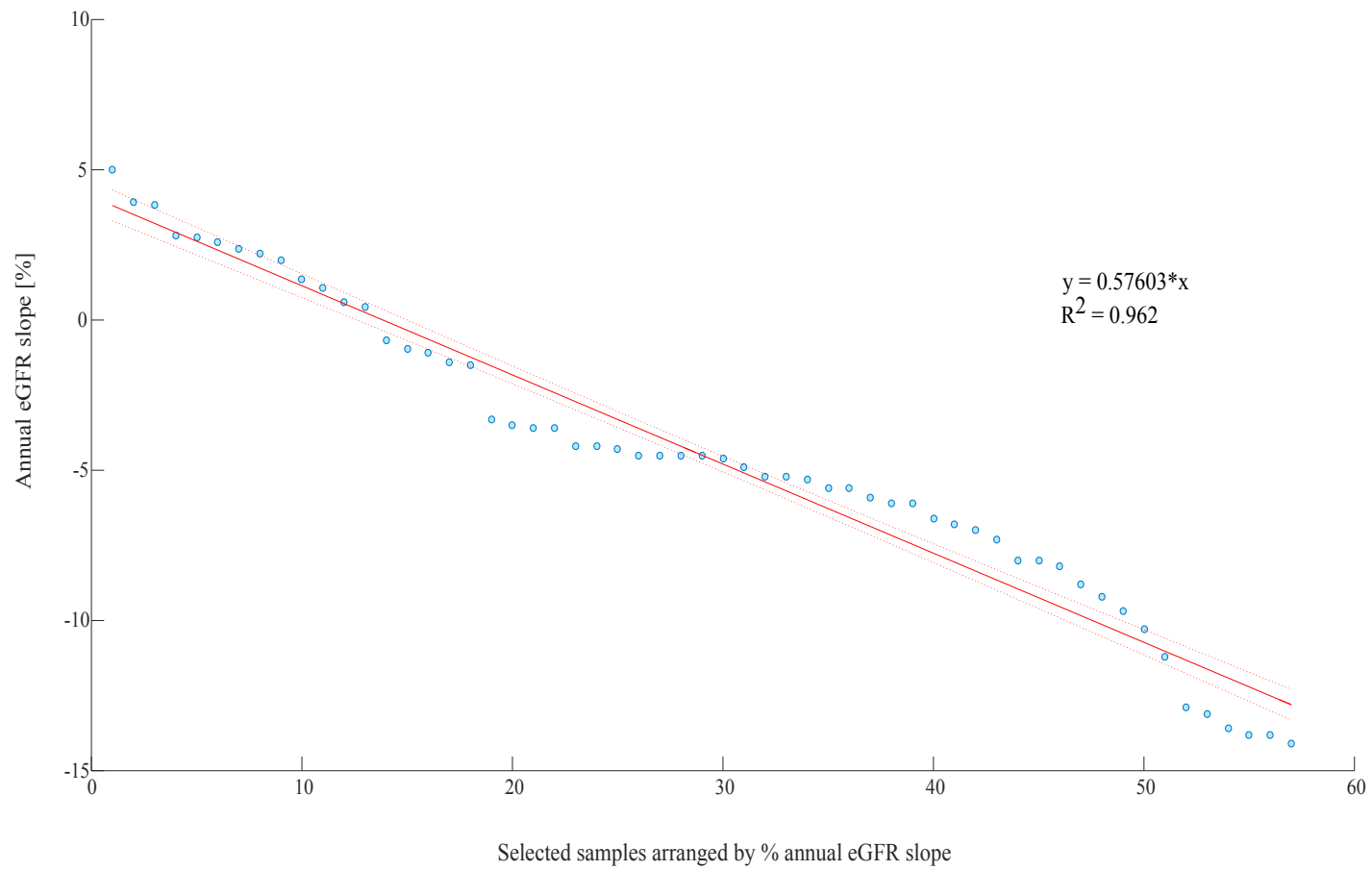
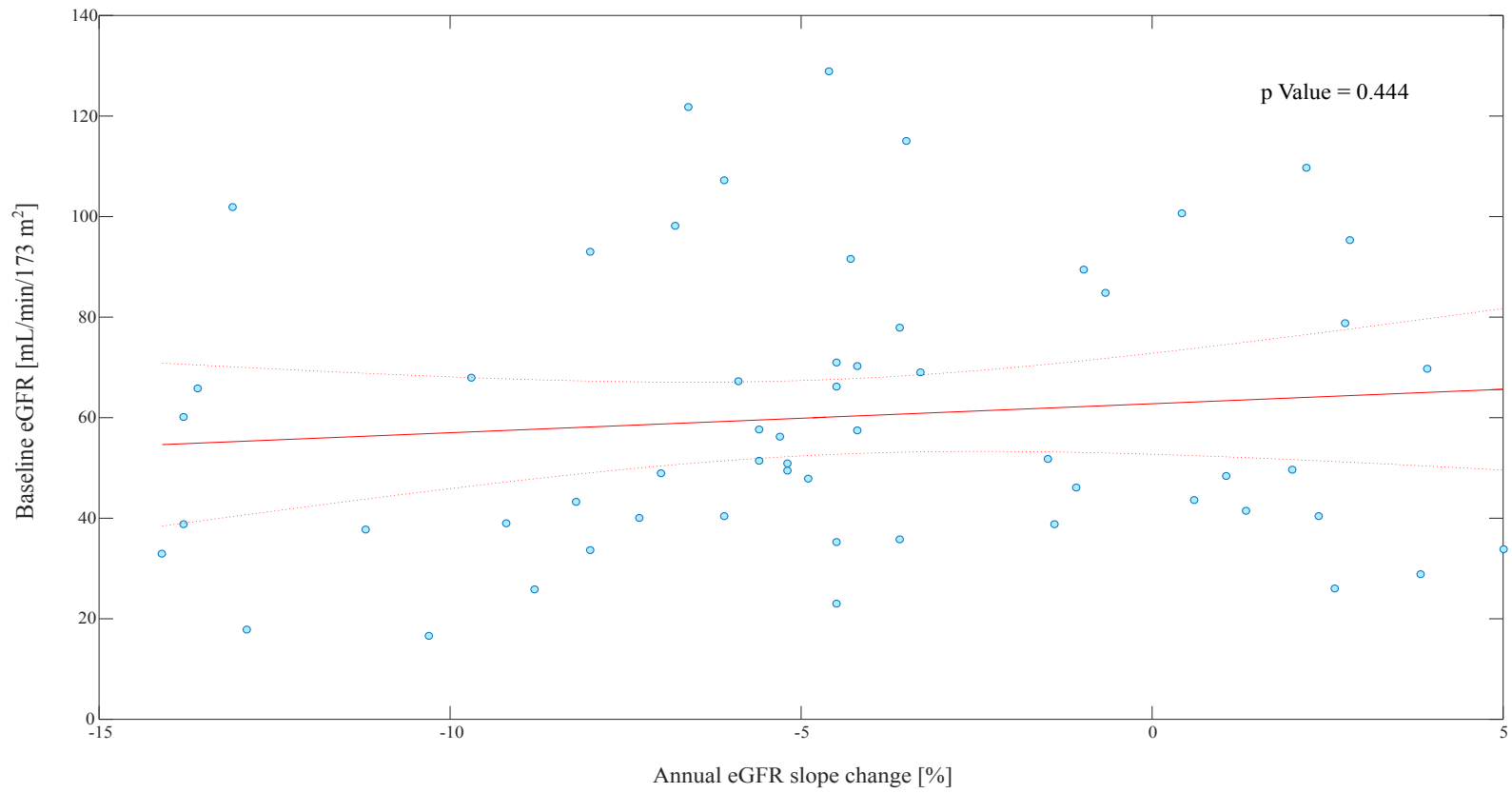


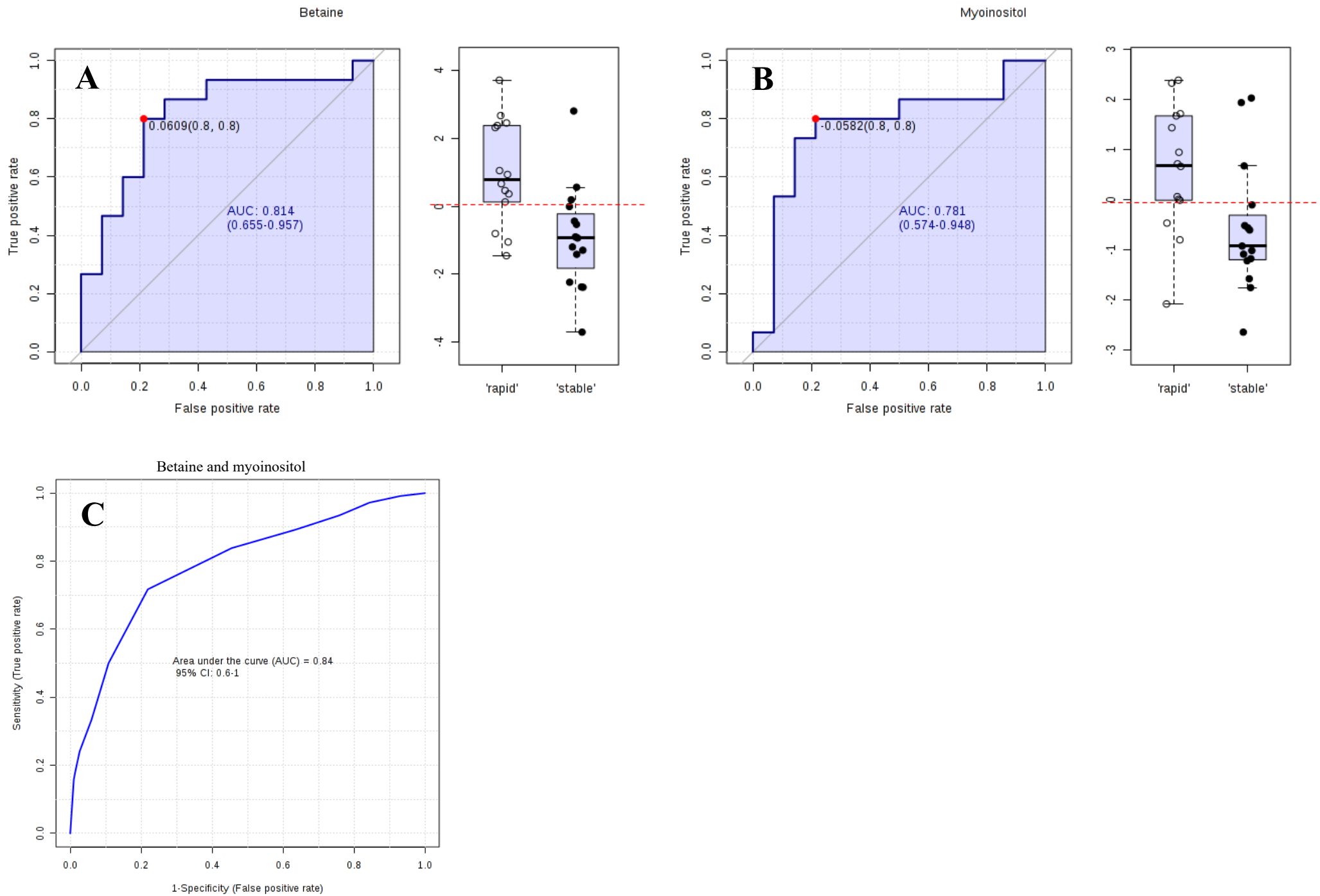
Supplement figure 1: Experimental work flow diagram A workflow overview which displays the sequence of methods used for metabolite biomarker discovery. Analysis of diagnostic metabolites of eGFR and analysis of prognostic markers of CKD progression were performed.



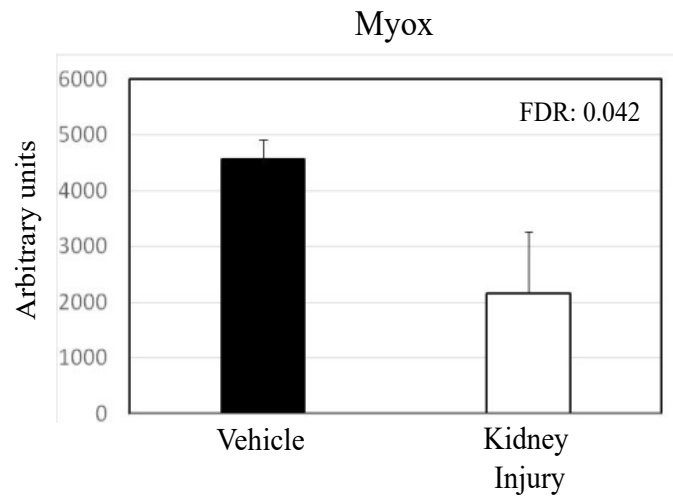
**Supplement figure 2:** Plot of samples selected for CKD progression analysis Displays the linear distribution of the nested CKD progression subset for % annual eGFR slope.



**Supplement figure 3:** Plot of baseline eGFR and % annual eGFR slope Displays no significant relationship with baseline eGFR and % annual eGFR slope



**Supplement figure 4** ROC analysis of osmolytes as markers of 'rapid' CKD progression (A) Betaine, (B) *myo*-inositol, (C) osmolytes combined



**Supplement figure 5:** Myox encoding *myo*-inositol oxygenase. Data expressed as mean $\pm$ SD of 3 mice.

<b>Supplement Table 1: Nested group to track progression (n=57)</b>	
<b><u>Sex</u></b>	
Male	34 (59.6 %)
Female	23 (40.4 %)
<b><u>Age (yrs.)</u></b>	62.7 ± 17 (20-85)
<b><u>Disease Groups (as defined by ERA-EDTA PRD registry)</u></b>	
Systemic diseases affecting the kidney	38 (65%)
Glomerular diseases	19 (35%)
<b><u>Mean Body Mass Index (kg/m<sup>2</sup>)</u></b>	28.9 ± 5.9 (20.1-47.9)
<b><u>Baseline CKD stage (CKD-EPI)</u></b>	
Stage 1 (eGFR > 90)	10
Stage 2 (eGFR 89-60)	13
Stage 3 (eGFR 59-30)	28
Stage 4 (eGFR 29-15)	6
<b><u>Baseline eGFR (mL/min/1.73 m<sup>2</sup>)</u></b>	60.2 ± 27.7 (16.6-128.9)
<b><u>Duration of follow-up (yrs.)</u></b>	2.4 ± 0.3

**Supplement table 1: Nested group to track progression** Age, gender, BMI, and CKD disease group were determined to be the most important metadata in the analysis and were adjusted for in the linear modeling of metabolites. For age, BMI, and eGFR, and duration of follow up the mean and standard deviation are shown with the range.

**Supplementary table 2: <sup>1</sup>H NMR chemical shift assignments used in BATMAN quantification**

<b>Metabolite</b>	<b>Assignment</b>	<b>δ<sup>1</sup>H (multiplicity)</b>
2-Furoylglycine	CH	6.653(dd)
2-Hydroxyisobutyric acid	β-(CH <sub>3</sub> ) <sub>2</sub>	1.364(s)
3-Hydroxyisovaleric acid	γ-(CH <sub>3</sub> ) <sub>2</sub>	1.276(s)
	α-CH <sub>2</sub>	2.372(s)
4-deoxyerythronic acid	γ-CH <sub>3</sub>	1.108(d)
4-deoxythreonic acid	γ-CH <sub>3</sub>	1.237(d)
Acetic acid	α-CH <sub>3</sub>	1.93(s)
Acetone	α-(CH <sub>3</sub> ) <sub>2</sub>	2.241(s)
α-Ketoglutaric acid	γ-CH <sub>2</sub>	2.408(t)
Betaine	N-(CH <sub>3</sub> ) <sub>3</sub>	3.272(s)
Citric acid	½ γ-CH <sub>2</sub>	2.529(d)
	½ γ-CH <sub>2</sub>	2.669(d)
Creatine	CH <sub>2</sub>	3.938(s)
Creatinine	CH <sub>2</sub>	4.064(s)
D-Glucose	C1H	4.665(d)
Dimethylamine	(CH <sub>3</sub> ) <sub>2</sub>	2.715(s)
Dimethylglycine	N-(CH <sub>3</sub> ) <sub>2</sub>	2.93(s)
Ethanolamine	CH <sub>2</sub> -N	3.147(t)
Formic acid	CH	8.469(s)
Fumaric acid	CH	6.529(s)
Glycine	α-CH <sub>2</sub>	3.573(s)
Glycolic acid	α-CH <sub>2</sub>	3.96(s)
Guanidoacetic acid	α-CH <sub>2</sub>	3.803(s)
Guanine	CH	7.71(s)
Hippuric acid	α-CH <sub>2</sub>	3.972(d)
Indoxyl sulfate	C1H	7.376(s)
	C6H	7.705(d)
	C8H	7.219(t)
	C7H	7.284(t)
L-Acetylcarnitine	CH	2.152(s)
	N-(CH <sub>3</sub> ) <sub>3</sub>	3.201(s)
L-Alanine	β-CH <sub>3</sub>	1.49(d)
L-Carnitine	α-CH <sub>2</sub>	2.449(dd)
	N-(CH <sub>3</sub> ) <sub>3</sub>	3.234(s)
L-lactic acid	β-CH <sub>3</sub>	1.337(d)
L-Phenylalanine	o-CH	7.317(d)
	p-CH	7.363(t)
L-Threonine	γ-CH <sub>3</sub>	1.342(d)
L-Tryptophan	C2H	7.344(s)
	C6H	7.523(d)
L-Tyrosine	m-(CH <sub>2</sub> )	6.881(d)
Methylguanidine	N-CH <sub>3</sub>	2.834(s)
myo-Inositol	C5H	4.081(t)
	C4H / C6H	3.551(dd)
N-Methylnicotinamide	N-CH <sub>3</sub>	4.49(s)
p-Cresol sulfate	CH <sub>3</sub>	2.344(s)
Phenylacetylglutamine	CH <sub>2</sub>	2.278(t)
	CH <sub>2</sub>	3.683(s)

Phosphorylcholine	N-(CH <sub>3</sub> ) <sub>3</sub>	3.208(s)
<i>p</i> -Hydroxyphenylacetic acid	(CH) <sub>2</sub>	3.454 (s)
Proline betaine	N-(CH <sub>3</sub> ) <sub>2</sub>	3.112(s)
Succinic acid	CH <sub>2</sub>	2.41(s)
Tartaric acid	CH	4.351(s)
Taurine	N-CH <sub>2</sub>	3.422(t)
Trigonelline	CH <sub>3</sub>	4.449(s)
	C1H	9.134(s)
Trimethylamine	N-(CH <sub>3</sub> ) <sub>3</sub>	2.868(s)
Trimethylamine <i>N</i> -oxide	N-(CH <sub>3</sub> ) <sub>3</sub>	3.277(s)
Uracil	C6H	5.809(d)

**Supplementary table 2: List of chemical shift assignments for metabolite quantification.** Metabolites are listed with their most characteristic chemical shift assignment and multiplicity for identification in <sup>1</sup>H NMR spectra. Both chemical shifts and multiplicity of each metabolite were used in the subsequent metabolite quantification using BATMAN.



**Supplemental Table 3.** Murine AKI transcriptomics. Genes with a FDR<5% and a fold-change increase or decrease in expression > 25%.

<b>Official Gene Symbol</b>	<b>Fold Change</b>	<b>p-value</b>	<b>FDR</b>
Fgb	14.346	0.00000	0.00443
Timp1	13.871	0.00000	0.00492
Fgg	12.578	0.00000	0.00443
Krt20	10.055	0.00006	0.00677
Timd2	9.556	0.00002	0.00516
Serpina10	9.518	0.00000	0.00232
Cyp4a12b	8.810	0.00008	0.00712
Fga	8.771	0.00000	0.00443
Lrg1	8.234	0.00000	0.00251
Serpina3n	8.103	0.00007	0.00677
Havcr1	7.561	0.00002	0.00570
Cyp4a12a	7.021	0.00005	0.00663
Fga	6.625	0.00004	0.00632
Steap1	6.548	0.00033	0.01167
Slc34a2	6.530	0.00001	0.00492
Lcn2	6.294	0.00002	0.00527
Aldh1a2	5.995	0.00000	0.00251
Il1f6	5.806	0.00012	0.00836
Dcdc2a	5.461	0.00002	0.00572
Spr2g	5.109	0.00003	0.00622
C3	4.868	0.00000	0.00320
Akr1b8	4.801	0.00179	0.02549
Cxcl10	4.450	0.00001	0.00492
Spr2f	4.418	0.00069	0.01596
Serpine1	4.339	0.00045	0.01313
Plac8	4.101	0.00000	0.00492
Tnfrsf12a	4.070	0.00002	0.00572
Cdkn1a	4.050	0.00031	0.01141
Smpdl3b	4.025	0.00003	0.00572
Tifa	4.013	0.00004	0.00630
Abp1	4.009	0.00000	0.00492
Socs3	3.956	0.00001	0.00492
Cd14	3.927	0.00008	0.00716
Acat3	3.923	0.00001	0.00492
Cfi	3.917	0.00000	0.00021
Myc	3.637	0.00006	0.00677
Itgam	3.591	0.00014	0.00881
Mthfd2	3.577	0.00026	0.01104
Ppm1j	3.470	0.00002	0.00572
Cd44	3.467	0.00077	0.01662
Ms4a6d	3.465	0.00012	0.00821
Pilra	3.425	0.00001	0.00492
Osmr	3.423	0.00016	0.00941
Golm1	3.387	0.00026	0.01101

Clu	3.386	0.00001	0.00492
C5ar1	3.384	0.00001	0.00492
D17H6S56E-5	3.379	0.00002	0.00527
Cyr61	3.334	0.00036	0.01208
Runx1	3.303	0.00011	0.00775
Gdf15	3.280	0.00060	0.01492
Car13	3.279	0.00019	0.01002
Adamts1	3.278	0.00004	0.00632
Edn1	3.227	0.00010	0.00775
Cd68	3.226	0.00007	0.00688
Anxa3	3.218	0.00223	0.02843
Lgals3	3.192	0.00013	0.00846
Bcl3	3.151	0.00001	0.00492
Anln	3.146	0.00068	0.01578
Tubb2b	3.146	0.00003	0.00578
Ankrd1	3.144	0.00094	0.01830
Kdelr3	3.144	0.00010	0.00772
Ms4a6c	3.131	0.00015	0.00935
Hmox1	3.117	0.00138	0.02213
Cxcl2	3.094	0.00058	0.01455
Top2a	3.091	0.00016	0.00962
Tmsb10	3.057	0.00009	0.00753
Msr1	3.035	0.00097	0.01855
Ifi205	3.023	0.00022	0.01058
Nrg1	3.005	0.00000	0.00443
Atf3	3.002	0.00001	0.00492
Slc25a24	2.992	0.00368	0.03754
Ugt2b37	2.987	0.00003	0.00572
Hells	2.986	0.00224	0.02853
Rrm2	2.983	0.00018	0.00985
Tmsb10	2.964	0.00010	0.00775
Tgfb1	2.924	0.00003	0.00572
Chrn1	2.917	0.00079	0.01683
Chaf1b	2.913	0.00026	0.01101
Adamts4	2.897	0.00029	0.01132
Lif	2.894	0.00001	0.00492
Col1a1	2.875	0.00011	0.00818
Il34	2.865	0.00000	0.00365
Tubb6	2.844	0.00015	0.00935
Dusp8	2.832	0.00008	0.00716
Vtcn1	2.831	0.00249	0.03034
Col3a1	2.817	0.00006	0.00677
Egr2	2.788	0.00000	0.00443
Tubb2b	2.785	0.00017	0.00965
Dtl	2.781	0.00019	0.00997

Tmem173	2.775	0.00013	0.00845
Clcf1	2.775	0.00026	0.01101
Mvp	2.767	0.00004	0.00632
Itgax	2.745	0.00000	0.00338
Mcm3	2.742	0.00038	0.01240
Creb5	2.741	0.00005	0.00663
Cks1b	2.736	0.00007	0.00679
Gp49a	2.722	0.00136	0.02197
Aldh18a1	2.720	0.00018	0.00985
Mapk4	2.718	0.00003	0.00572
Sfn	2.710	0.00338	0.03596
Fndc4	2.709	0.00069	0.01583
Cxcl1	2.698	0.00000	0.00320
Ccna2	2.695	0.00040	0.01253
Crlf1	2.686	0.00057	0.01447
Tacstd2	2.683	0.00098	0.01869
Chek1	2.680	0.00382	0.03841
Tubb5	2.669	0.00004	0.00632
Plaur	2.664	0.00224	0.02855
Uhrf1	2.652	0.00019	0.01002
A330021E22Rik	2.648	0.00132	0.02179
Ccr2	2.647	0.00004	0.00632
Lilrb4	2.633	0.00074	0.01634
Cldn1	2.632	0.00015	0.00920
Fam111a	2.626	0.00028	0.01130
Trpv6	2.602	0.00005	0.00664
Ppp1r14b	2.599	0.00029	0.01130
Rdh10	2.588	0.00012	0.00822
2810417H13Rik	2.564	0.00442	0.04130
Ppp1r14b	2.560	0.00019	0.00996
Figl1	2.553	0.00082	0.01710
Nfkbiz	2.542	0.00006	0.00677
Gc	2.515	0.00000	0.00320
Fn1	2.503	0.00207	0.02758
Sbno2	2.495	0.00003	0.00572
Cd52	2.485	0.00063	0.01521
Klf6	2.484	0.00020	0.01005
Grp	2.482	0.00091	0.01790
Sprr1a	2.480	0.00467	0.04271
Samd5	2.470	0.00005	0.00632
Ccl9	2.456	0.00003	0.00596
Nek6	2.451	0.00004	0.00625
Asf1b	2.442	0.00001	0.00492
Pea15a	2.439	0.00013	0.00845
Mkl1	2.438	0.00063	0.01519

Anxa2	2.432	0.00155	0.02351
Snord118	2.420	0.00191	0.02638
Snord118	2.420	0.00191	0.02638
Mki67	2.416	0.00004	0.00632
Tmem45a	2.399	0.00132	0.02172
Cldn4	2.397	0.00163	0.02419
Vcam1	2.392	0.00001	0.00492
Plp2	2.391	0.00001	0.00498
Plp2	2.388	0.00002	0.00527
Tacc2	2.377	0.00001	0.00492
Dusp10	2.373	0.00044	0.01301
Fbn1	2.371	0.00070	0.01604
Msn	2.368	0.00012	0.00821
Sfn	2.363	0.00317	0.03462
Plp2	2.362	0.00001	0.00492
Ctps	2.361	0.00029	0.01130
Gm9951	2.358	0.00001	0.00492
Actn1	2.350	0.00017	0.00965
Mcm4	2.337	0.00074	0.01627
Ccl7	2.335	0.00059	0.01479
Shisa4	2.323	0.00001	0.00492
Rcn1	2.313	0.00009	0.00749
Mcm5	2.313	0.00007	0.00688
Cd53	2.307	0.00020	0.01020
Csf1	2.306	0.00011	0.00802
Fut2	2.296	0.00057	0.01447
Mcm2	2.291	0.00002	0.00572
Plekho1	2.291	0.00035	0.01203
Pdlim7	2.290	0.00020	0.01015
Ccl2	2.289	0.00138	0.02211
1700049E17Rik1	2.288	0.00005	0.00664
Hesx1	2.283	0.00038	0.01247
Zwilch	2.281	0.00021	0.01045
Cdk1	2.279	0.00068	0.01579
Stat3	2.278	0.00002	0.00547
Cdh3	2.278	0.00010	0.00767
F3	2.277	0.00406	0.03957
Slc15a3	2.273	0.00007	0.00688
1300002K09Rik	2.268	0.00003	0.00600
BC023105	2.268	0.00001	0.00492
Asns	2.262	0.00462	0.04245
Hist1h3f	2.261	0.00001	0.00492
Tubb2a	2.259	0.00014	0.00891
Pgd	2.254	0.00048	0.01340
1700049E17Rik1	2.253	0.00001	0.00492

Rtn4	2.252	0.00105	0.01930
Trpv5	2.248	0.00093	0.01830
Hist1h3g	2.243	0.00001	0.00492
Myof	2.238	0.00112	0.01984
Hist2h3b	2.238	0.00001	0.00492
Snx10	2.231	0.00085	0.01729
Jun	2.228	0.00011	0.00802
Hist1h3d	2.227	0.00001	0.00492
Flna	2.212	0.00046	0.01316
Gins1	2.208	0.00108	0.01955
Frzb	2.207	0.00010	0.00770
Isg20	2.204	0.00522	0.04543
Parp3	2.204	0.00012	0.00821
Hist2h3b	2.202	0.00003	0.00572
Syt12	2.200	0.00007	0.00678
Clic1	2.197	0.00013	0.00852
Sox9	2.190	0.00006	0.00677
Hn1	2.186	0.00022	0.01060
Hist1h3f	2.181	0.00002	0.00547
Hist1h3a	2.181	0.00001	0.00492
Birc3	2.180	0.00000	0.00492
Rhoc	2.176	0.00005	0.00650
Pthr1	2.173	0.00029	0.01137
Mmp3	2.173	0.00162	0.02410
Smc2	2.172	0.00235	0.02941
Hist1h3g	2.166	0.00002	0.00572
Arpc1b	2.165	0.00007	0.00697
Bcl2a1a	2.165	0.00004	0.00625
Sox4	2.164	0.00035	0.01204
Ch25h	2.163	0.00034	0.01184
Ms4a4c	2.163	0.00429	0.04070
Pole	2.155	0.00201	0.02720
Carhsp1	2.149	0.00034	0.01198
Ypel2	2.149	0.00064	0.01523
A2m	2.144	0.00060	0.01479
Tcf19	2.139	0.00003	0.00572
Hist1h3g	2.131	0.00002	0.00572
Pprc1	2.126	0.00032	0.01167
Ctxn1	2.125	0.00004	0.00630
Glipr2	2.124	0.00056	0.01443
Cstb	2.119	0.00011	0.00779
Lig1	2.115	0.00017	0.00965
Flot1	2.105	0.00002	0.00572
Arpc1b	2.105	0.00020	0.01005
Tuba1a	2.104	0.00001	0.00492

Efhd2	2.103	0.00008	0.00716
Cml2	2.098	0.00002	0.00527
Vat1	2.098	0.00113	0.02002
Tagln2	2.096	0.00001	0.00492
Plek	2.095	0.00081	0.01701
Map3k1	2.095	0.00012	0.00818
Rpsa	2.091	0.00008	0.00704
Loxl2	2.091	0.00007	0.00688
Pros1	2.091	0.00182	0.02584
Pole2	2.080	0.00070	0.01607
Gadd45a	2.079	0.00038	0.01240
Col1a2	2.079	0.00034	0.01194
Mgp	2.078	0.00101	0.01889
Ammecr1	2.073	0.00102	0.01899
Fcer1g	2.073	0.00003	0.00615
B4galnt1	2.073	0.00008	0.00716
Clec5a	2.072	0.00257	0.03092
Ctss	2.070	0.00039	0.01247
Gmds	2.069	0.00023	0.01069
Hist2h3c1	2.067	0.00003	0.00572
Atad2	2.061	0.00126	0.02131
Col15a1	2.060	0.00032	0.01167
Lgals1	2.059	0.00003	0.00600
Nrm	2.054	0.00002	0.00527
Fkbp10	2.053	0.00004	0.00630
Rcan1	2.050	0.00062	0.01517
1700024B05Rik	2.048	0.00039	0.01247
Cd72	2.045	0.00004	0.00632
Stil	2.045	0.00064	0.01523
Pdpn	2.044	0.00014	0.00909
Bcl2a1d	2.042	0.00005	0.00660
Serpinh1	2.042	0.00003	0.00600
Eif6	2.038	0.00007	0.00688
Tpm4	2.037	0.00009	0.00753
Gm13363	2.036	0.00103	0.01910
Pvr	2.036	0.00326	0.03514
C4b	2.035	0.00004	0.00632
Sptlc2	2.032	0.00005	0.00632
1700024P16Rik	2.030	0.00027	0.01111
Sh3bp2	2.025	0.00029	0.01133
Ywhah	2.025	0.00030	0.01139
Syne2	2.024	0.00068	0.01577
Cp	2.023	0.00020	0.01022
Fosl2	2.020	0.00012	0.00836
Bub1	2.020	0.00192	0.02649

Tlr13	2.017	0.00017	0.00965
4930503E14Rik	2.017	0.00013	0.00876
Tyrobp	2.015	0.00029	0.01130
Cxadr	2.014	0.00067	0.01575
Rnd1	2.006	0.00062	0.01517
Ptp4a1	2.006	0.00100	0.01884
Rnf183	2.005	0.00114	0.02012
Icam1	2.001	0.00001	0.00492
Adam8	2.000	0.00280	0.03246
Mcm6	1.998	0.00049	0.01351
Bcmo1	1.997	0.00017	0.00980
Itga5	1.993	0.00135	0.02190
Cdk6	1.989	0.00047	0.01321
C3ar1	1.985	0.00235	0.02938
Cldn7	1.983	0.00165	0.02431
Ptp4a1	1.978	0.00106	0.01936
4930503E14Rik	1.978	0.00001	0.00492
Bcl2a1b	1.972	0.00010	0.00775
Akap12	1.972	0.00089	0.01764
Dnmt1	1.971	0.00011	0.00802
E2f1	1.966	0.00011	0.00778
Aurkb	1.964	0.00001	0.00492
Plin2	1.962	0.00014	0.00886
Mcm7	1.962	0.00146	0.02270
Prc1	1.959	0.00038	0.01247
Spsb1	1.957	0.00008	0.00704
2610028A01Rik	1.957	0.00212	0.02783
Aebp1	1.956	0.00022	0.01056
Slc7a5	1.953	0.00010	0.00767
Cdca7	1.951	0.00109	0.01955
Cenpt	1.951	0.00009	0.00749
Apex1	1.947	0.00006	0.00677
Ptpn23	1.944	0.00083	0.01723
Ncapg2	1.944	0.00078	0.01669
Ccl5	1.942	0.00063	0.01519
Smox	1.940	0.00204	0.02744
Nfkb2	1.939	0.00002	0.00572
Krt8	1.939	0.00212	0.02789
Carhsp1	1.939	0.00049	0.01351
Bspry	1.935	0.00364	0.03728
Rras	1.930	0.00001	0.00492
Rpsa	1.929	0.00006	0.00677
Gm5622	1.929	0.00046	0.01319
Tpm4	1.928	0.00032	0.01167
Trmt61a	1.927	0.00363	0.03728

Hpcal4	1.927	0.00002	0.00527
Tgfb1	1.927	0.00003	0.00592
Xdh	1.924	0.00004	0.00625
Col4a1	1.923	0.00044	0.01303
Ddx21	1.923	0.00283	0.03264
Nt5c1a	1.922	0.00059	0.01479
Ii1rn	1.919	0.00232	0.02914
Syne2	1.917	0.00030	0.01139
Fxyd5	1.915	0.00004	0.00625
Gm5622	1.911	0.00035	0.01204
Itgb2	1.910	0.00013	0.00850
Sirpb1b	1.907	0.00005	0.00660
Hist1h2ak	1.906	0.00001	0.00492
Syne2	1.903	0.00046	0.01316
Myh9	1.902	0.00009	0.00749
Mettl1	1.902	0.00040	0.01255
Cftr	1.902	0.00016	0.00965
Ptp4a1	1.902	0.00328	0.03530
F2rl1	1.899	0.00585	0.04864
Litaf	1.898	0.00039	0.01247
Tnfrsf1a	1.897	0.00007	0.00697
Smyd5	1.897	0.00022	0.01056
Cdc6	1.896	0.00065	0.01539
E030010A14Rik	1.891	0.00084	0.01726
Ccl20	1.891	0.00001	0.00492
Gbp2	1.891	0.00023	0.01063
Rbm3	1.891	0.00032	0.01167
Srxn1	1.890	0.00148	0.02287
4930506M07Rik	1.887	0.00287	0.03286
Rbm3	1.886	0.00035	0.01200
Ptp4a1	1.884	0.00260	0.03112
Hbegf	1.883	0.00129	0.02155
Slc38a2	1.878	0.00136	0.02195
Mxra7	1.874	0.00010	0.00757
Vim	1.873	0.00051	0.01375
Kntc1	1.873	0.00018	0.00985
Rpsa	1.871	0.00006	0.00674
Sparc	1.871	0.00176	0.02526
Mpeg1	1.869	0.00276	0.03227
S100a10	1.869	0.00037	0.01229
Bak1	1.868	0.00017	0.00965
Gxylt2	1.867	0.00108	0.01955
Rgs19	1.866	0.00017	0.00972
Alpk1	1.863	0.00001	0.00492
Kif11	1.862	0.00130	0.02164



Rbm3	1.861	0.00036	0.01208
Wisp1	1.859	0.00002	0.00572
Mapkapk2	1.857	0.00015	0.00926
Wfdc2	1.857	0.00008	0.00712
Arhgap11a	1.857	0.00555	0.04700
Cx3cl1	1.854	0.00019	0.00991
Pcna	1.853	0.00046	0.01316
Cad	1.844	0.00078	0.01669
Mmp14	1.844	0.00064	0.01523
Ctsd	1.844	0.00012	0.00818
Aldh1l2	1.844	0.00034	0.01194
Syne2	1.843	0.00044	0.01303
Ncaph	1.842	0.00044	0.01301
Mad2l1	1.840	0.00069	0.01584
Laptm5	1.840	0.00009	0.00753
Ankrd6	1.840	0.00014	0.00896
Tuba1b	1.840	0.00006	0.00668
Fblim1	1.835	0.00041	0.01265
Pgm1	1.833	0.00119	0.02068
Ppap2c	1.829	0.00138	0.02211
Erh	1.828	0.00332	0.03551
F730047E07Rik	1.828	0.00489	0.04391
Hist1h1a	1.826	0.00001	0.00492
Pcna	1.826	0.00049	0.01351
Rpsa	1.825	0.00005	0.00660
Tuba1b	1.822	0.00006	0.00677
Sgol2	1.821	0.00120	0.02072
Myd88	1.815	0.00015	0.00930
Mboat1	1.815	0.00204	0.02744
Gpr153	1.813	0.00018	0.00985
Col6a3	1.812	0.00046	0.01316
Tsc22d1	1.810	0.00017	0.00980
Tuba1b	1.810	0.00004	0.00632
D2Ertd750e	1.806	0.00045	0.01315
Coro1c	1.805	0.00043	0.01301
Taf1d	1.805	0.00114	0.02010
Rpsa	1.803	0.00007	0.00688
2610029G23Rik	1.803	0.00365	0.03740
Serpina3m	1.803	0.00208	0.02762
Slc13a1	1.802	0.00001	0.00492
Mrpl33	1.801	0.00280	0.03247
Ran	1.799	0.00125	0.02125
Tes	1.798	0.00284	0.03265
Srm	1.798	0.00087	0.01753
Sertad4	1.798	0.00025	0.01097

Pdgfb	1.798	0.00082	0.01708
Il1b	1.797	0.00354	0.03686
2810417H13Rik	1.797	0.00040	0.01255
Col4a2	1.796	0.00044	0.01303
Steap2	1.795	0.00145	0.02255
Alg8	1.795	0.00140	0.02229
Cenpk	1.795	0.00344	0.03638
Pilrb1	1.788	0.00001	0.00493
Rnd3	1.788	0.00127	0.02133
Fbl	1.788	0.00018	0.00985
Ckap4	1.787	0.00046	0.01318
Igf2bp2	1.787	0.00100	0.01885
Tubb2c	1.787	0.00021	0.01045
Mapk6	1.786	0.00099	0.01881
Gnl3	1.785	0.00479	0.04338
Il2rg	1.785	0.00024	0.01087
Sulf1	1.785	0.00516	0.04515
Dctd	1.785	0.00103	0.01910
Dysf	1.784	0.00035	0.01204
Gsta4	1.783	0.00008	0.00712
Nhp2	1.783	0.00122	0.02093
Sirpb1a	1.782	0.00001	0.00492
Hist1h2bb	1.782	0.00244	0.03003
Nans	1.781	0.00300	0.03357
Spns2	1.781	0.00051	0.01375
Set	1.780	0.00190	0.02633
Sla	1.779	0.00348	0.03655
H6pd	1.778	0.00017	0.00975
Foxm1	1.777	0.00027	0.01104
Ranbp1	1.776	0.00045	0.01315
Syt14	1.775	0.00006	0.00677
Zfp36l1	1.775	0.00009	0.00732
Tgif1	1.774	0.00085	0.01729
Mex3a	1.774	0.00082	0.01708
Ccr5	1.773	0.00023	0.01063
Ccr5	1.773	0.00023	0.01063
Limk1	1.771	0.00018	0.00985
Eif4ebp1	1.770	0.00206	0.02755
Cenpn	1.769	0.00022	0.01054
E2f8	1.769	0.00004	0.00632
Pmepa1	1.769	0.00013	0.00866
Gm6682	1.768	0.00004	0.00632
Plec	1.767	0.00100	0.01887
Fat1	1.767	0.00030	0.01139
2200002D01Rik	1.766	0.00005	0.00663

Tuba1c	1.764	0.00006	0.00677
lars	1.764	0.00091	0.01790
Susd1	1.758	0.00409	0.03974
Tpx2	1.758	0.00111	0.01982
Npl	1.757	0.00006	0.00677
Gm7172	1.757	0.00004	0.00632
Acsl4	1.757	0.00167	0.02444
Bzw2	1.755	0.00520	0.04534
Fstl1	1.753	0.00051	0.01372
Lgi2	1.753	0.00025	0.01092
Sirpb1b	1.752	0.00003	0.00625
Set	1.750	0.00164	0.02426
Hmgb3	1.748	0.00222	0.02839
Rap2b	1.748	0.00077	0.01662
Gstp1	1.748	0.00042	0.01279
Slc39a1	1.747	0.00036	0.01208
Fdps	1.746	0.00023	0.01064
Ywhah	1.746	0.00346	0.03646
Spp1	1.743	0.00005	0.00632
Sphk1	1.742	0.00050	0.01351
Ipo4	1.739	0.00020	0.01002
Fyb	1.739	0.00415	0.03997
G6pdx	1.737	0.00203	0.02735
Wdhd1	1.736	0.00041	0.01273
Junb	1.736	0.00303	0.03382
Map3k6	1.736	0.00026	0.01101
Rrm1	1.734	0.00313	0.03434
Pemt	1.733	0.00016	0.00965
Uchl3	1.732	0.00387	0.03865
Ifngr2	1.732	0.00031	0.01147
Tpm3	1.728	0.00047	0.01330
Rad51	1.727	0.00079	0.01676
Ept1	1.727	0.00230	0.02895
Lcp1	1.727	0.00004	0.00632
C1qb	1.727	0.00032	0.01162
Rps12	1.724	0.00026	0.01101
Inhbb	1.724	0.00015	0.00930
Rfc3	1.724	0.00313	0.03435
Slc39a1	1.723	0.00039	0.01251
Cct3	1.723	0.00103	0.01902
Pola1	1.722	0.00116	0.02023
Tubb2c	1.721	0.00017	0.00965
Mthfd1l	1.720	0.00005	0.00636
Sema7a	1.720	0.00039	0.01251
Kctd1	1.719	0.00204	0.02744

Sh3bgrl3	1.719	0.00041	0.01276
Slfn9	1.718	0.00017	0.00966
Lcp2	1.718	0.00026	0.01104
Plk1	1.717	0.00001	0.00492
Zbp1	1.716	0.00036	0.01208
Tgm2	1.716	0.00008	0.00704
Nlrc5	1.716	0.00003	0.00572
Lmna	1.715	0.00082	0.01710
Slc11a1	1.714	0.00009	0.00753
Rnf125	1.714	0.00207	0.02757
Kcnk6	1.714	0.00005	0.00663
Impdh2	1.712	0.00152	0.02315
Rps12	1.712	0.00020	0.01020
Lamc2	1.711	0.00542	0.04627
Rps12	1.710	0.00019	0.00992
Nckap1l	1.710	0.00003	0.00592
Sqle	1.709	0.00327	0.03525
Psd3	1.707	0.00130	0.02161
Rps12	1.706	0.00022	0.01055
F2r	1.706	0.00198	0.02689
Fcgr1	1.704	0.00103	0.01906
Dtx4	1.704	0.00318	0.03463
Adam12	1.702	0.00143	0.02245
Sfpi1	1.701	0.00019	0.00996
2010204K13Rik	1.700	0.00091	0.01790
Evi2a	1.698	0.00030	0.01137
Gins2	1.698	0.00005	0.00663
Gstp2	1.697	0.00081	0.01705
Rps12	1.697	0.00022	0.01058
Gstp2	1.695	0.00076	0.01661
Cx3cr1	1.694	0.00031	0.01147
Mcam	1.694	0.00129	0.02161
Rps12	1.693	0.00019	0.00996
Col8a1	1.693	0.00085	0.01732
BC021614	1.692	0.00110	0.01965
H2-DMb2	1.692	0.00076	0.01661
Col18a1	1.690	0.00015	0.00917
Casc5	1.689	0.00174	0.02502
Hsp90aa1	1.688	0.00384	0.03852
Nop56	1.688	0.00383	0.03847
Emilin1	1.688	0.00006	0.00677
Rps12	1.687	0.00032	0.01159
Ablim3	1.687	0.00052	0.01385
Nup43	1.685	0.00333	0.03559
Ctsl	1.685	0.00096	0.01849

Emp2	1.685	0.00275	0.03222
Gm16519	1.685	0.00001	0.00492
Ptprc	1.683	0.00356	0.03696
P2ry6	1.682	0.00058	0.01463
Tspan4	1.682	0.00015	0.00918
Dlgap5	1.681	0.00012	0.00822
Rnh1	1.681	0.00279	0.03242
Tap1	1.680	0.00001	0.00492
Irgm1	1.680	0.00002	0.00572
Rhbdf2	1.680	0.00078	0.01669
Plscr1	1.679	0.00023	0.01064
Gpr97	1.678	0.00261	0.03119
Ddx39	1.678	0.00362	0.03724
Pa2g4	1.677	0.00508	0.04480
C1qa	1.677	0.00143	0.02245
Csda	1.676	0.00060	0.01492
Cebpd	1.676	0.00072	0.01621
Hn1l	1.675	0.00070	0.01598
Cenpm	1.671	0.00010	0.00757
Plod3	1.671	0.00131	0.02172
Nlrc5	1.671	0.00004	0.00632
Hsp90aa1	1.670	0.00319	0.03463
Ccl17	1.670	0.00516	0.04520
2010003K11Rik	1.669	0.00032	0.01167
Rhob	1.669	0.00367	0.03753
Esco2	1.669	0.00005	0.00664
Lsm2	1.668	0.00102	0.01902
Trp53	1.667	0.00025	0.01097
Ctsc	1.667	0.00147	0.02274
Hk2	1.667	0.00044	0.01303
Cars	1.666	0.00349	0.03660
Dusp8	1.664	0.00041	0.01269
Timeless	1.663	0.00024	0.01087
Txnrd1	1.663	0.00495	0.04416
Eno2	1.661	0.00073	0.01626
Ctsb	1.661	0.00016	0.00959
Calcr	1.661	0.00087	0.01750
Nt5c	1.660	0.00148	0.02287
Cyth4	1.659	0.00019	0.01002
Fen1	1.657	0.00033	0.01175
Fbxw17	1.656	0.00081	0.01706
Gm3579	1.655	0.00048	0.01333
Gm3579	1.655	0.00048	0.01333
Mt2	1.654	0.00002	0.00572
Tnfrsf1b	1.653	0.00010	0.00775

Cdh11	1.651	0.00469	0.04284
Aff2	1.651	0.00104	0.01918
Nasp	1.651	0.00344	0.03637
Alox5ap	1.649	0.00090	0.01787
Emp1	1.649	0.00017	0.00980
4930422G04Rik	1.647	0.00009	0.00753
Praf2	1.647	0.00035	0.01200
Cfp	1.646	0.00004	0.00625
Fbl	1.646	0.00059	0.01479
Nuak2	1.645	0.00185	0.02602
Ii33	1.643	0.00193	0.02655
Dok4	1.642	0.00178	0.02543
Thop1	1.642	0.00025	0.01097
Lrrc59	1.642	0.00082	0.01713
Selp	1.640	0.00027	0.01111
Pcsk9	1.638	0.00064	0.01526
Hspb8	1.638	0.00134	0.02190
Cxcl14	1.637	0.00222	0.02838
Brca1	1.636	0.00116	0.02023
Mast4	1.636	0.00083	0.01723
Rangap1	1.636	0.00242	0.02984
Cep170	1.634	0.00234	0.02933
Ppp2r5c	1.634	0.00052	0.01381
Slfn1	1.634	0.00040	0.01255
Rps12	1.634	0.00034	0.01194
Rps12	1.631	0.00039	0.01247
Rps12	1.631	0.00039	0.01247
Rps12	1.631	0.00039	0.01247
Rps12	1.631	0.00039	0.01247
Nras	1.631	0.00257	0.03092
Egr1	1.630	0.00503	0.04455
Rpp25	1.630	0.00034	0.01197
Bop1	1.630	0.00128	0.02152
Panx1	1.630	0.00029	0.01130
Mgst1	1.629	0.00078	0.01669
Emp3	1.629	0.00083	0.01716
C79407	1.627	0.00069	0.01584
Snrpa1	1.627	0.00076	0.01662
Kcnh1	1.625	0.00087	0.01750
Jub	1.625	0.00293	0.03318
Glipr1	1.625	0.00154	0.02339
Thoc4	1.624	0.00107	0.01939
Alpk1	1.623	0.00026	0.01101
Golt1b	1.622	0.00073	0.01626
Psm8	1.622	0.00006	0.00677

Hmgb3	1.621	0.00144	0.02247
Mgl2	1.621	0.00004	0.00625
Efemp2	1.621	0.00023	0.01064
Zc3hav1	1.619	0.00157	0.02369
Cxcl9	1.619	0.00232	0.02916
Nfkbie	1.619	0.00006	0.00677
Pdgfrb	1.618	0.00332	0.03550
Lyz2	1.617	0.00483	0.04355
Iars	1.617	0.00471	0.04298
Tpm1	1.616	0.00021	0.01039
Psmb10	1.615	0.00006	0.00677
Myo7a	1.615	0.00040	0.01255
Pdia6	1.615	0.00046	0.01318
Mars	1.614	0.00250	0.03039
Dap	1.614	0.00018	0.00985
Gpnmb	1.614	0.00427	0.04058
Elf4	1.613	0.00329	0.03530
Mall	1.610	0.00439	0.04114
9130401M01Rik	1.609	0.00256	0.03089
Slc12a4	1.607	0.00036	0.01208
Hcls1	1.606	0.00016	0.00950
Casp4	1.606	0.00406	0.03957
Adam11	1.605	0.00024	0.01074
Itga6	1.604	0.00352	0.03673
Map4k4	1.603	0.00386	0.03861
Frk	1.603	0.00375	0.03793
Rnf121	1.602	0.00041	0.01275
Hck	1.601	0.00020	0.01010
Coro1a	1.601	0.00002	0.00572
Psd3	1.600	0.00058	0.01455
Ppa1	1.600	0.00290	0.03297
Hist1h2af	1.598	0.00004	0.00632
Slc39a14	1.598	0.00094	0.01833
Tax1bp3	1.598	0.00121	0.02087
Ecscr	1.597	0.00068	0.01578
Bmp1	1.597	0.00047	0.01327
Rps8	1.597	0.00041	0.01273
Alpk1	1.597	0.00096	0.01849
Pold4	1.596	0.00211	0.02783
Itih4	1.595	0.00524	0.04550
Slfm4	1.594	0.00040	0.01257
S100a11	1.593	0.00020	0.01015
Atf5	1.593	0.00024	0.01074
Taf1d	1.593	0.00374	0.03785
Hist1h2ao	1.592	0.00004	0.00625

Nr4a1	1.592	0.00270	0.03180
Exo1	1.592	0.00292	0.03306
6330406I15Rik	1.591	0.00600	0.04942
Steap4	1.591	0.00285	0.03271
Hist2h2bb	1.591	0.00043	0.01301
Parvg	1.591	0.00311	0.03421
Hist1h2ao	1.591	0.00004	0.00632
A430084P05Rik	1.590	0.00222	0.02838
Tax1bp3	1.590	0.00139	0.02215
Tmem41a	1.589	0.00025	0.01093
Nlrc5	1.589	0.00008	0.00716
Hist1h2ao	1.588	0.00003	0.00622
Maff	1.586	0.00081	0.01701
Gm11276	1.586	0.00003	0.00596
Hist1h2ao	1.585	0.00004	0.00630
Hist1h2ao	1.585	0.00005	0.00639
Ccnb2	1.585	0.00354	0.03686
Rps8	1.585	0.00042	0.01280
Hkdc1	1.584	0.00111	0.01984
Myadm	1.584	0.00221	0.02835
Hist1h2an	1.584	0.00005	0.00636
Trib1	1.583	0.00005	0.00636
Relb	1.582	0.00034	0.01197
Tmem98	1.581	0.00309	0.03408
Hist1h2ao	1.581	0.00004	0.00632
Esyt1	1.580	0.00274	0.03213
Gpr64	1.580	0.00006	0.00677
Mt1	1.579	0.00037	0.01231
Nfil3	1.579	0.00008	0.00716
Gm9930	1.579	0.00009	0.00757
Cfl1	1.578	0.00026	0.01101
Nubp1	1.578	0.00135	0.02190
Clspn	1.578	0.00143	0.02245
Sec24d	1.577	0.00053	0.01398
Cxcl16	1.574	0.00051	0.01375
BC037703	1.574	0.00049	0.01351
Map3k14	1.572	0.00152	0.02320
5730590G19Rik	1.572	0.00030	0.01139
Rnf145	1.571	0.00124	0.02116
Ccr1	1.571	0.00199	0.02704
Fam57a	1.571	0.00367	0.03751
Slc1a4	1.571	0.00387	0.03866
Gm9975	1.570	0.00027	0.01111
Wbp5	1.567	0.00352	0.03673
Syce2	1.567	0.00115	0.02013



Comt1	1.566	0.00054	0.01408
Trem1	1.566	0.00044	0.01301
Gm11428	1.565	0.00017	0.00965
Rpl23	1.565	0.00580	0.04836
P2rx4	1.565	0.00051	0.01369
Gm4157	1.565	0.00145	0.02255
Bysl	1.564	0.00226	0.02868
Tnf	1.564	0.00290	0.03293
Cyb561	1.564	0.00042	0.01280
Tsta3	1.563	0.00144	0.02255
Lsr	1.563	0.00087	0.01750
Zfp593	1.562	0.00405	0.03949
Adamts2	1.562	0.00486	0.04373
Mybbp1a	1.561	0.00244	0.03004
Mfsd10	1.561	0.00052	0.01377
Angptl4	1.561	0.00186	0.02608
Fosl1	1.560	0.00039	0.01247
Ccne1	1.560	0.00351	0.03668
Psme2	1.560	0.00157	0.02372
Ncl	1.559	0.00522	0.04543
Rac2	1.559	0.00009	0.00738
Tfdp1	1.558	0.00064	0.01526
S100a11	1.556	0.00019	0.01002
Tbl3	1.556	0.00076	0.01662
Sdf2l1	1.556	0.00040	0.01255
Fgr	1.554	0.00010	0.00770
Sf3b3	1.554	0.00110	0.01972
Pold1	1.553	0.00216	0.02806
Zdhhc15	1.553	0.00126	0.02131
Nfkbil2	1.551	0.00102	0.01896
Ctnn	1.551	0.00163	0.02416
H2-DMa	1.551	0.00589	0.04880
Arnt2	1.551	0.00013	0.00851
Dhcr24	1.550	0.00045	0.01316
Bpil2	1.550	0.00044	0.01303
Rab31	1.550	0.00108	0.01955
Prmt1	1.550	0.00517	0.04521
Parp14	1.550	0.00506	0.04469
Ccl12	1.549	0.00369	0.03766
Sirpb1a	1.547	0.00012	0.00819
Rad54b	1.547	0.00023	0.01064
Cenpi	1.547	0.00031	0.01147
Rexo2	1.546	0.00430	0.04074
Trim47	1.546	0.00214	0.02797
Gbp6	1.546	0.00223	0.02841

Dpysl3	1.546	0.00153	0.02330
Mrpl52	1.545	0.00008	0.00716
Clec12a	1.545	0.00199	0.02704
Rps8	1.545	0.00045	0.01305
Cct5	1.544	0.00345	0.03641
Rps8	1.544	0.00036	0.01208
Tgfbr1	1.543	0.00247	0.03026
Cbfb	1.543	0.00183	0.02591
Plscr1	1.543	0.00303	0.03381
Lair1	1.542	0.00067	0.01570
Ier5l	1.542	0.00014	0.00882
Cdk4	1.541	0.00133	0.02182
Fbxw9	1.540	0.00025	0.01093
Rps8	1.540	0.00036	0.01208
St3gal1	1.540	0.00547	0.04661
Fhl3	1.540	0.00055	0.01423
Morf4l2	1.540	0.00568	0.04773
Gm10052	1.540	0.00209	0.02769
Tll12	1.539	0.00048	0.01340
Kpnb1	1.539	0.00549	0.04666
Ptger4	1.538	0.00160	0.02398
Ciita	1.538	0.00009	0.00744
Gtf2f1	1.538	0.00139	0.02220
Rps18	1.537	0.00031	0.01148
Oasl1	1.536	0.00007	0.00688
Hat1	1.536	0.00154	0.02347
Nup62	1.536	0.00124	0.02116
Ezh2	1.536	0.00294	0.03320
Vav1	1.536	0.00042	0.01286
Noc4l	1.536	0.00143	0.02245
Adh1	1.535	0.00104	0.01915
Gusb	1.534	0.00047	0.01321
Tgfbr2	1.533	0.00096	0.01849
Itgb3	1.533	0.00023	0.01064
Hnrnpa1	1.532	0.00215	0.02800
Rasl12	1.531	0.00482	0.04352
Ywhag	1.531	0.00398	0.03917
Ii1r1	1.531	0.00323	0.03498
Dtx3l	1.530	0.00057	0.01448
Gm5643	1.530	0.00275	0.03222
Snrpd1	1.529	0.00035	0.01200
Axl	1.528	0.00011	0.00802
Ung	1.528	0.00015	0.00932
Grwd1	1.528	0.00190	0.02636
Ii4ra	1.527	0.00073	0.01624

Gpc3	1.527	0.00071	0.01610
Aimp2	1.527	0.00212	0.02788
Pla2g2e	1.526	0.00151	0.02308
Ifi204	1.526	0.00399	0.03922
Sh2d4b	1.526	0.00273	0.03204
Nlrc5	1.525	0.00287	0.03285
5430435G22Rik	1.525	0.00099	0.01881
Ssbp4	1.525	0.00011	0.00817
Ercc6l	1.525	0.00023	0.01064
Gm3579	1.525	0.00171	0.02475
Nlrc5	1.524	0.00197	0.02682
Rps8	1.523	0.00074	0.01635
Oasl2	1.521	0.00030	0.01137
Pld4	1.520	0.00458	0.04223
Ftsj3	1.520	0.00315	0.03447
Fam114a1	1.520	0.00427	0.04058
Ttyh2	1.519	0.00101	0.01890
Fbxl2	1.519	0.00072	0.01624
Cebpb	1.519	0.00239	0.02972
Sars	1.518	0.00118	0.02050
Atf4	1.517	0.00141	0.02233
Cyp1b1	1.517	0.00443	0.04138
Nme1	1.517	0.00127	0.02133
Slco2a1	1.516	0.00105	0.01930
Cdt1	1.516	0.00095	0.01849
Rbpms	1.516	0.00095	0.01838
Pgs1	1.516	0.00546	0.04649
Cdca5	1.515	0.00252	0.03056
Pvrl1	1.514	0.00142	0.02245
Gm16494	1.514	0.00010	0.00770
Pask	1.513	0.00018	0.00985
Smtnl2	1.513	0.00027	0.01122
Polr2l	1.513	0.00047	0.01321
Melk	1.513	0.00094	0.01837
Rpa2	1.512	0.00104	0.01913
Cd151	1.512	0.00178	0.02544
Tgfb1i1	1.512	0.00342	0.03629
Xpo1	1.511	0.00599	0.04934
sept-11	1.511	0.00038	0.01245
Irf7	1.511	0.00090	0.01782
Rad54l	1.510	0.00115	0.02021
Ccl3	1.509	0.00529	0.04578
Igln5	1.509	0.00093	0.01830
G6pd2	1.508	0.00315	0.03447
Polr2l	1.508	0.00036	0.01208

Pdap1	1.507	0.00125	0.02129
Heyl	1.507	0.00298	0.03350
Gfpt1	1.507	0.00358	0.03711
Cep55	1.507	0.00397	0.03915
Vars	1.507	0.00119	0.02068
Dscc1	1.507	0.00429	0.04070
Suv39h1	1.506	0.00218	0.02818
Srgap1	1.506	0.00599	0.04934
Rps18	1.506	0.00036	0.01208
Hnrnpa1	1.505	0.00321	0.03485
Cd86	1.504	0.00174	0.02499
Fam38b	1.504	0.00460	0.04236
H2afx	1.503	0.00503	0.04460
Osbpl10	1.503	0.00028	0.01130
Mobkl2a	1.502	0.00018	0.00985
Kcnn4	1.502	0.00008	0.00716
Rps18	1.501	0.00053	0.01398
Efcab5	1.501	0.00029	0.01132
Bicc1	1.500	0.00139	0.02215
Thyn1	1.499	0.00305	0.03389
Pknox2	1.499	0.00022	0.01051
Crct1	1.499	0.00190	0.02636
Eif4a1	1.499	0.00156	0.02362
Rps8	1.498	0.00053	0.01391
Rps8	1.498	0.00053	0.01391
Hist2h2aa1	1.498	0.00018	0.00985
Lmnb1	1.498	0.00028	0.01130
Rpl24	1.497	0.00240	0.02975
Pik3ap1	1.497	0.00151	0.02308
Pin4	1.497	0.00319	0.03463
Pak1	1.497	0.00032	0.01156
Bola2	1.497	0.00590	0.04883
Rps18	1.497	0.00046	0.01316
Kif22	1.496	0.00098	0.01866
Slc40a1	1.496	0.00326	0.03514
Akt1	1.496	0.00343	0.03632
Ap1s1	1.495	0.00214	0.02797
Mad2l2	1.495	0.00041	0.01275
Lgmn	1.495	0.00085	0.01729
Rps9	1.495	0.00413	0.03987
Gch1	1.495	0.00273	0.03204
Nusap1	1.494	0.00073	0.01626
Ipo5	1.494	0.00131	0.02172
Pafah1b3	1.493	0.00066	0.01558
Vcl	1.493	0.00463	0.04251

Calu	1.492	0.00233	0.02923
Rps18	1.492	0.00080	0.01691
Rin1	1.492	0.00054	0.01412
Cmtm3	1.491	0.00058	0.01462
Cnn2	1.489	0.00195	0.02669
Snord96a	1.489	0.00465	0.04264
Stat1	1.488	0.00013	0.00866
Cald1	1.487	0.00074	0.01634
Dynll1	1.487	0.00260	0.03112
Rps8	1.486	0.00063	0.01521
Rps18	1.486	0.00028	0.01130
Cdc42ep4	1.486	0.00182	0.02582
Camk2n2	1.486	0.00025	0.01099
Rps27a	1.485	0.00195	0.02669
Prpf31	1.485	0.00379	0.03822
Mcl1	1.484	0.00106	0.01937
Trip13	1.484	0.00057	0.01446
Dock2	1.484	0.00352	0.03673
Bzw1	1.484	0.00232	0.02916
Eif4a1	1.483	0.00279	0.03242
Irf1	1.483	0.00062	0.01514
Ppan	1.483	0.00291	0.03302
Aars	1.482	0.00100	0.01889
Ddit4	1.482	0.00162	0.02410
Cdca8	1.481	0.00362	0.03723
Lrrc32	1.481	0.00409	0.03971
Cd69	1.481	0.00304	0.03384
Pxk	1.481	0.00164	0.02426
Atox1	1.480	0.00146	0.02270
Sdc1	1.480	0.00447	0.04158
Tirap	1.480	0.00171	0.02475
Wdr46	1.480	0.00176	0.02523
Chaf1a	1.479	0.00013	0.00851
S100a4	1.478	0.00028	0.01130
Psd4	1.478	0.00394	0.03902
Jak1	1.478	0.00117	0.02042
Pfn1	1.478	0.00065	0.01532
Rps27a	1.477	0.00194	0.02659
Gnb2l1	1.477	0.00040	0.01263
Clec4n	1.476	0.00419	0.04018
Banf1	1.476	0.00108	0.01955
Chsy1	1.475	0.00140	0.02228
Traf2	1.475	0.00270	0.03181
Mast2	1.474	0.00257	0.03092
Rps18	1.473	0.00049	0.01351

Rplp1	1.473	0.00147	0.02276
Gm885	1.472	0.00556	0.04705
Adora2b	1.472	0.00034	0.01197
Psmg4	1.472	0.00207	0.02757
Adamts9	1.472	0.00202	0.02734
Nme2	1.472	0.00343	0.03632
Sdc4	1.472	0.00094	0.01837
Rps9	1.471	0.00064	0.01523
Ostc	1.471	0.00443	0.04135
Fgf2	1.470	0.00382	0.03842
Hspbp1	1.470	0.00290	0.03293
Eif4a1	1.470	0.00227	0.02871
Apobec1	1.470	0.00242	0.02987
Cerkl	1.469	0.00048	0.01340
ligp1	1.468	0.00125	0.02120
Eid3	1.468	0.00280	0.03246
2610524H06Rik	1.468	0.00547	0.04658
B4galt1	1.468	0.00191	0.02646
Erc1	1.467	0.00442	0.04130
Hist2h2aa1	1.467	0.00021	0.01039
Rpl24	1.467	0.00542	0.04630
Rpl24	1.466	0.00539	0.04617
Ier3	1.465	0.00131	0.02172
Tlr1	1.465	0.00238	0.02962
Eef1g	1.465	0.00255	0.03079
Rcn3	1.464	0.00549	0.04668
Cd48	1.464	0.00318	0.03463
Gnai2	1.464	0.00048	0.01331
Serf1	1.464	0.00193	0.02655
Tra2a	1.463	0.00546	0.04649
Psma5	1.463	0.00531	0.04578
Ncf1	1.463	0.00016	0.00965
Rps27a	1.462	0.00293	0.03313
Snrpf	1.462	0.00085	0.01729
Bcl2a1c	1.462	0.00228	0.02887
Nup210	1.461	0.00097	0.01854
Blm	1.461	0.00233	0.02919
Rela	1.461	0.00220	0.02831
Gm5803	1.461	0.00343	0.03633
Arid5a	1.461	0.00067	0.01569
Impdh1	1.461	0.00148	0.02287
Arrb2	1.459	0.00042	0.01282
Jund	1.458	0.00373	0.03779
Jak3	1.458	0.00012	0.00818
Xbp1	1.457	0.00298	0.03351

Hist2h2aa1	1.457	0.00020	0.01002
Olr1	1.456	0.00436	0.04103
Rps27a	1.456	0.00227	0.02878
Card14	1.456	0.00211	0.02783
Zfp367	1.455	0.00138	0.02214
Prr11	1.454	0.00149	0.02295
Adcy7	1.453	0.00062	0.01517
Tmed9	1.452	0.00226	0.02868
Cyp4f18	1.452	0.00077	0.01662
Vwa5a	1.452	0.00331	0.03547
Ccdc88a	1.452	0.00201	0.02723
Incenp	1.451	0.00213	0.02795
Gm5150	1.451	0.00166	0.02440
Traf3	1.451	0.00427	0.04058
Fscn1	1.450	0.00068	0.01579
Rrad	1.450	0.00074	0.01627
Hmgn2	1.450	0.00014	0.00882
Bicc1	1.450	0.00030	0.01139
Ppp2r5c	1.449	0.00612	0.04993
3110082I17Rik	1.449	0.00115	0.02012
Ltbp2	1.449	0.00073	0.01626
Spred3	1.448	0.00229	0.02888
Erc1	1.448	0.00436	0.04099
Flnb	1.448	0.00159	0.02395
Taldo1	1.447	0.00583	0.04847
3200002M19Rik	1.447	0.00302	0.03381
P4ha2	1.447	0.00412	0.03984
Adamts9	1.447	0.00217	0.02813
Gpm6b	1.446	0.00211	0.02783
4930427A07Rik	1.446	0.00033	0.01181
Tfdp1	1.446	0.00127	0.02133
Atp8b2	1.445	0.00133	0.02185
C1qc	1.445	0.00612	0.04993
Ruvbl1	1.445	0.00099	0.01881
Epb4.2	1.444	0.00152	0.02320
Rpl36a	1.444	0.00062	0.01517
Nln	1.442	0.00473	0.04308
Ercc1	1.442	0.00273	0.03207
Arpc2	1.442	0.00093	0.01826
Lgals3bp	1.442	0.00051	0.01375
Kif26b	1.441	0.00077	0.01669
Npm1	1.441	0.00584	0.04856
Nlgn2	1.441	0.00239	0.02972
Snd1	1.441	0.00086	0.01738
Hnrnpab	1.440	0.00283	0.03264

Rpl12	1.439	0.00060	0.01487
Tor2a	1.439	0.00032	0.01167
Irgm2	1.439	0.00018	0.00985
Myo1g	1.439	0.00021	0.01025
Hist2h2ab	1.439	0.00021	0.01024
Pbk	1.438	0.00506	0.04471
Il5ra	1.438	0.00173	0.02499
Dpep2	1.438	0.00171	0.02475
Plscr3	1.437	0.00063	0.01521
Il1rl2	1.436	0.00378	0.03817
Heatr5a	1.436	0.00213	0.02790
Cobl	1.435	0.00085	0.01729
Sec61b	1.434	0.00071	0.01608
Acot9	1.434	0.00379	0.03822
H2afy2	1.433	0.00207	0.02757
Bmp6	1.433	0.00451	0.04174
Gpatch4	1.433	0.00494	0.04410
Tk1	1.432	0.00087	0.01750
Mapre1	1.431	0.00427	0.04058
Hmgn2	1.431	0.00022	0.01058
Cd244	1.430	0.00131	0.02172
Nolc1	1.430	0.00030	0.01139
Ckap2l	1.430	0.00131	0.02172
Ptma	1.430	0.00038	0.01243
Rrp1b	1.430	0.00478	0.04334
Doc2g	1.430	0.00030	0.01137
Snord14a	1.429	0.00258	0.03101
Parp9	1.429	0.00348	0.03655
2610528E23Rik	1.428	0.00319	0.03463
Snord95	1.428	0.00386	0.03861
Habp4	1.428	0.00108	0.01955
Lsp1	1.426	0.00072	0.01621
Stmn1	1.426	0.00310	0.03418
Hmgn2	1.426	0.00029	0.01137
Stmn1	1.425	0.00284	0.03265
Csf2rb2	1.425	0.00159	0.02395
Pira1	1.425	0.00028	0.01130
Gm6235	1.424	0.00104	0.01919
Ptprn	1.423	0.00016	0.00956
Rtp4	1.423	0.00039	0.01247
Hist2h2aa1	1.423	0.00045	0.01305
Rce1	1.423	0.00080	0.01691
Serpina1a	1.422	0.00049	0.01350
1700017B05Rik	1.422	0.00218	0.02818
Wdfy4	1.422	0.00041	0.01275



Rrbp1	1.421	0.00058	0.01463
Mx2	1.421	0.00572	0.04794
Snrpg	1.421	0.00096	0.01849
Wipf1	1.421	0.00220	0.02832
Ncapd2	1.421	0.00035	0.01203
Rpl36a	1.420	0.00088	0.01753
Zyx	1.420	0.00157	0.02368
Rgs16	1.420	0.00071	0.01608
Rpl36a	1.419	0.00073	0.01625
Ly86	1.419	0.00444	0.04140
Rpl13	1.419	0.00268	0.03169
Ptma	1.418	0.00044	0.01303
Pin4	1.418	0.00606	0.04966
Fkbp1a	1.417	0.00359	0.03711
Nuf2	1.416	0.00341	0.03623
Tle3	1.415	0.00161	0.02400
E2f7	1.415	0.00130	0.02168
Traf7	1.415	0.00574	0.04806
Llg1	1.414	0.00159	0.02391
Riok3	1.414	0.00403	0.03943
Rpl12	1.414	0.00047	0.01331
Anxa5	1.413	0.00585	0.04867
Rpl12	1.412	0.00047	0.01331
Nlrc5	1.412	0.00080	0.01696
Hmgn2	1.412	0.00033	0.01167
Col5a1	1.412	0.00229	0.02887
Ifitm3	1.412	0.00051	0.01375
Blvra	1.412	0.00140	0.02229
Gpr123	1.412	0.00183	0.02591
Rps4x	1.411	0.00268	0.03167
Runx3	1.411	0.00033	0.01167
Ngf	1.410	0.00139	0.02215
Net1	1.410	0.00042	0.01290
Nsfl1c	1.409	0.00051	0.01375
Cndp2	1.409	0.00077	0.01662
Armcx4	1.409	0.00044	0.01301
Bcl2l1	1.409	0.00193	0.02655
Rnf213	1.409	0.00215	0.02800
Rps4x	1.408	0.00151	0.02309
Kat2a	1.408	0.00223	0.02847
Psmc5	1.408	0.00248	0.03030
Sema6b	1.408	0.00026	0.01101
Sema6b	1.408	0.00026	0.01101
Psmc7	1.408	0.00248	0.03033
Vasp	1.407	0.00030	0.01139

Rpl12	1.407	0.00058	0.01455
Slc35b1	1.407	0.00119	0.02068
2310014H01Rik	1.406	0.00136	0.02193
Fam38a	1.406	0.00083	0.01723
Reep4	1.406	0.00526	0.04559
Arhgap30	1.405	0.00039	0.01247
Slco3a1	1.405	0.00145	0.02258
Cenpe	1.405	0.00201	0.02723
Slc7a3	1.405	0.00366	0.03744
Adam19	1.405	0.00057	0.01446
Cyb5r3	1.405	0.00037	0.01224
Sec61g	1.404	0.00346	0.03649
Mrps18b	1.404	0.00534	0.04589
Nsl1	1.403	0.00443	0.04136
Rpl12	1.403	0.00055	0.01417
Rpl12	1.403	0.00046	0.01318
Emr4	1.402	0.00143	0.02246
AF251705	1.402	0.00043	0.01292
Rhobtb3	1.402	0.00309	0.03408
Cdc45	1.401	0.00307	0.03397
Spata5l1	1.401	0.00058	0.01459
Hist2h2aa1	1.401	0.00057	0.01446
Sec61g	1.401	0.00607	0.04967
Gm7059	1.400	0.00087	0.01748
Steap2	1.400	0.00446	0.04149
Snrpg	1.400	0.00272	0.03198
Rps4x	1.399	0.00135	0.02190
Ptma	1.399	0.00062	0.01517
Dck	1.399	0.00305	0.03389
Rps7	1.399	0.00353	0.03681
Siglece	1.399	0.00222	0.02838
Thoc6	1.398	0.00482	0.04352
Defb36	1.398	0.00047	0.01330
Gcnt2	1.398	0.00497	0.04425
Med19	1.398	0.00295	0.03332
Rpl12	1.398	0.00054	0.01412
Htr3a	1.398	0.00222	0.02838
Eef1b2	1.398	0.00054	0.01413
Dyrk3	1.397	0.00087	0.01748
4930422G04Rik	1.397	0.00100	0.01885
Clec4a1	1.397	0.00201	0.02723
Padi2	1.397	0.00221	0.02832
Hnrnpf	1.397	0.00320	0.03469
Tbrg1	1.396	0.00054	0.01408
Racgap1	1.396	0.00391	0.03889

Acsbg1	1.396	0.00218	0.02818
Maged2	1.396	0.00172	0.02486
Birc5	1.395	0.00267	0.03163
Hnrnpf	1.395	0.00275	0.03222
Tfpi2	1.395	0.00147	0.02272
Pklr	1.395	0.00099	0.01881
Spc24	1.395	0.00327	0.03525
4930422G04Rik	1.394	0.00060	0.01491
Sorbs1	1.394	0.00032	0.01156
Fermt3	1.393	0.00374	0.03788
Serpina3h	1.392	0.00604	0.04956
1810055G02Rik	1.391	0.00138	0.02214
Ptpn22	1.391	0.00375	0.03793
Ssr2	1.391	0.00192	0.02650
Gm5622	1.390	0.00337	0.03593
Clptm1l	1.390	0.00420	0.04025
Rpl13	1.390	0.00296	0.03338
Gpr84	1.390	0.00024	0.01074
A1504432	1.389	0.00257	0.03092
Rps28	1.389	0.00172	0.02483
Dusp3	1.389	0.00258	0.03098
Btbd12	1.389	0.00168	0.02452
Ccdc86	1.389	0.00431	0.04081
0610040J01Rik	1.388	0.00068	0.01579
Nfu1	1.387	0.00150	0.02307
Rpl13	1.387	0.00255	0.03079
Tspo	1.386	0.00213	0.02795
Pdcd6ip	1.385	0.00195	0.02669
Alg3	1.385	0.00447	0.04158
Eif3b	1.385	0.00433	0.04084
Cnih4	1.385	0.00302	0.03374
Rpl13	1.385	0.00154	0.02337
Erap1	1.384	0.00610	0.04984
Rplp1	1.384	0.00069	0.01583
Phldb1	1.384	0.00247	0.03026
Sec61g	1.383	0.00477	0.04327
Gtse1	1.383	0.00048	0.01332
Cdh18	1.382	0.00250	0.03039
Egfr	1.382	0.00262	0.03119
Rps4x	1.382	0.00236	0.02947
S1pr2	1.382	0.00562	0.04741
6330512M04Rik	1.381	0.00057	0.01446
Gpbar1	1.381	0.00471	0.04298
Sh3d19	1.380	0.00402	0.03937
Rpl38	1.380	0.00606	0.04966

Ap2m1	1.380	0.00298	0.03348
Calm1	1.380	0.00083	0.01723
Adck4	1.380	0.00097	0.01860
Acly	1.379	0.00392	0.03891
Aen	1.378	0.00146	0.02271
Hnrnpf	1.377	0.00226	0.02868
Dcakd	1.377	0.00056	0.01443
Tmigd1	1.376	0.00146	0.02271
Il2ra	1.376	0.00261	0.03119
Rpl15	1.376	0.00344	0.03638
Mmp19	1.376	0.00099	0.01881
Rpl15	1.374	0.00322	0.03489
Arl4c	1.374	0.00136	0.02192
Gm11275	1.374	0.00206	0.02755
Sec61a1	1.373	0.00115	0.02013
Lhfp	1.373	0.00410	0.03978
Dnajc8	1.373	0.00238	0.02965
Lpcat4	1.372	0.00163	0.02416
Nhp211	1.372	0.00218	0.02818
Fancd2	1.372	0.00206	0.02755
Eif5a	1.372	0.00288	0.03287
Stat2	1.371	0.00208	0.02760
Wwtr1	1.371	0.00490	0.04398
Nup210l	1.371	0.00541	0.04623
Ndrp1	1.371	0.00091	0.01795
BC094916	1.371	0.00143	0.02245
Ap2b1	1.370	0.00311	0.03419
Rpl15	1.370	0.00356	0.03695
Fanci	1.370	0.00122	0.02096
Fem1b	1.370	0.00522	0.04545
Ihh	1.370	0.00125	0.02128
Mogs	1.369	0.00160	0.02396
Rps4x	1.369	0.00226	0.02868
Atp10a	1.369	0.00139	0.02215
Rpl13	1.368	0.00209	0.02769
B230307C23Rik	1.367	0.00568	0.04773
Kif15	1.367	0.00495	0.04417
Chmp4b	1.366	0.00502	0.04448
Rpl15	1.366	0.00348	0.03653
Rpl15	1.366	0.00337	0.03590
Rps28	1.365	0.00347	0.03652
Gpr56	1.365	0.00117	0.02039
Rps19	1.365	0.00147	0.02276
Ccl6	1.364	0.00194	0.02661
Rpl5	1.364	0.00281	0.03252

2310016E02Rik	1.363	0.00285	0.03274
Slc39a7	1.363	0.00186	0.02603
Rpl13a	1.362	0.00120	0.02072
Nlrc5	1.362	0.00614	0.04997
Myl6	1.362	0.00143	0.02245
Inpp5d	1.361	0.00240	0.02975
Rpl5	1.361	0.00489	0.04390
Gpr31c	1.361	0.00509	0.04484
AB124611	1.361	0.00363	0.03727
Gm22	1.361	0.00097	0.01855
Rpl13	1.360	0.00212	0.02783
Pabpc1	1.360	0.00385	0.03852
Rpl13a	1.360	0.00362	0.03723
3110062M04Rik	1.360	0.00086	0.01743
S100a16	1.360	0.00194	0.02661
Pusl1	1.360	0.00253	0.03069
Pik3cg	1.360	0.00490	0.04397
Nutf2	1.360	0.00526	0.04559
Nutf2	1.360	0.00526	0.04559
Nfkbid	1.360	0.00144	0.02255
Haus7	1.360	0.00246	0.03021
Plcb2	1.360	0.00167	0.02444
Rpl37a	1.359	0.00348	0.03655
Rpl11	1.359	0.00129	0.02160
Erc1	1.359	0.00433	0.04084
Rpl38	1.359	0.00554	0.04694
Rnps1	1.359	0.00191	0.02637
Serpina3f	1.358	0.00205	0.02751
Rpl5	1.358	0.00438	0.04114
8430410A17Rik	1.358	0.00473	0.04308
Slc30a7	1.358	0.00410	0.03977
Rpl37a	1.358	0.00399	0.03922
Aaas	1.358	0.00420	0.04025
Tpd52	1.358	0.00311	0.03419
Fes	1.358	0.00122	0.02096
Rbmxrt	1.357	0.00360	0.03711
Adamts9	1.357	0.00223	0.02846
Ltbr	1.356	0.00521	0.04543
Gm9028	1.356	0.00433	0.04084
Il17rc	1.356	0.00530	0.04578
Nlrc5	1.356	0.00304	0.03388
Tifab	1.356	0.00442	0.04130
Rps16	1.356	0.00355	0.03687
Myl6	1.355	0.00135	0.02190
Limd1	1.355	0.00531	0.04578

Dusp22	1.355	0.00128	0.02149
Pomp	1.355	0.00326	0.03514
2610034B18Rik	1.355	0.00395	0.03903
Rps20	1.355	0.00269	0.03178
Srprb	1.354	0.00527	0.04562
Rps7	1.354	0.00425	0.04050
Smarca4	1.354	0.00228	0.02883
Rps28	1.354	0.00289	0.03293
Prdm4	1.354	0.00261	0.03115
Snora41	1.353	0.00352	0.03671
Rpl13	1.352	0.00305	0.03389
Rps23	1.352	0.00127	0.02136
Rpl7	1.352	0.00166	0.02434
Ssr4	1.351	0.00420	0.04025
Sirpa	1.351	0.00244	0.03001
Rps14	1.351	0.00501	0.04446
Pira11	1.350	0.00149	0.02295
Plin3	1.350	0.00354	0.03682
Sprr1b	1.350	0.00258	0.03103
Rps23	1.349	0.00120	0.02072
Cntn2	1.349	0.00326	0.03514
Nlrp3	1.349	0.00374	0.03785
Pold2	1.349	0.00190	0.02633
Rpl15	1.349	0.00406	0.03953
Enc1	1.348	0.00308	0.03406
Itih1	1.348	0.00169	0.02457
Gm9132	1.348	0.00267	0.03166
Rps16	1.347	0.00316	0.03455
Nsfl1c	1.347	0.00604	0.04956
Loxl3	1.347	0.00247	0.03026
Ralb	1.347	0.00384	0.03852
Rps23	1.347	0.00127	0.02133
Ripk3	1.347	0.00147	0.02277
E2f4	1.347	0.00402	0.03936
1500001M20Rik	1.347	0.00204	0.02744
Ifngr1	1.346	0.00477	0.04327
Rps23	1.346	0.00149	0.02295
Tubg1	1.346	0.00492	0.04404
Rps28	1.345	0.00415	0.03997
Hsp90ab1	1.345	0.00523	0.04546
Rnf213	1.345	0.00348	0.03655
Rpl15	1.345	0.00573	0.04801
Tapbpl	1.344	0.00552	0.04677
Mgat4b	1.343	0.00372	0.03775
Nutf2	1.343	0.00565	0.04756

Myl6	1.342	0.00151	0.02311
Rps16	1.342	0.00371	0.03775
Cdc7	1.342	0.00355	0.03687
Nhp211	1.341	0.00444	0.04139
Tcfe3	1.341	0.00288	0.03287
Gm6266	1.341	0.00252	0.03060
Zfp385a	1.341	0.00282	0.03260
Myl6	1.341	0.00189	0.02631
Tbcb	1.341	0.00423	0.04036
Rpl5	1.340	0.00468	0.04279
Rpl35	1.340	0.00214	0.02797
Myl6	1.340	0.00150	0.02306
Tmem176a	1.339	0.00062	0.01511
Nme2	1.339	0.00304	0.03384
Ttk	1.339	0.00254	0.03069
Kctd11	1.339	0.00535	0.04593
Rpl37a	1.339	0.00517	0.04521
Rpl37a	1.338	0.00485	0.04372
Psmc4	1.338	0.00250	0.03042
Zc3hav1l	1.338	0.00423	0.04036
Serbp1	1.337	0.00564	0.04749
Rpl35	1.337	0.00218	0.02818
Mtap1a	1.337	0.00130	0.02164
Rpl7	1.336	0.00426	0.04055
Gm6625	1.336	0.00071	0.01608
Dse	1.335	0.00074	0.01630
Glt25d1	1.335	0.00160	0.02396
Rdh12	1.335	0.00571	0.04788
Fam19a5	1.334	0.00215	0.02802
Slbp	1.334	0.00548	0.04663
Adamts9	1.334	0.00099	0.01881
Tmem214	1.333	0.00160	0.02396
Rpl13	1.332	0.00347	0.03652
Rps19	1.332	0.00497	0.04425
Bat1a	1.332	0.00261	0.03119
Rpl17	1.332	0.00590	0.04880
Cpsf4	1.332	0.00230	0.02900
Myl6	1.332	0.00124	0.02119
Rpl35	1.331	0.00233	0.02923
Rpl7	1.331	0.00459	0.04228
Plekhm1	1.330	0.00215	0.02800
Iqgap1	1.330	0.00366	0.03745
Akap2	1.330	0.00563	0.04746
Rpl10a	1.329	0.00197	0.02685
Rpl17	1.329	0.00474	0.04312

Rps23	1.329	0.00137	0.02204
B3gnt9	1.328	0.00195	0.02669
Rhod	1.328	0.00315	0.03449
Rpl11	1.328	0.00194	0.02661
Kif26b	1.328	0.00208	0.02763
Nono	1.327	0.00312	0.03432
Ms4a8a	1.327	0.00205	0.02751
Actg1	1.327	0.00465	0.04264
Mapk1ip1l	1.326	0.00318	0.03463
Smarcb1	1.326	0.00567	0.04768
Samd4b	1.325	0.00277	0.03234
Apbb1ip	1.325	0.00157	0.02369
Arhgdia	1.325	0.00216	0.02802
Eftud2	1.325	0.00515	0.04514
Rpl23a	1.325	0.00211	0.02783
Lat2	1.325	0.00284	0.03265
Rpl7	1.325	0.00455	0.04209
Creld2	1.325	0.00451	0.04178
Zswim4	1.324	0.00059	0.01479
Hdac7	1.324	0.00120	0.02073
Tk1	1.324	0.00252	0.03061
Rps7	1.324	0.00589	0.04880
Rps19	1.323	0.00313	0.03435
Rps19	1.323	0.00313	0.03435
Rplp1	1.323	0.00084	0.01729
Anxa6	1.320	0.00219	0.02827
Psm8	1.320	0.00445	0.04148
Actg1	1.320	0.00457	0.04216
Taf10	1.319	0.00180	0.02557
Zmynd17	1.319	0.00347	0.03652
Rpl15	1.319	0.00421	0.04025
Slc30a1	1.319	0.00574	0.04802
Lasp1	1.319	0.00509	0.04483
Myo9b	1.319	0.00277	0.03229
Rpl4	1.319	0.00364	0.03728
Lrrc25	1.318	0.00281	0.03251
9330175E14Rik	1.318	0.00433	0.04084
Mageb3	1.318	0.00323	0.03493
Skp2	1.317	0.00499	0.04437
Tapbp	1.317	0.00087	0.01750
Ddost	1.317	0.00252	0.03060
Polr3d	1.317	0.00614	0.05000
Mtap7d1	1.317	0.00214	0.02797
Sf3b4	1.316	0.00133	0.02185
Uxs1	1.316	0.00186	0.02603



Csk	1.316	0.00392	0.03889
Rpl10a	1.315	0.00189	0.02628
B4galt2	1.315	0.00277	0.03228
Casp8	1.315	0.00497	0.04425
Gm4157	1.314	0.00169	0.02456
Apoc2	1.314	0.00271	0.03189
Rps2	1.314	0.00135	0.02190
Dnajc5	1.314	0.00570	0.04779
Hmha1	1.313	0.00107	0.01944
Orc1l	1.313	0.00595	0.04908
2210411K11Rik	1.312	0.00270	0.03184
Ccdc21	1.312	0.00165	0.02426
Bcl7c	1.312	0.00435	0.04097
Hspb6	1.312	0.00112	0.01992
Psmc2	1.311	0.00443	0.04138
Gm4157	1.311	0.00173	0.02498
Birc2	1.310	0.00603	0.04952
Rrp9	1.310	0.00512	0.04493
Shq1	1.309	0.00482	0.04352
Agfg1	1.308	0.00333	0.03555
Dtymk	1.308	0.00248	0.03030
Rpl23a	1.308	0.00338	0.03596
Srrt	1.308	0.00358	0.03709
Wdr77	1.308	0.00560	0.04725
Hip1r	1.307	0.00466	0.04269
Ccdc124	1.307	0.00486	0.04375
Slc41a1	1.306	0.00352	0.03671
Sh2b2	1.306	0.00305	0.03390
Nlrc5	1.306	0.00545	0.04649
Muc13	1.306	0.00577	0.04826
Rpl10a	1.305	0.00290	0.03293
Psmc4	1.305	0.00349	0.03659
H13	1.304	0.00418	0.04010
Ppp1r9b	1.304	0.00410	0.03979
Samsn1	1.304	0.00481	0.04348
Tmem176b	1.304	0.00085	0.01732
Wdr62	1.303	0.00250	0.03039
Dna2	1.302	0.00608	0.04972
Ell2	1.302	0.00343	0.03635
Krtcap2	1.302	0.00229	0.02887
Rad9	1.302	0.00271	0.03189
Cttnbp2nl	1.302	0.00591	0.04883
Nin	1.302	0.00454	0.04198
Rpl23a	1.302	0.00508	0.04478
Manf	1.301	0.00194	0.02661

Rps23	1.301	0.00531	0.04579
Midn	1.301	0.00206	0.02755
Aprt	1.301	0.00342	0.03630
Rpl23a	1.301	0.00420	0.04025
Cerk	1.300	0.00276	0.03224
Hdac6	1.300	0.00392	0.03889
Cdk20	1.300	0.00392	0.03891
Lfn4	1.300	0.00174	0.02502
Mamstr	1.300	0.00213	0.02790
Capns1	1.300	0.00602	0.04948
Mtap4	1.299	0.00484	0.04365
Rnps1	1.299	0.00528	0.04569
Dnm3os	1.298	0.00477	0.04327
Pvrl2	1.298	0.00550	0.04668
Plekhh1	1.298	0.00319	0.03463
Mybpc2	1.297	0.00554	0.04692
Hnrnpf	1.297	0.00579	0.04831
Sh3gl1	1.297	0.00507	0.04474
Trim6	1.296	0.00394	0.03900
Rpl23a	1.296	0.00406	0.03953
Rpl6	1.296	0.00331	0.03545
Gdf3	1.296	0.00318	0.03463
Rplp2	1.296	0.00421	0.04026
Rpl11	1.295	0.00351	0.03671
Ap1m1	1.295	0.00490	0.04398
Slc7a2	1.295	0.00187	0.02610
Rpl23a	1.295	0.00267	0.03166
Rpl23a	1.295	0.00267	0.03166
Rpl23a	1.294	0.00411	0.03984
A4galt	1.294	0.00412	0.03984
B830017H08Rik	1.294	0.00403	0.03943
3200002M19Rik	1.294	0.00361	0.03720
Rpl17	1.293	0.00451	0.04174
Cercam	1.293	0.00411	0.03979
Rpl17	1.293	0.00401	0.03936
Hsd3b7	1.293	0.00446	0.04151
Ddx58	1.293	0.00551	0.04675
Rpl17	1.292	0.00362	0.03723
Actg1	1.292	0.00407	0.03957
Rara	1.292	0.00218	0.02818
Rpl17	1.292	0.00412	0.03984
Calm2	1.291	0.00515	0.04515
Adamtsl4	1.291	0.00134	0.02190
Dusp5	1.291	0.00407	0.03961
Masp1	1.290	0.00339	0.03608

Ddx49	1.289	0.00388	0.03868
Gm6533	1.289	0.00332	0.03550
Ncf4	1.289	0.00606	0.04966
Sf3a2	1.289	0.00345	0.03641
Lcat	1.289	0.00535	0.04594
Rpl6	1.289	0.00543	0.04639
Rpl10a	1.288	0.00399	0.03923
Rpl17	1.288	0.00421	0.04026
Dullard	1.288	0.00322	0.03489
Rpl17	1.288	0.00491	0.04399
Cic	1.287	0.00284	0.03265
Clec4d	1.287	0.00440	0.04121
Rpl23a	1.286	0.00473	0.04309
Gm1966	1.286	0.00264	0.03134
Gm9908	1.286	0.00332	0.03550
Csf2ra	1.286	0.00141	0.02238
Rps5	1.286	0.00384	0.03848
AW555464	1.286	0.00577	0.04824
Mdc1	1.286	0.00238	0.02962
Rpl11	1.286	0.00383	0.03847
B3galnt2	1.286	0.00483	0.04355
Isg15	1.286	0.00533	0.04589
Ikzf1	1.285	0.00575	0.04813
Rpl17	1.285	0.00359	0.03711
Rps2	1.284	0.00276	0.03227
Rpl11	1.284	0.00262	0.03125
Gpr183	1.284	0.00470	0.04289
Ifi2711	1.284	0.00221	0.02836
Mmp27	1.284	0.00433	0.04084
Rpl17	1.283	0.00400	0.03926
Mical1	1.283	0.00187	0.02618
Akna	1.283	0.00564	0.04749
Gm14005	1.283	0.00516	0.04515
2810025M15Rik	1.282	0.00221	0.02835
Rpl17	1.281	0.00439	0.04114
Ruvbl2	1.281	0.00485	0.04372
Hnrpd1	1.280	0.00375	0.03793
Zc3h11a	1.279	0.00536	0.04600
Rpl23a	1.279	0.00391	0.03889
Rpl23a	1.279	0.00391	0.03889
Cyp2c66	1.279	0.00480	0.04338
Gm13238	1.279	0.00531	0.04578
Mbd3	1.278	0.00291	0.03302
Sprr2i	1.278	0.00290	0.03293
Rpl17	1.278	0.00450	0.04174

Rpl11	1.277	0.00417	0.04009
Triobp	1.276	0.00182	0.02584
Ssr1	1.276	0.00399	0.03924
1700003E16Rik	1.276	0.00485	0.04372
Sell	1.276	0.00249	0.03038
Scn1b	1.275	0.00297	0.03342
Basp1	1.274	0.00439	0.04114
Necap2	1.274	0.00240	0.02973
Hs1bp3	1.274	0.00476	0.04327
Clic4	1.273	0.00287	0.03285
Cenpf	1.272	0.00326	0.03514
Shcbp1	1.271	0.00388	0.03870
Prkcb	1.271	0.00368	0.03753
Csf2rb	1.270	0.00303	0.03382
Emd	1.269	0.00507	0.04474
Rbmxrt	1.269	0.00499	0.04437
Fam46d	1.269	0.00604	0.04957
Rplp0	1.267	0.00550	0.04668
Bin2	1.267	0.00367	0.03753
Nacc1	1.266	0.00541	0.04623
Atxn2l	1.265	0.00532	0.04580
Sipa1	1.265	0.00255	0.03081
Rpl23a	1.265	0.00305	0.03389
Rpl17	1.265	0.00500	0.04439
Rps2	1.265	0.00426	0.04057
Rac3	1.264	0.00415	0.04000
Rps2	1.264	0.00397	0.03915
Sec61b	1.264	0.00185	0.02602
Pycr2	1.264	0.00204	0.02744
Pkmyt1	1.263	0.00359	0.03711
Chtf18	1.262	0.00456	0.04213
Ppie	1.262	0.00421	0.04025
Tram2	1.262	0.00308	0.03406
Lrrc16a	1.262	0.00535	0.04594
Mad11l	1.261	0.00524	0.04550
Ncdn	1.261	0.00558	0.04717
Tcof1	1.261	0.00430	0.04075
Meis3	1.260	0.00579	0.04832
Tacc3	1.260	0.00447	0.04158
Cytsb	1.259	0.00605	0.04959
Rps2	1.259	0.00404	0.03945
Rcan3	1.258	0.00376	0.03803
Gm13238	1.258	0.00498	0.04432
Adar	1.257	0.00415	0.03997
Dnajb13	1.256	0.00568	0.04773

Rps2	1.256	0.00397	0.03915
Mcm10	1.256	0.00433	0.04084
Gm5805	1.255	0.00591	0.04888
Runx2	1.254	0.00511	0.04484
Mbd2	1.253	0.00467	0.04272
Foxp4	1.253	0.00303	0.03381
Sec61b	1.252	0.00337	0.03590
Rbbp6	1.251	0.00539	0.04620
Rps2	1.251	0.00417	0.04009
Aurka	1.251	0.00604	0.04959
Ints1	1.251	0.00375	0.03793
Actb	1.251	0.00430	0.04070
Dld	0.750	0.00537	0.04609
Top3b	0.749	0.00067	0.01571
Myo6	0.749	0.00211	0.02783
Lrrc8b	0.749	0.00164	0.02424
Vldlr	0.749	0.00189	0.02633
Ncoa4	0.748	0.00079	0.01687
Agpat3	0.748	0.00125	0.02120
Stard4	0.748	0.00259	0.03108
Cyc1	0.748	0.00096	0.01849
Cbx4	0.748	0.00289	0.03293
Gm6123	0.747	0.00523	0.04548
E230008N13Rik	0.747	0.00604	0.04956
Rapgef5	0.747	0.00416	0.04005
Aes	0.747	0.00312	0.03429
Atp5f1	0.746	0.00116	0.02032
Zfp759	0.746	0.00613	0.04993
Gm8615	0.746	0.00240	0.02973
Ndufb11	0.746	0.00134	0.02190
Wdr45	0.746	0.00143	0.02245
Rbpms2	0.746	0.00359	0.03711
Card6	0.745	0.00102	0.01899
Plcb1	0.745	0.00496	0.04423
Rbl2	0.745	0.00114	0.02003
Epb4.1	0.745	0.00429	0.04070
Pdcd4	0.745	0.00393	0.03893
Lypd6	0.744	0.00109	0.01963
Cox7a2	0.744	0.00293	0.03318
Ankrd13c	0.744	0.00064	0.01523
Exoc3l2	0.744	0.00134	0.02190
Gca	0.744	0.00212	0.02783
Fras1	0.744	0.00588	0.04879
Ifi44	0.744	0.00540	0.04620
Kcnk2	0.744	0.00570	0.04779

Zfp422-rs1	0.744	0.00278	0.03241
H2-T23	0.744	0.00492	0.04402
Zkscan17	0.744	0.00181	0.02568
Sdhd	0.743	0.00136	0.02193
Lipa	0.743	0.00286	0.03279
Tmem59	0.743	0.00055	0.01433
Dnajc19	0.743	0.00523	0.04548
Slc25a17	0.743	0.00462	0.04247
Ndufab1	0.743	0.00231	0.02903
Nckap5	0.743	0.00054	0.01413
Ctdspl	0.743	0.00609	0.04980
Myh14	0.742	0.00465	0.04264
Pdgfra	0.742	0.00088	0.01757
Pptc7	0.742	0.00202	0.02724
Tle4	0.742	0.00363	0.03727
Uqcr11	0.742	0.00304	0.03384
Rnf5	0.742	0.00106	0.01938
Fgfr2	0.741	0.00590	0.04880
Ncoa4	0.741	0.00073	0.01624
B230317F23Rik	0.741	0.00193	0.02655
Gab1	0.741	0.00166	0.02440
Rufy3	0.741	0.00106	0.01933
Gm4759	0.741	0.00263	0.03129
Piga	0.741	0.00068	0.01579
Bbs2	0.740	0.00295	0.03333
Eps8l2	0.740	0.00113	0.01995
Prss12	0.739	0.00260	0.03109
Prps2	0.739	0.00204	0.02744
Cryz	0.739	0.00266	0.03161
D630039A03Rik	0.738	0.00156	0.02358
Phyh	0.738	0.00262	0.03119
1810013D10Rik	0.738	0.00077	0.01662
Frmpd3	0.737	0.00301	0.03371
Peci	0.737	0.00193	0.02655
N4bp2l1	0.737	0.00054	0.01408
Ston1	0.736	0.00436	0.04099
Eaf2	0.736	0.00081	0.01706
Fuz	0.736	0.00278	0.03235
Ermp1	0.736	0.00449	0.04166
Aktip	0.735	0.00048	0.01338
Ston2	0.735	0.00264	0.03138
Tbcel	0.735	0.00141	0.02233
Rab25	0.734	0.00415	0.03997
Tspan18	0.734	0.00063	0.01519
Nus1	0.733	0.00362	0.03723

Ndufb11	0.733	0.00048	0.01340
Mtx3	0.733	0.00048	0.01340
Ano4	0.733	0.00287	0.03285
Pank1	0.732	0.00432	0.04082
Slc17a5	0.732	0.00137	0.02207
Sod1	0.731	0.00322	0.03489
Car7	0.731	0.00393	0.03897
Nipal3	0.731	0.00056	0.01434
Kbtbd7	0.731	0.00062	0.01517
4932425I24Rik	0.730	0.00268	0.03169
Osbpl2	0.730	0.00136	0.02193
Xpnpep1	0.730	0.00176	0.02526
Stradb	0.730	0.00039	0.01247
C2cd2l	0.730	0.00349	0.03660
Acyp1	0.730	0.00081	0.01703
Tob1	0.730	0.00345	0.03641
Zfp398	0.730	0.00105	0.01921
Morn2	0.730	0.00504	0.04462
Serpina1f	0.730	0.00461	0.04243
1110058L19Rik	0.730	0.00063	0.01521
Emcn	0.729	0.00109	0.01956
Prdm16	0.729	0.00050	0.01365
Gm8970	0.729	0.00179	0.02552
Mosc2	0.729	0.00332	0.03551
Mfsd1	0.729	0.00096	0.01853
Slc47a1	0.728	0.00526	0.04562
Lpgat1	0.728	0.00189	0.02628
4930402E16Rik	0.728	0.00143	0.02245
Smad6	0.728	0.00129	0.02160
Syde2	0.728	0.00109	0.01962
Phkb	0.728	0.00071	0.01608
Appl2	0.727	0.00146	0.02271
Ddx26b	0.727	0.00206	0.02757
Plxdc2	0.727	0.00331	0.03545
Pnkd	0.727	0.00184	0.02597
Fbxo32	0.727	0.00279	0.03245
Timp2	0.727	0.00344	0.03638
Nfs1	0.727	0.00039	0.01249
Hoxa5	0.727	0.00288	0.03290
Pex7	0.727	0.00047	0.01328
Map4k2	0.727	0.00113	0.01995
Etfa	0.726	0.00292	0.03309
Igfbp2	0.726	0.00373	0.03779
Itpkb	0.726	0.00100	0.01889
D2hgdh	0.726	0.00606	0.04966

Ckb	0.726	0.00258	0.03104
Trpc3	0.726	0.00148	0.02287
2610204G22Rik	0.725	0.00129	0.02155
Gzf1	0.725	0.00031	0.01141
Tmem97	0.725	0.00065	0.01532
Nxt2	0.725	0.00107	0.01939
Wbp1	0.725	0.00226	0.02867
Clcn3	0.725	0.00035	0.01200
Fam63b	0.725	0.00135	0.02190
Uros	0.725	0.00027	0.01104
Unkl	0.725	0.00084	0.01723
Etfdh	0.724	0.00221	0.02832
Als2cr12	0.724	0.00215	0.02798
2810432L12Rik	0.724	0.00104	0.01911
BC025920	0.724	0.00523	0.04548
Phf7	0.724	0.00039	0.01247
Itgb8	0.723	0.00396	0.03915
BC034090	0.723	0.00324	0.03498
Timp3	0.723	0.00165	0.02426
Vps13a	0.723	0.00045	0.01315
Tcn2	0.723	0.00099	0.01876
Klhl7	0.723	0.00128	0.02145
Itm2b	0.723	0.00055	0.01417
Foxred1	0.723	0.00029	0.01132
Pde8a	0.723	0.00134	0.02190
Slc35f2	0.723	0.00126	0.02131
Mir10a	0.723	0.00242	0.02987
Mmaa	0.722	0.00239	0.02969
Glt28d2	0.722	0.00146	0.02271
Mcee	0.722	0.00145	0.02255
Cacnb2	0.722	0.00586	0.04869
Pex16	0.721	0.00078	0.01669
Fnip2	0.721	0.00200	0.02715
Cdadc1	0.721	0.00039	0.01247
Rab3a	0.721	0.00163	0.02416
Eps8l3	0.720	0.00540	0.04620
Sap18	0.720	0.00535	0.04594
Armc2	0.720	0.00115	0.02012
Kcna1	0.720	0.00315	0.03447
Ndufa9	0.719	0.00050	0.01363
Slc35a3	0.719	0.00168	0.02444
Lfng	0.719	0.00214	0.02797
Prex2	0.719	0.00065	0.01535
6430573F11Rik	0.719	0.00045	0.01315
Guca2b	0.719	0.00334	0.03568



Trim23	0.719	0.00220	0.02831
1700001L05Rik	0.719	0.00261	0.03115
Pigp	0.719	0.00046	0.01316
Dclk3	0.719	0.00113	0.02002
Scp2	0.719	0.00592	0.04894
Lynx1	0.719	0.00179	0.02552
Slc33a1	0.718	0.00073	0.01624
Jph1	0.718	0.00269	0.03170
Txnip	0.718	0.00154	0.02342
Mrps21	0.718	0.00545	0.04649
Vmn1r37	0.718	0.00417	0.04007
Cgref1	0.718	0.00479	0.04334
Xkrx	0.718	0.00491	0.04399
Pttg1	0.718	0.00188	0.02618
Glb1	0.718	0.00284	0.03265
5730407I07Rik	0.717	0.00540	0.04620
Hbxip	0.717	0.00209	0.02769
Smpd1	0.717	0.00049	0.01344
Ccng2	0.717	0.00186	0.02603
Epha4	0.717	0.00231	0.02907
Ropn1l	0.716	0.00504	0.04461
Bace2	0.716	0.00261	0.03119
Lonp2	0.716	0.00102	0.01902
Sdhb	0.716	0.00180	0.02559
Fxyd3	0.715	0.00235	0.02941
Degs2	0.715	0.00056	0.01434
Coq10a	0.715	0.00055	0.01419
Me1	0.715	0.00035	0.01204
Gchfr	0.715	0.00478	0.04334
Akap8l	0.715	0.00396	0.03914
Ppfibp2	0.715	0.00066	0.01558
Tmem70	0.715	0.00035	0.01202
Atp5e	0.714	0.00036	0.01208
1700029G01Rik	0.714	0.00169	0.02456
Tmprss2	0.714	0.00234	0.02930
AA474408	0.714	0.00215	0.02798
Tmem189	0.714	0.00214	0.02797
Scrn1	0.714	0.00257	0.03092
Etfb	0.713	0.00397	0.03915
Iscu	0.713	0.00064	0.01531
Nudt7	0.713	0.00104	0.01911
Zfp830	0.713	0.00077	0.01662
Gbas	0.713	0.00046	0.01316
D9Ertd402e	0.713	0.00228	0.02887
Nudt4	0.713	0.00131	0.02172

Grb7	0.712	0.00313	0.03435
AU023871	0.712	0.00299	0.03353
Arhgap10	0.712	0.00026	0.01101
Gm7560	0.712	0.00147	0.02277
2010011I20Rik	0.711	0.00096	0.01854
Col4a4	0.711	0.00248	0.03034
St3gal6	0.711	0.00042	0.01282
Dhfr	0.711	0.00126	0.02131
Slc22a1	0.711	0.00246	0.03022
Letm2	0.711	0.00093	0.01827
Exph5	0.711	0.00030	0.01139
Dapl1	0.710	0.00070	0.01603
1190002N15Rik	0.710	0.00126	0.02131
Enpp5	0.710	0.00107	0.01939
Ndufs5	0.710	0.00053	0.01398
Cdk18	0.710	0.00136	0.02197
Pts	0.710	0.00171	0.02478
Hist2h2be	0.710	0.00205	0.02754
Abca2	0.709	0.00074	0.01633
Ndufs3	0.709	0.00073	0.01624
Lamc3	0.709	0.00470	0.04289
Bmp4	0.709	0.00598	0.04930
Pdzd3	0.709	0.00307	0.03397
1110031I02Rik	0.708	0.00044	0.01301
Gm10752	0.708	0.00151	0.02308
Aqp7	0.708	0.00100	0.01884
Tmem143	0.708	0.00133	0.02182
Gylt1b	0.708	0.00429	0.04070
Slc25a23	0.707	0.00242	0.02984
Zfp39	0.707	0.00088	0.01757
Gm2a	0.707	0.00197	0.02686
Copz2	0.707	0.00256	0.03089
Fhl1	0.707	0.00413	0.03987
Slc25a19	0.706	0.00044	0.01301
Cd46	0.706	0.00190	0.02636
Osbp16	0.706	0.00439	0.04114
Pccb	0.706	0.00071	0.01608
Epb4.1I4b	0.706	0.00220	0.02831
Katnal1	0.706	0.00183	0.02589
St6galnac5	0.705	0.00152	0.02320
Pde9a	0.705	0.00135	0.02190
St6galnac3	0.705	0.00342	0.03629
Ubiad1	0.705	0.00283	0.03264
Siae	0.705	0.00162	0.02410
Unc13c	0.704	0.00548	0.04664

Hps5	0.704	0.00053	0.01403
Slc4a4	0.704	0.00516	0.04515
Plk1s1	0.704	0.00030	0.01139
3010026O09Rik	0.704	0.00063	0.01519
Ece1	0.703	0.00019	0.00996
1700001C19Rik	0.703	0.00505	0.04464
Adcy6	0.703	0.00019	0.01002
Mgst3	0.703	0.00023	0.01060
Hspa12a	0.703	0.00393	0.03893
Msmg	0.703	0.00143	0.02245
Mir181b-1	0.703	0.00217	0.02813
Med14	0.703	0.00089	0.01764
Pex19	0.702	0.00183	0.02585
Vkorc1	0.702	0.00271	0.03186
Gpld1	0.702	0.00167	0.02444
Cyp2j5	0.702	0.00296	0.03334
Tspan3	0.702	0.00014	0.00887
Mansc1	0.702	0.00026	0.01101
Lnx1	0.702	0.00098	0.01864
Sorcs3	0.701	0.00294	0.03318
Efcab2	0.701	0.00178	0.02545
Tysnd1	0.701	0.00279	0.03242
Napsa	0.701	0.00029	0.01132
Gm6705	0.700	0.00314	0.03440
Tmie	0.700	0.00423	0.04038
Boc	0.700	0.00109	0.01962
Bpnt1	0.699	0.00034	0.01197
Zbtb44	0.699	0.00299	0.03353
Sned1	0.699	0.00405	0.03952
Slc25a36	0.699	0.00039	0.01250
Sepsecs	0.699	0.00250	0.03042
Sirt1	0.698	0.00059	0.01474
Hmgcl	0.698	0.00096	0.01849
Man2b1	0.698	0.00086	0.01747
Zbtb44	0.698	0.00044	0.01303
Laptm4b	0.697	0.00150	0.02307
Pltp	0.697	0.00448	0.04158
Sorl1	0.697	0.00164	0.02426
Chpt1	0.697	0.00043	0.01301
Akap7	0.697	0.00030	0.01139
Prosapip1	0.697	0.00020	0.01005
2810416G20Rik	0.696	0.00511	0.04484
Trmt2b	0.696	0.00155	0.02357
Acpl2	0.696	0.00342	0.03629
Csf1r	0.696	0.00188	0.02618

Pgap1	0.696	0.00095	0.01845
Ildr1	0.696	0.00050	0.01366
Aldob	0.696	0.00350	0.03660
Nipsnap1	0.695	0.00142	0.02245
Lrba	0.695	0.00043	0.01299
Ccdc3	0.695	0.00140	0.02223
Fuca1	0.695	0.00071	0.01608
Prrg1	0.695	0.00577	0.04825
Hibadh	0.695	0.00141	0.02233
Olf1396	0.694	0.00389	0.03875
Vmn1r27	0.694	0.00053	0.01391
Tmem27	0.694	0.00091	0.01790
Gm12824	0.694	0.00278	0.03241
Fahd1	0.694	0.00126	0.02131
Hint3	0.693	0.00014	0.00882
Syp	0.693	0.00287	0.03284
Agbl3	0.693	0.00108	0.01955
Ppm1k	0.693	0.00061	0.01506
E230008N13Rik	0.693	0.00608	0.04977
Tbc1d16	0.693	0.00077	0.01666
Hsdl2	0.693	0.00063	0.01519
Sgpp2	0.692	0.00106	0.01938
Sucla2	0.692	0.00019	0.01002
Agps	0.692	0.00413	0.03987
Cpt2	0.692	0.00085	0.01729
Slc25a12	0.692	0.00028	0.01130
Rnf128	0.692	0.00108	0.01955
Lrrc61	0.692	0.00026	0.01101
Ifitm1	0.692	0.00556	0.04700
C530005A16Rik	0.692	0.00167	0.02444
Eid2b	0.692	0.00068	0.01578
Trpt1	0.692	0.00077	0.01663
Pde4d	0.691	0.00602	0.04948
Slc5a10	0.691	0.00106	0.01936
Snrpe	0.691	0.00033	0.01181
Slc25a36	0.691	0.00033	0.01173
Ndufc1	0.691	0.00205	0.02751
Dcaf11	0.691	0.00035	0.01204
Cd300lg	0.691	0.00110	0.01972
Smpd2	0.690	0.00069	0.01593
Pdzrn3	0.690	0.00104	0.01915
Acad8	0.690	0.00035	0.01202
Sp4	0.690	0.00043	0.01290
Pnpla2	0.689	0.00132	0.02174
Reln	0.689	0.00037	0.01220

Wbscr27	0.689	0.00106	0.01936
Arzb	0.689	0.00065	0.01543
Ces2	0.689	0.00270	0.03181
Ech1	0.689	0.00106	0.01938
Fam134b	0.688	0.00083	0.01717
Ankib1	0.688	0.00019	0.01002
Ptprd	0.688	0.00531	0.04578
1700029J07Rik	0.688	0.00027	0.01112
Gdpd3	0.687	0.00352	0.03671
Iscu	0.687	0.00071	0.01608
Mir30d	0.687	0.00070	0.01604
Kdr	0.687	0.00119	0.02068
Fbxo44	0.687	0.00056	0.01443
Rgs5	0.687	0.00403	0.03943
Dlec1	0.687	0.00327	0.03519
Proc	0.686	0.00231	0.02903
Sgpp1	0.686	0.00081	0.01706
Uck1	0.686	0.00018	0.00986
Glb1l	0.686	0.00111	0.01984
Aco2	0.686	0.00160	0.02400
1700055N04Rik	0.686	0.00397	0.03915
Zfp799	0.685	0.00135	0.02190
Arzb	0.685	0.00019	0.01002
Gpr116	0.685	0.00033	0.01167
Bnip3	0.685	0.00402	0.03936
Gpc4	0.685	0.00244	0.03004
Epm2a	0.685	0.00195	0.02669
Irx1	0.685	0.00030	0.01139
Ndufb10	0.684	0.00049	0.01350
Slc3a1	0.684	0.00346	0.03649
Slc46a1	0.684	0.00452	0.04184
Ndufb8	0.683	0.00042	0.01286
Magix	0.683	0.00044	0.01301
Ces1	0.683	0.00521	0.04543
9030617O03Rik	0.683	0.00341	0.03624
Slc25a11	0.683	0.00024	0.01074
L2hgdh	0.682	0.00088	0.01756
Unc5c	0.682	0.00301	0.03367
Tgfb2	0.682	0.00300	0.03357
Tpd52l1	0.682	0.00343	0.03635
Grtp1	0.682	0.00012	0.00822
Defb29	0.682	0.00425	0.04048
Klf12	0.682	0.00563	0.04748
0610011F06Rik	0.681	0.00115	0.02013
Apoo-ps	0.681	0.00091	0.01790

Chac2	0.681	0.00027	0.01107
9130221D24Rik	0.680	0.00335	0.03578
Tbc1d4	0.680	0.00319	0.03463
Itfg3	0.680	0.00019	0.00992
Uqcrfs1	0.680	0.00066	0.01555
Kcnip3	0.680	0.00080	0.01695
Rbm33	0.680	0.00050	0.01365
Iah1	0.679	0.00349	0.03655
Pon3	0.679	0.00555	0.04700
Cbx7	0.679	0.00143	0.02245
H1f0	0.679	0.00193	0.02653
Arhgef9	0.679	0.00121	0.02086
Kng2	0.678	0.00110	0.01965
Mtmr10	0.678	0.00020	0.01015
Apoo-ps	0.678	0.00049	0.01351
Fpgs	0.678	0.00089	0.01772
Ebp	0.678	0.00074	0.01637
Ndufs3	0.678	0.00025	0.01097
Gpr155	0.677	0.00486	0.04372
Rarb	0.677	0.00082	0.01708
Wdr93	0.677	0.00051	0.01375
Zfand1	0.677	0.00007	0.00690
Tom1l2	0.677	0.00026	0.01101
Cyp4a32	0.677	0.00522	0.04543
Gm6194	0.677	0.00115	0.02013
Lmbrd2	0.677	0.00030	0.01137
Klk1	0.677	0.00307	0.03397
Fam20c	0.677	0.00153	0.02330
Pcbd1	0.676	0.00052	0.01388
Shmt2	0.676	0.00474	0.04314
Ndufb5	0.676	0.00025	0.01097
Por	0.676	0.00298	0.03351
Pcolce2	0.676	0.00168	0.02450
Chrm3	0.675	0.00402	0.03936
Galr2	0.675	0.00371	0.03775
Tmem139	0.675	0.00032	0.01162
Plekha7	0.675	0.00085	0.01729
Cables1	0.675	0.00101	0.01894
Wdr16	0.675	0.00132	0.02174
Kctd12b	0.675	0.00026	0.01101
Dhrs11	0.674	0.00078	0.01669
Reck	0.674	0.00071	0.01608
Nudt12	0.674	0.00042	0.01280
Mpped2	0.674	0.00093	0.01825
Rufy4	0.673	0.00285	0.03273

Srr	0.673	0.00073	0.01626
Ptpdc1	0.673	0.00063	0.01521
Hexb	0.673	0.00124	0.02115
Nme3	0.673	0.00023	0.01060
Lpin2	0.673	0.00082	0.01710
Ndufc1	0.672	0.00052	0.01386
Mep1a	0.672	0.00100	0.01889
5730585A16Rik	0.672	0.00113	0.01995
Pdhb	0.672	0.00015	0.00932
Olfm3	0.672	0.00458	0.04224
Treh	0.672	0.00190	0.02633
1110020G09Rik	0.672	0.00046	0.01316
Bscl2	0.672	0.00029	0.01130
Pigg	0.671	0.00007	0.00688
Trak2	0.671	0.00035	0.01204
Oxsm	0.671	0.00080	0.01690
Slc12a6	0.671	0.00148	0.02287
Zfand1	0.671	0.00007	0.00679
Dock9	0.670	0.00049	0.01344
Slc4a5	0.670	0.00023	0.01066
Echs1	0.670	0.00023	0.01063
Ccdc107	0.670	0.00122	0.02096
Pstpip2	0.670	0.00044	0.01303
Shank2	0.669	0.00043	0.01301
Itm2a	0.669	0.00383	0.03847
Matn2	0.669	0.00186	0.02602
Frem2	0.669	0.00111	0.01984
Phlda2	0.669	0.00167	0.02444
0610007C21Rik	0.669	0.00028	0.01130
Cpne4	0.668	0.00018	0.00985
Arhgap32	0.668	0.00032	0.01162
Tgfbr3	0.668	0.00027	0.01111
Hadh	0.667	0.00390	0.03880
Ndufb9	0.667	0.00013	0.00866
Ivd	0.667	0.00062	0.01517
Dak	0.667	0.00436	0.04099
Dbt	0.667	0.00028	0.01130
Gm4324	0.667	0.00022	0.01056
Gm5512	0.666	0.00069	0.01596
Mras	0.666	0.00551	0.04674
Kbtbd11	0.666	0.00139	0.02215
Tpmt	0.666	0.00172	0.02488
Bnip3	0.666	0.00254	0.03069
Ndufs5	0.666	0.00048	0.01340
Rmnd1	0.666	0.00068	0.01579

Tln2	0.665	0.00064	0.01523
Kcnip2	0.665	0.00288	0.03288
2410017P09Rik	0.665	0.00306	0.03393
Sort1	0.665	0.00394	0.03902
Elmod3	0.664	0.00033	0.01167
Vdr	0.664	0.00308	0.03405
Pcmtd1	0.664	0.00016	0.00947
Tmem8	0.664	0.00559	0.04721
Sec62	0.663	0.00013	0.00866
2810055G20Rik	0.663	0.00412	0.03984
Arl6ip1	0.662	0.00061	0.01498
Mir27b	0.662	0.00235	0.02938
Cbs	0.662	0.00144	0.02255
Cisd1	0.662	0.00136	0.02192
Rundc2a	0.661	0.00364	0.03730
AB041803	0.661	0.00112	0.01988
Acot13	0.661	0.00049	0.01351
Kcnn2	0.661	0.00466	0.04265
Esr1	0.661	0.00171	0.02475
Dram2	0.660	0.00008	0.00724
4930412M03Rik	0.660	0.00161	0.02400
Inpp5j	0.660	0.00051	0.01369
Slc16a13	0.660	0.00496	0.04418
Gm6498	0.660	0.00119	0.02069
Igf1	0.660	0.00100	0.01882
B930007M17Rik	0.659	0.00527	0.04562
Arhgap24	0.659	0.00027	0.01116
Rfesd	0.659	0.00099	0.01879
Hyi	0.658	0.00413	0.03987
BC040756	0.658	0.00033	0.01167
BC031353	0.658	0.00162	0.02411
Slc17a3	0.658	0.00265	0.03145
Rsad2	0.658	0.00101	0.01889
A2bp1	0.658	0.00218	0.02818
Isoc2b	0.658	0.00587	0.04877
Pgcp	0.657	0.00086	0.01748
Omd	0.657	0.00176	0.02526
Pcyt2	0.657	0.00048	0.01331
Ccp1	0.656	0.00129	0.02155
Tcfap2b	0.656	0.00042	0.01279
Ppm1l	0.656	0.00010	0.00767
Me3	0.656	0.00185	0.02602
Pex3	0.656	0.00027	0.01111
Gm10664	0.656	0.00324	0.03498
Itih2	0.655	0.00037	0.01227



Chst3	0.655	0.00167	0.02444
Art3	0.655	0.00371	0.03775
Manea	0.655	0.00010	0.00775
Fam189a2	0.655	0.00036	0.01208
Ak3	0.654	0.00030	0.01139
Crip2	0.654	0.00008	0.00716
Rnf167	0.654	0.00015	0.00920
Rad9b	0.654	0.00283	0.03264
5730469M10Rik	0.653	0.00163	0.02419
Ppa2	0.653	0.00016	0.00956
Scd1	0.653	0.00303	0.03382
Cetn4	0.653	0.00018	0.00985
Mettl8	0.653	0.00047	0.01321
Cnm1	0.653	0.00099	0.01875
Shpk	0.653	0.00182	0.02582
Dst	0.653	0.00035	0.01202
Mdh1	0.652	0.00060	0.01490
Hacl1	0.652	0.00102	0.01899
Atp6v1a	0.652	0.00024	0.01074
Tprkb	0.652	0.00088	0.01757
Sepp1	0.652	0.00185	0.02602
Rasgrp3	0.652	0.00198	0.02693
Grsf1	0.652	0.00040	0.01255
Crat	0.652	0.00056	0.01436
Slc7a13	0.651	0.00214	0.02797
Irs2	0.650	0.00379	0.03822
Lmo7	0.650	0.00031	0.01146
Asl	0.650	0.00371	0.03775
Susd4	0.650	0.00032	0.01167
Nr3c2	0.650	0.00045	0.01315
Ppargc1a	0.649	0.00227	0.02871
Pnpla7	0.649	0.00022	0.01059
Sod2	0.649	0.00047	0.01330
Aldh5a1	0.649	0.00078	0.01669
Apom	0.648	0.00517	0.04521
Snhg11	0.648	0.00150	0.02307
Wnk4	0.648	0.00421	0.04026
Shank2	0.648	0.00110	0.01970
Dock8	0.648	0.00010	0.00767
Pou3f3	0.647	0.00081	0.01705
Apcdd1	0.647	0.00046	0.01316
Col4a3	0.647	0.00018	0.00985
Fam35a	0.647	0.00012	0.00821
Samd9l	0.646	0.00094	0.01837
E230008N13Rik	0.646	0.00010	0.00772

Folr1	0.646	0.00182	0.02581
Coasy	0.645	0.00004	0.00632
Samd12	0.645	0.00066	0.01559
Ahcy	0.645	0.00057	0.01446
Gpcpd1	0.644	0.00033	0.01167
4833442J19Rik	0.644	0.00460	0.04236
A2ld1	0.644	0.00023	0.01064
Ndufs1	0.644	0.00024	0.01089
Sh3bp5	0.644	0.00084	0.01729
Hadhb	0.643	0.00005	0.00663
Ahcy	0.643	0.00067	0.01570
Thrb	0.643	0.00016	0.00965
Coch	0.643	0.00013	0.00852
Acp6	0.643	0.00068	0.01578
2810055G20Rik	0.643	0.00006	0.00677
Slc35a5	0.642	0.00009	0.00753
Mobkl2b	0.642	0.00196	0.02675
Alb	0.642	0.00495	0.04416
Crebl2	0.642	0.00063	0.01521
Ttc38	0.642	0.00479	0.04334
Cd36	0.642	0.00023	0.01063
Sesn1	0.642	0.00004	0.00625
Kcnj10	0.642	0.00268	0.03169
Neu2	0.641	0.00208	0.02765
Tmtc1	0.641	0.00053	0.01395
Vmn1r34	0.641	0.00171	0.02475
Serping1	0.641	0.00596	0.04913
Tc2n	0.640	0.00433	0.04084
Rdm1	0.640	0.00007	0.00693
Mfsd9	0.640	0.00159	0.02395
Fn3krp	0.639	0.00025	0.01096
Mme	0.638	0.00010	0.00775
Slc39a8	0.638	0.00031	0.01147
Id3	0.638	0.00450	0.04174
Add3	0.637	0.00082	0.01710
9030607L17Rik	0.637	0.00058	0.01468
2310001A20Rik	0.637	0.00035	0.01199
E230008N13Rik	0.637	0.00028	0.01130
Acot1	0.636	0.00219	0.02829
Upp2	0.636	0.00588	0.04880
P2ry2	0.636	0.00416	0.04006
Fggy	0.636	0.00170	0.02473
Fmc1	0.636	0.00026	0.01104
Mthfd1	0.636	0.00054	0.01407
Ednrb	0.636	0.00030	0.01137

Cdhr2	0.635	0.00024	0.01087
Slc25a35	0.635	0.00135	0.02190
Ahcy	0.635	0.00048	0.01340
Sult1b1	0.635	0.00144	0.02246
Osgin1	0.635	0.00283	0.03264
Slc5a3	0.635	0.00338	0.03597
Cnm4	0.635	0.00240	0.02973
Hadhb	0.635	0.00008	0.00711
Acot12	0.635	0.00022	0.01049
1110032A03Rik	0.635	0.00074	0.01627
Ppic	0.635	0.00005	0.00660
Gm10732	0.635	0.00014	0.00881
Gm15441	0.634	0.00285	0.03274
Rnf186	0.634	0.00138	0.02211
Brp44l	0.634	0.00011	0.00775
Fgy	0.634	0.00504	0.04461
Acad9	0.634	0.00019	0.01002
Galnt14	0.633	0.00138	0.02211
Scoc	0.633	0.00325	0.03509
A330023F24Rik	0.633	0.00031	0.01147
Glt25d2	0.633	0.00037	0.01220
Lgals4	0.633	0.00606	0.04966
Abcd4	0.633	0.00051	0.01375
Tmem106a	0.632	0.00417	0.04007
Mcoln3	0.632	0.00028	0.01130
Tcp11l2	0.632	0.00056	0.01443
1300010F03Rik	0.632	0.00111	0.01982
Fry	0.632	0.00023	0.01064
Prkcz	0.632	0.00007	0.00677
Podn	0.632	0.00370	0.03770
Shmt1	0.632	0.00134	0.02190
Sdpr	0.631	0.00054	0.01413
Gpr137b	0.631	0.00255	0.03079
Aoah	0.631	0.00087	0.01752
Clec14a	0.630	0.00062	0.01512
Hint2	0.629	0.00026	0.01101
Lrrc51	0.629	0.00044	0.01301
Arsg	0.629	0.00017	0.00973
Asah2	0.628	0.00024	0.01074
lyd	0.628	0.00165	0.02431
Park2	0.628	0.00255	0.03079
Apeh	0.628	0.00131	0.02172
Rnf152	0.628	0.00047	0.01321
Ltbp1	0.628	0.00077	0.01663
Pfkm	0.628	0.00079	0.01676

Clic5	0.627	0.00041	0.01273
Pyroxd2	0.627	0.00577	0.04824
D4Bwg0951e	0.627	0.00071	0.01608
E230008N13Rik	0.627	0.00006	0.00677
Ccs	0.626	0.00094	0.01837
Adk	0.626	0.00019	0.01002
Tmem116	0.626	0.00032	0.01167
Clybl	0.626	0.00427	0.04058
Ngef	0.625	0.00151	0.02310
Rab11fip4	0.625	0.00161	0.02409
Arhgap18	0.625	0.00026	0.01104
Acot4	0.625	0.00076	0.01662
Cab39l	0.624	0.00120	0.02073
Rnf144b	0.624	0.00260	0.03115
Mpzl2	0.624	0.00049	0.01351
Clec2e	0.624	0.00040	0.01255
Slc10a2	0.623	0.00130	0.02164
Tet2	0.623	0.00188	0.02618
Nceh1	0.623	0.00021	0.01039
Ppargc1a	0.623	0.00105	0.01920
Gstm4	0.622	0.00007	0.00677
Ninl	0.622	0.00012	0.00818
AI316807	0.622	0.00113	0.01999
Slc6a20a	0.622	0.00614	0.05000
Lym5	0.622	0.00008	0.00716
Itpr2	0.622	0.00077	0.01663
3110057O12Rik	0.621	0.00083	0.01719
Lrrc19	0.621	0.00076	0.01661
Bmp2	0.621	0.00214	0.02797
Entpd5	0.621	0.00025	0.01097
Bmp7	0.621	0.00168	0.02444
Grhpr	0.621	0.00122	0.02090
Il15	0.619	0.00014	0.00880
Dpp4	0.618	0.00184	0.02597
4732465J04Rik	0.618	0.00025	0.01100
Ankrd43	0.618	0.00180	0.02559
Tmem206	0.617	0.00006	0.00669
Mir30c-2	0.617	0.00049	0.01351
Gabarapl1	0.617	0.00038	0.01247
Cecr2	0.617	0.00009	0.00757
Bckdha	0.616	0.00125	0.02126
Tmem97	0.616	0.00006	0.00669
Ppil6	0.616	0.00030	0.01139
D16H22S680E	0.616	0.00002	0.00572
Vill	0.615	0.00017	0.00965

Ypel3	0.615	0.00007	0.00704
Ccdc90a	0.614	0.00094	0.01838
Paqr9	0.614	0.00602	0.04948
Ahcyl2	0.614	0.00037	0.01219
Syn2	0.614	0.00040	0.01251
Prss8	0.613	0.00110	0.01968
Lactb2	0.613	0.00057	0.01447
Pdp2	0.613	0.00076	0.01662
Lrp4	0.613	0.00150	0.02304
Atp5sl	0.613	0.00037	0.01220
Cyp4f14	0.613	0.00141	0.02233
Tmem117	0.613	0.00235	0.02941
Decr2	0.612	0.00205	0.02751
Daam2	0.612	0.00077	0.01669
Fah	0.612	0.00306	0.03394
Ugt3a2	0.611	0.00040	0.01255
Gm10374	0.611	0.00126	0.02131
Sfxn4	0.611	0.00158	0.02377
D10Jhu81e	0.611	0.00163	0.02417
Slc25a16	0.610	0.00094	0.01830
Cyp39a1	0.610	0.00053	0.01394
Sap30	0.610	0.00002	0.00572
Abhd1	0.609	0.00468	0.04277
Osbp18	0.609	0.00022	0.01058
Brp44	0.609	0.00046	0.01316
Mirlet7c-1	0.609	0.00251	0.03049
Rhov	0.608	0.00144	0.02255
Acyp2	0.608	0.00004	0.00632
Slco4c1	0.608	0.00215	0.02798
D630013G24Rik	0.608	0.00010	0.00775
4732463B04Rik	0.607	0.00078	0.01669
Ptch1	0.607	0.00026	0.01101
Tle2	0.607	0.00052	0.01380
Xylt1	0.606	0.00184	0.02591
Slc1a1	0.606	0.00097	0.01864
Aadac	0.605	0.00504	0.04461
Car9	0.605	0.00226	0.02868
Odz4	0.604	0.00008	0.00704
Smpd13a	0.604	0.00071	0.01608
Gna14	0.604	0.00163	0.02416
Sat2	0.603	0.00050	0.01365
Prom2	0.603	0.00180	0.02565
Mertk	0.603	0.00183	0.02591
AA415398	0.603	0.00021	0.01044
Enpp1	0.603	0.00044	0.01303

Cdo1	0.603	0.00101	0.01889
Pex1	0.602	0.00013	0.00878
Aldh8a1	0.602	0.00083	0.01714
Pcca	0.602	0.00025	0.01097
Gm10804	0.602	0.00439	0.04114
Sardh	0.601	0.00511	0.04484
Ctsh	0.601	0.00001	0.00492
Slc1a1	0.601	0.00098	0.01875
Irs1	0.601	0.00084	0.01729
2310046K01Rik	0.601	0.00076	0.01661
Acad10	0.601	0.00066	0.01559
Mgat4a	0.601	0.00074	0.01635
Hemk1	0.601	0.00012	0.00836
Defb11	0.601	0.00289	0.03292
Gpam	0.601	0.00018	0.00985
Smarca2	0.601	0.00326	0.03517
Gm13262	0.601	0.00043	0.01301
2010002M12Rik	0.600	0.00050	0.01365
Thra	0.600	0.00006	0.00677
Ddt	0.600	0.00156	0.02365
Ptgs1	0.600	0.00078	0.01676
Nit2	0.600	0.00034	0.01194
Csrp2	0.600	0.00029	0.01131
Hsd11b1	0.599	0.00054	0.01416
Shank2	0.599	0.00026	0.01101
A1cf	0.599	0.00061	0.01502
9530008L14Rik	0.599	0.00368	0.03753
Snx29	0.599	0.00306	0.03394
Rapgef11	0.598	0.00061	0.01508
Atp6v1c2	0.598	0.00604	0.04956
Tmem45b	0.598	0.00331	0.03545
Zc3h6	0.597	0.00011	0.00785
Enpp3	0.597	0.00426	0.04057
Pink1	0.597	0.00049	0.01345
Ces2	0.597	0.00317	0.03455
Figf	0.597	0.00357	0.03700
Mir99a	0.597	0.00514	0.04508
Tm2d2	0.596	0.00004	0.00630
Prodh	0.596	0.00405	0.03949
Stxbp4	0.596	0.00005	0.00665
Hibch	0.596	0.00005	0.00660
1700009P17Rik	0.595	0.00513	0.04502
Atg10	0.595	0.00007	0.00679
Ppargc1b	0.595	0.00071	0.01610
Pdk3	0.594	0.00006	0.00677

Gcnt1	0.594	0.00156	0.02362
Gsn	0.594	0.00044	0.01303
Fam82b	0.594	0.00043	0.01290
1200009O22Rik	0.593	0.00080	0.01690
Htr1b	0.593	0.00117	0.02040
Myh11	0.593	0.00416	0.04007
Slc43a2	0.592	0.00474	0.04316
Rdh5	0.592	0.00165	0.02426
Aspg	0.592	0.00029	0.01133
Cd55	0.592	0.00082	0.01710
Tmco3	0.591	0.00009	0.00744
Lrp2	0.591	0.00128	0.02152
Mir29b-2	0.591	0.00208	0.02766
Etnk1	0.590	0.00023	0.01064
Fbln7	0.590	0.00063	0.01521
Scrn3	0.590	0.00027	0.01112
Fgf1	0.589	0.00133	0.02181
Entpd8	0.589	0.00329	0.03531
1700019D03Rik	0.589	0.00039	0.01247
Hsd11b2	0.589	0.00541	0.04623
Fam81a	0.589	0.00036	0.01208
Fam84a	0.588	0.00091	0.01790
Slc35f1	0.587	0.00594	0.04903
Scoc	0.587	0.00013	0.00846
2810055F11Rik	0.586	0.00024	0.01074
Cabc1	0.586	0.00398	0.03917
Selenbp2	0.586	0.00087	0.01752
Avpr2	0.586	0.00065	0.01535
6430601O08Rik	0.586	0.00005	0.00663
Phyhip	0.586	0.00147	0.02272
Erc2	0.586	0.00059	0.01470
Slc19a3	0.586	0.00082	0.01708
Elovl6	0.585	0.00034	0.01192
Pde7b	0.585	0.00010	0.00775
MacroD2	0.585	0.00442	0.04130
Glb1l2	0.585	0.00196	0.02671
9630013D21Rik	0.584	0.00101	0.01890
Car12	0.584	0.00533	0.04589
Dixdc1	0.584	0.00045	0.01315
St8sia1	0.584	0.00052	0.01377
Vwce	0.584	0.00578	0.04828
Dqx1	0.584	0.00252	0.03056
Mut	0.584	0.00024	0.01074
Cdh13	0.582	0.00068	0.01578
PcmtD2	0.582	0.00003	0.00572

Fam161a	0.582	0.00002	0.00527
Slc5a9	0.582	0.00224	0.02847
Hs3st3a1	0.582	0.00007	0.00688
Lgals12	0.582	0.00354	0.03682
Selenbp1	0.581	0.00017	0.00972
Dcn	0.581	0.00200	0.02715
Oxct1	0.580	0.00007	0.00688
Myo5a	0.580	0.00059	0.01479
Nap1l5	0.580	0.00257	0.03092
Slc7a9	0.579	0.00331	0.03545
Lyp1a1	0.579	0.00008	0.00716
Ddc	0.579	0.00003	0.00616
Map2k6	0.579	0.00460	0.04236
Tmem64	0.579	0.00028	0.01130
Idh2	0.578	0.00076	0.01661
Cth	0.578	0.00057	0.01447
Sv2a	0.578	0.00020	0.01006
Lrpap1	0.577	0.00090	0.01787
Ptpn9	0.577	0.00038	0.01235
Slc22a23	0.577	0.00026	0.01104
Abhd14a	0.576	0.00131	0.02172
Slc9a2	0.575	0.00009	0.00753
Fam49a	0.575	0.00032	0.01167
Fam164c	0.575	0.00016	0.00959
Tyw3	0.574	0.00020	0.01022
Prok1	0.574	0.00338	0.03597
Tpk1	0.573	0.00004	0.00632
Fbxo36	0.573	0.00103	0.01910
Ostb	0.573	0.00409	0.03972
BC026585	0.573	0.00114	0.02006
Gm5617	0.573	0.00093	0.01830
Slc9a3	0.573	0.00175	0.02509
Fxyd4	0.572	0.00393	0.03897
Fgfr3	0.571	0.00165	0.02426
Amacr	0.571	0.00288	0.03290
Steap3	0.570	0.00031	0.01156
Arsk	0.569	0.00003	0.00572
Wasf3	0.569	0.00113	0.02000
Ttc39c	0.568	0.00039	0.01247
E230008N13Rik	0.568	0.00006	0.00669
Zc3h6	0.567	0.00073	0.01626
Ntf3	0.567	0.00017	0.00965
Ido2	0.566	0.00405	0.03950
Plekha6	0.565	0.00382	0.03840
Nox4	0.564	0.00098	0.01875



Cntd1	0.564	0.00071	0.01610
Slc27a1	0.563	0.00229	0.02889
Brp44l	0.563	0.00006	0.00677
Enpp2	0.563	0.00001	0.00492
Slc23a1	0.562	0.00210	0.02779
Bbox1	0.562	0.00318	0.03463
Fmo4	0.562	0.00014	0.00898
Osbpl1a	0.562	0.00003	0.00616
Stard8	0.561	0.00051	0.01375
Aldh9a1	0.560	0.00081	0.01705
Cyp27a1	0.560	0.00220	0.02831
Slc5a2	0.560	0.00253	0.03069
Tmem184a	0.560	0.00005	0.00660
Gcdh	0.560	0.00050	0.01351
Mup1	0.560	0.00243	0.03001
Ptgr2	0.560	0.00005	0.00650
Spnb3	0.560	0.00051	0.01375
Phospho1	0.559	0.00009	0.00749
Tmem72	0.559	0.00042	0.01280
Fabp5	0.559	0.00003	0.00591
Acad11	0.558	0.00007	0.00688
5033411D12Rik	0.558	0.00024	0.01074
Slc25a21	0.558	0.00102	0.01899
Slco1a4	0.557	0.00063	0.01520
Vnn1	0.557	0.00283	0.03264
Spa17	0.557	0.00001	0.00492
Gstm2	0.557	0.00165	0.02426
2210020M01Rik	0.557	0.00056	0.01439
Mccc1	0.557	0.00016	0.00965
Nr1d1	0.557	0.00030	0.01139
Tcea3	0.556	0.00517	0.04521
Bcat2	0.556	0.00006	0.00677
Aacs	0.555	0.00010	0.00775
2010107H07Rik	0.555	0.00001	0.00492
Npr2	0.555	0.00010	0.00767
3110057O12Rik	0.554	0.00030	0.01139
Nnt	0.553	0.00008	0.00704
Bcar3	0.552	0.00017	0.00972
Pde1a	0.551	0.00002	0.00527
Cryl1	0.551	0.00100	0.01884
Tmem53	0.551	0.00220	0.02831
Ttc7b	0.550	0.00018	0.00985
Cyp2a5	0.550	0.00057	0.01446
Fabp5	0.549	0.00001	0.00492
Pde4c	0.549	0.00070	0.01604

Suox	0.549	0.00053	0.01391
Unc13c	0.549	0.00015	0.00917
Qdpr	0.549	0.00060	0.01492
Pla2g7	0.549	0.00084	0.01723
Mpv17l	0.549	0.00047	0.01321
Amy1	0.548	0.00014	0.00906
Ano1	0.548	0.00316	0.03455
Sema3d	0.548	0.00007	0.00688
Negr1	0.548	0.00036	0.01208
Epor	0.548	0.00160	0.02398
Slc16a5	0.548	0.00006	0.00677
Ank2	0.548	0.00017	0.00965
Slc7a8	0.547	0.00348	0.03654
Adssl1	0.547	0.00057	0.01446
Pdk1	0.546	0.00002	0.00572
Ell3	0.546	0.00073	0.01625
Sult1a1	0.546	0.00107	0.01944
Lin7a	0.545	0.00555	0.04699
Kynu	0.544	0.00282	0.03260
Sirt3	0.544	0.00366	0.03744
Spon1	0.544	0.00207	0.02757
Slc22a4	0.544	0.00010	0.00772
Tst	0.544	0.00007	0.00688
Tmem174	0.544	0.00137	0.02207
Reps2	0.544	0.00021	0.01027
Spag5	0.544	0.00055	0.01423
Acss3	0.542	0.00016	0.00956
Gstt3	0.542	0.00042	0.01285
Ndrg4	0.541	0.00541	0.04623
Fabp7	0.541	0.00002	0.00570
Slc8a1	0.540	0.00132	0.02172
Stxbp5l	0.540	0.00029	0.01133
Retsat	0.540	0.00063	0.01521
Slc26a7	0.540	0.00168	0.02444
Cldn8	0.540	0.00003	0.00608
Dpyd	0.539	0.00024	0.01074
Pfn3	0.538	0.00103	0.01903
Sim2	0.538	0.00290	0.03293
Gpd1	0.538	0.00164	0.02424
Atp6v1b1	0.538	0.00207	0.02759
Larp1b	0.537	0.00001	0.00492
Ace	0.537	0.00020	0.01005
Sord	0.537	0.00238	0.02961
Rasgrp1	0.536	0.00130	0.02164
Vmn1r18	0.536	0.00107	0.01944

Gnmt	0.536	0.00088	0.01754
Slc6a13	0.536	0.00401	0.03934
1700026J04Rik	0.535	0.00029	0.01133
Igfbp5	0.535	0.00021	0.01048
Cubn	0.535	0.00088	0.01758
Cwh43	0.535	0.00008	0.00716
Acnat1	0.535	0.00117	0.02036
Map3k15	0.535	0.00003	0.00572
Fam13a	0.535	0.00024	0.01070
Slc46a3	0.534	0.00071	0.01608
Aqp6	0.534	0.00073	0.01625
Leprel1	0.534	0.00084	0.01726
Gm16432	0.534	0.00007	0.00688
Gm1332	0.533	0.00279	0.03245
Hsd17b14	0.533	0.00565	0.04758
Mir30e	0.532	0.00054	0.01413
4931406C07Rik	0.532	0.00072	0.01612
Sord	0.532	0.00203	0.02742
Prkcq	0.530	0.00012	0.00821
B3galt5	0.530	0.00143	0.02245
Dhdh	0.529	0.00008	0.00716
Dnajc28	0.529	0.00004	0.00632
Fads6	0.529	0.00005	0.00663
Pes1	0.528	0.00008	0.00716
Pcx	0.528	0.00074	0.01627
Tmem204	0.525	0.00001	0.00492
Klhl3	0.525	0.00370	0.03770
Slc22a5	0.524	0.00219	0.02827
2410066E13Rik	0.523	0.00060	0.01479
Cd59a	0.523	0.00001	0.00492
Ephx1	0.523	0.00063	0.01521
Ptger3	0.522	0.00017	0.00971
Gstt2	0.521	0.00090	0.01779
Tmem25	0.521	0.00305	0.03389
Tlcd1	0.520	0.00006	0.00677
Slc38a3	0.520	0.00081	0.01706
AB056442	0.520	0.00034	0.01194
Lrrn1	0.519	0.00326	0.03514
Ceacam2	0.519	0.00310	0.03418
Pdzd2	0.519	0.00236	0.02945
Acadsb	0.519	0.00000	0.00443
Rhcg	0.519	0.00386	0.03864
Slc39a5	0.518	0.00482	0.04352
Abca4	0.517	0.00076	0.01658
Mgam	0.517	0.00143	0.02245

Fam195a	0.516	0.00079	0.01680
Acy3	0.515	0.00360	0.03716
Acss1	0.515	0.00285	0.03274
Gcgr	0.514	0.00185	0.02602
Mgat3	0.514	0.00387	0.03866
Echdc3	0.514	0.00015	0.00935
Gm11992	0.513	0.00022	0.01054
Cbr1	0.512	0.00008	0.00716
Galm	0.511	0.00018	0.00985
Auh	0.511	0.00015	0.00932
Fmod	0.511	0.00031	0.01146
Itga8	0.511	0.00097	0.01864
Sim1	0.511	0.00007	0.00694
Ecm1	0.511	0.00051	0.01375
Gstm7	0.510	0.00005	0.00636
Cyp2d9	0.510	0.00389	0.03875
Abcc9	0.509	0.00002	0.00572
Pdzk1	0.508	0.00176	0.02526
Dmgdh	0.508	0.00071	0.01608
Slit2	0.508	0.00039	0.01247
Gm9909	0.506	0.00003	0.00572
Acot7	0.506	0.00003	0.00600
Hsd3b4	0.505	0.00123	0.02104
Hsd3b4	0.505	0.00123	0.02104
Fut9	0.505	0.00103	0.01902
Sfrp1	0.504	0.00524	0.04550
Fabp3	0.504	0.00311	0.03424
Upk3a	0.504	0.00039	0.01247
1810020D17Rik	0.503	0.00002	0.00572
Acat1	0.503	0.00007	0.00688
Aqp3	0.503	0.00022	0.01056
Ipcef1	0.503	0.00162	0.02416
C330021F23Rik	0.502	0.00319	0.03463
Efhd1	0.502	0.00011	0.00802
Ugt3a1	0.502	0.00009	0.00749
Txndc16	0.500	0.00016	0.00941
3632451O06Rik	0.500	0.00020	0.01019
4931417G12Rik	0.500	0.00088	0.01758
Acadm	0.500	0.00029	0.01130
A4gnt	0.498	0.00059	0.01474
Casr	0.498	0.00039	0.01247
Cdc42ep3	0.497	0.00079	0.01683
2610017I09Rik	0.496	0.00036	0.01208
Ggct	0.496	0.00001	0.00492
Vstm2a	0.495	0.00095	0.01849

4430402118Rik	0.494	0.00008	0.00704
Scn4b	0.494	0.00411	0.03984
Mir218-1	0.494	0.00042	0.01286
Mogat2	0.493	0.00288	0.03287
Hgd	0.493	0.00299	0.03353
BC089597	0.493	0.00246	0.03022
Thns12	0.493	0.00184	0.02597
Pla1a	0.492	0.00015	0.00918
Mup2	0.491	0.00247	0.03026
8430408G22Rik	0.491	0.00005	0.00636
Kcnj1	0.490	0.00022	0.01059
Abhd3	0.490	0.00028	0.01130
Stxbp4	0.490	0.00009	0.00749
Id1	0.490	0.00028	0.01130
Lypd2	0.489	0.00187	0.02617
Slc22a18	0.489	0.00193	0.02655
Ugt3a1	0.488	0.00009	0.00753
Amt	0.487	0.00023	0.01064
Csad	0.487	0.00132	0.02172
Slc5a11	0.487	0.00249	0.03034
Tnfrsf8	0.486	0.00274	0.03213
Zmynd10	0.485	0.00025	0.01097
Slco1a6	0.484	0.00025	0.01100
Pik3c2g	0.483	0.00204	0.02744
9330129D05Rik	0.483	0.00016	0.00965
Fabp3	0.483	0.00189	0.02633
Ctsf	0.483	0.00072	0.01619
Cyfp2	0.482	0.00007	0.00694
Fn3k	0.482	0.00324	0.03498
Gyk	0.482	0.00315	0.03447
Sucnr1	0.482	0.00021	0.01025
Gprc5b	0.481	0.00159	0.02388
Lpin1	0.481	0.00387	0.03865
Ceacam1	0.480	0.00084	0.01729
Atp2a3	0.480	0.00000	0.00443
Klk1b22	0.479	0.00070	0.01607
BC015286	0.479	0.00064	0.01523
Gpm6a	0.479	0.00066	0.01559
Gstz1	0.479	0.00105	0.01921
Cpeb3	0.478	0.00004	0.00632
Apobec2	0.478	0.00060	0.01483
Abca9	0.478	0.00006	0.00677
Acaa2	0.478	0.00096	0.01849
Kl	0.477	0.00263	0.03126
Fmo1	0.477	0.00362	0.03723

Slc6a4	0.476	0.00155	0.02357
Miox	0.475	0.00447	0.04157
C8g	0.475	0.00036	0.01208
AA388235	0.475	0.00011	0.00814
Afmid	0.474	0.00165	0.02431
Bsnd	0.474	0.00022	0.01058
Aldh6a1	0.473	0.00070	0.01604
Gpr81	0.472	0.00009	0.00753
Nudt19	0.471	0.00206	0.02755
Gstk1	0.469	0.00028	0.01130
Slc22a9	0.469	0.00039	0.01247
Acaa1b	0.468	0.00469	0.04284
Fgf9	0.467	0.00042	0.01282
Vwa1	0.467	0.00056	0.01434
Cyp2a4	0.466	0.00060	0.01480
Slc25a10	0.465	0.00433	0.04084
D3Bwg0562e	0.465	0.00007	0.00697
Slc22a13	0.464	0.00296	0.03338
Atp4a	0.463	0.00579	0.04831
Slc37a4	0.463	0.00304	0.03388
Dnajc6	0.463	0.00030	0.01139
Slc2a12	0.463	0.00012	0.00821
Ecm2	0.462	0.00155	0.02357
Dpys	0.461	0.00263	0.03128
Mir29c	0.460	0.00006	0.00677
Acmsd	0.460	0.00275	0.03219
D630023F18Rik	0.460	0.00389	0.03875
D3Ertd751e	0.458	0.00022	0.01054
Pecr	0.457	0.00213	0.02792
Bco2	0.457	0.00010	0.00775
Tmem195	0.456	0.00248	0.03033
Rdh16	0.456	0.00549	0.04668
Tspan1	0.455	0.00002	0.00547
Unc13c	0.455	0.00102	0.01896
Corin	0.454	0.00023	0.01063
Lpl	0.453	0.00001	0.00492
Acsl1	0.453	0.00012	0.00821
Pygl	0.453	0.00001	0.00492
Acacb	0.453	0.00012	0.00821
Abcc3	0.452	0.00009	0.00752
Tarm1	0.451	0.00033	0.01169
Scgb1c1	0.450	0.00066	0.01558
Mpst	0.449	0.00082	0.01710
Slc10a5	0.448	0.00150	0.02306
Dhrs3	0.448	0.00123	0.02110

Aox3	0.446	0.00137	0.02205
Fbxl21	0.445	0.00023	0.01063
Id4	0.444	0.00002	0.00527
Chst9	0.444	0.00028	0.01130
F13b	0.444	0.00015	0.00928
Tnn	0.443	0.00085	0.01731
Slc2a13	0.441	0.00001	0.00492
Acss2	0.441	0.00045	0.01316
Dcxr	0.439	0.00254	0.03071
Abat	0.438	0.00071	0.01608
Bphl	0.438	0.00058	0.01464
Kmo	0.437	0.00400	0.03929
Sgk2	0.436	0.00122	0.02096
Cldn10a	0.436	0.00007	0.00677
Cldn10a	0.435	0.00005	0.00664
Rap1gap	0.435	0.00004	0.00625
Agxt2	0.434	0.00027	0.01115
Mup2	0.434	0.00143	0.02245
Calb1	0.433	0.00265	0.03145
Cmah	0.432	0.00138	0.02211
Papss2	0.432	0.00030	0.01137
2610528J11Rik	0.431	0.00072	0.01621
Abca6	0.430	0.00000	0.00492
Mir681	0.429	0.00004	0.00632
Akr1d1	0.429	0.00016	0.00941
Ndrg2	0.428	0.00010	0.00757
2210404O07Rik	0.428	0.00128	0.02152
Aspn	0.428	0.00005	0.00664
Pxmp2	0.427	0.00134	0.02190
Sema4g	0.427	0.00124	0.02113
1700040L02Rik	0.427	0.00032	0.01162
Slc5a8	0.427	0.00112	0.01984
Angpt2	0.426	0.00017	0.00965
Mccc2	0.426	0.00010	0.00775
Abhd14b	0.426	0.00080	0.01690
Car8	0.424	0.00321	0.03485
Acsm2	0.424	0.00099	0.01875
Cdkl1	0.423	0.00046	0.01318
Slc2a4	0.420	0.00006	0.00677
Gamt	0.419	0.00241	0.02979
Fmo2	0.419	0.00125	0.02119
Gm853	0.419	0.00101	0.01890
Pbld	0.419	0.00219	0.02827
Fbp1	0.418	0.00119	0.02063
E230008N13Rik	0.418	0.00173	0.02499

Prelp	0.417	0.00130	0.02165
Lyplal1	0.416	0.00059	0.01479
Car5a	0.415	0.00021	0.01025
Cacnb4	0.414	0.00011	0.00812
Ugt3a1	0.412	0.00081	0.01703
Agphd1	0.411	0.00220	0.02830
Agxt2l1	0.411	0.00112	0.01984
Afm	0.410	0.00019	0.00992
Khk	0.410	0.00196	0.02674
Mup2	0.410	0.00108	0.01955
Fam55c	0.408	0.00018	0.00985
Slc7a12	0.406	0.00076	0.01661
Aspdh	0.406	0.00396	0.03914
Fa2h	0.405	0.00003	0.00572
Upk3b	0.405	0.00487	0.04380
2310040G07Rik	0.404	0.00280	0.03245
Mup2	0.404	0.00281	0.03252
Haa0	0.403	0.00198	0.02693
Abca8a	0.402	0.00434	0.04087
Wfdc16	0.402	0.00018	0.00985
Cd59b	0.401	0.00021	0.01022
Ccbl2	0.401	0.00010	0.00767
Hmgcr	0.401	0.00008	0.00716
1700055N04Rik	0.400	0.00004	0.00632
Igfals	0.398	0.00046	0.01316
Bckdhb	0.397	0.00004	0.00632
Cyp2e1	0.396	0.00351	0.03671
Hnmt	0.396	0.00004	0.00632
Adhfe1	0.396	0.00139	0.02219
Slc6a19	0.395	0.00117	0.02039
Esrrb	0.395	0.00025	0.01097
Ptger1	0.395	0.00550	0.04668
Prlr	0.392	0.00061	0.01496
Aadat	0.392	0.00437	0.04104
Hsd3b2	0.391	0.00003	0.00600
AI452195	0.389	0.00003	0.00572
Gm221	0.389	0.00132	0.02174
Galnt11	0.387	0.00449	0.04164
Hao2	0.385	0.00094	0.01837
Rhbg	0.384	0.00033	0.01169
Slc34a3	0.384	0.00502	0.04448
Npy1r	0.383	0.00135	0.02190
Itih5	0.383	0.00079	0.01676
Mup2	0.382	0.00094	0.01837
Bhmt2	0.382	0.00357	0.03700



Slc22a7	0.381	0.00035	0.01204
Dhtkd1	0.381	0.00037	0.01224
Bhmt	0.381	0.00031	0.01156
Snx31	0.379	0.00047	0.01321
Slc13a2	0.377	0.00273	0.03205
Slc9a8	0.377	0.00041	0.01269
Ehhadh	0.376	0.00034	0.01194
Slc15a2	0.375	0.00037	0.01220
Chrdl1	0.375	0.00004	0.00632
Atp10b	0.374	0.00397	0.03915
Clcnka	0.373	0.00002	0.00572
Bhmt	0.372	0.00036	0.01208
Igfbp1	0.372	0.00063	0.01521
Aspa	0.371	0.00242	0.02984
Ogn	0.371	0.00045	0.01315
Slc8a1	0.370	0.00030	0.01138
Acox2	0.369	0.00078	0.01672
Acot11	0.368	0.00485	0.04369
Slc6a20b	0.368	0.00196	0.02671
Rasgef1b	0.367	0.00000	0.00492
Aqp1	0.365	0.00073	0.01626
Nepn	0.364	0.00096	0.01854
Upk2	0.363	0.00135	0.02190
Pm20d1	0.363	0.00201	0.02723
Slc16a7	0.363	0.00008	0.00716
Slc5a6	0.361	0.00002	0.00515
Ak3l1	0.361	0.00518	0.04522
Akr1c18	0.360	0.00039	0.01251
Ppp1r1a	0.353	0.00028	0.01130
Upb1	0.353	0.00088	0.01758
Cox7a1	0.352	0.00000	0.00443
Slc6a12	0.351	0.00020	0.01006
BC014805	0.348	0.00397	0.03915
Hpgd	0.348	0.00043	0.01293
Mgll	0.347	0.00004	0.00632
Gatm	0.347	0.00108	0.01955
Fmo5	0.347	0.00025	0.01092
Foxq1	0.346	0.00045	0.01313
Scel	0.345	0.00026	0.01104
Mup11	0.343	0.00105	0.01921
Aldh3b2	0.343	0.00032	0.01162
Cxcl12	0.342	0.00067	0.01571
ORF63	0.340	0.00076	0.01660
Sec14l3	0.340	0.00213	0.02790
Ttc36	0.340	0.00308	0.03406

Cyp51	0.339	0.00000	0.00443
Aqp11	0.338	0.00109	0.01962
Sycn	0.338	0.00261	0.03115
Cbr2	0.336	0.00062	0.01517
Mfsd2a	0.335	0.00004	0.00625
Mup2	0.335	0.00143	0.02245
Cpt1b	0.333	0.00001	0.00492
Mfsd4	0.332	0.00009	0.00753
Xpnpep2	0.331	0.00043	0.01301
Cml1	0.331	0.00360	0.03711
Ppp1r1b	0.331	0.00012	0.00822
Prox1	0.330	0.00001	0.00492
Pvalb	0.329	0.00057	0.01446
Sectm1b	0.329	0.00465	0.04265
Cyp2j11	0.326	0.00103	0.01911
Slc14a1	0.326	0.00247	0.03026
Acsm1	0.324	0.00066	0.01555
C8a	0.324	0.00012	0.00821
Ctse	0.323	0.00281	0.03250
Dnajc12	0.322	0.00006	0.00677
Serpina1c	0.321	0.00000	0.00365
0610008F07Rik	0.318	0.00113	0.02000
Cmb1	0.318	0.00140	0.02223
Tmem86a	0.315	0.00008	0.00715
Fam107a	0.315	0.00084	0.01723
Dpep1	0.315	0.00015	0.00915
Ces3	0.313	0.00491	0.04399
AU018778	0.311	0.00029	0.01130
Mfsd7c	0.311	0.00045	0.01305
Prlr	0.311	0.00034	0.01194
Slc16a4	0.310	0.00020	0.01020
Cyp2d26	0.309	0.00477	0.04327
Pcsk6	0.305	0.00010	0.00775
Spp2	0.303	0.00101	0.01889
Abca13	0.303	0.00073	0.01626
Es22	0.300	0.00142	0.02245
Acsm5	0.299	0.00008	0.00716
Mup7	0.296	0.00135	0.02190
Fitm1	0.293	0.00081	0.01700
Slc4a1	0.293	0.00006	0.00677
5830473C10Rik	0.292	0.00085	0.01732
Akr1c21	0.292	0.00408	0.03964
Slc2a5	0.290	0.00085	0.01729
Clec2h	0.288	0.00036	0.01208
Dfnb59	0.287	0.00026	0.01104

Rdh18	0.287	0.00266	0.03155
Hmgcs2	0.286	0.00270	0.03181
Gsdmc2	0.285	0.00166	0.02440
Cox8b	0.281	0.00289	0.03293
Sprr2a1	0.279	0.00570	0.04779
D630002G06Rik	0.279	0.00005	0.00636
Dnase1	0.278	0.00031	0.01145
Aldoc	0.278	0.00001	0.00492
C1qtnf3	0.276	0.00011	0.00818
Gys2	0.275	0.00040	0.01261
Gm9973	0.271	0.00007	0.00677
Slc17a2	0.269	0.00066	0.01558
Aqp4	0.266	0.00211	0.02783
Kcnj13	0.265	0.00018	0.00986
C730048C13Rik	0.263	0.00059	0.01472
Cndp1	0.260	0.00126	0.02129
Bdh1	0.258	0.00037	0.01224
9030619P08Rik	0.257	0.00528	0.04569
Ttr	0.256	0.00018	0.00985
Dusp15	0.254	0.00001	0.00492
Acy1	0.253	0.00064	0.01523
Rnf24	0.252	0.00045	0.01316
Gm5631	0.251	0.00078	0.01669
Egfl6	0.249	0.00006	0.00677
Gsdmc2	0.248	0.00239	0.02969
Vmn1r19	0.245	0.00001	0.00492
Inmt	0.245	0.00244	0.03004
Slc12a1	0.245	0.00012	0.00836
Cyp2d12	0.241	0.00213	0.02791
Mep1b	0.240	0.00097	0.01861
D630029K05Rik	0.239	0.00439	0.04114
Gpx6	0.236	0.00009	0.00753
Acot3	0.227	0.00128	0.02152
Vmn1r20	0.221	0.00114	0.02008
4933417A18Rik	0.219	0.00098	0.01869
Lrrc66	0.216	0.00002	0.00527
Wfdc15b	0.214	0.00036	0.01208
Dio1	0.210	0.00004	0.00632
Nccrp1	0.208	0.00002	0.00571
Car14	0.204	0.00150	0.02307
Hdc	0.202	0.00000	0.00320
Ranbp3l	0.190	0.00000	0.00492
Cck	0.190	0.00018	0.00986
Upk1a	0.189	0.00025	0.01100
1110032A04Rik	0.179	0.00299	0.03353

BC026439	0.177	0.00110	0.01968
Upk1b	0.169	0.00205	0.02752
Egf	0.166	0.00121	0.02086
Kcnt1	0.165	0.00004	0.00632
Psca	0.164	0.00096	0.01849
Akr1c14	0.152	0.00068	0.01579
Hpd	0.139	0.00087	0.01752
Tmem207	0.114	0.00004	0.00632