

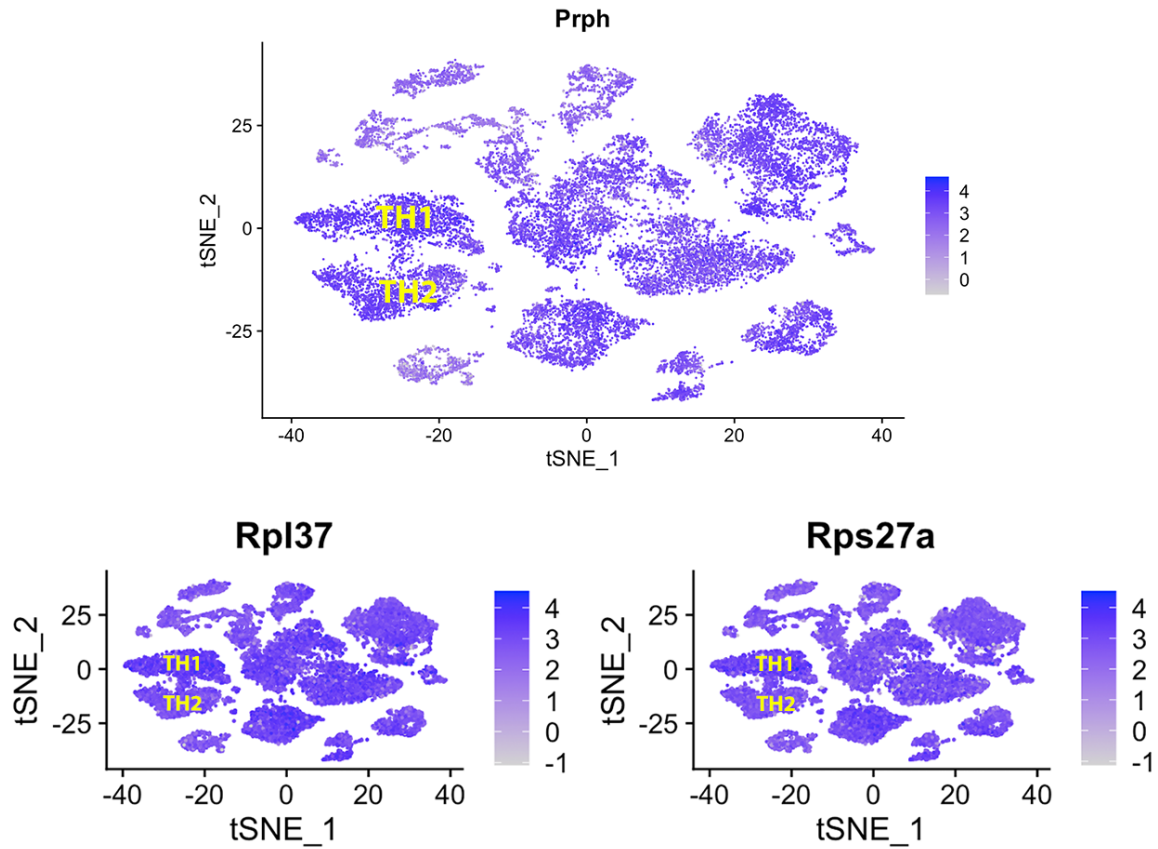


Figure S1. TH1 specific transcripts. TSNE plots of the top differentially expressed TH1 transcripts, *Prph*, *Rpl37*, and *Rps27a*. While significantly upregulated in TH1 DRGNs, these transcripts were highly expressed in all DRGN subpopulations.

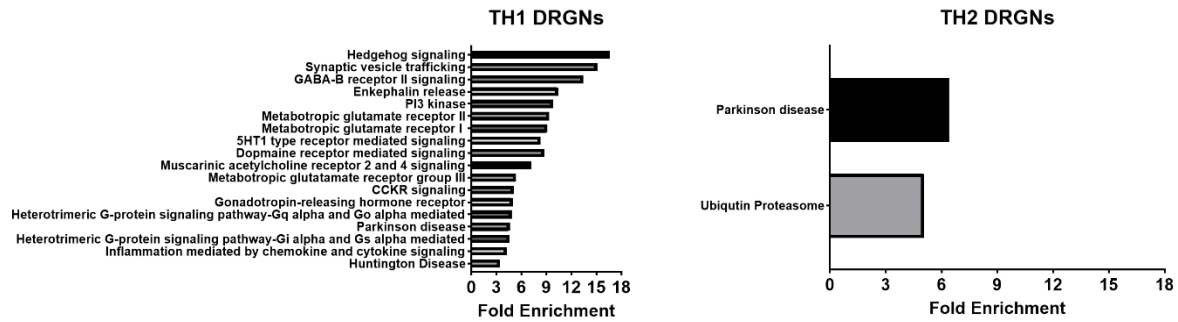


Figure S2. TH1 and TH2 transcriptomic profiles constitute distinct biologic pathways.

Within TH1 DRGNs (**left**), 18 pathways were statistically enriched, including the three metabotropic glutamate receptor pathways and many G-protein-related receptor signaling pathways. Within TH2 DRGNs (**right**), had Parkinson's disease, and the ubiquitin-proteasome pathways were enriched.

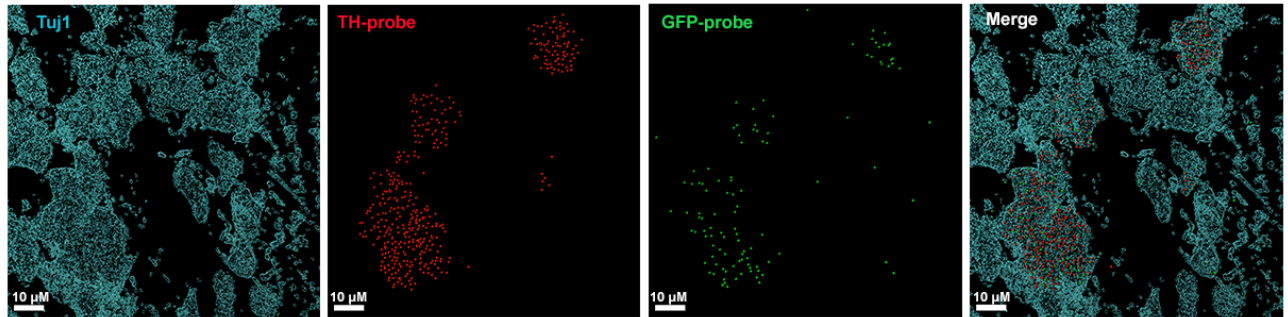


Figure S3. Validation of GFP⁺ DRGNs as TH⁺ C-LTMRs in adult mice. Single-molecule fluorescence in situ hybridization (smFISH) with RNAscope from TH-EGFP⁺ transgenic mice, demonstrating expression of *TH* (red) overlaps with GFP (green) in neurons (IHC; blue). Scale bars represent 10 μm.

Table S1: Genes unique to TH1 and TH2 when compared to all other dorsal root ganglia neuronal subpopulations

gene	p_val	avg_logFC	pct.1	pct.2	p_val_adj	Cluster
Prph	1.00E-305	0.432017	1	0.986	1.14E-301	TH1
Rpl37	4.07E-281	0.35792	0.998	0.996	4.66E-277	TH1
Fau	5.74E-281	0.39051	0.996	0.99	6.57E-277	TH1
Prune2	5.36E-261	0.894773	0.993	0.969	6.13E-257	TH1
Rps27a	2.39E-259	0.373122	0.996	0.991	2.73E-255	TH1
Rplp0	2.42E-212	0.478595	0.96	0.908	2.77E-208	TH1
Klf7	8.29E-179	0.35463	0.986	0.963	9.49E-175	TH1
Rpl6	2.92E-162	0.341402	0.982	0.968	3.34E-158	TH1
Rpl26	8.09E-158	0.285129	0.995	0.988	9.25E-154	TH1
Ncam1	7.86E-156	0.668321	0.832	0.705	8.99E-152	TH1
Pfdn5	9.64E-148	0.385181	0.956	0.93	1.10E-143	TH1
Rpl35a	1.05E-134	0.321054	0.985	0.977	1.20E-130	TH1
Rps7	1.75E-133	0.331036	0.972	0.949	2.00E-129	TH1
Ptms1	2.84E-115	0.362365	0.953	0.933	3.25E-111	TH1
Rpl11	2.43E-111	0.269275	0.99	0.975	2.77E-107	TH1
Chd51	1.38E-102	0.692368	0.702	0.615	1.57E-98	TH1
Scn9a	7.30E-100	0.421536	0.909	0.863	8.36E-96	TH1
Rpl7	7.16E-90	0.331971	0.955	0.929	8.19E-86	TH1
Eef1g1	3.52E-86	0.276172	0.967	0.957	4.02E-82	TH1
Cox7a2l	1.68E-85	0.302427	0.98	0.972	1.93E-81	TH1
Rps26	2.80E-85	0.281773	0.954	0.937	3.20E-81	TH1
Zcrb1	6.82E-84	0.394996	0.84	0.789	7.81E-80	TH1
Use1	1.02E-78	0.38411	0.903	0.873	1.17E-74	TH1
Serp2	1.21E-77	0.340231	0.931	0.887	1.39E-73	TH1
Rpl4	1.71E-77	0.299348	0.964	0.935	1.95E-73	TH1
Hnrnpa11	2.80E-77	0.318551	0.893	0.871	3.21E-73	TH1

Rbfox1	3.03E-76	0.399667	0.871	0.831	3.46E-72	TH1
Ythdf2	3.65E-75	0.532303	0.744	0.675	4.17E-71	TH1
Slc9a61	1.13E-69	0.365619	0.835	0.788	1.29E-65	TH1
Prrxl1	7.62E-65	0.547931	0.836	0.821	8.72E-61	TH1
Eif5b	2.07E-62	0.42484	0.794	0.785	2.37E-58	TH1
Spop1	6.97E-60	0.418882	0.826	0.787	7.98E-56	TH1
Rpl7a	1.24E-50	0.303963	0.892	0.88	1.42E-46	TH1
Eif3h	2.50E-50	0.331914	0.861	0.84	2.86E-46	TH1
Rp9	5.71E-43	0.357921	0.826	0.809	6.53E-39	TH1
Elavl3	4.66E-31	0.301481	0.755	0.747	5.33E-27	TH1
Bach2	1.16E-30	0.465818	0.538	0.486	1.33E-26	TH1
Rtf1	3.02E-28	0.338792	0.756	0.769	3.45E-24	TH1
Lrrc8d	7.14E-27	0.334482	0.66	0.647	8.17E-23	TH1
Ppm1l	1.27E-25	0.432289	0.588	0.555	1.45E-21	TH1
Lats2	2.89E-24	0.397697	0.578	0.55	3.31E-20	TH1
Zfhx4	1.15E-21	0.416961	0.68	0.633	1.31E-17	TH1
Krit1	6.26E-21	0.309801	0.63	0.615	7.16E-17	TH1
Nudc	1.19E-20	0.31148	0.791	0.789	1.36E-16	TH1
Pik3ca	1.37E-18	0.335337	0.641	0.631	1.56E-14	TH1
Peli2	1.88E-18	0.422903	0.459	0.418	2.16E-14	TH1
Drap1	2.36E-18	0.263698	0.804	0.809	2.70E-14	TH1
Map3k1	5.42E-18	0.430007	0.548	0.511	6.20E-14	TH1
Creld1	1.25E-17	0.294119	0.766	0.753	1.43E-13	TH1
Dgkk	2.29E-17	0.481887	0.603	0.571	2.62E-13	TH1
Prcp	4.62E-17	0.450608	0.5	0.468	5.29E-13	TH1
Gm9843	4.64E-16	0.259909	0.803	0.802	5.31E-12	TH1
Zbtb7a	5.09E-16	0.282799	0.746	0.786	5.82E-12	TH1
Zfp703	5.05E-15	0.460958	0.644	0.611	5.78E-11	TH1
Tcerg1l	2.67E-14	0.392012	0.636	0.611	3.06E-10	TH1
Gemin7	1.72E-13	0.272603	0.774	0.775	1.97E-09	TH1
Slc25a1	1.90E-13	0.288763	0.721	0.749	2.17E-09	TH1
Csnk1g3	2.01E-13	0.337779	0.594	0.608	2.30E-09	TH1
Rab11fip2	5.79E-13	0.340158	0.685	0.72	6.63E-09	TH1
Lrrc75b	7.11E-13	0.39315	0.669	0.655	8.14E-09	TH1
Acbd5	9.32E-13	0.261746	0.673	0.694	1.07E-08	TH1
Tln2	1.86E-11	0.278681	0.806	0.839	2.13E-07	TH1
Arglu1	4.07E-11	0.282116	0.66	0.673	4.66E-07	TH1
Suds3	5.31E-11	0.271127	0.758	0.758	6.08E-07	TH1
2510009E07Rik	1.19E-10	0.290971	0.615	0.621	1.36E-06	TH1
Zmiz1	2.39E-10	0.340676	0.543	0.536	2.74E-06	TH1
Med13l	2.64E-10	0.371156	0.513	0.499	3.02E-06	TH1

Al504432	3.42E-10	0.373487	0.583	0.572	3.91E-06	TH1
Nxph3	6.37E-10	0.448102	0.553	0.564	7.29E-06	TH1
Deaf1	5.30E-09	0.358735	0.742	0.77	6.06E-05	TH1
Coq2	8.61E-09	0.291979	0.734	0.739	9.85E-05	TH1
Kcna4	1.27E-08	0.344269	0.637	0.63	0.000146	TH1
St6galnac5	2.33E-08	0.379305	0.617	0.599	0.000267	TH1
Fdx1l	3.14E-08	0.27637	0.742	0.751	0.000359	TH1
Cul4a	5.61E-08	0.307175	0.546	0.542	0.000642	TH1
Uhrf1bp1l	3.70E-07	0.315491	0.567	0.576	0.004234	TH1
Marf1	4.36E-07	0.308372	0.798	0.788	0.004985	TH1
Foxp1	4.86E-07	0.351098	0.54	0.53	0.005561	TH1
Twf1	9.47E-07	0.298991	0.534	0.544	0.010837	TH1
Maz	1.25E-06	0.312685	0.645	0.682	0.014301	TH1
Nhs	6.75E-06	0.342398	0.492	0.487	0.077218	TH1
Fam135a	8.67E-06	0.31793	0.466	0.471	0.099203	TH1
Rrbp1	9.68E-06	0.328744	0.512	0.519	0.110723	TH1
Dpysl5	1.12E-05	0.31073	0.524	0.519	0.127808	TH1
Lrfn5	1.16E-05	0.366255	0.663	0.662	0.132568	TH1
Rnf141	1.36E-05	0.274328	0.533	0.543	0.155519	TH1
Arhgap31	1.38E-05	0.365106	0.425	0.418	0.158228	TH1
Srrm1	2.11E-05	0.254776	0.721	0.729	0.241407	TH1
Clock	2.95E-05	0.306726	0.499	0.514	0.33781	TH1
Adamts9	4.44E-05	0.348983	0.585	0.575	0.508373	TH1
Fst	6.67E-05	0.358749	0.583	0.574	0.76264	TH1
Slc12a7	0.000158	0.263691	0.371	0.403	1	TH1
Gclc	0.000197	0.313882	0.498	0.503	1	TH1
Tacc1	0.000722	0.381927	0.575	0.619	1	TH1
AW551984	0.001047	0.351744	0.576	0.572	1	TH1
Myadm	0.001139	0.282384	0.479	0.494	1	TH1
Celf3	0.001831	0.356467	0.599	0.589	1	TH1
Mrpl9	0.002068	0.364188	0.57	0.609	1	TH1
Tmem2	0.002427	0.267663	0.513	0.513	1	TH1
Tmf1	0.002893	0.264799	0.702	0.684	1	TH1
Dusp6	0.003195	0.290423	0.44	0.457	1	TH1
Mesdc1	0.004767	0.281967	0.765	0.809	1	TH1
Pla2g71	0	0.822942	0.919	0.673	0	TH2
Tsen34	0	0.678656	0.96	0.785	0	TH2
Uqcrc11	1.12E-284	0.660663	0.946	0.738	1.29E-280	TH2
Pmvk1	2.75E-281	0.647425	0.959	0.781	3.15E-277	TH2

Ccdc107	6.41E-275	0.672978	0.902	0.695	7.33E-271	TH2
Tceal81	1.04E-270	0.636131	0.943	0.745	1.19E-266	TH2
Pdcd101	6.28E-248	0.620968	0.939	0.757	7.19E-244	TH2
Akr1b3	1.40E-231	0.647818	0.826	0.615	1.61E-227	TH2
Ccdc109b	3.88E-221	0.581838	0.871	0.679	4.44E-217	TH2
Hsp90ab1	1.04E-219	0.322049	1	0.995	1.20E-215	TH2
Higd2a1	2.27E-212	0.529271	0.965	0.819	2.60E-208	TH2
Med21	5.85E-212	0.54358	0.905	0.711	6.69E-208	TH2
Ceacam103	5.24E-203	1.272883	0.833	0.725	5.99E-199	TH2
Bad1	6.82E-203	0.532035	0.877	0.689	7.80E-199	TH2
Snrpd31	2.66E-189	0.533457	0.884	0.704	3.05E-185	TH2
Hcfc1r1	2.95E-189	0.462486	0.978	0.873	3.37E-185	TH2
Psma12	2.43E-188	0.503568	0.922	0.812	2.77E-184	TH2
Ndufv11	1.96E-187	0.521311	0.903	0.722	2.24E-183	TH2
Cd631	7.72E-187	0.520567	0.894	0.697	8.83E-183	TH2
Eif3g	8.57E-187	0.532185	0.868	0.685	9.80E-183	TH2
Aig11	3.43E-186	0.535101	0.858	0.679	3.93E-182	TH2
Dnajc15	1.49E-184	0.540769	0.857	0.665	1.71E-180	TH2
Spag7	7.64E-182	0.498019	0.903	0.724	8.74E-178	TH2
Mllt11	2.17E-180	0.390493	0.992	0.948	2.48E-176	TH2
Timm17a	3.85E-179	0.490779	0.942	0.782	4.41E-175	TH2
Apoa1bp	1.76E-178	0.505149	0.88	0.698	2.01E-174	TH2
Sdhd1	2.99E-177	0.528534	0.876	0.694	3.42E-173	TH2

Avpi1	2.99E-174	0.516184	0.811	0.635	3.43E-170	TH2
Ndufa81	1.18E-172	0.435433	0.968	0.836	1.35E-168	TH2
Coa6	2.70E-171	0.501395	0.838	0.659	3.09E-167	TH2
Gadd45gip1	2.29E-169	0.487436	0.894	0.723	2.62E-165	TH2
Chmp51	3.43E-169	0.448694	0.968	0.834	3.92E-165	TH2
1110001J03Rik	4.98E-167	0.474427	0.85	0.665	5.69E-163	TH2
Fam173a	4.55E-166	0.476374	0.899	0.735	5.20E-162	TH2
Mrpl28	6.27E-163	0.465884	0.893	0.717	7.17E-159	TH2
Hexb	1.58E-162	0.493125	0.868	0.768	1.81E-158	TH2
Mcts11	5.02E-159	0.44022	0.885	0.695	5.74E-155	TH2
Med31	1.63E-154	0.453685	0.845	0.672	1.86E-150	TH2
2-Mar	1.13E-149	0.475578	0.808	0.639	1.29E-145	TH2
Rheb1	3.14E-147	0.374684	0.989	0.904	3.59E-143	TH2
Dhrs71	3.91E-147	0.515795	0.804	0.624	4.47E-143	TH2
Psmc2	2.13E-145	0.462279	0.879	0.794	2.44E-141	TH2
Ethe1	5.07E-143	0.471073	0.804	0.635	5.80E-139	TH2
Chchd1	5.25E-143	0.431218	0.9	0.736	6.00E-139	TH2
Mrpl211	4.22E-140	0.429845	0.861	0.692	4.83E-136	TH2
Ccl1	2.28E-136	0.539313	0.737	0.568	2.61E-132	TH2
Tex2641	6.72E-135	0.448812	0.847	0.68	7.69E-131	TH2
Emc21	8.06E-134	0.410535	0.844	0.676	9.22E-130	TH2
Bcas2	1.59E-133	0.392146	0.917	0.76	1.82E-129	TH2
Sec62	2.21E-132	0.376183	0.964	0.836	2.52E-128	TH2

Ccdc167	3.66E-132	0.47277	0.791	0.633	4.18E-128	TH2
Psemb4	9.33E-132	0.395216	0.928	0.785	1.07E-127	TH2
Tmem60	1.27E-131	0.413895	0.894	0.735	1.45E-127	TH2
Tceb1	1.59E-131	0.379556	0.981	0.876	1.82E-127	TH2
Ndufa101	5.42E-131	0.410077	0.922	0.78	6.20E-127	TH2
Mrpl46	1.82E-129	0.439035	0.806	0.646	2.08E-125	TH2
Pja1	3.11E-128	0.408725	0.856	0.693	3.56E-124	TH2
Uqcc2	3.82E-124	0.352499	0.97	0.832	4.37E-120	TH2
Mrpl12	3.84E-124	0.386947	0.845	0.7	4.39E-120	TH2
Timm101	7.87E-124	0.400831	0.853	0.701	9.00E-120	TH2
Dohh	1.77E-123	0.413898	0.87	0.72	2.03E-119	TH2
Snapc5	7.86E-123	0.395547	0.864	0.716	8.99E-119	TH2
Ppp1r35	4.58E-122	0.426272	0.833	0.674	5.24E-118	TH2
Polr2k1	1.88E-119	0.380521	0.968	0.838	2.15E-115	TH2
Fars2	2.80E-117	0.390104	0.751	0.602	3.21E-113	TH2
Mrpl14	8.54E-117	0.360141	0.904	0.752	9.77E-113	TH2
O610011F06Rik	1.21E-116	0.39621	0.796	0.637	1.38E-112	TH2
Psm6	9.93E-116	0.39034	0.843	0.684	1.14E-111	TH2
Tsen15	1.29E-114	0.400875	0.796	0.643	1.48E-110	TH2
Rbm8a	1.58E-113	0.346309	0.874	0.719	1.80E-109	TH2
Aamp	7.70E-113	0.387455	0.819	0.668	8.81E-109	TH2
Pfdn1	8.09E-113	0.349132	0.944	0.806	9.26E-109	TH2
Mrps26	6.15E-112	0.37046	0.858	0.724	7.03E-108	TH2

Ostc	3.88E-111	0.370464	0.872	0.725	4.44E-107	TH2
Suc1g1	9.61E-111	0.374389	0.811	0.659	1.10E-106	TH2
Snrpd1	1.16E-110	0.379745	0.842	0.694	1.32E-106	TH2
Polr2e1	4.47E-110	0.402443	0.807	0.657	5.11E-106	TH2
Rpp211	2.90E-109	0.361639	0.855	0.704	3.32E-105	TH2
Txn1	8.56E-109	0.355249	0.901	0.759	9.79E-105	TH2
Mzt2	1.58E-108	0.415	0.767	0.622	1.80E-104	TH2
Fam132a	2.30E-108	0.372928	0.773	0.626	2.63E-104	TH2
Tm2d2	3.35E-108	0.362386	0.843	0.694	3.83E-104	TH2
Naa201	3.43E-107	0.422746	0.804	0.651	3.93E-103	TH2
Ict1	6.34E-107	0.341456	0.844	0.692	7.25E-103	TH2
1810037I17Rik	6.95E-107	0.330785	0.951	0.815	7.95E-103	TH2
Hmgb31	8.08E-107	0.400037	0.756	0.613	9.24E-103	TH2
Ten1	8.41E-107	0.342054	0.827	0.682	9.62E-103	TH2
Acot9	1.37E-106	0.367484	0.785	0.634	1.56E-102	TH2
Snx31	2.75E-105	0.353129	0.945	0.821	3.15E-101	TH2
2610001J05Rik	3.63E-105	0.348978	0.926	0.792	4.16E-101	TH2
Eny2	6.32E-105	0.358398	0.861	0.717	7.23E-101	TH2
Pcmt1	9.82E-105	0.337873	0.961	0.846	1.12E-100	TH2
Unc50	5.44E-104	0.389778	0.825	0.676	6.22E-100	TH2
Cirbp	7.40E-104	0.328442	0.921	0.782	8.46E-100	TH2
Hes6	1.15E-103	0.404341	0.783	0.629	1.32E-99	TH2
Plpp1	2.03E-103	0.369936	0.754	0.611	2.32E-99	TH2

Phf5a1	3.63E-103	0.325686	0.834	0.691	4.15E-99	TH2
Eif6	9.02E-103	0.356822	0.86	0.711	1.03E-98	TH2
Apoo	1.62E-102	0.381067	0.835	0.774	1.85E-98	TH2
Mrpl43	1.74E-102	0.35836	0.828	0.693	1.99E-98	TH2
2010111I01Rik	9.12E-102	0.307846	0.834	0.687	1.04E-97	TH2
Gnpda2	1.32E-101	0.321774	0.853	0.702	1.51E-97	TH2
Slc35g2	2.13E-101	0.367231	0.734	0.586	2.44E-97	TH2
Ssna1	4.47E-100	0.318648	0.867	0.719	5.12E-96	TH2
Snrpc	7.52E-100	0.37206	0.788	0.644	8.61E-96	TH2
Sugt1	1.19E-99	0.318137	0.841	0.701	1.36E-95	TH2
Lsm5	3.79E-99	0.363355	0.784	0.574	4.34E-95	TH2
Mtch2	4.79E-99	0.332364	0.892	0.747	5.48E-95	TH2
Ppa1	1.92E-98	0.340284	0.811	0.66	2.20E-94	TH2
Plpp2	2.50E-98	0.313822	0.733	0.599	2.86E-94	TH2
Mrps21	4.14E-98	0.326154	0.901	0.713	4.74E-94	TH2
Yipf4	3.33E-97	0.329099	0.93	0.796	3.81E-93	TH2
Med29	3.69E-97	0.350933	0.793	0.651	4.22E-93	TH2
Cacybp	5.03E-97	0.334627	0.908	0.773	5.75E-93	TH2
Clic1	1.04E-96	0.323636	0.915	0.774	1.19E-92	TH2
Prmt1	4.92E-96	0.365509	0.802	0.652	5.63E-92	TH2
Isoc11	5.92E-96	0.419419	0.756	0.615	6.78E-92	TH2
Pin41	1.01E-94	0.314374	0.847	0.648	1.15E-90	TH2
Alkbh7	9.51E-94	0.383281	0.755	0.62	1.09E-89	TH2
Mrps18a	1.69E-92	0.324427	0.884	0.76	1.93E-88	TH2
Timm22	2.94E-92	0.300203	0.803	0.667	3.36E-88	TH2
Atg1011	8.45E-92	0.357845	0.806	0.662	9.67E-88	TH2
Carkd	8.88E-92	0.354089	0.758	0.62	1.02E-87	TH2
Tm2d3	2.36E-91	0.373077	0.771	0.64	2.70E-87	TH2
1810058I24Rik	5.37E-91	0.306389	0.953	0.861	6.14E-87	TH2
Flot11	6.58E-91	0.306239	0.919	0.782	7.53E-87	TH2
Tmem1471	7.40E-91	0.308395	0.915	0.778	8.47E-87	TH2
Sssca1	7.68E-91	0.355255	0.792	0.653	8.79E-87	TH2
Ech1	7.35E-90	0.327563	0.773	0.638	8.41E-86	TH2
Psm4	1.02E-89	0.30828	0.886	0.755	1.16E-85	TH2

Serpinf1	1.41E-89	0.420308	0.749	0.592	1.61E-85	TH2
Lhfp15	1.38E-88	0.428293	0.753	0.606	1.58E-84	TH2
Pts	2.06E-88	0.336548	0.807	0.675	2.36E-84	TH2
Sec61b	2.08E-88	0.30524	0.911	0.773	2.38E-84	TH2
Sdf2	6.38E-88	0.319877	0.827	0.684	7.30E-84	TH2
Mrpl551	6.81E-88	0.287244	0.871	0.731	7.79E-84	TH2
Smarcb1	7.20E-88	0.308239	0.748	0.609	8.24E-84	TH2
Timm10b	1.25E-87	0.307394	0.861	0.724	1.43E-83	TH2
Adrm1	2.22E-86	0.323347	0.801	0.659	2.53E-82	TH2
D10Jhu81e	3.94E-86	0.34422	0.767	0.634	4.51E-82	TH2
Jagn1	2.89E-85	0.355677	0.8	0.66	3.31E-81	TH2
Hspbp1	2.07E-84	0.348751	0.781	0.648	2.37E-80	TH2
Prmt2	3.96E-84	0.279074	0.836	0.702	4.53E-80	TH2
Eci1	2.28E-83	0.392211	0.759	0.613	2.61E-79	TH2
Ccdc124	2.45E-83	0.303276	0.921	0.799	2.80E-79	TH2
Tmem55b	1.52E-82	0.284856	0.903	0.773	1.74E-78	TH2
Sumo2	2.69E-82	0.267193	0.988	0.923	3.07E-78	TH2
Acyp21	6.04E-81	0.292745	0.844	0.711	6.91E-77	TH2
Cct71	1.29E-80	0.288977	0.859	0.726	1.47E-76	TH2
Fam96b	2.81E-80	0.274508	0.921	0.793	3.21E-76	TH2
Gm6710	6.23E-80	0.312142	0.743	0.614	7.13E-76	TH2
Snrnp27	1.46E-79	0.276389	0.881	0.704	1.67E-75	TH2
Uqcrc2	6.92E-79	0.292201	0.801	0.668	7.91E-75	TH2
Slc25a11	7.48E-79	0.288884	0.798	0.68	8.55E-75	TH2
Psme1	1.27E-78	0.306202	0.74	0.615	1.46E-74	TH2
Mrps11	3.38E-78	0.363207	0.767	0.637	3.86E-74	TH2
Yipf1	4.54E-78	0.319357	0.755	0.627	5.20E-74	TH2
Sec13	1.77E-77	0.306449	0.762	0.636	2.02E-73	TH2
Frg1	3.70E-77	0.299596	0.781	0.649	4.24E-73	TH2
Nxf1	4.34E-77	0.338014	0.801	0.683	4.97E-73	TH2
Pdcd5	5.79E-77	0.268492	0.945	0.796	6.63E-73	TH2
Etfa	8.09E-77	0.313241	0.824	0.699	9.26E-73	TH2
Psm142	8.54E-77	0.277305	0.847	0.722	9.77E-73	TH2
Rraga	1.51E-76	0.281151	0.884	0.763	1.73E-72	TH2
Sra1	3.29E-76	0.280286	0.83	0.702	3.76E-72	TH2
Mrps36	3.53E-76	0.263949	0.892	0.752	4.04E-72	TH2
Slc35b1	4.62E-76	0.311844	0.766	0.642	5.28E-72	TH2
Cdc5l	4.76E-76	0.311974	0.745	0.621	5.45E-72	TH2
Ndufaf3	1.19E-75	0.26442	0.819	0.689	1.37E-71	TH2
Rpl36al	1.59E-75	0.261367	0.952	0.85	1.82E-71	TH2
Mrps16	2.45E-75	0.274945	0.806	0.685	2.80E-71	TH2

Znhit3	5.46E-75	0.30969	0.768	0.639	6.24E-71	TH2
Tsg101	1.29E-74	0.26271	0.884	0.758	1.48E-70	TH2
Magoh	1.60E-74	0.32344	0.82	0.771	1.84E-70	TH2
Idh3g	1.90E-74	0.25541	0.754	0.632	2.17E-70	TH2
2310036O22Rik	2.19E-74	0.275193	0.929	0.819	2.51E-70	TH2
Psmc6	5.60E-74	0.281085	0.824	0.699	6.40E-70	TH2
Lsm1	1.10E-73	0.280061	0.83	0.7	1.26E-69	TH2
Tbc1d19	5.94E-73	0.291362	0.747	0.62	6.79E-69	TH2
Psme2	1.17E-72	0.25836	0.836	0.704	1.34E-68	TH2
Mea1	1.46E-72	0.25828	0.88	0.762	1.67E-68	TH2
Coro1a	3.81E-72	0.29604	0.763	0.652	4.36E-68	TH2
Fkbp2	4.31E-72	0.261424	0.964	0.864	4.94E-68	TH2
Txndc17	6.10E-72	0.268749	0.932	0.836	6.98E-68	TH2
Med30	1.42E-71	0.280627	0.813	0.684	1.62E-67	TH2
Atg3	2.63E-71	0.30999	0.845	0.716	3.01E-67	TH2
Psmd12	6.80E-71	0.293043	0.806	0.698	7.78E-67	TH2
Bud31	1.12E-70	0.294413	0.774	0.651	1.28E-66	TH2
Rbm42	2.17E-70	0.30489	0.737	0.616	2.48E-66	TH2
Isca2	2.59E-70	0.282872	0.831	0.715	2.97E-66	TH2
Pafah1b3	2.67E-70	0.28348	0.835	0.701	3.06E-66	TH2
Tmem14a	2.73E-70	0.274115	0.836	0.712	3.12E-66	TH2
Mrpl4	3.42E-70	0.273963	0.756	0.628	3.92E-66	TH2
Popdc3	3.89E-70	0.250303	0.744	0.628	4.45E-66	TH2
Cbr1	4.10E-70	0.270443	0.784	0.659	4.69E-66	TH2
Psmd8	6.14E-70	0.277627	0.816	0.694	7.02E-66	TH2
Nipsnap3b	9.09E-70	0.264272	0.848	0.716	1.04E-65	TH2
Sar1b	2.56E-69	0.296559	0.794	0.662	2.93E-65	TH2
Vbp1	3.07E-69	0.25826	0.952	0.845	3.52E-65	TH2
Ddost	6.34E-69	0.297437	0.746	0.626	7.26E-65	TH2
Gpx2	2.03E-68	0.334909	0.687	0.567	2.32E-64	TH2
Bola1	2.47E-68	0.279016	0.787	0.668	2.83E-64	TH2
Tmem53	2.71E-68	0.287624	0.706	0.586	3.10E-64	TH2
Uqcc3	6.05E-68	0.250813	0.9	0.785	6.92E-64	TH2
Aimp2	7.65E-68	0.269532	0.757	0.633	8.76E-64	TH2
2210013O21Rik	1.29E-67	0.259734	0.954	0.853	1.48E-63	TH2
Tsn	1.51E-67	0.261959	0.887	0.773	1.73E-63	TH2
Sf3b61	4.22E-67	0.283008	0.823	0.696	4.82E-63	TH2
Txndc15	5.26E-67	0.276838	0.775	0.657	6.02E-63	TH2
Dapk3	2.48E-66	0.256211	0.742	0.631	2.84E-62	TH2
2810428I15Rik	4.04E-66	0.250959	0.963	0.876	4.63E-62	TH2
Eri3	3.76E-65	0.252361	0.808	0.69	4.31E-61	TH2

Lsm7	3.91E-65	0.262171	0.688	0.511	4.47E-61	TH2
Pepd	1.21E-64	0.296512	0.71	0.597	1.38E-60	TH2
Hacd1	5.10E-64	0.28803	0.766	0.65	5.84E-60	TH2
Cyb561d2	1.11E-63	0.256299	0.759	0.642	1.27E-59	TH2
Nsfl1c	1.72E-63	0.25477	0.81	0.692	1.97E-59	TH2
Mvb12a1	2.30E-63	0.260401	0.78	0.67	2.63E-59	TH2
Lyrn4	7.18E-63	0.265531	0.777	0.667	8.22E-59	TH2
Ola1	8.08E-63	0.252246	0.837	0.725	9.24E-59	TH2
Slc51a	2.38E-62	0.34596	0.674	0.557	2.72E-58	TH2
Mrpl15	4.35E-61	0.299855	0.737	0.628	4.98E-57	TH2
Tomm40	1.20E-60	0.272529	0.743	0.632	1.38E-56	TH2
Tssc4	2.81E-60	0.257845	0.709	0.596	3.22E-56	TH2
Med19	6.82E-60	0.260578	0.766	0.655	7.80E-56	TH2
Yif1a	1.95E-59	0.28756	0.773	0.654	2.23E-55	TH2
Ercc1	2.14E-59	0.274573	0.712	0.598	2.44E-55	TH2
Tmco1	3.07E-59	0.263806	0.823	0.71	3.52E-55	TH2
Blvra	5.70E-58	0.286699	0.743	0.617	6.52E-54	TH2
Psmg3	4.92E-57	0.264669	0.732	0.624	5.62E-53	TH2
Mrpl22	8.96E-57	0.310539	0.825	0.767	1.02E-52	TH2
Sac3d1	9.05E-56	0.254731	0.753	0.645	1.04E-51	TH2
Ssr2	9.33E-56	0.269323	0.763	0.651	1.07E-51	TH2
Commd9	1.25E-55	0.276262	0.739	0.625	1.43E-51	TH2
Tbrg1	1.39E-55	0.270968	0.75	0.632	1.59E-51	TH2
Clpp	2.28E-55	0.256331	0.806	0.69	2.61E-51	TH2
Ubl7	2.62E-55	0.254613	0.731	0.627	3.00E-51	TH2
Lsm3	1.36E-54	0.259927	0.728	0.622	1.56E-50	TH2
Creb3	1.88E-54	0.256375	0.716	0.61	2.15E-50	TH2
Emd	1.55E-53	0.284974	0.744	0.631	1.77E-49	TH2
Gpr137b	4.50E-53	0.258567	0.699	0.594	5.15E-49	TH2
1700021F05Rik	4.55E-52	0.25281	0.725	0.623	5.20E-48	TH2
Prdx4	1.62E-51	0.264646	0.72	0.617	1.85E-47	TH2
Slc50a1	2.90E-50	0.254163	0.731	0.627	3.32E-46	TH2
Tsfm	3.60E-49	0.254521	0.726	0.625	4.12E-45	TH2
Fcf1	3.95E-49	0.26341	0.722	0.617	4.52E-45	TH2
Fads3	7.57E-48	0.254595	0.703	0.596	8.66E-44	TH2
Wdr18	1.82E-47	0.273394	0.73	0.625	2.08E-43	TH2
Mtx1	3.83E-44	0.251241	0.695	0.599	4.38E-40	TH2
Depdc7	5.48E-44	0.280059	0.675	0.562	6.26E-40	TH2
Rce1	8.73E-43	0.267869	0.706	0.607	9.99E-39	TH2
Fbp2	1.53E-38	0.345265	0.651	0.561	1.75E-34	TH2
Tmem159	4.40E-28	0.280827	0.779	0.74	5.03E-24	TH2

Pkp3	1.69E-25	0.306107	0.646	0.564	1.93E-21	TH2
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Table S2: Analysis of TH1 vs. TH2 single-cell gene expression; a positive log2FC indicates higher expression in TH1 dorsal root ganglia neurons					
Gene	p_val	avg_logFC	pct.1	pct.2	p_val_adj
Rps19	0	0.573924475	0.999	0.998	0
Rpl41	0	0.500153608	1	1	0
Fth1	0	0.480047554	1	1	0
Stmn3	0	- 0.628129813	0.98	0.998	0
Chchd2	0	- 0.645446233	0.983	1	0
Atp5l	0	- 0.707568055	0.968	1	0
Uqcrl1	0	- 0.715531187	0.956	0.997	0
Cfl1	0	- 0.758991236	0.937	0.998	0
Bex2	0	- 0.776061875	0.939	0.998	0
Atp6v1f	0	- 0.783961889	0.926	0.996	0
Tuba1a	0	- 0.804071377	0.986	0.997	0
Cox7a2	0	- 0.810162394	0.959	0.999	0
Uqcrl0	0	- 0.818703796	0.893	0.998	0
Rbx1	0	- 0.828397218	0.911	0.997	0
Uchl1	0	- 0.842812479	0.983	1	0
Stmn1	0	- 0.850013445	0.983	0.999	0
Ndufs5	0	- 0.850533877	0.88	0.992	0
Ppia	0	- 0.851446722	0.998	1	0
Gm7271	0	- 0.851760937	0.911	0.993	0
Myl6	0	- 0.880583026	0.819	0.987	0
Dctn3	0	- 0.881083861	0.877	0.993	0

Atp5g1	0	- 0.887217269	0.961	0.999	0
Cox6b1	0	- 0.888243259	0.951	0.999	0
Cox5a	0	- 0.888967397	0.928	0.999	0
Dynll1	0	-0.91890572	0.974	0.999	0
Aldoa	0	- 0.919039663	0.951	0.997	0
Sncg	0	- 0.929784482	1	1	0
Psma7	0	- 0.929916183	0.854	0.993	0
Atpif1	0	- 0.930811908	0.981	1	0
Atp5j2	0	- 0.933565747	0.905	0.996	0
Calm2	0	- 0.939539939	0.999	1	0
Rabac1	0	- 0.968995559	0.871	0.995	0
Ndufs7	0	- 0.969818157	0.737	0.979	0
Calm1	0	- 0.972127815	0.991	1	0
Anxa2	0	- 0.973573146	0.891	0.994	0
Cox6a1	0	- 0.979258683	0.94	0.995	0
Psmb3	0	- 0.997290641	0.755	0.986	0
Ndufb4	0	- 1.006673613	0.825	0.994	0
Spcs1	0	- 1.019860575	0.71	0.984	0
Psmb6	0	- 1.022806581	0.791	0.992	0
Uqcrb	0	- 1.022844111	0.875	0.995	0
Ndufb6	0	-1.02968983	0.773	0.993	0
Dad1	0	- 1.045304528	0.746	0.99	0
Gabarapl2	0	- 1.073328466	0.921	0.999	0
Mdh1	0	- 1.074910118	0.731	0.975	0

Ndufab1	0	- 1.076710609	0.77	0.99	0
Cd9	0	- 1.086745405	0.799	0.985	0
Ndufb2	0	- 1.098936589	0.811	0.994	0
Nop10	0	- 1.117311821	0.825	0.996	0
Psemb2	0	- 1.133926144	0.811	0.982	0
Ctsl	0	- 1.144569222	0.747	0.968	0
Ndufa11	0	- 1.166295896	0.865	0.997	0
Atp6v0b	0	- 1.168170019	0.875	0.999	0
Tecr	0	-1.20159641	0.749	0.989	0
Prdx1	0	- 1.201597075	0.857	0.996	0
Hspb1	0	- 1.265847724	0.805	0.993	0
Lxn	0	- 1.295287906	0.858	0.996	0
S100a10	0	-1.30008047	0.952	0.999	0
Txn1	0	- 1.309485344	0.946	0.999	0
Mgst3	0	- 1.363437598	0.713	0.978	0
Ndufa4	0	- 1.526808889	0.97	1	0
Ubb	0	- 1.748505444	0.955	0.999	0
Nme1	6.09E-305	- 0.848252775	0.832	0.992	6.96E-301
Anxa5	6.77E-305	- 0.674732636	0.939	0.997	7.74E-301
Sh3bgrl3	1.40E-302	- 0.621340664	0.979	0.999	1.60E-298
Rarres1	5.25E-302	- 0.768501813	0.851	0.997	6.00E-298
Uqcrcq	6.00E-295	- 0.684621168	0.955	0.999	6.87E-291
Atp5j	3.93E-293	- 0.628924598	0.947	0.997	4.50E-289
Tubb2a	5.06E-290	- 1.021879193	0.726	0.965	5.79E-286

Ldha	1.66E-289	- 0.874313348	0.803	0.987	1.90E-285
Cisd1	8.63E-289	- 0.750305725	0.89	0.994	9.88E-285
Pfn1	5.78E-288	- 0.720053021	0.92	0.997	6.61E-284
Tppp3	5.89E-287	- 0.501673766	1	1	6.74E-283
Cst3	1.43E-286	- 0.742037173	0.802	0.996	1.63E-282
Sdhb	3.37E-282	- 0.914544992	0.73	0.972	3.85E-278
Fez1	2.47E-280	- 0.788407731	0.821	0.977	2.82E-276
Gapdh	1.11E-277	- 0.768808495	0.897	0.99	1.27E-273
Rbms3	1.20E-276	0.52418634	1	0.998	1.37E-272
Ndufc2	1.69E-276	- 0.868815394	0.724	0.973	1.93E-272
Cox6c	7.07E-275	- 0.507238385	0.986	1	8.09E-271
Vps29	9.86E-274	- 0.889290711	0.69	0.972	1.13E-269
Hsp90aa1	7.15E-272	- 0.622061861	0.935	0.995	8.18E-268
Prdx2	7.30E-271	- 0.781522751	0.829	0.988	8.36E-267
Rpl13a	8.67E-270	0.592934364	0.992	0.989	9.92E-266
Rheb	3.89E-267	- 0.791711126	0.822	0.989	4.45E-263
Psmb5	4.75E-265	- 0.922869766	0.69	0.954	5.44E-261
Cox7b	4.17E-264	- 0.812038349	0.815	0.983	4.77E-260
Calcb	1.20E-263	- 1.053634564	0.84	0.976	1.37E-259
Rpl3	2.52E-263	0.598967971	0.996	0.992	2.88E-259
Rpl37	9.12E-263	0.503190783	0.998	0.998	1.04E-258
Fkbp3	9.71E-263	- 0.883119657	0.692	0.967	1.11E-258
Cox8a	3.99E-260	- 0.437932428	0.998	1	4.57E-256
Atp5g3	1.08E-259	-0.75642579	0.853	0.988	1.23E-255
Mif	7.87E-258	- 0.828092796	0.724	0.977	9.00E-254

Swi5	8.66E-258	- 0.791911906	0.791	0.981	9.91E-254
Polr2g	1.87E-257	- 0.920003868	0.64	0.942	2.14E-253
Atp5o	1.05E-255	- 0.740358897	0.846	0.986	1.20E-251
Ndufb8	1.16E-253	- 0.582593621	0.961	0.997	1.32E-249
Ywhaz	1.20E-251	0.587508931	0.999	0.993	1.37E-247
Tonsl	4.00E-251	- 0.891304074	0.685	0.953	4.57E-247
Nedd8	3.99E-250	- 0.613057262	0.95	0.997	4.57E-246
Ftl1	9.26E-249	0.410550803	1	1	1.06E-244
Zfhx3	5.07E-248	0.622487499	0.998	0.994	5.80E-244
Tceb2	2.28E-246	- 0.568285879	0.971	0.996	2.61E-242
Ndufa7	2.34E-246	- 0.760529755	0.842	0.984	2.68E-242
Atp6v1e1	2.43E-244	-0.83433308	0.688	0.956	2.78E-240
Tagln3	9.27E-241	- 0.802836543	0.789	0.975	1.06E-236
Prdx5	4.23E-240	- 0.701114646	0.872	0.989	4.84E-236
Rpl13	6.42E-237	0.541710068	0.995	0.99	7.35E-233
Rps23	2.73E-236	0.523146204	0.995	0.994	3.12E-232
Rps5	5.70E-236	0.523246912	0.996	0.992	6.52E-232
Usmg5	1.68E-234	- 0.613960616	0.906	0.994	1.92E-230
Itm2b	3.27E-233	- 0.688509003	0.835	0.991	3.75E-229
Rps18	4.40E-233	0.545530621	0.995	0.989	5.03E-229
Eif4a2	3.90E-231	0.514030476	0.999	0.995	4.46E-227
Uqcrc1	2.27E-229	- 0.787669899	0.655	0.946	2.60E-225
Rpl10	3.01E-229	0.527714778	0.995	0.992	3.45E-225
Atp5f1	2.44E-227	- 0.738679814	0.77	0.975	2.79E-223
Cstb	3.44E-224	- 0.805743391	0.675	0.948	3.94E-220
Hn1	2.16E-222	-0.77685851	0.715	0.964	2.47E-218
BC031181	1.84E-221	- 0.747434916	0.742	0.971	2.11E-217
Map1lc3a	8.64E-220	- 0.489421091	0.975	0.996	9.88E-216

Pla2g7	1.96E-219	- 0.767369644	0.62	0.919	2.24E-215
Atp5b	1.31E-218	-0.71611954	0.835	0.979	1.50E-214
Psm2	1.33E-217	- 0.776409604	0.729	0.96	1.52E-213
Ndufc1	1.15E-216	- 0.700569065	0.74	0.981	1.31E-212
Mdh2	3.41E-216	- 0.745160894	0.749	0.969	3.90E-212
Tubb4b	3.49E-216	- 0.785056545	0.675	0.939	3.99E-212
Ssu72	1.86E-215	- 0.780967277	0.664	0.939	2.12E-211
Psm6	1.88E-215	- 0.798293311	0.746	0.918	2.15E-211
Cox5b	5.53E-215	- 0.488852582	0.966	0.997	6.33E-211
Emc4	1.50E-214	- 0.778576243	0.63	0.924	1.71E-210
Kif21a	2.59E-214	0.481058154	0.999	0.998	2.96E-210
Rps27	2.98E-214	0.548768677	0.995	0.991	3.41E-210
Mpc1	5.98E-214	- 0.679574984	0.83	0.985	6.84E-210
Ifi27	1.09E-212	- 0.870120825	0.65	0.927	1.25E-208
Hagh	1.14E-212	- 0.786947523	0.618	0.918	1.31E-208
Pomp	2.40E-212	- 0.666899015	0.839	0.989	2.75E-208
Fabp5	6.45E-211	- 0.731543128	0.8	0.975	7.38E-207
Rab3a	4.17E-210	- 0.660556863	0.867	0.986	4.77E-206
Cyb5a	8.51E-210	-0.76931581	0.713	0.958	9.74E-206
Cd81	2.27E-208	- 0.765869151	0.584	0.944	2.59E-204
Psmb1	1.46E-207	- 0.649424567	0.852	0.984	1.67E-203
Ndufa5	5.99E-206	- 0.635309139	0.813	0.985	6.86E-202
Dynlrb1	7.64E-206	- 0.534923446	0.947	0.997	8.74E-202
Gstm5	1.59E-201	-0.73401913	0.609	0.917	1.82E-197
Snrpd3	2.50E-201	- 0.726602389	0.586	0.884	2.85E-197

Ctsb	2.56E-201	- 0.644491223	0.8	0.969	2.93E-197
Higd2a	4.05E-200	- 0.712835267	0.733	0.965	4.64E-196
Psma1	1.21E-197	- 0.702096913	0.76	0.922	1.38E-193
Crip2	2.29E-197	- 0.743508236	0.776	0.97	2.62E-193
Hprt	1.46E-196	-0.68871774	0.75	0.971	1.68E-192
Cdc42	1.77E-196	- 0.574087391	0.86	0.988	2.03E-192
Ndufa12	5.45E-196	- 0.681769189	0.7	0.961	6.24E-192
Emc9	4.52E-194	- 0.692752195	0.676	0.939	5.18E-190
Rpl32	1.77E-193	0.52530831	0.99	0.985	2.03E-189
Rps27a	8.06E-193	0.451202564	0.996	0.997	9.22E-189
Rpl27a	1.15E-192	0.519054161	0.991	0.989	1.31E-188
Rpl37a	5.32E-192	0.449730348	0.995	0.996	6.09E-188
Tshz2	9.62E-192	0.634938268	0.977	0.956	1.10E-187
Bsg	1.33E-191	- 0.674537806	0.735	0.967	1.53E-187
Bcap31	1.35E-191	-0.74878279	0.63	0.909	1.55E-187
Tmem50a	1.55E-191	- 0.656783519	0.785	0.973	1.77E-187
Coa3	1.92E-191	- 0.645664144	0.817	0.978	2.20E-187
Ndufs4	3.55E-191	- 0.685115826	0.63	0.919	4.06E-187
Ndufa9	1.45E-188	- 0.696072424	0.573	0.872	1.66E-184
Mcts1	1.63E-188	- 0.651425474	0.582	0.885	1.87E-184
Tmem59	1.90E-188	- 0.671609466	0.768	0.968	2.18E-184
Tmbim4	1.82E-186	- 0.683073092	0.608	0.899	2.08E-182
Med21	2.54E-186	- 0.668089416	0.62	0.905	2.91E-182
Cuta	1.97E-184	- 0.675151438	0.63	0.901	2.25E-180
Tbcb	2.01E-184	- 0.658929088	0.774	0.961	2.29E-180
Ubl5	5.00E-184	- 0.577228719	0.902	0.991	5.72E-180

Ndufb11	8.78E-184	- 0.652973764	0.764	0.968	1.00E-179
Mrpl41	4.27E-183	- 0.703934891	0.627	0.907	4.89E-179
Snrpb	4.55E-181	- 0.677997466	0.571	0.861	5.21E-177
Ndufs8	2.08E-180	-0.64787951	0.649	0.917	2.38E-176
Ap2s1	8.47E-180	- 0.643794556	0.71	0.954	9.69E-176
Fdps	9.59E-179	- 0.698619719	0.628	0.922	1.10E-174
Trappc2l	1.08E-178	- 0.647721051	0.663	0.922	1.24E-174
Camk2n1	1.74E-178	0.578205992	0.983	0.97	1.99E-174
Taldo1	4.92E-178	-0.68008113	0.577	0.869	5.63E-174
Rpl9	6.61E-178	0.504165983	0.988	0.985	7.56E-174
Psma4	4.01E-177	- 0.670018209	0.566	0.873	4.59E-173
S100a13	4.53E-177	- 0.686448214	0.707	0.944	5.18E-173
Ppp1r11	1.56E-176	- 0.696223378	0.68	0.935	1.79E-172
Cycs	1.75E-174	- 0.578755767	0.866	0.99	2.00E-170
Selm	2.56E-174	- 0.658191667	0.761	0.959	2.93E-170
Gtf2h5	9.11E-174	- 0.643045057	0.741	0.953	1.04E-169
Pdcd10	4.26E-172	- 0.646065291	0.68	0.939	4.88E-168
Mpc2	1.01E-170	- 0.665555905	0.639	0.902	1.16E-166
Tac1	4.96E-170	- 0.771898154	0.824	0.952	5.67E-166
Psenen	1.11E-169	- 0.659892142	0.668	0.93	1.27E-165
Mrpl27	2.26E-169	-0.63716197	0.642	0.911	2.59E-165
Commd4	1.18E-166	-0.59691247	0.748	0.887	1.35E-162
H2-D1	1.54E-166	- 0.637043632	0.619	0.903	1.76E-162
Rps8	2.10E-166	0.473620502	0.987	0.985	2.41E-162
H2afz	7.16E-166	- 0.572971862	0.856	0.989	8.20E-162
Srp14	9.38E-166	- 0.538249287	0.887	0.99	1.07E-161

Myl12b	1.02E-165	- 0.628301399	0.712	0.952	1.17E-161
Hint1	1.94E-165	- 0.393092251	0.987	0.997	2.22E-161
Psma3	2.21E-165	- 0.630417512	0.735	0.959	2.53E-161
Pitpnc1	2.95E-165	0.512633396	0.987	0.988	3.37E-161
Zdhhc2	3.34E-165	0.472965933	0.991	0.992	3.82E-161
Cox14	3.49E-165	- 0.609338038	0.784	0.97	3.99E-161
Ndufb7	1.22E-164	-0.57073457	0.86	0.98	1.40E-160
Tmem256	2.08E-163	- 0.573561471	0.749	0.973	2.38E-159
Hist1h2bc	2.52E-162	- 0.629832434	0.764	0.965	2.88E-158
Dpysl2	4.29E-162	0.479776195	0.995	0.994	4.91E-158
Mrpl20	4.59E-162	- 0.608460311	0.695	0.938	5.25E-158
Rpl18a	3.81E-161	0.41076277	0.995	0.996	4.35E-157
Ostf1	5.49E-161	- 0.653757427	0.81	0.973	6.28E-157
Napa	4.13E-160	-0.61227706	0.68	0.929	4.73E-156
Ndufv3	5.81E-160	- 0.519310072	0.859	0.986	6.65E-156
Mien1	7.14E-160	- 0.575727139	0.81	0.976	8.17E-156
Ndufa1	9.00E-160	- 0.601028957	0.617	0.937	1.03E-155
Tsen34	3.98E-159	- 0.603749856	0.752	0.96	4.55E-155
Piezo2	4.01E-159	0.521818454	0.978	0.984	4.58E-155
Mrps14	4.19E-157	- 0.639561386	0.624	0.896	4.80E-153
Erh	5.66E-155	- 0.609015519	0.685	0.929	6.48E-151
0610009B22Rik	6.71E-155	- 0.642307111	0.768	0.911	7.67E-151
Spag7	2.30E-154	- 0.587036757	0.643	0.903	2.63E-150
Rpl26	2.69E-154	0.415707957	0.995	0.992	3.08E-150
Rps14	4.36E-154	0.368442053	0.998	0.998	4.99E-150
Ndufs3	4.41E-154	- 0.607207797	0.656	0.921	5.04E-150
Atp6v1g1	7.07E-154	- 0.459710871	0.949	0.995	8.09E-150

S100a6	2.72E-153	- 0.870074356	0.885	0.946	3.11E-149
Pmm1	7.69E-153	- 0.569515417	0.83	0.978	8.80E-149
Mrpl36	7.89E-153	- 0.620316697	0.567	0.845	9.03E-149
Akr1a1	6.58E-152	- 0.543816657	0.845	0.977	7.53E-148
Aurkaip1	7.85E-152	- 0.591812225	0.759	0.956	8.98E-148
Pttg1	7.55E-151	- 0.660943014	0.756	0.899	8.63E-147
Tpi1	1.36E-150	- 0.574008212	0.697	0.928	1.56E-146
Eef1a1	2.22E-150	0.5080108	0.974	0.976	2.54E-146
Mrps33	2.92E-150	-0.56701738	0.82	0.977	3.34E-146
Rps29	6.06E-150	0.421773054	0.998	0.997	6.94E-146
Vdac3	1.15E-148	- 0.592691583	0.636	0.902	1.32E-144
Prr13	2.02E-148	- 0.427082662	0.974	0.999	2.31E-144
Chchd10	6.42E-148	-0.5528754	0.743	0.959	7.35E-144
Cope	9.09E-148	- 0.631001801	0.619	0.884	1.04E-143
BC048546	1.28E-147	-0.5641217	0.836	0.98	1.46E-143
Cystm1	2.97E-147	- 0.596614161	0.641	0.912	3.39E-143
Psmc2	6.03E-147	- 0.583238913	0.745	0.879	6.90E-143
Ndufa13	6.38E-147	- 0.426630123	0.958	0.998	7.29E-143
Hsbp1	9.62E-147	- 0.560814175	0.782	0.97	1.10E-142
Rps4x	2.56E-146	0.496296719	0.981	0.976	2.93E-142
Mrpl28	7.16E-146	- 0.559418195	0.635	0.893	8.19E-142
Rpl11	1.28E-145	0.478160083	0.99	0.981	1.46E-141
Edf1	4.42E-145	- 0.501681425	0.893	0.988	5.06E-141
Gadd45gip1	2.27E-144	- 0.566079967	0.642	0.894	2.59E-140
Psmc4	8.08E-144	- 0.593592281	0.571	0.841	9.24E-140
Romo1	9.70E-144	- 0.516833608	0.779	0.964	1.11E-139

Rpp21	1.04E-143	- 0.588267197	0.593	0.855	1.19E-139
Rps6	1.14E-143	0.419974918	0.992	0.99	1.31E-139
Nt5c	1.22E-143	- 0.582157042	0.637	0.905	1.40E-139
Fau	2.75E-143	0.370444215	0.996	0.996	3.14E-139
Med31	7.68E-143	- 0.521107266	0.585	0.845	8.79E-139
Trappc4	7.72E-143	- 0.566293798	0.774	0.966	8.84E-139
Rpl14	1.05E-142	0.453207042	0.991	0.99	1.20E-138
Cyc1	1.62E-142	- 0.574215142	0.688	0.919	1.85E-138
Ndufa8	2.13E-141	-0.5250557	0.793	0.968	2.44E-137
Ywhag	3.17E-141	0.455590563	0.995	0.989	3.62E-137
Nkiras1	3.96E-141	- 0.540992855	0.668	0.903	4.53E-137
Mrpl55	3.99E-141	- 0.528306663	0.61	0.871	4.57E-137
Acot7	2.22E-140	- 0.561801794	0.735	0.947	2.54E-136
Rps16	7.75E-140	0.447617584	0.988	0.99	8.86E-136
Fabp3	8.62E-140	- 0.551750325	0.589	0.851	9.87E-136
Mtx2	1.19E-139	- 0.559131518	0.573	0.841	1.36E-135
Chmp2a	1.62E-139	- 0.565475576	0.63	0.882	1.86E-135
Arl6ip5	1.77E-139	- 0.587661998	0.689	0.929	2.02E-135
Chmp5	4.82E-139	- 0.546059246	0.77	0.968	5.52E-135
Apoa1bp	6.86E-139	-0.53307718	0.619	0.88	7.85E-135
Hcfc1r1	2.55E-138	- 0.524954809	0.847	0.978	2.92E-134
Mrps12	4.44E-138	- 0.568238686	0.707	0.931	5.08E-134
Minos1	8.28E-138	- 0.454320789	0.932	0.993	9.47E-134
Sf3b5	8.44E-138	- 0.532531627	0.634	0.891	9.66E-134
2010107E04Rik	2.84E-137	- 0.476421524	0.922	0.993	3.25E-133
Mrps17	4.90E-137	- 0.519393663	0.589	0.849	5.61E-133

Med28	6.26E-137	- 0.553535723	0.686	0.941	7.17E-133
Lamtor5	7.28E-137	- 0.535537948	0.711	0.948	8.33E-133
Atp5d	1.28E-136	- 0.485689717	0.89	0.986	1.47E-132
Eif3g	1.90E-136	- 0.551700203	0.615	0.868	2.17E-132
Pfdn6	2.27E-136	-0.55481963	0.629	0.888	2.60E-132
Tspan3	4.21E-136	- 0.534992601	0.622	0.886	4.82E-132
Ank2	2.77E-135	0.475730338	0.985	0.983	3.17E-131
Phf24	2.61E-134	0.473717451	0.991	0.992	2.99E-130
Tmem205	2.65E-134	- 0.574250106	0.748	0.878	3.04E-130
Rpl6	5.78E-134	0.45507317	0.982	0.979	6.61E-130
Sf3b6	6.20E-134	- 0.561654086	0.561	0.823	7.09E-130
Atg101	1.26E-133	- 0.565614917	0.543	0.806	1.45E-129
Timm13	3.13E-133	- 0.477126812	0.885	0.987	3.58E-129
Mrps34	4.00E-133	- 0.511972129	0.593	0.845	4.57E-129
Ube2v2	4.01E-133	- 0.546694958	0.75	0.961	4.59E-129
Eno1	4.58E-133	- 0.502512993	0.648	0.901	5.24E-129
Ckb	4.88E-133	- 0.523121461	0.669	0.91	5.58E-129
Tmem59l	1.25E-132	- 0.506346587	0.6	0.844	1.43E-128
Timm17a	7.06E-132	- 0.545697655	0.714	0.942	8.08E-128
Mbnl2	2.19E-131	0.47371203	0.983	0.984	2.50E-127
Mllt11	4.87E-131	- 0.452297822	0.924	0.992	5.57E-127
Dbi	5.01E-131	- 0.525483425	0.633	0.897	5.74E-127
Sdhd	5.51E-131	- 0.551133347	0.618	0.876	6.31E-127
Sri	1.10E-130	- 0.519762343	0.707	0.932	1.26E-126
Acot13	1.84E-130	-0.50994329	0.616	0.866	2.10E-126
Ndufs6	1.95E-130	- 0.490572934	0.862	0.981	2.23E-126

Supt4a	9.29E-130	- 0.508624043	0.642	0.895	1.06E-125
Mrps25	2.36E-129	- 0.495963764	0.603	0.856	2.70E-125
Psmb4	2.45E-129	- 0.527297966	0.713	0.928	2.80E-125
Mrps6	3.51E-129	- 0.460338946	0.582	0.839	4.01E-125
Mrpl51	3.81E-129	- 0.472889017	0.642	0.891	4.36E-125
Ppib	9.12E-129	- 0.473819993	0.597	0.849	1.04E-124
Polr2j	1.18E-128	- 0.495420342	0.621	0.874	1.35E-124
1110001J03Rik	1.81E-128	- 0.500380703	0.589	0.85	2.07E-124
Ldhb	3.21E-128	- 0.500296673	0.571	0.807	3.67E-124
Mrpl21	1.83E-127	- 0.505535236	0.617	0.861	2.10E-123
Rps20	4.40E-127	0.494444835	0.974	0.963	5.03E-123
Pin1	7.70E-127	- 0.494518091	0.674	0.91	8.81E-123
Yipf4	9.09E-127	-0.50379414	0.697	0.93	1.04E-122
Higd1a	1.20E-126	- 0.525189228	0.782	0.962	1.38E-122
Sncb	2.63E-126	- 0.522210062	0.751	0.942	3.01E-122
Cct7	2.71E-126	- 0.521146884	0.622	0.859	3.10E-122
Dhrs7	2.94E-126	- 0.551602414	0.545	0.804	3.36E-122
Park7	8.01E-126	- 0.509934065	0.774	0.96	9.17E-122
Med29	1.28E-125	- 0.479902519	0.552	0.793	1.47E-121
Flot1	1.54E-124	- 0.520658954	0.678	0.919	1.76E-120
Apoo	7.77E-124	- 0.492842809	0.736	0.835	8.89E-120
Ethe1	9.57E-124	- 0.497645001	0.559	0.804	1.10E-119
Dpy30	1.94E-123	- 0.509094118	0.673	0.921	2.22E-119
Lgals1	3.68E-123	- 0.617582199	0.794	0.949	4.21E-119

Tmem208	4.10E-123	- 0.483396019	0.605	0.853	4.69E-119
Etfb	6.88E-123	- 0.521291926	0.583	0.836	7.88E-119
Meg3	9.00E-123	0.498080523	0.989	0.98	1.03E-118
Shfm1	1.30E-122	- 0.401589403	0.92	0.993	1.49E-118
Trappc1	1.08E-121	- 0.524385134	0.659	0.905	1.24E-117
Pgp	1.26E-121	- 0.513698148	0.723	0.931	1.44E-117
Ptma	1.56E-121	0.388841672	0.988	0.992	1.78E-117
Cdkn2d	2.22E-121	- 0.496736322	0.684	0.905	2.54E-117
Vimp	2.23E-121	-0.53113008	0.595	0.847	2.55E-117
1110008F13Rik	5.09E-121	- 0.463163507	0.605	0.857	5.82E-117
Suclg1	8.67E-121	- 0.477408672	0.569	0.811	9.92E-117
Naa38	1.09E-120	- 0.491926673	0.583	0.907	1.25E-116
Coq7	1.30E-120	- 0.463104428	0.575	0.805	1.49E-116
Ndufb3	3.22E-120	- 0.468975944	0.77	0.961	3.69E-116
Psmb7	8.44E-120	- 0.482938145	0.712	0.931	9.65E-116
Rps2	4.20E-119	0.466496411	0.985	0.982	4.80E-115
Psmd14	6.21E-119	-0.48345689	0.614	0.847	7.11E-115
N6amt2	1.16E-118	- 0.468269099	0.738	0.839	1.33E-114
Pebp1	1.31E-118	- 0.489087945	0.783	0.961	1.50E-114
Timm10	2.14E-118	- 0.475243415	0.615	0.853	2.45E-114
Zmat5	9.40E-118	- 0.515700247	0.586	0.83	1.08E-113
Tmem14c	9.55E-118	- 0.452288317	0.558	0.794	1.09E-113
Rpl17	1.40E-117	0.511489074	0.975	0.965	1.60E-113
Polr2k	3.06E-117	- 0.519089879	0.778	0.968	3.50E-113
Tmem60	3.07E-117	-0.49409913	0.653	0.894	3.51E-113
Acyp2	3.61E-117	- 0.491776075	0.608	0.844	4.13E-113
Pop5	5.50E-117	-0.47966582	0.708	0.92	6.29E-113

Dnajc15	4.12E-116	-0.4982954	0.608	0.857	4.71E-112
Rpl36	1.45E-115	0.421537743	0.98	0.979	1.66E-111
Cdkn1a	2.91E-115	- 0.510972382	0.751	0.946	3.33E-111
Psmc6	7.28E-115	- 0.489461074	0.596	0.843	8.33E-111
Ten1	8.59E-115	- 0.407472679	0.593	0.827	9.83E-111
Pdlim7	2.42E-114	- 0.445044329	0.656	0.886	2.77E-110
Elavl2	2.48E-114	0.4620785	0.978	0.978	2.84E-110
0610011F06Rik	2.84E-114	-0.44303243	0.55	0.796	3.25E-110
Timm22	1.69E-113	- 0.394639644	0.579	0.803	1.93E-109
Mrpl34	1.72E-113	-0.47439443	0.59	0.823	1.97E-109
Eif6	6.54E-113	- 0.472035915	0.619	0.86	7.48E-109
Nfu1	1.11E-112	- 0.492868478	0.621	0.864	1.28E-108
Bola1	1.62E-112	- 0.463892267	0.559	0.787	1.86E-108
Dhrs1	1.65E-112	- 0.469107604	0.612	0.851	1.89E-108
Commd1	2.01E-112	- 0.418995809	0.578	0.818	2.30E-108
Tmem160	3.10E-112	- 0.459288925	0.815	0.965	3.55E-108
Arl2	3.45E-112	- 0.427504352	0.609	0.847	3.95E-108
Atox1	4.69E-112	- 0.475389899	0.815	0.962	5.37E-108
Snrpc	5.11E-112	- 0.448009225	0.554	0.788	5.84E-108
Pcmt1	9.03E-112	- 0.468513096	0.758	0.961	1.03E-107
Atp6v1d	1.38E-111	- 0.470982256	0.68	0.901	1.58E-107
Rpl36a	1.99E-111	0.487644893	0.958	0.961	2.28E-107
Rsu1	2.95E-111	- 0.468411932	0.833	0.947	3.37E-107
Zwint	3.87E-111	- 0.445076965	0.885	0.98	4.43E-107
Sssca1	3.97E-111	- 0.458759652	0.559	0.792	4.54E-107
Naa20	4.43E-111	- 0.517005417	0.558	0.804	5.07E-107

Acyp1	6.19E-111	- 0.485057394	0.55	0.79	7.08E-107
Dohh	1.44E-110	- 0.479279534	0.641	0.87	1.65E-106
Acot9	2.39E-110	- 0.407726454	0.548	0.785	2.74E-106
Ndufb9	3.33E-110	- 0.395516459	0.936	0.994	3.81E-106
Tm2d2	1.61E-109	- 0.439012374	0.607	0.843	1.84E-105
Lamtor4	1.79E-109	-0.45580341	0.685	0.908	2.04E-105
Anapc11	2.26E-109	- 0.468373344	0.822	0.97	2.59E-105
Pde6d	2.58E-109	- 0.478361605	0.545	0.827	2.95E-105
Slc25a3	3.06E-109	- 0.420928847	0.91	0.981	3.50E-105
Commd3	3.66E-109	-0.44482648	0.581	0.832	4.18E-105
Mrpl35	4.18E-109	- 0.458068564	0.572	0.809	4.78E-105
Isl2	7.27E-109	- 0.459194449	0.816	0.964	8.31E-105
Rpl35a	8.40E-109	0.420046478	0.985	0.985	9.61E-105
Ndufv1	2.68E-108	- 0.457660861	0.681	0.903	3.06E-104
Emc7	3.90E-108	- 0.447855545	0.631	0.865	4.46E-104
Rps3a1	5.60E-108	0.447311611	0.965	0.962	6.41E-104
Fam173a	8.88E-108	- 0.447802121	0.665	0.899	1.02E-103
Scg5	1.27E-107	- 0.440155276	0.558	0.792	1.45E-103
Cuedc2	1.27E-107	-0.4728938	0.747	0.95	1.45E-103
Avpi1	1.78E-107	- 0.440430316	0.6	0.811	2.04E-103
Rpl8	6.84E-107	0.45370016	0.973	0.965	7.83E-103
Pdzd11	6.91E-107	- 0.465407987	0.545	0.786	7.90E-103
Grpel1	7.90E-107	- 0.435471508	0.565	0.793	9.04E-103
Pou4f1	1.02E-106	0.397043151	0.99	0.99	1.17E-102
Rps7	1.07E-106	0.437011151	0.972	0.969	1.22E-102
Cacybp	3.85E-106	- 0.448345747	0.68	0.908	4.41E-102
Cbr1	6.91E-106	- 0.416717955	0.554	0.784	7.91E-102

Eif3f	1.22E-105	0.492864554	0.965	0.96	1.39E-101
Arpc3	1.26E-105	- 0.479685095	0.684	0.9	1.44E-101
Chchd1	1.33E-105	- 0.458622802	0.667	0.9	1.52E-101
Tceb1	1.61E-105	- 0.443499289	0.837	0.981	1.85E-101
Polr2e	1.63E-105	- 0.435536352	0.574	0.807	1.87E-101
Idh3g	2.12E-105	- 0.360559942	0.54	0.754	2.42E-101
Lgmn	2.42E-105	- 0.422138184	0.478	0.818	2.77E-101
Ttll7	2.47E-105	0.303610995	0.999	1	2.83E-101
Eef1g	2.82E-105	0.491522093	0.967	0.962	3.23E-101
Rps15a	3.55E-105	0.418502161	0.975	0.979	4.06E-101
Snrpd1	4.65E-105	- 0.431894469	0.614	0.842	5.32E-101
Tm2d3	5.24E-105	- 0.453672234	0.548	0.771	5.99E-101
Sec13	7.48E-105	- 0.422477102	0.543	0.762	8.56E-101
Klf7	4.54E-104	0.376607281	0.986	0.992	5.19E-100
Snca	7.70E-104	- 0.504651237	0.633	0.852	8.81E-100
Aamp	1.06E-103	- 0.423959019	0.588	0.819	1.21E-99
Psma5	1.63E-103	- 0.474343297	0.7	0.911	1.87E-99
Ubash3b	2.00E-103	0.636900333	0.865	0.837	2.29E-99
Ran	2.51E-103	- 0.429148415	0.788	0.963	2.87E-99
Rps11	3.85E-103	0.338353732	0.995	0.994	4.41E-99
Atp6v0d1	5.76E-103	- 0.451476289	0.676	0.904	6.59E-99
Ndufv2	5.91E-103	-0.41832834	0.65	0.879	6.76E-99
Txn1	7.87E-103	- 0.431011436	0.676	0.901	9.00E-99
Tmem258	1.21E-102	- 0.449582372	0.565	0.882	1.39E-98
Pcbp2	1.22E-102	0.463714833	0.958	0.958	1.39E-98
Emc2	2.12E-102	- 0.402699087	0.613	0.844	2.43E-98
Tubb5	3.31E-102	0.282437646	0.998	0.997	3.79E-98
Mrps21	5.43E-102	- 0.457876059	0.623	0.901	6.21E-98

Rpl31	8.62E-102	0.422501828	0.974	0.973	9.87E-98
Rpl34	2.53E-101	0.369621568	0.987	0.989	2.90E-97
Yipf1	3.90E-101	- 0.402461758	0.533	0.755	4.46E-97
Akr1b3	4.54E-101	- 0.437621092	0.601	0.826	5.19E-97
Ppa1	5.87E-101	- 0.409494234	0.574	0.811	6.71E-97
Laptm4a	1.07E-100	- 0.433638965	0.67	0.931	1.23E-96
Mtch2	1.22E-100	- 0.424479045	0.654	0.892	1.40E-96
Ndufa2	1.44E-100	- 0.362059893	0.93	0.992	1.64E-96
Manf	1.67E-100	- 0.427276152	0.685	0.912	1.91E-96
Slc25a11	3.53E-100	- 0.372891568	0.595	0.798	4.04E-96
Tex264	7.92E-100	- 0.441246382	0.607	0.847	9.06E-96
Atp5h	1.07E-99	- 0.349134838	0.942	0.989	1.22E-95
Oaz1	1.10E-99	- 0.261221496	0.995	1	1.26E-95
Tmem14a	2.27E-99	- 0.415304524	0.609	0.836	2.60E-95
Rprm	3.41E-99	- 0.460372982	0.756	0.945	3.90E-95
I7Rn6	3.88E-99	- 0.414522277	0.6	0.832	4.44E-95
Atp5k	4.82E-99	- 0.378945283	0.927	0.993	5.52E-95
Ech1	8.83E-99	- 0.384735757	0.555	0.773	1.01E-94
Ebf1	1.28E-98	0.413075985	0.974	0.978	1.47E-94
Ranbp1	1.60E-98	- 0.427742635	0.755	0.952	1.83E-94
Scn7a	1.70E-98	0.374255363	0.985	0.988	1.94E-94
Psmd8	1.98E-98	- 0.410438196	0.594	0.816	2.26E-94
Rps27l	2.24E-98	- 0.440581901	0.697	0.947	2.56E-94
Nipsnap3b	2.82E-98	- 0.407787132	0.613	0.848	3.23E-94
Slirp	3.28E-98	- 0.415074305	0.675	0.898	3.75E-94

Carkd	2.68E-97	- 0.394688703	0.54	0.758	3.06E-93
Coro1a	8.03E-97	- 0.371475827	0.563	0.763	9.18E-93
Map1lc3b	1.43E-96	- 0.433980928	0.83	0.965	1.63E-92
Frg1	2.50E-96	- 0.395212528	0.555	0.781	2.86E-92
Tpgs1	2.95E-96	- 0.416630114	0.664	0.877	3.37E-92
Rnh1	3.05E-96	- 0.430320293	0.594	0.827	3.49E-92
Rraga	3.84E-96	- 0.413961716	0.663	0.884	4.39E-92
Ccdc109b	3.95E-96	- 0.412272158	0.663	0.871	4.51E-92
Rplp0	4.51E-96	0.443179068	0.96	0.959	5.16E-92
Fkbp1a	1.30E-95	-0.30316885	0.965	0.996	1.49E-91
Lrpap1	2.28E-95	- 0.324259228	0.577	0.787	2.61E-91
Sra1	2.82E-95	- 0.391960061	0.614	0.83	3.22E-91
Prmt1	3.07E-95	- 0.428144947	0.574	0.802	3.51E-91
Tspo	4.29E-95	- 0.685468228	0.571	0.732	4.91E-91
Znhit3	4.46E-95	- 0.392583167	0.55	0.768	5.10E-91
Plpp1	7.74E-95	- 0.432389895	0.536	0.754	8.85E-91
Timm8b	1.00E-94	- 0.434813258	0.677	0.924	1.15E-90
Ndufa10	1.20E-94	- 0.438009503	0.731	0.922	1.37E-90
Jagn1	1.28E-94	- 0.451292299	0.575	0.8	1.47E-90
Ciapi1	1.43E-94	- 0.410616384	0.58	0.811	1.63E-90
Pdrg1	1.50E-94	- 0.433817366	0.635	0.867	1.72E-90
Akap12	1.82E-94	0.466563725	0.942	0.936	2.08E-90
D10Jhu81e	1.85E-94	- 0.388058936	0.554	0.767	2.12E-90
Mrpl33	4.42E-94	- 0.415323618	0.658	0.876	5.06E-90
Ict1	7.95E-94	-0.36562032	0.615	0.844	9.09E-90

Bud31	8.96E-94	- 0.388710894	0.558	0.774	1.02E-89
Cyb561d2	9.54E-94	- 0.371431878	0.548	0.759	1.09E-89
Map4	1.62E-93	0.406989619	0.975	0.976	1.85E-89
Rnf7	1.98E-93	- 0.333617049	0.961	0.995	2.26E-89
Adrm1	2.54E-93	- 0.388314395	0.565	0.801	2.91E-89
Spcs2	3.12E-93	- 0.410274119	0.741	0.942	3.57E-89
Morf4l1	3.62E-93	0.329486954	0.995	0.994	4.15E-89
Ociad1	4.67E-93	- 0.405262915	0.651	0.874	5.35E-89
Coa6	7.64E-93	- 0.360848725	0.619	0.838	8.74E-89
Alkbh7	9.11E-93	- 0.401503915	0.541	0.755	1.04E-88
Cebpz	1.36E-92	- 0.378523123	0.615	0.839	1.56E-88
Eif4g2	1.53E-92	0.464712959	0.946	0.941	1.75E-88
Magoh	1.57E-92	- 0.417915411	0.732	0.82	1.80E-88
Sec11a	3.22E-92	- 0.441988042	0.77	0.864	3.69E-88
Rpl24	4.48E-92	0.390515173	0.978	0.977	5.13E-88
Scamp3	1.04E-91	- 0.384627413	0.574	0.789	1.19E-87
Cnbp	1.04E-91	- 0.368611219	0.623	0.849	1.20E-87
Sar1b	1.46E-91	-0.41421367	0.562	0.794	1.67E-87
Mrpl12	3.98E-91	-0.37196985	0.644	0.845	4.55E-87
Ddt	7.55E-91	- 0.376038554	0.636	0.854	8.64E-87
Bcas2	7.94E-91	- 0.401707395	0.706	0.917	9.08E-87
Mrpl42	8.92E-91	-0.40016747	0.709	0.922	1.02E-86
Unc50	9.63E-91	- 0.396545897	0.59	0.825	1.10E-86
Hexb	1.15E-90	-0.37356684	0.763	0.868	1.32E-86
Hspbp1	1.26E-90	- 0.410384801	0.562	0.781	1.44E-86
Mrpl23	2.32E-90	- 0.385260236	0.665	0.875	2.66E-86
Gnb2	2.94E-90	- 0.412619394	0.723	0.922	3.36E-86

Tbcc	5.61E-90	- 0.404521497	0.76	0.86	6.42E-86
Alcam	6.86E-90	0.340279345	0.988	0.995	7.85E-86
Tmem167	9.17E-90	- 0.423895804	0.779	0.952	1.05E-85
Ccdc107	1.77E-89	-0.40456586	0.691	0.902	2.02E-85
Rps26	1.84E-89	0.448197393	0.954	0.953	2.11E-85
Aimp2	2.09E-89	- 0.353405316	0.545	0.757	2.39E-85
Mrpl46	2.12E-89	- 0.363899738	0.583	0.806	2.43E-85
Ngfrap1	5.60E-89	- 0.348863963	0.89	0.975	6.41E-85
Bub3	2.24E-88	- 0.290340004	0.594	0.809	2.56E-84
Vbp1	3.93E-88	- 0.395635943	0.755	0.952	4.49E-84
Scp2	5.46E-88	-0.39913236	0.658	0.876	6.25E-84
Mrpl11	5.91E-88	- 0.360174097	0.576	0.789	6.76E-84
Cetn2	9.30E-88	- 0.366751352	0.417	0.733	1.06E-83
Rgs4	4.08E-87	0.294161466	0.997	0.998	4.66E-83
Rer1	4.89E-87	- 0.354339584	0.627	0.85	5.60E-83
Psmg3	5.97E-87	- 0.357715281	0.529	0.732	6.83E-83
Med19	7.77E-87	- 0.367977368	0.56	0.766	8.89E-83
Tceal8	8.07E-87	- 0.409366553	0.763	0.943	9.23E-83
Snrpn	1.03E-86	-0.30735143	0.967	0.993	1.17E-82
Capns1	1.45E-86	- 0.362108063	0.903	0.985	1.66E-82
Polr2i	1.65E-86	- 0.352199108	0.649	0.861	1.88E-82
Wfdc2	1.75E-86	- 0.491801981	0.747	0.918	2.00E-82
Ptrhd1	1.99E-86	- 0.379193878	0.563	0.767	2.28E-82
Sub1	3.48E-86	-0.36283342	0.885	0.982	3.98E-82
Spink2	4.08E-86	- 0.404109299	0.615	0.826	4.67E-82
Tmem147	4.54E-86	- 0.394663398	0.717	0.915	5.20E-82

Msmo1	7.11E-86	- 0.374377194	0.654	0.921	8.14E-82
Clic1	1.07E-85	-0.40444108	0.705	0.915	1.23E-81
Tmem9	1.48E-85	- 0.300121444	0.569	0.767	1.70E-81
Pdia3	2.08E-85	- 0.342881303	0.651	0.881	2.38E-81
Ostc	2.12E-85	- 0.374283953	0.659	0.872	2.42E-81
2610001J05Rik	2.24E-85	- 0.388424576	0.731	0.926	2.56E-81
Ssr2	2.65E-85	- 0.378524251	0.556	0.763	3.03E-81
Snap47	6.03E-85	- 0.346521129	0.615	0.815	6.89E-81
Atraid	7.73E-85	- 0.331827889	0.539	0.748	8.84E-81
Dpm3	9.44E-85	- 0.365375924	0.423	0.714	1.08E-80
Ebp	1.18E-84	- 0.416595727	0.576	0.79	1.36E-80
Sdf2	1.43E-84	- 0.341988775	0.602	0.827	1.64E-80
Malat1	1.79E-84	0.676149229	0.995	0.993	2.04E-80
Mrpl14	2.40E-84	- 0.382821655	0.698	0.904	2.75E-80
Tmco1	2.41E-84	- 0.384063575	0.61	0.823	2.76E-80
Isca2	9.31E-84	-0.36260543	0.627	0.831	1.07E-79
Dctn6	1.42E-83	- 0.326712827	0.615	0.82	1.62E-79
Chchd7	1.69E-83	-0.26645288	0.405	0.689	1.93E-79
Pfdn1	3.95E-83	- 0.373419162	0.758	0.944	4.52E-79
Cd59a	4.77E-83	- 0.396533478	0.767	0.949	5.46E-79
Jkamp	9.74E-83	- 0.386302478	0.651	0.876	1.11E-78
Sod2	1.33E-82	- 0.364351852	0.672	0.889	1.52E-78
Yif1a	3.78E-82	- 0.388886915	0.557	0.773	4.32E-78
Pet100	4.17E-82	- 0.290464902	0.456	0.739	4.77E-78
Bad	4.61E-82	- 0.369012654	0.676	0.877	5.28E-78

Rogdi	5.77E-82	- 0.298286958	0.553	0.739	6.61E-78
Ccdc28a	8.27E-82	- 0.332241702	0.568	0.759	9.46E-78
Polr2h	9.86E-82	- 0.276630648	0.56	0.751	1.13E-77
Yif1b	2.86E-81	- 0.370764879	0.557	0.773	3.27E-77
Slc25a14	6.99E-81	- 0.330472819	0.553	0.754	7.99E-77
Sumo1	1.18E-80	- 0.371615947	0.898	0.99	1.35E-76
Elavl4	1.20E-80	0.382489969	0.976	0.984	1.37E-76
Ppp1ca	1.74E-80	- 0.385886483	0.798	0.953	2.00E-76
Banf1	1.99E-80	- 0.303438996	0.472	0.773	2.28E-76
Ywhab	2.29E-80	0.408947098	0.954	0.975	2.62E-76
Mrpl15	2.31E-80	- 0.358048829	0.541	0.737	2.65E-76
Sdhaf4	3.82E-80	- 0.373214615	0.599	0.817	4.36E-76
Th	4.92E-80	- 0.479594119	0.792	0.921	5.63E-76
Tsen15	5.01E-80	- 0.325172761	0.584	0.796	5.73E-76
Sec61b	5.25E-80	- 0.377961861	0.705	0.911	6.00E-76
Smim14	8.16E-80	- 0.362410023	0.873	0.984	9.34E-76
Sfr1	1.21E-79	- 0.325503274	0.624	0.835	1.38E-75
Mrpl4	2.26E-79	- 0.303973547	0.552	0.756	2.59E-75
Bnip3	2.32E-79	- 0.345751333	0.672	0.876	2.65E-75
Mrps16	2.55E-79	- 0.302733979	0.612	0.806	2.92E-75
Mrpl17	2.99E-79	- 0.328877959	0.641	0.842	3.42E-75
Uqcc2	3.60E-79	- 0.371482341	0.803	0.97	4.11E-75
Degs1	4.18E-79	- 0.388078756	0.73	0.921	4.78E-75
Znhit1	5.61E-79	- 0.343707479	0.728	0.925	6.42E-75

Commd7	6.52E-79	- 0.365831011	0.559	0.775	7.46E-75
Trappc6a	6.63E-79	- 0.318432199	0.6	0.799	7.58E-75
Rplp1	7.10E-79	0.260244156	0.997	0.999	8.12E-75
Pdcd6	1.04E-78	- 0.336535753	0.575	0.773	1.19E-74
Arf5	1.55E-78	- 0.308396933	0.943	0.993	1.77E-74
Pfdn4	1.98E-78	- 0.387572412	0.576	0.858	2.27E-74
Smrbc1	2.20E-78	- 0.294793307	0.55	0.748	2.52E-74
Gnb1	2.27E-78	0.61815315	0.968	0.965	2.60E-74
Msrbc1	2.44E-78	- 0.322955396	0.602	0.807	2.79E-74
Atp6v0e	2.56E-78	- 0.357125991	0.455	0.763	2.93E-74
Izumo4	5.26E-78	- 0.319225934	0.547	0.74	6.02E-74
Ahsa1	7.04E-78	- 0.298263974	0.62	0.835	8.05E-74
Ceacam10	9.27E-78	- 0.959150263	0.754	0.833	1.06E-73
2-Mar	1.02E-77	- 0.332590144	0.608	0.808	1.17E-73
Pmvk	1.10E-77	- 0.368465652	0.797	0.959	1.25E-73
Mrps15	1.26E-77	- 0.320876107	0.621	0.821	1.45E-73
Prune2	1.59E-77	0.667201327	0.993	0.99	1.82E-73
Paip2	2.46E-77	- 0.366743919	0.806	0.965	2.82E-73
Ccdc167	2.54E-77	- 0.346786162	0.594	0.791	2.91E-73
Pdia6	3.63E-77	- 0.270116409	0.747	0.833	4.15E-73
Uqcrc2	6.27E-77	- 0.308090845	0.592	0.801	7.17E-73
Mzt2	6.85E-77	- 0.340202282	0.566	0.767	7.84E-73
Rps9	1.00E-76	0.252063384	0.995	0.999	1.14E-72
H3f3b	1.37E-76	- 0.365825917	0.86	0.981	1.57E-72
Haghl	1.39E-76	- 0.251887912	0.549	0.724	1.59E-72

Clu	1.76E-76	- 0.259132246	0.335	0.587	2.01E-72
Rpl21	2.00E-76	0.404141247	0.959	0.968	2.29E-72
Cops5	2.75E-76	- 0.291881069	0.6	0.787	3.15E-72
C1d	3.31E-76	- 0.369771605	0.848	0.982	3.79E-72
Rps12	6.61E-76	0.486969017	0.909	0.902	7.56E-72
Pam16	8.15E-76	- 0.339733605	0.707	0.893	9.32E-72
Trappc2	1.00E-75	- 0.375912717	0.719	0.916	1.15E-71
Mrps36	1.37E-75	- 0.330565413	0.685	0.892	1.57E-71
Amn1	1.82E-75	- 0.337818612	0.549	0.741	2.08E-71
Esd	2.11E-75	- 0.303231303	0.579	0.778	2.42E-71
Polr2l	5.72E-75	- 0.256011153	0.454	0.725	6.54E-71
Exosc7	7.81E-75	-0.32885325	0.538	0.729	8.93E-71
Mvk	7.92E-75	-0.26390333	0.542	0.713	9.07E-71
Mtpn	1.13E-74	0.562695711	0.854	0.851	1.29E-70
Immp1l	2.16E-74	- 0.298808187	0.585	0.791	2.48E-70
Psmc6	3.65E-74	- 0.286683902	0.618	0.824	4.18E-70
Emc10	5.22E-74	- 0.350096279	0.775	0.943	5.97E-70
Dctn2	1.26E-73	- 0.319447061	0.697	0.896	1.44E-69
1110008P14Rik	1.37E-73	- 0.346963324	0.847	0.974	1.57E-69
Cdk5	1.42E-73	- 0.275158233	0.605	0.799	1.63E-69
Itpa	1.81E-73	- 0.263063336	0.54	0.712	2.07E-69
Tomm40	1.82E-73	-0.31670537	0.554	0.743	2.08E-69
Slc35g2	2.89E-73	- 0.331094901	0.535	0.734	3.30E-69
Lsm7	3.26E-73	- 0.276485841	0.413	0.688	3.73E-69
Mrpl2	6.18E-73	- 0.320552787	0.542	0.731	7.08E-69
Tmx2	8.17E-73	- 0.319834795	0.665	0.869	9.35E-69

Lsm4	1.26E-72	- 0.341651155	0.686	0.88	1.44E-68
Hes6	1.51E-72	- 0.340885092	0.576	0.783	1.73E-68
2210013O21Rik	1.60E-72	- 0.365095097	0.805	0.954	1.83E-68
Gsk3b	1.72E-72	0.486328375	0.939	0.943	1.97E-68
Cisd3	1.75E-72	- 0.346008901	0.788	0.95	2.01E-68
Srp19	2.89E-72	- 0.303875241	0.69	0.891	3.31E-68
Hint2	3.15E-72	- 0.370576274	0.683	0.883	3.60E-68
Lamtor2	4.03E-72	- 0.348804287	0.814	0.968	4.62E-68
0610007P14Rik	6.21E-72	- 0.270220719	0.757	0.828	7.10E-68
Cirbp	6.67E-72	- 0.337878673	0.733	0.921	7.64E-68
Commd6	7.13E-72	- 0.353588226	0.571	0.772	8.16E-68
Mrps18c	8.68E-72	- 0.342953909	0.669	0.87	9.94E-68
Rpl10a	1.20E-71	0.370449813	0.964	0.958	1.37E-67
Rbm42	1.46E-71	- 0.308898395	0.548	0.737	1.67E-67
Rps19bp1	3.49E-71	- 0.272255293	0.4	0.668	4.00E-67
Mrpl43	6.55E-71	- 0.292667137	0.633	0.828	7.50E-67
Ubl7	1.04E-70	- 0.305198549	0.547	0.731	1.19E-66
Rpl22l1	1.04E-70	0.33489919	0.991	0.996	1.19E-66
Commd9	1.26E-70	- 0.345649923	0.542	0.739	1.44E-66
Cltc	1.54E-70	0.460376285	0.908	0.922	1.76E-66
Lhfpl5	2.04E-70	- 0.438608884	0.535	0.753	2.33E-66
Pfdn5	2.55E-70	0.375975286	0.956	0.963	2.91E-66
Exosc5	2.64E-70	- 0.310145242	0.523	0.706	3.02E-66
Gtf2a2	3.54E-70	- 0.325052436	0.647	0.841	4.04E-66
Ndfip1	3.91E-70	- 0.378193246	0.531	0.73	4.48E-66

Hopx	4.30E-70	- 0.382741298	0.78	0.933	4.92E-66
Ercc1	4.42E-70	- 0.298639163	0.526	0.712	5.05E-66
Wbp5	5.58E-70	- 0.349104407	0.858	0.955	6.38E-66
Tomm5	6.13E-70	- 0.349615395	0.791	0.951	7.01E-66
Rps24	8.33E-70	0.434296269	0.921	0.924	9.54E-66
1110051M20Rik	8.34E-70	- 0.250250271	0.549	0.709	9.54E-66
Ywhaq	1.25E-69	- 0.310589789	0.94	0.99	1.43E-65
Mrps18a	1.57E-69	- 0.316502443	0.698	0.884	1.80E-65
Creb3	2.39E-69	- 0.295199922	0.534	0.716	2.74E-65
Pafah1b3	3.91E-69	- 0.339644652	0.627	0.835	4.48E-65
Pigyl	4.19E-69	- 0.261217018	0.609	0.796	4.79E-65
Snx15	4.46E-69	- 0.277776668	0.378	0.657	5.10E-65
Ptov1	4.88E-69	- 0.316111875	0.716	0.898	5.58E-65
Ccni	4.92E-69	0.515307863	0.87	0.873	5.63E-65
Nsmce1	1.72E-68	- 0.316031597	0.543	0.721	1.97E-64
Ly6h	3.06E-68	- 0.274379665	0.741	0.924	3.51E-64
Rps3	3.28E-68	0.340006574	0.983	0.985	3.75E-64
Slc35b1	3.63E-68	- 0.291313429	0.576	0.766	4.15E-64
B2m	3.72E-68	- 0.317713169	0.76	0.854	4.26E-64
Rps28	4.61E-68	0.394799778	0.97	0.969	5.28E-64
Mrpl22	5.34E-68	- 0.418771594	0.725	0.825	6.11E-64
Sbds	5.75E-68	- 0.295515468	0.598	0.807	6.58E-64
Atp1b3	9.31E-68	0.297601607	0.988	0.995	1.06E-63
Psmd12	1.28E-67	- 0.299301128	0.625	0.806	1.46E-63
Vdac2	1.54E-67	-0.28711757	0.679	0.883	1.77E-63
Mrpl32	1.71E-67	- 0.263857992	0.557	0.746	1.96E-63

Fam162a	2.14E-67	- 0.278732912	0.619	0.818	2.45E-63
Atxn7l3b	2.15E-67	- 0.332154094	0.844	0.963	2.46E-63
Etfa	2.40E-67	-0.32589987	0.631	0.824	2.74E-63
Mrpl57	2.66E-67	- 0.325605912	0.694	0.88	3.04E-63
Cct8	4.25E-67	- 0.274861566	0.663	0.868	4.86E-63
Commd2	7.44E-67	-0.30935997	0.54	0.722	8.51E-63
Pop7	7.66E-67	- 0.281085757	0.565	0.751	8.76E-63
Pja2	9.25E-67	0.426815653	0.917	0.933	1.06E-62
Stoml1	1.28E-66	- 0.303247381	0.583	0.791	1.46E-62
Sptbn1	1.88E-66	0.423438666	0.915	0.922	2.15E-62
Ddost	2.85E-66	- 0.276041976	0.56	0.746	3.26E-62
Mkks	3.86E-66	- 0.256930097	0.615	0.802	4.41E-62
Cct3	6.21E-66	- 0.255712393	0.612	0.815	7.11E-62
Them6	6.54E-66	- 0.282353534	0.67	0.863	7.48E-62
Emd	6.68E-66	- 0.357444421	0.55	0.744	7.64E-62
Ost4	7.80E-66	- 0.333317432	0.769	0.944	8.92E-62
Sec11c	7.90E-66	- 0.252191301	0.634	0.818	9.04E-62
Exosc4	9.06E-66	- 0.302633509	0.54	0.722	1.04E-61
Wdr18	9.67E-66	-0.33687153	0.535	0.73	1.11E-61
Tmed9	1.40E-65	-0.28134922	0.619	0.815	1.60E-61
2410015M20Rik	2.13E-65	- 0.302087143	0.708	0.898	2.44E-61
Cops3	2.13E-65	- 0.292238323	0.537	0.719	2.44E-61
Ndn	2.35E-65	- 0.267477854	0.585	0.758	2.69E-61
Snhg11	2.79E-65	0.463806712	0.929	0.932	3.20E-61
Rpl23a	3.23E-65	0.358113215	0.957	0.967	3.69E-61
Mrps11	3.39E-65	- 0.325700307	0.573	0.767	3.88E-61
Wdr61	4.07E-65	- 0.264925732	0.54	0.721	4.66E-61

Psm13	5.64E-65	- 0.269946468	0.572	0.755	6.45E-61
Txndc15	5.74E-65	- 0.272870778	0.585	0.775	6.57E-61
Prmt2	6.00E-65	- 0.252600902	0.646	0.836	6.86E-61
Tmed10	8.86E-65	- 0.293274349	0.682	0.875	1.01E-60
Raly	8.89E-65	- 0.265798285	0.64	0.83	1.02E-60
Ndufaf3	8.94E-65	- 0.254199432	0.62	0.819	1.02E-60
Prkar1a	1.04E-64	0.311317627	0.99	0.994	1.19E-60
Nrip3	1.06E-64	0.428102682	0.889	0.9	1.22E-60
Pepd	1.21E-64	- 0.278699493	0.535	0.71	1.38E-60
Vapa	1.24E-64	- 0.308948447	0.783	0.957	1.42E-60
Mrpl18	1.29E-64	- 0.266072303	0.65	0.845	1.47E-60
Rit1	1.36E-64	- 0.278114323	0.591	0.785	1.56E-60
Tmem55b	1.55E-64	- 0.284578002	0.709	0.903	1.78E-60
Hax1	1.58E-64	- 0.281684493	0.577	0.758	1.81E-60
Prdx4	1.70E-64	- 0.284343346	0.541	0.72	1.94E-60
Cnih4	2.43E-64	- 0.273178438	0.56	0.739	2.78E-60
Ccl27a	2.50E-64	- 0.274885585	0.47	0.737	2.86E-60
Tsn	2.76E-64	- 0.300209744	0.707	0.887	3.16E-60
Nudt16l1	5.66E-64	- 0.277422292	0.751	0.811	6.47E-60
Aasdhpt	5.70E-64	- 0.264924096	0.572	0.765	6.52E-60
Adprh	6.56E-64	- 0.271768225	0.564	0.845	7.51E-60
Atp6ap2	8.24E-64	- 0.325415357	0.764	0.939	9.42E-60
Ppp1r35	1.16E-63	- 0.287190594	0.63	0.833	1.33E-59
Cd151	1.17E-63	- 0.314839567	0.74	0.919	1.34E-59

Ssr4	1.27E-63	- 0.270749038	0.658	0.845	1.45E-59
Spr	1.34E-63	- 0.319884335	0.545	0.739	1.53E-59
Eif5a	1.40E-63	- 0.330193277	0.878	0.975	1.60E-59
Gsto1	2.36E-63	-0.27757859	0.549	0.729	2.70E-59
Slc25a5	2.60E-63	- 0.324597587	0.856	0.969	2.98E-59
Wdr83os	2.73E-63	- 0.304104349	0.735	0.919	3.12E-59
Eri3	3.76E-63	- 0.256667646	0.613	0.808	4.30E-59
Tmem45b	4.81E-63	- 0.448123475	0.69	0.843	5.50E-59
Psmc3	7.23E-63	- 0.280324044	0.682	0.869	8.27E-59
Txn14a	8.29E-63	- 0.277402558	0.669	0.847	9.49E-59
1700021F05Rik	1.29E-62	- 0.268097794	0.549	0.725	1.48E-58
Glo1	1.75E-62	- 0.260204515	0.632	0.814	2.00E-58
Serpinf1	2.48E-62	-0.37177246	0.535	0.749	2.84E-58
Cetn3	2.63E-62	- 0.284012356	0.664	0.86	3.01E-58
Rbm8a	2.90E-62	- 0.270596978	0.682	0.874	3.31E-58
Gde1	3.27E-62	- 0.303068281	0.65	0.858	3.74E-58
Tpd52	4.01E-62	0.360646545	0.965	0.975	4.59E-58
Srm	4.44E-62	- 0.281987704	0.53	0.702	5.08E-58
Uqcrfs1	4.44E-62	- 0.312719039	0.765	0.937	5.08E-58
Fam103a1	6.58E-62	- 0.319882373	0.804	0.954	7.53E-58
Ctsz	1.07E-61	-0.25637262	0.563	0.744	1.23E-57
Trappc5	1.12E-61	- 0.287386126	0.542	0.717	1.28E-57
Psme1	1.21E-61	- 0.279540423	0.568	0.74	1.38E-57
Mrps18b	1.23E-61	- 0.262562813	0.545	0.723	1.40E-57
Ssbp1	1.27E-61	- 0.306421953	0.541	0.738	1.45E-57

Blvra	1.29E-61	- 0.297487018	0.55	0.743	1.47E-57
O610012G03Rik	1.39E-61	-0.30459228	0.64	0.886	1.59E-57
Slc50a1	2.00E-61	- 0.262494445	0.551	0.731	2.29E-57
Mrpl54	2.57E-61	- 0.308555004	0.767	0.934	2.94E-57
Lsm5	2.69E-61	-0.28762109	0.495	0.784	3.07E-57
Ndr4	3.41E-61	0.336711379	0.966	0.976	3.90E-57
Pts	4.56E-61	- 0.276857598	0.626	0.807	5.22E-57
Fcf1	5.20E-61	- 0.313675534	0.536	0.722	5.95E-57
Eny2	5.38E-61	- 0.284328674	0.661	0.861	6.15E-57
Ndufb10	8.55E-61	- 0.303924688	0.775	0.954	9.78E-57
Iah1	1.16E-60	- 0.279000465	0.535	0.703	1.33E-56
Ncoa7	3.88E-60	0.35005949	0.954	0.976	4.44E-56
Eif4a1	5.34E-60	- 0.320503664	0.78	0.934	6.11E-56
Tsg101	6.94E-60	- 0.266300436	0.693	0.884	7.94E-56
Mrpl40	1.00E-59	-0.27441445	0.551	0.723	1.15E-55
Tmem199	1.14E-59	- 0.292524034	0.548	0.739	1.30E-55
Chrac1	2.09E-59	- 0.272595021	0.56	0.731	2.39E-55
Aig1	3.64E-59	- 0.292037033	0.679	0.858	4.17E-55
Mtx1	4.67E-59	- 0.275320584	0.524	0.695	5.35E-55
Stx8	5.31E-59	- 0.267225431	0.532	0.7	6.08E-55
Ogfrl1	5.73E-59	0.448026773	0.867	0.88	6.56E-55
Krtcap2	5.90E-59	- 0.298935556	0.732	0.912	6.75E-55
Camk2d	6.21E-59	0.384386579	0.919	0.95	7.10E-55
Nxf1	7.51E-59	- 0.289279106	0.621	0.801	8.59E-55
Tmbim6	9.94E-59	- 0.256346372	0.564	0.763	1.14E-54
Pigp	1.07E-58	-0.26308787	0.682	0.885	1.23E-54
Arpc1a	1.35E-58	0.40211453	0.945	0.952	1.54E-54

Ube2w	1.73E-58	- 0.254088572	0.692	0.896	1.98E-54
Tsfm	1.82E-58	- 0.261569332	0.549	0.726	2.08E-54
Marcks	2.54E-58	0.38871341	0.919	0.936	2.91E-54
Mrps28	3.25E-58	- 0.313615078	0.531	0.708	3.72E-54
Timm10b	3.67E-58	- 0.266911278	0.661	0.861	4.20E-54
Tmem261	8.59E-58	- 0.302196564	0.532	0.711	9.83E-54
Ndufa3	1.17E-57	- 0.312508096	0.693	0.913	1.34E-53
Grina	1.23E-57	- 0.295399737	0.751	0.94	1.41E-53
Alkbh6	1.39E-57	-0.27212967	0.557	0.725	1.59E-53
Bax	2.10E-57	- 0.274525032	0.692	0.883	2.40E-53
Dtd1	4.20E-57	- 0.259612136	0.533	0.72	4.81E-53
Dnaja1	5.85E-57	- 0.294332076	0.866	0.977	6.69E-53
Efcab10	6.65E-57	- 0.300987236	0.531	0.714	7.61E-53
Hnrnpa1	7.80E-57	0.414131322	0.893	0.921	8.93E-53
Tmem158	9.70E-57	- 0.302117758	0.572	0.782	1.11E-52
Rpl4	1.17E-56	0.393730916	0.964	0.961	1.34E-52
Rsrp1	1.60E-56	- 0.276422844	0.583	0.851	1.83E-52
Fbxo2	2.08E-56	- 0.300975544	0.789	0.935	2.39E-52
Mydgf	2.39E-56	- 0.282548741	0.554	0.738	2.73E-52
Atp5c1	2.42E-56	- 0.285628728	0.8	0.955	2.77E-52
Fdft1	2.60E-56	- 0.275584785	0.581	0.839	2.97E-52
Pin4	2.68E-56	- 0.259560006	0.589	0.847	3.06E-52
Psmg2	3.14E-56	-0.25912703	0.517	0.685	3.59E-52
Fam96b	4.24E-56	-0.28030484	0.748	0.921	4.85E-52
Polr2c	5.36E-56	- 0.270446064	0.546	0.733	6.13E-52
Glr3	5.81E-56	- 0.289812949	0.708	0.899	6.65E-52

Rasgrp1	1.15E-55	0.466010333	0.902	0.885	1.31E-51
Snrnp27	1.19E-55	- 0.277786962	0.63	0.881	1.37E-51
Mpv17l2	1.53E-55	- 0.280393658	0.744	0.805	1.75E-51
Rpsa	1.79E-55	0.405739019	0.909	0.914	2.04E-51
Cox20	1.81E-55	- 0.261109394	0.509	0.78	2.07E-51
Eif5	2.17E-55	- 0.308503139	0.805	0.952	2.48E-51
Ppp3ca	2.80E-55	0.374914839	0.943	0.96	3.21E-51
Rps21	1.23E-54	0.331287263	0.974	0.978	1.41E-50
Kif1b	1.45E-54	0.352285189	0.93	0.943	1.66E-50
Rpl19	1.64E-54	0.272662513	0.983	0.986	1.88E-50
Tusc5	1.71E-54	0.480279242	0.881	0.896	1.95E-50
Pura	2.39E-54	0.345095393	0.945	0.962	2.74E-50
Ufc1	5.35E-54	- 0.267207819	0.679	0.852	6.12E-50
Gm4950	1.75E-53	- 0.250300631	0.517	0.675	2.01E-49
Nrp1	2.09E-53	0.394767439	0.891	0.913	2.39E-49
Klhdc2	3.87E-53	- 0.265589046	0.677	0.863	4.42E-49
Actr6	3.91E-53	- 0.270710848	0.529	0.704	4.47E-49
1110004F10Rik	5.91E-53	-0.26887617	0.611	0.862	6.76E-49
Vps8	1.01E-52	0.600626235	0.84	0.843	1.16E-48
Asph	1.20E-52	- 0.258306254	0.655	0.816	1.38E-48
P2ry1	1.53E-52	0.296546805	0.983	0.988	1.75E-48
Urod	1.89E-52	- 0.271238856	0.523	0.698	2.16E-48
Dst	1.99E-52	0.410843519	0.864	0.88	2.28E-48
Eif2s2	3.77E-52	- 0.286642377	0.665	0.898	4.31E-48
Pfdn2	3.97E-52	0.34012697	0.945	0.961	4.54E-48
Iscu	6.77E-52	- 0.279639541	0.841	0.962	7.74E-48
Ssbp3	2.56E-51	0.385986906	0.911	0.938	2.93E-47
Rab6a	4.03E-51	0.258256237	0.989	0.995	4.61E-47
Cops6	4.31E-51	- 0.261342042	0.67	0.862	4.94E-47
Nrsn1	4.59E-51	0.432933542	0.918	0.925	5.25E-47
Gm1673	7.17E-51	- 0.279941642	0.849	0.963	8.21E-47

Snrpd2	7.87E-51	- 0.275605741	0.803	0.936	9.00E-47
Eif2s1	1.02E-50	- 0.277287344	0.723	0.769	1.17E-46
Sv2c	1.29E-50	0.422794948	0.888	0.924	1.48E-46
Saysd1	3.05E-50	- 0.287057762	0.728	0.767	3.49E-46
Rbms1	6.20E-50	0.38678868	0.911	0.939	7.10E-46
Prkar2a	8.87E-50	0.473064377	0.823	0.836	1.02E-45
Syt1	2.33E-49	0.340435375	0.925	0.949	2.66E-45
Atg3	2.91E-49	- 0.270868383	0.656	0.845	3.32E-45
Tlx3	3.61E-49	- 0.255094867	0.746	0.915	4.13E-45
Ldb2	4.76E-49	0.387044242	0.929	0.928	5.45E-45
Lym2	6.07E-49	- 0.257407629	0.555	0.723	6.95E-45
Card19	1.19E-48	- 0.270560244	0.902	0.982	1.36E-44
Gm13889	1.51E-48	- 0.277924447	0.713	0.91	1.73E-44
Ube2n	1.96E-48	- 0.263119407	0.772	0.939	2.25E-44
Sec62	2.96E-48	-0.27167587	0.827	0.964	3.39E-44
Eef2	5.76E-48	0.46331961	0.864	0.913	6.58E-44
Syt11	7.91E-48	0.328902003	0.935	0.97	9.05E-44
Sumo2	1.01E-47	- 0.265157639	0.894	0.988	1.16E-43
Med10	2.19E-47	- 0.296145941	0.609	0.7	2.50E-43
BC005537	3.67E-47	0.35478918	0.915	0.946	4.20E-43
Casz1	3.78E-47	0.394154223	0.85	0.878	4.32E-43
Ccl1	4.38E-47	- 0.266369378	0.574	0.737	5.01E-43
Cd24a	8.74E-47	0.27959768	0.968	0.976	1.00E-42
Fgf12	2.14E-46	- 0.251648222	0.791	0.938	2.45E-42
Raph1	2.18E-46	0.45040365	0.83	0.841	2.49E-42
Slc51a	4.85E-46	- 0.287865603	0.514	0.674	5.54E-42
Rpl7	6.98E-46	0.3423863	0.955	0.96	7.99E-42
Rps25	8.16E-46	0.292012594	0.97	0.978	9.34E-42
Pafah1b1	2.24E-45	0.357501777	0.936	0.951	2.56E-41
Arpc5l	3.44E-45	- 0.265019396	0.725	0.893	3.93E-41

Ppp1r2	6.58E-45	0.264307092	0.98	0.989	7.53E-41
Capzb	7.12E-45	- 0.255205813	0.723	0.914	8.15E-41
Fos	9.79E-45	0.618058096	0.732	0.635	1.12E-40
Stxbp1	1.28E-44	0.460062832	0.875	0.862	1.46E-40
Rpl7a	5.01E-44	0.442376095	0.892	0.894	5.73E-40
Pkm	5.12E-44	- 0.262724732	0.827	0.954	5.86E-40
Rpl35	5.90E-44	0.315325054	0.944	0.962	6.75E-40
Rpl39	1.58E-43	0.268931934	0.985	0.994	1.81E-39
Hspe1	1.68E-43	- 0.251273758	0.79	0.948	1.93E-39
Atp6v1a	2.33E-43	0.348286592	0.92	0.955	2.67E-39
Gnao1	6.36E-43	0.448549368	0.846	0.887	7.28E-39
Arpc1b	1.13E-42	0.356974107	0.956	0.972	1.29E-38
Ptms	2.28E-42	0.314134208	0.953	0.967	2.61E-38
Ap1ar	7.45E-42	0.409129643	0.832	0.845	8.52E-38
Atp2b1	7.65E-42	0.29537869	0.936	0.967	8.75E-38
Txndc17	8.50E-42	- 0.258785974	0.81	0.932	9.72E-38
Rpl23	1.71E-40	0.250321969	0.981	0.99	1.95E-36
Napb	1.81E-40	0.380566738	0.855	0.877	2.07E-36
Lifr	2.15E-39	0.384083697	0.846	0.889	2.46E-35
Zfpl1	7.48E-39	-0.28927352	0.527	0.704	8.55E-35
Dpp10	8.21E-39	0.351870869	0.88	0.907	9.40E-35
Ddx3x	1.70E-38	0.347812338	0.876	0.904	1.95E-34
Slc17a6	1.90E-37	0.388724844	0.883	0.89	2.17E-33
Spock2	2.68E-37	0.358139297	0.846	0.874	3.07E-33
Ret	5.46E-37	0.312046089	0.946	0.965	6.25E-33
Rpl29	7.24E-37	0.309446039	0.955	0.96	8.28E-33
Ahnak	1.90E-36	0.359060544	0.894	0.934	2.18E-32
Cd63	2.62E-36	- 0.252533748	0.75	0.894	3.00E-32
Bag1	3.71E-36	0.327946077	0.938	0.962	4.25E-32
Canx	3.94E-36	0.370943249	0.875	0.907	4.51E-32
Gfra2	9.01E-36	0.320429984	0.927	0.919	1.03E-31
Rps15	1.48E-35	0.25876375	0.965	0.977	1.69E-31
Cox7a2l	9.29E-35	0.260684023	0.98	0.99	1.06E-30
Runx1	2.36E-33	0.330229725	0.917	0.945	2.70E-29
Pgm2l1	1.08E-32	0.339643657	0.859	0.916	1.24E-28
Olfm1	2.86E-32	0.276879758	0.913	0.95	3.27E-28
App	2.89E-32	0.303204715	0.912	0.948	3.30E-28

Prkce	4.99E-32	0.41248948	0.794	0.824	5.71E-28
Gnaq	6.20E-31	0.439064956	0.76	0.79	7.09E-27
Camta1	8.10E-31	0.419460101	0.85	0.849	9.27E-27
Zfp521	1.10E-30	0.373338841	0.815	0.858	1.25E-26
Magi1	6.78E-30	0.373753702	0.807	0.844	7.76E-26
Slc9a6	2.39E-29	0.354780635	0.835	0.864	2.73E-25
Cplx1	1.88E-27	0.342781775	0.862	0.916	2.15E-23
Rnf11	8.35E-27	0.376897558	0.8	0.837	9.55E-23
Plagl1	9.50E-27	0.404116029	0.781	0.782	1.09E-22
Cab39	9.64E-27	0.404036006	0.742	0.766	1.10E-22
Csde1	1.05E-26	0.381802953	0.81	0.859	1.20E-22
Tgoln1	2.21E-26	0.337026602	0.811	0.847	2.53E-22
Ank3	6.95E-26	0.405430779	0.83	0.833	7.95E-22
Kcnd3	5.39E-25	0.30189813	0.881	0.916	6.17E-21
Emp3	1.89E-24	-0.31767357	0.74	0.755	2.16E-20
Gabbr2	4.18E-24	0.485475506	0.686	0.703	4.78E-20
Pcnp	7.29E-24	0.362700626	0.804	0.848	8.34E-20
Gmfb	8.05E-24	0.296852905	0.85	0.9	9.21E-20
Ids	9.15E-23	0.342915377	0.802	0.851	1.05E-18
Pten	1.42E-22	0.316207102	0.868	0.902	1.62E-18
Cadps	2.28E-22	0.370995223	0.79	0.844	2.61E-18
Arf3	2.35E-22	0.372751454	0.802	0.856	2.68E-18
Gnai2	4.42E-22	0.326205952	0.873	0.91	5.05E-18
Epb41l3	4.76E-22	0.37992027	0.75	0.79	5.45E-18
Ptges3	9.72E-22	0.30333694	0.86	0.912	1.11E-17
St13	2.48E-21	0.392786666	0.816	0.857	2.84E-17
Chd3	6.76E-21	0.378737267	0.747	0.799	7.74E-17
Elavl3	2.37E-20	0.380303383	0.755	0.792	2.71E-16
Snap91	3.12E-20	0.349453497	0.792	0.84	3.57E-16
Calm3	4.17E-20	0.271091781	0.86	0.914	4.77E-16
Asap1	5.71E-20	0.292618686	0.805	0.862	6.53E-16
Usp9x	1.29E-19	0.354022429	0.788	0.837	1.47E-15
Ncam1	1.75E-19	0.373075836	0.832	0.831	2.01E-15
Kif5a	1.75E-19	0.379714564	0.829	0.851	2.01E-15
Cbfb	2.98E-19	0.311654326	0.822	0.871	3.41E-15
Rab6b	3.90E-19	0.27752139	0.832	0.882	4.46E-15
Pdpk1	7.63E-19	0.344756994	0.758	0.784	8.73E-15
Atpaf2	1.10E-18	0.288133452	0.646	0.789	1.26E-14
Ppp3cb	1.67E-18	0.331846488	0.79	0.861	1.91E-14
Ivns1abp	1.94E-18	0.365377298	0.743	0.796	2.22E-14
Dnm3	3.99E-18	0.285379595	0.826	0.857	4.57E-14

Fam174a	5.55E-18	0.259846264	0.918	0.947	6.35E-14
Nfe2l1	6.31E-18	0.377474463	0.777	0.85	7.22E-14
Rcan2	8.63E-18	0.336076432	0.85	0.881	9.87E-14
Isl1	1.07E-17	0.2598041	0.839	0.902	1.22E-13
Bhlhe41	5.27E-17	0.497876208	0.565	0.474	6.03E-13
Pld5	1.51E-16	0.320954004	0.838	0.877	1.73E-12
Pcp4	1.90E-16	- 0.277576049	0.549	0.704	2.18E-12
Csnk1a1	2.05E-16	0.263717135	0.845	0.891	2.35E-12
Cmip	2.17E-16	0.374023638	0.731	0.765	2.48E-12
Arl8b	2.45E-16	0.365405853	0.738	0.773	2.80E-12
2-Mar	3.66E-16	0.379570128	0.805	0.828	4.19E-12
Scn9a	3.92E-16	0.253603273	0.909	0.944	4.49E-12
Syt7	4.57E-16	0.399086763	0.851	0.895	5.23E-12
Syn1	6.35E-16	0.336315603	0.768	0.821	7.26E-12
Caprin1	6.81E-16	0.335494408	0.743	0.804	7.79E-12
Zbtb7a	6.97E-16	0.438221647	0.746	0.825	7.97E-12
Mbnl1	8.43E-16	0.322468485	0.835	0.853	9.64E-12
Ppp2r2c	1.70E-15	0.357745993	0.733	0.776	1.94E-11
Chmp3	1.79E-15	0.342144581	0.764	0.81	2.05E-11
Hecw1	2.37E-15	0.356966425	0.752	0.803	2.72E-11
Irf2bpl	2.72E-15	0.442118925	0.679	0.691	3.11E-11
Nrxn2	3.60E-15	0.345666724	0.792	0.875	4.12E-11
Ppp1cb	3.80E-15	0.308580281	0.766	0.815	4.34E-11
Spop	9.03E-15	0.340589299	0.826	0.856	1.03E-10
Rpl12	9.76E-15	0.292520126	0.875	0.911	1.12E-10
Eif3h	1.55E-14	0.290243262	0.861	0.898	1.78E-10
Map1a	1.91E-14	0.346236346	0.865	0.908	2.18E-10
H2-T23	3.62E-14	0.311683506	0.516	0.683	4.14E-10
Taok1	1.20E-13	0.341443842	0.715	0.768	1.37E-09
Actr2	3.55E-13	0.355602056	0.724	0.784	4.06E-09
Eif3a	4.32E-13	0.391589856	0.711	0.769	4.94E-09
Ppm1b	6.19E-13	0.313341694	0.767	0.851	7.08E-09
A330069E16Rik	7.22E-13	0.421946584	0.504	0.66	8.26E-09
Matr3	1.50E-12	0.297355699	0.759	0.832	1.71E-08
Nsf	2.09E-12	0.336992033	0.695	0.741	2.39E-08
Cd44	3.84E-12	0.308440856	0.695	0.694	4.40E-08
Stau2	5.14E-12	0.332286819	0.727	0.791	5.88E-08
Spry2	6.26E-12	0.474109216	0.813	0.786	7.16E-08
Ythdf2	6.76E-12	0.369273461	0.744	0.802	7.73E-08
Gabbr1	9.77E-12	0.312632142	0.747	0.804	1.12E-07
Rph3a	9.81E-12	0.361466081	0.76	0.835	1.12E-07

Bmpr2	1.17E-11	0.297646296	0.736	0.802	1.34E-07
Dgkz	1.72E-11	0.372047043	0.743	0.835	1.96E-07
Paip1	2.26E-11	0.454429474	0.788	0.764	2.58E-07
Pam	2.58E-11	0.528479032	0.837	0.917	2.95E-07
Cntn1	4.88E-11	0.365295761	0.716	0.773	5.58E-07
Fbxw7	5.26E-11	0.426064827	0.657	0.695	6.02E-07
Nav1	7.53E-11	0.429067597	0.64	0.664	8.61E-07
Purb	1.63E-10	0.334120164	0.665	0.716	1.86E-06
Gabra1	1.66E-10	0.301372093	0.733	0.794	1.90E-06
Rab10	1.80E-10	0.281306769	0.757	0.82	2.06E-06
Ano3	2.47E-10	0.285916803	0.825	0.874	2.83E-06
Flot2	3.16E-10	0.324464143	0.714	0.782	3.61E-06
Itpkb	3.68E-10	0.333548926	0.696	0.762	4.21E-06
Akap11	4.46E-10	0.318575146	0.718	0.773	5.11E-06
Rpl22	5.94E-10	0.300091418	0.744	0.809	6.79E-06
Ntrk3	6.18E-10	0.269950541	0.775	0.845	7.07E-06
Junb	7.51E-10	0.466607218	0.562	0.561	8.59E-06
Prkacb	9.13E-10	0.351328784	0.687	0.747	1.04E-05
Ptp4a2	1.35E-09	0.357895166	0.644	0.689	1.55E-05
Vps4b	1.55E-09	0.281025744	0.759	0.845	1.78E-05
Thra	1.86E-09	0.345446497	0.743	0.83	2.13E-05
Xist	3.56E-09	0.473707455	0.984	0.974	4.07E-05
Ncor1	3.57E-09	0.307248981	0.795	0.827	4.09E-05
Set	5.20E-09	0.265057947	0.755	0.833	5.95E-05
Kdm6b	7.75E-09	0.26063818	0.509	0.671	8.87E-05
Nckap1	1.36E-08	0.316698732	0.707	0.775	0.000155687
Eif5a2	2.33E-08	0.299271301	0.683	0.746	0.000267048
Agtppbp1	2.58E-08	0.330380967	0.68	0.754	0.000295112
Adipor1	3.45E-08	0.307496339	0.808	0.841	0.000394603
Krit1	4.42E-08	0.365709563	0.63	0.689	0.000505806
Cd164	4.79E-08	0.357019974	0.671	0.72	0.000548522
Phactr2	2.06E-07	0.334274777	0.654	0.693	0.002354962
Stat3	2.37E-07	0.34360328	0.73	0.834	0.002715962
Larp4b	2.52E-07	0.348344234	0.753	0.771	0.002886985
Mef2a	2.55E-07	0.303596189	0.69	0.761	0.002921088
Adrbk1	2.68E-07	0.365471375	0.709	0.805	0.00306462
Nedd4l	2.73E-07	0.325495038	0.764	0.788	0.003121745
Fam189b	2.88E-07	0.279702217	0.854	0.916	0.003297763
B4galt6	3.03E-07	0.373694841	0.654	0.711	0.003463015
Chd5	3.96E-07	0.389370821	0.702	0.785	0.004529327
Mtmr6	4.04E-07	0.304377387	0.687	0.746	0.00462373

Dnajc5	4.23E-07	0.332588912	0.655	0.702	0.004844733
Pou4f2	4.90E-07	0.256416043	0.724	0.797	0.005607109
Wac	5.23E-07	0.333585347	0.621	0.674	0.005978573
Ppp3r1	5.67E-07	0.353945163	0.656	0.712	0.006482179
Ctnnb1	7.59E-07	0.276291725	0.67	0.732	0.0086833
2900055J20Rik	8.56E-07	0.349732644	0.743	0.755	0.009794354
Msn	8.84E-07	0.277537495	0.72	0.792	0.010118488
Ptbp3	9.34E-07	0.322013	0.629	0.685	0.010690292
Cpeb2	1.34E-06	0.314045812	0.667	0.733	0.015310142
Chp1	1.59E-06	0.298400243	0.681	0.757	0.018138044
Tspyl1	1.61E-06	0.333715119	0.656	0.715	0.018445324
Tspan2	4.09E-06	0.281415855	0.791	0.834	0.04678504
Kcnab2	5.90E-06	0.276991953	0.762	0.857	0.067451285
Lrrc8d	1.25E-05	0.287212752	0.66	0.746	0.143321457
Gls	1.34E-05	0.323948661	0.64	0.693	0.153625543
Usp34	1.39E-05	0.332082753	0.755	0.796	0.159199511
Nptn	1.62E-05	0.314217794	0.651	0.727	0.185343203
Zswim6	1.69E-05	0.251692567	0.455	0.538	0.193923822
Vwa5a	1.90E-05	0.265106288	0.714	0.798	0.217202406
Abhd2	2.99E-05	0.571516428	0.695	0.796	0.342188342
Ube2q2	3.04E-05	0.345927397	0.642	0.715	0.347703296
Zbtb38	3.10E-05	0.367998997	0.705	0.727	0.354580385
Marf1	3.49E-05	0.386248982	0.798	0.783	0.398870737
Pik3ca	3.99E-05	0.328944872	0.641	0.699	0.456072753
Map3k1	5.86E-05	0.445561139	0.548	0.578	0.670063776
Rtf1	5.91E-05	0.281983302	0.756	0.854	0.675685617
Mpped2	9.91E-05	0.275560182	0.789	0.83	1
Rps6ka3	9.92E-05	0.37275092	0.594	0.649	1
Trim36	0.000106152	0.288973346	0.605	0.671	1
Trappc10	0.000129265	0.286900429	0.443	0.503	1
Eno2	0.000138014	0.287543321	0.673	0.755	1
Robo2	0.000141851	0.292161465	0.757	0.795	1
Mapt	0.000146467	0.295324796	0.681	0.748	1
Nek7	0.000177471	0.272365981	0.678	0.753	1
Rbfox3	0.000182203	0.37052084	0.602	0.649	1
Acbd5	0.000241538	0.273311472	0.673	0.756	1
Rnf112	0.000248732	0.2661727	0.774	0.808	1
Ubl3	0.000262605	0.3245772	0.734	0.76	1
Peli1	0.000264426	0.389469878	0.546	0.579	1
Pink1	0.000353148	0.313432428	0.76	0.792	1
Socs2	0.000415497	0.377682227	0.688	0.708	1

Sptan1	0.000460135	0.295849444	0.654	0.716	1
Bach2	0.000490898	0.32385655	0.538	0.592	1
Add1	0.000500643	0.349448427	0.616	0.669	1
Myef2	0.000561047	0.393338993	0.591	0.64	1
Clip3	0.000596408	0.33932663	0.617	0.681	1
Reep1	0.000790686	0.258309453	0.675	0.772	1
Clasp2	0.000883469	0.297758191	0.572	0.729	1
Gcnt2	0.000954949	0.345813974	0.594	0.65	1
Pde1c	0.001009187	0.297646139	0.753	0.78	1
Crk	0.001175717	0.30927043	0.61	0.699	1
Azin1	0.001302155	0.286001074	0.649	0.749	1
Mapk1	0.001344658	0.267697438	0.665	0.753	1
Cacnb4	0.001354336	0.304789158	0.64	0.724	1
Dnm1l	0.001439999	0.256124698	0.648	0.724	1
Brap	0.00144458	0.302774633	0.746	0.792	1
Spata13	0.001454453	0.293871326	0.473	0.541	1
Ehd3	0.00166586	0.270830463	0.588	0.736	1
Impad1	0.001686701	0.291984566	0.635	0.698	1
Dctn4	0.001810095	0.378865936	0.652	0.711	1
Tusc2	0.001846353	0.263369625	0.799	0.849	1
Cul3	0.001876347	0.294869013	0.6	0.671	1
Atp9a	0.001937496	0.309253661	0.645	0.71	1
Cbx3	0.002563409	0.396380947	0.64	0.706	1
Rtn4rl1	0.003580749	0.309403323	0.716	0.744	1
Cdk5r2	0.004083229	0.326778442	0.675	0.771	1
Inpp4a	0.004241018	0.393673167	0.659	0.777	1
C77080	0.004467784	0.255534155	0.583	0.723	1
Zbtb4	0.006111729	0.328338614	0.696	0.711	1
Slc25a1	0.006741039	0.279172934	0.721	0.827	1
Suds3	0.00766625	0.252683721	0.758	0.783	1
Cbx6	0.007742122	0.32568952	0.585	0.639	1
Lpin1	0.008512583	0.32079837	0.588	0.665	1
Lats2	0.008740686	0.298944591	0.578	0.657	1
Dapk1	0.010269423	0.337236879	0.594	0.645	1
Atf2	0.012487382	0.297848751	0.704	0.73	1
Zfos1	0.013966359	0.300836757	0.707	0.81	1
Sox4	0.016215776	0.287744597	0.426	0.483	1
Wnk1	0.016549172	0.283467704	0.608	0.686	1
Tomm70a	0.018415364	0.268941186	0.642	0.722	1
Ttbk2	0.01905593	0.311536254	0.596	0.661	1
Gatad1	0.019441557	0.335357547	0.685	0.792	1

Fam63b	0.01982395	0.266279106	0.622	0.715	1
Tiparp	0.019879972	0.271819336	0.408	0.474	1
Capza1	0.0213303	0.285237051	0.619	0.703	1
Cyfp2	0.023592022	0.270654469	0.641	0.716	1
Agfg1	0.024486452	0.302503736	0.579	0.668	1
Id2	0.027169844	0.258656282	0.752	0.802	1
Camsap2	0.027777079	0.324486681	0.596	0.668	1
Prkab2	0.031364194	0.323593711	0.721	0.751	1
Slc24a5	0.031830571	0.371494095	0.695	0.674	1
Smad1	0.032274586	0.279779521	0.63	0.725	1
BC030336	0.034104857	0.284518994	0.629	0.715	1
3-Sep	0.034872913	0.322446407	0.584	0.659	1
Pygb	0.037834906	0.332726567	0.585	0.645	1
Map4k4	0.03866663	0.263669821	0.51	0.571	1
Cdk16	0.038683547	0.323082047	0.588	0.656	1
Brd2	0.039944578	0.260362212	0.515	0.596	1
Slc24a2	0.044828796	0.275390675	0.708	0.814	1
Prrxl1	0.044926751	0.265849715	0.836	0.919	1
Med13l	0.048899616	0.371446373	0.513	0.562	1
Coro2a	0.050702289	0.285160061	0.564	0.616	1
Dync1li2	0.053406479	0.278290965	0.615	0.689	1
Cpeb4	0.054232464	0.355604893	0.545	0.603	1
Sobp	0.063137077	0.272675476	0.476	0.555	1
Cacnb3	0.067742725	0.264646805	0.733	0.8	1
Actb	0.068207883	0.420723551	0.999	0.999	1
Abca1	0.0683115	0.272705843	0.54	0.614	1
Pak3	0.068484405	0.26651826	0.658	0.745	1
Myo5a	0.069089547	0.265167196	0.606	0.686	1
Rhoq	0.072142773	0.306188521	0.579	0.652	1
Arid1a	0.075126844	0.261265737	0.605	0.676	1
Kat7	0.084075524	0.257128537	0.531	0.608	1
Npepps	0.085332137	0.303342243	0.554	0.616	1
Rad21	0.085786427	0.279655533	0.701	0.75	1
Igsf3	0.089477567	0.351515213	0.647	0.67	1
Susd6	0.090585961	0.267487	0.523	0.591	1
Pdzd8	0.091441822	0.269621122	0.51	0.613	1
Fam168a	0.093175805	0.253605742	0.523	0.617	1
Akap6	0.093658681	0.263265787	0.608	0.693	1
Plekha6	0.095124343	0.255738429	0.48	0.559	1
Mfhas1	0.096823169	0.297060316	0.519	0.6	1
Dock9	0.099444484	0.287289187	0.482	0.565	1

Asic2	0.102606901	0.265966336	0.628	0.708	1
Efna5	0.107301041	0.281229897	0.495	0.574	1
Wtap	0.123628198	0.263667485	0.638	0.737	1
Kcnb2	0.124752777	0.275713112	0.62	0.718	1
Tnrc6a	0.132360494	0.28502499	0.611	0.749	1
Ctif	0.135274933	0.290300831	0.518	0.594	1
Rgs8	0.136946497	0.258122561	0.659	0.698	1
Dnajc6	0.138494723	0.258542155	0.53	0.613	1
Tnrc6c	0.139595856	0.299294587	0.541	0.622	1
Rims1	0.139815276	0.253576417	0.565	0.681	1
Dnm1	0.14089488	0.255152854	0.572	0.66	1
Wipf3	0.141093403	0.281298387	0.529	0.613	1
Plcx2	0.143815178	0.266102414	0.604	0.69	1
Mtss1	0.144552828	0.256869737	0.53	0.604	1
Ugcg	0.148552808	0.26136601	0.613	0.7	1
Ppm1l	0.148746735	0.257402691	0.588	0.674	1
Dusp5	0.149644285	0.267753529	0.555	0.63	1
Shoc2	0.152709144	0.309642421	0.563	0.637	1
Usp31	0.153137549	0.274141056	0.626	0.72	1
Bptf	0.158587433	0.263392339	0.5	0.587	1
Usp22	0.159722626	0.261361994	0.553	0.631	1
Hdgf	0.162645972	0.263638289	0.638	0.729	1
Mesdc1	0.170316052	0.255750588	0.765	0.858	1
Uhrf1bp1l	0.173463975	0.2988279	0.567	0.641	1
2510009E07Rik	0.18283533	0.250455301	0.615	0.711	1
Plekhm3	0.202737138	0.286107747	0.514	0.577	1
Mycbp2	0.234656597	0.265489967	0.583	0.666	1
Gnl3l	0.241340226	0.258071662	0.601	0.67	1
Setd7	0.250273708	0.275310277	0.567	0.632	1
Pim1	0.26306423	0.372459421	0.551	0.681	1
Dok4	0.263382502	0.254315739	0.808	0.9	1
Mapk8ip2	0.275277673	0.250536504	0.553	0.628	1
Onecut2	0.291365696	0.283649086	0.609	0.684	1
Lrrc8a	0.299291428	0.362564075	0.634	0.76	1
Fat3	0.307752279	0.267321326	0.593	0.674	1
Strn3	0.321063561	0.271158906	0.565	0.665	1
Bean1	0.32171384	0.307803455	0.677	0.7	1
Cul4a	0.322429413	0.302847206	0.546	0.613	1
Rap1gds1	0.338262912	0.266516978	0.595	0.691	1
Hif1a	0.343705603	0.255721575	0.58	0.67	1
Mapre2	0.34765003	0.26440257	0.58	0.67	1

Jup	0.369686845	0.272656435	0.596	0.686	1
Zfhx4	0.375330369	0.295613582	0.68	0.703	1
Amph	0.387360195	0.290153391	0.525	0.594	1
Jph4	0.399024042	0.252853338	0.651	0.785	1
Foxp1	0.39922267	0.29813585	0.54	0.614	1
Yme1l1	0.401273863	0.265069793	0.515	0.635	1
Hcn1	0.409283816	0.255044405	0.511	0.593	1
Ablim1	0.418784609	0.265004513	0.533	0.613	1
Birc6	0.422342433	0.282842361	0.49	0.567	1
Avl9	0.427917862	0.274172604	0.532	0.617	1
Prkar1b	0.437657212	0.278368482	0.602	0.696	1
Trim37	0.457853156	0.309435551	0.538	0.611	1
Apba1	0.458955556	0.273553626	0.63	0.763	1
Tshz3	0.465396222	0.344946856	0.529	0.569	1
Kmt2c	0.475673522	0.27982774	0.485	0.563	1
Kpna1	0.505812725	0.264359397	0.52	0.604	1
Rnf44	0.517306978	0.320881257	0.557	0.6	1
Eif4g3	0.539203165	0.253661914	0.686	0.728	1
Efr3a	0.549694801	0.268269923	0.556	0.625	1
Ube2o	0.550048818	0.296047229	0.599	0.73	1
Chd4	0.564471216	0.340968281	0.607	0.727	1
Tmf1	0.574197044	0.30865623	0.702	0.701	1
Tex2	0.578779781	0.282492292	0.574	0.666	1
Spin1	0.580769855	0.257957972	0.585	0.686	1
Mprp	0.609838071	0.27366276	0.547	0.623	1
Nhs	0.612997098	0.292316238	0.492	0.565	1
Socs3	0.619813431	0.296278975	0.609	0.612	1
Xiap	0.63722398	0.25372242	0.591	0.682	1
Clstn1	0.659725139	0.255390518	0.562	0.642	1
Sox11	0.663230304	0.413366912	0.475	0.502	1
Car10	0.68662445	0.268139633	0.671	0.713	1
Zmiz1	0.689061728	0.261066136	0.543	0.623	1
Ptprf	0.692066541	0.31665755	0.63	0.773	1
Egr1	0.701006738	0.263031759	0.458	0.498	1
Lingo1	0.704095011	0.255908877	0.69	0.733	1
Rab11fip2	0.715695406	0.25719229	0.685	0.813	1
Wasf3	0.727510828	0.264193527	0.539	0.625	1
Dmxl2	0.731349486	0.268497446	0.546	0.63	1
Frat2	0.750671934	0.322886285	0.466	0.517	1
Ubr3	0.792928211	0.26625246	0.565	0.657	1
Six1	0.80838172	0.266414603	0.519	0.614	1

Tmem117	0.814583096	0.253395712	0.551	0.646	1
Rps27rt	0.824351636	0.298290083	0.654	0.772	1
Mt1	0.825186512	0.354681918	0.515	0.552	1
Twf1	0.826663301	0.282025838	0.534	0.633	1
Sorbs2	0.828084271	0.254646072	0.661	0.704	1
Lrrc75b	0.858755502	0.275697893	0.669	0.706	1
Samd14	0.864498957	0.287399098	0.743	0.835	1
Synj1	0.877086084	0.306726623	0.515	0.584	1
Crebrf	0.879358654	0.271032998	0.695	0.729	1
Plekha3	0.883491689	0.269136598	0.517	0.613	1
Atxn1	0.88706628	0.299046646	0.508	0.577	1
Apc	0.897794048	0.255684466	0.56	0.65	1
Pum2	0.905432307	0.252628603	0.55	0.636	1
Picalm	0.908616541	0.253333298	0.671	0.721	1
Sv2a	0.963711169	0.324411526	0.527	0.614	1
Alkbh5	0.967967164	0.298716621	0.676	0.671	1