

Supplemental Material for

An engineered nano-liposome-human ACE2 decoy neutralizes SARS-CoV-2 Spike protein-induced inflammation in both murine and human macrophages

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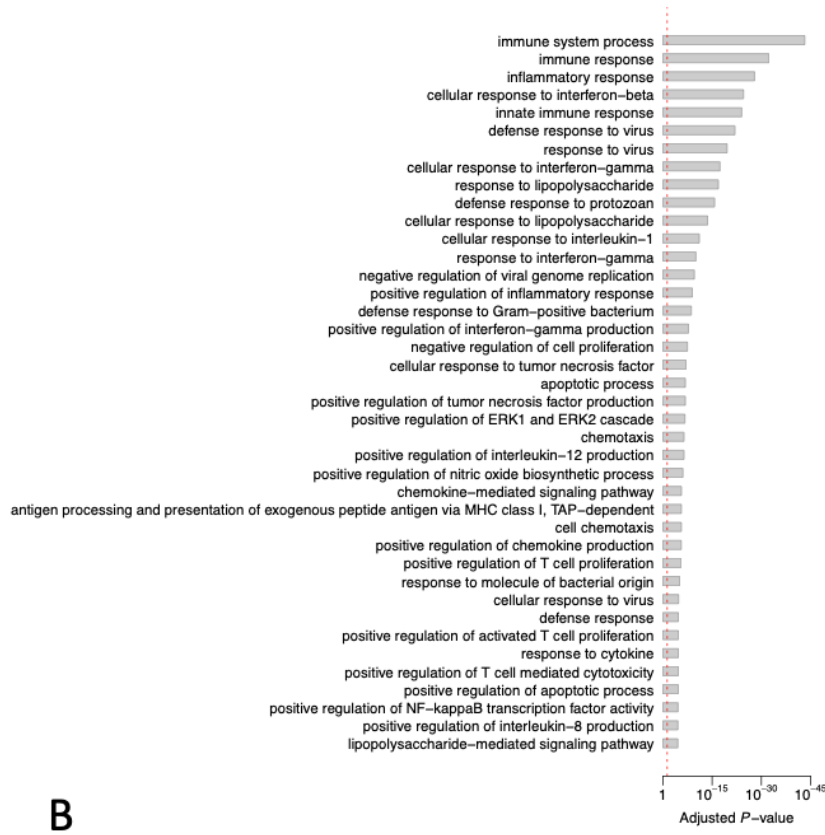
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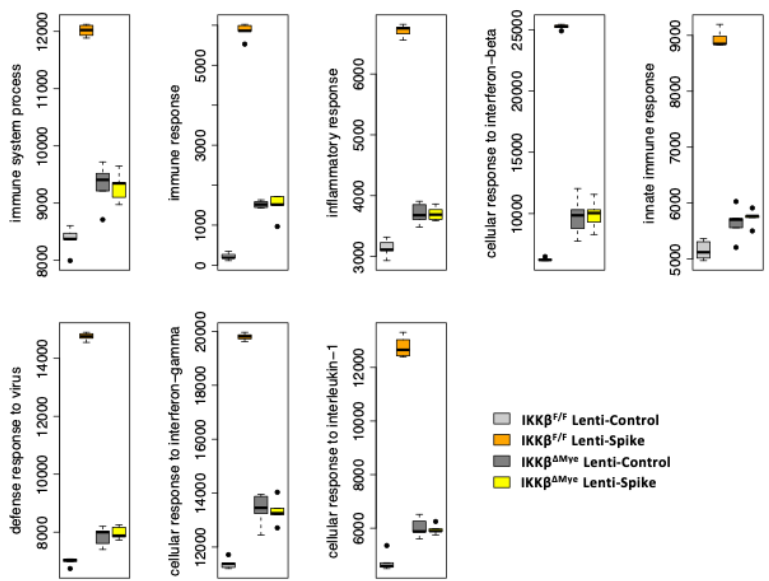
This PDF file includes:

**Supplemental Figure 1
Supplemental Table 1-2**

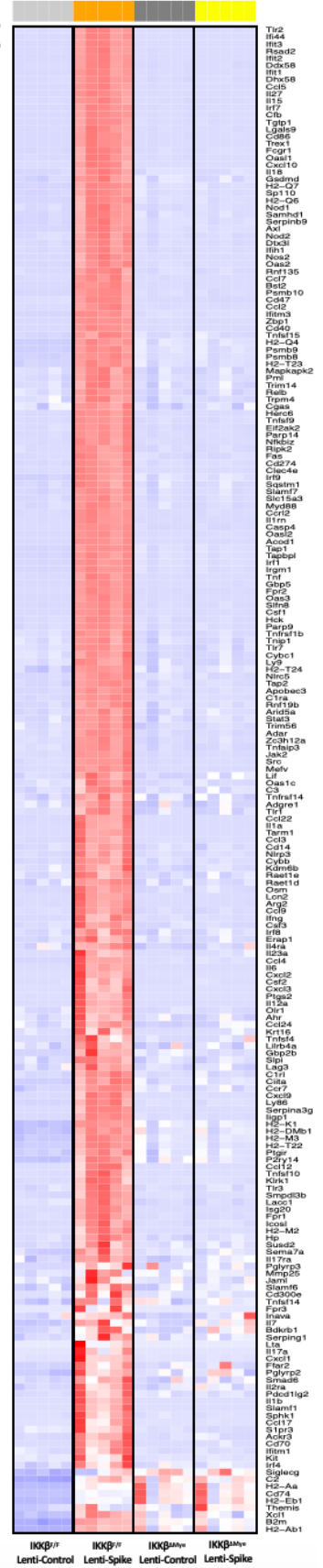
A



B



C



Supplemental Figure 1. Gene Ontology (GO) Biological Process analysis of RNA-Seq results from macrophages infected with control lentivirus or lentivirus expressing SARS-CoV-2 Spike protein.

Peritoneal macrophages were isolated from eight-week-old male $IKK\beta^{F/F}$ and $IKK\beta^{\Delta Mye}$ mice. Macrophages were infected with Lentivirus expressing SARS-CoV-2 Spike protein (Lenti-Spike) (2.3×10^7 pfu/mL) or control lentivirus for 24 hr. Total RNA was isolated for RNAseq analysis ($n=5$). (A) Gene Ontology (GO) Biological Process terms significantly associated with the DEGs in control macrophages after Lenti-Spike infection. The P -values were computed by *Fisher's* exact test. The vertical dash line indicates the significance level of $\alpha=0.01$. The y-axis displays the GO Biological Process terms while the x-axis displays the P -values. (B) Geneset scores of the prioritized GO terms. The geneset score was calculated using the FAIME algorithm. (C) Heatmap representation of DEGs involved in the biological processes of “immune system process”, “immune response”, and “inflammatory response” shown in panel A and B. Each row shows one individual gene and each column a biological replicate of mouse. Red represents relatively increased gene expression while blue denotes downregulation.

Supplemental Table 1. Primer sequences for QPCR

Mouse Primers	F R	Human Primers	F R
CCL-2	5'- TTA AAAACCTGGATCGGAACCAA -3' 5'- GCATTAGCTTCAGATTTACGGGT -3'	CCL-2	5'-TGTCCCAAAGAAGCTGTGATCT-3' 5'-GGAATCCTGAACCCACTTCTG-3'
CCL-3	5'-TTCTCTGTACCATGACACTCTGC-3' 5'-CGTGGAATCTTCCGGCTGTAG-3'	CCL-3	5'-CGCCTGCTGCTTCAGCTACACCTCCCGGCAGA-3' 5'-TGGACCCCTCAGGCACTCAGCTCCAGGTCGCT-3'
CCL-4	5'-TTCCTGCTGTTTCTCTTACACCT-3' 5'-CTGTCTGCCTCTTTTGGTCAG-3'	CXCL-10	5'- GTGGCATTCAAGGAGTACCTC -3' 5'- TGATGGCCTTCGATTCTGGATT -3'
CXCL-1	5'- CCGAAGTCATAGCCACACTCAA -3' 5'- GCAGTCTGTCTTCTTTCTCCGTTAC-3'	IL-1 β	5'- CGCCAATGACTCAGAGGAAGA -3' 5'- AGGGCGTCATT CAGGATGAA -3'
CXCL-10	5'- CCAAGTCTGCCGTCATTTTC -3' 5'- GGCTCGCAGGGATGATTTCAA -3'	IL-6	5'- GGTACATCCTCGACGGCATCT -3' 5'- GTGCCTCTTTGCTGCTTTTAC -3'
IL-1 β	5'-GCAACTGTTCCCTGAACTCAACT-3' 5'-ATCTTTTGGGGTCCGTCAACT-3'	IL-8	5'- TTTTGCCAAGGAGTGCTAAAGA -3' 5'- AACCTCTGCACCCAGTTTTTC -3'
IL-6	5'-CCGAGGAAGACGTGGACACCTTC-3' 5'-CCTCAGCCATGACCTGCCTTGTAG-3'	IL-10	5'- TCAAGGCGCATGTGA ACTCC -3' 5'- GATGTCAA ACTCACTCATGGCT -3'
IL-10	5'- GCTCTTACTGACTGGCATGAG -3' 5'- CGCAGCTCTAGGAGCATGTG -3'	TNF α	5'- CCTCTCTCTAATCAGCCCTCTG -3' 5'- GAGGACCTGGGAGTAGATGAG -3'
TNF α	5'- CCCATATACCTGGGAGGAGTCTTC -3' 5'- CATTCCCTTCACAGAGCAATGAC -3'	GAPDH	5'-GGCCTCCAAGGAGTAAGACC-3' 5'-AGGGGAGATT CAGTGTGGTG-3'
GAPDH	5'-AACTTTGGCATTGTGGAAGG-3' 5'-GGATGCAGGGATGATGTTCT-3'		

Supplemental Table 2. Detailed RNAseq data of macrophage DEGs induced by Lenti-Spike

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Nos2	15.66551162	8.75E-19	6.97E-17	51974.32958	Ccl12	8.415747679	9.01E-13	1.49E-11	341.5013991
Ifi44	14.5174660	1.37E-24	2.97E-21	23452.69362	Slco4a1	8.31434401	1.32E-13	2.58E-12	318.32221
Il1b	14.4098103	5.40E-18	3.25E-16	21766.32752	Alpk2	8.308008346	1.60E-13	3.08E-12	316.9273478
Slamf1	13.7048968	1.74E-12	2.68E-11	13353.1905	Thbs4	8.283955283	2.59E-08	1.73E-07	311.6872398
Serpina3f	13.6655515	1.93E-19	2.04E-17	12993.94174	Il27	8.219949036	2.45E-20	3.40E-18	298.1612652
Il12b	13.11365637	4.59E-22	1.51E-19	8863.472852	Gm4951	8.207123877	7.90E-18	4.47E-16	295.5224408
Cxcl9	12.6948834	8.09E-18	4.57E-16	6630.415081	Ch25h	8.066520773	1.31E-15	4.21E-14	268.0801843
Lad1	12.6475602	1.60E-15	4.98E-14	6415.099901	Carlr	8.06002624	4.40E-08	2.82E-07	266.8760887
Il6	12.2073161	8.70E-19	6.96E-17	4728.9891	Olfr433	8.003990266	9.93E-12	1.30E-10	256.7090355
Il12a	12.1396058	3.29E-18	2.16E-16	4512.170344	Tnf	7.96398126	1.35E-18	9.99E-17	249.6877548
Gbp5	11.89864057	1.84E-21	4.39E-19	3818.103687	Ccl17	7.883820313	1.96E-09	1.61E-08	236.1926585
Rnf225	11.81063296	1.43E-21	3.52E-19	3592.152692	H2-M2	7.866148632	6.20E-17	2.78E-15	233.3171638
Lta	11.68842859	1.13E-07	6.71E-07	3300.407826	Gbp3	7.853774263	7.18E-26	7.25E-22	231.3245
Ms4a4c	11.54378672	5.05E-24	8.42E-21	2985.561806	Irf7	7.801842202	1.26E-21	3.17E-19	223.1457009
Ifit3b	11.31436526	1.09E-19	1.25E-17	2546.615195	Calhm6	7.798991259	5.02E-23	3.40E-20	222.7051729
Ifi206	11.28326021	1.67E-25	7.25E-22	2492.296868	Il23a	7.796402648	3.13E-07	1.73E-06	222.3059339
Igf2bp1	11.2180605	8.46E-14	1.74E-12	2382.169736	AA467197	7.792717605	6.34E-23	4.04E-20	221.7388276
Tarm1	11.0339453	1.85E-20	2.72E-18	2096.75895	Pla1a	7.785847588	8.53E-13	1.42E-11	220.6854322
Il22	10.8703029	3.69E-12	5.31E-11	1871.919854	Six1	7.732198437	4.24E-07	2.29E-06	212.6295705
Gbp10	10.5521997	1.76E-11	2.17E-10	1501.511392	Oas1g	7.64070379	5.40E-16	1.92E-14	199.5634616
Acod1	10.5495915	1.33E-25	7.25E-22	1498.799352	Gbp2	7.638380113	1.29E-25	7.25E-22	199.2422935
Cxcl10	10.52171108	6.26E-20	7.71E-18	1470.112735	Rsad2	7.624599548	1.06E-22	5.25E-20	197.3481997
Edn1	10.4105287	4.88E-16	1.75E-14	1361.073044	Car2	7.603815233	3.74E-14	8.27E-13	194.5254671
Ifit3	10.3927760	4.64E-25	1.26E-21	1344.427306	Cmpk2	7.595044939	7.30E-20	8.94E-18	193.3465134
Apol9b	10.3137642	3.55E-18	2.28E-16	1272.77722	Gm16181	7.49796545	3.96E-13	7.10E-12	180.7642347
Ifi2	10.3022166	3.26E-23	2.52E-20	1262.630343	Gpr84	7.40862336	3.84E-17	1.83E-15	169.9095767
Tgtp2	10.2966990	3.56E-25	1.10E-21	1257.810641	Rasgrp1	7.364448543	5.36E-19	4.54E-17	164.7858486
Iigp1	10.2130742	1.68E-21	4.06E-19	1186.975336	Zbp1	7.310833578	1.67E-22	7.48E-20	158.7742977
Ptgs2	10.1393583	1.30E-18	9.77E-17	1127.849117	Il1r2	7.307944314	1.23E-05	5.21E-05	158.4566409
Ccl5	10.1318043	7.99E-23	4.33E-20	1121.959046	H2-Q6	7.294877549	3.14E-20	4.21E-18	157.0279485
Trim30c	10.11866613	1.62E-21	3.95E-19	1111.788103	Apobec4	7.275531894	3.17E-06	1.48E-05	154.936355
Apol9a	10.0473177	9.47E-16	3.12E-14	1058.142178	Serpine1	7.268500156	4.24E-18	2.63E-16	154.183028
Klri1	9.9893682	4.65E-12	6.56E-11	1016.882189	Clec4e	7.236072375	8.92E-21	1.53E-18	150.7560797
Ifi213	9.96413835	4.74E-22	1.51E-19	998.8597765	Cd69	7.212439793	1.23E-20	2.02E-18	148.3066823
Hear2	9.91469801	5.18E-21	9.60E-19	965.2093053	Syt7	7.186161286	4.35E-13	7.72E-12	145.6297489
Gbp4	9.89808753	9.39E-17	4.02E-15	954.1600898	Misp	7.176229692	2.40E-09	1.93E-08	144.6306683
Ifi205	9.80870599	2.74E-22	1.06E-19	896.839492	Klri2	7.153874539	5.48E-14	1.18E-12	142.4068307
Cxcl2	9.80473335	1.05E-18	8.10E-17	894.3733288	Rtp4	7.125061107	1.77E-23	1.95E-20	139.5909022
Heatr2	9.68665334	7.04E-11	7.70E-10	824.0872858	Klrk1	7.112704755	7.82E-13	1.32E-11	138.4004434
Lcn2	9.64905443	1.36E-21	3.38E-19	803.3614605	Oas3	7.083486602	6.54E-22	1.89E-19	135.6256838
Inhba	9.63565715	1.91E-20	2.74E-18	795.4663861	Sfn4	7.082152375	3.35E-18	2.18E-16	135.5003131
Ifi1bl1	9.59135343	5.93E-15	1.57E-13	771.4096788	H2-Q7	7.040944953	1.67E-19	1.81E-17	131.684794
Ccl22	9.55067831	2.87E-19	2.77E-17	749.9644052	Usp18	7.008747689	8.67E-22	2.35E-19	128.7784776
Ifi1	9.52489981	3.01E-25	1.09E-21	736.6828313	Isg20	6.986440264	4.46E-19	3.96E-17	126.8025777
Lhx2	9.47638749	4.00E-15	1.10E-13	712.3228652	Il1a	6.97799173	1.86E-20	2.72E-18	126.0621821
Cish	9.42563912	1.40E-14	3.43E-13	687.7017129	Gbp9	6.825402985	4.95E-22	1.55E-19	113.4099166
Ifi208	9.30799159	5.95E-18	3.51E-16	633.8473368	Ppm1n	6.82454363	8.45E-06	3.67E-05	113.342383
Cxcl3	9.21735841	1.73E-15	5.35E-14	595.2526873	Aqp3	6.789865174	1.31E-05	5.49E-05	110.6504244
Serpina3g	9.20755761	5.55E-18	3.31E-16	591.2226039	Gm19410	6.721668936	6.38E-06	2.82E-05	105.5416721
Cd40	9.10006325	1.52E-25	7.25E-22	548.7720714	Cd300ld5	6.717792334	0.00067180	0.002146	105.2584564
Gbp6	9.07251845	8.00E-22	2.25E-19	538.3939734	Gm15056	6.710253422	4.84E-14	1.06E-12	104.7098551
Fpr2	9.07005092	1.14E-23	1.55E-20	537.4739118	Slc7a2	6.688659644	2.94E-21	6.01E-19	103.1542637
Sfn1	9.002112369	6.06E-24	9.38E-21	512.7502105	Arg2	6.686795515	5.37E-16	1.91E-14	103.0210626
Ccl2	8.97235106	2.70E-21	5.73E-19	502.2810615	Zfp811	6.653187701	6.22E-09	4.62E-08	100.6489074
Irfng	8.95381838	3.09E-13	5.64E-12	495.870084	Pilra	6.644819488	2.52E-21	5.69E-19	100.0667931
Isg15	8.84437315	4.44E-22	1.48E-19	459.6440169	Oasl1	6.643292764	1.37E-20	2.15E-18	99.96095392
Gbp2b	8.83656201	4.80E-09	3.65E-08	457.1621048	Xaf1	6.629586055	3.83E-20	5.07E-18	99.01574546
Cst7	8.81215277	1.68E-18	1.21E-16	449.4923566	Vnn3	6.608785099	3.02E-24	5.96E-21	97.59836669
Upp1	8.7833227	4.97E-19	4.27E-17	440.5990885	Ly6i	6.599261826	1.41E-09	1.19E-08	96.95623863
Ccl7	8.747109116	2.45E-20	3.40E-18	429.677111	Ccdc17	6.587566555	0.0026304	0.007650	96.17343578
Magee2	8.60659970	4.14E-09	3.19E-08	389.8025455	Csf2	6.560418876	4.97E-08	3.15E-07	94.38062865
Bpifc	8.59502083	3.09E-09	2.44E-08	386.6865658	Gbp7	6.494998565	4.69E-22	1.51E-19	90.19643864
Ptx3	8.59354653	9.35E-18	5.17E-16	386.2916093	Tdgf1	6.489519154	0.0002003	0.000699	89.85451884
Tgtp1	8.58068683	1.89E-20	2.72E-18	382.863638	Batf2	6.48799499	4.76E-20	6.21E-18	89.75964034
Cfb	8.535199	4.49E-18	2.77E-16	370.9804	Htra4	6.458503	8.74E-11	9.38E-10	87.94335

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Ptges	6.453591	1.91E-23	1.95E-20	87.64444	Fabp3	5.601709	2.52E-19	2.51E-17	48.56042
Slco3a1	6.423665	2.24E-23	2.12E-20	85.84515	Axl	5.597385	2.59E-21	5.73E-19	48.41511
Phf11a	6.4203	1.78E-18	1.26E-16	85.64516	Olr1	5.568756	2.15E-14	5.04E-13	47.46381
Tmem132e	6.415422	7.08E-08	4.36E-07	85.35607	Dnase1l3	5.567539	6.53E-06	2.88E-05	47.4238
Vcam1	6.396946	2.72E-20	3.67E-18	84.26993	Lrrc75a	5.563949	6.44E-21	1.16E-18	47.30593
Cd70	6.390425	2.32E-05	9.38E-05	83.8899	Clmp	5.547616	2.80E-23	2.34E-20	46.77338
Gm49358	6.386785	0.002775	0.008043	83.67849	Il15ra	5.545094	1.68E-17	8.80E-16	46.69168
Oas2	6.375523	1.87E-20	2.72E-18	83.02785	Scimp	5.533417	1.84E-16	7.29E-15	46.31531
Gm21970	6.37203	2.12E-05	8.59E-05	82.82702	Icosl	5.526041	5.61E-16	1.98E-14	46.07913
Ubd	6.331584	1.95E-07	1.11E-06	80.53723	Pdgfrb	5.503552	2.31E-17	1.16E-15	45.3664
Socs2	6.329971	5.64E-17	2.60E-15	80.44722	Tlr2	5.479812	1.95E-22	8.12E-20	44.62598
Traf1	6.328392	1.56E-20	2.39E-18	80.35925	Shisa3	5.41736	1.22E-08	8.62E-08	42.73541
Ifi47	6.320666	7.38E-23	4.25E-20	79.93007	Col27a1	5.415562	5.08E-09	3.85E-08	42.68217
Adm2	6.305767	0.000242	0.000834	79.10886	Oas2	5.40988	3.16E-22	1.12E-19	42.51441
Ccnd2	6.292293	1.02E-19	1.20E-17	78.37347	Rasgef1c	5.400552	0.000612	0.001965	42.2404
Vmn2r124	6.264535	0.000346	0.00116	76.87994	Insrr	5.383284	0.000489	0.001596	41.73785
Ackr3	6.235202	1.67E-07	9.66E-07	75.33258	Cdh6	5.375343	0.000586	0.00189	41.50874
Trex1	6.222661	3.12E-22	1.12E-19	74.68055	Icam1	5.370573	1.15E-24	2.77E-21	41.37172
Lysmd2	6.216524	1.47E-11	1.85E-10	74.36354	AC167036.2	5.357362	2.33E-06	1.11E-05	40.9946
Olfir1271	6.213477	0.001227	0.003766	74.20667	Adipoq	5.351212	0.001687	0.005069	40.82021
Cxcl1	6.189198	4.12E-11	4.76E-10	72.9683	Ifi203	5.35064	1.44E-23	1.74E-20	40.80403
Ffar2	6.166026	9.57E-07	4.83E-06	71.80569	Gem	5.346858	4.10E-18	2.55E-16	40.69721
BC147527	6.156982	1.19E-09	1.02E-08	71.35695	Aqp9	5.346454	1.36E-18	1.00E-16	40.68582
Nts	6.137769	7.25E-05	0.000271	70.41298	Milk	5.343907	6.03E-23	3.96E-20	40.61405
Tcp10b	6.096772	4.42E-09	3.38E-08	68.44018	Oas1h	5.329016	0.000437	0.001436	40.19702
Ppfia3	6.091513	2.01E-08	1.37E-07	68.19117	Ovol1	5.325581	2.96E-05	0.000118	40.10142
Socs3	6.08981	1.31E-20	2.10E-18	68.11072	Eva1b	5.309353	2.46E-19	2.47E-17	39.65285
Clic5	6.070755	3.32E-16	1.24E-14	67.21704	Sprr2e	5.292757	6.88E-07	3.57E-06	39.19933
Dmwd	6.06996	1.11E-09	9.59E-09	67.18001	Ifi209	5.284765	6.68E-24	9.66E-21	38.98278
Olfir56	6.047102	2.67E-07	1.50E-06	66.12397	Mfsd7a	5.277284	4.78E-20	6.21E-18	38.78115
Majin	6.044892	2.60E-08	1.73E-07	66.02277	Pcp4	5.276604	0.000571	0.001844	38.76289
Olfir1396	6.038738	5.26E-05	0.000201	65.74176	Gm12216	5.251225	8.87E-14	1.81E-12	38.08695
Nt5c1a	5.996998	4.30E-07	2.32E-06	63.86696	Fam3b	5.25059	3.59E-06	1.66E-05	38.07019
Tnfsf10	5.980176	3.69E-14	8.19E-13	63.12658	Serpina11	5.241335	0.000959	0.002994	37.82676
Tnfsf4	5.970484	0.000132	0.000473	62.70395	H1f10	5.238097	1.19E-08	8.39E-08	37.74195
Fpr1	5.96631	3.50E-11	4.09E-10	62.52276	AC168977.2	5.227561	0.002089	0.006184	37.46733
Fpr3	5.966045	0.000984	0.003067	62.51128	Hpcal4	5.216129	4.25E-05	0.000165	37.17161
Ms4a4d	5.964656	8.81E-08	5.35E-07	62.45115	Cd86	5.210641	2.14E-20	3.05E-18	37.03046
Pilrb1	5.956161	4.34E-15	1.19E-13	62.08451	Il12rb1	5.209766	9.72E-11	1.03E-09	37.00802
Hdc	5.928589	2.26E-17	1.14E-15	60.90924	Tmem200b	5.208213	2.04E-07	1.16E-06	36.96821
Hsh2d	5.926037	1.73E-09	1.43E-08	60.80158	Slc43a3	5.205447	1.03E-22	5.20E-20	36.8974
Cd38	5.920672	4.51E-23	3.26E-20	60.57588	Enpp4	5.194016	1.62E-19	1.77E-17	36.6062
Timpt	5.878346	2.71E-17	1.34E-15	58.82451	Nags	5.189073	1.79E-05	7.35E-05	36.48098
Ifi211	5.841317	1.13E-22	5.46E-20	57.33394	Krt16	5.182884	7.77E-06	3.39E-05	36.32482
Marcks1l	5.828724	1.23E-20	2.02E-18	56.83564	Csprs	5.176638	1.01E-11	1.32E-10	36.16791
Adora2a	5.811782	1.90E-22	8.10E-20	56.17209	Bst2	5.168324	2.72E-20	3.67E-18	35.96007
Ifi214	5.788302	1.26E-06	6.26E-06	55.26528	Dll1	5.147888	2.45E-06	1.16E-05	35.5428
Socs1	5.779803	7.98E-19	6.44E-17	54.94067	Ddx60	5.127376	5.12E-20	6.57E-18	34.95376
Igtp	5.776101	2.47E-20	3.40E-18	54.79989	Irf1	5.124116	1.44E-23	1.74E-20	34.87488
Slc2a6	5.764966	3.67E-23	2.75E-20	54.37856	AC147806.1	5.117218	2.83E-05	0.000113	34.70853
Dnmt3c	5.751821	0.000256	0.000876	53.88533	Cd300e	5.114967	5.59E-05	0.000212	34.6544
Zmynd15	5.75108	3.94E-21	7.63E-19	53.85768	Tnfaiip8l3	5.090515	3.29E-07	1.81E-06	34.07201
Ifnb1	5.748372	0.000484	0.001582	53.75666	Vcan	5.08908	6.34E-16	2.20E-14	34.03813
Phf11d	5.745317	2.13E-21	4.92E-19	53.64295	Stfa3	5.088203	3.28E-06	1.53E-05	34.01744
Cp	5.738447	8.05E-16	2.70E-14	53.38812	Ngf	5.071262	0.00067	0.002143	33.62033
Csf1	5.725313	4.75E-24	8.42E-21	52.90428	Hed1	5.062577	4.98E-23	3.40E-20	33.41854
Hamp	5.719301	8.94E-07	4.54E-06	52.6843	Ier3	5.059249	1.67E-16	6.68E-15	33.34155
Slc1a2	5.705352	1.15E-13	2.28E-12	52.17734	Rtn2	5.05312	3.17E-07	1.75E-06	33.20021
Htr7	5.701923	0.002556	0.007451	52.05348	Bmp10	5.03655	0.002316	0.006796	32.82106
Sprr2d	5.687071	0.000322	0.001085	51.52038	Hspa1b	5.024091	2.39E-14	5.53E-13	32.53884
Pax4	5.681776	0.002405	0.007044	51.33163	Tnfrsf9	5.020615	3.02E-08	2.00E-07	32.46053
Serpib2	5.659746	4.79E-18	2.93E-16	50.55374	Irgm2	5.01367	3.12E-23	2.51E-20	32.30466
Phf11b	5.625006	8.65E-21	1.50E-18	49.35094	Adm	5.012232	3.39E-07	1.86E-06	32.27247
Mefv	5.619963	6.22E-22	1.82E-19	49.17875	Oas1d	4.985886	0.002893	0.00836	31.68847
Plaat3	5.618669761	5.85E-19	4.86E-17	49.1346802	Susd2	4.92894081	1.27E-08	8.91E-08	30.4620432

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Flrt3	4.926825	8.62E-15	2.20E-13	30.41741	Acp5	4.442567	8.04E-19	6.46E-17	21.74432
Casp4	4.921014	2.93E-22	1.10E-19	30.29512	Gm5431	4.437675	1.19E-21	3.05E-19	21.67072
Oas1a	4.915572	2.65E-21	5.73E-19	30.18108	Nt5c3	4.436083	1.07E-21	2.79E-19	21.64682
Ildr1	4.914618	0.002122	0.00627	30.16112	Ralgds	4.431521	6.65E-21	1.18E-18	21.57848
Mroh8	4.906959	5.90E-05	0.000223	30.00142	Pmepa1	4.429184	1.34E-11	3.75E-10	21.54355
Tnfsf15	4.897792	1.73E-16	6.88E-15	29.81139	Krt23	4.42475	0.000482	0.001576	21.47744
Ifit1b2	4.894427	1.20E-09	1.03E-08	29.74194	Nlrp3	4.407843	1.52E-19	1.69E-17	21.22721
Il1rn	4.888813	2.58E-21	5.73E-19	29.62642	Ms4a6d	4.399427	3.20E-21	6.37E-19	21.10374
Tnfsf9	4.867666	2.48E-20	3.40E-18	29.19534	Slc6a4	4.389618	4.41E-08	2.82E-07	20.96075
Sh2d6	4.857247	3.31E-09	2.60E-08	28.98525	P3h2	4.387998	9.32E-06	4.02E-05	20.93722
Bcl2a1a	4.853819	2.28E-19	2.32E-17	28.91646	Pglyrp3	4.382341	0.003014	0.008679	20.85528
Nfkbie	4.850644	6.78E-21	1.20E-18	28.8529	Slamf9	4.381453	1.15E-15	3.75E-14	20.84246
Mycl	4.844858	1.47E-12	2.32E-11	28.73741	Acs11	4.371656	1.94E-23	1.95E-20	20.7014
Sema7a	4.843425	1.41E-06	6.96E-06	28.70887	Jaml	4.371482	3.47E-07	1.90E-06	20.69889
Ube2l6	4.83682	7.25E-23	4.25E-20	28.57775	Ppp1r26	4.370098	1.71E-06	8.30E-06	20.67904
Gzma	4.836158	7.52E-05	0.00028	28.56463	Ddx58	4.36175	9.73E-22	2.57E-19	20.55974
Ms4a6c	4.833435	1.19E-22	5.59E-20	28.51078	Col5a3	4.346911	3.34E-08	2.19E-07	20.34936
Nfkbiz	4.83108	1.27E-20	2.06E-18	28.46426	Ccl3	4.328243	2.98E-18	1.96E-16	20.08773
Trim30b	4.821151	4.36E-11	5.01E-10	28.26903	Pgf	4.327279	4.07E-06	1.86E-05	20.07431
Upb1	4.808564	0.002912	0.008406	28.02348	Uba7	4.302395	1.22E-20	2.02E-18	19.73103
Kcng3	4.798931	0.000241	0.00083	27.83699	Sdk1	4.301229	0.000143	0.000509	19.7151
Trim72	4.788021	5.88E-07	3.10E-06	27.62728	Ntn2	4.29275	5.49E-17	2.54E-15	19.59956
Cyp26c1	4.783693	0.000233	0.000805	27.54451	Nfkbia	4.288429	9.44E-23	4.87E-20	19.54095
Il17a	4.779417	0.003244	0.009296	27.463	Vmn2r11	4.286281	6.49E-11	7.14E-10	19.51188
Prom1	4.765254	5.31E-05	0.000202	27.19471	Ly6e	4.275161	4.11E-21	7.89E-19	19.36207
Siglece	4.763651	4.42E-08	2.83E-07	27.16452	Tpbp	4.274737	1.66E-11	2.06E-10	19.35638
Pde11a	4.735867	2.32E-06	1.10E-05	26.64636	Lgals9	4.273509	1.08E-20	1.84E-18	19.33991
Ccdc116	4.71122	0.001544	0.004669	26.19501	Lif	4.270572	2.59E-07	1.45E-06	19.30058
Gvin1	4.702752	7.02E-23	4.25E-20	26.04171	Il4i1	4.259929	8.23E-13	1.38E-11	19.15872
1110032F0									
4Rik	4.69647	1.48E-06	7.27E-06	25.92856	Ugt3a1	4.254757	0.000112	0.000407	19.09015
Herc6	4.695086	2.52E-23	2.19E-20	25.90369	Apol6	4.251477	0.000389	0.001289	19.0468
Gm7609	4.687282	2.13E-09	1.73E-08	25.76395	Nrg1	4.248551	1.95E-07	1.11E-06	19.00821
Fcgr1	4.683566	2.01E-19	2.10E-17	25.69768	Kazn	4.226963	4.17E-10	3.93E-09	18.7259
Dbx2	4.668752	0.001665	0.005008	25.43516	Parp14	4.226752	8.28E-23	4.38E-20	18.72316
H2-Oa	4.664403	1.53E-07	8.90E-07	25.3586	H2-Q4	4.223932	6.78E-22	1.94E-19	18.6866
Cxcl16	4.66234	8.54E-22	2.35E-19	25.32235	Nod2	4.221651	1.57E-16	6.35E-15	18.65708
Tap1	4.662139	2.95E-22	1.10E-19	25.31883	Wnk2	4.218831	1.56E-12	2.44E-11	18.62064
Has1	4.646571	0.003315	0.009485	25.04708	Il18bp	4.202815	8.64E-13	1.44E-11	18.41507
Pcsk1	4.64394	0.002023	0.005996	25.00145	Stx1b	4.200408	0.000371	0.001235	18.38437
Ikzf4	4.637772	1.47E-05	6.15E-05	24.89478	Ifi2712a	4.191924	1.84E-14	4.37E-13	18.27658
Dennd3	4.636299	1.36E-16	5.57E-15	24.86939	Csf3	4.186335	7.56E-09	5.51E-08	18.20591
Hspa1a	4.63469	8.46E-20	1.01E-17	24.84167	Hbegf	4.173504	1.43E-12	2.26E-11	18.04471
Calcr	4.623328	0.003241	0.009289	24.64679	Stat2	4.166717	1.16E-20	1.95E-18	17.96002
Pilrb2	4.59494	1.80E-14	4.30E-13	24.16655	Gbp8	4.163929	1.65E-07	9.55E-07	17.92535
AC147806.2									
	4.590423	4.70E-15	1.28E-13	24.09101	Ifih1	4.15528	2.73E-21	5.73E-19	17.81821
Sh3bp5	4.58582	2.71E-22	1.06E-19	24.01427	1700019D03R				
Xcl1	4.583528	2.46E-06	1.17E-05	23.97614	ik	4.145369	3.77E-07	2.06E-06	17.69622
Gm4070	4.570508	5.70E-21	1.05E-18	23.76075	Crabp2	4.141899	0.000156	0.000552	17.6537
Ifi204	4.54248	2.50E-23	2.19E-20	23.30359	Trp53i11	4.139924	3.93E-11	4.55E-10	17.62956
Gm12185	4.536853	1.57E-15	4.91E-14	23.21287	Ifitm3	4.138278	1.39E-20	2.17E-18	17.60945
Mndal	4.533856	1.69E-22	7.48E-20	23.1647	Klrg2	4.137176	1.49E-05	6.19E-05	17.596
Nudt17	4.530359	5.46E-05	0.000208	23.10862	Hap1	4.137115	1.15E-05	4.90E-05	17.59526
Gjb2	4.522067	7.14E-05	0.000267	22.97618	Bcl2a1d	4.136293	1.08E-17	5.87E-16	17.58524
Gm4841	4.520479	4.42E-11	5.08E-10	22.9509	F830016B08R				
Il15	4.500102	1.72E-20	2.56E-18	22.62901	ik	4.129492	1.54E-08	1.07E-07	17.50254
Ifi35	4.49833	1.71E-20	2.56E-18	22.60123	C1rl	4.124344	1.44E-12	2.27E-11	17.4402
C1ra	4.489856	3.65E-18	2.33E-16	22.46887	A1cf	4.115462	0.000225	0.000779	17.33316
Nirc5	4.470041	3.45E-22	1.21E-19	22.16239	Nmi	4.113921	2.67E-21	5.73E-19	17.31465
Timd4	4.458092	2.27E-07	1.28E-06	21.97958	Dhx58	4.111235	5.94E-22	1.79E-19	17.28244
Nfkb2	4.455903	7.45E-23	4.25E-20	21.94626	Smpdl3b	4.109513	1.93E-13	3.66E-12	17.26183
Fam171b	4.448979	2.06E-09	1.68E-08	21.84118	Elfn1	4.103988	2.51E-05	0.000101	17.19584
Irgm1	4.448686	2.37E-22	9.70E-20	21.83674	Mmp13	4.098059	8.01E-12	1.06E-10	17.12532
Myrlf	4.447945	0.002804	0.008121	21.82553	Ly6a	4.092089	8.46E-13	1.42E-11	17.0546
Sifn8	4.445646	1.39E-22	6.40E-20	21.79079	Ereg	4.091333	4.52E-05	0.000174	17.04566
Krt4	4.44455	0.00246	0.007193	21.77424	Stat1	4.074393	7.85E-23	4.33E-20	16.84669
					Casp7	4.071544	1.89E-21	4.46E-19	16.81346
					Gm19684	4.070791	5.66E-10	5.16E-09	16.80467

Gene	log2(FC)	P-value	FDR	FC	Gene	log2(FC)	P-value	FDR	FC
Fbxo39	4.067046466	0.00072850	0.002311	16.761117	Chic1	3.720074282	4.75E-05	0.000182408	13.178134
Helz2	4.062026437	4.39E-21	8.27E-19	16.702896	Ciita	3.71779574	7.01E-17	3.13E-15	13.157338
Car6	4.054728421	3.09E-16	1.16E-14	16.618617	Adgb	3.714091108	4.19E-06	1.92E-05	13.123595
Xkr8	4.052076469	2.72E-16	1.03E-14	16.588096	Fas	3.714085849	1.95E-19	2.05E-17	13.123547
Tnfrsf8	4.027314262	1.65E-07	9.56E-07	16.305810	Penk	3.708549369	7.85E-09	5.70E-08	13.073281
Filip1l	4.023075275	1.51E-20	2.33E-18	16.257970	Ccl9	3.704428729	1.53E-18	1.11E-16	13.035994
Trim30a	4.016400088	1.86E-22	8.07E-20	16.182920	A530032D15Rik	3.699744335	1.33E-13	2.60E-12	12.993735
Fit4	4.014301858	1.02E-08	7.27E-08	16.159401	Cd274	3.692662359	3.08E-21	6.18E-19	12.930107
Orm1	4.013340287	7.90E-13	1.33E-11	16.148634	Osbp3	3.665796105	1.35E-18	9.99E-17	12.691547
Src	4.009850397	1.92E-19	2.04E-17	16.109618	Pdcd1lg2	3.664511279	1.91E-09	1.57E-08	12.680249
Cdc42ep2	4.001748232	1.89E-17	9.76E-16	16.019400	Glrp1	3.663616728	4.32E-16	1.56E-14	12.672389
Gm45799	3.998775269	8.61E-05	0.000318	15.98642306	Cdh17	3.659770086	0.002567779	0.007481477	12.63864668
Coch	3.998048063	2.55E-06	1.20E-05	15.978366	Sphk1	3.65458525	2.00E-11	2.45E-10	12.593306
F10	3.976663739	8.64E-22	2.35E-19	15.743274	Maff	3.653046507	4.13E-16	1.51E-14	12.579882
Met	3.964576828	2.73E-19	2.66E-17	15.6119282	Car3	3.652125812	0.002248073	0.006613956	12.57185656
Pipp1	3.959123317	1.02E-13	2.05E-12	15.553025	Wars	3.645160918	3.62E-22	1.25E-19	12.511309
Pappa2	3.947216315	0.000430285	0.001415547	15.42518958	Plekha4	3.643434513	5.52E-07	2.93E-06	12.49634698
Tmprss2	3.943809261	0.00222304	0.00654	15.388804	Gm8113	3.642639636	4.52E-19	4.00E-17	12.489463
Pamr1	3.935303472	0.00013143	0.000472	15.298342	Slc28a2	3.633328431	3.63E-21	7.09E-19	12.409115
Rnf213	3.934505521	5.32E-20	6.75E-18	15.289883	Lpar1	3.631681386	3.24E-11	3.81E-10	12.394957
Psme2	3.928857103	2.21E-19	2.27E-17	15.230137	Krt13	3.629946692	0.0012617	0.0038629	12.38006
Tet1	3.91923581	2.04E-06	9.81E-06	15.128906	Lgals3bp	3.629212462	3.81E-19	3.48E-17	12.373763
Trim30d	3.915761392	4.37E-22	1.48E-19	15.092515	Sifn9	3.62536816	3.83E-18	2.41E-16	12.340835
Tapp1	3.913267816	2.74E-22	1.06E-19	15.066452	Sass6	3.624858437	5.08E-13	8.88E-12	12.336476
Dlgap3	3.902905508	0.00030019	0.001016	14.958623	Psmb9	3.624462657	9.92E-20	1.18E-17	12.333092
Fam167a	3.896294694	5.74E-05	0.000217	14.890235	Samd9l	3.616765772	9.06E-22	2.43E-19	12.267469
Cnn3	3.883901761	3.09E-15	8.79E-14	14.762874	Gipc3	3.606841129	2.11E-05	8.59E-05	12.183368
Gzmb	3.882073108	9.37E-05	0.000343	14.744174	Rnd3	3.602821956	1.17E-18	8.95E-17	12.149474
Neb	3.881219278	5.18E-07	2.76E-06	14.735450	Zc3h12c	3.598885297	1.85E-19	1.99E-17	12.116367
Bdkrb1	3.867750753	3.49E-05	0.000137333	14.598525	Tmem178	3.596808839	9.88E-17	4.19E-15	12.098940
Hao1	3.864944243	0.0030389	0.008741	14.570154	Zdhc15	3.593979327	1.74E-10	1.76E-09	12.075234
Ndufa4l2	3.853241346	0.00133148	0.004061	14.452441	Eif2ak2	3.587943884	2.95E-19	2.81E-17	12.024824
Mov10	3.849726934	3.83E-19	3.48E-17	14.417278	Gm20075	3.586875725	0.0001205	0.0004359	12.015924
Gfi1	3.845013766	7.44E-05	0.000277	14.370255	Slc25a37	3.578940244	1.68E-12	2.61E-11	11.950012
Sifn2	3.842384564	1.16E-20	1.95E-18	14.344090	Samd11	3.556120779	1.27E-05	5.35E-05	11.762483
Mki67	3.841945871	6.10E-14	1.30E-12	14.339729	Gm49342	3.548535485	2.92E-17	1.43E-15	11.700801
Rnd1	3.837491688	5.69E-14	1.22E-12	14.295524	Jak2	3.545451419	6.15E-22	1.82E-19	11.675815
Gm36079	3.833463557	0.00072094	0.002290	14.255666	Agrn	3.539707845	6.07E-18	3.57E-16	11.629424
Ccl4	3.832175118	2.37E-16	9.10E-15	14.242940	Adgrf1	3.523800988	0.0002604	0.0008901	11.501905
Psmb10	3.814163234	3.68E-20	4.90E-18	14.066224	Col9a3	3.520239637	1.57E-06	7.66E-06	11.473547
Ccne1	3.810639729	1.16E-17	6.24E-16	14.031912	Nr4a3	3.510915643	2.40E-07	1.35E-06	11.399634
Ms4a4a	3.810273954	7.84E-12	1.04E-10	14.028355	Ddit3	3.509784494	1.66E-20	2.52E-18	11.390699
1600014C10Rik	3.809261189	3.91E-17	1.85E-15	14.018510	Tgm2	3.508643638	5.52E-22	1.69E-19	11.381695
Gpr85	3.803627253	5.70E-12	7.84E-11	13.963873	Tspan33	3.500314742	0.0005310	0.0017230	11.316176
Mybpc2	3.802373652	0.00253568	0.007397	13.951744	Pde4b	3.494170804	1.19E-17	6.40E-16	11.268087
Ifitm1	3.793925991	2.26E-06	1.08E-05	13.870289	Tnfrsf14	3.48592842	0.0004397	0.0014439	11.203894
Daxx	3.791032452	2.83E-21	5.85E-19	13.842498	St3gal5	3.470870149	7.72E-20	9.36E-18	11.087561
Slc39a2	3.789129062	3.96E-08	2.56E-07	13.824247	Tlr3	3.465465073	2.00E-14	4.72E-13	11.046099
Cybb	3.778723676	1.35E-20	2.13E-18	13.724899	Asb11	3.465067324	5.70E-05	0.0002161	11.043054
Sod2	3.774772681	7.69E-21	1.34E-18	13.687363	Frbz	3.464102744	0.0008278	0.0026091	11.035673
Tjp1	3.768649114	5.94E-14	1.27E-12	13.629390	Mmp14	3.463891418	4.41E-19	3.94E-17	11.034056
Cflar	3.767838419	2.73E-21	5.73E-19	13.621733	Rnf144a	3.463318129	2.09E-08	1.42E-07	11.029673
AC167036.1	3.763482977	8.81E-06	3.81E-05	13.580672	Lrrc8c	3.463050365	1.88E-19	2.01E-17	11.027626
Aoah	3.761563991	3.11E-19	2.91E-17	13.562619	Mmp25	3.457173485	0.0002329	0.0008038	10.982796
Hpx	3.752630026	0.00121325	0.003725	13.47889	Il17rd	3.454050215	1.31E-07	7.74E-07	10.959045
Fst	3.74820949	0.00333933	0.009548	13.437655	Sp110	3.431430907	1.60E-18	1.16E-16	10.788563
Itgal	3.747132222	2.63E-19	2.59E-17	13.4276	Ak4	3.429877305	1.89E-15	5.71E-14	10.776952
Dnmt3l	3.741277555	0.00019763	0.000690	13.37324	Serpib9	3.426733202	6.36E-18	3.68E-16	10.753491
Phf11c	3.73986376	5.10E-13	8.91E-12	13.360145	Krt5	3.426687458	0.0011391	0.0035144	10.753150
Akap12	3.737472624	1.54E-08	1.07E-07	13.338020	Psmb8	3.425998443	1.96E-18	1.36E-16	10.748015
Gch1	3.730389851	2.46E-19	2.47E-17	13.272698	Ass1	3.425739063	1.49E-17	7.84E-16	10.746083
Depp1	3.729432439	3.02E-07	1.67E-06	13.263893	Gng4	3.425728958	1.37E-08	9.61E-08	10.746008
Serpine2	3.726646241	2.03E-08	1.38E-07	13.238302	Sifn3	3.420838042	4.81E-16	1.73E-14	10.709639
Abli2	3.725182118	6.42E-13	1.10E-11	13.224874	Rcn1	3.404722998	1.12E-16	4.70E-15	10.590677
Kit	3.721790687	3.83E-07	2.09E-06	13.19382	Znfx1	3.400200595	7.50E-20	9.14E-18	10.557531

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Car13	3.399518686	4.39E-21	8.27E-19	10.55254214	Lag3	3.076630784	0.000264	0.000903301	8.436419205
Pnp2	3.399517766	4.65E-12	6.56E-11	10.55253541	Svep1	3.074605984	3.18E-07	1.75E-06	8.424587128
Batf	3.398822429	9.86E-19	7.66E-17	10.54745062	Scd4	3.06194212	4.53E-07	2.43E-06	8.350960375
Dusp4	3.397182616	2.56E-19	2.55E-17	10.53546887	Osm	3.048734275	3.63E-16	1.35E-14	8.274856393
Dtx3l	3.392082185	1.70E-20	2.56E-18	10.49828807	Epop	3.047098732	3.68E-06	1.70E-05	8.265480737
Ppp1r15a	3.388017725	5.23E-20	6.67E-18	10.46875319	Rgs1	3.032783937	2.56E-17	1.28E-15	8.183874023
Hrc	3.386639057	2.91E-07	1.61E-06	10.45875382	Slc31a2	3.03073984	6.76E-19	5.55E-17	8.172286829
Procr	3.378526358	1.20E-17	6.45E-16	10.40010622	Tap2	3.030266562	1.03E-17	5.66E-16	8.169606338
Csrnp1	3.377675727	3.91E-18	2.45E-16	10.39397599	Naa25	3.029652839	1.37E-19	1.54E-17	8.166131723
Pnp	3.371726631	2.30E-18	1.57E-16	10.35120365	Sp100	3.02688459	5.76E-20	7.21E-18	8.150477541
Camk2n1	3.358935671	3.61E-09	2.80E-08	10.25983533	Htr1b	3.020151114	0.003483	0.009928086	8.112525534
Trim21	3.35735223	9.89E-20	1.18E-17	10.24858075	Milr1	3.019193991	1.74E-18	1.02E-16	8.107145251
S1pr3	3.338392212	2.13E-07	1.21E-06	10.11477422	Adams1 4	3.018508178	1.95E-09	1.60E-08	8.103292277
Pde10a	3.337971501	0.00010 1513	0.000370 807	10.11182504	Psmc1	3.015091673	1.28E-19	1.45E-17	8.084125243
Jsrp1	3.336619878	0.00114	0.003518	10.10235597	Stxbp6	3.010480724	8.52E-08	5.19E-07	8.058329087
Il2ra	3.331941445	1.75E-07	1.01E-06	10.06964868	Col23a1	3.006639383	3.47E-09	2.71E-08	8.036901406
Slamf6	3.329930133	3.40E-09	2.66E-08	10.05562001	AC13310 3.1	3.006561546	0.001646 512	0.004959084	8.036467802
Bcl2l14	3.319596695	0.00187 6767	0.005599 055	9.983853016	Rab11fip 1	3.000852498	4.83E-19	4.19E-17	8.004728652
Rab32	3.315529449	2.75E-21	5.73E-19	9.955746179	Nfkbib	2.990455438	4.82E-19	4.19E-17	7.947248397
Epsti1	3.31225465	1.47E-18	1.07E-16	9.93317308	Dusp28	2.989287931	5.27E-14	1.14E-12	7.940819658
Prdx5	3.304613799	8.64E-18	4.84E-16	9.880703738	Tent4a	2.989011161	5.84E-18	3.46E-16	7.939296416
C1cf1	3.292925082	8.38E-06	3.64E-05	9.800973686	Tent5c	2.978960603	2.20E-19	2.27E-17	7.884179393
Il21r	3.291286628	6.61E-11	7.26E-10	9.789849138	Intu	2.97857321	7.84E-16	2.65E-14	7.882062613
Parp12	3.271341824	1.24E-20	2.02E-18	9.655438793	Ogfr	2.959222876	1.64E-20	2.50E-18	7.777049258
Slc6a9	3.259934905	9.14E-10	8.03E-09	9.579397403	Shf1	2.95680014	7.26E-11	7.90E-10	7.764000117
Foxq1	3.250487344	1.00E-05	4.30E-05	9.516871186	Oas1c	2.954821789	4.24E-13	7.54E-12	7.753360729
Ccr7	3.250095206	2.63E-09	2.10E-08	9.514284764	Spint1	2.954742816	1.77E-07	1.02E-06	7.752936324
Exoc3l4	3.247333235	4.41E-13	7.82E-12	9.496087542	Parp10	2.953608381	1.42E-16	5.80E-15	7.746842351
Eil2	3.245902625	6.79E-18	3.85E-16	9.486675667	Soat2	2.950514829	6.88E-16	2.36E-14	7.730248697
Gm29094	3.24319346	4.06E-13	7.26E-12	9.468877827	Cth	2.937426225	7.76E-06	3.38E-05	7.660434506
Fit3	3.231415304	0.00198	0.005905	9.391888649	Acy1	2.935323013	1.92E-11	2.35E-10	7.649274987
Prrg4	3.229967346	4.63E-07	2.49E-06	9.382467227	Tor3a	2.933637929	6.05E-20	7.53E-18	7.640345765
Sult6b1	3.22539687	3.15E-06	1.47E-05	9.352790488	Bcl2a1b	2.917062068	5.38E-17	2.49E-15	7.553064297
Hp	3.194765763	1.38E-12	2.19E-11	9.156306543	Tmeff1	2.902319475	0.000378	0.001258278	7.47627416
Ermap	3.181136634	0.00118	0.003650	9.07021428	Olfm1	2.898053164	5.75E-11	6.42E-10	7.454198119
Nupr1	3.18021593	1.49E-17	7.83E-16	9.064427664	Boc	2.894161425	0.000403	0.001332549	7.43411716
Rhof	3.179658537	1.69E-06	8.20E-06	9.060926253	Mit1	2.890809721	6.09E-18	3.57E-16	7.416866087
Gsap	3.178698342	1.32E-16	5.41E-15	9.054897701	Rfx5	2.88882807	2.10E-10	2.08E-09	7.406685452
Zfp945	3.167546262	8.09E-17	3.52E-15	8.985172879	Setdb2	2.886471724	8.16E-18	4.59E-16	7.394598028
C130026l 21Rik	3.164103927	2.25E-14	5.23E-13	8.963759409	Spata13	2.885641184	6.14E-09	4.57E-08	7.390342284
Saa3	3.156970214	4.87E-10	4.51E-09	8.919545592	Micall2	2.884533748	6.94E-15	1.81E-13	7.384671515
H2-Ab1	3.154803446	1.45E-18	1.06E-16	8.906159482	Trim12a	2.876892506	3.77E-19	3.48E-17	7.345661961
Zup1	3.153014132	4.01E-18	2.50E-16	8.895120392	Zswim5	2.874934099	9.15E-05	0.000336218	7.335697248
Olfir898	3.142275202	0.00072	0.002296	8.829153966	Mpp2	2.870695083	0.000559	0.001808448	7.314174682
Apobec3	3.142252554	1.01E-19	1.19E-17	8.82901537	Adgre4	2.869857362	0.000887	0.00278456	7.309928838
Camp	3.138909701	0.00052	0.001712	8.808581434	Glipr2	2.867077108	1.03E-15	3.37E-14	7.295855258
Adora2b	3.137727089	3.99E-12	5.71E-11	8.801363786	Parp9	2.863441883	6.20E-19	5.13E-17	7.277494698
Rtn4r	3.136120747	3.92E-08	2.54E-07	8.791569522	Ets2	2.853993566	4.87E-19	4.20E-17	7.229989569
Ly6c2	3.129222523	6.07E-09	4.53E-08	8.749633109	Tpst1	2.851059134	1.61E-16	6.46E-15	7.215298765
Tapbp	3.125992164	4.94E-20	6.38E-18	8.7300636	Tbx21	2.84934109	0.000955	0.002984675	7.206711489
Ctla2b	3.123535939	4.49E-05	0.000173	8.715213091	Plau	2.844183934	2.63E-19	2.59E-17	7.180995875
Tagap	3.122744064	3.25E-15	9.24E-14	8.710430742	Ece1	2.843721918	3.27E-16	1.22E-14	7.178696567
Ccrl2	3.113081313	2.67E-18	1.79E-16	8.652285754	Tor1aip2	2.841347887	1.10E-19	1.26E-17	7.166893353
Srgn	3.11003761	1.70E-18	1.22E-16	8.634050971	Creb5	2.841308335	3.59E-18	2.30E-16	7.166696875
Nod1	3.105600646	4.03E-16	1.48E-14	8.607538008	Gpr31b	2.836753538	0.000287	0.000976897	7.144106254
Ripk2	3.104471089	1.07E-18	8.19E-17	8.600801381	Tspo	2.833973173	7.09E-16	2.43E-14	7.130351377
Parp11	3.103112313	2.66E-17	1.32E-15	8.592704685	Trim34a	2.827754876	1.23E-18	9.29E-17	7.099684311
Themis	3.094566378	0.00259	0.007546	8.541955477	Cdkn1a	2.812440825	2.91E-19	2.80E-17	7.024720501
Pou3f1	3.093159487	7.16E-15	1.86E-13	8.533629573	Alox12	2.811744659	0.002849	0.008238426	7.021331575
Ggct	3.092449957	2.66E-14	6.08E-13	8.529433689	Tnfaip3	2.800438555	4.05E-20	5.33E-18	6.966521891
Atp13a4	3.092350074	0.00245	0.007191	8.528843183	Gimap9	2.799793011	1.47E-09	1.24E-08	6.96340537
Tmem67	3.087840693	3.79E-18	2.40E-16	8.502226498	Igfbf8	2.79961813	1.32E-18	9.85E-17	6.962561326
Rnf180	3.080813723	1.59E-11	1.98E-10	8.460915185	Phykp1	2.796040629	5.45E-11	6.11E-10	6.945317412
Sod3	3.079160669	3.01E-05	0.000119	8.451226142	Gm49355	2.793875368	0.000266	0.000909306	6.93490139
Rph3a	3.078459461	4.72E-06	2.14E-05	8.447119499	Sp140	2.792704843	2.48E-18	1.68E-16	6.929277063

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Gpr18	2.78867	0.000144	0.000513	6.909923	Serpina3n	2.531282	8.38E-07	4.28E-06	5.780852
Batf3	2.787876	6.64E-11	7.29E-10	6.906121	Rmi2	2.529634	0.000261	0.00089	5.77425
Rnf114	2.784547	4.99E-19	4.27E-17	6.890206	Slc7a3	2.529055	0.001976	0.005867	5.771934
H2-T22	2.783437	1.95E-16	7.62E-15	6.884906	Idnk	2.526847	2.16E-17	1.10E-15	5.763106
Fhod3	2.778741	0.000135	0.000484	6.862534	Traf2	2.523074	4.66E-18	2.87E-16	5.748056
Lmo4	2.772137	1.24E-18	9.36E-17	6.83119	Mtmr7	2.517201	2.58E-07	1.45E-06	5.724705
Lilrb4a	2.766279	0.001106	0.00342	6.803508	Antxr1	2.51119	0.000159	0.000562	5.700901
Pglyrp2	2.760143	4.15E-05	0.000161	6.774633	Foxp4	2.50858	1.59E-14	3.85E-13	5.690597
Trib3	2.754096	1.02E-18	7.89E-17	6.746298	Gm21748	2.507925	7.81E-07	4.02E-06	5.688015
Dab2	2.75358	6.70E-12	9.02E-11	6.743885	Il13ra1	2.505686	1.62E-19	1.77E-17	5.679195
Inava	2.746486	0.000194	0.00068	6.710807	Nckap1	2.497994	1.59E-12	2.48E-11	5.648995
Hck	2.742574	1.03E-19	1.20E-17	6.692634	Aldh112	2.49026	9.18E-07	4.65E-06	5.618794
Lck	2.728942	7.08E-10	6.33E-09	6.629691	Slc15a3	2.489407	2.08E-19	2.17E-17	5.61547
Abtb2	2.715335	2.08E-12	3.14E-11	6.567457	Pdzrn3	2.486564	0.0002	0.000698	5.604416
Ccl24	2.713251	9.26E-05	0.00034	6.557978	Tmem243	2.48453	9.72E-14	1.96E-12	5.596518
Smad6	2.702464	1.65E-05	6.81E-05	6.509129	Wdr20rt	2.482496	0.001312	0.004004	5.588637
Denr	2.700272	9.91E-18	5.47E-16	6.499244	Aftph	2.479273	1.57E-19	1.74E-17	5.576163
Phyhd1	2.699705	7.31E-15	1.90E-13	6.496691	Gpr141	2.477512	3.06E-17	1.49E-15	5.569362
Rac3	2.696119	1.72E-05	7.07E-05	6.480562	Notch1	2.474247	1.05E-14	2.64E-13	5.556773
Stx2	2.693418	4.12E-18	2.56E-16	6.468439	Myd88	2.469193	3.52E-18	2.27E-16	5.53734
Hrh1	2.687837	0.001176	0.003617	6.443467	Cysltr2	2.466257	3.57E-07	1.95E-06	5.526083
Slc7a8	2.685471	1.48E-16	5.99E-15	6.432909	Nrp2	2.464542	9.21E-19	7.21E-17	5.519518
Lox	2.67991	4.60E-12	6.51E-11	6.408159	Dck	2.463823	4.05E-16	1.48E-14	5.516766
Hook2	2.679531	1.94E-16	7.58E-15	6.406477	Cyb5r1	2.457315	1.91E-18	1.33E-16	5.491935
Il18	2.667587	8.79E-16	2.92E-14	6.353658	Ifrd1	2.455198	5.10E-17	2.37E-15	5.483884
Ms4a14	2.666705	3.58E-11	4.17E-10	6.349772	Adamts7	2.443978	1.65E-05	6.79E-05	5.4414
Ms4a7	2.666617	1.38E-16	5.64E-15	6.349385	Txlnb	2.442825	0.000701	0.002233	5.437054
Gimap6	2.66642	1.51E-10	1.54E-09	6.348517	Gm21188	2.439707	8.07E-09	5.85E-08	5.425317
Malt1	2.666406	3.94E-19	3.56E-17	6.348459	Ccdc86	2.432708	2.64E-17	1.31E-15	5.399059
Ms4a4b	2.666264	9.71E-07	4.90E-06	6.34783	Schip1	2.426202	7.52E-09	5.49E-08	5.374767
Zcwpw1	2.662605	6.52E-11	7.17E-10	6.331751	Rbpj	2.42429	1.03E-16	4.36E-15	5.367646
Sipi	2.656165	1.37E-09	1.16E-08	6.30355	Lap3	2.422071	2.45E-18	1.66E-16	5.359397
Rnf135	2.655173	2.21E-15	6.53E-14	6.299221	Gtppp2	2.421255	2.03E-17	1.04E-15	5.356367
C2	2.653327	5.03E-10	4.64E-09	6.291164	H2-K1	2.420983	8.50E-18	4.77E-16	5.355358
Cd83	2.65267	1.11E-14	2.78E-13	6.288298	Mapk11	2.42044	8.32E-06	3.61E-05	5.353344
Six5	2.639744	0.00045	0.001476	6.232212	Zc3h12a	2.419061	3.30E-18	2.16E-16	5.348228
Eng	2.637213	1.07E-16	4.51E-15	6.221287	Adar	2.417731	1.03E-19	1.20E-17	5.343299
Tnfrsf18	2.633437	0.002648	0.007698	6.205026	Lcp2	2.410384	5.44E-18	3.26E-16	5.316159
Irf9	2.632663	5.46E-19	4.59E-17	6.201695	Msr1	2.40346	7.45E-19	6.05E-17	5.290706
C3	2.631005	1.33E-13	2.60E-12	6.194574	Nxph1	2.396506	0.001154	0.003554	5.262666
Pml	2.622507	7.31E-17	3.23E-15	6.158191	Stat5a	2.394383	3.04E-11	3.59E-10	5.257524
Psmc10	2.613908	6.18E-18	3.60E-16	6.121595	Slc25a22	2.389956	2.07E-13	3.90E-12	5.241413
Spred1	2.613895	2.78E-18	1.86E-16	6.121542	Rab11fip4	2.386929	4.79E-08	3.05E-07	5.230429
Agtrap	2.611912	6.10E-20	7.56E-18	6.113133	Sppl2a	2.386697	1.06E-19	1.22E-17	5.229588
Usb1	2.611204	7.85E-17	3.43E-15	6.110133	Kdm6b	2.383948	6.76E-13	1.15E-11	5.219633
Skil	2.610672	1.90E-18	1.33E-16	6.107882	Tnfrsf1b	2.37876	1.63E-18	1.17E-16	5.200894
Nkg7	2.609906	0.000763	0.002415	6.104641	Olfrl1033	2.377145	2.86E-12	4.21E-11	5.195075
Il2rb	2.609231	1.62E-06	7.88E-06	6.101782	Sfn5	2.37415	4.80E-19	4.19E-17	5.184303
Zdhhc2	2.602279	0.000251	0.000862	6.07245	Stx11	2.373853	2.95E-17	1.44E-15	5.183237
Ankmy1	2.591459	0.001816	0.005434	6.027078	Creb3l1	2.373852	7.63E-10	6.77E-09	5.183233
Tnfrsf11b	2.588954	0.001037	0.00322	6.016625	Aida	2.367351	2.03E-16	7.91E-15	5.159928
Hid1	2.581447	3.69E-06	1.71E-05	5.985399	Samhd1	2.36283	8.82E-17	3.81E-15	5.143782
Trim46	2.581382	0.000203	0.000706	5.985129	Fanca	2.360993	1.72E-07	9.91E-07	5.137237
Slamf8	2.570498	1.81E-17	9.38E-16	5.940146	Cebpb	2.359987	5.09E-19	4.35E-17	5.133658
Fam102b	2.569612	2.25E-19	2.30E-17	5.936499	Casp1	2.359037	2.94E-19	2.81E-17	5.130279
Gpr132	2.5665	1.72E-15	5.31E-14	5.923707	Ms4a6b	2.356907	7.00E-08	4.31E-07	5.12271
Stc2	2.564422	1.11E-05	4.72E-05	5.91518	Irf4	2.352494	1.86E-08	1.27E-07	5.107063
Gm6377	2.561579	2.20E-12	3.31E-11	5.903534	Abca1	2.349817	1.04E-16	4.38E-15	5.097595
Cicn7	2.559215	2.05E-16	7.98E-15	5.893867	Snn	2.344561	5.43E-11	6.09E-10	5.079058
Slc31a1	2.557487	1.25E-19	1.42E-17	5.886815	Msantd3	2.340192	9.88E-08	5.95E-07	5.063701
Dcbld2	2.555898	3.07E-19	2.90E-17	5.880332	Atp10a	2.33768	8.04E-16	2.70E-14	5.05489
H2-M3	2.555343	3.29E-15	9.31E-14	5.878071	Pstpip2	2.337346	8.97E-12	1.18E-10	5.05372
Adamts4	2.543961	0.003221	0.009237	5.831878	Birc3	2.336931	1.19E-18	9.09E-17	5.052266
Pcgf5	2.53954	6.44E-18	3.70E-16	5.814037	Pla2g4a	2.336565	2.77E-17	1.37E-15	5.050984
Ghitm	2.535646	7.70E-19	6.23E-17	5.798364	Arhgef3	2.331985	1.77E-17	9.23E-16	5.034977

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Apol7c	2.330958	5.44E-08	3.43E-07	5.031394	Tnfrsf14	2.184537	1.74E-13	3.33E-12	4.545809
Eif6	2.325225	9.06E-18	5.05E-16	5.01144	Rbl1	2.180847	6.63E-16	2.28E-14	4.534196
Whamm	2.324203	1.50E-14	3.67E-13	5.007889	Rnaset2b	2.166717	1.72E-15	5.31E-14	4.490006
Plac8	2.322575	6.55E-09	4.83E-08	5.002244	Mylk2	2.16213	3.56E-05	0.00014	4.475752
Bid	2.320574	5.72E-18	3.40E-16	4.995309	Jag1	2.158545	5.83E-13	1.01E-11	4.464644
E2f5	2.318266	8.52E-15	2.18E-13	4.987326	Gde1	2.154025	1.40E-16	5.69E-15	4.450676
Dgat2	2.318228	2.70E-05	0.000108	4.987191	Zfp507	2.15282	1.60E-08	1.11E-07	4.446963
Crim1	2.316199	6.88E-14	1.44E-12	4.980185	Cd302	2.152499	7.70E-16	2.61E-14	4.445973
Cd74	2.312505	2.27E-18	1.55E-16	4.967448	Rhoh	2.15005	2.03E-13	3.83E-12	4.438431
Prss35	2.312446	3.31E-06	1.54E-05	4.967244	Myo16	2.149356	0.001234	0.003785	4.436298
PsmA5	2.309815	1.92E-16	7.53E-15	4.958194	Selenow	2.144596	1.19E-14	2.97E-13	4.421684
H2-Aa	2.305364	7.36E-16	2.51E-14	4.942922	Rnf31	2.143925	8.09E-16	2.72E-14	4.419628
Ptgir	2.30086	5.92E-16	2.07E-14	4.927516	Relb	2.140942	1.37E-15	4.34E-14	4.4105
Spry1	2.299792	7.88E-06	3.43E-05	4.923868	Nfkb1	2.140717	3.72E-18	2.37E-16	4.409813
Ccn2	2.298388	6.86E-05	0.000257	4.919079	Lrp11	2.140312	4.10E-14	9.04E-13	4.408575
Timeless	2.298306	3.79E-08	2.46E-07	4.9188	Trmt10a	2.132296	4.43E-10	4.14E-09	4.384146
H2-DMb1	2.29619	7.67E-15	1.98E-13	4.911589	Tnip3	2.130311	1.51E-12	2.37E-11	4.378119
Pdpn	2.292275	3.73E-18	2.37E-16	4.898281	Myo19	2.12797	0.000155	0.000549	4.371019
Sh3tc1	2.290423	8.92E-19	7.03E-17	4.891994	Arddc4	2.126931	9.25E-18	5.13E-16	4.367875
Riox2	2.284458	4.69E-18	2.88E-16	4.87181	Azi2	2.126245	4.92E-18	2.99E-16	4.365798
Sco1	2.283785	1.83E-15	5.57E-14	4.869537	B230307C23Rik	2.122016	4.87E-12	6.84E-11	4.353018
Hk2	2.282025	3.35E-17	1.61E-15	4.863603	Kpna3	2.121162	5.38E-19	4.54E-17	4.350443
Eef1e1	2.280849	1.62E-14	3.92E-13	4.859637	Olfr853	2.119784	4.53E-05	0.000174	4.34629
Abracl	2.278871	6.41E-15	1.68E-13	4.85298	Btg1	2.116861	6.71E-18	3.83E-16	4.337492
Junb	2.278463	1.33E-18	9.93E-17	4.851608	Rnf19b	2.114319	6.07E-17	2.76E-15	4.329856
Raet1e	2.273812	1.58E-08	1.09E-07	4.835994	Hrh2	2.111783	1.16E-05	4.92E-05	4.322251
Arhgap28	2.273546	2.08E-06	1.00E-05	4.835101	Gimap8	2.109563	1.89E-06	9.15E-06	4.315604
Dram1	2.271119	4.68E-19	4.11E-17	4.826975	Serping1	2.107907	3.08E-07	1.71E-06	4.310654
Pim1	2.260872	8.87E-19	7.02E-17	4.792812	Rab3ip	2.106207	1.87E-15	5.67E-14	4.305579
Snx10	2.256449	3.02E-18	1.99E-16	4.778139	Hivep3	2.10369	2.08E-12	3.15E-11	4.298073
Scarf1	2.255381	1.99E-10	1.99E-09	4.774603	Tma16	2.09793	2.72E-11	3.27E-10	4.280947
Ii7	2.249142	4.22E-06	1.93E-05	4.754	Pald	2.097851	1.75E-10	1.77E-09	4.280714
Parp8	2.245954	1.13E-16	4.71E-15	4.743508	Asap3	2.095056	5.07E-05	0.000194	4.272426
Nampt	2.238312	1.04E-18	7.99E-17	4.718447	Stip1	2.094847	1.10E-15	3.58E-14	4.27181
Gm13889	2.237642	0.003157	0.009061	4.716257	Coro2a	2.089747	2.68E-16	1.02E-14	4.256735
Gmppb	2.231839	1.88E-14	4.45E-13	4.697323	Slamf7	2.087133	3.46E-18	2.25E-16	4.24903
Fbn1	2.231075	3.71E-08	2.41E-07	4.694836	Slc25a33	2.085859	4.64E-13	8.19E-12	4.245278
Tnc	2.229198	0.00269	0.007814	4.688732	Gm49339	2.085853	4.21E-16	1.54E-14	4.24526
Larp1b	2.228592	1.26E-15	4.05E-14	4.686763	Gm8797	2.08507	5.80E-07	3.06E-06	4.242957
Cacybp	2.226884	1.47E-17	7.76E-16	4.68122	Rab20	2.07156	1.86E-17	9.61E-16	4.20341
Rnf24	2.222447	4.15E-12	5.91E-11	4.666844	Lacc1	2.071245	1.02E-14	2.58E-13	4.202491
5-Mar	2.219865	3.67E-16	1.36E-14	4.658499	Itga2	2.071075	0.001815	0.00543	4.201996
Tcea1	2.218504	8.85E-19	7.02E-17	4.654107	Erap1	2.070297	1.49E-18	1.09E-16	4.199732
N4bp1	2.215744	2.85E-17	1.40E-15	4.645212	Tmtc2	2.068341	2.94E-05	0.000117	4.194041
Mgat4a	2.214784	1.12E-15	3.65E-14	4.64212	Gpr171	2.063867	0.000467	0.001529	4.181054
Ttc39b	2.214587	9.02E-16	2.99E-14	4.641488	Raet1d	2.062185	3.24E-09	2.55E-08	4.176183
Dnah17	2.214514	3.21E-05	0.000127	4.641252	Dnajb3	2.06181	1.21E-05	5.11E-05	4.175097
Plekhf1	2.212813	0.000358	0.001195	4.635784	Ppp4r2	2.058313	7.40E-17	3.25E-15	4.164989
Tmbim4	2.212417	1.77E-15	5.43E-14	4.634511	Zfp658	2.056857	3.52E-10	3.36E-09	4.160789
Mllt6	2.207405	8.40E-16	2.81E-14	4.618438	Ly86	2.053491	8.08E-14	1.67E-12	4.151093
Fndc3a	2.205795	1.25E-18	9.42E-17	4.613287	Map2k1	2.050706	2.40E-18	1.63E-16	4.143088
Stxbp3	2.20171	2.02E-17	1.04E-15	4.600242	Pttg1	2.050335	2.26E-14	5.25E-13	4.14202
Cd47	2.200775	6.18E-17	2.78E-15	4.597262	Tank	2.045134	4.32E-17	2.04E-15	4.127117
Trip13	2.198986	1.84E-09	1.52E-08	4.591566	Rab12	2.044389	2.09E-17	1.07E-15	4.124985
Rmdn3	2.198589	2.53E-16	9.64E-15	4.590303	Usp25	2.04426	6.22E-18	3.61E-16	4.124616
Cmtr1	2.196432	2.23E-18	1.54E-16	4.583444	Gm10053	2.042866	7.88E-16	2.66E-14	4.120632
Bend6	2.195209	0.00256	0.00746	4.579559	Gfpt2	2.040502	1.15E-08	8.15E-08	4.113888
H2-T24	2.194696	1.03E-13	2.05E-12	4.577933	Rnf14	2.038164	5.16E-15	1.38E-13	4.107225
Sqstm1	2.193999	2.26E-17	1.14E-15	4.575721	Tagln2	2.034746	2.03E-18	1.40E-16	4.097506
Tlr7	2.193185	5.61E-18	3.34E-16	4.573141	Ppfbp2	2.026448	2.80E-17	1.38E-15	4.074006
Pkp4	2.189336	2.52E-13	4.67E-12	4.560954	Snai1	2.024158	0.001551	0.004689	4.067543
Flt1	2.18917	4.71E-06	2.14E-05	4.56043	F3	2.021869	3.08E-07	1.71E-06	4.061094
Ppa1	2.188551	2.64E-15	7.67E-14	4.558473	Dcp2	2.021514	6.18E-18	3.60E-16	4.060096
Cd14	2.188218	3.75E-16	1.39E-14	4.557421	Igf2bp2	2.021115	2.20E-13	4.12E-12	4.058974
Pvr	2.186194	2.37E-16	9.10E-15	4.551032	Bcl3	2.018912	1.21E-11	1.55E-10	4.052781

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Clic4	2.018433	9.26E-18	5.13E-16	4.051434	Arl4a	1.872401	2.04E-14	4.79E-13	3.661414
Pisma3	2.016071	1.14E-10	1.19E-09	4.044808	Csf3r	1.871905	3.24E-16	1.22E-14	3.660155
Slc6a12	2.013932	6.19E-09	4.60E-08	4.038815	Btg3	1.871809	5.43E-13	9.42E-12	3.659913
Nrap	2.007729	0.000183	0.000641	4.021486	Grap	1.870895	7.20E-10	6.43E-09	3.657593
Gdf15	2.003895	5.07E-16	1.81E-14	4.010813	Slc11a2	1.869082	6.51E-18	3.74E-16	3.653
P4ha1	2.00372	9.23E-17	3.96E-15	4.010327	Ran	1.868757	1.13E-16	4.71E-15	3.652178
Cox6a2	2.00104	2.23E-11	2.71E-10	4.002886	Rnaseh2b	1.866796	2.43E-15	7.12E-14	3.647217
Hspa4l	1.992988	4.33E-17	2.04E-15	3.980605	Snx20	1.865994	3.80E-16	1.40E-14	3.64519
Cbwd1	1.990279	5.74E-14	1.23E-12	3.97314	Trim56	1.865799	9.73E-15	2.47E-13	3.644698
Smim3	1.987829	5.07E-14	1.10E-12	3.966397	Pnpt1	1.857911	1.97E-15	5.90E-14	3.624825
Zbtb5	1.986338	7.22E-15	1.88E-13	3.9623	Zhx2	1.856185	7.42E-11	8.07E-10	3.62049
Leprot1	1.981917	1.82E-18	1.28E-16	3.950176	Nfe2l1	1.854616	1.58E-16	6.40E-15	3.616555
H2-T23	1.981888	3.47E-15	9.73E-14	3.950098	Zeb1	1.851889	2.25E-06	1.07E-05	3.609726
Acpp	1.976945	2.03E-10	2.03E-09	3.936586	Pgs1	1.838461	4.13E-12	5.89E-11	3.576284
Tlr1	1.976362	9.17E-15	2.33E-13	3.934995	Trim12c	1.835129	3.87E-17	1.84E-15	3.568034
Ccdc25	1.97339	1.77E-15	5.43E-14	3.926897	Asb13	1.833157	1.25E-14	3.10E-13	3.56316
Arid5a	1.970093	7.98E-14	1.65E-12	3.917934	Tmem11	1.830894	3.07E-14	6.94E-13	3.557575
Tmed1	1.970012	8.72E-14	1.79E-12	3.917714	Cept1	1.830101	1.13E-17	6.14E-16	3.55562
Msi2	1.967092	3.44E-15	9.66E-14	3.909793	Mrpl27	1.829054	4.31E-15	1.18E-13	3.55304
Phgdh	1.965652	1.33E-17	7.04E-16	3.905892	Gadd45b	1.825414	5.73E-15	1.52E-13	3.544087
Stard3	1.964712	1.18E-15	3.82E-14	3.903347	Wdr43	1.825373	5.26E-15	1.41E-13	3.543987
Cgas	1.963616	9.73E-11	1.03E-09	3.900383	Ly9	1.825256	4.30E-16	1.56E-14	3.543699
Mmp3	1.96322	0.003184	0.009135	3.899313	Rnaset2a	1.821686	5.56E-16	1.97E-14	3.53494
Bmp1	1.962292	6.27E-08	3.91E-07	3.896805	Trafd1	1.819699	3.25E-17	1.57E-15	3.530075
Fmn12	1.960192	1.84E-11	2.27E-10	3.891137	Itga5	1.819542	6.06E-17	2.76E-15	3.529691
Cyts	1.958575	2.11E-14	4.95E-13	3.886778	Parp3	1.819541	7.99E-14	1.65E-12	3.529688
Tm4sf1	1.957281	2.77E-06	1.30E-05	3.883295	Rhobtb1	1.815951	0.001494	0.004529	3.520917
Il4ra	1.955578	4.24E-13	7.54E-12	3.878712	Cenpq	1.815415	3.88E-07	2.11E-06	3.519608
Ctu1	1.955474	1.39E-14	3.42E-13	3.878435	Vasp	1.81158	1.28E-16	5.28E-15	3.510265
Rassf4	1.953013	1.21E-16	5.00E-15	3.871824	H2-Eb1	1.810904	3.33E-13	6.05E-12	3.508621
Acyp2	1.949652	1.98E-09	1.62E-08	3.862814	Ddx39	1.810897	3.84E-14	8.48E-13	3.508603
Siglecg	1.949382	0.000795	0.002512	3.86209	Synpo2	1.810677	0.000328	0.001102	3.508069
Trim14	1.946222	1.38E-14	3.40E-13	3.853641	Ebi3	1.807209	6.60E-14	1.39E-12	3.499645
Gpc1	1.945514	1.57E-13	3.03E-12	3.85175	Ppfia1	1.804681	6.03E-14	1.29E-12	3.493518
Cacnb3	1.941879	1.97E-05	8.04E-05	3.842058	Dennd4a	1.804478	9.36E-14	1.90E-12	3.493027
Ttc9c	1.939319	1.51E-16	6.14E-15	3.835246	Dok7	1.801867	1.75E-08	1.20E-07	3.486713
Perm1	1.935575	4.40E-10	4.11E-09	3.825307	Mapkapk2	1.801237	7.98E-17	3.48E-15	3.485189
Dusp16	1.935196	6.10E-16	2.13E-14	3.824302	Trim6	1.800141	5.56E-06	2.49E-05	3.482542
Ptpn2	1.934142	6.12E-17	2.77E-15	3.821507	Srgap1	1.799472	9.84E-06	4.23E-05	3.480928
Ahr	1.93339	2.48E-09	1.99E-08	3.819515	St3gal1	1.796651	1.91E-15	5.76E-14	3.474129
Lilr4b	1.931818	1.22E-16	5.03E-15	3.815356	Zc3hav1l	1.796414	0.000388	0.001288	3.473556
Tnip1	1.926627	2.91E-18	1.93E-16	3.801653	Milt11	1.79397	1.12E-10	1.17E-09	3.467679
1110038F14Rik	1.926368	2.47E-13	4.59E-12	3.80097	Rhbdf2	1.793871	1.97E-14	4.65E-13	3.467441
Prpf38a	1.921554	1.81E-15	5.51E-14	3.788308	Focad	1.792528	9.17E-15	2.33E-13	3.464215
Tpx2	1.920408	1.15E-10	1.20E-09	3.785302	Atxn7l1	1.792155	1.77E-15	5.43E-14	3.463318
Ly75	1.914619	7.32E-16	2.50E-14	3.770143	Arel1	1.791515	1.86E-15	5.67E-14	3.461783
Insl6	1.914086	3.07E-11	3.63E-10	3.768749	Tmem202	1.791505	6.37E-08	3.96E-07	3.461759
Pim3	1.910738	1.40E-13	2.71E-12	3.760014	Coq10b	1.790335	2.03E-14	4.78E-13	3.458953
Sntb1	1.91003	2.32E-10	2.29E-09	3.758169	Srp54b	1.788349	0.001679	0.005046	3.454193
Psmb6	1.905323	5.25E-16	1.87E-14	3.745928	Cd33	1.785225	4.55E-16	1.64E-14	3.446722
Irak3	1.904618	2.66E-15	7.71E-14	3.744097	Hip1r	1.780351	0.000249	0.000855	3.435098
Etnk1	1.900533	9.80E-17	4.17E-15	3.733511	Col4a2	1.778045	2.44E-06	1.16E-05	3.429612
Klra2	1.897923	1.58E-05	6.53E-05	3.726764	Nme6	1.776677	1.42E-10	1.46E-09	3.42636
Rcl1	1.896199	1.81E-14	4.32E-13	3.722312	Hsp90aa1	1.775146	1.03E-12	1.68E-11	3.422726
Ralgps1	1.89434	1.44E-09	1.21E-08	3.717518	Dnajc1	1.773759	8.16E-16	2.73E-14	3.419437
Mmp28	1.894005	0.000215	0.000747	3.716656	Flywch2	1.773363	1.54E-05	6.41E-05	3.4185
Vasn	1.892768	1.17E-10	1.21E-09	3.713471	Gabpb1	1.771223	7.84E-15	2.02E-13	3.413431
Pik3ip1	1.885949	2.50E-05	0.0001	3.69596	Lzts2	1.771018	2.70E-12	4.00E-11	3.412947
Ccdc144b	1.883259	0.002745	0.007962	3.689075	Trpm4	1.768073	1.25E-12	2.01E-11	3.405987
Il17ra	1.880644	1.61E-08	1.11E-07	3.682394	Grina	1.764522	1.61E-16	6.47E-15	3.397615
Stk40	1.877164	6.34E-16	2.20E-14	3.673522	Tmem140	1.762779	6.65E-15	1.74E-13	3.393513
Cyp1b1	1.876031	3.09E-08	2.03E-07	3.670639	Il2rg	1.761735	2.79E-15	8.04E-14	3.391058
Gas7	1.875863	1.81E-16	7.20E-15	3.670212	Dyrk2	1.757515	5.03E-15	1.36E-13	3.381152
Zfp719	1.874664	1.82E-12	2.79E-11	3.667161	Camkk1	1.755658	0.000801	0.002529	3.376803
Plk3	1.873062	1.14E-07	6.77E-07	3.663093	Hspa9	1.754201	2.81E-15	8.08E-14	3.373394

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Max	1.752095	8.50E-16	2.83E-14	3.368473	P4ha2	1.619358	5.85E-07	3.09E-06	3.072382
Fbxw17	1.750757	3.49E-10	3.33E-09	3.365351	Phldb1	1.617008	9.84E-11	1.04E-09	3.067383
Alas1	1.749748	6.75E-15	1.77E-13	3.362998	Them4	1.615026	4.86E-11	5.51E-10	3.063172
Kcna3	1.749529	0.000205	0.000714	3.362487	Olfir571	1.60997	3.77E-06	1.74E-05	3.052454
Ascc3	1.749023	9.82E-17	4.18E-15	3.36131	Steap2	1.609622	0.000583	0.00188	3.051718
Kars	1.746488	1.05E-16	4.41E-15	3.355407	Mlit3	1.607167	7.09E-12	9.51E-11	3.04653
Gsdmd	1.742669	1.43E-15	4.51E-14	3.346537	Stk38l	1.606528	4.50E-09	3.43E-08	3.045182
Rrs1	1.738238	1.85E-14	4.38E-13	3.336276	Irf8	1.604493	1.22E-12	1.96E-11	3.040888
Top1mt	1.737121	5.20E-10	4.78E-09	3.333691	Psmc2	1.60246	5.96E-15	1.57E-13	3.036606
Rhbdf1	1.736935	0.002238	0.006587	3.333263	Cables2	1.601252	2.72E-13	5.01E-12	3.034065
Tmem229b	1.730109	3.11E-14	7.00E-13	3.317528	Psm7	1.600112	7.43E-14	1.55E-12	3.031669
Ube2m	1.728917	8.43E-16	2.81E-14	3.314789	Katna1	1.599426	5.31E-13	9.22E-12	3.030227
Tmem171	1.72763	1.47E-05	6.15E-05	3.311834	Tlk2	1.598839	8.47E-13	1.42E-11	3.028995
Gpd2	1.727242	4.47E-16	1.62E-14	3.310942	Klf4	1.598415	6.39E-11	7.04E-10	3.028105
Crem	1.721809	1.21E-12	1.95E-11	3.298498	Cybc1	1.597965	1.14E-16	4.73E-15	3.027161
Apool	1.721784	8.42E-14	1.73E-12	3.29844	Mafk	1.596759	1.37E-15	4.34E-14	3.024631
Dcaf1	1.720344	3.77E-15	1.04E-13	3.295149	Cox18	1.596702	6.54E-08	4.06E-07	3.024512
Sdc4	1.719407	5.91E-13	1.02E-11	3.293009	Rflf1	1.596389	5.09E-14	1.10E-12	3.023854
Coa5	1.718273	4.26E-16	1.55E-14	3.290422	Larp1	1.596373	8.13E-15	2.09E-13	3.023822
Fhl3	1.718165	6.75E-12	9.08E-11	3.290176	Gst1	1.596327	7.42E-13	1.25E-11	3.023726
Lmtk2	1.716778	1.49E-09	1.25E-08	3.287014	Pgap2	1.592618	4.74E-13	8.36E-12	3.015962
Nlgn2	1.716775	4.23E-06	1.93E-05	3.287009	Lgals8	1.590866	4.11E-16	1.51E-14	3.012302
Acs15	1.71553	7.08E-17	3.15E-15	3.284173	Mob3b	1.588828	3.85E-10	3.65E-09	3.008048
Asah2	1.714804	9.55E-14	1.93E-12	3.28252	Cdh5	1.588768	0.003252	0.009316	3.007924
Ampd3	1.713947	4.39E-13	7.79E-12	3.280571	B2m	1.588493	7.78E-14	1.62E-12	3.00735
Elp5	1.713588	8.36E-14	1.73E-12	3.279755	Dhps	1.585045	3.52E-14	7.83E-13	3.000172
Pbxip1	1.711163	2.19E-15	6.50E-14	3.274246	Psm4	1.58328	4.46E-15	1.21E-13	2.996503
Gabbr1	1.710298	9.53E-05	0.000349	3.272283	Kif1a	1.581832	8.86E-05	0.000326	2.993498
Angptl6	1.708916	4.96E-09	3.76E-08	3.269152	Cav1	1.580665	1.03E-07	6.18E-07	2.991076
Ramp3	1.708886	0.001879	0.005604	3.269084	Ilrn	1.580466	4.92E-17	2.92E-15	2.990664
Mthfr	1.708625	6.30E-11	6.96E-10	3.268492	Rassf1	1.578107	1.20E-12	1.93E-11	2.985779
Mdm2	1.708216	5.94E-15	1.57E-13	3.267566	Rasgef1b	1.577874	4.36E-15	1.19E-13	2.985297
Mocs2	1.703885	3.45E-15	9.69E-14	3.25777	Cmlkr1	1.577853	1.20E-11	1.55E-10	2.985252
Dst	1.692229	7.84E-09	5.69E-08	3.231555	Plek	1.577322	9.15E-15	2.33E-13	2.984153
Amn1	1.684504	3.68E-13	6.62E-12	3.214299	Bak1	1.5741	2.76E-15	7.98E-14	2.977498
Fcf1	1.681823	4.45E-13	7.88E-12	3.208331	Tmco3	1.570991	2.45E-15	7.18E-14	2.971088
Mrp153	1.681195	4.72E-12	6.64E-11	3.206935	St6galnac4	1.569154	1.22E-15	3.95E-14	2.967306
Adgre1	1.679633	2.18E-16	8.45E-15	3.203465	Macroh2a1	1.567104	1.37E-15	4.34E-14	2.963094
Akna	1.676191	4.90E-14	1.07E-12	3.195831	Rab38	1.567028	0.0006	0.00193	2.962938
Asf1a	1.676151	4.23E-13	7.54E-12	3.195741	Rela	1.566474	2.75E-15	7.96E-14	2.961799
Ubb	1.673096	5.53E-15	1.47E-13	3.188981	Phlda1	1.566112	2.17E-05	8.82E-05	2.961056
Ube2e2	1.671092	4.66E-07	2.50E-06	3.184557	Tbk1	1.564439	1.64E-16	6.59E-15	2.957625
Psmd11	1.669669	9.78E-16	3.22E-14	3.181416	Fam72a	1.56342	0.001138	0.00351	2.955535
Dbn1	1.66559	0.000895	0.002806	3.172433	Irfar2	1.563148	3.80E-15	1.05E-13	2.95498
Psm2	1.664728	2.09E-13	3.93E-12	3.170538	Psm4	1.560384	3.56E-15	9.95E-14	2.949323
Asns	1.664572	2.87E-16	1.09E-14	3.170195	Tfpi2	1.558218	0.000894	0.002802	2.944898
Ccdc88b	1.660622	1.27E-15	4.09E-14	3.161528	Inpp5b	1.557321	3.54E-15	9.89E-14	2.943069
Zfp593	1.658004	1.29E-11	1.64E-10	3.155796	Tmem128	1.554484	2.77E-13	5.08E-12	2.937287
Aars	1.65739	1.80E-16	7.18E-15	3.154454	Thbs1	1.553114	2.97E-10	2.87E-09	2.934498
Mgst2	1.653992	0.000508	0.001655	3.147033	Themis2	1.551905	4.97E-11	5.61E-10	2.932041
Ubr4	1.652667	1.09E-13	2.16E-12	3.144142	Camsap1	1.551267	1.35E-08	9.44E-08	2.930743
Pola2	1.651777	1.70E-12	2.64E-11	3.142203	Itpr2	1.548896	9.48E-12	1.24E-10	2.925931
Mid1	1.645609	8.48E-09	6.12E-08	3.128799	Slc39a14	1.548187	3.51E-12	5.07E-11	2.924494
Arl5c	1.645248	5.73E-12	7.87E-11	3.128015	Slc12a4	1.546931	6.39E-16	2.21E-14	2.921949
P2ry14	1.642237	1.48E-12	2.33E-11	3.121496	Peli1	1.546878	9.27E-14	1.88E-12	2.921842
Plk2	1.640947	2.46E-14	5.67E-13	3.118705	Hspa1l	1.546022	1.05E-05	4.47E-05	2.920108
Ugcg	1.640749	1.32E-15	4.21E-14	3.118276	Chpf	1.545571	8.49E-09	6.13E-08	2.919196
Lipg	1.638095	0.001621	0.004886	3.112545	Nfu1	1.544504	3.68E-15	1.03E-13	2.917037
Ttc39c	1.637812	1.94E-10	1.94E-09	3.111934	Ears2	1.544473	1.16E-07	6.91E-07	2.916974
Stat3	1.637265	1.04E-16	4.38E-15	3.110755	Ccr5	1.542997	3.58E-11	4.17E-10	2.913992
Prrx1	1.633724	0.000864	0.002714	3.10313	Slx4ip	1.541489	6.32E-11	6.98E-10	2.910948
Txnl1	1.63243	9.87E-16	3.23E-14	3.100347	Ccny11	1.537965	2.31E-12	3.46E-11	2.903845
Olfir735	1.63073	1.62E-07	9.38E-07	3.096697	Slc30a6	1.536853	1.55E-10	1.58E-09	2.901608
Jam2	1.628656	0.000236	0.000812	3.092247	Gca	1.536209	1.74E-12	2.69E-11	2.900313
Slc7a11	1.626579	7.96E-11	8.61E-10	3.087799	Trim13	1.531832	2.13E-12	3.22E-11	2.891528

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Ankib1	1.5304	1.42E-14	3.47E-13	2.888659	Hspa8	1.421567	2.26E-13	4.21E-12	2.678763
Tmbim6	1.529352	8.16E-16	2.73E-14	2.886561	Fam177a	1.420259	6.09E-13	1.04E-11	2.676336
Pced1b	1.524724	2.40E-06	1.14E-05	2.877318	Ube2f	1.4198	1.00E-13	2.01E-12	2.675483
Rbm7	1.522133	2.99E-15	8.57E-14	2.872155	Cenpj	1.417759	1.93E-10	1.93E-09	2.671701
Eno2	1.519413	4.26E-12	6.05E-11	2.866745	Gnb4	1.416829	4.07E-05	0.000158	2.669981
Lrrc51	1.516106	9.82E-05	0.000359	2.860179	Yjefn3	1.416398	0.001577	0.004761	2.669183
Gja1	1.513333	9.23E-06	3.98E-05	2.854687	Noc4l	1.413473	7.05E-12	9.46E-11	2.663776
Sirt6	1.51081	9.10E-12	1.20E-10	2.849699	Pi4k2b	1.413016	9.06E-14	1.84E-12	2.662933
1810055G02Rik	1.509071	1.12E-07	6.66E-07	2.846266	Tdrd7	1.41231	1.62E-14	3.93E-13	2.661629
Cct3	1.508706	2.21E-14	5.17E-13	2.845548	Ntmt1	1.407949	1.80E-09	1.49E-08	2.653597
Tent5a	1.508656	2.40E-15	7.05E-14	2.845449	Uchl1	1.407947	0.00131	0.003998	2.653593
Aldh1b1	1.503068	2.47E-08	1.65E-07	2.834449	Atp6v0b	1.407605	1.68E-13	3.23E-12	2.652964
Tnfrsf26	1.501268	1.71E-10	1.74E-09	2.830914	Tmem209	1.407222	1.18E-12	1.91E-11	2.65226
Fkbp5	1.501221	1.10E-08	7.80E-08	2.830821	Psmd12	1.406748	1.86E-13	3.55E-12	2.651389
Vmn2r108	1.498838	0.000633	0.002029	2.826149	Hsp90ab1	1.404593	2.60E-14	5.95E-13	2.647431
Prr5l	1.497581	1.12E-09	9.64E-09	2.823688	Timm17a	1.403494	3.02E-12	4.42E-11	2.645416
Tmbim1	1.497551	8.58E-16	2.85E-14	2.82363	Sic3a2	1.403251	3.29E-15	9.31E-14	2.644969
Faap24	1.495469	3.43E-11	4.01E-10	2.819558	Adap2	1.399866	6.33E-10	5.73E-09	2.638771
Trim24	1.491587	2.44E-14	5.63E-13	2.811982	Gif4e	1.399336	9.79E-14	1.97E-12	2.637801
Bst1	1.491284	1.40E-12	2.21E-11	2.811391	Lonp1	1.39894	1.84E-14	4.37E-13	2.637078
Rrp9	1.491095	5.19E-13	9.04E-12	2.811023	Sh3bp4	1.398065	1.70E-09	1.41E-08	2.635478
Mrps10	1.489449	3.56E-12	5.13E-11	2.807818	Rnf145	1.39703	8.48E-13	1.42E-11	2.633589
Nfil3	1.488883	1.21E-10	1.26E-09	2.806716	Mrpl52	1.395983	1.34E-11	1.70E-10	2.631678
Wnt9a	1.488714	8.95E-05	0.00033	2.806387	Ptges2	1.394928	1.10E-12	1.79E-11	2.629754
Diablo	1.488433	3.83E-13	6.89E-12	2.805841	Ankrd24	1.393925	1.11E-07	6.62E-07	2.627927
Pipp5	1.487311	5.96E-08	3.73E-07	2.80366	Rgs14	1.392772	1.93E-09	1.58E-08	2.625828
Arv1	1.486638	8.01E-08	4.89E-07	2.802351	Zc3hav1	1.392202	2.01E-15	6.01E-14	2.62479
Gtpbp6	1.484804	8.77E-13	1.46E-11	2.798791	Atp13a1	1.391659	1.98E-13	3.74E-12	2.623802
St7	1.483548	4.88E-08	3.10E-07	2.796356	Tyw5	1.390329	3.49E-08	2.28E-07	2.621385
Vav1	1.479421	4.82E-15	1.30E-13	2.788367	Eme2	1.3883	1.84E-09	1.51E-08	2.6177
Mecp2	1.478857	3.81E-13	6.86E-12	2.787278	Rars	1.387346	6.09E-15	1.60E-13	2.61597
Prkrip1	1.474828	1.18E-10	1.23E-09	2.779504	Nectin2	1.386978	1.66E-07	9.60E-07	2.615302
Pdlim7	1.465993	1.05E-06	5.25E-06	2.762535	Dnaja1	1.385002	4.07E-15	1.12E-13	2.611723
Ascc2	1.464583	3.46E-14	7.70E-13	2.759837	Psmc5	1.38485	1.37E-14	3.38E-13	2.611448
Poir3d	1.464569	6.82E-13	1.16E-11	2.759809	Sh3bgrl	1.382924	1.71E-10	1.73E-09	2.607964
Eif2b2	1.464033	4.03E-14	8.88E-13	2.758785	H2-DMa	1.38033	2.78E-09	2.21E-08	2.60328
Stk39	1.462766	5.11E-06	2.31E-05	2.756364	Cox17	1.375473	1.48E-11	1.86E-10	2.59453
Orai2	1.461087	1.75E-12	2.69E-11	2.753157	Phlpp1	1.375412	6.44E-12	8.72E-11	2.594419
B9d2	1.460601	2.69E-12	3.99E-11	2.75223	Cks2	1.373667	1.01E-06	5.07E-06	2.591283
Sell	1.460144	0.000301	0.001019	2.751357	Tasor2	1.372484	4.54E-12	6.44E-11	2.58916
Trib1	1.460103	4.61E-06	2.09E-05	2.751279	Fbxo7	1.37216	2.71E-13	5.00E-12	2.588579
Stau2	1.459321	3.74E-11	4.35E-10	2.749789	Rnf139	1.371531	7.11E-14	1.49E-12	2.58745
Olfir539	1.459303	1.51E-10	1.54E-09	2.749754	Rfc3	1.370566	5.38E-10	4.93E-09	2.58572
Mmp9	1.458192	6.88E-06	3.03E-05	2.747638	Psmd7	1.369416	4.53E-15	1.23E-13	2.58366
Ints12	1.456663	1.90E-13	3.61E-12	2.744727	Tdg	1.368932	3.42E-13	6.20E-12	2.582792
Zyx	1.456277	5.42E-09	4.07E-08	2.743994	Wdr74	1.368662	4.75E-12	6.67E-11	2.58231
Dbnl	1.455012	6.65E-14	1.40E-12	2.741588	Itprp	1.367723	3.48E-11	4.06E-10	2.580629
Timm10	1.450984	1.62E-11	2.01E-10	2.733944	Casp3	1.365532	6.53E-11	7.18E-10	2.576713
Fam241a	1.450169	6.19E-15	1.63E-13	2.732401	Col20a1	1.364408	0.000564	0.001823	2.574706
Smg7	1.448778	1.09E-12	1.78E-11	2.729767	Mrpl32	1.361647	2.20E-10	2.18E-09	2.569783
Ubtcd2	1.445549	9.71E-06	4.17E-05	2.723665	Mill2	1.361465	1.31E-06	6.48E-06	2.569461
Acot7	1.445281	2.40E-11	2.90E-10	2.723159	Tm9sf4	1.361392	3.08E-15	8.78E-14	2.56933
Esd	1.445153	1.64E-13	3.16E-12	2.722916	Flnb	1.35898	9.33E-12	1.22E-10	2.565037
Fzr1	1.444569	8.70E-10	7.67E-09	2.721815	Dhdh1	1.356928	2.38E-13	4.44E-12	2.561393
Chmp4b	1.436421	4.97E-14	1.08E-12	2.706487	Ube2s	1.356721	8.40E-14	1.73E-12	2.561024
Cnih4	1.436055	2.24E-12	3.37E-11	2.7058	Ppie	1.355984	5.66E-12	7.81E-11	2.559717
Ddx24	1.430695	9.80E-16	3.22E-14	2.695765	Ctsc	1.354972	5.07E-13	8.87E-12	2.557921
Traf6	1.430496	4.97E-11	5.62E-10	2.695393	Adprh	1.354824	8.43E-14	1.73E-12	2.557659
Pxk	1.429705	4.09E-13	7.30E-12	2.693916	Fgl2	1.354243	1.32E-08	9.23E-08	2.556629
Plscr2	1.428793	0.000521	0.001693	2.692214	Znrd2	1.353672	3.95E-09	3.05E-08	2.555618
Pomp	1.427902	2.39E-13	4.44E-12	2.690551	Ssr2	1.353585	1.41E-12	2.24E-11	2.555463
Rnf11	1.427282	3.61E-14	8.03E-13	2.689395	Sra1	1.352985	4.89E-10	4.52E-09	2.554401
Rrp7a	1.426063	2.24E-15	6.60E-14	2.687125	Psat1	1.352738	2.84E-15	8.16E-14	2.553964
Zcchc2	1.424699	4.75E-15	1.29E-13	2.684586	Vmn1r233	1.35212	2.01E-05	8.19E-05	2.552869
Adgra2	1.423189	0.000804	0.002538	2.681776	Dusp1	1.351309	1.88E-09	1.55E-08	2.551435

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
St3gal3	1.350055	1.33E-11	1.68E-10	2.549219	Rhbdd1	1.281416	2.84E-14	6.46E-13	2.430774
Ube2e1	1.348873	3.85E-12	5.51E-11	2.547132	Pwp1	1.281289	1.60E-12	2.49E-11	2.43056
Mt2	1.348573	2.82E-08	1.87E-07	2.5466	Furin	1.281091	8.62E-11	9.27E-10	2.430227
Ribc1	1.347842	0.003451	0.009848	2.545312	Rpf2	1.280737	6.12E-11	6.79E-10	2.429631
Med13	1.345388	1.22E-13	2.41E-12	2.540986	Sav1	1.280592	1.61E-13	3.10E-12	2.429386
Cemip2	1.345248	3.56E-12	5.13E-11	2.540739	Dpf2	1.279038	1.06E-10	1.12E-09	2.426771
Vps37c	1.34471	1.65E-12	2.56E-11	2.539791	Kansl3	1.278896	1.04E-12	1.70E-11	2.426531
Olfir509	1.344533	0.000197	0.000687	2.53948	Srsf7	1.278783	5.43E-12	7.52E-11	2.426342
Map4	1.3417	9.04E-14	1.84E-12	2.534497	Psmb4	1.278227	1.68E-12	2.61E-11	2.425407
Nup43	1.33989	1.40E-06	6.89E-06	2.531321	Chil1	1.274085	0.00222	0.006538	2.418454
Taf7	1.339596	1.93E-10	1.94E-09	2.530805	Tmem219	1.273869	1.42E-11	1.79E-10	2.418091
Pkdcc	1.339447	2.45E-10	2.41E-09	2.530542	Lmbr11	1.272575	2.35E-10	2.31E-09	2.415924
Keap1	1.3386	6.86E-13	1.16E-11	2.529057	Psmc4	1.270796	1.21E-13	2.39E-12	2.412946
Vps54	1.338583	5.72E-14	1.23E-12	2.529027	Man2a1	1.270697	1.89E-13	3.58E-12	2.41278
Lims1	1.336828	2.88E-14	6.54E-13	2.525953	Cct7	1.270551	2.72E-13	5.02E-12	2.412536
Pno1	1.336587	2.53E-12	3.77E-11	2.525531	Gpbp1	1.268427	1.16E-13	2.29E-12	2.408988
Slc2a1	1.336428	8.15E-15	2.10E-13	2.525253	Ppp1r11	1.265766	5.84E-12	7.99E-11	2.404549
1810037I17Rik	1.336329	4.72E-10	4.38E-09	2.52508	Rwdd1	1.26444	5.64E-12	7.78E-11	2.40234
Shf	1.336198	1.20E-05	5.08E-05	2.524851	Prelid3b	1.262564	2.13E-13	4.00E-12	2.399217
Klh38	1.335974	0.000103	0.000375	2.524459	Tmem221	1.261805	0.000266	0.000908	2.397955
Bcam	1.33554	1.23E-06	6.13E-06	2.523699	Mtmr14	1.260107	1.02E-13	2.05E-12	2.395135
Opa3	1.335101	1.21E-13	2.38E-12	2.522932	Gng5	1.258311	1.60E-11	1.99E-10	2.392156
Lnpk	1.334746	5.60E-11	6.26E-10	2.522311	Mif	1.257345	1.31E-12	2.09E-11	2.390554
Osmr	1.33465	0.000321	0.001081	2.522143	Tut7	1.257096	2.39E-14	5.53E-13	2.390142
Nubp1	1.333795	2.76E-14	6.28E-13	2.520649	Rrad	1.257012	1.18E-05	5.00E-05	2.390002
Chordc1	1.331296	6.87E-14	1.44E-12	2.516286	Zfp446	1.256112	5.79E-06	2.59E-05	2.388512
Rgcc	1.3312	1.32E-08	9.27E-08	2.51612	Sap30	1.253949	8.75E-12	1.16E-10	2.384934
Grk4	1.329671	1.26E-07	7.44E-07	2.513453	Cul2	1.253019	1.72E-09	1.43E-08	2.383397
Lztf11	1.327909	4.02E-12	5.74E-11	2.510385	Msn	1.250315	7.46E-14	1.55E-12	2.378933
Wdr59	1.326764	8.33E-12	1.10E-10	2.508394	Surf4	1.249525	7.00E-15	1.83E-13	2.377631
Dclre1c	1.324614	1.04E-11	1.36E-10	2.504659	9930111J21Rik1	1.24843	9.17E-10	8.05E-09	2.375827
Ift57	1.323893	4.67E-10	4.34E-09	2.503407	Rxylt1	1.248101	3.74E-12	5.37E-11	2.375286
Snrnp35	1.323081	5.06E-11	5.71E-10	2.501999	Samsn1	1.245137	1.44E-10	1.48E-09	2.37041
Cpd	1.322999	2.36E-13	4.40E-12	2.501857	Ppp3cc	1.244982	8.05E-07	4.13E-06	2.370156
Slc7a1	1.320817	4.63E-13	8.18E-12	2.498075	Gtf3c5	1.244955	1.53E-11	1.91E-10	2.370111
Olfir46	1.32077	3.84E-07	2.09E-06	2.497994	Cd200r4	1.24475	2.40E-12	3.58E-11	2.369774
Ddit4	1.320664	1.64E-07	9.49E-07	2.49781	Nmd3	1.244713	7.39E-10	6.58E-09	2.369714
Spsb1	1.318687	9.23E-06	3.98E-05	2.49439	Snw1	1.244622	3.29E-13	5.98E-12	2.369564
Trim25	1.317426	1.96E-15	5.89E-14	2.49221	Ciapin1	1.243853	2.13E-12	3.21E-11	2.368303
Hat1	1.314669	3.08E-13	5.64E-12	2.487452	Cers6	1.241623	9.04E-14	1.84E-12	2.364645
Kri1	1.313999	6.62E-14	1.39E-12	2.486298	Pnpla1	1.241098	0.000423	0.001391	2.363784
Slirp	1.313894	1.96E-10	1.96E-09	2.486117	Al837181	1.239695	3.89E-13	6.97E-12	2.361486
Ms4a8a	1.311565	8.59E-06	3.72E-05	2.482107	Ist1	1.239053	8.22E-14	1.70E-12	2.360436
Dtx2	1.310162	1.24E-11	1.59E-10	2.479693	Gng12	1.238859	6.36E-14	1.34E-12	2.360117
Mpzl3	1.306371	7.13E-05	0.000266	2.473186	Tgif1	1.238601	1.26E-14	3.13E-13	2.359695
Tbc1d9	1.304864	4.02E-13	7.19E-12	2.470604	Smg5	1.237752	9.52E-14	1.92E-12	2.358307
Tor1aip1	1.301881	6.34E-14	1.34E-12	2.465501	Rps5	1.237447	6.20E-11	6.87E-10	2.357809
Csf2rb	1.300943	4.13E-14	9.07E-13	2.4639	Cnot4	1.236359	4.61E-12	6.53E-11	2.356032
Mthfd2	1.299297	6.20E-14	1.32E-12	2.461089	Hectd4	1.235706	2.07E-09	1.69E-08	2.354966
Figl2	1.298211	5.02E-11	5.67E-10	2.459237	Zranb2	1.235501	8.36E-11	9.02E-10	2.354631
Mtdh	1.297637	4.18E-15	1.15E-13	2.458259	Urm1	1.234714	2.89E-12	4.24E-11	2.353347
Tbc1d13	1.296046	5.35E-12	7.42E-11	2.45555	Gfpt1	1.234119	2.72E-14	6.21E-13	2.352377
Hax1	1.29564	2.79E-12	4.13E-11	2.454858	Ilgav	1.233473	2.31E-08	1.55E-07	2.351324
Ift22	1.294424	5.23E-11	5.89E-10	2.452791	Bclaf3	1.233435	2.11E-08	1.43E-07	2.351261
Thyn1	1.293097	3.41E-10	3.26E-09	2.450535	Ciao2b	1.231693	6.93E-13	1.17E-11	2.348425
Hspd1	1.292569	5.62E-13	9.73E-12	2.449638	Mrpl54	1.231413	2.18E-10	2.16E-09	2.347969
Jdp2	1.292394	6.36E-10	5.74E-09	2.449342	Rapgef2	1.230502	7.22E-11	7.88E-10	2.346486
Tmem199	1.290803	6.38E-13	1.09E-11	2.446641	3830406C13Rik	1.229954	1.30E-11	1.66E-10	2.345595
Mocs1	1.288059	9.95E-13	1.63E-11	2.441993	Usp42	1.229945	9.80E-10	8.54E-09	2.34558
Psmb7	1.287715	1.47E-13	2.84E-12	2.441411	Mettl1	1.228963	5.72E-09	4.29E-08	2.343984
Psmb3	1.287028	9.03E-14	1.84E-12	2.440248	Spata5	1.228463	5.84E-10	5.31E-09	2.343172
Srpr	1.286229	2.52E-14	5.79E-13	2.438897	Psmc3	1.228238	8.13E-15	2.09E-13	2.342807
Timm23	1.285858	5.94E-13	1.02E-11	2.438271	Psmc2b	1.227355	4.95E-08	3.14E-07	2.341373
Tal1	1.285838	4.96E-07	2.65E-06	2.438237	Psmc6	1.225195	6.61E-13	1.13E-11	2.33787
Eif3c	1.283808	1.27E-13	2.49E-12	2.434808	Yrdc	1.223448	2.84E-10	2.76E-09	2.335041

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Plagl2	1.222645	1.98E-12	3.02E-11	2.333741	Reps1	1.159638	6.56E-10	5.90E-09	2.234013
Fcer1g	1.221314	1.09E-12	1.78E-11	2.331589	Eif2s1	1.157963	1.48E-12	2.33E-11	2.231421
Mrpl13	1.219885	7.18E-11	7.84E-10	2.329281	Papss2	1.157218	3.95E-08	2.55E-07	2.230269
Pole4	1.219244	4.66E-12	6.56E-11	2.328247	Slc30a4	1.155815	2.90E-07	1.61E-06	2.228101
Tmsb10	1.218544	2.47E-10	2.43E-09	2.327118	Nbas	1.155702	1.84E-11	2.26E-10	2.227928
Tra2a	1.218536	1.41E-09	1.19E-08	2.327104	Mrpl24	1.155337	4.63E-12	6.54E-11	2.227364
Prkce	1.218484	1.54E-06	7.52E-06	2.327021	Ndufs4	1.151685	3.41E-09	2.67E-08	2.221732
Tmem120b	1.218044	1.33E-09	1.13E-08	2.326311	Pdzd11	1.148342	9.72E-11	1.03E-09	2.21659
Ak2	1.217098	1.30E-12	2.07E-11	2.324786	Zcrb1	1.148114	8.92E-11	9.54E-10	2.21624
Trim5	1.216531	1.69E-09	1.40E-08	2.323872	Morc3	1.148066	2.97E-13	5.43E-12	2.216166
Fbrs	1.216212	3.46E-10	3.31E-09	2.323358	Ktn1	1.148005	5.68E-10	5.17E-09	2.216072
Rpl24	1.215421	2.54E-11	3.06E-10	2.322085	Amz2	1.147638	9.42E-13	1.56E-11	2.215508
4930453N24Rik	1.215234	8.65E-12	1.14E-10	2.321785	Mrpl35	1.144702	1.49E-10	1.53E-09	2.211005
Mcm9	1.211731	2.76E-11	3.30E-10	2.316153	Ranbp1	1.143411	4.26E-11	4.90E-10	2.209026
Mfhas1	1.209801	3.02E-09	2.39E-08	2.313057	Eif2s2	1.143251	4.45E-12	6.31E-11	2.208782
Uri1	1.209636	7.17E-12	9.60E-11	2.312792	Cr1l	1.142079	6.68E-13	1.14E-11	2.206988
Metap1	1.209342	1.55E-12	2.43E-11	2.312322	Col4a1	1.141057	0.000162	0.000574	2.205426
Cd164	1.208652	9.77E-13	1.61E-11	2.311215	Ctss	1.140765	1.79E-12	2.76E-11	2.204979
Ubxn2a	1.208169	5.78E-09	4.32E-08	2.310442	Slx18a1	1.140551	3.32E-06	1.54E-05	2.204652
Hmmr	1.206489	0.000156	0.000552	2.307753	Isca2	1.138969	1.49E-10	1.53E-09	2.202236
Vta1	1.205907	6.49E-10	5.85E-09	2.306822	Rasa4	1.138232	1.29E-11	1.64E-10	2.201111
Arid5b	1.205062	8.77E-11	9.40E-10	2.305472	Lym1	1.138128	2.16E-08	1.46E-07	2.200953
Dusp6	1.203441	3.59E-08	2.33E-07	2.302883	Slc20a1	1.136196	3.65E-11	4.24E-10	2.198006
Nemp1	1.203187	3.68E-08	2.40E-07	2.302477	Acot9	1.136041	4.17E-12	5.93E-11	2.19777
Psmd14	1.20259	4.08E-13	7.29E-12	2.301525	Ifi207	1.135706	8.89E-14	1.82E-12	2.197261
Polr2c	1.201998	5.96E-13	1.03E-11	2.300581	Zdhc5	1.135195	3.27E-13	5.96E-12	2.196482
Tmem173	1.200893	2.02E-09	1.65E-08	2.298819	Scnm1	1.135165	4.66E-09	3.55E-08	2.196436
Aldh1a2	1.199431	1.44E-08	1.01E-07	2.296491	Zwint	1.134513	1.88E-13	3.58E-12	2.195444
Nutf2	1.194131	9.49E-05	0.000348	2.28807	Psmb2	1.134472	1.62E-12	2.52E-11	2.195381
9930111J21Rik2	1.193187	1.91E-12	2.92E-11	2.286572	Aen	1.134245	5.09E-11	5.73E-10	2.195036
Rbis	1.193143	3.16E-10	3.04E-09	2.286503	Trip10	1.132607	1.04E-10	1.10E-09	2.192547
Dnajc21	1.192594	3.51E-11	4.10E-10	2.285634	Mrps18a	1.130383	3.09E-12	4.51E-11	2.189169
Ptprj	1.19253	5.13E-12	7.17E-11	2.285531	Chmp2a	1.128536	1.02E-11	1.33E-10	2.186368
Zbtb3	1.192353	2.30E-06	1.10E-05	2.285252	Rbbp8	1.12744	9.60E-11	1.02E-09	2.184707
Usp12	1.19034	6.07E-14	1.29E-12	2.282064	Eif3j2	1.125725	2.58E-09	2.07E-08	2.182112
Irak2	1.189369	2.62E-14	5.99E-13	2.28053	Cwf19l1	1.125673	0.000107	0.000391	2.182032
Mlx	1.188727	1.04E-11	1.36E-10	2.279514	Ppp2r2a	1.125419	9.06E-11	9.68E-10	2.181648
Gphn	1.188423	1.46E-10	1.50E-09	2.279034	Akirin1	1.125145	2.84E-12	4.18E-11	2.181235
Tbrg1	1.186124	2.21E-13	4.13E-12	2.275406	Mat2a	1.123907	6.75E-13	1.15E-11	2.179363
Shisa5	1.185105	1.09E-14	2.73E-13	2.273799	2200002D01Rik	1.120805	0.002984	0.0086	2.174683
Eif5	1.183358	2.13E-12	3.21E-11	2.271048	Pfdn6	1.119896	5.80E-11	6.47E-10	2.173313
Atp11b	1.182639	2.89E-13	5.31E-12	2.269915	Itfg2	1.117436	1.21E-07	7.16E-07	2.169611
Nif3l1	1.181097	6.52E-11	7.17E-10	2.267491	Stk19	1.117349	1.29E-09	1.10E-08	2.16948
Calcr1	1.179194	1.45E-11	1.82E-10	2.264502	Spp1	1.117205	4.97E-12	6.96E-11	2.169263
Lrrc32	1.178986	4.18E-06	1.91E-05	2.264176	Zfp821	1.115305	1.50E-08	1.04E-07	2.166408
Dtnb	1.178649	0.000219	0.00076	2.263648	Leng1	1.114505	1.39E-10	1.44E-09	2.165207
Fyb	1.178519	2.99E-11	3.54E-10	2.263444	Acaa1a	1.114339	1.95E-13	3.70E-12	2.164958
Adamts9	1.177614	0.000671	0.002143	2.262024	Ubc	1.114185	1.56E-11	1.94E-10	2.164727
Gpr176	1.175076	7.03E-08	4.33E-07	2.258048	Mrpl39	1.113418	4.45E-11	5.11E-10	2.163577
Polr2g	1.173633	2.85E-12	4.19E-11	2.255791	Vdac3	1.110623	3.63E-13	6.55E-12	2.159389
Nfkbil1	1.172923	3.25E-09	2.56E-08	2.254681	Pdss1	1.108873	0.000202	0.000705	2.156772
Nploc4	1.172531	1.89E-13	3.59E-12	2.254067	Aptx	1.108429	7.81E-08	4.77E-07	2.156107
Zfand3	1.167883	1.96E-10	1.96E-09	2.246817	Manbal	1.107214	1.55E-11	1.93E-10	2.154292
Hsph1	1.166608	1.22E-11	1.57E-10	2.244832	Igsf6	1.105102	2.13E-12	3.22E-11	2.15114
Psmb5	1.166466	1.10E-12	1.79E-11	2.244612	Dync1h1	1.10432	1.07E-10	1.12E-09	2.149975
Smg9	1.166184	2.92E-11	3.47E-10	2.244173	Rbpms	1.104262	1.16E-09	9.99E-09	2.149889
Ccdc71l	1.166121	1.01E-13	2.03E-12	2.244075	Abcc4	1.103938	6.95E-08	4.29E-07	2.149405
Aff1	1.16598	1.32E-12	2.10E-11	2.243856	Cep85l	1.102888	1.35E-08	9.44E-08	2.147842
Zfp991	1.165194	1.24E-11	1.58E-10	2.242634	Gm45902	1.102574	0.000709	0.002258	2.147375
Erc8	1.162074	0.000267	0.000911	2.237788	Tent2	1.099736	5.49E-13	9.51E-12	2.143155
Ebna1bp2	1.161873	1.43E-12	2.25E-11	2.237477	Ninj1	1.09766	6.95E-12	9.33E-11	2.140073
H60b	1.161155	0.001861	0.005557	2.236364	Psmc6	1.096688	1.41E-12	2.23E-11	2.138632
Atp6v1e1	1.161094	6.76E-13	1.15E-11	2.236269	Ndel1	1.096024	3.07E-13	5.63E-12	2.137648
Id2	1.160396	5.27E-13	9.18E-12	2.235187	Sbds	1.095763	2.88E-12	4.23E-11	2.137261
Gna13	1.160359	7.34E-14	1.53E-12	2.23513	Seh1l	1.095391	7.21E-12	9.64E-11	2.13671

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Nub1	1.094791	9.77E-14	1.97E-12	2.135822	Twsg1	1.04955	2.10E-11	2.56E-10	2.069884
Tet2	1.094137	3.74E-08	2.43E-07	2.134854	Tefm	1.049305	1.99E-06	9.59E-06	2.069533
Usp16	1.093933	1.58E-11	1.97E-10	2.134552	Nop58	1.047791	3.73E-09	2.89E-08	2.067362
Agfg1	1.093207	6.33E-14	1.34E-12	2.133477	Sesn2	1.047782	1.46E-11	1.84E-10	2.067349
Ptk2	1.092702	7.98E-10	7.06E-09	2.132731	Tbrg4	1.047712	6.45E-09	4.77E-08	2.067248
B3gnt2	1.092566	1.17E-12	1.90E-11	2.132531	Pgam5	1.04692	1.44E-11	1.81E-10	2.066114
Sczep1	1.092362	3.95E-13	7.08E-12	2.132228	Eif3d	1.046439	8.21E-13	1.38E-11	2.065425
Dennd5b	1.091523	0.000884	0.002774	2.130989	Foxred1	1.045135	3.48E-09	2.72E-08	2.063559
Ctps	1.09123	2.15E-06	1.03E-05	2.130556	Rad23b	1.044491	5.78E-14	1.24E-12	2.062639
Zfp455	1.09113	6.26E-08	3.90E-07	2.130408	Ypel5	1.044347	1.28E-12	2.05E-11	2.062433
Mrpl47	1.091043	1.88E-08	1.28E-07	2.130279	Mrpl30	1.043559	2.35E-10	2.32E-09	2.061307
Nop56	1.090129	4.19E-10	3.94E-09	2.12893	Csrp1	1.042813	3.73E-08	2.42E-07	2.060241
Prdm1	1.090123	2.21E-09	1.79E-08	2.128922	Dus4l	1.041987	0.000545	0.001765	2.059061
Aifm2	1.089881	1.07E-09	9.27E-09	2.128565	Ppif	1.041975	7.33E-08	4.49E-07	2.059045
Ticam2	1.089431	2.97E-14	6.71E-13	2.127901	Atrnl1	1.041604	2.24E-09	1.81E-08	2.058515
Tfam	1.089256	3.80E-10	3.61E-09	2.127643	Ccdc93	1.041341	2.80E-11	3.35E-10	2.058139
Krtcap2	1.086864	1.42E-10	1.46E-09	2.124118	Ctsh	1.040666	1.03E-09	8.96E-09	2.057178
Picd1	1.08607	9.42E-05	0.000346	2.122949	Alg9	1.04058	4.12E-08	2.65E-07	2.057055
Trem12	1.084911	5.14E-06	2.32E-05	2.121244	Rap1b	1.040048	1.56E-12	2.44E-11	2.056296
Stxbp1	1.084103	1.99E-07	1.14E-06	2.120057	Sgpl1	1.039772	1.13E-12	1.83E-11	2.055902
Eif2b3	1.083758	2.24E-08	1.51E-07	2.119549	Dpep2	1.03858	3.35E-12	4.85E-11	2.054204
Mrps30	1.082206	4.28E-10	4.02E-09	2.117272	Amot2	1.038269	0.000529	0.001718	2.053762
Smurf1	1.082095	1.26E-11	1.60E-10	2.117108	Ccdc59	1.037937	1.42E-10	1.47E-09	2.053289
Rbm43	1.081833	5.16E-12	7.20E-11	2.116723	Fgfr1l	1.037874	0.000593	0.001909	2.053199
Tcof1	1.081566	4.70E-11	5.36E-10	2.116333	Zc3h7a	1.03731	8.86E-13	1.47E-11	2.052397
Rap2c	1.081341	9.73E-13	1.60E-11	2.116002	Snrnp27	1.036511	1.14E-10	1.19E-09	2.051261
Appl1	1.081032	3.00E-12	4.40E-11	2.11555	Pop4	1.036452	9.39E-11	9.99E-10	2.051177
Maip1	1.079249	7.47E-10	6.64E-09	2.112936	Rhou	1.03637	4.77E-11	5.41E-10	2.051061
Sertad1	1.078715	5.87E-09	4.38E-08	2.112153	Trit1	1.035707	2.46E-06	1.16E-05	2.050118
Ralgapa2	1.07842	3.90E-10	3.69E-09	2.111723	Dimt1	1.034835	3.96E-08	2.56E-07	2.048879
Med21	1.076874	1.05E-08	7.51E-08	2.109461	Dda1	1.034667	9.51E-13	1.57E-11	2.048641
Rhoq	1.075327	8.79E-13	1.46E-11	2.1072	Zfp653	1.033937	3.65E-09	2.83E-08	2.047604
Yars2	1.075298	6.27E-09	4.65E-08	2.107157	Sbno2	1.03258	1.71E-11	2.11E-10	2.045679
Jmjd6	1.074677	4.31E-10	4.04E-09	2.10625	Zfyve27	1.032403	4.11E-11	4.75E-10	2.045429
Pogk	1.074588	4.64E-10	4.31E-09	2.106121	Yju2	1.032181	9.91E-08	5.96E-07	2.045114
Rab5c	1.073988	1.42E-12	2.25E-11	2.105245	Hsd17b12	1.032051	8.44E-13	1.41E-11	2.044929
Mfsd8	1.073932	6.47E-09	4.78E-08	2.105163	Plk4	1.031623	3.48E-05	0.000137	2.044323
Triobp	1.07308	5.26E-12	7.31E-11	2.10392	Cdc42bpg	1.030376	1.93E-05	7.89E-05	2.042556
Sqcb	1.07251	1.74E-10	1.77E-09	2.103088	Eif1a	1.029954	9.88E-12	1.29E-10	2.041959
Cldnd1	1.072292	8.58E-11	9.23E-10	2.102772	Adrm1	1.028931	7.65E-13	1.29E-11	2.040512
Snrpa1	1.072034	1.90E-09	1.56E-08	2.102395	Lrrc59	1.028721	3.51E-13	6.36E-12	2.040214
Chac2	1.071922	2.43E-06	1.15E-05	2.102232	Prdm4	1.028371	4.67E-11	5.33E-10	2.039719
F11r	1.071741	0.000341	0.001143	2.101969	Usp53	1.028061	2.38E-06	1.13E-05	2.039282
Casp8	1.069621	1.54E-11	1.93E-10	2.098882	Ppp2r2d	1.026604	3.31E-11	3.88E-10	2.037224
H2-D1	1.068611	1.33E-11	1.68E-10	2.097413	Kcnh7	1.025317	1.02E-05	4.38E-05	2.035407
Chchd4	1.068354	1.79E-09	1.48E-08	2.097039	Susd6	1.023354	2.71E-12	4.00E-11	2.032638
Pfkfb3	1.066427	1.91E-08	1.30E-07	2.094241	Uxt	1.021057	9.99E-08	6.01E-07	2.029406
Mrps22	1.0663	2.58E-09	2.06E-08	2.094056	Rilpl1	1.020478	4.99E-05	0.000191	2.028591
Npc2	1.065863	1.47E-11	1.85E-10	2.093422	Znhit1	1.020336	9.28E-11	9.89E-10	2.028391
Atg10	1.065074	9.53E-09	6.83E-08	2.092278	Gm9803	1.019992	1.01E-05	4.31E-05	2.027908
Zswim4	1.06505	1.09E-10	1.14E-09	2.092242	Fit3l	1.019951	5.99E-07	3.15E-06	2.02785
Cdv3	1.064493	1.55E-12	2.43E-11	2.091435	Tlcd2	1.019119	0.002371	0.006951	2.026681
Kcmf1	1.063557	1.44E-13	2.80E-12	2.090078	Moap1	1.017748	7.67E-06	3.35E-05	2.024756
Suco	1.061662	2.54E-10	2.48E-09	2.087334	Kansl2	1.016107	2.93E-09	2.32E-08	2.022454
Laptm4a	1.060885	1.13E-11	1.46E-10	2.086212	Emc7	1.015574	8.74E-11	9.38E-10	2.021707
Ptges3	1.058669	6.09E-12	8.30E-11	2.083009	Lin9	1.01498	0.000352	0.001177	2.020875
Dclre1b	1.056831	3.52E-09	2.74E-08	2.080356	Tmsb4x	1.013964	5.66E-09	4.24E-08	2.019453
Atf3	1.056748	4.22E-11	4.86E-10	2.080237	Mreg	1.013632	2.24E-08	1.51E-07	2.018988
Mcoln2	1.054901	4.13E-12	5.89E-11	2.077576	Abhd16a	1.013143	1.27E-09	1.09E-08	2.018303
Znbp1l	1.054088	8.13E-07	4.16E-06	2.076405	Cops5	1.01188	5.93E-12	8.10E-11	2.016537
Zfp993	1.052406	1.27E-08	8.91E-08	2.073985	Daam1	1.011353	1.98E-10	1.98E-09	2.0158
Tmem138	1.051882	7.16E-05	0.000267	2.073233	Rps6ka2	1.011157	2.34E-11	2.84E-10	2.015527
Tspan31	1.050767	1.07E-12	1.74E-11	2.071631	Fubp1	1.010577	2.20E-13	4.12E-12	2.014717
Psmc1	1.050433	9.61E-13	1.58E-11	2.071151	Pprc1	1.009959	5.86E-10	5.32E-09	2.013855
Rps19bp1	1.05016	4.53E-10	4.23E-09	2.07076	Txnl4b	1.009297	1.03E-08	7.35E-08	2.01293

Gene	log2 (FC)	P-value	FDR	FC	Gene	log2 (FC)	P-value	FDR	FC
Mettl22	1.009183	6.00E-07	3.16E-06	2.012771	Tiparp	1.004493	7.22E-12	9.66E-11	2.006238
Rnf149	1.008833	3.17E-12	4.62E-11	2.012282	Klf6	1.004443	5.33E-13	9.26E-12	2.006169
Pde5a	1.008611	5.57E-06	2.50E-05	2.011972	Rab22a	1.003558	1.18E-12	1.91E-11	2.004938
Rps6ka4	1.008219	2.05E-12	3.11E-11	2.011427	Ncf1	1.001163	3.01E-11	3.56E-10	2.001613
9130401M01Rik	1.007552	1.37E-11	1.73E-10	2.010497	Glce	1.001079	3.27E-09	2.57E-08	2.001496
Bloc1s4	1.007386	1.73E-10	1.76E-09	2.010266	C1s1	1.000895	0.000367	0.001221	2.001241
Dxo	1.007187	5.73E-09	4.29E-08	2.009988	Txndc9	1.000717	2.32E-10	2.29E-09	2.000994
Rcsd1	1.00633	1.67E-09	1.39E-08	2.008795	Rab13	1.000061	1.07E-05	4.55E-05	2.000085
Dock10	1.006082	7.58E-11	8.23E-10	2.008449					

FC: Fold change; FDR: False discovery rate