

Table SI. Differentially expressed genes identified in GSE52313 dataset.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Col12a1	4.837478	10.2967	29.10318	2.35x10 ⁻⁰⁹	1.69x10 ⁻⁰⁵	11.90545	Increased
Lrp8	3.588306	8.089257	27.46341	3.71x10 ⁻⁰⁹	1.69x10 ⁻⁰⁵	11.5494	Increased
Nppa	4.366188	16.2917	25.3251	7.01x10 ⁻⁰⁹	1.69x10 ⁻⁰⁵	11.03213	Increased
Snai3	-1.36522	8.753614	-25.1801	7.34x10 ⁻⁰⁹	1.69x10 ⁻⁰⁵	10.99466	Decreased
Serpina3n	3.002031	11.98511	24.07488	1.04x10 ⁻⁰⁸	1.92x10 ⁻⁰⁵	10.69821	Increased
Vcan	1.997998	11.96198	22.72662	1.64x10 ⁻⁰⁸	2.52x10 ⁻⁰⁵	10.30869	Increased
Crlf1	5.154233	8.267864	20.93921	3.11x10 ⁻⁰⁸	4.09x10 ⁻⁰⁵	9.739227	Increased
Dkk3	3.960006	10.79073	20.26402	4.02x10 ⁻⁰⁸	4.25x10 ⁻⁰⁵	9.506598	Increased
Lox	4.179026	11.5524	20.17702	4.16x10 ⁻⁰⁸	4.25x10 ⁻⁰⁵	9.475871	Increased
Bst1	1.738614	7.657839	19.52425	5.37x10 ⁻⁰⁸	4.50x10 ⁻⁰⁵	9.239609	Increased
Col8a1	3.092544	13.45632	19.24714	6.01x10 ⁻⁰⁸	4.50x10 ⁻⁰⁵	9.136166	Increased
Panx1	2.582623	9.110602	19.22953	6.05x10 ⁻⁰⁸	4.50x10 ⁻⁰⁵	9.12953	Increased
Ptn	3.30985	9.759687	19.10939	6.35x10 ⁻⁰⁸	4.50x10 ⁻⁰⁵	9.084025	Increased
Dhrs9	3.82733	4.065364	18.83957	7.10x10 ⁻⁰⁸	4.57x10 ⁻⁰⁵	8.980478	Increased
Sprr1a	5.915985	7.628227	18.61243	7.80x10 ⁻⁰⁸	4.57x10 ⁻⁰⁵	8.891823	Increased
Chsy3	1.940548	6.225739	18.53712	8.05x10 ⁻⁰⁸	4.57x10 ⁻⁰⁵	8.862127	Increased
Mfap5	2.999443	12.44683	18.31738	8.83x10 ⁻⁰⁸	4.57x10 ⁻⁰⁵	8.774587	Increased
Timp1	4.330547	9.461454	18.28744	8.94x10 ⁻⁰⁸	4.57x10 ⁻⁰⁵	8.762557	Increased
Serinc2	2.889147	6.90132	18.09804	9.70x10 ⁻⁰⁸	4.66x10 ⁻⁰⁵	8.685879	Increased
Fmod	5.356439	10.2714	17.99661	1.01x10 ⁻⁰⁷	4.66x10 ⁻⁰⁵	8.644398	Increased
Pcp4	-2.06757	5.79322	-17.8149	1.10x10 ⁻⁰⁷	4.77x10 ⁻⁰⁵	8.569328	Decreased
Fn1	3.056472	14.63915	17.72346	1.14x10 ⁻⁰⁷	4.77x10 ⁻⁰⁵	8.531221	Increased
Frem1	3.343746	7.185924	17.5683	1.22x10 ⁻⁰⁷	4.89x10 ⁻⁰⁵	8.465958	Increased
Mdk	2.438799	8.489078	17.36508	1.34x10 ⁻⁰⁷	4.94x10 ⁻⁰⁵	8.379396	Increased
Slc41a2	1.65032	8.414656	17.25739	1.40x10 ⁻⁰⁷	4.94x10 ⁻⁰⁵	8.33302	Increased
Frzb	3.135642	10.70706	17.17129	1.46x10 ⁻⁰⁷	4.94x10 ⁻⁰⁵	8.295684	Increased
Il13ra2	4.07805	2.610242	17.10563	1.50x10 ⁻⁰⁷	4.94x10 ⁻⁰⁵	8.267057	Increased
Rimklb	4.284187	2.713311	16.95349	1.61x10 ⁻⁰⁷	4.94x10 ⁻⁰⁵	8.200208	Increased
Col8a2	5.203094	9.32615	16.90793	1.64x10 ⁻⁰⁷	4.94x10 ⁻⁰⁵	8.180045	Increased
Fsd1	2.595465	3.307672	16.88836	1.66x10 ⁻⁰⁷	4.94x10 ⁻⁰⁵	8.171366	Increased
Acan	4.267597	6.825465	16.88224	1.66x10 ⁻⁰⁷	4.94x10 ⁻⁰⁵	8.168646	Increased
NIncreasedr1	2.582765	10.04006	16.72429	1.79x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	8.098107	Increased
Sulf1	1.607015	12.49074	16.54652	1.94x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	8.017743	Increased
Ttc9	2.296363	8.664797	16.49662	1.99x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	7.994998	Increased
Dio2	3.666073	9.602369	16.45446	2.03x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	7.975717	Increased
Etv4	2.089712	7.275907	16.45226	2.03x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	7.974708	Increased
Emp1	2.180727	13.89606	16.28528	2.20x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	7.897741	Increased
Saa3	6.420483	6.025779	16.26954	2.21x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	7.890439	Increased
Selenbp1	-1.05206	13.36811	-16.2645	2.22x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	7.888116	Decreased
Selenbp2	-1.05206	13.36811	-16.2645	2.22x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	7.888116	Decreased
Tmem45a	2.385593	9.280905	16.21116	2.28x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	7.863274	Increased
Col11a1	6.566443	6.802738	16.19189	2.30x10 ⁻⁰⁷	5.04x10 ⁻⁰⁵	7.854282	Increased
Tubb3	2.535809	8.606682	16.01273	2.50x10 ⁻⁰⁷	5.36x10 ⁻⁰⁵	7.77007	Increased
Sec1	2.01995	5.787885	15.78185	2.80x10 ⁻⁰⁷	5.86x10 ⁻⁰⁵	7.659886	Increased
Col5a2	3.079095	13.73824	15.71513	2.90x10 ⁻⁰⁷	5.92x10 ⁻⁰⁵	7.627691	Increased
Ptpn22	1.218525	6.5747	15.59889	3.07x10 ⁻⁰⁷	6.14x10 ⁻⁰⁵	7.571214	Increased
Nlrc3	1.674661	8.411507	15.49952	3.22x10 ⁻⁰⁷	6.31x10 ⁻⁰⁵	7.522545	Increased
Dram1	0.999715	9.9264	15.37362	3.43x10 ⁻⁰⁷	6.45x10 ⁻⁰⁵	7.46035	Increased
Cxcl2	3.265232	5.053519	15.37311	3.43x10 ⁻⁰⁷	6.45x10 ⁻⁰⁵	7.460096	Increased
Cdh3	4.414411	5.304244	15.25549	3.64x10 ⁻⁰⁷	6.70x10 ⁻⁰⁵	7.401456	Increased
Otoa	2.966787	4.573814	15.1557	3.83x10 ⁻⁰⁷	6.91x10 ⁻⁰⁵	7.351287	Increased
Enpp1	2.038405	10.34022	15.08902	3.96x10 ⁻⁰⁷	7.01x10 ⁻⁰⁵	7.317555	Increased
Kcne1	1.473064	10.63213	15.00751	4.13x10 ⁻⁰⁷	7.17x10 ⁻⁰⁵	7.276084	Increased
Olfrl346	-2.88628	2.801773	-14.7705	4.67x10 ⁻⁰⁷	7.96x10 ⁻⁰⁵	7.153997	Decreased
Slc7a11	4.785612	4.690746	14.68674	4.88x10 ⁻⁰⁷	8.02x10 ⁻⁰⁵	7.110334	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Rai14	1.139835	10.62547	14.6864	4.88x10 ⁻⁰⁷	8.02x10 ⁻⁰⁵	7.110157	Increased
Adamts12	2.702521	12.30293	14.62085	5.05x10 ⁻⁰⁷	8.15x10 ⁻⁰⁵	7.075774	Increased
Creg2	4.021663	3.87453	14.4598	5.50x10 ⁻⁰⁷	8.72x10 ⁻⁰⁵	6.990556	Increased
Adamts2	2.086235	12.28521	14.33069	5.89x10 ⁻⁰⁷	9.19x10 ⁻⁰⁵	6.921454	Increased
Svep1	1.850357	12.30517	14.26222	6.11x10 ⁻⁰⁷	9.37x10 ⁻⁰⁵	6.884528	Increased
Col14a1	2.739931	12.3551	14.21381	6.27x10 ⁻⁰⁷	9.46x10 ⁻⁰⁵	6.858297	Increased
Gdf6	2.895551	8.193438	14.11446	6.62x10 ⁻⁰⁷	9.82x10 ⁻⁰⁵	6.804149	Increased
Ckmt1	2.562506	5.320061	13.95402	7.22x10 ⁻⁰⁷	1.05x10 ⁻⁰⁴	6.715796	Increased
Tyro3	1.118774	9.049498	13.94057	7.28x10 ⁻⁰⁷	1.05x10 ⁻⁰⁴	6.708339	Increased
Plekha4	1.958809	9.510125	13.82991	7.73x10 ⁻⁰⁷	1.10x10 ⁻⁰⁴	6.646675	Increased
Nox4	3.508684	9.214118	13.74987	8.09x10 ⁻⁰⁷	1.11x10 ⁻⁰⁴	6.601726	Increased
Tnfrsf11b	4.568867	5.930453	13.68678	8.38x10 ⁻⁰⁷	1.11x10 ⁻⁰⁴	6.566094	Increased
Penk	-2.04479	8.472754	-13.6506	8.55x10 ⁻⁰⁷	1.11x10 ⁻⁰⁴	6.54559	Decreased
Loxl3	2.771185	10.84498	13.63788	8.61x10 ⁻⁰⁷	1.11x10 ⁻⁰⁴	6.538352	Increased
Zfp365	1.668493	7.691115	13.62819	8.66x10 ⁻⁰⁷	1.11x10 ⁻⁰⁴	6.532842	Increased
Sh2b2	1.835126	7.258371	13.61796	8.71x10 ⁻⁰⁷	1.11x10 ⁻⁰⁴	6.527018	Increased
Tlr13	1.546271	9.002172	13.61712	8.71x10 ⁻⁰⁷	1.11x10 ⁻⁰⁴	6.52654	Increased
Megf10	2.325615	7.5558	13.55321	9.03x10 ⁻⁰⁷	1.13x10 ⁻⁰⁴	6.490056	Increased
Cda	1.588899	7.173412	13.51789	9.21x10 ⁻⁰⁷	1.13x10 ⁻⁰⁴	6.469813	Increased
Wisp1	3.160915	8.694512	13.51274	9.24x10 ⁻⁰⁷	1.13x10 ⁻⁰⁴	6.466855	Increased
St14	3.295077	7.111685	13.43998	9.63x10 ⁻⁰⁷	1.15x10 ⁻⁰⁴	6.424949	Increased
Epyc	4.164928	3.696162	13.4225	9.72x10 ⁻⁰⁷	1.15x10 ⁻⁰⁴	6.414846	Increased
Pla2g4a	1.240361	9.360885	13.40358	9.83x10 ⁻⁰⁷	1.15x10 ⁻⁰⁴	6.403891	Increased
Mme	-1.37699	9.934919	-13.3977	9.86x10 ⁻⁰⁷	1.15x10 ⁻⁰⁴	6.400458	Decreased
Fbln2	1.231987	14.53677	13.3798	9.96x10 ⁻⁰⁷	1.15x10 ⁻⁰⁴	6.390103	Increased
AA467197	2.549321	5.557403	13.33711	1.02x10 ⁻⁰⁶	1.15x10 ⁻⁰⁴	6.365276	Increased
Prss23	1.693233	10.43963	13.3305	1.02x10 ⁻⁰⁶	1.15x10 ⁻⁰⁴	6.361423	Increased
Ereg	4.812662	5.16627	13.25595	1.07x10 ⁻⁰⁶	1.18x10 ⁻⁰⁴	6.317843	Increased
Ccbe1	-1.1224	10.35696	-13.2444	1.08x10 ⁻⁰⁶	1.18x10 ⁻⁰⁴	6.311066	Decreased
Fstl1	2.637995	14.78338	13.21568	1.09x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.294185	Increased
Serpinb1a	2.433442	9.810886	13.18708	1.11x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.277341	Increased
Cgref1	1.001908	7.971996	13.16222	1.13x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.262662	Increased
Frmpd3	-1.51559	8.352365	-13.1237	1.15x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.239852	Decreased
Fam180a	3.38034	6.506411	13.12325	1.15x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.239596	Increased
Clec4e	4.360686	5.270764	13.08136	1.18x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.214718	Increased
Mlana	3.345897	4.276486	13.04814	1.21x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.194931	Increased
Ak5	3.987555	5.338184	13.02358	1.22x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.180263	Increased
Sdc1	1.79725	10.49242	13.01972	1.23x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.177954	Increased
Cilp	3.803169	12.90967	12.98905	1.25x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.15959	Increased
Nlgn2	1.163375	11.14519	12.97535	1.26x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.151377	Increased
Rassf5	1.042161	8.647239	12.95816	1.27x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.14105	Increased
Mmp2	1.98982	13.94728	12.93739	1.29x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.128558	Increased
Mfap4	3.675916	12.25924	12.93589	1.29x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.12765	Increased
Ms4a6d	1.510398	9.228733	12.93418	1.29x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.126626	Increased
Fgfr2	2.647294	6.401027	12.92782	1.29x10 ⁻⁰⁶	1.19x10 ⁻⁰⁴	6.122792	Increased
Ubtd2	1.09283	9.983317	12.86229	1.35x10 ⁻⁰⁶	1.23x10 ⁻⁰⁴	6.083197	Increased
Mgp	1.968414	14.82588	12.83918	1.36x10 ⁻⁰⁶	1.23x10 ⁻⁰⁴	6.069183	Increased
Dio3	3.586656	4.775509	12.79916	1.40x10 ⁻⁰⁶	1.25x10 ⁻⁰⁴	6.04485	Increased
Kcnd1	1.25016	7.479231	12.78704	1.41x10 ⁻⁰⁶	1.25x10 ⁻⁰⁴	6.037465	Increased
Anxa1	1.62847	12.05104	12.75823	1.43x10 ⁻⁰⁶	1.26x10 ⁻⁰⁴	6.019883	Increased
Scara3	1.929709	9.360379	12.6977	1.48x10 ⁻⁰⁶	1.29x10 ⁻⁰⁴	5.982794	Increased
Trpm6	2.214659	5.863729	12.58396	1.59x10 ⁻⁰⁶	1.37x10 ⁻⁰⁴	5.912596	Increased
Pcdh9	1.510612	7.734699	12.5293	1.64x10 ⁻⁰⁶	1.37x10 ⁻⁰⁴	5.878614	Increased
Bckdhhb	-0.98991	12.22306	-12.5252	1.65x10 ⁻⁰⁶	1.37x10 ⁻⁰⁴	5.876032	Decreased
Col24a1	4.484621	6.007841	12.5121	1.66x10 ⁻⁰⁶	1.37x10 ⁻⁰⁴	5.867889	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Atp8b1	0.882156	10.71252	12.50441	1.67x10 ⁻⁰⁶	1.37x10 ⁻⁰⁴	5.863094	Increased
Fbln5	1.768124	12.47398	12.50222	1.67x10 ⁻⁰⁶	1.37x10 ⁻⁰⁴	5.861726	Increased
Nsmf	0.796238	11.41061	12.48127	1.69x10 ⁻⁰⁶	1.37x10 ⁻⁰⁴	5.848632	Increased
Rgs11	2.638533	6.665834	12.46693	1.71x10 ⁻⁰⁶	1.37x10 ⁻⁰⁴	5.839651	Increased
Tbc1d10c	-1.33431	8.853396	-12.4636	1.71x10 ⁻⁰⁶	1.37x10 ⁻⁰⁴	5.837563	Decreased
Ift81	-1.08301	12.15005	-12.4101	1.77x10 ⁻⁰⁶	1.40x10 ⁻⁰⁴	5.803998	Decreased
Add2	2.51144	5.027869	12.35373	1.83x10 ⁻⁰⁶	1.44x10 ⁻⁰⁴	5.768407	Increased
Fst	3.116792	6.915508	12.32732	1.86x10 ⁻⁰⁶	1.45x10 ⁻⁰⁴	5.751689	Increased
Aqp5	5.050376	3.596405	12.26631	1.93x10 ⁻⁰⁶	1.49x10 ⁻⁰⁴	5.712912	Increased
Piezo2	3.031147	8.562658	12.2556	1.94x10 ⁻⁰⁶	1.49x10 ⁻⁰⁴	5.70609	Increased
Dusp2	1.081835	5.612422	12.245	1.96x10 ⁻⁰⁶	1.49x10 ⁻⁰⁴	5.699323	Increased
Acp5	3.194713	6.664876	12.17785	2.04x10 ⁻⁰⁶	1.53x10 ⁻⁰⁴	5.656333	Increased
Ppp1r3f	-0.8749	8.791991	-12.1714	2.05x10 ⁻⁰⁶	1.53x10 ⁻⁰⁴	5.652223	Decreased
Pnp2	1.609037	4.746185	12.16394	2.06x10 ⁻⁰⁶	1.53x10 ⁻⁰⁴	5.647401	Increased
Increasedb1	-1.45617	5.186892	-12.1299	2.10x10 ⁻⁰⁶	1.54x10 ⁻⁰⁴	5.625487	Decreased
Nfkbid	1.693332	5.887938	12.12073	2.11x10 ⁻⁰⁶	1.54x10 ⁻⁰⁴	5.619576	Increased
Eln	3.371515	13.22738	12.11313	2.12x10 ⁻⁰⁶	1.54x10 ⁻⁰⁴	5.614666	Increased
Csf2rb2	2.654166	8.668888	12.08924	2.15x10 ⁻⁰⁶	1.54x10 ⁻⁰⁴	5.59923	Increased
Ssc5d	2.033579	11.5238	12.0848	2.16x10 ⁻⁰⁶	1.54x10 ⁻⁰⁴	5.596356	Increased
Ltbp3	1.327831	13.21111	12.05456	2.20x10 ⁻⁰⁶	1.56x10 ⁻⁰⁴	5.576758	Increased
Bfsp1	0.849837	5.84079	12.01937	2.25x10 ⁻⁰⁶	1.56x10 ⁻⁰⁴	5.553891	Increased
Col1a2	2.830428	15.77472	12.01705	2.25x10 ⁻⁰⁶	1.56x10 ⁻⁰⁴	5.552379	Increased
Tmem119	2.716586	9.927042	12.01442	2.26x10 ⁻⁰⁶	1.56x10 ⁻⁰⁴	5.550666	Increased
1810033B17Rik	3.146641	4.017501	12.01005	2.26x10 ⁻⁰⁶	1.56x10 ⁻⁰⁴	5.547821	Increased
Ces1d	-2.30054	13.25698	-11.9822	2.31x10 ⁻⁰⁶	1.57x10 ⁻⁰⁴	5.52964	Decreased
Arnt2	1.793015	6.929923	11.96361	2.33x10 ⁻⁰⁶	1.58x10 ⁻⁰⁴	5.517508	Increased
Sh3pxd2b	1.469826	10.88607	11.94359	2.36x10 ⁻⁰⁶	1.59x10 ⁻⁰⁴	5.504406	Increased
Spire2	2.63806	3.801211	11.87404	2.47x10 ⁻⁰⁶	1.65x10 ⁻⁰⁴	5.4587	Increased
Pde1a	0.966688	10.29581	11.84584	2.51x10 ⁻⁰⁶	1.66x10 ⁻⁰⁴	5.440088	Increased
Sstr3	1.575699	10.81554	11.78602	2.61x10 ⁻⁰⁶	1.72x10 ⁻⁰⁴	5.400455	Increased
Ptx3	2.96494	6.633744	11.76868	2.64x10 ⁻⁰⁶	1.72x10 ⁻⁰⁴	5.388929	Increased
Cers6	1.003864	9.742002	11.75266	2.67x10 ⁻⁰⁶	1.72x10 ⁻⁰⁴	5.378262	Increased
Pcdhb13	1.647986	6.081906	11.73226	2.70x10 ⁻⁰⁶	1.72x10 ⁻⁰⁴	5.364662	Increased
Ankrd63	-1.62695	8.047891	-11.7301	2.71x10 ⁻⁰⁶	1.72x10 ⁻⁰⁴	5.363244	Decreased
Bdkrb2	2.305718	6.4421	11.72542	2.72x10 ⁻⁰⁶	1.72x10 ⁻⁰⁴	5.360092	Increased
B4gal5	0.915329	11.41619	11.71118	2.74x10 ⁻⁰⁶	1.73x10 ⁻⁰⁴	5.350579	Increased
Sbno2	0.982416	11.98719	11.69484	2.77x10 ⁻⁰⁶	1.73x10 ⁻⁰⁴	5.339649	Increased
Aldob	-3.12011	8.340305	-11.6692	2.82x10 ⁻⁰⁶	1.73x10 ⁻⁰⁴	5.322478	Decreased
5430435G22Rik	1.160333	9.93953	11.66887	2.82x10 ⁻⁰⁶	1.73x10 ⁻⁰⁴	5.322237	Increased
Col27a1	1.566804	10.34356	11.66658	2.82x10 ⁻⁰⁶	1.73x10 ⁻⁰⁴	5.320699	Increased
Ano10	-1.12657	12.16455	-11.6332	2.88x10 ⁻⁰⁶	1.75x10 ⁻⁰⁴	5.298273	Decreased
Mansc4	-1.20993	5.053862	-11.6215	2.90x10 ⁻⁰⁶	1.75x10 ⁻⁰⁴	5.290362	Decreased
Pfkip	1.15579	13.7242	11.62119	2.90x10 ⁻⁰⁶	1.75x10 ⁻⁰⁴	5.290169	Increased
Sh2d2a	1.854478	4.115739	11.58908	2.97x10 ⁻⁰⁶	1.77x10 ⁻⁰⁴	5.268503	Increased
Akr1b8	1.535507	8.959135	11.56167	3.02x10 ⁻⁰⁶	1.78x10 ⁻⁰⁴	5.249949	Increased
Adamts8	2.830552	7.890214	11.55887	3.02x10 ⁻⁰⁶	1.78x10 ⁻⁰⁴	5.248054	Increased
Cib3	-1.61067	5.817406	-11.5209	3.10x10 ⁻⁰⁶	1.82x10 ⁻⁰⁴	5.222265	Decreased
Rab27b	1.396919	8.177393	11.51213	3.12x10 ⁻⁰⁶	1.82x10 ⁻⁰⁴	5.216318	Increased
Adamts4	3.108201	7.387261	11.46034	3.23x10 ⁻⁰⁶	1.87x10 ⁻⁰⁴	5.180991	Increased
Fbn1	2.415266	14.33658	11.44925	3.25x10 ⁻⁰⁶	1.87x10 ⁻⁰⁴	5.173407	Increased
Fgfr1	0.940595	12.58931	11.43665	3.28x10 ⁻⁰⁶	1.87x10 ⁻⁰⁴	5.164779	Increased
Pdpm	1.863075	9.44144	11.42538	3.30x10 ⁻⁰⁶	1.88x10 ⁻⁰⁴	5.157057	Increased
Slc16a3	2.075384	8.638424	11.3138	3.55x10 ⁻⁰⁶	2.00x10 ⁻⁰⁴	5.080158	Increased
Gchfr	-1.27996	7.923639	-11.3089	3.57x10 ⁻⁰⁶	2.00x10 ⁻⁰⁴	5.076737	Decreased
Ackr2	1.553406	8.31289	11.26399	3.67x10 ⁻⁰⁶	2.03x10 ⁻⁰⁴	5.045577	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Nbl1	1.529542	11.51689	11.25643	3.69x10 ⁻⁰⁶	2.03x10 ⁻⁰⁴	5.040319	Increased
Serpina3k	2.565768	8.094978	11.25259	3.70x10 ⁻⁰⁶	2.03x10 ⁻⁰⁴	5.037647	Increased
Dsel	0.998256	10.19967	11.25205	3.70x10 ⁻⁰⁶	2.03x10 ⁻⁰⁴	5.037267	Increased
Gxylt2	2.552887	11.01002	11.20998	3.81x10 ⁻⁰⁶	2.08x10 ⁻⁰⁴	5.007913	Increased
Crcp	-0.84254	16.34597	-11.1683	3.92x10 ⁻⁰⁶	2.12x10 ⁻⁰⁴	4.978691	Decreased
Ubash3b	0.932598	9.069794	11.12365	4.04x10 ⁻⁰⁶	2.17x10 ⁻⁰⁴	4.947319	Increased
Col18a1	1.760419	11.61905	11.11074	4.07x10 ⁻⁰⁶	2.18x10 ⁻⁰⁴	4.938223	Increased
Cd69	2.039162	3.9156	11.03788	4.28x10 ⁻⁰⁶	2.28x10 ⁻⁰⁴	4.886652	Increased
Col1a1	3.224296	15.42356	11.01923	4.33x10 ⁻⁰⁶	2.29x10 ⁻⁰⁴	4.8734	Increased
Fndc1	1.919501	12.43211	10.99459	4.41x10 ⁻⁰⁶	2.32x10 ⁻⁰⁴	4.855853	Increased
Myof	1.577227	11.20761	10.98653	4.43x10 ⁻⁰⁶	2.32x10 ⁻⁰⁴	4.850105	Increased
Nrip3	3.087432	6.103394	10.94097	4.57x10 ⁻⁰⁶	2.37x10 ⁻⁰⁴	4.817534	Increased
Soat1	1.254818	10.41908	10.93232	4.60x10 ⁻⁰⁶	2.37x10 ⁻⁰⁴	4.811339	Increased
Ncam1	1.83487	10.08572	10.92897	4.61x10 ⁻⁰⁶	2.37x10 ⁻⁰⁴	4.808936	Increased
Clca1	1.870849	7.823135	10.89704	4.71x10 ⁻⁰⁶	2.38x10 ⁻⁰⁴	4.786	Increased
5-Sep	1.780209	10.13071	10.89651	4.71x10 ⁻⁰⁶	2.38x10 ⁻⁰⁴	4.78562	Increased
Gp1bb	1.780209	10.13071	10.89651	4.71x10 ⁻⁰⁶	2.38x10 ⁻⁰⁴	4.78562	Increased
Oard1	-0.66702	10.76792	-10.8899	4.74x10 ⁻⁰⁶	2.38x10 ⁻⁰⁴	4.780855	Decreased
Tmem132e	2.2437	5.664601	10.88206	4.76x10 ⁻⁰⁶	2.38x10 ⁻⁰⁴	4.775221	Increased
Mdfi	1.977245	7.331345	10.85012	4.87x10 ⁻⁰⁶	2.42x10 ⁻⁰⁴	4.752183	Increased
Ccdc80	1.203578	14.18489	10.83584	4.91x10 ⁻⁰⁶	2.43x10 ⁻⁰⁴	4.741862	Increased
Map6	1.235732	10.19917	10.83181	4.93x10 ⁻⁰⁶	2.43x10 ⁻⁰⁴	4.738946	Increased
Gstm7	-1.14331	11.69071	-10.8187	4.97x10 ⁻⁰⁶	2.43x10 ⁻⁰⁴	4.729457	Decreased
Ugdh	1.025203	11.08258	10.81488	4.99x10 ⁻⁰⁶	2.43x10 ⁻⁰⁴	4.726689	Increased
Dpep2	2.038737	6.981074	10.78109	5.10x10 ⁻⁰⁶	2.47x10 ⁻⁰⁴	4.702161	Increased
Slc6a12	1.170859	3.797207	10.77703	5.12x10 ⁻⁰⁶	2.47x10 ⁻⁰⁴	4.699213	Increased
Syt8	4.142554	3.038735	10.71961	5.33x10 ⁻⁰⁶	2.55x10 ⁻⁰⁴	4.657347	Increased
Cacna1s	-1.36911	10.6255	-10.6952	5.42x10 ⁻⁰⁶	2.58x10 ⁻⁰⁴	4.639461	Decreased
Egflam	-1.03035	11.0621	-10.681	5.47x10 ⁻⁰⁶	2.6x10 ⁻⁰⁴	4.629039	Decreased
Pdp2	-1.22977	12.1444	-10.6131	5.74x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.579059	Decreased
Gabrb3	1.526832	5.625305	10.61286	5.74x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.57892	Increased
9630014M24Rik	1.500757	6.261402	10.61112	5.75x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.577632	Increased
Ptgis	1.747036	10.65969	10.60943	5.76x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.576381	Increased
Mcoln2	2.424788	5.179852	10.59064	5.83x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.562493	Increased
Inmt	-2.28956	9.307707	-10.5775	5.89x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.55274	Decreased
Camkk1	1.714686	8.622769	10.56599	5.93x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.544235	Increased
Ptgnr	0.757086	13.36233	10.56185	5.95x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.541169	Increased
Pfkfb1	-1.85623	9.417929	-10.5594	5.96x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.539364	Decreased
Adc	1.498893	8.048353	10.55478	5.98x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.535922	Increased
Efh2	1.155429	12.77087	10.54505	6.02x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.528694	Increased
Zdhc2	1.469137	9.556664	10.54156	6.04x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.526101	Increased
Acad12	-0.89668	13.64544	-10.5347	6.07x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.521003	Decreased
Slco2a1	1.517829	9.531347	10.52659	6.10x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.51497	Increased
Gpr155	-0.70268	11.19251	-10.5026	6.21x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.497092	Decreased
Slc9a3	1.321059	8.373571	10.49163	6.26x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.488904	Increased
Slc6a7	3.661691	6.239866	10.48472	6.29x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.483745	Increased
Ugt1a1	1.788129	8.759724	10.47569	6.33x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.476994	Increased
Ugt1a10	1.788129	8.759724	10.47569	6.33x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.476994	Increased
Ugt1a2	1.788129	8.759724	10.47569	6.33x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.476994	Increased
Ugt1a5	1.788129	8.759724	10.47569	6.33x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.476994	Increased
Ugt1a6a	1.788129	8.759724	10.47569	6.33x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.476994	Increased
Ugt1a7c	1.788129	8.759724	10.47569	6.33x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.476994	Increased
Ugt1a8	1.788129	8.759724	10.47569	6.33x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.476994	Increased
Ugt1a9	1.788129	8.759724	10.47569	6.33x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.476994	Increased
Dse	1.318311	10.28969	10.47314	6.34x10 ⁻⁰⁶	2.65x10 ⁻⁰⁴	4.475089	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Bnc2	1.693788	8.521841	10.45954	6.40x10 ⁻⁰⁶	2.67x10 ⁻⁰⁴	4.46491	Increased
Meox1	2.366595	11.6983	10.417	6.60x10 ⁻⁰⁶	2.74x10 ⁻⁰⁴	4.432988	Increased
9030617O03Rik	-1.31251	12.63509	-10.384	6.76x10 ⁻⁰⁶	2.78x10 ⁻⁰⁴	4.408097	Decreased
Itgb8	1.486268	8.299679	10.38036	6.77x10 ⁻⁰⁶	2.78x10 ⁻⁰⁴	4.405386	Increased
Anxa8	3.323975	7.470673	10.36467	6.85x10 ⁻⁰⁶	2.79x10 ⁻⁰⁴	4.393543	Increased
Mst1r	1.246148	9.084512	10.36269	6.86x10 ⁻⁰⁶	2.79x10 ⁻⁰⁴	4.392048	Increased
C8g	-1.00927	7.092249	-10.3545	6.90x10 ⁻⁰⁶	2.8x10 ⁻⁰⁴	4.385885	Decreased
B4galnt3	3.256643	5.920581	10.31721	7.09x10 ⁻⁰⁶	2.86x10 ⁻⁰⁴	4.357598	Increased
Atp8b4	1.506839	7.251179	10.30428	7.16x10 ⁻⁰⁶	2.88x10 ⁻⁰⁴	4.34778	Increased
Ctf1	-0.83827	8.979133	-10.281	7.28x10 ⁻⁰⁶	2.91x10 ⁻⁰⁴	4.330034	Decreased
Tubb2b	1.587395	8.934945	10.26315	7.37x10 ⁻⁰⁶	2.92x10 ⁻⁰⁴	4.316464	Increased
Myh8	1.481679	5.88036	10.26244	7.38x10 ⁻⁰⁶	2.92x10 ⁻⁰⁴	4.315925	Increased
Mrc2	1.427374	12.12222	10.26025	7.39x10 ⁻⁰⁶	2.92x10 ⁻⁰⁴	4.31425	Increased
Robo1	1.092629	8.962741	10.24815	7.45x10 ⁻⁰⁶	2.93x10 ⁻⁰⁴	4.305014	Increased
Serpinf1	1.978373	12.55753	10.23994	7.50x10 ⁻⁰⁶	2.93x10 ⁻⁰⁴	4.298742	Increased
Pi16	1.671907	13.34772	10.23913	7.50x10 ⁻⁰⁶	2.93x10 ⁻⁰⁴	4.298117	Increased
Entpd1	0.850811	12.12188	10.22679	7.57x10 ⁻⁰⁶	2.93x10 ⁻⁰⁴	4.288683	Increased
Snail	1.390423	8.533212	10.22136	7.60x10 ⁻⁰⁶	2.93x10 ⁻⁰⁴	4.284518	Increased
Itih5	1.717216	11.61897	10.21892	7.61x10 ⁻⁰⁶	2.93x10 ⁻⁰⁴	4.282654	Increased
Mybl1	1.486319	7.593971	10.18666	7.79x10 ⁻⁰⁶	2.99x10 ⁻⁰⁴	4.257901	Increased
Slc25a12	-0.674	14.78125	-10.1569	7.96x10 ⁻⁰⁶	3.04x10 ⁻⁰⁴	4.234983	Decreased
Hadh	-0.98033	16.06574	-10.1486	8.01x10 ⁻⁰⁶	3.04x10 ⁻⁰⁴	4.228573	Decreased
Col4a3	1.485022	10.34856	10.14217	8.05x10 ⁻⁰⁶	3.04x10 ⁻⁰⁴	4.223644	Increased
Slfn1	0.977402	10.4392	10.12901	8.13x10 ⁻⁰⁶	3.04x10 ⁻⁰⁴	4.213485	Increased
Slfn2	0.977402	10.4392	10.12901	8.13x10 ⁻⁰⁶	3.04x10 ⁻⁰⁴	4.213485	Increased
Slfn4	0.977402	10.4392	10.12901	8.13x10 ⁻⁰⁶	3.04x10 ⁻⁰⁴	4.213485	Increased
Isoc1	-0.63725	13.22621	-10.1094	8.25x10 ⁻⁰⁶	3.06x10 ⁻⁰⁴	4.198291	Decreased
Myc	1.244788	9.191646	10.10859	8.25x10 ⁻⁰⁶	3.06x10 ⁻⁰⁴	4.197693	Increased
Pira2	1.141693	10.01809	10.10473	8.28x10 ⁻⁰⁶	3.06x10 ⁻⁰⁴	4.1947	Increased
Ctla4	-1.76601	9.811745	-10.1006	8.30x10 ⁻⁰⁶	3.06x10 ⁻⁰⁴	4.191527	Decreased
Ccbl2	-1.01474	11.49126	-10.0735	8.47x10 ⁻⁰⁶	3.08x10 ⁻⁰⁴	4.170516	Decreased
Hist2h2be	-0.7336	10.28416	-10.0727	8.47x10 ⁻⁰⁶	3.08x10 ⁻⁰⁴	4.169879	Decreased
Sirpb1a	2.602676	5.736387	10.07012	8.49x10 ⁻⁰⁶	3.08x10 ⁻⁰⁴	4.167852	Increased
Sirpb1b	2.602676	5.736387	10.07012	8.49x10 ⁻⁰⁶	3.08x10 ⁻⁰⁴	4.167852	Increased
Il1r1	0.815734	11.44528	10.05272	8.60x10 ⁻⁰⁶	3.1x10 ⁻⁰⁴	4.154321	Increased
Phgdh	1.582303	8.035405	10.05074	8.61x10 ⁻⁰⁶	3.1x10 ⁻⁰⁴	4.152786	Increased
Adcy2	1.974335	6.334565	10.03715	8.70x10 ⁻⁰⁶	3.1x10 ⁻⁰⁴	4.142202	Increased
Lrrc14b	-0.84592	12.75053	-10.0324	8.73x10 ⁻⁰⁶	3.1x10 ⁻⁰⁴	4.138518	Decreased
S100a11	1.329615	12.18789	10.03152	8.73x10 ⁻⁰⁶	3.1x10 ⁻⁰⁴	4.137811	Increased
Sec16b	1.399595	9.640636	10.01228	8.86x10 ⁻⁰⁶	3.13x10 ⁻⁰⁴	4.122795	Increased
Gpr153	1.222845	11.9186	10.01052	8.87x10 ⁻⁰⁶	3.13x10 ⁻⁰⁴	4.121419	Increased
Itgav	0.644969	12.11641	10.00077	8.94x10 ⁻⁰⁶	3.14x10 ⁻⁰⁴	4.113792	Increased
Arhgap11a	1.338222	9.209392	9.990743	9.00x10 ⁻⁰⁶	3.15x10 ⁻⁰⁴	4.105948	Increased
Sh2d1b1	2.845897	4.829128	9.9833	9.05x10 ⁻⁰⁶	3.16x10 ⁻⁰⁴	4.100119	Increased
Drd2	-0.97408	8.683689	-9.97741	9.09x10 ⁻⁰⁶	3.16x10 ⁻⁰⁴	4.095503	Decreased
Zbtb7c	1.154579	8.909037	9.958311	9.22x10 ⁻⁰⁶	3.19x10 ⁻⁰⁴	4.080519	Increased
Mctpl	0.915838	7.539857	9.954353	9.25x10 ⁻⁰⁶	3.19x10 ⁻⁰⁴	4.07741	Increased
Lhfp	1.16735	12.31436	9.947562	9.30x10 ⁻⁰⁶	3.19x10 ⁻⁰⁴	4.072074	Increased
Mrpl52	1.468737	12.75603	9.932901	9.40x10 ⁻⁰⁶	3.2x10 ⁻⁰⁴	4.06054	Increased
Ech1	-1.25191	16.77509	-9.93283	9.40x10 ⁻⁰⁶	3.2x10 ⁻⁰⁴	4.060484	Decreased
2410018M08Rik	1.953626	6.012574	9.913649	9.53x10 ⁻⁰⁶	3.24x10 ⁻⁰⁴	4.045371	Increased
Edem1	0.712687	11.63509	9.893757	9.68x10 ⁻⁰⁶	3.26x10 ⁻⁰⁴	4.029668	Increased
Hgf	1.290999	7.458396	9.892855	9.68x10 ⁻⁰⁶	3.26x10 ⁻⁰⁴	4.028955	Increased
Apobr	1.385989	8.058854	9.869226	9.86x10 ⁻⁰⁶	3.31x10 ⁻⁰⁴	4.010261	Increased
Chodl	3.45565	3.672005	9.861098	9.92x10 ⁻⁰⁶	3.32x10 ⁻⁰⁴	4.00382	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Antxr1	1.660844	11.56285	9.852327	9.98x10 ⁻⁰⁶	3.33x10 ⁻⁰⁴	3.996866	Increased
Ric8b	-0.7116	12.51362	-9.84699	1.00x10 ⁻⁰⁵	3.33x10 ⁻⁰⁴	3.992631	Decreased
Medag	1.204859	11.47379	9.833658	1.01x10 ⁻⁰⁵	3.35x10 ⁻⁰⁴	3.982041	Increased
Mccc2	-0.86509	12.68201	-9.82141	1.02x10 ⁻⁰⁵	3.35x10 ⁻⁰⁴	3.972301	Decreased
Itk	-1.37867	9.270947	-9.82081	1.02x10 ⁻⁰⁵	3.35x10 ⁻⁰⁴	3.97182	Decreased
Pink1	-0.98595	15.84283	-9.82006	1.02x10 ⁻⁰⁵	3.35x10 ⁻⁰⁴	3.971229	Decreased
Glpr2	1.118829	9.325252	9.812851	1.03x10 ⁻⁰⁵	3.36x10 ⁻⁰⁴	3.965487	Increased
4430402I18Rik	-1.01221	10.2272	-9.79904	1.04x10 ⁻⁰⁵	3.38x10 ⁻⁰⁴	3.954485	Decreased
Stac2	2.222029	5.768951	9.789833	1.05x10 ⁻⁰⁵	3.39x10 ⁻⁰⁴	3.947136	Increased
Rdm1	-0.82869	11.40832	-9.78435	1.05x10 ⁻⁰⁵	3.39x10 ⁻⁰⁴	3.942763	Decreased
Ccdc136	1.326753	8.589907	9.781278	1.05x10 ⁻⁰⁵	3.39x10 ⁻⁰⁴	3.940305	Increased
Hrc	-1.21109	16.94071	-9.76866	1.06x10 ⁻⁰⁵	3.41x10 ⁻⁰⁴	3.930222	Decreased
Ptger3	2.202672	4.866867	9.757105	1.07x10 ⁻⁰⁵	3.43x10 ⁻⁰⁴	3.920974	Increased
Gnmt	-1.57596	7.545681	-9.73767	1.09x10 ⁻⁰⁵	3.47x10 ⁻⁰⁴	3.905402	Decreased
Hadha	-0.90697	17.2223	-9.72231	1.10x10 ⁻⁰⁵	3.49x10 ⁻⁰⁴	3.893068	Decreased
Col6a6	-1.90137	9.297125	-9.71913	1.10x10 ⁻⁰⁵	3.49x10 ⁻⁰⁴	3.890509	Decreased
Lpar2	1.433723	6.162194	9.715362	1.11x10 ⁻⁰⁵	3.49x10 ⁻⁰⁴	3.887484	Increased
Anxa2	1.149763	13.52284	9.703734	1.12x10 ⁻⁰⁵	3.51x10 ⁻⁰⁴	3.878131	Increased
Olfm2	1.681453	4.034907	9.682981	1.13x10 ⁻⁰⁵	3.53x10 ⁻⁰⁴	3.861411	Increased
Ankrd1	1.902196	18.13916	9.682072	1.14x10 ⁻⁰⁵	3.53x10 ⁻⁰⁴	3.860678	Increased
Spn	1.603772	7.773756	9.681355	1.14x10 ⁻⁰⁵	3.53x10 ⁻⁰⁴	3.8601	Increased
Omd	1.710252	7.925967	9.674172	1.14x10 ⁻⁰⁵	3.54x10 ⁻⁰⁴	3.854305	Increased
Hs6st2	1.788252	7.077641	9.658952	1.16x10 ⁻⁰⁵	3.56x10 ⁻⁰⁴	3.842011	Increased
Gstk1	-1.29397	12.24584	-9.657	1.16x10 ⁻⁰⁵	3.56x10 ⁻⁰⁴	3.84043	Decreased
Gpc6	1.254573	12.14808	9.641679	1.17x10 ⁻⁰⁵	3.59x10 ⁻⁰⁴	3.828037	Increased
P2ry1	-1.19902	10.80457	-9.63252	1.18x10 ⁻⁰⁵	3.59x10 ⁻⁰⁴	3.820616	Decreased
Gpr18	1.696169	4.350856	9.632089	1.18x10 ⁻⁰⁵	3.59x10 ⁻⁰⁴	3.820268	Increased
Capg	1.641784	10.93439	9.629253	1.18x10 ⁻⁰⁵	3.59x10 ⁻⁰⁴	3.817969	Increased
Mmp12	4.521004	8.351275	9.625537	1.19x10 ⁻⁰⁵	3.59x10 ⁻⁰⁴	3.814956	Increased
Slc16a8	-1.25785	8.256871	-9.61777	1.19x10 ⁻⁰⁵	3.6x10 ⁻⁰⁴	3.808654	Decreased
Pxmp2	-1.03145	12.51918	-9.61434	1.20x10 ⁻⁰⁵	3.6x10 ⁻⁰⁴	3.805869	Decreased
Tenm3	1.542113	10.27921	9.593985	1.21x10 ⁻⁰⁵	3.63x10 ⁻⁰⁴	3.789329	Increased
Cdh11	1.533062	9.815245	9.592302	1.22x10 ⁻⁰⁵	3.63x10 ⁻⁰⁴	3.78796	Increased
Aldh2	-0.87313	14.74321	-9.5792	1.23x10 ⁻⁰⁵	3.65x10 ⁻⁰⁴	3.77729	Decreased
Efcab2	-0.84505	13.82762	-9.5746	1.23x10 ⁻⁰⁵	3.65x10 ⁻⁰⁴	3.773546	Decreased
Kcnj15	3.292629	8.968831	9.569849	1.24x10 ⁻⁰⁵	3.65x10 ⁻⁰⁴	3.769672	Increased
Fcrlb	3.736084	2.585499	9.56939	1.24x10 ⁻⁰⁵	3.65x10 ⁻⁰⁴	3.769298	Increased
Ccr1	1.700604	7.625713	9.546807	1.26x10 ⁻⁰⁵	3.7x10 ⁻⁰⁴	3.750863	Increased
Il18	1.49748	5.319869	9.543844	1.26x10 ⁻⁰⁵	3.7x10 ⁻⁰⁴	3.748441	Increased
Pdk3	1.018119	9.186067	9.527856	1.28x10 ⁻⁰⁵	3.74x10 ⁻⁰⁴	3.735361	Increased
Itm2a	1.283962	10.90545	9.512543	1.29x10 ⁻⁰⁵	3.77x10 ⁻⁰⁴	3.722814	Increased
Fxyd6	1.7594	12.58309	9.505058	1.30x10 ⁻⁰⁵	3.77x10 ⁻⁰⁴	3.716675	Increased
Shox2	1.519998	6.8134	9.504168	1.30x10 ⁻⁰⁵	3.77x10 ⁻⁰⁴	3.715944	Increased
Tfr2	3.15414	3.667491	9.484908	1.32x10 ⁻⁰⁵	3.79x10 ⁻⁰⁴	3.700123	Increased
Raet1d	2.034754	4.451397	9.479998	1.33x10 ⁻⁰⁵	3.79x10 ⁻⁰⁴	3.696085	Increased
Raet1e	2.034754	4.451397	9.479998	1.33x10 ⁻⁰⁵	3.79x10 ⁻⁰⁴	3.696085	Increased
Myo5a	0.86165	11.22202	9.479018	1.33x10 ⁻⁰⁵	3.79x10 ⁻⁰⁴	3.695279	Increased
Fhad1	2.344543	6.115252	9.475377	1.33x10 ⁻⁰⁵	3.79x10 ⁻⁰⁴	3.692283	Increased
Carhsp1	0.966496	12.37788	9.444406	1.36x10 ⁻⁰⁵	3.87x10 ⁻⁰⁴	3.666756	Increased
Fbxl21	1.073117	6.78012	9.442263	1.37x10 ⁻⁰⁵	3.87x10 ⁻⁰⁴	3.664987	Increased
Aldh9a1	-0.69971	12.11983	-9.43336	1.38x10 ⁻⁰⁵	3.88x10 ⁻⁰⁴	3.657636	Decreased
Ikbke	1.653806	8.356009	9.430533	1.38x10 ⁻⁰⁵	3.88x10 ⁻⁰⁴	3.655297	Increased
Pycr1	1.336108	8.092101	9.42713	1.38x10 ⁻⁰⁵	3.88x10 ⁻⁰⁴	3.652483	Increased
Diras2	1.663723	5.947142	9.403876	1.41x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.633233	Increased
Slc5a6	-0.65203	10.97677	-9.39389	1.42x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.624949	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Cpne2	0.787804	9.648998	9.389491	1.42x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.621302	Increased
Masp1	1.195175	11.21003	9.385941	1.43x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.618355	Increased
Klra2	1.455217	5.700658	9.382829	1.43x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.615771	Increased
Entpd5	-0.88963	14.40145	-9.38102	1.43x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.614267	Decreased
Fbn2	1.859487	8.462732	9.377891	1.44x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.611669	Increased
Arhgap33	1.064838	7.69512	9.370602	1.44x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.605611	Increased
Klc3	1.922477	3.711017	9.368097	1.45x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.603527	Increased
Adamts12	2.190671	9.243584	9.36765	1.45x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.603155	Increased
Dfna5	1.470022	6.582828	9.362394	1.45x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.598782	Increased
Fibin	2.231914	11.83145	9.360207	1.46x10 ⁻⁰⁵	3.94x10 ⁻⁰⁴	3.596962	Increased
Spata17	-0.69229	6.395043	-9.3438	1.48x10 ⁻⁰⁵	3.96x10 ⁻⁰⁴	3.583297	Decreased
Cacng6	-2.24116	6.395829	-9.3427	1.48x10 ⁻⁰⁵	3.96x10 ⁻⁰⁴	3.582378	Decreased
Numbl	1.162832	10.39173	9.342288	1.48x10 ⁻⁰⁵	3.96x10 ⁻⁰⁴	3.582034	Increased
Matn2	0.938661	11.82624	9.32384	1.50x10 ⁻⁰⁵	4.00x10 ⁻⁰⁴	3.566637	Increased
Ifitm10	1.323024	7.410358	9.322495	1.50x10 ⁻⁰⁵	4.00x10 ⁻⁰⁴	3.565514	Increased
Ivd	-1.03525	15.51268	-9.31695	1.51x10 ⁻⁰⁵	4.01x10 ⁻⁰⁴	3.560877	Decreased
Srpx2	1.813098	10.82459	9.291716	1.54x10 ⁻⁰⁵	4.08x10 ⁻⁰⁴	3.53976	Increased
Htr2b	1.75494	5.386782	9.285385	1.54x10 ⁻⁰⁵	4.09x10 ⁻⁰⁴	3.534452	Increased
Cenpt	0.969752	8.904831	9.261564	1.57x10 ⁻⁰⁵	4.15x10 ⁻⁰⁴	3.514453	Increased
Mpeg1	2.033794	11.56707	9.256639	1.58x10 ⁻⁰⁵	4.15x10 ⁻⁰⁴	3.510313	Increased
Hdac11	-0.81199	11.19303	-9.25134	1.59x10 ⁻⁰⁵	4.15x10 ⁻⁰⁴	3.505858	Decreased
Cyp2b10	-2.52625	5.845112	-9.25099	1.59x10 ⁻⁰⁵	4.15x10 ⁻⁰⁴	3.505557	Decreased
Ptprf	1.602746	10.80208	9.248356	1.59x10 ⁻⁰⁵	4.15x10 ⁻⁰⁴	3.503344	Increased
Actg2	1.773148	7.23422	9.240562	1.60x10 ⁻⁰⁵	4.16x10 ⁻⁰⁴	3.496782	Increased
Ppil1	-0.84387	11.33983	-9.23521	1.61x10 ⁻⁰⁵	4.17x10 ⁻⁰⁴	3.492271	Decreased
Hadhb	-0.88693	17.61855	-9.22565	1.62x10 ⁻⁰⁵	4.19x10 ⁻⁰⁴	3.484211	Decreased
Col6a1	1.624954	14.38303	9.215053	1.63x10 ⁻⁰⁵	4.21x10 ⁻⁰⁴	3.475269	Increased
Cpeb3	-1.04958	13.71772	-9.20081	1.65x10 ⁻⁰⁵	4.25x10 ⁻⁰⁴	3.463235	Decreased
Hebp2	1.353523	6.963861	9.190026	1.67x10 ⁻⁰⁵	4.27x10 ⁻⁰⁴	3.454108	Increased
Klhdc1	-0.92098	11.69823	-9.18882	1.67x10 ⁻⁰⁵	4.27x10 ⁻⁰⁴	3.453084	Decreased
Ppic	1.447841	11.92187	9.145465	1.73x10 ⁻⁰⁵	4.40x10 ⁻⁰⁴	3.416302	Increased
As3mt	-0.84183	12.54733	-9.14253	1.73x10 ⁻⁰⁵	4.40x10 ⁻⁰⁴	3.413809	Decreased
Ppl	-1.91274	10.2352	-9.13697	1.74x10 ⁻⁰⁵	4.41x10 ⁻⁰⁴	3.409073	Decreased
Timp2	0.993626	14.32861	9.131255	1.75x10 ⁻⁰⁵	4.42x10 ⁻⁰⁴	3.40421	Increased
Acs11	-0.75343	16.84294	-9.12835	1.75x10 ⁻⁰⁵	4.42x10 ⁻⁰⁴	3.401733	Decreased
Coro1a	1.084047	10.32109	9.111262	1.77x10 ⁻⁰⁵	4.46x10 ⁻⁰⁴	3.387169	Increased
Pik3r5	1.649134	8.400764	9.101093	1.79x10 ⁻⁰⁵	4.48x10 ⁻⁰⁴	3.378488	Increased
Vat1	1.086027	12.24558	9.100053	1.79x10 ⁻⁰⁵	4.48x10 ⁻⁰⁴	3.377599	Increased
Ccdc88a	0.739024	10.36578	9.055037	1.86x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.339061	Increased
Pak1	1.551031	8.131489	9.047534	1.87x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.33262	Increased
Acadm	-0.90215	16.91595	-9.04254	1.88x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.328332	Decreased
Gp49a	1.529124	11.07959	9.035119	1.89x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.321953	Increased
Lilrb4	1.529124	11.07959	9.035119	1.89x10 ⁻⁰⁵	4.6x10 ⁻⁰⁴	3.321953	Increased
Cyp11b1	1.581204	10.30204	9.031032	1.89x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.318438	Increased
Gcdh	-0.90958	12.86833	-9.03024	1.89x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.317755	Decreased
Cnr2	0.896627	6.994412	9.0294	1.90x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.317035	Increased
Gal3st4	1.487949	5.463189	9.028666	1.90x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.316403	Increased
Ldhb	-0.90699	17.21763	-9.02831	1.90x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.316096	Decreased
Nnt	-0.74079	16.02151	-9.02616	1.90x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.314248	Decreased
Adi1	-0.75756	12.03877	-9.02311	1.91x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.311623	Decreased
Fbxo24	1.255077	11.95322	9.019127	1.91x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.308193	Increased
Ipo13	-0.73731	13.4699	-9.0184	1.91x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.307564	Decreased
Scg2	5.463506	3.633452	9.015061	1.92x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.30469	Increased
Pcolce	1.254794	11.95451	9.011731	1.92x10 ⁻⁰⁵	4.61x10 ⁻⁰⁴	3.30182	Increased
Kynu	2.617895	1.880165	9.00705	1.93x10 ⁻⁰⁵	4.62x10 ⁻⁰⁴	3.297786	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Pam	0.608266	16.88444	8.995625	1.95x10 ⁻⁰⁵	4.64x10 ⁻⁰⁴	3.287929	Increased
Trim46	1.918974	7.979182	8.995387	1.95x10 ⁻⁰⁵	4.64x10 ⁻⁰⁴	3.287724	Increased
Mmab	-0.8524	12.18142	-8.98665	1.96x10 ⁻⁰⁵	4.66x10 ⁻⁰⁴	3.280183	Decreased
Fmn1	1.301538	8.646719	8.980984	1.97x10 ⁻⁰⁵	4.66x10 ⁻⁰⁴	3.275283	Increased
Twist1	1.336769	7.718051	8.980617	1.97x10 ⁻⁰⁵	4.66x10 ⁻⁰⁴	3.274965	Increased
Cxcl5	3.059459	6.078373	8.9755	1.98x10 ⁻⁰⁵	4.66x10 ⁻⁰⁴	3.270541	Increased
Gstm2	-0.81089	14.87249	-8.96361	2.00x10 ⁻⁰⁵	4.74x10 ⁻⁰⁴	3.260249	Decreased
Creg1	-0.8432	13.65192	-8.94575	2.03x10 ⁻⁰⁵	4.74x10 ⁻⁰⁴	3.24477	Decreased
Slc2a4	-0.86208	15.6162	-8.94565	2.03x10 ⁻⁰⁵	4.74x10 ⁻⁰⁴	3.244684	Decreased
Chsy1	0.73176	11.05638	8.93681	2.04x10 ⁻⁰⁵	4.76x10 ⁻⁰⁴	3.237011	Increased
Cpz	1.971926	6.727516	8.930522	2.05x10 ⁻⁰⁵	4.77x10 ⁻⁰⁴	3.231548	Increased
Xcr1	-1.10908	15.96602	-8.92092	2.07x10 ⁻⁰⁵	4.77x10 ⁻⁰⁴	3.223198	Decreased
Snap91	0.774591	10.84608	8.919986	2.07x10 ⁻⁰⁵	4.77x10 ⁻⁰⁴	3.222389	Increased
Dhdh	-0.79629	12.00138	-8.91734	2.08x10 ⁻⁰⁵	4.77x10 ⁻⁰⁴	3.220083	Decreased
Dnm1	0.951507	11.06755	8.917088	2.08x10 ⁻⁰⁵	4.77x10 ⁻⁰⁴	3.219867	Increased
Hps1	0.889777	8.589326	8.916719	2.08x10 ⁻⁰⁵	4.77x10 ⁻⁰⁴	3.219546	Increased
Oplah	-0.78021	13.03633	-8.88549	2.13x10 ⁻⁰⁵	4.87x10 ⁻⁰⁴	3.192333	Decreased
Acsm5	-1.79643	8.946565	-8.8842	2.13x10 ⁻⁰⁵	4.87x10 ⁻⁰⁴	3.191205	Decreased
Etv5	0.661073	11.78085	8.878907	2.14x10 ⁻⁰⁵	4.87x10 ⁻⁰⁴	3.186584	Increased
Pbp2	4.670965	4.675904	8.878227	2.14x10 ⁻⁰⁵	4.87x10 ⁻⁰⁴	3.18599	Increased
Slc6a17	-1.09825	9.619441	-8.87038	2.16x10 ⁻⁰⁵	4.88x10 ⁻⁰⁴	3.179134	Decreased
Prkcdp	1.001963	11.30067	8.869644	2.16x10 ⁻⁰⁵	4.88x10 ⁻⁰⁴	3.17849	Increased
Pygm	-0.7404	17.18812	-8.86709	2.16x10 ⁻⁰⁵	4.88x10 ⁻⁰⁴	3.17626	Decreased
Ahnak2	1.83962	10.568	8.865262	2.17x10 ⁻⁰⁵	4.88x10 ⁻⁰⁴	3.174657	Increased
Pcdhb16	0.738007	8.396819	8.85724	2.18x10 ⁻⁰⁵	4.90x10 ⁻⁰⁴	3.167639	Increased
Gm6086	-0.8219	12.78167	-8.85387	2.19x10 ⁻⁰⁵	4.90x10 ⁻⁰⁴	3.164691	Decreased
Gpr64	1.339159	8.056306	8.847004	2.20x10 ⁻⁰⁵	4.92x10 ⁻⁰⁴	3.158674	Increased
Mettl15	-0.60009	9.892592	-8.8183	2.25x10 ⁻⁰⁵	5.02x10 ⁻⁰⁴	3.133481	Decreased
Dus4l	-0.61491	9.267663	-8.81681	2.26x10 ⁻⁰⁵	5.02x10 ⁻⁰⁴	3.132174	Decreased
Slpi	3.892691	5.060044	8.804521	2.28x10 ⁻⁰⁵	5.05x10 ⁻⁰⁴	3.121368	Increased
Lbp	1.167603	10.2236	8.789394	2.31x10 ⁻⁰⁵	5.10x10 ⁻⁰⁴	3.108045	Increased
Prkar1a	0.651656	16.55599	8.787278	2.31x10 ⁻⁰⁵	5.10x10 ⁻⁰⁴	3.10618	Increased
Rtn2	-1.07151	12.67607	-8.78583	2.31x10 ⁻⁰⁵	5.10x10 ⁻⁰⁴	3.104905	Decreased
Ddx59	-0.61709	9.889406	-8.7686	2.35x10 ⁻⁰⁵	5.16x10 ⁻⁰⁴	3.089697	Decreased
Cep128	-0.89593	10.40366	-8.76473	2.36x10 ⁻⁰⁵	5.16x10 ⁻⁰⁴	3.086281	Decreased
0610040J01Rik	-1.02794	8.491918	-8.75131	2.38x10 ⁻⁰⁵	5.20x10 ⁻⁰⁴	3.074415	Decreased
Egr2	2.984028	7.302522	8.747531	2.39x10 ⁻⁰⁵	5.20x10 ⁻⁰⁴	3.071068	Increased
Dnajc28	-0.91068	12.53449	-8.74672	2.39x10 ⁻⁰⁵	5.20x10 ⁻⁰⁴	3.070353	Decreased
Oxsm	-0.68152	11.72834	-8.7404	2.40x10 ⁻⁰⁵	5.21x10 ⁻⁰⁴	3.06475	Decreased
Ust	0.830019	8.650246	8.73629	2.41x10 ⁻⁰⁵	5.21x10 ⁻⁰⁴	3.061112	Increased
Acat1	-0.73035	15.90924	-8.73544	2.41x10 ⁻⁰⁵	5.21x10 ⁻⁰⁴	3.060356	Decreased
Nov	0.865493	8.960239	8.733544	2.42x10 ⁻⁰⁵	5.21x10 ⁻⁰⁴	3.058678	Increased
Gpr65	1.280373	7.992554	8.729899	2.42x10 ⁻⁰⁵	5.21x10 ⁻⁰⁴	3.055447	Increased
Dut	-0.66429	10.83968	-8.71606	2.45x10 ⁻⁰⁵	5.26x10 ⁻⁰⁴	3.043163	Decreased
Tnfaip6	1.455604	7.729556	8.71293	2.46x10 ⁻⁰⁵	5.26x10 ⁻⁰⁴	3.040386	Increased
Lhfp12	2.144305	10.32393	8.695741	2.49x10 ⁻⁰⁵	5.32x10 ⁻⁰⁴	3.025103	Increased
Crb1	-1.77158	6.251529	-8.69421	2.50x10 ⁻⁰⁵	5.32x10 ⁻⁰⁴	3.023742	Decreased
Svopl	0.891951	6.407867	8.692211	2.50x10 ⁻⁰⁵	5.32x10 ⁻⁰⁴	3.021962	Increased
Cln1	-1.98673	9.387176	-8.68278	2.52x10 ⁻⁰⁵	5.35x10 ⁻⁰⁴	3.013565	Decreased
Pcp4l1	-0.78793	14.3052	-8.66822	2.55x10 ⁻⁰⁵	5.40x10 ⁻⁰⁴	3.000582	Decreased
Ppap2c	1.267012	8.330264	8.662122	2.57x10 ⁻⁰⁵	5.42x10 ⁻⁰⁴	2.995136	Increased
Stxbp2	0.936296	8.789908	8.655592	2.58x10 ⁻⁰⁵	5.43x10 ⁻⁰⁴	2.989304	Increased
Hpse	1.152433	7.008506	8.651516	2.59x10 ⁻⁰⁵	5.44x10 ⁻⁰⁴	2.985661	Increased
Met	1.814174	8.594589	8.640399	2.61x10 ⁻⁰⁵	5.44x10 ⁻⁰⁴	2.975718	Increased
Leprel2	1.336235	10.53366	8.639011	2.62x10 ⁻⁰⁵	5.44x10 ⁻⁰⁴	2.974475	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Gpr162	1.336235	11.53366	8.639011	2.62x10 ⁻⁰⁵	5.44x10 ⁻⁰⁴	2.974475	Increased
Steap2	1.616667	7.730066	8.637247	2.62x10 ⁻⁰⁵	5.44x10 ⁻⁰⁴	2.972896	Increased
Srgap3	1.943148	8.454058	8.636825	2.62x10 ⁻⁰⁵	5.44x10 ⁻⁰⁴	2.972518	Increased
Col15a1	1.752552	13.46519	8.631648	2.63x10 ⁻⁰⁵	5.46x10 ⁻⁰⁴	2.967882	Increased
Phkg1	-1.35657	10.63837	-8.62814	2.64x10 ⁻⁰⁵	5.46x10 ⁻⁰⁴	2.964743	Decreased
Cst10	-2.26614	3.932328	-8.62013	2.66x10 ⁻⁰⁵	5.48x10 ⁻⁰⁴	2.957559	Decreased
Tmem56	-1.03182	8.148752	-8.60093	2.70x10 ⁻⁰⁵	5.55x10 ⁻⁰⁴	2.940328	Decreased
Slc7a2	1.606922	9.703202	8.600818	2.70x10 ⁻⁰⁵	5.55x10 ⁻⁰⁴	2.940224	Increased
Acaa2	-1.11273	16.24242	-8.59766	2.71x10 ⁻⁰⁵	5.55x10 ⁻⁰⁴	2.937389	Decreased
Abca4	-1.33915	9.30869	-8.59364	2.72x10 ⁻⁰⁵	5.55x10 ⁻⁰⁴	2.933774	Decreased
Mmp16	1.021432	6.356729	8.592152	2.72x10 ⁻⁰⁵	5.55x10 ⁻⁰⁴	2.932433	Increased
Actr3b	-1.00121	12.2007	-8.58861	2.73x10 ⁻⁰⁵	5.55x10 ⁻⁰⁴	2.929245	Decreased
Fam26e	1.530555	8.759215	8.58581	2.74x10 ⁻⁰⁵	5.55x10 ⁻⁰⁴	2.926728	Increased
6820408C15Rik	-0.79533	8.41328	-8.58484	2.74x10 ⁻⁰⁵	5.55x10 ⁻⁰⁴	2.925853	Decreased
Ankrd13d	0.623388	10.48693	8.570289	2.77x10 ⁻⁰⁵	5.61x10 ⁻⁰⁴	2.912749	Increased
Rab32	1.403986	8.1718	8.564834	2.78x10 ⁻⁰⁵	5.62x10 ⁻⁰⁴	2.90783	Increased
Msn	0.682094	15.29212	8.555822	2.81x10 ⁻⁰⁵	5.65x10 ⁻⁰⁴	2.899699	Increased
Gpr27	-0.67992	10.58661	-8.5223	2.89x10 ⁻⁰⁵	5.80x10 ⁻⁰⁴	2.869387	Decreased
AI467606	0.746475	7.435502	8.516746	2.90x10 ⁻⁰⁵	5.82x10 ⁻⁰⁴	2.864352	Increased
Rdh12	1.526141	5.299365	8.511709	2.91x10 ⁻⁰⁵	5.83x10 ⁻⁰⁴	2.859786	Increased
Asns	0.907224	8.462692	8.504738	2.93x10 ⁻⁰⁵	5.85x10 ⁻⁰⁴	2.853462	Increased
Mrps35	-0.7043	12.50129	-8.49238	2.96x10 ⁻⁰⁵	5.90x10 ⁻⁰⁴	2.842239	Decreased
Acy3	-0.84865	11.22871	-8.48731	2.97x10 ⁻⁰⁵	5.90x10 ⁻⁰⁴	2.837631	Decreased
Cd300a	1.419111	8.622306	8.48679	2.98x10 ⁻⁰⁵	5.90x10 ⁻⁰⁴	2.837159	Increased
Il1rl2	1.064087	9.341799	8.478109	3.00x10 ⁻⁰⁵	5.93x10 ⁻⁰⁴	2.829262	Increased
Tmem143	-0.92336	13.41162	-8.47136	3.01x10 ⁻⁰⁵	5.95x10 ⁻⁰⁴	2.823117	Decreased
Cd9	0.97207	11.90817	8.470017	3.02x10 ⁻⁰⁵	5.95x10 ⁻⁰⁴	2.821896	Increased
F2r	0.975844	12.6555	8.466081	3.03x10 ⁻⁰⁵	5.96x10 ⁻⁰⁴	2.818311	Increased
Clec5a	1.31289	7.951279	8.454445	3.06x10 ⁻⁰⁵	6.00x10 ⁻⁰⁴	2.807703	Increased
Il10ra	1.19552	9.640636	8.44932	3.07x10 ⁻⁰⁵	6.02x10 ⁻⁰⁴	2.803026	Increased
Trem2	2.305675	8.750458	8.447044	3.08x10 ⁻⁰⁵	6.02x10 ⁻⁰⁴	2.800949	Increased
Faim2	4.181685	4.681264	8.432533	3.12x10 ⁻⁰⁵	6.04x10 ⁻⁰⁴	2.787691	Increased
Ppm1k	-1.13315	13.58227	-8.42964	3.12x10 ⁻⁰⁵	6.04x10 ⁻⁰⁴	2.785046	Decreased
Efhb	1.408849	4.517448	8.429511	3.12x10 ⁻⁰⁵	6.04x10 ⁻⁰⁴	2.784927	Increased
Cfh	1.129979	14.62647	8.428854	3.13x10 ⁻⁰⁵	6.04x10 ⁻⁰⁴	2.784326	Increased
Rxra	-0.60016	13.36999	-8.42818	3.13x10 ⁻⁰⁵	6.04x10 ⁻⁰⁴	2.783712	Decreased
Fyb	1.29069	9.967412	8.414952	3.16x10 ⁻⁰⁵	6.09x10 ⁻⁰⁴	2.771602	Increased
Col7a1	1.788598	7.903684	8.402152	3.20x10 ⁻⁰⁵	6.14x10 ⁻⁰⁴	2.75987	Increased
Gja5	0.863908	10.41385	8.398881	3.21x10 ⁻⁰⁵	6.14x10 ⁻⁰⁴	2.756869	Increased
Fam213a	-0.7629	11.09497	-8.39854	3.21x10 ⁻⁰⁵	6.14x10 ⁻⁰⁴	2.756556	Decreased
Fbxw17	0.710892	9.205278	8.381224	3.26x10 ⁻⁰⁵	6.22x10 ⁻⁰⁴	2.740654	Increased
Echs1	-0.66759	15.27734	-8.37359	3.28x10 ⁻⁰⁵	6.23x10 ⁻⁰⁴	2.733636	Decreased
Fuom	-0.66759	15.27734	-8.37359	3.28x10 ⁻⁰⁵	6.23x10 ⁻⁰⁴	2.733636	Decreased
Fgd3	1.026302	8.130453	8.366758	3.30x10 ⁻⁰⁵	6.26x10 ⁻⁰⁴	2.727348	Increased
Tssk1	-1.49275	5.540853	-8.36112	3.31x10 ⁻⁰⁵	6.28x10 ⁻⁰⁴	2.722155	Decreased
Tnfsf11	3.616051	2.525483	8.353591	3.34x10 ⁻⁰⁵	6.30x10 ⁻⁰⁴	2.715218	Increased
Pmaip1	1.836134	5.950166	8.350869	3.34x10 ⁻⁰⁵	6.30x10 ⁻⁰⁴	2.712708	Increased
Hsd17b10	-0.70312	13.34424	-8.34736	3.35x10 ⁻⁰⁵	6.30x10 ⁻⁰⁴	2.709473	Decreased
Dnaaf3	-0.9056	18.55256	-8.34066	3.37x10 ⁻⁰⁵	6.30x10 ⁻⁰⁴	2.703293	Decreased
Tnni3	-0.9056	18.55256	-8.34066	3.37x10 ⁻⁰⁵	6.30x10 ⁻⁰⁴	2.703293	Decreased
Tnnt1	-0.9056	18.55256	-8.34066	3.37x10 ⁻⁰⁵	6.30x10 ⁻⁰⁴	2.703293	Decreased
Ncf2	0.831949	9.700319	8.338774	3.38x10 ⁻⁰⁵	6.30x10 ⁻⁰⁴	2.701549	Increased
Tango6	-0.65023	11.06678	-8.33687	3.38x10 ⁻⁰⁵	6.30x10 ⁻⁰⁴	2.699788	Decreased
Olfm13	1.342854	11.58874	8.335747	3.39x10 ⁻⁰⁵	6.30x10 ⁻⁰⁴	2.698754	Increased
Galnt16	0.981192	10.2718	8.325808	3.42x10 ⁻⁰⁵	6.34x10 ⁻⁰⁴	2.68957	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Prrg3	0.877388	11.47862	8.317079	3.44x10 ⁻⁰⁵	6.36x10 ⁻⁰⁴	2.681496	Increased
Cyb5rl	-0.82899	10.47499	-8.31572	3.45x10 ⁻⁰⁵	6.36x10 ⁻⁰⁴	2.680236	Decreased
Tmod4	-0.97431	10.86498	-8.31318	3.45x10 ⁻⁰⁵	6.36x10 ⁻⁰⁴	2.677887	Decreased
Fitm1	-0.66338	15.32557	-8.31106	3.46x10 ⁻⁰⁵	6.36x10 ⁻⁰⁴	2.675929	Decreased
Psmel	-0.66338	15.32557	-8.31106	3.46x10 ⁻⁰⁵	6.36x10 ⁻⁰⁴	2.675929	Decreased
Car14	-0.86908	13.49296	-8.29109	3.52x10 ⁻⁰⁵	6.46x10 ⁻⁰⁴	2.657416	Decreased
Ldhd	-1.13053	12.38093	-8.28829	3.53x10 ⁻⁰⁵	6.46x10 ⁻⁰⁴	2.654816	Decreased
Trps1	0.865184	10.30433	8.267183	3.59x10 ⁻⁰⁵	6.56x10 ⁻⁰⁴	2.635205	Increased
Gm9733	2.981189	2.311811	8.259423	3.62x10 ⁻⁰⁵	6.60x10 ⁻⁰⁴	2.627984	Increased
Acy1	-0.84841	10.20729	-8.25705	3.63x10 ⁻⁰⁵	6.60x10 ⁻⁰⁴	2.625779	Decreased
Pccb	-0.63156	13.73538	-8.22524	3.73x10 ⁻⁰⁵	6.77x10 ⁻⁰⁴	2.596104	Decreased
Msr1	0.971119	9.343033	8.222797	3.74x10 ⁻⁰⁵	6.77x10 ⁻⁰⁴	2.593824	Increased
AF251705	1.664298	8.59076	8.219688	3.75x10 ⁻⁰⁵	6.78x10 ⁻⁰⁴	2.590917	Increased
Syk	0.538348	12.54367	8.214271	3.76x10 ⁻⁰⁵	6.78x10 ⁻⁰⁴	2.585852	Increased
Atp1a2	-0.76253	16.96955	-8.21289	3.77x10 ⁻⁰⁵	6.78x10 ⁻⁰⁴	2.584559	Decreased
Tmem182	-0.55762	14.80897	-8.20508	3.79x10 ⁻⁰⁵	6.81x10 ⁻⁰⁴	2.577252	Decreased
Cdnf	-0.75643	11.98448	-8.19154	3.84x10 ⁻⁰⁵	6.86x10 ⁻⁰⁴	2.564571	Decreased
Sdha	-0.79772	17.39605	-8.1914	3.84x10 ⁻⁰⁵	6.86x10 ⁻⁰⁴	2.564432	Decreased
Rasl2-9	-0.81099	8.339601	-8.18661	3.86x10 ⁻⁰⁵	6.88x10 ⁻⁰⁴	2.559941	Decreased
Itgam	1.212195	10.61414	8.182719	3.87x10 ⁻⁰⁵	6.89x10 ⁻⁰⁴	2.556293	Increased
C1qtnf4	-0.93804	7.762987	-8.16957	3.91x10 ⁻⁰⁵	6.96x10 ⁻⁰⁴	2.543944	Decreased
Osgepl1	-0.77215	12.3005	-8.15777	3.96x10 ⁻⁰⁵	7.02x10 ⁻⁰⁴	2.532853	Decreased
Ttc32	-0.74138	10.45869	-8.15207	3.98x10 ⁻⁰⁵	7.04x10 ⁻⁰⁴	2.527488	Decreased
Milr1	1.362358	6.777924	8.146072	4.00x10 ⁻⁰⁵	7.06x10 ⁻⁰⁴	2.521836	Increased
Ucp3	-1.02447	12.2998	-8.14005	4.02x10 ⁻⁰⁵	7.09x10 ⁻⁰⁴	2.516158	Decreased
Nckap11	1.146549	10.7503	8.137893	4.03x10 ⁻⁰⁵	7.09x10 ⁻⁰⁴	2.514128	Increased
S100a6	1.252974	11.85797	8.129781	4.05x10 ⁻⁰⁵	7.11x10 ⁻⁰⁴	2.506475	Increased
S100a7a	1.252974	11.85797	8.129781	4.05x10 ⁻⁰⁵	7.11x10 ⁻⁰⁴	2.506475	Increased
Lrpprc	-0.64686	14.89884	-8.12369	4.08x10 ⁻⁰⁵	7.13x10 ⁻⁰⁴	2.500723	Decreased
Doc2g	-0.72377	15.00385	-8.10802	4.13x10 ⁻⁰⁵	7.19x10 ⁻⁰⁴	2.485915	Decreased
Nudt8	-0.72377	15.00385	-8.10802	4.13x10 ⁻⁰⁵	7.19x10 ⁻⁰⁴	2.485915	Decreased
Tbx10	-0.72377	15.00385	-8.10802	4.13x10 ⁻⁰⁵	7.19x10 ⁻⁰⁴	2.485915	Decreased
Tmem65	-0.61023	14.80472	-8.10072	4.16x10 ⁻⁰⁵	7.20x10 ⁻⁰⁴	2.479006	Decreased
Gpx7	1.025774	9.754066	8.09637	4.18x10 ⁻⁰⁵	7.20x10 ⁻⁰⁴	2.474891	Increased
Slc25a20	-0.73395	14.15701	-8.09623	4.18x10 ⁻⁰⁵	7.20x10 ⁻⁰⁴	2.474762	Decreased
Decr1	-0.82201	15.47809	-8.09616	4.18x10 ⁻⁰⁵	7.20x10 ⁻⁰⁴	2.474693	Decreased
Muc1	1.343584	6.28347	8.095262	4.18x10 ⁻⁰⁵	7.20x10 ⁻⁰⁴	2.473842	Increased
Fjx1	1.523831	6.756336	8.092556	4.19x10 ⁻⁰⁵	7.20x10 ⁻⁰⁴	2.471279	Increased
Ppm1e	0.901825	10.28008	8.090033	4.20x10 ⁻⁰⁵	7.20x10 ⁻⁰⁴	2.468888	Increased
Fbp2	-1.2168	10.66879	-8.08931	4.20x10 ⁻⁰⁵	7.20x10 ⁻⁰⁴	2.468199	Decreased
Lrrc52	-1.43149	7.547945	-8.08232	4.23x10 ⁻⁰⁵	7.23x10 ⁻⁰⁴	2.46158	Decreased
Phldb2	0.924427	12.43935	8.080508	4.24x10 ⁻⁰⁵	7.23x10 ⁻⁰⁴	2.459858	Increased
Plac8	3.215759	6.071264	8.078483	4.24x10 ⁻⁰⁵	7.23x10 ⁻⁰⁴	2.457937	Increased
Emilin1	1.43082	12.51714	8.074348	4.26x10 ⁻⁰⁵	7.25x10 ⁻⁰⁴	2.454013	Increased
Sgca	-0.77811	13.77954	-8.06791	4.28x10 ⁻⁰⁵	7.26x10 ⁻⁰⁴	2.447904	Decreased
Crat	-0.84804	15.99998	-8.0647	4.29x10 ⁻⁰⁵	7.26x10 ⁻⁰⁴	2.44485	Decreased
Tmem176a	1.188382	10.92126	8.063703	4.30x10 ⁻⁰⁵	7.26x10 ⁻⁰⁴	2.443904	Increased
Fbxw9	0.852155	8.071424	8.053391	4.34x10 ⁻⁰⁵	7.30x10 ⁻⁰⁴	2.434099	Increased
Gnb3	-0.83746	10.56543	-8.053	4.34x10 ⁻⁰⁵	7.30x10 ⁻⁰⁴	2.433722	Decreased
Emilin3	2.35589	3.725885	8.050463	4.35x10 ⁻⁰⁵	7.31x10 ⁻⁰⁴	2.431313	Increased
Cxcl16	1.242092	10.58247	8.04538	4.37x10 ⁻⁰⁵	7.33x10 ⁻⁰⁴	2.426476	Increased
Cdhr3	-1.30285	6.142214	-8.04112	4.39x10 ⁻⁰⁵	7.33x10 ⁻⁰⁴	2.422415	Decreased
Cd200r4	2.397496	3.789169	8.040081	4.39x10 ⁻⁰⁵	7.33x10 ⁻⁰⁴	2.421428	Increased
Rasa3	0.590661	12.4419	8.036474	4.40x10 ⁻⁰⁵	7.33x10 ⁻⁰⁴	2.417992	Increased
Psd4	1.284392	7.965505	8.036263	4.41x10 ⁻⁰⁵	7.33x10 ⁻⁰⁴	2.417791	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Mxra7	1.181145	12.24371	8.034295	4.41x10 ⁻⁰⁵	7.33x10 ⁻⁰⁴	2.415915	Increased
Farp1	0.858458	11.30775	8.030465	4.43x10 ⁻⁰⁵	7.34x10 ⁻⁰⁴	2.412263	Increased
Pnliprp1	-1.73923	1.678326	-8.02486	4.45x10 ⁻⁰⁵	7.37x10 ⁻⁰⁴	2.406914	Decreased
Mtfp1	-0.85166	13.5599	-8.01186	4.50x10 ⁻⁰⁵	7.44x10 ⁻⁰⁴	2.394507	Decreased
Gjb5	4.108852	4.271883	8.00942	4.51x10 ⁻⁰⁵	7.44x10 ⁻⁰⁴	2.392173	Increased
Plk1s1	-0.73345	12.73455	-8.00663	4.52x10 ⁻⁰⁵	7.45x10 ⁻⁰⁴	2.389502	Decreased
Lonrf2	-0.63534	10.03695	-7.9818	4.62x10 ⁻⁰⁵	7.59x10 ⁻⁰⁴	2.36574	Decreased
Ms4a4b	1.611298	5.162552	7.977092	4.64x10 ⁻⁰⁵	7.61x10 ⁻⁰⁴	2.361223	Increased
Gng8	3.500336	6.897769	7.973948	4.66x10 ⁻⁰⁵	7.61x10 ⁻⁰⁴	2.358208	Increased
Sod2	-0.68959	16.04924	-7.95885	4.72x10 ⁻⁰⁵	7.70x10 ⁻⁰⁴	2.343712	Decreased
Pkia	-0.56196	14.73401	-7.95666	4.73x10 ⁻⁰⁵	7.70x10 ⁻⁰⁴	2.341607	Decreased
Nnmt	1.087404	8.84776	7.955554	4.73x10 ⁻⁰⁵	7.70x10 ⁻⁰⁴	2.340545	Increased
Kcnip2	-1.09349	14.40019	-7.94656	4.77x10 ⁻⁰⁵	7.74x10 ⁻⁰⁴	2.3319	Decreased
Trim30a	0.583584	11.06793	7.928903	4.85x10 ⁻⁰⁵	7.85x10 ⁻⁰⁴	2.314893	Increased
Cth	-1.8508	7.35955	-7.92475	4.87x10 ⁻⁰⁵	7.86x10 ⁻⁰⁴	2.310889	Decreased
Olfm1	0.909154	9.6863	7.918153	4.90x10 ⁻⁰⁵	7.89x10 ⁻⁰⁴	2.304525	Increased
Kif5c	0.652511	8.349798	7.906689	4.95x10 ⁻⁰⁵	7.96x10 ⁻⁰⁴	2.293455	Increased
Pted3	-0.57408	14.12724	-7.90486	4.96x10 ⁻⁰⁵	7.96x10 ⁻⁰⁴	2.291692	Decreased
Cd14	1.128743	9.923767	7.898762	4.98x10 ⁻⁰⁵	7.98x10 ⁻⁰⁴	2.285793	Increased
1700040L02Rik	-0.97817	10.32501	-7.8985	4.98x10 ⁻⁰⁵	7.98x10 ⁻⁰⁴	2.285543	Decreased
Slc27a6	1.725338	5.452568	7.896326	4.99x10 ⁻⁰⁵	7.98x10 ⁻⁰⁴	2.283437	Increased
Plxna3	1.133568	8.119623	7.894233	5.00x10 ⁻⁰⁵	7.98x10 ⁻⁰⁴	2.281413	Increased
Scarf2	1.241482	10.71031	7.891876	5.01x10 ⁻⁰⁵	7.99x10 ⁻⁰⁴	2.279132	Increased
Coq10a	-0.85951	14.6693	-7.88879	5.03x10 ⁻⁰⁵	7.99x10 ⁻⁰⁴	2.276142	Decreased
Mgat5b	2.203633	7.663549	7.887438	5.03x10 ⁻⁰⁵	7.99x10 ⁻⁰⁴	2.274836	Increased
Mrgprh	-1.54492	10.3241	-7.88416	5.05x10 ⁻⁰⁵	8.00x10 ⁻⁰⁴	2.271658	Decreased
Alad	-0.7988	12.27609	-7.88208	5.06x10 ⁻⁰⁵	8.00x10 ⁻⁰⁴	2.269643	Decreased
Gabre	1.408814	6.989948	7.880537	5.07x10 ⁻⁰⁵	8.00x10 ⁻⁰⁴	2.268152	Increased
Bex1	-1.11986	6.983895	-7.86169	5.15x10 ⁻⁰⁵	8.12x10 ⁻⁰⁴	2.249874	Decreased
Cmtm8	-0.89255	10.29865	-7.8559	5.18x10 ⁻⁰⁵	8.15x10 ⁻⁰⁴	2.244249	Decreased
Gtse1	1.698836	6.873804	7.853769	5.19x10 ⁻⁰⁵	8.15x10 ⁻⁰⁴	2.24218	Increased
Inhbb	1.582596	8.774423	7.85103	5.20x10 ⁻⁰⁵	8.16x10 ⁻⁰⁴	2.239519	Increased
Ptgs2	2.113695	7.479149	7.843128	5.24x10 ⁻⁰⁵	8.20x10 ⁻⁰⁴	2.231835	Increased
Slc30a4	0.603458	11.61841	7.830493	5.30x10 ⁻⁰⁵	8.27x10 ⁻⁰⁴	2.219537	Increased
Tgfbr1	0.855517	12.17534	7.828688	5.31x10 ⁻⁰⁵	8.27x10 ⁻⁰⁴	2.217779	Increased
Prss57	1.765356	6.094368	7.823911	5.33x10 ⁻⁰⁵	8.29x10 ⁻⁰⁴	2.213123	Increased
Vstm5	1.755375	5.4357	7.821024	5.35x10 ⁻⁰⁵	8.30x10 ⁻⁰⁴	2.210309	Increased
Ndufv1	-0.73371	16.23896	-7.81953	5.35x10 ⁻⁰⁵	8.30x10 ⁻⁰⁴	2.20885	Decreased
Apaf1	0.659907	10.60655	7.817602	5.36x10 ⁻⁰⁵	8.30x10 ⁻⁰⁴	2.206971	Increased
Prkcb	0.966751	9.602927	7.806075	5.42x10 ⁻⁰⁵	8.36x10 ⁻⁰⁴	2.195721	Increased
Ybx2	-1.14999	11.00059	-7.80572	5.42x10 ⁻⁰⁵	8.36x10 ⁻⁰⁴	2.195376	Decreased
Gfra4	-1.37745	7.967085	-7.79184	5.49x10 ⁻⁰⁵	8.45x10 ⁻⁰⁴	2.181807	Decreased
Fkbp1b	1.348825	6.631736	7.790248	5.50x10 ⁻⁰⁵	8.45x10 ⁻⁰⁴	2.180252	Increased
Mob1a	0.542706	12.73302	7.788662	5.51x10 ⁻⁰⁵	8.45x10 ⁻⁰⁴	2.1787	Increased
Nabp1	0.704753	13.73179	7.779176	5.56x10 ⁻⁰⁵	8.51x10 ⁻⁰⁴	2.169414	Increased
Gpr123	2.654727	5.33824	7.776554	5.57x10 ⁻⁰⁵	8.51x10 ⁻⁰⁴	2.166846	Increased
Stk36	1.038268	6.651724	7.774619	5.58x10 ⁻⁰⁵	8.52x10 ⁻⁰⁴	2.16495	Increased
Zfp658	0.676427	8.062246	7.767102	5.62x10 ⁻⁰⁵	8.56x10 ⁻⁰⁴	2.157581	Increased
Pank1	-0.84339	12.9547	-7.76459	5.63x10 ⁻⁰⁵	8.57x10 ⁻⁰⁴	2.155119	Decreased
Kcne11	1.590888	5.251542	7.761476	5.65x10 ⁻⁰⁵	8.58x10 ⁻⁰⁴	2.152063	Increased
Wnk2	-1.38636	13.46513	-7.75604	5.67x10 ⁻⁰⁵	8.60x10 ⁻⁰⁴	2.146722	Decreased
Plcg2	0.666225	11.33628	7.748946	5.71x10 ⁻⁰⁵	8.65x10 ⁻⁰⁴	2.139758	Increased
Lrp1	1.003442	15.34213	7.743381	5.74x10 ⁻⁰⁵	8.66x10 ⁻⁰⁴	2.134289	Increased
AB099516	-0.69494	12.63687	-7.73511	5.78x10 ⁻⁰⁵	8.66x10 ⁻⁰⁴	2.126151	Decreased
Higd1c	-0.69494	12.63687	-7.73511	5.78x10 ⁻⁰⁵	8.66x10 ⁻⁰⁴	2.126151	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Mettl7a1	-0.69494	12.63687	-7.73511	5.78x10 ⁻⁰⁵	8.66x10 ⁻⁰⁴	2.126151	Decreased
Mettl7a2	-0.69494	12.63687	-7.73511	5.78x10 ⁻⁰⁵	8.66x10 ⁻⁰⁴	2.126151	Decreased
Mettl7a3	-0.69494	12.63687	-7.73511	5.78x10 ⁻⁰⁵	8.66x10 ⁻⁰⁴	2.126151	Decreased
Cacnb3	1.443719	9.745129	7.734797	5.79x10 ⁻⁰⁵	8.66x10 ⁻⁰⁴	2.125846	Increased
Vsig10l	-0.99508	14.56524	-7.7289	5.82x10 ⁻⁰⁵	8.68x10 ⁻⁰⁴	2.120039	Decreased
Iga4	0.939813	9.193277	7.726811	5.83x10 ⁻⁰⁵	8.68x10 ⁻⁰⁴	2.117984	Increased
Lrrk1	0.78047	11.96881	7.725433	5.84x10 ⁻⁰⁵	8.68x10 ⁻⁰⁴	2.116626	Increased
Grin3b	-0.70833	9.290026	-7.72372	5.84x10 ⁻⁰⁵	8.68x10 ⁻⁰⁴	2.114937	Decreased
Plxdc2	0.83933	11.35342	7.719897	5.87x10 ⁻⁰⁵	8.68x10 ⁻⁰⁴	2.111172	Increased
Cldnd2	-0.99616	15.56389	-7.71887	5.87x10 ⁻⁰⁵	8.68x10 ⁻⁰⁴	2.110157	Decreased
Etfb	-0.99616	15.56389	-7.71887	5.87x10 ⁻⁰⁵	8.68x10 ⁻⁰⁴	2.110157	Decreased
Acad11	-0.64407	14.34925	-7.71669	5.88x10 ⁻⁰⁵	8.68x10 ⁻⁰⁴	2.108008	Decreased
Padi4	1.863015	7.00307	7.715851	5.89x10 ⁻⁰⁵	8.68x10 ⁻⁰⁴	2.107183	Increased
Sox5	0.78678	8.178634	7.715151	5.89x10 ⁻⁰⁵	8.68x10 ⁻⁰⁴	2.106492	Increased
2410127L17Rik	-0.62634	12.84959	-7.7057	5.94x10 ⁻⁰⁵	8.72x10 ⁻⁰⁴	2.09717	Decreased
C330027C09Rik	0.870395	8.577289	7.704872	5.95x10 ⁻⁰⁵	8.72x10 ⁻⁰⁴	2.09635	Increased
Rasal3	1.668005	6.844187	7.704862	5.95x10 ⁻⁰⁵	8.72x10 ⁻⁰⁴	2.09634	Increased
Bin1	0.671957	10.40606	7.701454	5.97x10 ⁻⁰⁵	8.73x10 ⁻⁰⁴	2.092976	Increased
Ptpn1	0.501978	11.99851	7.695555	6.00x10 ⁻⁰⁵	8.76x10 ⁻⁰⁴	2.087148	Increased
Cyp4v3	0.734912	9.526214	7.692536	6.02x10 ⁻⁰⁵	8.77x10 ⁻⁰⁴	2.084164	Increased
Acadv1	-0.74718	15.74753	-7.68929	6.03x10 ⁻⁰⁵	8.79x10 ⁻⁰⁴	2.080952	Decreased
Myl2	-0.67937	19.55737	-7.68464	6.06x10 ⁻⁰⁵	8.81x10 ⁻⁰⁴	2.076353	Decreased
Pkn3	0.615076	11.16558	7.68012	6.08x10 ⁻⁰⁵	8.83x10 ⁻⁰⁴	2.071882	Increased
Celsr3	-0.98957	10.81392	-7.67517	6.11x10 ⁻⁰⁵	8.83x10 ⁻⁰⁴	2.066978	Decreased
Zfp423	1.004615	9.063338	7.674092	6.12x10 ⁻⁰⁵	8.83x10 ⁻⁰⁴	2.065913	Increased
Rnd1	1.217853	8.504104	7.673886	6.12x10 ⁻⁰⁵	8.83x10 ⁻⁰⁴	2.065709	Increased
Adss	0.56775	10.82793	7.671372	6.13x10 ⁻⁰⁵	8.84x10 ⁻⁰⁴	2.063218	Increased
Cx3cl1	1.278194	11.00523	7.666202	6.16x10 ⁻⁰⁵	8.86x10 ⁻⁰⁴	2.058095	Increased
Abcc3	1.046047	8.623676	7.647955	6.27x10 ⁻⁰⁵	9.00x10 ⁻⁰⁴	2.039987	Increased
Rcan1	1.40123	13.83007	7.643285	6.30x10 ⁻⁰⁵	9.00x10 ⁻⁰⁴	2.035348	Increased
Abcc9	-0.98516	15.69426	-7.64256	6.30x10 ⁻⁰⁵	9.00x10 ⁻⁰⁴	2.034626	Decreased
Oxld1	-0.88175	10.79815	-7.64184	6.30x10 ⁻⁰⁵	9.00x10 ⁻⁰⁴	2.033912	Decreased
Pde6g	-0.88175	10.79815	-7.64184	6.30x10 ⁻⁰⁵	9.00x10 ⁻⁰⁴	2.033912	Decreased
Fam115a	0.576175	11.14853	7.627817	6.39x10 ⁻⁰⁵	9.10x10 ⁻⁰⁴	2.019963	Increased
Sowaha	-1.55059	4.578535	-7.62506	6.40x10 ⁻⁰⁵	9.11x10 ⁻⁰⁴	2.017221	Decreased
Cthrc1	6.080604	8.321065	7.61967	6.43x10 ⁻⁰⁵	9.14x10 ⁻⁰⁴	2.01185	Increased
Eya4	2.163345	6.841688	7.618027	6.44x10 ⁻⁰⁵	9.14x10 ⁻⁰⁴	2.010213	Increased
Napsa	1.871263	6.239371	7.616578	6.45x10 ⁻⁰⁵	9.14x10 ⁻⁰⁴	2.008768	Increased
Ly9	2.235693	6.987524	7.614487	6.47x10 ⁻⁰⁵	9.14x10 ⁻⁰⁴	2.006685	Increased
Txndc5	0.705134	12.51686	7.608268	6.50x10 ⁻⁰⁵	9.18x10 ⁻⁰⁴	2.000483	Increased
Kcna1	-1.31583	8.064458	-7.5942	6.59x10 ⁻⁰⁵	9.29x10 ⁻⁰⁴	1.986444	Decreased
Arfgap3	0.863564	10.6762	7.591764	6.60x10 ⁻⁰⁵	9.30x10 ⁻⁰⁴	1.984005	Increased
Mrm1	-0.67232	13.26127	-7.58805	6.63x10 ⁻⁰⁵	9.30x10 ⁻⁰⁴	1.980292	Decreased
Cpne8	0.739378	10.42439	7.586728	6.64x10 ⁻⁰⁵	9.30x10 ⁻⁰⁴	1.978971	Increased
Eef1a1	0.829344	16.98518	7.586334	6.64x10 ⁻⁰⁵	9.30x10 ⁻⁰⁴	1.978577	Increased
Car9	1.288747	7.064549	7.579733	6.68x10 ⁻⁰⁵	9.33x10 ⁻⁰⁴	1.971974	Increased
Prkd	0.878409	11.44145	7.579009	6.68x10 ⁻⁰⁵	9.33x10 ⁻⁰⁴	1.97125	Increased
Serpinb9b	2.922452	4.715273	7.577527	6.69x10 ⁻⁰⁵	9.33x10 ⁻⁰⁴	1.969766	Increased
Nt5c	0.661893	9.725019	7.568871	6.75x10 ⁻⁰⁵	9.40x10 ⁻⁰⁴	1.961099	Increased
Tmem121	2.275144	3.265994	7.561337	6.79x10 ⁻⁰⁵	9.45x10 ⁻⁰⁴	1.953549	Increased
Epm2a	-0.55071	12.2723	-7.556	6.83x10 ⁻⁰⁵	9.45x10 ⁻⁰⁴	1.948195	Decreased
Pmepa1	1.505208	12.79265	7.555953	6.83x10 ⁻⁰⁵	9.45x10 ⁻⁰⁴	1.948149	Increased
3110002H16Rik	-0.66136	11.63733	-7.55123	6.86x10 ⁻⁰⁵	9.48x10 ⁻⁰⁴	1.943412	Decreased
Hibadh	-0.63554	14.73365	-7.54108	6.92x10 ⁻⁰⁵	9.55x10 ⁻⁰⁴	1.933221	Decreased
Dhodh	-0.62217	10.73732	-7.53987	6.93x10 ⁻⁰⁵	9.55x10 ⁻⁰⁴	1.932001	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Nipsnap3b	0.755822	9.708128	7.531712	6.99x10 ⁻⁰⁵	9.61x10 ⁻⁰⁴	1.923799	Increased
Pros1	0.538946	12.0362	7.528976	7.00x10 ⁻⁰⁵	9.62x10 ⁻⁰⁴	1.921047	Increased
Cngb3	-2.1944	8.257703	-7.52636	7.02x10 ⁻⁰⁵	9.63x10 ⁻⁰⁴	1.918411	Decreased
Gpld1	-0.62511	9.07964	-7.51182	7.12x10 ⁻⁰⁵	9.75x10 ⁻⁰⁴	1.903767	Decreased
Slc7a6	0.595447	11.09363	7.490561	7.26x10 ⁻⁰⁵	9.93x10 ⁻⁰⁴	1.882316	Increased
Rgn	-0.94832	5.377727	-7.48802	7.28x10 ⁻⁰⁵	9.94x10 ⁻⁰⁴	1.879753	Decreased
Slc40a1	-0.8356	11.22123	-7.48346	7.31x10 ⁻⁰⁵	9.97x10 ⁻⁰⁴	1.875136	Decreased
Oas3	1.412272	6.29025	7.480586	7.33x10 ⁻⁰⁵	9.98x10 ⁻⁰⁴	1.872232	Increased
Stap1	1.783292	6.331036	7.477666	7.35x10 ⁻⁰⁵	9.99x10 ⁻⁰⁴	1.869279	Increased
Disp2	4.028642	4.489216	7.471407	7.39x10 ⁻⁰⁵	1.00x10 ⁻⁰³	1.862944	Increased
Gdf3	3.011118	3.473017	7.467314	7.42x10 ⁻⁰⁵	1.01x10 ⁻⁰³	1.8588	Increased
Aarsd1	-0.72756	11.79351	-7.46596	7.43x10 ⁻⁰⁵	1.01x10 ⁻⁰³	1.857424	Decreased
Clmp	1.569674	9.315634	7.456084	7.50x10 ⁻⁰⁵	1.01x10 ⁻⁰³	1.847418	Increased
Pcdhb14	0.518894	8.581148	7.451759	7.53x10 ⁻⁰⁵	1.02x10 ⁻⁰³	1.843031	Increased
Acot1	-0.95992	12.12539	-7.44807	7.56x10 ⁻⁰⁵	1.02x10 ⁻⁰³	1.839286	Decreased
Tlr8	1.055164	9.043257	7.437456	7.63x10 ⁻⁰⁵	1.03x10 ⁻⁰³	1.828509	Increased
Sord	-0.85259	14.43054	-7.42863	7.70x10 ⁻⁰⁵	1.03x10 ⁻⁰³	1.819533	Decreased
Kcnv2	-2.74427	10.21892	-7.42732	7.71x10 ⁻⁰⁵	1.03x10 ⁻⁰³	1.818202	Decreased
Sec31b	-0.88577	11.90819	-7.42634	7.72x10 ⁻⁰⁵	1.03x10 ⁻⁰³	1.817208	Decreased
Ppp1r16a	-0.5571	12.38176	-7.42577	7.72x10 ⁻⁰⁵	1.03x10 ⁻⁰³	1.816631	Decreased
Gpt	-0.5571	12.7968	-7.42577	7.72x10 ⁻⁰⁵	1.03x10 ⁻⁰³	1.816631	Decreased
Mfsd3	-0.5571	12.7968	-7.42577	7.72x10 ⁻⁰⁵	1.03x10 ⁻⁰³	1.816631	Decreased
Dzip1	0.953165	8.817048	7.425046	7.72x10 ⁻⁰⁵	1.03x10 ⁻⁰³	1.81589	Increased
Arhgdig	1.259857	6.044483	7.418933	7.77x10 ⁻⁰⁵	1.03x10 ⁻⁰³	1.809668	Increased
Stom	-0.57216	14.14747	-7.41536	7.80x10 ⁻⁰⁵	1.03x10 ⁻⁰³	1.806032	Decreased
Pyroxd2	1.147882	8.205691	7.410638	7.83x10 ⁻⁰⁵	1.04x10 ⁻⁰³	1.801219	Increased
Abcd3	-0.55023	14.09031	-7.40794	7.85x10 ⁻⁰⁵	1.04x10 ⁻⁰³	1.79847	Decreased
Cbx7	-0.64508	11.52653	-7.40313	7.89x10 ⁻⁰⁵	1.04x10 ⁻⁰³	1.793561	Decreased
Atp8b2	0.884383	12.19609	7.401932	7.90x10 ⁻⁰⁵	1.04x10 ⁻⁰³	1.792342	Increased
Slc18a1	1.173157	6.690028	7.398057	7.93x10 ⁻⁰⁵	1.04x10 ⁻⁰³	1.788388	Increased
Pcdhb17	0.610869	9.492903	7.388979	7.99x10 ⁻⁰⁵	1.05x10 ⁻⁰³	1.77912	Increased
Cenpi	2.139241	6.212892	7.387913	8.00x10 ⁻⁰⁵	1.05x10 ⁻⁰³	1.778031	Increased
Zdhhc20	0.711435	11.4413	7.381979	8.05x10 ⁻⁰⁵	1.05x10 ⁻⁰³	1.771966	Increased
Wdr19	0.928793	8.961001	7.378363	8.08x10 ⁻⁰⁵	1.06x10 ⁻⁰³	1.768269	Increased
Xirp2	1.128494	16.99284	7.373122	8.12x10 ⁻⁰⁵	1.06x10 ⁻⁰³	1.762907	Increased
Pcdhb3	0.95523	5.829135	7.373037	8.12x10 ⁻⁰⁵	1.06x10 ⁻⁰³	1.76282	Increased
Them6	-0.73237	10.17102	-7.37272	8.12x10 ⁻⁰⁵	1.06x10 ⁻⁰³	1.762501	Decreased
Tnfaip8l2	1.177096	8.100587	7.362201	8.20x10 ⁻⁰⁵	1.07x10 ⁻⁰³	1.751726	Increased
Mx1	1.521684	7.037066	7.359226	8.22x10 ⁻⁰⁵	1.07x10 ⁻⁰³	1.748677	Increased
Adam22	-0.5947	11.00649	-7.35686	8.24x10 ⁻⁰⁵	1.07x10 ⁻⁰³	1.746255	Decreased
Hhip1l	1.429404	10.46846	7.356575	8.24x10 ⁻⁰⁵	1.07x10 ⁻⁰³	1.74596	Increased
Il4ra	0.882709	11.6503	7.341539	8.36x10 ⁻⁰⁵	1.08x10 ⁻⁰³	1.730533	Increased
Stab2	-0.58753	7.096095	-7.34054	8.37x10 ⁻⁰⁵	1.08x10 ⁻⁰³	1.729504	Decreased
Mgme1	-0.59448	10.79021	-7.3394	8.38x10 ⁻⁰⁵	1.08x10 ⁻⁰³	1.728333	Decreased
Acs16	-0.99683	10.89149	-7.3359	8.41x10 ⁻⁰⁵	1.08x10 ⁻⁰³	1.724738	Decreased
Gpr35	1.872141	6.996737	7.329723	8.46x10 ⁻⁰⁵	1.09x10 ⁻⁰³	1.718393	Increased
Gcom1	-0.55928	14.9751	-7.32932	8.46x10 ⁻⁰⁵	1.09x10 ⁻⁰³	1.717983	Decreased
Myzap	-0.55928	14.9751	-7.32932	8.46x10 ⁻⁰⁵	1.09x10 ⁻⁰³	1.717983	Decreased
Gpn3	-0.52144	10.5488	-7.32229	8.52x10 ⁻⁰⁵	1.09x10 ⁻⁰³	1.710748	Decreased
Birc5	1.864281	7.282386	7.320008	8.54x10 ⁻⁰⁵	1.09x10 ⁻⁰³	1.708399	Increased
Cdh1	3.266277	2.600596	7.317479	8.56x10 ⁻⁰⁵	1.10x10 ⁻⁰³	1.705796	Increased
Slc46a3	-0.98164	10.71587	-7.31152	8.61x10 ⁻⁰⁵	1.10x10 ⁻⁰³	1.699661	Decreased
Tmem158	1.460109	7.277264	7.30904	8.63x10 ⁻⁰⁵	1.10x10 ⁻⁰³	1.697105	Increased
Angpt4	1.567036	5.333425	7.304902	8.66x10 ⁻⁰⁵	1.10x10 ⁻⁰³	1.69284	Increased
Rhbd12	1.082238	5.927318	7.304444	8.67x10 ⁻⁰⁵	1.10x10 ⁻⁰³	1.692367	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Ipcef1	1.499653	5.261704	7.303504	8.67x10 ⁻⁰⁵	1.10x10 ⁻⁰³	1.691398	Increased
Dcun1d2	-0.64029	13.06144	-7.2895	8.79x10 ⁻⁰⁵	1.11x10 ⁻⁰³	1.676953	Decreased
Mcm6	0.758407	10.6206	7.284118	8.84x10 ⁻⁰⁵	1.12x10 ⁻⁰³	1.671388	Increased
Dusp14	1.379848	5.854191	7.282214	8.85x10 ⁻⁰⁵	1.12x10 ⁻⁰³	1.669421	Increased
Aigl	-0.55083	11.83883	-7.28061	8.87x10 ⁻⁰⁵	1.12x10 ⁻⁰³	1.667763	Decreased
Bok	1.290681	9.300206	7.275134	8.91x10 ⁻⁰⁵	1.12x10 ⁻⁰³	1.662101	Increased
Cs	-0.59779	17.41597	-7.27232	8.94x10 ⁻⁰⁵	1.12x10 ⁻⁰³	1.659187	Decreased
Hdlbp	-0.66493	16.58644	-7.26331	9.02x10 ⁻⁰⁵	1.13x10 ⁻⁰³	1.649866	Decreased
Ccdc116	0.917154	4.388972	7.260944	9.04x10 ⁻⁰⁵	1.13x10 ⁻⁰³	1.647413	Increased
Map3k8	0.523052	9.102556	7.2582	9.06x10 ⁻⁰⁵	1.13x10 ⁻⁰³	1.644571	Increased
Kcnj5	-0.84359	12.23912	-7.25689	9.07x10 ⁻⁰⁵	1.13x10 ⁻⁰³	1.643218	Decreased
Rhod	0.855601	9.346925	7.256309	9.08x10 ⁻⁰⁵	1.13x10 ⁻⁰³	1.642611	Increased
Cmb1	-0.72037	11.37884	-7.25431	9.10x10 ⁻⁰⁵	1.13x10 ⁻⁰³	1.640538	Decreased
Asic1	-0.51057	12.38818	-7.24292	9.20x10 ⁻⁰⁵	1.14x10 ⁻⁰³	1.628728	Decreased
Smardc1	-0.51057	12.38818	-7.24292	9.20x10 ⁻⁰⁵	1.14x10 ⁻⁰³	1.628728	Decreased
Col5a3	1.724518	11.96539	7.241668	9.21x10 ⁻⁰⁵	1.14x10 ⁻⁰³	1.627425	Increased
Oma1	-0.55675	11.97822	-7.24119	9.21x10 ⁻⁰⁵	1.14x10 ⁻⁰³	1.626926	Decreased
Cd48	1.15301	8.366396	7.239193	9.23x10 ⁻⁰⁵	1.14x10 ⁻⁰³	1.624855	Increased
Snx20	1.111809	7.350211	7.23161	9.30x10 ⁻⁰⁵	1.15x10 ⁻⁰³	1.616978	Increased
Gpr133	0.988769	10.47354	7.225753	9.35x10 ⁻⁰⁵	1.15x10 ⁻⁰³	1.61089	Increased
Pappa2	2.421105	4.088974	7.213088	9.47x10 ⁻⁰⁵	1.17x10 ⁻⁰³	1.59771	Increased
Npdc1	0.858129	12.56022	7.212529	9.47x10 ⁻⁰⁵	1.17x10 ⁻⁰³	1.597129	Increased
Gm12942	0.674777	7.600448	7.209833	9.50x10 ⁻⁰⁵	1.17x10 ⁻⁰³	1.59432	Increased
Retsat	-0.88282	12.6709	-7.20277	9.56x10 ⁻⁰⁵	1.17x10 ⁻⁰³	1.586963	Decreased
C130050O18Rik	0.811251	6.852336	7.202765	9.56x10 ⁻⁰⁵	1.17x10 ⁻⁰³	1.586955	Increased
Rgs19	0.868313	9.386718	7.200616	9.58x10 ⁻⁰⁵	1.17x10 ⁻⁰³	1.584715	Increased
Cpt1b	-0.52207	16.49146	-7.1989	9.60x10 ⁻⁰⁵	1.17x10 ⁻⁰³	1.582924	Decreased
Pmp22	0.944416	13.08529	7.19585	9.63x10 ⁻⁰⁵	1.17x10 ⁻⁰³	1.579744	Increased
Ckap4	1.114967	12.48467	7.187211	9.71x10 ⁻⁰⁵	1.17x10 ⁻⁰³	1.570726	Increased
Sp140	0.790408	9.280066	7.183984	9.74x10 ⁻⁰⁵	1.18x10 ⁻⁰³	1.567355	Increased
Itgax	2.633856	7.912578	7.180662	9.77x10 ⁻⁰⁵	1.19x10 ⁻⁰³	1.563885	Increased
Cnga3	-1.33123	8.844318	-7.17565	9.82x10 ⁻⁰⁵	1.19x10 ⁻⁰³	1.558645	Decreased
Efna4	2.216624	4.489727	7.174401	9.83x10 ⁻⁰⁵	1.19x10 ⁻⁰³	1.557339	Increased
Cyp2s1	2.177533	5.737033	7.173364	9.84x10 ⁻⁰⁵	1.19x10 ⁻⁰³	1.556255	Increased
Coq7	-0.66108	12.84147	-7.17218	9.85x10 ⁻⁰⁵	1.19x10 ⁻⁰³	1.555019	Decreased
Tyrobp	1.307245	10.43209	7.162334	9.94x10 ⁻⁰⁵	1.20x10 ⁻⁰³	1.544713	Increased
Cryba4	-1.21001	8.62623	-7.16143	9.95x10 ⁻⁰⁵	1.20x10 ⁻⁰³	1.543768	Decreased
Kcnj14	0.939788	8.038927	7.157796	9.99x10 ⁻⁰⁵	1.20x10 ⁻⁰³	1.539959	Increased
Inhba	2.026244	8.520955	7.153175	1.00x10 ⁻⁰⁴	1.20x10 ⁻⁰³	1.535116	Increased
Abcb8	-0.59618	13.44907	-7.15134	1.01x10 ⁻⁰⁴	1.20x10 ⁻⁰³	1.533195	Decreased
Asic3	-0.59618	13.44907	-7.15134	1.01x10 ⁻⁰⁴	1.20x10 ⁻⁰³	1.533195	Decreased
Wfdc17	1.016237	8.645275	7.151225	1.01x10 ⁻⁰⁴	1.20x10 ⁻⁰³	1.533072	Increased
A630095N17Rik	-0.96341	16.05355	-7.14962	1.01x10 ⁻⁰⁴	1.20x10 ⁻⁰³	1.531393	Decreased
Tuba4a	-0.96341	16.05355	-7.14962	1.01x10 ⁻⁰⁴	1.20x10 ⁻⁰³	1.531393	Decreased
Ephx2	-0.66978	14.8149	-7.14145	1.01x10 ⁻⁰⁴	1.21x10 ⁻⁰³	1.522816	Decreased
Galnt10	0.677578	11.47471	7.138519	1.02x10 ⁻⁰⁴	1.21x10 ⁻⁰³	1.519742	Increased
Garnl3	0.614334	7.653181	7.138481	1.02x10 ⁻⁰⁴	1.21x10 ⁻⁰³	1.519702	Increased
Atp5a1	-0.64118	19.04117	-7.12234	1.03x10 ⁻⁰⁴	1.23x10 ⁻⁰³	1.502738	Decreased
Cdkn2a	1.898378	4.665235	7.116727	1.04x10 ⁻⁰⁴	1.23x10 ⁻⁰³	1.496835	Increased
Cd302	0.901644	10.394	7.116457	1.04x10 ⁻⁰⁴	1.23x10 ⁻⁰³	1.496552	Increased
Fam129c	-0.6194	14.32667	-7.11561	1.04x10 ⁻⁰⁴	1.23x10 ⁻⁰³	1.495655	Decreased
Pgls	-0.6194	14.32667	-7.11561	1.04x10 ⁻⁰⁴	1.23x10 ⁻⁰³	1.495655	Decreased
Slc27a1	-0.6194	14.32667	-7.11561	1.04x10 ⁻⁰⁴	1.23x10 ⁻⁰³	1.495655	Decreased
Ptpn7	1.086828	7.48818	7.106229	1.05x10 ⁻⁰⁴	1.23x10 ⁻⁰³	1.485781	Increased
Rasl11a	0.758555	6.474622	7.103656	1.05x10 ⁻⁰⁴	1.23x10 ⁻⁰³	1.48307	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Det1	-0.65782	10.85267	-7.10306	1.05x10 ⁻⁰⁴	1.23x10 ⁻⁰³	1.482446	Decreased
Blk	0.837333	9.509575	7.102985	1.05x10 ⁻⁰⁴	1.23x10 ⁻⁰³	1.482362	Increased
Rab12	-0.56845	13.25332	-7.09966	1.06x10 ⁻⁰⁴	1.24x10 ⁻⁰³	1.478862	Decreased
P2rx7	0.984013	10.09612	7.092187	1.07x10 ⁻⁰⁴	1.24x10 ⁻⁰³	1.470976	Increased
Lsm1	0.908911	11.0019	7.088049	1.07x10 ⁻⁰⁴	1.25x10 ⁻⁰³	1.466608	Increased
Wbp5	0.749634	11.08837	7.083984	1.07x10 ⁻⁰⁴	1.25x10 ⁻⁰³	1.462315	Increased
Rltpr	0.883338	5.474419	7.080071	1.08x10 ⁻⁰⁴	1.25x10 ⁻⁰³	1.458182	Increased
Scn11a	1.350659	2.827028	7.079508	1.08x10 ⁻⁰⁴	1.25x10 ⁻⁰³	1.457586	Increased
Krt80	0.956722	9.057882	7.070977	1.09x10 ⁻⁰⁴	1.26x10 ⁻⁰³	1.448567	Increased
Star	0.906834	10.00455	7.066771	1.09x10 ⁻⁰⁴	1.26x10 ⁻⁰³	1.444118	Increased
Laptm5	1.128362	12.01175	7.066004	1.09x10 ⁻⁰⁴	1.26x10 ⁻⁰³	1.443306	Increased
Tns3	0.871814	12.30941	7.065557	1.09x10 ⁻⁰⁴	1.26x10 ⁻⁰³	1.442833	Increased
Agtpbp1	-0.82135	13.73265	-7.06468	1.09x10 ⁻⁰⁴	1.26x10 ⁻⁰³	1.4419	Decreased
Spryd7	-0.55439	10.88079	-7.06129	1.10x10 ⁻⁰⁴	1.27x10 ⁻⁰³	1.438321	Decreased
BC021785	-0.632	10.52774	-7.05745	1.11x10 ⁻⁰⁴	1.27x10 ⁻⁰³	1.434248	Decreased
Zfhx4	1.291991	6.659134	7.052655	1.11x10 ⁻⁰⁴	1.27x10 ⁻⁰³	1.429169	Increased
Clec4a2	1.250482	8.101791	7.052279	1.11x10 ⁻⁰⁴	1.27x10 ⁻⁰³	1.42877	Increased
Tmem198b	0.717645	10.6448	7.049726	1.11x10 ⁻⁰⁴	1.27x10 ⁻⁰³	1.426064	Increased
Far1	0.553508	11.83086	7.047796	1.11x10 ⁻⁰⁴	1.27x10 ⁻⁰³	1.424018	Increased
Sdk2	0.617911	7.78017	7.037362	1.12x10 ⁻⁰⁴	1.29x10 ⁻⁰³	1.412947	Increased
Fkbp4	-0.99216	15.36271	-7.03601	1.13x10 ⁻⁰⁴	1.29x10 ⁻⁰³	1.411508	Decreased
Gpt2	-1.35122	12.31552	-7.02751	1.14x10 ⁻⁰⁴	1.29x10 ⁻⁰³	1.402479	Decreased
Slc2a10	1.151219	8.603107	7.026578	1.14x10 ⁻⁰⁴	1.29x10 ⁻⁰³	1.401492	Increased
Gba	0.574556	10.84796	7.02515	1.14x10 ⁻⁰⁴	1.29x10 ⁻⁰³	1.399973	Increased
Lyz2	1.255902	13.17934	7.022282	1.14x10 ⁻⁰⁴	1.30x10 ⁻⁰³	1.396924	Increased
Stat4	1.550176	5.158138	7.000426	1.17x10 ⁻⁰⁴	1.32x10 ⁻⁰³	1.373654	Increased
D130040H23Rik	0.828114	9.205947	7.000391	1.17x10 ⁻⁰⁴	1.32x10 ⁻⁰³	1.373617	Increased
11-Sep	0.738363	12.4546	7.000358	1.17x10 ⁻⁰⁴	1.32x10 ⁻⁰³	1.373582	Increased
Nanos1	1.028681	5.672029	6.993162	1.17x10 ⁻⁰⁴	1.33x10 ⁻⁰³	1.365909	Increased
Lpcat2	1.676106	7.945679	6.991956	1.18x10 ⁻⁰⁴	1.33x10 ⁻⁰³	1.364621	Increased
Arrb2	0.883772	10.74687	6.990759	1.18x10 ⁻⁰⁴	1.33x10 ⁻⁰³	1.363345	Increased
Thbs1	3.478055	12.48488	6.984849	1.18x10 ⁻⁰⁴	1.33x10 ⁻⁰³	1.357036	Increased
Slc7a1	-0.54664	12.98216	-6.98366	1.19x10 ⁻⁰⁴	1.33x10 ⁻⁰³	1.355766	Decreased
Col28a1	1.202771	8.32058	6.982614	1.19x10 ⁻⁰⁴	1.33x10 ⁻⁰³	1.354649	Increased
D3Erttd751e	-0.58773	11.41598	-6.97644	1.19x10 ⁻⁰⁴	1.34x10 ⁻⁰³	1.348047	Decreased
Begain	1.840219	6.061528	6.971095	1.20x10 ⁻⁰⁴	1.34x10 ⁻⁰³	1.342338	Increased
Dgat2	-1.10207	15.72983	-6.97109	1.20x10 ⁻⁰⁴	1.34x10 ⁻⁰³	1.342329	Decreased
Txlnb	-0.69477	15.62457	-6.97007	1.20x10 ⁻⁰⁴	1.34x10 ⁻⁰³	1.341242	Decreased
Pcdhb9	1.49364	6.055647	6.968624	1.20x10 ⁻⁰⁴	1.34x10 ⁻⁰³	1.339695	Increased
Lamb3	-0.8742	10.96463	-6.96596	1.21x10 ⁻⁰⁴	1.34x10 ⁻⁰³	1.336844	Decreased
Kcne4	1.11292	9.425686	6.964185	1.21x10 ⁻⁰⁴	1.34x10 ⁻⁰³	1.334945	Increased
Tmem201	-0.60752	13.9043	-6.96374	1.21x10 ⁻⁰⁴	1.34x10 ⁻⁰³	1.334467	Decreased
Fchsd1	0.834584	8.410015	6.955291	1.22x10 ⁻⁰⁴	1.35x10 ⁻⁰³	1.325422	Increased
Golim4	0.553902	12.66208	6.954684	1.22x10 ⁻⁰⁴	1.35x10 ⁻⁰³	1.324771	Increased
Tlr4	0.928306	12.4473	6.954332	1.22x10 ⁻⁰⁴	1.35x10 ⁻⁰³	1.324395	Increased
Nceh1	-0.50031	15.04653	-6.9543	1.22x10 ⁻⁰⁴	1.35x10 ⁻⁰³	1.324364	Decreased
Dcbld2	0.507015	12.13437	6.952344	1.22x10 ⁻⁰⁴	1.35x10 ⁻⁰³	1.322264	Increased
Tfpi2	1.12439	7.498967	6.948149	1.23x10 ⁻⁰⁴	1.35x10 ⁻⁰³	1.317767	Increased
Spata6	0.609333	10.57968	6.947009	1.23x10 ⁻⁰⁴	1.35x10 ⁻⁰³	1.316546	Increased
Clic5	0.502081	15.95962	6.939046	1.24x10 ⁻⁰⁴	1.36x10 ⁻⁰³	1.308003	Increased
Lgi2	1.119997	9.310865	6.928948	1.25x10 ⁻⁰⁴	1.37x10 ⁻⁰³	1.297159	Increased
Ccdc28a	-0.51317	10.05304	-6.92425	1.26x10 ⁻⁰⁴	1.38x10 ⁻⁰³	1.292116	Decreased
Brsk1	1.116735	7.23402	6.923667	1.26x10 ⁻⁰⁴	1.38x10 ⁻⁰³	1.291484	Increased
Tspan6	1.063433	10.02217	6.917887	1.27x10 ⁻⁰⁴	1.38x10 ⁻⁰³	1.285268	Increased
Gm826	-0.61002	9.615408	-6.91593	1.27x10 ⁻⁰⁴	1.38x10 ⁻⁰³	1.283166	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Gm5069	-0.70698	8.639474	-6.91343	1.27x10 ⁻⁰⁴	1.39x10 ⁻⁰³	1.280471	Decreased
Naip2	0.72965	8.526101	6.908943	1.28x10 ⁻⁰⁴	1.39x10 ⁻⁰³	1.275642	Increased
4930503B20Rik	-0.90164	7.420694	-6.90752	1.28x10 ⁻⁰⁴	1.39x10 ⁻⁰³	1.274113	Decreased
Oaf	1.247407	11.44213	6.907227	1.28x10 ⁻⁰⁴	1.39x10 ⁻⁰³	1.273794	Increased
Cdr2l	0.96644	10.26187	6.906332	1.28x10 ⁻⁰⁴	1.39x10 ⁻⁰³	1.27283	Increased
Rab33a	1.675939	3.92839	6.90058	1.29x10 ⁻⁰⁴	1.39x10 ⁻⁰³	1.266632	Increased
Ctsz	1.102592	12.09445	6.897963	1.29x10 ⁻⁰⁴	1.40x10 ⁻⁰³	1.263811	Increased
Rhoj	0.656006	12.03082	6.890871	1.30x10 ⁻⁰⁴	1.40x10 ⁻⁰³	1.256162	Increased
Bid	1.185318	7.637351	6.88551	1.31x10 ⁻⁰⁴	1.41x10 ⁻⁰³	1.250376	Increased
Zmynd15	0.981081	9.365971	6.884112	1.31x10 ⁻⁰⁴	1.41x10 ⁻⁰³	1.248867	Increased
Lat2	1.022386	8.577983	6.883229	1.31x10 ⁻⁰⁴	1.41x10 ⁻⁰³	1.247913	Increased
Dab2	0.608454	12.5534	6.877625	1.32x10 ⁻⁰⁴	1.42x10 ⁻⁰³	1.24186	Increased
Nmrk2	1.679048	11.44155	6.876911	1.32x10 ⁻⁰⁴	1.42x10 ⁻⁰³	1.241088	Increased
Nmt2	0.635287	10.03378	6.87319	1.32x10 ⁻⁰⁴	1.42x10 ⁻⁰³	1.237067	Increased
Ctage5	-0.55041	13.03648	-6.86885	1.33x10 ⁻⁰⁴	1.42x10 ⁻⁰³	1.232371	Decreased
Slain1	2.066566	2.3545	6.866801	1.33x10 ⁻⁰⁴	1.42x10 ⁻⁰³	1.230157	Increased
B430306N03Rik	2.123675	6.193862	6.866285	1.33x10 ⁻⁰⁴	1.42x10 ⁻⁰³	1.229599	Increased
Sucla2	-0.65569	16.02784	-6.86616	1.33x10 ⁻⁰⁴	1.42x10 ⁻⁰³	1.229465	Decreased
Cysltrl	1.508421	8.664234	6.856901	1.35x10 ⁻⁰⁴	1.43x10 ⁻⁰³	1.219441	Increased
Cadm4	-0.64381	11.71119	-6.85577	1.35x10 ⁻⁰⁴	1.43x10 ⁻⁰³	1.218221	Decreased
Rhbd1l	-0.69768	14.83374	-6.85452	1.35x10 ⁻⁰⁴	1.43x10 ⁻⁰³	1.216865	Decreased
Rhot2	-0.69768	14.83374	-6.85452	1.35x10 ⁻⁰⁴	1.43x10 ⁻⁰³	1.216865	Decreased
Stub1	-0.69768	14.83374	-6.85452	1.35x10 ⁻⁰⁴	1.43x10 ⁻⁰³	1.216865	Decreased
Col4a4	0.956671	10.51789	6.853699	1.35x10 ⁻⁰⁴	1.43x10 ⁻⁰³	1.215973	Increased
Cxcr6	2.632811	6.132434	6.852934	1.35x10 ⁻⁰⁴	1.43x10 ⁻⁰³	1.215144	Increased
Fsd2	-0.67281	15.1437	-6.85095	1.35x10 ⁻⁰⁴	1.43x10 ⁻⁰³	1.212988	Decreased
Lmod3	-0.63587	12.82061	-6.84948	1.36x10 ⁻⁰⁴	1.43x10 ⁻⁰³	1.211401	Decreased
Soat2	1.411252	5.15885	6.846281	1.36x10 ⁻⁰⁴	1.43x10 ⁻⁰³	1.207932	Increased
Arrb1	0.664889	12.51838	6.836963	1.37x10 ⁻⁰⁴	1.44x10 ⁻⁰³	1.197823	Increased
Gpr84	3.493521	2.567977	6.827603	1.39x10 ⁻⁰⁴	1.45x10 ⁻⁰³	1.187658	Increased
Ube2c	2.053299	7.591566	6.821341	1.40x10 ⁻⁰⁴	1.46x10 ⁻⁰³	1.180851	Increased
Gsta1	-1.37507	7.059323	-6.82101	1.40x10 ⁻⁰⁴	1.46x10 ⁻⁰³	1.180495	Decreased
Lepre1	0.604291	11.32153	6.811282	1.41x10 ⁻⁰⁴	1.47x10 ⁻⁰³	1.169909	Increased
Arsb	0.668196	11.07866	6.810941	1.41x10 ⁻⁰⁴	1.47x10 ⁻⁰³	1.169537	Increased
Tcp1l1l2	-0.54813	14.11914	-6.80425	1.42x10 ⁻⁰⁴	1.48x10 ⁻⁰³	1.162248	Decreased
Rmnd1	-0.58297	13.13188	-6.79269	1.44x10 ⁻⁰⁴	1.49x10 ⁻⁰³	1.149649	Decreased
Xkr4	2.083552	4.018277	6.792681	1.44x10 ⁻⁰⁴	1.49x10 ⁻⁰³	1.149639	Increased
Dlg5	0.614804	11.18217	6.791576	1.44x10 ⁻⁰⁴	1.49x10 ⁻⁰³	1.148433	Increased
Lsm14b	-0.53365	12.79533	-6.7878	1.44x10 ⁻⁰⁴	1.50x10 ⁻⁰³	1.144315	Decreased
Irx1	-0.89692	9.727166	-6.787	1.44x10 ⁻⁰⁴	1.50x10 ⁻⁰³	1.143442	Decreased
Avpr1a	-1.21125	7.212937	-6.78528	1.45x10 ⁻⁰⁴	1.50x10 ⁻⁰³	1.141564	Decreased
Asb16	-0.7833	7.41481	-6.78445	1.45x10 ⁻⁰⁴	1.50x10 ⁻⁰³	1.140657	Decreased
Ccdc68	1.289774	8.57391	6.783516	1.45x10 ⁻⁰⁴	1.50x10 ⁻⁰³	1.139637	Increased
Lsp1	0.741173	12.60384	6.783189	1.45x10 ⁻⁰⁴	1.50x10 ⁻⁰³	1.13928	Increased
BC100451	0.812892	5.051838	6.780326	1.45x10 ⁻⁰⁴	1.50x10 ⁻⁰³	1.136154	Increased
Lrch2	0.774922	8.447351	6.771837	1.47x10 ⁻⁰⁴	1.51x10 ⁻⁰³	1.126876	Increased
Slc25a3	-0.58933	17.3429	-6.76094	1.48x10 ⁻⁰⁴	1.52x10 ⁻⁰³	1.114957	Decreased
Peo1	-0.62114	12.13543	-6.75181	1.50x10 ⁻⁰⁴	1.54x10 ⁻⁰³	1.104957	Decreased
Rnps1	-0.74182	14.82306	-6.74754	1.50x10 ⁻⁰⁴	1.54x10 ⁻⁰³	1.100271	Decreased
Bckdk	-0.50425	13.64012	-6.74231	1.51x10 ⁻⁰⁴	1.54x10 ⁻⁰³	1.094539	Decreased
Kat8	-0.50425	13.64012	-6.74231	1.51x10 ⁻⁰⁴	1.54x10 ⁻⁰³	1.094539	Decreased
Pcdhb12	0.58115	6.810213	6.737769	1.52x10 ⁻⁰⁴	1.55x10 ⁻⁰³	1.089558	Increased
Galnt12	1.471642	5.868897	6.735992	1.52x10 ⁻⁰⁴	1.55x10 ⁻⁰³	1.087608	Increased
Coq9	-0.77535	15.74558	-6.7329	1.53x10 ⁻⁰⁴	1.55x10 ⁻⁰³	1.084216	Decreased
Ap3s1	0.866419	10.97184	6.715632	1.55x10 ⁻⁰⁴	1.58x10 ⁻⁰³	1.065233	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Krt8	2.418018	5.208787	6.711675	1.56x10 ⁻⁰⁴	1.59x10 ⁻⁰³	1.060879	Increased
Src	0.90653	9.761268	6.709831	1.56x10 ⁻⁰⁴	1.59x10 ⁻⁰³	1.058849	Increased
Tert	3.692647	3.813781	6.708326	1.57x10 ⁻⁰⁴	1.59x10 ⁻⁰³	1.057192	Increased
Osbp2	-1.00914	11.75188	-6.70734	1.57x10 ⁻⁰⁴	1.59x10 ⁻⁰³	1.056111	Decreased
Zfp575	1.219145	4.616998	6.704113	1.57x10 ⁻⁰⁴	1.59x10 ⁻⁰³	1.052552	Increased
Skap2	0.664596	10.70292	6.698177	1.58x10 ⁻⁰⁴	1.59x10 ⁻⁰³	1.046011	Increased
Gm5077	1.532012	2.960186	6.696699	1.58x10 ⁻⁰⁴	1.60x10 ⁻⁰³	1.044381	Increased
Mtg2	-0.65101	11.41802	-6.6958	1.59x10 ⁻⁰⁴	1.60x10 ⁻⁰³	1.043389	Decreased
Me3	-0.5826	13.23289	-6.69284	1.59x10 ⁻⁰⁴	1.60x10 ⁻⁰³	1.040121	Decreased
Aox1	-0.86721	12.09671	-6.671	1.63x10 ⁻⁰⁴	1.63x10 ⁻⁰³	1.016009	Decreased
B3gnt9	0.875652	10.14948	6.670067	1.63x10 ⁻⁰⁴	1.63x10 ⁻⁰³	1.014975	Increased
Tradd	0.875652	10.14948	6.670067	1.63x10 ⁻⁰⁴	1.63x10 ⁻⁰³	1.014975	Increased
Tef	-0.62533	14.98672	-6.66459	1.64x10 ⁻⁰⁴	1.63x10 ⁻⁰³	1.008916	Decreased
Whrn	-1.41517	11.71652	-6.66431	1.64x10 ⁻⁰⁴	1.63x10 ⁻⁰³	1.008606	Decreased
Scd3	-1.48225	4.552381	-6.6635	1.64x10 ⁻⁰⁴	1.63x10 ⁻⁰³	1.007708	Decreased
Smc4	0.668194	11.67322	6.663039	1.64x10 ⁻⁰⁴	1.63x10 ⁻⁰³	1.0072	Increased
Fastk	-0.67527	14.66169	-6.65656	1.65x10 ⁻⁰⁴	1.64x10 ⁻⁰³	1.000027	Decreased
Zfp37	0.845835	8.422142	6.650796	1.66x10 ⁻⁰⁴	1.65x10 ⁻⁰³	0.993643	Increased
Shisa4	1.12581	10.07557	6.649499	1.66x10 ⁻⁰⁴	1.65x10 ⁻⁰³	0.992206	Increased
Gli2	1.315919	8.794863	6.64932	1.66x10 ⁻⁰⁴	1.65x10 ⁻⁰³	0.992007	Increased
2410137M14Rik	-1.48791	6.51928	-6.64852	1.66x10 ⁻⁰⁴	1.65x10 ⁻⁰³	0.991116	Decreased
Atp8a2	0.541601	10.3429	6.647067	1.67x10 ⁻⁰⁴	1.65x10 ⁻⁰³	0.98951	Increased
Rab39b	1.440941	4.254625	6.64304	1.67x10 ⁻⁰⁴	1.65x10 ⁻⁰³	0.985044	Increased
Sobp	-0.60534	11.30895	-6.64237	1.67x10 ⁻⁰⁴	1.65x10 ⁻⁰³	0.984302	Decreased
Syt12	0.762845	9.449311	6.638921	1.68x10 ⁻⁰⁴	1.65x10 ⁻⁰³	0.980474	Increased
Pdlim2	1.50335	10.36555	6.638541	1.68x10 ⁻⁰⁴	1.65x10 ⁻⁰³	0.980053	Increased
Ddt	-0.78167	11.62907	-6.63232	1.69x10 ⁻⁰⁴	1.66x10 ⁻⁰³	0.973145	Decreased
Gstp2	-0.81439	8.857073	-6.62852	1.70x10 ⁻⁰⁴	1.66x10 ⁻⁰³	0.968928	Decreased
Ikbip	0.583375	11.28116	6.628132	1.70x10 ⁻⁰⁴	1.66x10 ⁻⁰³	0.968495	Increased
Pde1b	1.213335	8.617133	6.626659	1.70x10 ⁻⁰⁴	1.67x10 ⁻⁰³	0.966858	Increased
B230118H07Rik	-0.59294	12.20874	-6.62516	1.70x10 ⁻⁰⁴	1.67x10 ⁻⁰³	0.965192	Decreased
Cd80	0.825111	8.260251	6.623395	1.71x10 ⁻⁰⁴	1.67x10 ⁻⁰³	0.963231	Increased
Lrrc30	-1.09348	7.173738	-6.62173	1.71x10 ⁻⁰⁴	1.67x10 ⁻⁰³	0.961383	Decreased
Prdx3	-0.59141	14.86527	-6.61804	1.72x10 ⁻⁰⁴	1.67x10 ⁻⁰³	0.957274	Decreased
Il18rap	2.200775	5.827291	6.612546	1.73x10 ⁻⁰⁴	1.68x10 ⁻⁰³	0.951164	Increased
Scn1b	0.850208	11.48715	6.611481	1.73x10 ⁻⁰⁴	1.68x10 ⁻⁰³	0.949979	Increased
Itgb2	1.367918	10.39177	6.611128	1.73x10 ⁻⁰⁴	1.68x10 ⁻⁰³	0.949586	Increased
Rps6ka5	-0.85238	10.37272	-6.60986	1.73x10 ⁻⁰⁴	1.68x10 ⁻⁰³	0.94817	Decreased
Myh10	0.676326	13.13364	6.600199	1.75x10 ⁻⁰⁴	1.70x10 ⁻⁰³	0.937413	Increased
Fap	0.845157	9.454441	6.596755	1.76x10 ⁻⁰⁴	1.70x10 ⁻⁰³	0.933574	Increased
1810055G02Rik	0.812947	10.17489	6.595894	1.76x10 ⁻⁰⁴	1.70x10 ⁻⁰³	0.932614	Increased
Prmt2	0.58781	11.20221	6.594598	1.76x10 ⁻⁰⁴	1.70x10 ⁻⁰³	0.931169	Increased
Mylk3	-0.69963	16.50698	-6.59369	1.76x10 ⁻⁰⁴	1.70x10 ⁻⁰³	0.930158	Decreased
Vdr	1.216537	7.361378	6.592122	1.76x10 ⁻⁰⁴	1.70x10 ⁻⁰³	0.928408	Increased
Cox7a1	-1.00347	15.24109	-6.5911	1.77x10 ⁻⁰⁴	1.70x10 ⁻⁰³	0.92727	Decreased
Gm5113	-1.00347	15.24109	-6.5911	1.77x10 ⁻⁰⁴	1.70x10 ⁻⁰³	0.92727	Decreased
Zc3h6	-0.60595	10.85904	-6.59081	1.77x10 ⁻⁰⁴	1.70x10 ⁻⁰³	0.926948	Decreased
Dzip11	0.756062	9.6626	6.585781	1.78x10 ⁻⁰⁴	1.71x10 ⁻⁰³	0.921332	Increased
Tnfrsf1b	1.237048	11.2682	6.584074	1.78x10 ⁻⁰⁴	1.71x10 ⁻⁰³	0.919427	Increased
Plekha7	0.882256	8.953162	6.581027	1.78x10 ⁻⁰⁴	1.71x10 ⁻⁰³	0.916024	Increased
Sec61a1	0.521036	12.82369	6.579766	1.79x10 ⁻⁰⁴	1.71x10 ⁻⁰³	0.914615	Increased
Asb10	-0.87841	13.68922	-6.57896	1.79x10 ⁻⁰⁴	1.71x10 ⁻⁰³	0.913713	Decreased
Ggct	-0.54253	10.4386	-6.57642	1.79x10 ⁻⁰⁴	1.71x10 ⁻⁰³	0.910878	Decreased
Hes7	1.54231	4.719816	6.575274	1.80x10 ⁻⁰⁴	1.71x10 ⁻⁰³	0.909597	Increased
Epha3	2.449306	5.301289	6.57341	1.80x10 ⁻⁰⁴	1.71x10 ⁻⁰³	0.907513	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Cd164l2	2.440314	2.937615	6.56746	1.81x10 ⁻⁰⁴	1.72x10 ⁻⁰³	0.90086	Increased
Tmem150c	-1.10589	9.928233	-6.56545	1.81x10 ⁻⁰⁴	1.73x10 ⁻⁰³	0.898611	Decreased
Cpn2	-1.11548	12.10742	-6.56137	1.82x10 ⁻⁰⁴	1.73x10 ⁻⁰³	0.894047	Decreased
Irx2	-0.61702	8.800152	-6.56094	1.82x10 ⁻⁰⁴	1.73x10 ⁻⁰³	0.893563	Decreased
Pip4k2a	0.64125	10.96389	6.558661	1.83x10 ⁻⁰⁴	1.73x10 ⁻⁰³	0.891014	Increased
Crip1	0.891295	12.24229	6.554412	1.83x10 ⁻⁰⁴	1.74x10 ⁻⁰³	0.886254	Increased
Cd300lb	1.937426	7.534594	6.551519	1.84x10 ⁻⁰⁴	1.74x10 ⁻⁰³	0.883013	Increased
Ada	1.007111	7.423198	6.550551	1.84x10 ⁻⁰⁴	1.74x10 ⁻⁰³	0.881929	Increased
Pet112	-0.66953	12.26558	-6.54403	1.85x10 ⁻⁰⁴	1.75x10 ⁻⁰³	0.874616	Decreased
Rab4b	0.603848	10.52294	6.541824	1.86x10 ⁻⁰⁴	1.75x10 ⁻⁰³	0.872144	Increased
Pfn4	-0.78938	7.909137	-6.54067	1.86x10 ⁻⁰⁴	1.75x10 ⁻⁰³	0.870851	Decreased
Sv2b	1.038904	7.72507	6.535676	1.87x10 ⁻⁰⁴	1.76x10 ⁻⁰³	0.865245	Increased
Abcc8	-0.55173	14.73633	-6.53124	1.88x10 ⁻⁰⁴	1.76x10 ⁻⁰³	0.86027	Decreased
Fbln7	2.185807	6.906144	6.529307	1.88x10 ⁻⁰⁴	1.76x10 ⁻⁰³	0.858093	Increased
Arhgef4	0.586068	6.357194	6.529119	1.88x10 ⁻⁰⁴	1.76x10 ⁻⁰³	0.857881	Increased
D10Jhu81e	-0.70056	15.51002	-6.52773	1.89x10 ⁻⁰⁴	1.76x10 ⁻⁰³	0.856317	Decreased
Pwp2	-0.70056	15.51002	-6.52773	1.89x10 ⁻⁰⁴	1.76x10 ⁻⁰³	0.856317	Decreased
Greb1	1.004842	7.348669	6.52707	1.89x10 ⁻⁰⁴	1.76x10 ⁻⁰³	0.85558	Increased
Naip5	0.813919	8.625641	6.521854	1.90x10 ⁻⁰⁴	1.77x10 ⁻⁰³	0.849717	Increased
Kcnk3	-0.69526	13.94348	-6.52121	1.90x10 ⁻⁰⁴	1.77x10 ⁻⁰³	0.848994	Decreased
4632434I11Rik	1.241761	6.505974	6.520363	1.90x10 ⁻⁰⁴	1.77x10 ⁻⁰³	0.848041	Increased
Prelid1	0.744976	11.88958	6.5201	1.90x10 ⁻⁰⁴	1.77x10 ⁻⁰³	0.847745	Increased
Mrpl23	-0.58118	11.93099	-6.51721	1.91x10 ⁻⁰⁴	1.77x10 ⁻⁰³	0.844496	Decreased
Cd276	1.163881	10.04118	6.517	1.91x10 ⁻⁰⁴	1.77x10 ⁻⁰³	0.844259	Increased
Sdc3	0.517833	13.79758	6.506086	1.93x10 ⁻⁰⁴	1.79x10 ⁻⁰³	0.831974	Increased
Hsd11b1	-1.28325	10.27968	-6.50409	1.93x10 ⁻⁰⁴	1.79x10 ⁻⁰³	0.829722	Decreased
Tfpi	-0.53628	13.06927	-6.50351	1.93x10 ⁻⁰⁴	1.79x10 ⁻⁰³	0.82907	Decreased
Slc39a6	0.89436	10.48167	6.493796	1.95x10 ⁻⁰⁴	1.81x10 ⁻⁰³	0.818122	Increased
Arhgap15	0.948116	7.156997	6.491497	1.96x10 ⁻⁰⁴	1.81x10 ⁻⁰³	0.815529	Increased
Tmem202	1.326171	5.469312	6.490088	1.96x10 ⁻⁰⁴	1.81x10 ⁻⁰³	0.813939	Increased
Bcl2l11	-0.56306	10.97255	-6.48244	1.98x10 ⁻⁰⁴	1.82x10 ⁻⁰³	0.805304	Decreased
Uqcrc1	-0.70164	17.06631	-6.47738	1.99x10 ⁻⁰⁴	1.83x10 ⁻⁰³	0.799586	Decreased
Adarb1	0.554198	12.50999	6.472506	2.00x10 ⁻⁰⁴	1.83x10 ⁻⁰³	0.794083	Increased
Cald1	0.66553	13.43973	6.469672	2.00x10 ⁻⁰⁴	1.84x10 ⁻⁰³	0.790878	Increased
Ccnb1	2.917728	7.090135	6.46471	2.02x10 ⁻⁰⁴	1.84x10 ⁻⁰³	0.785265	Increased
Eno3	-0.64383	17.09658	-6.46144	2.02x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.781568	Decreased
Slfn3	0.553839	10.5822	6.459684	2.03x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.779577	Increased
Gpr173	1.501403	6.741565	6.458904	2.03x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.778694	Increased
Slc4a11	1.10041	5.262102	6.455846	2.03x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.775231	Increased
Pif1	2.09749	5.452201	6.455592	2.03x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.774943	Increased
Tmem62	0.510855	9.820068	6.452376	2.04x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.7713	Increased
Id4	1.472048	6.406962	6.450124	2.05x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.768747	Increased
Mmachc	-0.53946	12.79304	-6.44981	2.05x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.768386	Decreased
Slc16a7	-0.87981	10.20044	-6.4497	2.05x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.768264	Decreased
Acta1	2.608138	16.12063	6.449439	2.05x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.767971	Increased
Klhl21	-0.65926	13.89018	-6.44842	2.05x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.766812	Decreased
Tram2	0.93993	10.79542	6.448143	2.05x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.766502	Increased
Batf	1.183415	5.971886	6.445634	2.06x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.763658	Increased
Vdac1	-0.55323	16.81846	-6.44262	2.06x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.760234	Decreased
Pdgfc	1.343823	8.734146	6.442469	2.06x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.760069	Increased
BC005764	1.375528	6.577947	6.442024	2.06x10 ⁻⁰⁴	1.85x10 ⁻⁰³	0.759563	Increased
Vcam1	0.692183	11.643	6.440575	2.07x10 ⁻⁰⁴	1.86x10 ⁻⁰³	0.757919	Increased
Nmral1	0.631979	8.379669	6.438507	2.07x10 ⁻⁰⁴	1.86x10 ⁻⁰³	0.755573	Increased
Mlf1	-0.61225	13.80649	-6.43554	2.08x10 ⁻⁰⁴	1.86x10 ⁻⁰³	0.75221	Decreased
Cdk1	2.329468	7.88959	6.432805	2.08x10 ⁻⁰⁴	1.86x10 ⁻⁰³	0.749101	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Qsox1	0.651437	13.12269	6.432388	2.08x10 ⁻⁰⁴	1.86x10 ⁻⁰³	0.748626	Increased
Sntb2	0.610288	12.32026	6.42481	2.10x10 ⁻⁰⁴	1.87x10 ⁻⁰³	0.740017	Increased
Tmem43	0.665903	12.13851	6.424495	2.10x10 ⁻⁰⁴	1.87x10 ⁻⁰³	0.739659	Increased
Auh	-0.67829	13.0564	-6.41644	2.12x10 ⁻⁰⁴	1.89x10 ⁻⁰³	0.730505	Decreased
Slc25a43	0.930758	6.81483	6.416132	2.12x10 ⁻⁰⁴	1.89x10 ⁻⁰³	0.730149	Increased
Foxo6	-1.53945	7.744607	-6.41284	2.13x10 ⁻⁰⁴	1.89x10 ⁻⁰³	0.726401	Decreased
Bcl2a1d	2.386216	4.442887	6.412583	2.13x10 ⁻⁰⁴	1.89x10 ⁻⁰³	0.72611	Increased
Tub	1.453056	4.863416	6.411242	2.13x10 ⁻⁰⁴	1.89x10 ⁻⁰³	0.724584	Increased
Cxcr3	1.973321	4.525469	6.411155	2.13x10 ⁻⁰⁴	1.89x10 ⁻⁰³	0.724485	Increased
Gnao1	0.782069	11.91782	6.409458	2.14x10 ⁻⁰⁴	1.89x10 ⁻⁰³	0.722554	Increased
Pick1	-0.50761	11.36212	-6.40409	2.15x10 ⁻⁰⁴	1.90x10 ⁻⁰³	0.716443	Decreased
Tmem179	-1.22864	9.089948	-6.40369	2.15x10 ⁻⁰⁴	1.90x10 ⁻⁰³	0.715982	Decreased
Grip1	1.496775	6.310756	6.403526	2.15x10 ⁻⁰⁴	1.90x10 ⁻⁰³	0.715798	Increased
Hlf	-0.99707	12.48553	-6.3927	2.17x10 ⁻⁰⁴	1.91x10 ⁻⁰³	0.70346	Decreased
Mapk7	0.751596	10.50449	6.39138	2.18x10 ⁻⁰⁴	1.91x10 ⁻⁰³	0.70195	Increased
Nudt15	-0.73873	9.789291	-6.39033	2.18x10 ⁻⁰⁴	1.91x10 ⁻⁰³	0.700754	Decreased
Fgfbp3	0.79385	8.006585	6.390036	2.18x10 ⁻⁰⁴	1.91x10 ⁻⁰³	0.700417	Increased
Mgst3	-0.67666	14.1184	-6.3876	2.19x10 ⁻⁰⁴	1.92x10 ⁻⁰³	0.697634	Decreased
Pappa	1.126098	7.955291	6.386149	2.19x10 ⁻⁰⁴	1.92x10 ⁻⁰³	0.69598	Increased
Ccbl1	-0.50112	11.77397	-6.38567	2.19x10 ⁻⁰⁴	1.92x10 ⁻⁰³	0.695432	Decreased
Nr1i3	-0.75964	7.230984	-6.3846	2.19x10 ⁻⁰⁴	1.92x10 ⁻⁰³	0.694217	Decreased
Ddx58	0.500987	11.36159	6.383303	2.20x10 ⁻⁰⁴	1.92x10 ⁻⁰³	0.69273	Increased
Fam110c	3.215156	2.759277	6.382801	2.20x10 ⁻⁰⁴	1.92x10 ⁻⁰³	0.692158	Increased
Pcgf6	0.552075	9.243475	6.37896	2.21x10 ⁻⁰⁴	1.92x10 ⁻⁰³	0.687771	Increased
Setd6	-0.54021	10.21004	-6.369	2.23x10 ⁻⁰⁴	1.94x10 ⁻⁰³	0.67639	Decreased
Klrg2	1.275911	5.922148	6.365695	2.24x10 ⁻⁰⁴	1.94x10 ⁻⁰³	0.672604	Increased
Myo1d	0.919235	11.77582	6.361122	2.25x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.667371	Increased
Arl11	1.370202	6.861349	6.358614	2.25x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.6645	Increased
Fcer1g	-0.64376	16.69364	-6.35729	2.26x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.662984	Decreased
Ndufs2	-0.64376	16.69364	-6.35729	2.26x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.662984	Decreased
Ano4	-0.77439	9.207724	-6.35668	2.26x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.662285	Decreased
Traf1	1.35707	7.718508	6.356429	2.26x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.661998	Increased
C230052I12Rik	0.505148	7.83566	6.355633	2.26x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.661086	Increased
Tshz3	0.775904	9.630449	6.355243	2.26x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.660639	Increased
Mfn1	-0.53107	15.65054	-6.35439	2.26x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.659661	Decreased
Ears2	-0.5112	10.59047	-6.35261	2.27x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.657623	Decreased
Myh7	-0.62352	20.91841	-6.35168	2.27x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.656559	Decreased
Alox5	-0.95245	10.91077	-6.3515	2.27x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.656352	Decreased
Asb12	-0.65334	9.952036	-6.35139	2.27x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.656224	Decreased
Tnfsf8	2.400162	3.5961	6.349265	2.28x10 ⁻⁰⁴	1.95x10 ⁻⁰³	0.653789	Increased
Rin1	0.893237	8.876911	6.346837	2.28x10 ⁻⁰⁴	1.96x10 ⁻⁰³	0.651005	Increased
Trove2	0.504607	11.46313	6.34411	2.29x10 ⁻⁰⁴	1.96x10 ⁻⁰³	0.647878	Increased
Spg21	0.534749	10.89055	6.343666	2.29x10 ⁻⁰⁴	1.96x10 ⁻⁰³	0.647369	Increased
Tcap	-0.66042	15.89201	-6.34215	2.29x10 ⁻⁰⁴	1.96x10 ⁻⁰³	0.645633	Decreased
Zfyve28	0.924389	7.808074	6.335687	2.31x10 ⁻⁰⁴	1.97x10 ⁻⁰³	0.638213	Increased
Zmat3	0.567258	11.22089	6.332748	2.32x10 ⁻⁰⁴	1.97x10 ⁻⁰³	0.634838	Increased
3-Sep	0.942413	6.594457	6.330141	2.32x10 ⁻⁰⁴	1.98x10 ⁻⁰³	0.631844	Increased
Sdr39u1	-0.54472	12.99082	-6.32983	2.32x10 ⁻⁰⁴	1.98x10 ⁻⁰³	0.631485	Decreased
Pex6	-0.63908	12.57541	-6.32374	2.34x10 ⁻⁰⁴	1.98x10 ⁻⁰³	0.624489	Decreased
Glis3	0.789642	7.581311	6.321662	2.35x10 ⁻⁰⁴	1.99x10 ⁻⁰³	0.6221	Increased
Synpo2l	1.250633	15.29352	6.320816	2.35x10 ⁻⁰⁴	1.99x10 ⁻⁰³	0.621126	Increased
Tnfrsf26	1.409617	6.705291	6.317601	2.36x10 ⁻⁰⁴	2.00x10 ⁻⁰³	0.617429	Increased
Ndufv2	-0.57723	15.36925	-6.31575	2.36x10 ⁻⁰⁴	2.00x10 ⁻⁰³	0.615293	Decreased
E2f1	1.45792	8.45808	6.313471	2.37x10 ⁻⁰⁴	2.00x10 ⁻⁰³	0.612677	Increased
Necab3	1.45792	8.45808	6.313471	2.37x10 ⁻⁰⁴	2.00x10 ⁻⁰³	0.612677	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Elfn2	-1.16891	6.058132	-6.30668	2.38x10 ⁻⁰⁴	2.01x10 ⁻⁰³	0.604856	Decreased
Ppm1l	-0.73266	13.29681	-6.30647	2.38x10 ⁻⁰⁴	2.01x10 ⁻⁰³	0.604616	Decreased
Cenpe	1.917985	7.722059	6.303543	2.39x10 ⁻⁰⁴	2.01x10 ⁻⁰³	0.601244	Increased
Sbk1	-0.88224	14.09191	-6.29341	2.42x10 ⁻⁰⁴	2.03x10 ⁻⁰³	0.589558	Decreased
Pex11a	-0.66104	11.17077	-6.29043	2.42x10 ⁻⁰⁴	2.03x10 ⁻⁰³	0.586127	Decreased
Fcrls	1.399899	10.53565	6.288948	2.43x10 ⁻⁰⁴	2.03x10 ⁻⁰³	0.584414	Increased
Adra2b	-1.00588	7.579503	-6.2867	2.43x10 ⁻⁰⁴	2.03x10 ⁻⁰³	0.581815	Decreased
Idh3g	-0.65044	15.44064	-6.28553	2.44x10 ⁻⁰⁴	2.03x10 ⁻⁰³	0.580468	Decreased
Npc1	-0.67184	12.78798	-6.28461	2.44x10 ⁻⁰⁴	2.03x10 ⁻⁰³	0.579409	Decreased
Chad	2.283164	7.039733	6.282805	2.44x10 ⁻⁰⁴	2.04x10 ⁻⁰³	0.577323	Increased
AI118078	-0.88538	8.709372	-6.27961	2.45x10 ⁻⁰⁴	2.04x10 ⁻⁰³	0.573636	Decreased
Sdhb	-0.68267	15.31286	-6.2775	2.46x10 ⁻⁰⁴	2.03x10 ⁻⁰³	0.571191	Decreased
Enah	0.767872	14.44726	6.269556	2.48x10 ⁻⁰⁴	2.05x10 ⁻⁰³	0.56201	Increased
Ptpn9	0.60448	11.37379	6.268227	2.48x10 ⁻⁰⁴	2.05x10 ⁻⁰³	0.560473	Increased
Twf1	0.633035	11.58526	6.266669	2.49x10 ⁻⁰⁴	2.05x10 ⁻⁰³	0.55867	Increased
Naalad2	0.846847	11.67837	6.266309	2.49x10 ⁻⁰⁴	2.05x10 ⁻⁰³	0.558254	Increased
Cbr1	-0.53061	11.37455	-6.26609	2.49x10 ⁻⁰⁴	2.05x10 ⁻⁰³	0.558005	Decreased
Gm14440	-1.14168	9.453108	-6.26549	2.49x10 ⁻⁰⁴	2.05x10 ⁻⁰³	0.557305	Decreased
AW551984	1.948713	5.72939	6.265137	2.49x10 ⁻⁰⁴	2.05x10 ⁻⁰³	0.556897	Increased
Slc6a13	1.094497	3.887001	6.256985	2.51x10 ⁻⁰⁴	2.07x10 ⁻⁰³	0.547461	Increased
Celsr2	-0.99862	10.40119	-6.24795	2.54x10 ⁻⁰⁴	2.08x10 ⁻⁰³	0.536985	Decreased
Adamts19	0.718481	6.395653	6.247039	2.54x10 ⁻⁰⁴	2.08x10 ⁻⁰³	0.535933	Increased
Jak1	-0.52583	14.58894	-6.24334	2.55x10 ⁻⁰⁴	2.09x10 ⁻⁰³	0.531638	Decreased
Fam211a	0.814507	9.131312	6.241827	2.55x10 ⁻⁰⁴	2.09x10 ⁻⁰³	0.529888	Increased
Fam149a	0.525206	9.798558	6.24167	2.56x10 ⁻⁰⁴	2.09x10 ⁻⁰³	0.529706	Increased
Unc5c	1.9447	5.113506	6.241559	2.56x10 ⁻⁰⁴	2.09x10 ⁻⁰³	0.529577	Increased
Zfp382	0.872123	9.507115	6.241417	2.56x10 ⁻⁰⁴	2.09x10 ⁻⁰³	0.529413	Increased
Slc26a11	0.566733	9.610423	6.238886	2.56x10 ⁻⁰⁴	2.09x10 ⁻⁰³	0.526476	Increased
Nudt6	-0.702	11.13708	-6.2348	2.57x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.521731	Decreased
Ndufs3	-0.6183	15.08105	-6.23375	2.58x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.520512	Decreased
C1s	0.620642	12.45431	6.233527	2.58x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.520254	Increased
Adra1b	-0.82591	11.42597	-6.23246	2.58x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.519019	Decreased
Xkrx	-0.64183	7.832437	-6.23185	2.58x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.518309	Decreased
Tpcn2	0.692537	9.921266	6.231439	2.58x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.51783	Increased
Slc25a24	0.690251	9.330061	6.229355	2.59x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.515408	Increased
Rtn4ip1	-0.59586	13.18167	-6.22904	2.59x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.51504	Decreased
3110057O12Rik	-0.54357	14.08776	-6.22765	2.59x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.513426	Decreased
Larp1b	-0.54357	14.08776	-6.22765	2.59x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.513426	Decreased
Gm572	-0.67694	11.49425	-6.22734	2.60x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.51307	Decreased
Ripk1	0.514891	10.78935	6.2261	2.60x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.511626	Increased
Herpud1	-1.14534	14.27634	-6.22534	2.60x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.510741	Decreased
Rbm44	2.421649	3.112523	6.220158	2.62x10 ⁻⁰⁴	2.10x10 ⁻⁰³	0.504718	Increased
Nt5c1a	-0.79337	13.66933	-6.21508	2.63x10 ⁻⁰⁴	2.11x10 ⁻⁰³	0.498807	Decreased
Ndufb4	-0.66856	14.02588	-6.21038	2.64x10 ⁻⁰⁴	2.12x10 ⁻⁰³	0.493333	Decreased
Sgol1	1.017637	6.408498	6.197318	2.68x10 ⁻⁰⁴	2.15x10 ⁻⁰³	0.47812	Increased
Top1mt	-0.56548	9.2614	-6.19629	2.68x10 ⁻⁰⁴	2.15x10 ⁻⁰³	0.476919	Decreased
Mmp3	1.203492	9.080016	6.195613	2.69x10 ⁻⁰⁴	2.15x10 ⁻⁰³	0.476131	Increased
Kcna7	-0.80003	10.71189	-6.19425	2.69x10 ⁻⁰⁴	2.15x10 ⁻⁰³	0.474538	Decreased
l-Sep	0.750927	8.035562	6.192072	2.70x10 ⁻⁰⁴	2.15x10 ⁻⁰³	0.472001	Increased
Lamc1	0.578978	15.46652	6.190952	2.70x10 ⁻⁰⁴	2.15x10 ⁻⁰³	0.470693	Increased
Ahi1	0.629978	8.567902	6.189704	2.70x10 ⁻⁰⁴	2.15x10 ⁻⁰³	0.469237	Increased
Sptlc2	0.529516	10.7357	6.188315	2.71x10 ⁻⁰⁴	2.16x10 ⁻⁰³	0.467616	Increased
Asrgl1	-0.51557	12.87803	-6.18723	2.71x10 ⁻⁰⁴	2.16x10 ⁻⁰³	0.466351	Decreased
Dtnbp1	-0.61474	12.86064	-6.18024	2.73x10 ⁻⁰⁴	2.17x10 ⁻⁰³	0.458186	Decreased
Pdhb	-0.53377	16.00196	-6.17357	2.75x10 ⁻⁰⁴	2.18x10 ⁻⁰³	0.450388	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Atp5f1	-0.57991	16.61527	-6.17044	2.76x10 ⁻⁰⁴	2.19x10 ⁻⁰³	0.446726	Decreased
Fam109b	1.094215	7.056746	6.164894	2.78x10 ⁻⁰⁴	2.20x10 ⁻⁰³	0.440242	Increased
Coq3	-0.50103	12.55643	-6.15677	2.80x10 ⁻⁰⁴	2.21x10 ⁻⁰³	0.430735	Decreased
Crabp2	3.900722	4.578783	6.145758	2.84x10 ⁻⁰⁴	2.24x10 ⁻⁰³	0.417823	Increased
2610524H06Rik	1.49121	6.485258	6.138005	2.86x10 ⁻⁰⁴	2.25x10 ⁻⁰³	0.408727	Increased
Hvcn1	0.837592	9.211486	6.136912	2.86x10 ⁻⁰⁴	2.25x10 ⁻⁰³	0.407443	Increased
Elov11	0.590668	11.36511	6.135839	2.87x10 ⁻⁰⁴	2.25x10 ⁻⁰³	0.406183	Increased
Acsf3	-0.50953	12.15848	-6.13194	2.88x10 ⁻⁰⁴	2.25x10 ⁻⁰³	0.401608	Decreased
Mcee	-0.68786	12.45075	-6.13063	2.88x10 ⁻⁰⁴	2.25x10 ⁻⁰³	0.400069	Decreased
Mrpl50	-0.55676	12.71811	-6.13062	2.88x10 ⁻⁰⁴	2.25x10 ⁻⁰³	0.400051	Decreased
1110001J03Rik	-0.71258	11.97015	-6.12926	2.89x10 ⁻⁰⁴	2.26x10 ⁻⁰³	0.398452	Decreased
Thy1	1.025615	10.37381	6.12611	2.90x10 ⁻⁰⁴	2.26x10 ⁻⁰³	0.394754	Increased
Lrrc19	1.977335	1.706125	6.123867	2.90x10 ⁻⁰⁴	2.26x10 ⁻⁰³	0.392117	Increased
Samm50	-0.53271	14.92771	-6.12332	2.91x10 ⁻⁰⁴	2.26x10 ⁻⁰³	0.391474	Decreased
Isca1	-0.5133	14.90823	-6.12312	2.91x10 ⁻⁰⁴	2.26x10 ⁻⁰³	0.391243	Decreased
Echdc3	-0.79867	11.37814	-6.12312	2.91x10 ⁻⁰⁴	2.26x10 ⁻⁰³	0.391241	Decreased
Dennd2d	1.06288	5.840114	6.117745	2.92x10 ⁻⁰⁴	2.26x10 ⁻⁰³	0.384917	Increased
Gpr141	1.579547	4.45339	6.113301	2.94x10 ⁻⁰⁴	2.28x10 ⁻⁰³	0.379687	Increased
Atg10	-0.54334	10.86216	-6.11268	2.94x10 ⁻⁰⁴	2.28x10 ⁻⁰³	0.37895	Decreased
Athl1	0.82544	9.883118	6.112513	2.94x10 ⁻⁰⁴	2.28x10 ⁻⁰³	0.378759	Increased
Ccnb2	1.672189	7.252191	6.110681	2.95x10 ⁻⁰⁴	2.28x10 ⁻⁰³	0.376602	Increased
Nxf2	1.567977	2.581928	6.10449	2.97x10 ⁻⁰⁴	2.29x10 ⁻⁰³	0.36931	Increased
Stx1a	0.670293	8.665062	6.103594	2.97x10 ⁻⁰⁴	2.29x10 ⁻⁰³	0.368254	Increased
Aco2	-0.53741	18.2303	-6.09758	2.99x10 ⁻⁰⁴	2.30x10 ⁻⁰³	0.361161	Decreased
Idh3a	-0.51116	16.15969	-6.09407	3.00x10 ⁻⁰⁴	2.31x10 ⁻⁰³	0.357019	Decreased
Fbxo48	0.755533	6.530021	6.091681	3.01x10 ⁻⁰⁴	2.31x10 ⁻⁰³	0.354205	Increased
Cobl1	-0.68328	13.86785	-6.08967	3.01x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.351837	Decreased
Mov10l1	-0.61276	12.58791	-6.08541	3.03x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.346803	Decreased
Ptpn	0.77961	9.914948	6.085023	3.03x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.346347	Increased
Mms22l	1.092462	7.140709	6.084901	3.03x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.346202	Increased
Pacsin1	1.576396	7.46929	6.084772	3.03x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.34605	Increased
Arl4c	0.758316	10.65512	6.083796	3.03x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.344897	Increased
Rasa4	1.1814	10.88726	6.082654	3.04x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.343548	Increased
Unc13d	0.755889	7.4419	6.081821	3.04x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.342564	Increased
Aspdh	-0.56108	12.77914	-6.08178	3.04x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.342515	Decreased
Lrrc4b	-0.56108	12.77914	-6.08178	3.04x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.342515	Decreased
Sema3f	0.902433	11.57167	6.081446	3.04x10 ⁻⁰⁴	2.32x10 ⁻⁰³	0.342121	Increased
Agpat4	0.773896	9.472085	6.077721	3.05x10 ⁻⁰⁴	2.33x10 ⁻⁰³	0.33772	Increased
Ccdc88b	0.867426	8.872834	6.076475	3.06x10 ⁻⁰⁴	2.33x10 ⁻⁰³	0.336247	Increased
Nudt12	-0.71985	9.943126	-6.0757	3.06x10 ⁻⁰⁴	2.33x10 ⁻⁰³	0.335329	Decreased
Bcl2a1a	2.163923	3.501258	6.072108	3.07x10 ⁻⁰⁴	2.33x10 ⁻⁰³	0.331084	Increased
1700061G19Rik	1.529803	3.953402	6.068137	3.09x10 ⁻⁰⁴	2.34x10 ⁻⁰³	0.326386	Increased
Rpusd4	-0.50253	10.71429	-6.06343	3.10x10 ⁻⁰⁴	2.35x10 ⁻⁰³	0.320814	Decreased
Sh3bgrl	0.674296	12.83716	6.061789	3.11x10 ⁻⁰⁴	2.35x10 ⁻⁰³	0.318873	Increased
Mtap7d3	0.860618	6.252628	6.059833	3.11x10 ⁻⁰⁴	2.36x10 ⁻⁰³	0.316557	Increased
Pcolce2	0.687704	11.85132	6.059137	3.12x10 ⁻⁰⁴	2.36x10 ⁻⁰³	0.315732	Increased
Scn4b	-1.70071	12.09092	-6.0569	3.13x10 ⁻⁰⁴	2.36x10 ⁻⁰³	0.313077	Decreased
Mpc2	-0.62982	14.44206	-6.05057	3.15x10 ⁻⁰⁴	2.37x10 ⁻⁰³	0.305584	Decreased
Stat5a	-0.61484	11.74563	-6.03569	3.20x10 ⁻⁰⁴	2.41x10 ⁻⁰³	0.287922	Decreased
Cdk6	0.740333	11.41658	6.029584	3.22x10 ⁻⁰⁴	2.42x10 ⁻⁰³	0.280673	Increased
Ryr3	-0.61828	8.089138	-6.02903	3.22x10 ⁻⁰⁴	2.42x10 ⁻⁰³	0.280017	Decreased
Mb21d2	-0.5276	10.71968	-6.0225	3.25x10 ⁻⁰⁴	2.43x10 ⁻⁰³	0.27225	Decreased
Bcl11b	-1.42998	7.860711	-6.02199	3.25x10 ⁻⁰⁴	2.43x10 ⁻⁰³	0.271643	Decreased
Mras	0.523955	9.834127	6.017224	3.26x10 ⁻⁰⁴	2.44x10 ⁻⁰³	0.265976	Increased
Qsox2	-0.76782	11.28683	-6.01661	3.27x10 ⁻⁰⁴	2.44x10 ⁻⁰³	0.265239	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Rdh11	0.644945	9.49576	6.015621	3.27x10 ⁻⁰⁴	2.44x10 ⁻⁰³	0.264067	Increased
Tle3	0.5392	11.41084	6.015076	3.27x10 ⁻⁰⁴	2.44x10 ⁻⁰³	0.26342	Increased
Fitm2	-0.77361	12.32949	-6.01052	3.29x10 ⁻⁰⁴	2.45x10 ⁻⁰³	0.257993	Decreased
Praf2	1.009915	9.743812	6.01028	3.29x10 ⁻⁰⁴	2.45x10 ⁻⁰³	0.25771	Increased
Azin1	0.594202	13.87071	6.010235	3.29x10 ⁻⁰⁴	2.45x10 ⁻⁰³	0.257656	Increased
Dlgap5	2.384095	6.572436	6.010228	3.29x10 ⁻⁰⁴	2.45x10 ⁻⁰³	0.257647	Increased
B3galnt1	0.783661	8.205178	6.007055	3.30x10 ⁻⁰⁴	2.45x10 ⁻⁰³	0.253868	Increased
Rab23	0.697245	9.378932	6.005482	3.31x10 ⁻⁰⁴	2.45x10 ⁻⁰³	0.251993	Increased
Ghr	-0.5348	14.13725	-6.00499	3.31x10 ⁻⁰⁴	2.45x10 ⁻⁰³	0.251409	Decreased
Mpzl1	0.919607	10.80435	6.004915	3.31x10 ⁻⁰⁴	2.45x10 ⁻⁰³	0.251319	Increased
Kcnj12	-0.81878	12.46173	-6.00486	3.31x10 ⁻⁰⁴	2.45x10 ⁻⁰³	0.251248	Decreased
Scd4	1.657855	11.27587	5.997152	3.34x10 ⁻⁰⁴	2.47x10 ⁻⁰³	0.242063	Increased
Itga2	1.554922	5.307715	5.994311	3.35x10 ⁻⁰⁴	2.48x10 ⁻⁰³	0.238675	Increased
Neto2	0.756838	7.733379	5.99391	3.35x10 ⁻⁰⁴	2.48x10 ⁻⁰³	0.238196	Increased
Alpk1	0.595753	10.67551	5.992466	3.36x10 ⁻⁰⁴	2.48x10 ⁻⁰³	0.236473	Increased
Map3k14	0.649645	9.93721	5.990201	3.36x10 ⁻⁰⁴	2.48x10 ⁻⁰³	0.23377	Increased
Dym	-0.59875	13.26194	-5.98007	3.40x10 ⁻⁰⁴	2.51x10 ⁻⁰³	0.22167	Decreased
Hook1	-0.70141	11.38062	-5.97851	3.41x10 ⁻⁰⁴	2.51x10 ⁻⁰³	0.219804	Decreased
Slc1a5	0.689409	12.41579	5.977315	3.41x10 ⁻⁰⁴	2.51x10 ⁻⁰³	0.218378	Increased
Gm5141	0.747484	7.216009	5.977013	3.41x10 ⁻⁰⁴	2.51x10 ⁻⁰³	0.218017	Increased
Pafah1b3	0.680617	7.525617	5.975888	3.42x10 ⁻⁰⁴	2.51x10 ⁻⁰³	0.216672	Increased
Bzrap1	1.512101	3.515989	5.970649	3.44x10 ⁻⁰⁴	2.52x10 ⁻⁰³	0.210407	Increased
Kcnt2	0.868387	9.656907	5.968899	3.44x10 ⁻⁰⁴	2.52x10 ⁻⁰³	0.208313	Increased
Atp5b	-0.55665	19.30059	-5.96663	3.45x10 ⁻⁰⁴	2.52x10 ⁻⁰³	0.205599	Decreased
Baz2a	-0.55665	19.30059	-5.96663	3.45x10 ⁻⁰⁴	2.52x10 ⁻⁰³	0.205599	Decreased
Syt12	0.85618	7.31951	5.96663	3.45x10 ⁻⁰⁴	2.52x10 ⁻⁰³	0.205598	Increased
Iah1	0.606358	10.64343	5.960337	3.48x10 ⁻⁰⁴	2.54x10 ⁻⁰³	0.198064	Increased
Il1b	2.823934	6.802127	5.959794	3.48x10 ⁻⁰⁴	2.54x10 ⁻⁰³	0.197413	Increased
Nfkbie	1.303528	8.253818	5.947407	3.53x10 ⁻⁰⁴	2.57x10 ⁻⁰³	0.182568	Increased
Cbln1	-1.49347	4.475456	-5.94613	3.53x10 ⁻⁰⁴	2.57x10 ⁻⁰³	0.181032	Decreased
Slc2a6	1.122351	6.015237	5.944197	3.54x10 ⁻⁰⁴	2.57x10 ⁻⁰³	0.178717	Increased
Spidr	0.595151	8.884057	5.939283	3.56x10 ⁻⁰⁴	2.58x10 ⁻⁰³	0.17282	Increased
Tll2	-1.37675	7.607965	-5.93708	3.57x10 ⁻⁰⁴	2.59x10 ⁻⁰³	0.170174	Decreased
Kctd17	0.933632	11.48858	5.934747	3.58x10 ⁻⁰⁴	2.59x10 ⁻⁰³	0.167373	Increased
Ndufs7	-0.75206	14.6812	-5.93345	3.58x10 ⁻⁰⁴	2.59x10 ⁻⁰³	0.165812	Decreased
Tll1	1.682816	6.748563	5.932253	3.59x10 ⁻⁰⁴	2.59x10 ⁻⁰³	0.164377	Increased
Mcat	-0.534	11.89143	-5.93219	3.59x10 ⁻⁰⁴	2.59x10 ⁻⁰³	0.164301	Decreased
Akap2	0.553686	15.30939	5.932103	3.59x10 ⁻⁰⁴	2.59x10 ⁻⁰³	0.164197	Increased
Spc24	-0.90773	8.733016	-5.9271	3.61x10 ⁻⁰⁴	2.60x10 ⁻⁰³	0.158184	Decreased
Leprel4	-0.50532	11.78816	-5.92118	3.63x10 ⁻⁰⁴	2.62x10 ⁻⁰³	0.151071	Decreased
Wdr62	0.806689	8.425225	5.919414	3.64x10 ⁻⁰⁴	2.62x10 ⁻⁰³	0.148941	Increased
Arfgef1	-0.65482	14.15379	-5.91935	3.64x10 ⁻⁰⁴	2.62x10 ⁻⁰³	0.148862	Decreased
Slc25a38	-0.56556	11.05973	-5.91913	3.64x10 ⁻⁰⁴	2.62x10 ⁻⁰³	0.148603	Decreased
Acads	-0.67183	14.46398	-5.91901	3.64x10 ⁻⁰⁴	2.62x10 ⁻⁰³	0.148457	Decreased
Cox7b	-0.58158	15.59152	-5.91744	3.65x10 ⁻⁰⁴	2.62x10 ⁻⁰³	0.14656	Decreased
Grap2	1.283315	6.426062	5.913121	3.67x10 ⁻⁰⁴	2.63x10 ⁻⁰³	0.141366	Increased
2310067B10Rik	-0.56504	14.00982	-5.90852	3.68x10 ⁻⁰⁴	2.64x10 ⁻⁰³	0.13583	Decreased
Uqcrc2	-0.52839	16.87034	-5.90741	3.69x10 ⁻⁰⁴	2.64x10 ⁻⁰³	0.134488	Decreased
Myl6	0.672203	14.20816	5.906928	3.69x10 ⁻⁰⁴	2.64x10 ⁻⁰³	0.133907	Increased
Myl6b	0.672203	14.20816	5.906928	3.69x10 ⁻⁰⁴	2.64x10 ⁻⁰³	0.133907	Increased
Mrpl14	-0.74615	11.97045	-5.90299	3.71x10 ⁻⁰⁴	2.65x10 ⁻⁰³	0.129158	Decreased
Tulp1	2.868127	3.628244	5.898874	3.72x10 ⁻⁰⁴	2.66x10 ⁻⁰³	0.124198	Increased
Dennd1c	0.784022	8.803943	5.896371	3.73x10 ⁻⁰⁴	2.66x10 ⁻⁰³	0.12118	Increased
Ccl2	0.824911	7.477827	5.893406	3.75x10 ⁻⁰⁴	2.67x10 ⁻⁰³	0.117602	Increased
Trim30b	0.962564	5.9134	5.892681	3.75x10 ⁻⁰⁴	2.67x10 ⁻⁰³	0.116728	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Rilp11	-0.74853	14.33612	-5.8918	3.75x10 ⁻⁰⁴	2.67x10 ⁻⁰³	0.115659	Decreased
Ankrd9	-0.76482	11.91257	-5.89074	3.76x10 ⁻⁰⁴	2.67x10 ⁻⁰³	0.114385	Decreased
Fam111a	0.842995	10.24305	5.88433	3.79x10 ⁻⁰⁴	2.69x10 ⁻⁰³	0.106644	Increased
Susd4	0.864674	5.173479	5.883594	3.79x10 ⁻⁰⁴	2.69x10 ⁻⁰³	0.105756	Increased
Cux2	-0.71424	10.94632	-5.87884	3.81x10 ⁻⁰⁴	2.70x10 ⁻⁰³	0.100009	Decreased
Gstp1	-0.56333	12.76264	-5.8733	3.83x10 ⁻⁰⁴	2.71x10 ⁻⁰³	0.093309	Decreased
Wwc1	1.612199	4.257717	5.872932	3.83x10 ⁻⁰⁴	2.71x10 ⁻⁰³	0.092867	Increased
Tnip3	-0.88739	7.893799	-5.87145	3.84x10 ⁻⁰⁴	2.71x10 ⁻⁰³	0.091074	Decreased
Usp2	-0.70195	14.3132	-5.86626	3.86x10 ⁻⁰⁴	2.73x10 ⁻⁰³	0.0848	Decreased
Slc35d2	0.901456	7.977811	5.859354	3.89x10 ⁻⁰⁴	2.74x10 ⁻⁰³	0.076432	Increased
Adcy9	-0.62281	12.73159	-5.85918	3.89x10 ⁻⁰⁴	2.74x10 ⁻⁰³	0.07622	Decreased
Sptbn4	-0.99046	7.39558	-5.85738	3.90x10 ⁻⁰⁴	2.74x10 ⁻⁰³	0.074038	Decreased
Prss55	-2.08681	5.695168	-5.85728	3.90x10 ⁻⁰⁴	2.74x10 ⁻⁰³	0.073915	Decreased
Scn3b	1.047565	7.454624	5.854531	3.91x10 ⁻⁰⁴	2.75x10 ⁻⁰³	0.070588	Increased
Pla2g7	1.126852	9.862865	5.854384	3.92x10 ⁻⁰⁴	2.75x10 ⁻⁰³	0.07041	Increased
Gng7	-0.68962	7.329183	-5.8439	3.96x10 ⁻⁰⁴	2.77x10 ⁻⁰³	0.057694	Decreased
Sash3	1.236193	7.864355	5.843885	3.96x10 ⁻⁰⁴	2.77x10 ⁻⁰³	0.057677	Increased
Synj2	-0.69765	13.21484	-5.83953	3.98x10 ⁻⁰⁴	2.78x10 ⁻⁰³	0.052393	Decreased
Tiam2	0.708577	9.994693	5.835891	4.00x10 ⁻⁰⁴	2.79x10 ⁻⁰³	0.047973	Increased
Dock11	0.582196	9.807994	5.832814	4.01x10 ⁻⁰⁴	2.80x10 ⁻⁰³	0.044235	Increased
Ptges	0.707537	7.694805	5.824127	4.05x10 ⁻⁰⁴	2.82x10 ⁻⁰³	0.033675	Increased
Atp5j	-0.58424	15.52997	-5.81596	4.09x10 ⁻⁰⁴	2.85x10 ⁻⁰³	0.02374	Decreased
Atp1a3	1.89626	7.060963	5.815134	4.09x10 ⁻⁰⁴	2.85x10 ⁻⁰³	0.022732	Increased
Wfdc1	-0.59113	10.83564	-5.81492	4.09x10 ⁻⁰⁴	2.85x10 ⁻⁰³	0.022472	Decreased
Pcsk1	-0.74258	4.586713	-5.81105	1.11x10 ⁻⁰⁴	2.85x10 ⁻⁰³	0.017759	Decreased
Cd244	1.700045	5.432423	5.809466	4.12x10 ⁻⁰⁴	2.86x10 ⁻⁰³	0.01583	Increased
Ltbp4	0.691821	16.31038	5.808931	4.12x10 ⁻⁰⁴	2.86x10 ⁻⁰³	0.015178	Increased
Itgb4	1.045948	8.767962	5.806899	4.13x10 ⁻⁰⁴	2.86x10 ⁻⁰³	0.012702	Increased
Kbtbd12	-0.86444	12.04785	-5.80679	4.13x10 ⁻⁰⁴	2.86x10 ⁻⁰³	0.01257	Decreased
Cac5	1.736176	6.123007	5.801083	4.16x10 ⁻⁰⁴	2.87x10 ⁻⁰³	0.005613	Increased
Slc25a34	-0.87995	14.49654	-5.8003	4.16x10 ⁻⁰⁴	2.87x10 ⁻⁰³	0.004653	Decreased
Tmem82	-0.87995	14.49654	-5.8003	4.16x10 ⁻⁰⁴	2.87x10 ⁻⁰³	0.004653	Decreased
Pdha1	-0.53661	16.62356	-5.79867	4.17x10 ⁻⁰⁴	2.87x10 ⁻⁰³	0.002668	Decreased
Thns11	-0.50413	10.11222	-5.79757	4.17x10 ⁻⁰⁴	2.87x10 ⁻⁰³	0.001326	Decreased
Trpc6	1.623344	5.562154	5.795182	4.19x10 ⁻⁰⁴	2.88x10 ⁻⁰³	-0.00158	Increased
Leprel1	0.925707	8.029601	5.789772	4.21x10 ⁻⁰⁴	2.90x10 ⁻⁰³	-0.00819	Increased
Gpr157	-0.7988	13.30418	-5.78161	4.25x10 ⁻⁰⁴	2.92x10 ⁻⁰³	-0.01815	Decreased
Skp2	0.804528	7.634216	5.780311	4.26x10 ⁻⁰⁴	2.92x10 ⁻⁰³	-0.01975	Increased
Acyp2	-0.57614	12.59618	-5.77804	4.27x10 ⁻⁰⁴	2.93x10 ⁻⁰³	-0.02252	Decreased
Cnst	-0.60357	13.27524	-5.77745	4.27x10 ⁻⁰⁴	2.93x10 ⁻⁰³	-0.02325	Decreased
Atp5h	-0.56683	16.11361	-5.77128	4.30x10 ⁻⁰⁴	2.94x10 ⁻⁰³	-0.03079	Decreased
Clpb	-0.54292	13.38495	-5.76777	4.32x10 ⁻⁰⁴	2.95x10 ⁻⁰³	-0.03508	Decreased
Lamc2	0.543261	10.28785	5.765005	4.33x10 ⁻⁰⁴	2.96x10 ⁻⁰³	-0.03847	Increased
Mkl1	0.637525	9.298337	5.763054	4.34x10 ⁻⁰⁴	2.96x10 ⁻⁰³	-0.04086	Increased
Xk	-0.70883	10.32101	-5.76058	4.35x10 ⁻⁰⁴	2.97x10 ⁻⁰³	-0.04389	Decreased
Fut11	0.548824	10.84146	5.759246	4.36x10 ⁻⁰⁴	2.97x10 ⁻⁰³	-0.04552	Increased
Zfp354c	1.044643	9.120579	5.757149	4.37x10 ⁻⁰⁴	2.97x10 ⁻⁰³	-0.04809	Increased
Lynx1	-0.50977	15.38369	-5.75396	4.39x10 ⁻⁰⁴	2.98x10 ⁻⁰³	-0.05199	Decreased
B230216G23Rik	1.099807	5.383354	5.752923	4.39x10 ⁻⁰⁴	2.98x10 ⁻⁰³	-0.05327	Increased
Bend6	1.091183	7.264057	5.748532	4.41x10 ⁻⁰⁴	2.99x10 ⁻⁰³	-0.05865	Increased
Odf311	1.677329	3.348603	5.744468	4.43x10 ⁻⁰⁴	3.00x10 ⁻⁰³	-0.06364	Increased
Prodh	-1.28444	11.72378	-5.74374	4.44x10 ⁻⁰⁴	3.00x10 ⁻⁰³	-0.06453	Decreased
Ddr1	0.559768	12.08622	5.741728	4.45x10 ⁻⁰⁴	3.01x10 ⁻⁰³	-0.067	Increased
Aurka	1.443441	7.578894	5.736736	4.47x10 ⁻⁰⁴	3.02x10 ⁻⁰³	-0.07313	Increased
Stard10	-1.02823	10.79775	-5.72608	4.53x10 ⁻⁰⁴	3.05x10 ⁻⁰³	-0.08623	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Dcxr	-0.59185	9.91307	-5.72549	4.53x10 ⁻⁰⁴	3.05x10 ⁻⁰³	-0.08695	Decreased
Cd37	0.944285	8.502596	5.724685	4.54x10 ⁻⁰⁴	3.05x10 ⁻⁰³	-0.08794	Increased
Slc25a45	0.722814	9.6386	5.7233	4.54x10 ⁻⁰⁴	3.06x10 ⁻⁰³	-0.08965	Increased
Egfr	0.876353	9.827946	5.712451	4.60x10 ⁻⁰⁴	3.08x10 ⁻⁰³	-0.103	Increased
Inadl	-0.5606	11.93507	-5.71162	4.60x10 ⁻⁰⁴	3.08x10 ⁻⁰³	-0.10403	Decreased
Oacyl	1.824224	3.946267	5.709155	4.62x10 ⁻⁰⁴	3.09x10 ⁻⁰³	-0.10706	Increased
Gpr82	2.0447	2.239808	5.705437	4.64x10 ⁻⁰⁴	3.10x10 ⁻⁰³	-0.11164	Increased
Chst12	1.107965	9.526454	5.705299	4.64x10 ⁻⁰⁴	3.10x10 ⁻⁰³	-0.11181	Increased
Rap1gap2	-0.64931	13.91123	-5.69787	4.68x10 ⁻⁰⁴	3.12x10 ⁻⁰³	-0.12098	Decreased
Ptgr1	0.768788	8.565798	5.697582	4.68x10 ⁻⁰⁴	3.12x10 ⁻⁰³	-0.12133	Increased
Aqp6	-1.01572	3.912139	-5.69632	4.69x10 ⁻⁰⁴	3.12x10 ⁻⁰³	-0.12288	Decreased
Kcnh2	-0.71345	13.46768	-5.6933	4.70x10 ⁻⁰⁴	3.13x10 ⁻⁰³	-0.12661	Decreased
Prss53	0.623637	10.70987	5.69046	4.72x10 ⁻⁰⁴	3.14x10 ⁻⁰³	-0.13012	Increased
Vkorc1	0.623637	10.70987	5.69046	4.72x10 ⁻⁰⁴	3.14x10 ⁻⁰³	-0.13012	Increased
Lpl	-0.62755	19.44886	-5.68209	4.76x10 ⁻⁰⁴	3.17x10 ⁻⁰³	-0.14046	Decreased
Cd55	0.97977	11.13357	5.681107	4.77x10 ⁻⁰⁴	3.17x10 ⁻⁰³	-0.14167	Increased
Il12rb2	-0.58648	8.424374	-5.68091	4.77x10 ⁻⁰⁴	3.17x10 ⁻⁰³	-0.14192	Decreased
Arl3	-0.51655	11.84319	-5.67682	4.79x10 ⁻⁰⁴	3.18x10 ⁻⁰³	-0.14697	Decreased
Dck	0.572444	9.375848	5.675592	4.80x10 ⁻⁰⁴	3.18x10 ⁻⁰³	-0.14849	Increased
Skap1	1.152292	4.647275	5.673931	4.81x10 ⁻⁰⁴	3.18x10 ⁻⁰³	-0.15055	Increased
Sprn	1.090733	6.901312	5.673593	4.81x10 ⁻⁰⁴	3.18x10 ⁻⁰³	-0.15096	Increased
Bcl3	0.954841	9.300002	5.673081	4.81x10 ⁻⁰⁴	3.18x10 ⁻⁰³	-0.1516	Increased
Fcgr1	1.23119	8.534592	5.672552	4.82x10 ⁻⁰⁴	3.18x10 ⁻⁰³	-0.15225	Increased
Arrdc4	0.575776	10.72293	5.672431	4.82x10 ⁻⁰⁴	3.18x10 ⁻⁰³	-0.1524	Increased
Fars2	-0.59176	12.5508	-5.6678	4.84x10 ⁻⁰⁴	3.19x10 ⁻⁰³	-0.15813	Decreased
Ass1	1.009054	9.777206	5.663243	4.87x10 ⁻⁰⁴	3.21x10 ⁻⁰³	-0.16377	Increased
Kdelc2	0.650449	11.01005	5.662039	4.87x10 ⁻⁰⁴	3.21x10 ⁻⁰³	-0.16526	Increased
Slamf7	1.999203	7.445299	5.661467	4.88x10 ⁻⁰⁴	3.21x10 ⁻⁰³	-0.16597	Increased
Got2	-0.53454	15.10663	-5.66033	4.88x10 ⁻⁰⁴	3.21x10 ⁻⁰³	-0.16739	Decreased
Kcnj3	-1.33125	12.88614	-5.6597	4.89x10 ⁻⁰⁴	3.21x10 ⁻⁰³	-0.16816	Decreased
Dnajc4	-0.54346	14.85397	-5.65908	4.89x10 ⁻⁰⁴	3.21x10 ⁻⁰³	-0.16893	Decreased
Nudt22	-0.54346	14.85397	-5.65908	4.89x10 ⁻⁰⁴	3.21x10 ⁻⁰³	-0.16893	Decreased
Cyth4	1.142833	10.85322	5.653497	4.92x10 ⁻⁰⁴	3.23x10 ⁻⁰³	-0.17585	Increased
Calr3	-0.72301	10.33987	-5.65304	4.92x10 ⁻⁰⁴	3.23x10 ⁻⁰³	-0.17641	Decreased
Ncapg2	0.76435	9.133979	5.652295	4.93x10 ⁻⁰⁴	3.23x10 ⁻⁰³	-0.17734	Increased
Clip3	1.034979	10.30496	5.650048	4.94x10 ⁻⁰⁴	3.23x10 ⁻⁰³	-0.18013	Increased
Atp5g3	-0.55268	17.17324	-5.64922	4.95x10 ⁻⁰⁴	3.23x10 ⁻⁰³	-0.18116	Decreased
Pbld1	-0.88888	8.346574	-5.64886	4.95x10 ⁻⁰⁴	3.23x10 ⁻⁰³	-0.1816	Decreased
Pbld2	-0.88888	8.346574	-5.64886	4.95x10 ⁻⁰⁴	3.23x10 ⁻⁰³	-0.1816	Decreased
Rac2	1.187497	9.082623	5.647661	4.96x10 ⁻⁰⁴	3.23x10 ⁻⁰³	-0.18309	Increased
2610020H08Rik	0.574029	7.380304	5.644949	4.97x10 ⁻⁰⁴	3.24x10 ⁻⁰³	-0.18645	Increased
Arsg	0.573247	8.513385	5.644301	4.97x10 ⁻⁰⁴	3.24x10 ⁻⁰³	-0.18726	Increased
Adcy8	-1.24903	6.510598	-5.64357	4.98x10 ⁻⁰⁴	3.24x10 ⁻⁰³	-0.18816	Decreased
Chchd3	-0.5423	15.36028	-5.63956	5.00x10 ⁻⁰⁴	3.25x10 ⁻⁰³	-0.19315	Decreased
Nmnat2	1.165745	5.521373	5.637287	5.02x10 ⁻⁰⁴	3.26x10 ⁻⁰³	-0.19596	Increased
Arhgap26	-0.89763	13.27563	-5.63716	5.02x10 ⁻⁰⁴	3.26x10 ⁻⁰³	-0.19612	Decreased
Acot4	-0.90064	6.319557	-5.63038	5.06x10 ⁻⁰⁴	3.28x10 ⁻⁰³	-0.20455	Decreased
Gpr132	1.494351	6.690816	5.628002	5.07x10 ⁻⁰⁴	3.28x10 ⁻⁰³	-0.2075	Increased
Fam101a	2.119144	5.44543	5.627846	5.07x10 ⁻⁰⁴	3.28x10 ⁻⁰³	-0.2077	Increased
Bbs2	-0.56246	10.45525	-5.62671	5.08x10 ⁻⁰⁴	3.28x10 ⁻⁰³	-0.2091	Decreased
Gm996	-0.60236	12.18822	-5.62645	5.08x10 ⁻⁰⁴	3.28x10 ⁻⁰³	-0.20944	Decreased
Mamdc4	-0.60236	12.18822	-5.62645	5.08x10 ⁻⁰⁴	3.28x10 ⁻⁰³	-0.20944	Decreased
Phpt1	-0.60236	12.18822	-5.62645	5.08x10 ⁻⁰⁴	3.28x10 ⁻⁰³	-0.20944	Decreased
Dnajc30	-0.60894	11.94923	-5.62275	5.10x10 ⁻⁰⁴	3.29x10 ⁻⁰³	-0.21403	Decreased
Slc24a2	0.715121	8.319442	5.620329	5.11x10 ⁻⁰⁴	3.29x10 ⁻⁰³	-0.21705	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Eci3	-0.54411	13.5309	-5.61983	5.12x10 ⁻⁰⁴	3.29x10 ⁻⁰³	-0.21767	Decreased
Agbl2	-0.58166	8.061571	-5.61928	5.12x10 ⁻⁰⁴	3.29x10 ⁻⁰³	-0.21835	Decreased
Pent	-0.84014	13.60973	-5.61906	5.12x10 ⁻⁰⁴	3.29x10 ⁻⁰³	-0.21863	Decreased
Nuf2	2.302448	6.889793	5.615401	5.14x10 ⁻⁰⁴	3.30x10 ⁻⁰³	-0.22318	Increased
Kif11	1.327438	8.507921	5.61265	5.16x10 ⁻⁰⁴	3.31x10 ⁻⁰³	-0.22661	Increased
Angptl3	-1.07534	7.38348	-5.60723	5.19x10 ⁻⁰⁴	3.32x10 ⁻⁰³	-0.23336	Decreased
Acs15	0.614518	11.17619	5.607173	5.19x10 ⁻⁰⁴	3.32x10 ⁻⁰³	-0.23343	Increased
Ampd2	0.765443	10.47802	5.604513	5.21x10 ⁻⁰⁴	3.33x10 ⁻⁰³	-0.23675	Increased
Camk1d	0.608546	9.406536	5.597409	5.25x10 ⁻⁰⁴	3.36x10 ⁻⁰³	-0.24561	Increased
Ube2cbp	-0.65852	6.834133	-5.59687	5.26x10 ⁻⁰⁴	3.36x10 ⁻⁰³	-0.24628	Decreased
Lxn	1.179436	9.026399	5.5906	5.29x10 ⁻⁰⁴	3.38x10 ⁻⁰³	-0.2541	Increased
Mfsd7c	-0.73578	9.432093	-5.59013	5.30x10 ⁻⁰⁴	3.38x10 ⁻⁰³	-0.25469	Decreased
Ppp1r26	-0.75606	9.122151	-5.58927	5.30x10 ⁻⁰⁴	3.38x10 ⁻⁰³	-0.25576	Decreased
Amot	0.505859	11.75344	5.588895	5.30x10 ⁻⁰⁴	3.38x10 ⁻⁰³	-0.25623	Increased
P2rx3	-0.60416	5.868107	-5.58655	5.32x10 ⁻⁰⁴	3.38x10 ⁻⁰³	-0.25917	Decreased
Foxp2	1.092765	9.190815	5.582093	5.35x10 ⁻⁰⁴	3.40x10 ⁻⁰³	-0.26473	Increased
Creb3l3	2.348576	3.434227	5.581938	5.35x10 ⁻⁰⁴	3.40x10 ⁻⁰³	-0.26493	Increased
Tagln2	0.753971	13.42424	5.576402	5.38x10 ⁻⁰⁴	3.41x10 ⁻⁰³	-0.27185	Increased
Tuba1a	0.519154	14.3398	5.57024	5.42x10 ⁻⁰⁴	3.43x10 ⁻⁰³	-0.27956	Increased
Tuba1b	0.519154	14.3398	5.57024	5.42x10 ⁻⁰⁴	3.43x10 ⁻⁰³	-0.27956	Increased
Lingo1	1.647774	7.593176	5.568687	5.43x10 ⁻⁰⁴	3.44x10 ⁻⁰³	-0.2815	Increased
Apol7e	2.107945	2.27143	5.566165	5.45x10 ⁻⁰⁴	3.44x10 ⁻⁰³	-0.28466	Increased
Capn5	0.976649	9.185205	5.560835	5.48x10 ⁻⁰⁴	3.45x10 ⁻⁰³	-0.29133	Increased
Iqgap3	2.429521	8.666056	5.559868	5.49x10 ⁻⁰⁴	3.45x10 ⁻⁰³	-0.29254	Increased
Mfsd10	0.546511	10.19966	5.559047	5.49x10 ⁻⁰⁴	3.46x10 ⁻⁰³	-0.29357	Increased
6-Mar	-0.56197	14.71505	-5.55837	5.50x10 ⁻⁰⁴	3.46x10 ⁻⁰³	-0.29442	Decreased
Pi4k2b	0.962139	8.865417	5.557437	5.50x10 ⁻⁰⁴	3.46x10 ⁻⁰³	-0.29559	Increased
Rcn1	0.510813	12.1021	5.556419	5.54x10 ⁻⁰⁴	3.46x10 ⁻⁰³	-0.29686	Increased
Pld4	0.928673	10.41045	5.553969	5.52x10 ⁻⁰⁴	3.47x10 ⁻⁰³	-0.29994	Increased
Pygo1	-0.68108	11.90005	-5.55369	5.53x10 ⁻⁰⁴	3.47x10 ⁻⁰³	-0.30029	Decreased
Dpt	0.66132	13.30958	5.541369	5.61x10 ⁻⁰⁴	3.51x10 ⁻⁰³	-0.31574	Increased
Glrp1	-0.72322	5.608421	-5.53812	5.63x10 ⁻⁰⁴	3.52x10 ⁻⁰³	-0.31982	Decreased
Eva1b	0.981978	10.14727	5.537517	5.63x10 ⁻⁰⁴	3.52x10 ⁻⁰³	-0.32058	Increased
Cep63	-0.51102	12.33425	-5.53678	5.64x10 ⁻⁰⁴	3.52x10 ⁻⁰³	-0.3215	Decreased
Ptpn6	0.931526	9.549354	5.535686	5.64x10 ⁻⁰⁴	3.52x10 ⁻⁰³	-0.32288	Increased
Gsta2	-1.94727	3.70441	-5.52839	5.69x10 ⁻⁰⁴	3.54x10 ⁻⁰³	-0.33205	Decreased
Mmp24	1.855478	3.475678	5.525906	5.71x10 ⁻⁰⁴	3.55x10 ⁻⁰³	-0.33517	Increased
Abcb11	1.254483	3.467662	5.522024	5.73x10 ⁻⁰⁴	3.56x10 ⁻⁰³	-0.34006	Increased
Spred1	0.644781	12.21122	5.520324	5.75x10 ⁻⁰⁴	3.56x10 ⁻⁰³	-0.3422	Increased
Slitrk4	1.298675	8.37191	5.517878	5.76x10 ⁻⁰⁴	3.57x10 ⁻⁰³	-0.34528	Increased
Klre1	1.487495	3.291687	5.516131	5.77x10 ⁻⁰⁴	3.57x10 ⁻⁰³	-0.34748	Increased
Eme1	1.079696	4.817876	5.514673	5.78x10 ⁻⁰⁴	3.58x10 ⁻⁰³	-0.34931	Increased
Tpd52l1	-0.58784	9.500262	-5.51036	5.81x10 ⁻⁰⁴	3.59x10 ⁻⁰³	-0.35474	Decreased
Shisa5	0.721711	12.45061	5.507414	5.83x10 ⁻⁰⁴	3.60x10 ⁻⁰³	-0.35846	Increased
Scn4a	-1.25757	12.33693	-5.50597	5.84x10 ⁻⁰⁴	3.60x10 ⁻⁰³	-0.36027	Decreased
Cyb5r3	0.598494	13.75851	5.504707	5.85x10 ⁻⁰⁴	3.60x10 ⁻⁰³	-0.36187	Increased
Cep112	-0.63397	8.889927	-5.49969	5.89x10 ⁻⁰⁴	3.62x10 ⁻⁰³	-0.3682	Decreased
Igf2bp2	0.707814	9.404775	5.498464	5.89x10 ⁻⁰⁴	3.62x10 ⁻⁰³	-0.36974	Increased
Casp3	1.199847	9.130695	5.497941	5.90x10 ⁻⁰⁴	3.62x10 ⁻⁰³	-0.3704	Increased
Ccr7	2.123164	5.082619	5.494339	5.92x10 ⁻⁰⁴	3.63x10 ⁻⁰³	-0.37495	Increased
Arhgap20	-0.89528	12.09378	-5.49376	5.93x10 ⁻⁰⁴	3.63x10 ⁻⁰³	-0.37568	Decreased
Galm	-0.69319	11.36223	-5.49178	5.94x10 ⁻⁰⁴	3.64x10 ⁻⁰³	-0.37817	Decreased
Gmfg	0.865941	8.043132	5.491423	5.94x10 ⁻⁰⁴	3.64x10 ⁻⁰³	-0.37863	Increased
Npl	0.826795	7.10072	5.488309	5.97x10 ⁻⁰⁴	3.65x10 ⁻⁰³	-0.38256	Increased
Rap1b	0.587955	13.22926	5.486915	5.97x10 ⁻⁰⁴	3.65x10 ⁻⁰³	-0.38432	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Arf4	0.548264	13.22731	5.486108	5.98x10 ⁻⁰⁴	3.65x10 ⁻⁰³	-0.38534	Increased
Cox6a2	-0.74192	14.73786	-5.48595	5.98x10 ⁻⁰⁴	3.65x10 ⁻⁰³	-0.38554	Decreased
Mmp15	-0.57232	12.85676	-5.48334	6.00x10 ⁻⁰⁴	3.66x10 ⁻⁰³	-0.38884	Decreased
Tnfrsf9	1.795692	4.551127	5.482824	6.00x10 ⁻⁰⁴	3.66x10 ⁻⁰³	-0.38949	Increased
4930503L19Rik	0.509687	10.24407	5.481331	6.01x10 ⁻⁰⁴	3.66x10 ⁻⁰³	-0.39138	Increased
Cnn3	0.614466	12.99409	5.480888	6.02x10 ⁻⁰⁴	3.66x10 ⁻⁰³	-0.39194	Increased
Phyhip	-0.51692	11.55136	-5.47889	6.03x10 ⁻⁰⁴	3.66x10 ⁻⁰³	-0.39446	Decreased
Angptl7	3.145557	10.51399	5.477517	6.04x10 ⁻⁰⁴	3.66x10 ⁻⁰³	-0.3962	Increased
Aldoc	1.300184	4.130579	5.477439	6.05x10 ⁻⁰⁴	3.66x10 ⁻⁰³	-0.3963	Increased
Klhl38	-0.94259	12.7803	-5.47633	6.06x10 ⁻⁰⁴	3.66x10 ⁻⁰³	-0.39771	Decreased
Tspan33	-1.03253	7.262653	-5.47538	6.06x10 ⁻⁰⁴	3.67x10 ⁻⁰³	-0.39891	Decreased
Ftsj2	-0.51444	10.21833	-5.47424	6.06x10 ⁻⁰⁴	3.67x10 ⁻⁰³	-0.40035	Decreased
Bcl2	0.903561	10.58322	5.472575	6.08x10 ⁻⁰⁴	3.67x10 ⁻⁰³	-0.40245	Increased
Gap43	1.820975	4.969526	5.470802	6.09x10 ⁻⁰⁴	3.68x10 ⁻⁰³	-0.40469	Increased
Tfb1m	-0.56026	9.230176	-5.46807	6.11x10 ⁻⁰⁴	3.69x10 ⁻⁰³	-0.40815	Decreased
Nlrp3	1.43934	6.508417	5.466789	6.12x10 ⁻⁰⁴	3.69x10 ⁻⁰³	-0.40977	Increased
Optrn	-0.511	14.00672	-5.46652	6.12x10 ⁻⁰⁴	3.69x10 ⁻⁰³	-0.41011	Decreased
2310042D19Rik	-0.57607	15.77658	-5.46644	6.12x10 ⁻⁰⁴	3.69x10 ⁻⁰³	-0.41021	Decreased
Flna	0.569443	15.02947	5.462419	6.15x10 ⁻⁰⁴	3.70x10 ⁻⁰³	-0.41531	Increased
Dpf1	1.424772	5.036147	5.461803	6.15x10 ⁻⁰⁴	3.70x10 ⁻⁰³	-0.41609	Increased
Fam57a	0.547121	8.575274	5.457681	6.18x10 ⁻⁰⁴	3.71x10 ⁻⁰³	-0.42131	Increased
Fndc5	-0.81578	14.55587	-5.45621	6.19x10 ⁻⁰⁴	3.72x10 ⁻⁰³	-0.42318	Decreased
Trip13	1.108817	6.182117	5.455314	6.20x10 ⁻⁰⁴	3.72x10 ⁻⁰³	-0.42431	Increased
Sv2c	-2.0791	4.562078	-5.45497	6.20x10 ⁻⁰⁴	3.72x10 ⁻⁰³	-0.42474	Decreased
Mdh2	-0.55148	17.2237	-5.44934	6.25x10 ⁻⁰⁴	3.74x10 ⁻⁰³	-0.43188	Decreased
My13	-0.52687	19.14151	-5.44831	6.25x10 ⁻⁰⁴	3.74x10 ⁻⁰³	-0.43319	Decreased
Boc	0.654361	10.08422	5.442595	6.30x10 ⁻⁰⁴	3.76x10 ⁻⁰³	-0.44044	Increased
Ndn	0.609314	9.627722	5.439522	6.32x10 ⁻⁰⁴	3.77x10 ⁻⁰³	-0.44435	Increased
Naip6	0.835912	7.756569	5.439321	6.32x10 ⁻⁰⁴	3.77x10 ⁻⁰³	-0.4446	Increased
Nfam1	0.793335	9.624315	5.435227	6.35x10 ⁻⁰⁴	3.78x10 ⁻⁰³	-0.4498	Increased
Eno2	1.198588	8.209247	5.435015	6.35x10 ⁻⁰⁴	3.78x10 ⁻⁰³	-0.45007	Increased
Serpina12	-0.94198	4.68378	-5.43499	6.35x10 ⁻⁰⁴	3.78x10 ⁻⁰³	-0.4501	Decreased
Uros	-0.51658	11.57084	-5.43186	6.38x10 ⁻⁰⁴	3.79x10 ⁻⁰³	-0.45409	Decreased
Nuak1	0.897192	12.16312	5.426169	6.42x10 ⁻⁰⁴	3.80x10 ⁻⁰³	-0.46132	Increased
Gimap3	1.156201	6.728444	5.425893	6.42x10 ⁻⁰⁴	3.80x10 ⁻⁰³	-0.46167	Increased
Atp5s	-0.50243	10.90105	-5.42304	6.44x10 ⁻⁰⁴	3.81x10 ⁻⁰³	-0.46529	Decreased
Adam5	1.747725	4.860524	5.419138	6.47x10 ⁻⁰⁴	3.82x10 ⁻⁰³	-0.47026	Increased
Ephb2	1.659089	6.999319	5.418315	6.48x10 ⁻⁰⁴	3.82x10 ⁻⁰³	-0.47131	Increased
Ndufa10	-0.56263	15.96577	-5.41587	6.50x10 ⁻⁰⁴	3.83x10 ⁻⁰³	-0.47443	Decreased
Emc9	-0.56754	11.169	-5.4158	6.50x10 ⁻⁰⁴	3.83x10 ⁻⁰³	-0.47451	Decreased
Trim6	0.50294	6.882712	5.411187	6.53x10 ⁻⁰⁴	3.84x10 ⁻⁰³	-0.48039	Increased
Lipc	1.960712	3.253412	5.410836	6.54x10 ⁻⁰⁴	3.84x10 ⁻⁰³	-0.48083	Increased
Tekt2	0.533736	6.558063	5.410703	6.54x10 ⁻⁰⁴	3.84x10 ⁻⁰³	-0.481	Increased
Gabrr2	-1.63954	7.307396	-5.41007	6.54x10 ⁻⁰⁴	3.84x10 ⁻⁰³	-0.48181	Decreased
Cnr1	2.433654	1.788044	5.408183	6.56x10 ⁻⁰⁴	3.85x10 ⁻⁰³	-0.48422	Increased
Dpp7	0.788827	9.197212	5.407658	6.56x10 ⁻⁰⁴	3.85x10 ⁻⁰³	-0.48488	Increased
Gng2	0.767848	9.584205	5.407529	6.56x10 ⁻⁰⁴	3.85x10 ⁻⁰³	-0.48505	Increased
Fam189b	0.734074	9.581431	5.405014	6.58x10 ⁻⁰⁴	3.85x10 ⁻⁰³	-0.48825	Increased
Igfbp4	0.939019	13.71108	5.399041	6.63x10 ⁻⁰⁴	3.88x10 ⁻⁰³	-0.49587	Increased
Atp5o	-0.60201	16.40668	-5.39695	6.64x10 ⁻⁰⁴	3.88x10 ⁻⁰³	-0.49853	Decreased
Klrl1	1.4648	5.254549	5.396623	6.65x10 ⁻⁰⁴	3.88x10 ⁻⁰³	-0.49896	Increased
Kcnc3	-0.62998	8.459562	-5.39392	6.67x10 ⁻⁰⁴	3.89x10 ⁻⁰³	-0.50241	Decreased
Tnfrsf13b	1.154241	6.85233	5.387287	6.72x10 ⁻⁰⁴	3.92x10 ⁻⁰³	-0.51087	Increased
Lrrc24	-0.62289	12.45629	-5.38476	6.74x10 ⁻⁰⁴	3.93x10 ⁻⁰³	-0.51411	Decreased
Cadm3	0.645825	8.826216	5.382928	6.76x10 ⁻⁰⁴	3.93x10 ⁻⁰³	-0.51644	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Darc	0.645825	8.826216	5.382928	6.76x10 ⁻⁰⁴	3.93x10 ⁻⁰³	-0.51644	Increased
Cd40	0.801278	8.429437	5.38122	6.77x10 ⁻⁰⁴	3.93x10 ⁻⁰³	-0.51863	Increased
Sat1	0.738702	11.72838	5.380468	6.78x10 ⁻⁰⁴	3.94x10 ⁻⁰³	-0.51959	Increased
Ndufa5	-0.67258	14.42158	-5.37893	6.79x10 ⁻⁰⁴	3.94x10 ⁻⁰³	-0.52155	Decreased
Klf5	1.225381	5.617158	5.378502	6.79x10 ⁻⁰⁴	3.94x10 ⁻⁰³	-0.5221	Increased
Tmem106a	0.685433	10.00065	5.378255	6.79x10 ⁻⁰⁴	3.94x10 ⁻⁰³	-0.52242	Increased
Agpat3	-0.53058	14.51366	-5.37714	6.80x10 ⁻⁰⁴	3.94x10 ⁻⁰³	-0.52385	Decreased
Thap4	-0.5677	11.40009	-5.37437	6.83x10 ⁻⁰⁴	3.95x10 ⁻⁰³	-0.52739	Decreased
Lpxn	1.16593	7.526624	5.371872	6.85x10 ⁻⁰⁴	3.96x10 ⁻⁰³	-0.53058	Increased
Asb2	-0.65053	15.82136	-5.36494	6.90x10 ⁻⁰⁴	3.98x10 ⁻⁰³	-0.53946	Decreased
Cklf	0.660921	7.614158	5.357919	6.96x10 ⁻⁰⁴	4.01x10 ⁻⁰³	-0.54845	Increased
Lad1	-0.53753	19.91913	-5.35788	6.96x10 ⁻⁰⁴	4.01x10 ⁻⁰³	-0.5485	Decreased
Trnp1	0.856256	7.62759	5.357375	6.96x10 ⁻⁰⁴	4.01x10 ⁻⁰³	-0.54915	Increased
Amz1	0.90084	7.078614	5.355664	6.98x10 ⁻⁰⁴	4.01x10 ⁻⁰³	-0.55134	Increased
Tmc7	-0.73686	10.32177	-5.34649	7.06x10 ⁻⁰⁴	4.04x10 ⁻⁰³	-0.5631	Decreased
Wdr66	0.569104	8.379426	5.346444	7.06x10 ⁻⁰⁴	4.04x10 ⁻⁰³	-0.56317	Increased
Dusp23	-0.70268	10.18685	-5.34549	7.06x10 ⁻⁰⁴	4.05x10 ⁻⁰³	-0.56439	Decreased
Sntb1	0.735128	10.00826	5.338334	7.12x10 ⁻⁰⁴	4.08x10 ⁻⁰³	-0.57358	Increased
Kifc5b	0.663288	6.946669	5.336741	7.14x10 ⁻⁰⁴	4.08x10 ⁻⁰³	-0.57562	Increased
Cox7c	-0.54471	15.1179	-5.33441	7.16x10 ⁻⁰⁴	4.09x10 ⁻⁰³	-0.57862	Decreased
Gna12	-0.55982	12.34904	-5.32858	7.21x10 ⁻⁰⁴	4.12x10 ⁻⁰³	-0.58612	Decreased
Ppp2r2c	-1.60028	6.387895	-5.3194	7.29x10 ⁻⁰⁴	4.15x10 ⁻⁰³	-0.59792	Decreased
Pglyrp1	0.75542	5.324969	5.3175	7.30x10 ⁻⁰⁴	4.16x10 ⁻⁰³	-0.60037	Increased
Shc4	1.000706	7.225256	5.317317	7.31x10 ⁻⁰⁴	4.16x10 ⁻⁰³	-0.6006	Increased
Agl	-0.53239	15.03915	-5.31617	7.32x10 ⁻⁰⁴	4.16x10 ⁻⁰³	-0.60208	Decreased
Rgs10	1.110368	9.322593	5.315795	7.32x10 ⁻⁰⁴	4.16x10 ⁻⁰³	-0.60256	Increased
Atp5g2	-0.52407	13.64704	-5.30837	7.39x10 ⁻⁰⁴	4.19x10 ⁻⁰³	-0.61212	Decreased
Asb18	-0.65199	11.76307	-5.308	7.39x10 ⁻⁰⁴	4.19x10 ⁻⁰³	-0.6126	Decreased
Gipr	1.092019	6.474513	5.305685	7.41x10 ⁻⁰⁴	4.20x10 ⁻⁰³	-0.61559	Increased
Hmgn5	-0.56975	11.66528	-5.3021	7.44x10 ⁻⁰⁴	4.21x10 ⁻⁰³	-0.62021	Decreased
Oip5	0.940915	5.606353	5.301958	7.44x10 ⁻⁰⁴	4.21x10 ⁻⁰³	-0.62039	Increased
Fam210a	-0.69937	14.78922	-5.30018	7.46x10 ⁻⁰⁴	4.21x10 ⁻⁰³	-0.62268	Decreased
Icam1	0.759838	11.0779	5.299807	7.46x10 ⁻⁰⁴	4.21x10 ⁻⁰³	-0.62316	Increased
Pou2f3	0.862556	4.372945	5.298872	7.47x10 ⁻⁰⁴	4.22x10 ⁻⁰³	-0.62437	Increased
Crispld1	0.631734	9.201593	5.29377	7.52x10 ⁻⁰⁴	4.24x10 ⁻⁰³	-0.63095	Increased
Gpr63	0.60322	7.842102	5.291943	7.53x10 ⁻⁰⁴	4.24x10 ⁻⁰³	-0.63331	Increased
Cnksr1	0.739598	11.06939	5.291068	7.54x10 ⁻⁰⁴	4.24x10 ⁻⁰³	-0.63444	Increased
Cit	0.823291	8.703475	5.289936	7.55x10 ⁻⁰⁴	4.24x10 ⁻⁰³	-0.6359	Increased
Rad9b	-0.57118	8.034326	-5.2896	7.55x10 ⁻⁰⁴	4.24x10 ⁻⁰³	-0.63634	Decreased
Sftpb	1.079843	4.583431	5.289123	7.56x10 ⁻⁰⁴	4.24x10 ⁻⁰³	-0.63695	Increased
Mbp	0.517537	8.267115	5.287067	7.58x10 ⁻⁰⁴	4.25x10 ⁻⁰³	-0.63961	Increased
Nmnat1	-0.56916	11.56558	-5.28534	7.59x10 ⁻⁰⁴	4.25x10 ⁻⁰³	-0.64185	Decreased
1810011H11Rik	1.695439	6.934571	5.28521	7.59x10 ⁻⁰⁴	4.25x10 ⁻⁰³	-0.64201	Increased
Tead2	0.626007	9.666267	5.282923	7.61x10 ⁻⁰⁴	4.26x10 ⁻⁰³	-0.64496	Increased
Lypd2	-1.15863	6.204948	-5.28171	7.63x10 ⁻⁰⁴	4.26x10 ⁻⁰³	-0.64654	Decreased
Plekhhg2	0.540499	12.45321	5.279889	7.64x10 ⁻⁰⁴	4.27x10 ⁻⁰³	-0.64888	Increased
Clic1	0.813543	13.17871	5.263157	7.80x10 ⁻⁰⁴	4.33x10 ⁻⁰³	-0.67053	Increased
4921507P07Rik	-0.50016	6.057179	-5.26135	7.81x10 ⁻⁰⁴	4.34x10 ⁻⁰³	-0.67287	Decreased
Ppp1r42	-1.40418	3.303282	-5.25662	7.86x10 ⁻⁰⁴	4.36x10 ⁻⁰³	-0.67901	Decreased
Rgs7bp	-0.70815	9.868003	-5.25418	7.88x10 ⁻⁰⁴	4.37x10 ⁻⁰³	-0.68216	Decreased
Crym	1.860216	4.239146	5.252699	7.90x10 ⁻⁰⁴	4.37x10 ⁻⁰³	-0.68409	Increased
Itpr1l2	0.571389	13.12572	5.25239	7.90x10 ⁻⁰⁴	4.37x10 ⁻⁰³	-0.68449	Increased
Eda	0.708716	8.828495	5.24945	7.93x10 ⁻⁰⁴	4.38x10 ⁻⁰³	-0.6883	Increased
Slc25a35	-0.51608	9.728171	-5.24882	7.93x10 ⁻⁰⁴	4.38x10 ⁻⁰³	-0.68912	Decreased
Casp1	0.619507	8.414861	5.248714	7.93x10 ⁻⁰⁴	4.38x10 ⁻⁰³	-0.68926	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Cstb	0.574564	10.27028	5.248418	7.94x10 ⁻⁰⁴	4.38x10 ⁻⁰³	-0.68964	Increased
Myrip	-0.70425	9.460644	-5.24833	7.94x10 ⁻⁰⁴	4.38x10 ⁻⁰³	-0.68975	Decreased
Slc9a2	-1.17703	8.882013	-5.24828	7.94x10 ⁻⁰⁴	4.38x10 ⁻⁰³	-0.68982	Decreased
Susd3	1.477909	6.827201	5.245273	7.97x10 ⁻⁰⁴	4.39x10 ⁻⁰³	-0.69372	Increased
Cntn3	-0.67351	4.563866	-5.23316	8.09x10 ⁻⁰⁴	4.44x10 ⁻⁰³	-0.70946	Decreased
Fbxl2	1.078624	6.890154	5.229715	8.12x10 ⁻⁰⁴	4.46x10 ⁻⁰³	-0.71393	Increased
Kif20b	1.385285	7.55515	5.227152	8.14x10 ⁻⁰⁴	4.47x10 ⁻⁰³	-0.71726	Increased
Map7d1	-0.51152	15.48374	-5.2217	8.20x10 ⁻⁰⁴	4.50x10 ⁻⁰³	-0.72435	Decreased
Gfra1	-0.90509	10.19379	-5.21753	8.24x10 ⁻⁰⁴	4.51x10 ⁻⁰³	-0.72978	Decreased
Nxn12	1.571343	3.79561	5.21519	8.26x10 ⁻⁰⁴	4.52x10 ⁻⁰³	-0.73282	Increased
Apol7c	1.690876	3.738583	5.212054	8.29x10 ⁻⁰⁴	4.53x10 ⁻⁰³	-0.73691	Increased
Rab44	2.281716	3.574878	5.210971	8.31x10 ⁻⁰⁴	4.53x10 ⁻⁰³	-0.73832	Increased
Kif14	1.505822	6.051765	5.205126	8.36x10 ⁻⁰⁴	4.56x10 ⁻⁰³	-0.74593	Increased
Pvrl1	0.754945	9.427705	5.20466	8.37x10 ⁻⁰⁴	4.56x10 ⁻⁰³	-0.74654	Increased
Smc2	0.720086	9.542939	5.202427	8.39x10 ⁻⁰⁴	4.56x10 ⁻⁰³	-0.74945	Increased
Fam65c	1.61625	7.115412	5.201935	8.40x10 ⁻⁰⁴	4.56x10 ⁻⁰³	-0.75009	Increased
Esrra	-0.51679	14.05159	-5.2007	8.41x10 ⁻⁰⁴	4.56x10 ⁻⁰³	-0.75171	Decreased
Kcnk4	-0.51679	14.05159	-5.2007	8.41x10 ⁻⁰⁴	4.56x10 ⁻⁰³	-0.75171	Decreased
Tex40	-0.51679	14.05159	-5.2007	8.41x10 ⁻⁰⁴	4.56x10 ⁻⁰³	-0.75171	Decreased
Slc7a3	0.952308	5.574414	5.200683	8.41x10 ⁻⁰⁴	4.56x10 ⁻⁰³	-0.75173	Increased
Cenpm	1.629021	5.472382	5.19744	8.44x10 ⁻⁰⁴	4.57x10 ⁻⁰³	-0.75596	Increased
Tspan5	0.550565	9.762674	5.197124	8.45x10 ⁻⁰⁴	4.57x10 ⁻⁰³	-0.75637	Increased
Ror2	0.806203	7.824676	5.190488	8.51x10 ⁻⁰⁴	4.60x10 ⁻⁰³	-0.76503	Increased
Crybb1	-1.41076	6.658061	-5.19032	8.52x10 ⁻⁰⁴	4.60x10 ⁻⁰³	-0.76525	Decreased
C77080	0.731335	10.27	5.19031	8.52x10 ⁻⁰⁴	4.60x10 ⁻⁰³	-0.76526	Increased
Opcml	-1.10531	7.429234	-5.18944	8.53x10 ⁻⁰⁴	4.60x10 ⁻⁰³	-0.76641	Decreased
Cenpf	-1.54848	11.46793	-5.18929	8.53x10 ⁻⁰⁴	4.60x10 ⁻⁰³	-0.7666	Decreased
Aifm1	-0.50718	13.39084	-5.17961	8.63x10 ⁻⁰⁴	4.64x10 ⁻⁰³	-0.77925	Decreased
Dact3	1.038201	11.36694	5.17902	8.63x10 ⁻⁰⁴	4.64x10 ⁻⁰³	-0.78001	Increased
Pilrb2	1.059071	6.095339	5.178649	8.64x10 ⁻⁰⁴	4.64x10 ⁻⁰³	-0.7805	Increased
Gusb	0.531993	11.82288	5.178329	8.64x10 ⁻⁰⁴	4.64x10 ⁻⁰³	-0.78092	Increased
Epha4	-1.03197	12.04169	-5.17664	8.66x10 ⁻⁰⁴	4.65x10 ⁻⁰³	-0.78312	Decreased
Slc38a3	-0.88734	13.40142	-5.17628	8.66x10 ⁻⁰⁴	4.65x10 ⁻⁰³	-0.78359	Decreased
A330021E22Rik	0.690006	7.495473	5.173392	8.69x10 ⁻⁰⁴	4.66x10 ⁻⁰³	-0.78737	Increased
Astn2	0.824869	8.550364	5.170892	8.72x10 ⁻⁰⁴	4.67x10 ⁻⁰³	-0.79064	Increased
Eef1a2	-0.57575	17.19055	-5.16577	8.77x10 ⁻⁰⁴	4.69x10 ⁻⁰³	-0.79734	Decreased
Pitpnm3	-0.78641	9.05645	-5.1613	8.82x10 ⁻⁰⁴	4.71x10 ⁻⁰³	-0.8032	Decreased
Slco5a1	-0.7297	11.63505	-5.15663	8.87x10 ⁻⁰⁴	4.74x10 ⁻⁰³	-0.80931	Decreased
Apod	0.914799	9.596158	5.154998	8.89x10 ⁻⁰⁴	4.74x10 ⁻⁰³	-0.81146	Increased
Diap3	1.888948	6.910043	5.154698	8.89x10 ⁻⁰⁴	4.74x10 ⁻⁰³	-0.81185	Increased
Lace1	-0.50122	12.53323	-5.14424	9.01x10 ⁻⁰⁴	4.79x10 ⁻⁰³	-0.82556	Decreased
Mis18a	0.618065	8.240722	5.137988	9.08x10 ⁻⁰⁴	4.83x10 ⁻⁰³	-0.83377	Increased
Pea15a	0.571932	13.43819	5.129708	9.17x10 ⁻⁰⁴	4.87x10 ⁻⁰³	-0.84465	Increased
Tram111	1.605391	4.614456	5.128389	9.18x10 ⁻⁰⁴	4.87x10 ⁻⁰³	-0.84639	Increased
Cdca71	1.509833	4.826838	5.126715	9.20x10 ⁻⁰⁴	4.88x10 ⁻⁰³	-0.84859	Increased
Hint2	-0.60082	12.41782	-5.11597	9.33x10 ⁻⁰⁴	4.93x10 ⁻⁰³	-0.86272	Decreased
Myo9b	0.511386	13.22731	5.11536	9.33x10 ⁻⁰⁴	4.93x10 ⁻⁰³	-0.86352	Increased
Spil	1.107254	9.386011	5.115322	9.33x10 ⁻⁰⁴	4.93x10 ⁻⁰³	-0.86357	Increased
Spib	1.781956	5.326236	5.111112	9.38x10 ⁻⁰⁴	4.95x10 ⁻⁰³	-0.86912	Increased
Snx10	0.531784	10.91144	5.109789	9.40x10 ⁻⁰⁴	4.95x10 ⁻⁰³	-0.87086	Increased
D830015G02Rik	-0.77729	10.38036	-5.10861	9.41x10 ⁻⁰⁴	4.95x10 ⁻⁰³	-0.87241	Decreased
Peg12	0.600197	7.332555	5.108104	9.42x10 ⁻⁰⁴	4.95x10 ⁻⁰³	-0.87308	Increased
I830012O16Rik	0.523068	11.81152	5.098845	9.52x10 ⁻⁰⁴	5.00x10 ⁻⁰³	-0.88529	Increased
Ogdhl	-0.75995	14.71782	-5.09851	9.53x10 ⁻⁰⁴	5.00x10 ⁻⁰³	-0.88573	Decreased
Acacb	-0.66569	15.94632	-5.09729	9.54x10 ⁻⁰⁴	5.00x10 ⁻⁰³	-0.88733	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Abhd15	0.633388	8.649264	5.094405	9.58x10 ⁻⁰⁴	5.01x10 ⁻⁰³	-0.89114	Increased
Rai2	-0.52507	12.33019	-5.09054	9.62x10 ⁻⁰⁴	5.03x10 ⁻⁰³	-0.89625	Decreased
Unc45b	-0.62893	14.63575	-5.09003	9.63x10 ⁻⁰⁴	5.03x10 ⁻⁰³	-0.89691	Decreased
Nhs	1.010801	7.533159	5.086528	9.67x10 ⁻⁰⁴	5.05x10 ⁻⁰³	-0.90154	Increased
Crmp1	1.283634	6.79706	5.083586	9.70x10 ⁻⁰⁴	5.06x10 ⁻⁰³	-0.90543	Increased
2310002L09Rik	-0.59373	11.85501	-5.08308	9.71x10 ⁻⁰⁴	5.06x10 ⁻⁰³	-0.9061	Decreased
S100a10	0.758831	11.86783	5.078426	9.77x10 ⁻⁰⁴	5.09x10 ⁻⁰³	-0.91225	Increased
Hist1h2bh	-0.77548	6.088409	-5.0734	9.83x10 ⁻⁰⁴	5.12x10 ⁻⁰³	-0.91889	Decreased
Gm10644	-1.41963	5.604072	-5.07287	9.83x10 ⁻⁰⁴	5.12x10 ⁻⁰³	-0.9196	Decreased
Mrpl18	-0.53568	13.38788	-5.07237	9.84x10 ⁻⁰⁴	5.12x10 ⁻⁰³	-0.92026	Decreased
Slc7a4	-0.6775	7.907325	-5.06928	9.88x10 ⁻⁰⁴	5.13x10 ⁻⁰³	-0.92434	Decreased
Slc25a29	-0.91575	9.890257	-5.06729	9.90x10 ⁻⁰⁴	5.14x10 ⁻⁰³	-0.92697	Decreased
Pdlim3	0.96492	11.26931	5.062952	9.95x10 ⁻⁰⁴	5.16x10 ⁻⁰³	-0.93272	Increased
Mob1b	0.515418	12.75967	5.060677	9.98x10 ⁻⁰⁴	5.17x10 ⁻⁰³	-0.93573	Increased
Gm872	-1.88008	3.121718	-5.05809	1.00x10 ⁻⁰³	5.18x10 ⁻⁰³	-0.93915	Decreased
Cox4i1	-0.58688	16.96284	-5.05739	1.00x10 ⁻⁰³	5.18x10 ⁻⁰³	-0.94008	Decreased
Chac2	-0.57094	10.4126	-5.05593	1.00x10 ⁻⁰³	5.19x10 ⁻⁰³	-0.94202	Decreased
Hcn4	-0.63608	9.764415	-5.05487	1.01x10 ⁻⁰³	5.19x10 ⁻⁰³	-0.94342	Decreased
Ndufb10	-0.63538	15.32542	-5.05341	1.01x10 ⁻⁰³	5.19x10 ⁻⁰³	-0.94536	Decreased
Hs3st5	-1.05711	8.16698	-5.04728	1.02x10 ⁻⁰³	5.23x10 ⁻⁰³	-0.95349	Decreased
Foxm1	1.598561	8.39354	5.042159	1.02x10 ⁻⁰³	5.26x10 ⁻⁰³	-0.96028	Increased
Marco	3.713529	3.904704	5.04169	1.02x10 ⁻⁰³	5.26x10 ⁻⁰³	-0.9609	Increased
Tmem98	0.643444	10.87763	5.039391	1.03x10 ⁻⁰³	5.27x10 ⁻⁰³	-0.96395	Increased
Il18bp	0.50358	10.526	5.037484	1.03x10 ⁻⁰³	5.28x10 ⁻⁰³	-0.96648	Increased
Th	2.257589	2.346252	5.028875	1.04x10 ⁻⁰³	5.32x10 ⁻⁰³	-0.97792	Increased
A930033H14Rik	0.806426	8.321647	5.026186	1.04x10 ⁻⁰³	5.34x10 ⁻⁰³	-0.9815	Increased
Scel	3.546182	3.692387	5.019394	1.05x10 ⁻⁰³	5.38x10 ⁻⁰³	-0.99053	Increased
Slc9a7	0.521352	8.005615	5.017706	1.05x10 ⁻⁰³	5.39x10 ⁻⁰³	-0.99277	Increased
Siglecg	1.64842	5.541194	5.016466	1.05x10 ⁻⁰³	5.39x10 ⁻⁰³	-0.99442	Increased
Ung	-0.77747	11.23444	-5.01549	1.06x10 ⁻⁰³	5.39x10 ⁻⁰³	-0.99573	Decreased
Gpr161	0.79641	9.511817	5.014304	1.06x10 ⁻⁰³	5.39x10 ⁻⁰³	-0.9973	Increased
Sod3	0.944576	12.88973	5.011158	1.06x10 ⁻⁰³	5.4x10 ⁻⁰³	-1.00149	Increased
Amtn	-2.16618	2.141803	-5.01008	1.06x10 ⁻⁰³	5.41x10 ⁻⁰³	-1.00292	Decreased
6330416G13Rik	-0.63891	10.57855	-5.00713	1.07x10 ⁻⁰³	5.42x10 ⁻⁰³	-1.00686	Decreased
Bora	0.685346	7.345495	5.000422	1.08x10 ⁻⁰³	5.46x10 ⁻⁰³	-1.01579	Increased
Aoc3	0.589827	11.68145	4.999828	1.08x10 ⁻⁰³	5.46x10 ⁻⁰³	-1.01659	Increased
Sqrdl	-0.50206	12.23064	-4.99832	1.08x10 ⁻⁰³	5.47x10 ⁻⁰³	-1.0186	Decreased
Chst10	0.815617	5.848883	4.997744	1.08x10 ⁻⁰³	5.47x10 ⁻⁰³	-1.01936	Increased
Myl7b	-0.85267	13.72705	-4.99642	1.08x10 ⁻⁰³	5.47x10 ⁻⁰³	-1.02113	Decreased
Aif1	1.155157	8.295915	4.991179	1.09x10 ⁻⁰³	5.50x10 ⁻⁰³	-1.02812	Increased
Zfp677	0.609962	8.148204	4.989411	1.09x10 ⁻⁰³	5.51x10 ⁻⁰³	-1.03048	Increased
Plin3	-0.5457	13.59768	-4.9859	1.10x10 ⁻⁰³	5.53x10 ⁻⁰³	-1.03516	Decreased
Aqp11	-0.60002	7.677778	-4.98561	1.10x10 ⁻⁰³	5.53x10 ⁻⁰³	-1.03555	Decreased
Cacnb1	0.576573	10.25056	4.983782	1.10x10 ⁻⁰³	5.54x10 ⁻⁰³	-1.038	Increased
Dhtkd1	-0.75159	9.863847	-4.9807	1.10x10 ⁻⁰³	5.55x10 ⁻⁰³	-1.04212	Decreased
Slc22a3	-1.21635	9.621739	-4.97788	1.11x10 ⁻⁰³	5.57x10 ⁻⁰³	-1.04589	Decreased
Ndufa8	-0.59265	14.69437	-4.977	1.11x10 ⁻⁰³	5.57x10 ⁻⁰³	-1.04705	Decreased
Rnf180	0.657671	6.768378	4.973243	1.11x10 ⁻⁰³	5.59x10 ⁻⁰³	-1.05208	Increased
Cox6c	-0.54692	15.74344	-4.96861	1.12x10 ⁻⁰³	5.61x10 ⁻⁰³	-1.05828	Decreased
Zc2hc1a	0.509868	10.83313	4.962791	1.13x10 ⁻⁰³	5.65x10 ⁻⁰³	-1.06606	Increased
Cd248	1.370009	10.68438	4.959925	1.13x10 ⁻⁰³	5.66x10 ⁻⁰³	-1.0699	Increased
Unc13c	1.633736	3.034326	4.95963	1.13x10 ⁻⁰³	5.66x10 ⁻⁰³	-1.07029	Increased
Ank2	-0.62181	14.28307	-4.95879	1.13x10 ⁻⁰³	5.67x10 ⁻⁰³	-1.07143	Decreased
Ecm2	0.655871	12.18204	4.955793	1.14x10 ⁻⁰³	5.68x10 ⁻⁰³	-1.07543	Increased
Leprot	0.501441	12.26542	4.952756	1.14x10 ⁻⁰³	5.70x10 ⁻⁰³	-1.0795	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Wsb1	0.609911	11.59533	4.951615	1.14x10 ⁻⁰³	5.71x10 ⁻⁰³	-1.08103	Increased
Aurkb	1.61766	6.96871	4.951603	1.14x10 ⁻⁰³	5.71x10 ⁻⁰³	-1.08105	Increased
Gas2l3	1.392883	8.840807	4.95057	1.14x10 ⁻⁰³	5.71x10 ⁻⁰³	-1.08243	Increased
Duox1	0.66293	7.04388	4.949312	1.15x10 ⁻⁰³	5.72x10 ⁻⁰³	-1.08412	Increased
Osbpl6	-0.77188	11.47727	-4.94872	1.15x10 ⁻⁰³	5.72x10 ⁻⁰³	-1.08491	Decreased
Oasl2	0.807956	10.8297	4.947775	1.15x10 ⁻⁰³	5.72x10 ⁻⁰³	-1.08618	Increased
Nalcn	0.619302	7.433856	4.946393	1.15x10 ⁻⁰³	5.73x10 ⁻⁰³	-1.08803	Increased
Agmo	0.561497	8.982128	4.945727	1.15x10 ⁻⁰³	5.73x10 ⁻⁰³	-1.08893	Increased
Fhl1	0.937887	14.45815	4.944924	1.15x10 ⁻⁰³	5.73x10 ⁻⁰³	-1.09	Increased
Bdkrb1	2.63747	2.866675	4.941924	1.16x10 ⁻⁰³	5.75x10 ⁻⁰³	-1.09403	Increased
Rgs13	-1.37025	7.560221	-4.93941	1.16x10 ⁻⁰³	5.76x10 ⁻⁰³	-1.0974	Decreased
Lif	1.959946	5.909782	4.935572	1.17x10 ⁻⁰³	5.79x10 ⁻⁰³	-1.10255	Increased
Relb	0.628901	10.41395	4.932626	1.17x10 ⁻⁰³	5.80x10 ⁻⁰³	-1.10651	Increased
Lcp2	1.145672	8.554286	4.931186	1.17x10 ⁻⁰³	5.81x10 ⁻⁰³	-1.10844	Increased
Ndufa13	-0.6178	13.06918	-4.9246	1.18x10 ⁻⁰³	5.85x10 ⁻⁰³	-1.11729	Decreased
Zp2	-0.91978	5.889114	-4.92378	1.18x10 ⁻⁰³	5.865x10 ⁻⁰³	-1.1184	Decreased
Ldlrad4	0.598885	10.75016	4.917678	1.19x10 ⁻⁰³	5.90x10 ⁻⁰³	-1.1266	Increased
Dand5	-0.55779	10.29564	-4.9173	1.19x10 ⁻⁰³	5.90x10 ⁻⁰³	-1.12711	Decreased
A1bg	-0.88011	3.777313	-4.91537	1.20x10 ⁻⁰³	5.90x10 ⁻⁰³	-1.1297	Decreased
Luzp2	-1.17795	5.204666	-4.90905	1.21x10 ⁻⁰³	5.94x10 ⁻⁰³	-1.13821	Decreased
Ccl3	2.100377	5.116663	4.901275	1.22x10 ⁻⁰³	5.99x10 ⁻⁰³	-1.14868	Increased
Gli3	0.665401	9.088464	4.900517	1.22x10 ⁻⁰³	5.99x10 ⁻⁰³	-1.1497	Increased
Smim8	-0.51212	11.69906	-4.89327	1.23x10 ⁻⁰³	6.03x10 ⁻⁰³	-1.15947	Decreased
Cdc7	0.657679	7.6173	4.889797	1.24x10 ⁻⁰³	6.05x10 ⁻⁰³	-1.16416	Increased
Ociad2	-0.64577	8.921902	-4.88906	1.24x10 ⁻⁰³	6.05x10 ⁻⁰³	-1.16516	Decreased
Nat8l	-0.5174	8.31796	-4.88739	1.24x10 ⁻⁰³	6.06x10 ⁻⁰³	-1.1674	Decreased
Cdc42se1	0.501133	11.87025	4.884338	1.24x10 ⁻⁰³	6.08x10 ⁻⁰³	-1.17153	Increased
Elovl6	0.634418	7.290832	4.883761	1.24x10 ⁻⁰³	6.08x10 ⁻⁰³	-1.17231	Increased
Ndufb9	-0.57675	14.84953	-4.87684	1.26x10 ⁻⁰³	6.12x10 ⁻⁰³	-1.18166	Decreased
Atp5e	-0.56272	14.73527	-4.87549	1.26x10 ⁻⁰³	6.12x10 ⁻⁰³	-1.18348	Decreased
Slmo2	-0.56272	14.73527	-4.87549	1.26x10 ⁻⁰³	6.12x10 ⁻⁰³	-1.18348	Decreased
Ndufb8	-0.57867	15.5981	-4.86813	1.27x10 ⁻⁰³	6.17x10 ⁻⁰³	-1.19342	Decreased
Guca1a	1.063229	4.414665	4.865477	1.27x10 ⁻⁰³	6.19x10 ⁻⁰³	-1.19701	Increased
Nr3c2	-0.80777	11.35016	-4.86267	1.28x10 ⁻⁰³	6.20x10 ⁻⁰³	-1.20081	Decreased
Nckap5l	0.612648	9.891701	4.862479	1.28x10 ⁻⁰³	6.20x10 ⁻⁰³	-1.20107	Increased
Clspn	1.634931	7.125112	4.861035	1.28x10 ⁻⁰³	6.20x10 ⁻⁰³	-1.20302	Increased
Aacs	0.807522	9.520102	4.855438	1.29x10 ⁻⁰³	6.23x10 ⁻⁰³	-1.2106	Increased
Plk4	0.84014	8.569873	4.851965	1.30x10 ⁻⁰³	6.25x10 ⁻⁰³	-1.21531	Increased
Trem14	2.000841	3.944601	4.850254	1.30x10 ⁻⁰³	6.26x10 ⁻⁰³	-1.21762	Increased
Map2k6	-0.66019	10.14076	-4.84929	1.30x10 ⁻⁰³	6.27x10 ⁻⁰³	-1.21894	Decreased
Armc7	0.803327	8.091329	4.847866	1.30x10 ⁻⁰³	6.28x10 ⁻⁰³	-1.22086	Increased
Trp53i11	1.103032	12.28368	4.845847	1.31x10 ⁻⁰³	6.28x10 ⁻⁰³	-1.2236	Increased
Musk	1.094061	4.227426	4.845833	1.31x10 ⁻⁰³	6.28x10 ⁻⁰³	-1.22362	Increased
Nme5	-0.64266	7.19132	-4.84477	1.31x10 ⁻⁰³	6.28x10 ⁻⁰³	-1.22506	Decreased
Slc38a2	0.866967	15.23407	4.841244	1.31x10 ⁻⁰³	6.30x10 ⁻⁰³	-1.22984	Increased
Slc7a5	0.659981	10.24433	4.837405	1.32x10 ⁻⁰³	6.32x10 ⁻⁰³	-1.23505	Increased
2010111I01Rik	0.586212	13.33174	4.836085	1.32x10 ⁻⁰³	6.32x10 ⁻⁰³	-1.23684	Increased
Arap1	0.568909	12.44768	4.831629	1.33x10 ⁻⁰³	6.36x10 ⁻⁰³	-1.24289	Increased
Cygb	0.94379	13.46802	4.829924	1.33x10 ⁻⁰³	6.36x10 ⁻⁰³	-1.2452	Increased
Zfp473	0.82981	4.557147	4.826845	1.34x10 ⁻⁰³	6.38x10 ⁻⁰³	-1.24938	Increased
Ckm	-0.68029	16.99758	-4.8254	1.34x10 ⁻⁰³	6.39x10 ⁻⁰³	-1.25135	Decreased
Myo1e	0.586909	11.26718	4.822073	1.35x10 ⁻⁰³	6.40x10 ⁻⁰³	-1.25587	Increased
Gadd45a	-0.68665	10.08999	-4.82	1.35x10 ⁻⁰³	6.41x10 ⁻⁰³	-1.25869	Decreased
Ear2	1.17428	4.959882	4.81991	1.35x10 ⁻⁰³	6.41x10 ⁻⁰³	-1.25881	Increased
Coq5	-0.51403	13.89709	-4.81776	1.35x10 ⁻⁰³	6.42x10 ⁻⁰³	-1.26173	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Ahrr	-0.68321	9.262472	-4.81692	1.35x10 ⁻⁰³	6.42x10 ⁻⁰³	-1.26287	Decreased
Fam171b	0.909805	8.519212	4.815549	1.36x10 ⁻⁰³	6.43x10 ⁻⁰³	-1.26473	Increased
Apex2	-0.70883	10.4849	-4.81064	1.37x10 ⁻⁰³	6.46x10 ⁻⁰³	-1.27141	Decreased
Tmsb4x	0.739171	15.09205	4.809881	1.37x10 ⁻⁰³	6.46x10 ⁻⁰³	-1.27245	Increased
9330182L06Rik	1.390058	2.954968	4.808757	1.37x10 ⁻⁰³	6.46x10 ⁻⁰³	-1.27398	Increased
Radil	0.924827	8.603349	4.80794	1.37x10 ⁻⁰³	6.47x10 ⁻⁰³	-1.27509	Increased
Sirpa	0.530553	12.80053	4.804648	1.38x10 ⁻⁰³	6.49x10 ⁻⁰³	-1.27957	Increased
Npc2	0.502808	12.99186	4.801937	1.38x10 ⁻⁰³	6.50x10 ⁻⁰³	-1.28326	Increased
Acot3	-1.3616	5.926452	-4.80132	1.38x10 ⁻⁰³	6.51x10 ⁻⁰³	-1.28409	Decreased
Zc4h2	0.838359	7.603421	4.794622	1.39x10 ⁻⁰³	6.56x10 ⁻⁰³	-1.29323	Increased
Pgm1	0.521763	9.983914	4.792897	1.40x10 ⁻⁰³	6.57x10 ⁻⁰³	-1.29558	Increased
A930017K11Rik	-2.36828	4.915734	-4.78232	1.42x10 ⁻⁰³	6.65x10 ⁻⁰³	-1.31	Decreased
Gmn	-0.55918	11.93731	-4.78135	1.42x10 ⁻⁰³	6.65x10 ⁻⁰³	-1.31133	Decreased
Alox5ap	0.654236	8.871264	4.780198	1.42x10 ⁻⁰³	6.66x10 ⁻⁰³	-1.3129	Increased
4930563D23Rik	0.976223	4.895403	4.778036	1.42x10 ⁻⁰³	6.67x10 ⁻⁰³	-1.31585	Increased
Hcst	1.759118	4.231078	4.776676	1.43x10 ⁻⁰³	6.68x10 ⁻⁰³	-1.31771	Increased
Ggn	0.820249	6.593157	4.773953	1.43x10 ⁻⁰³	6.70x10 ⁻⁰³	-1.32143	Increased
Lgals1	0.592109	14.14571	4.768285	1.44x10 ⁻⁰³	6.74x10 ⁻⁰³	-1.32918	Increased
Myo5c	-0.86614	9.900664	-4.7643	1.45x10 ⁻⁰³	6.77x10 ⁻⁰³	-1.33463	Decreased
Alkbh2	0.65013	7.413208	4.760145	1.46x10 ⁻⁰³	6.79x10 ⁻⁰³	-1.34031	Increased
Sec61b	0.566542	9.725039	4.759477	1.46x10 ⁻⁰³	6.79x10 ⁻⁰³	-1.34122	Increased
Ufsp1	-0.52088	9.29747	-4.7592	1.46x10 ⁻⁰³	6.79x10 ⁻⁰³	-1.3416	Decreased
Dpysl2	0.762949	11.76084	4.75284	1.47x10 ⁻⁰³	6.83x10 ⁻⁰³	-1.3503	Increased
Arsk	0.50579	9.698555	4.749794	1.48x10 ⁻⁰³	6.85x10 ⁻⁰³	-1.35448	Increased
Gda	0.535143	11.64592	4.745697	1.48x10 ⁻⁰³	6.88x10 ⁻⁰³	-1.36009	Increased
S100a8	2.603631	6.623736	4.745111	1.48x10 ⁻⁰³	6.88x10 ⁻⁰³	-1.36089	Increased
Slc39a13	0.504277	11.32658	4.745011	1.48x10 ⁻⁰³	6.88x10 ⁻⁰³	-1.36103	Increased
Slc38a4	0.504769	10.48914	4.744555	1.49x10 ⁻⁰³	6.88x10 ⁻⁰³	-1.36165	Increased
Ndufa3	-0.6175	13.98863	-4.74182	1.49x10 ⁻⁰³	6.90x10 ⁻⁰³	-1.36541	Decreased
Cd4	0.529417	7.14669	4.73843	1.50x10 ⁻⁰³	6.92x10 ⁻⁰³	-1.37005	Increased
Sec14l2	1.078915	7.226592	4.737233	1.50x10 ⁻⁰³	6.93x10 ⁻⁰³	-1.37169	Increased
Lrmp	0.727801	8.348847	4.731188	1.51x10 ⁻⁰³	6.97x10 ⁻⁰³	-1.37998	Increased
Ret	-0.70891	9.812971	-4.72903	1.52x10 ⁻⁰³	6.98x10 ⁻⁰³	-1.38295	Decreased
Kcp	0.742234	9.498249	4.72832	1.52x10 ⁻⁰³	6.98x10 ⁻⁰³	-1.38392	Increased
Pou2f2	1.383894	8.367303	4.727857	1.52x10 ⁻⁰³	6.98x10 ⁻⁰³	-1.38455	Increased
Unc5b	1.039419	12.75718	4.727384	1.52x10 ⁻⁰³	6.98x10 ⁻⁰³	-1.3852	Increased
Tas2r135	0.701012	12.4132	4.727115	1.52x10 ⁻⁰³	6.98x10 ⁻⁰³	-1.38557	Increased
Mgst2	1.644834	2.832356	4.726519	1.52x10 ⁻⁰³	6.98x10 ⁻⁰³	-1.38639	Increased
Zyx	0.701823	13.41094	4.725406	1.52x10 ⁻⁰³	6.99x10 ⁻⁰³	-1.38792	Increased
Uap1l1	0.577437	9.95237	4.723471	1.53x10 ⁻⁰³	7.00x10 ⁻⁰³	-1.39058	Increased
Trim62	0.642352	8.274822	4.721663	1.53x10 ⁻⁰³	7.01x10 ⁻⁰³	-1.39306	Increased
Dpyd	-0.5381	10.51999	-4.72093	1.53x10 ⁻⁰³	7.01x10 ⁻⁰³	-1.39406	Decreased
Apoc4	3.117306	3.672351	4.719194	1.53x10 ⁻⁰³	7.02x10 ⁻⁰³	-1.39645	Increased
Tifa	0.895806	8.489359	4.718287	1.54x10 ⁻⁰³	7.02x10 ⁻⁰³	-1.3977	Increased
Krt79	2.516612	3.654325	4.716625	1.54x10 ⁻⁰³	7.03x10 ⁻⁰³	-1.39998	Increased
Fmnl3	0.622496	12.76984	4.716398	1.54x10 ⁻⁰³	7.03x10 ⁻⁰³	-1.40029	Increased
Kcnd2	-0.93902	11.47503	-4.71481	1.54x10 ⁻⁰³	7.04x10 ⁻⁰³	-1.40248	Decreased
Gpx8	0.562148	11.2937	4.713413	1.55x10 ⁻⁰³	7.05x10 ⁻⁰³	-1.4044	Increased
Rad51b	0.629128	6.128184	4.713138	1.55x10 ⁻⁰³	7.05x10 ⁻⁰³	-1.40478	Increased
Cd5	1.628579	3.928926	4.708922	1.55x10 ⁻⁰³	7.06x10 ⁻⁰³	-1.41057	Increased
Myrf1	-0.64118	7.828629	-4.6969	1.58x10 ⁻⁰³	7.15x10 ⁻⁰³	-1.42712	Decreased
Creb3l1	0.909734	9.711951	4.694255	1.58x10 ⁻⁰³	7.17x10 ⁻⁰³	-1.43076	Increased
Samd14	0.567803	9.846976	4.692137	1.59x10 ⁻⁰³	7.18x10 ⁻⁰³	-1.43368	Increased
Rab13	0.852771	9.34213	4.685591	1.60x10 ⁻⁰³	7.24x10 ⁻⁰³	-1.4427	Increased
C1qa	0.792832	12.5453	4.683093	1.61x10 ⁻⁰³	7.24x10 ⁻⁰³	-1.44615	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Ece2	0.641034	9.743807	4.674606	1.62x10 ⁻⁰³	7.31x10 ⁻⁰³	-1.45786	Increased
Msi1	1.245945	5.016478	4.672669	1.63x10 ⁻⁰³	7.32x10 ⁻⁰³	-1.46053	Increased
Srcin1	-0.67801	5.46428	-4.67118	1.63x10 ⁻⁰³	7.33x10 ⁻⁰³	-1.46259	Decreased
Cenpk	1.479642	5.240303	4.667262	1.64x10 ⁻⁰³	7.36x10 ⁻⁰³	-1.468	Increased
Pitpnc1	-0.5236	13.49471	-4.66609	1.64x10 ⁻⁰³	7.37x10 ⁻⁰³	-1.46962	Decreased
4930529M08Rik	-1.70006	6.31036	-4.66562	1.64x10 ⁻⁰³	7.37x10 ⁻⁰³	-1.47028	Decreased
Dlk2	0.548829	5.161467	4.663936	1.65x10 ⁻⁰³	7.38x10 ⁻⁰³	-1.4726	Increased
Ky	-1.05312	11.44388	-4.66166	1.65x10 ⁻⁰³	7.40x10 ⁻⁰³	-1.47575	Decreased
Smad1	0.511727	11.41003	4.660549	1.65x10 ⁻⁰³	7.40x10 ⁻⁰³	-1.47728	Increased
H2-DMb1	0.869205	9.039709	4.658935	1.66x10 ⁻⁰³	7.40x10 ⁻⁰³	-1.47951	Increased
H2-DMb2	0.869205	9.039709	4.658935	1.66x10 ⁻⁰³	7.40x10 ⁻⁰³	-1.47951	Increased
Tnfrsf23	0.911414	8.96219	4.65869	1.66x10 ⁻⁰³	7.40x10 ⁻⁰³	-1.47985	Increased
Fam195a	-0.6271	12.76383	-4.65743	1.66x10 ⁻⁰³	7.41x10 ⁻⁰³	-1.48159	Decreased
Apobec1	1.102677	9.885003	4.655892	1.66x10 ⁻⁰³	7.41x10 ⁻⁰³	-1.48372	Increased
Fhod3	-0.52208	15.77645	-4.65572	1.66x10 ⁻⁰³	7.41x10 ⁻⁰³	-1.48396	Decreased
Mocos	-0.52208	15.77645	-4.65572	1.66x10 ⁻⁰³	7.41x10 ⁻⁰³	-1.48396	Decreased
Sqle	0.810878	7.972253	4.655071	1.67x10 ⁻⁰³	7.41x10 ⁻⁰³	-1.48485	Increased
Fth1	-0.51707	16.67067	-4.65504	1.67x10 ⁻⁰³	7.41x10 ⁻⁰³	-1.48489	Decreased
Fbxo41	1.360459	2.147687	4.653759	1.67x10 ⁻⁰³	7.42x10 ⁻⁰³	-1.48667	Increased
Slc45a2	1.676217	1.555566	4.652021	1.67x10 ⁻⁰³	7.43x10 ⁻⁰³	-1.48907	Increased
Ch25h	1.853037	6.005161	4.648492	1.68x10 ⁻⁰³	7.45x10 ⁻⁰³	-1.49396	Increased
Cyb561	0.755251	11.82391	4.648074	1.68x10 ⁻⁰³	7.45x10 ⁻⁰³	-1.49454	Increased
Hao	1.321274	5.322409	4.646152	1.69x10 ⁻⁰³	7.47x10 ⁻⁰³	-1.4972	Increased
Flnc	0.512335	16.40818	4.645285	1.69x10 ⁻⁰³	7.47x10 ⁻⁰³	-1.4984	Increased
Gm14403	-0.66486	11.71811	-4.64379	1.69x10 ⁻⁰³	7.48x10 ⁻⁰³	-1.50047	Decreased
Tax1bp3	0.518183	12.58261	4.639673	1.70x10 ⁻⁰³	7.51x10 ⁻⁰³	-1.50617	Increased
Nmnat3	0.660216	12.17588	4.63956	1.70x10 ⁻⁰³	7.51x10 ⁻⁰³	-1.50633	Increased
Rbp1	0.660216	12.17588	4.63956	1.70x10 ⁻⁰³	7.51x10 ⁻⁰³	-1.50633	Increased
Rap2b	0.820058	10.08574	4.639091	1.70x10 ⁻⁰³	7.51x10 ⁻⁰³	-1.50698	Increased
Tlr6	1.073959	6.824808	4.638521	1.70x10 ⁻⁰³	7.51x10 ⁻⁰³	-1.50777	Increased
Stard6	0.58663	7.201787	4.636984	1.71x10 ⁻⁰³	7.52x10 ⁻⁰³	-1.5099	Increased
Tgfbli1	0.655811	11.64435	4.63352	1.71x10 ⁻⁰³	7.54x10 ⁻⁰³	-1.5147	Increased
Gpr85	0.983364	5.277443	4.624014	1.73x10 ⁻⁰³	7.62x10 ⁻⁰³	-1.52789	Increased
Dusp9	1.728941	1.831928	4.618012	1.75x10 ⁻⁰³	7.66x10 ⁻⁰³	-1.53622	Increased
Trab2b	-0.58016	13.62762	-4.61066	1.76x10 ⁻⁰³	7.72x10 ⁻⁰³	-1.54643	Decreased
Cfi	2.347641	4.413144	4.607625	1.77x10 ⁻⁰³	7.75x10 ⁻⁰³	-1.55065	Increased
Meis3	0.50591	9.387399	4.600565	1.79x10 ⁻⁰³	7.81x10 ⁻⁰³	-1.56047	Increased
Cnpy4	0.681141	9.693818	4.599392	1.79x10 ⁻⁰³	7.81x10 ⁻⁰³	-1.5621	Increased
Sele	0.980366	8.117525	4.595667	1.80x10 ⁻⁰³	7.84x10 ⁻⁰³	-1.56728	Increased
E130012A19Rik	-1.11139	6.665289	-4.59313	1.81x10 ⁻⁰³	7.86x10 ⁻⁰³	-1.57082	Decreased
Plin4	-0.76346	15.77604	-4.58535	1.82x10 ⁻⁰³	7.93x10 ⁻⁰³	-1.58165	Decreased
Plin5	-0.76346	15.77604	-4.58535	1.82x10 ⁻⁰³	7.93x10 ⁻⁰³	-1.58165	Decreased
Gnai3	0.512163	12.06474	4.584323	1.83x10 ⁻⁰³	7.93x10 ⁻⁰³	-1.58308	Increased
Igsf8	0.617947	10.87396	4.573293	1.85x10 ⁻⁰³	8.03x10 ⁻⁰³	-1.59846	Increased
Tmem138	0.53114	8.521961	4.568287	1.87x10 ⁻⁰³	8.07x10 ⁻⁰³	-1.60545	Increased
Epha8	-1.26994	2.938003	-4.56689	1.87x10 ⁻⁰³	8.08x10 ⁻⁰³	-1.60739	Decreased
4932438H23Rik	0.706756	2.956916	4.566391	1.87x10 ⁻⁰³	8.08x10 ⁻⁰³	-1.60809	Increased
Cmtm3	0.869136	11.07366	4.563086	1.88x10 ⁻⁰³	8.11x10 ⁻⁰³	-1.61271	Increased
Tpm4	0.591919	14.10466	4.560046	1.89x10 ⁻⁰³	8.13x10 ⁻⁰³	-1.61695	Increased
Prex1	0.744218	10.995	4.558486	1.89x10 ⁻⁰³	8.14x10 ⁻⁰³	-1.61913	Increased
Cdh8	1.416057	1.279245	4.556263	1.89x10 ⁻⁰³	8.15x10 ⁻⁰³	-1.62224	Increased
Rhox2h	-1.34179	2.729606	-4.55596	1.90x10 ⁻⁰³	8.15x10 ⁻⁰³	-1.62267	Decreased
Calml4	0.969106	5.722808	4.555055	1.90x10 ⁻⁰³	8.15x10 ⁻⁰³	-1.62393	Increased
Kif21b	1.347765	8.760632	4.554581	1.90x10 ⁻⁰³	8.15x10 ⁻⁰³	-1.62459	Increased
Ypel4	0.896222	7.246777	4.552698	1.90x10 ⁻⁰³	8.17x10 ⁻⁰³	-1.62722	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Fam84a	-0.71535	6.901829	-4.55064	1.91x10 ⁻⁰³	8.18x10 ⁻⁰³	-1.6301	Decreased
Bsg	-0.50739	16.95011	-4.54388	1.93x10 ⁻⁰³	8.25x10 ⁻⁰³	-1.63956	Decreased
Anpep	0.941402	11.09224	4.543666	1.93x10 ⁻⁰³	8.25x10 ⁻⁰³	-1.63986	Increased
Wbscr27	1.006372	7.747086	4.542269	1.93x10 ⁻⁰³	8.26x10 ⁻⁰³	-1.64181	Increased
Tnfrsf11a	0.910728	8.689118	4.539242	1.94x10 ⁻⁰³	8.28x10 ⁻⁰³	-1.64605	Increased
Kcnd3	-0.69023	11.20087	-4.53686	1.94x10 ⁻⁰³	8.30x10 ⁻⁰³	-1.64938	Decreased
Mrpl2	-0.55117	12.85746	-4.53615	1.95x10 ⁻⁰³	8.30x10 ⁻⁰³	-1.65037	Decreased
Pla2g4e	-0.76206	10.09105	-4.53374	1.95x10 ⁻⁰³	8.32x10 ⁻⁰³	-1.65375	Decreased
Oprl1	1.28823	2.838295	4.532492	1.95x10 ⁻⁰³	8.32x10 ⁻⁰³	-1.6555	Increased
Erc1	-0.62879	12.92844	-4.53004	1.96x10 ⁻⁰³	8.35x10 ⁻⁰³	-1.65894	Decreased
Cacna1f	1.182835	2.455116	4.52764	1.97x10 ⁻⁰³	8.37x10 ⁻⁰³	-1.6623	Increased
Igsf6	0.849712	8.859345	4.525002	1.97x10 ⁻⁰³	8.39x10 ⁻⁰³	-1.666	Increased
Il3ra	0.645901	9.269811	4.518713	1.99x10 ⁻⁰³	8.45x10 ⁻⁰³	-1.67482	Increased
Cox5a	-0.50172	16.43127	-4.51549	2.00x10 ⁻⁰³	8.47x10 ⁻⁰³	-1.67934	Decreased
Marcks	1.060476	12.93537	4.514745	2.00x10 ⁻⁰³	8.48x10 ⁻⁰³	-1.68039	Increased
Ly75	-0.73561	7.511792	-4.51016	2.01x10 ⁻⁰³	8.52x10 ⁻⁰³	-1.68683	Decreased
Phldb3	0.765345	5.267822	4.507947	2.02x10 ⁻⁰³	8.53x10 ⁻⁰³	-1.68993	Increased
Fras1	1.97872	6.517834	4.506267	2.02x10 ⁻⁰³	8.54x10 ⁻⁰³	-1.69229	Increased
Syt5	0.843596	6.281548	4.504061	2.03x10 ⁻⁰³	8.56x10 ⁻⁰³	-1.69539	Increased
N6amt2	-0.52143	11.04227	-4.50223	2.03x10 ⁻⁰³	8.57x10 ⁻⁰³	-1.69797	Decreased
Ecsr	0.687399	10.9098	4.49902	2.04x10 ⁻⁰³	8.60x10 ⁻⁰³	-1.70247	Increased
Lck	1.425909	5.436762	4.49714	2.05x10 ⁻⁰³	8.60x10 ⁻⁰³	-1.70512	Increased
Socs1	0.999848	6.161604	4.496401	2.05x10 ⁻⁰³	8.60x10 ⁻⁰³	-1.70616	Increased
Cyp46a1	0.574015	6.760286	4.490866	2.06x10 ⁻⁰³	8.66x10 ⁻⁰³	-1.71394	Increased
Ifit1	0.652746	9.898831	4.48916	2.07x10 ⁻⁰³	8.67x10 ⁻⁰³	-1.71634	Increased
Eya2	0.812562	8.707612	4.482089	2.09x10 ⁻⁰³	8.7x10 ⁻⁰³	-1.7263	Increased
Fpr2	1.517677	4.878129	4.481315	2.09x10 ⁻⁰³	8.73x10 ⁻⁰³	-1.72739	Increased
Fpr3	1.517677	4.878129	4.481315	2.09x10 ⁻⁰³	8.73x10 ⁻⁰³	-1.72739	Increased
Exoc3l2	1.203043	8.106817	4.480845	2.09x10 ⁻⁰³	8.73x10 ⁻⁰³	-1.72805	Increased
Agpat2	-0.69801	11.95317	-4.47908	2.10x10 ⁻⁰³	8.75x10 ⁻⁰³	-1.73053	Decreased
Fhl5	2.057206	4.288542	4.477439	2.10x10 ⁻⁰³	8.76x10 ⁻⁰³	-1.73285	Increased
Top2a	1.946389	9.67977	4.475883	2.11x10 ⁻⁰³	8.77x10 ⁻⁰³	-1.73504	Increased
Flt1	-0.51672	14.43049	-4.47398	2.11x10 ⁻⁰³	8.78x10 ⁻⁰³	-1.73772	Decreased
Ppib	0.532668	11.21214	4.471601	2.12x10 ⁻⁰³	8.79x10 ⁻⁰³	-1.74107	Increased
Foxs1	1.346444	8.408354	4.469493	2.12x10 ⁻⁰³	8.80x10 ⁻⁰³	-1.74404	Increased
Scml2	0.672703	6.640438	4.465957	2.13x10 ⁻⁰³	8.84x10 ⁻⁰³	-1.74903	Increased
Gm128	1.58956	2.59272	4.463636	2.14x10 ⁻⁰³	8.85x10 ⁻⁰³	-1.7523	Increased
Prdx5	-0.5234	14.92857	-4.46326	2.14x10 ⁻⁰³	8.85x10 ⁻⁰³	-1.75284	Decreased
Gstm6	-0.6821	7.537772	-4.45989	2.15x10 ⁻⁰³	8.88x10 ⁻⁰³	-1.75759	Decreased
Pigyl	-0.56677	10.34727	-4.45832	2.15x10 ⁻⁰³	8.89x10 ⁻⁰³	-1.7598	Decreased
Zfp90	0.683991	9.539679	4.45209	2.17x10 ⁻⁰³	8.93x10 ⁻⁰³	-1.7686	Increased
Ticrr	1.387299	5.068446	4.451733	2.17x10 ⁻⁰³	8.93x10 ⁻⁰³	-1.76911	Increased
Ccr2	1.876627	9.140104	4.451163	2.18x10 ⁻⁰³	8.93x10 ⁻⁰³	-1.76991	Increased
Aldh3b1	-0.55283	14.24066	-4.44667	2.19x10 ⁻⁰³	8.97x10 ⁻⁰³	-1.77626	Decreased
Ndufs8	-0.55283	14.24066	-4.44667	2.19x10 ⁻⁰³	8.97x10 ⁻⁰³	-1.77626	Decreased
Npas3	1.727323	4.11558	4.44351	2.20x10 ⁻⁰³	9.00x10 ⁻⁰³	-1.78073	Increased
Gldn	1.668197	2.405316	4.440556	2.21x10 ⁻⁰³	9.02x10 ⁻⁰³	-1.78491	Increased
Pik3ap1	1.046303	9.405952	4.436594	2.22x10 ⁻⁰³	9.05x10 ⁻⁰³	-1.79051	Increased
Zfp820	0.744711	7.632122	4.436435	2.22x10 ⁻⁰³	9.05x10 ⁻⁰³	-1.79073	Increased
Plagl1	0.653215	9.161101	4.432115	2.23x10 ⁻⁰³	9.09x10 ⁻⁰³	-1.79685	Increased
Cenpn	0.647544	7.092624	4.430798	2.23x10 ⁻⁰³	9.10x10 ⁻⁰³	-1.79871	Increased
P2ry10	1.424934	5.193449	4.430046	2.24x10 ⁻⁰³	9.10x10 ⁻⁰³	-1.79977	Increased
Qpct	0.681584	9.148653	4.427637	2.24x10 ⁻⁰³	9.12x10 ⁻⁰³	-1.80318	Increased
Cnn2	0.580802	12.80471	4.424231	2.25x10 ⁻⁰³	9.15x10 ⁻⁰³	-1.80801	Increased
F2rl3	0.898101	8.547969	4.421569	2.26x10 ⁻⁰³	9.17x10 ⁻⁰³	-1.81178	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
C1qc	0.727516	12.397	4.421349	2.26x10 ⁻⁰³	9.17x10 ⁻⁰³	-1.81209	Increased
Nlrp1b	1.091559	6.796093	4.417546	2.27x10 ⁻⁰³	9.21x10 ⁻⁰³	-1.81748	Increased
Nusap1	1.083993	8.025989	4.417341	2.27x10 ⁻⁰³	9.21x10 ⁻⁰³	-1.81777	Increased
Rhou	0.743428	10.22351	4.416332	2.28x10 ⁻⁰³	9.22x10 ⁻⁰³	-1.8192	Increased
H2-Eb1	0.686651	12.5131	4.415167	2.28x10 ⁻⁰³	9.23x10 ⁻⁰³	-1.82085	Increased
Slamf6	1.097273	4.619766	4.404233	2.31x10 ⁻⁰³	9.33x10 ⁻⁰³	-1.83636	Increased
Srd5a2	-1.97877	2.951776	-4.4039	2.32x10 ⁻⁰³	9.33x10 ⁻⁰³	-1.83683	Decreased
Tmem237	0.557875	9.157536	4.403598	2.32x10 ⁻⁰³	9.33x10 ⁻⁰³	-1.83726	Increased
Kntc1	1.95191	6.936164	4.397663	2.34x10 ⁻⁰³	9.39x10 ⁻⁰³	-1.84569	Increased
Specc1	0.587266	9.41645	4.396166	2.34x10 ⁻⁰³	9.40x10 ⁻⁰³	-1.84782	Increased
Islr2	0.954251	7.6045	4.39265	2.35x10 ⁻⁰³	9.43x10 ⁻⁰³	-1.85281	Increased
Adamts17	0.729261	7.855479	4.392221	2.35x10 ⁻⁰³	9.43x10 ⁻⁰³	-1.85342	Increased
Scrn1	0.554099	9.823299	4.388608	2.36x10 ⁻⁰³	9.46x10 ⁻⁰³	-1.85856	Increased
H2-Aa	0.67208	12.60663	4.388261	2.36x10 ⁻⁰³	9.46x10 ⁻⁰³	-1.85905	Increased
Cyc1	-0.54119	16.32553	-4.38763	2.37x10 ⁻⁰³	9.47x10 ⁻⁰³	-1.85994	Decreased
Tro	0.624864	11.71825	4.384397	2.38x10 ⁻⁰³	9.49x10 ⁻⁰³	-1.86454	Increased
Slc22a1	-1.28877	6.38028	-4.38219	2.38x10 ⁻⁰³	9.51x10 ⁻⁰³	-1.86768	Decreased
H2-Ob	0.965116	7.211066	4.377068	2.40x10 ⁻⁰³	9.56x10 ⁻⁰³	-1.87497	Increased
Lpar5	1.028114	6.069338	4.375129	2.41x10 ⁻⁰³	9.57x10 ⁻⁰³	-1.87773	Increased
Tuba8	-0.75859	14.43259	-4.37333	2.41x10 ⁻⁰³	9.59x10 ⁻⁰³	-1.8803	Decreased
Bola1	-0.51001	10.12354	-4.3713	2.42x10 ⁻⁰³	9.61x10 ⁻⁰³	-1.88318	Decreased
Gng10	0.552001	10.50761	4.364369	2.44x10 ⁻⁰³	9.69x10 ⁻⁰³	-1.89305	Increased
Aspg	1.023286	5.237241	4.361035	2.45x10 ⁻⁰³	9.72x10 ⁻⁰³	-1.8978	Increased
Ndufa12	-0.56237	14.18108	-4.35905	2.46x10 ⁻⁰³	9.74x10 ⁻⁰³	-1.90063	Decreased
Olfr1336	-2.32987	2.279245	-4.35857	2.46x10 ⁻⁰³	9.74x10 ⁻⁰³	-1.90131	Decreased
Aoah	0.707159	8.265666	4.354059	2.47x10 ⁻⁰³	9.78x10 ⁻⁰³	-1.90775	Increased
DIncreasedd1	1.41814	3.708849	4.353292	2.48x10 ⁻⁰³	9.78x10 ⁻⁰³	-1.90885	Increased
Hsf3	-1.30499	0.314965	-4.35143	2.48x10 ⁻⁰³	9.80x10 ⁻⁰³	-1.91151	Decreased
6030419C18Rik	-0.5015	11.57988	-4.35058	2.49x10 ⁻⁰³	9.80x10 ⁻⁰³	-1.91272	Decreased
Lfng	0.694191	10.34336	4.343368	2.51x10 ⁻⁰³	9.88x10 ⁻⁰³	-1.92301	Increased
Sod1	-0.50317	14.35976	-4.34263	2.51x10 ⁻⁰³	9.88x10 ⁻⁰³	-1.92406	Decreased
Slc12a8	0.758462	6.506948	4.340464	2.52x10 ⁻⁰³	9.91x10 ⁻⁰³	-1.92716	Increased
Twist2	0.946759	6.127152	4.337561	2.53x10 ⁻⁰³	9.94x10 ⁻⁰³	-1.9313	Increased
Arhgdib	0.550197	11.3052	4.332876	2.55x10 ⁻⁰³	9.97x10 ⁻⁰³	-1.938	Increased
Erp27	0.550197	11.3052	4.332876	2.55x10 ⁻⁰³	9.97x10 ⁻⁰³	-1.938	Increased
Ikzf1	1.159972	8.485441	4.332679	2.55x10 ⁻⁰³	9.97x10 ⁻⁰³	-1.93828	Increased
Melk	1.626648	6.167803	4.33124	2.55x10 ⁻⁰³	9.98x10 ⁻⁰³	-1.94034	Increased
Rassf7	1.073212	6.441095	4.331196	2.55x10 ⁻⁰³	9.98x10 ⁻⁰³	-1.9404	Increased
Helt	-1.46529	6.693586	-4.32442	2.58x10 ⁻⁰³	1.01x10 ⁻⁰²	-1.95009	Decreased
Tes	0.851478	8.710364	4.323814	2.58x10 ⁻⁰³	1.01x10 ⁻⁰²	-1.95096	Increased
Rad51ap1	1.580558	6.959653	4.322398	2.58x10 ⁻⁰³	1.01x10 ⁻⁰²	-1.95298	Increased
Cidec	5.092451	4.697924	4.319368	2.59x10 ⁻⁰³	1.01x10 ⁻⁰²	-1.95732	Increased
Lgals7	3.121279	2.528097	4.316838	2.60x10 ⁻⁰³	1.01x10 ⁻⁰²	-1.96094	Increased
Mob3a	0.84251	9.128058	4.315931	2.60x10 ⁻⁰³	1.01x10 ⁻⁰²	-1.96224	Increased
Clcf1	0.828886	8.585831	4.31027	2.62x10 ⁻⁰³	1.02x10 ⁻⁰²	-1.97034	Increased
Pde4a	-0.59047	13.25621	-4.30537	2.64x10 ⁻⁰³	1.02x10 ⁻⁰²	-1.97736	Decreased
1600014C23Rik	0.807231	6.454712	4.293861	2.68x10 ⁻⁰³	1.04x10 ⁻⁰²	-1.99387	Increased
Il18r1	1.196447	4.50189	4.28905	2.70x10 ⁻⁰³	1.04x10 ⁻⁰²	-2.00077	Increased
Aspm	1.513111	7.718477	4.288872	2.70x10 ⁻⁰³	1.04x10 ⁻⁰²	-2.00103	Increased
Ankrd23	0.803951	15.56283	4.287396	2.71x10 ⁻⁰³	1.04x10 ⁻⁰²	-2.00315	Increased
Ankrd39	0.803951	15.56283	4.287396	2.71x10 ⁻⁰³	1.04x10 ⁻⁰²	-2.00315	Increased
Sstr4	-0.73095	6.884784	-4.28617	2.71x10 ⁻⁰³	1.05x10 ⁻⁰²	-2.00491	Decreased
Bmp2	0.759496	7.446943	4.285058	2.71x10 ⁻⁰³	1.05x10 ⁻⁰²	-2.00651	Increased
Impa2	-0.58413	10.31136	-4.27895	2.74x10 ⁻⁰³	1.05x10 ⁻⁰²	-2.01527	Decreased
Cdc25c	2.608026	4.682435	4.275138	2.75x10 ⁻⁰³	1.06x10 ⁻⁰²	-2.02076	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Spsb2	0.878547	8.431408	4.271281	2.77x10 ⁻⁰³	1.06x10 ⁻⁰²	-2.0263	Increased
Ptpn18	0.642534	8.495427	4.26865	2.78x10 ⁻⁰³	1.07x10 ⁻⁰²	-2.03009	Increased
Klra1	1.333756	4.932409	4.268073	2.78x10 ⁻⁰³	1.07x10 ⁻⁰²	-2.03092	Increased
S100a9	2.137691	7.468967	4.266048	2.78x10 ⁻⁰³	1.07x10 ⁻⁰²	-2.03383	Increased
Lst1	1.068783	7.095062	4.262688	2.80x10 ⁻⁰³	1.07x10 ⁻⁰²	-2.03866	Increased
Pthr1	0.537668	8.069803	4.260541	2.81x10 ⁻⁰³	1.08x10 ⁻⁰²	-2.04175	Increased
Adrb3	3.505005	3.654201	4.259147	2.81x10 ⁻⁰³	1.08x10 ⁻⁰²	-2.04376	Increased
BC026590	0.506892	9.509379	4.255836	2.82x10 ⁻⁰³	1.08x10 ⁻⁰²	-2.04853	Increased
Rhoh	1.194864	6.125076	4.2551	2.83x10 ⁻⁰³	1.08x10 ⁻⁰²	-2.04959	Increased
Spint1	2.252922	2.899517	4.250447	2.84x10 ⁻⁰³	1.09x10 ⁻⁰²	-2.05629	Increased
Bcl2l15	-0.85315	2.931445	-4.24852	2.85x10 ⁻⁰³	1.09x10 ⁻⁰²	-2.05907	Decreased
Gsap	0.539241	9.143292	4.247999	2.85x10 ⁻⁰³	1.09x10 ⁻⁰²	-2.05982	Increased
Papd4	-0.89154	17.06343	-4.24325	2.87x10 ⁻⁰³	1.09x10 ⁻⁰²	-2.06666	Decreased
Cog5	-0.52027	11.96846	-4.2425	2.88x10 ⁻⁰³	1.09x10 ⁻⁰²	-2.06775	Decreased
Bbox1	1.711705	3.196273	4.240962	2.88x10 ⁻⁰³	1.09x10 ⁻⁰²	-2.06996	Increased
Cox5b	-0.55645	15.76932	-4.24013	2.88x10 ⁻⁰³	1.09x10 ⁻⁰²	-2.07116	Decreased
Fam20a	0.94947	9.668839	4.238171	2.89x10 ⁻⁰³	1.10x10 ⁻⁰²	-2.07399	Increased
Cnga2	0.695223	3.796272	4.237574	2.89x10 ⁻⁰³	1.10x10 ⁻⁰²	-2.07485	Increased
Hsh2d	1.874219	2.800808	4.236898	2.90x10 ⁻⁰³	1.10x10 ⁻⁰²	-2.07583	Increased
Tlr9	0.967112	8.257454	4.236798	2.90x10 ⁻⁰³	1.10x10 ⁻⁰²	-2.07597	Increased
H1fx	0.98238	6.4648	4.235967	2.90x10 ⁻⁰³	1.10x10 ⁻⁰²	-2.07717	Increased
2310061I04Rik	-0.56199	13.31148	-4.23525	2.90x10 ⁻⁰³	1.10x10 ⁻⁰²	-2.07821	Decreased
Fbxl13	1.215593	4.948217	4.233309	2.91x10 ⁻⁰³	1.10x10 ⁻⁰²	-2.081	Increased
Il17rd	0.584131	10.98223	4.228502	2.93x10 ⁻⁰³	1.11x10 ⁻⁰²	-2.08794	Increased
Tacc3	0.889576	8.977803	4.227089	2.94x10 ⁻⁰³	1.11x10 ⁻⁰²	-2.08998	Increased
Lsmem1	-0.55035	11.58362	-4.22556	2.94x10 ⁻⁰³	1.11x10 ⁻⁰²	-2.09219	Decreased
Izumo4	0.563964	8.700207	4.224947	2.94x10 ⁻⁰³	1.11x10 ⁻⁰²	-2.09308	Increased
Mrpl42	-0.5294	14.43258	-4.22347	2.95x10 ⁻⁰³	1.11x10 ⁻⁰²	-2.09521	Decreased
Csk	0.521912	11.60948	4.22157	2.96x10 ⁻⁰³	1.11x10 ⁻⁰²	-2.09796	Increased
Scube1	0.525155	8.825935	4.220902	2.96x10 ⁻⁰³	1.11x10 ⁻⁰²	-2.09892	Increased
Cntln	0.628965	9.964676	4.219584	2.97x10 ⁻⁰³	1.12x10 ⁻⁰²	-2.10083	Increased
Tigd4	0.697439	3.907758	4.217486	2.97x10 ⁻⁰³	1.12x10 ⁻⁰²	-2.10386	Increased
Gpcpd1	-0.95077	15.1378	-4.21701	2.98x10 ⁻⁰³	1.12x10 ⁻⁰²	-2.10454	Decreased
Ccdc65	0.835965	4.386378	4.215316	2.98x10 ⁻⁰³	1.12x10 ⁻⁰²	-2.10699	Increased
Plp1	-0.52039	9.510014	-4.21511	2.98x10 ⁻⁰³	1.12x10 ⁻⁰²	-2.1073	Decreased
Mmp9	1.812657	7.149298	4.206602	3.02x10 ⁻⁰³	1.13x10 ⁻⁰²	-2.1196	Increased
Tgfb1	0.610202	11.79183	4.206015	3.02x10 ⁻⁰³	1.13x10 ⁻⁰²	-2.12045	Increased
Rad51	1.084677	7.06004	4.201828	3.04x10 ⁻⁰³	1.13x10 ⁻⁰²	-2.12651	Increased
Bhlhe40	0.58979	13.29309	4.199131	3.05x10 ⁻⁰³	1.14x10 ⁻⁰²	-2.13041	Increased
Glis2	0.921262	10.29248	4.198269	3.05x10 ⁻⁰³	1.14x10 ⁻⁰²	-2.13166	Increased
Abcg4	0.921815	5.536517	4.190624	3.09x10 ⁻⁰³	1.15x10 ⁻⁰²	-2.14273	Increased
Gm561	-0.5175	10.82857	-4.18232	3.12x10 ⁻⁰³	1.16x10 ⁻⁰²	-2.15477	Decreased
Slc25a33	-0.93802	11.72349	-4.18163	3.12x10 ⁻⁰³	1.16x10 ⁻⁰²	-2.15578	Decreased
Mapk15	0.994435	4.873023	4.175255	3.15x10 ⁻⁰³	1.17x10 ⁻⁰²	-2.16502	Increased
Dhcr24	0.520638	9.09975	4.17367	3.16x10 ⁻⁰³	1.17x10 ⁻⁰²	-2.16732	Increased
Cd8a	2.052404	4.244598	4.171849	3.16x10 ⁻⁰³	1.17x10 ⁻⁰²	-2.16996	Increased
Mmgt2	0.62794	9.068836	4.170821	3.17x10 ⁻⁰³	1.17x10 ⁻⁰²	-2.17146	Increased
Apcdd1	1.017008	9.181271	4.169912	3.17x10 ⁻⁰³	1.17x10 ⁻⁰²	-2.17278	Increased
Ndufb7	-0.52269	14.47161	-4.16849	3.18x10 ⁻⁰³	1.18x10 ⁻⁰²	-2.17484	Decreased
Smim11	-0.54508	11.93001	-4.16428	3.18x10 ⁻⁰³	1.18x10 ⁻⁰²	-2.18095	Decreased
Adamts6	0.758683	9.584026	4.15871	3.22x10 ⁻⁰³	1.19x10 ⁻⁰²	-2.18905	Increased
Arrdc5	-1.73381	5.319317	-4.15835	3.22x10 ⁻⁰³	1.19x10 ⁻⁰²	-2.18957	Decreased
3-Mar	0.530594	8.807993	4.152459	3.25x10 ⁻⁰³	1.19x10 ⁻⁰²	-2.19814	Increased
Otud7a	1.708538	2.175486	4.150298	3.26x10 ⁻⁰³	1.19x10 ⁻⁰²	-2.20128	Increased
Pde4c	-0.88499	10.40636	-4.14816	3.27x10 ⁻⁰³	1.20x10 ⁻⁰²	-2.20439	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Pp2d1	-0.56574	4.028891	-4.14612	3.28x10 ⁻⁰³	1.20x10 ⁻⁰²	-2.20735	Decreased
Anxa9	0.801455	7.311094	4.144327	3.29x10 ⁻⁰³	1.21x10 ⁻⁰²	-2.20997	Increased
Gm5150	1.740574	2.983985	4.140151	3.31x10 ⁻⁰³	1.21x10 ⁻⁰²	-2.21605	Increased
Sox8	1.303151	6.439914	4.139328	3.31x10 ⁻⁰³	1.21x10 ⁻⁰²	-2.21725	Increased
Enkur	0.795183	6.404864	4.13638	3.32x10 ⁻⁰³	1.22x10 ⁻⁰²	-2.22154	Increased
Enpp6	0.638657	8.354284	4.135455	3.33x10 ⁻⁰³	1.22x10 ⁻⁰²	-2.22289	Increased
Nrarp	0.649758	10.80354	4.134151	3.33x10 ⁻⁰³	1.22x10 ⁻⁰²	-2.22478	Increased
Tmem63c	0.788275	6.302619	4.131888	3.34x10 ⁻⁰³	1.22x10 ⁻⁰²	-2.22808	Increased
Limd2	0.751757	9.599866	4.127383	3.36x10 ⁻⁰³	1.23x10 ⁻⁰²	-2.23465	Increased
Comtd1	0.621547	6.715475	4.124735	3.38x10 ⁻⁰³	1.23x10 ⁻⁰²	-2.23851	Increased
Pxdn	0.67526	13.91152	4.12425	3.38x10 ⁻⁰³	1.23x10 ⁻⁰²	-2.23921	Increased
Lefty1	0.840799	7.777918	4.121682	3.39x10 ⁻⁰³	1.23x10 ⁻⁰²	-2.24296	Increased
Hells	0.943121	7.414223	4.120419	3.40x10 ⁻⁰³	1.23x10 ⁻⁰²	-2.2448	Increased
Dscc1	1.411868	4.547605	4.112305	3.43x10 ⁻⁰³	1.25x10 ⁻⁰²	-2.25664	Increased
A230083G16Rik	0.511056	6.676925	4.105396	3.47x10 ⁻⁰³	1.25x10 ⁻⁰²	-2.26673	Increased
Mcm8	-0.51719	9.023	-4.10464	3.47x10 ⁻⁰³	1.25x10 ⁻⁰²	-2.26784	Decreased
Arl5c	1.007888	6.582842	4.103494	3.48x10 ⁻⁰³	1.26x10 ⁻⁰²	-2.26951	Increased
Cercam	0.505232	10.6631	4.102204	3.48x10 ⁻⁰³	1.26x10 ⁻⁰²	-2.27139	Increased
Cdca5	2.195739	5.382414	4.101156	3.49x10 ⁻⁰³	1.26x10 ⁻⁰²	-2.27292	Increased
Urm1	0.505156	11.66274	4.097973	3.50x10 ⁻⁰³	1.26x10 ⁻⁰²	-2.27758	Increased
Cxcr4	1.330681	9.912898	4.095307	3.51x10 ⁻⁰³	1.27x10 ⁻⁰²	-2.28147	Increased
Myoz1	1.818621	5.37668	4.094305	3.52x10 ⁻⁰³	1.27x10 ⁻⁰²	-2.28294	Increased
Pbk	2.412695	6.151232	4.092083	3.53x10 ⁻⁰³	1.27x10 ⁻⁰²	-2.28619	Increased
Anks1	-0.55225	13.83196	-4.09171	3.53x10 ⁻⁰³	1.27x10 ⁻⁰²	-2.28673	Decreased
Slc29a3	0.599281	10.27033	4.089099	3.54x10 ⁻⁰³	1.27x10 ⁻⁰²	-2.29055	Increased
Adipoq	4.578267	5.104671	4.087124	3.55x10 ⁻⁰³	1.28x10 ⁻⁰²	-2.29344	Increased
Iqce	0.536045	9.956676	4.084428	3.57x10 ⁻⁰³	1.28x10 ⁻⁰²	-2.29739	Increased
Rasl10a	-0.96461	8.139964	-4.08312	3.57x10 ⁻⁰³	1.28x10 ⁻⁰²	-2.29931	Decreased
Ripk4	-1.16427	5.438276	-4.08131	3.58x10 ⁻⁰³	1.28x10 ⁻⁰²	-2.30195	Decreased
Mitf	-0.55539	12.72458	-4.0809	3.58x10 ⁻⁰³	1.28x10 ⁻⁰²	-2.30255	Decreased
Bin2	1.241181	7.118333	4.079837	3.59x10 ⁻⁰³	1.29x10 ⁻⁰²	-2.30411	Increased
Cxcl13	3.711674	4.688153	4.079774	3.59x10 ⁻⁰³	1.29x10 ⁻⁰²	-2.3042	Increased
Tmem130	1.155361	5.439505	4.07695	3.60x10 ⁻⁰³	1.29x10 ⁻⁰²	-2.30833	Increased
Iffo1	0.597532	11.1425	4.075055	3.61x10 ⁻⁰³	1.29x10 ⁻⁰²	-2.31111	Increased
Sgtb	0.517463	7.225334	4.073546	3.62x10 ⁻⁰³	1.29x10 ⁻⁰²	-2.31332	Increased
Gng4	1.402592	4.281556	4.073085	3.62x10 ⁻⁰³	1.29x10 ⁻⁰²	-2.314	Increased
Gspt2	0.744068	6.696637	4.072197	3.63x10 ⁻⁰³	1.29x10 ⁻⁰²	-2.3153	Increased
Slc25a47	-0.67531	10.44283	-4.07102	3.63x10 ⁻⁰³	1.30x10 ⁻⁰²	-2.31702	Decreased
Col26a1	1.994381	5.891798	4.068857	3.64x10 ⁻⁰³	1.30x10 ⁻⁰²	-2.32019	Increased
Rpp25	0.785383	6.288236	4.065717	3.66x10 ⁻⁰³	1.30x10 ⁻⁰²	-2.32479	Increased
Spatc1	0.822958	6.333234	4.058798	3.70x10 ⁻⁰³	1.31x10 ⁻⁰²	-2.33494	Increased
Tlr7	0.619915	9.335705	4.058311	3.70x10 ⁻⁰³	1.31x10 ⁻⁰²	-2.33565	Increased
Zfp879	-0.8551	7.997432	-4.05625	3.71x10 ⁻⁰³	1.32x10 ⁻⁰²	-2.33867	Decreased
Dsg2	-0.57849	13.84415	-4.05058	3.74x10 ⁻⁰³	1.32x10 ⁻⁰²	-2.347	Decreased
Trf	0.656842	12.37786	4.047226	3.76x10 ⁻⁰³	1.32x10 ⁻⁰²	-2.35192	Increased
Foxo3	-0.6953	13.82174	-4.04437	3.77x10 ⁻⁰³	1.33x10 ⁻⁰²	-2.35612	Decreased
Fam186b	1.113628	4.112191	4.042975	3.78x10 ⁻⁰³	1.33x10 ⁻⁰²	-2.35816	Increased
2810417H13Rik	1.434026	7.165374	4.039051	3.80x10 ⁻⁰³	1.34x10 ⁻⁰²	-2.36393	Increased
Art3	-0.50413	15.02961	-4.03767	3.81x10 ⁻⁰³	1.34x10 ⁻⁰²	-2.36596	Decreased
Hoxd8	0.861242	5.995621	4.029949	3.85x10 ⁻⁰³	1.35x10 ⁻⁰²	-2.37731	Increased
Atad2	0.573247	9.843114	4.029656	3.85x10 ⁻⁰³	1.35x10 ⁻⁰²	-2.37774	Increased
1700003F12Rik	1.190431	3.866253	4.025763	3.87x10 ⁻⁰³	1.35x10 ⁻⁰²	-2.38347	Increased
D17H6S56x105	1.292486	10.27112	4.025256	3.87x10 ⁻⁰³	1.35x10 ⁻⁰²	-2.38421	Increased
Plk3	0.8498	8.931207	4.024547	3.88x10 ⁻⁰³	1.36x10 ⁻⁰²	-2.38526	Increased
Fam115c	0.529131	9.113059	4.023084	3.88x10 ⁻⁰³	1.36x10 ⁻⁰²	-2.38741	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Tbx15	1.263818	7.216082	4.018729	3.91x10 ⁻⁰³	1.36x10 ⁻⁰²	-2.39382	Increased
Cdcp1	1.474176	4.79062	4.018341	3.91x10 ⁻⁰³	1.36x10 ⁻⁰²	-2.39439	Increased
Hrk	-1.19815	6.301363	-4.01422	3.93x10 ⁻⁰³	1.37x10 ⁻⁰²	-2.40047	Decreased
Ccl4	2.717212	4.373108	4.005389	3.98x10 ⁻⁰³	1.38x10 ⁻⁰²	-2.41347	Increased
Cpne7	0.610113	7.665838	4.005294	3.98x10 ⁻⁰³	1.38x10 ⁻⁰²	-2.41361	Increased
Ccl6	0.544714	10.75812	4.005245	3.98x10 ⁻⁰³	1.38x10 ⁻⁰²	-2.41368	Increased
Trim16	0.764441	10.56454	4.004764	3.98x10 ⁻⁰³	1.38x10 ⁻⁰²	-2.41439	Increased
Adra1a	-1.10236	11.68071	-4.003	3.99x10 ⁻⁰³	1.38x10 ⁻⁰²	-2.41699	Decreased
Asb11	-0.50829	13.82807	-4.00283	3.99x10 ⁻⁰³	1.38x10 ⁻⁰²	-2.41724	Decreased
Ccdc83	1.667696	3.970735	3.992149	4.05x10 ⁻⁰³	1.40x10 ⁻⁰²	-2.433	Increased
Ces1a	1.690762	2.812839	3.992108	4.05x10 ⁻⁰³	1.40x10 ⁻⁰²	-2.43306	Increased
Rps6ka1	0.551316	10.03948	3.98923	4.07x10 ⁻⁰³	1.41x10 ⁻⁰²	-2.4373	Increased
Nav1	0.844478	12.92454	3.985995	4.09x10 ⁻⁰³	1.41x10 ⁻⁰²	-2.44208	Increased
Matk	0.830721	6.967664	3.984928	4.09x10 ⁻⁰³	1.42x10 ⁻⁰²	-2.44366	Increased
Xcl1	1.419422	2.530928	3.983834	4.10x10 ⁻⁰³	1.42x10 ⁻⁰²	-2.44527	Increased
Defb42	0.67874	4.741773	3.982227	4.11x10 ⁻⁰³	1.42x10 ⁻⁰²	-2.44765	Increased
Dmp1	1.78118	3.61364	3.981785	4.11x10 ⁻⁰³	1.42x10 ⁻⁰²	-2.4483	Increased
Pkdrej	-0.59278	10.28026	-3.9808	4.12x10 ⁻⁰³	1.42x10 ⁻⁰²	-2.44975	Decreased
Lrrc25	0.808278	8.163003	3.979854	4.12x10 ⁻⁰³	1.42x10 ⁻⁰²	-2.45115	Increased
Rab36	0.693632	7.390763	3.974188	4.16x10 ⁻⁰³	1.43x10 ⁻⁰²	-2.45952	Increased
Khk	-0.50365	9.986313	-3.97222	4.17x10 ⁻⁰³	1.44x10 ⁻⁰²	-2.46243	Decreased
Lpcat4	0.540165	8.938327	3.968944	4.19x10 ⁻⁰³	1.44x10 ⁻⁰²	-2.46727	Increased
Dusp4	0.988717	8.134189	3.965906	4.20x10 ⁻⁰³	1.45x10 ⁻⁰²	-2.47177	Increased
I830077J02Rik	0.613537	6.830641	3.959497	4.24x10 ⁻⁰³	1.46x10 ⁻⁰²	-2.48125	Increased
Mxd3	1.653703	6.108987	3.956644	4.26x10 ⁻⁰³	1.46x10 ⁻⁰²	-2.48547	Increased
Tnfrsf14	0.500237	10.8896	3.946893	4.32x10 ⁻⁰³	1.48x10 ⁻⁰²	-2.49991	Increased
Ccl9	0.818471	10.28822	3.946593	4.32x10 ⁻⁰³	1.48x10 ⁻⁰²	-2.50035	Increased
Nrros	0.651492	10.19489	3.942906	4.34x10 ⁻⁰³	1.48x10 ⁻⁰²	-2.50582	Increased
Rarb	-0.6312	11.11901	-3.94279	4.34x10 ⁻⁰³	1.48x10 ⁻⁰²	-2.50599	Decreased
Acpp	2.085507	3.85829	3.942421	4.34x10 ⁻⁰³	1.48x10 ⁻⁰²	-2.50654	Increased
Rhog	0.549835	10.94068	3.942115	4.35x10 ⁻⁰³	1.48x10 ⁻⁰²	-2.50699	Increased
BC049352	0.673046	4.031641	3.940664	4.35x10 ⁻⁰³	1.49x10 ⁻⁰²	-2.50914	Increased
Nkain3	1.269816	1.706125	3.939414	4.36x10 ⁻⁰³	1.49x10 ⁻⁰²	-2.51099	Increased
Ifit3	0.70991	10.75447	3.938274	4.37x10 ⁻⁰³	1.49x10 ⁻⁰²	-2.51268	Increased
Tspan9	0.543926	13.41993	3.938042	4.37x10 ⁻⁰³	1.49x10 ⁻⁰²	-2.51303	Increased
Ifitm2	0.530593	12.16677	3.937352	4.37x10 ⁻⁰³	1.49x10 ⁻⁰²	-2.51405	Increased
Ifitm5	0.530936	11.16772	3.934598	4.39x10 ⁻⁰³	1.49x10 ⁻⁰²	-2.51813	Increased
Plekhg6	0.504904	6.563422	3.933355	4.40x10 ⁻⁰³	1.50x10 ⁻⁰²	-2.51998	Increased
Lsamp	-0.60323	7.25927	-3.92704	4.44x10 ⁻⁰³	1.51x10 ⁻⁰²	-2.52934	Decreased
Nid2	0.599509	12.06173	3.923582	4.46x10 ⁻⁰³	1.51x10 ⁻⁰²	-2.53448	Increased
Plekhg4	0.81686	5.294691	3.92198	4.47x10 ⁻⁰³	1.51x10 ⁻⁰²	-2.53686	Increased
Lhfp14	-0.58675	6.180882	-3.92179	4.47x10 ⁻⁰³	1.51x10 ⁻⁰²	-2.53715	Decreased
Lgals3bp	0.608282	12.51578	3.917224	4.50x10 ⁻⁰³	1.52x10 ⁻⁰²	-2.54392	Increased
Angpt2	0.629877	8.995357	3.912318	4.53x10 ⁻⁰³	1.53x10 ⁻⁰²	-2.55121	Increased
Nrm	0.570841	12.09322	3.911294	4.54x10 ⁻⁰³	1.53x10 ⁻⁰²	-2.55273	Increased
Gale	0.79278	7.062819	3.910531	4.54x10 ⁻⁰³	1.53x10 ⁻⁰²	-2.55386	Increased
Olfm12a	0.638207	10.3771	3.909618	4.55x10 ⁻⁰³	1.53x10 ⁻⁰²	-2.55522	Increased
Hoxa7	1.311182	3.269289	3.907606	4.56x10 ⁻⁰³	1.54x10 ⁻⁰²	-2.55821	Increased
Plaur	0.934828	8.429387	3.905039	4.58x10 ⁻⁰³	1.54x10 ⁻⁰²	-2.56203	Increased
Pcyox11	0.594385	8.275064	3.904376	4.58x10 ⁻⁰³	1.54x10 ⁻⁰²	-2.56301	Increased
Myo16	1.493087	1.964001	3.899364	4.61x10 ⁻⁰³	1.55x10 ⁻⁰²	-2.57047	Increased
Cx3cr1	1.887841	8.133418	3.897782	4.62x10 ⁻⁰³	1.55x10 ⁻⁰²	-2.57282	Increased
Bpifb1	-0.92105	3.545876	-3.89332	4.65x10 ⁻⁰³	1.56x10 ⁻⁰²	-2.57946	Decreased
Atp5k	-0.57267	14.95775	-3.89036	4.67x10 ⁻⁰³	1.56x10 ⁻⁰²	-2.58387	Decreased
Pou2af1	1.087489	5.945182	3.887411	4.69x10 ⁻⁰³	1.57x10 ⁻⁰²	-2.58826	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Vmn2r15	-1.67634	2.727366	-3.88646	4.70x10 ⁻⁰³	1.57x10 ⁻⁰²	-2.58967	Decreased
Btbd11	-0.98786	8.693855	-3.88388	4.72x10 ⁻⁰³	1.57x10 ⁻⁰²	-2.59352	Decreased
Ttc25	-0.71182	5.417984	-3.88318	4.72x10 ⁻⁰³	1.57x10 ⁻⁰²	-2.59456	Decreased
Nfe2l3	1.138004	5.027003	3.881416	4.73x10 ⁻⁰³	1.58x10 ⁻⁰²	-2.59719	Increased
AU023871	-1.03918	4.533039	-3.88108	4.73x10 ⁻⁰³	1.58x10 ⁻⁰²	-2.59768	Decreased
Cnrip1	0.762798	8.285555	3.879628	4.74x10 ⁻⁰³	1.58x10 ⁻⁰²	-2.59985	Increased
Fam105b	0.582792	11.46917	3.875923	4.77x10 ⁻⁰³	1.59x10 ⁻⁰²	-2.60537	Increased
Artn	2.494435	3.312755	3.87242	4.79x10 ⁻⁰³	1.59x10 ⁻⁰²	-2.61059	Increased
Lypd6b	1.218473	3.303417	3.872055	4.79x10 ⁻⁰³	1.59x10 ⁻⁰²	-2.61114	Increased
Mmp25	0.973766	4.922978	3.86921	4.81x10 ⁻⁰³	1.60x10 ⁻⁰²	-2.61538	Increased
Emid1	0.722385	8.364667	3.858928	4.88x10 ⁻⁰³	1.62x10 ⁻⁰²	-2.63072	Increased
Oas1c	0.815681	6.806944	3.858857	4.88x10 ⁻⁰³	1.62x10 ⁻⁰²	-2.63083	Increased
Fscn1	0.971709	12.37294	3.858152	4.89x10 ⁻⁰³	1.62x10 ⁻⁰²	-2.63188	Increased
Strc	0.86312	3.431339	3.847915	4.96x10 ⁻⁰³	1.64x10 ⁻⁰²	-2.64717	Increased
Fbxo5	0.624157	7.546629	3.84708	4.97x10 ⁻⁰³	1.64x10 ⁻⁰²	-2.64841	Increased
Car3	4.96647	7.164836	3.845446	4.98x10 ⁻⁰³	1.64x10 ⁻⁰²	-2.65085	Increased
Syng3	1.253248	3.442161	3.838849	5.02x10 ⁻⁰³	1.65x10 ⁻⁰²	-2.66071	Increased
Tenm2	-2.35318	3.000027	-3.83565	5.05x10 ⁻⁰³	1.66x10 ⁻⁰²	-2.66549	Decreased
Prtn3	2.216465	3.2508	3.835534	5.05x10 ⁻⁰³	1.66x10 ⁻⁰²	-2.66567	Increased
Ndufs5	-0.50106	13.95195	-3.8337	5.06x10 ⁻⁰³	1.66x10 ⁻⁰²	-2.66842	Decreased
Parbp	2.329821	5.372912	3.83263	5.07x10 ⁻⁰³	1.66x10 ⁻⁰²	-2.67001	Increased
Pkd1	0.732254	14.17599	3.826734	5.11x10 ⁻⁰³	1.67x10 ⁻⁰²	-2.67883	Increased
Col9a3	0.771768	5.678546	3.823776	5.13x10 ⁻⁰³	1.68x10 ⁻⁰²	-2.68326	Increased
Rasef	-0.98654	6.418287	-3.82326	5.14x10 ⁻⁰³	1.68x10 ⁻⁰²	-2.68403	Decreased
Sorcs2	-0.7692	11.39339	-3.81909	5.17x10 ⁻⁰³	1.69x10 ⁻⁰²	-2.69027	Decreased
Irf8	0.791863	9.870998	3.817424	5.18x10 ⁻⁰³	1.69x10 ⁻⁰²	-2.69277	Increased
Grrp1	0.619272	9.38242	3.8104	5.23x10 ⁻⁰³	1.70x10 ⁻⁰²	-2.7033	Increased
Igfbp5	0.544606	14.29664	3.81026	5.23x10 ⁻⁰³	1.70x10 ⁻⁰²	-2.70351	Increased
Dnph1	-0.54011	7.115627	-3.80714	5.25x10 ⁻⁰³	1.71x10 ⁻⁰²	-2.70818	Decreased
Gli1	1.06273	8.024861	3.804589	5.27x10 ⁻⁰³	1.71x10 ⁻⁰²	-2.71201	Increased
Ropn11	0.658349	4.752341	3.804497	5.27x10 ⁻⁰³	1.71x10 ⁻⁰²	-2.71214	Increased
Tnfsf9	0.536999	6.191941	3.800584	5.30x10 ⁻⁰³	1.72x10 ⁻⁰²	-2.71801	Increased
Stbd1	0.707245	10.85134	3.799877	5.31x10 ⁻⁰³	1.72x10 ⁻⁰²	-2.71907	Increased
Maneal	-0.78383	5.836676	-3.7968	5.33x10 ⁻⁰³	1.73x10 ⁻⁰²	-2.72369	Decreased
Clip2	0.67999	11.21081	3.796341	5.34x10 ⁻⁰³	1.73x10 ⁻⁰²	-2.72438	Increased
Mgl2	-0.76639	9.608476	-3.79535	5.34x10 ⁻⁰³	1.73x10 ⁻⁰²	-2.72587	Decreased
Stambpl1	0.578791	8.586447	3.787063	5.41x10 ⁻⁰³	1.74x10 ⁻⁰²	-2.7383	Increased
Ctf2	-1.56797	4.525737	-3.78654	5.41x10 ⁻⁰³	1.74x10 ⁻⁰²	-2.73909	Decreased
Eif5a2	0.581416	9.1579	3.785555	5.42x10 ⁻⁰³	1.74x10 ⁻⁰²	-2.74056	Increased
Lonrf1	-0.77042	10.83464	-3.78539	5.42x10 ⁻⁰³	1.74x10 ⁻⁰²	-2.7408	Decreased
Rasgef1c	-1.12795	5.338822	-3.78513	5.42x10 ⁻⁰³	1.74x10 ⁻⁰²	-2.74121	Decreased
Prr15	1.045628	6.677425	3.784742	5.42x10 ⁻⁰³	1.74x10 ⁻⁰²	-2.74179	Increased
Ndufab1	-0.51454	14.92703	-3.78359	5.43x10 ⁻⁰³	1.74x10 ⁻⁰²	-2.74351	Decreased
2810408A11Rik	0.51834	8.052719	3.782216	5.44x10 ⁻⁰³	1.75x10 ⁻⁰²	-2.74558	Increased
Acap1	0.51834	8.052719	3.782216	5.44x10 ⁻⁰³	1.75x10 ⁻⁰²	-2.74558	Increased
Podn11	2.644834	3.412838	3.781733	5.45x10 ⁻⁰³	1.75x10 ⁻⁰²	-2.7463	Increased
Cdhr1	2.002922	3.072678	3.780899	5.45x10 ⁻⁰³	1.75x10 ⁻⁰²	-2.74756	Increased
Sla2	0.668112	3.131996	3.780525	5.46x10 ⁻⁰³	1.75x10 ⁻⁰²	-2.74812	Increased
Gapt	0.66909	4.953835	3.778318	5.47x10 ⁻⁰³	1.75x10 ⁻⁰²	-2.75143	Increased
2610318N02Rik	1.823708	2.379312	3.77491	5.50x10 ⁻⁰³	1.76x10 ⁻⁰²	-2.75655	Increased
Ckmt2	-0.53082	17.65616	-3.77376	5.51x10 ⁻⁰³	1.76x10 ⁻⁰²	-2.75829	Decreased
Fktn	-0.63659	11.34351	-3.77235	5.52x10 ⁻⁰³	1.76x10 ⁻⁰²	-2.7604	Decreased
Trmt5	-0.50014	12.08595	-3.77135	5.53x10 ⁻⁰³	1.76x10 ⁻⁰²	-2.76191	Decreased
Tuft1	0.798339	7.546865	3.763611	5.59x10 ⁻⁰³	1.78x10 ⁻⁰²	-2.77354	Increased
Shcbp1	1.140337	6.476939	3.760386	5.62x10 ⁻⁰³	1.78x10 ⁻⁰²	-2.77839	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Slc35e4	0.500473	10.06682	3.753025	5.67x10 ⁻⁰³	1.79x10 ⁻⁰²	-2.78947	Increased
Zfp40	0.561638	9.088384	3.749507	5.70x10 ⁻⁰³	1.81x10 ⁻⁰²	-2.79477	Increased
Ccl24	-0.60936	6.841036	-3.74772	5.72x10 ⁻⁰³	1.81x10 ⁻⁰²	-2.79746	Decreased
Lgr5	1.184055	5.102905	3.747577	5.72x10 ⁻⁰³	1.81x10 ⁻⁰²	-2.79768	Increased
Msl3l2	0.776586	7.320646	3.747449	5.72x10 ⁻⁰³	1.81x10 ⁻⁰²	-2.79787	Increased
Sgsm1	0.904772	6.646643	3.746439	5.73x10 ⁻⁰³	1.81x10 ⁻⁰²	-2.79939	Increased
Rbbp8	0.505127	9.705041	3.744101	5.75x10 ⁻⁰³	1.81x10 ⁻⁰²	-2.80291	Increased
Epha6	-1.95123	2.589924	-3.73969	5.78x10 ⁻⁰³	1.82x10 ⁻⁰²	-2.80956	Decreased
Trerf1	0.544865	9.434066	3.737368	5.80x10 ⁻⁰³	1.82x10 ⁻⁰²	-2.81306	Increased
Tnfrsf8	1.028255	3.948147	3.733543	5.83x10 ⁻⁰³	1.84x10 ⁻⁰²	-2.81882	Increased
Edn3	1.040816	8.159375	3.732039	5.85x10 ⁻⁰³	1.84x10 ⁻⁰²	-2.82109	Increased
Pcyt1b	0.644783	5.428773	3.728463	5.88x10 ⁻⁰³	1.84x10 ⁻⁰²	-2.82648	Increased
Gjc3	-1.0599	5.411631	-3.72593	5.90x10 ⁻⁰³	1.85x10 ⁻⁰²	-2.83031	Decreased
Bco2	1.096439	5.532305	3.725108	5.91x10 ⁻⁰³	1.85x10 ⁻⁰²	-2.83154	Increased
Kcnj6	1.57745	6.760622	3.722456	5.93x10 ⁻⁰³	1.86x10 ⁻⁰²	-2.83554	Increased
Nhs1l	-0.50028	11.50279	-3.7204	5.94x10 ⁻⁰³	1.86x10 ⁻⁰²	-2.83865	Decreased
Cd8b1	1.270998	4.198523	3.720339	5.95x10 ⁻⁰³	1.86x10 ⁻⁰²	-2.83874	Increased
Tmie	-0.55895	7.902871	-3.71734	5.97x10 ⁻⁰³	1.86x10 ⁻⁰²	-2.84327	Decreased
Exo5	0.547901	8.406131	3.717334	5.97x10 ⁻⁰³	1.86x10 ⁻⁰²	-2.84327	Increased
Zim1	-0.52314	8.128601	-3.70995	6.03x10 ⁻⁰³	1.88x10 ⁻⁰²	-2.85443	Decreased
Neurl3	0.956534	9.934466	3.708144	6.05x10 ⁻⁰³	1.88x10 ⁻⁰²	-2.85715	Increased
Arsj	0.931406	5.849897	3.703326	6.09x10 ⁻⁰³	1.88x10 ⁻⁰²	-2.86443	Increased
Cd19	1.226078	6.523094	3.693055	6.18x10 ⁻⁰³	1.92x10 ⁻⁰²	-2.87996	Increased
Gipc3	-0.56439	8.190296	-3.68966	6.21x10 ⁻⁰³	1.92x10 ⁻⁰²	-2.8851	Decreased
Dest1	1.412268	5	3.686262	6.24x10 ⁻⁰³	1.93x10 ⁻⁰²	-2.89024	Increased
Ccnf	1.604274	6.79516	3.686259	6.24x10 ⁻⁰³	1.93x10 ⁻⁰²	-2.89024	Increased
Chaf1b	1.111977	6.601773	3.68511	6.25x10 ⁻⁰³	1.93x10 ⁻⁰²	-2.89198	Increased
Fam64a	2.260764	6.89788	3.683209	6.27x10 ⁻⁰³	1.93x10 ⁻⁰²	-2.89486	Increased
Fam83e	-1.19143	5.26971	-3.67805	6.32x10 ⁻⁰³	1.94x10 ⁻⁰²	-2.90266	Decreased
Dhx58	0.664198	8.336938	3.674233	6.32x10 ⁻⁰³	1.95x10 ⁻⁰²	-2.90844	Increased
Cenph	1.498993	4.592165	3.668214	6.41x10 ⁻⁰³	1.96x10 ⁻⁰²	-2.91756	Increased
Foxl1	1.472145	3.05161	3.66399	6.45x10 ⁻⁰³	1.97x10 ⁻⁰²	-2.92396	Increased
Tbxas1	0.663942	8.455022	3.663328	6.45x10 ⁻⁰³	1.97x10 ⁻⁰²	-2.92497	Increased
Tjp3	0.650887	4.120696	3.657712	6.50x10 ⁻⁰³	1.99x10 ⁻⁰²	-2.93348	Increased
Cyp2r1	0.568219	7.873719	3.65684	6.51x10 ⁻⁰³	1.99x10 ⁻⁰²	-2.9348	Increased
Gins2	0.694647	6.887557	3.65457	6.53x10 ⁻⁰³	1.99x10 ⁻⁰²	-2.93825	Increased
Asprv1	1.488433	3.938397	3.654545	6.53x10 ⁻⁰³	1.99x10 ⁻⁰²	-2.93828	Increased
Itpka	-0.59747	3.834169	-3.65038	6.57x10 ⁻⁰³	2.00x10 ⁻⁰²	-2.94461	Decreased
Lgi1	-1.02469	9.592792	-3.6488	6.59x10 ⁻⁰³	2.01x10 ⁻⁰²	-2.94699	Decreased
Erc2	0.775749	7.604324	3.644747	6.63x10 ⁻⁰³	2.01x10 ⁻⁰²	-2.95315	Increased
Rnf222	-0.92212	4.921318	-3.64305	6.64x10 ⁻⁰³	2.02x10 ⁻⁰²	-2.95573	Decreased
Bin3	0.707087	10.55928	3.642169	6.65x10 ⁻⁰³	2.02x10 ⁻⁰²	-2.95706	Increased
Egr3	0.707087	10.55928	3.642169	6.65x10 ⁻⁰³	2.02x10 ⁻⁰²	-2.95706	Increased
Gabrq	1.811479	3.721276	3.636798	6.70x10 ⁻⁰³	2.03x10 ⁻⁰²	-2.96522	Increased
Aqp1	-0.55129	15.81294	-3.62242	6.84x10 ⁻⁰³	2.07x10 ⁻⁰²	-2.98707	Decreased
Tdgfl	1.621731	2.480162	3.621001	6.86x10 ⁻⁰³	2.07x10 ⁻⁰²	-2.98922	Increased
Kif6	-0.63776	8.011854	-3.6174	6.89x10 ⁻⁰³	2.08x10 ⁻⁰²	-2.99469	Decreased
Anxa13	-0.60656	7.195672	-3.61592	6.91x10 ⁻⁰³	2.08x10 ⁻⁰²	-2.99695	Decreased
Atplb4	1.666057	1.904245	3.615064	6.92x10 ⁻⁰³	2.09x10 ⁻⁰²	-2.99825	Increased
Pgbd5	0.685729	5.930267	3.614573	6.92x10 ⁻⁰³	2.09x10 ⁻⁰²	-2.999	Increased
Tvp23a	0.622904	7.757615	3.613391	6.93x10 ⁻⁰³	2.09x10 ⁻⁰²	-3.0008	Increased
Greb1l	0.789547	7.336572	3.60079	7.06x10 ⁻⁰³	2.12x10 ⁻⁰²	-3.01997	Increased
Fpr1	2.551842	3.591458	3.600546	7.06x10 ⁻⁰³	2.12x10 ⁻⁰²	-3.02035	Increased
2610018G03Rik	1.097548	7.090307	3.598714	7.08x10 ⁻⁰³	2.13x10 ⁻⁰²	-3.02313	Increased
Ces2b	1.55278	3.097607	3.598309	7.09x10 ⁻⁰³	2.13x10 ⁻⁰²	-3.02375	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Ppp1r1a	-0.5907	6.928253	-3.59708	7.10x10 ⁻⁰³	2.13x10 ⁻⁰²	-3.02563	Decreased
Tlr1	1.317127	7.520958	3.592545	7.14x10 ⁻⁰³	2.14x10 ⁻⁰²	-3.03253	Increased
Klf15	-1.18328	12.06905	-3.59181	7.15x10 ⁻⁰³	2.14x10 ⁻⁰²	-3.03365	Decreased
Hapln4	1.501019	3.152209	3.58345	7.24x10 ⁻⁰³	2.16x10 ⁻⁰²	-3.04639	Increased
D10Bwg1379e	1.628903	3.17815	3.582755	7.25x10 ⁻⁰³	2.16x10 ⁻⁰²	-3.04745	Increased
Efhdl	0.883584	8.800294	3.582529	7.25x10 ⁻⁰³	2.16x10 ⁻⁰²	-3.0478	Increased
Chrna2	-1.13209	7.410368	-3.57883	7.29x10 ⁻⁰³	2.17x10 ⁻⁰²	-3.05343	Decreased
Rims4	-0.76331	7.88379	-3.57878	7.29x10 ⁻⁰³	2.17x10 ⁻⁰²	-3.05351	Decreased
Gsdma	1.928028	4.468273	3.576587	7.31x10 ⁻⁰³	2.18x10 ⁻⁰²	-3.05686	Increased
8430427H17Rik	0.503285	9.942577	3.573916	7.34x10 ⁻⁰³	2.19x10 ⁻⁰²	-3.06093	Increased
Esr1	0.840205	5.751547	3.573114	7.35x10 ⁻⁰³	2.19x10 ⁻⁰²	-3.06215	Increased
Sptb	-0.53712	14.92741	-3.57037	7.38x10 ⁻⁰³	2.19x10 ⁻⁰²	-3.06633	Decreased
Slc39a4	1.392	4.124045	3.568598	7.40x10 ⁻⁰³	2.20x10 ⁻⁰²	-3.06904	Increased
L3mbtl1	1.814352	2.308875	3.56031	7.49x10 ⁻⁰³	2.22x10 ⁻⁰²	-3.08169	Increased
Sec14l4	-1.04026	1.989808	-3.55948	7.50x10 ⁻⁰³	2.22x10 ⁻⁰²	-3.08296	Decreased
Mettl24	-0.58886	6.308189	-3.55754	7.52x10 ⁻⁰³	2.23x10 ⁻⁰²	-3.08592	Decreased
Rs1	-0.89672	5.145695	-3.5493	7.61x10 ⁻⁰³	2.25x10 ⁻⁰²	-3.09851	Decreased
Wnt9b	1.49723	6.565661	3.547838	7.62x10 ⁻⁰³	2.25x10 ⁻⁰²	-3.10075	Increased
Nrg1	1.046091	8.256758	3.547316	7.63x10 ⁻⁰³	2.25x10 ⁻⁰²	-3.10154	Increased
Zbtbd6	1.534088	3.478822	3.54617	7.64x10 ⁻⁰³	2.25x10 ⁻⁰²	-3.1033	Increased
Dtl	1.608604	6.497228	3.544523	7.66x10 ⁻⁰³	2.26x10 ⁻⁰²	-3.10581	Increased
Smco2	-1.19778	3.288	-3.53973	7.713x10 ⁻⁰³	2.27x10 ⁻⁰²	-3.11313	Decreased
Rgs18	0.625179	6.574131	3.538038	7.73x10 ⁻⁰³	2.27x10 ⁻⁰²	-3.11573	Increased
Evi2a	1.128559	9.620562	3.536013	7.76x10 ⁻⁰³	2.28x10 ⁻⁰²	-3.11882	Increased
Evi2b	1.128559	9.620562	3.536013	7.76x10 ⁻⁰³	2.28x10 ⁻⁰²	-3.11882	Increased
Cd180	1.307665	7.717348	3.53593	7.76x10 ⁻⁰³	2.28x10 ⁻⁰²	-3.11895	Increased
Chst11	0.620465	10.02156	3.529161	7.83x10 ⁻⁰³	2.29x10 ⁻⁰²	-3.12931	Increased
Tmprss6	1.55038	4.024968	3.522705	7.91x10 ⁻⁰³	2.31x10 ⁻⁰²	-3.13919	Increased
Ltk	1.519816	1.831125	3.522689	7.91x10 ⁻⁰³	2.31x10 ⁻⁰²	-3.13921	Increased
Tesc	-0.51596	12.89288	-3.52157	7.92x10 ⁻⁰³	2.31x10 ⁻⁰²	-3.14092	Decreased
Siglece	0.626899	7.948937	3.516352	7.98x10 ⁻⁰³	2.32x10 ⁻⁰²	-3.14891	Increased
Kcnn2	-0.79042	10.51248	-3.51589	7.99x10 ⁻⁰³	2.33x10 ⁻⁰²	-3.14962	Decreased
Htr7	-0.54396	6.809583	-3.51097	8.04x10 ⁻⁰³	2.34x10 ⁻⁰²	-3.15716	Decreased
Clca5	1.194289	4.968682	3.50856	8.071x10 ⁻⁰³	2.35x10 ⁻⁰²	-3.16085	Increased
C3ar1	1.177264	10.26191	3.508354	8.07x10 ⁻⁰³	2.35x10 ⁻⁰²	-3.16116	Increased
Cd74	0.593173	13.94699	3.49885	8.19x10 ⁻⁰³	2.38x10 ⁻⁰²	-3.17573	Increased
Odf3b	-0.79704	5.898795	-3.49749	8.20x10 ⁻⁰³	2.38x10 ⁻⁰²	-3.17781	Decreased
Pitx3	-0.74404	4.580247	-3.49659	8.21x10 ⁻⁰³	2.38x10 ⁻⁰²	-3.1792	Decreased
Nsun7	1.584261	4.44263	3.495756	8.22x10 ⁻⁰³	2.38x10 ⁻⁰²	-3.18047	Increased
Ier5l	0.659866	9.57895	3.495312	8.23x10 ⁻⁰³	2.38x10 ⁻⁰²	-3.18116	Increased
Lgr6	-0.53026	12.69183	-3.49127	8.28x10 ⁻⁰³	2.39x10 ⁻⁰²	-3.18736	Decreased
Lama5	-0.53789	14.65923	-3.48997	8.29x10 ⁻⁰³	2.40x10 ⁻⁰²	-3.18936	Decreased
Slamf8	1.050122	5.693388	3.489116	8.30x10 ⁻⁰³	2.40x10 ⁻⁰²	-3.19066	Increased
Plekho2	0.701058	11.15972	3.483827	8.37x10 ⁻⁰³	2.41x10 ⁻⁰²	-3.19877	Increased
Zfp239	1.136831	4.768188	3.481448	8.40x10 ⁻⁰³	2.42x10 ⁻⁰²	-3.20243	Increased
Nkg7	1.309849	4.434216	3.480596	8.41x10 ⁻⁰³	2.42x10 ⁻⁰²	-3.20373	Increased
Dpf3	-0.82699	10.00661	-3.47071	8.53x10 ⁻⁰³	2.45x10 ⁻⁰²	-3.21891	Decreased
Zfp300	0.619579	6.105893	3.469131	8.55x10 ⁻⁰³	2.46x10 ⁻⁰²	-3.22134	Increased
Ephx3	0.964211	8.359794	3.468202	8.56x10 ⁻⁰³	2.46x10 ⁻⁰²	-3.22276	Increased
Scimp	1.341598	5.706195	3.467534	8.57x10 ⁻⁰³	2.46x10 ⁻⁰²	-3.22379	Increased
Spsb1	-0.65704	12.22033	-3.46284	8.63x10 ⁻⁰³	2.47x10 ⁻⁰²	-3.231	Decreased
Sh2d6	1.374418	3.398987	3.462619	8.63x10 ⁻⁰³	2.47x10 ⁻⁰²	-3.23134	Increased
Zkscan7	-0.54366	8.892671	-3.46172	8.63x10 ⁻⁰³	2.48x10 ⁻⁰²	-3.23272	Decreased
Sla	0.961453	9.001795	3.459713	8.67x10 ⁻⁰³	2.48x10 ⁻⁰²	-3.23581	Increased
Mapk1ip1	-0.53938	11.42672	-3.45585	8.72x10 ⁻⁰³	2.49x10 ⁻⁰²	-3.24175	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Ppp1r9a	-0.56886	11.87727	-3.45555	8.72x10 ⁻⁰³	2.49x10 ⁻⁰²	-3.24221	Decreased
Ndufv3	-0.54234	14.16198	-3.45535	8.72x10 ⁻⁰³	2.49x10 ⁻⁰²	-3.24252	Decreased
Exoc3l	0.601798	9.318754	3.43909	8.93x10 ⁻⁰³	2.54x10 ⁻⁰²	-3.26752	Increased
Cyp4a32	-0.6812	4.95553	-3.43736	8.96x10 ⁻⁰³	2.55x10 ⁻⁰²	-3.27019	Decreased
9030619P08Rik	-1.28821	2.873272	-3.43042	9.05x10 ⁻⁰³	2.57x10 ⁻⁰²	-3.28087	Decreased
Cdca7	0.63844	7.761284	3.430382	9.05x10 ⁻⁰³	2.57x10 ⁻⁰²	-3.28093	Increased
Pim3	-0.95169	13.27378	-3.42974	9.06x10 ⁻⁰³	2.57x10 ⁻⁰²	-3.28191	Decreased
Slc22a21	0.729274	6.992379	3.429738	9.06x10 ⁻⁰³	2.57x10 ⁻⁰²	-3.28192	Increased
Klri1	0.761711	2.348313	3.428674	9.07x10 ⁻⁰³	2.57x10 ⁻⁰²	-3.28356	Increased
Prr18	0.535875	4.227202	3.428399	9.08x10 ⁻⁰³	2.58x10 ⁻⁰²	-3.28398	Increased
Gprn3	1.799119	3.117017	3.42171	9.17x10 ⁻⁰³	2.60x10 ⁻⁰²	-3.29428	Increased
Agbl1	-1.32826	2.901405	-3.41972	9.19x10 ⁻⁰³	2.60x10 ⁻⁰²	-3.29734	Decreased
Gpr20	-0.66439	7.098366	-3.41411	9.27x10 ⁻⁰³	2.62x10 ⁻⁰²	-3.30599	Decreased
Arsi	1.272045	7.639718	3.413998	9.27x10 ⁻⁰³	2.62x10 ⁻⁰²	-3.30617	Increased
Rtn4r	-1.07309	9.599381	-3.41001	9.32x10 ⁻⁰³	2.63x10 ⁻⁰²	-3.31232	Decreased
Thpo	0.761921	5.489381	3.403021	9.42x10 ⁻⁰³	2.65x10 ⁻⁰²	-3.32309	Increased
Meig1	-0.58024	7.003829	-3.4026	9.43x10 ⁻⁰³	2.66x10 ⁻⁰²	-3.32375	Decreased
Rbm38	-0.71159	13.9386	-3.40157	9.44x10 ⁻⁰³	2.66x10 ⁻⁰²	-3.32532	Decreased
Mfi2	-0.90875	0.616844	-3.39954	9.47x10 ⁻⁰³	2.66x10 ⁻⁰²	-3.32846	Decreased
Dyrk3	1.257899	4.647932	3.398712	9.48x10 ⁻⁰³	2.66x10 ⁻⁰²	-3.32974	Increased
3110035E14Rik	1.048448	4.574131	3.397306	9.50x10 ⁻⁰³	2.67x10 ⁻⁰²	-3.33191	Increased
Grhl3	1.204591	3.154716	3.396668	9.51x10 ⁻⁰³	2.67x10 ⁻⁰²	-3.33289	Increased
Foxc1	0.650392	9.081236	3.396268	9.52x10 ⁻⁰³	2.67x10 ⁻⁰²	-3.33351	Increased
Cd93	0.556645	14.35883	3.393197	9.56x10 ⁻⁰³	2.68x10 ⁻⁰²	-3.33825	Increased
Ms4a6b	0.783606	9.738248	3.389928	9.60x10 ⁻⁰³	2.69x10 ⁻⁰²	-3.34329	Increased
Nckap5	-0.76141	9.954105	-3.38112	9.73x10 ⁻⁰³	2.71x10 ⁻⁰²	-3.35688	Decreased
9530077C05Rik	0.542094	6.058183	3.380849	9.73x10 ⁻⁰³	2.71x10 ⁻⁰²	-3.35731	Increased
Nhlrc4	-1.85968	3.422792	-3.3807	9.74x10 ⁻⁰³	2.71x10 ⁻⁰²	-3.35753	Decreased
Gsta3	-1.17565	9.672316	-3.37814	9.77x10 ⁻⁰³	2.72x10 ⁻⁰²	-3.36148	Decreased
Mcc	-0.63686	11.4171	-3.37782	9.78x10 ⁻⁰³	2.72x10 ⁻⁰²	-3.36199	Decreased
Mall	0.577568	10.01864	3.370496	9.88x10 ⁻⁰³	2.74x10 ⁻⁰²	-3.3733	Increased
Mybl2	1.125719	6.615143	3.368925	9.91x10 ⁻⁰³	2.75x10 ⁻⁰²	-3.37573	Increased
Xlr4c	1.851327	2.246881	3.362787	1.00x10 ⁻⁰²	2.77x10 ⁻⁰²	-3.38521	Increased
Cmtm2a	-0.93202	2.849526	-3.36249	1.00x10 ⁻⁰²	2.77x10 ⁻⁰²	-3.38567	Decreased
Slc9a4	-1.02852	4.967405	-3.36023	1.00x10 ⁻⁰²	2.78x10 ⁻⁰²	-3.38916	Decreased
Rab9b	-0.74885	5.33398	-3.35834	1.01x10 ⁻⁰²	2.78x10 ⁻⁰²	-3.39209	Decreased
Tmem151a	1.041776	7.101551	3.358289	1.01x10 ⁻⁰²	2.78x10 ⁻⁰²	-3.39217	Increased
Gm1078	-1.32319	9.860976	-3.35144	1.02x10 ⁻⁰²	2.80x10 ⁻⁰²	-3.40276	Decreased
Pzp	-0.66832	6.588799	-3.34767	1.02x10 ⁻⁰²	2.81x10 ⁻⁰²	-3.4086	Decreased
Cytip	1.307604	7.899341	3.34466	1.03x10 ⁻⁰²	2.82x10 ⁻⁰²	-3.41325	Increased
Fbp1	-0.90232	5.593976	-3.34461	1.03x10 ⁻⁰²	2.82x10 ⁻⁰²	-3.41332	Decreased
Kcnmb4	0.660092	3.274226	3.344583	1.03x10 ⁻⁰²	2.82x10 ⁻⁰²	-3.41337	Increased
Bach1	-0.50445	12.58501	-3.34256	1.03x10 ⁻⁰²	2.83x10 ⁻⁰²	-3.41649	Decreased
Ccdc18	1.229802	4.616286	3.340603	1.03x10 ⁻⁰²	2.83x10 ⁻⁰²	-3.41952	Increased
Tnfsf14	1.59389	3.84319	3.339612	1.03x10 ⁻⁰²	2.84x10 ⁻⁰²	-3.42106	Increased
Nxph3	0.842218	4.384641	3.334707	1.04x10 ⁻⁰²	2.85x10 ⁻⁰²	-3.42865	Increased
Ebi3	0.841383	6.210258	3.330881	1.05x10 ⁻⁰²	2.86x10 ⁻⁰²	-3.43457	Increased
Ccdc88c	0.594929	11.46132	3.329408	1.05x10 ⁻⁰²	2.87x10 ⁻⁰²	-3.43685	Increased
Pdel1a	-0.98066	7.768555	-3.32769	1.05x10 ⁻⁰²	2.87x10 ⁻⁰²	-3.43951	Decreased
Gpr156	2.759184	4.004389	3.327681	1.05x10 ⁻⁰²	2.87x10 ⁻⁰²	-3.43953	Increased
Gm5111	1.019816	2.081125	3.325777	1.06x10 ⁻⁰²	2.88x10 ⁻⁰²	-3.44248	Increased
Tgif2	0.531796	7.752853	3.323809	1.06x10 ⁻⁰²	2.89x10 ⁻⁰²	-3.44553	Increased
Tbx3	-0.57006	10.99108	-3.31843	1.07x10 ⁻⁰²	2.91x10 ⁻⁰²	-3.45385	Decreased
Fat3	-0.94592	6.330019	-3.31807	1.07x10 ⁻⁰²	2.91x10 ⁻⁰²	-3.45442	Decreased
Rnd3	0.548045	11.35259	3.311161	1.08x10 ⁻⁰²	2.93x10 ⁻⁰²	-3.46513	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Lmtk3	1.513841	3.239102	3.310357	1.08x10 ⁻⁰²	2.93x10 ⁻⁰²	-3.46637	Increased
Adamts7	-0.73197	11.59972	-3.31023	1.08x10 ⁻⁰²	2.93x10 ⁻⁰²	-3.46657	Decreased
D130058E05Rik	1.743087	2.485242	3.309878	1.08x10 ⁻⁰²	2.93x10 ⁻⁰²	-3.46711	Increased
BC049635	-0.69163	4.654366	-3.30908	1.083x10 ⁻⁰²	2.94x10 ⁻⁰²	-3.46836	Decreased
Dmrta2	1.279798	3.639677	3.303496	1.09x10 ⁻⁰²	2.95x10 ⁻⁰²	-3.47701	Increased
Fam107b	0.565172	10.1859	3.301733	1.09x10 ⁻⁰²	2.96x10 ⁻⁰²	-3.47974	Increased
Casp8	0.574041	10.46278	3.292127	1.11x10 ⁻⁰²	2.99x10 ⁻⁰²	-3.49464	Increased
Ccl12	1.42581	6.739313	3.27797	1.13x10 ⁻⁰²	3.04x10 ⁻⁰²	-3.51662	Increased
Jakmip1	1.17559	3.305253	3.2759	1.14x10 ⁻⁰²	3.04x10 ⁻⁰²	-3.51983	Increased
Zcchc5	0.53675	6.814847	3.269519	1.15x10 ⁻⁰²	3.06x10 ⁻⁰²	-3.52974	Increased
Cacng4	1.856339	3.202832	3.26049	1.16x10 ⁻⁰²	3.10x10 ⁻⁰²	-3.54377	Increased
Hoxd3	0.740124	6.124895	3.25972	1.16x10 ⁻⁰²	3.10x10 ⁻⁰²	-3.54497	Increased
Cacng1	0.982554	3.873511	3.256368	1.17x10 ⁻⁰²	3.11x10 ⁻⁰²	-3.55018	Increased
Zfp593	0.639268	5.729473	3.25034	1.18x10 ⁻⁰²	3.13x10 ⁻⁰²	-3.55955	Increased
Xdh	-0.71294	14.20429	-3.24593	1.19x10 ⁻⁰²	3.15x10 ⁻⁰²	-3.56641	Decreased
Sh3bp1	0.666118	9.424221	3.228943	1.22x10 ⁻⁰²	3.21x10 ⁻⁰²	-3.59283	Increased
Adamts14	0.600563	8.486635	3.228568	1.22x10 ⁻⁰²	3.21x10 ⁻⁰²	-3.59341	Increased
A930018P22Rik	-0.58171	3.251402	-3.22707	1.22x10 ⁻⁰²	3.22x10 ⁻⁰²	-3.59575	Decreased
Lrrn4cl	0.590897	10.47814	3.221379	1.23x10 ⁻⁰²	3.24x10 ⁻⁰²	-3.6046	Increased
Gpr179	-1.21089	3.15198	-3.22103	1.23x10 ⁻⁰²	3.24x10 ⁻⁰²	-3.60514	Decreased
Hist1h2bm	-0.64784	6.786046	-3.21832	1.24x10 ⁻⁰²	3.25x10 ⁻⁰²	-3.60937	Decreased
Hist1h2bn	-0.64784	6.786046	-3.21832	1.24x10 ⁻⁰²	3.25x10 ⁻⁰²	-3.60937	Decreased
Myh13	1.426162	3.157261	3.217108	1.24x10 ⁻⁰²	3.25x10 ⁻⁰²	-3.61125	Increased
Bambi	0.68754	10.76549	3.213034	1.25x10 ⁻⁰²	3.27x10 ⁻⁰²	-3.6176	Increased
Ocln	0.55142	5.75197	3.211738	1.25x10 ⁻⁰²	3.27x10 ⁻⁰²	-3.61961	Increased
Acta2	0.565159	13.63753	3.200418	1.27x10 ⁻⁰²	3.32x10 ⁻⁰²	-3.63725	Increased
Iqck	0.830979	5.107975	3.199662	1.27x10 ⁻⁰²	3.32x10 ⁻⁰²	-3.63843	Increased
Shcgp11	1.119799	2.277357	3.193527	1.29x10 ⁻⁰²	3.35x10 ⁻⁰²	-3.64799	Increased
Ttc22	1.29022	1.758808	3.193156	1.29x10 ⁻⁰²	3.35x10 ⁻⁰²	-3.64857	Increased
BC030867	0.727271	5.804771	3.185029	1.30x10 ⁻⁰²	3.38x10 ⁻⁰²	-3.66124	Increased
Btla	1.034259	6.576449	3.183108	1.31x10 ⁻⁰²	3.38x10 ⁻⁰²	-3.66423	Increased
Ptch2	1.057901	7.958833	3.181963	1.31x10 ⁻⁰²	3.39x10 ⁻⁰²	-3.66602	Increased
Brdt	0.744653	6.929591	3.180238	1.31x10 ⁻⁰²	3.39x10 ⁻⁰²	-3.66871	Increased
Fam150b	-1.49525	4.307635	-3.17149	1.33x10 ⁻⁰²	3.43x10 ⁻⁰²	-3.68236	Decreased
Ano5	-1.34493	7.758226	-3.16548	1.34x10 ⁻⁰²	3.45x10 ⁻⁰²	-3.69173	Decreased
Lhx9	0.502219	1.864808	3.162	1.34x10 ⁻⁰²	3.47x10 ⁻⁰²	-3.69716	Increased
Tmem154	0.632749	8.569685	3.161297	1.35x10 ⁻⁰²	3.47x10 ⁻⁰²	-3.69826	Increased
Slc13a3	0.616069	6.301946	3.160335	1.35x10 ⁻⁰²	3.47x10 ⁻⁰²	-3.69976	Increased
Tmc3	0.896155	5.363597	3.155927	1.36x10 ⁻⁰²	3.49x10 ⁻⁰²	-3.70664	Increased
Myl4	2.852382	9.239151	3.154888	1.36x10 ⁻⁰²	3.49x10 ⁻⁰²	-3.70826	Increased
Dlx1	-1.61851	3.490931	-3.15347	1.37x10 ⁻⁰²	3.50x10 ⁻⁰²	-3.71048	Decreased
St8sia1	0.631078	5.822115	3.151512	1.37x10 ⁻⁰²	3.51x10 ⁻⁰²	-3.71353	Increased
Slfn9	0.691675	9.031827	3.151494	1.37x10 ⁻⁰²	3.51x10 ⁻⁰²	-3.71356	Increased
Nrp2	0.500139	13.20588	3.148796	1.38x10 ⁻⁰²	3.52x10 ⁻⁰²	-3.71778	Increased
Prkar2b	1.041761	7.824145	3.147396	1.38x10 ⁻⁰²	3.52x10 ⁻⁰²	-3.71996	Increased
Gm711	0.52153	4.633507	3.145366	1.38x10 ⁻⁰²	3.53x10 ⁻⁰²	-3.72313	Increased
Trim63	-0.69357	14.55818	-3.14454	1.38x10 ⁻⁰²	3.53x10 ⁻⁰²	-3.72443	Decreased
Mt2	0.998292	12.16569	3.144526	1.38x10 ⁻⁰²	3.53x10 ⁻⁰²	-3.72444	Increased
Mobp	0.920042	2.36172	3.140412	1.39x10 ⁻⁰²	3.55x10 ⁻⁰²	-3.73087	Increased
Tex15	1.529308	2.312594	3.138056	1.40x10 ⁻⁰²	3.56x10 ⁻⁰²	-3.73455	Increased
Sun3	-0.69263	5.983057	-3.13488	1.40x10 ⁻⁰²	3.57x10 ⁻⁰²	-3.73951	Decreased
Mctp2	1.130718	4.682911	3.134679	1.40x10 ⁻⁰²	3.57x10 ⁻⁰²	-3.73982	Increased
Gdf7	1.304496	4.312027	3.133134	1.41x10 ⁻⁰²	3.58x10 ⁻⁰²	-3.74224	Increased
Plch1	1.488433	1.815434	3.132749	1.41x10 ⁻⁰²	3.58x10 ⁻⁰²	-3.74284	Increased
Fabp5	0.532477	12.24035	3.126095	1.42x10 ⁻⁰²	3.61x10 ⁻⁰²	-3.75324	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Pcdhb15	0.646718	5.878621	3.125488	1.42x10 ⁻⁰²	3.61x10 ⁻⁰²	-3.75419	Increased
Tc2n	0.721694	4.343028	3.121827	1.43x10 ⁻⁰²	3.63x10 ⁻⁰²	-3.75991	Increased
Msx1	0.608033	9.034671	3.118187	1.44x10 ⁻⁰²	3.64x10 ⁻⁰²	-3.7656	Increased
Klrc1	1.401626	3.412591	3.116511	1.44x10 ⁻⁰²	3.65x10 ⁻⁰²	-3.76822	Increased
B020004J07Rik	0.543093	2.135245	3.114724	1.45x10 ⁻⁰²	3.65x10 ⁻⁰²	-3.77101	Increased
Crabp1	1.766365	1.704399	3.114387	1.45x10 ⁻⁰²	3.66x10 ⁻⁰²	-3.77154	Increased
Gm614	0.59691	10.59136	3.113644	1.45x10 ⁻⁰²	3.66x10 ⁻⁰²	-3.7727	Increased
Il2rg	0.59691	10.59136	3.113644	1.45x10 ⁻⁰²	3.66x10 ⁻⁰²	-3.7727	Increased
Prdm8	-0.6471	4.311228	-3.11343	1.45x10 ⁻⁰²	3.66x10 ⁻⁰²	-3.77304	Decreased
Gpc2	0.765277	7.117085	3.112627	1.45x10 ⁻⁰²	3.66x10 ⁻⁰²	-3.77429	Increased
Ska3	1.050919	6.130604	3.107328	1.46x10 ⁻⁰²	3.68x10 ⁻⁰²	-3.78258	Increased
Isl2	-1.17997	2.490277	-3.10691	1.46x10 ⁻⁰²	3.69x10 ⁻⁰²	-3.78322	Decreased
Ryr2	-0.67265	18.15893	-3.10501	1.47x10 ⁻⁰²	3.69x10 ⁻⁰²	-3.78621	Decreased
Gm13271	-1.08649	2.846276	-3.10482	1.47x10 ⁻⁰²	3.69x10 ⁻⁰²	-3.78651	Decreased
Ttyh2	0.562556	9.916899	3.100978	1.48x10 ⁻⁰²	3.71x10 ⁻⁰²	-3.79251	Increased
Tiam1	0.679316	10.24405	3.100638	1.48x10 ⁻⁰²	3.71x10 ⁻⁰²	-3.79304	Increased
Mybphl	3.49713	5.471441	3.099251	1.48x10 ⁻⁰²	3.72x10 ⁻⁰²	-3.79521	Increased
Cxcr2	1.071277	6.221265	3.097058	1.49x10 ⁻⁰²	3.73x10 ⁻⁰²	-3.79864	Increased
Unc79	0.786666	4.007969	3.0929	1.50x10 ⁻⁰²	3.75x10 ⁻⁰²	-3.80515	Increased
Cdrt4	1.252862	2.795727	3.092036	1.50x10 ⁻⁰²	3.75x10 ⁻⁰²	-3.8065	Increased
Pla2g2d	-0.71442	7.247992	-3.08964	1.50x10 ⁻⁰²	3.76x10 ⁻⁰²	-3.81025	Decreased
H2-M5	1.022017	4.463269	3.087429	1.51x10 ⁻⁰²	3.77x10 ⁻⁰²	-3.81371	Increased
Depdc1b	1.516147	4.484574	3.087069	1.51x10 ⁻⁰²	3.77x10 ⁻⁰²	-3.81427	Increased
Saped2	1.928986	4.927209	3.081742	1.52x10 ⁻⁰²	3.80x10 ⁻⁰²	-3.82261	Increased
Ptchd1	1.414845	5.806531	3.075612	1.54x10 ⁻⁰²	3.83x10 ⁻⁰²	-3.83221	Increased
1700047I17Rik2	3.122708	5.547347	3.070066	1.55x10 ⁻⁰²	3.85x10 ⁻⁰²	-3.84089	Increased
Fam177a	3.122708	5.547347	3.070066	1.55x10 ⁻⁰²	3.85x10 ⁻⁰²	-3.84089	Increased
Gsto2	-0.56383	6.808216	-3.06295	1.56x10 ⁻⁰²	3.88x10 ⁻⁰²	-3.85203	Decreased
Timd4	-0.53839	7.816241	-3.06194	1.57x10 ⁻⁰²	3.89x10 ⁻⁰²	-3.85361	Decreased
Hspa2	0.565392	10.17664	3.060812	1.57x10 ⁻⁰²	3.89x10 ⁻⁰²	-3.85538	Increased
Foxf1	0.840075	5.974378	3.058925	1.57x10 ⁻⁰²	3.90x10 ⁻⁰²	-3.85834	Increased
Rdh9	0.608511	5.533451	3.054758	1.58x10 ⁻⁰²	3.92x10 ⁻⁰²	-3.86486	Increased
Ppp1r3a	-0.54007	14.48252	-3.05223	1.59x10 ⁻⁰²	3.93x10 ⁻⁰²	-3.86883	Decreased
Cdon	0.57075	10.01697	3.050563	1.59x10 ⁻⁰²	3.93x10 ⁻⁰²	-3.87144	Increased
Gpr115	-0.70452	5.29939	-3.04687	1.60x10 ⁻⁰²	3.95x10 ⁻⁰²	-3.87722	Decreased
Tuba1c	0.527275	11.63668	3.044426	1.61x10 ⁻⁰²	3.96x10 ⁻⁰²	-3.88105	Increased
Dgkb	-0.50623	6.977344	-3.03636	1.63x10 ⁻⁰²	4.00x10 ⁻⁰²	-3.89369	Decreased
Gal3st2	1.072689	5.9841	3.033075	1.64x10 ⁻⁰²	4.02x10 ⁻⁰²	-3.89884	Increased
Ccdc120	0.599829	6.96983	3.032281	1.64x10 ⁻⁰²	4.02x10 ⁻⁰²	-3.90009	Increased
Spata20	-0.69045	5.45323	-3.02871	1.65x10 ⁻⁰²	4.03x10 ⁻⁰²	-3.90568	Decreased
Spsb4	1.083338	10.23239	3.01953	1.67x10 ⁻⁰²	4.09x10 ⁻⁰²	-3.92008	Increased
Zap70	0.821602	4.133677	3.016825	1.68x10 ⁻⁰²	4.10x10 ⁻⁰²	-3.92432	Increased
Hsd17b14	1.573569	1.608002	3.009571	1.70x10 ⁻⁰²	4.13x10 ⁻⁰²	-3.9357	Increased
Cd79a	1.170854	6.544105	3.004325	1.71x10 ⁻⁰²	4.16x10 ⁻⁰²	-3.94392	Increased
Btbd17	0.769816	1.998606	2.999755	1.72x10 ⁻⁰²	4.18x10 ⁻⁰²	-3.95109	Increased
Olf1393	-0.61859	7.762316	-2.99975	1.72x10 ⁻⁰²	4.18x10 ⁻⁰²	-3.95109	Decreased
Rtkn2	1.097576	5.193085	2.983179	1.77x10 ⁻⁰²	4.27x10 ⁻⁰²	-3.9771	Increased
Slc3a1	1.232112	3.286959	2.979881	1.77x10 ⁻⁰²	4.28x10 ⁻⁰²	-3.98228	Increased
Hdc	0.763119	8.218009	2.979289	1.78x10 ⁻⁰²	4.29x10 ⁻⁰²	-3.98321	Increased
Gm11992	-1.13338	6.541771	-2.97764	1.78x10 ⁻⁰²	4.29x10 ⁻⁰²	-3.98579	Decreased
Ifi2712b	0.859989	4.60745	2.972438	1.80x10 ⁻⁰²	4.32x10 ⁻⁰²	-3.99396	Increased
Il16	0.726179	10.4259	2.971171	1.80x10 ⁻⁰²	4.32x10 ⁻⁰²	-3.99595	Increased
Rsph9	0.570044	6.250718	2.968807	1.81x10 ⁻⁰²	4.34x10 ⁻⁰²	-3.99966	Increased
Nptx1	1.037958	4.023238	2.96682	1.81x10 ⁻⁰²	4.34x10 ⁻⁰²	-4.00278	Increased
Hydin	1.514714	4.337617	2.959172	1.83x10 ⁻⁰²	4.39x10 ⁻⁰²	-4.01479	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Maats1	0.880111	2.818477	2.949549	1.86x10 ⁻⁰²	4.44x10 ⁻⁰²	-4.0299	Increased
Tnf	1.106402	5.523232	2.946562	1.87x10 ⁻⁰²	4.46x10 ⁻⁰²	-4.03459	Increased
Retnla	-0.92917	7.407332	-2.94318	1.88x10 ⁻⁰²	4.47x10 ⁻⁰²	-4.0399	Decreased
Slamf1	-0.92459	4.797019	-2.94198	1.88x10 ⁻⁰²	4.48x10 ⁻⁰²	-4.0418	Decreased
Chrna10	-0.72972	8.380302	-2.94165	1.88x10 ⁻⁰²	4.48x10 ⁻⁰²	-4.04231	Decreased
Pbx4	1.214218	3.422646	2.938689	1.89x10 ⁻⁰²	4.50x10 ⁻⁰²	-4.04696	Increased
Rsph1	0.913717	5.883723	2.935874	1.90x10 ⁻⁰²	4.51x10 ⁻⁰²	-4.05138	Increased
Mcm5	0.541956	9.410517	2.934316	1.90x10 ⁻⁰²	4.52x10 ⁻⁰²	-4.05383	Increased
Cd24a	0.72813	8.437732	2.927361	1.92x10 ⁻⁰²	4.56x10 ⁻⁰²	-4.06476	Increased
Lhx6	0.657258	9.739209	2.927288	1.92x10 ⁻⁰²	4.56x10 ⁻⁰²	-4.06487	Increased
Insl6	0.543173	4.793735	2.915486	1.96x10 ⁻⁰²	4.63x10 ⁻⁰²	-4.08342	Increased
Snhg11	1.157813	5.732284	2.913932	1.96x10 ⁻⁰²	4.64x10 ⁻⁰²	-4.08586	Increased
Rasl11b	1.080556	12.54464	2.913118	1.96x10 ⁻⁰²	4.65x10 ⁻⁰²	-4.08714	Increased
Samd5	0.503771	10.0937	2.908531	1.98x10 ⁻⁰²	4.67x10 ⁻⁰²	-4.09435	Increased
BC022687	0.530649	8.582302	2.906833	1.98x10 ⁻⁰²	4.68x10 ⁻⁰²	-4.09702	Increased
Lrdd	0.541823	7.868627	2.903324	1.99x10 ⁻⁰²	4.70x10 ⁻⁰²	-4.10253	Increased
Klhdc8a	0.594712	11.61678	2.892232	2.03x10 ⁻⁰²	4.77x10 ⁻⁰²	-4.11996	Increased
Gabrg3	-0.95123	2.114808	-2.8919	2.03x10 ⁻⁰²	4.77x10 ⁻⁰²	-4.12048	Decreased
Glt8d2	0.569787	8.130763	2.888553	2.04x10 ⁻⁰²	4.79x10 ⁻⁰²	-4.12575	Increased
Esm1	1.219895	8.033391	2.887875	2.04x10 ⁻⁰²	4.80x10 ⁻⁰²	-4.12681	Increased
Sacs	-1.75719	7.732414	-2.88572	2.05x10 ⁻⁰²	4.81x10 ⁻⁰²	-4.1302	Decreased
Rasgrp1	0.946525	5.98254	2.885362	2.05x10 ⁻⁰²	4.81x10 ⁻⁰²	-4.13076	Increased
Duoxa1	0.900526	5.255179	2.882341	2.06x10 ⁻⁰²	4.82x10 ⁻⁰²	-4.13551	Increased
Pck1	4.028005	4.458183	2.880626	2.06x10 ⁻⁰²	4.84x10 ⁻⁰²	-4.13821	Increased
Lrrc16a	0.513544	9.369106	2.874602	2.08x10 ⁻⁰²	4.87x10 ⁻⁰²	-4.14768	Increased
Agbl4	1.428879	2.262379	2.872193	2.09x10 ⁻⁰²	4.88x10 ⁻⁰²	-4.15147	Increased
Nts	0.894343	6.924527	2.871409	2.09x10 ⁻⁰²	4.89x10 ⁻⁰²	-4.1527	Increased
Themis2	0.746648	9.088164	2.870639	2.10x10 ⁻⁰²	4.89x10 ⁻⁰²	-4.15391	Increased
Ffar2	2.064864	3.24989	2.860026	2.13x10 ⁻⁰²	4.96x10 ⁻⁰²	-4.1706	Increased
Gpr111	-0.86558	4.255917	-2.85417	2.15x10 ⁻⁰²	4.99x10 ⁻⁰²	-4.1798	Decreased
Cd177	1.907951	2.623272	2.850012	2.16x10 ⁻⁰²	-	-4.18635	Increased
Ffar4	1.397255	3.514165	2.849906	2.16x10 ⁻⁰²	-	-4.18651	Increased
Kcnh1	0.644345	5.760882	2.846154	2.18x10 ⁻⁰²	-	-4.19241	Increased
Uhrf1	0.778385	8.867482	2.841811	2.19x10 ⁻⁰²	-	-4.19924	Increased
Ly6d	1.085489	4.582491	2.83861	2.20x10 ⁻⁰²	-	-4.20428	Increased
Mafk	0.556196	12.9115	2.830908	2.22x10 ⁻⁰²	-	-4.21639	Increased
Oprd1	-0.67328	5.488307	-2.82636	2.24x10 ⁻⁰²	-	-4.22354	Decreased
Zeb1	0.554531	6.173348	2.82621	2.24x10 ⁻⁰²	-	-4.22378	Increased
Slc35f3	-1.14402	2.041687	-2.82547	2.25x10 ⁻⁰²	-	-4.22494	Decreased
Fam132b	0.905204	4.104301	2.82382	2.25x10 ⁻⁰²	-	-4.22754	Increased
4930550C14Rik	0.96436	4.065434	2.821778	2.26x10 ⁻⁰²	-	-4.23075	Increased
Lhcgr	-0.82258	2.904245	-2.82147	2.26x10 ⁻⁰²	-	-4.23124	Decreased
Creb3l4	0.645854	5.514145	2.820947	2.26x10 ⁻⁰²	-	-4.23206	Increased
Tsnaxip1	1.110459	2.603169	2.818022	2.27x10 ⁻⁰²	-	-4.23666	Increased
Clec2i	1.171182	4.939772	2.816615	2.28x10 ⁻⁰²	-	-4.23887	Increased
Vwa3a	-0.67579	10.32566	-2.81623	2.28x10 ⁻⁰²	-	-4.23948	Decreased
Tshb	0.850298	2.142607	2.808663	2.31x10 ⁻⁰²	-	-4.25138	Increased
Msln	2.557221	6.72553	2.807174	2.31x10 ⁻⁰²	-	-4.25372	Increased
Paplb	1.128056	2.465727	2.800649	2.33x10 ⁻⁰²	-	-4.26398	Increased
Cyp2e1	3.224845	7.100022	2.800498	2.33x10 ⁻⁰²	-	-4.26422	Increased
Bmpr1b	0.73828	5.225747	2.79861	2.34x10 ⁻⁰²	-	-4.26719	Increased
Pgr	-1.20123	0.763085	-2.79613	2.35x10 ⁻⁰²	-	-4.27109	Decreased
Stc1	0.867583	9.452548	2.794979	2.35x10 ⁻⁰²	-	-4.2729	Increased
Cpne4	-0.65236	4.135597	-2.79225	2.36x10 ⁻⁰²	-	-4.27719	Decreased
Onecut3	-1.82176	2.501915	-2.7901	2.37x10 ⁻⁰²	-	-4.28057	Decreased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Klhl10	-0.74804	5.43732	-2.78689	2.38x10 ⁻⁰²	-	-4.28562	Decreased
Mbnl3	0.612326	7.32886	2.784883	2.39x10 ⁻⁰²	-	-4.28878	Increased
B2m	0.504897	14.61843	2.779257	2.41x10 ⁻⁰²	-	-4.29763	Increased
4921513D11Rik	-0.97649	3.932656	-2.77361	2.43x10 ⁻⁰²	-	-4.30651	Decreased
Lrrn4	2.805899	4.924593	2.77266	2.44x10 ⁻⁰²	-	-4.308	Increased
Hid1	0.611171	8.728288	2.771412	2.44x10 ⁻⁰²	-	-4.30997	Increased
Endog	-0.61919	10.46808	-2.7695	2.45x10 ⁻⁰²	-	-4.31297	Decreased
Spo11	-1.45933	3.078346	-2.76297	2.47x10 ⁻⁰²	-	-4.32324	Decreased
Pdpr	-0.6162	13.0699	-2.7598	2.49x10 ⁻⁰²	-	-4.32823	Decreased
Cd3e	1.505019	3.975559	2.754563	2.51x10 ⁻⁰²	-	-4.33647	Increased
Gltpd2	1.120557	2.820218	2.753398	2.51x10 ⁻⁰²	-	-4.3383	Increased
Zfp831	0.701343	4.158684	2.74861	2.53x10 ⁻⁰²	-	-4.34583	Increased
4930447C04Rik	0.787413	3.459244	2.74326	2.55x10 ⁻⁰²	-	-4.35424	Increased
Efcab11	1.341492	4.280668	2.741496	2.56x10 ⁻⁰²	-	-4.35702	Increased
H1foo	-0.90875	0.366844	-2.74015	2.56x10 ⁻⁰²	-	-4.35913	Decreased
Lyzl4	-0.62074	1.949567	-2.72468	2.62x10 ⁻⁰²	-	-4.38345	Decreased
Elmod1	1.393076	2.310236	2.722214	2.63x10 ⁻⁰²	-	-4.38734	Increased
Alas2	-0.80247	11.44184	-2.71838	2.65x10 ⁻⁰²	-	-4.39337	Decreased
Esx1	-1.15875	1.388085	-2.71289	2.67x10 ⁻⁰²	-	-4.402	Decreased
Ppp2r2b	1.592193	1.909795	2.711924	2.68x10 ⁻⁰²	-	-4.40352	Increased
Maff	0.884296	10.58612	2.710253	2.68x10 ⁻⁰²	-	-4.40614	Increased
Olfr239	-1.30499	1.211205	-2.70785	2.69x10 ⁻⁰²	-	-4.40992	Decreased
Klk13	-1.0125	2.163044	-2.70726	2.70x10 ⁻⁰²	-	-4.41084	Decreased
Morn3	0.801021	4.071413	2.699724	2.73x10 ⁻⁰²	-	-4.42269	Increased
F9	1.248594	1.591755	2.69395	2.75x10 ⁻⁰²	-	-4.43177	Increased
Tbxa2r	0.793424	8.89292	2.693692	2.75x10 ⁻⁰²	-	-4.43218	Increased
Tnfrsf13c	1.000318	3.549037	2.687697	2.78x10 ⁻⁰²	-	-4.4416	Increased
Impg2	0.922969	4.56699	2.686085	2.78x10 ⁻⁰²	-	-4.44413	Increased
Tchhl1	-1.40064	3.131996	-2.67431	2.84x10 ⁻⁰²	-	-4.46263	Decreased
Cspg4	0.597185	12.59021	2.670339	2.85x10 ⁻⁰²	-	-4.46888	Increased
Pkib	0.552311	6.98018	2.667315	2.87x10 ⁻⁰²	-	-4.47363	Increased
Leap2	1.543093	2.465727	2.665048	2.88x10 ⁻⁰²	-	-4.47719	Increased
Aldh1a7	1.37486	4.433703	2.663517	2.88x10 ⁻⁰²	-	-4.47959	Increased
Smc1b	0.548968	3.645619	2.647689	2.96x10 ⁻⁰²	-	-4.50446	Increased
Alox15	1.60979	2.352835	2.646367	2.96x10 ⁻⁰²	-	-4.50653	Increased
Lctl	2.327469	2.565434	2.645944	2.96x10 ⁻⁰²	-	-4.5072	Increased
Ston2	-0.60522	10.12038	-2.6386	3.00x10 ⁻⁰²	-	-4.51873	Decreased
Rnase10	-0.52684	4.66018	-2.63229	3.03x10 ⁻⁰²	-	-4.52864	Decreased
Rnf144a	0.511924	11.38035	2.631235	3.03x10 ⁻⁰²	-	-4.53029	Increased
Actb	0.501004	15.4953	2.630642	3.03x10 ⁻⁰²	-	-4.53123	Increased
Mfsd9	0.682204	7.278522	2.628604	3.04x10 ⁻⁰²	-	-4.53442	Increased
Xylt1	0.689566	7.600473	2.628565	3.04x10 ⁻⁰²	-	-4.53449	Increased
Kmo	0.709353	6.593728	2.626521	3.05x10 ⁻⁰²	-	-4.53769	Increased
Ms4a1	1.24791	5.488591	2.620525	3.08x10 ⁻⁰²	-	-4.54711	Increased
Orm3	-0.90956	3.062594	-2.61337	3.12x10 ⁻⁰²	-	-4.55834	Decreased
Hist1h3i	-0.56921	5.376039	-2.61043	3.13x10 ⁻⁰²	-	-4.56295	Decreased
Adgb	0.827842	3.9072	2.606099	3.15x10 ⁻⁰²	-	-4.56974	Increased
Slc4a9	0.823964	2.709922	2.605933	3.16x10 ⁻⁰²	-	-4.57001	Increased
Zfp941	0.862724	5.116989	2.600882	3.18x10 ⁻⁰²	-	-4.57793	Increased
Lat	0.787361	5.252473	2.595533	3.20x10 ⁻⁰²	-	-4.58632	Increased
Myl7	5.113078	6.3803	2.593532	3.21x10 ⁻⁰²	-	-4.58946	Increased
Mlycd	-0.77635	10.50423	-2.58958	3.23x10 ⁻⁰²	-	-4.59566	Decreased
Nrtn	0.887306	10.18389	2.589496	3.23x10 ⁻⁰²	-	-4.59579	Increased
Hemgn	-1.13547	1.376446	-2.58576	3.25x10 ⁻⁰²	-	-4.60164	Decreased
Flywch2	0.567587	5.345469	2.583961	3.26x10 ⁻⁰²	-	-4.60447	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Pcdhb2	0.80575	3.864653	2.582143	3.27x10 ⁻⁰²	-	-4.60732	Increased
Rnase1	-0.99874	5.053175	-2.58154	3.27x10 ⁻⁰²	-	-4.60827	Decreased
Lrguk	1.082701	3.08929	2.581047	3.28x10 ⁻⁰²	-	-4.60904	Increased
Acsn3	1.511945	3.596393	2.580999	3.28x10 ⁻⁰²	-	-4.60911	Increased
Ccdc40	0.618917	4.373584	2.578995	3.29x10 ⁻⁰²	-	-4.61225	Increased
Calr4	1.011711	3.303795	2.573462	3.31x10 ⁻⁰²	-	-4.62093	Increased
Piwi14	1.512841	3.346841	2.571918	3.32x10 ⁻⁰²	-	-4.62335	Increased
Chek1	0.620906	6.680425	2.571131	3.33x10 ⁻⁰²	-	-4.62458	Increased
Tcf23	-1.13421	8.468887	-2.56984	3.33x10 ⁻⁰²	-	-4.6266	Decreased
Pde3a	-0.5121	12.36419	-2.56852	3.34x10 ⁻⁰²	-	-4.62868	Decreased
Fgf12	1.262742	6.027521	2.563094	3.37x10 ⁻⁰²	-	-4.63718	Increased
Trpa1	1.874005	3.131183	2.551413	3.43x10 ⁻⁰²	-	-4.65548	Increased
Myo3b	0.994932	2.416762	2.550523	3.43x10 ⁻⁰²	-	-4.65687	Increased
Egr1	1.155881	10.91222	2.549488	3.44x10 ⁻⁰²	-	-4.65849	Increased
Traip	0.612849	6.282788	2.548669	3.44x10 ⁻⁰²	-	-4.65977	Increased
2310014L17Rik	0.709945	4.582503	2.546298	3.46x10 ⁻⁰²	-	-4.66349	Increased
Ccsap	0.585462	6.886913	2.542871	3.48x10 ⁻⁰²	-	-4.66885	Increased
Sypl2	0.68406	7.233897	2.535268	3.52x10 ⁻⁰²	-	-4.68076	Increased
Vmo1	1.605978	2.312928	2.53107	3.54x10 ⁻⁰²	-	-4.68733	Increased
Mag	1.358673	4.001257	2.530823	3.54x10 ⁻⁰²	-	-4.68771	Increased
Ikzf3	0.847417	5.887337	2.52907	3.55x10 ⁻⁰²	-	-4.69046	Increased
Riiad1	0.693076	5.387842	2.524929	3.57x10 ⁻⁰²	-	-4.69694	Increased
Med12l	-0.70631	8.245338	-2.52475	3.57x10 ⁻⁰²	-	-4.69722	Decreased
Aurkc	-0.97581	3.902923	-2.52195	3.59x10 ⁻⁰²	-	-4.70159	Decreased
Cdkn1a	0.993782	11.8391	2.519974	3.60x10 ⁻⁰²	-	-4.70469	Increased
Pcdhb10	0.697517	4.617283	2.514848	3.63x10 ⁻⁰²	-	-4.71271	Increased
Hils1	-0.77473	8.283775	-2.51212	3.65x10 ⁻⁰²	-	-4.71698	Decreased
Increasedk3b	3.524979	5.899891	2.511377	3.65x10 ⁻⁰²	-	-4.71814	Increased
Eya1	-0.55443	7.379657	-2.5106	3.65x10 ⁻⁰²	-	-4.71934	Decreased
Tmem178b	-0.80738	4.495696	-2.50686	3.68x10 ⁻⁰²	-	-4.7252	Decreased
Clec4f	-1.19976	3.212781	-2.50462	3.69x10 ⁻⁰²	-	-4.72871	Decreased
Sh2d5	0.541917	6.496167	2.500657	3.71x10 ⁻⁰²	-	-4.7349	Increased
Qrich2	-1.39858	2.050486	-2.49992	3.722x10 ⁻⁰²	-	-4.73606	Decreased
Slc7a15	1.002219	1.864808	2.499195	3.72x10 ⁻⁰²	-	-4.73718	Increased
Ankrd2	1.000943	5.821138	2.4987	3.72x10 ⁻⁰²	-	-4.73796	Increased
Stag3	0.561349	5.569158	2.497038	3.73x10 ⁻⁰²	-	-4.74055	Increased
Klf9	-0.59411	13.30993	-2.49309	3.75x10 ⁻⁰²	-	-4.74672	Decreased
Gm4724	1.094248	2.595064	2.491417	3.76x10 ⁻⁰²	-	-4.74934	Increased
Mmp11	0.532991	9.897478	2.489031	3.78x10 ⁻⁰²	-	-4.75306	Increased
Ppp1r32	0.631497	4.056396	2.487084	3.79x10 ⁻⁰²	-	-4.75611	Increased
Oas1g	0.612718	6.667792	2.48397	3.80x10 ⁻⁰²	-	-4.76097	Increased
Rxfp1	0.9514	4.975881	2.474825	3.86x10 ⁻⁰²	-	-4.77525	Increased
Wnt6	-0.68436	4.654092	-2.46315	3.93x10 ⁻⁰²	-	-4.79348	Decreased
5031414D18Rik	0.637358	8.335705	2.456078	3.98x10 ⁻⁰²	-	-4.8045	Increased
Alox8	1.197384	4.033741	2.450385	4.01x10 ⁻⁰²	-	-4.81338	Increased
Rspo1	1.287288	5.73743	2.441776	4.07x10 ⁻⁰²	-	-4.8268	Increased
Muc16	2.613566	4.553543	2.441702	4.07x10 ⁻⁰²	-	-4.82692	Increased
Gpr31b	1.027463	2.867269	2.439431	4.08x10 ⁻⁰²	-	-4.83046	Increased
Tdrd1	1.162605	1.15252	2.437808	4.09x10 ⁻⁰²	-	-4.83298	Increased
Fam83f	0.900723	3.540783	2.433856	4.12x10 ⁻⁰²	-	-4.83914	Increased
Adamts15	0.789923	10.59313	2.432885	4.12x10 ⁻⁰²	-	-4.84065	Increased
1700001J03Rik	-0.59149	7.770146	-2.43179	4.13x10 ⁻⁰²	-	-4.84235	Decreased
AY074887	0.823569	2.733002	2.419471	4.21x10 ⁻⁰²	-	-4.86154	Increased
Spin2c	1.576443	2.689921	2.418717	4.21x10 ⁻⁰²	-	-4.86271	Increased
Ptafr	0.647375	9.098994	2.41734	4.22x10 ⁻⁰²	-	-4.86486	Increased

Table SI. Continued.

	logFC	AveExpr	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Rprm	-0.72796	3.470763	-2.40888	4.28x10 ⁻⁰²	-	-4.87802	Decreased
Bmp8b	0.752219	1.343567	2.407777	4.29x10 ⁻⁰²	-	-4.87974	Increased
Snph	0.671737	2.095807	2.407483	4.29x10 ⁻⁰²	-	-4.88019	Increased
Cdh23	-0.70925	10.31363	-2.40705	4.29x10 ⁻⁰²	-	-4.88086	Decreased
Klb	1.042275	2.982915	2.400441	4.34x10 ⁻⁰²	-	-4.89114	Increased
Fabp9	-0.92236	2.629242	-2.39977	4.34x10 ⁻⁰²	-	-4.89218	Decreased
Pmp2	-0.92236	2.629242	-2.39977	4.34x10 ⁻⁰²	-	-4.89218	Decreased
Sh3gl2	-0.70822	7.255477	-2.38999	4.41x10 ⁻⁰²	-	-4.90739	Decreased
Ush1g	0.593828	3.362451	2.38784	4.42x10 ⁻⁰²	-	-4.91073	Increased
Hdx	0.504023	4.29082	2.387728	4.42x10 ⁻⁰²	-	-4.9109	Increased
Abcg3	0.596304	6.052428	2.384092	4.45x10 ⁻⁰²	-	-4.91655	Increased
4930486L24Rik	0.57859	11.77645	2.383741	4.45x10 ⁻⁰²	-	-4.91709	Increased
Aire	-0.83576	3.134539	-2.38052	4.45x10 ⁻⁰²	-	-4.92209	Decreased
Cutal	-0.56106	6.219324	-2.3802	4.48x10 ⁻⁰²	-	-4.92259	Decreased
Lgals12	2.408829	3.964353	2.373769	4.52x10 ⁻⁰²	-	-4.93257	Increased
Crb3	0.578346	3.848211	2.373566	4.52x10 ⁻⁰²	-	-4.93289	Increased
Cr2	0.882571	4.867904	2.373533	4.52x10 ⁻⁰²	-	-4.93294	Increased
Ntrk1	0.649892	5.336466	2.366633	4.57x10 ⁻⁰²	-	-4.94364	Increased
Stmn4	0.503866	5.255077	2.365006	4.58x10 ⁻⁰²	-	-4.94617	Increased
Gpr183	0.965339	7.364587	2.363816	4.59x10 ⁻⁰²	-	-4.94801	Increased
BC067074	-0.5421	9.36802	-2.36283	4.60x10 ⁻⁰²	-	-4.94954	Decreased
9330171B17Rik	0.626298	3.872187	2.361351	4.61x10 ⁻⁰²	-	-4.95183	Increased
Camk1g	0.879278	6.247607	2.359264	4.62x10 ⁻⁰²	-	-4.95507	Increased
Gm4894	-1.05499	0.689965	-2.35887	4.63x10 ⁻⁰²	-	-4.95569	Decreased
Nlrc4	0.58855	6.337082	2.354028	4.66x10 ⁻⁰²	-	-4.96319	Increased
Tctex1d4	1.278862	2.39937	2.348857	4.70x10 ⁻⁰²	-	-4.9712	Increased
Spag8	-0.50942	4.224036	-2.34868	4.70x10 ⁻⁰²	-	-4.97148	Decreased
Syt9	1.181229	1.888554	2.336643	4.79x10 ⁻⁰²	-	-4.99011	Increased
Ube2u	1.008544	3.227322	2.336229	4.79x10 ⁻⁰²	-	-4.99075	Increased
Tcf7	0.5722	6.596015	2.336155	4.79x10 ⁻⁰²	-	-4.99087	Increased
Ly6k	1.113415	2.670406	2.335169	4.80x10 ⁻⁰²	-	-4.99239	Increased
Dsg3	-1.15875	2.049049	-2.32112	4.90x10 ⁻⁰²	-	-5.01412	Decreased
Hs3st3a1	0.598765	7.23595	2.310072	4.99x10 ⁻⁰²	-	-5.03119	Increased

Only false discovery rate <0.05 was listed. FC, fold change

Table SII. Differentially expressed long non-coding RNAs identified in GSE52313 dataset.

	logFC	Average expression	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Dio3os	2.697521	6.20028	15.14775	2.39x10 ⁻⁰⁷	9.83x10 ⁻⁰⁵	7.764656	Increased
Gm13749	3.319482	5.716724	14.57163	3.26x10 ⁻⁰⁷	9.8x10 ⁻⁰⁵	7.463492	Increased
Gm15867	2.47827	6.222612	11.27989	2.50x10 ⁻⁰⁶	5.02x10 ⁻⁰⁴	5.434537	Increased
A830039N20Rik	2.881196	3.304296	10.56524	4.18x10 ⁻⁰⁶	6.29x10 ⁻⁰⁴	4.910042	Increased
Gm26512	2.600004	3.640423	8.871932	1.60x10 ⁻⁰⁵	1.91x10 ⁻⁰³	3.513137	Increased
Gm26740	1.106523	7.379809	8.045943	3.35x10 ⁻⁰⁵	3.01x10 ⁻⁰³	2.739706	Increased
4930469K13Rik	2.440941	1.791687	7.982348	3.55x10 ⁻⁰⁵	3.01x10 ⁻⁰³	2.677322	Increased
Gm17281	-0.91472	10.73819	-7.74551	4.44x10 ⁻⁰⁵	3.01x10 ⁻⁰³	2.441223	Decreased
Pvt1	1.047189	7.574173	7.732339	4.50x10 ⁻⁰⁵	3.01x10 ⁻⁰³	2.427919	Increased
5330416C01Rik	3.638146	3.682771	7.501174	5.63x10 ⁻⁰⁵	3.39x10 ⁻⁰³	2.191257	Increased
BB218582	-1.13612	9.835268	-7.34868	6.54x10 ⁻⁰⁵	3.58x10 ⁻⁰³	2.031851	Decreased
9430065F17Rik	1.091374	3.587947	7.090197	8.49x10 ⁻⁰⁵	4.26x10 ⁻⁰³	1.755496	Increased
B430212C06Rik	-1.15141	7.396347	-6.96875	9.62x10 ⁻⁰⁵	4.46x10 ⁻⁰³	1.62291	Decreased
Gm15832	0.881945	10.59546	6.707952	1.27x10 ⁻⁰⁴	5.44x10 ⁻⁰³	1.332092	Increased
Has2os	1.23721	5.565359	6.631244	1.37x10 ⁻⁰⁴	5.51x10 ⁻⁰³	1.244937	Increased
1810021B22Rik	-0.82336	7.773507	-6.55271	1.5x10 ⁻⁰⁴	5.63x10 ⁻⁰³	1.15493	Decreased
1810014B01Rik	-0.9166	9.687215	-6.42727	1.71x10 ⁻⁰⁴	6.07x10 ⁻⁰³	1.009513	Decreased
A430046D13Rik	-0.90808	11.36267	-6.27416	2.03x10 ⁻⁰⁴	6.38x10 ⁻⁰³	0.829236	Decreased
Gm13111	-0.96704	9.714499	-6.27199	2.04x10 ⁻⁰⁴	6.38x10 ⁻⁰³	0.826657	Decreased
Gm4956	-2.05393	7.399052	-6.23555	2.12x10 ⁻⁰⁴	6.38x10 ⁻⁰³	0.783288	Decreased
A930029G22Rik	0.920583	9.35719	6.140229	2.36x10 ⁻⁰⁴	6.77x10 ⁻⁰³	0.668988	Increased
Gm6277	0.979462	4.972748	5.96542	2.88x10 ⁻⁰⁴	6.89x10 ⁻⁰³	0.456173	Increased
4930547M16Rik	-1.11873	4.480878	-5.95255	2.93x10 ⁻⁰⁴	6.89x10 ⁻⁰³	0.440339	Decreased
4921504A21Rik	-0.84642	8.282666	-5.88954	3.15x10 ⁻⁰⁴	6.89x10 ⁻⁰³	0.362484	Decreased
A530020G20Rik	2.608922	5.060148	5.858595	3.27x10 ⁻⁰⁴	6.89x10 ⁻⁰³	0.324056	Increased
Gm15958	-1.84717	4.854738	-5.85003	3.3x10 ⁻⁰⁴	6.89x10 ⁻⁰³	0.313398	Decreased
Gm12996	-0.90716	7.238561	-5.83441	3.36x10 ⁻⁰⁴	6.89x10 ⁻⁰³	0.293922	Decreased
B230369F24Rik	-0.74445	9.998132	-5.83211	3.37x10 ⁻⁰⁴	6.89x10 ⁻⁰³	0.291061	Decreased
A430078I02Rik	-0.84179	9.934499	-5.81595	3.43x10 ⁻⁰⁴	6.89x10 ⁻⁰³	0.270878	Decreased
Gm20619	-1.07666	10.89711	-5.81579	3.43x10 ⁻⁰⁴	6.89x10 ⁻⁰³	0.270666	Decreased
Igf2os	-1.01036	4.89222	-5.75957	3.67x10 ⁻⁰⁴	7.12x10 ⁻⁰³	0.200168	Decreased
4732463B04Rik	-1.24581	6.661889	-5.61165	4.38x10 ⁻⁰⁴	8.23x10 ⁻⁰³	0.01254	Decreased
Gm15866	1.572992	3.164918	5.571347	4.59x10 ⁻⁰⁴	8.38x10 ⁻⁰³	-0.03912	Increased
1110046J04Rik	1.101934	6.782811	5.512109	4.93x10 ⁻⁰⁴	8.74x10 ⁻⁰³	-0.11547	Increased
1600010F14Rik	-0.8742	10.96463	-5.47158	5.18x10 ⁻⁰⁴	8.92x10 ⁻⁰³	-0.168	Decreased
Gm15601	0.932043	5.677447	5.420052	5.52x10 ⁻⁰⁴	9.23x10 ⁻⁰³	-0.23512	Increased
Gm13403	-2.13547	1.126446	-5.34598	6.05x10 ⁻⁰⁴	9.84x10 ⁻⁰³	-0.33228	Decreased
F730043M19Rik	1.209508	6.930135	5.293864	6.45x10 ⁻⁰⁴	1.01x10 ⁻⁰²	-0.40111	Increased
Gm4117	2.138065	4.037428	5.28313	6.54x10 ⁻⁰⁴	1.01x10 ⁻⁰²	-0.41534	Increased
1700112J16Rik	-1.07651	5.106067	-5.17148	7.53x10 ⁻⁰⁴	1.13x10 ⁻⁰²	-0.56431	Decreased
E230013L22Rik	0.933202	11.70258	5.148265	7.75x10 ⁻⁰⁴	1.13x10 ⁻⁰²	-0.59551	Increased
0610025J13Rik	-0.8044	6.369165	-5.13486	7.88x10 ⁻⁰⁴	1.13x10 ⁻⁰²	-0.61357	Decreased
6330403K07Rik	1.400235	4.729557	5.091059	8.33x10 ⁻⁰⁴	1.17x10 ⁻⁰²	-0.67274	Increased
A330074K22Rik	0.911426	7.879638	5.023429	9.09x10 ⁻⁰⁴	1.24x10 ⁻⁰²	-0.76465	Increased
Gm5665	1.255584	3.675732	4.974802	9.67x10 ⁻⁰⁴	1.29x10 ⁻⁰²	-0.83115	Increased
1500017E21Rik	0.759785	10.13082	4.935559	1.02x10 ⁻⁰³	1.32x10 ⁻⁰²	-0.88506	Increased
Gm16119	-1.10656	6.101284	-4.92596	1.03x10 ⁻⁰³	1.32x10 ⁻⁰²	-0.89829	Decreased
BC028471	2.379484	2.6572	4.91254	1.05x10 ⁻⁰³	1.32x10 ⁻⁰²	-0.9168	Increased
9330162012Rik	-0.62511	9.07964	-4.77994	1.25x10 ⁻⁰³	1.50x10 ⁻⁰²	-1.10108	Decreased
Gm13391	1.367732	3.249403	4.777777	1.25x10 ⁻⁰³	1.50x10 ⁻⁰²	-1.10412	Increased
BC006965	1.864444	2.64968	4.764753	1.27x10 ⁻⁰³	1.50x10 ⁻⁰²	-1.12236	Increased
Gm26902	0.952912	5.340956	4.704176	1.38x10 ⁻⁰³	1.59x10 ⁻⁰²	-1.20754	Increased
Gm10693	1.271285	3.68452	4.691244	1.40x10 ⁻⁰³	1.59x10 ⁻⁰²	-1.22579	Increased
Gm12357	-1.03572	6.528426	-4.65024	1.48x10 ⁻⁰³	1.65x10 ⁻⁰²	-1.28382	Decreased
A330023F24Rik	0.763876	14.67316	4.605123	1.57x10 ⁻⁰³	1.69x10 ⁻⁰²	-1.34796	Increased

Table SII. Continued.

	logFC	Average expression	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Gm10561	0.980866	5.436206	4.592146	1.60x10 ⁻⁰³	1.69x10 ⁻⁰²	-1.36646	Increased
A330069E16Rik	-0.78035	6.501984	-4.59094	1.60x10 ⁻⁰³	1.69x10 ⁻⁰²	-1.36819	Decreased
Gm11476	2.506298	3.051089	4.550514	1.69x10 ⁻⁰³	1.76x10 ⁻⁰²	-1.42598	Increased
A330032B11Rik	-1.02778	4.16582	-4.52384	1.76x10 ⁻⁰³	1.79x10 ⁻⁰²	-1.46425	Decreased
Rmst	-1.05847	7.74713	-4.48924	1.84x10 ⁻⁰³	1.82x10 ⁻⁰²	-1.51403	Decreased
RMST_1	-1.05847	7.74713	-4.48924	1.84x10 ⁻⁰³	1.82 x10 ⁻⁰²	-1.51403	Decreased
2410006H16Rik	0.834427	9.421151	4.474257	1.88x10 ⁻⁰³	1.82x10 ⁻⁰²	-1.53564	Increased
Gm11547	1.361916	4.011219	4.385148	2.12x10 ⁻⁰³	1.84x10 ⁻⁰²	-1.66483	Increased
Trbj1-4	0.958791	6.222962	4.379031	2.14x10 ⁻⁰³	1.84x10 ⁻⁰²	-1.67374	Increased
Trbj1-5	0.958791	6.222962	4.379031	2.14x10 ⁻⁰³	1.84x10 ⁻⁰²	-1.67374	Increased
Trbj2-4	0.958791	6.222962	4.379031	2.14x10 ⁻⁰³	1.84x10 ⁻⁰²	-1.67374	Increased
Trbj2-6	0.958791	6.222962	4.379031	2.14x10 ⁻⁰³	1.84x10 ⁻⁰²	-1.67374	Increased
Trbv19	0.958791	6.222962	4.379031	2.14x10 ⁻⁰³	1.84 x10 ⁻⁰²	-1.67374	Increased
Trbv26	0.958791	6.222962	4.379031	2.14x10 ⁻⁰³	1.84x10 ⁻⁰²	-1.67374	Increased
Trbv4	0.958791	6.222962	4.379031	2.14x10 ⁻⁰³	1.84x10 ⁻⁰²	-1.67374	Increased
Gm14023	-0.75812	5.968878	-4.27807	2.46x10 ⁻⁰³	2.09x10 ⁻⁰²	-1.82154	Decreased
C530005A16Rik	-0.75201	7.491166	-4.25121	2.56x10 ⁻⁰³	2.10x10 ⁻⁰²	-1.8611	Decreased
4933431K23Rik	-0.55915	8.809674	-4.25064	2.56x10 ⁻⁰³	2.10x10 ⁻⁰²	-1.86194	Decreased
4930473A02Rik	0.5543	5.659688	4.24512	2.58x10 ⁻⁰³	2.10x10 ⁻⁰²	-1.87008	Increased
Gm9530	1.464795	3.680563	4.227543	2.64x10 ⁻⁰³	2.12x10 ⁻⁰²	-1.89603	Increased
Klra13-ps	1.333756	4.932409	4.141429	2.98x10 ⁻⁰³	2.36x10 ⁻⁰²	-2.02379	Increased
B430219N15Rik	-0.84254	5.841091	-4.11874	3.08x10 ⁻⁰³	2.39x10 ⁻⁰²	-2.05763	Decreased
Dlx6os1	1.92244	2.678678	4.113471	3.10x10 ⁻⁰³	2.39x10 ⁻⁰²	-2.06549	Increased
Gm16025	0.892541	5.279391	4.064759	3.33x10 ⁻⁰³	2.53x10 ⁻⁰²	-2.13837	Increased
Fer1l5	-0.56091	9.528853	-4.023	3.53x10 ⁻⁰³	2.66x10 ⁻⁰²	-2.20111	Decreased
6430710C18Rik	-0.73746	7.326433	-3.99495	3.67x10 ⁻⁰³	2.67x10 ⁻⁰²	-2.24337	Decreased
Gas5	0.632826	11.2834	3.976491	3.77x10 ⁻⁰³	2.67x10 ⁻⁰²	-2.27123	Increased
Gm6634	0.777886	5.594796	3.974771	3.78x10 ⁻⁰³	2.67x10 ⁻⁰²	-2.27383	Increased
Gm15535	-0.79148	6.23209	-3.96178	3.85x10 ⁻⁰³	2.67x10 ⁻⁰²	-2.29347	Decreased
Gm11613	-0.7181	8.860161	-3.96157	3.85x10 ⁻⁰³	2.67x10 ⁻⁰²	-2.29378	Decreased
Gm11899	-0.53449	7.163018	-3.93666	4.00x10 ⁻⁰³	2.76x10 ⁻⁰²	-2.33151	Decreased
Snord35a	1.769816	1.852366	3.88749	4.29x10 ⁻⁰³	2.93x10 ⁻⁰²	-2.40618	Increased
Gm6548	0.525063	11.74281	3.831156	4.66x10 ⁻⁰³	3.15x10 ⁻⁰²	-2.4921	Increased
Gm4262	1.130378	4.647056	3.808241	4.81x10 ⁻⁰³	3.22x10 ⁻⁰²	-2.52716	Increased
BC024582	0.90898	2.936671	3.796044	4.90x10 ⁻⁰³	3.24x10 ⁻⁰²	-2.54584	Increased
D230017M19Rik	-0.84654	7.644025	-3.76587	5.12x10 ⁻⁰³	3.34x10 ⁻⁰²	-2.59214	Decreased
Gm17396	0.522524	6.942259	3.760633	5.16x10 ⁻⁰³	3.34x10 ⁻⁰²	-2.60019	Increased
Gm17322	1.115236	3.741638	3.710747	5.55x10 ⁻⁰³	3.52x10 ⁻⁰²	-2.67699	Increased
Gm9903	-0.52249	7.415102	-3.70989	5.56x10 ⁻⁰³	3.52x10 ⁻⁰²	-2.67831	Decreased
Gm15567	1.371083	4.39946	3.662924	5.96x10 ⁻⁰³	3.67x10 ⁻⁰²	-2.75087	Increased
B230110C06Rik	-0.90845	9.182859	-3.66065	5.98x10 ⁻⁰³	3.67x10 ⁻⁰²	-2.7544	Decreased
Snora70	0.88842	5.053983	3.655183	6.03x10 ⁻⁰³	3.67x10 ⁻⁰²	-2.76286	Increased
3010003L21Rik	0.828432	4.52112	3.633223	6.23x10 ⁻⁰³	3.74x10 ⁻⁰²	-2.79688	Increased
Foxl1	1.472145	3.05161	3.628516	6.27x10 ⁻⁰³	3.74x10 ⁻⁰²	-2.80418	Increased
1700001L05Rik	0.602944	6.931565	3.621488	6.34x10 ⁻⁰³	3.74x10 ⁻⁰²	-2.81509	Increased
T2	-0.53494	5.801047	-3.56542	6.89x10 ⁻⁰³	4.02x10 ⁻⁰²	-2.90226	Decreased
AI507597	-1.50709	8.277238	-3.54636	7.09x10 ⁻⁰³	4.05x10 ⁻⁰²	-2.93197	Decreased
Gm15417	-0.50465	10.1793	-3.5369	7.19x10 ⁻⁰³	4.05x10 ⁻⁰²	-2.94672	Decreased
4930480K23Rik	-0.94399	8.878831	-3.53678	7.19x10 ⁻⁰³	4.05x10 ⁻⁰²	-2.9469	Decreased
9330132A10Rik	2.005584	2.72025	3.518416	7.39x10 ⁻⁰³	4.12x10 ⁻⁰²	-2.97557	Increased
4930570G19Rik	0.822606	4.280593	3.497847	7.62x10 ⁻⁰³	4.21x10 ⁻⁰²	-3.00772	Increased
Gm14636	1.034761	6.600362	3.482829	7.80x10 ⁻⁰³	4.27x10 ⁻⁰²	-3.03122	Increased
2900089D17Rik	0.634381	7.714768	3.456668	8.11x10 ⁻⁰³	4.36x10 ⁻⁰²	-3.0722	Increased
Gm16010	1.159442	6.423818	3.45621	8.12x10 ⁻⁰³	4.36x10 ⁻⁰²	-3.07292	Increased
2700033N17Rik	-0.5454	6.306026	-3.42368	8.52x10 ⁻⁰³	4.54x10 ⁻⁰²	-3.12397	Decreased

Table SII. Continued.

	logFC	Average expression	Moderated t-statistic	P-value	Adjusted P-value	B-statistic	Change in expression
Gm14634	-0.74907	5.698323	-3.30999	1.01x10 ⁻⁰²	-	-3.30305	Decreased
Gm26555	-1.0125	1.461205	-3.30206	1.03x10 ⁻⁰²	-	-3.31558	Decreased
Gm10390	-1.15426	2.574567	-3.29963	1.03x10 ⁻⁰²	-	-3.31942	Decreased
Gm13986	0.977335	2.602366	3.298582	1.03x10 ⁻⁰²	-	-3.32107	Increased
D330050G23Rik	1.496351	3.901842	3.285836	1.05x10 ⁻⁰²	-	-3.34122	Increased
Gm15477	-1.30499	2.743526	-3.27569	1.07x10 ⁻⁰²	-	-3.35726	Decreased
Etohd2	-0.55626	8.22418	-3.27104	1.07x10 ⁻⁰²	-	-3.36463	Decreased
4930441O14Rik	-0.57683	4.546323	-3.21606	1.17x10 ⁻⁰²	-	-3.45172	Decreased
C330013E15Rik	-0.64788	7.223467	-3.17889	1.24x10 ⁻⁰²	-	-3.5107	Decreased
Gm17566	-0.55871	6.00513	-3.17878	1.24x10 ⁻⁰²	-	-3.51088	Decreased
E230016M11Rik	0.796006	7.303663	3.174593	1.25x10 ⁻⁰²	-	-3.51753	Increased
Gm13713	0.822972	4.488999	3.149481	1.30x10 ⁻⁰²	-	-3.55743	Increased
AI314831	1.206553	3.466975	3.116556	1.36x10 ⁻⁰²	-	-3.60979	Increased
Pisd-ps1	0.560954	12.01255	3.112323	1.37x10 ⁻⁰²	-	-3.61652	Increased
1700095B22Rik	-0.74242	5.95447	-3.10704	1.38x10 ⁻⁰²	-	-3.62493	Decreased
Gm13594	-0.85477	7.659466	-3.08755	1.43x10 ⁻⁰²	-	-3.65595	Decreased
Gm16249	-0.85049	3.561419	-3.08624	1.43x10 ⁻⁰²	-	-3.65804	Decreased
C130046K22Rik	-0.5277	8.762123	-3.07993	1.44x10 ⁻⁰²	-	-3.66809	Decreased
1810059H22Rik	-0.63573	7.908405	-3.05394	1.56x10 ⁻⁰²	-	-3.70949	Decreased
Gm20482	1.214218	2.074567	3.028741	1.56x10 ⁻⁰²	-	-3.74967	Increased
A430057M04Rik	1.205001	3.96163	3.028268	1.56x10 ⁻⁰²	-	-3.75042	Increased
Gm12977	1.082701	1.758808	3.016071	1.59x10 ⁻⁰²	-	-3.76988	Increased
0610040F04Rik	-0.87885	3.339718	-2.99807	1.64x10 ⁻⁰²	-	-3.79859	Decreased
Gm10371	-0.92317	3.173977	-2.9946	1.65x10 ⁻⁰²	-	-3.80413	Decreased
Gm12092	0.667536	7.719465	2.916134	1.86x10 ⁻⁰²	-	-3.92939	Increased
1700092K14Rik	-0.92347	2.552767	-2.83534	2.11x10 ⁻⁰²	-	-4.05845	Decreased
Gm15492	-0.56493	3.712448	-2.78606	2.28x10 ⁻⁰²	-	-4.13716	Decreased
A730090N16Rik	0.964218	2.530049	2.759881	2.38x10 ⁻⁰²	-	-4.17897	Increased
Pldi	1.029977	1.482446	2.716368	2.55x10 ⁻⁰²	-	-4.24842	Increased
Gm4221	1.22854	3.66221	2.699738	2.62x10 ⁻⁰²	-	-4.27494	Increased
1010001N08Rik	-0.58177	10.58845	-2.63153	2.91x10 ⁻⁰²	-	-4.38364	Decreased
1010001B22Rik	-0.5021	4.513491	-2.60392	3.04x10 ⁻⁰²	-	-4.42759	Decreased
RP23 ⁻³⁰ M1.2	-0.55024	6.40399	-2.59402	3.10x10 ⁻⁰²	-	-4.44333	Decreased
Gm15587	0.532025	5.708018	2.592573	3.10x10 ⁻⁰²	-	-4.44563	Increased
Gm12367	-1.15875	0.491844	-2.56368	3.24x10 ⁻⁰²	-	-4.49155	Decreased
5730588L14Rik	0.682835	2.162635	2.553497	3.30x10 ⁻⁰²	-	-4.50772	Increased
Gm15543	-0.55805	11.2264	-2.53784	3.38x10 ⁻⁰²	-	-4.53257	Decreased
6430590A07Rik	-1.03254	4.356534	-2.5246	3.45x10 ⁻⁰²	-	-4.55357	Decreased
2310016D23Rik	-0.75383	3.707825	-2.507	3.55x10 ⁻⁰²	-	-4.58146	Decreased
RP23 ⁻¹³ F21.1	-1.2625	1.939965	-2.48828	3.65x10 ⁻⁰²	-	-4.61109	Decreased
Gm16835	0.666267	3.058028	2.485613	3.67x10 ⁻⁰²	-	-4.61531	Increased
4932435O22Rik	-0.75094	5.340928	-2.4709	3.76x10 ⁻⁰²	-	-4.63858	Decreased
Gm2366	1.204057	2.215727	2.462413	3.81x10 ⁻⁰²	-	-4.65199	Increased
4930474H06Rik	1.112955	3.750658	2.456677	3.84x10 ⁻⁰²	-	-4.66105	Increased
C030005K06Rik	-0.73717	6.466802	-2.42802	4.02x10 ⁻⁰²	-	-4.70627	Decreased
4833422M21Rik	1.310515	2.508796	2.426352	4.03x10 ⁻⁰²	-	-4.7089	Increased
0610043K17Rik	-0.59317	6.540827	-2.41862	4.08x10 ⁻⁰²	-	-4.72109	Decreased
Gm17540	-1.54483	1.977366	-2.39925	4.21x10 ⁻⁰²	-	-4.75158	Decreased
Gm16159	1.942348	2.584872	2.398555	4.21x10 ⁻⁰²	-	-4.75268	Increased
Gm26559	1.064	4.385538	2.386859	4.29x10 ⁻⁰²	-	-4.77107	Increased
Gm14261	-0.53428	9.05051	-2.38324	4.32x10 ⁻⁰²	-	-4.77676	Decreased
2700086A05Rik	0.72353	3.890413	2.357356	4.50x10 ⁻⁰²	-	-4.8174	Increased
Gm5101	1.043093	1.885245	2.353189	4.53x10 ⁻⁰²	-	-4.82393	Increased
Gm14488	0.945916	4.345699	2.335124	4.66x10 ⁻⁰²	-	-4.85223	Increased
1810058N05Rik	-0.87074	1.324567	-2.33307	4.67x10 ⁻⁰²	-	-4.85545	Decreased
1700109F18Rik	0.712305	4.20401	2.308352	4.86x10 ⁻⁰²	-	-4.89409	Increased
2310043M15Rik	0.571372	5.044998	2.305489	4.88x10 ⁻⁰²	-	-4.89856	Increased
2310002F09Rik	-0.62024	4.069764	-2.29262	4.99x10 ⁻⁰²	-	-4.91864	Decreased

Only false discover rate <0.05 was listed. FC, fold change.