041734	9.23E-06	1.29E-05	5.55E-06	0.43	-1.2	0.00055	0.0045
Emilin2	ENSMUSG00000024053	9.93E-06	1.36E-05	6.25E-06	0.46	-1.1	0.00056	0.0045
Tbcl1d22b	ENSMUSG00000042203	4.64E-06	6.26E-06	3.01E-06	0.48	-1.1	0.00056	0.0045
Ccdc55	ENSMUSG00000037958	2.15E-06	3.08E-06	1.22E-06	0.4	-1.3	0.00056	0.0045
Slc1a3	ENSMUSG00000005360	2.08E-06	2.86E-06	1.30E-06	0.45	-1.1	0.00056	0.0045
Zfp963	ENSMUSG00000092260	1.14E-06	1.73E-06	5.48E-07	0.32	-1.7	0.00056	0.0045
Brpf3	ENSMUSG00000063952	2.62E-06	3.67E-06	1.57E-06	0.43	-1.2	0.00056	0.0045
Gas1	ENSMUSG00000052957	1.09E-05	1.54E-05	6.28E-06	0.41	-1.3	0.00056	0.0045
Frmd6	ENSMUSG00000048285	8.07E-06	1.09E-05	5.29E-06	0.49	-1	0.00056	0.0045
Mil2	ENSMUSG00000048154	2.23E-05	3.00E-05	1.46E-05	0.49	-1	0.00056	0.0045
Col19a1	ENSMUSG00000026141	1.13E-06	1.69E-06	5.71E-07	0.34	-1.6	0.00056	0.0045
Cald1	ENSMUSG00000029761	1.10E-05	1.50E-05	6.95E-06	0.46	-1.1	0.00056	0.0045
Pde3a	ENSMUSG00000041741	1.60E-06	2.33E-06	8.65E-07	0.37	-1.4	0.00056	0.0045
Arid4b	ENSMUSG00000039219	7.78E-06	1.03E-05	5.25E-06	0.51	-0.97	0.00056	0.0045
Argl1	ENSMUSG00000040459	1.51E-05	2.10E-05	9.11E-06	0.43	-1.2	0.00056	0.0045
Rbms3	ENSMUSG00000039607	5.04E-06	6.74E-06	3.35E-06	0.5	-1	0.00056	0.0045
Tst	ENSMUSG00000044986	1.12E-05	7.66E-06	1.47E-05	1.9	0.94	0.00057	0.0046
AC109138.1	ENSMUSG00000097233	1.98E-06	1.15E-06	2.81E-06	2.5	1.3	0.00057	0.0046
Bahcc1	ENSMUSG00000039741	4.19E-06	5.61E-06	2.77E-06	0.49	-1	0.00057	0.0046
Dnaja1	ENSMUSG00000028410	5.29E-06	7.99E-06	2.58E-06	0.32	-1.6	0.00057	0.0046
AI606181	ENSMUSG00000074873	1.03E-06	1.58E-06	4.86E-07	0.31	-1.7	0.00057	0.0046
2900026A02Rik	ENSMUSG00000051339	8.04E-06	1.07E-05	5.38E-06	0.5	-0.99	0.00058	0.0046
5530601H04Rik	ENSMUSG00000087174	7.98E-07	1.22E-06	3.78E-07	0.31	-1.7	0.00058	0.0046
Ankrd16	ENSMUSG00000047909	5.39E-06	7.16E-06	3.62E-06	0.51	-0.98	0.00058	0.0046
Ube2k	ENSMUSG00000029203	1.39E-05	1.81E-05	9.69E-06	0.54	-0.9	0.00058	0.0046
Zfp119a	ENSMUSG00000057835	9.52E-07	1.42E-06	4.88E-07	0.35	-1.5	0.00058	0.0047
C4b	ENSMUSG00000073418	1.04E-05	1.42E-05	6.61E-06	0.47	-1.1	0.00058	0.0047
Tra2a	ENSMUSG00000029817	4.77E-06	6.91E-06	2.63E-06	0.38	-1.4	0.00058	0.0047

Tbc1d15	ENSMUSG00000020130	1.21E-05	1.62E-05	8.03E-06	0.5	-1	0.00059	0.0047
Ube2d2a	ENSMUSG00000091896	2.25E-06	3.25E-06	1.25E-06	0.38	-1.4	0.00059	0.0047
Camsap2	ENSMUSG00000041570	8.34E-06	1.11E-05	5.60E-06	0.51	-0.98	0.00059	0.0047
Zfp418	ENSMUSG00000034538	1.36E-06	2.04E-06	6.78E-07	0.33	-1.6	0.00059	0.0047
Desi2	ENSMUSG00000026502	2.04E-05	2.68E-05	1.40E-05	0.52	-0.94	0.0006	0.0048
Gm13050	ENSMUSG00000082575	8.90E-06	1.18E-05	6.00E-06	0.51	-0.98	0.0006	0.0048
C1qtnf4	ENSMUSG00000040794	1.70E-06	2.43E-06	9.71E-07	0.4	-1.3	0.0006	0.0048
Wfdc1	ENSMUSG00000023336	1.56E-05	2.02E-05	1.11E-05	0.55	-0.86	0.0006	0.0048
Fdxacb1	ENSMUSG00000037845	2.01E-06	2.91E-06	1.12E-06	0.39	-1.4	0.0006	0.0048
Prkar2a	ENSMUSG00000032601	7.45E-05	9.71E-05	5.18E-05	0.53	-0.91	0.00061	0.0048
Emc6	ENSMUSG00000047260	1.68E-05	2.20E-05	1.17E-05	0.53	-0.92	0.00061	0.0048
Zdhhc3	ENSMUSG00000025786	3.13E-05	4.09E-05	2.17E-05	0.53	-0.92	0.00061	0.0048
Rprd1b	ENSMUSG00000027651	1.34E-05	1.76E-05	9.28E-06	0.53	-0.92	0.00061	0.0048
0610011F06Rik	ENSMUSG00000025731	4.95E-06	6.60E-06	3.30E-06	0.5	-1	0.00061	0.0048
Fbxo33	ENSMUSG00000035329	2.16E-06	3.01E-06	1.31E-06	0.43	-1.2	0.00061	0.0049
Unc50	ENSMUSG00000026111	5.25E-06	7.13E-06	3.37E-06	0.47	-1.1	0.00061	0.0049
Hspa13	ENSMUSG00000032932	7.71E-06	1.02E-05	5.17E-06	0.5	-0.99	0.00061	0.0049
Tgm2	ENSMUSG00000037820	4.22E-05	5.48E-05	2.97E-05	0.54	-0.88	0.00062	0.0049
n-R5s193	ENSMUSG00000064798	1.28E-06	5.77E-07	1.98E-06	3.4	1.8	0.00062	0.0049
Tbk1	ENSMUSG00000020115	5.97E-06	8.02E-06	3.92E-06	0.49	-1	0.00062	0.0049
Dnaja2	ENSMUSG00000031701	6.25E-05	8.14E-05	4.37E-05	0.54	-0.9	0.00062	0.0049
Homer2	ENSMUSG00000025813	8.45E-06	4.84E-06	1.21E-05	2.5	1.3	0.00062	0.0049
Rian	ENSMUSG00000097451	3.99E-06	5.63E-06	2.35E-06	0.42	-1.3	0.00062	0.0049
Lima1	ENSMUSG00000023022	1.18E-05	1.55E-05	8.14E-06	0.52	-0.93	0.00063	0.005
Alg13	ENSMUSG00000041718	1.44E-06	2.10E-06	7.73E-07	0.37	-1.4	0.00063	0.005
St6galnac6	ENSMUSG00000026811	1.99E-05	2.60E-05	1.39E-05	0.53	-0.91	0.00063	0.005
Msantd2	ENSMUSG00000042138	1.49E-06	2.17E-06	8.06E-07	0.37	-1.4	0.00063	0.005
Zmat3	ENSMUSG00000027663	3.35E-06	4.60E-06	2.10E-06	0.46	-1.1	0.00063	0.005
Chd6	ENSMUSG00000057133	2.42E-05	3.22E-05	1.62E-05	0.5	-0.99	0.00063	0.005
Rasa1	ENSMUSG00000021549	6.94E-06	9.16E-06	4.72E-06	0.51	-0.96	0.00064	0.005
Ifi204	ENSMUSG00000073489	2.94E-06	4.16E-06	1.73E-06	0.41	-1.3	0.00064	0.005
Jkamp	ENSMUSG00000005078	4.36E-06	5.76E-06	2.96E-06	0.51	-0.96	0.00064	0.005
Exoc6b	ENSMUSG00000033769	1.02E-05	1.34E-05	6.96E-06	0.52	-0.95	0.00064	0.0051
Glis3	ENSMUSG00000052942	7.39E-07	1.14E-06	3.38E-07	0.3	-1.8	0.00064	0.0051
Gm21807	ENSMUSG00000095306	4.20E-06	6.01E-06	2.39E-06	0.4	-1.3	0.00065	0.0051
Mrgprf	ENSMUSG00000031070	1.82E-06	2.71E-06	9.26E-07	0.34	-1.6	0.00065	0.0051
Prosl	ENSMUSG00000022912	5.02E-06	7.27E-06	2.78E-06	0.38	-1.4	0.00065	0.0051
Med1	ENSMUSG00000018160	2.03E-05	2.70E-05	1.36E-05	0.5	-0.99	0.00065	0.0051
Mycbp	ENSMUSG00000028647	3.25E-06	4.57E-06	1.93E-06	0.42	-1.2	0.00065	0.0051
Cd300lb	ENSMUSG00000063193	7.06E-07	1.08E-06	3.35E-07	0.31	-1.7	0.00066	0.0052
Gak	ENSMUSG00000062234	1.12E-05	1.49E-05	7.56E-06	0.51	-0.97	0.00066	0.0052
Spag1	ENSMUSG00000037617	6.23E-07	9.87E-07	2.59E-07	0.26	-1.9	0.00067	0.0052
Pigm	ENSMUSG00000050229	4.63E-06	6.21E-06	3.05E-06	0.49	-1	0.00067	0.0052
Papola	ENSMUSG00000021111	2.15E-05	2.82E-05	1.49E-05	0.53	-0.92	0.00067	0.0052
Mapk8ip3	ENSMUSG00000024163	8.59E-06	1.14E-05	5.79E-06	0.51	-0.98	0.00067	0.0052
5730455P16Rik	ENSMUSG00000057181	2.44E-05	3.19E-05	1.70E-05	0.53	-0.91	0.00067	0.0053
Pkn3	ENSMUSG00000026785	2.03E-06	2.95E-06	1.10E-06	0.37	-1.4	0.00067	0.0053
Mfsd6	ENSMUSG00000041439	2.77E-06	3.75E-06	1.79E-06	0.48	-1.1	0.00068	0.0053
Mesdc2	ENSMUSG00000038503	1.00E-05	1.33E-05	6.78E-06	0.51	-0.97	0.00068	0.0053
Ctnnd1	ENSMUSG00000034101	1.89E-05	2.53E-05	1.26E-05	0.5	-1	0.00068	0.0053
Mttp	ENSMUSG00000028158	1.94E-06	1.30E-06	2.57E-06	2	0.98	0.00069	0.0053
Zdhhc18	ENSMUSG00000037553	3.94E-06	5.31E-06	2.57E-06	0.48	-1	0.00069	0.0053
Rnf19a	ENSMUSG00000022280	1.05E-05	1.45E-05	6.57E-06	0.45	-1.1	0.00069	0.0053
Man1a2	ENSMUSG00000008763	9.53E-06	1.31E-05	5.98E-06	0.46	-1.1	0.00069	0.0054
Gm16580	ENSMUSG00000089764	1.34E-06	1.93E-06	7.42E-07	0.38	-1.4	0.00069	0.0054
Nr1d1	ENSMUSG00000020889	1.05E-05	7.20E-06	1.38E-05	1.9	0.94	0.0007	0.0054
Rnf4	ENSMUSG00000029110	8.88E-06	1.17E-05	6.03E-06	0.51	-0.96	0.0007	0.0054
Ccn1l	ENSMUSG00000027829	7.69E-06	1.02E-05	5.18E-06	0.51	-0.98	0.0007	0.0054
Dstn	ENSMUSG00000015932	8.64E-06	1.15E-05	5.81E-06	0.51	-0.98	0.0007	0.0054
Ppig	ENSMUSG00000042133	6.69E-06	8.90E-06	4.48E-06	0.5	-0.99	0.0007	0.0054
Sppl2a	ENSMUSG00000027366	3.63E-05	4.71E-05	2.55E-05	0.54	-0.88	0.00071	0.0055
Epm2aip1	ENSMUSG00000046785	1.54E-05	2.04E-05	1.04E-05	0.51	-0.98	0.00071	0.0055
Rsf1	ENSMUSG00000035623	1.14E-05	1.52E-05	7.54E-06	0.49	-1	0.00071	0.0055
Zfp651	ENSMUSG00000013419	5.79E-05	7.50E-05	4.07E-05	0.54	-0.88	0.00071	0.0055
Usp43	ENSMUSG00000020905	1.18E-07	2.18E-07	1.79E-08	0.082	-3.6	0.00071	0.0055
Cyb5r3	ENSMUSG00000018042	9.59E-06	1.27E-05	6.52E-06	0.51	-0.96	0.00071	0.0055
Slc41a1	ENSMUSG00000013275	2.19E-05	1.46E-05	2.93E-05	2	1	0.00072	0.0055
Rnf26	ENSMUSG00000053128	1.03E-06	1.51E-06	5.48E-07	0.36	-1.5	0.00072	0.0056

Fbnp4	ENSMUSG00000008200	7.23E-06	9.63E-06	4.82E-06	0.5	-1	0.00072	0.0056
Reep1	ENSMUSG00000052852	2.29E-05	2.96E-05	1.62E-05	0.55	-0.87	0.00072	0.0056
Sorbs1	ENSMUSG00000025006	1.66E-05	2.23E-05	1.08E-05	0.48	-1.1	0.00072	0.0056
Nxpe5	ENSMUSG00000047592	5.34E-07	9.42E-07	1.26E-07	0.13	-2.9	0.00073	0.0056
C78339	ENSMUSG00000069237	1.09E-05	1.43E-05	7.55E-06	0.53	-0.92	0.00073	0.0056
Mir3096	ENSMUSG00000096832	4.42E-07	7.22E-07	1.61E-07	0.22	-2.2	0.00073	0.0056
Slc15a4	ENSMUSG00000029416	1.09E-05	1.54E-05	6.48E-06	0.42	-1.2	0.00073	0.0056
Snord93	ENSMUSG00000095205	7.50E-07	1.13E-06	3.72E-07	0.33	-1.6	0.00073	0.0056
Stk4	ENSMUSG00000018209	5.44E-06	7.20E-06	3.68E-06	0.51	-0.97	0.00073	0.0056
Sf3b1	ENSMUSG00000025982	4.84E-05	6.31E-05	3.37E-05	0.53	-0.9	0.00073	0.0056
Napb	ENSMUSG00000027438	6.16E-06	8.33E-06	4.00E-06	0.48	-1.1	0.00073	0.0056
Npr3	ENSMUSG00000022206	2.58E-06	3.73E-06	1.43E-06	0.38	-1.4	0.00073	0.0056
Peli1	ENSMUSG00000020134	6.82E-06	9.07E-06	4.58E-06	0.5	-0.99	0.00073	0.0056
Fam188a	ENSMUSG00000026767	3.46E-06	4.82E-06	2.10E-06	0.43	-1.2	0.00073	0.0056
Snord87	ENSMUSG000000093178	2.32E-05	3.26E-05	1.37E-05	0.42	-1.3	0.00074	0.0056
Ufm1	ENSMUSG00000027746	7.01E-06	9.86E-06	4.16E-06	0.42	-1.2	0.00074	0.0057
Atxn2l	ENSMUSG00000032637	7.17E-06	9.45E-06	4.90E-06	0.52	-0.95	0.00074	0.0057
Spry2	ENSMUSG00000022114	5.99E-06	8.00E-06	3.99E-06	0.5	-1	0.00074	0.0057
Gm11878	ENSMUSG00000081810	1.44E-06	2.36E-06	5.20E-07	0.22	-2.2	0.00075	0.0057
1110018G07Rik	ENSMUSG00000042350	1.52E-05	1.98E-05	1.05E-05	0.53	-0.91	0.00075	0.0057
Tyw5	ENSMUSG00000048495	8.61E-07	1.29E-06	4.29E-07	0.33	-1.6	0.00075	0.0057
Mfap3l	ENSMUSG00000031647	3.29E-06	4.40E-06	2.18E-06	0.49	-1	0.00075	0.0057
Npdc1	ENSMUSG00000015094	4.76E-06	6.76E-06	2.76E-06	0.41	-1.3	0.00075	0.0057
Arhgap11a	ENSMUSG00000041219	5.42E-07	8.33E-07	2.51E-07	0.3	-1.7	0.00075	0.0057
Fam193a	ENSMUSG00000037210	7.10E-06	9.46E-06	4.74E-06	0.5	-1	0.00075	0.0057
Trpm7	ENSMUSG00000027365	1.98E-05	2.57E-05	1.39E-05	0.54	-0.89	0.00076	0.0058
Pde1a	ENSMUSG00000059173	1.79E-06	2.51E-06	1.07E-06	0.43	-1.2	0.00076	0.0058
Mrfap1	ENSMUSG00000055302	2.11E-05	2.83E-05	1.40E-05	0.49	-1	0.00076	0.0058
Sned1	ENSMUSG00000047793	7.19E-06	9.55E-06	4.84E-06	0.51	-0.98	0.00076	0.0058
Stx4a	ENSMUSG00000030805	1.65E-05	2.15E-05	1.16E-05	0.54	-0.9	0.00077	0.0058
Dusp11	ENSMUSG00000030002	1.06E-05	1.40E-05	7.33E-06	0.53	-0.93	0.00077	0.0058
Tapt1	ENSMUSG00000046985	2.06E-05	2.67E-05	1.45E-05	0.54	-0.88	0.00077	0.0058
Chd1	ENSMUSG00000023852	9.44E-06	1.25E-05	6.35E-06	0.51	-0.98	0.00077	0.0058
Oxr1	ENSMUSG00000022307	2.12E-05	2.72E-05	1.52E-05	0.56	-0.84	0.00077	0.0058
Chic2	ENSMUSG00000029229	3.70E-06	4.95E-06	2.45E-06	0.49	-1	0.00077	0.0058
Dab2	ENSMUSG00000022150	1.01E-05	1.34E-05	6.85E-06	0.51	-0.97	0.00077	0.0058
D19Ert737e	ENSMUSG00000057858	3.03E-06	4.15E-06	1.91E-06	0.46	-1.1	0.00077	0.0058
Map3k2	ENSMUSG00000024383	8.19E-06	1.08E-05	5.59E-06	0.52	-0.95	0.00077	0.0058
Zswim6	ENSMUSG00000032846	1.57E-06	2.23E-06	9.11E-07	0.41	-1.3	0.00077	0.0058
Caml	ENSMUSG00000021501	4.81E-06	6.58E-06	3.04E-06	0.46	-1.1	0.00077	0.0058
Mzt1	ENSMUSG00000033186	1.06E-05	1.41E-05	6.97E-06	0.49	-1	0.00078	0.0059
Snora41	ENSMUSG00000064602	1.70E-06	2.41E-06	9.86E-07	0.41	-1.3	0.00078	0.0059
Ybey	ENSMUSG00000033126	3.50E-06	4.73E-06	2.28E-06	0.48	-1.1	0.00078	0.0059
Kif1a	ENSMUSG00000014602	7.55E-07	1.16E-06	3.52E-07	0.3	-1.7	0.00078	0.0059
Upf3b	ENSMUSG00000036572	2.96E-06	4.43E-06	1.50E-06	0.34	-1.6	0.00078	0.0059
Nf2	ENSMUSG00000009073	2.41E-05	3.22E-05	1.59E-05	0.49	-1	0.00078	0.0059
Orc4	ENSMUSG00000026761	6.26E-06	8.30E-06	4.22E-06	0.51	-0.98	0.00079	0.0059
Cox8b	ENSMUSG00000025488	1.56E-04	1.09E-04	2.03E-04	1.9	0.9	0.00079	0.0059
Rexo4	ENSMUSG00000052406	5.20E-06	7.00E-06	3.41E-06	0.49	-1	0.00079	0.0059
Nadk	ENSMUSG00000029063	1.17E-05	1.53E-05	8.19E-06	0.54	-0.9	0.00079	0.0059
Tlk2	ENSMUSG00000020694	1.01E-05	1.32E-05	6.97E-06	0.53	-0.92	0.00079	0.0059
Vti1b	ENSMUSG00000021124	2.08E-05	2.70E-05	1.46E-05	0.54	-0.89	0.0008	0.006
Pknx2	ENSMUSG00000035934	8.76E-06	1.16E-05	5.95E-06	0.51	-0.96	0.0008	0.006
Galnt1	ENSMUSG00000000420	3.01E-05	3.98E-05	2.04E-05	0.51	-0.96	0.0008	0.006
Fam168a	ENSMUSG00000029461	2.12E-05	2.78E-05	1.46E-05	0.52	-0.93	0.0008	0.006
Phf15	ENSMUSG00000020387	8.08E-06	1.06E-05	5.58E-06	0.53	-0.92	0.00081	0.006
Atg2b	ENSMUSG00000041341	1.27E-05	1.72E-05	8.21E-06	0.48	-1.1	0.00081	0.006
Rlf	ENSMUSG00000049878	1.05E-05	1.38E-05	7.21E-06	0.52	-0.93	0.00081	0.0061
Zfp503	ENSMUSG00000039081	2.41E-06	3.42E-06	1.39E-06	0.41	-1.3	0.00081	0.0061
Radil	ENSMUSG00000029576	9.40E-07	1.37E-06	5.07E-07	0.37	-1.4	0.00081	0.0061
Tmem26	ENSMUSG00000060044	1.37E-06	2.01E-06	7.25E-07	0.36	-1.5	0.00081	0.0061
Loxl2	ENSMUSG00000034205	3.56E-06	4.89E-06	2.23E-06	0.46	-1.1	0.00081	0.0061
Rnf216	ENSMUSG00000045078	9.69E-06	1.27E-05	6.70E-06	0.53	-0.92	0.00081	0.0061
3110082I17Rik	ENSMUSG00000053553	9.22E-07	1.37E-06	4.70E-07	0.34	-1.5	0.00082	0.0061
Prrg2	ENSMUSG00000007837	2.47E-06	3.37E-06	1.58E-06	0.47	-1.1	0.00082	0.0061
Ncoa7	ENSMUSG00000039697	1.97E-06	2.86E-06	1.09E-06	0.38	-1.4	0.00082	0.0061
Tm9sf2	ENSMUSG00000025544	2.22E-05	2.85E-05	1.59E-05	0.56	-0.84	0.00083	0.0061
Mab21l1	ENSMUSG00000056947	3.37E-06	4.70E-06	2.04E-06	0.43	-1.2	0.00083	0.0061

Gab2	ENSMUSG00000004508	5.67E-06	7.51E-06	3.83E-06	0.51	-0.97	0.00083	0.0061
Arhgap10	ENSMUSG00000037148	3.04E-05	3.96E-05	2.13E-05	0.54	-0.89	0.00083	0.0062
Mras	ENSMUSG00000032470	4.78E-06	6.81E-06	2.76E-06	0.4	-1.3	0.00083	0.0062
Ahsa1	ENSMUSG00000021037	2.16E-05	2.82E-05	1.51E-05	0.53	-0.9	0.00083	0.0062
Cd109	ENSMUSG00000046186	8.32E-07	1.23E-06	4.31E-07	0.35	-1.5	0.00083	0.0062
Mctp2	ENSMUSG00000032776	3.28E-07	5.54E-07	1.03E-07	0.19	-2.4	0.00083	0.0062
St6galnac2	ENSMUSG00000057286	1.77E-06	2.48E-06	1.06E-06	0.43	-1.2	0.00083	0.0062
Whrn	ENSMUSG00000039137	4.72E-07	7.24E-07	2.20E-07	0.3	-1.7	0.00083	0.0062
Suco	ENSMUSG00000040297	4.31E-06	5.78E-06	2.84E-06	0.49	-1	0.00084	0.0062
Prkce	ENSMUSG00000045038	8.22E-06	1.08E-05	5.61E-06	0.52	-0.95	0.00084	0.0062
Tmco1	ENSMUSG00000052428	8.17E-06	1.08E-05	5.54E-06	0.51	-0.96	0.00084	0.0062
Rnpc3	ENSMUSG00000027981	4.95E-06	6.58E-06	3.33E-06	0.51	-0.99	0.00085	0.0063
Rbm39	ENSMUSG00000027620	3.83E-05	5.06E-05	2.60E-05	0.51	-0.96	0.00085	0.0063
Dyrk1a	ENSMUSG00000022897	4.71E-05	6.13E-05	3.29E-05	0.54	-0.9	0.00085	0.0063
Ston2	ENSMUSG00000020961	1.47E-05	1.92E-05	1.01E-05	0.53	-0.92	0.00085	0.0063
Sema3e	ENSMUSG00000063531	3.98E-07	6.39E-07	1.57E-07	0.25	-2	0.00085	0.0063
Rbm6	ENSMUSG00000032582	6.20E-06	8.32E-06	4.08E-06	0.49	-1	0.00086	0.0063
Six4	ENSMUSG00000034460	1.19E-05	1.58E-05	7.98E-06	0.5	-0.99	0.00086	0.0063
Gm10073	ENSMUSG00000060019	6.22E-06	8.34E-06	4.11E-06	0.49	-1	0.00086	0.0063
Klhl26	ENSMUSG00000055707	5.40E-06	7.17E-06	3.64E-06	0.51	-0.98	0.00086	0.0063
Thap2	ENSMUSG00000020137	2.39E-06	3.39E-06	1.38E-06	0.41	-1.3	0.00086	0.0063
Serpinf1	ENSMUSG00000000753	1.82E-05	2.35E-05	1.29E-05	0.55	-0.86	0.00086	0.0063
Tshz1	ENSMUSG00000046982	1.12E-05	1.47E-05	7.65E-06	0.52	-0.94	0.00086	0.0064
Gnas	ENSMUSG00000027523	5.65E-05	7.77E-05	3.52E-05	0.45	-1.1	0.00086	0.0064
Nr4a1	ENSMUSG00000023034	1.90E-05	2.47E-05	1.32E-05	0.54	-0.9	0.00086	0.0064
Mmp14	ENSMUSG00000000957	5.87E-06	7.84E-06	3.90E-06	0.5	-1	0.00086	0.0064
Tmbim1	ENSMUSG00000006301	2.43E-05	3.32E-05	1.53E-05	0.46	-1.1	0.00087	0.0064
Ubac2	ENSMUSG00000041765	1.45E-05	1.88E-05	1.02E-05	0.54	-0.88	0.00087	0.0064
Eif4e2	ENSMUSG00000026254	1.13E-05	1.60E-05	6.55E-06	0.41	-1.3	0.00087	0.0064
Dbnl	ENSMUSG00000020476	5.00E-06	6.64E-06	3.37E-06	0.51	-0.98	0.00087	0.0064
Usp47	ENSMUSG00000059263	1.10E-04	1.42E-04	7.75E-05	0.54	-0.88	0.00087	0.0064
Ncoa6	ENSMUSG00000038369	5.04E-06	7.22E-06	2.86E-06	0.4	-1.3	0.00087	0.0064
Ddx21	ENSMUSG00000020075	2.87E-05	3.75E-05	2.00E-05	0.53	-0.91	0.00087	0.0064
Gm26202	ENSMUSG00000064844	4.97E-06	7.57E-06	2.37E-06	0.31	-1.7	0.00087	0.0064
Calr	ENSMUSG00000003814	6.54E-05	8.57E-05	4.51E-05	0.53	-0.93	0.00087	0.0064
Utp11l	ENSMUSG00000028907	8.97E-06	1.18E-05	6.17E-06	0.53	-0.93	0.00087	0.0064
Tuba1a	ENSMUSG00000072235	7.08E-06	9.85E-06	4.31E-06	0.44	-1.2	0.00087	0.0064
Atp2b1	ENSMUSG00000019943	1.87E-05	2.46E-05	1.27E-05	0.52	-0.95	0.00087	0.0064
Zbtb8a	ENSMUSG00000028807	6.05E-07	9.12E-07	2.97E-07	0.33	-1.6	0.00087	0.0064
Ppp2r2d	ENSMUSG00000041769	1.48E-05	2.09E-05	8.77E-06	0.42	-1.3	0.00088	0.0064
Mcmcdc2	ENSMUSG00000046101	3.37E-07	5.50E-07	1.24E-07	0.23	-2.2	0.00088	0.0064
Usp16	ENSMUSG00000025616	2.18E-05	2.82E-05	1.54E-05	0.55	-0.87	0.00088	0.0064
Kctd18	ENSMUSG00000054770	1.98E-06	2.73E-06	1.22E-06	0.45	-1.2	0.00088	0.0064
Hmgn1	ENSMUSG00000040681	3.65E-06	4.96E-06	2.33E-06	0.47	-1.1	0.00088	0.0064
Ganab	ENSMUSG00000071650	1.40E-05	1.81E-05	9.82E-06	0.54	-0.88	0.00088	0.0064
Pctp	ENSMUSG00000020553	1.06E-06	1.50E-06	6.20E-07	0.41	-1.3	0.00088	0.0064
Dfna5	ENSMUSG00000029821	3.94E-06	5.35E-06	2.53E-06	0.47	-1.1	0.00089	0.0065
Cyth3	ENSMUSG00000018001	9.91E-06	1.29E-05	6.91E-06	0.54	-0.9	0.00089	0.0065
St7l	ENSMUSG00000045576	8.75E-06	1.15E-05	6.06E-06	0.53	-0.92	0.00089	0.0065
Mcf2	ENSMUSG00000024150	1.37E-05	1.77E-05	9.63E-06	0.54	-0.88	0.00089	0.0065
Creb3l2	ENSMUSG00000038648	1.00E-05	1.39E-05	6.23E-06	0.45	-1.2	0.00089	0.0065
Fer1l6	ENSMUSG00000037106	9.59E-07	4.57E-07	1.46E-06	3.2	1.7	0.00089	0.0065
F13a1	ENSMUSG00000039109	2.19E-05	3.01E-05	1.38E-05	0.46	-1.1	0.0009	0.0065
L1cam	ENSMUSG00000031391	1.39E-06	2.02E-06	7.64E-07	0.38	-1.4	0.0009	0.0065
Hnrnp	ENSMUSG00000086084	3.72E-07	6.21E-07	1.23E-07	0.2	-2.3	0.0009	0.0066
H2afy	ENSMUSG00000015937	1.41E-05	1.82E-05	1.00E-05	0.55	-0.86	0.00091	0.0066
Zfp207	ENSMUSG00000017421	2.49E-05	3.23E-05	1.76E-05	0.54	-0.88	0.00091	0.0066
Lss	ENSMUSG00000033105	2.21E-06	3.09E-06	1.33E-06	0.43	-1.2	0.00091	0.0066
Hdac7	ENSMUSG00000022475	4.96E-06	6.62E-06	3.30E-06	0.5	-1	0.00091	0.0066
Clip2	ENSMUSG00000063146	4.04E-06	5.48E-06	2.60E-06	0.48	-1.1	0.00091	0.0066
Rhbd2	ENSMUSG00000020806	5.70E-06	7.56E-06	3.84E-06	0.51	-0.98	0.00091	0.0066
Ccdc157	ENSMUSG00000051427	2.77E-06	3.73E-06	1.82E-06	0.49	-1	0.00092	0.0066
Tacc1	ENSMUSG00000065954	1.18E-05	1.54E-05	8.21E-06	0.53	-0.91	0.00092	0.0066
Syk	ENSMUSG00000021457	4.40E-06	6.17E-06	2.64E-06	0.43	-1.2	0.00092	0.0066
Rsl24d1	ENSMUSG00000032215	3.77E-06	5.09E-06	2.44E-06	0.48	-1.1	0.00092	0.0066
Zfp280c	ENSMUSG00000036916	2.01E-06	3.05E-06	9.70E-07	0.32	-1.7	0.00093	0.0067
Ccr1	ENSMUSG00000025804	3.82E-07	5.84E-07	1.79E-07	0.31	-1.7	0.00093	0.0067
Asxl1	ENSMUSG00000042548	4.75E-06	6.41E-06	3.09E-06	0.48	-1.1	0.00093	0.0067

Src	ENSMUSG00000027646	8.65E-07	1.29E-06	4.40E-07	0.34	-1.5	0.00093	0.0067
Atg3	ENSMUSG00000022663	4.42E-06	5.90E-06	2.94E-06	0.5	-1	0.00094	0.0067
Rpl31	ENSMUSG00000073702	5.04E-07	7.70E-07	2.37E-07	0.31	-1.7	0.00094	0.0067
Prdm15	ENSMUSG00000014039	4.20E-06	5.68E-06	2.71E-06	0.48	-1.1	0.00094	0.0068
Scara5	ENSMUSG00000022032	2.31E-05	2.95E-05	1.66E-05	0.56	-0.83	0.00094	0.0068
Rny3	ENSMUSG00000064945	4.57E-04	6.07E-04	3.06E-04	0.5	-0.99	0.00095	0.0068
Cpsf7	ENSMUSG00000034820	8.40E-06	1.11E-05	5.70E-06	0.51	-0.96	0.00095	0.0068
Taok1	ENSMUSG00000017291	3.90E-05	5.07E-05	2.72E-05	0.54	-0.9	0.00095	0.0068
Zfp933	ENSMUSG00000059423	4.62E-06	6.22E-06	3.02E-06	0.49	-1	0.00095	0.0068
Sept11	ENSMUSG00000058013	1.94E-05	2.52E-05	1.37E-05	0.54	-0.88	0.00095	0.0068
Popdc3	ENSMUSG00000019848	1.58E-05	2.08E-05	1.09E-05	0.52	-0.93	0.00095	0.0068
Uaca	ENSMUSG00000034485	8.27E-05	1.06E-04	5.89E-05	0.55	-0.85	0.00095	0.0068
AC158662.1	ENSMUSG00000097048	1.62E-06	2.30E-06	9.48E-07	0.41	-1.3	0.00096	0.0068
Pabpn1	ENSMUSG00000022194	3.40E-06	4.68E-06	2.11E-06	0.45	-1.1	0.00096	0.0068
Ngly1	ENSMUSG00000021785	2.23E-05	2.90E-05	1.57E-05	0.54	-0.88	0.00096	0.0068
4632427E13Rik	ENSMUSG00000074024	2.75E-06	3.74E-06	1.75E-06	0.47	-1.1	0.00096	0.0068
Col5a3	ENSMUSG00000004098	1.34E-05	1.85E-05	8.27E-06	0.45	-1.2	0.00096	0.0068
Edem1	ENSMUSG00000030104	3.56E-06	4.98E-06	2.14E-06	0.43	-1.2	0.00096	0.0068
Agap1	ENSMUSG00000055013	1.61E-05	2.08E-05	1.14E-05	0.55	-0.87	0.00096	0.0069
Metnrl	ENSMUSG00000039208	2.33E-06	3.21E-06	1.45E-06	0.45	-1.1	0.00097	0.0069
Gmip	ENSMUSG00000036246	1.53E-06	2.22E-06	8.31E-07	0.37	-1.4	0.00097	0.0069
Thumpd1	ENSMUSG00000030942	9.36E-06	1.23E-05	6.43E-06	0.52	-0.93	0.00097	0.0069
BC100451	ENSMUSG00000076433	3.80E-07	6.19E-07	1.41E-07	0.23	-2.1	0.00097	0.0069
Sec24b	ENSMUSG00000001052	5.35E-06	7.74E-06	2.95E-06	0.38	-1.4	0.00097	0.0069
Cyb561	ENSMUSG00000019590	3.58E-06	4.82E-06	2.34E-06	0.49	-1	0.00098	0.007
Ankrd13c	ENSMUSG00000039988	9.38E-06	1.22E-05	6.52E-06	0.53	-0.91	0.00099	0.007
Tmtc3	ENSMUSG00000036676	4.11E-06	5.57E-06	2.65E-06	0.48	-1.1	0.00099	0.0071
Ncoa1	ENSMUSG00000020647	2.13E-05	2.84E-05	1.41E-05	0.5	-1	0.00099	0.0071
Cnksr3	ENSMUSG00000015202	2.82E-06	4.10E-06	1.54E-06	0.37	-1.4	0.001	0.0071
Hdac2	ENSMUSG00000019777	8.69E-06	1.13E-05	6.08E-06	0.54	-0.89	0.001	0.0071
Car2	ENSMUSG00000027562	2.76E-06	1.72E-06	3.80E-06	2.2	1.1	0.001	0.0071
Lysmd3	ENSMUSG00000035840	4.26E-06	5.67E-06	2.84E-06	0.5	-1	0.001	0.0071
Mycbp2	ENSMUSG00000033004	2.37E-05	3.08E-05	1.67E-05	0.54	-0.88	0.001	0.0071
Mapre1	ENSMUSG00000027479	1.36E-05	1.82E-05	8.97E-06	0.49	-1	0.001	0.0071
Rbm25	ENSMUSG00000010608	1.52E-05	2.01E-05	1.04E-05	0.51	-0.96	0.001	0.0072
S100a9	ENSMUSG00000056071	1.47E-07	2.49E-07	4.42E-08	0.18	-2.5	0.001	0.0072
Dnajc3	ENSMUSG00000022136	2.46E-05	3.19E-05	1.74E-05	0.54	-0.88	0.001	0.0072
Pdp2	ENSMUSG00000048371	4.61E-06	6.29E-06	2.94E-06	0.47	-1.1	0.001	0.0072
Akr1b8	ENSMUSG00000029762	1.08E-06	1.55E-06	6.10E-07	0.39	-1.4	0.001	0.0072
Zfp280d	ENSMUSG00000038535	5.28E-06	7.28E-06	3.28E-06	0.45	-1.2	0.001	0.0072
Shprh	ENSMUSG00000090112	7.66E-06	1.01E-05	5.26E-06	0.52	-0.94	0.001	0.0072
Dstyky	ENSMUSG00000042046	1.06E-05	1.41E-05	7.07E-06	0.5	-1	0.001	0.0072
Sp3	ENSMUSG00000027109	1.18E-05	1.57E-05	7.93E-06	0.51	-0.98	0.001	0.0072
Hira	ENSMUSG00000022702	5.56E-06	7.70E-06	3.43E-06	0.45	-1.2	0.001	0.0073
Ky	ENSMUSG00000035606	1.18E-04	8.62E-05	1.51E-04	1.7	0.81	0.001	0.0073
Ntn4	ENSMUSG00000020019	3.33E-06	4.54E-06	2.12E-06	0.47	-1.1	0.001	0.0073
Elovl5	ENSMUSG00000032349	5.13E-06	6.85E-06	3.41E-06	0.5	-1	0.001	0.0073
Sgpp1	ENSMUSG00000021054	8.03E-06	1.05E-05	5.60E-06	0.54	-0.9	0.001	0.0073
Stam	ENSMUSG00000026718	2.76E-06	3.95E-06	1.58E-06	0.4	-1.3	0.001	0.0073
Zfp954	ENSMUSG00000062116	2.50E-06	3.48E-06	1.52E-06	0.44	-1.2	0.001	0.0073
Ambra1	ENSMUSG00000040506	1.73E-05	2.25E-05	1.21E-05	0.54	-0.9	0.001	0.0074
Spryd7	ENSMUSG00000021930	1.63E-05	2.13E-05	1.12E-05	0.53	-0.92	0.0011	0.0074
Ift80	ENSMUSG00000027778	1.89E-06	2.73E-06	1.06E-06	0.39	-1.4	0.0011	0.0074
Phospho1	ENSMUSG00000050860	6.42E-06	8.77E-06	4.07E-06	0.46	-1.1	0.0011	0.0074
Emc7	ENSMUSG00000055943	1.36E-05	1.76E-05	9.66E-06	0.55	-0.87	0.0011	0.0074
Mtx3	ENSMUSG00000021704	3.37E-06	4.87E-06	1.86E-06	0.38	-1.4	0.0011	0.0074
Prr3	ENSMUSG00000038500	7.39E-07	1.11E-06	3.65E-07	0.33	-1.6	0.0011	0.0074
Lamb1	ENSMUSG00000002900	3.31E-05	4.29E-05	2.33E-05	0.54	-0.88	0.0011	0.0075
Pfklp	ENSMUSG00000021196	3.49E-06	4.60E-06	2.39E-06	0.52	-0.94	0.0011	0.0075
Maff	ENSMUSG00000042622	1.54E-06	2.32E-06	7.46E-07	0.32	-1.6	0.0011	0.0075
Mast2	ENSMUSG00000003810	5.82E-05	7.55E-05	4.08E-05	0.54	-0.89	0.0011	0.0075
Cct6a	ENSMUSG00000029447	2.71E-05	3.49E-05	1.92E-05	0.55	-0.86	0.0011	0.0075
Mettl1	ENSMUSG00000006732	4.87E-06	6.49E-06	3.24E-06	0.5	-1	0.0011	0.0075
AU022252	ENSMUSG00000078584	1.07E-05	1.41E-05	7.38E-06	0.52	-0.93	0.0011	0.0075
mt-Tv	ENSMUSG00000064338	1.86E-03	1.04E-03	2.68E-03	2.6	1.4	0.0011	0.0075
Kat2b-ps	ENSMUSG00000053208	1.62E-06	2.27E-06	9.76E-07	0.43	-1.2	0.0011	0.0075
Adipor2	ENSMUSG00000030168	5.55E-05	7.15E-05	3.96E-05	0.55	-0.85	0.0011	0.0075
Cgnl1	ENSMUSG00000032232	3.85E-06	5.27E-06	2.42E-06	0.46	-1.1	0.0011	0.0075

Enpp4	ENSMUSG00000023961	2.51E-05	3.22E-05	1.80E-05	0.56	-0.84	0.0011	0.0075
Hirip3	ENSMUSG00000042606	1.44E-06	2.07E-06	8.07E-07	0.39	-1.4	0.0011	0.0075
Pnpla8	ENSMUSG00000036257	5.05E-05	6.51E-05	3.58E-05	0.55	-0.86	0.0011	0.0075
Manf	ENSMUSG00000032575	7.67E-06	9.86E-06	5.48E-06	0.56	-0.85	0.0011	0.0075
Zbtb21	ENSMUSG00000046962	5.01E-06	6.95E-06	3.08E-06	0.44	-1.2	0.0011	0.0075
Zbtb26	ENSMUSG00000050714	2.21E-06	3.12E-06	1.31E-06	0.42	-1.3	0.0011	0.0076
Fbxo11	ENSMUSG00000005371	5.78E-06	7.94E-06	3.62E-06	0.46	-1.1	0.0011	0.0076
Ldlrad3	ENSMUSG00000048058	2.46E-06	3.43E-06	1.49E-06	0.43	-1.2	0.0011	0.0076
Plcd4	ENSMUSG00000026173	5.30E-05	6.80E-05	3.81E-05	0.56	-0.83	0.0011	0.0076
Rc3h2	ENSMUSG00000075376	2.74E-05	3.54E-05	1.95E-05	0.55	-0.86	0.0011	0.0076
Skil	ENSMUSG00000027660	9.71E-06	1.36E-05	5.81E-06	0.43	-1.2	0.0011	0.0076
Nxn	ENSMUSG00000020844	1.96E-05	2.58E-05	1.35E-05	0.52	-0.93	0.0011	0.0076
Arl2bp	ENSMUSG00000031776	1.21E-05	1.56E-05	8.54E-06	0.55	-0.87	0.0011	0.0076
Tmed7	ENSMUSG00000033184	2.58E-05	3.30E-05	1.86E-05	0.56	-0.83	0.0011	0.0076
Zfp317	ENSMUSG00000057551	7.31E-06	9.69E-06	4.94E-06	0.51	-0.97	0.0011	0.0076
Rsb1	ENSMUSG00000044098	6.30E-06	8.39E-06	4.20E-06	0.5	-1	0.0011	0.0076
Gm10638	ENSMUSG00000074178	8.11E-07	1.36E-06	2.59E-07	0.19	-2.4	0.0011	0.0076
Ctdspl2	ENSMUSG00000033411	4.02E-06	5.36E-06	2.68E-06	0.5	-1	0.0011	0.0076
Gatsl2	ENSMUSG00000015944	9.21E-06	1.21E-05	6.32E-06	0.52	-0.94	0.0011	0.0076
Rnfl11	ENSMUSG00000032217	6.69E-06	9.33E-06	4.06E-06	0.43	-1.2	0.0011	0.0077
RP23-202I21.2	ENSMUSG00000097324	2.66E-06	3.81E-06	1.51E-06	0.4	-1.3	0.0011	0.0077
Rad52	ENSMUSG00000030166	2.77E-06	3.88E-06	1.65E-06	0.43	-1.2	0.0011	0.0077
2310008H04Rik	ENSMUSG00000041974	1.21E-06	1.75E-06	6.76E-07	0.39	-1.4	0.0011	0.0077
Ube2r2	ENSMUSG00000036241	4.24E-05	5.43E-05	3.05E-05	0.56	-0.83	0.0011	0.0077
Rbbp6	ENSMUSG00000030779	1.66E-05	2.15E-05	1.18E-05	0.55	-0.87	0.0011	0.0077
Ttc28	ENSMUSG00000033209	9.57E-06	1.25E-05	6.62E-06	0.53	-0.92	0.0011	0.0077
Ypel2	ENSMUSG00000018427	5.86E-06	7.73E-06	3.98E-06	0.52	-0.96	0.0011	0.0078
Faf2	ENSMUSG00000025873	7.91E-06	1.05E-05	5.30E-06	0.5	-0.99	0.0011	0.0078
5031425E22Rik	ENSMUSG00000073147	5.56E-06	7.29E-06	3.82E-06	0.52	-0.93	0.0011	0.0078
Tceb1	ENSMUSG00000079658	1.01E-05	1.30E-05	7.24E-06	0.55	-0.85	0.0011	0.0078
Map3k3	ENSMUSG00000020700	1.44E-05	1.87E-05	1.01E-05	0.54	-0.89	0.0011	0.0078
Chd9	ENSMUSG00000056608	1.54E-05	1.99E-05	1.08E-05	0.55	-0.87	0.0011	0.0078
Gm6104	ENSMUSG00000062588	3.19E-07	8.65E-08	5.51E-07	6.4	2.7	0.0011	0.0078
Dcaf5	ENSMUSG00000049106	1.91E-05	2.46E-05	1.35E-05	0.55	-0.86	0.0011	0.0078
Chrdl1	ENSMUSG00000031283	1.40E-06	2.03E-06	7.76E-07	0.38	-1.4	0.0011	0.0079
Psen1	ENSMUSG00000019969	1.13E-05	1.47E-05	7.86E-06	0.54	-0.9	0.0012	0.0079
Trdn	ENSMUSG00000019787	2.43E-04	3.19E-04	1.68E-04	0.53	-0.93	0.0012	0.0079
Ahctf1	ENSMUSG00000026491	2.67E-05	3.47E-05	1.87E-05	0.54	-0.89	0.0012	0.0079
Tril	ENSMUSG00000043496	1.61E-06	2.23E-06	9.88E-07	0.44	-1.2	0.0012	0.0079
Trip11	ENSMUSG00000021188	2.08E-05	2.88E-05	1.28E-05	0.44	-1.2	0.0012	0.0079
4930486L24Rik	ENSMUSG00000050345	3.71E-07	5.90E-07	1.53E-07	0.26	-1.9	0.0012	0.0079
Tube1	ENSMUSG00000019845	2.56E-07	4.26E-07	8.56E-08	0.2	-2.3	0.0012	0.008
Zmpste24	ENSMUSG00000043207	1.05E-05	1.36E-05	7.48E-06	0.55	-0.86	0.0012	0.008
Dapk1	ENSMUSG00000021559	6.21E-06	8.28E-06	4.14E-06	0.5	-1	0.0012	0.008
Zeb1	ENSMUSG00000024238	2.24E-05	2.89E-05	1.60E-05	0.55	-0.85	0.0012	0.008
Arcn1	ENSMUSG00000032096	3.11E-05	4.10E-05	2.11E-05	0.52	-0.96	0.0012	0.008
Dyrk2	ENSMUSG00000028630	1.18E-05	1.54E-05	8.11E-06	0.53	-0.92	0.0012	0.008
Ubn1	ENSMUSG00000039473	2.05E-05	2.69E-05	1.42E-05	0.53	-0.93	0.0012	0.008
Zc3h12a	ENSMUSG00000042677	2.14E-06	3.02E-06	1.26E-06	0.42	-1.3	0.0012	0.008
AC137156.1	ENSMUSG00000097234	1.85E-06	2.66E-06	1.03E-06	0.39	-1.4	0.0012	0.008
Sox5	ENSMUSG00000041540	1.12E-06	1.62E-06	6.18E-07	0.38	-1.4	0.0012	0.008
Poglut1	ENSMUSG00000034064	5.83E-06	7.70E-06	3.96E-06	0.51	-0.96	0.0012	0.0081
Sertad3	ENSMUSG00000055200	2.07E-06	2.85E-06	1.29E-06	0.45	-1.1	0.0012	0.0081
Slc4a4	ENSMUSG00000060961	1.27E-05	1.66E-05	8.77E-06	0.53	-0.92	0.0012	0.0081
Tirap	ENSMUSG00000032041	1.00E-05	1.31E-05	6.88E-06	0.52	-0.93	0.0012	0.0081
Prkar1a	ENSMUSG00000020612	4.52E-05	5.85E-05	3.19E-05	0.55	-0.87	0.0012	0.0081
Synpo	ENSMUSG00000043079	4.47E-05	5.81E-05	3.13E-05	0.54	-0.89	0.0012	0.0081
Eif4h	ENSMUSG00000040731	4.22E-05	5.44E-05	3.00E-05	0.55	-0.86	0.0012	0.0081
Napa	ENSMUSG00000006024	5.69E-05	7.32E-05	4.05E-05	0.55	-0.85	0.0012	0.0082
Hsp25-ps1	ENSMUSG00000078915	4.73E-06	6.66E-06	2.79E-06	0.42	-1.3	0.0012	0.0082
Enpep	ENSMUSG00000028024	5.06E-06	6.66E-06	3.45E-06	0.52	-0.95	0.0012	0.0082
Fam3c	ENSMUSG00000029672	3.45E-06	4.52E-06	2.38E-06	0.53	-0.92	0.0012	0.0082
Midn	ENSMUSG00000035621	1.49E-05	1.93E-05	1.05E-05	0.55	-0.87	0.0012	0.0082
Map2k1	ENSMUSG00000004936	2.30E-05	2.95E-05	1.65E-05	0.56	-0.84	0.0012	0.0082
Soga2	ENSMUSG00000052105	1.77E-06	2.50E-06	1.04E-06	0.42	-1.3	0.0012	0.0082
Bicd1	ENSMUSG00000003452	7.24E-07	1.03E-06	4.16E-07	0.4	-1.3	0.0012	0.0082
Slc35d1	ENSMUSG00000028521	2.41E-06	3.51E-06	1.32E-06	0.38	-1.4	0.0012	0.0082
Gm14567	ENSMUSG00000080896	1.19E-06	1.75E-06	6.23E-07	0.36	-1.5	0.0012	0.0082

Sbf2	ENSMUSG00000038371	1.07E-05	1.40E-05	7.47E-06	0.53	-0.91	0.0012	0.0083
Rsrc2	ENSMUSG00000029422	1.17E-05	1.64E-05	7.09E-06	0.43	-1.2	0.0012	0.0083
Sde2	ENSMUSG00000038806	5.94E-06	8.08E-06	3.79E-06	0.47	-1.1	0.0012	0.0083
Pm20d2	ENSMUSG00000054659	3.13E-06	2.12E-06	4.14E-06	2	0.97	0.0012	0.0083
Zfp180	ENSMUSG00000057101	1.13E-05	1.48E-05	7.84E-06	0.53	-0.92	0.0012	0.0083
Rad51	ENSMUSG00000027323	5.06E-07	7.98E-07	2.14E-07	0.27	-1.9	0.0012	0.0083
Gm12844	ENSMUSG00000084260	2.00E-06	2.75E-06	1.25E-06	0.46	-1.1	0.0012	0.0083
B230120H23Rik	ENSMUSG00000004085	1.80E-04	2.34E-04	1.26E-04	0.54	-0.89	0.0012	0.0083
Cand1	ENSMUSG00000020114	1.23E-05	1.68E-05	7.92E-06	0.47	-1.1	0.0012	0.0083
G6pdx	ENSMUSG00000031400	2.77E-06	3.74E-06	1.79E-06	0.48	-1.1	0.0012	0.0084
AI837181	ENSMUSG00000047423	8.85E-06	1.23E-05	5.43E-06	0.44	-1.2	0.0012	0.0084
Zdhhc17	ENSMUSG00000035798	1.04E-05	1.36E-05	7.17E-06	0.53	-0.93	0.0012	0.0084
Cd80	ENSMUSG00000075122	2.29E-07	3.95E-07	6.41E-08	0.16	-2.6	0.0012	0.0084
Gdap2	ENSMUSG00000027865	3.36E-06	4.50E-06	2.23E-06	0.49	-1	0.0013	0.0084
Vapa	ENSMUSG00000024091	4.29E-05	5.49E-05	3.08E-05	0.56	-0.83	0.0013	0.0084
Man2a2	ENSMUSG00000038886	7.78E-05	9.97E-05	5.59E-05	0.56	-0.83	0.0013	0.0084
Wnt9a	ENSMUSG00000000126	4.86E-06	6.45E-06	3.28E-06	0.51	-0.98	0.0013	0.0085
Emd	ENSMUSG00000001964	1.14E-05	1.47E-05	8.07E-06	0.55	-0.87	0.0013	0.0085
Ncbp2	ENSMUSG00000022774	4.20E-06	5.57E-06	2.84E-06	0.51	-0.97	0.0013	0.0085
Nos1ap	ENSMUSG00000038473	1.97E-07	3.37E-07	5.72E-08	0.17	-2.6	0.0013	0.0085
Saysd1	ENSMUSG00000045107	3.25E-06	4.35E-06	2.16E-06	0.5	-1	0.0013	0.0085
Fosl2	ENSMUSG00000029135	6.94E-06	9.11E-06	4.77E-06	0.52	-0.93	0.0013	0.0086
Rere	ENSMUSG00000039852	1.41E-05	1.82E-05	1.01E-05	0.56	-0.84	0.0013	0.0086
Vldlr	ENSMUSG00000024924	1.45E-04	1.89E-04	1.02E-04	0.54	-0.89	0.0013	0.0086
Sh3rf2	ENSMUSG00000057719	8.57E-06	6.04E-06	1.11E-05	1.8	0.88	0.0013	0.0086
Rnf8	ENSMUSG00000090083	8.98E-06	1.18E-05	6.13E-06	0.52	-0.95	0.0013	0.0086
Gm12141	ENSMUSG00000058809	8.26E-06	1.08E-05	5.70E-06	0.53	-0.92	0.0013	0.0086
Set	ENSMUSG00000054766	9.34E-06	1.26E-05	6.12E-06	0.49	-1	0.0013	0.0086
Gja5	ENSMUSG00000057123	1.24E-06	1.91E-06	5.73E-07	0.3	-1.7	0.0013	0.0086
Cfl1	ENSMUSG00000056201	1.17E-05	1.54E-05	8.06E-06	0.52	-0.93	0.0013	0.0086
Atmin	ENSMUSG00000047388	1.58E-05	2.04E-05	1.11E-05	0.55	-0.87	0.0013	0.0087
Rab11fip2	ENSMUSG00000040022	6.13E-06	8.06E-06	4.20E-06	0.52	-0.94	0.0013	0.0087
Pls3	ENSMUSG00000016382	9.90E-06	1.30E-05	6.83E-06	0.53	-0.92	0.0013	0.0087
Colla1	ENSMUSG00000001506	2.62E-05	3.34E-05	1.89E-05	0.57	-0.82	0.0013	0.0087
Isg20l2	ENSMUSG00000048039	5.75E-06	7.93E-06	3.58E-06	0.45	-1.1	0.0013	0.0088
Zfp706	ENSMUSG00000062397	1.35E-05	1.91E-05	7.83E-06	0.41	-1.3	0.0013	0.0088
Gm6158	ENSMUSG00000090381	1.48E-06	2.11E-06	8.58E-07	0.41	-1.3	0.0013	0.0088
Hrasls	ENSMUSG00000022525	1.46E-05	1.89E-05	1.02E-05	0.54	-0.89	0.0013	0.0088
Micall1	ENSMUSG00000033039	6.74E-06	8.84E-06	4.65E-06	0.53	-0.93	0.0013	0.0089
S100a1	ENSMUSG00000044080	2.92E-05	2.15E-05	3.69E-05	1.7	0.78	0.0013	0.0089
Eif3j2	ENSMUSG00000043424	7.60E-06	1.02E-05	4.99E-06	0.49	-1	0.0013	0.0089
Vps35	ENSMUSG00000031696	2.94E-05	3.76E-05	2.11E-05	0.56	-0.84	0.0013	0.0089
Pgm2l1	ENSMUSG00000030729	7.87E-06	1.03E-05	5.45E-06	0.53	-0.92	0.0013	0.0089
Npy1r	ENSMUSG00000036437	6.69E-07	1.04E-06	3.01E-07	0.29	-1.8	0.0013	0.0089
N6amt2	ENSMUSG00000021951	8.47E-06	1.11E-05	5.89E-06	0.53	-0.91	0.0013	0.0089
Exoc2	ENSMUSG00000021357	8.95E-06	1.17E-05	6.23E-06	0.53	-0.91	0.0013	0.0089
Med8	ENSMUSG00000006392	7.83E-06	1.02E-05	5.45E-06	0.53	-0.91	0.0014	0.0089
Rnf219	ENSMUSG00000022120	9.85E-07	1.43E-06	5.38E-07	0.38	-1.4	0.0014	0.0089
Mtr	ENSMUSG00000021311	1.01E-05	1.33E-05	6.89E-06	0.52	-0.95	0.0014	0.0089
Zfp597	ENSMUSG00000039789	4.28E-06	5.67E-06	2.88E-06	0.51	-0.97	0.0014	0.0089
Gt3c4	ENSMUSG00000035666	1.47E-05	1.94E-05	1.00E-05	0.52	-0.95	0.0014	0.0089
Prpf6	ENSMUSG00000002455	1.85E-05	2.40E-05	1.30E-05	0.54	-0.89	0.0014	0.0089
Tcf23	ENSMUSG00000006642	2.15E-07	3.65E-07	6.38E-08	0.17	-2.5	0.0014	0.0089
Myof	ENSMUSG00000048612	8.62E-06	1.20E-05	5.25E-06	0.44	-1.2	0.0014	0.009
Zcchc7	ENSMUSG00000035649	8.65E-06	1.17E-05	5.56E-06	0.47	-1.1	0.0014	0.009
Tex2	ENSMUSG00000040548	4.91E-05	6.33E-05	3.49E-05	0.55	-0.86	0.0014	0.009
Calm2	ENSMUSG00000036438	2.59E-05	3.49E-05	1.69E-05	0.48	-1	0.0014	0.009
Prkab2	ENSMUSG00000038205	1.57E-04	2.02E-04	1.13E-04	0.56	-0.83	0.0014	0.009
Phf21b	ENSMUSG00000016624	3.60E-07	1.41E-07	5.79E-07	4.1	2	0.0014	0.009
Zfand5	ENSMUSG00000024750	1.09E-04	1.44E-04	7.38E-05	0.51	-0.96	0.0014	0.009
Vps36	ENSMUSG00000031479	1.37E-05	1.77E-05	9.77E-06	0.55	-0.86	0.0014	0.0091
Pi4k2b	ENSMUSG00000029186	6.71E-07	9.98E-07	3.44E-07	0.35	-1.5	0.0014	0.0091
Chchd2	ENSMUSG00000070493	1.52E-05	1.93E-05	1.10E-05	0.57	-0.81	0.0014	0.0091
Wapal	ENSMUSG00000041408	2.57E-05	3.30E-05	1.84E-05	0.56	-0.85	0.0014	0.0091
Arhgap23	ENSMUSG00000049807	2.91E-06	3.89E-06	1.93E-06	0.5	-1	0.0014	0.0092
Sell1	ENSMUSG00000020964	2.90E-05	3.73E-05	2.07E-05	0.56	-0.85	0.0014	0.0092
Tcf4	ENSMUSG00000053477	1.88E-05	2.42E-05	1.33E-05	0.55	-0.86	0.0014	0.0092
Tbcd	ENSMUSG00000039230	5.99E-06	7.91E-06	4.08E-06	0.52	-0.96	0.0014	0.0092

Eif3a	ENSMUSG00000024991	4.65E-05	6.01E-05	3.30E-05	0.55	-0.86	0.0014	0.0092
Fto	ENSMUSG00000055932	4.06E-05	5.19E-05	2.93E-05	0.56	-0.83	0.0014	0.0092
Pkn2	ENSMUSG00000004591	2.33E-05	3.00E-05	1.65E-05	0.55	-0.87	0.0014	0.0093
Pex12	ENSMUSG00000018733	5.80E-06	7.67E-06	3.93E-06	0.51	-0.96	0.0014	0.0093
Zfp788	ENSMUSG00000074165	3.25E-06	4.36E-06	2.15E-06	0.49	-1	0.0014	0.0093
Wdfy3	ENSMUSG00000043940	2.15E-05	2.76E-05	1.55E-05	0.56	-0.84	0.0014	0.0093
Zhx1	ENSMUSG00000022361	1.63E-05	2.10E-05	1.16E-05	0.55	-0.86	0.0014	0.0093
Tubgcp3	ENSMUSG00000000759	7.94E-06	1.03E-05	5.57E-06	0.54	-0.89	0.0014	0.0093
Pak4	ENSMUSG00000030602	1.11E-06	1.57E-06	6.54E-07	0.42	-1.3	0.0014	0.0093
Ddit4l	ENSMUSG00000046818	4.72E-05	6.01E-05	3.42E-05	0.57	-0.81	0.0014	0.0094
Slc5a3	ENSMUSG00000089774	2.96E-06	4.01E-06	1.90E-06	0.47	-1.1	0.0014	0.0094
Ywhag	ENSMUSG00000051391	1.52E-04	1.96E-04	1.09E-04	0.56	-0.85	0.0014	0.0094
Slc30a4	ENSMUSG00000005802	1.11E-05	1.49E-05	7.31E-06	0.49	-1	0.0015	0.0095
Zbtb1	ENSMUSG00000033454	7.45E-06	9.71E-06	5.18E-06	0.53	-0.91	0.0015	0.0095
Glg1	ENSMUSG00000003316	3.15E-05	4.08E-05	2.23E-05	0.55	-0.87	0.0015	0.0095
Foxj2	ENSMUSG00000003154	1.26E-05	1.63E-05	8.85E-06	0.54	-0.88	0.0015	0.0095
Mfhas1	ENSMUSG00000070056	3.13E-06	4.10E-06	2.17E-06	0.53	-0.92	0.0015	0.0095
Pigl	ENSMUSG00000014245	7.79E-07	1.24E-06	3.15E-07	0.25	-2	0.0015	0.0095
Palm	ENSMUSG00000035863	6.31E-06	8.71E-06	3.92E-06	0.45	-1.2	0.0015	0.0095
Kif1c	ENSMUSG00000020821	2.42E-04	3.30E-04	1.53E-04	0.46	-1.1	0.0015	0.0095
Nubp1	ENSMUSG00000022503	2.30E-06	3.13E-06	1.47E-06	0.47	-1.1	0.0015	0.0096
Stac3	ENSMUSG00000040287	8.41E-05	1.08E-04	6.07E-05	0.56	-0.82	0.0015	0.0096
Rab14	ENSMUSG00000026878	2.48E-05	3.18E-05	1.79E-05	0.56	-0.83	0.0015	0.0096
Plagl2	ENSMUSG00000051413	1.35E-06	1.90E-06	7.99E-07	0.42	-1.3	0.0015	0.0096
Ccnc	ENSMUSG00000028252	3.06E-06	4.13E-06	1.98E-06	0.48	-1.1	0.0015	0.0096
Bscl2	ENSMUSG00000071657	3.50E-06	4.66E-06	2.34E-06	0.5	-0.99	0.0015	0.0096
Prkd3	ENSMUSG00000024070	9.96E-06	1.30E-05	6.96E-06	0.54	-0.9	0.0015	0.0096
Gramd1b	ENSMUSG00000040111	6.27E-06	8.43E-06	4.10E-06	0.49	-1	0.0015	0.0097
Nol8	ENSMUSG00000021392	5.14E-06	6.76E-06	3.51E-06	0.52	-0.94	0.0015	0.0097
Prkcdpb	ENSMUSG00000037060	6.14E-06	8.15E-06	4.13E-06	0.51	-0.98	0.0015	0.0097
Gramd4	ENSMUSG00000035900	6.23E-06	8.03E-06	4.43E-06	0.55	-0.86	0.0015	0.0097
Asb4	ENSMUSG00000042607	6.57E-06	8.99E-06	4.16E-06	0.46	-1.1	0.0015	0.0097
Snord15a	ENSMUSG00000065822	2.91E-05	3.94E-05	1.87E-05	0.47	-1.1	0.0015	0.0098
Ptpn11	ENSMUSG00000043733	4.18E-05	5.37E-05	3.00E-05	0.56	-0.84	0.0015	0.0098
Zfp361l	ENSMUSG00000021127	2.50E-06	3.37E-06	1.63E-06	0.48	-1.1	0.0015	0.0098
Fam78b	ENSMUSG00000060568	8.59E-07	1.25E-06	4.64E-07	0.37	-1.4	0.0015	0.0098
Cebpb	ENSMUSG00000056501	7.21E-06	1.00E-05	4.37E-06	0.43	-1.2	0.0015	0.0098
Rab28	ENSMUSG00000029128	1.97E-05	2.58E-05	1.37E-05	0.53	-0.92	0.0015	0.0098
Hnrnpa0	ENSMUSG00000007836	9.59E-06	1.30E-05	6.18E-06	0.48	-1.1	0.0015	0.0098
Zfp646	ENSMUSG00000049739	7.04E-06	9.25E-06	4.83E-06	0.52	-0.94	0.0015	0.0098
Ppap2b	ENSMUSG00000028517	5.98E-05	7.73E-05	4.23E-05	0.55	-0.87	0.0015	0.0098
Rbfox1	ENSMUSG00000008658	7.22E-05	9.19E-05	5.25E-05	0.57	-0.81	0.0015	0.0099
Rsb1l1	ENSMUSG00000039968	8.15E-06	1.06E-05	5.72E-06	0.54	-0.89	0.0015	0.0099
Fars2	ENSMUSG00000021420	1.38E-05	1.03E-05	1.72E-05	1.7	0.74	0.0015	0.0099
Nnat	ENSMUSG00000067786	2.80E-06	3.75E-06	1.84E-06	0.49	-1	0.0015	0.0099
Lsm6	ENSMUSG00000031683	4.38E-06	5.78E-06	2.97E-06	0.51	-0.96	0.0015	0.0099
Cd59b	ENSMUSG00000068686	4.16E-07	6.60E-07	1.72E-07	0.26	-1.9	0.0015	0.0099
Ppp3r1	ENSMUSG00000033953	3.57E-05	4.64E-05	2.49E-05	0.54	-0.9	0.0015	0.0099
H2-Ke2	ENSMUSG00000024309	6.86E-06	8.97E-06	4.75E-06	0.53	-0.92	0.0015	0.0099
Ramp2	ENSMUSG00000001240	8.28E-06	1.07E-05	5.81E-06	0.54	-0.89	0.0016	0.0099
Bet1	ENSMUSG00000032757	3.83E-06	5.11E-06	2.55E-06	0.5	-1	0.0016	0.01
Phactr2	ENSMUSG00000062866	1.32E-05	1.70E-05	9.44E-06	0.56	-0.85	0.0016	0.01
Sirt1	ENSMUSG00000020063	4.69E-06	6.29E-06	3.10E-06	0.49	-1	0.0016	0.01
Dpy19l4	ENSMUSG00000045205	1.25E-05	1.61E-05	8.94E-06	0.55	-0.85	0.0016	0.01
Gm5113	ENSMUSG00000066647	1.64E-06	2.25E-06	1.02E-06	0.45	-1.1	0.0016	0.01
Sqstm1	ENSMUSG00000015837	2.84E-04	3.67E-04	2.01E-04	0.55	-0.87	0.0016	0.01
Ormdl2	ENSMUSG00000025353	5.24E-07	8.26E-07	2.23E-07	0.27	-1.9	0.0016	0.01
Ap4s1	ENSMUSG00000020955	9.19E-06	1.17E-05	6.71E-06	0.58	-0.8	0.0016	0.01
Mbtps1	ENSMUSG00000031835	1.59E-05	2.05E-05	1.14E-05	0.56	-0.84	0.0016	0.01
Ythdf3	ENSMUSG00000047213	2.44E-05	3.14E-05	1.74E-05	0.55	-0.85	0.0016	0.01

Table 3: Significant ($P < 0.01$) differential expression in ANT1 after the correction for multiple testing. 2297 genes.

1.5.2 Upregulated genes in muscle

gene	ensid	baseMean	bNorm	bRB	fc	log2fc	pval	padj
Fgf21	ENSMUSG00000030827	4.13E-07	0.00E+00	8.25E-07	Inf	Inf	2.6e-10	2.3e-08
AL845483.1	ENSMUSG00000097837	1.99E-07	9.15E-09	3.90E-07	43	5.4	1.4e-06	4.1e-05
Rnu3a	ENSMUSG00000065870	7.18E-05	3.62E-06	1.40E-04	39	5.3	3.3e-57	4.8e-53
Kcna10	ENSMUSG00000042861	1.65E-06	8.59E-08	3.21E-06	37	5.2	1.4e-18	5e-16
Gm1305	ENSMUSG00000087236	1.29E-07	7.15E-09	2.50E-07	35	5.1	0.00028	0.0027
Frzb	ENSMUSG00000027004	4.23E-06	2.78E-07	8.19E-06	29	4.9	9.3e-24	7.2e-21
C130080G10Rik	ENSMUSG00000092397	4.78E-07	3.94E-08	9.16E-07	23	4.5	5.7e-16	1.3e-13
Armc2	ENSMUSG00000071324	8.57E-07	1.00E-07	1.61E-06	16	4	2.1e-19	9e-17
Crybb1	ENSMUSG00000029343	6.72E-07	8.08E-08	1.26E-06	16	4	4.5e-05	0.00066
Snapp1	ENSMUSG00000033419	2.98E-07	3.94E-08	5.56E-07	14	3.8	1.6e-07	6.7e-06
Slc7a11	ENSMUSG00000027737	6.74E-07	9.64E-08	1.25E-06	13	3.7	2.1e-08	1.1e-06
Actc1	ENSMUSG00000068614	3.26E-05	4.69E-06	6.05E-05	13	3.7	5.5e-16	1.3e-13
Grin2c	ENSMUSG00000020734	3.85E-07	5.54E-08	7.15E-07	13	3.7	2.4e-08	1.3e-06
Mdfi	ENSMUSG00000032717	1.90E-06	3.10E-07	3.50E-06	11	3.5	3.8e-06	9.2e-05
Fat2	ENSMUSG00000055333	1.51E-06	2.75E-07	2.75E-06	10	3.3	4.6e-06	0.0011
Gdf15	ENSMUSG00000038508	2.26E-07	4.11E-08	4.10E-07	10	3.3	0.00011	0.0013
Erc2	ENSMUSG00000040640	6.22E-07	1.15E-07	1.13E-06	9.8	3.3	0.00014	0.0016
Trib3	ENSMUSG00000032715	3.02E-06	5.60E-07	5.48E-06	9.8	3.3	3e-11	3.4e-09
Bdnf	ENSMUSG00000048482	1.47E-06	3.00E-07	2.64E-06	8.8	3.1	2.2e-12	2.9e-10
Plb1	ENSMUSG00000029134	1.33E-06	3.12E-07	2.35E-06	7.5	2.9	8.2e-09	5.1e-07
6330403A02Rik	ENSMUSG00000053963	2.56E-06	6.26E-07	4.49E-06	7.2	2.8	5.1e-09	3.3e-07
Foxo6	ENSMUSG00000052135	9.72E-07	2.46E-07	1.70E-06	6.9	2.8	2.3e-07	9e-06
Gm20594	ENSMUSG00000096887	3.24E-07	8.27E-08	5.64E-07	6.8	2.8	0.0002	0.0021
Gm6104	ENSMUSG00000062588	3.19E-07	8.65E-08	5.51E-07	6.4	2.7	0.0011	0.0078
Zscan18	ENSMUSG00000070822	3.73E-07	1.08E-07	6.39E-07	5.9	2.6	0.00018	0.0019
Gm12185	ENSMUSG00000048852	8.14E-07	2.45E-07	1.38E-06	5.7	2.5	5.4e-06	0.00012
Pcnxl2	ENSMUSG00000060212	8.88E-07	2.69E-07	1.51E-06	5.6	2.5	7.3e-07	2.3e-05
Cdkl1	ENSMUSG00000020990	2.44E-07	7.40E-08	4.15E-07	5.6	2.5	0.00023	0.0023
Hmgb3	ENSMUSG00000015217	5.18E-07	1.60E-07	8.77E-07	5.5	2.5	0.00027	0.0027
Nhs	ENSMUSG00000059493	6.20E-06	1.93E-06	1.05E-05	5.4	2.4	6e-14	1.1e-11
Adig	ENSMUSG00000044405	1.08E-06	3.59E-07	1.81E-06	5	2.3	5.7e-06	0.00013
Scube2	ENSMUSG0000007279	8.07E-07	2.70E-07	1.34E-06	5	2.3	4.4e-05	0.00065
mt-Tf	ENSMUSG00000064336	1.14E-05	3.92E-06	1.89E-05	4.8	2.3	9.4e-13	1.4e-10
Mthfd2	ENSMUSG00000005667	7.86E-06	2.81E-06	1.29E-05	4.6	2.2	1.9e-11	2.2e-09
mt-Tl1	ENSMUSG00000064340	4.55E-05	1.65E-05	7.45E-05	4.5	2.2	5.9e-05	0.00082
mt-Rnr1	ENSMUSG00000064337	1.41E-02	5.32E-03	2.29E-02	4.3	2.1	6.5e-17	1.8e-14
Blnk	ENSMUSG00000061132	3.29E-06	1.25E-06	5.32E-06	4.2	2.1	4.5e-09	3e-07
AC155258.1	ENSMUSG00000097494	5.64E-07	2.17E-07	9.11E-07	4.2	2.1	0.00052	0.0043
Lzts1	ENSMUSG00000036306	7.15E-07	2.76E-07	1.15E-06	4.2	2.1	8.4e-05	0.0011
Adcy1	ENSMUSG00000020431	1.32E-06	5.13E-07	2.12E-06	4.1	2	3.4e-07	1.3e-05
Phf21b	ENSMUSG00000016624	3.60E-07	1.41E-07	5.79E-07	4.1	2	0.0014	0.009
Spc24	ENSMUSG00000074476	1.04E-06	4.14E-07	1.67E-06	4	2	5.7e-05	0.0008
mt-Ta	ENSMUSG00000064347	9.81E-06	3.94E-06	1.57E-05	4	2	0.00049	0.0041
mt-Co3	ENSMUSG00000064358	7.82E-07	3.15E-07	1.25E-06	4	2	4.6e-05	0.00067
mt-Rnr2	ENSMUSG00000064339	4.97E-02	2.02E-02	7.91E-02	3.9	2	1.5e-19	6.4e-17
4732418A04Rik	ENSMUSG00000084929	5.62E-06	2.39E-06	8.84E-06	3.7	1.9	6e-07	2e-05
Atcay	ENSMUSG00000034958	3.28E-06	1.42E-06	5.15E-06	3.6	1.9	1.2e-06	3.5e-05
Syt12	ENSMUSG00000030616	3.98E-06	1.74E-06	6.21E-06	3.6	1.8	6.1e-07	2e-05
Kcnn2	ENSMUSG00000054477	9.37E-07	4.13E-07	1.46E-06	3.5	1.8	2.1e-06	5.7e-05
Rbpms	ENSMUSG00000031586	7.82E-06	3.48E-06	1.22E-05	3.5	1.8	2.8e-10	2.5e-08

Table 4: Strongly significantly upregulated genes in ANT1 (top 50)

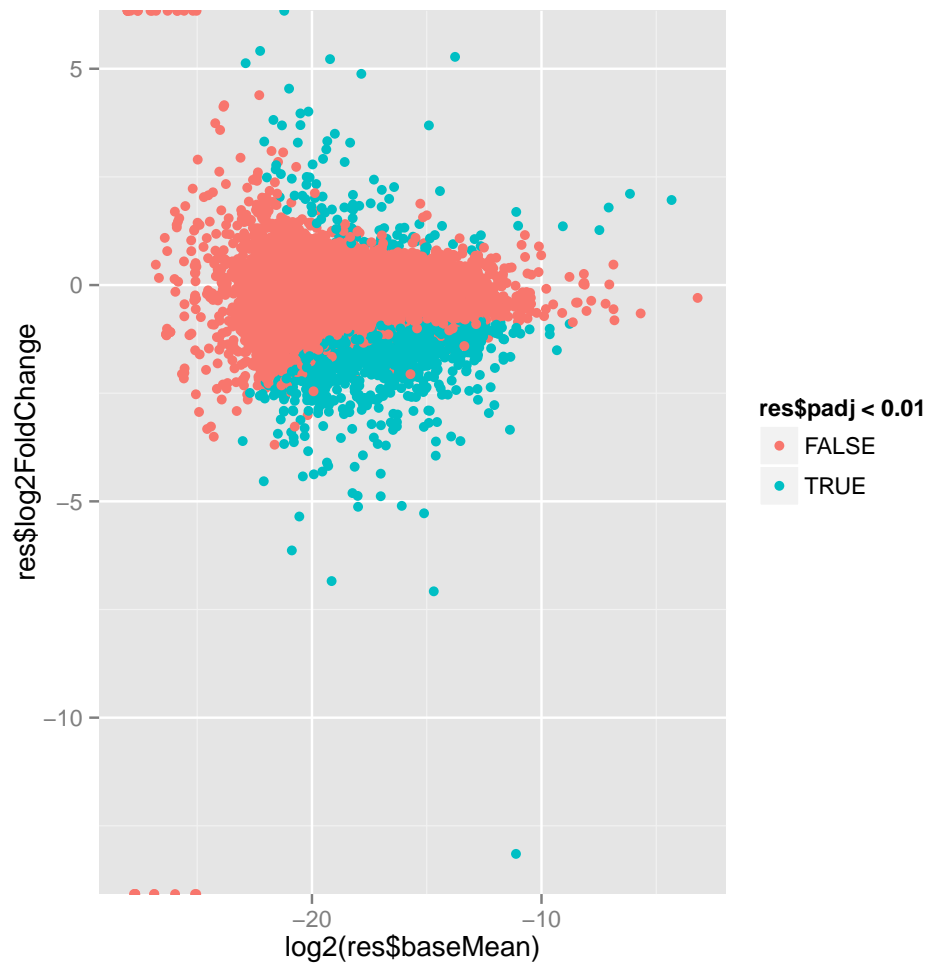
1.5.3 Downregulated genes

gene	ensid	baseMean	bNorm	bRB	fc	log2fc	pval	padj
Slc25a4	ENSMUSG00000031633	4.522E-04	9.043E-04	9.955E-08	0.00011	-13.1	1.15e-17	3.59e-15
Mss51	ENSMUSG00000021815	3.774E-05	7.492E-05	5.539E-07	0.00739	-7.08	2.93e-52	2.14e-48
Htra4	ENSMUSG00000037406	1.726E-06	3.421E-06	2.981E-08	0.00871	-6.84	1.4e-09	1.05e-07
Mrgprg	ENSMUSG00000050276	5.191E-07	1.024E-06	1.457E-08	0.0142	-6.13	0.000105	0.00129
Clec4d	ENSMUSG00000030144	6.507E-07	1.270E-06	3.113E-08	0.0245	-5.35	1.29e-05	0.00025
Odf3l2	ENSMUSG00000035963	2.815E-05	5.488E-05	1.416E-06	0.0258	-5.28	6.93e-24	5.97e-21
Mt2	ENSMUSG00000031762	3.837E-06	7.461E-06	2.137E-07	0.0286	-5.13	6.84e-29	1.11e-25
Nr4a3	ENSMUSG00000028341	1.436E-05	2.790E-05	8.113E-07	0.0291	-5.1	9.98e-29	1.46e-25
Sbk2	ENSMUSG00000030433	7.605E-06	1.471E-05	4.989E-07	0.0339	-4.88	3.82e-18	1.33e-15
Hspa1a	ENSMUSG00000091971	3.790E-06	7.331E-06	2.501E-07	0.0341	-4.87	8.97e-31	1.87e-27
Ms4a6d	ENSMUSG00000024679	3.240E-06	6.257E-06	2.233E-07	0.0357	-4.81	1.7e-13	2.87e-11
Gm7816	ENSMUSG00000083261	2.224E-07	4.264E-07	1.839E-08	0.0431	-4.54	1.35e-07	5.66e-06
Adam12	ENSMUSG00000054555	7.238E-07	1.383E-06	6.447E-08	0.0466	-4.42	3.25e-11	3.64e-09
Timp1	ENSMUSG00000001131	1.008E-06	1.923E-06	9.266E-08	0.0482	-4.38	0.000233	0.00237
Dkk3	ENSMUSG00000030772	7.608E-06	1.451E-05	7.062E-07	0.0487	-4.36	1.73e-17	5.16e-15
Gm13091	ENSMUSG00000085213	1.304E-06	2.483E-06	1.251E-07	0.0504	-4.31	9.38e-16	2.11e-13
Hspa1b	ENSMUSG00000090877	3.462E-06	6.566E-06	3.571E-07	0.0544	-4.2	6.05e-26	6.81e-23
Cxcl13	ENSMUSG00000023078	1.559E-06	2.954E-06	1.628E-07	0.0551	-4.18	3.28e-19	1.33e-16
Gm15833	ENSMUSG00000089703	1.500E-06	2.835E-06	1.649E-07	0.0582	-4.1	3.71e-16	9.06e-14
Fgl2	ENSMUSG00000039899	4.006E-05	7.523E-05	4.887E-06	0.065	-3.94	2.02e-44	9.86e-41
Amd-ps3	ENSMUSG00000060096	4.440E-06	8.335E-06	5.447E-07	0.0653	-3.94	5.76e-06	0.000131
Mmp3	ENSMUSG00000043613	8.490E-07	1.587E-06	1.108E-07	0.0698	-3.84	1.24e-17	3.78e-15
Mt1	ENSMUSG00000031765	8.883E-06	1.650E-05	1.262E-06	0.0764	-3.71	3.05e-38	1.12e-34
Gm7278	ENSMUSG00000080950	4.111E-07	7.624E-07	5.970E-08	0.0783	-3.67	3.93e-06	9.5e-05
Lep	ENSMUSG00000059201	6.945E-06	1.288E-05	1.010E-06	0.0784	-3.67	4.98e-15	1.03e-12
Ush1c	ENSMUSG00000030838	5.524E-07	1.022E-06	8.247E-08	0.0807	-3.63	1.51e-09	1.11e-07
Amd2	ENSMUSG00000063953	4.026E-05	7.446E-05	6.067E-06	0.0815	-3.62	4.2e-07	1.5e-05
Srxn1	ENSMUSG00000032802	8.449E-05	1.562E-04	1.282E-05	0.0821	-3.61	1.67e-37	4.89e-34
Usp43	ENSMUSG00000020905	1.177E-07	2.176E-07	1.786E-08	0.0821	-3.61	0.000714	0.00551
1700071M16Rik	ENSMUSG00000090307	2.285E-06	4.208E-06	3.629E-07	0.0863	-3.54	1.54e-16	4.18e-14
4921514A10Rik	ENSMUSG00000097620	5.479E-07	1.008E-06	8.754E-08	0.0868	-3.53	5.35e-08	2.6e-06
Mmp19	ENSMUSG00000025355	6.175E-06	1.136E-05	9.871E-07	0.0869	-3.52	9.08e-22	5.53e-19
Amd1	ENSMUSG00000075232	6.377E-05	1.172E-04	1.035E-05	0.0883	-3.5	5.32e-15	1.07e-12
Nr4a2	ENSMUSG00000026826	7.666E-07	1.408E-06	1.252E-07	0.0889	-3.49	1.45e-06	4.17e-05
Sln	ENSMUSG00000042045	3.406E-07	6.237E-07	5.758E-08	0.0923	-3.44	3.56e-09	2.48e-07
Prima1	ENSMUSG00000041669	5.094E-07	9.307E-07	8.806E-08	0.0946	-3.4	1.21e-06	3.6e-05
Ccl9	ENSMUSG00000019122	1.104E-05	2.011E-05	1.973E-06	0.0981	-3.35	5.7e-14	1.03e-11
Ppp1r3c	ENSMUSG00000067279	3.766E-04	6.857E-04	6.746E-05	0.0984	-3.35	1.19e-19	5.26e-17
Atf3	ENSMUSG00000026628	3.215E-06	5.846E-06	5.835E-07	0.0998	-3.32	0.000338	0.00312
Cacna2d4	ENSMUSG00000041460	7.635E-07	1.387E-06	1.402E-07	0.101	-3.31	1.54e-08	8.85e-07
Nfil3	ENSMUSG00000056749	2.798E-05	5.074E-05	5.227E-06	0.103	-3.28	8.3e-20	3.92e-17
Tnfrsf12a	ENSMUSG00000023905	1.239E-05	2.245E-05	2.328E-06	0.104	-3.27	6.79e-21	3.82e-18
Gm17709	ENSMUSG00000091952	1.339E-06	2.424E-06	2.533E-07	0.104	-3.26	8.2e-06	0.000172
Crem	ENSMUSG00000063889	7.654E-06	1.384E-05	1.465E-06	0.106	-3.24	1.98e-27	2.64e-24
Pim1	ENSMUSG00000024014	5.775E-06	1.043E-05	1.122E-06	0.108	-3.22	7.45e-24	6.06e-21
Vcan	ENSMUSG00000021614	3.256E-05	5.867E-05	6.446E-06	0.11	-3.19	4.03e-18	1.37e-15
Kcnf1	ENSMUSG00000051726	1.030E-05	1.856E-05	2.051E-06	0.111	-3.18	1.11e-09	8.44e-08
Arhgap26	ENSMUSG00000036452	1.241E-05	2.234E-05	2.485E-06	0.111	-3.17	2.27e-29	4.16e-26
Slc7a2	ENSMUSG00000031596	4.166E-05	7.498E-05	8.351E-06	0.111	-3.17	2.09e-32	5.1e-29
Fam132b	ENSMUSG00000047443	6.743E-07	1.209E-06	1.392E-07	0.115	-3.12	9.93e-07	3.03e-05

Table 5: Strongly significantly downregulated genes in ANT1 (top 50)

1.5.4 Fold Change and Significance Muscle

Genes with high fold change may not be significantly differentially expressed simply due to high variance.



1.6 Heart Results

1.6.1 Significantly DE genes in heart

gene	ensid	baseMean	bNorm	bRB	fc	log2fc	pval	padj
Gm26079	ENSMUSG00000077254	1.79E-05	5.11E-07	3.53E-05	69	6.1	3.4e-47	4.9e-43
Gm22486	ENSMUSG00000080465	6.61E-04	5.20E-05	1.27E-03	24	4.6	6e-45	4.4e-41
Scarna3a	ENSMUSG00000089536	2.08E-04	2.15E-05	3.95E-04	18	4.2	3e-41	1.5e-37
Snord45c	ENSMUSG00000065463	6.41E-05	4.79E-06	1.23E-04	26	4.7	3.9e-33	1.4e-29
Rpl5	ENSMUSG00000058558	1.56E-04	1.13E-05	3.01E-04	27	4.7	1.4e-31	4e-28
Rnu3a	ENSMUSG00000065870	2.58E-04	4.74E-06	5.11E-04	1.1e+02	6.8	2.9e-30	6.8e-27
Gm25835	ENSMUSG00000089542	4.97E-04	4.52E-05	9.49E-04	21	4.4	3.2e-30	6.8e-27
Gm22661	ENSMUSG00000077380	3.23E-06	2.10E-07	6.26E-06	30	4.9	6.9e-30	1.3e-26
Gm26175	ENSMUSG00000065728	4.55E-05	5.50E-06	8.54E-05	16	4	4.4e-29	7.2e-26
Snora7a	ENSMUSG00000064563	2.25E-03	1.83E-04	4.32E-03	24	4.6	5.9e-28	8.6e-25
Eif4a1	ENSMUSG00000059796	5.45E-04	4.15E-05	1.05E-03	25	4.7	4.2e-27	5.6e-24
Snora34	ENSMUSG00000065336	5.16E-05	1.06E-05	9.27E-05	8.8	3.1	3.7e-26	4.5e-23
Rpl27a	ENSMUSG00000046364	7.08E-05	5.73E-06	1.36E-04	24	4.6	5.6e-26	6.2e-23
Snord17	ENSMUSG00000077714	9.27E-04	1.56E-04	1.70E-03	11	3.4	5.9e-26	6.2e-23
Snord15a	ENSMUSG00000065822	1.61E-04	2.10E-05	3.02E-04	14	3.8	1.9e-23	1.8e-20
Snora68	ENSMUSG00000077563	4.74E-04	7.97E-05	8.67E-04	11	3.4	1.3e-22	1.2e-19
Gm23202	ENSMUSG00000077564	2.03E-06	1.95E-07	3.87E-06	20	4.3	3.9e-22	3.4e-19
Snora30	ENSMUSG00000065259	2.50E-04	6.06E-05	4.39E-04	7.3	2.9	4.4e-21	3.6e-18
Gm22676	ENSMUSG00000080622	6.15E-06	4.69E-07	1.18E-05	25	4.7	8.1e-21	6.3e-18
Gnb3	ENSMUSG00000023439	1.21E-05	2.96E-06	2.13E-05	7.2	2.8	1.1e-20	8e-18
Slc25a4	ENSMUSG00000031633	6.34E-04	1.27E-03	1.06E-07	8.4e-05	-14	1.5e-20	1.1e-17
Gm22888	ENSMUSG00000089265	1.22E-06	7.32E-08	2.37E-06	32	5	1.7e-19	1.2e-16
943008C03Rik	ENSMUSG00000085385	4.38E-05	7.64E-06	8.00E-05	10	3.4	3.7e-19	2.4e-16
Gm23123	ENSMUSG00000088273	6.39E-07	0.00E+00	1.28E-06	Inf	Inf	1.4e-18	8.6e-16
Gm25206	ENSMUSG00000064778	4.84E-06	1.14E-06	8.54E-06	7.5	2.9	1.5e-17	8.9e-15
Tmem116	ENSMUSG00000029452	5.13E-06	1.25E-06	9.00E-06	7.2	2.8	5.8e-17	3.3e-14
Kif1a	ENSMUSG00000014602	2.33E-06	3.41E-07	4.33E-06	13	3.7	2.1e-16	1.1e-13
Rpl30	ENSMUSG00000058600	2.62E-05	8.14E-06	4.43E-05	5.4	2.4	3.8e-16	2e-13
Snord13	ENSMUSG00000088252	4.11E-04	8.73E-05	7.36E-04	8.4	3.1	5.5e-16	2.8e-13
Snora21	ENSMUSG00000064901	1.99E-04	6.34E-05	3.35E-04	5.3	2.4	1.1e-15	5.2e-13
Gm22422	ENSMUSG00000064994	3.85E-05	1.30E-05	6.40E-05	4.9	2.3	4.2e-15	2e-12
Gm26225	ENSMUSG00000064442	2.61E-06	5.51E-07	4.66E-06	8.5	3.1	4.7e-15	2.1e-12
Gm10080	ENSMUSG00000060467	9.87E-06	1.43E-06	1.83E-05	13	3.7	4.9e-15	2.2e-12
Gm23245	ENSMUSG00000065304	1.95E-05	4.43E-06	3.46E-05	7.8	3	1.1e-14	4.8e-12
Gm24698	ENSMUSG00000065817	8.68E-05	1.49E-05	1.59E-04	11	3.4	1.1e-14	4.8e-12
Snora36b	ENSMUSG00000077571	3.90E-05	3.39E-06	7.47E-05	22	4.5	2e-14	8e-12
Egln3	ENSMUSG00000035105	1.10E-05	2.00E-05	1.93E-06	0.096	-3.4	2.8e-14	1.1e-11
Snord87	ENSMUSG00000093178	2.55E-05	8.97E-06	4.19E-05	4.7	2.2	4.9e-14	1.9e-11
Scarna3b	ENSMUSG00000088158	4.41E-05	4.61E-06	8.37E-05	18	4.2	1e-13	3.8e-11
Gm24148	ENSMUSG00000064696	9.40E-05	3.26E-05	1.55E-04	4.8	2.3	1.4e-13	5e-11
Gm23734	ENSMUSG00000065687	8.73E-05	3.14E-05	1.43E-04	4.6	2.2	6.4e-13	2.3e-10
Snord93	ENSMUSG00000095205	1.41E-06	2.81E-07	2.54E-06	9	3.2	6.5e-13	2.3e-10
Rpl10	ENSMUSG0000008682	8.33E-05	3.08E-05	1.36E-04	4.4	2.1	9.4e-13	3.2e-10
Gm23262	ENSMUSG00000088948	1.58E-03	4.15E-04	2.75E-03	6.6	2.7	1e-12	3.4e-10
Snord89	ENSMUSG00000077704	6.92E-04	2.41E-04	1.14E-03	4.7	2.2	2.1e-12	6.7e-10
mt-Nd3	ENSMUSG00000064360	7.50E-05	1.66E-05	1.33E-04	8	3	2.4e-12	7.7e-10
Snord23	ENSMUSG00000080478	1.67E-04	5.59E-05	2.78E-04	5	2.3	3.8e-12	1.2e-09
Gm26457	ENSMUSG00000064612	1.25E-05	3.62E-06	2.14E-05	5.9	2.6	5.4e-12	1.6e-09
Gm22455	ENSMUSG00000064514	5.67E-05	1.30E-05	1.00E-04	7.7	3	6e-12	1.8e-09
Gm25635	ENSMUSG00000064609	2.97E-06	6.70E-07	5.27E-06	7.9	3	9.5e-12	2.8e-09
Snord8	ENSMUSG00000093044	4.97E-04	1.80E-04	8.13E-04	4.5	2.2	1.2e-11	3.5e-09
Gm26109	ENSMUSG00000065904	4.19E-05	5.64E-06	7.81E-05	14	3.8	1.8e-11	5.1e-09
Snord92	ENSMUSG00000093289	4.19E-05	1.69E-05	6.70E-05	4	2	2.7e-11	7.5e-09
Cpne4	ENSMUSG00000032564	6.88E-07	9.79E-08	1.28E-06	13	3.7	5.2e-11	1.4e-08
Snord67	ENSMUSG00000077221	7.74E-04	2.93E-04	1.25E-03	4.3	2.1	5.2e-11	1.4e-08
Snord90	ENSMUSG00000077756	2.80E-05	1.53E-06	5.45E-05	36	5.2	5.2e-11	1.4e-08
Gm24119	ENSMUSG00000077167	5.51E-04	1.32E-04	9.70E-04	7.4	2.9	6.6e-11	1.7e-08
Gm26387	ENSMUSG00000077426	9.81E-05	1.46E-05	1.82E-04	12	3.6	6.6e-11	1.7e-08
mt-Nd6	ENSMUSG00000064368	8.00E-05	3.37E-05	1.26E-04	3.7	1.9	1.1e-10	2.8e-08
Snord35b	ENSMUSG00000064767	1.47E-04	4.64E-05	2.47E-04	5.3	2.4	1.5e-10	3.7e-08
Ccl9	ENSMUSG00000019122	8.94E-06	1.60E-05	1.87E-06	0.12	-3.1	1.7e-10	4e-08
Mmp19	ENSMUSG00000025355	3.05E-06	5.37E-06	7.44E-07	0.14	-2.9	2.7e-10	6.4e-08
Snord88a	ENSMUSG00000095472	4.59E-05	1.58E-05	7.60E-05	4.8	2.3	3.4e-10	7.9e-08

Grin2c	ENSMUSG00000020734	1.34E-06	3.47E-07	2.34E-06	6.7	2.8	3.9e-10	9e-08
Snord7	ENSMUSG00000065715	2.79E-04	4.53E-06	5.53E-04	1.2e+02	6.9	4.4e-10	9.9e-08
Arhgap9	ENSMUSG00000040345	7.84E-06	1.84E-06	1.38E-05	7.5	2.9	5e-10	1.1e-07
Ccl6	ENSMUSG00000018927	1.49E-05	2.57E-05	4.07E-06	0.16	-2.7	5.6e-10	1.2e-07
AC025794.1	ENSMUSG00000097188	1.94E-03	6.19E-04	3.26E-03	5.3	2.4	5.8e-10	1.2e-07
Mttp	ENSMUSG00000028158	7.85E-06	3.31E-06	1.24E-05	3.7	1.9	6.8e-10	1.4e-07
Gm24616	ENSMUSG00000065208	1.63E-05	5.00E-06	2.76E-05	5.5	2.5	7.7e-10	1.6e-07
Akr1c19	ENSMUSG00000071551	1.05E-06	2.21E-07	1.88E-06	8.5	3.1	9.8e-10	2e-07
Cdkn1a	ENSMUSG00000023067	1.09E-05	1.84E-05	3.36E-06	0.18	-2.4	1e-09	2.1e-07
Eif1ax	ENSMUSG00000067194	3.49E-05	1.54E-05	5.43E-05	3.5	1.8	1.2e-09	2.4e-07
Gstk1	ENSMUSG00000029864	3.04E-05	1.34E-05	4.74E-05	3.5	1.8	1.2e-09	2.5e-07
Rab27a	ENSMUSG00000032202	3.25E-06	1.27E-06	5.23E-06	4.1	2	3e-09	5.8e-07
Dancr	ENSMUSG00000053656	1.21E-04	1.90E-05	2.22E-04	12	3.6	3.5e-09	6.7e-07
Snord88c	ENSMUSG00000096296	9.76E-06	4.26E-06	1.53E-05	3.6	1.8	4.4e-09	8.4e-07
Cenpf	ENSMUSG00000026605	2.88E-06	5.08E-06	6.72E-07	0.13	-2.9	4.5e-09	8.5e-07
Snhg12	ENSMUSG00000086290	9.62E-05	2.19E-05	1.70E-04	7.8	3	6.5e-09	1.2e-06
Tspan10	ENSMUSG00000039691	8.08E-07	1.54E-07	1.46E-06	9.5	3.3	7.2e-09	1.3e-06
Ms4a6d	ENSMUSG00000024679	3.67E-06	6.30E-06	1.04E-06	0.16	-2.6	7.6e-09	1.4e-06
Gm25939	ENSMUSG00000093843	1.65E-04	5.32E-05	2.78E-04	5.2	2.4	8.2e-09	1.5e-06
Edn3	ENSMUSG00000027524	1.58E-06	2.86E-06	2.99E-07	0.1	-3.3	1.5e-08	2.7e-06
Mir221	ENSMUSG00000065422	1.27E-06	3.76E-07	2.17E-06	5.8	2.5	2.1e-08	3.6e-06
Gm13368	ENSMUSG00000081389	9.75E-07	2.50E-07	1.70E-06	6.8	2.8	2.7e-08	4.6e-06
Gm24888	ENSMUSG00000077575	7.55E-05	3.57E-05	1.15E-04	3.2	1.7	2.8e-08	4.8e-06
mt-Nd2	ENSMUSG00000064345	2.97E-04	1.39E-04	4.55E-04	3.3	1.7	3.9e-08	6.5e-06
Mir3068	ENSMUSG00000064938	6.54E-05	1.18E-05	1.19E-04	10	3.3	5.3e-08	8.7e-06
2010107E04Rik	ENSMUSG00000021290	7.40E-05	3.66E-05	1.11E-04	3	1.6	7e-08	1.1e-05
Snord16a	ENSMUSG00000094411	7.38E-05	3.63E-05	1.11E-04	3.1	1.6	7.3e-08	1.2e-05
3632451O06Rik	ENSMUSG00000036242	2.75E-06	4.70E-06	8.02E-07	0.17	-2.6	7.3e-08	1.2e-05
Gm20628	ENSMUSG00000093656	4.54E-06	1.71E-06	7.37E-06	4.3	2.1	7.4e-08	1.2e-05
Nos1	ENSMUSG00000029361	1.38E-06	2.97E-07	2.46E-06	8.3	3	7.5e-08	1.2e-05
Mbd1	ENSMUSG00000024561	1.98E-05	3.19E-05	7.72E-06	0.24	-2	8.6e-08	1.3e-05
Serpina3n	ENSMUSG00000021091	1.13E-05	1.88E-05	3.74E-06	0.2	-2.3	9.3e-08	1.4e-05
Ccdc23	ENSMUSG00000028643	7.83E-06	3.16E-06	1.25E-05	4	2	1.1e-07	1.6e-05
Rplp2	ENSMUSG00000025508	2.55E-05	1.28E-05	3.83E-05	3	1.6	1.2e-07	1.9e-05
Hspa1b	ENSMUSG00000090877	1.55E-06	2.83E-06	2.60E-07	0.092	-3.4	1.5e-07	2.2e-05
Gm25291	ENSMUSG00000084744	1.35E-05	6.82E-06	2.02E-05	3	1.6	1.7e-07	2.4e-05
Rpl12	ENSMUSG00000038900	7.73E-05	1.18E-05	1.43E-04	12	3.6	1.9e-07	2.8e-05
Snord83b	ENSMUSG00000077734	1.05E-03	4.63E-04	1.63E-03	3.5	1.8	2.5e-07	3.6e-05
Clec4d	ENSMUSG00000030144	8.39E-07	1.64E-06	3.62E-08	0.022	-5.5	3.1e-07	4.4e-05
Gm24044	ENSMUSG00000065041	2.18E-04	8.40E-05	3.52E-04	4.2	2.1	3.1e-07	4.4e-05
Calm2	ENSMUSG00000036438	2.73E-05	1.39E-05	4.06E-05	2.9	1.5	3.2e-07	4.5e-05
Mettl11b	ENSMUSG00000040113	1.57E-06	6.74E-07	2.46E-06	3.7	1.9	3.8e-07	5.3e-05
Prom2	ENSMUSG00000027376	1.04E-06	3.22E-07	1.76E-06	5.5	2.5	4.2e-07	5.8e-05
2210407C18Rik	ENSMUSG00000037145	8.15E-07	1.47E-06	1.62E-07	0.11	-3.2	4.4e-07	6.1e-05
S100a8	ENSMUSG00000056054	4.64E-07	8.68E-07	5.93E-08	0.068	-3.9	4.8e-07	6.5e-05
Akap5	ENSMUSG00000021057	8.90E-07	2.96E-07	1.48E-06	5	2.3	4.9e-07	6.6e-05
Itgam	ENSMUSG00000030786	6.50E-06	1.03E-05	2.73E-06	0.27	-1.9	8.2e-07	0.00011
Scarna2	ENSMUSG00000088185	4.58E-05	2.46E-05	6.70E-05	2.7	1.4	8.9e-07	0.00012
Snord111	ENSMUSG00000080396	3.20E-05	1.48E-05	4.92E-05	3.3	1.7	1e-06	0.00013
Gadd45a	ENSMUSG00000036390	4.68E-06	2.41E-06	6.95E-06	2.9	1.5	1.3e-06	0.00017
Cxcl13	ENSMUSG00000023078	5.02E-07	9.02E-07	1.02E-07	0.11	-3.1	1.3e-06	0.00017
Egr1	ENSMUSG00000038418	2.09E-06	9.31E-07	3.25E-06	3.5	1.8	1.4e-06	0.00018
Mcee	ENSMUSG00000033429	2.91E-05	1.46E-05	4.37E-05	3	1.6	1.5e-06	0.00019
Tmem150c	ENSMUSG00000050640	8.02E-06	4.17E-06	1.19E-05	2.8	1.5	1.5e-06	0.00019
Snord14a	ENSMUSG00000064741	3.49E-06	1.69E-06	5.28E-06	3.1	1.6	1.6e-06	0.00019
Bhlhe41	ENSMUSG00000030256	9.56E-06	5.15E-06	1.40E-05	2.7	1.4	1.6e-06	0.00019
Zdhhc2	ENSMUSG00000039470	3.57E-06	1.03E-06	6.12E-06	5.9	2.6	2e-06	0.00024
Scarna9	ENSMUSG00000077506	4.46E-06	2.12E-06	6.80E-06	3.2	1.7	2.1e-06	0.00025
Gm25128	ENSMUSG00000065273	8.47E-05	4.68E-05	1.22E-04	2.6	1.4	2.3e-06	0.00027
Pah	ENSMUSG00000020051	1.18E-06	3.81E-07	1.98E-06	5.2	2.4	2.5e-06	0.0003
Ankrd63	ENSMUSG00000078137	1.25E-06	2.13E-06	3.72E-07	0.17	-2.5	2.8e-06	0.00033
Gm23301	ENSMUSG00000064647	8.49E-06	3.37E-06	1.36E-05	4	2	3.1e-06	0.00036
Chrna1	ENSMUSG00000027107	6.13E-07	7.44E-08	1.15E-06	15	4	3.4e-06	0.0004
Snord37	ENSMUSG00000064441	1.45E-04	4.61E-05	2.44E-04	5.3	2.4	3.6e-06	0.00041
Rgs2	ENSMUSG00000026360	7.19E-06	1.12E-05	3.14E-06	0.28	-1.8	3.7e-06	0.00042
Rnu73b	ENSMUSG00000064390	5.02E-05	2.56E-05	7.47E-05	2.9	1.5	3.8e-06	0.00043
Rorb	ENSMUSG00000036192	9.21E-07	3.29E-07	1.51E-06	4.6	2.2	3.8e-06	0.00043
Scarna6	ENSMUSG00000089281	2.75E-05	9.16E-06	4.59E-05	5	2.3	3.8e-06	0.00043

Pla2g5	ENSMUSG00000041193	8.22E-06	1.29E-05	3.57E-06	0.28	-1.8	3.9e-06	0.00043
Gm24494	ENSMUSG00000065738	1.71E-04	9.36E-05	2.49E-04	2.7	1.4	4.7e-06	0.00052
Hist1h1e	ENSMUSG00000051627	2.32E-05	1.29E-05	3.35E-05	2.6	1.4	5.9e-06	0.00065
Gm22980	ENSMUSG00000064542	9.04E-05	3.82E-05	1.43E-04	3.7	1.9	6.5e-06	0.0007
Ankrd1	ENSMUSG00000024803	2.80E-04	1.59E-04	4.02E-04	2.5	1.3	7.2e-06	0.00077
P4ha1	ENSMUSG00000019916	2.13E-05	3.22E-05	1.04E-05	0.32	-1.6	7.4e-06	0.00079
Lyve1	ENSMUSG00000030787	1.41E-05	2.15E-05	6.72E-06	0.31	-1.7	7.9e-06	0.00084
Acta1	ENSMUSG00000031972	1.28E-04	6.14E-05	1.94E-04	3.2	1.7	8.1e-06	0.00086
Gfpt2	ENSMUSG00000020363	8.42E-06	1.29E-05	3.98E-06	0.31	-1.7	8.5e-06	0.00089
Krt19	ENSMUSG00000020911	1.59E-06	2.80E-06	3.79E-07	0.14	-2.9	8.6e-06	0.00089
8430408G22Rik	ENSMUSG00000048489	1.59E-05	2.40E-05	7.71E-06	0.32	-1.6	9.2e-06	0.00094
Gm24233	ENSMUSG00000077505	3.88E-06	1.62E-06	6.14E-06	3.8	1.9	9.2e-06	0.00094
Snora5c	ENSMUSG00000065686	1.20E-05	5.34E-06	1.87E-05	3.5	1.8	9.3e-06	0.00094
Scarna17	ENSMUSG00000088689	2.20E-04	1.25E-04	3.15E-04	2.5	1.3	1.1e-05	0.0011
Snord42b	ENSMUSG00000065676	3.54E-05	1.91E-05	5.17E-05	2.7	1.4	1.1e-05	0.0011
Nabp1	ENSMUSG00000026107	9.84E-06	5.17E-06	1.45E-05	2.8	1.5	1.2e-05	0.0012
Fat2	ENSMUSG00000055333	3.28E-07	1.04E-07	5.52E-07	5.3	2.4	1.2e-05	0.0012
Gm12906	ENSMUSG00000084874	2.20E-06	9.48E-07	3.45E-06	3.6	1.9	1.2e-05	0.0012
Snora73a	ENSMUSG00000064387	3.70E-06	9.68E-07	6.44E-06	6.7	2.7	1.2e-05	0.0012
Snord66	ENSMUSG00000077239	2.32E-05	1.33E-05	3.30E-05	2.5	1.3	1.2e-05	0.0012
Eif4a2	ENSMUSG00000022884	7.68E-04	3.25E-04	1.21E-03	3.7	1.9	1.3e-05	0.0013
Gm9762	ENSMUSG00000037096	6.71E-06	3.60E-06	9.82E-06	2.7	1.4	1.4e-05	0.0013
St8sia5	ENSMUSG00000025425	3.77E-07	1.42E-07	6.12E-07	4.3	2.1	1.4e-05	0.0013
Atf3	ENSMUSG00000026628	2.30E-06	3.58E-06	1.02E-06	0.29	-1.8	1.6e-05	0.0015
Gm129	ENSMUSG00000038550	3.81E-06	1.66E-06	5.97E-06	3.6	1.8	1.7e-05	0.0016
S100a9	ENSMUSG00000056071	1.08E-06	1.95E-06	2.14E-07	0.11	-3.2	1.8e-05	0.0016
Yaf2	ENSMUSG00000022634	8.81E-06	5.00E-06	1.26E-05	2.5	1.3	1.9e-05	0.0017
Robo2	ENSMUSG00000052516	9.99E-07	4.23E-07	1.58E-06	3.7	1.9	1.9e-05	0.0018
Tfrc	ENSMUSG00000022797	2.09E-05	1.25E-05	2.93E-05	2.3	1.2	2e-05	0.0019
Snord35a	ENSMUSG00000065818	2.43E-04	1.39E-04	3.46E-04	2.5	1.3	2.3e-05	0.0021
Rhbdl3	ENSMUSG00000017692	2.04E-06	3.21E-06	8.65E-07	0.27	-1.9	2.5e-05	0.0023
Aldh1l2	ENSMUSG00000020256	2.66E-06	4.15E-06	1.17E-06	0.28	-1.8	2.6e-05	0.0023
Tmem100	ENSMUSG00000069763	4.87E-06	7.61E-06	2.13E-06	0.28	-1.8	2.7e-05	0.0024
Gm8121	ENSMUSG00000051116	7.49E-06	4.00E-06	1.10E-05	2.7	1.5	2.8e-05	0.0025
Trp53inp1	ENSMUSG00000028211	7.39E-06	4.18E-06	1.06E-05	2.5	1.3	2.9e-05	0.0025
Ndufb2	ENSMUSG00000002416	9.16E-05	4.87E-05	1.35E-04	2.8	1.5	2.9e-05	0.0026
Snord91a	ENSMUSG00000077493	5.35E-05	3.17E-05	7.53E-05	2.4	1.2	3e-05	0.0026
Gpr133	ENSMUSG00000044017	4.07E-06	6.17E-06	1.98E-06	0.32	-1.6	3e-05	0.0026
Lox	ENSMUSG00000024529	2.41E-06	3.67E-06	1.14E-06	0.31	-1.7	3e-05	0.0026
Kcnc1	ENSMUSG00000058975	1.02E-06	5.37E-07	1.50E-06	2.8	1.5	3e-05	0.0026
Pthlh	ENSMUSG00000048776	3.27E-07	5.78E-07	7.57E-08	0.13	-2.9	3e-05	0.0026
Ramp1	ENSMUSG00000034353	1.75E-06	2.77E-06	7.21E-07	0.26	-1.9	3.7e-05	0.0031
Ugp2	ENSMUSG00000001891	1.71E-04	9.85E-05	2.43E-04	2.5	1.3	4.2e-05	0.0035
Cubn	ENSMUSG00000026726	1.92E-06	9.52E-07	2.88E-06	3	1.6	4.4e-05	0.0037
D7Ertd443e	ENSMUSG00000030994	3.08E-06	1.53E-06	4.63E-06	3	1.6	4.5e-05	0.0038
Gbp6	ENSMUSG00000079362	6.00E-06	8.97E-06	3.03E-06	0.34	-1.6	4.8e-05	0.004
Snord123	ENSMUSG00000089317	3.01E-05	1.79E-05	4.23E-05	2.4	1.2	5.2e-05	0.0042
BB114351	ENSMUSG00000085001	7.91E-07	3.15E-07	1.27E-06	4	2	5.2e-05	0.0043
Snord49a	ENSMUSG00000065734	1.45E-04	7.92E-05	2.10E-04	2.7	1.4	5.6e-05	0.0045
Rasl10a	ENSMUSG00000034209	8.06E-07	1.36E-06	2.48E-07	0.18	-2.5	5.6e-05	0.0045
Mir677	ENSMUSG00000093245	6.07E-06	1.50E-06	1.06E-05	7.1	2.8	5.6e-05	0.0045
Ahsg	ENSMUSG00000022868	2.31E-06	3.65E-06	9.69E-07	0.27	-1.9	5.6e-05	0.0045
Gm25107	ENSMUSG00000084421	3.42E-05	8.63E-06	5.97E-05	6.9	2.8	5.7e-05	0.0045
Masp1	ENSMUSG00000022887	9.15E-07	1.52E-06	3.06E-07	0.2	-2.3	5.9e-05	0.0046
Gm23008	ENSMUSG00000089571	7.43E-07	2.66E-07	1.22E-06	4.6	2.2	6e-05	0.0047
Ahrr	ENSMUSG00000021575	2.07E-06	1.06E-06	3.09E-06	2.9	1.5	6.1e-05	0.0048
Cilp2	ENSMUSG00000044006	4.40E-07	7.99E-07	8.13E-08	0.1	-3.3	6.1e-05	0.0048
G0s2	ENSMUSG00000009633	2.08E-05	3.12E-05	1.04E-05	0.33	-1.6	6.2e-05	0.0048
Hp	ENSMUSG00000031722	5.83E-07	1.01E-06	1.59E-07	0.16	-2.7	6.3e-05	0.0049
Cd163	ENSMUSG00000008845	1.28E-05	1.93E-05	6.36E-06	0.33	-1.6	6.7e-05	0.0051
Gm22009	ENSMUSG00000089417	3.80E-05	2.32E-05	5.28E-05	2.3	1.2	7.1e-05	0.0054
Manf	ENSMUSG00000032575	1.29E-05	1.96E-05	6.25E-06	0.32	-1.6	7.2e-05	0.0055
Nlrc3	ENSMUSG00000049871	1.90E-06	9.57E-07	2.83E-06	3	1.6	7.6e-05	0.0057
Wnt5b	ENSMUSG00000030170	1.55E-06	7.83E-07	2.32E-06	3	1.6	7.7e-05	0.0058
Mmp3	ENSMUSG00000043613	4.12E-06	6.46E-06	1.78E-06	0.28	-1.9	8.2e-05	0.0061
231005B05Rik	ENSMUSG00000085779	2.08E-05	1.23E-05	2.92E-05	2.4	1.2	8.2e-05	0.0061
Scn4b	ENSMUSG00000046480	7.15E-05	4.31E-05	9.98E-05	2.3	1.2	8.3e-05	0.0061
mt-Tf	ENSMUSG00000064336	3.56E-05	1.16E-05	5.96E-05	5.1	2.4	8.3e-05	0.0061

Gm12002	ENSMUSG00000086584	3.66E-06	2.06E-06	5.26E-06	2.5	1.3	8.8e-05	0.0065
Herpud1	ENSMUSG00000031770	1.11E-04	1.64E-04	5.82E-05	0.35	-1.5	9e-05	0.0066
Shisa2	ENSMUSG00000044461	2.93E-07	4.94E-07	9.21E-08	0.19	-2.4	9.1e-05	0.0066
Chd6	ENSMUSG00000057133	3.05E-05	4.43E-05	1.67E-05	0.38	-1.4	9.1e-05	0.0066
Hspa1a	ENSMUSG00000091971	1.34E-06	2.46E-06	2.18E-07	0.089	-3.5	9.2e-05	0.0066
Serpinh1	ENSMUSG00000070436	8.59E-05	1.27E-04	4.46E-05	0.35	-1.5	9.4e-05	0.0067
Eya1	ENSMUSG00000025932	4.88E-07	1.87E-07	7.89E-07	4.2	2.1	9.7e-05	0.0069
Nxpe5	ENSMUSG00000047592	4.30E-07	7.29E-07	1.30E-07	0.18	-2.5	9.7e-05	0.0069
Kif26b	ENSMUSG00000026494	1.80E-06	9.79E-07	2.63E-06	2.7	1.4	0.0001	0.0071
Snord19	ENSMUSG00000077797	4.22E-05	2.03E-05	6.41E-05	3.2	1.7	0.0001	0.0072
Shmt1	ENSMUSG00000020534	6.40E-06	3.64E-06	9.16E-06	2.5	1.3	0.0001	0.0072
Pik3r1	ENSMUSG00000041417	4.58E-05	6.65E-05	2.51E-05	0.38	-1.4	0.00011	0.0076
Nr1d1	ENSMUSG00000020889	8.61E-06	4.95E-06	1.23E-05	2.5	1.3	0.00011	0.0076
A230103J11Rik	ENSMUSG00000087026	6.02E-06	3.57E-06	8.46E-06	2.4	1.2	0.00012	0.0082
Lbh	ENSMUSG00000024063	1.85E-04	1.16E-04	2.54E-04	2.2	1.1	0.00012	0.0085
Vcan	ENSMUSG00000021614	1.75E-05	2.52E-05	9.72E-06	0.39	-1.4	0.00013	0.0086
Gm23344	ENSMUSG00000065752	1.60E-05	9.96E-06	2.21E-05	2.2	1.1	0.00013	0.0088
Csf2rb2	ENSMUSG00000071714	2.17E-07	3.89E-07	4.49E-08	0.12	-3.1	0.00014	0.0096
Tmem52	ENSMUSG00000023153	9.93E-07	5.39E-07	1.45E-06	2.7	1.4	0.00014	0.0096

Table 6: Significant ($P < 0.01$) differential expression in ANT1 after the correction for multiple testing. 218 genes.

1.6.2 Upregulated genes in heart

gene	ensid	baseMean	bNorm	bRB	fc	log2fc	pval	padj
Gm23123	ENSMUSG00000088273	6.39E-07	0.00E+00	1.28E-06	Inf	Inf	1.4e-18	8.6e-16
Snord7	ENSMUSG00000065715	2.79E-04	4.53E-06	5.53E-04	1.2e+02	6.9	4.4e-10	9.9e-08
Rnu3a	ENSMUSG00000065870	2.58E-04	4.74E-06	5.11E-04	1.1e+02	6.8	2.9e-30	6.8e-27
Gm26079	ENSMUSG00000077254	1.79E-05	5.11E-07	3.53E-05	69	6.1	3.4e-47	4.9e-43
Snord90	ENSMUSG00000077756	2.80E-05	1.53E-06	5.45E-05	36	5.2	5.2e-11	1.4e-08
Gm22888	ENSMUSG00000089265	1.22E-06	7.32E-08	2.37E-06	32	5	1.7e-19	1.2e-16
Gm22661	ENSMUSG00000077380	3.23E-06	2.10E-07	6.26E-06	30	4.9	6.9e-30	1.3e-26
Rpl5	ENSMUSG00000058558	1.56E-04	1.13E-05	3.01E-04	27	4.7	1.4e-31	4e-28
Snord45c	ENSMUSG00000065463	6.41E-05	4.79E-06	1.23E-04	26	4.7	3.9e-33	1.4e-29
Eif4a1	ENSMUSG00000059796	5.45E-04	4.15E-05	1.05E-03	25	4.7	4.2e-27	5.6e-24
Gm22676	ENSMUSG00000080622	6.15E-06	4.69E-07	1.18E-05	25	4.7	8.1e-21	6.3e-18
Gm22486	ENSMUSG00000080465	6.61E-04	5.20E-05	1.27E-03	24	4.6	6e-45	4.4e-41
Rpl27a	ENSMUSG00000046364	7.08E-05	5.73E-06	1.36E-04	24	4.6	5.6e-26	6.2e-23
Snora7a	ENSMUSG00000064563	2.25E-03	1.83E-04	4.32E-03	24	4.6	5.9e-28	8.6e-25
Snora36b	ENSMUSG00000077571	3.90E-05	3.39E-06	7.47E-05	22	4.5	2e-14	8e-12
Gm25835	ENSMUSG00000089542	4.97E-04	4.52E-05	9.49E-04	21	4.4	3.2e-30	6.8e-27
Gm23202	ENSMUSG00000077564	2.03E-06	1.95E-07	3.87E-06	20	4.3	3.9e-22	3.4e-19
Scarna3a	ENSMUSG00000089536	2.08E-04	2.15E-05	3.95E-04	18	4.2	3e-41	1.5e-37
Scarna3b	ENSMUSG00000088158	4.41E-05	4.61E-06	8.37E-05	18	4.2	1e-13	3.8e-11
Gm26175	ENSMUSG00000065728	4.55E-05	5.50E-06	8.54E-05	16	4	4.4e-29	7.2e-26
Chrna1	ENSMUSG00000027107	6.13E-07	7.44E-08	1.15E-06	15	4	3.4e-06	0.0004
Snord15a	ENSMUSG00000065822	1.61E-04	2.10E-05	3.02E-04	14	3.8	1.9e-23	1.8e-20
Gm26109	ENSMUSG00000065904	4.19E-05	5.64E-06	7.81E-05	14	3.8	1.8e-11	5.1e-09
Cpne4	ENSMUSG00000032564	6.88E-07	9.79E-08	1.28E-06	13	3.7	5.2e-11	1.4e-08
Gm10080	ENSMUSG00000060467	9.87E-06	1.43E-06	1.83E-05	13	3.7	4.9e-15	2.2e-12
Kif1a	ENSMUSG00000014602	2.33E-06	3.41E-07	4.33E-06	13	3.7	2.1e-16	1.1e-13
Gm26387	ENSMUSG00000077426	9.81E-05	1.46E-05	1.82E-04	12	3.6	6.6e-11	1.7e-08
Rpl12	ENSMUSG00000038900	7.73E-05	1.18E-05	1.43E-04	12	3.6	1.9e-07	2.8e-05
Dancr	ENSMUSG00000053656	1.21E-04	1.90E-05	2.22E-04	12	3.6	3.5e-09	6.7e-07
Snord17	ENSMUSG00000077714	9.27E-04	1.56E-04	1.70E-03	11	3.4	5.9e-26	6.2e-23
Snora68	ENSMUSG00000077563	4.74E-04	7.97E-05	8.67E-04	11	3.4	1.3e-22	1.2e-19
Gm24698	ENSMUSG00000065817	8.68E-05	1.49E-05	1.59E-04	11	3.4	1.1e-14	4.8e-12
943008C03Rik	ENSMUSG00000085385	4.38E-05	7.64E-06	8.00E-05	10	3.4	3.7e-19	2.4e-16
Mir3068	ENSMUSG00000064938	6.54E-05	1.18E-05	1.19E-04	10	3.3	5.3e-08	8.7e-06
Tspan10	ENSMUSG00000039691	8.08E-07	1.54E-07	1.46E-06	9.5	3.3	7.2e-09	1.3e-06
Snord93	ENSMUSG00000095205	1.41E-06	2.81E-07	2.54E-06	9	3.2	6.5e-13	2.3e-10
Snora34	ENSMUSG00000065336	5.16E-05	1.06E-05	9.27E-05	8.8	3.1	3.7e-26	4.5e-23
Akr1c19	ENSMUSG00000071551	1.05E-06	2.21E-07	1.88E-06	8.5	3.1	9.8e-10	2e-07
Gm26225	ENSMUSG00000064442	2.61E-06	5.51E-07	4.66E-06	8.5	3.1	4.7e-15	2.1e-12
Snord13	ENSMUSG00000088252	4.11E-04	8.73E-05	7.36E-04	8.4	3.1	5.5e-16	2.8e-13
Nos1	ENSMUSG00000029361	1.38E-06	2.97E-07	2.46E-06	8.3	3	7.5e-08	1.2e-05
mt-Nd3	ENSMUSG00000064360	7.50E-05	1.66E-05	1.33E-04	8	3	2.4e-12	7.7e-10
Gm25635	ENSMUSG00000064609	2.97E-06	6.70E-07	5.27E-06	7.9	3	9.5e-12	2.8e-09
Gm23245	ENSMUSG00000065304	1.95E-05	4.43E-06	3.46E-05	7.8	3	1.1e-14	4.8e-12
Snhg12	ENSMUSG00000086290	9.62E-05	2.19E-05	1.70E-04	7.8	3	6.5e-09	1.2e-06
Gm22455	ENSMUSG00000064514	5.67E-05	1.30E-05	1.00E-04	7.7	3	6e-12	1.8e-09
Gm25206	ENSMUSG00000064778	4.84E-06	1.14E-06	8.54E-06	7.5	2.9	1.5e-17	8.9e-15
Arhgap9	ENSMUSG00000040345	7.84E-06	1.84E-06	1.38E-05	7.5	2.9	5e-10	1.1e-07
Gm24119	ENSMUSG00000077167	5.51E-04	1.32E-04	9.70E-04	7.4	2.9	6.6e-11	1.7e-08
Snora30	ENSMUSG00000065259	2.50E-04	6.06E-05	4.39E-04	7.3	2.9	4.4e-21	3.6e-18

Table 7: Strongly significantly upregulated genes in ANT1 (top 50)

1.6.3 Downregulated genes in heart

gene	ensid	baseMean	bNorm	bRB	fc	log2fc	pval	padj
Slc25a4	ENSMUSG00000031633	6.337E-04	1.267E-03	1.058E-07	8.35e-05	-13.5	1.52e-20	1.06e-17
Clec4d	ENSMUSG00000030144	8.386E-07	1.641E-06	3.623E-08	0.0221	-5.5	3.11e-07	4.43e-05
S100a8	ENSMUSG00000056054	4.635E-07	8.677E-07	5.933E-08	0.0684	-3.87	4.82e-07	6.53e-05
Hspa1a	ENSMUSG000000091971	1.338E-06	2.459E-06	2.177E-07	0.0885	-3.5	9.19e-05	0.0066
Hspa1b	ENSMUSG00000090877	1.545E-06	2.830E-06	2.603E-07	0.092	-3.44	1.47e-07	2.2e-05
Egln3	ENSMUSG00000035105	1.097E-05	2.000E-05	1.928E-06	0.0964	-3.38	2.82e-14	1.12e-11
Cilp2	ENSMUSG00000044006	4.403E-07	7.992E-07	8.132E-08	0.102	-3.3	6.14e-05	0.00478
Edn3	ENSMUSG00000027524	1.580E-06	2.861E-06	2.994E-07	0.105	-3.26	1.53e-08	2.69e-06
S100a9	ENSMUSG00000056071	1.083E-06	1.951E-06	2.145E-07	0.11	-3.19	1.76e-05	0.00165
2210407C18Rik	ENSMUSG00000037145	8.153E-07	1.468E-06	1.621E-07	0.11	-3.18	4.43e-07	6.06e-05
Cxcl13	ENSMUSG00000023078	5.019E-07	9.019E-07	1.018E-07	0.113	-3.15	1.29e-06	0.000165
Csf2rb2	ENSMUSG00000071714	2.172E-07	3.895E-07	4.493E-08	0.115	-3.12	0.000143	0.00962
Ccl9	ENSMUSG00000019122	8.938E-06	1.601E-05	1.865E-06	0.117	-3.1	1.67e-10	4.02e-08
Pthlh	ENSMUSG00000048776	3.267E-07	5.776E-07	7.572E-08	0.131	-2.93	3.04e-05	0.00259
Cenpf	ENSMUSG00000026605	2.877E-06	5.082E-06	6.717E-07	0.132	-2.92	4.55e-09	8.54e-07
Krt19	ENSMUSG00000020911	1.588E-06	2.797E-06	3.794E-07	0.136	-2.88	8.57e-06	0.00089
Mmp19	ENSMUSG00000025355	3.055E-06	5.366E-06	7.436E-07	0.139	-2.85	2.73e-10	6.43e-08
Hp	ENSMUSG00000031722	5.830E-07	1.007E-06	1.590E-07	0.158	-2.66	6.34e-05	0.00488
Ccl6	ENSMUSG00000018927	1.488E-05	2.569E-05	4.067E-06	0.158	-2.66	5.61e-10	1.23e-07
Ms4a6d	ENSMUSG00000024679	3.667E-06	6.296E-06	1.038E-06	0.165	-2.6	7.64e-09	1.38e-06
3632451O06Rik	ENSMUSG00000036242	2.752E-06	4.701E-06	8.021E-07	0.171	-2.55	7.34e-08	1.18e-05
Ankrd63	ENSMUSG00000078137	1.250E-06	2.128E-06	3.723E-07	0.175	-2.51	2.8e-06	0.00033
Nxpe5	ENSMUSG00000047592	4.297E-07	7.291E-07	1.303E-07	0.179	-2.48	9.73e-05	0.00688
Rasl10a	ENSMUSG00000034209	8.055E-07	1.363E-06	2.482E-07	0.182	-2.46	5.57e-05	0.00449
Cdkn1a	ENSMUSG00000023067	1.087E-05	1.837E-05	3.363E-06	0.183	-2.45	1.03e-09	2.1e-07
Shisa2	ENSMUSG00000044461	2.931E-07	4.941E-07	9.210E-08	0.186	-2.42	9.05e-05	0.00656
Serpina3n	ENSMUSG00000021091	1.128E-05	1.881E-05	3.741E-06	0.199	-2.33	9.31e-08	1.43e-05
Masp1	ENSMUSG00000022887	9.147E-07	1.523E-06	3.063E-07	0.201	-2.31	5.86e-05	0.00464
Mbd1	ENSMUSG00000024561	1.979E-05	3.186E-05	7.720E-06	0.242	-2.05	8.57e-08	1.33e-05
Ramp1	ENSMUSG00000034353	1.747E-06	2.773E-06	7.206E-07	0.26	-1.94	3.71e-05	0.00314
Ahsg	ENSMUSG00000022868	2.310E-06	3.652E-06	9.686E-07	0.265	-1.91	5.62e-05	0.00449
Itgam	ENSMUSG00000030786	6.497E-06	1.026E-05	2.734E-06	0.266	-1.91	8.16e-07	0.000109
Rhbdl3	ENSMUSG00000017692	2.037E-06	3.209E-06	8.655E-07	0.27	-1.89	2.54e-05	0.00229
Mmp3	ENSMUSG00000043613	4.119E-06	6.457E-06	1.781E-06	0.276	-1.86	8.15e-05	0.00609
Pla2g5	ENSMUSG00000041193	8.217E-06	1.286E-05	3.574E-06	0.278	-1.85	3.87e-06	0.00043
Rgs2	ENSMUSG00000026360	7.191E-06	1.124E-05	3.140E-06	0.279	-1.84	3.69e-06	0.000422
Tmem100	ENSMUSG00000069763	4.867E-06	7.609E-06	2.126E-06	0.279	-1.84	2.68e-05	0.00239
Aldh1l2	ENSMUSG00000020256	2.660E-06	4.150E-06	1.170E-06	0.282	-1.83	2.6e-05	0.00233
Atf3	ENSMUSG00000026628	2.299E-06	3.577E-06	1.020E-06	0.285	-1.81	1.56e-05	0.00147
Gfpt2	ENSMUSG00000020363	8.420E-06	1.286E-05	3.985E-06	0.31	-1.69	8.51e-06	0.00089
Lox	ENSMUSG00000024529	2.408E-06	3.673E-06	1.144E-06	0.312	-1.68	2.97e-05	0.00256
Lyve1	ENSMUSG00000030787	1.410E-05	2.147E-05	6.719E-06	0.313	-1.68	7.93e-06	0.000841
Manf	ENSMUSG00000032575	1.293E-05	1.960E-05	6.249E-06	0.319	-1.65	7.23e-05	0.00548
8430408G22Rik	ENSMUSG00000048489	1.588E-05	2.404E-05	7.712E-06	0.321	-1.64	9.19e-06	0.000943
Gpr133	ENSMUSG00000044017	4.075E-06	6.168E-06	1.982E-06	0.321	-1.64	2.97e-05	0.00256
P4ha1	ENSMUSG00000019916	2.131E-05	3.221E-05	1.040E-05	0.323	-1.63	7.36e-06	0.000786
Cd163	ENSMUSG00000008845	1.283E-05	1.930E-05	6.359E-06	0.329	-1.6	6.7e-05	0.00514
G0s2	ENSMUSG00000009633	2.080E-05	3.124E-05	1.036E-05	0.332	-1.59	6.18e-05	0.00479
Gbp6	ENSMUSG00000079362	6.000E-06	8.971E-06	3.029E-06	0.338	-1.57	4.84e-05	0.00401
Serpinh1	ENSMUSG00000070436	8.589E-05	1.272E-04	4.461E-05	0.351	-1.51	9.43e-05	0.00673

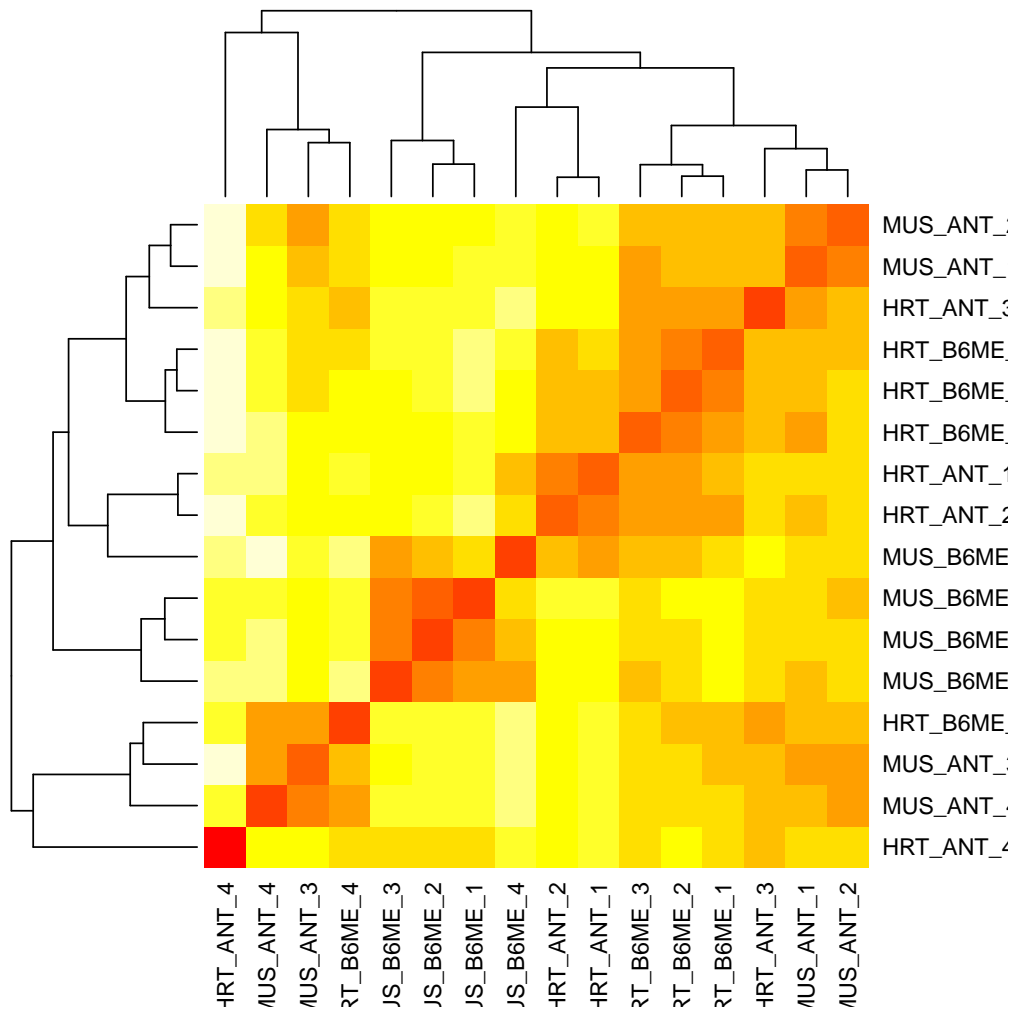
Table 8: Strongly significantly downregulated genes in ANT1 (top 50)

1.6.4 Fold Change and Significance Heart

Genes with high fold change may not be significantly differentially expressed simply due to high variance.



1.7 Euclidian distances



1.8 GO enrichment

1.8.1 GAGE

GAGE was used to generate GO and KEGG pathway analysis using a ranked list analysis (gene counts are taken into consideration)

1.8.2 TopGO

TopGO provides additional tools for exploring enrichment.

The classicFisher is a filtered list approach - enrichment is strictly based on counts of genes associated with the GO terms.

Kolmogorov-Smirnov test is supposed to use differential p-values to weight enrichment. The elim method was design to be more conservative then the classic method.

Building most specific GOs (8022 GO terms found.)

Build GO DAG topology (11244 GO terms and 25559 relations.)

Annotating nodes (12574 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 7941 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 11244 nontrivial nodes parameters: test statistic: ks score order: increasing

– Elim Algorithm –

the algorithm is scoring 11244 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: increasing

Level 19: 2 nodes to be scored (0 eliminated genes)

Level 18: 14 nodes to be scored (0 eliminated genes)

Level 17: 27 nodes to be scored (0 eliminated genes)

Level 16: 74 nodes to be scored (0 eliminated genes)

Level 15: 145 nodes to be scored (0 eliminated genes)

Level 14: 317 nodes to be scored (22 eliminated genes)

Level 13: 633 nodes to be scored (81 eliminated genes)

Level 12: 1016 nodes to be scored (162 eliminated genes)

Level 11: 1349 nodes to be scored (1000 eliminated genes)

Level 10: 1583 nodes to be scored (1574 eliminated genes)

Level 9: 1577 nodes to be scored (2889 eliminated genes)

Level 8: 1489 nodes to be scored (3371 eliminated genes)

Level 7: 1199 nodes to be scored (3993 eliminated genes)

Level 6: 958 nodes to be scored (4382 eliminated genes)

Level 5: 550 nodes to be scored (5213 eliminated genes)

Level 4: 238 nodes to be scored (5612 eliminated genes)

Level 3: 54 nodes to be scored (6320 eliminated genes)

Level 2: 18 nodes to be scored (6393 eliminated genes)

Level 1: 1 nodes to be scored (6393 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	cl
GO:0006355	regulation of transcription, DNA-depende...	2066	713	567.850	17	9.5e-15	1.3
GO:0008380	RNA splicing	242	97	66.510	130	1.3e-05	8.4
GO:0045672	positive regulation of osteoclast differ...	13	11	3.570	140	2.9e-05	3.5
GO:0045944	positive regulation of transcription fro...	567	195	155.840	178	0.00013	6.4
GO:0006397	mRNA processing	304	122	83.560	96	9.5e-07	1.5

Table 9: muscle BP most sig de

Building most specific GOs (8022 GO terms found.)

Build GO DAG topology (11244 GO terms and 25559 relations.)

Annotating nodes (12574 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 115 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 11244 nontrivial nodes parameters: test statistic: ks score order: decreasing

– Elim Algorithm –

the algorithm is scoring 11244 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: decreasing

Level 19: 2 nodes to be scored (0 eliminated genes)

Level 18: 14 nodes to be scored (0 eliminated genes)

Level 17: 27 nodes to be scored (0 eliminated genes)

Level 16: 74 nodes to be scored (0 eliminated genes)

Level 15: 145 nodes to be scored (12 eliminated genes)

Level 14: 317 nodes to be scored (12 eliminated genes)

Level 13: 633 nodes to be scored (15 eliminated genes)

Level 12: 1016 nodes to be scored (33 eliminated genes)

Level 11: 1349 nodes to be scored (58 eliminated genes)

Level 10: 1583 nodes to be scored (192 eliminated genes)

Level 9: 1577 nodes to be scored (276 eliminated genes)

Level 8: 1489 nodes to be scored (709 eliminated genes)

Level 7: 1199 nodes to be scored (1108 eliminated genes)

Level 6: 958 nodes to be scored (1382 eliminated genes)

Level 5: 550 nodes to be scored (1436 eliminated genes)

Level 4: 238 nodes to be scored (1705 eliminated genes)

Level 3: 54 nodes to be scored (2023 eliminated genes)

Level 2: 18 nodes to be scored (2023 eliminated genes)

Level 1: 1 nodes to be scored (2023 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	cl
GO:0022900	electron transport chain	109	0	0.090	115	1	2.
GO:0006099	tricarboxylic acid cycle	24	0	0.020	116	1	9.
GO:0015986	ATP synthesis coupled proton transport	15	0	0.010	117	1	3.
GO:0006418	tRNA aminoacylation for protein translat...	41	0	0.030	118	1	2.
GO:0051289	protein homotetramerization	51	0	0.040	119	1	7.

Table 10: muscle BP most upreg in ANT1

Building most specific GOs (8022 GO terms found.)

Build GO DAG topology (11244 GO terms and 25559 relations.)

Annotating nodes (12574 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 115 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 11244 nontrivial nodes parameters: test statistic: ks score order: increasing

– Elim Algorithm –

the algorithm is scoring 11244 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: increasing

Level 19: 2 nodes to be scored (0 eliminated genes)

Level 18: 14 nodes to be scored (0 eliminated genes)

Level 17: 27 nodes to be scored (0 eliminated genes)

Level 16: 74 nodes to be scored (0 eliminated genes)

Level 15: 145 nodes to be scored (0 eliminated genes)

Level 14: 317 nodes to be scored (6 eliminated genes)

Level 13: 633 nodes to be scored (43 eliminated genes)

Level 12: 1016 nodes to be scored (62 eliminated genes)

Level 11: 1349 nodes to be scored (1165 eliminated genes)

Level 10: 1583 nodes to be scored (1531 eliminated genes)

Level 9: 1577 nodes to be scored (2845 eliminated genes)

Level 8: 1489 nodes to be scored (3265 eliminated genes)
 Level 7: 1199 nodes to be scored (4072 eliminated genes)
 Level 6: 958 nodes to be scored (4589 eliminated genes)
 Level 5: 550 nodes to be scored (5581 eliminated genes)
 Level 4: 238 nodes to be scored (5999 eliminated genes)
 Level 3: 54 nodes to be scored (6037 eliminated genes)
 Level 2: 18 nodes to be scored (6037 eliminated genes)
 Level 1: 1 nodes to be scored (6037 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	cl
GO:0006355	regulation of transcription, DNA-depende...	2066	0	1.640	115	1.00	4.7
GO:0045944	positive regulation of transcription fro...	567	0	0.450	116	1.00	1.9
GO:0006397	mRNA processing	304	0	0.240	117	1.00	6.3
GO:0009952	anterior/posterior pattern specification	134	0	0.110	118	1.00	4.8
GO:0040008	regulation of growth	417	1	0.330	57	0.29	2.0

Table 11: muscle BP most downreg in ANT1

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Building most specific GOs (8024 GO terms found.)

Build GO DAG topology (11246 GO terms and 25561 relations.)

Annotating nodes (12578 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 4279 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 11246 nontrivial nodes parameters: test statistic: ks score order: increasing

– Elim Algorithm –

the algorithm is scoring 11246 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order:

increasing

Level 19: 2 nodes to be scored (0 eliminated genes)

Level 18: 14 nodes to be scored (0 eliminated genes)

Level 17: 27 nodes to be scored (0 eliminated genes)

Level 16: 74 nodes to be scored (0 eliminated genes)

Level 15: 145 nodes to be scored (0 eliminated genes)

Level 14: 317 nodes to be scored (0 eliminated genes)

Level 13: 633 nodes to be scored (79 eliminated genes)

Level 12: 1016 nodes to be scored (198 eliminated genes)

Level 11: 1349 nodes to be scored (514 eliminated genes)

Level 10: 1583 nodes to be scored (583 eliminated genes)

Level 9: 1579 nodes to be scored (1078 eliminated genes)

Level 8: 1489 nodes to be scored (1472 eliminated genes)

Level 7: 1199 nodes to be scored (2436 eliminated genes)

Level 6: 958 nodes to be scored (2989 eliminated genes)

Level 5: 550 nodes to be scored (3788 eliminated genes)

Level 4: 238 nodes to be scored (4102 eliminated genes)

Level 3: 54 nodes to be scored (4183 eliminated genes)

Level 2: 18 nodes to be scored (4333 eliminated genes)

Level 1: 1 nodes to be scored (4333 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	cl
GO:0030198	extracellular matrix organization	129	14	4.940	90	0.00042	1.5
GO:0030336	negative regulation of cell migration	118	12	4.520	158	0.00187	3.6
GO:0070486	leukocyte aggregation	10	5	0.380	42	1.7e-05	6.3
GO:0050728	negative regulation of inflammatory resp...	56	6	2.150	464	0.01974	0.0

GO:0002070	epithelial cell maturation	9	0	0.340	4279	1.00000	0.0
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Table 12: heart BP most sig de

Building most specific GOs (8024 GO terms found.)

Build GO DAG topology (11246 GO terms and 25561 relations.)

Annotating nodes (12578 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 550 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 11246 nontrivial nodes parameters: test statistic: ks score order: decreasing

– Elim Algorithm –

the algorithm is scoring 11246 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: decreasing

Level 19: 2 nodes to be scored (0 eliminated genes)

Level 18: 14 nodes to be scored (0 eliminated genes)

Level 17: 27 nodes to be scored (0 eliminated genes)

Level 16: 74 nodes to be scored (0 eliminated genes)

Level 15: 145 nodes to be scored (0 eliminated genes)

Level 14: 317 nodes to be scored (11 eliminated genes)

Level 13: 633 nodes to be scored (19 eliminated genes)

Level 12: 1016 nodes to be scored (47 eliminated genes)

Level 11: 1349 nodes to be scored (72 eliminated genes)

Level 10: 1583 nodes to be scored (117 eliminated genes)

Level 9: 1579 nodes to be scored (499 eliminated genes)

Level 8: 1489 nodes to be scored (608 eliminated genes)

Level 7: 1199 nodes to be scored (1000 eliminated genes)

Level 6: 958 nodes to be scored (1040 eliminated genes)

Level 5: 550 nodes to be scored (1049 eliminated genes)

Level 4: 238 nodes to be scored (1082 eliminated genes)

Level 3: 54 nodes to be scored (1082 eliminated genes)

Level 2: 18 nodes to be scored (1082 eliminated genes)

Level 1: 1 nodes to be scored (1082 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	clas
GO:1900006	positive regulation of dendrite developm...	8	0	0.010	550	1	0.00
GO:0034453	microtubule anchoring	25	0	0.030	551	1	0.00
GO:0070647	protein modification by small protein co...	440	0	0.590	552	1	0.00
GO:0051290	protein heterotetramerization	6	0	0.010	553	1	0.00
GO:0032400	melanosome localization	13	0	0.020	554	1	0.00

Table 13: heart BP most upreg in ANT1

Building most specific GOs (8024 GO terms found.)

Build GO DAG topology (11246 GO terms and 25561 relations.)

Annotating nodes (12578 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 550 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 11246 nontrivial nodes parameters: test statistic: ks score order: increasing

– Elim Algorithm –

the algorithm is scoring 11246 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: increasing

Level 19: 2 nodes to be scored (0 eliminated genes)

Level 18: 14 nodes to be scored (0 eliminated genes)

Level 17: 27 nodes to be scored (0 eliminated genes)

Level 16: 74 nodes to be scored (8 eliminated genes)
 Level 15: 145 nodes to be scored (18 eliminated genes)
 Level 14: 317 nodes to be scored (18 eliminated genes)
 Level 13: 633 nodes to be scored (34 eliminated genes)
 Level 12: 1016 nodes to be scored (600 eliminated genes)
 Level 11: 1349 nodes to be scored (641 eliminated genes)
 Level 10: 1583 nodes to be scored (1057 eliminated genes)
 Level 9: 1579 nodes to be scored (2365 eliminated genes)
 Level 8: 1489 nodes to be scored (2662 eliminated genes)
 Level 7: 1199 nodes to be scored (3219 eliminated genes)
 Level 6: 958 nodes to be scored (4023 eliminated genes)
 Level 5: 550 nodes to be scored (4857 eliminated genes)
 Level 4: 238 nodes to be scored (7219 eliminated genes)
 Level 3: 54 nodes to be scored (7546 eliminated genes)
 Level 2: 18 nodes to be scored (7572 eliminated genes)
 Level 1: 1 nodes to be scored (7572 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	classicKS
GO:0060039	pericardium development	22	0	0.030	550	1.00	0.0001
GO:0035860	glial cell-derived neurotrophic factor r...	5	0	0.010	551	1.00	0.0002
GO:0016477	cell migration	640	1	0.870	478	0.59	9.5e-1
GO:0007190	activation of adenylate cyclase activity	10	0	0.010	552	1.00	0.0002
GO:0007423	sensory organ development	308	1	0.420	404	0.34	0.0002

Table 14: heart BP most downreg in ANT1

Building most specific GOs (1091 GO terms found.)

Build GO DAG topology (1259 GO terms and 2427 relations.)

Annotating nodes (12742 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 961 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks score order: increasing

– Elim Algorithm –

the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: increasing

Level 16: 1 nodes to be scored (0 eliminated genes)
 Level 15: 22 nodes to be scored (0 eliminated genes)
 Level 14: 63 nodes to be scored (7 eliminated genes)
 Level 13: 74 nodes to be scored (157 eliminated genes)
 Level 12: 110 nodes to be scored (321 eliminated genes)
 Level 11: 177 nodes to be scored (406 eliminated genes)
 Level 10: 167 nodes to be scored (791 eliminated genes)
 Level 9: 110 nodes to be scored (1062 eliminated genes)
 Level 8: 142 nodes to be scored (1062 eliminated genes)
 Level 7: 96 nodes to be scored (5500 eliminated genes)
 Level 6: 112 nodes to be scored (5561 eliminated genes)
 Level 5: 74 nodes to be scored (5594 eliminated genes)
 Level 4: 76 nodes to be scored (5651 eliminated genes)
 Level 3: 23 nodes to be scored (5703 eliminated genes)
 Level 2: 11 nodes to be scored (5826 eliminated genes)
 Level 1: 1 nodes to be scored (5979 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	classicKS
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GO:0005634	nucleus	4464	1396	1230.390	1	4.4e-12	1.1e-19
GO:0005783	endoplasmic reticulum	942	334	259.640	2	2.2e-08	1.2e-07
GO:0005730	nucleolus	392	137	108.040	27	0.00069	2.3e-06
GO:0016607	nuclear speck	73	36	20.120	18	6.2e-05	5.5e-05
GO:0035097	histone methyltransferase complex	66	29	18.190	38	0.00307	7.2e-05

Table 15: muscle CC most sig de

Building most specific GOs (1091 GO terms found.)
 Build GO DAG topology (1259 GO terms and 2427 relations.)
 Annotating nodes (12742 genes annotated to the GO terms.)
 – Classic Algorithm –
 the algorithm is scoring 43 nontrivial nodes parameters: test statistic: fisher
 – Classic Algorithm –
 the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks score order: decreasing
 – Elim Algorithm –
 the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order:
 decreasing
 Level 16: 1 nodes to be scored (0 eliminated genes)
 Level 15: 22 nodes to be scored (0 eliminated genes)
 Level 14: 63 nodes to be scored (0 eliminated genes)
 Level 13: 74 nodes to be scored (60 eliminated genes)
 Level 12: 110 nodes to be scored (68 eliminated genes)
 Level 11: 177 nodes to be scored (487 eliminated genes)
 Level 10: 167 nodes to be scored (676 eliminated genes)
 Level 9: 110 nodes to be scored (710 eliminated genes)
 Level 8: 142 nodes to be scored (751 eliminated genes)
 Level 7: 96 nodes to be scored (1691 eliminated genes)
 Level 6: 112 nodes to be scored (7356 eliminated genes)
 Level 5: 74 nodes to be scored (7357 eliminated genes)
 Level 4: 76 nodes to be scored (7407 eliminated genes)
 Level 3: 23 nodes to be scored (7407 eliminated genes)
 Level 2: 11 nodes to be scored (7407 eliminated genes)
 Level 1: 1 nodes to be scored (7407 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	cla
GO:0005739	mitochondrion	1427	1	1.120	28	0.70	<
GO:0005743	mitochondrial inner membrane	316	1	0.250	12	0.22	<
GO:0005759	mitochondrial matrix	151	0	0.120	43	1.00	1.4
GO:0005747	mitochondrial respiratory chain complex ...	36	0	0.030	44	1.00	2.4
GO:0005762	mitochondrial large ribosomal subunit	22	0	0.020	45	1.00	1.8

Table 16: muscle CC most upreg in ANT1

Building most specific GOs (1091 GO terms found.)
 Build GO DAG topology (1259 GO terms and 2427 relations.)
 Annotating nodes (12742 genes annotated to the GO terms.)
 – Classic Algorithm –
 the algorithm is scoring 43 nontrivial nodes parameters: test statistic: fisher
 – Classic Algorithm –
 the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks score order: increasing
 – Elim Algorithm –
 the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order:
 increasing
 Level 16: 1 nodes to be scored (0 eliminated genes)
 Level 15: 22 nodes to be scored (0 eliminated genes)

Level 14: 63 nodes to be scored (7 eliminated genes)
 Level 13: 74 nodes to be scored (150 eliminated genes)
 Level 12: 110 nodes to be scored (260 eliminated genes)
 Level 11: 177 nodes to be scored (587 eliminated genes)
 Level 10: 167 nodes to be scored (1043 eliminated genes)
 Level 9: 110 nodes to be scored (1217 eliminated genes)
 Level 8: 142 nodes to be scored (1217 eliminated genes)
 Level 7: 96 nodes to be scored (6443 eliminated genes)
 Level 6: 112 nodes to be scored (6479 eliminated genes)
 Level 5: 74 nodes to be scored (6484 eliminated genes)
 Level 4: 76 nodes to be scored (8629 eliminated genes)
 Level 3: 23 nodes to be scored (8942 eliminated genes)
 Level 2: 11 nodes to be scored (8942 eliminated genes)
 Level 1: 1 nodes to be scored (9136 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	classicKS	elim
GO:0005634	nucleus	4464	0	3.500	43	1	9.6e-23	2.0e-
GO:0005730	nucleolus	392	0	0.310	44	1	1.1e-06	1.1e-
GO:0005783	endoplasmic reticulum	942	0	0.740	45	1	3.0e-05	3.0e-
GO:0016607	nuclear speck	73	0	0.060	46	1	7.2e-05	7.2e-
GO:0005667	transcription factor complex	253	0	0.200	47	1	0.00034	0.000

Table 17: muscle CC most downreg in ANT1

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Building most specific GOs (1091 GO terms found.)

Build GO DAG topology (1259 GO terms and 2427 relations.)

Annotating nodes (12746 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 437 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks score order: increasing

– Elim Algorithm –

the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: increasing

Level 16: 1 nodes to be scored (0 eliminated genes)

Level 15: 22 nodes to be scored (0 eliminated genes)

Level 14: 63 nodes to be scored (0 eliminated genes)

Level 13: 74 nodes to be scored (0 eliminated genes)

Level 12: 110 nodes to be scored (0 eliminated genes)

Level 11: 177 nodes to be scored (0 eliminated genes)

Level 10: 167 nodes to be scored (87 eliminated genes)

Level 9: 110 nodes to be scored (104 eliminated genes)

Level 8: 142 nodes to be scored (104 eliminated genes)

Level 7: 96 nodes to be scored (505 eliminated genes)

Level 6: 112 nodes to be scored (749 eliminated genes)

Level 5: 74 nodes to be scored (767 eliminated genes)

Level 4: 76 nodes to be scored (4422 eliminated genes)

Level 3: 23 nodes to be scored (4741 eliminated genes)

Level 2: 11 nodes to be scored (4741 eliminated genes)

Level 1: 1 nodes to be scored (4983 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	classicKS
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GO:0005615	extracellular space	422	47	15.690	3	1.3e-11	5.4e-12
GO:0005576	extracellular region	932	86	34.660	2	1.5e-15	7.6e-25
GO:0005578	proteinaceous extracellular matrix	236	26	8.780	4	7.2e-07	1.9e-11
GO:0005887	integral to plasma membrane	357	21	13.280	46	0.02589	1.8e-06
GO:0016021	integral to membrane	2887	137	107.360	11	0.00074	7.1e-09

Table 18: heart CC most sig de

Building most specific GOs (1091 GO terms found.)
 Build GO DAG topology (1259 GO terms and 2427 relations.)
 Annotating nodes (12746 genes annotated to the GO terms.)
 – Classic Algorithm –
 the algorithm is scoring 79 nontrivial nodes parameters: test statistic: fisher
 – Classic Algorithm –
 the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks score order: decreasing
 – Elim Algorithm –
 the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: decreasing
 Level 16: 1 nodes to be scored (0 eliminated genes)
 Level 15: 22 nodes to be scored (0 eliminated genes)
 Level 14: 63 nodes to be scored (7 eliminated genes)
 Level 13: 74 nodes to be scored (7 eliminated genes)
 Level 12: 110 nodes to be scored (20 eliminated genes)
 Level 11: 177 nodes to be scored (349 eliminated genes)
 Level 10: 167 nodes to be scored (1004 eliminated genes)
 Level 9: 110 nodes to be scored (1242 eliminated genes)
 Level 8: 142 nodes to be scored (1242 eliminated genes)
 Level 7: 96 nodes to be scored (5731 eliminated genes)
 Level 6: 112 nodes to be scored (5731 eliminated genes)
 Level 5: 74 nodes to be scored (8822 eliminated genes)
 Level 4: 76 nodes to be scored (8822 eliminated genes)
 Level 3: 23 nodes to be scored (8822 eliminated genes)
 Level 2: 11 nodes to be scored (8822 eliminated genes)
 Level 1: 1 nodes to be scored (8822 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	classicKS
GO:0005739	mitochondrion	1428	2	2.020	55	0.61	1.1e-07
GO:0005634	nucleus	4465	5	6.310	68	0.81	4.8e-05
GO:0005779	integral to peroxisomal membrane	13	0	0.020	79	1.00	0.0013
GO:0005662	DNA replication factor A complex	7	0	0.010	80	1.00	0.0021
GO:0005761	mitochondrial ribosome	53	0	0.070	81	1.00	0.0033

Table 19: heart CC most upreg in ANT1

Building most specific GOs (1091 GO terms found.)
 Build GO DAG topology (1259 GO terms and 2427 relations.)
 Annotating nodes (12746 genes annotated to the GO terms.)
 – Classic Algorithm –
 the algorithm is scoring 79 nontrivial nodes parameters: test statistic: fisher
 – Classic Algorithm –
 the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks score order: increasing
 – Elim Algorithm –
 the algorithm is scoring 1259 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: increasing
 Level 16: 1 nodes to be scored (0 eliminated genes)
 Level 15: 22 nodes to be scored (0 eliminated genes)

Level 14: 63 nodes to be scored (0 eliminated genes)
 Level 13: 74 nodes to be scored (0 eliminated genes)
 Level 12: 110 nodes to be scored (77 eliminated genes)
 Level 11: 177 nodes to be scored (80 eliminated genes)
 Level 10: 167 nodes to be scored (113 eliminated genes)
 Level 9: 110 nodes to be scored (133 eliminated genes)
 Level 8: 142 nodes to be scored (1662 eliminated genes)
 Level 7: 96 nodes to be scored (2204 eliminated genes)
 Level 6: 112 nodes to be scored (7619 eliminated genes)
 Level 5: 74 nodes to be scored (9147 eliminated genes)
 Level 4: 76 nodes to be scored (10328 eliminated genes)
 Level 3: 23 nodes to be scored (10523 eliminated genes)
 Level 2: 11 nodes to be scored (10523 eliminated genes)
 Level 1: 1 nodes to be scored (10674 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	classicKS
GO:0005615	extracellular space	422	2	0.600	12	0.118	4.0e-16
GO:0005576	extracellular region	932	4	1.320	4	0.038	9.2e-29
GO:0005578	proteinaceous extracellular matrix	236	1	0.330	36	0.286	3.8e-10
GO:0005886	plasma membrane	2308	3	3.260	58	0.658	1.9e-12
GO:0005887	integral to plasma membrane	357	1	0.500	42	0.401	1.6e-05

Table 20: heart CC most downreg in ANT1

Building most specific GOs (3086 GO terms found.)

Build GO DAG topology (3548 GO terms and 4417 relations.)

Annotating nodes (12422 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 1952 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks score order: increasing

– Elim Algorithm –

the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: increasing

Level 15: 2 nodes to be scored (0 eliminated genes)
 Level 14: 8 nodes to be scored (0 eliminated genes)
 Level 13: 21 nodes to be scored (0 eliminated genes)
 Level 12: 58 nodes to be scored (0 eliminated genes)
 Level 11: 67 nodes to be scored (0 eliminated genes)
 Level 10: 128 nodes to be scored (11 eliminated genes)
 Level 9: 210 nodes to be scored (16 eliminated genes)
 Level 8: 414 nodes to be scored (66 eliminated genes)
 Level 7: 700 nodes to be scored (116 eliminated genes)
 Level 6: 921 nodes to be scored (1461 eliminated genes)
 Level 5: 610 nodes to be scored (2350 eliminated genes)
 Level 4: 285 nodes to be scored (4750 eliminated genes)
 Level 3: 104 nodes to be scored (5286 eliminated genes)
 Level 2: 19 nodes to be scored (7425 eliminated genes)
 Level 1: 1 nodes to be scored (7425 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	classicKS
GO:0003723	RNA binding	691	241	188.970	11	4.8e-06	9.1e-07
GO:0008270	zinc ion binding	805	272	220.140	15	1.9e-05	1.6e-06
GO:0043565	sequence-specific DNA binding	413	152	112.940	13	1.3e-05	8.2e-06
GO:0046332	SMAD binding	61	33	16.680	12	8.9e-06	1.2e-05
GO:0004674	protein serine/threonine kinase activity	366	140	100.090	9	2.7e-06	1.3e-05

Table 21: muscle MF most sig de

Building most specific GOs (3086 GO terms found.)

Build GO DAG topology (3548 GO terms and 4417 relations.)

Annotating nodes (12422 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 59 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks score order: decreasing

– Elim Algorithm –

the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: decreasing

Level 15: 2 nodes to be scored (0 eliminated genes)

Level 14: 8 nodes to be scored (0 eliminated genes)

Level 13: 21 nodes to be scored (8 eliminated genes)

Level 12: 58 nodes to be scored (8 eliminated genes)

Level 11: 67 nodes to be scored (11 eliminated genes)

Level 10: 128 nodes to be scored (11 eliminated genes)

Level 9: 210 nodes to be scored (228 eliminated genes)

Level 8: 414 nodes to be scored (228 eliminated genes)

Level 7: 700 nodes to be scored (415 eliminated genes)

Level 6: 921 nodes to be scored (454 eliminated genes)

Level 5: 610 nodes to be scored (658 eliminated genes)

Level 4: 285 nodes to be scored (950 eliminated genes)

Level 3: 104 nodes to be scored (973 eliminated genes)

Level 2: 19 nodes to be scored (1095 eliminated genes)

Level 1: 1 nodes to be scored (1130 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	cl
GO:0008137	NADH dehydrogenase (ubiquinone) activity	23	0	0.010	59	1	4.
GO:0003735	structural constituent of ribosome	119	0	0.080	60	1	4.
GO:0004129	cytochrome-c oxidase activity	21	0	0.010	61	1	3.
GO:0004812	aminoacyl-tRNA ligase activity	43	0	0.030	62	1	4.
GO:0009055	electron carrier activity	64	0	0.040	63	1	3.

Table 22: muscle MF most upreg in ANT1

Building most specific GOs (3086 GO terms found.)

Build GO DAG topology (3548 GO terms and 4417 relations.)

Annotating nodes (12422 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 59 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks score order: increasing

– Elim Algorithm –

the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: increasing

Level 15: 2 nodes to be scored (0 eliminated genes)

Level 14: 8 nodes to be scored (0 eliminated genes)

Level 13: 21 nodes to be scored (0 eliminated genes)

Level 12: 58 nodes to be scored (0 eliminated genes)

Level 11: 67 nodes to be scored (0 eliminated genes)

Level 10: 128 nodes to be scored (11 eliminated genes)

Level 9: 210 nodes to be scored (29 eliminated genes)

Level 8: 414 nodes to be scored (58 eliminated genes)

Level 7: 700 nodes to be scored (63 eliminated genes)

Level 6: 921 nodes to be scored (1310 eliminated genes)

Level 5: 610 nodes to be scored (1890 eliminated genes)

Level 4: 285 nodes to be scored (4777 eliminated genes)
 Level 3: 104 nodes to be scored (5115 eliminated genes)
 Level 2: 19 nodes to be scored (5159 eliminated genes)
 Level 1: 1 nodes to be scored (5159 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	cla
GO:0003723	RNA binding	691	0	0.450	59	1.00	6.3
GO:0003677	DNA binding	1336	0	0.860	60	1.00	5.2
GO:0046872	metal ion binding	2758	1	1.780	55	0.87	7.3
GO:0003700	sequence-specific DNA binding transcript...	532	0	0.340	61	1.00	1.3
GO:0004842	ubiquitin-protein ligase activity	210	0	0.140	62	1.00	5.4

Table 23: muscle MF most downreg in ANT1

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Building most specific GOs (3086 GO terms found.)
 Build GO DAG topology (3548 GO terms and 4417 relations.)
 Annotating nodes (12426 genes annotated to the GO terms.)
 – Classic Algorithm –
 the algorithm is scoring 891 nontrivial nodes parameters: test statistic: fisher
 – Classic Algorithm –
 the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks score order: increasing
 – Elim Algorithm –
 the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order:

increasing

Level 15: 2 nodes to be scored (0 eliminated genes)
 Level 14: 8 nodes to be scored (0 eliminated genes)
 Level 13: 21 nodes to be scored (0 eliminated genes)
 Level 12: 58 nodes to be scored (0 eliminated genes)
 Level 11: 67 nodes to be scored (0 eliminated genes)
 Level 10: 128 nodes to be scored (0 eliminated genes)
 Level 9: 210 nodes to be scored (72 eliminated genes)
 Level 8: 414 nodes to be scored (95 eliminated genes)
 Level 7: 700 nodes to be scored (95 eliminated genes)
 Level 6: 921 nodes to be scored (244 eliminated genes)
 Level 5: 610 nodes to be scored (753 eliminated genes)
 Level 4: 285 nodes to be scored (1431 eliminated genes)
 Level 3: 104 nodes to be scored (2076 eliminated genes)
 Level 2: 19 nodes to be scored (2088 eliminated genes)
 Level 1: 1 nodes to be scored (2088 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	cla
GO:0005509	calcium ion binding	353	26	13.210	15	0.00079	5.2
GO:0008201	heparin binding	89	7	3.330	175	0.04894	5.9
GO:0005102	receptor binding	787	47	29.450	16	0.00097	8.5
GO:0004888	transmembrane signaling receptor activit...	337	29	12.610	3	2.6e-05	7.5
GO:0004930	G-protein coupled receptor activity	161	12	6.020	59	0.01784	0.0

Table 24: heart MF most sig de

Building most specific GOs (3086 GO terms found.)
 Build GO DAG topology (3548 GO terms and 4417 relations.)
 Annotating nodes (12426 genes annotated to the GO terms.)
 – Classic Algorithm –
 the algorithm is scoring 107 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks score order: decreasing

– Elim Algorithm –

the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: decreasing

Level 15: 2 nodes to be scored (0 eliminated genes)
 Level 14: 8 nodes to be scored (0 eliminated genes)
 Level 13: 21 nodes to be scored (0 eliminated genes)
 Level 12: 58 nodes to be scored (0 eliminated genes)
 Level 11: 67 nodes to be scored (0 eliminated genes)
 Level 10: 128 nodes to be scored (0 eliminated genes)
 Level 9: 210 nodes to be scored (80 eliminated genes)
 Level 8: 414 nodes to be scored (80 eliminated genes)
 Level 7: 700 nodes to be scored (80 eliminated genes)
 Level 6: 921 nodes to be scored (290 eliminated genes)
 Level 5: 610 nodes to be scored (336 eliminated genes)
 Level 4: 285 nodes to be scored (550 eliminated genes)
 Level 3: 104 nodes to be scored (1100 eliminated genes)
 Level 2: 19 nodes to be scored (1122 eliminated genes)
 Level 1: 1 nodes to be scored (1154 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	class
GO:0016788	hydrolase activity, acting on ester bond...	554	0	0.760	107	1.000	1.6e
GO:0004812	aminoacyl-tRNA ligase activity	43	0	0.060	108	1.000	0.003
GO:0015267	channel activity	206	2	0.280	53	0.032	0.004
GO:0008026	ATP-dependent helicase activity	80	0	0.110	109	1.000	0.004
GO:0031432	titin binding	9	0	0.010	110	1.000	0.004

Table 25: heart MF most upreg in ANT1

Building most specific GOs (3086 GO terms found.)

Build GO DAG topology (3548 GO terms and 4417 relations.)

Annotating nodes (12426 genes annotated to the GO terms.)

– Classic Algorithm –

the algorithm is scoring 107 nontrivial nodes parameters: test statistic: fisher

– Classic Algorithm –

the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks score order: increasing

– Elim Algorithm –

the algorithm is scoring 3548 nontrivial nodes parameters: test statistic: ks cutOff: 0.01 score order: increasing

Level 15: 2 nodes to be scored (0 eliminated genes)
 Level 14: 8 nodes to be scored (0 eliminated genes)
 Level 13: 21 nodes to be scored (0 eliminated genes)
 Level 12: 58 nodes to be scored (0 eliminated genes)
 Level 11: 67 nodes to be scored (0 eliminated genes)
 Level 10: 128 nodes to be scored (0 eliminated genes)
 Level 9: 210 nodes to be scored (0 eliminated genes)
 Level 8: 414 nodes to be scored (23 eliminated genes)
 Level 7: 700 nodes to be scored (62 eliminated genes)
 Level 6: 921 nodes to be scored (1001 eliminated genes)
 Level 5: 610 nodes to be scored (1513 eliminated genes)
 Level 4: 285 nodes to be scored (1994 eliminated genes)
 Level 3: 104 nodes to be scored (2094 eliminated genes)
 Level 2: 19 nodes to be scored (2256 eliminated genes)
 Level 1: 1 nodes to be scored (2612 eliminated genes)

GO.ID	Term	Annotated	Significant	Expected	Rank in classicFisher	classicFisher	classicKS	elim
GO:0005509	calcium ion binding	353	0	0.480	107	1	3.4e-06	3.4e-06
GO:0005179	hormone activity	30	0	0.040	108	1	0.00011	0.00011
GO:0004222	metalloendopeptidase activity	62	0	0.080	109	1	0.00026	0.00026
GO:0004016	adenylate cyclase activity	10	0	0.010	110	1	0.00027	0.00027
GO:0008009	chemokine activity	17	0	0.020	111	1	0.00032	0.00032

Table 26: heart MF most downreg in ANT1

The R session information (including the OS info, R version and all packages used):

R version 3.0.2 (2013-09-25)

Platform: x86_64-redhat-linux-gnu (64-bit)

locale:

[1] C

attached base packages:

[1] parallel stats graphics grDevices utils datasets methods

[8] base

other attached packages:

[1] topGO_2.14.0	SparseM_1.03	GO.db_2.10.1
[4] graph_1.40.1	gage_2.12.1	gageData_2.0.3
[7] biomaRt_2.18.0	org.Mm.eg.db_2.10.1	RSQLite_0.11.4
[10] DBI_0.2-7	AnnotationDbi_1.24.0	xtable_1.7-1
[13] ggplot2_0.9.3.1	DESeq_1.14.0	lattice_0.20-23
[16] locfit_1.5-9.1	Biobase_2.22.0	reshape_0.8.4
[19] plyr_1.8	stringr_0.6.2	Rsamtools_1.14.2
[22] Biostrings_2.30.1	GenomicRanges_1.14.4	XVector_0.2.0
[25] IRanges_1.20.6	BiocGenerics_0.8.0	

loaded via a namespace (and not attached):

[1] KEGGREST_1.2.0	MASS_7.3-29	RColorBrewer_1.0-5	RCurl_1.95-4.1
[5] XML_3.98-1.1	annotate_1.40.0	bitops_1.0-6	colorspace_1.2-4
[9] dichromat_2.0-0	digest_0.6.4	genefilter_1.44.0	geneplotter_1.40.0
[13] grid_3.0.2	gtable_0.1.2	httr_0.2	labeling_0.2
[17] munsell_0.4.2	png_0.1-7	proto_0.3-10	reshape2_1.2.2
[21] scales_0.2.3	splines_3.0.2	stats4_3.0.2	survival_2.37-4
[25] tools_3.0.2	zlibbioc_1.8.0		

[1] "2014-02-05 08:23:57 EST"

References

- [1] Anders, S. and Huber, W. Differential expression analysis for sequence count data. Nature Precedings <http://dx.doi.org/10.1038/npre.2010.4282.2>.