

Dataset S1. Top20 expressed genes in each cluster identified in WT and SoxC cKO cochlea.

p_val	avg_log2FC	pct.1	pct.2	p_val_adj	cluster	gene
2.86E-219	1.19214952	0.784	0.603	5.71E-216	0	Cryab
2.60E-246	1.06935623	0.919	0.648	5.21E-243	0	Ebf1
3.19E-279	0.9683778	0.82	0.437	6.38E-276	0	Tmod1
5.86E-237	0.92126711	0.892	0.667	1.17E-233	0	Tecta
9.47E-211	0.85197961	0.671	0.371	1.89E-207	0	Aldh1a3
1.51E-114	0.79127426	0.792	0.63	3.02E-111	0	Mia
1.08E-154	0.77899052	0.751	0.53	2.16E-151	0	Rgcc
5.76E-189	0.72635592	0.958	0.861	1.15E-185	0	Epha7
4.77E-142	0.71522203	0.981	0.881	9.53E-139	0	Tgfb2
1.88E-175	0.70012671	0.99	0.959	3.77E-172	0	Atp2b1
7.03E-114	0.67607187	0.732	0.523	1.41E-110	0	Ckb
1.13E-183	0.62104483	0.878	0.793	2.27E-180	0	Crip2
1.65E-152	0.61675453	0.933	0.802	3.31E-149	0	Irx3
4.62E-146	0.60483016	0.984	0.884	9.23E-143	0	Nr2f1
1.77E-130	0.60138726	0.991	0.941	3.54E-127	0	Ccnd1
1.19E-87	0.59257533	0.679	0.554	2.38E-84	0	Slc12a2
2.58E-134	0.54009938	0.81	0.659	5.17E-131	0	Chst15
1.97E-163	0.53670196	0.593	0.393	3.93E-160	0	1500015O10Rik
1.04E-142	0.53444439	0.826	0.661	2.07E-139	0	Pantr1
4.94E-129	0.52406754	0.682	0.502	9.87E-126	0	Fbxo32
0	1.52234885	0.91	0.491	0	1	Bmp4
0	1.34486139	0.99	0.944	0	1	Clu
0	1.26134373	0.991	0.833	0	1	Gata3
0	1.03249347	1	0.983	0	1	Btg1
3.38E-187	0.9579012	0.823	0.621	6.77E-184	1	Lum
2.72E-286	0.9262467	0.97	0.806	5.45E-283	1	Fbxo2
1.32E-159	0.91435327	0.945	0.871	2.64E-156	1	H19
0	0.90894032	0.991	0.954	0	1	Grb10
5.91E-279	0.7712551	0.988	0.945	1.18E-275	1	Sfrp1
1.07E-154	0.74857659	0.751	0.559	2.13E-151	1	Fst
8.78E-201	0.73352177	0.661	0.421	1.76E-197	1	Hs3st1
3.69E-159	0.72149772	0.739	0.635	7.38E-156	1	9230102O04Rik
4.37E-187	0.72038108	0.76	0.486	8.74E-184	1	Fam132a
4.92E-165	0.70691203	0.683	0.461	9.84E-162	1	Gata2
5.54E-181	0.69831361	0.852	0.781	1.11E-177	1	Rtn1
7.02E-176	0.69353358	0.766	0.589	1.40E-172	1	Unc5b
4.63E-249	0.69313734	0.996	0.929	9.26E-246	1	Id3

7.58E-106	0.64453873	0.757	0.675	1.52E-102	1	Gjb2
9.02E-189	0.64017745	0.949	0.909	1.80E-185	1	Uchl1
6.16E-133	0.63574357	0.963	0.911	1.23E-129	1	Hmga2
0	1.56481078	0.978	0.776	0	2	Isl1
0	1.48922726	0.987	0.908	0	2	Hmga2
0	1.4550046	0.904	0.475	0	2	Sox2
2.56E-194	1.34046948	0.728	0.593	5.11E-191	2	Tectb
0	1.32010725	0.923	0.54	0	2	Zdhhc2
0	1.27873849	0.933	0.717	0	2	Rorb
0	1.17251852	1	0.882	0	2	Nr2f1
0	1.16735996	0.874	0.53	0	2	Moxd1
0	1.15699955	0.84	0.543	0	2	Ntf3
0	1.12231944	0.949	0.817	0	2	Socs2
0	1.12079074	0.897	0.747	0	2	Slc1a3
8.16E-239	1.05705535	0.907	0.652	1.63E-235	2	Ebf1
0	1.0422603	0.931	0.86	0	2	Cdkn1b
0	1.04033445	0.987	0.932	0	2	Zfos1
0	0.99071575	0.912	0.666	0	2	Tecta
6.24E-255	0.98340846	0.767	0.471	1.25E-251	2	S100a1
1.07E-265	0.95737873	0.735	0.474	2.14E-262	2	Nrxn3
2.10E-264	0.95271048	0.989	0.944	4.20E-261	2	Clu
1.19E-281	0.94727498	0.872	0.64	2.38E-278	2	Anxa5
0	0.93008344	0.946	0.786	0	2	Eya1
0	2.00591389	0.828	0.585	0	3	Tectb
0	1.6740812	0.999	0.647	0	3	Ebf1
0	1.64076142	0.887	0.583	0	3	Hist1h2ap
0	1.61716247	0.951	0.549	0	3	Top2a
0	1.59857807	0.984	0.663	0	3	Tecta
0	1.44264066	0.969	0.594	0	3	2810417H13Rik
8.02E-292	1.39984928	0.879	0.565	1.60E-288	3	Cenpf
0	1.39933117	1	0.91	0	3	Hmgb2
5.13E-301	1.27725257	0.859	0.555	1.03E-297	3	Nusap1
0	1.27014086	0.941	0.645	0	3	H2afx
0	1.21554159	0.992	0.843	0	3	Ybx3
3.14E-191	1.11927498	0.77	0.514	6.28E-188	3	Ube2c
1.20E-279	1.11650759	0.787	0.442	2.41E-276	3	Prc1
0	1.09136078	0.911	0.437	0	3	Tmod1
0	1.04546767	0.93	0.564	0	3	Smc4
0	1.00965841	1	0.941	0	3	Ccnd1
0	0.99243325	1	0.885	0	3	Nr2f1

1.05E-134	0.99133683	0.754	0.611	2.10E-131	3	Cryab
0	0.98204806	1	0.921	0	3	Dek
1.06E-206	0.97683723	0.854	0.615	2.12E-203	3	Cks2
0	1.61054755	0.968	0.549	0	4	Top2a
0	1.55212215	0.909	0.563	0	4	Cenpf
0	1.40768709	0.912	0.582	0	4	Hist1h2ap
0	1.3722923	1	0.91	0	4	Hmgb2
4.39E-192	1.30985687	0.78	0.514	8.79E-189	4	Ube2c
3.53E-301	1.24736148	0.878	0.555	7.06E-298	4	Nusap1
2.42E-205	1.18025445	0.929	0.766	4.83E-202	4	Lockd
0	1.09406995	0.966	0.597	0	4	2810417H13Rik
7.76E-287	1.07867557	0.931	0.723	1.55E-283	4	Sall3
0	1.03254203	0.938	0.565	0	4	Smc4
1.52E-253	0.99261275	0.932	0.648	3.05E-250	4	H2afx
9.14E-216	0.99077223	0.875	0.615	1.83E-212	4	Cks2
6.74E-258	0.95525734	0.838	0.501	1.35E-254	4	Mki67
0	0.95292164	0.981	0.735	0	4	Smc2
7.87E-225	0.92016084	0.781	0.444	1.57E-221	4	Prc1
9.79E-303	0.91793129	0.858	0.504	1.96E-299	4	Spc25
1.40E-263	0.91121659	0.882	0.491	2.80E-260	4	Birc5
0	0.89596723	1	0.996	0	4	H2afz
1.34E-281	0.89021676	0.997	0.922	2.68E-278	4	Dek
2.69E-293	0.88116691	0.997	0.868	5.38E-290	4	Cks1b
0	2.25477703	1	0.897	0	5	Oc90
0	1.68538154	0.935	0.439	0	5	Ecel1
0	1.44800964	0.924	0.417	0	5	Frem2
5.09E-215	1.3451538	0.983	0.769	1.02E-211	5	Igfbp5
0	1.26986468	0.945	0.53	0	5	Pax2
2.31E-288	1.26704774	0.934	0.502	4.62E-285	5	Ccnd2
0	1.12831124	0.885	0.427	0	5	Fut9
3.20E-223	1.04324527	0.921	0.549	6.41E-220	5	Meg3
0	1.03683773	0.858	0.361	0	5	Gsc
1.70E-302	1.03140127	0.996	0.912	3.39E-299	5	Lect1
3.81E-269	1.01290957	0.933	0.64	7.62E-266	5	Arl4c
0	1.0052768	0.867	0.349	0	5	Kctd8
0	0.96368303	0.99	0.907	0	5	Mtch1
1.62E-216	0.95789946	0.951	0.735	3.25E-213	5	Dclk1
3.92E-179	0.9485629	0.985	0.87	7.83E-176	5	H19
1.17E-258	0.93955729	0.943	0.636	2.35E-255	5	Ppp2r2b
2.57E-219	0.87633425	0.992	0.948	5.14E-216	5	Nrep

1.65E-172	0.86707944	0.924	0.659	3.31E-169	5	Sptssa
0	0.83670016	0.821	0.457	0	5	Cxxc4
2.44E-264	0.83120847	0.793	0.347	4.89E-261	5	Lurap1l
0	2.65412511	0.992	0.545	0	6	Meg3
0	2.27794778	1	0.897	0	6	Oc90
0	2.18813219	0.984	0.529	0	6	Pid1
0	2.03744698	0.978	0.555	0	6	Otx2
0	1.98851234	0.916	0.491	0	6	Ap1s2
0	1.95024019	0.933	0.424	0	6	Wnt4
0	1.78125495	0.999	0.887	0	6	Ptn
0	1.60442897	0.872	0.543	0	6	Smoc2
0	1.58483806	0.981	0.734	0	6	Sulf1
0	1.56935905	0.861	0.353	0	6	Slc6a15
0	1.53801808	0.958	0.674	0	6	Calml4
0	1.5016371	0.875	0.471	0	6	B4galt6
0	1.44285422	0.848	0.371	0	6	Tpm2
0	1.40631672	0.913	0.535	0	6	Phldb2
0	1.37530473	0.889	0.454	0	6	Lypd6
0	1.36468064	0.906	0.632	0	6	Fgf9
0	1.35682544	0.971	0.616	0	6	Tshz2
0	1.32756847	0.866	0.403	0	6	Postn
0	1.25278626	0.831	0.44	0	6	Mecom
0	1.23831733	0.931	0.698	0	6	Pcdh7
4.18E-288	1.81734003	1	0.899	8.36E-285	7	Oc90
4.91E-238	1.46594163	0.952	0.565	9.83E-235	7	Top2a
4.20E-206	1.35986748	0.916	0.575	8.41E-203	7	Cenpf
6.82E-198	1.33202232	0.882	0.566	1.36E-194	7	Nusap1
6.23E-306	1.27637191	0.972	0.564	1.25E-302	7	Otx2
3.19E-229	1.23637031	0.999	0.914	6.37E-226	7	Hmgb2
1.04E-229	1.20353341	0.979	0.609	2.07E-226	7	2810417H13Rik
4.98E-192	1.20059335	0.935	0.62	9.96E-189	7	Cks2
1.37E-139	1.1335537	0.938	0.771	2.74E-136	7	Lockd
6.44E-154	1.1308681	0.835	0.52	1.29E-150	7	Ube2c
1.71E-220	1.12098828	0.926	0.502	3.43E-217	7	Birc5
7.57E-202	1.0056046	0.961	0.745	1.51E-198	7	Smc2
1.66E-190	0.97062586	0.879	0.51	3.33E-187	7	Mki67
2.45E-213	0.94646256	0.945	0.619	4.91E-210	7	Cndp2
2.75E-215	0.92164958	0.847	0.457	5.49E-212	7	Ecel1
8.45E-146	0.9187502	0.876	0.596	1.69E-142	7	Hist1h2ap
8.20E-197	0.8971942	1	0.914	1.64E-193	7	Lect1

4.65E-178	0.89533331	0.862	0.534	9.31E-175	7	Tpx2
5.92E-151	0.89396724	0.791	0.455	1.18E-147	7	Prc1
1.95E-113	0.87149153	0.978	0.87	3.90E-110	7	Arl6ip1
0	2.98070189	0.965	0.496	0	8	Tac1
0	2.31976537	0.995	0.556	0	8	Fst
0	2.22741801	1	0.946	0	8	Clu
0	2.13417078	0.995	0.623	0	8	Nr2f2
0	1.97094138	0.984	0.633	0	8	Pcdh17
0	1.96456214	0.999	0.774	0	8	Igfbp5
0	1.86191184	1	0.912	0	8	Hmga2
0	1.78861561	0.99	0.795	0	8	Vim
4.16E-293	1.61746399	0.98	0.726	8.32E-290	8	Rorb
0	1.56133268	0.999	0.843	0	8	Gata3
2.16E-288	1.4111665	0.989	0.787	4.31E-285	8	Isl1
3.21E-274	1.32351182	0.957	0.667	6.42E-271	8	Ppfibp1
6.13E-289	1.27771223	0.987	0.816	1.23E-285	8	Fbxo2
0	1.26653473	0.999	0.984	0	8	Btg1
2.37E-284	1.25922604	0.877	0.381	4.75E-281	8	Rprm
9.60E-221	1.21287519	0.918	0.687	1.92E-217	8	Fn1
7.14E-195	1.14920251	0.814	0.532	1.43E-191	8	Ntng1
4.73E-231	1.11369039	0.772	0.371	9.46E-228	8	Msx1
4.58E-238	1.07856668	0.814	0.41	9.16E-235	8	Angpt1
6.08E-219	1.06681339	0.869	0.596	1.22E-215	8	Plet1
0	2.01562537	0.809	0.04	0	9	Col3a1
0	2.00384689	0.907	0.108	0	9	Col1a1
0	1.98506405	0.95	0.264	0	9	Col26a1
0	1.92133	0.976	0.621	0	9	Igfbp4
3.21E-216	1.8595192	0.764	0.135	6.41E-213	9	Col1a2
1.08E-243	1.83750173	0.797	0.232	2.15E-240	9	Cped1
5.15E-231	1.81810641	0.717	0.022	1.03E-227	9	Tbx18
0	1.6653236	0.916	0.103	0	9	Bgn
4.82E-257	1.59184507	0.968	0.696	9.65E-254	9	Lgals1
2.79E-205	1.58046516	0.948	0.506	5.58E-202	9	Car2
5.75E-120	1.56142875	0.966	0.669	1.15E-116	9	Crym
6.22E-253	1.52593	0.718	0.007	1.24E-249	9	Prrx1
8.33E-123	1.5130137	0.745	0.412	1.67E-119	9	Vcan
2.87E-305	1.38014674	0.92	0.26	5.74E-302	9	Timp3
7.18E-202	1.36612858	0.889	0.64	1.44E-198	9	Cald1
1.48E-198	1.35302702	0.975	0.663	2.96E-195	9	Ebf1
5.61E-227	1.33527517	0.961	0.513	1.12E-223	9	Ccnd2

3.81E-191	1.32814212	0.976	0.691	7.62E-188	9	Csrp2
3.50E-144	1.29938578	0.986	0.609	7.01E-141	9	2810417H13Rik
1.66E-72	1.29743309	0.62	0.071	3.32E-69	9	Tgfb1
5.93E-117	1.78784307	0.993	0.78	1.19E-113	10	Igfbp5
1.27E-66	1.59176139	0.739	0.49	2.54E-63	10	Lor
2.23E-196	1.5817251	0.854	0.29	4.46E-193	10	Cpm
3.85E-183	1.47202751	0.934	0.419	7.70E-180	10	Npnt
3.82E-173	1.45471505	0.946	0.444	7.63E-170	10	Frem2
1.45E-55	1.34246987	0.893	0.646	2.90E-52	10	Pcdh17
3.07E-63	1.12603266	0.807	0.493	6.14E-60	10	Dcn
2.49E-121	1.11429013	0.98	0.731	4.98E-118	10	Krt18
1.15E-101	1.06663715	0.983	0.876	2.30E-98	10	Rbp1
5.01E-122	1.05505015	0.946	0.628	1.00E-118	10	Dapk1
1.34E-117	1.05101195	0.985	0.773	2.67E-114	10	Krt8
1.95E-105	1.02928882	0.961	0.804	3.89E-102	10	Gpc6
1.22E-124	0.9716663	0.954	0.577	2.44E-121	10	Otx2
2.00E-90	0.96912195	0.917	0.584	4.01E-87	10	Fam101b
5.62E-92	0.91683622	0.849	0.477	1.12E-88	10	Lypd6
1.74E-115	0.90584695	0.822	0.303	3.49E-112	10	Negr1
3.09E-107	0.89815024	0.822	0.32	6.18E-104	10	Cthrc1
6.22E-96	0.8828067	0.944	0.645	1.24E-92	10	Fgf9
1.19E-128	0.84624233	0.815	0.288	2.39E-125	10	Gprin3
4.41E-59	0.76841997	0.978	0.903	8.83E-56	10	Oc90