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SUPPLEMENTARY INFORMATION

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Pro-efferocytic nanoparticles are specifically taken up by lesional macrophages and prevent atherosclerosis

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Supplementary Information

Supplementary Data Legends

Supplementary Table 1. Differentially expressed genes for each of the cell populations identified by unsupervised clustering of the scRNA-seq dataset. Cluster markers were identified using the non-parametric Wilcoxon rank rum test with Bonferroni correction for multiple comparisons (n = 8 biologically independent animals).

Supplementary Table 2. Transcriptional response to SWNT-SHP1i in lesional macrophages, relative to SWNT-Cy5.5 control (Cluster 1). Cluster markers were identified using the non-parametric Wilcoxon rank rum test (n = 4 biologically independent animals per group).

Supplementary Table 3. Enriched functions in SWNT-SHP1i-treated lesional macrophages identified by Ingenuity Pathway Analysis. Note the lack of a predicted increase in signaling related to cell death or apoptosis of leukocytes, indicating that chronic blockade of the CD47-SIRPα axis does not induce maladaptive changes in the lesional macrophage. Functional enrichment was assessed using two-sided Fisher's exact test (n = 4 biologically independent animals per group).

Supplementary Table 4. Enriched canonical pathways in SWNT-SHP1i-treated lesional macrophages from Ingenuity Pathway Analysis. Functional enrichment was assessed using two-sided Fisher's exact test (n = 4 biologically independent animals per group).

Supplementary Table 5. Gene Ontology enrichment analysis of genes that were upregulated in lesional macrophages by exposure to SWNT-SHP1i. Functional enrichment was assessed using two-sided Fisher's exact test with Bonferroni correction for multiple comparisons (n = 4 biologically independent animals per group).

Supplementary Table 6. Gene Ontology enrichment analysis of genes that showed reduced expression in lesional macrophages exposed to SWNT-SHP1i. Functional enrichment was assessed using two-sided Fisher's exact test with Bonferroni correction for multiple comparisons (n = 4 biologically independent animals per group).

Supplementary Video 1. ^{18}F-FDG-PET/CT of SWNT-SHP1i treated and SWNT-Cy5.5 control *apoE*$^{-/-}$ mice.

Supplementary Methods

Endotoxin assay

Formulations of SWNT-PEG, SWNT-PEG-Cy5.5 (SWNT-Cy5.5), and SWNT-PEG-Cy5.5-SHP1i (SWNT-SHP1i) were each assessed for endotoxin levels using the *Limulus* Amebocyte Lysate chromogenic endotoxin quantification kit (Thermo Scientific) according to the manufacturer's protocol.

Study of SHP1i release from SWNTs

Solutions of SWNT- SHP1i were dialyzed at room temperature with PBS (pH=7.4). The spectroscopic absorption of the outlet buffer was measured at different timepoints to quantify the release profile of SHP1i. For study of physiologically-relevant release, solutions of SWNT-SHP1i were dialyzed at room temperature with 20% serum solution in PBS. The amount of released SHP1i was measured using UV spectroscopy by sampling the serum solution at different timepoints.

Macrophage polarization

To induce differentiation of THP-1 monocytes to M0 macrophages, cells were incubated with phorbol 12-myristate 13-acetate (PMA, 50 $ngmL^{-1}$, Sigma) for 24 hrs. Once differentiated, cells were serum-starved overnight and incubated with lipopolysaccharide (LPS, 10 $ngmL^{-1}$, Sigma) and human IFN-γ (20 $ngmL^{-1}$, R&D systems) to obtain classically activated M1 macrophages, or human IL-4 (20 $ngmL^{-1}$) in RMPI with 10% FBS for 24hr to obtain M2-polarized macrophages. RAW264.7 cells were polarized to M1 macrophages by culturing cells with lipopolysaccharide (LPS, 10 $ngmL^{-1}$) and mouse IFN-γ (50 $ngmL^{-1}$, Sigma), or M2 macrophages with mouse IL-4 (20 $ngmL^{-1}$, BioLegend) for 24hr in DMEM supplemented with 10% FBS.

Apoptosis assay

RAW264.7 cells were plated at 5,000 cells/well in glass bottom culture dishes (MatTek Corporation), grown overnight at 37°C, and serum-starved for the next 24hr. Apoptosis was induced with staurosporine (STS, 1 μM, Sigma-Aldrich) in the presence or absence of SWNT-Cy5.5 (4 nM), SWNT-SHP1i (4 nM), or SHP1i (300 nM) for 2 hours. Apoptosis was evaluated using the *In Situ* Cell Detection Kit, Fluorescein (Roche, 11684795910), according to the manufacturer's protocol.

Proliferation assay

A modified MTT (3-[4,5-dimethyl-thiazol-2-yl]-2,5-diphenyltetrazolium bromide) assays was performed to analyze macrophage proliferation and viability. RAW264.7 cells were plated at 25,000 cells/well in a 96-well plate grown overnight at 37°C, and serum-starved for the next 24hr. Cells were stimulated with 10% FBS for 24hr with or without SWNT-Cy5.5 (4 nM), SWNT-SHP1i (4 nM), or SHP1i (300 nM), and then incubated with 10 uL of MTT AB solution (Millipore, Billerica) for 2hr. 100 μl of acidic isopropanol (0.04N HCl) was added to each well and the absorbance was measured at 570 nm (reference wavelength 650 nm) on an ELISA plate reader using SpectraMax 190 Microplate Reader (Molecular Devices).

Single-cell RNA sequencing

Following aortic sample preparation, single cells were encapsulated in a gel bead that is functionalized with a 14-base pair (bp) cell-specific barcode and 10-bp unique molecular identified (UMI) that tags each mRNA molecule.[7] Reverse transcription occurs in each gel bead. The 10X system utilizes droplet-based microfluidics to capture the mRNA of thousands of cells in parallel. Following capture and lysis, full-length cDNA is synthesized and amplified for construction of Illumina sequencing libraries. The resulting libraries were sequenced across three lanes on an Illumina HiSeq4000 platform with a 26-bp Read 1 to sequence the cell barcode and UMI, an 8-bp i7 index read to sequence the sample index, and a 98-bp Read 2 to sequence the transcript using a paired-end configuration. Library preparation and sequencing was performed by the Stanford Functional Genomics Facility.

Supplementary References

1 Robinet, P. *et al.* Consideration of Sex Differences in Design and Reporting of Experimental Arterial Pathology Studies-Statement From ATVB Council. *Arterioscler Thromb Vasc Biol* **38**, 292-303, doi:10.1161/ATVBAHA.117.309524 (2018).

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6 Kaneko, T. *et al.* Dendritic cell-specific ablation of the protein tyrosine phosphatase Shp1 promotes Th1 cell differentiation and induces autoimmunity. *J Immunol* **188**, 5397-5407, doi:10.4049/jimmunol.1103210 (2012).

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Supplementary Table 1. Differentially expressed genes for each of the cell populations identified by unsupervised clustering of the scRNA-seq dataset.
Cluster markers were identified using the non-parametric Wilcoxon rank rum test with Bonferroni correction for multiple comparisons (n = 8 biologically independent animals).

Gene	log2 Fold Change	pct.1	pct.2	P value	Cluster
C1qa	2.291464082	0.989	0.246	7.03E-193	1
C1qc	2.079113431	0.995	0.257	1.97E-186	1
C1qb	2.004672967	0.995	0.307	3.17E-184	1
Csf1r	1.441349141	0.97	0.347	5.56E-154	1
Pf4	2.623642171	0.829	0.098	2.20E-152	1
Adgre1	1.394182768	0.896	0.177	3.80E-152	1
Trf	1.607489033	0.947	0.269	9.89E-150	1
Ms4a7	1.440422262	0.942	0.195	1.10E-143	1
Dab2	1.268210835	0.929	0.243	7.82E-141	1
Cd81	1.317932847	0.965	0.341	9.29E-138	1
Selenop	1.862115607	0.989	0.502	2.23E-135	1
Fcrls	1.699271456	0.767	0.091	7.20E-129	1
Stab1	1.235877988	0.751	0.099	2.19E-127	1
Fcgr3	1.206674515	0.972	0.444	3.90E-127	1
Rnase4	1.176097436	0.783	0.124	3.83E-125	1
Itm2b	1.023261983	0.998	0.925	8.76E-125	1
C3ar1	1.074230931	0.834	0.154	3.97E-124	1
Fcgrt	1.687996112	0.815	0.182	4.55E-123	1
Trem2	1.122079957	0.862	0.18	2.39E-120	1
Ctsc	1.203979074	0.97	0.537	4.61E-119	1
P2ry6	0.981993926	0.838	0.235	9.71E-114	1
Ehd4	1.007086907	0.857	0.301	1.40E-113	1
Rgs10	0.951730998	0.94	0.465	1.41E-113	1
Mrc1	1.468775424	0.691	0.096	2.27E-112	1
Pmp22	1.089663602	0.672	0.075	1.12E-108	1
Timp2	1.153247531	0.928	0.372	5.52E-107	1
Camk1	0.93299381	0.797	0.207	1.80E-105	1
Grn	1.00663332	0.977	0.474	2.90E-102	1
C5ar1	0.923635831	0.877	0.228	1.20E-101	1
Glul	1.058202849	0.829	0.274	1.07E-99	1
Rab3il1	0.842642422	0.697	0.133	1.10E-99	1
Smagp	0.928972799	0.638	0.091	4.87E-97	1
Igfbp4	0.858830542	0.765	0.167	6.60E-95	1
Blvrb	0.987672148	0.79	0.249	1.64E-92	1
Igf1	0.847226785	0.7	0.116	4.24E-91	1
Pid1	0.90576315	0.824	0.263	5.47E-91	1
Unc93b1	0.878982776	0.965	0.509	2.31E-90	1
Ccl12	1.743520454	0.591	0.068	2.50E-90	1
Pltp	1.03794599	0.834	0.272	1.46E-87	1
Tmem37	0.819952086	0.658	0.127	8.46E-86	1
Cd14	0.700171689	0.942	0.392	7.82E-85	1
Ntpcr	0.839598284	0.637	0.132	1.23E-84	1
Cbr2	1.611514895	0.541	0.059	1.36E-84	1
Gas6	1.219436472	0.674	0.153	1.56E-84	1
Fcgr2b	0.892566942	0.907	0.385	9.02E-83	1
Folr2	2.058610302	0.476	0.027	1.36E-81	1
Lifr	0.72010119	0.559	0.071	4.68E-81	1
Dhrs3	0.748421365	0.783	0.259	4.87E-81	1
Lgmn	0.776318807	0.981	0.45	1.70E-80	1
Cd63	0.566130176	0.965	0.43	3.48E-80	1
Mafb	0.842135805	0.78	0.209	1.74E-79	1
Ccl2	1.103548038	0.739	0.208	7.36E-79	1
Pld4	0.854267168	0.887	0.397	1.43E-78	1
Cst3	0.576731191	1	0.902	8.03E-78	1
Lmo2	0.658246224	0.737	0.242	1.27E-77	1
Ltc4s	1.357925285	0.476	0.037	1.53E-77	1
Cxcl16	0.826198493	0.841	0.294	1.38E-75	1
Serinc3	0.770346783	0.947	0.628	2.70E-75	1
Ms4a6d	0.72886947	0.866	0.331	9.73E-75	1
Cd302	0.671137175	0.762	0.259	2.07E-74	1
Slco2b1	0.625958177	0.418	0.008	2.15E-74	1
Mgl2	0.986397279	0.637	0.126	4.55E-74	1
Mef2c	0.630429274	0.64	0.147	6.12E-74	1
Fos	1.049492272	0.94	0.659	9.75E-74	1
Hexa	0.713352465	0.968	0.525	1.06E-73	1
Ly86	0.791001282	0.912	0.409	1.71E-72	1
Serpinb6a	0.719080135	0.718	0.205	2.46E-72	1
Lyz2	0.791613081	0.996	0.594	2.74E-71	1
Itgb5	0.693235452	0.73	0.222	5.75E-69	1
Adam15	0.65788784	0.658	0.185	1.11E-68	1
Ccl7	1.655833277	0.57	0.115	3.31E-68	1

Mt1	0.770165077	0.986	0.703	3.41E-68	1
Trim47	0.622740284	0.506	0.075	4.84E-68	1
Jun	1.018673945	0.84	0.38	2.00E-67	1
Tmem176b	0.724757692	0.899	0.373	1.07E-66	1
Lamp2	0.637264554	0.894	0.437	1.43E-66	1
Laptm4a	0.603290259	0.905	0.516	1.80E-65	1
Gas7	0.714233434	0.545	0.107	3.08E-65	1
Nfkbiz	0.803665804	0.765	0.29	4.56E-65	1
Cfh	0.806869774	0.617	0.167	6.29E-65	1
Tcf4	0.605560616	0.605	0.164	2.81E-64	1
Hpgd	0.737398413	0.441	0.047	3.82E-63	1
Snx5	0.608668092	0.91	0.508	3.99E-63	1
Ctsb	0.297503257	1	0.724	6.68E-63	1
Ninj1	1.100087355	0.824	0.396	7.54E-63	1
Fcgr1	0.691734831	0.679	0.216	9.39E-63	1
App	0.570297934	0.847	0.399	4.46E-62	1
Tnfaip8l2	0.68000022	0.723	0.291	3.89E-61	1
Slamf9	0.836145622	0.593	0.161	5.02E-61	1
Maf	0.843585349	0.557	0.14	1.97E-60	1
Gpr34	0.659684601	0.397	0.033	2.65E-60	1
Aif1	0.571521894	0.81	0.294	5.28E-60	1
Ang	0.619539628	0.432	0.051	1.24E-59	1
F13a1	1.460956371	0.515	0.123	1.13E-58	1
C4b	1.040490097	0.379	0.028	2.36E-58	1
Metrnl	0.794681186	0.841	0.42	8.14E-58	1
Cd86	0.636301016	0.684	0.257	2.32E-57	1
Fxyd2	0.912824801	0.342	0.013	2.62E-57	1
Abhd12	0.558023821	0.748	0.318	4.15E-57	1
Ifi207	0.747908507	0.619	0.215	1.00E-56	1
Ctsh	0.62704447	0.972	0.492	1.15E-56	1
Ccl9	0.855618221	0.817	0.375	1.73E-56	1
Ctsl	0.279744938	0.845	0.358	1.92E-56	1
Pea15a	0.642538879	0.683	0.26	1.98E-56	1
Rtn4	0.57406878	0.884	0.506	2.22E-56	1
Sult1a1	0.669966311	0.381	0.033	3.76E-56	1
Zfhx3	0.551436645	0.439	0.064	5.19E-56	1
Rab7b	0.626133459	0.608	0.178	7.00E-56	1
Hexb	0.982990034	0.815	0.44	1.59E-55	1
Comt	0.536736207	0.735	0.307	1.75E-55	1
Lyve1	1.281046643	0.307	0.001	2.73E-55	1
Blnk	0.533275576	0.531	0.123	3.83E-55	1
Man2b1	0.572591511	0.848	0.467	4.90E-55	1
Cxcl2	0.566907924	0.838	0.393	6.85E-55	1
Gatm	0.590165568	0.506	0.113	1.38E-54	1
Rhob	0.687694174	0.626	0.202	2.26E-54	1
Tgfbi	0.497341368	0.935	0.43	1.05E-53	1
Asah1	0.560747971	0.847	0.409	1.60E-53	1
Hfe	0.560940037	0.617	0.201	2.49E-53	1
Cltc	0.556274534	0.743	0.334	3.72E-53	1
Ms4a6c	0.66987308	0.832	0.371	3.85E-53	1
Klf6	0.874696787	0.878	0.54	7.87E-53	1
Socs3	0.921150155	0.755	0.364	4.12E-52	1
Cybb	0.540234568	0.815	0.349	5.59E-52	1
Ccl8	2.25538722	0.342	0.025	3.99E-51	1
Dok3	0.431176226	0.582	0.164	6.49E-51	1
Anxa3	0.460352237	0.644	0.221	5.62E-50	1
Tm6sf1	0.545078854	0.829	0.429	8.24E-49	1
Cd83	0.778492068	0.716	0.315	1.21E-48	1
Hacd4	0.50411549	0.527	0.149	1.55E-48	1
Rab11fip5	0.445953133	0.414	0.075	5.94E-48	1
Tmem106a	0.566280866	0.656	0.262	7.18E-48	1
Ctsa	0.523656209	0.917	0.532	8.66E-48	1
Prune2	0.397471763	0.305	0.017	1.51E-47	1
Tspan4	0.542860213	0.45	0.102	1.81E-47	1
Vsir	0.5486193	0.82	0.431	3.13E-47	1
Zfp36	0.694209869	0.878	0.525	3.82E-47	1
Lamp1	0.465268662	0.981	0.661	8.94E-47	1
Tnfsf12	0.437040709	0.563	0.174	9.67E-47	1
Sdc4	0.682307567	0.589	0.194	1.58E-46	1
Fuca1	0.469104718	0.787	0.388	6.40E-46	1
Ap2a2	0.621020067	0.593	0.24	1.20E-45	1
Tmem176a	0.480270596	0.783	0.315	1.32E-45	1
Tcn2	0.5304257	0.637	0.256	1.51E-45	1
Cndp2	0.496348093	0.721	0.308	1.58E-45	1
Cx3cr1	0.646054921	0.45	0.109	2.49E-45	1
Egr1	0.727092242	0.66	0.267	3.07E-45	1
Clec12a	0.591003903	0.594	0.218	3.38E-45	1

Arrb2	0.446402721	0.743	0.371	4.91E-45	1
Ighm	0.31609416	0.697	0.297	5.98E-45	1
Clec4a1	0.582410601	0.621	0.232	6.40E-45	1
Rac3	0.414123945	0.305	0.023	7.75E-45	1
Rnf130	0.52760588	0.774	0.405	9.14E-45	1
Sash1	0.486888918	0.349	0.054	6.34E-44	1
S100a1	0.287426773	0.614	0.221	1.10E-43	1
Cd72	0.939173729	0.563	0.198	1.18E-43	1
Il10rb	0.455156937	0.82	0.447	1.28E-43	1
Plod1	0.438372794	0.422	0.1	1.95E-43	1
Tbxas1	0.503011308	0.485	0.139	2.26E-43	1
Fez2	0.4456249	0.436	0.106	6.16E-43	1
Vkorc1	0.378183544	0.522	0.167	6.98E-43	1
Frmd4b	0.557605414	0.481	0.136	7.37E-43	1
Pdlim4	0.328734372	0.411	0.085	8.32E-43	1
Pkig	0.440993245	0.612	0.25	1.31E-42	1
Lrrc25	0.438681397	0.787	0.372	1.37E-42	1
Marcksl1	0.354521342	0.732	0.311	1.80E-42	1
Atpif1	0.464355863	0.892	0.536	2.59E-42	1
Lacc1	0.484114581	0.418	0.099	2.87E-42	1
Selenbp1	0.552044638	0.328	0.042	3.75E-42	1
Clec4a2	0.514593437	0.647	0.26	6.80E-42	1
Cebpd	0.347733774	0.573	0.192	1.37E-41	1
Lair1	0.476189366	0.547	0.188	1.39E-41	1
Gusb	0.515436283	0.751	0.38	1.98E-41	1
Marcks	0.502463236	0.743	0.375	2.61E-41	1
Aldh2	0.501402591	0.739	0.361	4.78E-41	1
Stard8	0.468134969	0.257	0.011	4.80E-41	1
Itm2c	0.476193011	0.82	0.477	7.03E-41	1
Cited2	0.794680815	0.607	0.248	7.97E-41	1
Cmtm3	0.511754421	0.591	0.24	1.17E-40	1
Tsen34	0.415352524	0.487	0.156	1.33E-40	1
Alox5ap	0.395078199	0.963	0.516	1.45E-40	1
Nenf	0.391040062	0.638	0.273	3.42E-40	1
Cfp	0.632466954	0.757	0.362	3.70E-40	1
Nrp1	0.501905266	0.478	0.151	4.36E-40	1
Lmna	0.546933284	0.628	0.239	1.16E-39	1
Ccl24	0.909083688	0.266	0.018	1.44E-39	1
Zeb2	0.511394693	0.728	0.335	1.69E-39	1
Prdx4	0.415930913	0.559	0.208	2.74E-39	1
Picalm	0.376396204	0.711	0.351	3.39E-39	1
Pla2g15	0.39023854	0.462	0.134	3.40E-39	1
Bin1	0.550996697	0.649	0.297	3.88E-39	1
Selenom	0.28867547	0.489	0.141	4.46E-39	1
Mt2	0.35454077	0.787	0.399	4.60E-39	1
Wnk1	0.42398469	0.762	0.393	5.09E-39	1
Ccl3	0.593424148	0.635	0.266	6.18E-39	1
Ier3	0.471864519	0.69	0.284	6.74E-39	1
Kcnk13	0.404646668	0.316	0.048	1.20E-38	1
Snx8	0.450142036	0.432	0.127	1.55E-38	1
Itsn1	0.411062609	0.273	0.025	1.70E-38	1
Man1c1	0.446549825	0.346	0.066	2.68E-38	1
Rhoc	0.426293647	0.566	0.195	2.95E-38	1
Lyl1	0.414542975	0.467	0.146	4.00E-38	1
Hmox1	0.502548343	0.578	0.211	4.09E-38	1
Cd68	0.355469939	0.931	0.471	5.42E-38	1
Atf3	0.640154986	0.744	0.379	5.74E-38	1
Ap1b1	0.437215521	0.437	0.124	8.81E-38	1
Rin2	0.417952301	0.381	0.091	2.10E-37	1
Rrbp1	0.41504682	0.788	0.423	2.95E-37	1
Ifi27l2a	0.97704624	0.924	0.631	1.36E-36	1
Ckb	0.503344451	0.728	0.359	1.51E-36	1
Pon2	0.44376715	0.635	0.311	3.69E-36	1
Anxa5	0.38707863	0.951	0.627	4.79E-36	1
Atp13a2	0.398441076	0.481	0.161	8.50E-36	1
Olfml3	0.504876011	0.272	0.031	9.04E-36	1
Dusp1	0.66167929	0.924	0.73	1.35E-35	1
Ifitm2	0.377212445	0.979	0.601	2.87E-35	1
Atraid	0.377530409	0.649	0.314	3.18E-35	1
Zfp36l1	0.471467191	0.746	0.379	3.95E-35	1
Abca1	0.437565001	0.485	0.17	4.86E-35	1
Tmem59	0.365324421	0.908	0.603	5.73E-35	1
Pepd	0.588266498	0.573	0.267	6.57E-35	1
Erp29	0.417460413	0.875	0.516	6.83E-35	1
Rnf13	0.365039775	0.6	0.267	8.53E-35	1
Slc29a1	0.451109148	0.49	0.174	8.99E-35	1
Wwp1	0.424441427	0.337	0.071	1.05E-34	1

Plekho1	0.40815745	0.646	0.297	1.32E-34	1
Tmbim1	0.461625915	0.471	0.17	1.41E-34	1
Ms4a6b	0.51378731	0.787	0.443	1.79E-34	1
Serpinf1	0.368108558	0.411	0.113	2.10E-34	1
Tubb6	0.513809737	0.624	0.286	2.37E-34	1
Man1a	0.424226161	0.466	0.16	2.84E-34	1
Tmed10	0.409413044	0.891	0.557	3.65E-34	1
Nrros	0.439025496	0.743	0.373	5.58E-34	1
Hpgds	0.405338648	0.443	0.136	7.62E-34	1
Adap2	0.382840536	0.325	0.068	7.72E-34	1
Cttnbp2nl	0.392475958	0.37	0.099	8.58E-34	1
Npl	0.549285898	0.265	0.033	8.63E-34	1
Mtss1	0.439220714	0.45	0.15	1.32E-33	1
Alox5	0.355286492	0.291	0.042	1.44E-33	1
Hsbp1	0.355076088	0.806	0.495	2.04E-33	1
Rab14	0.378787014	0.776	0.468	3.08E-33	1
Ctss	0.300663127	0.989	0.656	4.10E-33	1
Tmem141	0.384823292	0.356	0.091	4.49E-33	1
Ecm1	0.488198839	0.559	0.229	4.82E-33	1
Lilra5	0.36748438	0.284	0.044	7.87E-33	1
Cd151	0.361566832	0.37	0.098	9.48E-33	1
Dram2	0.352209854	0.58	0.262	1.15E-32	1
B4galt6	0.405199441	0.374	0.103	1.51E-32	1
Tgfbr2	0.325435736	0.503	0.181	1.53E-32	1
Ergic3	0.372882059	0.681	0.361	1.59E-32	1
Gna12	0.308765092	0.362	0.095	2.01E-32	1
Ncf1	0.388377573	0.533	0.221	2.15E-32	1
Pros1	0.365478231	0.333	0.078	2.41E-32	1
Eif4ebp1	0.357838997	0.684	0.345	3.61E-32	1
Cebpa	0.490691677	0.504	0.199	4.64E-32	1
Bst2	0.464441662	0.817	0.502	6.77E-32	1
Fcer1g	0.374806437	0.998	0.696	7.96E-32	1
Ctsf	0.305277508	0.273	0.041	8.23E-32	1
Mcub	0.302830652	0.658	0.298	9.25E-32	1
Ucp2	0.43793194	0.931	0.704	9.43E-32	1
Mapk3	0.361413921	0.582	0.281	1.07E-31	1
Rassf4	0.385279044	0.554	0.239	1.23E-31	1
Clec4a3	0.366017709	0.661	0.29	1.34E-31	1
Cyfip1	0.374123593	0.568	0.266	1.35E-31	1
Rab5c	0.393924695	0.795	0.487	1.38E-31	1
Col14a1	0.283064054	0.27	0.038	1.39E-31	1
P2rx4	0.419090418	0.637	0.303	1.63E-31	1
Daglb	0.364135838	0.467	0.17	2.08E-31	1
Clta	0.412171831	0.965	0.752	2.86E-31	1
Bmyc	0.333954131	0.51	0.198	3.02E-31	1
Arhgap22	0.349642829	0.302	0.064	3.89E-31	1
Atp6v0b	0.358717961	0.928	0.632	6.32E-31	1
Milr1	0.367715412	0.434	0.154	1.17E-30	1
Fam234a	0.356267993	0.399	0.124	2.25E-30	1
Tmem109	0.355009299	0.522	0.221	2.92E-30	1
Ptgs1	0.344710529	0.272	0.044	3.73E-30	1
Atp2b1	0.369140567	0.783	0.444	4.81E-30	1
Snx2	0.500152426	0.684	0.397	5.78E-30	1
Hmox2	0.345462862	0.658	0.347	8.33E-30	1
Txndc17	0.274127581	0.802	0.485	9.03E-30	1
Gnai2	0.361369452	0.966	0.785	1.03E-29	1
Plxnb2	0.344235002	0.354	0.098	1.13E-29	1
Snx3	0.408223948	0.882	0.577	1.70E-29	1
Gns	0.324442175	0.624	0.294	1.82E-29	1
Nfic	0.349072155	0.367	0.11	2.83E-29	1
Phlda1	0.619913966	0.499	0.209	4.97E-29	1
Pla2g7	0.308817672	0.698	0.307	6.50E-29	1
Tlr7	0.324561035	0.321	0.078	6.99E-29	1
Mpp1	0.370912973	0.54	0.223	8.15E-29	1
Cyth4	0.36629215	0.765	0.453	9.97E-29	1
Tlr2	0.461639427	0.593	0.283	1.18E-28	1
Tifa	0.362914638	0.478	0.191	1.28E-28	1
Sqor	0.317368769	0.363	0.109	2.09E-28	1
Fgd2	0.381768749	0.406	0.146	2.20E-28	1
Stard3nl	0.353013434	0.543	0.263	2.48E-28	1
Ptov1	0.280984951	0.455	0.181	3.06E-28	1
Creb5	0.314066727	0.302	0.069	3.41E-28	1
Lpcat2	0.330451976	0.503	0.204	5.08E-28	1
Nisch	0.375453582	0.646	0.347	5.71E-28	1
Ilk	0.298714254	0.631	0.328	5.84E-28	1
Emp1	0.424438361	0.457	0.175	7.36E-28	1
Sdc3	0.366593813	0.462	0.182	1.64E-27	1

Ly96	0.30594687	0.451	0.18	7.28E-27	1
Atp6ap1	0.315619387	0.78	0.453	9.02E-27	1
Sirpa	0.295219225	0.702	0.342	9.61E-27	1
Snx6	0.373060587	0.593	0.321	2.76E-26	1
Bsg	0.281838876	0.887	0.611	3.09E-26	1
Tmcc3	0.360281953	0.307	0.081	3.45E-26	1
Tm2d2	0.327793409	0.651	0.375	3.83E-26	1
Dse	0.366840353	0.34	0.109	4.70E-26	1
Ap2m1	0.378915931	0.806	0.564	5.59E-26	1
Eid1	0.352345971	0.481	0.214	6.60E-26	1
Ggh	0.299475507	0.594	0.296	6.86E-26	1
Rcn3	0.502072264	0.395	0.144	7.16E-26	1
Idh2	0.341326449	0.439	0.177	7.33E-26	1
Ptpro	0.341878126	0.351	0.116	1.19E-25	1
Susd3	0.355336021	0.485	0.209	1.31E-25	1
Fkbp5	0.360673582	0.39	0.139	1.35E-25	1
Il6ra	0.327079043	0.425	0.168	1.67E-25	1
Adap2os	0.322850365	0.291	0.076	1.76E-25	1
Luzp1	0.282951103	0.303	0.083	3.48E-25	1
Evi2a	0.325585714	0.764	0.429	3.52E-25	1
Cxcl1	0.633596008	0.275	0.062	4.76E-25	1
Ccl4	0.396100529	0.614	0.315	5.92E-25	1
Ccr5	0.42313909	0.489	0.231	6.59E-25	1
Card19	0.266958668	0.765	0.461	7.98E-25	1
Scpep1	0.372919094	0.492	0.235	8.80E-25	1
Cd36	0.428168388	0.296	0.079	1.62E-24	1
Lrpap1	0.261641552	0.552	0.28	1.94E-24	1
Ppp1r21	0.301042678	0.339	0.113	2.12E-24	1
Dnase1l1	0.338315197	0.39	0.154	3.72E-24	1
Cnpy3	0.318067482	0.52	0.256	3.73E-24	1
Irf5	0.252416536	0.739	0.388	4.42E-24	1
Dpysl2	0.335949725	0.48	0.211	4.51E-24	1
Tmcc1	0.322285894	0.379	0.133	5.25E-24	1
Cdkn1a	0.656986817	0.677	0.413	5.75E-24	1
Ccl6	0.282851216	0.799	0.471	6.10E-24	1
Dusp6	0.349774132	0.392	0.139	6.22E-24	1
Myo5a	0.337028158	0.347	0.119	6.27E-24	1
Itgam	0.251544578	0.547	0.253	6.38E-24	1
Hsd17b11	0.293112191	0.305	0.089	6.91E-24	1
Rabac1	0.253362	0.884	0.648	9.65E-24	1
Tmem55b	0.281607487	0.536	0.262	1.09E-23	1
Ptpn18	0.297731559	0.91	0.625	1.22E-23	1
Ifi204	0.406444019	0.483	0.208	1.26E-23	1
Slc6a6	0.289573149	0.561	0.294	1.27E-23	1
Fam46a	0.439812243	0.446	0.195	1.47E-23	1
mt-Atp6	0.251324733	0.998	0.96	1.52E-23	1
Crlf2	0.30921461	0.723	0.431	1.57E-23	1
Ptpra	0.259776297	0.497	0.231	1.74E-23	1
Fam174a	0.277153891	0.637	0.349	1.87E-23	1
Aoah	0.305762867	0.282	0.075	2.21E-23	1
Axl	0.354932928	0.441	0.184	2.59E-23	1
Tnf	0.355277315	0.386	0.143	3.40E-23	1
Nfkbia	0.294112098	0.889	0.692	4.38E-23	1
Ap2s1	0.302335087	0.81	0.569	5.17E-23	1
Rnpep	0.276251142	0.596	0.31	6.10E-23	1
Spred1	0.251962189	0.317	0.103	8.51E-23	1
Klf9	0.30067253	0.432	0.18	8.54E-23	1
Slc35b2	0.263495183	0.404	0.167	8.74E-23	1
Pou2f2	0.357279737	0.42	0.168	1.05E-22	1
mt-Cytb	0.290437441	0.998	0.911	1.32E-22	1
Fkbp2	0.260274715	0.723	0.414	1.33E-22	1
Prcp	0.270315939	0.64	0.341	1.38E-22	1
Necap2	0.299358441	0.651	0.368	1.44E-22	1
Tspan17	0.274839338	0.303	0.098	1.52E-22	1
Epn1	0.31581531	0.633	0.352	1.67E-22	1
Il4ra	0.297431893	0.503	0.236	1.69E-22	1
Plbd2	0.28455389	0.429	0.201	1.76E-22	1
2610001J05Rik	0.277874095	0.649	0.378	1.81E-22	1
Rtcb	0.334993424	0.571	0.317	1.95E-22	1
Gdi2	0.295238939	0.944	0.713	2.15E-22	1
Mgat1	0.297477981	0.45	0.201	2.47E-22	1
Stxbp3	0.295686566	0.407	0.168	3.72E-22	1
Eps8	0.324399238	0.411	0.168	4.42E-22	1
Adam9	0.275711751	0.353	0.134	6.74E-22	1
Gnaq	0.288278159	0.34	0.126	6.83E-22	1
Sumo3	0.311314329	0.57	0.325	1.17E-21	1
mt-Nd4	0.280124246	0.989	0.887	1.25E-21	1

Cln8	0.263968998	0.369	0.139	1.69E-21	1
Spi1	0.313166023	0.901	0.509	1.81E-21	1
Jmjd1c	0.286212153	0.485	0.235	1.82E-21	1
Mef2a	0.295699103	0.453	0.216	1.93E-21	1
Apobec1	0.285728726	0.487	0.232	1.94E-21	1
Cmklr1	0.266069946	0.303	0.093	2.28E-21	1
Scamp2	0.294014246	0.533	0.281	2.89E-21	1
Hgsnat	0.359531241	0.346	0.127	2.98E-21	1
Ifnar2	0.269813404	0.663	0.389	3.57E-21	1
Tex264	0.253548686	0.416	0.182	7.51E-21	1
Emp3	0.316513899	0.949	0.694	8.16E-21	1
Cnpy2	0.266518864	0.54	0.303	1.46E-20	1
Nckap1l	0.275953789	0.524	0.284	1.51E-20	1
Fam213b	0.311620242	0.326	0.116	2.28E-20	1
Mgst3	0.272771915	0.347	0.133	5.42E-20	1
Dhrs1	0.2957365	0.388	0.174	5.84E-20	1
Nagpa	0.290712385	0.404	0.19	7.44E-20	1
Rgs18	0.25555497	0.28	0.093	3.09E-19	1
Rnaset2a	0.303916682	0.69	0.44	3.48E-19	1
Hprt	0.263416897	0.702	0.444	4.64E-19	1
Lgals3bp	0.273018476	0.593	0.321	5.04E-19	1
Wfdc17	0.431873447	0.882	0.546	5.62E-19	1
Pdcd2l	0.304237524	0.353	0.154	7.90E-19	1
Ifitm3	0.268822289	0.921	0.59	8.03E-19	1
Mfsd11	0.308367766	0.305	0.115	1.32E-18	1
Eps15	0.25503562	0.376	0.164	1.68E-18	1
Mknk1	0.264222071	0.351	0.147	1.72E-18	1
2010111I01Rik	0.406557226	0.443	0.222	1.88E-18	1
Xdh	0.281554976	0.307	0.113	2.24E-18	1
Csf2ra	0.250105636	0.672	0.385	2.26E-18	1
Jund	0.409546836	0.937	0.823	2.75E-18	1
Tnfsf9	0.531609978	0.263	0.086	4.46E-18	1
Qk	0.253098726	0.43	0.214	6.09E-18	1
Dpep2	0.423533191	0.27	0.093	1.17E-17	1
Ywhah	0.320697837	0.829	0.595	1.57E-17	1
Dusp22	0.286127414	0.34	0.15	2.47E-17	1
Ppp3ca	0.273625034	0.526	0.304	2.93E-17	1
Calr	0.271630208	0.929	0.656	3.44E-17	1
Clec10a	0.404713976	0.316	0.123	3.73E-17	1
Pnp	0.271083168	0.619	0.368	5.83E-17	1
Tsc22d3	0.310652785	0.64	0.396	7.80E-17	1
Gadd45g	0.331931044	0.362	0.161	1.59E-16	1
Sdf2l1	0.250374709	0.695	0.424	1.79E-16	1
Neat1	0.262372968	0.635	0.402	2.62E-16	1
Klf4	0.472668322	0.563	0.337	2.71E-16	1
Adrb2	0.280035273	0.34	0.146	4.98E-16	1
Casp4	0.286571984	0.31	0.133	8.30E-16	1
Zfand5	0.253714632	0.654	0.399	9.66E-16	1
Tagap	0.304544461	0.349	0.153	1.36E-15	1
Ptger4	0.309029609	0.356	0.168	3.00E-15	1
Cept1	0.260135742	0.432	0.238	5.50E-15	1
Slc39a1	0.30199064	0.388	0.19	5.98E-15	1
Ier2	0.357381803	0.868	0.675	1.01E-14	1
Ahnak	0.288589808	0.621	0.4	1.21E-14	1
Rgl1	0.265803218	0.256	0.098	1.76E-14	1
Ubc	0.26917807	0.982	0.897	2.42E-14	1
F11r	0.325098507	0.261	0.106	4.72E-14	1
Ier5	0.272228819	0.802	0.583	7.88E-14	1
Ccnd1	0.250523575	0.279	0.123	1.06E-12	1
Sulf2	0.273072479	0.293	0.15	4.16E-11	1
Gm6377	0.255199258	0.39	0.238	1.08E-09	1
Tppp3	0.411618182	0.279	0.143	1.55E-09	1
Glipr1	0.361080179	0.501	0.399	3.00E-06	1
Ptprcap	1.999221413	0.931	0.04	3.80E-193	2
Il2rb	1.837566306	0.718	0.002	9.00E-189	2
Gimap3	1.622752686	0.707	0.008	4.89E-174	2
Gimap4	1.949636906	0.724	0.013	2.21E-172	2
Ms4a4b	2.475343009	0.764	0.029	3.53E-166	2
Nkg7	3.284150386	0.678	0.011	2.30E-163	2
Trbc2	1.452475127	0.874	0.045	1.06E-161	2
Ctsw	1.669902203	0.621	0.002	1.94E-160	2
Skap1	1.342877834	0.747	0.025	1.11E-155	2
Lat	1.466011887	0.822	0.038	1.78E-155	2
Cd3g	2.076315491	0.793	0.038	2.99E-152	2
Sept1	1.53026759	0.81	0.046	3.45E-149	2
Gimap1	1.397347939	0.73	0.027	8.79E-149	2
Cxcr6	1.801450476	0.563	0	1.49E-147	2

Sh2d2a	1.347959541	0.644	0.013	4.28E-146	2
Cd3d	1.901405271	0.759	0.035	1.11E-145	2
Cd3e	1.607300823	0.718	0.035	1.91E-132	2
Trbc1	1.195355587	0.661	0.025	2.25E-128	2
Thy1	1.714203396	0.799	0.072	3.07E-128	2
Gimap6	1.44688093	0.776	0.065	8.68E-125	2
Trac	1.769744479	0.655	0.032	2.24E-122	2
Lck	1.211861984	0.695	0.041	9.33E-120	2
H2-Q7	1.960038532	0.954	0.218	1.00E-119	2
Gimap5	1.093247249	0.523	0.012	4.75E-115	2
Cd2	1.333336739	0.672	0.049	4.60E-113	2
Zap70	0.966683752	0.489	0.009	1.05E-109	2
Ltb	1.706376261	0.776	0.087	1.28E-109	2
AW112010	2.599155418	0.868	0.199	1.33E-103	2
Gzmb	2.149630547	0.408	0.001	1.47E-103	2
Ccl5	4.449273326	0.626	0.059	1.43E-101	2
Tbc1d10c	1.13800692	0.609	0.046	6.73E-101	2
Ets1	1.122461187	0.701	0.071	8.14E-101	2
Cd247	1.04274502	0.54	0.029	1.76E-94	2
Icos	1.064728974	0.391	0.004	7.86E-94	2
Sytl3	0.908647661	0.356	0.004	1.66E-84	2
Tmsb10	1.692898734	1	0.74	3.83E-84	2
Ctla2a	1.929579528	0.552	0.061	2.04E-79	2
H2-Q6	1.096443448	0.575	0.068	2.73E-78	2
S1pr4	0.911311617	0.414	0.02	1.59E-77	2
Klk8	0.819395964	0.362	0.011	6.37E-76	2
Cd28	1.008669272	0.46	0.03	8.42E-76	2
Gata3	0.81404153	0.31	0.002	9.90E-76	2
Gimap7	0.897427859	0.328	0.005	2.36E-75	2
Klrc1	1.22987331	0.293	0	6.42E-75	2
Hcst	1.474230864	0.868	0.334	6.86E-75	2
Cst7	0.914321723	0.437	0.031	6.91E-74	2
Fasl	0.729077899	0.282	0	6.08E-72	2
Serpina3g	1.280935925	0.42	0.027	7.48E-72	2
Xcl1	1.312637443	0.293	0.002	1.60E-71	2
Ptpn22	1.308945383	0.626	0.12	8.27E-69	2
Vps37b	1.520387341	0.747	0.189	1.42E-68	2
Fam189b	0.811686479	0.431	0.035	2.72E-68	2
Rps15a	0.905597836	1	0.945	3.00E-68	2
Tespa1	0.714203306	0.397	0.023	1.63E-67	2
Bcl11b	0.731354729	0.391	0.021	2.87E-67	2
Txk	0.82203861	0.437	0.032	4.63E-67	2
H2-K1	1.119375879	0.994	0.835	5.34E-67	2
Rps27	0.906303562	0.994	0.986	6.51E-67	2
Gimap9	0.744568011	0.425	0.031	4.32E-66	2
Itk	0.741552742	0.362	0.016	6.25E-66	2
Prf1	1.005816066	0.264	0.001	8.77E-66	2
Rpl13a	1.178017881	0.989	0.805	9.57E-66	2
Shisa5	1.209092109	0.977	0.766	4.13E-64	2
Rac2	1.222527054	0.971	0.706	1.09E-63	2
Itgb7	1.230861578	0.649	0.142	3.13E-62	2
Ccdc88c	0.677298009	0.362	0.022	5.28E-62	2
Lax1	0.509768779	0.253	0.002	4.35E-61	2
Ikzf3	0.652836691	0.287	0.007	1.25E-60	2
Gm11808	1.105781386	0.977	0.706	9.85E-59	2
Klrk1	1.310673244	0.448	0.056	1.69E-58	2
Il18r1	0.757008824	0.253	0.004	3.02E-58	2
Rpl27	0.878407912	0.994	0.882	3.92E-58	2
Rpl19	0.668554563	1	0.947	1.92E-57	2
Rps7	0.774371189	0.994	0.935	3.23E-57	2
Tnfrsf18	1.180388357	0.391	0.036	3.41E-57	2
F2r	0.686589491	0.345	0.025	6.48E-55	2
Rps3	0.678657656	0.994	0.945	1.32E-54	2
Rpl38	0.689276326	0.989	0.948	4.35E-54	2
Rps16	0.670906023	1	0.967	7.91E-54	2
Hsd11b1	0.763553767	0.368	0.035	1.53E-52	2
Ablim1	0.641768753	0.362	0.032	2.80E-52	2
Dusp5	1.178740766	0.736	0.239	2.86E-52	2
Gzma	3.187753073	0.264	0.01	3.03E-52	2
Jakmip1	0.576172292	0.322	0.02	3.98E-52	2
Rps24	0.6872942	0.994	0.947	4.45E-52	2
Sh2d1a	0.597278249	0.322	0.02	4.76E-52	2
Bcl2	1.360237078	0.615	0.167	5.91E-52	2
Rpl18a	0.634472764	0.994	0.979	1.08E-51	2
Rpl18	0.655964916	0.994	0.921	9.90E-51	2
Klrd1	1.29731141	0.443	0.065	2.25E-50	2
Cd7	0.999307556	0.31	0.021	2.95E-50	2

Ppp1r16b	0.633730631	0.374	0.036	3.78E-50	2
Serpinb9	0.985325446	0.368	0.039	4.76E-50	2
Rpl23a	0.61107281	1	0.955	7.91E-50	2
Cd82	1.177432549	0.73	0.28	1.58E-49	2
Pdcd4	1.059565633	0.603	0.158	1.62E-49	2
Rasal3	0.776206719	0.489	0.09	1.98E-49	2
Prkcq	0.560703368	0.276	0.014	3.74E-49	2
Gm8369	0.743624611	0.322	0.025	7.05E-49	2
Il2rg	1.028964974	0.736	0.282	8.41E-49	2
Rpsa	0.762735918	0.994	0.891	2.26E-48	2
Rpl9	0.616590762	1	0.95	4.14E-48	2
Lamb3	0.58388447	0.27	0.014	4.29E-48	2
Rplp2	0.594428735	1	0.962	4.83E-48	2
Rpl4	0.672254292	1	0.918	1.93E-47	2
Dusp2	1.491511073	0.644	0.195	4.09E-47	2
Serpinb6b	0.854229143	0.356	0.04	5.57E-47	2
Rpl37a	0.565240472	0.994	0.985	1.25E-46	2
Limd2	0.957057094	0.868	0.473	1.57E-46	2
Ccnd2	0.982773743	0.695	0.234	5.77E-46	2
Rpl17	0.62964544	0.994	0.962	2.51E-45	2
Rps3a1	0.575069187	0.994	0.947	1.13E-44	2
Rpl39	0.617391229	1	0.944	5.42E-44	2
Phgdh	0.541403377	0.339	0.037	4.76E-43	2
Uba52	0.869388357	0.914	0.587	4.94E-43	2
Rps13	0.5691045	0.994	0.941	6.82E-43	2
Selplg	0.881882545	0.92	0.62	1.01E-42	2
Acap1	0.662150983	0.345	0.042	1.14E-42	2
Cxcr3	0.836538522	0.397	0.064	1.33E-42	2
Rps6	0.611163915	1	0.95	1.41E-42	2
Cish	0.795456825	0.356	0.048	2.86E-42	2
Anxa6	0.97855022	0.724	0.332	5.07E-42	2
Rps21	0.676661291	0.989	0.899	5.76E-42	2
Eef1a1	0.531194705	1	0.969	8.59E-42	2
Rpl12	0.863196896	0.96	0.855	1.17E-41	2
Rps23	0.521522222	1	0.966	1.27E-41	2
Rps5	0.571875931	0.994	0.952	2.40E-41	2
Rpl36	0.588098824	0.989	0.933	1.29E-40	2
Btg1	0.814166467	0.989	0.788	1.71E-40	2
Sept6	0.752015655	0.483	0.107	2.53E-40	2
Rhof	0.571677243	0.322	0.038	3.25E-40	2
Rora	0.863287899	0.362	0.056	5.92E-40	2
Rps15	0.576875706	0.994	0.939	6.10E-40	2
Cd69	0.909495378	0.448	0.091	6.15E-40	2
Rpl8	0.580734369	1	0.935	6.55E-40	2
Rplp0	0.567521883	1	0.963	8.39E-40	2
Cd8b1	1.151367179	0.322	0.035	1.22E-39	2
H2-Q4	0.972943276	0.621	0.232	4.58E-39	2
Rpl32	0.531728137	0.994	0.955	9.55E-39	2
Rps18	0.649999811	0.994	0.945	9.84E-39	2
Il7r	1.115107067	0.391	0.074	2.91E-38	2
Tcf7	0.339022887	0.305	0.031	7.58E-38	2
Rpl21	0.513280786	0.994	0.953	7.60E-38	2
Eef2	0.650683382	0.994	0.877	9.50E-38	2
Rpl11	0.491800723	1	0.945	1.62E-37	2
Rps10	0.591567218	0.989	0.907	1.88E-37	2
Tecpr1	0.737274037	0.471	0.118	1.14E-36	2
Rpl34	0.497083753	0.994	0.956	2.81E-36	2
Cd8a	0.904551468	0.299	0.034	5.38E-36	2
Rps14	0.503631658	1	0.97	1.48E-35	2
Rpl13	0.49089725	0.994	0.972	3.86E-35	2
B4galnt1	0.857175448	0.684	0.323	4.90E-35	2
Tpt1	0.436875209	0.994	0.975	1.17E-34	2
Rpl30	0.552892742	0.989	0.912	1.59E-34	2
Rplp1	0.526216518	1	0.962	1.66E-34	2
Gramd3	0.817433156	0.408	0.088	3.99E-34	2
Itgal	0.586460732	0.454	0.103	1.45E-33	2
Pkp3	0.709105401	0.339	0.059	2.52E-33	2
Rpl3	0.53821535	0.994	0.919	5.38E-33	2
Arhgef1	0.824941414	0.672	0.326	6.65E-33	2
Cnn2	0.807762486	0.81	0.515	8.52E-33	2
Rpl27a	0.482466335	0.994	0.94	3.30E-32	2
Rpl23	0.444593978	0.989	0.96	8.42E-32	2
Prkca	0.5781061	0.287	0.04	1.22E-31	2
Cd27	0.474836956	0.351	0.064	6.67E-31	2
Spn	0.605308034	0.425	0.105	1.57E-30	2
Snrpg	0.698715172	0.902	0.694	1.78E-30	2
Rpl5	0.610915315	0.96	0.839	2.24E-30	2

Rpl29	0.463607547	0.983	0.894	3.59E-30	2
Prdx6	0.683427788	0.805	0.495	3.76E-30	2
Tnfaip3	0.884411252	0.747	0.395	4.19E-30	2
Camk2n1	0.58560269	0.287	0.045	4.40E-30	2
Pabpc1	0.578934389	0.948	0.823	6.99E-30	2
Rpl14	0.464408564	0.994	0.944	8.86E-30	2
Gstp1	0.839236704	0.523	0.191	1.09E-29	2
Rps11	0.442871804	0.994	0.948	5.11E-29	2
Emb	0.997739644	0.701	0.383	6.40E-29	2
Rpl37	0.435915753	0.994	0.963	8.02E-29	2
Hbb-bs	0.483787801	0.724	0.315	8.79E-29	2
Rps28	0.490620233	0.994	0.957	1.40E-28	2
Smad7	0.669146519	0.362	0.084	2.64E-28	2
Rpl41	0.34232028	1	0.994	4.88E-28	2
Saraf	0.688521404	0.856	0.619	7.05E-28	2
Glipr2	0.606594492	0.454	0.133	1.69E-27	2
Fam107b	0.673842167	0.592	0.245	2.34E-27	2
Rinl	0.697056523	0.466	0.163	3.59E-27	2
Bin2	0.800061309	0.695	0.39	3.85E-27	2
S100a10	0.695842152	0.937	0.712	5.31E-27	2
Ptpn18	0.602699104	0.92	0.725	1.24E-26	2
Rps4x	0.444347749	1	0.929	1.92E-26	2
Apobec3	0.710515751	0.69	0.383	3.92E-26	2
Gnas	0.577035565	0.96	0.81	8.29E-26	2
Eef1g	0.563956699	0.96	0.807	9.89E-26	2
Rpl15	0.420917743	1	0.922	9.94E-26	2
Rps20	0.508576866	0.994	0.91	1.03E-25	2
Rpl27-ps3	0.635721347	0.724	0.445	1.08E-25	2
Ncor1	0.668373313	0.73	0.449	1.31E-25	2
Acot7	0.630090517	0.454	0.159	1.57E-25	2
Leprotl1	0.660806161	0.655	0.382	3.03E-25	2
Vasp	0.584793002	0.816	0.542	5.63E-25	2
Arhgdib	0.523100416	0.96	0.835	7.56E-25	2
Rasgrp2	0.532904781	0.374	0.095	7.69E-25	2
Arl2bp	0.653125093	0.5	0.2	7.80E-25	2
Ifngr1	0.808240877	0.897	0.743	1.29E-24	2
Rps2	0.478851262	0.983	0.938	1.46E-24	2
H2-D1	0.415447664	0.994	0.955	1.60E-24	2
Padi2	0.564530204	0.259	0.047	2.25E-24	2
Rpl13a-ps1	0.642339168	0.408	0.132	5.57E-24	2
Bhlhe40	0.90551793	0.563	0.238	8.95E-24	2
Id2	0.816622765	0.839	0.543	9.21E-24	2
Gpr171	0.630253925	0.42	0.127	1.36E-23	2
Jak1	0.635147113	0.753	0.49	1.54E-23	2
Pla2g16	0.723033977	0.46	0.177	1.68E-23	2
Rpl6	0.402268219	1	0.947	1.87E-23	2
Gramd1a	0.607122855	0.454	0.165	2.66E-23	2
Nop53	0.594381589	0.839	0.658	2.77E-23	2
Coro1a	0.503467932	0.983	0.815	2.94E-23	2
Vgll4	0.750333072	0.454	0.17	4.53E-23	2
Aes	0.581595122	0.776	0.551	6.00E-23	2
Zfp36l2	0.815842017	0.805	0.642	9.73E-23	2
Rpl7	0.362092648	1	0.925	9.73E-23	2
Rpl24	0.367756722	0.983	0.926	2.97E-22	2
Fkbp3	0.614563737	0.626	0.356	4.19E-22	2
D16Ertd472e	0.518348824	0.293	0.068	4.88E-22	2
Gem	0.706051341	0.259	0.052	6.37E-22	2
Cd52	0.515777198	0.994	0.865	7.13E-22	2
Rnf138	0.65589916	0.448	0.175	8.19E-22	2
Grap	0.653261698	0.443	0.161	8.22E-22	2
Rpl35	0.460968511	0.977	0.922	1.33E-21	2
Rpl36a	0.463470904	0.948	0.895	7.66E-21	2
Rpl22l1	0.531992131	0.937	0.796	7.96E-21	2
Eef1b2	0.472201429	0.914	0.776	1.49E-20	2
Rack1	0.451825582	0.937	0.844	1.96E-20	2
Ccnd3	0.624655594	0.649	0.381	2.16E-20	2
4930523C07Rik	0.627194771	0.431	0.162	2.20E-20	2
Psmb8	0.506876032	0.891	0.726	2.76E-20	2
Ptpn7	0.561425876	0.402	0.145	3.15E-20	2
Rpl22	0.409423261	0.943	0.864	8.74E-20	2
Rpl10a	0.394856316	0.977	0.915	1.49E-19	2
Arhgap45	0.484941376	0.747	0.484	2.64E-19	2
Gm9844	0.523981225	0.322	0.099	4.27E-19	2
Cnbp	0.456494774	0.908	0.743	4.47E-19	2
Rps8	0.348149711	0.994	0.95	5.73E-19	2
Hmgb2	0.817973677	0.724	0.51	5.77E-19	2
Rasgrp1	0.505046703	0.27	0.066	6.35E-19	2

Rbm39	0.465005799	0.943	0.808	7.51E-19	2
Fyn	0.534688797	0.431	0.18	8.64E-19	2
Traf3ip3	0.495503873	0.316	0.093	1.45E-18	2
H2-T22	0.707651558	0.529	0.294	3.65E-18	2
Socs1	0.403655532	0.264	0.063	3.82E-18	2
Eif3f	0.426719529	0.971	0.838	5.61E-18	2
Ezr	0.420029405	0.603	0.326	6.49E-18	2
Cd37	0.574489448	0.718	0.471	7.80E-18	2
Snrpf	0.461122586	0.793	0.62	1.04E-17	2
Sept9	0.553787427	0.5	0.255	1.64E-17	2
Prkch	0.627907017	0.368	0.143	2.34E-17	2
Evl	0.605019746	0.592	0.352	2.42E-17	2
Eif3e	0.495902628	0.805	0.654	2.47E-17	2
Npm1	0.466057349	0.897	0.78	2.94E-17	2
Ptprc	0.559532725	0.793	0.631	4.98E-17	2
Sp100	0.614666907	0.609	0.374	5.00E-17	2
Ppp1r12a	0.548380997	0.603	0.386	5.46E-17	2
Ppp1cc	0.517480203	0.747	0.571	8.49E-17	2
Chd3	0.513060801	0.333	0.116	2.24E-16	2
Hba-a1	0.350471292	0.46	0.203	3.23E-16	2
Rbm3	0.432751376	0.879	0.705	4.02E-16	2
Sub1	0.381010908	0.966	0.835	4.66E-16	2
Def6	0.527488691	0.408	0.181	5.54E-16	2
Rps19	0.366185586	1	0.951	7.56E-16	2
Ldha	0.452347273	0.885	0.75	1.46E-15	2
Dad1	0.472411256	0.856	0.743	2.32E-15	2
Vps28	0.49438843	0.707	0.526	2.49E-15	2
Prkar1a	0.443559867	0.759	0.587	6.72E-15	2
Mbnl1	0.578482301	0.678	0.531	8.27E-15	2
Rps26	0.371557431	0.977	0.925	9.22E-15	2
Dnajc9	0.498342008	0.368	0.153	9.25E-15	2
B2m	0.283085452	0.994	0.971	1.02E-14	2
Ppp1ca	0.410212847	0.885	0.808	1.24E-14	2
Abhd8	0.377086325	0.27	0.084	1.68E-14	2
Atp5h	0.332693607	0.914	0.839	2.16E-14	2
Ifi47	0.516874429	0.425	0.197	2.50E-14	2
Rpl35a	0.253717585	0.994	0.965	6.03E-14	2
Arhgap31	0.594486875	0.471	0.246	6.03E-14	2
Ly6c2	1.24473543	0.299	0.105	7.99E-14	2
Stk17b	0.395540526	0.73	0.54	1.33E-13	2
Ddx5	0.378477331	0.977	0.899	1.33E-13	2
Rps12	0.325591857	0.971	0.915	1.35E-13	2
Rps29	0.279792233	0.994	0.994	1.50E-13	2
Rapgef6	0.453148533	0.339	0.145	3.58E-13	2
Rpl7a	0.309273767	0.954	0.873	3.68E-13	2
Cdc42ep3	0.448475352	0.368	0.163	3.85E-13	2
Rhoh	0.394263695	0.443	0.221	4.71E-13	2
Eif3h	0.380372385	0.851	0.768	6.23E-13	2
Psip1	0.409956809	0.305	0.117	8.10E-13	2
Stk24	0.559037545	0.557	0.378	8.94E-13	2
Gabarapl2	0.40327333	0.741	0.592	1.02E-12	2
Gm8186	0.4355551	0.46	0.263	1.04E-12	2
Cirbp	0.456135323	0.5	0.287	1.27E-12	2
Naca	0.28589616	0.96	0.905	1.94E-12	2
Znrf1	0.473759687	0.391	0.186	2.06E-12	2
Csnk2b	0.377454864	0.632	0.475	2.13E-12	2
Elf1	0.49672559	0.489	0.302	2.66E-12	2
Esyt1	0.583443316	0.42	0.237	2.83E-12	2
Oaz1	0.264518184	0.994	0.938	3.57E-12	2
Sumo2	0.344367753	0.914	0.79	4.48E-12	2
Mfng	0.371092936	0.31	0.128	6.13E-12	2
Pnrc1	0.365600616	0.856	0.734	6.88E-12	2
Grcc10	0.479049752	0.5	0.32	7.28E-12	2
Arhgap15	0.432086385	0.42	0.217	8.01E-12	2
Slc7a6os	0.424529806	0.253	0.09	9.46E-12	2
Xist	0.420513229	0.891	0.77	9.72E-12	2
Zc3hav1	0.62045559	0.5	0.323	1.04E-11	2
Tra2b	0.453510983	0.718	0.597	1.07E-11	2
Lrrfip1	0.416882855	0.621	0.44	1.11E-11	2
Btf3	0.26082287	0.983	0.877	1.79E-11	2
Ndufa4	0.353499246	0.862	0.753	2.58E-11	2
Gpr132	0.496031305	0.437	0.238	3.18E-11	2
Hmgb1	0.276866298	0.874	0.778	3.30E-11	2
Serbp1	0.334575374	0.816	0.732	3.41E-11	2
Gtf2i	0.491865438	0.287	0.121	3.49E-11	2
Lbr	0.416024877	0.408	0.216	3.49E-11	2
Cct7	0.390836139	0.655	0.535	3.51E-11	2

Tbrg1	0.420272968	0.466	0.284	4.98E-11	2
Ly9	0.357613439	0.322	0.143	5.62E-11	2
Krtcap2	0.411264235	0.73	0.62	5.74E-11	2
Ly6a	0.955119396	0.448	0.259	7.87E-11	2
Rgs1	0.44807845	0.741	0.481	9.99E-11	2
Sri	0.347652921	0.782	0.649	9.99E-11	2
Ankrd44	0.442007072	0.466	0.281	1.04E-10	2
Slc38a1	0.526165341	0.443	0.264	1.07E-10	2
Ubald2	0.59645401	0.598	0.489	1.30E-10	2
Atp5g3	0.318281849	0.672	0.532	1.72E-10	2
Rgcc	0.637971598	0.287	0.115	2.02E-10	2
Npm3	0.479118362	0.5	0.349	2.10E-10	2
Hnrnpf	0.306646298	0.902	0.806	2.60E-10	2
Psme1	0.376052885	0.736	0.638	3.02E-10	2
Traf1	0.423894797	0.356	0.174	3.19E-10	2
Emg1	0.385911001	0.626	0.5	3.27E-10	2
Srsf5	0.280741548	0.885	0.776	3.63E-10	2
Hba-a2	0.334742605	0.356	0.172	3.72E-10	2
Srpk1	0.436701888	0.356	0.185	4.36E-10	2
Vars	0.447928519	0.333	0.165	4.63E-10	2
Tecr	0.460962933	0.563	0.421	4.94E-10	2
Uqcrh	0.300142048	0.891	0.855	5.49E-10	2
Eif4a2	0.492167552	0.667	0.546	5.61E-10	2
Mif	0.340743896	0.707	0.576	6.68E-10	2
Tcf3	0.417839334	0.328	0.166	7.39E-10	2
Yaf2	0.361686441	0.299	0.14	1.09E-09	2
Sms	0.411065064	0.339	0.182	1.24E-09	2
Slc9a3r1	0.377217501	0.54	0.395	1.40E-09	2
Sp110	0.412291443	0.46	0.292	1.51E-09	2
Dnajc15	0.502133958	0.569	0.466	1.77E-09	2
Itpkb	0.400546349	0.391	0.22	1.77E-09	2
Raly	0.362082054	0.701	0.611	2.04E-09	2
Myl12b	0.29818807	0.793	0.678	2.12E-09	2
Rpl31	0.250933517	0.983	0.931	2.12E-09	2
Pitpnc1	0.426316417	0.276	0.124	2.16E-09	2
Rwdd1	0.406908832	0.58	0.436	2.22E-09	2
Riok1	0.437594871	0.259	0.114	2.29E-09	2
Grk6	0.369850759	0.368	0.2	2.29E-09	2
Psmb3	0.292736752	0.839	0.719	2.34E-09	2
Rps27rt	0.360748052	0.764	0.681	2.55E-09	2
Med10	0.471600328	0.454	0.318	2.77E-09	2
Lsm5	0.395240139	0.552	0.42	2.93E-09	2
Slc44a2	0.366416459	0.31	0.149	3.02E-09	2
Junb	0.447069003	0.966	0.886	3.33E-09	2
Hilpda	0.753869767	0.339	0.179	3.66E-09	2
Nsd3	0.438537623	0.443	0.288	4.14E-09	2
Nabp1	0.467388883	0.333	0.169	4.30E-09	2
Ptp4a3	0.401364172	0.322	0.162	4.82E-09	2
Hnrnpa3	0.342416906	0.787	0.691	5.95E-09	2
Snrnp48	0.422893677	0.368	0.212	6.18E-09	2
Runx3	0.466847352	0.402	0.243	6.56E-09	2
Eef1d	0.283483977	0.799	0.714	6.68E-09	2
Ube2s	0.337980306	0.707	0.6	7.88E-09	2
Snrnp70	0.384277538	0.592	0.48	9.12E-09	2
Psmb9	0.40761464	0.563	0.418	9.41E-09	2
Lbh	0.32268339	0.391	0.227	1.06E-08	2
Trp53	0.363012513	0.454	0.312	1.08E-08	2
Psmb1	0.267349397	0.845	0.761	1.24E-08	2
Mettl23	0.408106318	0.454	0.312	1.49E-08	2
Dock10	0.408225058	0.437	0.285	1.74E-08	2
Dok2	0.327163096	0.546	0.347	2.18E-08	2
Crem	0.617485669	0.351	0.201	2.22E-08	2
Tuba4a	0.454443362	0.282	0.137	2.37E-08	2
Gbp7	0.377055396	0.293	0.145	2.46E-08	2
Arl6ip5	0.396518181	0.672	0.571	2.55E-08	2
Clint1	0.438744932	0.397	0.247	2.68E-08	2
Ncl	0.352107525	0.701	0.636	2.75E-08	2
Arl6ip1	0.391628316	0.759	0.676	3.01E-08	2
Epsti1	0.415222402	0.563	0.426	3.03E-08	2
Ogt	0.461513681	0.368	0.216	3.03E-08	2
Snrpd2	0.310277084	0.707	0.627	3.34E-08	2
Sash3	0.381615089	0.339	0.186	3.72E-08	2
Dut	0.376815359	0.27	0.129	4.09E-08	2
Erh	0.353732585	0.54	0.395	4.58E-08	2
Gpr183	0.577067694	0.402	0.26	4.67E-08	2
Ppp1r18	0.319159739	0.626	0.524	4.71E-08	2
Eno1	0.250680311	0.822	0.693	5.07E-08	2

Abracl	0.300965014	0.736	0.652	5.23E-08	2
Dnaja1	0.306371347	0.73	0.646	5.41E-08	2
Tapbpl	0.319939038	0.27	0.132	6.92E-08	2
Slc50a1	0.375897203	0.379	0.235	7.34E-08	2
Psme2	0.304959878	0.736	0.64	7.77E-08	2
St3gal6	0.275574962	0.42	0.245	8.43E-08	2
Cnp	0.412509748	0.414	0.275	8.66E-08	2
Lfng	0.459209806	0.511	0.378	8.85E-08	2
Pnisr	0.390265286	0.425	0.28	8.97E-08	2
Pole4	0.352577731	0.54	0.434	9.59E-08	2
Sept11	0.457272053	0.305	0.163	9.95E-08	2
Ankrd11	0.404400209	0.603	0.509	1.15E-07	2
Srrm2	0.353615345	0.672	0.574	1.24E-07	2
Mrpl58	0.33878834	0.42	0.283	1.25E-07	2
Tma7	0.260614539	0.833	0.794	1.32E-07	2
Pik3r1	0.416367587	0.408	0.274	1.36E-07	2
Dazap1	0.354360401	0.471	0.333	1.39E-07	2
Taf1d	0.313939076	0.402	0.255	1.60E-07	2
Gpsm3	0.294930781	0.695	0.619	1.68E-07	2
Mat2b	0.348596336	0.489	0.372	1.91E-07	2
Ppm1g	0.389900743	0.437	0.319	2.05E-07	2
Irf8	0.398783	0.218	0.496	2.30E-07	2
Cbx3	0.417515576	0.397	0.255	2.58E-07	2
Nt5c	0.365844395	0.557	0.463	2.79E-07	2
Ccnl2	0.329205074	0.46	0.332	3.02E-07	2
S100a13	0.337972403	0.695	0.639	3.18E-07	2
Snrpe	0.322906599	0.713	0.655	3.84E-07	2
Arhgap9	0.36320514	0.483	0.36	4.14E-07	2
Cetn2	0.343593244	0.379	0.251	4.35E-07	2
Kcnab2	0.330922242	0.264	0.137	4.39E-07	2
Ndufb11	0.311530925	0.707	0.661	4.62E-07	2
Lsm4	0.293458435	0.638	0.555	4.77E-07	2
Cdc37	0.303494227	0.672	0.617	5.32E-07	2
Tprgl	0.312987599	0.615	0.524	5.42E-07	2
Nedd9	0.350682525	0.282	0.147	5.71E-07	2
Syf2	0.306393721	0.609	0.528	6.13E-07	2
Polr1d	0.27680059	0.764	0.685	6.67E-07	2
Spcs2	0.315550608	0.747	0.653	6.78E-07	2
Dennd4a	0.391134687	0.506	0.385	6.90E-07	2
Rnf166	0.364868747	0.368	0.237	7.56E-07	2
Sap18	0.261055924	0.563	0.468	1.03E-06	2
Tes	0.273771465	0.351	0.214	1.10E-06	2
Ddx21	0.365321901	0.374	0.248	1.11E-06	2
Hectd1	0.388230528	0.385	0.257	1.11E-06	2
Rnaset2b	0.407567212	0.477	0.38	1.19E-06	2
Nmi	0.329413298	0.374	0.245	1.21E-06	2
Anxa11	0.259614628	0.448	0.327	1.28E-06	2
Akap13	0.423458609	0.546	0.463	1.34E-06	2
Tpst2	0.391554845	0.494	0.394	1.38E-06	2
Rcan2	0.390034557	0.356	0.231	1.55E-06	2
Ube2i	0.304986013	0.638	0.551	1.58E-06	2
Anp32a	0.266483664	0.701	0.661	1.77E-06	2
Srsf3	0.269602136	0.695	0.622	1.92E-06	2
Sec11a	0.266952309	0.609	0.548	1.97E-06	2
Ppdpf	0.322711861	0.431	0.304	2.02E-06	2
Cox7a2l	0.261235215	0.885	0.794	2.57E-06	2
Rsl1d1	0.305083553	0.414	0.306	2.91E-06	2
Ramp1	0.762259251	0.408	0.306	3.15E-06	2
Puf60	0.311816245	0.523	0.441	3.37E-06	2
Irf2bpl	0.333037782	0.264	0.145	3.50E-06	2
H2afv	0.347070327	0.534	0.443	4.02E-06	2
Churc1	0.317874018	0.5	0.409	4.53E-06	2
Lgals1	0.400163642	0.908	0.881	4.70E-06	2
Srsf2	0.295514081	0.667	0.605	4.87E-06	2
Capn1	0.364098906	0.276	0.163	4.94E-06	2
Sipa1	0.264331938	0.471	0.371	5.27E-06	2
Prr13	0.29424339	0.753	0.698	5.69E-06	2
Smc4	0.403408959	0.345	0.222	5.70E-06	2
Malt1	0.33057843	0.276	0.155	6.27E-06	2
Cd47	0.265444809	0.764	0.713	6.30E-06	2
Ptbp1	0.30657674	0.385	0.275	6.55E-06	2
Ikzf1	0.330331256	0.368	0.246	6.87E-06	2
Sae1	0.275979678	0.397	0.289	8.71E-06	2
Zdhhc20	0.34081386	0.333	0.218	8.89E-06	2
Cnot6l	0.274043964	0.287	0.172	8.90E-06	2
Supt4a	0.282975358	0.655	0.621	8.91E-06	2
Celf2	0.315764245	0.603	0.533	1.01E-05	2

Dock2	0.452077469	0.397	0.315	1.07E-05	2
Efr3a	0.273549104	0.339	0.221	1.08E-05	2
Sfpq	0.37524409	0.546	0.469	1.16E-05	2
Polr2m	0.29167621	0.379	0.278	1.22E-05	2
E2f4	0.337932007	0.374	0.267	1.27E-05	2
Tap2	0.434436282	0.397	0.3	1.34E-05	2
Chic2	0.300721989	0.517	0.447	1.40E-05	2
Set	0.304440074	0.632	0.584	1.46E-05	2
Ddx24	0.320076315	0.529	0.445	1.48E-05	2
Zfand6	0.270154149	0.517	0.444	1.54E-05	2
Ttc14	0.322084984	0.345	0.231	1.80E-05	2
Nasp	0.300215979	0.264	0.153	1.84E-05	2
Rtf1	0.272870037	0.437	0.341	1.94E-05	2
Senp6	0.28403853	0.305	0.192	2.06E-05	2
Arid5a	0.436163252	0.368	0.26	2.09E-05	2
Scamp3	0.314247164	0.397	0.294	2.29E-05	2
Cytip	0.253058061	0.523	0.375	2.35E-05	2
Ssrp1	0.28641983	0.42	0.323	2.35E-05	2
Tpr	0.31470709	0.557	0.488	2.40E-05	2
Odc1	0.801503239	0.328	0.227	2.43E-05	2
Ctbp1	0.250313129	0.54	0.483	2.44E-05	2
Tubb4b	0.34663178	0.408	0.308	2.47E-05	2
Sf3b3	0.277354081	0.333	0.225	2.56E-05	2
Ewsr1	0.311577423	0.54	0.466	2.58E-05	2
Ifi27	0.271548123	0.552	0.451	2.58E-05	2
Arpc5l	0.308306346	0.483	0.398	2.88E-05	2
Rcc2	0.394165745	0.282	0.176	2.89E-05	2
Med30	0.31679632	0.345	0.241	3.13E-05	2
Lsm6	0.272034807	0.506	0.425	3.48E-05	2
Ran	0.260573042	0.724	0.661	3.51E-05	2
Hnrnpl	0.374761307	0.414	0.318	3.83E-05	2
Rassf5	0.275421148	0.374	0.275	3.95E-05	2
Peli1	0.303112311	0.356	0.253	4.03E-05	2
Lrp10	0.423607769	0.454	0.365	4.16E-05	2
Rbbp4	0.2970342	0.425	0.336	4.64E-05	2
Khdrbs1	0.265163676	0.506	0.424	5.12E-05	2
Rbbp6	0.330744826	0.368	0.276	6.08E-05	2
N4bp2l2	0.353214471	0.31	0.215	6.49E-05	2
Tap1	0.32683851	0.379	0.281	6.57E-05	2
Tsc22d4	0.295459161	0.506	0.449	7.01E-05	2
Snrnp40	0.34161776	0.339	0.245	7.11E-05	2
Pdcd6	0.260398144	0.58	0.545	7.65E-05	2
Prex1	0.275331619	0.339	0.24	8.75E-05	2
Magoh	0.250637092	0.454	0.37	9.44E-05	2
Smchd1	0.316804617	0.322	0.227	9.95E-05	2
Ptk2b	0.274994854	0.368	0.268	0.00010472	2
Nudt21	0.332883742	0.448	0.393	0.00010516	2
Bex3	0.307093561	0.316	0.22	0.00010574	2
Mknk2	0.328119603	0.379	0.293	0.00011046	2
Nr4a2	0.293258813	0.253	0.151	0.00012035	2
Prkacb	0.323241447	0.287	0.192	0.0001207	2
Dap	0.362676162	0.477	0.42	0.00012558	2
Nop56	0.29081183	0.322	0.231	0.00013406	2
Cdc42se1	0.273260022	0.425	0.357	0.000136	2
Ppp2r5a	0.275720321	0.305	0.212	0.00014045	2
Idnk	0.261935314	0.374	0.285	0.00014277	2
Fip1l1	0.287546266	0.305	0.215	0.00015715	2
Hivep2	0.386082988	0.27	0.179	0.00015755	2
Ubac2	0.301102271	0.356	0.27	0.00017844	2
Lrch4	0.269331337	0.287	0.194	0.00018961	2
Ifi203	0.286763413	0.42	0.325	0.00019156	2
Krit1	0.305988838	0.293	0.2	0.00019619	2
Sema4a	0.269492974	0.374	0.276	0.0001998	2
Ndfip1	0.278617527	0.368	0.283	0.00020056	2
Wac	0.315484302	0.379	0.297	0.00022974	2
Dusp11	0.317310031	0.42	0.347	0.00025354	2
Sugt1	0.2741197	0.431	0.358	0.00025656	2
Pstpip1	0.252924656	0.391	0.305	0.00027121	2
Larp7	0.251831832	0.264	0.173	0.00030103	2
Phf20l1	0.292779182	0.293	0.205	0.00032233	2
Rfc2	0.288321809	0.351	0.27	0.00033378	2
Rsbn1l	0.288970447	0.305	0.215	0.00036181	2
Usp3	0.29392418	0.305	0.217	0.00036644	2
Mrpl4	0.288511682	0.414	0.361	0.00039285	2
Ankrd12	0.267700109	0.339	0.257	0.0004728	2
Lta4h	0.257472258	0.282	0.194	0.00052222	2
Tnrc6b	0.284909784	0.276	0.19	0.00053497	2

Rgs2	0.44552878	0.638	0.571	0.00054728	2
Ddx50	0.272594396	0.362	0.293	0.00056887	2
Arf6	0.250849612	0.546	0.52	0.00057619	2
Smc6	0.263870759	0.397	0.325	0.0005839	2
Sec11c	0.300566457	0.632	0.62	0.00068468	2
Uhrf2	0.468513049	0.305	0.226	0.00073227	2
Me2	0.25695081	0.259	0.179	0.00096478	2
Ptpn2	0.260139996	0.253	0.176	0.00098152	2
Tram1	0.272113536	0.552	0.527	0.00101141	2
Srsf7	0.268843159	0.489	0.447	0.00101443	2
H2-T23	0.315682471	0.408	0.34	0.0011559	2
Eif4b	0.275271532	0.425	0.369	0.00119335	2
Fubp1	0.278381819	0.333	0.258	0.00120123	2
Mndal	0.259853045	0.443	0.369	0.00120181	2
Rnf167	0.267910133	0.264	0.182	0.00126093	2
Tsn	0.255377419	0.471	0.418	0.00131627	2
Selenoh	0.36115028	0.379	0.321	0.00140881	2
Immp1l	0.255688504	0.328	0.259	0.00142494	2
Lsm8	0.291856027	0.356	0.299	0.0015109	2
Prpsap1	0.262115054	0.305	0.235	0.00159782	2
Ilf2	0.256057665	0.282	0.204	0.00173673	2
Rexo2	0.275857627	0.523	0.497	0.00178404	2
Nelfb	0.256084553	0.282	0.215	0.00210282	2
Slbp	0.337990054	0.351	0.296	0.00211552	2
Vrk3	0.275069771	0.264	0.199	0.00254075	2
Tob2	0.338575383	0.339	0.275	0.00254975	2
Prkag1	0.260628998	0.305	0.241	0.00265387	2
Hpf1	0.290821921	0.333	0.274	0.00265449	2
Rp9	0.258373752	0.425	0.385	0.00283068	2
Cd164	0.260927001	0.333	0.271	0.00286802	2
Frmd8	0.29908587	0.264	0.201	0.00289836	2
Cast	0.288945272	0.339	0.286	0.00343741	2
Slc3a2	0.263286053	0.724	0.665	0.00380734	2
Bclaf1	0.259932842	0.368	0.319	0.00426597	2
Pik3cd	0.288663557	0.282	0.219	0.00453996	2
Fgl2	0.28316671	0.356	0.29	0.00483505	2
Pfkp	0.328015435	0.356	0.296	0.00489216	2
Mycbp2	0.302842168	0.333	0.285	0.00530172	2
Cbfb	0.262799732	0.339	0.301	0.0081992	2
Arid1a	0.258461156	0.287	0.237	0.0089221	2
H2-DMb2	1.709629991	0.722	0.018	2.46E-163	3
H2-Oa	1.056483043	0.469	0.013	1.55E-99	3
Cd209a	2.257741127	0.463	0.019	3.72E-91	3
H2-Eb1	1.602873209	1	0.371	4.29E-74	3
H2-Aa	1.606800978	1	0.388	1.37E-73	3
Napsa	1.387545143	0.796	0.18	2.22E-73	3
H2-Ab1	1.617238467	1	0.472	2.44E-70	3
Siglecg	0.60541353	0.327	0.008	1.05E-69	3
H2-Ob	0.761194892	0.401	0.024	2.90E-68	3
Ciita	0.674002448	0.519	0.059	1.53E-65	3
H2-DMa	1.268796741	0.969	0.46	1.13E-63	3
Cd74	1.391573894	1	0.669	1.26E-60	3
H2-DMb1	1.317582767	0.864	0.344	1.77E-56	3
Flt3	0.412120017	0.327	0.019	8.89E-55	3
Cbfa2t3	0.628832408	0.525	0.085	9.78E-52	3
Map4k1	0.547844493	0.475	0.067	5.46E-51	3
Dpp4	0.354036965	0.315	0.02	7.68E-51	3
Olfm1	0.566226836	0.525	0.101	9.30E-44	3
Kmo	0.355999314	0.321	0.031	2.41E-42	3
Plbd1	0.94120646	0.747	0.269	5.13E-41	3
Rnase6	0.663578818	0.494	0.101	1.26E-39	3
Gm2a	0.971961742	0.895	0.56	4.86E-39	3
Ryr1	0.336559405	0.272	0.025	1.25E-36	3
Bri3bp	0.414388026	0.444	0.083	1.99E-36	3
Spint1	0.312787029	0.278	0.029	2.99E-35	3
Klrd1	0.531087885	0.42	0.073	3.06E-34	3
Clec4b1	0.829814226	0.438	0.099	9.73E-33	3
Syngr2	1.088800558	0.796	0.494	2.00E-31	3
Cytip	0.58045485	0.796	0.336	2.20E-31	3
Lsp1	0.763504691	0.957	0.687	3.37E-31	3
Wdfy4	0.502614312	0.377	0.074	1.61E-30	3
Rpl41	0.354606727	1	0.994	4.92E-28	3
Tnip3	0.720145771	0.438	0.113	8.33E-28	3
Rpsa	0.488657037	0.994	0.892	9.16E-28	3
Rpl35	0.468452057	0.994	0.92	3.31E-27	3
Grk3	0.299813992	0.321	0.058	7.70E-27	3
Rps19	0.434731923	1	0.951	2.46E-26	3

Gpr171	0.497713257	0.463	0.124	3.05E-26	3
Pmaip1	0.634971603	0.58	0.2	3.67E-26	3
Tmsb10	0.407482505	0.994	0.744	1.01E-25	3
Slamf8	0.300811224	0.352	0.076	5.34E-25	3
Rpl13	0.387580428	1	0.971	8.24E-25	3
Csf2rb	0.514673321	0.556	0.198	2.41E-24	3
Rps6	0.381763873	0.988	0.952	5.23E-24	3
Avpi1	0.450441198	0.438	0.122	6.49E-24	3
Ear2	1.191674297	0.309	0.063	8.06E-24	3
Pkib	0.394433851	0.506	0.162	1.09E-23	3
Agpat4	0.375797	0.574	0.193	1.15E-23	3
Fgr	0.342688122	0.481	0.141	1.64E-23	3
Bhlhe40	0.658388338	0.605	0.236	2.47E-23	3
Ccdc88a	0.4597288	0.531	0.179	3.95E-23	3
Itgb7	0.385406982	0.525	0.165	4.25E-23	3
Alcam	0.322489455	0.525	0.172	9.39E-23	3
Rogdi	0.753383173	0.463	0.146	1.08E-22	3
St3gal5	0.300215099	0.321	0.072	5.22E-22	3
Crip1	0.931818255	0.951	0.887	2.47E-21	3
Ppm1m	0.455645459	0.457	0.155	4.10E-21	3
Rps28	0.355061694	0.994	0.958	4.28E-21	3
Rps8	0.330569334	1	0.95	6.68E-21	3
Sub1	0.445201327	0.944	0.84	8.75E-21	3
Prcp	0.443345216	0.821	0.424	1.07E-20	3
Rps27a	0.305474179	1	0.967	1.41E-20	3
Batf3	0.603076069	0.389	0.121	1.86E-20	3
Cd52	0.485937877	0.988	0.868	2.66E-20	3
S100a11	0.282513819	0.914	0.783	2.85E-20	3
Rps26	0.384344256	0.994	0.923	4.62E-20	3
Plxnd1	0.506827801	0.315	0.079	6.09E-20	3
Tap1	0.447906621	0.611	0.248	7.48E-20	3
Rps7	0.394294799	0.994	0.936	7.59E-20	3
S100a4	0.673833747	0.809	0.539	9.59E-20	3
Mcemp1	0.260018569	0.34	0.085	1.49E-19	3
Itgax	0.357647066	0.451	0.147	3.38E-19	3
Rplp0	0.342345723	1	0.963	3.39E-19	3
Ms4a4c	0.564133595	0.475	0.17	3.86E-19	3
Bcl2a1d	0.691693326	0.679	0.339	1.43E-18	3
Ifitm6	0.41705633	0.438	0.145	1.66E-18	3
Gpr132	0.326659859	0.568	0.221	1.71E-18	3
Rps18	0.329850936	0.994	0.945	2.11E-18	3
Etv3	0.485204133	0.463	0.163	2.30E-18	3
Rpl28	0.344004375	0.994	0.908	2.87E-18	3
Rras2	0.308878061	0.272	0.062	3.12E-18	3
Ccnd1	0.442121337	0.451	0.155	4.44E-18	3
Slamf7	0.34733842	0.432	0.146	1.09E-17	3
Vars	0.374339003	0.444	0.151	1.40E-17	3
Rpl39	0.319634911	1	0.944	3.10E-17	3
Gm11808	0.440386097	0.957	0.712	1.34E-16	3
Traf1	0.526792334	0.432	0.165	1.84E-16	3
Rpl15	0.315000212	0.994	0.924	2.33E-16	3
Cnn2	0.460987472	0.827	0.516	3.64E-16	3
Rps16	0.286441254	1	0.968	4.32E-16	3
Pira2	0.25227033	0.389	0.129	4.43E-16	3
Rpl36a	0.362092243	0.994	0.888	5.38E-16	3
Bloc1s2	0.296061687	0.611	0.271	8.49E-16	3
Ahr	0.254242603	0.296	0.081	1.02E-15	3
Malt1	0.285471551	0.401	0.138	1.16E-15	3
H2afz	0.663424146	0.92	0.84	1.17E-15	3
Rps9	0.284322474	1	0.982	1.52E-15	3
Fgfr1	0.253672523	0.34	0.103	1.90E-15	3
Rps15a	0.29930034	0.994	0.946	3.23E-15	3
Pgls	0.326276083	0.821	0.518	4.80E-15	3
Rps24	0.309629437	0.994	0.948	4.89E-15	3
Eef1g	0.418308827	0.944	0.811	7.27E-15	3
Rps3a1	0.297512336	1	0.947	1.05E-14	3
H2afy	0.541514646	0.747	0.562	1.05E-14	3
St3gal4	0.320786666	0.463	0.182	1.19E-14	3
Ass1	0.380317825	0.444	0.173	1.30E-14	3
Rpl14	0.260185343	0.988	0.945	1.35E-14	3
Rpl35a	0.277515831	0.994	0.965	2.16E-14	3
Rps5	0.313666524	0.994	0.952	2.28E-14	3
Slc35c2	0.306780177	0.506	0.212	3.39E-14	3
Rel	0.499113895	0.531	0.257	3.52E-14	3
Atox1	0.494100537	0.889	0.829	5.22E-14	3
Ifitm1	0.342035347	0.253	0.066	5.72E-14	3
Mrps6	0.255861832	0.34	0.111	5.92E-14	3

Rps4x	0.2680106	0.994	0.931	6.33E-14	3
Lsr	0.279497488	0.333	0.112	6.33E-14	3
Nr4a1	0.332763351	0.716	0.392	6.88E-14	3
Sept9	0.330383672	0.543	0.252	1.08E-13	3
Naaa	0.669727503	0.562	0.301	1.49E-13	3
Psmb8	0.463440041	0.864	0.732	1.95E-13	3
Gm10076	0.34618592	0.617	0.302	2.05E-13	3
Nr4a2	0.302191821	0.377	0.134	2.99E-13	3
Rpl4	0.294017861	0.988	0.921	3.85E-13	3
Unc119	0.364134521	0.481	0.223	4.60E-13	3
Pip4k2a	0.282585075	0.537	0.238	4.62E-13	3
Rps27	0.391161823	1	0.986	4.88E-13	3
Myo1g	0.401972802	0.506	0.239	5.13E-13	3
Rps10	0.278644937	0.988	0.908	5.75E-13	3
Nfkb2	0.273438293	0.414	0.163	5.81E-13	3
Rpl21	0.267550977	0.994	0.953	7.24E-13	3
H2-T23	0.259058802	0.636	0.308	9.27E-13	3
Psmb9	0.373478399	0.691	0.401	9.33E-13	3
Lrrk1	0.264318877	0.333	0.115	1.15E-12	3
Rpl8	0.26731168	1	0.935	1.18E-12	3
Nap1l1	0.313415554	0.778	0.465	1.18E-12	3
Actg1	0.335204955	0.981	0.971	1.42E-12	3
5031439G07Rik	0.309497707	0.475	0.209	1.48E-12	3
Rps15	0.301410198	0.994	0.94	1.60E-12	3
Pde4b	0.269400793	0.562	0.266	1.69E-12	3
Ccr2	0.435055038	0.599	0.301	1.96E-12	3
Rps11	0.298532394	0.994	0.949	2.46E-12	3
Snrpg	0.282805513	0.926	0.692	3.03E-12	3
Rpl27-ps3	0.288053467	0.778	0.44	4.00E-12	3
Rpl36al	0.296219792	0.938	0.765	5.89E-12	3
Tctex1d2	0.336925589	0.457	0.202	6.26E-12	3
Rpl27	0.280529115	0.981	0.885	6.56E-12	3
Fbl	0.307356882	0.71	0.412	8.04E-12	3
Rpl17	0.288526028	0.994	0.962	8.77E-12	3
Sec61b	0.341676304	0.926	0.785	1.01E-11	3
Rpl32	0.262659302	0.994	0.955	1.06E-11	3
Naga	0.388924406	0.377	0.159	1.25E-11	3
Dbnl	0.362245315	0.685	0.421	1.44E-11	3
Tuba1a	0.304931719	0.741	0.467	1.67E-11	3
Rack1	0.266125274	0.981	0.838	3.10E-11	3
Baz1a	0.305740936	0.58	0.304	4.32E-11	3
Skap2	0.266839882	0.753	0.475	4.61E-11	3
Grb2	0.374421265	0.747	0.509	5.38E-11	3
Tmem123	0.787003994	0.63	0.354	5.90E-11	3
Eef1b2	0.296318532	0.938	0.774	6.18E-11	3
Qpct	0.283941013	0.278	0.101	6.20E-11	3
Rpl34	0.250954489	0.994	0.957	6.64E-11	3
Rps20	0.326696248	0.994	0.911	7.62E-11	3
Eif3k	0.250484422	0.932	0.765	1.02E-10	3
Ppdpf	0.257892088	0.568	0.285	1.09E-10	3
Clec10a	0.557819032	0.395	0.182	1.19E-10	3
Uba52	0.353969437	0.858	0.599	1.21E-10	3
Hspe1	0.268034546	0.87	0.671	1.36E-10	3
Set	0.291473262	0.802	0.559	2.38E-10	3
Map3k14	0.272726581	0.278	0.096	2.44E-10	3
Dock10	0.300236678	0.525	0.273	2.78E-10	3
Rpl13a	0.265333606	0.957	0.811	4.31E-10	3
Snrpf	0.271237831	0.852	0.613	4.60E-10	3
Slc25a20	0.264789854	0.346	0.147	6.71E-10	3
Psma7	0.29406362	0.877	0.707	8.82E-10	3
Zyx	0.290269958	0.728	0.484	1.32E-09	3
Ndufa6	0.269024538	0.907	0.742	1.61E-09	3
Glipr2	0.251693388	0.358	0.15	1.86E-09	3
Nhp2	0.275393973	0.636	0.371	1.94E-09	3
Rps21	0.253254933	0.988	0.9	2.23E-09	3
Mrpl52	0.260572758	0.852	0.648	2.81E-09	3
Sri	0.2601534	0.84	0.642	4.87E-09	3
Samhd1	0.275181954	0.778	0.502	4.89E-09	3
Fh1	0.277844962	0.5	0.262	5.78E-09	3
Smdt1	0.356845523	0.852	0.707	7.88E-09	3
Sec61g	0.257244234	0.932	0.826	1.27E-08	3
Fam96a	0.250944072	0.722	0.483	1.64E-08	3
Ranbp1	0.295475537	0.784	0.571	2.22E-08	3
Anxa2	0.396175186	0.809	0.666	3.83E-08	3
Serp1	0.270356764	0.87	0.641	4.03E-08	3
Uqcc2	0.268137463	0.728	0.475	5.19E-08	3
Cfp	0.431431596	0.71	0.513	5.62E-08	3

Erp29	0.264187142	0.87	0.647	7.84E-08	3
Fosb	0.252464689	0.667	0.419	9.29E-08	3
Cd83	0.295904253	0.722	0.46	1.08E-07	3
Actb	0.322450525	1	0.982	1.14E-07	3
Nfkb1	0.274570695	0.549	0.329	1.89E-07	3
Mif4gd	0.35566051	0.475	0.29	1.11E-06	3
Relb	0.514187609	0.352	0.193	3.86E-06	3
Rps27l	0.28692513	0.864	0.754	4.61E-06	3
Pitpna	0.25014261	0.846	0.719	6.92E-06	3
Ptp4a3	0.34486071	0.315	0.165	8.31E-06	3
Rps27rt	0.251032834	0.87	0.666	2.19E-05	3
Herpud1	0.272349785	0.568	0.387	2.52E-05	3
Psme2	0.266595069	0.79	0.633	5.43E-05	3
Mcub	0.314711648	0.586	0.44	8.40E-05	3
Tagln2	0.282750492	0.809	0.744	0.00235228	3
Fn1	0.939658013	0.352	0.265	0.00333692	3
F10	1.693287739	0.735	0.031	2.04E-146	4
Chil3	2.881132039	0.629	0.021	6.40E-131	4
Gsr	1.266323717	0.887	0.215	6.26E-79	4
Nr1h3	0.659398746	0.477	0.038	2.51E-70	4
Sirpb1c	0.997610738	0.649	0.105	4.50E-65	4
Cd300a	1.101860233	0.907	0.348	2.48E-58	4
Treml4	0.675081303	0.305	0.012	2.86E-58	4
Thbs1	0.931244771	0.543	0.077	7.97E-57	4
Tgm2	0.843503933	0.675	0.139	5.64E-56	4
Ly6c2	1.206858872	0.543	0.076	6.73E-56	4
Lgals3	1.399476623	1	0.655	2.19E-54	4
Gngt2	1.405057594	0.907	0.385	3.99E-54	4
Plac8	2.580864109	0.649	0.154	7.01E-54	4
Cyp4f18	1.007225757	0.748	0.2	8.22E-53	4
Psap	1.372312547	0.993	0.859	1.16E-52	4
Hp	0.938930581	0.477	0.063	1.93E-50	4
Lst1	0.99650055	0.954	0.481	1.84E-49	4
Soat1	0.629303358	0.669	0.157	3.37E-49	4
Msrb1	0.915385948	0.974	0.5	4.56E-49	4
Napsa	0.875890376	0.762	0.191	3.41E-48	4
Tnfsf13os	0.413087284	0.311	0.022	1.40E-47	4
Ly6i	0.74539341	0.258	0.012	6.95E-47	4
Gm21188	0.68283499	0.669	0.16	7.53E-46	4
Klra2	0.611341699	0.371	0.041	4.64E-45	4
Mpeg1	0.9910443	0.927	0.431	1.14E-44	4
Plaur	0.556156012	0.841	0.273	4.03E-44	4
Fgr	0.634017292	0.589	0.13	1.88E-43	4
Ms4a4c	1.134940208	0.623	0.153	2.34E-43	4
Slc7a11	0.347750898	0.543	0.097	1.08E-41	4
Tmem51	0.675487784	0.603	0.148	1.39E-41	4
Cyba	0.657733904	1	0.925	1.64E-41	4
Clec4e	0.83293841	0.636	0.155	7.98E-41	4
Fam20c	0.575036978	0.397	0.058	1.76E-40	4
Igsf6	0.710151227	0.801	0.297	1.78E-40	4
Abi3	0.629033359	0.702	0.213	1.56E-38	4
Gpnmb	1.214527809	0.384	0.058	2.08E-38	4
Hck	0.741443988	0.834	0.331	2.38E-38	4
Rab20	0.68868959	0.742	0.258	3.95E-38	4
Rab32	0.60429693	0.576	0.149	7.68E-38	4
Slpi	0.317446614	0.371	0.047	9.22E-38	4
Hpse	0.365268834	0.325	0.038	1.76E-37	4
Abcg1	0.629567349	0.715	0.23	5.96E-37	4
Ctsz	0.865173862	0.98	0.729	1.52E-36	4
Sat1	0.982438409	0.987	0.768	1.71E-36	4
Fabp5	1.598814892	0.616	0.182	1.87E-36	4
Plin2	0.923420078	0.947	0.622	4.86E-36	4
Gm5150	0.418545759	0.338	0.045	5.79E-36	4
Ctss	0.827617338	0.98	0.781	1.03E-35	4
Gsto1	0.596705065	0.762	0.271	1.46E-35	4
Trem3	0.383207643	0.285	0.028	1.87E-35	4
Arl5c	0.4709588	0.55	0.131	4.29E-35	4
B2m	0.572804615	1	0.971	7.33E-35	4
Adssl1	0.605752652	0.636	0.194	1.13E-34	4
Ear2	0.600896337	0.371	0.057	2.01E-34	4
Cstb	1.243861689	0.954	0.708	2.09E-33	4
Pla2g7	0.827882459	0.901	0.425	3.16E-32	4
Gla	0.378294007	0.424	0.085	3.35E-32	4
Tnfaip2	0.345000929	0.596	0.167	3.43E-31	4
Emilin2	0.539246799	0.682	0.247	5.18E-31	4
Taldo1	0.645407804	0.967	0.713	1.21E-30	4
Acp5	1.135701154	0.609	0.215	1.66E-30	4

Cd93	0.645345036	0.55	0.159	1.86E-30	4
Tmem38b	0.397332498	0.397	0.077	2.59E-30	4
Eif4a1	0.640406688	0.98	0.825	3.27E-30	4
Cd68	0.801486074	0.947	0.639	5.19E-30	4
Osm	0.919337423	0.656	0.232	8.62E-30	4
Tyrobp	0.474212369	1	0.805	9.55E-30	4
Slc11a1	0.644326439	0.735	0.282	1.16E-29	4
Cebpb	0.772574816	0.987	0.731	1.43E-29	4
Ace	0.537246436	0.331	0.056	1.57E-29	4
Lamp1	0.63202552	0.993	0.777	3.59E-29	4
Clec4a3	0.768414126	0.841	0.403	6.69E-29	4
Sirpb1b	0.268481263	0.391	0.076	7.72E-29	4
Mgst1	0.7766686	0.503	0.141	4.61E-28	4
Fuca2	0.480765919	0.669	0.245	7.85E-28	4
Pglyrp1	0.976860517	0.45	0.11	2.09E-27	4
Mfsd1	0.569268463	0.748	0.331	3.33E-27	4
Gm2a	0.639013492	0.921	0.56	5.48E-27	4
Fam26f	0.442010446	0.311	0.053	6.79E-27	4
Gpr137b	0.582883152	0.675	0.26	7.18E-27	4
Plbd1	0.517753869	0.735	0.275	8.26E-27	4
Smpdl3a	0.915921619	0.808	0.416	1.31E-26	4
Gm14005	0.33646588	0.325	0.06	1.37E-26	4
Rnh1	0.963109093	0.848	0.525	2.37E-26	4
Sgk1	0.885946555	0.689	0.287	2.65E-26	4
Litaf	0.553662661	0.921	0.581	6.58E-26	4
Gdf15	1.052071909	0.358	0.08	6.80E-26	4
Cd300c2	0.532574156	0.927	0.471	1.05E-25	4
Mmp14	0.449511793	0.371	0.083	1.31E-25	4
Oas1a	0.517743813	0.603	0.226	2.84E-25	4
Atp6v1c1	0.586260632	0.715	0.329	3.11E-25	4
Fcer1g	0.456933744	1	0.808	3.98E-25	4
Atp6v1b2	0.514356658	0.788	0.388	8.61E-25	4
Tgfb1	0.667304337	0.907	0.609	9.64E-25	4
Cib1	0.388333534	0.722	0.291	1.14E-24	4
Nfe2l2	0.538322447	0.861	0.472	1.16E-24	4
Ctsb	0.973841124	0.993	0.827	1.23E-24	4
Sirpa	0.512570366	0.834	0.458	3.36E-24	4
Sdcbp	0.622274715	0.967	0.779	3.81E-24	4
Npc2	0.509327024	0.987	0.857	3.81E-24	4
Adgre5	0.517551783	0.728	0.308	4.42E-24	4
Rnf149	0.497189534	0.768	0.368	5.54E-24	4
Mcemp1	0.331715473	0.371	0.083	7.35E-24	4
Rap1a	0.589679108	0.934	0.654	2.54E-23	4
Clec4n	0.85957723	0.722	0.325	3.03E-23	4
Lyn	0.523765941	0.848	0.473	3.32E-23	4
Nceh1	0.538456255	0.457	0.137	4.74E-23	4
Gpr141	0.376094952	0.265	0.047	4.76E-23	4
Rilpl2	0.717632828	0.649	0.284	1.00E-22	4
Pilrb1	0.383868341	0.364	0.088	1.36E-22	4
Ifi211	0.501050152	0.47	0.144	2.03E-22	4
Prdx5	0.787663463	0.954	0.715	2.05E-22	4
Ms4a6c	0.658427402	0.921	0.53	2.05E-22	4
Sod2	0.842572048	0.801	0.437	6.73E-22	4
Ifitm3	0.787111874	0.98	0.704	7.68E-22	4
Fam49a	0.408396186	0.404	0.112	8.02E-22	4
Slc25a5	0.469382284	0.987	0.809	9.22E-22	4
Zeb2os	0.367345275	0.583	0.214	1.06E-21	4
Adgre4	0.443348342	0.252	0.045	1.21E-21	4
Cd44	0.356789291	0.821	0.418	1.28E-21	4
Slc15a3	0.344130502	0.689	0.278	1.44E-21	4
Msr1	0.615415561	0.57	0.22	1.84E-21	4
Clec4d	0.311394486	0.57	0.203	2.59E-21	4
Coro1b	0.41668771	0.901	0.51	6.60E-21	4
Bri3	0.588039275	0.954	0.68	8.67E-21	4
Slc16a10	0.309626359	0.404	0.113	9.15E-21	4
H3f3a	0.407879455	0.993	0.934	1.04E-20	4
Tpd52	0.4392845	0.921	0.576	1.40E-20	4
Bax	0.533876815	0.921	0.611	2.47E-20	4
Il1rn	0.854478097	0.464	0.155	2.89E-20	4
Tmem14c	0.473418275	0.881	0.574	5.27E-20	4
Nadk	0.491342487	0.715	0.337	8.52E-20	4
Itgb2	0.525022962	0.921	0.595	9.36E-20	4
Gpr35	0.302227206	0.344	0.09	1.29E-19	4
Tkt	0.416050542	0.907	0.503	1.43E-19	4
Lgals8	0.285888433	0.51	0.175	1.85E-19	4
Hes1	0.574840754	0.331	0.085	2.19E-19	4
Tcirg1	0.462602367	0.596	0.266	2.61E-19	4

Itgal	0.450561658	0.404	0.117	3.34E-19	4
Ptp4a1	0.411827785	0.775	0.409	3.40E-19	4
Tmem65	0.377028627	0.43	0.138	3.72E-19	4
Acp2	0.39180909	0.457	0.159	4.17E-19	4
Gsap	0.281060814	0.351	0.096	5.94E-19	4
Ftl1	0.551898705	1	0.996	6.18E-19	4
Ifi204	0.396992979	0.656	0.287	7.50E-19	4
Atp6v0d1	0.44767626	0.848	0.489	7.69E-19	4
Cd48	0.669145011	0.874	0.606	8.44E-19	4
Aprt	0.539372528	0.808	0.478	9.65E-19	4
Vps26a	0.385188249	0.636	0.286	9.69E-19	4
Csf2rb	0.304329245	0.543	0.203	2.16E-18	4
Slamf8	0.471160148	0.318	0.083	2.76E-18	4
Pgam1	0.504695705	0.781	0.469	3.03E-18	4
Apobec1	0.324269803	0.682	0.3	3.59E-18	4
Cybb	0.603294645	0.861	0.516	3.91E-18	4
Prdx1	0.663760497	0.967	0.824	3.96E-18	4
Tifab	0.342131538	0.437	0.144	4.03E-18	4
Ass1	0.594707557	0.477	0.171	4.54E-18	4
Haus8	0.290644799	0.43	0.141	5.94E-18	4
Tmem86a	0.402053173	0.576	0.234	8.11E-18	4
Pparg	0.295860504	0.285	0.069	8.21E-18	4
Skap2	0.380687279	0.861	0.463	1.07E-17	4
Atp6v1d	0.369794079	0.735	0.378	1.18E-17	4
Zeb2	0.457812918	0.854	0.464	1.41E-17	4
Lyz2	0.609117261	0.993	0.744	1.43E-17	4
Ctsd	0.810033112	0.954	0.826	1.49E-17	4
Sem1	0.362003619	0.993	0.869	1.78E-17	4
Frrs1	0.270390302	0.384	0.118	1.97E-17	4
Mrpl52	0.453312736	0.94	0.638	2.22E-17	4
2310022A10Rik	0.29971328	0.411	0.136	2.49E-17	4
Ly9	0.374294762	0.411	0.134	3.85E-17	4
Ugp2	0.356633425	0.623	0.274	4.02E-17	4
Ifitm6	0.874204167	0.417	0.15	4.10E-17	4
Tnfrsf1b	0.432509544	0.57	0.238	4.53E-17	4
Spi1	0.414303682	0.98	0.644	5.11E-17	4
Prkcd	0.488699648	0.801	0.464	6.12E-17	4
Renbp	0.436112008	0.523	0.224	6.40E-17	4
Mpp1	0.414492964	0.662	0.324	6.41E-17	4
Sec61g	0.418470355	0.974	0.822	6.86E-17	4
Irf7	0.414852032	0.576	0.235	7.07E-17	4
Rasgef1b	0.420554839	0.53	0.215	7.77E-17	4
Uap1l1	0.516333222	0.576	0.285	9.89E-17	4
Lgmn	0.642379913	0.907	0.656	1.18E-16	4
Lrp1	0.321829345	0.695	0.341	1.20E-16	4
Ncf2	0.425426352	0.834	0.49	1.58E-16	4
Myo1f	0.355961092	0.722	0.362	1.72E-16	4
Scarb1	0.259495862	0.331	0.097	2.15E-16	4
Alas1	0.268594941	0.464	0.171	3.06E-16	4
Ube2a	0.325476819	0.735	0.406	3.17E-16	4
Aph1c	0.363303583	0.43	0.157	3.78E-16	4
Plgrkt	0.436512907	0.603	0.286	4.12E-16	4
Hnrnpa3	0.435777771	0.927	0.674	4.16E-16	4
Camk2d	0.341469142	0.523	0.211	4.33E-16	4
Dusp3	0.340404193	0.616	0.281	5.63E-16	4
Cycs	0.426830566	0.848	0.536	1.11E-15	4
Eno1	0.543832117	0.927	0.681	1.14E-15	4
Capza2	0.384068268	0.98	0.738	1.22E-15	4
Ptpn1	0.459853969	0.854	0.504	1.34E-15	4
Plekhf2	0.335813174	0.503	0.21	1.56E-15	4
Esd	0.463339767	0.868	0.551	1.69E-15	4
Cln3	0.273731342	0.483	0.189	2.07E-15	4
Cd244	0.253765687	0.258	0.065	3.02E-15	4
Nfil3	0.335863184	0.563	0.247	3.30E-15	4
Tgfbi	0.652483687	0.894	0.622	3.41E-15	4
Creg1	0.551956446	0.841	0.532	3.89E-15	4
Pdxk	0.316302035	0.384	0.133	4.15E-15	4
Stard5	0.251506326	0.371	0.121	4.68E-15	4
Mdfic	0.353269953	0.53	0.24	5.38E-15	4
Ak2	0.346025159	0.563	0.264	6.33E-15	4
Atp6v1a	0.395372128	0.603	0.292	7.27E-15	4
Gabarap	0.319746479	0.98	0.89	9.23E-15	4
Atp1a1	0.348563118	0.887	0.571	1.07E-14	4
Lilr4b	0.405947153	0.755	0.479	1.12E-14	4
Plek	0.318075452	0.834	0.506	1.24E-14	4
Pilra	0.407393101	0.543	0.236	1.30E-14	4
Hnrnph2	0.273805878	0.695	0.348	1.32E-14	4

Cmpk1	0.305757856	0.848	0.538	1.34E-14	4
Mtpn	0.347109094	0.715	0.375	1.45E-14	4
Cisd2	0.33472455	0.695	0.366	1.59E-14	4
Por	0.308894521	0.497	0.207	1.72E-14	4
AB124611	0.464074318	0.755	0.444	1.73E-14	4
Havcr2	0.286454399	0.311	0.096	2.69E-14	4
Pilrb2	0.308608811	0.384	0.138	2.75E-14	4
Ifngr2	0.312215792	0.768	0.419	2.82E-14	4
Itgax	0.345050401	0.411	0.156	3.20E-14	4
Fcgr4	0.437764015	0.536	0.24	3.27E-14	4
Fyb	0.384829854	0.854	0.556	3.49E-14	4
Rhoa	0.307285497	0.98	0.8	3.60E-14	4
Msn	0.349763763	0.974	0.722	4.06E-14	4
Calm1	0.34688985	1	0.901	4.15E-14	4
C3	0.330438619	0.47	0.195	4.24E-14	4
Fam105a	0.445093697	0.775	0.49	4.42E-14	4
Ptpn6	0.353436365	0.874	0.588	5.02E-14	4
Nampt	0.25887981	0.543	0.237	5.03E-14	4
Cndp2	0.457596953	0.742	0.459	5.78E-14	4
Lrrc25	0.324283593	0.861	0.516	5.89E-14	4
M6pr	0.369982857	0.821	0.545	5.90E-14	4
Mafb	0.454132805	0.755	0.424	5.92E-14	4
Fabp4	0.723903967	0.258	0.072	8.10E-14	4
Tep1	0.390283601	0.523	0.241	8.46E-14	4
Csf2ra	0.353741397	0.854	0.467	9.49E-14	4
Atp6v1e1	0.278904432	0.854	0.547	1.03E-13	4
Rap2a	0.275813531	0.397	0.151	1.23E-13	4
Rbpms	0.28924957	0.364	0.129	1.28E-13	4
Gm6377	0.498447639	0.556	0.272	1.32E-13	4
Anxa5	0.418100186	0.954	0.746	1.37E-13	4
Tlr2	0.430068741	0.715	0.381	1.49E-13	4
Lamtor5	0.264141662	0.848	0.547	1.55E-13	4
Amdhd2	0.294651804	0.49	0.217	2.35E-13	4
P2rx4	0.38767816	0.728	0.414	2.39E-13	4
Fam129b	0.252407643	0.397	0.154	4.76E-13	4
Rpl36al	0.343873644	0.974	0.762	5.00E-13	4
Samhd1	0.509251736	0.788	0.503	6.29E-13	4
Ubl3	0.371942844	0.834	0.543	7.38E-13	4
Atox1	0.274645605	0.987	0.817	8.10E-13	4
Arf1	0.302056575	0.954	0.76	9.56E-13	4
Usmg5	0.264711354	0.947	0.69	9.60E-13	4
Idh1	0.317374404	0.457	0.2	1.01E-12	4
Abracl	0.347574477	0.907	0.63	1.07E-12	4
Fth1	0.488177915	1	0.998	1.23E-12	4
Rab1a	0.329938176	0.795	0.504	1.58E-12	4
Capzb	0.300741379	0.967	0.834	1.67E-12	4
Hif1a	0.263206915	0.49	0.219	1.73E-12	4
Gnpda1	0.291812119	0.51	0.237	2.62E-12	4
Neu1	0.255858186	0.57	0.265	2.68E-12	4
Ap1s2	0.432068567	0.656	0.35	2.99E-12	4
Irf5	0.369045095	0.788	0.511	3.07E-12	4
Tmsb10	0.320144364	0.974	0.749	3.41E-12	4
Sgpl1	0.26382999	0.536	0.255	3.41E-12	4
Evl	0.282176814	0.682	0.345	3.60E-12	4
Cacybp	0.274501162	0.722	0.399	3.86E-12	4
Glud1	0.307668348	0.854	0.524	3.91E-12	4
Sf3b6	0.300575609	0.868	0.537	3.94E-12	4
Pkm	0.450359579	0.974	0.789	4.05E-12	4
Ccrl2	0.395972005	0.709	0.409	4.25E-12	4
Vapa	0.282683714	0.874	0.593	5.07E-12	4
Clec4a1	0.36302138	0.689	0.367	5.85E-12	4
Tmem208	0.254547568	0.702	0.369	6.07E-12	4
Noct	0.255351282	0.291	0.099	6.10E-12	4
Cd84	0.335989671	0.629	0.336	6.26E-12	4
Atp6v0e	0.264070293	0.974	0.812	6.57E-12	4
Fam96a	0.266380341	0.788	0.476	7.00E-12	4
Got1	0.292582645	0.517	0.249	7.35E-12	4
Irak2	0.283343	0.338	0.122	8.99E-12	4
Cyp4f16	0.267429383	0.318	0.112	9.30E-12	4
Dtnbp1	0.333032618	0.596	0.322	1.05E-11	4
Anxa4	0.340087404	0.603	0.315	1.15E-11	4
Lipa	0.466376461	0.623	0.354	1.29E-11	4
B4galt5	0.281456557	0.437	0.191	1.39E-11	4
Il17ra	0.285705876	0.364	0.141	1.40E-11	4
Arpc5	0.279645583	0.987	0.807	1.72E-11	4
Cct8	0.286827472	0.788	0.487	2.10E-11	4
Pcbp1	0.284397114	0.894	0.63	2.41E-11	4

Ptafr	0.39840482	0.636	0.348	2.66E-11	4
BC028528	0.266774863	0.649	0.33	2.78E-11	4
Bin2	0.314313309	0.702	0.395	3.50E-11	4
Atp6v1g1	0.346630565	0.927	0.782	3.71E-11	4
Aldh3b1	0.276289848	0.47	0.214	4.03E-11	4
Ifrd1	0.409227766	0.735	0.469	4.27E-11	4
Kras	0.288682036	0.55	0.272	5.01E-11	4
Ncf4	0.351888358	0.715	0.431	5.14E-11	4
Malt1	0.301131408	0.364	0.146	7.40E-11	4
Itga4	0.36693747	0.417	0.191	1.05E-10	4
Ms4a6d	0.440049036	0.828	0.534	1.06E-10	4
Psma2	0.279449586	0.901	0.672	1.29E-10	4
Ppp4c	0.25496061	0.854	0.568	1.54E-10	4
Vamp4	0.276063639	0.55	0.289	1.62E-10	4
Cd53	0.300799152	0.974	0.798	1.62E-10	4
Gch1	0.253697771	0.523	0.256	1.73E-10	4
Dnase2a	0.301857538	0.576	0.313	1.79E-10	4
Gyg	0.306168241	0.47	0.224	1.83E-10	4
Atp6v0b	0.3278093	0.974	0.736	2.02E-10	4
Vps29	0.298596546	0.801	0.533	2.18E-10	4
Gpx1	0.356599512	0.98	0.843	2.35E-10	4
Ctsa	0.2856339	0.954	0.67	2.37E-10	4
Ifi209	0.326806093	0.404	0.183	3.31E-10	4
Naa20	0.294201019	0.543	0.284	3.73E-10	4
Gapdh	0.277791765	0.987	0.849	4.11E-10	4
Ccr2	0.396526495	0.583	0.306	4.17E-10	4
Chmp4b	0.262432356	0.921	0.653	5.05E-10	4
Gstm1	0.74882476	0.536	0.298	5.40E-10	4
Psme2	0.315604011	0.901	0.62	5.57E-10	4
Atp6ap1	0.275213292	0.834	0.566	5.75E-10	4
Pirb	0.251005912	0.728	0.428	6.11E-10	4
Pdia6	0.434782189	0.821	0.616	6.36E-10	4
Lat2	0.402057469	0.629	0.377	7.53E-10	4
Cytip	0.301289751	0.656	0.36	9.50E-10	4
Rgl1	0.272745115	0.344	0.144	1.59E-09	4
Trappc1	0.258423496	0.589	0.331	1.91E-09	4
Dnajb11	0.252012128	0.715	0.461	2.03E-09	4
Psma3	0.258141266	0.914	0.655	2.76E-09	4
Selenos	0.270412143	0.781	0.476	2.99E-09	4
Tmem258	0.252829829	0.934	0.662	3.01E-09	4
Akr1a1	0.389622341	0.934	0.789	3.83E-09	4
Psmb6	0.380329262	0.868	0.673	4.04E-09	4
Psma7	0.264409229	0.927	0.702	4.23E-09	4
Iqgap1	0.280808533	0.848	0.585	8.22E-09	4
Fn1	0.262187798	0.483	0.248	1.45E-08	4
Pgk1	0.285484864	0.728	0.464	1.46E-08	4
Tpp1	0.278655432	0.589	0.355	1.48E-08	4
Fam49b	0.280122763	0.921	0.707	1.49E-08	4
Efhd2	0.286175131	0.934	0.666	1.54E-08	4
Tgif1	0.255433147	0.662	0.39	1.54E-08	4
Pitpna	0.280056698	0.94	0.708	1.61E-08	4
Psmd8	0.265807646	0.828	0.593	2.18E-08	4
Fcgr1	0.340952316	0.656	0.391	2.19E-08	4
Hexa	0.29917495	0.954	0.691	2.81E-08	4
Lpxn	0.273932223	0.596	0.35	4.08E-08	4
Vat1	0.404710755	0.464	0.26	4.12E-08	4
Hmox1	0.32026801	0.589	0.346	5.19E-08	4
Bcl2a1d	0.32494222	0.609	0.352	5.29E-08	4
Bcl2a1a	0.254804555	0.437	0.226	5.62E-08	4
Spg21	0.251145178	0.702	0.471	6.02E-08	4
Pycard	0.288284462	0.841	0.568	8.20E-08	4
Grn	0.294524447	0.934	0.666	8.75E-08	4
Rap1b	0.289340905	0.947	0.78	9.43E-08	4
S100a4	0.281586907	0.808	0.541	1.07E-07	4
Nr4a1	0.315617343	0.662	0.402	1.37E-07	4
Lgals3bp	0.37195616	0.623	0.418	1.78E-07	4
Cotl1	0.254428074	0.967	0.851	2.17E-07	4
Capg	0.286807201	0.801	0.551	2.25E-07	4
St13	0.26177676	0.742	0.512	2.77E-07	4
Hspa8	0.275735493	1	0.953	3.29E-07	4
Aif1	0.28217015	0.728	0.496	3.88E-07	4
Vim	0.51727098	0.947	0.813	4.58E-07	4
Ctsh	0.255320629	0.934	0.675	5.72E-07	4
Tgfbr1	0.250580997	0.424	0.235	6.12E-07	4
Hspa5	0.300584465	0.947	0.774	1.63E-06	4
Anxa2	0.330534034	0.828	0.665	2.05E-06	4
Rgs1	0.527854546	0.675	0.495	5.29E-06	4

Hebp1	0.360903571	0.278	0.136	5.66E-06	4
Ier3	0.280220758	0.636	0.442	1.69E-05	4
Sdf2l1	0.254975785	0.702	0.524	3.62E-05	4
Calr	0.276305033	0.874	0.765	5.38E-05	4
Aldoa	0.251267877	0.907	0.762	6.80E-05	4
Mgp	1.579870946	0.915	0.972	2.24E-31	5
Fth1	0.625592686	1	0.998	3.81E-12	5
Acta2	1.27875791	0.708	0.735	1.31E-11	5
Igfbp7	1.408270021	0.708	0.809	4.23E-11	5
Serf2	0.475257287	0.887	0.976	6.05E-10	5
Ftl1	0.823096647	0.991	0.997	1.54E-09	5
Rplp1	0.338119653	0.925	0.971	1.81E-08	5
Ppia	0.448723913	0.868	0.968	2.37E-08	5
Dcn	1.520172264	0.557	0.471	2.39E-08	5
Sparc	1.205981572	0.594	0.604	7.43E-08	5
1810058I24Rik	0.279248127	0.198	0.585	4.46E-07	5
Sin3b	0.285297422	0.189	0.545	4.74E-07	5
Cst3	0.332380975	0.981	0.943	5.31E-07	5
Mpc1	0.321965322	0.217	0.591	9.72E-07	5
Lamtor5	0.271057875	0.226	0.615	1.24E-06	5
Myl6	0.410726012	0.887	0.983	1.40E-06	5
Mt1	0.598231629	0.783	0.833	1.82E-06	5
Strap	0.260305929	0.132	0.423	1.97E-06	5
Pgls	0.367229857	0.226	0.586	3.22E-06	5
Spp1	1.74631368	0.462	0.334	3.45E-06	5
1110004F10Rik	0.261634814	0.151	0.459	4.32E-06	5
Rps17	0.368815152	0.83	0.945	4.45E-06	5
Creg1	0.270174471	0.236	0.598	4.50E-06	5
Trappc4	0.293397408	0.17	0.481	6.58E-06	5
Pdcd5	0.330669303	0.208	0.553	6.67E-06	5
Nars	0.452481341	0.17	0.497	6.96E-06	5
Tmem219	0.413937125	0.132	0.416	7.55E-06	5
Akr1b3	0.271454322	0.217	0.562	8.10E-06	5
Ddost	0.343290114	0.217	0.567	1.04E-05	5
Tpd52l2	0.254952041	0.085	0.31	1.36E-05	5
Dram2	0.289271801	0.151	0.426	1.49E-05	5
Eif2s2	0.308526625	0.274	0.635	1.74E-05	5
Rpl31	0.419319545	0.821	0.949	2.33E-05	5
Clptm1l	0.307318668	0.132	0.397	2.36E-05	5
Ik	0.271447267	0.142	0.406	2.45E-05	5
Yipf4	0.338950539	0.151	0.415	2.64E-05	5
Mrps33	0.291553513	0.236	0.573	2.80E-05	5
Gnpda1	0.33557215	0.075	0.287	3.31E-05	5
Asna1	0.33916391	0.123	0.366	3.69E-05	5
Anp32b	0.266833225	0.274	0.64	3.73E-05	5
Hsbp1	0.324881852	0.292	0.664	3.76E-05	5
Mvb12a	0.250825149	0.113	0.346	3.80E-05	5
Nme1	0.267646243	0.274	0.64	3.91E-05	5
Anapc13	0.281531464	0.208	0.531	4.34E-05	5
Uqcr10	0.320881682	0.33	0.76	4.47E-05	5
Cmpk1	0.323581294	0.255	0.604	4.60E-05	5
Tbcb	0.342769488	0.236	0.573	4.92E-05	5
Snrpc	0.267616952	0.198	0.495	5.21E-05	5
Bgn	1.159030352	0.538	0.586	5.49E-05	5
Commd8	0.30767382	0.198	0.489	5.93E-05	5
Park7	0.30733644	0.311	0.72	6.30E-05	5
Ino80e	0.269028538	0.075	0.274	6.97E-05	5
Mrps16	0.272408423	0.16	0.418	6.99E-05	5
Ndufv1	0.257202248	0.113	0.339	7.10E-05	5
Ndufa5	0.319120213	0.217	0.522	7.35E-05	5
Dnajc19	0.303088639	0.17	0.436	7.41E-05	5
Tsg101	0.333684528	0.132	0.378	7.70E-05	5
Mcts1	0.275805374	0.16	0.415	7.97E-05	5
Cd302	0.317984915	0.208	0.508	9.32E-05	5
Rps2	0.303937249	0.877	0.95	9.82E-05	5
Mrpl28	0.350226357	0.16	0.416	0.00010404	5
Apobec1	0.2856988	0.132	0.365	0.00010685	5
Polr2g	0.255947068	0.179	0.457	0.00010803	5
Prmt1	0.254951451	0.132	0.365	0.00010807	5
Cd63	0.725640133	0.66	0.669	0.00011278	5
Ctnnb1	0.279709172	0.113	0.336	0.0001172	5
Chmp5	0.291783016	0.17	0.44	0.00012021	5
Gm2000	0.306394171	0.245	0.575	0.00012365	5
Sertad1	0.278132245	0.085	0.283	0.00012859	5
Txndc17	0.322981184	0.283	0.658	0.00013448	5
Dap	0.250268533	0.179	0.45	0.00013641	5
Cltb	0.343392149	0.123	0.342	0.00015083	5

Rsl24d1	0.287909289	0.075	0.263	0.00015801	5
Fundc2	0.293056	0.16	0.406	0.00017786	5
Snf8	0.276094056	0.198	0.473	0.0001891	5
Zeb2os	0.282945965	0.085	0.273	0.00018972	5
G3bp1	0.33248097	0.208	0.497	0.00021588	5
Rragc	0.289998764	0.151	0.383	0.00023102	5
Romo1	0.326397408	0.264	0.605	0.0002454	5
Pdrg1	0.255945669	0.075	0.252	0.00025212	5
Fabp5	1.49769575	0.33	0.224	0.00025636	5
Ndufv2	0.308380652	0.245	0.581	0.00027012	5
Rps12	0.391230092	0.755	0.938	0.00027335	5
Gsn	1.164764513	0.604	0.713	0.00028776	5
Clec4a2	0.274169264	0.198	0.454	0.00030399	5
Bcl2l1	0.251562259	0.104	0.289	0.00034439	5
Lrp1	0.427300347	0.17	0.402	0.0003794	5
Abhd12	0.330857456	0.245	0.533	0.0003855	5
Dctn3	0.274026162	0.245	0.553	0.00039908	5
Uqcrq	0.29399204	0.368	0.789	0.00040707	5
Lgals1	0.429027832	0.811	0.891	0.00043109	5
Tmed3	0.399420396	0.236	0.527	0.000445	5
Tuba1a	0.258323199	0.236	0.526	0.00045199	5
Snapc5	0.316967658	0.208	0.467	0.00046858	5
Spcs1	0.352628291	0.311	0.696	0.00048566	5
Cuedc2	0.368577077	0.179	0.423	0.00050884	5
Pih1d1	0.294205236	0.094	0.273	0.00053378	5
Vdac1	0.387694409	0.198	0.461	0.00053994	5
Paics	0.362062863	0.094	0.276	0.00054132	5
Rpl26	0.307886638	0.943	0.961	0.00055178	5
Hcfc1r1	0.378265422	0.208	0.475	0.0005566	5
Ptov1	0.259096882	0.123	0.319	0.00056203	5
Commd3	0.373592722	0.17	0.408	0.00066077	5
Mrpl48	0.338463268	0.113	0.302	0.0006686	5
Mrpl51	0.283636969	0.16	0.369	0.00070041	5
1500011K16Rik	0.283489651	0.132	0.336	0.0007017	5
Cox7b	0.342343719	0.34	0.727	0.00072616	5
Ntan1	0.261808349	0.16	0.379	0.00073564	5
Yif1a	0.265713547	0.104	0.286	0.00084131	5
Fam50a	0.294779942	0.132	0.328	0.00090963	5
Pgk1	0.452138526	0.245	0.518	0.00093826	5
Zcchc17	0.421124544	0.104	0.281	0.00095324	5
Npc2	0.501629285	0.726	0.885	0.00096668	5
Mrpl23	0.406536826	0.264	0.573	0.00103729	5
Hikeshi	0.29098591	0.132	0.326	0.0010435	5
Pold4	0.327887418	0.179	0.401	0.00105157	5
Bsg	0.287588955	0.368	0.767	0.00117162	5
Ndufa7	0.265141252	0.358	0.757	0.00119957	5
Polr2f	0.425507211	0.236	0.503	0.00127723	5
March2	0.310743909	0.17	0.373	0.00133127	5
Ccndbp1	0.276475638	0.094	0.257	0.00159935	5
Lamtor2	0.377145379	0.33	0.692	0.00165956	5
Gyg	0.250410245	0.104	0.267	0.00167095	5
Ftl1-ps1	0.386192287	0.226	0.485	0.00174561	5
Eef1d	0.326777812	0.358	0.759	0.00177053	5
Hsd17b10	0.337649307	0.16	0.362	0.00182933	5
Rcn2	0.321565156	0.104	0.268	0.00185057	5
Rps26	0.256911922	0.821	0.942	0.00185946	5
Ranbp1	0.31481639	0.302	0.625	0.00187544	5
Ctsb	0.721380043	0.821	0.849	0.00206979	5
Akr1a1	0.610573704	0.613	0.824	0.00218164	5
Polr2m	0.326404472	0.132	0.307	0.00219692	5
Col3a1	1.218406097	0.415	0.408	0.00228634	5
Stt3a	0.442250999	0.142	0.334	0.00234696	5
Atp5o.1	0.397340417	0.33	0.693	0.00240991	5
Rit1	0.33773165	0.104	0.265	0.00255991	5
Slc25a4	0.391909086	0.264	0.543	0.00264076	5
Slirp	0.383104278	0.236	0.494	0.00280399	5
Stk11	0.403693545	0.151	0.34	0.00284871	5
Sar1a	0.385666288	0.208	0.439	0.00309707	5
Atp6v1c1	0.373705558	0.189	0.392	0.00320236	5
Glo1	0.324816407	0.151	0.336	0.00324614	5
Ppp1r2	0.283881448	0.189	0.39	0.00337124	5
Cyb5a	0.321002546	0.302	0.619	0.00337527	5
Gpx1	0.429082653	0.764	0.868	0.00342943	5
Rnf7	0.493442892	0.264	0.557	0.00353756	5
Ptms	0.353513131	0.302	0.593	0.00355086	5
Minos1	0.29461233	0.377	0.792	0.00373587	5
Ubtd1	0.308185297	0.113	0.266	0.0038176	5

Immp1l	0.268800053	0.123	0.282	0.00388479	5
Bola3	0.528157743	0.132	0.298	0.00388665	5
Lamtor4	0.32372683	0.292	0.6	0.00390796	5
Ufm1	0.282822523	0.17	0.367	0.00429179	5
Esd	0.453010804	0.302	0.615	0.00431002	5
Lbh	0.317699695	0.113	0.262	0.00486686	5
Gltp	0.265024184	0.368	0.728	0.00506961	5
Pgam1	0.382917082	0.264	0.528	0.0052004	5
Ndufa1	0.384126398	0.34	0.69	0.00521339	5
Anxa1	0.307485282	0.274	0.523	0.00563692	5
Mt2	1.110805882	0.509	0.577	0.0057738	5
Ndufv3	0.460440543	0.311	0.634	0.00578346	5
Stx8	0.346139761	0.151	0.316	0.00599549	5
Itgb5	0.349299164	0.236	0.467	0.00654543	5
Prdx4	0.250346651	0.189	0.38	0.0065728	5
Sec14l1	0.358192897	0.132	0.28	0.00815224	5
Hspb1	1.033960264	0.302	0.251	0.00826001	5
Tmx1	0.342050664	0.16	0.328	0.00886631	5
Mrps18a	0.376393747	0.189	0.38	0.00914905	5
Prdx1	0.687987964	0.651	0.858	0.00958005	5
Atp5g1	0.283904288	0.387	0.753	0.00966221	5
Naca	0.294402697	0.708	0.932	0.00980435	5
Swi5	0.618183658	0.33	0.649	0.00985727	5
S100a9	5.831852864	0.96	0.02	6.48E-204	6
Hdc	2.891606542	0.787	0.013	6.56E-174	6
S100a8	6.051934529	0.96	0.042	6.07E-164	6
G0s2	3.843860649	0.773	0.028	4.91E-136	6
Cxcr2	1.963947524	0.507	0.001	1.93E-134	6
Retnlg	3.722440682	0.48	0.002	1.18E-123	6
Acod1	2.368170523	0.6	0.014	1.90E-118	6
Il1r2	2.969434743	0.867	0.07	4.06E-109	6
Mmp9	2.07117699	0.547	0.013	1.13E-106	6
Wfdc21	2.588882307	0.427	0.004	8.00E-100	6
Il1f9	1.803025621	0.373	0.002	3.62E-94	6
Slpi	3.108000674	0.653	0.05	3.01E-79	6
Gm5483	2.328958618	0.28	0.003	3.55E-66	6
Arg2	1.969614275	0.52	0.037	4.39E-65	6
Il1b	3.162696662	0.987	0.275	1.19E-63	6
Asprv1	1.761789877	0.267	0.003	1.37E-62	6
Stfa2l1	1.612046535	0.253	0.002	4.53E-62	6
Ifitm1	2.725060759	0.587	0.058	2.12E-59	6
Trem1	2.394971011	0.653	0.083	7.54E-59	6
Clec4d	2.394786786	0.867	0.208	4.60E-57	6
Csf3r	2.236554807	0.693	0.11	7.38E-55	6
Cd300lf	2.097230551	0.773	0.153	1.50E-54	6
Mxd1	2.243981518	0.693	0.124	3.17E-50	6
H2-Q10	1.424009288	0.36	0.021	7.91E-49	6
Hp	2.294312246	0.6	0.082	1.03E-48	6
Lmnb1	2.36532679	0.787	0.209	4.51E-46	6
Cd24a	1.779093874	0.667	0.115	4.31E-45	6
Slc7a11	2.212265213	0.653	0.118	6.12E-45	6
Srgn	2.251375772	1	0.874	1.11E-44	6
Msrb1	2.366352402	0.96	0.53	4.66E-43	6
Ccr1	2.38758549	0.787	0.219	1.26E-42	6
Upp1	1.380433268	0.267	0.011	1.63E-42	6
Cxcl3	2.492370932	0.32	0.019	2.49E-42	6
Lrg1	2.102682391	0.427	0.048	3.22E-39	6
S100a11	2.20111017	0.973	0.789	9.73E-39	6
Pglyrp1	1.98150671	0.613	0.122	1.35E-37	6
Slfn1	2.175209943	0.6	0.123	1.47E-37	6
Hcar2	2.255340284	0.427	0.051	1.68E-37	6
Cebpb	1.736254613	0.973	0.748	1.11E-36	6
Tyrobp	1.134401968	1	0.817	1.45E-35	6
Clec4e	2.12621522	0.667	0.183	1.05E-32	6
Btg1	1.420183587	0.987	0.805	2.95E-32	6
Eif1	0.870730835	1	0.981	2.36E-29	6
Gadd45a	1.728220341	0.453	0.08	6.38E-29	6
Fth1	1.140085377	1	0.998	1.09E-28	6
Ets2	1.710059845	0.693	0.289	1.14E-24	6
Cxcl2	1.745046787	0.92	0.57	2.46E-24	6
Mcemp1	1.471027855	0.44	0.097	3.98E-23	6
Cd44	1.808184284	0.76	0.447	8.86E-23	6
Sell	1.490189888	0.387	0.073	5.19E-22	6
S100a6	1.316398561	0.933	0.866	2.92E-21	6
2310001H17Rik	1.627827489	0.493	0.145	6.58E-21	6
Samsn1	1.724938993	0.667	0.318	1.65E-20	6
Cd9	1.456103233	0.827	0.518	2.31E-20	6

Malat1	0.691888927	1	0.987	3.15E-20	6
Il1rn	1.803680685	0.533	0.17	3.16E-20	6
Ptgs2	1.435396475	0.387	0.083	8.11E-20	6
Sirpb1b	1.476801851	0.4	0.095	2.33E-19	6
Mcl1	1.370270419	0.813	0.666	4.81E-19	6
Acta2	1.065224873	0.88	0.723	5.29E-19	6
Cdk2ap2	1.863937705	0.8	0.659	3.74E-18	6
Il1rap	1.172328913	0.253	0.038	6.55E-18	6
Gabarap	0.840319216	0.92	0.899	9.30E-18	6
Nudt4	1.609231029	0.547	0.217	9.77E-18	6
Rnf149	1.600126699	0.667	0.399	6.66E-17	6
Plaur	1.992529526	0.627	0.323	1.27E-16	6
Tnfaip2	1.643709909	0.52	0.199	1.50E-16	6
Grina	1.65463408	0.653	0.407	1.33E-15	6
Gsr	1.492608896	0.587	0.277	2.17E-15	6
Trim30b	1.055790829	0.267	0.051	4.14E-15	6
Ifitm2	1.004029987	0.893	0.761	6.47E-15	6
Trem3	1.050869494	0.253	0.047	8.88E-15	6
Rab11fip1	1.222988061	0.347	0.093	1.51E-14	6
Map1lc3b	1.146404765	0.773	0.766	2.63E-14	6
Osgin1	1.198338403	0.253	0.05	8.60E-14	6
Alox5ap	0.918356048	0.88	0.705	8.88E-14	6
Plek	1.537426969	0.68	0.536	2.29E-13	6
H3f3a	0.53929643	0.933	0.942	5.33E-13	6
Fxyd5	0.637996738	0.92	0.895	6.72E-13	6
Klf2	1.369855584	0.747	0.545	9.53E-13	6
Litaf	1.219784615	0.72	0.615	1.69E-12	6
Cass4	0.980860898	0.267	0.062	1.69E-12	6
Cd33	1.222039542	0.52	0.264	2.38E-12	6
Tpd52	1.121905257	0.72	0.611	5.08E-12	6
Pim1	1.279222865	0.773	0.64	9.40E-12	6
Pnrc1	1.099084969	0.773	0.749	1.02E-11	6
Slc16a3	1.630070588	0.4	0.152	1.15E-11	6
Cd52	0.6440767	0.96	0.878	4.84E-11	6
Trib1	1.325140543	0.573	0.358	6.90E-11	6
Gcnt2	1.095067115	0.293	0.088	1.02E-10	6
Vasp	1.042993754	0.68	0.573	1.20E-10	6
Hbb-bs	1.229593256	0.587	0.357	1.24E-10	6
Thbs1	1.884146067	0.347	0.118	1.45E-10	6
Actg1	0.645686383	0.973	0.972	2.40E-10	6
Pfn1	0.464035505	1	0.98	3.81E-10	6
Stk17b	1.268091634	0.653	0.56	7.93E-10	6
Sorl1	1.072852379	0.36	0.141	1.30E-09	6
Txn1	1.071655095	0.747	0.788	1.50E-09	6
Tgm2	1.329311973	0.413	0.189	2.35E-09	6
Ube2b	1.101080291	0.653	0.617	6.48E-09	6
Atp6v1g1	0.760523959	0.747	0.802	1.05E-08	6
Lst1	1.137488784	0.64	0.53	1.53E-08	6
Cd53	0.825409703	0.76	0.822	2.03E-08	6
AA467197	0.812410718	0.44	0.191	2.17E-08	6
Ier3	1.107970154	0.627	0.455	5.33E-08	6
Emilin2	1.365738508	0.467	0.288	5.72E-08	6
Cxcr4	1.59857793	0.387	0.189	6.12E-08	6
Cd14	1.286056964	0.707	0.632	7.14E-08	6
Nlrp3	1.152827279	0.453	0.27	1.42E-07	6
C5ar1	0.85333326	0.64	0.509	1.78E-07	6
Nfkbia	1.134274737	0.733	0.782	1.81E-07	6
Ccl6	1.282817374	0.72	0.611	2.62E-07	6
Dusp1	0.602145047	0.88	0.812	3.83E-07	6
Fcer1g	0.512105403	0.973	0.822	5.18E-07	6
Adam8	1.121272378	0.333	0.153	5.34E-07	6
Prdx5	0.788529708	0.693	0.746	6.72E-07	6
Adipor1	1.068688295	0.6	0.593	7.67E-07	6
Cks2	1.500446674	0.413	0.239	8.76E-07	6
Sem1	0.552406409	0.787	0.89	8.95E-07	6
Mrpl33	0.965598253	0.667	0.694	9.51E-07	6
Cox17	1.366665615	0.613	0.631	9.55E-07	6
Osm	1.085748535	0.453	0.271	1.11E-06	6
Dgat1	1.115894612	0.28	0.116	1.22E-06	6
Gadd45b	1.194174716	0.52	0.391	1.27E-06	6
Lilr4b	1.31437072	0.573	0.508	1.53E-06	6
Sirpb1c	1.151473389	0.333	0.159	1.83E-06	6
Myl6	0.26544025	0.987	0.974	2.00E-06	6
2810474O19Rik	1.361335348	0.44	0.287	2.18E-06	6
Jaml	1.225678657	0.28	0.122	3.19E-06	6
Gmfg	0.869505587	0.68	0.786	3.85E-06	6
Ube2d3	0.548704394	0.773	0.857	5.93E-06	6

Sdcbp	0.527771859	0.747	0.805	6.20E-06	6
Marcksl1	1.197954864	0.573	0.494	7.50E-06	6
Taldo1	0.932032367	0.653	0.749	8.60E-06	6
Btg2	0.793778584	0.707	0.731	1.04E-05	6
Junb	0.412336425	0.907	0.897	1.11E-05	6
Lcp1	0.604214943	0.773	0.802	1.16E-05	6
Cd300ld	1.261612366	0.427	0.296	1.17E-05	6
Snx20	1.195819095	0.52	0.455	1.18E-05	6
Tagln	0.883411999	0.533	0.423	1.26E-05	6
Rnf11	1.054446782	0.333	0.189	2.22E-05	6
Snap23	1.030311699	0.547	0.51	2.34E-05	6
Ltb	0.791662344	0.347	0.171	3.07E-05	6
Rab20	1.157906046	0.427	0.309	3.93E-05	6
Fosl2	1.110697892	0.413	0.295	6.37E-05	6
Ptafr	0.958990787	0.467	0.377	6.63E-05	6
Txnip	1.013392679	0.467	0.344	7.58E-05	6
1600010M07Rik	1.150382129	0.267	0.134	8.37E-05	6
Selenok	0.602504861	0.693	0.84	9.45E-05	6
Nfe2l2	0.950099441	0.533	0.517	9.59E-05	6
Ppp1r2	1.042032464	0.453	0.369	9.77E-05	6
Arpc3	0.483688846	0.773	0.899	0.00011541	6
Rtp4	1.283653331	0.427	0.321	0.00013946	6
Csrnp1	0.850880616	0.493	0.43	0.00014517	6
Cyp4f18	0.947000204	0.387	0.258	0.00014649	6
Hist1h2bc	0.890690367	0.427	0.313	0.00017749	6
Atp6v0e	0.531896937	0.72	0.838	0.00018053	6
Fgl2	1.085420966	0.4	0.293	0.00019749	6
Rgcc	0.872591028	0.267	0.131	0.00019976	6
Pkm	0.611734458	0.68	0.819	0.00020472	6
Slfn2	0.760324844	0.613	0.656	0.00024028	6
Pilra	0.999199207	0.373	0.266	0.00041767	6
Siglece	1.025131351	0.307	0.193	0.00044539	6
Isg15	1.196381286	0.4	0.294	0.00044886	6
Gda	1.033787665	0.387	0.28	0.00047746	6
Coro1a	0.487418422	0.8	0.84	0.00050307	6
Cr1l	0.261680842	0.133	0.382	0.00067337	6
Anxa2	0.639453644	0.653	0.686	0.00071992	6
Ier5	0.760603376	0.627	0.684	0.00081079	6
Actb	0.529341101	1	0.983	0.00097402	6
Atp6v1c1	0.273377165	0.147	0.389	0.00103107	6
Bnip2	0.25718284	0.2	0.493	0.00122354	6
Sap18	0.455139652	0.227	0.497	0.00152641	6
Ccrl2	1.641519403	0.467	0.443	0.00158744	6
Tes	0.944981806	0.32	0.227	0.00168807	6
Fam107b	1.041138948	0.373	0.287	0.00191488	6
Ddx5	0.274350883	0.787	0.917	0.00193035	6
Rac2	0.622568366	0.64	0.749	0.00223281	6
Supt4a	0.782642806	0.56	0.63	0.00247599	6
Gpcpd1	1.060833361	0.32	0.231	0.00258769	6
Ppp1r15a	0.995360857	0.507	0.546	0.00260902	6
Hba-a2	0.792499245	0.293	0.191	0.00283778	6
Ppp1r12a	0.282206431	0.2	0.43	0.00310474	6
Gng5	0.379902891	0.733	0.882	0.0031601	6
Dennd4a	0.928479696	0.427	0.4	0.00326077	6
Jmjd1c	0.296786863	0.147	0.359	0.00326463	6
Xbp1	0.906087844	0.493	0.525	0.00337615	6
Ski	0.250867196	0.093	0.259	0.00511288	6
H2afj	0.666560764	0.547	0.667	0.00572562	6
Irf2bp2	0.435529296	0.12	0.309	0.00594177	6
Adgre5	0.68543629	0.4	0.355	0.00610546	6
Ostf1	0.622103125	0.627	0.804	0.00657689	6
Dok3	0.311678761	0.16	0.362	0.00658603	6
Bcl2a1a	1.168395282	0.32	0.247	0.00903389	6
Cebpd	0.873272769	0.4	0.359	0.0090504	6
Ccl3	1.20525517	0.467	0.428	0.00990334	6
Ccr9	2.813845138	0.949	0.004	5.14E-233	7
Dntt	2.702782174	0.769	0.001	1.30E-206	7
Endou	1.97077366	0.718	0	5.72E-199	7
Arpp21	1.86576429	0.615	0	2.63E-170	7
Gm15340	1.841861659	0.538	0.002	6.63E-136	7
Rag1	1.75936998	0.487	0	1.01E-134	7
A930003A15Rik	1.467188451	0.436	0	1.46E-120	7
Dgkeos	1.486481919	0.41	0	1.70E-113	7
Myb	1.767842845	0.59	0.01	4.19E-107	7
Tctex1d1	1.318031483	0.385	0	1.93E-106	7
Cd8b1	2.688481746	0.949	0.047	3.07E-102	7
Satb1	3.036361423	0.974	0.064	1.09E-94	7

Aqp11	1.574394745	0.436	0.004	5.50E-93	7
Cd8a	2.308415844	0.846	0.045	1.09E-87	7
Tcf7	2.583364431	0.821	0.045	8.18E-87	7
Sox4	2.628100708	0.718	0.035	5.16E-80	7
Rapgef3	1.146760142	0.333	0.002	6.73E-80	7
Ldhb	2.197221171	0.846	0.068	9.65E-70	7
Ly6d	2.105403363	0.513	0.017	9.29E-67	7
Trat1	1.104306795	0.333	0.005	1.00E-62	7
Cd4	1.639612341	0.538	0.023	2.93E-62	7
Trbc2	3.270941779	1	0.131	9.52E-61	7
Lat	2.422467796	0.974	0.119	1.71E-59	7
Themis	1.570119562	0.487	0.02	1.02E-57	7
Cd3e	2.15400507	0.923	0.104	1.20E-57	7
Lck	2.465777419	0.897	0.106	8.80E-57	7
Cd3g	1.946934306	0.974	0.115	1.05E-54	7
Cd27	2.292746302	0.795	0.081	1.33E-54	7
Tubb2b	2.190701016	0.667	0.052	1.89E-54	7
Txk	1.963089948	0.718	0.067	1.76E-50	7
Rnf157	1.765681452	0.513	0.029	2.13E-50	7
Nsg2	1.031755493	0.282	0.005	2.99E-50	7
Cd247	1.739671183	0.744	0.079	3.33E-47	7
Cd3d	1.962030076	0.872	0.111	1.48E-46	7
Sit1	1.658651551	0.538	0.037	8.93E-46	7
Sh2d1a	1.561158716	0.564	0.045	4.55E-43	7
Gm5914	1.514146938	0.462	0.028	2.66E-42	7
Spint2	1.88848566	0.718	0.091	7.40E-41	7
Ssbp2	1.980878816	0.667	0.079	4.13E-40	7
Cd24a	2.018768422	0.821	0.126	4.32E-39	7
Trac	2.031598011	0.744	0.097	1.18E-38	7
Thy1	2.082283612	0.872	0.149	2.27E-38	7
Ntrk3	0.984861337	0.282	0.01	6.66E-37	7
Trbc1	3.235527702	0.692	0.094	7.51E-37	7
Bcl11b	1.628278482	0.564	0.056	9.12E-37	7
Lef1	1.592488984	0.41	0.028	4.17E-35	7
Camk4	1.02904514	0.385	0.024	3.93E-34	7
Frat2	1.636518568	0.59	0.07	6.84E-34	7
Ets1	1.840455521	0.769	0.138	2.20E-33	7
Arl5c	2.151446096	0.795	0.161	3.93E-32	7
Sept1	1.47194764	0.744	0.132	1.01E-29	7
Hist3h2ba	1.79577673	0.538	0.068	1.28E-29	7
Cd28	1.797240704	0.538	0.074	1.68E-26	7
Dusp10	1.618282291	0.487	0.061	2.05E-26	7
Sla2	1.422502661	0.385	0.036	3.38E-26	7
Ppp1r16b	1.761048747	0.513	0.069	5.43E-26	7
Jakmip1	1.327966556	0.436	0.049	3.10E-25	7
Skap1	1.339731062	0.615	0.108	2.46E-24	7
Ramp1	1.76381013	0.872	0.303	3.72E-24	7
Itk	1.205150163	0.436	0.052	6.02E-24	7
Socs1	1.583008201	0.513	0.077	7.28E-24	7
Atl2	1.422152863	0.462	0.062	2.22E-23	7
Clk3	1.908688886	0.795	0.26	4.71E-23	7
Mier1	1.935571383	0.718	0.199	3.34E-22	7
Slc35d1	1.063797219	0.333	0.032	4.83E-22	7
Znrf1	1.596939495	0.718	0.198	4.89E-22	7
Trp53i11	1.237773362	0.41	0.051	5.63E-22	7
Rgcc	1.54311341	0.59	0.125	3.99E-19	7
Vps37b	1.436564257	0.769	0.249	1.68E-18	7
Dusp5	1.608582535	0.795	0.291	2.22E-18	7
Tespa1	1.399336923	0.41	0.063	4.14E-18	7
Plcxd2	0.991273259	0.282	0.028	8.64E-18	7
Gimap9	1.351924031	0.436	0.074	8.72E-18	7
Rmnd5a	1.580609396	0.513	0.108	1.05E-17	7
H3f3b	0.92260548	1	0.958	1.28E-17	7
Rhoh	1.84052079	0.692	0.237	2.29E-17	7
Xrcc6	1.392822833	0.436	0.078	4.13E-17	7
Saraf	1.422493601	0.897	0.644	5.05E-17	7
Cdca7	1.01917319	0.282	0.031	1.39E-16	7
Ubb	0.703979464	1	0.984	1.76E-16	7
Gramd3	1.852232839	0.513	0.12	5.62E-16	7
Cnn3	1.299552712	0.385	0.062	5.64E-16	7
Hmgb1	1.41907667	0.923	0.787	8.71E-16	7
Malat1	1.048774266	1	0.988	2.12E-15	7
Prkcq	0.842915033	0.308	0.041	6.42E-15	7
Traf4	0.916679898	0.256	0.028	6.96E-15	7
Eif1	0.664126194	1	0.981	1.68E-14	7
Gtf2h4	1.226296144	0.41	0.083	2.77E-14	7
Snx18	1.715551511	0.692	0.296	3.38E-14	7

Ptprcap	1.141338418	0.59	0.148	5.68E-14	7
Patz1	1.04040838	0.308	0.047	1.39E-13	7
Prkca	1.222478608	0.359	0.065	1.99E-13	7
Gimap1	1.060760641	0.487	0.112	2.48E-13	7
Rnf125	0.858431135	0.282	0.04	3.14E-13	7
Limd2	1.412821229	0.821	0.517	3.64E-13	7
Cyb5a	1.305758424	0.846	0.585	4.14E-13	7
Nabp1	1.250236982	0.564	0.18	4.77E-13	7
Gimap6	1.291216249	0.538	0.151	5.69E-13	7
Srsf5	1.124369614	0.897	0.788	6.15E-13	7
Arhgap45	1.419316445	0.769	0.512	3.50E-12	7
Tubb2a	2.01127197	0.718	0.408	3.77E-12	7
Ddx5	0.745661954	1	0.907	5.26E-12	7
Ezr	1.323567893	0.692	0.354	1.14E-11	7
Metap2	1.620606232	0.744	0.49	1.26E-11	7
Hnrnpf	0.808414818	0.923	0.816	1.93E-11	7
Fbxl12	0.862270329	0.282	0.047	2.34E-11	7
Rbm39	0.865451764	0.923	0.823	3.06E-11	7
Sept6	1.099549938	0.487	0.148	3.53E-11	7
Ube2s	1.236053284	0.795	0.609	5.91E-11	7
Paip2	1.017340093	0.769	0.555	7.56E-11	7
Klf13	1.093914253	0.795	0.586	1.06E-10	7
Xist	0.986730171	0.897	0.783	2.48E-10	7
Rasgrp1	1.01526324	0.359	0.086	4.91E-10	7
Rnf145	1.495091107	0.487	0.177	9.53E-10	7
Ap3s1	1.201713585	0.718	0.49	9.90E-10	7
Rcsd1	1.160531217	0.59	0.282	1.49E-09	7
Edem1	1.259253691	0.641	0.356	1.88E-09	7
Slc25a5	0.765898424	0.872	0.828	3.44E-09	7
Prdx6	1.109268595	0.769	0.53	7.23E-09	7
Hnrnpa1	1.022334263	0.744	0.571	8.43E-09	7
Nono	1.140962878	0.667	0.436	8.51E-09	7
Ezh2	0.957634543	0.333	0.089	1.58E-08	7
Taf7	1.134071538	0.436	0.154	2.07E-08	7
H2afv	1.169947087	0.667	0.449	2.32E-08	7
Cnbp	0.799643934	0.821	0.764	3.65E-08	7
Smc4	1.167718785	0.513	0.23	3.96E-08	7
Hba-a1	1.262215455	0.513	0.229	7.37E-08	7
Mapk8	0.810393103	0.282	0.069	7.78E-08	7
Cdk17	0.869073234	0.333	0.094	8.33E-08	7
Chmp1b	1.094900496	0.436	0.172	1.02E-07	7
Hbb-bs	1.222809602	0.641	0.362	1.03E-07	7
Hnrnpa2b1	0.727567539	0.846	0.763	1.34E-07	7
Ablim1	0.964118479	0.282	0.07	1.66E-07	7
Rpl27	0.513763883	0.974	0.895	1.82E-07	7
Hnrnpk	0.772772856	0.795	0.802	2.45E-07	7
Tra2b	0.850815095	0.718	0.611	2.67E-07	7
Cirbp	1.114583714	0.564	0.309	2.86E-07	7
Il21r	1.156225684	0.513	0.261	3.18E-07	7
H3f3a	0.589403821	0.949	0.941	3.31E-07	7
Rps27	0.278869083	1	0.987	3.82E-07	7
Wdr12	1.020087867	0.333	0.105	3.91E-07	7
Abhd8	0.787501999	0.333	0.102	4.05E-07	7
Nrip1	1.163092868	0.41	0.16	4.65E-07	7
Mxd4	1.085882223	0.513	0.264	4.94E-07	7
Pcbp2	0.719946977	0.795	0.753	5.50E-07	7
Desi1	0.974333518	0.385	0.143	6.06E-07	7
Snrnp70	1.123029511	0.641	0.491	7.31E-07	7
Rps3a1	0.333182059	1	0.952	7.44E-07	7
Rbm3	0.853115998	0.769	0.727	1.21E-06	7
Stmn1	1.305411911	0.462	0.197	1.25E-06	7
Acta2	0.485694734	0.846	0.729	1.48E-06	7
Zfp422	0.930603683	0.308	0.097	1.51E-06	7
Eif3h	0.63125098	0.821	0.778	1.83E-06	7
Pnrc1	0.798659121	0.795	0.749	2.05E-06	7
Slc38a2	0.965447511	0.615	0.43	2.25E-06	7
Fus	0.991786325	0.667	0.533	2.31E-06	7
Sash3	0.981555813	0.436	0.2	3.84E-06	7
Actn1	0.91045457	0.436	0.198	4.34E-06	7
Prps2	0.833550937	0.308	0.102	4.59E-06	7
Sub1	0.642976854	0.846	0.853	5.06E-06	7
Gpr132	1.053925806	0.487	0.258	5.79E-06	7
Orai2	0.76639253	0.256	0.074	6.25E-06	7
Krit1	0.90175029	0.436	0.206	6.82E-06	7
Rnf167	0.94309999	0.41	0.186	8.70E-06	7
Rbmx	0.857519077	0.256	0.077	9.19E-06	7
Cdkn1b	0.98396835	0.333	0.126	1.01E-05	7

Atp5h	0.48289235	0.846	0.849	1.14E-05	7
Usp3	0.94983233	0.436	0.223	1.36E-05	7
Impdh1	0.781776764	0.282	0.094	1.45E-05	7
Hbb-bt	0.730061594	0.256	0.077	1.50E-05	7
Kif5b	0.972634184	0.59	0.469	1.61E-05	7
Ube2d3	0.60342836	0.795	0.854	1.74E-05	7
Acap1	0.652453528	0.256	0.078	2.00E-05	7
Serbp1	0.501595958	0.769	0.743	2.14E-05	7
Ccng2	0.965024668	0.333	0.135	2.61E-05	7
Stat5b	0.918893136	0.282	0.1	3.01E-05	7
Ubn1	0.809923531	0.462	0.263	3.19E-05	7
Sik1	0.803752158	0.308	0.115	3.25E-05	7
Ctcf	0.986655929	0.385	0.184	3.30E-05	7
Gsk3b	0.961405143	0.513	0.329	3.31E-05	7
Sh2d2a	0.725197485	0.282	0.093	3.62E-05	7
Hist3h2a	1.112591424	0.462	0.26	3.80E-05	7
Tia1	0.741498991	0.308	0.117	3.88E-05	7
Polg	0.755922867	0.282	0.1	3.99E-05	7
Hs2st1	0.825500189	0.256	0.085	4.35E-05	7
Ptma	0.746601296	0.949	0.934	4.46E-05	7
Gmfg	0.722729593	0.769	0.78	5.37E-05	7
Ets2	0.924554894	0.513	0.307	5.50E-05	7
Rpl7	0.341065678	0.974	0.934	5.56E-05	7
Sumo2	0.663883037	0.744	0.809	5.69E-05	7
Fbxw2	0.9039443	0.487	0.313	5.96E-05	7
Trir	0.681396677	0.641	0.589	6.32E-05	7
Gpr171	0.902720406	0.359	0.161	7.31E-05	7
mt-Nd3	0.63138907	0.667	0.631	8.78E-05	7
Bcl2l11	1.054752161	0.333	0.148	8.97E-05	7
Ccpg1	1.079601681	0.333	0.147	0.00010625	7
Aes	0.913232854	0.641	0.58	0.00011691	7
Son	0.688606614	0.667	0.645	0.00011752	7
Hspb11	0.892436622	0.359	0.173	0.00011988	7
Rgs2	0.785682608	0.692	0.577	0.00012064	7
mt-Co2	0.26263515	1	0.949	0.00013039	7
Tpt1	0.281499864	1	0.977	0.00013156	7
Fas	0.897841827	0.333	0.15	0.00013559	7
Tob1	1.035546498	0.308	0.13	0.00015579	7
Hba-a2	0.900957335	0.385	0.191	0.00015895	7
Rps6kb1	0.858501368	0.333	0.156	0.00016133	7
Tcf12	0.826023307	0.308	0.134	0.0001779	7
Eif4g2	0.726625816	0.641	0.646	0.0001828	7
Mef2d	0.783089862	0.308	0.134	0.00019631	7
Stx6	0.996347684	0.359	0.183	0.00019836	7
Dnaja1	0.980123811	0.667	0.657	0.00022505	7
Taf1d	1.036713466	0.436	0.27	0.00023046	7
Tex30	0.769124732	0.282	0.116	0.00023213	7
Il2rg	1.030703973	0.513	0.338	0.00024487	7
Pycard	0.640304249	0.667	0.598	0.0002501	7
Bnip3l	0.819370286	0.564	0.476	0.00025442	7
Lztfl1	0.824693346	0.282	0.117	0.00025616	7
Slc7a11	0.821666231	0.333	0.144	0.00029573	7
Rpa1	0.7121036	0.308	0.14	0.0003078	7
Ttc14	1.041950433	0.41	0.241	0.00032583	7
Lbr	0.760763264	0.41	0.237	0.00035356	7
Tubb5	0.844419375	0.692	0.684	0.00037398	7
Gtf3c2	0.81572707	0.308	0.141	0.00037531	7
Hbp1	0.826406589	0.385	0.207	0.0003921	7
Tnfaip3	0.621297217	0.59	0.439	0.00043453	7
Trim11	0.872433485	0.256	0.104	0.00045272	7
Traf3ip3	0.707873077	0.282	0.118	0.0004885	7
Csrp1	0.783501671	0.487	0.335	0.00053878	7
Tnrc6b	0.847343613	0.359	0.197	0.0005665	7
Tsc22d4	0.899167842	0.538	0.454	0.00072718	7
Eif3f	0.378570738	0.846	0.857	0.00074602	7
Oaz1	0.377619023	0.974	0.945	0.00074747	7
mt-Cytb	0.254598795	1	0.948	0.0007652	7
Selplg	0.586969	0.692	0.66	0.00082358	7
Ndufv3	0.47917671	0.641	0.606	0.00083282	7
Tmed9	0.451285759	0.692	0.7	0.00083763	7
Snrpe	0.602972511	0.641	0.664	0.00084609	7
Prkar1a	0.690706141	0.615	0.611	0.0009098	7
Smc3	0.870248747	0.359	0.208	0.00098801	7
Btg1	0.286792046	0.897	0.813	0.00102458	7
Rcbtb2	1.150952765	0.385	0.235	0.00108368	7
Cabin1	0.825810372	0.308	0.155	0.00111542	7
Eif3e	0.647568775	0.667	0.674	0.0011558	7

Arhgef1	0.850596875	0.487	0.37	0.00119421	7
Cd47	0.605409685	0.667	0.721	0.00122262	7
Chd1	0.892834476	0.256	0.115	0.00123443	7
Arhgdib	0.569360271	0.795	0.854	0.00125167	7
Ttc19	0.725308924	0.282	0.135	0.00135475	7
Itgal	0.55214728	0.308	0.146	0.00139888	7
Atp5d	0.405096501	0.718	0.777	0.00154564	7
Actr1b	0.951971712	0.308	0.161	0.00154797	7
Tomm20	0.676481573	0.641	0.67	0.0016766	7
Snu13	0.793139106	0.564	0.586	0.00173582	7
Rbm25	0.908045394	0.513	0.449	0.00174606	7
Ubald2	0.736371388	0.564	0.502	0.00175062	7
Trpc4ap	0.96605179	0.41	0.283	0.00192017	7
Smarce1	0.77492956	0.436	0.323	0.00208	7
Itpr2	0.672658397	0.256	0.118	0.00213426	7
Cox7a2l	0.381975114	0.769	0.807	0.00222669	7
Bclaf1	0.792418007	0.436	0.322	0.00260502	7
Srsf3	0.646039776	0.615	0.632	0.00271848	7
Nop53	0.677561364	0.641	0.684	0.00281344	7
Eef2	0.335954166	0.897	0.893	0.00286896	7
Srsf6	0.813511592	0.513	0.473	0.00299851	7
Rpl13a	0.403320663	0.795	0.831	0.00304791	7
Slc44a2	0.696815021	0.308	0.167	0.00305659	7
Pdcd4	0.850601894	0.359	0.215	0.00322199	7
Emb	0.593236489	0.538	0.423	0.00325527	7
Stk16	0.766783871	0.308	0.172	0.0032681	7
Ikzf1	0.898335354	0.385	0.259	0.00337421	7
Calm2	0.521698208	0.769	0.869	0.00351836	7
Usmg5	0.454869324	0.667	0.722	0.00384164	7
Dnajb1	0.997060995	0.41	0.296	0.0039081	7
Selenok	0.348430683	0.769	0.833	0.00390991	7
Atp11b	0.790635399	0.282	0.149	0.00392934	7
Rps17	0.281243837	0.923	0.936	0.00394207	7
Foxp1	0.758987442	0.487	0.423	0.00406405	7
Srp9	0.559111299	0.641	0.695	0.00442703	7
Topors	0.716651808	0.256	0.129	0.00450377	7
Stk4	0.802126087	0.333	0.203	0.00455393	7
Rpl15	0.253825747	0.949	0.932	0.00467433	7
Ing2	0.831933905	0.308	0.177	0.00486723	7
Snrpg	0.460377124	0.692	0.723	0.00496595	7
Peli1	0.800857287	0.385	0.263	0.0051215	7
Dnajc15	0.917871839	0.513	0.479	0.00512171	7
Polr1d	0.444637336	0.641	0.698	0.00512978	7
Fam107b	0.758165049	0.41	0.288	0.00514919	7
Def6	0.702186621	0.333	0.208	0.00523906	7
Hnrnpdl	0.877985775	0.487	0.442	0.00527004	7
Abi3	0.772596934	0.385	0.267	0.00528545	7
Atp5a1	0.576222652	0.667	0.768	0.00550113	7
Smarcd2	0.932534063	0.385	0.281	0.00566489	7
Ncor1	0.729440636	0.513	0.487	0.0060338	7
Ppp1r15a	0.599418337	0.564	0.543	0.00611055	7
Rasgrp2	1.012396589	0.256	0.13	0.00616805	7
Fkbp1a	0.532531998	0.615	0.659	0.00644051	7
Vgll4	0.746358101	0.333	0.205	0.00651995	7
Tspan13	0.675030383	0.462	0.347	0.00653797	7
Celf2	0.962746129	0.538	0.543	0.00669457	7
Emg1	0.86335954	0.513	0.517	0.00671836	7
Npm1	0.3614872	0.769	0.797	0.00679564	7
Ankrd11	0.704811969	0.538	0.521	0.00693591	7
Atp5b	0.4408089	0.718	0.841	0.00702044	7
Rbm38	0.555020667	0.256	0.132	0.00798975	7
Tmsb10	0.492052868	0.821	0.774	0.00807371	7
Tecpr1	0.886794647	0.282	0.163	0.00807454	7
Rbm6	0.718489196	0.282	0.163	0.00817276	7
Rpf1	0.743330569	0.333	0.217	0.00855296	7
Psip1	0.747914705	0.256	0.139	0.00871841	7
Hnrnpm	0.679394913	0.513	0.508	0.00902008	7
Chchd2	0.340848019	0.897	0.894	0.0095251	7
Ythdf1	0.63651554	0.308	0.189	0.00955288	7
Acyp1	0.660323629	0.256	0.141	0.00956333	7

Supplementary Table 2. Transcriptional response to SWNT-SHP1i in lesional macrophages, relative to SWNT-Cy5.5 control (Cluster 1).
Cluster markers were identified using the non-parametric Wilcoxon rank rum test (n = 4 biologically independent animals per group).

Gene	log2 Fold Change	P value	pct.1	pct.2
Acta2	1.265152964	1.24E-59	0.909	0.21
Mgp	0.459018521	5.07E-25	0.996	1
Tagln	0.753298678	1.33E-19	0.502	0.136
Myl9	0.552016153	4.20E-18	0.474	0.121
Tpm2	0.510457321	3.10E-17	0.446	0.107
Spp1	0.417340773	1.38E-16	0.604	0.229
Fau	0.254796871	1.46E-16	1	0.995
Eef1a1	0.288009697	2.53E-14	1	1
Hspb1	0.482242624	3.88E-14	0.4	0.103
Rps15	0.286833643	6.87E-13	0.993	0.977
Lgals1	-0.428487287	8.19E-13	0.958	0.991
Crip1	-0.590857524	1.25E-12	0.93	0.986
Cd36	-0.479534984	3.34E-12	0.186	0.491
Igfbp7	0.406678942	6.81E-12	0.891	0.785
Ucp2	0.388976747	2.43E-11	0.944	0.893
Ifi27l2a	-0.763231471	2.84E-11	0.898	0.963
Bin1	-0.42898845	1.85E-10	0.544	0.785
Ndufa4	-0.404960776	2.61E-10	0.768	0.883
Rpl30	0.262910032	3.58E-10	0.989	0.967
Clu	0.413980296	4.58E-10	0.386	0.145
Rgl1	-0.335340932	5.02E-10	0.165	0.425
Npl	-0.539366078	6.00E-10	0.186	0.435
Atp5k	-0.3870932	1.13E-09	0.66	0.822
Rps20	0.277814168	1.52E-09	0.989	0.972
Retnla	-1.168421472	4.24E-09	0.081	0.28
Csrp2	0.318143302	4.86E-09	0.449	0.21
Pf4	-0.507081019	5.06E-09	0.807	0.921
Ednrb	-0.52050367	5.65E-09	0.077	0.266
Cnn1	0.279474566	6.69E-09	0.182	0.019
Snx2	-0.415336689	6.73E-09	0.611	0.799
Rnaset2a	-0.389801845	7.47E-09	0.565	0.818
Fcna	-0.826365094	1.03E-08	0.158	0.364
Emp1	-0.42812922	1.10E-08	0.361	0.607
Dok2	-0.393976103	1.78E-08	0.354	0.612
Timd4	-0.347192473	2.57E-08	0.06	0.234
Folr2	-0.560122249	2.73E-08	0.439	0.645
Ccl7	-0.597285864	3.71E-08	0.502	0.724
Eif3f	0.269586077	3.72E-08	0.923	0.883
Ltc4s	-0.579856412	3.91E-08	0.435	0.636
Ap2m1	-0.361551132	4.19E-08	0.733	0.902
Eno1	-0.33124207	5.05E-08	0.621	0.808
Rap1a	-0.374988127	9.60E-08	0.681	0.832
Mpeg1	0.42111853	1.58E-07	0.66	0.472
Erh	-0.298973465	1.58E-07	0.179	0.393
Snx3	-0.289155533	2.58E-07	0.839	0.949
Fam213b	-0.404177348	3.69E-07	0.249	0.458
Fcgrt	-0.46737877	3.72E-07	0.796	0.893
Cstb	-0.352959275	4.41E-07	0.818	0.911
Pfn1	-0.279597286	4.71E-07	0.996	1
Romo1	-0.311461868	5.87E-07	0.54	0.757
Rgs1	0.642363468	6.34E-07	0.589	0.407
Pdia3	-0.264724614	6.90E-07	0.877	0.93
Snx6	-0.333671722	7.70E-07	0.512	0.724
Ccl24	-0.363795006	9.55E-07	0.207	0.411
Lyve1	-0.42600244	1.03E-06	0.253	0.467
Pepd	-0.394514693	1.20E-06	0.498	0.659
Cd163	-0.375362198	1.45E-06	0.182	0.383
Dusp3	-0.300437049	1.68E-06	0.291	0.509
F13a1	-0.551406091	2.01E-06	0.495	0.645
Gas6	-0.403648186	2.10E-06	0.663	0.813
Trim47	-0.350096468	2.37E-06	0.393	0.603
C3	0.350908814	2.44E-06	0.389	0.22
Cycs	-0.280627523	3.76E-06	0.421	0.654
Alox5	-0.285724966	4.05E-06	0.214	0.407
Jaml	0.256541987	4.45E-06	0.133	0.019
Cbr2	-0.413161454	4.70E-06	0.512	0.692
Clec10a	-0.444487706	4.71E-06	0.256	0.449
Pdlim1	-0.280702188	5.27E-06	0.168	0.35
S100a13	-0.326742005	5.32E-06	0.646	0.804
Ndufa3	-0.287046914	6.01E-06	0.723	0.804
Fgfr1	-0.272694806	6.20E-06	0.13	0.29
Nisch	0.300341889	6.84E-06	0.709	0.556

Psma4	-0.279602743	8.82E-06	0.593	0.771
Manf	-0.330700252	1.00E-05	0.688	0.808
Ccl2	-0.509657421	1.01E-05	0.691	0.813
S100a10	-0.301703773	1.13E-05	0.793	0.879
Mfge8	0.330838367	1.28E-05	0.372	0.215
Eps8	-0.286386111	1.29E-05	0.337	0.528
Cd209f	-0.855827569	1.31E-05	0.067	0.192
Gas7	-0.27208706	1.32E-05	0.463	0.654
Myl12a	-0.252549817	1.34E-05	0.884	0.963
Cd209g	-0.419650897	1.34E-05	0.053	0.173
Cox7a2l	0.255013872	1.40E-05	0.898	0.883
Mt2	0.286952605	1.44E-05	0.86	0.729
Fkbp5	0.33704007	1.82E-05	0.449	0.304
Rgs2	0.335063253	1.86E-05	0.653	0.514
Usmg5	-0.323985805	1.87E-05	0.653	0.776
Cd52	0.262394769	1.92E-05	0.874	0.729
Cfh	-0.257459094	1.99E-05	0.572	0.752
Tslp	-0.32029767	2.12E-05	0.098	0.243
Fxyd2	-0.32408326	2.24E-05	0.291	0.481
Ifitm3	-0.340298498	2.32E-05	0.909	0.958
Timp2	-0.313386265	3.83E-05	0.926	0.958
Selenbp1	-0.25089197	3.98E-05	0.274	0.453
Polr2k	-0.260597737	4.70E-05	0.428	0.645
Ramp1	0.290376637	5.24E-05	0.288	0.14
Tppp3	-0.504746258	5.76E-05	0.214	0.374
Vsig4	-0.552757294	7.86E-05	0.056	0.164
Cd74	0.481114409	8.47E-05	0.877	0.785
Ifngr1	0.258547977	9.26E-05	0.881	0.841
Ifitm6	-0.275327141	9.52E-05	0.091	0.21
Gatm	-0.321523463	9.99E-05	0.407	0.598
Tmem147	-0.254748607	0.000114012	0.354	0.542
Cfp	-0.341959248	0.000134932	0.709	0.813
Hgsnat	-0.402645101	0.000151451	0.288	0.439
Pros1	-0.272127264	0.000200569	0.267	0.43
Cd300c2	0.265584857	0.000215326	0.709	0.593
Ccl6	-0.638146279	0.000217453	0.772	0.883
Tmem256	-0.259323005	0.000255849	0.705	0.832
Serpinb6a	-0.313895502	0.00028179	0.681	0.804
Gmfg	-0.257308706	0.000324405	0.804	0.893
Xlr	-0.250515701	0.000447415	0.077	0.182
Cd69	0.277436576	0.000557059	0.102	0.023
Rpf1	0.259104159	0.000619865	0.26	0.145
Lpcat2	0.252576146	0.000679242	0.523	0.393
Pi16	-0.319615705	0.000728676	0.375	0.547
C4b	-0.372158757	0.000768452	0.368	0.5
Ccl8	-0.821591152	0.000800435	0.323	0.453
Igsf6	0.26184576	0.000980792	0.484	0.383
Anxa2	-0.27835436	0.001068155	0.684	0.743
Sod3	0.263970329	0.001078514	0.316	0.21
H2-Aa	0.519853719	0.001250177	0.554	0.439
Tgfbr1	0.300661088	0.001481815	0.386	0.271
Fcgr4	0.360474341	0.001595442	0.411	0.304
S100a6	-0.285174482	0.001626434	0.849	0.902
Nsa2	0.260436488	0.001902764	0.509	0.449
H2-Ab1	0.431596943	0.001958187	0.649	0.561
Actb	-0.313482748	0.001988336	0.996	1
Zfp36	0.264597507	0.002141865	0.891	0.855
Sgk1	0.439967947	0.002431366	0.425	0.341
Mpp1	-0.259811428	0.002524474	0.509	0.589
Wfdc17	-0.645606271	0.00252928	0.881	0.883
Pmp22	-0.260922983	0.003829081	0.635	0.734
Zmynd15	0.292398799	0.004098366	0.214	0.121
Cd9	0.283008433	0.004764828	0.582	0.486
H2-Eb1	0.477652984	0.00557242	0.505	0.421
AA467197	0.359055243	0.005581539	0.242	0.14
Glipr1	0.325030349	0.006283802	0.509	0.402
Gadd45b	0.340564586	0.008447609	0.442	0.369
Ccl12	-0.255224849	0.010698404	0.54	0.664
H2-DMa	0.259179246	0.011579529	0.66	0.607
Plac8	-0.26769656	0.013950563	0.06	0.121
Rcn3	-0.250987714	0.021168616	0.393	0.477
Clec4n	0.301439559	0.024884113	0.491	0.435
Socs3	0.344478064	0.025698788	0.765	0.743
Clec4d	0.278825536	0.029345348	0.267	0.206
Ccl3	0.253884552	0.030944622	0.642	0.589

Supplementary Table 3. Enriched functions in SWNT-SHP1i-treated lesional macrophages identified by Ingenuity Pathway Analysis. Note the lack of a predicted increase in signaling related to cell death or apoptosis of leukocytes, indicating that chronic blockade of the CD47-SIRPα axis does not induce maladaptive changes in the lesional macrophage.
Functional enrichment was assessed using two-sided Fisher's exact test (n = 4 biologically independent animals per group).

Categories	Diseases or Functions Annotation	P value	Predicted Activation	z-score	Molecules	# Molecules
Cellular Movement,Immune Cell Trafficking	Leukocyte migration	5.91E-22		-1.986	ACTB,ALOX5,ANX	48
Connective Tissue Disorders,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Inflammation of joint	2.22E-18		-1.061	ACTA2,ALOX5,C3,	45
Connective Tissue Disorders,Inflammatory Disease,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Rheumatic Disease	7.15E-18		-0.989	ACTA2,ALOX5,C3,	49
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cell movement of leukocytes	1.29E-17		-1.618	ACTB,ALOX5,ANX	39
Immunological Disease	Systemic autoimmune syndrome	1.33E-17		0	ACTA2,ALOX5,C3,	49
Cellular Movement	Cell movement	2.78E-16	Decreased	-3.113	ACTA2,ACTB,ALO	65
Hematological System Development and Function,Tissue Morphology	Quantity of blood cells	7.82E-16		0.254	ALOX5,C3,C4A/C4	42
Cellular Movement	Migration of cells	1.53E-15	Decreased	-2.898	ACTA2,ACTB,ALO	60
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Cell movement of phagocytes	1.64E-15		-1.462	ALOX5,ANXA2,C3,	31
Hematological System Development and Function,Tissue Morphology	Quantity of leukocytes	2.29E-15		-0.083	ALOX5,C3,C4A/C4	39
Connective Tissue Disorders,Immunological Disease,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Skeletal and	Rheumatoid arthritis	3.57E-15			ACTA2,ALOX5,C3,	35
Connective Tissue Disorders,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Non-traumatic arthropathy	6.44E-15			ACTA2,ALOX5,C3,	37
Cellular Movement	Cell movement of myeloid cells	8.94E-15		-1.143	ALOX5,ANXA2,C3,	30
Tissue Morphology	Quantity of cells	2.01E-14		-0.307	ALOX5,C3,C4A/C4	54
Cell-To-Cell Signaling and Interaction	Adhesion of blood cells	3.81E-14		-0.455	C3,C4A/C4B,CCL2,	24
Function	Binding of leukocytes	4.32E-14		-0.158	C3,CCL2,Ccl2,CCL3	24
Inflammatory Response,Organismal Injury and Abnormalities	Inflammation of organ	5.56E-14		0.179	ACTA2,ACTB,ALO	46
Hematological System Development and Function,Tissue Morphology	Quantity of myeloid cells	6.04E-14		-0.587	ALOX5,C3,C4A/C4	27
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Immune Cell Trafficking	Adhesion of immune cells	6.09E-14		-0.078	C3,CCL2,Ccl2,CCL3	23
Cell-To-Cell Signaling and Interaction	Binding of blood cells	7.53E-14		-0.532	C3,C4A/C4B,CCL2,	25
Cellular Function and Maintenance	Function of antigen presenting cells	8.23E-14			CCL2,Ccl2,CD36,C	19
Cell-To-Cell Signaling and Interaction,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Recruitment of leukocytes	1.12E-13		-1.597	ALOX5,C3,C4A/C4	22
Cell-To-Cell Signaling and Interaction,Cellular Movement	Recruitment of cells	1.28E-13		-1.808	ALOX5,C3,C4A/C4	23
Cellular Movement	Chemotaxis	1.89E-13		-0.321	ALOX5,ANXA2,C3,	28
Inflammatory Disease	Chronic inflammatory disorder	2.44E-13			ACTA2,ALOX5,C3,	40
Cellular Compromise,Inflammatory Response	Degranulation of cells	4.97E-13		0.275	ALOX5,ANXA2,C3,	28
Inflammatory Response	Inflammatory response	5.50E-13	Decreased	-2.277	ALOX5,ANXA2,C3,	33
Endocrine System Disorders,Gastrointestinal Disease,Metabolic Disease,Organismal Injury and Abnormalities	Diabetes mellitus	7.58E-13		0.692	ACTA2,ANXA2,C3,	39
Cellular Movement	Cellular infiltration	7.63E-13		-0.712	ACTB,C3,C4A/C4B	25
Hematological System Development and Function,Tissue Morphology	Quantity of granulocytes	9.97E-13		-0.121	ALOX5,C3,C4A/C4	21
Inflammatory Response	Inflammation of absolute anatomical regior	1.32E-12		-0.351	ACTA2,ACTB,ALO	38
Cellular Function and Maintenance	Function of blood cells	1.50E-12			C3,CCL2,Ccl2,CD3	26
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Cell movement of neutrophils	3.43E-12		-0.772	ALOX5,C3,C4A/C4	20
Cellular Function and Maintenance	Function of leukocytes	5.83E-12			C3,CCL2,Ccl2,CD3	24
Immunological Disease	Hypersensitive reaction	6.26E-12		0.954	ALOX5,C3,CCL2,Cc	23
Cellular Function and Maintenance	Function of phagocytes	6.66E-12			C3,CCL2,Ccl2,CD3	18
Inflammatory Response	Inflammation of body cavity	7.61E-12		-0.699	ACTA2,ACTB,ALO	33
Hematological System Development and Function,Inflammatory Response,Tissue Morphology	Quantity of phagocytes	8.78E-12		0.95	C3,C4A/C4B,CCL2,	23
Cell Death and Survival	Apoptosis	1.11E-11		-0.336	3830403N18Rik/X	62
Endocrine System Disorders,Gastrointestinal Disease,Immunological Disease,Metabolic Disease,Organismal Injury and Abnormalities	Insulin-dependent diabetes mellitus	1.49E-11			ACTA2,CCL2,Ccl2,	23
Cell Death and Survival	Necrosis	1.60E-11		0.987	3830403N18Rik/X	62
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cell movement of granulocytes	2.58E-11		-0.914	ALOX5,C3,C4A/C4	21
Dermatological Diseases and Conditions,Organismal Injury and Abnormalities	Psoriasis	4.13E-11			ACTA2,ANXA2,C3,	25
Cellular Movement,Immune Cell Trafficking	Cell movement of lymphatic system cells	4.90E-11		0.267	ACTB,ALOX5,C3,C	22

Cell-To-Cell Signaling and Interaction,Inflammatory Response	Immune response of leukocytes	4.90E-11		-1.018	BIN1,C3,CCL2,Ccl2	19
Metabolic Disease	Glucose metabolism disorder	7.85E-11		0.687	ACTA2,ANXA2,C3,	40
Cellular Function and Maintenance,Hematological System Development and Function	Function of macrophages	8.50E-11			CCL2,Ccl2,CD36,CI	14
Inflammatory Response	Immune response of cells	1.13E-10		-1.201	BIN1,C3,CCL2,Ccl2	25
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cellular infiltration by leukocytes	1.46E-10		-0.743	C3,C4A/C4B,CCL2,	21
Immunological Disease	Allergy	1.66E-10		-0.555	ACTB,ALOX5,C3,C	21
Cellular Compromise,Inflammatory Response	Degranulation of phagocytes	1.80E-10		-0.391	ALOX5,ANXA2,C3,	22
Neurological Disease	Progressive neurological disorder	1.97E-10			ACTB,ALOX5,ANX	26
Infectious Diseases	Viral Infection	2.22E-10		-0.897	ACTA2,ACTB,ALO	43
Cell-To-Cell Signaling and Interaction,Cellular Movement	Recruitment of myeloid cells	2.49E-10		-1.248	ALOX5,C3,CCL2,Cc	17
Hematological System Development and Function,Tissue Development	Accumulation of myeloid cells	2.73E-10		-1.192	ALOX5,C3,CCL2,Cc	14
Cardiovascular System Development and Function,Tissue Morphology	Permeability of blood vessel	3.65E-10		1.643	ACTA2,C3,C4A/C4	11
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Chemotaxis of leukocytes	4.39E-10		-0.965	ALOX5,C3,CCL2,Cc	19
Hematological System Development and Function,Tissue Morphology	Quantity of mononuclear leukocytes	4.80E-10		-0.568	C3,CCL2,Ccl2,Ccl7,	28
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cell movement of mononuclear leukocytes	5.20E-10		-0.367	ACTB,ALOX5,ANX	22
Cellular Movement	Chemotaxis of myeloid cells	5.24E-10		-0.665	ALOX5,C3,CCL2,Cc	17
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cell movement of lymphocytes	8.06E-10		0.338	ACTB,ALOX5,C3,C	20
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Cell movement of dendritic cells	8.08E-10		-0.788	C3,CCL2,Ccl2,CCL2	13
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Chemotaxis of phagocytes	8.74E-10		-0.938	ALOX5,C3,CCL2,Cc	17
Lymphoid Tissue Structure and Development,Tissue Morphology	Quantity of lymphatic system cells	1.14E-09		-0.229	C3,CCL2,Ccl2,CD3	28
Neurological Disease	Progressive motor neuropathy	1.18E-09			ACTB,ALOX5,ANX	23
Cancer,Organismal Injury and Abnormalities,Reproductive System Disease	Prostatic intraepithelial tumor	1.21E-09			ANXA2,C3,CD74,C	11
Hematological System Development and Function,Inflammatory Response,Tissue Morphology	Quantity of neutrophils	1.53E-09		1.175	C3,C4A/C4B,CCL2,	15
Tissue Development	Growth of epithelial tissue	2.22E-09		-0.705	C3,CCL2,Ccl2,CCL2	26
Cellular Function and Maintenance	Endocytosis by eukaryotic cells	2.47E-09		-0.45	AP2M1,BIN1,C3,C	17
Cellular Development,Cellular Growth and Proliferation	Proliferation of blood cells	2.59E-09		0.563	C3,CCL2,Ccl2,CCL2	29
Cellular Movement	Cellular infiltration by myeloid cells	3.06E-09		-0.838	C3,C4A/C4B,CCL2,	17
Cardiovascular Disease	Vascular lesion	3.08E-09			ACTA2,ALOX5,CCL	15
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Cellular infiltration by phagocytes	3.85E-09		-0.655	C3,C4A/C4B,CCL2,	16
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Chemotaxis of granulocytes	3.93E-09		-0.47	ALOX5,C3,CCL2,Cc	13
Cellular Function and Maintenance	Engulfment of cells	4.08E-09		-0.522	AP2M1,BIN1,C3,C	20
Cell-To-Cell Signaling and Interaction,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Recruitment of phagocytes	4.30E-09		-1.48	ALOX5,CCL2,Ccl2,	15
Hematological System Development and Function,Lymphoid Tissue Structure and Development,Tissue Morphology	Quantity of lymphocytes	4.31E-09		-0.512	C3,CCL2,Ccl2,CD3	26
Cellular Compromise,Inflammatory Response	Degranulation of neutrophils	4.49E-09			ALOX5,ANXA2,C3,	18
Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Respiratory Disease	Inflammation of lung	4.69E-09		-1.29	ACTB,C3,CCL2,Ccl	19
Cellular Function and Maintenance	Endocytosis	4.99E-09		-0.618	ACTB,AP2M1,BIN	22
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cell movement of antigen presenting cells	5.25E-09		-0.907	C3,CCL2,Ccl2,CCL2	18
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Chemotaxis of neutrophils	6.53E-09		-0.849	ALOX5,C3,CCL2,Cc	12
Inflammatory Response,Respiratory Disease	Inflammation of respiratory system	7.16E-09		-0.945	ACTB,C3,CCL2,Ccl	20
Cellular Movement,Immune Cell Trafficking	Migration of lymphatic system cells	7.35E-09		0.394	ACTB,ALOX5,C3,C	18
Cellular Movement	Cell movement of tumor cell lines	8.54E-09	Decreased	-3.011	ACTA2,ANXA2,AP	31
Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response,Tissue Development	Accumulation of leukocytes	9.91E-09		-0.743	ALOX5,C3,C4A/C4	15
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Migration of mononuclear leukocytes	1.02E-08		0.307	ACTB,ALOX5,ANX	18
Cell-mediated Immune Response,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	T cell migration	1.15E-08		0.592	ACTB,ALOX5,C3,C	15

Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Renal and Urological Disease	Nephritis	1.63E-08		0.163	ALOX5,C3,C4A/C4	17
Cardiovascular System Development and Function	Development of vasculature	1.73E-08		-0.071	ACTA2,ANXA2,C3,	32
Abnormalities	Celiac disease	1.86E-08			ALOX5,HLA-DQA1	6
Inflammatory Response,Neurological Disease	Inflammation of central nervous system	1.86E-08		0.45	ALOX5,C3,C4A/C4	18
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Lymphocyte migration	2.14E-08		0.657	ACTB,ALOX5,C3,C	17
Infectious Diseases	Infection of mammalia	2.44E-08		-0.206	C3,C4A/C4B,Ccl2,	16
Cancer,Organismal Injury and Abnormalities	Advanced malignant tumor	2.52E-08		0.522	ACTA2,ACTB,ALO	31
Cardiovascular Disease,Organismal Injury and Abnormalities	Arteriosclerosis	2.63E-08		-0.784	ACTA2,ALOX5,CCL	20
Organismal Injury and Abnormalities,Respiratory Disease	Damage of lung	2.66E-08		-1.268	ANXA2,C3,CCL2,C	13
Humoral Immune Response,Protein Synthesis	Quantity of immunoglobulin	2.67E-08		0.195	C4A/C4B,Ccl2,CD3	15
Dermatological Diseases and Conditions,Immunological Disease,Inflammatory Disease,Organismal Injury and Abnormalities	Lichen planus	2.75E-08			CCL2,CD74,EEF1A	9
Cell-To-Cell Signaling and Interaction,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Recruitment of granulocytes	2.91E-08		0	ALOX5,C3,CCL2,C	13
Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Renal and Urological Disease	Glomerulonephritis	3.29E-08		0.081	ALOX5,C3,C4A/C4	15
Inflammatory Disease,Inflammatory Response,Neurological Disease,Organismal Injury and Abnormalities	Encephalitis	3.32E-08		0.696	ALOX5,C3,C4A/C4	17
Cellular Growth and Proliferation,Lymphoid Tissue Structure and Development	Proliferation of lymphatic system cells	3.50E-08		0.671	C3,CCL2,Ccl2,CD3	26
Cellular Development,Cellular Growth and Proliferation,Hematological System Development and Function,Lymphoid Tissue Structure and Development	Cell proliferation of T lymphocytes	3.68E-08		0.415	C3,CCL2,Ccl2,CD3	22
Tissue Development	Accumulation of cells	3.80E-08		-1.009	ALOX5,C3,C4A/C4	16
Cancer,Hematological Disease,Immunological Disease,Organismal Injury and Abnormalities	Plasma cell neoplasm	4.49E-08			Ccl2,CCL24,Ccl6,C	9
Cardiovascular System Development and Function,Cellular Development,Cellular Function and Maintenance,Cellular Growth and Proliferation,Organismal Development,Tissue Development	Endothelial cell development	4.67E-08		0.084	ANXA2,C3,CCL2,C	17
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cellular infiltration by granulocytes	5.92E-08		-0.586	C3,C4A/C4B,Ccl2,	13
Cell-To-Cell Signaling and Interaction,Cellular Function and Maintenance,Inflammatory Response	Phagocytosis of phagocytes	5.95E-08		-0.019	BIN1,C3,CD36,CFH	11
Cell-To-Cell Signaling and Interaction,Cellular Function and Maintenance,Hematological System Development and Function	Phagocytosis of myeloid cells	6.28E-08		-0.198	BIN1,C3,CD36,CFH	11
Endocrine System Disorders,Gastrointestinal Disease,Metabolic Disease,Organismal Injury and Abnormalities	Experimentally-induced diabetes	7.13E-08			ANXA2,C3,CD74,F	9
Cell-To-Cell Signaling and Interaction	Response of myeloid cells	7.22E-08		-0.855	BIN1,C3,CCL2,CD3	13
Cell-To-Cell Signaling and Interaction,Inflammatory Response	Response of phagocytes	8.45E-08		-0.736	BIN1,C3,CCL2,CD3	13
Cellular Development,Cellular Growth and Proliferation,Hematological System Development and Function,Lymphoid Tissue Structure and Development	Proliferation of lymphocytes	1.03E-07		0.602	C3,CCL2,Ccl2,CD3	24
Cardiovascular Disease,Organismal Injury and Abnormalities	Atherosclerosis	1.12E-07		-0.784	ACTA2,ALOX5,CCL	19
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Migration of phagocytes	1.25E-07		-1.069	ANXA2,C3,CCL2,C	14
Cell-mediated Immune Response,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cell movement of T lymphocytes	1.34E-07		1.063	C3,CCL2,Ccl2,CCL2	13
Gastrointestinal Disease,Immunological Disease,Ophthalmic Disease,Organismal Injury and Abnormalities	Sjögren syndrome	1.36E-07			ACTB,C3,Ccl2,CCL	9
Cancer,Organismal Injury and Abnormalities	Secondary tumor	1.46E-07		0.522	ACTA2,ACTB,ALO	28
Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response,Tissue Development	Accumulation of granulocytes	1.56E-07		-0.651	ALOX5,CCL2,Ccl2,	9
Cellular Function and Maintenance,Inflammatory Response	Phagocytosis	1.78E-07		-0.272	BIN1,C3,Ccl2,CD3	15
Cell-To-Cell Signaling and Interaction	Binding of myeloid cells	1.89E-07		-0.767	C3,CCL2,CD69,CFH	12
Cellular Compromise,Inflammatory Response	Degranulation of blood platelets	1.91E-07			CD36,CD9,CLU,F1	9
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Migration of antigen presenting cells	1.95E-07		-0.954	C3,CCL2,Ccl2,CCL3	11
Connective Tissue Disorders,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Polyarthritis	2.14E-07		-0.514	CD69,CD74,F13A1	11
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Migration of dendritic cells	2.17E-07		-0.402	C3,CCL2,CCL3L3,C	9
Cell-To-Cell Signaling and Interaction,Inflammatory Response	Immune response of phagocytes	2.31E-07		-0.497	BIN1,C3,CCL2,CD3	12

Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Infiltration by neutrophils	2.35E-07		-0.182	C3,C4A/C4B,CD36	11
Cell-To-Cell Signaling and Interaction	Activation of cells	2.37E-07		-0.867	ANXA2,C3,C4A/C4	28
Cardiovascular System Development and Function,Cellular Development,Cellular Function and Maintenance,Cellular Growth and Proliferation,Organismal Development,Tissue Development	Proliferation of endothelial cells	2.38E-07		-0.266	C3,CCL2,Ccl2,CCL2	15
Cardiovascular Disease,Organismal Injury and Abnormalities	Vaso-occlusion	2.43E-07		-0.784	ACTA2,ALOX5,CCL	20
Cell-To-Cell Signaling and Interaction,Cellular Function and Maintenance,Inflammatory Response	Phagocytosis of cells	2.47E-07		-0.071	BIN1,C3,CD36,CFH	14
Metabolic Disease	Amyloidosis	2.63E-07			ACTA2,ACTB,BIN1	21
Inflammatory Disease,Respiratory Disease	Airway hyperresponsiveness	2.99E-07		-0.216	ALOX5,C3,CCL2,Cc	9
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function	Activation of myeloid cells	2.99E-07		-1.025	ANXA2,C3,C4A/C4	15
Cell Death and Survival	Cell survival	3.30E-07		0.809	ATP5MD,C3,CCL2,	36
Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response,Tissue Development	Accumulation of phagocytes	3.41E-07		-1.229	C3,CCL2,Ccl2,FCG	10
Infectious Diseases	Sepsis	3.50E-07		-0.447	C3,C4A/C4B,CCL3	11
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Activation of leukocytes	3.59E-07		-0.257	ANXA2,C3,C4A/C4	22
Organismal Injury and Abnormalities	Fibrosis	3.68E-07	Decreased	-3.047	ALOX5,C3,CCL2,Cc	20
Immunological Disease,Inflammatory Response	Abnormal function of immune system	3.86E-07			ALOX5,C3,C4A/C4	8
Hematological Disease,Immunological Disease,Inflammatory Disease	Eosinophilic inflammation	4.56E-07			ACTB,CCL24,CCL3	9
Cardiovascular System Development and Function,Organismal Development	Vasculogenesis	4.66E-07		-0.409	ANXA2,C3,CCL2,C	24
Metabolic Disease,Neurological Disease,Organismal Injury and Abnormalities,Psychological Disorders	Alzheimer disease	4.72E-07			ACTA2,ACTB,BIN1	20
Organismal Injury and Abnormalities	Blood clot	4.77E-07		-0.038	ANXA2,C3,CD36,C	12
Inflammatory Disease,Respiratory Disease	Asthma	5.52E-07			ACTA2,ALOX5,C3,	12
Hereditary Disorder,Neurological Disease,Organismal Injury and Abnormalities,Psychological Disorders	Unverricht-Lundborg syndrome	5.58E-07			C3,C4A/C4B,CSTB	4
Cardiovascular System Development and Function,Organismal Development	Angiogenesis	5.64E-07		-0.071	ANXA2,C3,CCL2,C	27
Function	Activation of blood cells	5.64E-07		-0.405	ANXA2,C3,C4A/C4	23
Dermatological Diseases and Conditions,Organismal Injury and Abnormalities	Chronic skin disorder	6.75E-07			C3,C4A/C4B,CCL2,	10
Hematological System Development and Function,Lymphoid Tissue Structure and Development,Tissue Morphology	Quantity of T lymphocytes	7.37E-07		-0.684	Ccl2,CD69,CD74,C	19
Cellular Development,Cellular Growth and Proliferation,Hematological System Development and Function,Hematopoiesis,Lymphoid Tissue Structure and Development,Tissue Development	Leukopoiesis	7.60E-07		0.223	ALOX5,C3,CCL2,CD	24
Cellular Development,Cellular Growth and Proliferation,Connective Tissue Development and Function,Skeletal and Muscular System Development and Function,Tissue Development	Formation of osteoclasts	7.60E-07		-0.83	ALOX5,ANXA2,CCL	9
Cell Death and Survival,Organismal Injury and Abnormalities	Necrosis of epithelial tissue	7.64E-07		-1.032	CD36,CD74,CLU,C	20
Cellular Function and Maintenance	Internalization of cells	8.13E-07		-0.647	BIN1,C3,CD36,CFH	12
Interaction	Interaction of endothelial cells	8.32E-07		0.557	ANXA2,C3,CCL2,CL	11
Hematological System Development and Function,Hypersensitivity Response,Immune Cell Trafficking,Inflammatory Response,Tissue Development	Accumulation of mast cells	8.32E-07			C3,CCL2,FGFR1,LT	4
Cardiovascular System Development and Function	Vascularization	8.42E-07		-0.432	ANXA2,C3,Ccl2,FC	12
Organismal Survival	Morbidity or mortality	8.66E-07		1.338	ACTA2,ACTB,ALOX	49
Cell Death and Survival,Cellular Function and Maintenance	Clearance of cells	8.99E-07		-0.587	ANXA2,CCL2,Ccl2,	8
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Activation of phagocytes	9.13E-07		-1.131	ANXA2,C3,C4A/C4	15
Cardiovascular Disease,Organismal Injury and Abnormalities	Atherogenesis	9.39E-07			ALOX5,CCL2,Ccl2,(	7
Development	Chemotaxis of lymphatic system cells	9.44E-07		-1.159	CCL2,Ccl2,CCL24,C	9
Cancer,Cell Death and Survival,Organismal Injury and Abnormalities	Cell death of tumor	1.09E-06		-0.324	ANXA2,CD74,CLU,	17
Cardiovascular System Development and Function	Neovascularization	1.11E-06		-0.126	ANXA2,C3,Ccl2,FC	10
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Cell movement of macrophages	1.16E-06		0.009	C3,CCL2,Ccl2,CCL3	13
Cell-To-Cell Signaling and Interaction,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Recruitment of inflammatory leukocytes	1.16E-06		0.447	C3,C4A/C4B,Ccl2,(	5
Cardiovascular Disease,Organismal Injury and Abnormalities	Atherosclerotic lesion	1.21E-06			ALOX5,CCL2,Ccl2,(	10
Cancer,Organismal Injury and Abnormalities	Advanced extracranial solid tumor	1.24E-06		1.091	ACTA2,ALOX5,AN	20
Cellular Function and Maintenance	Uptake of cells	1.25E-06		-0.2	C3,CD163,CD36,CF	6

Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Immune Cell Trafficking	Binding of granulocytes	1.29E-06		-0.376	C3,CFH,CFP,FCGR	9
Hematological Disease,Immunological Disease	Abnormal function of neutrophils	1.31E-06			ALOX5,Ccl2,CLEC6	7
Organismal Injury and Abnormalities,Renal and Urological Disease	Proteinuria	1.38E-06		0.398	C3,CCL2,Ccl2,CFH,	10
Hematological System Development and Function,Tissue Morphology	Quantity of antigen presenting cells	1.38E-06		0.272	C4A/C4B,CCL2,Ccl	13
Neurological Disease,Skeletal and Muscular Disorders	Neuromuscular disease	1.47E-06			ACTB,ALOX5,ANX	25
Cellular Movement	Transmigration of cells	1.50E-06		0.974	ACTA2,CCL2,Ccl2,(	10
Cell Morphology	Morphology of leukocytes	1.50E-06			C3,CCL2,Ccl2,Ccl7,	14
Hematological Disease,Immunological Disease	Eosinophilia	1.56E-06		-0.229	ACTB,ALOX5,CCL2	10
Gastrointestinal Disease,Organismal Injury and Abnormalities	Benign oral disorder	1.59E-06			ACTB,C3,C4A/C4B	16
Cancer,Organismal Injury and Abnormalities	Metastatic solid tumor	1.64E-06		1.153	ACTA2,ALOX5,AN	21
Inflammatory Response	Function of immune system	1.66E-06			ALOX5,C3,C4A/C4	9
Cardiovascular Disease,Organismal Injury and Abnormalities	Formation of vascular lesion	1.69E-06			ALOX5,CCL2,Ccl2,(	8
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Chemotaxis of macrophages	1.80E-06		-0.98	CCL2,Ccl2,CCL3L3,	8
Cell Death and Survival	Cell death of blood cells	1.83E-06		1.468	C3,CCL2,Ccl2,CCL3	21
Humoral Immune Response,Protein Synthesis	Quantity of IgG	1.89E-06		0.497	Ccl2,CD36,CD69,C	11
Cardiovascular System Development and Function,Cellular Movement	Cell movement of endothelial cells	1.89E-06		-0.04	ANXA2,CCL2,CCL2	15
Cell-To-Cell Signaling and Interaction,Cellular Function and Maintenance,Hematological System Development and Function,Inflammatory	Phagocytosis of neutrophils	1.94E-06		0.343	C3,CD36,CFH,CLEC	6
Cellular Movement	Mobilization of cells	1.94E-06		-1.342	ALOX5,CCL2,Ccl2,(	7
Cellular Movement,Organismal Injury and Abnormalities,Respiratory Disease	Cellular infiltration of lung	1.94E-06			ACTB,CCL3L3,ENC	7
Cell-To-Cell Signaling and Interaction	Binding of lymphatic system cells	2.00E-06		0.091	ANXA2,CCL2,CD69	10
Infectious Diseases	Parasitic Infection	2.00E-06		-0.128	C3,C4A/C4B,Ccl2,(	10
Embryonic Development,Hematological System Development and Function,Lymphoid Tissue Structure and Development,Organ Development,Organismal Development,Tissue Development	Formation of lymphoid tissue	2.10E-06		0.727	C3,C4A/C4B,CD74	14
Organismal Injury and Abnormalities	Bleeding	2.20E-06		-0.027	ALOX5,ANXA2,C3,	16
Cardiovascular Disease,Organismal Injury and Abnormalities	Intermediate disease stage peripheral arter	2.22E-06			ALOX5,CD163,CFH	9
Cellular Function and Maintenance	Cellular homeostasis	2.28E-06		1.696	ANXA2,C3,C4A/C4	36
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Chemotaxis of mononuclear leukocytes	2.55E-06	Decreased	-2.003	CCL2,Ccl2,CCL24,C	10
Cell-To-Cell Signaling and Interaction,Cellular Growth and Proliferation,Hematological System Development and Function	Stimulation of leukocytes	2.55E-06		-1.001	C3,CCL2,CCL24,CD	10
Cellular Movement,Hematological System Development and Function	Mobilization of myeloid cells	2.66E-06		-1.432	ALOX5,CCL2,Ccl2,(	5
Cell Signaling,Molecular Transport,Vitamin and Mineral Metabolism	Quantity of Ca2+	2.67E-06		-1.25	ANXA2,C3,CCL2,C	15
Immunological Disease	Abnormal morphology of immune system	2.85E-06			C3,Ccl2,Ccl7,CD36	13
Organismal Injury and Abnormalities	Wound	2.96E-06		0.339	ACTA2,ANXA2,C3,	11
Cancer,Organismal Injury and Abnormalities	Lymphatic system tumor	3.26E-06			ACTB,ALOX5,ANX	39
Cardiovascular System Development and Function,Cellular Movement	Migration of endothelial cells	3.35E-06		-0.093	ANXA2,CCL2,CD36	14
Cell Cycle	Cell cycle progression	3.38E-06	Decreased	-2.233	ACTB,CLU,CSTB,D	27
Morphology	Cell death of tumor cells	3.48E-06		-0.324	ANXA2,CD74,CLU,	16
Free Radical Scavenging	Metabolism of reactive oxygen species	3.48E-06		-1.553	ACTB,ALOX5,ANX	17
Cell-To-Cell Signaling and Interaction	Binding of tumor cell lines	3.57E-06	Decreased	-2.403	ANXA2,CCL2,Ccl2,	15
Cancer,Organismal Injury and Abnormalities	Advanced malignant solid tumor	3.61E-06		1.153	ACTA2,ALOX5,AN	22
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Chemotaxis of peritoneal macrophages	3.90E-06		-0.566	CCL2,Ccl2,CCL3L3,	4
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Activation of antigen presenting cells	3.91E-06		-1.806	ANXA2,C3,CCL2,C	13
Immunological Disease,Inflammatory Disease	Atopic disease	3.93E-06			C3,CD74,EEF1A1,E	12
Connective Tissue Disorders,Dermatological Diseases and Conditions,Inflammatory Disease,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Scleroderma	3.96E-06			ACTA2,C3,C4A/C4	8
Connective Tissue Development and Function,Tissue Development	Growth of connective tissue	4.00E-06		-1.147	ACTB,ALOX5,ANX	20
Neurological Disease	Demyelination	4.17E-06		1.528	ALOX5,C3,CCL2,C	8
Connective Tissue Disorders,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Experimentally-induced arthritis	4.19E-06		-0.025	C3,CCL3L3,CD69,F	9
Cardiovascular Disease,Organismal Injury and Abnormalities	Peripheral vascular disease	4.34E-06			ACTA2,ALOX5,CD1	16
Cancer,Hematological Disease,Immunological Disease,Organismal Injury and Abnormalities	Neoplasia of leukocytes	4.38E-06			ALOX5,ANXA2,C3,	38
Organismal Injury and Abnormalities,Respiratory Disease	Lung injury	4.51E-06		-0.97	ANXA2,C3,CCL2,C	10
Cell-To-Cell Signaling and Interaction	Response of mononuclear leukocytes	4.67E-06		-1.729	CCL2,Ccl2,CD69,H	11

Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Chemotaxis of antigen presenting cells	4.76E-06		-1.354	CCL2,Ccl2,CCL24,C	9
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cellular infiltration by mononuclear leukocyt	4.85E-06		0.554	C3,CCL2,Ccl2,CCL3	10
Interaction	Binding of endothelial cells	4.85E-06		0.886	ANXA2,C3,CCL2,C	10
Cardiovascular System Development and Function	Morphology of cardiovascular system	4.87E-06			ACTA2,BIN1,CCL2	24
Immunological Disease	Delayed hypersensitive reaction	4.88E-06		0.816	CCL2,Ccl2,CD74,CI	8
Cell-To-Cell Signaling and Interaction,Inflammatory Response	Immune response of antigen presenting cel	5.02E-06		0.132	BIN1,C3,CD36,CD	10
Cell-To-Cell Signaling and Interaction,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Recruitment of antigen presenting cells	5.14E-06		-1.98	CCL2,Ccl2,CCL3L3,	8
Cellular Function and Maintenance	Uptake of leukocytes	5.39E-06			C3,CD36,GAS6	3
Immunological Disease	Immediate hypersensitivity	5.58E-06			ALOX5,C3,CD74,E	13
Cell Death and Survival	Apoptosis of tumor cell lines	5.63E-06		-0.93	3830403N18Rik/X	30
Cell-To-Cell Signaling and Interaction	Binding of leukemia cell lines	5.68E-06		-1.854	ANXA2,CCL2,CD36	8
Immunological Disease,Inflammatory Disease,Inflammatory Response,Neurological Disease,Organismal Injury and Abnormalities	Experimental autoimmune encephalomyelit	5.72E-06		0.405	C3,Ccl2,CD74,CLE	13
Cardiovascular Disease,Hereditary Disorder,Organismal Injury and Abnormalities	Familial vascular disease	5.82E-06			ACTA2,C3,CCL2,CI	11
Disease,Inflammatory Response,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Polyarticular juvenile rheumatoid arthritis	5.87E-06			CD69,CD74,GADD	7
Cancer,Organismal Injury and Abnormalities,Respiratory Disease	Pulmonary metastasis	5.88E-06		1.091	ALOX5,ANXA2,CC	9
Cancer,Organismal Injury and Abnormalities	Visceral metastasis	6.20E-06		1.153	ACTA2,ALOX5,AN	15
Immunological Disease,Inflammatory Disease,Ophthalmic Disease,Organismal Injury and Abnormalities	Experimental autoimmune uveoretinitis	6.29E-06		0.277	ALOX5,CLEC6A,IFI	4
Hematological Disease	Abnormal function of hematopoietic system	6.29E-06			ANXA2,GAS6,IFN	4
Cellular Movement	Migration of tumor cell lines	6.34E-06	Decreased	-2.331	ACTA2,ANXA2,AP	23
Cell Death and Survival	Cell viability	6.41E-06		0.411	ATP5MD,C3,CCL2,	32
Connective Tissue Disorders,Immunological Disease,Inflammatory Disease,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Lupus erythematosus	6.48E-06			ALOX5,C3,C4A/C4	13
Neurological Disease,Organismal Injury and Abnormalities	Progressive encephalopathy	6.64E-06			ANXA2,C3,C4A/C4	13
Organismal Development	Growth of vessel	6.65E-06		-1.091	CCL2,Ccl2,EDNRB,	9
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function	Binding of lymphocytes	6.92E-06		0.486	CCL2,CD69,CLEC1(	9
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response,Lymphoid Tissue Structure and Development	Chemotaxis of lymphocytes	6.93E-06		-1.474	CCL2,Ccl2,CCL24,C	8
Infectious Diseases	Infection by Influenza A virus	7.79E-06			C3,C4A/C4B,CCL2,	5
Cardiovascular Disease,Immunological Disease,Inflammatory Disease,Organismal Injury and Abnormalities	Experimental autoimmune myocarditis	7.82E-06			CCL2,Ccl2,CCL3L3,	4
Infectious Diseases	Infection by Herpesviridae	7.99E-06		-0.218	C3,C4A/C4B,CCL2,	7
Organ Morphology,Organismal Injury and Abnormalities,Renal and Urological Disease,Renal and Urological System Development and Function	Abnormal morphology of renal glomerulus	8.49E-06			C4A/C4B,CFH,CLU	7
Cell-To-Cell Signaling and Interaction,Inflammatory Response	Immune response of T lymphocytes	8.80E-06		-0.776	Ccl2,CD69,HLA-DC	8
Organismal Survival	Organismal death	8.83E-06		1.347	ACTA2,ACTB,ALO	46
Protein Synthesis	Quantity of cytokine	8.86E-06		1.372	ALOX5,C3,Ccl2,CD	11
Cellular Movement,Hematological System Development and Function	Mobilization of blood cells	9.03E-06		-0.97	ALOX5,CCL2,Ccl2,(	6
Free Radical Scavenging	Synthesis of reactive oxygen species	9.15E-06		-1.369	ACTB,ALOX5,ANX	16
Cell-mediated Immune Response,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response,Lymphoid Tissue Structure and Development	Chemotaxis of T lymphocytes	9.54E-06		-1.22	CCL2,Ccl2,CCL24,C	7
Infectious Diseases	Staphylococcal infection	9.61E-06			C3,C4A/C4B,CD36	4
Organismal Injury and Abnormalities,Respiratory Disease	Infectious lung disease	9.61E-06			C3,C4A/C4B,CCL2,	4
Hematological System Development and Function,Inflammatory Response,Tissue Morphology	Quantity of macrophages	9.67E-06		-0.953	C4A/C4B,CCL2,Ccl	10
Cell-To-Cell Signaling and Interaction	Binding of muscle cells	9.84E-06			ACTA2,PDIA3,PF4	5
Cell-To-Cell Signaling and Interaction,Cellular Function and Maintenance,Hematological System Development and Function,Inflammatory	Phagocytosis by macrophages	1.01E-05		0.33	BIN1,C3,CD36,CLE	8
Cellular Development,Cellular Growth and Proliferation	Cell proliferation of tumor cell lines	1.04E-05		-1.52	ACTB,ANXA2,ATP	36
Connective Tissue Development and Function,Tissue Morphology	Quantity of connective tissue cells	1.05E-05		-1.066	C3,CCL2,Ccl2,CD9,	11
Molecular Transport	Quantity of metal	1.08E-05		-1.409	ANXA2,C3,CCL2,C	16
Cellular Function and Maintenance	Function of mononuclear leukocytes	1.10E-05			CCL2,Ccl2,CD69,CI	12
Cancer,Hematological Disease,Organismal Injury and Abnormalities	Lymphocytic neoplasm	1.11E-05			ALOX5,ANXA2,C3,	37

Cellular Development,Cellular Growth and Proliferation,Hematological System Development and Function,Hematopoiesis,Lymphoid Tissue Structure and Development,Tissue Development	Hematopoiesis of mononuclear leukocytes	1.11E-05		1.013	C3,CCL2,CD36,CD6	20
Hematological Disease,Immunological Disease	Lymphoproliferative disorder	1.18E-05			ALOX5,ANXA2,C3,	37
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cell movement of natural killer cells	1.23E-05		-1.71	CCL2,Ccl2,CCL3L3,	6
Connective Tissue Development and Function,Tissue Morphology	Quantity of connective tissue	1.27E-05		-1.056	C3,CCL2,Ccl2,CD36	18
Cancer,Hematological Disease,Immunological Disease,Organismal Injury and Abnormalities	Lymphocytic cancer	1.29E-05			ALOX5,ANXA2,C3,	36
Cell-To-Cell Signaling and Interaction	Response of lymphatic system cells	1.29E-05		-1.067	CCL2,Ccl2,CD9,HLA	10
Inflammatory Disease,Organismal Injury and Abnormalities,Respiratory Disease	Fibrosis of lung	1.34E-05	Decreased	-2.219	ALOX5,C3,CCL24,C	10
Cardiovascular Disease,Hematological Disease,Organismal Injury and Abnormalities	Thrombus	1.34E-05			ANXA2,C3,CD36,C	10
Cardiovascular Disease,Inflammatory Disease,Organismal Injury and Abnormalities	Myocarditis	1.37E-05		-1.067	CCL2,Ccl2,CCL3L3,	5
Infectious Diseases,Neurological Disease,Organismal Injury and Abnormalities,Psychological Disorders	Prion disease	1.41E-05			C3,CLU,MFGE8,PD	4
Cellular Growth and Proliferation	Colony formation	1.42E-05		-0.765	BIN1,CCL2,CCL24,	18
Cancer,Hematological Disease,Organismal Injury and Abnormalities	Lymphoid cancer	1.44E-05			ALOX5,ANXA2,C3,	37
Cellular Growth and Proliferation,Connective Tissue Development and Function,Tissue Development	Proliferation of connective tissue cells	1.44E-05		-1.069	ACTB,ALOX5,ANX	18
Cell-To-Cell Signaling and Interaction,Cellular Assembly and Organization,Cellular Function and Maintenance,Inflammatory Response	Phagocytosis of photoreceptor outer segme	1.50E-05			GAS6,MFGE8,PRC	3
Cancer,Organismal Injury and Abnormalities	Growth of tumor	1.51E-05		-1.253	ALOX5,ANXA2,CCI	23
Disease	Albuminuria	1.52E-05			CCL2,CFH,EDNRB,	6
Cellular Development,Cellular Growth and Proliferation,Respiratory System Development and Function	Proliferation of lung cell lines	1.52E-05		-0.808	ALOX5,CCL24,CD9	6
Cardiovascular Disease,Organismal Injury and Abnormalities	Peripheral arterial disease	1.56E-05			ALOX5,CD163,CD3	10
Cardiovascular Disease,Connective Tissue Disorders,Dermatological Diseases and Conditions,Immunological Disease,Inflammatory Disease,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Systemic sclerosis	1.58E-05			ACTA2,C3,C4A/C4	7
Cell Death and Survival,Organismal Injury and Abnormalities	Apoptosis of vascular endothelial cells	1.66E-05		-0.765	CD36,CYCS,GAS6,	7
Neurological Disease	Demyelination of central nervous system	1.68E-05		1.342	C3,CCL2,CCL3L3,G	5
Lipid Metabolism,Small Molecule Biochemistry	Synthesis of eicosanoid	1.71E-05		-0.971	ALOX5,Ccl2,CCL3L	10
Cell-To-Cell Signaling and Interaction,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Recruitment of macrophages	1.75E-05	Decreased	-2.366	CCL2,Ccl2,CD36,CI	7
Gastrointestinal Disease,Organismal Injury and Abnormalities	Abnormality of large intestine	1.80E-05		-0.127	ALOX5,C3,CCL2,Cc	14
Cellular Function and Maintenance	Function of lymphatic system cells	1.84E-05			Ccl2,CD69,CD74,G	12
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Activation of granulocytes	1.85E-05		-0.842	C3,CCL2,CFH,FCGF	7
Dermatological Diseases and Conditions,Gastrointestinal Disease,Immunological Disease,Organismal Injury and Abnormalities	Stevens-Johnson syndrome	1.99E-05			C3,C4A/C4B,CLU,F	4
Cell-To-Cell Signaling and Interaction,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Recruitment of neutrophils	2.04E-05		0	ALOX5,CCL2,Ccl2,(	9
Connective Tissue Disorders,Dermatological Diseases and Conditions,Hematological Disease,Immunological Disease,Organismal Injury and Abnormalities	Acute immune thrombocytopenic purpura	2.23E-05			C3,C4A/C4B,FCGR	3
Connective Tissue Disorders,Dermatological Diseases and Conditions,Hematological Disease,Immunological Disease,Organismal Injury and Abnormalities	Chronic immune thrombocytopenic purpura	2.23E-05			C3,C4A/C4B,FCGR	3
Organismal Injury and Abnormalities,Respiratory Disease	Recurrent sinopulmonary infection	2.23E-05			C3,C4A/C4B,FCGR	3
Developmental Disorder,Hematological Disease,Hereditary Disorder,Immunological Disease,Metabolic Disease,Organismal Injury and Abnormalities	Congenital agammaglobulinemia	2.23E-05			C3,C4A/C4B,FCGR	3
Cancer,Hematological Disease,Immunological Disease,Organismal Injury and Abnormalities	Plasma cell dyscrasia	2.25E-05			ANXA2,CCL2,Ccl2,	15
Cell-mediated Immune Response,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	NK cell migration	2.26E-05		-1.342	CCL2,Ccl2,CCL3L3,	5
Cellular Movement	Migration of myeloid cells	2.26E-05		0.067	C3,CCL2,Ccl2,CCL2	9
Organismal Injury and Abnormalities,Renal and Urological Disease	Glomerulosclerosis	2.29E-05		-0.475	C3,CCL2,CLU,GAS(	8
Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response,Tissue Development	Accumulation of neutrophils	2.30E-05		-0.152	CCL2,Ccl2,FCGR3A	6
Function	Aggregation of blood cells	2.31E-05		-1.177	C3,CD36,CD9,CFH,	10
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Migration of granulocytes	2.49E-05		0.026	C3,CCL2,Ccl2,CCL2	8
Cell Death and Survival,Organismal Injury and Abnormalities	Apoptosis of endothelial cells	2.50E-05		-0.684	CD36,CD74,CYCS,(	9

Cellular Movement	Invasion of cells	2.53E-05		-1.709	ACTA2,ALOX5,AN	24
Cellular Function and Maintenance	Homeostasis of mononuclear leukocytes	2.58E-05	Increased	2.107	Ccl2,CD69,CD74,C	17
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Inflammatory Response	Aggregation of blood platelets	2.59E-05		-1.667	C3,CD36,CD9,CFH,	9
Development	Differentiation of connective tissue cells	2.66E-05		0.453	ALOX5,C3,CCL2,CC	18
Cell-To-Cell Signaling and Interaction,Cellular Growth and Proliferation,Hematological System Development and Function	Stimulation of mononuclear leukocytes	2.69E-05		-0.483	C3,CCL2,CD69,CD7	8
Hematological System Development and Function,Lymphoid Tissue Structure and Development,Tissue Morphology	Quantity of helper T lymphocytes	2.76E-05	Decreased	-2.211	CD69,IFNGR1,LGA	7
Gastrointestinal Disease,Inflammatory Response	Inflammation of gastrointestinal tract	2.78E-05		-0.236	ALOX5,C3,CCL2,Cc	15
Cancer,Hematological Disease,Immunological Disease,Organismal Injury and Abnormalities	B cell cancer	2.79E-05			ALOX5,ANXA2,CCl	25
Cardiovascular Disease,Organismal Injury and Abnormalities	Infarction	2.84E-05			ACTA2,C3,C4A/C4	13
Cellular Movement	Cell movement of connective tissue cells	2.99E-05		-1.383	ACTB,CCL2,Ccl2,F	10
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Immune Cell Trafficking	Adhesion of granulocytes	3.04E-05		-0.378	C3,CFH,GAS6,LGA	7
Hematological System Development and Function	Hemostasis	3.06E-05		-1.4	ANXA2,C3,C4A/C4	12
Gastrointestinal Disease,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities	Inflammation of large intestine	3.08E-05		-0.236	ALOX5,C3,CCL2,Cc	13
Dermatological Diseases and Conditions,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities	Dermatitis	3.14E-05		0.555	C3,CD74,EEF1A1,I	14
Infectious Diseases	Sexually transmitted disease	3.14E-05			ACTA2,ALOX5,C3,	8
Cardiovascular Disease,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Myocardial infarction	3.16E-05			ACTA2,C3,C4A/C4	10
Infectious Diseases,Inflammatory Disease,Neurological Disease	Postpoliomyelitis syndrome	3.17E-05			C3,C4A/C4B,FCGR	3
Immunological Disease,Inflammatory Disease,Neurological Disease	Guillain-Barré syndrome	3.17E-05			C3,C4A/C4B,FCGR	3
Hematological System Development and Function,Lymphoid Tissue Structure and Development,Tissue Morphology	Quantity of CD8+ T lymphocyte	3.27E-05		-1.111	CD74,CLEC10A,HL	8
Cardiovascular System Development and Function	Neovascularization of organ	3.34E-05		0.391	C3,Ccl2,FGFR1,LG	7
Hematological System Development and Function,Organismal Functions	Coagulation of blood	3.38E-05		-1.715	ANXA2,C3,C4A/C4	11
Cellular Function and Maintenance	Ion homeostasis of cells	3.39E-05		0.835	ANXA2,C3,C4A/C4	17
Cell Death and Survival	Cell death of immune cells	3.60E-05		0.765	C3,CCL2,Ccl2,CD6	18
Organismal Survival	Survival of organism	3.66E-05		0.889	C3,CCL2,Ccl2,CCL3	20
Cellular Movement	Cell movement of hepatic stellate cells	3.66E-05		-0.9	CCL2,Ccl2,LGALS1	4
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Inflammatory Response	Binding of professional phagocytic cells	3.70E-05		-0.059	C3,CCL2,CD69,CFH	9
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Activation of neutrophils	3.79E-05		-0.598	C3,CCL2,CFH,FCGI	6
Protein Synthesis	Quantity of leptin in blood	3.83E-05		1.219	ALOX5,C3,Ccl2,CD	7
Neurological Disease,Organismal Injury and Abnormalities	Epileptic seizure	3.94E-05			C3,C4A/C4B,CSTB	9
Hematological System Development and Function,Lymphoid Tissue Structure and Development,Tissue Morphology	Morphology of lymphoid tissue	3.94E-05			ALOX5,C3,C4A/C4	16
Cell-To-Cell Signaling and Interaction,Cellular Growth and Proliferation,Hematological System Development and Function	Stimulation of T lymphocytes	4.01E-05		-0.218	C3,CD69,CD74,CY(	7
Organismal Development	Morphology of body cavity	4.06E-05			ALOX5,BIN1,C3,C4	32
Cell Death and Survival	Apoptosis of blood cells	4.19E-05		1.278	CCL2,Ccl2,CCL3L3,	15
Organismal Injury and Abnormalities,Reproductive System Disease	Spontaneous abortion	4.19E-05			C3,C4A/C4B,FCGR	5
Cardiovascular System Development and Function,Cellular Movement	Chemotaxis of endothelial cells	4.19E-05		-0.585	CCL2,CCL24,CD36,	5
Cell-To-Cell Signaling and Interaction	Adhesion of myeloid cells	4.24E-05		-0.714	C3,CCL2,CFH,GAS(	8
Cell-To-Cell Signaling and Interaction	Penetration of monocytes	4.24E-05			ANXA2,CCL2	2
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function	Response of lymphocytes	4.32E-05		-0.776	CCL2,Ccl2,HLA-DQ	9
Cellular Growth and Proliferation	Colony formation of cells	4.33E-05		-0.827	BIN1,CCL2,CCL24,	16
Cardiovascular Disease,Cell Death and Survival,Connective Tissue Disorders,Hematological Disease,Organismal Injury and Abnormalities	Fetal erythroblastosis	4.34E-05			C3,C4A/C4B,FCGR	3
Hematological Disease,Immunological Disease,Metabolic Disease	Severe hypogammaglobulinemia	4.34E-05			C3,C4A/C4B,FCGR	3
Connective Tissue Disorders,Hematological Disease,Organismal Injury and Abnormalities	Neonatal alloimmune thrombocytopenia	4.34E-05			C3,C4A/C4B,FCGR	3
Infectious Diseases,Respiratory Disease	Whooping cough	4.34E-05			C3,C4A/C4B,FCGR	3
Ophthalmic Disease,Organismal Injury and Abnormalities	Nonexudative age-related macular degener	4.34E-05			C3,CCL2,CFH	3

Connective Tissue Disorders,Immunological Disease,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Juvenile rheumatoid arthritis	4.46E-05			ALOX5,CD300C,CD	9
Digestive System Development and Function,Gastrointestinal Disease,Hepatic System Development and Function,Hepatic System Disease,Inflammatory Disease,Inflammatory Response,Organ Development,Organismal Injury and Abnormalities	Inflammation of liver	4.62E-05		0.61	ACTA2,C3,C4A/C4	12
Cellular Function and Maintenance	Endocytosis by epithelial cell lines	4.80E-05		-0.106	C3,CD163,GAS6,P	4
Inflammatory Disease,Neurological Disease,Skeletal and Muscular Disorders	Multiple Sclerosis	5.01E-05			ALOX5,C3,C4A/C4	10
Cellular Function and Maintenance,Hematological System Development and Function	Function of T lymphocytes	5.14E-05			Ccl2,CD69,CD74,G	10
Cellular Function and Maintenance,Hematological System Development and Function	Function of lymphocytes	5.31E-05			Ccl2,CD69,CD74,G	11
Immunological Disease,Neurological Disease,Skeletal and Muscular Disorders	Myasthenia gravis	5.35E-05			C3,C4A/C4B,CD74	6
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Migration of monocytes	5.35E-05		-0.912	ANXA2,CCL2,Ccl2,	6
Cellular Growth and Proliferation,Tissue Development	Proliferation of epithelial cells	5.72E-05		-0.498	C3,CD9,CLU,DOK2	15
Connective Tissue Disorders,Dermatological Diseases and Conditions,Hematological Disease,Organismal Injury and Abnormalities	Chronic idiopathic thrombocytopenic purpur	5.76E-05			C3,C4A/C4B,FCGR	3
Cardiovascular Disease,Developmental Disorder,Organismal Injury and Abnormalities	Congenital heart block	5.76E-05			C3,C4A/C4B,FCGR	3
Inflammatory Disease,Neurological Disease,Organismal Injury and Abnormalities	Transverse myelitis	5.76E-05			C3,C4A/C4B,FCGR	3
Immunological Disease,Infectious Diseases	Acquired immunodeficiency syndrome	5.77E-05			ALOX5,C3,C4A/C4	5
Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response,Tissue Development	Accumulation of antigen presenting cells	5.97E-05		-1.154	CCL2,Ccl2,FGFR1,	6
Cardiovascular System Development and Function,Organismal Development	Growth of blood vessel	5.97E-05		-0.391	EDNRB,GAS6,LGA	6
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Cell movement of monocytes	6.05E-05		-1.572	ANXA2,CCL2,Ccl2,	8
Neurological Disease,Organismal Injury and Abnormalities	Demyelination of spinal cord	6.18E-05		1	C3,CCL2,GAS6,SPI	4
Cardiovascular System Development and Function,Hematological System Development and Function	Blood pressure	6.23E-05		0.517	ACTA2,CD36,EDN	11
Connective Tissue Development and Function,Skeletal and Muscular System Development and Function,Tissue Morphology	Quantity of osteoclasts	6.47E-05		-0.896	C3,CCL2,Ccl2,CD9,	7
Cancer,Organismal Injury and Abnormalities,Respiratory Disease	Advanced lung cancer	6.48E-05		1.091	ALOX5,ANXA2,CC	10
Cellular Development,Cellular Growth and Proliferation,Nervous System Development and Function,Tissue Development	Proliferation of neuronal cells	6.52E-05		-1.343	ACTB,Ccl2,CD9,CL	16
Organismal Injury and Abnormalities,Renal and Urological Disease	Urination disorder	6.66E-05		-0.665	C3,CCL2,Ccl2,CFH,	11
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Cellular infiltration by lymphocytes	6.70E-05		1.273	C3,CCL2,Ccl2,IFNG	8
Cellular Development,Cellular Growth and Proliferation,Connective Tissue Development and Function,Tissue Development	Development of connective tissue cells	6.81E-05		-0.83	ALOX5,ANXA2,CC	10
Cell-To-Cell Signaling and Interaction,Cellular Movement	Chemoattraction of myeloid cells	6.97E-05		-1.195	C3,CCL2,Ccl2,PF4	4
Organismal Injury and Abnormalities,Reproductive System Disease	Habitual abortion	6.97E-05			C3,C4A/C4B,FCGR	4
Organismal Injury and Abnormalities	Injury of mice	7.01E-05		-0.64	C3,CFP,FCGR3A/F	6
Cellular Development,Cellular Growth and Proliferation,Connective Tissue Development and Function,Tissue Development	Cell proliferation of fibroblasts	7.11E-05		-0.968	ACTB,ALOX5,ANX	12
Cell Morphology	Morphology of mononuclear leukocytes	7.15E-05			Ccl2,Ccl7,CD36,CD	9
Cell Morphology,Cellular Development	Branching of cells	7.17E-05		-1.121	ANXA2,C3,CCL2,CI	13
Organismal Injury and Abnormalities	Visceromegaly	7.25E-05			C3,C4A/C4B,Ccl2,(	19
Organismal Development	Abnormal morphology of body cavity	7.32E-05			ALOX5,BIN1,C3,C4	29
Organismal Functions,Organismal Injury and Abnormalities,Tissue Morphology	Healing of wound	7.41E-05			C3,Ccl2,FGFR1,HS	8
Cancer,Hematological Disease,Organismal Injury and Abnormalities	Mature lymphocytic neoplasm	7.44E-05			ALOX5,ANXA2,C3,	30
Cancer,Cellular Development,Cellular Growth and Proliferation,Organismal Injury and Abnormalities,Tumor Morphology	Proliferation of tumor cells	7.45E-05		-1.619	ALOX5,ANXA2,EE	14
Cell-To-Cell Signaling and Interaction	Penetration of cells	7.46E-05			ACTA2,ANXA2,CC	3
Immunological Disease,Neurological Disease,Skeletal and Muscular Disorders	Generalized myasthenia gravis	7.46E-05			C3,C4A/C4B,FCGR	3
Cell Morphology	Budding of cellular membrane	7.46E-05			ANXA2,AP2M1,S1	3
Hematological Disease,Infectious Diseases,Neurological Disease,Organismal Injury and Abnormalities	Cerebral malaria	7.46E-05			C3,C4A/C4B,CD36	3
Organismal Injury and Abnormalities,Renal and Urological Disease	Steroid dependent nephrotic syndrome	7.46E-05			C3,C4A/C4B,FCGR	3
Dermatological Diseases and Conditions,Organismal Injury and Abnormalities	Toxic epidermal necrolysis	7.46E-05			C3,C4A/C4B,FCGR	3

Dermatological Diseases and Conditions,Organismal Injury and Abnormalities	Chronic psoriasis	7.62E-05			CCL2,CNN1,CRIP1	7
Connective Tissue Development and Function,Skeletal and Muscular System Development and Function,Tissue Morphology	Quantity of bone cells	7.66E-05		-0.478	C3,CCL2,Ccl2,CD9,	8
Infectious Diseases	Quantity of virus	7.76E-05		-0.152	ANXA2,Ccl2,CCL3l	5
Gastrointestinal Disease,Hepatic System Disease,Metabolic Disease,Organismal Injury and Abnormalities	Hepatic steatosis	7.77E-05		-1.528	ALOX5,C3,CCL2,Cc	11
Cardiovascular Disease	Aneurysm	7.78E-05			ACTA2,IGFBP7,M	6
Cancer,Hematological Disease,Immunological Disease,Organismal Injury and Abnormalities	B-cell neoplasm	7.78E-05			ALOX5,ANXA2,CC	28
Infectious Diseases	Infection by cytomegalovirus	7.83E-05			C3,C4A/C4B,CCL2,	4
Organ Morphology,Organismal Injury and Abnormalities,Renal and Urological Disease,Renal and Urological System Development and Function	Abnormal morphology of kidney	7.90E-05			C4A/C4B,CD36,CF	10
Organ Morphology,Renal and Urological System Development and Function	Morphology of kidney	7.94E-05			C4A/C4B,CD36,CF	11
Hematological System Development and Function,Immunological Disease,Lymphoid Tissue Structure and Development,Organ Morphology,Organismal Injury and Abnormalities,Tissue Morphology	Abnormal morphology of lymphoid organ	7.99E-05			ALOX5,C3,C4A/C4	13
Cell-To-Cell Signaling and Interaction,Cellular Growth and Proliferation	Stimulation of cells	8.12E-05		-0.852	C3,CCL2,CCL24,CD	11
Hematological System Development and Function,Inflammatory Response,Tissue Morphology	Quantity of dendritic cells	8.25E-05		1.594	CCL2,Ccl2,CLEC4D	7
Cellular Movement,Hematological Disease,Immunological Disease,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Respiratory Disease	Eosinophilia of lung	8.33E-05			ACTB,CCL3L3,ENC	5
Hematological System Development and Function,Lymphoid Tissue Structure and Development,Tissue Morphology	Quantity of CD4+ T-lymphocytes	8.45E-05	Increased	2.203	Ccl2,CD69,CD74,H	8
Cancer,Organismal Injury and Abnormalities,Reproductive System Disease	Mammary tumor	8.56E-05		0.692	ACTA2,ALOX5,BIN	42
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Migration of macrophages	8.61E-05		-0.676	CCL2,Ccl2,CCL3L3,	6
Cellular Function and Maintenance,Molecular Transport	Flux of inorganic cation	8.66E-05		0.674	ANXA2,C3,C4A/C4	11
Cell Death and Survival	Cell death of tumor cell lines	8.72E-05		-0.634	3830403N18Rik/X	32
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Transmigration of leukocytes	8.93E-05		0.511	CCL2,Ccl2,CCL24,C	7
Cellular Function and Maintenance	Lymphocyte homeostasis	8.97E-05	Increased	2.107	CD69,CD74,CLEC6	16
Organismal Injury and Abnormalities,Tissue Morphology	Size of lesion	9.00E-05			C3,Ccl2,CLU,CSTB	12
Cell Signaling	Protein kinase cascade	9.23E-05		0.14	CCL2,CD36,CD74,C	14
Organismal Injury and Abnormalities	Angiogenesis of lesion	9.29E-05		0.216	ANXA2,C3,CD36,L	7
Hematological System Development and Function,Humoral Immune Response,Lymphoid Tissue Structure and Development,Tissue Morphology	Quantity of B lymphocytes	9.35E-05		-0.285	C3,CD36,CD69,CD	12
Connective Tissue Disorders,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	K/BxN serum transfer arthritis	9.44E-05			C3,FCGR3A/FCGR	3
Embryonic Development,Hematological System Development and Function,Lymphoid Tissue Structure and Development,Organ Development,Organismal Development,Tissue Development	Lymphangiogenesis	9.57E-05		0.497	CD9,EDNRB,FGFR	5
Cell-To-Cell Signaling and Interaction,Skeletal and Muscular System Development and Function	Binding of smooth muscle cells	9.78E-05			PDIA3,PF4,SPP1,T	4
Connective Tissue Disorders,Immunological Disease,Inflammatory Disease,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Systemic lupus erythematosus	9.84E-05			ALOX5,C4A/C4B,C	11
Carbohydrate Metabolism	Metabolism of polysaccharide	1.00E-04		-1.254	CCL24,CD36,FGFR	10
Cell-mediated Immune Response,Cellular Development,Cellular Function and Maintenance,Cellular Growth and Proliferation,Embryonic Development,Hematological System Development and Function,Hematopoiesis,Lymphoid Tissue Structure and Development,Organ Development,Organismal Development,Tissue Development	Differentiation of Th17 cells	1.05E-04		0.186	CD69,CLEC6A,IFN	6
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Cellular infiltration by macrophages	1.06E-04		0.014	C3,CCL2,Ccl2,GAS	8
Cardiovascular System Development and Function,Tissue Morphology	Morphology of blood vessel	1.07E-04			ACTA2,CCL2,CFH,C	11
Cardiovascular Disease,Organismal Injury and Abnormalities	Advanced stage peripheral arterial disease	1.08E-04			ALOX5,CD163,CD3	7
Humoral Immune Response,Inflammatory Response	Complement activation	1.10E-04			C3,C4A/C4B,CD69	6
Infectious Diseases	Infection by RNA virus	1.11E-04		-1.331	ACTA2,ALOX5,AN	21
Cancer,Organismal Injury and Abnormalities,Reproductive System Disease	Breast cancer	1.12E-04			ACTA2,ALOX5,C3,	40
Gastrointestinal Disease,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities	Colitis	1.13E-04		0.083	ALOX5,C3,CCL2,Cc	12

Cancer,Neurological Disease,Organismal Injury and Abnormalities	Glioblastoma	1.15E-04			CCL2,CD300C,CLU	13
Cardiovascular System Development and Function,Organismal Development	Vascularization of absolute anatomical regi	1.17E-04		0.555	C3,Ccl2,FGFR1,LG	7
Inflammatory Disease,Inflammatory Response,Neurological Disease,Organismal Injury and Abnormalities	Rasmussen encephalitis	1.17E-04			C3,C4A/C4B,FCGR	3
Hematological Disease,Hereditary Disorder,Immunological Disease,Organismal Injury and Abnormalities	Hyper-igm immunodeficiency syndrome	1.17E-04			C3,C4A/C4B,FCGR	3
Cellular Function and Maintenance,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Lymphoid Tissue Structure and Development	Compartmentalization of leukocytes	1.17E-04			Ccl2,CCL3L3,DOK2	3
Cell Death and Survival	Cell death of uterus	1.17E-04			CCL24,F13A1,SGK	3
Inflammatory Disease,Neurological Disease,Ophthalmic Disease,Organismal Injury and Abnormalities	Devic syndrome	1.17E-04			C3,C4A/C4B,FCGR	3
Inflammatory Disease,Neurological Disease	Chronic inflammatory demyelinating polyra	1.17E-04			C3,C4A/C4B,FCGR	3
Cell-To-Cell Signaling and Interaction,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Chemoattraction of monocytes	1.17E-04			CCL2,Ccl2,PF4	3
Cardiovascular System Development and Function,Cellular Movement	Migration of vascular endothelial cells	1.20E-04		0.123	ANXA2,CD36,CD9,	8
Gastrointestinal Disease,Hepatic System Disease,Organismal Injury and Abnormalities	Fibrosis of liver	1.21E-04	Decreased	-2.425	CD74,FGFR1,HSPI	7
Cellular Function and Maintenance	Uptake of bacteria	1.21E-04		0	C3,CD163,CFH,SN	4
Lipid Metabolism,Small Molecule Biochemistry	Exposure of phospholipid	1.21E-04			CD9,EDNRB,LGAL	4
Organismal Injury and Abnormalities	Granulation tissue	1.21E-04			ACTA2,F13A1,RAI	4
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Homing of M1 macrophages	1.27E-04			CCL2,Ccl2	2
Lipid Metabolism,Small Molecule Biochemistry	Synthesis of leukotriene A4	1.27E-04			ALOX5,LTC4S	2
Cellular Movement	Transendothelial migration of myeloma cell	1.27E-04			CCL2,SPP1	2
Organismal Injury and Abnormalities,Renal and Urological Disease	Obstructive nephropathy	1.27E-04			CCL2,CLU	2
Cardiovascular Disease	Calcification of blood vessel wall	1.27E-04			GAS6,MGP	2
Cellular Movement	Migration of connective tissue cells	1.31E-04		-0.886	ACTB,CCL2,FGFR1	8
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Trafficking of mononuclear leukocytes	1.33E-04			CCL2,Ccl2,CCL3L3,	4
Connective Tissue Disorders,Developmental Disorder,Hereditary Disorder,Organismal Injury and Abnormalities,Skeletal and Muscular Disorders	Marfan syndrome	1.33E-04			ACTA2,CNN1,TAG	4
Connective Tissue Disorders,Hematological Disease,Organismal Injury and Abnormalities	Early-onset thrombocytopenia	1.33E-04			C3,C4A/C4B,CYCS	4
Cell-mediated Immune Response,Cellular Development,Cellular Function and Maintenance,Cellular Growth and Proliferation,Embryonic Development,Hematological System Development and Function,Hematopoiesis,Lymphoid Tissue Structure and Development,Organ Development,Organismal Development,Tissue Development	T cell development	1.36E-04	Increased	2.107	CD69,CD74,CLEC6	15
Cardiovascular System Development and Function,Cellular Development,Cellular Function and Maintenance,Cellular Growth and Proliferation,Organismal Development,Tissue Development	Cell proliferation of vascular endothelial cel	1.39E-04		0.354	C3,CCL2,FGFR1,G	8
Lipid Metabolism,Small Molecule Biochemistry	Synthesis of fatty acid	1.42E-04		-1.227	ALOX5,Ccl2,CCL3L	11
Organismal Injury and Abnormalities	Formation of scar tissue	1.44E-04			Ccl2,CSTB,SPP1	3
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Inflammatory Response	Immune response of helper T lymphocytes	1.44E-04			Ccl2,LGALS1,SOCS	3
Gastrointestinal Disease,Hepatic System Disease,Organismal Injury and Abnormalities	Damage of liver	1.45E-04		-0.649	ACTA2,C3,CCL2,Cc	10
Cell Signaling,Small Molecule Biochemistry	Synthesis of nitric oxide	1.45E-04		-0.598	ALOX5,CD36,CLU,	10
Cellular Development,Cellular Growth and Proliferation,Digestive System Development and Function,Hepatic System Development and Function,Organ Development	Proliferation of liver cells	1.48E-04		-0.08	C3,EDNRB,IFNGR	8
Cell Signaling	MAPKKK cascade	1.52E-04		0	CCL2,CD36,CD74,I	10
Cell-To-Cell Signaling and Interaction,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Binding of neutrophils	1.59E-04		0.461	C3,CFH,FCGR3A/F	6
Cellular Movement,Hematological Disease,Immunological Disease,Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Respiratory Disease	Allergic pulmonary eosinophilia	1.62E-04			ACTB,ENO1,PDIA3	4
Cell-To-Cell Signaling and Interaction,Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking,Inflammatory Response	Chemoattraction of phagocytes	1.62E-04		-1.188	C3,CCL2,Ccl2,PF4	4
Cellular Movement,Connective Tissue Development and Function	Migration of fibroblasts	1.62E-04		-0.57	ACTB,CCL2,FGFR1	7

Cancer,Cell Death and Survival,Organismal Injury and Abnormalities,Tumor Morphology	Apoptosis of tumor cells	1.66E-04		-0.286	ANXA2,CLU,CYCS,	10
Organismal Injury and Abnormalities,Renal and Urological Disease	Damage of kidney	1.66E-04		-0.6	ALOX5,C3,C4A/C4	8
Cardiovascular System Development and Function,Organismal Development,Visual System Development and Function	Neovascularization of eye	1.67E-04		0.164	C3,Ccl2,FGFR1,LG	6
Embryonic Development,Hematological System Development and Function,Lymphoid Tissue Structure and Development,Organ Development,Organismal Development,Tissue Development	Formation of lymph node	1.67E-04			C3,C4A/C4B,HLA-I	6
Cardiovascular System Development and Function,Cell-To-Cell Signaling and Interaction	Adhesion of endothelial cells	1.73E-04		0.628	CCL2,CD36,GAS6,I	7
Hematological Disease,Hereditary Disorder,Immunological Disease,Metabolic Disease,Organismal Injury and Abnormalities	X-linked agammaglobulinemia	1.74E-04			C3,C4A/C4B,FCGR	3
Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Renal and Urological Disease	Crescentic glomerulonephritis	1.74E-04			Ccl2,CCL3L3,SPP1	3
Infectious Diseases	Streptococcal infection	1.77E-04			C3,C4A/C4B,CCL2,	4
Carbohydrate Metabolism,Drug Metabolism,Small Molecule Biochemistry	Synthesis of hyaluronic acid	1.77E-04		-0.152	CCL24,FGFR1,SPP	4
Infectious Diseases	Dengue fever	1.77E-04			C3,CD69,PF4,PRO	4
Organismal Injury and Abnormalities,Renal and Urological Disease	Injury of kidney	1.79E-04		-0.2	ALOX5,C3,Ccl2,CF	7
Cellular Movement,Connective Tissue Development and Function	Cell movement of fibroblasts	1.81E-04		-0.911	ACTB,CCL2,FGFR1	8
Cellular Movement,Hematological System Development and Function,Hypersensitivity Response,Immune Cell Trafficking	Cell movement of eosinophils	1.82E-04		-0.861	C3,CCL2,Ccl2,CCL2	6
Hematological System Development and Function,Lymphoid Tissue Structure and Development,Organ Morphology,Tissue Morphology	Morphology of lymphoid organ	1.83E-04			ALOX5,C3,C4A/C4	14
Cardiovascular System Development and Function	Morphology of vasculature	1.87E-04			ACTA2,CCL2,CFH,(	12
Cellular Development,Cellular Growth and Proliferation,Embryonic Development,Hematological System Development and Function,Hematopoiesis,Lymphoid Tissue Structure and Development,Organ Development,Organismal Development,Tissue Development	Lymphopoiesis	1.89E-04		1.8	C3,CD36,CD69,CD	17
Protein Synthesis	Metabolism of protein	1.93E-04		0.24	ALOX5,C3,C4A/C4	24
Digestive System Development and Function,Gastrointestinal Disease,Hepatic System Development and Function,Hepatic System Disease,Infectious Diseases,Inflammatory Disease,Inflammatory Response,Organ Development,Organismal Injury and Abnormalities	Infection by hepatitis B virus	2.03E-04			C3,C4A/C4B,CCL2,	5
Cellular Development,Cellular Growth and Proliferation	Cell proliferation of breast cancer cell lines	2.03E-04		-0.08	ACTB,ANXA2,BIN1	14
Cell Death and Survival	Cell death of mononuclear leukocytes	2.04E-04		-0.017	Ccl2,CD9,CLEC10A	12
Post-Translational Modification	Phosphorylation of protein	2.06E-04		0.705	ANXA2,C3,CCL2,CI	17
Cell Death and Survival	Apoptosis of leukocytes	2.15E-04		0.755	CCL2,Ccl2,CD69,CI	13
Cell Morphology,Inflammatory Response	Morphology of phagocytes	2.20E-04			C3,CCL2,Ccl2,Ccl7,	7
Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Respiratory Disease	Pneumonia	2.20E-04			C3,CCL2,EDNRB,F	8
Cell Death and Survival,Organismal Injury and Abnormalities	Cell death of epithelial cells	2.25E-04		-0.996	CLU,CYCS,EEF1A1	14
Cellular Movement,Hematological System Development and Function	Cell movement of hematopoietic progenitor	2.27E-04		0.447	CCL2,CCL3L3,CD69	5
Cellular Movement,Hematological System Development and Function,Immune Cell Trafficking	Mobilization of leukocytes	2.31E-04		-1.067	ALOX5,CCL2,Ccl2,(	4
Inflammatory Disease,Inflammatory Response,Organismal Injury and Abnormalities,Renal and Urological Disease	Proliferative nephritis	2.31E-04			C3,CFH,PDLIM1,SI	4
Digestive System Development and Function,Gastrointestinal Disease,Hepatic System Development and Function,Hepatic System Disease,Infectious Diseases,Inflammatory Disease,Inflammatory Response,Organ Development,Organismal Injury and Abnormalities	Viral hepatitis	2.34E-04			ACTA2,C3,C4A/C4	7
Cardiovascular Disease,Organismal Injury and Abnormalities	Arterial aneurysm	2.40E-04			ACTA2,IGFBP7,SP	5
Cell Death and Survival,Organismal Injury and Abnormalities	Cell death of epithelial cell lines	2.42E-04	Decreased	-2.159	CYCS,EEF1A1,EMI	10
Cellular Function and Maintenance	Engulfment of tumor cell lines	2.42E-04		-1.584	AP2M1,CD36,FGF	7
Cancer,Organismal Injury and Abnormalities,Reproductive System Disease	Female genital tract serous carcinoma	2.50E-04			ANXA2,C4A/C4B,(	12
Cardiovascular System Development and Function,Organismal Functions,Tissue Development,Tissue Morphology	Healing of endothelial tissue	2.52E-04			CCL2,SPP1	2
Cell Signaling,Inflammatory Response	Complement activation, alternative pathwa	2.52E-04			C3,CFP	2
Cell Morphology,Organ Morphology,Renal and Urological System Development and Function	Cellularity of renal glomerulus	2.52E-04			CFH,CNN1	2
Infectious Diseases	Infection by Murine herpesvirus 4	2.52E-04			C3,IFNGR1	2
Cellular Function and Maintenance,Tissue Development	Function of fibroblasts	2.52E-04			ALOX5,TAGLN	2

Supplementary Table 4. Enriched canonical pathways in SWNT-SHP1i-treated lesional macrophages from Ingenuity Pathway Analysis.
Functional enrichment was assessed using two-sided Fisher's exact test (n = 4 biologically independent animals per group).

Ingenuity Canonical Pathways	-log(p-value)	Ratio	z-score	Molecules
Agranulocyte Adhesion and Diapedesis	7.25	0.0573		MYL9,CCL2,ACTA2,Ccl8,CCL3L3,Ccl2,PF4,ACTB,CCL24,Ccl6,Ccl7
Antigen Presentation Pathway	6.79	0.158		PDIA3,HLA-DMA,HLA-DQA1,CD74,HLA-DQB1,HLA-DRB5
Th1 and Th2 Activation Pathway	6.36	0.0535		SOCS3,TGFBR1,HLA-DMA,FGFR1,HLA-DQA1,IFNGR1,HLA-DQB1,TSLP,TIMD4,HLA-DRB5
Th2 Pathway	6.14	0.0592	-1	SOCS3,TGFBR1,HLA-DMA,FGFR1,HLA-DQA1,HLA-DQB1,TSLP,TIMD4,HLA-DRB5
Granulocyte Adhesion and Diapedesis	5.53	0.05		CCL2,Ccl8,CCL3L3,Ccl2,PF4,CCL24,Ccl6,Ccl7,HSPB1
T Helper Cell Differentiation	5.08	0.0822		TGFBR1,HLA-DMA,HLA-DQA1,IFNGR1,HLA-DQB1,HLA-DRB5
Type I Diabetes Mellitus Signaling	5.07	0.0631		SOCS3,HLA-DMA,HLA-DQA1,IFNGR1,CYCS,HLA-DQB1,HLA-DRB5
EIF2 Signaling	4.69	0.0393		EIF3F,RPS15,ACTA2,RPS20,FGFR1,ACTB,RPL30,RAP1A,FAU
Hepatic Fibrosis / Hepatic Stellate Cell Activation	4.5	0.043		MYL9,TGFBR1,CCL2,EDNRB,ACTA2,FGFR1,IFNGR1,TIMP2
Th1 Pathway	4.48	0.0511	1.134	SOCS3,HLA-DMA,FGFR1,HLA-DQA1,IFNGR1,HLA-DQB1,HLA-DRB5
IL-4 Signaling	4.4	0.0625		HLA-DMA,FGFR1,HLA-DQA1,HLA-DQB1,RAP1A,HLA-DRB5
Nur77 Signaling in T Lymphocytes	4.38	0.0847		HLA-DMA,HLA-DQA1,CYCS,HLA-DQB1,HLA-DRB5
B Cell Development	4.06	0.111		HLA-DMA,HLA-DQA1,HLA-DQB1,HLA-DRB5
T Cell Exhaustion Signaling Pathway	3.7	0.0385		TGFBR1,HLA-DMA,FGFR1,HLA-DQA1,HLA-DQB1,RAP1A,HLA-DRB5
Neuroinflammation Signaling Pathway	3.65	0.0288	1.667	TGFBR1,CCL2,HLA-DMA,FGFR1,HLA-DQA1,IFNGR1,MFGE8,HLA-DQB1,HLA-DRB5
Graft-versus-Host Disease Signaling	3.57	0.0833		HLA-DMA,HLA-DQA1,HLA-DQB1,HLA-DRB5
Role of NFAT in Regulation of the Immune Response	3.55	0.0363	1.134	HLA-DMA,FGFR1,HLA-DQA1,HLA-DQB1,RAP1A,HLA-DRB5,FCGR3A/FCGR3B
Autoimmune Thyroid Disease Signaling	3.53	0.0816		HLA-DMA,HLA-DQA1,HLA-DQB1,HLA-DRB5
Regulation of Actin-based Motility by Rho	3.53	0.0562	-0.447	MYL9,PFN1,ACTA2,ACTB,MYL12B
Dendritic Cell Maturation	3.51	0.0357	1.134	PDIA3,HLA-DMA,FGFR1,HLA-DQA1,HLA-DQB1,HLA-DRB5,FCGR3A/FCGR3B
Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	3.5	0.0556		SPP1,HLA-DMA,HLA-DQA1,HLA-DQB1,HLA-DRB5
Epithelial Adherens Junction Signaling	3.35	0.0403		MYL9,TGFBR1,ACTA2,FGFR1,ACTB,RAP1A
Glucocorticoid Receptor Signaling	3.32	0.0259		TGFBR1,CCL2,SGK1,FGFR1,ACTB,POLR2K,FKBP5,CD163,RAP1A
Integrin Signaling	3.19	0.0317	-1.134	MYL9,PFN1,ACTA2,FGFR1,ACTB,RAP1A,MYL12B
Regulation of eIF4 and p70S6K Signaling	3.12	0.0364		EIF3F,RPS15,RPS20,FGFR1,RAP1A,FAU
Cdc42 Signaling	3.09	0.0359		MYL9,HLA-DMA,HLA-DQA1,HLA-DQB1,HLA-DRB5,MYL12B
PKCθ Signaling in T Lymphocytes	3.09	0.0359	0.816	HLA-DMA,FGFR1,HLA-DQA1,HLA-DQB1,RAP1A,HLA-DRB5
Actin Cytoskeleton Signaling	3.08	0.0303	-1.134	MYL9,PFN1,ACTA2,FGFR1,ACTB,RAP1A,MYL12B
Calcium-induced T Lymphocyte Apoptosis	3.04	0.0606	2	HLA-DMA,HLA-DQA1,HLA-DQB1,HLA-DRB5
Virus Entry via Endocytic Pathways	2.97	0.0424		AP2M1,ACTA2,FGFR1,ACTB,RAP1A
Cardiac Hypertrophy Signaling	2.96	0.0289	-0.378	MYL9,TGFBR1,PDIA3,FGFR1,RAP1A,MYL12B,HSPB1
LXR/RXR Activation	2.92	0.0413	0.447	C4A/C4B,C3,CCL2,CD36,CLU
RhoA Signaling	2.89	0.0407	-0.447	MYL9,PFN1,ACTA2,ACTB,MYL12B
iCOS-iCOSL Signaling in T Helper Cells	2.86	0.04	1.342	HLA-DMA,FGFR1,HLA-DQA1,HLA-DQB1,HLA-DRB5
MSP-RON Signaling Pathway	2.85	0.0541		ACTA2,CCL2,ACTB,FGFR1
Cellular Effects of Sildenafil (Viagra)	2.77	0.0382		MYL9,ACTA2,PDIA3,ACTB,MYL12B
Role of JAK1 and JAK3 in γc Cytokine Signaling	2.76	0.0513		SOCS3,FGFR1,RAP1A,TSLP
Complement System	2.74	0.0811		C4A/C4B,C3,CFH
CD28 Signaling in T Helper Cells	2.72	0.0373		HLA-DMA,FGFR1,HLA-DQA1,HLA-DQB1,HLA-DRB5
NRF2-mediated Oxidative Stress Response	2.67	0.0297		ACTA2,FGFR1,ACTB,FKBP5,RAP1A,SOD3
Allograft Rejection Signaling	2.61	0.0465		HLA-DMA,HLA-DQA1,HLA-DQB1,HLA-DRB5
mTOR Signaling	2.6	0.0288		EIF3F,RPS15,RPS20,FGFR1,RAP1A,FAU
Crosstalk between Dendritic Cells and Natural Killer Cells	2.56	0.0449		ACTA2,CD69,ACTB,HLA-DRB5
OX40 Signaling Pathway	2.54	0.0444		HLA-DMA,HLA-DQA1,HLA-DQB1,HLA-DRB5
Leukotriene Biosynthesis	2.5	0.154		LTC4S,ALOX5
Death Receptor Signaling	2.49	0.043	-1	ACTA2,ACTB,CYCS,HSPB1
Hereditary Breast Cancer Signaling	2.49	0.0329		GADD45B,FGFR1,ACTB,POLR2K,RAP1A
Extrinsic Prothrombin Activation Pathway	2.32	0.125		PROS1,F13A1
Mitochondrial Dysfunction	2.27	0.0292		NDUFA4,UCP2,COX7A2L,CYCS,NDUFA3
FAK Signaling	2.27	0.0374		ACTA2,FGFR1,ACTB,RAP1A
PAK Signaling	2.24	0.0367	-1	MYL9,FGFR1,RAP1A,MYL12B
Oxidative Phosphorylation	2.24	0.0367	-1	NDUFA4,COX7A2L,CYCS,NDUFA3
VEGF Signaling	2.21	0.036	-1	ACTA2,FGFR1,ACTB,RAP1A
UVA-Induced MAPK Signaling	2.19	0.0354		PDIA3,FGFR1,CYCS,RAP1A
IGF-1 Signaling	2.19	0.0354		SOCS3,FGFR1,IGFBP7,RAP1A

Germ Cell-Sertoli Cell Junction Signaling	2.18	0.0278		TGFBR1,ACTA2,FGFR1,ACTB,RAP1A
Apelin Cardiomyocyte Signaling Pathway	2.16	0.0348	-1	MYL9,PDIA3,FGFR1,MYL12B
Paxillin Signaling	2.08	0.0331	-1	ACTA2,FGFR1,ACTB,RAP1A
Atherosclerosis Signaling	2	0.0312		CCL2,CD36,ALOX5,CLU
Tumoricidal Function of Hepatic Natural Killer Cells	1.97	0.0833		CYCS,LYVE1
IL-8 Signaling	1.95	0.0245	-1.342	MYL9,FGFR1,RAP1A,CSTB,MYL12B
STAT3 Pathway	1.95	0.0303	-1	SOCS3,TGFBR1,FGFR1,RAP1A
Adrenomedullin signaling pathway	1.93	0.0242	-2.236	C3,PDIA3,FGFR1,CFH,RAP1A
Gap Junction Signaling	1.92	0.024		ACTA2,PDIA3,FGFR1,ACTB,RAP1A
Clathrin-mediated Endocytosis Signaling	1.91	0.0239		AP2M1,ACTA2,FGFR1,ACTB,CLU
IL-6 Signaling	1.91	0.0294	-1	SOCS3,FGFR1,RAP1A,HSPB1
Lipid Antigen Presentation by CD1	1.91	0.0769		AP2M1,PDIA3
Thrombin Signaling	1.9	0.0237		MYL9,PDIA3,FGFR1,RAP1A,MYL12B
Glycine Degradation (Creatine Biosynthesis)	1.89	0.5		GATM
Leukocyte Extravasation Signaling	1.88	0.0235	-0.447	ACTA2,FGFR1,ACTB,RAP1A,TIMP2
Agrin Interactions at Neuromuscular Junction	1.88	0.04		ACTA2,ACTB,RAP1A
HMGB1 Signaling	1.86	0.0284	-1	CCL2,FGFR1,IFNGR1,RAP1A
Myc Mediated Apoptosis Signaling	1.85	0.039		FGFR1,CYCS,RAP1A
Chemokine Signaling	1.85	0.039		CCL2,CCL24,RAP1A
Gα12/13 Signaling	1.84	0.028	-1	MYL9,FGFR1,RAP1A,MYL12B
Glioma Invasiveness Signaling	1.84	0.0385		FGFR1,RAP1A,TIMP2
Insulin Receptor Signaling	1.8	0.0272	-1	SOCS3,SGK1,FGFR1,RAP1A
SPINK1 General Cancer Pathway	1.78	0.0366		FGFR1,Mt2,RAP1A
GDNF Family Ligand-Receptor Interactions	1.75	0.0357		DOK2,FGFR1,RAP1A
Angiopoietin Signaling	1.72	0.0349		DOK2,FGFR1,RAP1A
Role of Macrophages, Fibroblasts and Endothelial Cells in R	1.71	0.0186		SOCS3,CCL2,PDIA3,FGFR1,RAP1A,FCGR3A/FCGR3B
Erythropoietin Signaling	1.7	0.0341		SOCS3,FGFR1,RAP1A
Leptin Signaling in Obesity	1.7	0.0341		SOCS3,PDIA3,FGFR1
Inhibition of Angiogenesis by TSP1	1.68	0.0588		TGFBR1,CD36
Coagulation System	1.66	0.0571		PROS1,F13A1
Prolactin Signaling	1.66	0.033		SOCS3,FGFR1,RAP1A
JAK/Stat Signaling	1.66	0.033		SOCS3,FGFR1,RAP1A
Fcγ Receptor-mediated Phagocytosis in Macrophages and M	1.65	0.0326		ACTA2,ACTB,FCGR3A/FCGR3B
Interferon Signaling	1.64	0.0556		IFITM3,IFNGR1
IL-17 Signaling	1.63	0.0323		CCL2,FGFR1,RAP1A
Tight Junction Signaling	1.61	0.0238		MYL9,TGFBR1,ACTA2,ACTB
Signaling by Rho Family GTPases	1.6	0.0198	-0.447	MYL9,ACTA2,FGFR1,ACTB,MYL12B
Glutathione Redox Reactions II	1.59	0.25		PDIA3
CXCR4 Signaling	1.58	0.0233	-1	MYL9,FGFR1,RAP1A,MYL12B
Aldosterone Signaling in Epithelial Cells	1.56	0.023		PDIA3,SGK1,FGFR1,HSPB1
TR/RXR Activation	1.55	0.03		ENO1,UCP2,FGFR1
RhoGDI Signaling	1.55	0.0229	0	MYL9,ACTA2,ACTB,MYL12B
Acute Phase Response Signaling	1.54	0.0227		C4A/C4B,SOCS3,C3,RAP1A
Ceramide Signaling	1.54	0.0297		FGFR1,CYCS,RAP1A
Mechanisms of Viral Exit from Host Cells	1.53	0.0488		ACTA2,ACTB
Intrinsic Prothrombin Activation Pathway	1.51	0.0476		PROS1,F13A1
PPARα/RXRα Activation	1.47	0.0215		TGFBR1,PDIA3,CD36,RAP1A
FAT10 Cancer Signaling Pathway	1.44	0.0435		EEF1A1,TGFBR1
IL-9 Signaling	1.42	0.0426		SOCS3,FGFR1
Chronic Myeloid Leukemia Signaling	1.42	0.0265		TGFBR1,FGFR1,RAP1A
Production of Nitric Oxide and Reactive Oxygen Species in M	1.4	0.0204		FGFR1,IFNGR1,RAP1A,CLU
ILK Signaling	1.39	0.0203	0	MYL9,ACTA2,FGFR1,ACTB
Endothelin-1 Signaling	1.38	0.0201	-2	EDNRB,PDIA3,FGFR1,RAP1A
Sirtuin Signaling Pathway	1.37	0.0171	1.342	NDUFA4,UCP2,GADD45B,NDUFA3,SOD3
Calcium Signaling	1.33	0.0194		MYL9,ACTA2,Tpm2,RAP1A
PTEN Signaling	1.33	0.0244		TGFBR1,FGFR1,RAP1A
Protein Kinase A Signaling	1.32	0.015	0.447	MYL9,TGFBR1,DUSP3,PDIA3,RAP1A,MYL12B
Docosahexaenoic Acid (DHA) Signaling	1.31	0.037		FGFR1,CYCS

Supplementary Table 5. Gene Ontology enrichment analysis of genes that were upregulated in lesional macrophages by exposure to SWNT-SHP1i.
Functional enrichment was assessed using two-sided Fisher's exact test with Bonferroni correction for multiple comparisons (n = 4 biologically independent animals per group).

Analyzed List:	upload_1 (Mus musculus)				
Reference List:	Mus musculus (all genes in database)				
Test Type:	FISHER				
Correction:	BONFERRONI				
ID	Reference list	Input	Expected	Fold Enrichment	P value
MHC class II protein complex (GO:0042613)	9	5	0.02	100	2.29E-07
antigen processing and presentation of exogenous peptide antigen via MHC class II (GO:0019886)	14	5	0.04	100	8.03E-06
antigen processing and presentation of peptide or polysaccharide antigen via MHC class II (GO:0002504)	16	5	0.04	100	1.40E-05
antigen processing and presentation of peptide antigen via MHC class II (GO:0002495)	16	5	0.04	100	1.40E-05
MHC protein complex (GO:0042611)	23	5	0.06	86.55	1.09E-05
antigen processing and presentation of exogenous peptide antigen (GO:0002478)	24	5	0.06	82.95	8.05E-05
antigen processing and presentation of exogenous antigen (GO:0019884)	30	5	0.08	66.36	2.18E-04
chaperone-mediated protein folding (GO:0061077)	50	5	0.13	39.81	2.24E-03
antigen processing and presentation of peptide antigen (GO:0048002)	63	5	0.16	31.6	6.56E-03
antigen processing and presentation (GO:0019882)	95	5	0.24	20.95	4.46E-02
response to bacterium (GO:0009617)	801	11	2.01	5.47	3.92E-02
response to other organism (GO:0051707)	1022	13	2.57	5.06	1.06E-02
response to external biotic stimulus (GO:0043207)	1024	13	2.57	5.05	1.09E-02
response to biotic stimulus (GO:0009607)	1047	13	2.63	4.94	1.39E-02
multi-organism process (GO:0051704)	2119	19	5.32	3.57	4.51E-03
protein binding (GO:0005515)	8991	40	22.58	1.77	9.40E-03

Supplementary Table 6. Gene Ontology enrichment analysis of genes that showed reduced expression in lesional macrophages exposed to SWNT-SHP1i.
Functional enrichment was assessed using two-sided Fisher's exact test with Bonferroni correction for multiple comparisons (n = 4 biologically independent animals per group).

Analyzed List:	upload_1 (Mus musculus)				
Reference List:	Mus musculus (all genes in database)				
Test Type:	FISHER				
Correction:	BONFERRONI				
ID	Reference list	Input	Expected	Fold Enrichment	P value
CCR2 chemokine receptor binding (GO:0031727)	4	3	0.02	100	6.75E-03
eosinophil chemotaxis (GO:0048245)	18	6	0.08	79.06	5.09E-06
eosinophil migration (GO:0072677)	19	6	0.08	74.9	6.68E-06
monocyte chemotaxis (GO:0002548)	33	6	0.14	43.13	1.17E-04
lymphocyte chemotaxis (GO:0048247)	39	7	0.16	42.57	7.41E-06
chemokine activity (GO:0008009)	42	7	0.18	39.53	3.71E-06
mononuclear cell migration (GO:0071674)	39	6	0.16	36.49	2.87E-04
CCR chemokine receptor binding (GO:0048020)	44	6	0.19	32.34	1.74E-04
lymphocyte migration (GO:0072676)	55	7	0.23	30.19	6.44E-05
chemokine-mediated signaling pathway (GO:0070098)	56	7	0.24	29.65	7.23E-05
chemokine receptor binding (GO:0042379)	64	7	0.27	25.94	5.33E-05
cellular response to chemokine (GO:1990869)	65	7	0.27	25.54	1.87E-04
response to chemokine (GO:1990868)	65	7	0.27	25.54	1.87E-04
neutrophil chemotaxis (GO:0030593)	76	7	0.32	21.85	5.07E-04
granulocyte chemotaxis (GO:0071621)	83	7	0.35	20	8.90E-04
cellular response to interleukin-1 (GO:0071347)	72	6	0.3	19.77	8.10E-03
neutrophil migration (GO:1990266)	85	7	0.36	19.53	1.04E-03
granulocyte migration (GO:0097530)	95	7	0.4	17.48	2.11E-03
leukocyte chemotaxis (GO:0030595)	127	9	0.54	16.81	5.11E-05
response to interleukin-1 (GO:0070555)	87	6	0.37	16.36	2.29E-02
myeloid leukocyte migration (GO:0097529)	117	8	0.49	16.22	4.84E-04
response to interferon-gamma (GO:0034341)	125	8	0.53	15.18	7.85E-04
regulation of phagocytosis (GO:0050764)	99	6	0.42	14.38	4.63E-02
cellular response to interferon-gamma (GO:0071346)	100	6	0.42	14.23	4.90E-02
leukocyte migration (GO:0050900)	196	10	0.83	12.1	1.39E-04
regulation of cell shape (GO:0008360)	146	7	0.62	11.37	3.26E-02
positive regulation of endocytosis (GO:0045807)	172	8	0.73	11.03	7.96E-03
cell chemotaxis (GO:0060326)	200	9	0.84	10.67	2.09E-03
regulation of symbiosis, encompassing mutualism through parasitism (GO:0043903)	209	9	0.88	10.21	2.99E-03
positive regulation of ERK1 and ERK2 cascade (GO:0070374)	217	9	0.91	9.84	4.05E-03
positive regulation of GTPase activity (GO:0043547)	217	9	0.91	9.84	4.05E-03
myelin sheath (GO:0043209)	214	8	0.9	8.87	6.24E-03

cytokine activity (GO:0005125)	214	8	0.9	8.87	1.20E-02
cytokine-mediated signaling pathway (GO:0019221)	255	9	1.08	8.37	1.47E-02
regulation of ERK1 and ERK2 cascade (GO:0070372)	304	10	1.28	7.8	7.03E-03
regulation of endocytosis (GO:0030100)	288	9	1.21	7.41	3.86E-02
collagen-containing extracellular matrix (GO:0062023)	356	11	1.5	7.33	5.73E-04
regulation of GTPase activity (GO:0043087)	295	9	1.24	7.24	4.66E-02
positive regulation of hydrolase activity (GO:0051345)	502	14	2.12	6.61	2.78E-04
cytokine receptor binding (GO:0005126)	323	9	1.36	6.61	2.98E-02
receptor ligand activity (GO:0048018)	483	12	2.04	5.89	3.00E-03
extracellular matrix (GO:0031012)	473	11	1.99	5.52	8.36E-03
receptor regulator activity (GO:0030545)	518	12	2.18	5.49	6.11E-03
cellular response to cytokine stimulus (GO:0071345)	627	13	2.64	4.92	2.34E-02
regulation of hydrolase activity (GO:0051336)	971	19	4.09	4.64	2.09E-04
response to cytokine (GO:0034097)	727	14	3.07	4.57	2.17E-02
lipid binding (GO:0008289)	742	13	3.13	4.16	4.36E-02
defense response (GO:0006952)	1299	20	5.48	3.65	3.90E-03
immune response (GO:0006955)	1370	21	5.78	3.64	2.03E-03
molecular function regulator (GO:0098772)	1728	25	7.29	3.43	1.04E-04
organelle envelope (GO:0031967)	1036	15	4.37	3.43	4.35E-02
envelope (GO:0031975)	1037	15	4.37	3.43	4.39E-02
signaling receptor binding (GO:0005102)	1825	25	7.69	3.25	2.96E-04
regulation of protein phosphorylation (GO:0001932)	1397	19	5.89	3.23	4.80E-02
extracellular region part (GO:0044421)	2203	29	9.29	3.12	2.50E-05
extracellular space (GO:0005615)	1969	25	8.3	3.01	6.40E-04
cellular response to organic substance (GO:0071310)	1750	22	7.38	2.98	2.68E-02
regulation of catalytic activity (GO:0050790)	1790	22	7.55	2.92	3.85E-02
extracellular region (GO:0005576)	2765	32	11.66	2.75	7.35E-05
cellular response to chemical stimulus (GO:0070887)	2244	26	9.46	2.75	1.22E-02
regulation of cellular protein metabolic process (GO:0032268)	2437	27	10.27	2.63	1.68E-02
response to organic substance (GO:0010033)	2415	26	10.18	2.55	4.68E-02