

Supplementary information

TableS8. Differentially expressed genes between human Astrocyte and NSC

	p_val	avg_log2FC	pct.1	pct.2	p_val_adj	cluster
	1.41E-07	0.4965639	0.236	0.136	0.00397731	Astrocyte
	1.40E-07	0.39761212	0.309	0.203	0.0039661	Astrocyte
	1.37E-07	0.40866826	0.174	0.082	0.0038917	Astrocyte
	1.16E-07	0.1288617	0.297	0.487	0.00328238	Astrocyte
	1.07E-07	0.36622784	0.198	0.101	0.00302275	Astrocyte
	1.05E-07	0.77826716	0.335	0.244	0.00296546	Astrocyte
	1.03E-07	0.57063702	0.242	0.14	0.00291215	Astrocyte
	8.20E-08	0.39904029	0.826	0.83	0.00232141	Astrocyte
	7.12E-08	0.36052486	0.147	0.058	0.00201641	Astrocyte
	6.80E-08	0.74566413	0.638	0.644	0.0019255	Astrocyte
	6.79E-08	0.48012066	0.273	0.164	0.00192105	Astrocyte
	6.32E-08	0.62734114	0.725	0.754	0.00178794	Astrocyte
	6.17E-08	0.5981297	0.647	0.591	0.00174524	Astrocyte
	5.12E-08	0.65262166	0.548	0.506	0.00144803	Astrocyte
	4.38E-08	0.39476301	0.319	0.201	0.00124014	Astrocyte
	4.33E-08	0.48475917	0.411	0.304	0.00122559	Astrocyte
	3.13E-08	0.54104519	0.735	0.785	0.00088657	Astrocyte
	2.87E-08	0.25480511	0.157	0.062	0.00081286	Astrocyte
	2.63E-08	0.37208101	0.92	0.979	0.00074364	Astrocyte
	2.54E-08	0.53341007	0.64	0.662	0.00072035	Astrocyte
	2.49E-08	0.30768925	0.101	0.024	0.00070503	Astrocyte
	1.94E-08	0.71949514	0.242	0.14	0.00055036	Astrocyte
	1.80E-08	0.60881991	0.466	0.379	0.00051061	Astrocyte
	1.79E-08	0.37194175	0.931	0.983	0.00050584	Astrocyte
	1.50E-08	0.52883805	0.468	0.358	0.00042495	Astrocyte
	1.26E-08	0.29054374	0.958	0.987	0.00035589	Astrocyte
	8.06E-09	0.46293879	0.769	0.836	0.00022806	Astrocyte
	7.95E-09	0.33137757	0.152	0.056	0.00022489	Astrocyte
	7.36E-09	0.33968793	0.121	0.034	0.00020836	Astrocyte
	5.83E-09	0.7683687	0.597	0.563	0.00016504	Astrocyte
	4.50E-09	0.46268626	0.221	0.112	0.00012749	Astrocyte
	4.06E-09	0.28486303	0.114	0.028	0.00011494	Astrocyte
	3.85E-09	0.50172276	0.205	0.097	0.00010888	Astrocyte
	2.99E-09	0.3046701	0.198	0.086	8.46E-05	Astrocyte
	2.58E-09	0.59145699	0.532	0.455	7.29E-05	Astrocyte
	1.62E-09	0.59602713	0.359	0.228	4.57E-05	Astrocyte
	1.61E-09	0.79412729	0.596	0.554	4.57E-05	Astrocyte
	1.25E-09	0.35679741	0.12	0.03	3.53E-05	Astrocyte

	1.03E-09	0.4335226	0.766	0.662	2.92E-05	Astrocyte
	6.13E-10	0.48967899	0.156	0.052	1.73E-05	Astrocyte
	5.95E-10	0.5442247	0.663	0.675	1.69E-05	Astrocyte
	4.43E-10	0.31408788	0.147	0.045	1.25E-05	Astrocyte
	4.26E-10	1.08186117	0.44	0.341	1.20E-05	Astrocyte
	4.10E-10	1.08360876	0.302	0.187	1.16E-05	Astrocyte
	3.87E-10	0.28754982	0.179	0.067	1.09E-05	Astrocyte
	3.67E-10	0.31118008	0.124	0.03	1.04E-05	Astrocyte
	3.13E-10	0.60346644	0.347	0.222	8.85E-06	Astrocyte
	3.11E-10	0.58190721	0.738	0.694	8.79E-06	Astrocyte
	2.99E-10	0.66358906	0.381	0.259	8.46E-06	Astrocyte
	2.77E-10	0.84277088	0.568	0.532	7.83E-06	Astrocyte
	2.02E-10	0.37972609	0.909	0.951	5.71E-06	Astrocyte
	1.48E-10	0.60365021	0.358	0.224	4.20E-06	Astrocyte
	1.03E-10	0.40399674	0.136	0.034	2.93E-06	Astrocyte
	6.40E-11	0.53067706	0.264	0.134	1.81E-06	Astrocyte
	5.73E-11	0.47731151	0.344	0.211	1.62E-06	Astrocyte
	5.59E-11	0.66835108	0.28	0.147	1.58E-06	Astrocyte
	5.08E-11	0.22591721	0.981	0.998	1.44E-06	Astrocyte
	3.17E-11	0.50634302	0.709	0.651	8.98E-07	Astrocyte
	2.91E-11	0.57795397	0.356	0.222	8.25E-07	Astrocyte
	1.98E-11	0.6676456	0.478	0.353	5.59E-07	Astrocyte
	1.58E-11	0.41495072	0.898	0.944	4.46E-07	Astrocyte
	1.53E-11	0.75423395	0.442	0.312	4.34E-07	Astrocyte
	1.40E-11	0.61906108	0.49	0.364	3.98E-07	Astrocyte
	1.25E-11	0.92517841	0.173	0.05	3.53E-07	Astrocyte
	9.03E-12	0.45980379	0.151	0.039	2.56E-07	Astrocyte
	8.51E-12	0.47681329	0.798	0.826	2.41E-07	Astrocyte
	6.22E-12	0.36342326	0.931	0.968	1.76E-07	Astrocyte
	4.83E-12	1.44058274	0.315	0.183	1.37E-07	Astrocyte
	4.15E-12	0.34809198	0.118	0.017	1.18E-07	Astrocyte
	2.70E-12	0.29761492	0.966	1	7.63E-08	Astrocyte
	2.69E-12	0.54776175	0.264	0.125	7.61E-08	Astrocyte
	2.23E-12	0.32200168	0.11	0.011	6.30E-08	Astrocyte
	1.16E-12	0.70832475	0.618	0.567	3.28E-08	Astrocyte
	9.42E-13	0.75428923	0.367	0.226	2.67E-08	Astrocyte
	8.68E-13	0.51343296	0.14	0.028	2.46E-08	Astrocyte
	6.96E-13	0.59353095	0.274	0.125	1.97E-08	Astrocyte
	6.85E-13	0.68907555	0.415	0.285	1.94E-08	Astrocyte
	3.27E-13	0.77961931	0.984	1	9.25E-09	Astrocyte
	2.07E-13	0.72640151	0.595	0.511	5.87E-09	Astrocyte

	1.82E-13	0.74765374	0.431	0.3	5.16E-09	Astrocyte
	1.25E-13	0.8835274	0.466	0.347	3.53E-09	Astrocyte
	1.09E-13	0.67669077	0.635	0.506	3.08E-09	Astrocyte
	8.24E-14	0.42680417	0.933	0.985	2.33E-09	Astrocyte
	5.62E-14	0.63043238	0.491	0.34	1.59E-09	Astrocyte
	5.04E-14	0.56781151	0.789	0.81	1.43E-09	Astrocyte
	4.99E-14	0.58227207	0.754	0.748	1.41E-09	Astrocyte
	4.97E-14	0.58233334	0.161	0.035	1.41E-09	Astrocyte
	3.52E-14	0.68644047	0.619	0.506	9.98E-10	Astrocyte
	2.92E-14	0.82140309	0.47	0.328	8.28E-10	Astrocyte
	1.37E-14	0.66688945	0.31	0.151	3.89E-10	Astrocyte
	9.41E-15	0.62751876	0.696	0.72	2.66E-10	Astrocyte
	5.57E-15	0.92166324	0.265	0.112	1.58E-10	Astrocyte
	4.57E-15	0.64133682	0.365	0.203	1.29E-10	Astrocyte
	3.38E-15	0.37987079	0.148	0.021	9.57E-11	Astrocyte
	2.32E-15	0.67716805	0.619	0.539	6.55E-11	Astrocyte
	1.88E-15	0.87031293	0.36	0.194	5.33E-11	Astrocyte
	1.81E-15	0.60210719	0.33	0.155	5.12E-11	Astrocyte
	1.52E-15	0.97032287	0.257	0.099	4.30E-11	Astrocyte
	1.44E-15	0.64550813	0.632	0.515	4.07E-11	Astrocyte
	1.40E-15	0.7361709	0.345	0.17	3.96E-11	Astrocyte
	4.28E-16	1.18223347	0.559	0.459	1.21E-11	Astrocyte
	3.87E-16	0.68921445	0.183	0.039	1.10E-11	Astrocyte
	2.29E-16	0.79508326	0.79	0.785	6.47E-12	Astrocyte
	1.82E-16	0.7251317	0.469	0.299	5.15E-12	Astrocyte
	1.66E-16	0.58660609	0.211	0.056	4.69E-12	Astrocyte
	1.39E-16	0.57536056	0.146	0.015	3.94E-12	Astrocyte
	9.43E-17	0.69981094	0.204	0.05	2.67E-12	Astrocyte
	8.09E-17	0.44313825	0.177	0.03	2.29E-12	Astrocyte
	4.21E-17	0.37465721	0.977	0.998	1.19E-12	Astrocyte
	1.93E-17	0.59166567	0.282	0.104	5.47E-13	Astrocyte
	1.79E-17	0.61987382	0.239	0.071	5.06E-13	Astrocyte
	1.30E-17	0.79316922	0.541	0.409	3.67E-13	Astrocyte
	1.97E-18	0.72798142	0.523	0.332	5.58E-14	Astrocyte
	1.87E-18	0.62015333	0.822	0.825	5.30E-14	Astrocyte
	1.13E-18	0.47052356	0.918	0.972	3.19E-14	Astrocyte
	4.98E-19	0.9073925	0.6	0.444	1.41E-14	Astrocyte
	4.86E-19	0.74482206	0.394	0.205	1.38E-14	Astrocyte
	1.81E-19	0.68592782	0.252	0.075	5.13E-15	Astrocyte
	1.52E-19	0.59493477	0.226	0.05	4.30E-15	Astrocyte
	6.12E-20	0.91761689	0.717	0.683	1.73E-15	Astrocyte

	5.29E-20	0.69376131	0.18	0.021	1.50E-15	Astrocyte
	1.65E-20	1.06509672	0.931	0.955	4.66E-16	Astrocyte
	1.37E-20	0.81703617	0.535	0.306	3.89E-16	Astrocyte
	3.62E-21	0.73928175	0.265	0.067	1.02E-16	Astrocyte
	1.02E-21	0.99302878	0.57	0.412	2.88E-17	Astrocyte
	1.23E-22	0.63535032	0.223	0.037	3.47E-18	Astrocyte
	1.81E-23	0.61954768	0.867	0.888	5.12E-19	Astrocyte
	1.04E-23	1.07636606	0.351	0.132	2.94E-19	Astrocyte
	1.03E-23	1.11198583	0.752	0.685	2.91E-19	Astrocyte
	9.51E-24	0.76096151	0.777	0.715	2.69E-19	Astrocyte
	2.67E-25	0.96363602	0.386	0.151	7.56E-21	Astrocyte
	1.23E-25	0.82572903	0.345	0.116	3.47E-21	Astrocyte
	1.74E-26	0.68835106	0.839	0.853	4.94E-22	Astrocyte
	1.78E-27	1.4091198	0.438	0.203	5.05E-23	Astrocyte
	1.64E-28	1.0740101	0.31	0.076	4.65E-24	Astrocyte
	1.08E-28	0.91932211	0.508	0.257	3.04E-24	Astrocyte
	8.08E-30	0.96980076	0.807	0.718	2.29E-25	Astrocyte
	2.75E-31	0.97688557	0.291	0.047	7.78E-27	Astrocyte
	9.97E-32	1.47423363	0.606	0.401	2.82E-27	Astrocyte
	9.92E-32	1.16921944	0.677	0.524	2.81E-27	Astrocyte
	4.30E-32	0.55388673	0.989	0.972	1.22E-27	Astrocyte
	1.75E-32	1.01634996	0.448	0.181	4.96E-28	Astrocyte
	5.29E-33	1.41397545	0.941	0.912	1.50E-28	Astrocyte
	3.03E-33	1.37340358	0.326	0.069	8.57E-29	Astrocyte
	1.81E-33	0.98455095	0.324	0.062	5.12E-29	Astrocyte
	1.63E-33	0.96009075	0.76	0.683	4.62E-29	Astrocyte
	1.43E-33	0.99421533	0.445	0.174	4.05E-29	Astrocyte
	5.08E-36	1.27453331	0.541	0.293	1.44E-31	Astrocyte
	7.58E-37	1.25202765	0.627	0.364	2.14E-32	Astrocyte
	2.24E-39	1.34207699	0.629	0.405	6.35E-35	Astrocyte
	4.51E-43	1.1668999	0.94	0.912	1.28E-38	Astrocyte
	2.62E-46	1.27385555	0.503	0.157	7.40E-42	Astrocyte
	1.58E-46	1.60183065	0.653	0.343	4.48E-42	Astrocyte
	1.75E-49	1.33155181	0.724	0.418	4.94E-45	Astrocyte
	3.99E-50	1.22589844	0.859	0.709	1.13E-45	Astrocyte
	1.41E-50	1.28075159	0.807	0.623	4.00E-46	Astrocyte
	1.18E-55	2.01149245	0.695	0.375	3.35E-51	Astrocyte
	3.47E-62	1.70313242	0.742	0.44	9.81E-58	Astrocyte
	5.33E-64	1.58596185	0.583	0.177	1.51E-59	Astrocyte
	3.39E-76	1.93122261	0.623	0.151	9.59E-72	Astrocyte
	6.90E-79	1.72828008	0.526	0.043	1.95E-74	Astrocyte

	4.99E-79	1.91342459	0.604	0.125	1.41E-74	Astrocyte
	9.59E-105	2.02487099	0.899	0.575	2.71E-100	Astrocyte
	1.17E-07	0.23651256	0.231	0.125	0.00330752	NSC
	5.26E-08	0.22625696	0.907	0.709	0.00148774	NSC
	3.26E-08	0.27703386	0.8	0.624	0.00092384	NSC
	3.12E-08	0.23136221	0.634	0.46	0.00088212	NSC
	1.46E-08	0.23628783	0.897	0.733	0.00041346	NSC
	5.95E-09	0.25438335	0.879	0.693	0.00016833	NSC
	3.51E-09	0.24104668	0.819	0.598	9.93E-05	NSC
	2.81E-09	0.22113988	0.759	0.571	7.95E-05	NSC
	2.43E-09	0.35056733	0.229	0.116	6.89E-05	NSC
	2.32E-09	0.2647446	0.862	0.647	6.58E-05	NSC
	2.30E-09	0.25227576	0.703	0.505	6.50E-05	NSC
	1.19E-09	0.26399543	0.325	0.179	3.38E-05	NSC
	1.03E-09	0.28897418	0.153	0.059	2.90E-05	NSC
	7.47E-10	0.22743477	0.761	0.548	2.11E-05	NSC
	6.70E-10	0.22330151	0.491	0.315	1.90E-05	NSC
	5.83E-10	0.23258608	0.59	0.393	1.65E-05	NSC
	3.44E-10	0.23295307	0.916	0.727	9.73E-06	NSC
	3.35E-10	0.23552181	0.75	0.527	9.49E-06	NSC
	2.45E-10	0.25106914	0.231	0.108	6.94E-06	NSC
	2.13E-10	0.23946017	0.354	0.198	6.04E-06	NSC
	1.45E-10	0.22963608	0.91	0.732	4.10E-06	NSC
	1.30E-10	0.23855833	0.972	0.843	3.68E-06	NSC
	1.25E-10	0.23075021	0.761	0.514	3.53E-06	NSC
	1.20E-10	0.24572819	0.513	0.323	3.41E-06	NSC
	9.97E-11	0.23097803	0.869	0.638	2.82E-06	NSC
	9.68E-11	0.25059968	0.94	0.761	2.74E-06	NSC
	8.24E-11	0.22746396	0.864	0.615	2.33E-06	NSC
	7.93E-11	0.24001018	0.937	0.775	2.24E-06	NSC
	7.48E-11	0.24851265	0.813	0.592	2.12E-06	NSC
	6.51E-11	0.59668372	0.252	0.123	1.84E-06	NSC
	6.20E-11	0.28468706	0.528	0.338	1.76E-06	NSC
	5.65E-11	0.26166231	0.659	0.446	1.60E-06	NSC
	3.50E-11	0.33594091	0.293	0.149	9.91E-07	NSC
	2.66E-11	0.22096725	0.209	0.088	7.52E-07	NSC
	2.45E-11	0.23016191	0.985	0.862	6.92E-07	NSC
	2.25E-11	0.25013914	0.944	0.772	6.35E-07	NSC
	1.94E-11	0.22497935	0.784	0.549	5.48E-07	NSC
	1.29E-11	0.2309688	0.791	0.566	3.65E-07	NSC
	1.21E-11	0.25025287	0.91	0.701	3.41E-07	NSC

	1.10E-11	0.26925504	0.789	0.563	3.11E-07	NSC
	1.05E-11	0.28536704	0.925	0.724	2.97E-07	NSC
	8.08E-12	0.22905438	0.851	0.606	2.29E-07	NSC
	6.41E-12	0.30742625	0.409	0.227	1.81E-07	NSC
	5.46E-12	0.29625215	0.771	0.552	1.54E-07	NSC
	4.86E-12	0.2357793	0.965	0.804	1.38E-07	NSC
	4.81E-12	0.2832146	0.951	0.827	1.36E-07	NSC
	4.41E-12	0.24521712	0.881	0.642	1.25E-07	NSC
	4.38E-12	0.2271132	0.769	0.518	1.24E-07	NSC
	4.20E-12	0.28394678	0.545	0.341	1.19E-07	NSC
	4.14E-12	0.23211452	0.716	0.484	1.17E-07	NSC
	3.86E-12	0.24284955	0.174	0.062	1.09E-07	NSC
	3.84E-12	0.29372868	0.422	0.234	1.09E-07	NSC
	3.79E-12	0.23778946	0.289	0.137	1.07E-07	NSC
	3.38E-12	0.23548735	0.785	0.554	9.56E-08	NSC
	2.41E-12	0.24799013	0.991	0.909	6.83E-08	NSC
	2.19E-12	0.26456666	0.804	0.567	6.20E-08	NSC
	2.06E-12	0.45395271	0.328	0.171	5.83E-08	NSC
	2.03E-12	0.23579177	0.994	0.943	5.75E-08	NSC
	1.84E-12	0.23739557	0.729	0.481	5.20E-08	NSC
	1.46E-12	0.41876074	0.192	0.073	4.13E-08	NSC
	1.39E-12	0.26962783	0.554	0.341	3.94E-08	NSC
	1.22E-12	0.23203917	0.619	0.388	3.45E-08	NSC
	1.03E-12	0.28587959	0.692	0.452	2.90E-08	NSC
	9.93E-13	0.2252117	0.728	0.48	2.81E-08	NSC
	8.78E-13	0.24424567	0.603	0.379	2.49E-08	NSC
	7.65E-13	0.3121705	0.569	0.35	2.16E-08	NSC
	7.53E-13	0.28741516	0.965	0.829	2.13E-08	NSC
	7.41E-13	0.22097294	0.662	0.413	2.10E-08	NSC
	7.12E-13	0.28504878	0.78	0.552	2.01E-08	NSC
	6.71E-13	0.22977588	0.438	0.243	1.90E-08	NSC
	6.18E-13	0.22253822	0.563	0.341	1.75E-08	NSC
	5.89E-13	0.24628661	0.838	0.598	1.67E-08	NSC
	5.07E-13	0.25394652	0.759	0.515	1.44E-08	NSC
	4.46E-13	0.24700329	0.688	0.45	1.26E-08	NSC
	3.80E-13	0.25882808	0.791	0.54	1.08E-08	NSC
	3.64E-13	0.40507059	0.707	0.486	1.03E-08	NSC
	3.46E-13	0.25473824	0.787	0.533	9.79E-09	NSC
	3.37E-13	0.27264325	0.892	0.696	9.53E-09	NSC
	3.04E-13	0.24682298	0.778	0.522	8.61E-09	NSC
	2.53E-13	0.27304805	0.993	0.924	7.15E-09	NSC

	2.13E-13	0.25724554	0.825	0.563	6.02E-09	NSC
	2.12E-13	0.29708336	0.951	0.761	5.99E-09	NSC
	1.94E-13	0.24944009	0.789	0.552	5.49E-09	NSC
	1.86E-13	0.31613416	0.985	0.863	5.27E-09	NSC
	1.85E-13	0.30214966	0.59	0.38	5.23E-09	NSC
	1.65E-13	0.23225034	0.235	0.095	4.66E-09	NSC
	1.60E-13	0.37782895	0.455	0.26	4.53E-09	NSC
	1.47E-13	0.24443925	0.218	0.085	4.15E-09	NSC
	1.22E-13	0.33423269	0.547	0.333	3.47E-09	NSC
	1.18E-13	0.30605037	0.94	0.743	3.34E-09	NSC
	1.18E-13	0.34003138	0.888	0.654	3.34E-09	NSC
	1.07E-13	0.1497727	0.116	0.025	3.03E-09	NSC
	9.93E-14	0.38560926	0.897	0.696	2.81E-09	NSC
	8.99E-14	0.27879942	0.901	0.704	2.54E-09	NSC
	8.23E-14	0.27914005	0.759	0.51	2.33E-09	NSC
	7.45E-14	0.27057472	0.849	0.614	2.11E-09	NSC
	7.38E-14	0.3020293	0.847	0.603	2.09E-09	NSC
	7.14E-14	0.24527752	0.78	0.528	2.02E-09	NSC
	6.03E-14	0.29035572	0.793	0.568	1.71E-09	NSC
	5.90E-14	0.25839767	0.468	0.261	1.67E-09	NSC
	5.47E-14	0.22208613	0.44	0.233	1.55E-09	NSC
	4.75E-14	0.24979295	0.858	0.606	1.34E-09	NSC
	4.50E-14	0.29077343	0.828	0.609	1.27E-09	NSC
	4.47E-14	0.2296584	0.517	0.299	1.26E-09	NSC
	4.13E-14	0.29549974	0.731	0.489	1.17E-09	NSC
	3.24E-14	0.22706275	0.703	0.44	9.17E-10	NSC
	3.19E-14	0.27124869	0.578	0.346	9.04E-10	NSC
	2.63E-14	0.24494191	0.825	0.562	7.45E-10	NSC
	2.62E-14	0.25052741	0.222	0.083	7.43E-10	NSC
	2.56E-14	0.25151954	0.75	0.512	7.25E-10	NSC
	2.10E-14	0.28725413	0.843	0.606	5.96E-10	NSC
	2.06E-14	0.27894979	0.782	0.53	5.84E-10	NSC
	2.05E-14	0.30812676	0.931	0.748	5.82E-10	NSC
	2.01E-14	0.29038181	0.978	0.856	5.70E-10	NSC
	1.84E-14	0.29592584	0.955	0.769	5.21E-10	NSC
	1.65E-14	0.24442762	0.724	0.459	4.67E-10	NSC
	1.65E-14	0.2245952	0.25	0.101	4.66E-10	NSC
	1.43E-14	0.2509136	0.705	0.464	4.04E-10	NSC
	1.39E-14	0.24364427	0.351	0.167	3.92E-10	NSC
	1.32E-14	0.27722931	0.558	0.323	3.73E-10	NSC
	1.04E-14	0.23765299	0.696	0.43	2.95E-10	NSC

	1.03E-14	0.22632673	0.588	0.347	2.91E-10	NSC
	1.01E-14	0.27828323	0.233	0.089	2.85E-10	NSC
	8.86E-15	0.26275809	0.826	0.571	2.51E-10	NSC
	8.35E-15	0.30859165	0.896	0.666	2.36E-10	NSC
	7.15E-15	0.30065396	0.866	0.614	2.02E-10	NSC
	6.94E-15	0.32738221	0.933	0.721	1.97E-10	NSC
	6.94E-15	0.28428054	0.674	0.421	1.96E-10	NSC
	5.90E-15	0.32116344	0.966	0.839	1.67E-10	NSC
	5.60E-15	0.25470996	0.657	0.411	1.58E-10	NSC
	5.14E-15	0.22313516	0.431	0.222	1.45E-10	NSC
	4.95E-15	0.22675812	0.575	0.334	1.40E-10	NSC
	4.68E-15	0.22899782	0.653	0.391	1.33E-10	NSC
	4.46E-15	0.22266938	0.364	0.177	1.26E-10	NSC
	4.34E-15	0.42319976	0.718	0.508	1.23E-10	NSC
	3.99E-15	0.29015561	0.207	0.071	1.13E-10	NSC
	3.91E-15	0.21323248	0.687	0.417	1.11E-10	NSC
	3.85E-15	0.33880596	0.683	0.444	1.09E-10	NSC
	3.61E-15	0.32705067	0.886	0.689	1.02E-10	NSC
	3.42E-15	0.36460724	0.832	0.594	9.67E-11	NSC
	2.63E-15	0.42916191	0.916	0.763	7.44E-11	NSC
	2.54E-15	0.31160717	0.903	0.644	7.18E-11	NSC
	2.46E-15	0.3080444	0.955	0.797	6.96E-11	NSC
	2.32E-15	0.33199787	0.944	0.768	6.56E-11	NSC
	2.17E-15	0.31067296	0.625	0.384	6.13E-11	NSC
	2.16E-15	0.34367014	0.351	0.163	6.12E-11	NSC
	2.13E-15	0.3468026	0.856	0.621	6.04E-11	NSC
	2.09E-15	0.28658599	0.356	0.173	5.90E-11	NSC
	2.08E-15	0.36074052	0.599	0.365	5.88E-11	NSC
	1.84E-15	0.27666242	0.517	0.287	5.22E-11	NSC
	1.80E-15	0.50618769	0.41	0.214	5.09E-11	NSC
	1.75E-15	0.3213826	0.916	0.679	4.96E-11	NSC
	1.61E-15	0.32619121	0.907	0.672	4.57E-11	NSC
	1.56E-15	0.23340391	0.418	0.208	4.42E-11	NSC
	1.51E-15	0.33516517	0.866	0.627	4.28E-11	NSC
	1.19E-15	0.30426541	0.789	0.53	3.36E-11	NSC
	1.07E-15	0.28457171	0.711	0.453	3.03E-11	NSC
	1.05E-15	0.23781173	0.409	0.201	2.96E-11	NSC
	9.86E-16	0.40025627	0.653	0.404	2.79E-11	NSC
	9.44E-16	0.22296271	0.368	0.172	2.67E-11	NSC
	9.43E-16	0.29946251	0.817	0.559	2.67E-11	NSC
	8.58E-16	0.23118504	0.515	0.281	2.43E-11	NSC

	8.23E-16	0.39754966	0.929	0.82	2.33E-11	NSC
	4.34E-16	0.23183832	0.535	0.299	1.23E-11	NSC
	3.45E-16	0.32429515	0.569	0.336	9.78E-12	NSC
	3.43E-16	0.33939776	0.563	0.333	9.72E-12	NSC
	3.34E-16	0.28090645	0.576	0.328	9.45E-12	NSC
	2.90E-16	0.30174451	0.494	0.27	8.20E-12	NSC
	2.80E-16	0.22618374	0.597	0.353	7.91E-12	NSC
	2.72E-16	0.24106906	0.826	0.547	7.69E-12	NSC
	2.65E-16	0.32924521	0.797	0.532	7.51E-12	NSC
	2.42E-16	0.36293615	0.909	0.659	6.84E-12	NSC
	2.39E-16	0.22990238	0.356	0.164	6.76E-12	NSC
	2.27E-16	0.32654339	0.774	0.526	6.43E-12	NSC
	1.92E-16	0.26255578	0.787	0.49	5.44E-12	NSC
	1.91E-16	0.3596171	0.668	0.421	5.40E-12	NSC
	1.74E-16	0.34980721	0.144	0.031	4.93E-12	NSC
	1.66E-16	0.34506261	0.957	0.802	4.69E-12	NSC
	1.62E-16	0.25057514	0.58	0.328	4.59E-12	NSC
	1.53E-16	0.22321904	0.662	0.383	4.34E-12	NSC
	1.48E-16	0.3677652	0.918	0.724	4.19E-12	NSC
	1.44E-16	0.33176493	0.942	0.747	4.09E-12	NSC
	1.36E-16	0.29252871	0.649	0.404	3.86E-12	NSC
	1.21E-16	0.22704707	0.364	0.169	3.42E-12	NSC
	1.07E-16	0.32127277	0.976	0.89	3.03E-12	NSC
	1.02E-16	0.38573441	0.825	0.576	2.87E-12	NSC
	1.00E-16	0.29765152	0.84	0.576	2.84E-12	NSC
	6.97E-17	0.31517081	0.89	0.627	1.97E-12	NSC
	5.20E-17	0.27321949	0.517	0.281	1.47E-12	NSC
	4.86E-17	0.26420746	0.664	0.387	1.38E-12	NSC
	4.41E-17	0.22848446	0.338	0.148	1.25E-12	NSC
	4.32E-17	0.2494953	0.502	0.26	1.22E-12	NSC
	3.15E-17	0.28826273	0.899	0.675	8.93E-13	NSC
	2.40E-17	0.30673349	0.603	0.352	6.79E-13	NSC
	1.22E-17	0.25021489	0.459	0.227	3.46E-13	NSC
	1.16E-17	0.22554648	0.575	0.315	3.29E-13	NSC
	1.12E-17	0.25029384	0.595	0.328	3.17E-13	NSC
	1.05E-17	0.41639576	0.392	0.195	2.98E-13	NSC
	1.05E-17	0.27165468	0.582	0.317	2.97E-13	NSC
	9.59E-18	0.27633091	0.58	0.319	2.71E-13	NSC
	8.51E-18	0.33984088	0.959	0.801	2.41E-13	NSC
	8.47E-18	0.34463511	0.933	0.707	2.40E-13	NSC
	8.39E-18	0.23440585	0.142	0.028	2.38E-13	NSC

	6.44E-18	0.3194447	0.425	0.205	1.82E-13	NSC
	4.17E-18	0.33368348	0.864	0.602	1.18E-13	NSC
	3.76E-18	0.35385809	0.685	0.422	1.06E-13	NSC
	3.43E-18	0.27045754	0.534	0.278	9.70E-14	NSC
	2.69E-18	0.28455105	0.996	0.955	7.62E-14	NSC
	1.81E-18	0.27669148	0.341	0.146	5.14E-14	NSC
	1.72E-18	0.23948419	0.229	0.073	4.88E-14	NSC
	1.70E-18	0.25880345	0.267	0.094	4.82E-14	NSC
	1.65E-18	0.24707586	0.496	0.25	4.66E-14	NSC
	1.61E-18	0.28346406	0.853	0.581	4.56E-14	NSC
	1.60E-18	0.5105564	0.845	0.619	4.53E-14	NSC
	1.18E-18	0.31140308	0.851	0.588	3.33E-14	NSC
	9.49E-19	0.42146733	0.868	0.646	2.69E-14	NSC
	8.81E-19	0.23914735	0.584	0.319	2.49E-14	NSC
	8.05E-19	0.34732646	0.925	0.688	2.28E-14	NSC
	7.87E-19	0.2704603	0.787	0.496	2.23E-14	NSC
	7.10E-19	0.34315872	0.879	0.613	2.01E-14	NSC
	6.73E-19	0.33515294	0.748	0.476	1.91E-14	NSC
	6.24E-19	0.32693579	0.937	0.703	1.77E-14	NSC
	5.56E-19	0.30626208	0.147	0.028	1.57E-14	NSC
	4.43E-19	0.26272356	0.535	0.277	1.25E-14	NSC
	4.20E-19	0.33895185	0.271	0.096	1.19E-14	NSC
	3.80E-19	0.64750285	0.341	0.149	1.08E-14	NSC
	3.58E-19	0.28454624	0.604	0.336	1.01E-14	NSC
	3.54E-19	0.28054624	0.597	0.334	1.00E-14	NSC
	3.38E-19	0.37645639	0.744	0.471	9.56E-15	NSC
	3.17E-19	0.33304143	0.836	0.548	8.99E-15	NSC
	2.93E-19	0.39549614	0.957	0.806	8.30E-15	NSC
	2.85E-19	0.38652164	0.92	0.713	8.06E-15	NSC
	2.84E-19	0.32381762	0.978	0.874	8.05E-15	NSC
	2.57E-19	0.32486543	0.558	0.298	7.28E-15	NSC
	2.46E-19	0.47492239	0.929	0.779	6.97E-15	NSC
	2.39E-19	0.30830798	0.66	0.378	6.77E-15	NSC
	2.03E-19	0.27865485	0.668	0.38	5.75E-15	NSC
	1.62E-19	0.44535105	0.828	0.577	4.57E-15	NSC
	1.57E-19	0.24753483	0.282	0.1	4.45E-15	NSC
	1.55E-19	0.33455927	0.711	0.421	4.39E-15	NSC
	9.28E-20	0.29651222	0.621	0.344	2.63E-15	NSC
	6.90E-20	0.38142615	0.978	0.804	1.95E-15	NSC
	5.89E-20	0.31067749	0.377	0.164	1.67E-15	NSC
	4.69E-20	0.32238038	0.996	0.958	1.33E-15	NSC

	4.13E-20	0.44322921	0.289	0.108	1.17E-15	NSC
	4.07E-20	0.23096612	0.64	0.342	1.15E-15	NSC
	3.96E-20	0.39153721	0.965	0.843	1.12E-15	NSC
	3.42E-20	0.53328782	0.789	0.523	9.67E-16	NSC
	3.29E-20	0.35210632	0.562	0.295	9.31E-16	NSC
	3.25E-20	0.32857331	0.625	0.351	9.19E-16	NSC
	2.99E-20	0.34182806	0.888	0.626	8.47E-16	NSC
	2.84E-20	0.33125333	0.265	0.088	8.04E-16	NSC
	2.75E-20	0.33519515	0.774	0.501	7.77E-16	NSC
	2.68E-20	0.23085339	0.504	0.246	7.60E-16	NSC
	1.90E-20	0.3434671	0.744	0.455	5.39E-16	NSC
	1.47E-20	0.40191465	0.922	0.666	4.16E-16	NSC
	1.26E-20	0.2721679	0.418	0.187	3.57E-16	NSC
	1.22E-20	0.36307842	0.989	0.857	3.46E-16	NSC
	8.88E-21	0.35487397	0.951	0.775	2.51E-16	NSC
	8.15E-21	0.3524736	0.556	0.29	2.31E-16	NSC
	8.11E-21	0.36760571	0.614	0.338	2.30E-16	NSC
	8.06E-21	0.29956441	0.313	0.116	2.28E-16	NSC
	7.00E-21	0.33525477	0.965	0.748	1.98E-16	NSC
	5.34E-21	0.35185426	1	0.989	1.51E-16	NSC
	4.91E-21	0.31661732	0.58	0.305	1.39E-16	NSC
	3.41E-21	0.24630982	0.269	0.087	9.64E-17	NSC
	3.35E-21	0.29715342	0.698	0.386	9.49E-17	NSC
	3.34E-21	0.32479218	0.325	0.119	9.45E-17	NSC
	2.70E-21	0.27951963	0.149	0.024	7.63E-17	NSC
	2.65E-21	0.41451055	0.836	0.56	7.50E-17	NSC
	2.25E-21	0.35328474	0.981	0.862	6.38E-17	NSC
	2.19E-21	0.40261615	0.381	0.162	6.19E-17	NSC
	1.84E-21	0.23990829	0.33	0.122	5.20E-17	NSC
	1.59E-21	0.28288373	0.271	0.088	4.49E-17	NSC
	1.49E-21	0.24015672	0.306	0.105	4.23E-17	NSC
	8.93E-22	0.41600801	0.854	0.608	2.53E-17	NSC
	6.99E-22	0.4087624	0.976	0.824	1.98E-17	NSC
	6.79E-22	0.25760068	0.382	0.155	1.92E-17	NSC
	6.41E-22	0.34074452	0.547	0.28	1.81E-17	NSC
	5.58E-22	0.39066744	0.989	0.891	1.58E-17	NSC
	4.82E-22	0.332088	0.567	0.287	1.36E-17	NSC
	4.28E-22	0.2410815	0.616	0.319	1.21E-17	NSC
	4.23E-22	0.34174374	0.994	0.921	1.20E-17	NSC
	4.12E-22	0.43194741	0.388	0.16	1.16E-17	NSC
	3.73E-22	0.30466775	0.183	0.038	1.06E-17	NSC

	3.33E-22	0.40767749	0.881	0.605	9.42E-18	NSC
	3.22E-22	0.33911877	0.571	0.296	9.12E-18	NSC
	2.43E-22	0.2920165	0.733	0.419	6.88E-18	NSC
	2.33E-22	0.28835765	0.638	0.36	6.58E-18	NSC
	2.11E-22	0.4636033	0.806	0.507	5.98E-18	NSC
	2.06E-22	0.27590206	0.483	0.227	5.82E-18	NSC
	1.76E-22	0.2413977	0.313	0.108	4.98E-18	NSC
	1.52E-22	0.31314753	0.646	0.344	4.30E-18	NSC
	1.48E-22	0.39022092	0.356	0.135	4.18E-18	NSC
	1.41E-22	0.33870948	0.674	0.368	4.00E-18	NSC
	1.05E-22	0.35022174	0.211	0.05	2.96E-18	NSC
	7.88E-23	0.43701342	0.927	0.687	2.23E-18	NSC
	6.75E-23	0.33364753	0.754	0.452	1.91E-18	NSC
	6.38E-23	0.32307056	0.3	0.102	1.81E-18	NSC
	4.08E-23	0.41496427	0.785	0.492	1.16E-18	NSC
	3.70E-23	0.35272312	0.168	0.029	1.05E-18	NSC
	3.20E-23	0.26084672	0.744	0.429	9.06E-19	NSC
	3.01E-23	0.3741218	0.715	0.408	8.53E-19	NSC
	2.94E-23	0.37199388	0.729	0.416	8.32E-19	NSC
	2.70E-23	0.58845347	0.407	0.179	7.63E-19	NSC
	2.28E-23	0.30662262	0.524	0.249	6.46E-19	NSC
	2.10E-23	0.30283011	0.493	0.228	5.94E-19	NSC
	1.76E-23	0.30330504	0.565	0.281	4.97E-19	NSC
	1.56E-23	0.42188721	0.922	0.722	4.41E-19	NSC
	1.53E-23	0.3999621	0.871	0.591	4.33E-19	NSC
	1.07E-23	0.41073878	0.709	0.409	3.02E-19	NSC
	8.23E-24	0.48949493	0.371	0.142	2.33E-19	NSC
	4.68E-24	0.45316902	0.593	0.32	1.32E-19	NSC
	3.74E-24	0.38535433	0.782	0.481	1.06E-19	NSC
	3.73E-24	0.47662237	0.882	0.628	1.06E-19	NSC
	3.72E-24	0.37929052	0.718	0.429	1.05E-19	NSC
	3.59E-24	0.3581336	0.989	0.881	1.01E-19	NSC
	3.22E-24	0.49710554	0.854	0.6	9.11E-20	NSC
	2.44E-24	0.35314044	0.698	0.394	6.90E-20	NSC
	1.20E-24	0.28157965	0.16	0.022	3.40E-20	NSC
	1.12E-24	0.43282207	0.815	0.521	3.18E-20	NSC
	8.07E-25	0.41030091	0.623	0.321	2.29E-20	NSC
	6.68E-25	0.2469836	0.209	0.043	1.89E-20	NSC
	6.61E-25	0.56152728	0.922	0.698	1.87E-20	NSC
	6.16E-25	0.42245799	0.849	0.582	1.74E-20	NSC
	3.87E-25	0.38578201	0.507	0.235	1.10E-20	NSC

	3.71E-25	0.49208317	0.769	0.468	1.05E-20	NSC
	3.29E-25	0.45601393	0.399	0.157	9.32E-21	NSC
	3.17E-25	0.43430633	0.856	0.572	8.96E-21	NSC
	3.15E-25	0.57080065	0.647	0.353	8.92E-21	NSC
	2.39E-25	0.42580108	0.386	0.148	6.77E-21	NSC
	2.26E-25	0.29796363	0.313	0.1	6.39E-21	NSC
	1.89E-25	0.44072601	0.84	0.517	5.35E-21	NSC
	1.56E-25	0.44088034	0.881	0.596	4.43E-21	NSC
	1.21E-25	0.52384761	0.282	0.084	3.43E-21	NSC
	1.16E-25	0.25040367	0.321	0.101	3.29E-21	NSC
	1.15E-25	0.41089457	0.612	0.317	3.26E-21	NSC
	1.05E-25	0.49908859	0.927	0.722	2.98E-21	NSC
	9.37E-26	0.30187839	0.293	0.087	2.65E-21	NSC
	4.81E-26	0.34064217	0.694	0.384	1.36E-21	NSC
	4.53E-26	0.31488408	0.55	0.252	1.28E-21	NSC
	3.73E-26	0.39832717	0.368	0.128	1.06E-21	NSC
	3.10E-26	0.71131732	0.524	0.258	8.76E-22	NSC
	1.10E-26	0.41896405	0.996	0.928	3.11E-22	NSC
	9.97E-27	0.33963231	0.338	0.115	2.82E-22	NSC
	9.43E-27	0.38060097	0.606	0.302	2.67E-22	NSC
	7.02E-27	0.33813943	0.571	0.264	1.99E-22	NSC
	2.74E-27	0.42969156	0.972	0.825	7.77E-23	NSC
	2.67E-27	0.390739	0.769	0.458	7.56E-23	NSC
	2.32E-27	0.47448747	0.965	0.79	6.58E-23	NSC
	1.48E-27	0.48308823	0.748	0.429	4.19E-23	NSC
	1.43E-27	0.52268463	0.685	0.387	4.06E-23	NSC
	1.38E-27	0.41469448	0.282	0.075	3.90E-23	NSC
	1.25E-27	0.61366624	0.332	0.109	3.53E-23	NSC
	1.21E-27	0.46476472	0.922	0.655	3.42E-23	NSC
	9.96E-28	0.41663112	0.937	0.671	2.82E-23	NSC
	8.57E-28	0.47143025	0.912	0.655	2.42E-23	NSC
	8.49E-28	0.41239007	0.832	0.51	2.40E-23	NSC
	6.52E-28	0.76474392	0.644	0.369	1.85E-23	NSC
	6.20E-28	0.41778441	0.61	0.293	1.76E-23	NSC
	3.37E-28	0.50556606	0.849	0.561	9.55E-24	NSC
	2.30E-28	0.389888	0.634	0.311	6.52E-24	NSC
	1.71E-28	0.29320943	0.448	0.168	4.84E-24	NSC
	1.25E-28	0.46511823	0.873	0.574	3.55E-24	NSC
	1.13E-28	0.48781845	0.804	0.483	3.19E-24	NSC
	1.04E-28	0.35062011	0.744	0.406	2.94E-24	NSC
	9.90E-29	0.40913415	0.884	0.578	2.80E-24	NSC

	8.31E-29	0.47503095	0.866	0.566	2.35E-24	NSC
	7.31E-29	0.74663336	0.869	0.656	2.07E-24	NSC
	6.24E-29	0.4000755	0.853	0.516	1.77E-24	NSC
	5.19E-29	0.52904618	0.84	0.557	1.47E-24	NSC
	4.76E-29	0.34380726	0.429	0.161	1.35E-24	NSC
	4.23E-29	0.52433388	0.746	0.411	1.20E-24	NSC
	2.80E-29	0.44666252	0.733	0.409	7.93E-25	NSC
	1.53E-29	0.27661268	0.285	0.072	4.33E-25	NSC
	1.34E-29	0.32281028	0.181	0.022	3.79E-25	NSC
	1.26E-29	0.32284175	0.229	0.043	3.56E-25	NSC
	8.48E-30	0.44154825	0.524	0.222	2.40E-25	NSC
	7.15E-30	0.6127503	0.646	0.328	2.02E-25	NSC
	5.71E-30	0.42783845	0.604	0.287	1.61E-25	NSC
	3.13E-30	0.49048033	0.726	0.398	8.87E-26	NSC
	2.47E-30	0.39224604	0.597	0.278	6.99E-26	NSC
	2.45E-30	0.33821887	0.396	0.13	6.92E-26	NSC
	2.42E-30	0.45781808	0.996	0.918	6.85E-26	NSC
	2.12E-30	0.56875261	0.821	0.481	6.00E-26	NSC
	2.08E-30	0.46927973	0.938	0.707	5.88E-26	NSC
	7.50E-31	0.48646198	0.772	0.462	2.12E-26	NSC
	7.44E-31	0.36413345	0.437	0.158	2.11E-26	NSC
	5.70E-31	0.47689498	0.989	0.865	1.61E-26	NSC
	2.67E-31	0.53709247	0.864	0.536	7.54E-27	NSC
	2.56E-31	0.38073418	0.653	0.314	7.25E-27	NSC
	2.37E-31	0.38609602	1	0.976	6.71E-27	NSC
	1.84E-31	0.74111114	0.782	0.501	5.20E-27	NSC
	1.54E-31	0.61807734	0.909	0.649	4.37E-27	NSC
	4.27E-32	0.48496189	0.621	0.312	1.21E-27	NSC
	3.09E-32	0.51052335	0.767	0.44	8.74E-28	NSC
	2.52E-32	0.50951027	0.317	0.083	7.13E-28	NSC
	1.42E-32	0.53551795	0.957	0.706	4.01E-28	NSC
	1.02E-32	0.48488272	0.983	0.825	2.88E-28	NSC
	2.04E-33	0.71992994	0.7	0.384	5.76E-29	NSC
	1.27E-33	0.57223692	0.823	0.461	3.61E-29	NSC
	8.57E-34	0.37232598	0.354	0.099	2.43E-29	NSC
	6.23E-34	0.50019494	0.485	0.188	1.76E-29	NSC
	4.89E-34	0.60979361	0.672	0.336	1.38E-29	NSC
	3.06E-34	0.53532407	0.394	0.123	8.67E-30	NSC
	1.69E-34	0.79744155	0.743	0.444	4.78E-30	NSC
	5.99E-35	0.61635139	0.871	0.587	1.70E-30	NSC
	4.46E-35	0.44867572	0.7	0.332	1.26E-30	NSC

	2.65E-35	0.41821221	1	0.965	7.50E-31	NSC
	1.21E-35	0.63568258	0.944	0.689	3.43E-31	NSC
	8.91E-36	0.40850911	0.414	0.132	2.52E-31	NSC
	7.55E-36	0.99765283	0.756	0.475	2.14E-31	NSC
	6.34E-36	0.4833911	0.175	0.01	1.80E-31	NSC
	3.56E-36	0.63147664	0.849	0.545	1.01E-31	NSC
	3.06E-36	0.86143962	0.72	0.426	8.67E-32	NSC
	5.25E-37	0.56030852	0.873	0.505	1.49E-32	NSC
	1.44E-37	0.58602994	0.972	0.82	4.07E-33	NSC
	6.15E-38	0.72128439	0.847	0.567	1.74E-33	NSC
	4.34E-38	0.61907934	0.685	0.333	1.23E-33	NSC
	1.13E-38	0.48255911	0.457	0.149	3.21E-34	NSC
	5.00E-39	0.53647903	0.983	0.816	1.42E-34	NSC
	4.23E-39	0.41609036	0.996	0.943	1.20E-34	NSC
	3.30E-39	0.60476811	0.825	0.514	9.34E-35	NSC
	1.62E-39	0.60278901	0.573	0.229	4.57E-35	NSC
	1.43E-39	0.63514333	0.942	0.692	4.04E-35	NSC
	7.52E-40	0.73081466	0.675	0.326	2.13E-35	NSC
	1.54E-40	0.58583877	0.957	0.73	4.37E-36	NSC
	1.00E-40	0.54322942	0.556	0.209	2.83E-36	NSC
	9.52E-41	0.6475646	0.903	0.584	2.69E-36	NSC
	3.08E-41	0.7412016	0.668	0.306	8.72E-37	NSC
	2.16E-41	0.62445347	0.78	0.4	6.11E-37	NSC
	1.13E-41	0.6067303	0.993	0.858	3.19E-37	NSC
	1.08E-41	0.70774389	0.875	0.605	3.07E-37	NSC
	6.98E-42	0.54111709	0.674	0.291	1.97E-37	NSC
	3.68E-42	0.60414838	0.784	0.413	1.04E-37	NSC
	2.30E-42	0.7333172	0.89	0.563	6.51E-38	NSC
	1.97E-42	0.50875499	1	0.923	5.59E-38	NSC
	9.70E-43	0.73708856	0.871	0.52	2.74E-38	NSC
	7.46E-43	0.51777433	0.625	0.253	2.11E-38	NSC
	6.80E-43	0.91434094	0.843	0.555	1.93E-38	NSC
	4.90E-44	0.46595792	0.998	0.973	1.39E-39	NSC
	1.18E-44	0.69793788	0.868	0.546	3.34E-40	NSC
	4.13E-45	0.68409151	0.955	0.719	1.17E-40	NSC
	3.26E-45	0.7541325	0.72	0.327	9.22E-41	NSC
	1.68E-45	0.6011007	0.716	0.334	4.75E-41	NSC
	9.04E-46	0.75866331	0.882	0.56	2.56E-41	NSC
	2.35E-46	0.6330986	0.382	0.083	6.65E-42	NSC
	6.29E-47	0.67885129	0.978	0.896	1.78E-42	NSC
	4.71E-47	0.62328557	0.722	0.326	1.33E-42	NSC

	1.97E-47	0.53433885	0.711	0.308	5.58E-43	NSC
	1.12E-47	0.78067786	0.965	0.791	3.18E-43	NSC
	8.59E-48	0.74078433	0.614	0.227	2.43E-43	NSC
	6.50E-48	0.85498102	0.328	0.056	1.84E-43	NSC
	2.54E-48	0.47044162	1	0.991	7.19E-44	NSC
	1.01E-48	0.72953092	0.974	0.791	2.85E-44	NSC
	8.96E-49	0.85103175	0.905	0.578	2.54E-44	NSC
	1.67E-50	0.61084284	0.576	0.2	4.73E-46	NSC
	1.62E-50	0.65575123	0.769	0.342	4.59E-46	NSC
	8.49E-51	0.71872425	0.815	0.428	2.40E-46	NSC
	3.17E-51	0.86350846	0.791	0.42	8.97E-47	NSC
	8.14E-52	0.76173945	0.812	0.395	2.30E-47	NSC
	7.68E-52	0.63820983	0.513	0.148	2.17E-47	NSC
	6.74E-52	0.73695014	0.989	0.907	1.91E-47	NSC
	3.79E-52	1.03931018	0.629	0.236	1.07E-47	NSC
	1.71E-52	0.68358987	0.959	0.707	4.83E-48	NSC
	1.31E-52	0.54942484	0.39	0.074	3.71E-48	NSC
	6.22E-54	0.91578022	0.556	0.171	1.76E-49	NSC
	6.32E-55	0.85013289	0.606	0.209	1.79E-50	NSC
	4.07E-57	0.94821923	0.815	0.422	1.15E-52	NSC
	2.09E-57	0.80840811	0.938	0.636	5.91E-53	NSC
	2.83E-59	0.70801055	0.979	0.767	8.01E-55	NSC
	8.58E-62	0.44138787	1	0.993	2.43E-57	NSC
	7.06E-63	1.00377838	0.543	0.141	2.00E-58	NSC
	2.00E-63	0.85912359	0.8	0.35	5.65E-59	NSC
	1.15E-63	0.63064125	1	0.945	3.27E-59	NSC
	2.42E-65	1.02172458	0.649	0.211	6.84E-61	NSC
	9.13E-66	0.98349546	0.64	0.199	2.58E-61	NSC
	1.76E-66	0.84791176	0.991	0.858	4.99E-62	NSC
	1.23E-66	1.04213046	0.854	0.411	3.47E-62	NSC
	3.30E-67	0.96333015	0.996	0.927	9.35E-63	NSC
	1.65E-68	1.12333682	0.771	0.326	4.66E-64	NSC
	2.69E-69	0.62752771	0.996	0.969	7.61E-65	NSC
	3.56E-70	1.086636	0.856	0.457	1.01E-65	NSC
	1.13E-72	1.0327821	0.875	0.435	3.19E-68	NSC
	6.11E-73	0.84448166	0.983	0.834	1.73E-68	NSC
	1.10E-75	0.65010906	1	0.983	3.11E-71	NSC
	8.18E-77	1.62737313	0.653	0.203	2.32E-72	NSC
	5.22E-77	0.90216985	0.996	0.875	1.48E-72	NSC
	3.89E-78	1.02153092	0.597	0.125	1.10E-73	NSC
	3.56E-78	1.1560152	0.938	0.571	1.01E-73	NSC

	7.91E-97	1.42298803	0.84	0.295	2.24E-92	NSC
	6.21E-109	0.96726364	0.996	0.943	1.76E-104	NSC
	2.56E-119	1.43842285	1	0.937	7.25E-115	NSC
	2.40E-119	1.20089697	0.998	0.864	6.80E-115	NSC
	3.44E-139	1.76492739	0.854	0.2	9.75E-135	NSC

gene
SORBS2
PRTG
RCAN2
CAMK2N1
AR
TTLL7
CREB5
DLGAP1
ITGBL1
CSMD1
SH3GL2
TENM4
AQP1
PHYHD1
PTPRE
ABI3BP
RGMA
ACTN2
GPM6B
WNK2
AC007221.2
GRIN2A
ADAMTS9
MAML2
LRFN5
NAV2
ADCY8
CALCRL
TMEM132E
KCNIP4
AGPAT4
KIT
SYNM
MIR9-3HG
ZDHHC14
MAML3
ADAMTS9-AS2
ARHGAP10

GPC6
CLVS1
CASK
RHOBTB1
PLP1
ROBO2
ECM2
NT5DC3
MOB3B
FRMD5
DPYD
PTPRD
ITPKB
MYO16
AC079298.3
FREM1
GFPT2
MYRIP
PPP2R2B
L3MBTL4
EXPH5
CFAP47
ABR
DIRC3
GMPR
XIST
CYP4F12
NAV1
PDE4DIP
CTNNA3
ABCA8
NEBL
GRIA3
F5
SLC16A1-AS1
MAN1C1
PLCXD3
GUCY1A1
FRY
NEAT1
GSE1

RTN1
GRIA1
LMNTD1
DCLK2
SMAD9
CERS6
WDR49
SORCS3
COL21A1
TNR
AEBP1
ATP9A
TTN
USH1C
TMCC3
GRIK4
DOCK10
OSBPL3
KIAA1217
PLCE1
IGFBP5
LINC01094
AL603840.1
LINC00609
SLC24A4
MYO5C
CP
LRAT
ITGA2
SORBS1
PIRT
ARHGAP6
CLIP2
NTNG1
MAPT
ARHGEF4
DGKB
SMOC1
APLNR
CYP4F3
3-Mar

SLC8A3
FP671120.1
RGS6
LINC01411
SPOCK1
SIDT1
BICD1
ST6GAL1
MIR4300HG
VCAN
SPARC
SYNDIG1
DAAM2
HS6ST3
GALNT13
MATN2
PLEKHA5
PRR16
LRRTM4
SNED1
DPP10
KCNN2
FP236383.1
CCDC85A
FYB2
NFASC
ELN
GALNT15
ADAMTSL3
STXBP5L
GFAP
KCNJ3
CD44
TNC
DPP6
AC073941.1
LINC01088
KAZN
SLCO3A1
TSHZ2
LINC00836

SLC38A1
DCLK1
PKN2-AS1
LINC01748
PTCHD1-AS
AC108866.1
FAT3
PPP1R9A
MFHAS1
EFNA5
ZNF804B
PLSCR4
GDAP1
AC113414.1
AC022639.1
TTY14
ROR1
AC005162.3
CTDSPL
ZC3H12C
NEXMIF
BAALC-AS1
WDFY3
DDX17
FKBP5
AC091948.1
STK3
MAP4K4
ACSS3
DANT2
PLPP3
HPSE2
SCFD2
AKAP10
PLSCR1
LINC00886
MAP3K5
CACHD1
NOTCH2
CDC14B
ARHGAP32

KIAA0319
AC027117.2
UTY
PID1
BAALC
SGIP1
BCL2
EPS15
SCMH1
MKRN3
CDH10
COL23A1
POU6F2
DDX58
NIN
FMNL2
METTLL15
AC098829.1
DOCK4
FNDC3B
AC007402.1
ROBO1
MPPED2
CA8
FAM198B-AS1
AL121760.1
XKR6
TMEM161B-AS1
INTS10
PER3
EAF2
WRN
NCKAP1
MAGI3
CDH11
KIF21A
AC010099.4
MLLT3
INPP4B
LRP1
FBXL7

ZNF518A
FBXL17
NRF1
MGAT4C
ABCC9
MBNL3
KCTD8
BMPER
SHISA6
TRIM9
FLRT2
HES5
SAMD4A
DDAH1
TRIP12
SLC6A1
PCGF5
LAMA1
CDC14A
KCND3
PGM1
RBM26
WLS
MEF2C
KLF7
ZNF280D
GPSM2
VPS13C
ZFHX4-AS1
TLK1
MAG1
PIK3R1
CDC42BPA
CAMTA1
TRIO
PPM1B
PCTP
PAPLN
KCNIP1
BRINP2
RAB11FIP2

DCUN1D1
C2CD6
ANKDD1A
PDLIM5
MEGF10
CHPT1
EPS8
CSGALNACT1
PPM1K
NTSR2
RALGDS
ZNF827
CU633967.1
UBA6-AS1
AL591686.2
SOX2
SUCLG2-AS1
MYO6
FGF2
SGCD
KAT2B
MED12L
RHOBTB3
ANO5
MIR2052HG
RGL1
BDH1
AL445426.1
ZFP36L2
SLC8A1
POU2F1
ACSS1
PDK4
MGST1
WASF3
FGGY
ENOSF1
CPNE8
MIAT
CEP350
B4GALNT4

SPARCL1
AL136366.1
C3orf70
RNF182
LINC02060
AC125613.1
CGNL1
SDC4
FGFR2
PAMR1
ADAMTS10
FERMT2
SEMA4B
STXBP6
DACH1
RANBP3L
MMP28
HIVEP1
TCF7L2
ATP13A4
HS2ST1
SLC30A10
SASH1
TMEM108
PPP1R12A
GRID1
ORC4
ATP8A1
SHROOM2
NRP2
GJA1
ITGAV
LYVE1
HERPUD2
DECR1
KBTBD12
EEF2K
SETD3
NFAT5
PDE7B
LPAR3

RIPOR2
PTPN13
TMEM164
PSMG4
NFIA
ANKRD29
NEDD9
TRIM47
SYBU
LRP4
MACROD2
NCAN
C1orf21
HMGN3
LINC00299
GRAMD1B
TMTC2
HIF1A
PRDM16
CHI3L1
FUT10
LAMA3
MOXD1
ETFDH
PLIN5
FTH1
RABGAP1
DGKG
ARHGEF12
GPHN
PHKA1
TENM2
RAB31
SPRED2
EYA1
RGCC
SREBF2
TMOD2
APC
TIPARP
NTRK2

AC079760.1
IL6ST
BMPR1B
AC087564.1
PTCHD1
USP3
SFMBT2
LYN
TLE1
FAM204A
ACSL3
FGD4
SALL3
SFXN5
CHD9
ASRGL1
SNCAIP
TMEM241
PHLPP1
CTNNA2
AGL
PDE5A
AMER2
NDRG1
AC022294.1
MRVI1
GNAQ
FREM2
HES1
PCDH9-AS2
PRR5
CPEB3
ZSWIM6
AMY2B
PLCG1
CPE
GLI2
BCAN
RYR3
BICC1
AC008957.2

ABI1
AKAP7
GPR37L1
TP53BP2
SHROOM3
TSPOAP1
LRP8
SCARA3
PSMA1
PCDH17
DNAH14
PCDH7
FRMD4A
HEPN1
OSBPL6
GFRA1
SOX9
USP24
ZDHHC21
MCF2L2
FBXO21
ATL2
AASS
CPEB4
FGFR3
WDR17
HS3ST5
CYB5B
MYO10
ESRRG
ATP2C1
ATP1A2
MEF2C-AS1
PTAR1
ARHGAP29
PLEKHG1
SLC6A11
SEL1L3
LRRC4C
INTU
SAT1

NOL4
AC115622.1
CEP85L
KCNMB2-AS1
XAF1
TBC1D10A
STOX1
CDH2
AC090993.1
EPAS1
ELOVL2
NEO1
NID1
TIMP3
CLDN10
CC2D2B
FAM19A1
AC092691.1
LINC00982
SDC2
ST3GAL1
ITPR2
CHKA
LINC00461
ADGRG1
PIK3C2A
LINC02328
NR2F2-AS1
PON2
ACSBG1
LINC00511
OLFM2
MEIS2
MGLL
LGR4
GRIN2C
VEGFA
GRAMD1C
EPB41L2
ABHD2
7-Sep

RALGAPA2
AC002429.2
GRIA2
FAM171B
MFGE8
NLGN4X
C2orf72
GJB6
FGL1
LINC00500
EPHA4
FSTL5
CD47
GPD2
PDGFRB
HOPX
TNIK
SLC35F1
ITSN1
ASAP2
CSPG5
PTPRZ1
RORB
LHX2
RORA
LRMDA
RGS20
UGP2
GARNL3
SPRY4-AS1
ZFHX4
SYNE1
F3
ENOX1
SEMA4A
PTCH1
SMURF2
ENTPD1
EGLN3
ALDH1L1
UNC5C

CADM2
AC073050.1
TUBB2B
AL589740.1
WIF1
ETNPPL
TPD52L1
ALCAM
OPHN1
GABRA2
DLC1
AL365273.2
ASPH
SOX5
FAM184A
ME1
GLUD1
PDE3B
C1orf61
ABCD2
DNM3
TOX
SPRED1
GABRB1
LMO3
HTRA1
SLC15A2
BRINP3
ADGRL3
EPHB1
EDNRB
DNAH7
LRP1B
ATP1B2
STXBP5
ADAMTS17
OAF
AC091826.2
AKAP12
ADGRV1
RHOJ

SLC1A4
SLC4A4
RBMS3
RERG
PCDH9
NHSL1
PLCB1
GPAM
SH3RF1
MERTK
SLCO1C1
F11-AS1
ETV1
NKAIN3
AF279873.3
MAST4
DIO2
KCNQ3
COL11A1
COL5A3
GLI3
CARMIL1
LSAMP
VAV3
PTN
ADGRB3
NRP1
TMEM132C
RNF219-AS1
EPHA6
SLC1A3
LRRC3B
ERBB4
GNA14
GLUL
PREX2
GPM6A
LINC00499
CADM1
GRM3
CACNB2

ARHGAP24
GPC5
SLC1A2
NRXN1
CABLES1