

Table 1. Expression Profile of E13.5 Genes

No.	gene name	abbreviated name	GenBank No.	category	ratio (P2/E13.5)	E13.5				P2		
						ratio (CR/non-CR)	signal		ratio (CR/non-CR)	signal		
							CR	non-CR		CR	non-CR	
1	BTB and CNC homology 2	Bach2	AW553304	transcription regulator/nuclear protein	0.01	0.59	1191	2021	0.01	5	842	
2	B-cell leukemia/lymphoma 11B	Bcl11b	NM_021399	transcription regulator/nuclear protein	0.01	0.97	3143	3234	0.02	12	593	
3	cellular retinoic acid binding protein II	Crabp2	BC018397	transcription regulator/nuclear protein	0.01	2.3	2400	1035	1.2	12	10	
4	neurogenic differentiation 1	NeuroD	AK005073	transcription regulator/nuclear protein	0.03	0.50	1724	3436	0.07	51	691	
5	cyclin D2	Ccnd2	NM_009829	transcription regulator/nuclear protein	0.05	0.56	5978	10648	0.05	271	5302	
6	SRY-box containing gene 4	Sox4	NM_009238	transcription regulator/nuclear protein	0.08	0.71	3689	5230	0.09	275	3049	
7	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3	Smardc3	NM_025891	transcription regulator/nuclear protein	0.08	1.6	2059	1256	0.18	156	853	
8	represso	Reprimo	NM_023396	transcription regulator/nuclear protein	0.09	0.28	1557	5501	0.06	133	2067	
9	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1	Smarb1	AV310148	transcription regulator/nuclear protein	0.10	4.3	1655	389	0.55	167	303	
10	enhancer of zeste homolog 2	Ezh2	NM_007971	transcription regulator/nuclear protein	0.11	0.53	2086	3975	0.14	225	1582	
11	LIM homeobox protein 9	Lhx9	NM_010714	transcription regulator/nuclear protein	0.12	4.1	2082	512	2.8	235	85	
12	growth arrest and DNA-damage-inducible 45 gamma	Gadd45g	AK007410	transcription regulator/nuclear protein	0.12	0.94	4481	4749	0.97	532	549	
13	minichromosome maintenance deficient 2 mitotin	Mcm2	BB699415	transcription regulator/nuclear protein	0.14	1.1	1812	1685	0.21	238	1159	
14	chromodomain helicase DNA binding protein 4	Chd4	BM502696	transcription regulator/nuclear protein	0.14	0.36	1162	854	0.39	157	408	
15	ecomesoderm homolog	Eomes	BB128925	transcription regulator/nuclear protein	0.14	0.29	1126	3868	0.18	156	853	
16	ectodermal-neural cortex 1	Enc1	BM120053	transcription regulator/nuclear protein	0.15	0.43	4527	10494	0.06	668	11798	
17	RNA binding motif protein 14	Rbm14	BB730281	transcription regulator/nuclear protein	0.17	0.91	1555	1712	0.23	258	1123	
18	mini chromosome maintenance deficient 7	Mcm7	BB464359	transcription regulator/nuclear protein	0.18	0.54	5293	9749	0.22	898	4054	
19	cyclin-dependent kinase 4	Cdk4	NM_009870	transcription regulator/nuclear protein	0.18	0.65	3244	4982	0.24	564	2336	
20	thymopoietin	Tmop	AA153892	transcription regulator/nuclear protein	0.18	0.58	1227	2100	0.14	216	1601	
21	pleomorphic adenoma gene-like 1	Plagl1	AF147785	transcription regulator/nuclear protein	0.19	0.36	2507	7049	0.11	453	4306	
22	nescent helix loop helix 1	Nhlh1	NM_010916	transcription regulator/nuclear protein	0.19	2.0	2270	1119	2.4	411	168	
23	transducin-like enhancer of split 3, homolog of Drosophila E(spl)	Tle3	BC006672	transcription regulator/nuclear protein	0.19	1.2	1230	998	0.23	228	976	
24	early B-cell factor 2	Ebf2	NM_010095	transcription regulator/nuclear protein	0.19	14	3253	225	10	625	62	
25	insulin-like growth factor 2, binding protein 3	Igf2bp3	NM_023670	transcription regulator/nuclear protein	0.20	0.87	1473	1688	0.60	299	496	
26	transformation related protein 53 inducible nuclear protein 1	p53inp1	NM_021897	transcription regulator/nuclear protein	0.21	2.2	3858	1777	0.82	806	985	
27	LIM homeobox protein 2	Lhx2	NM_010710	transcription regulator/nuclear protein	0.21	1.1	3329	2958	0.59	708	1202	
28	serologically defined colon cancer antigen 33	Sdceag33	AV291373	transcription regulator/nuclear protein	0.21	2.9	1710	597	0.56	367	661	
29	p21 (cyclin-dependent kinase inhibitor 1A)	p21	AK007630	transcription regulator/nuclear protein	0.22	29	5090	176	1.8	1102	605	
30	neuronal d4 domain family member	Neud4	AW553317	transcription regulator/nuclear protein	0.22	1.9	1305	704	0.41	291	715	
31	F-box and leucine-rich repeat protein 10	Fbxl10	AF176524	transcription regulator/nuclear protein	0.22	1.5	2308	1555	0.33	517	1562	
32	nuclear mitotic apparatus protein 1	Numa	BC006631	transcription regulator/nuclear protein	0.23	1.5	1115	753	0.58	253	434	
33	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1	Smardc1	AK018493	transcription regulator/nuclear protein	0.23	1.3	3376	2659	0.59	774	1317	
34	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 2	Smardc2	NM_031878	transcription regulator/nuclear protein	0.23	2.5	4174	1668	0.74	973	1312	
35	CUG triplet repeat.RNA binding protein 2	Cugbp2	BG067936	transcription regulator/nuclear protein	0.24	0.52	3244	6219	0.11	774	7171	
36	chromosome condensation-related SMC-associated protein 1	Ccscap1	BC025460	transcription regulator/nuclear protein	0.24	0.48	1304	2721	0.37	318	862	
37	cell division cycle associated 4	Cdca4	AF322238	transcription regulator/nuclear protein	0.25	0.66	1353	2055	0.32	338	1064	
38	BTB and CNC homology 1, basic leucine zipper transcription factor 1 homolog	Bach1	AV324314	transcription regulator/nuclear protein	0.26	1.7	1286	764	0.30	335	1116	
39	BAF53a	Baf53a	BB094081	transcription regulator/nuclear protein	0.26	0.83	2477	2992	0.47	650	1396	
40	polyhomeotic-like 2	Phc2	BB334118	transcription regulator/nuclear protein	0.26	0.92	4809	5238	0.54	1263	2335	
41	BTB and CNC homology 1, basic leucine zipper transcription factor 1	Bach1	NM_007520	transcription regulator/nuclear protein	0.27	1.4	1403	1026	1.0	376	359	
42	histone 3, H2bb	Hist3h2bb	AV297651	transcription regulator/nuclear protein	0.27	2.0	2473	1242	1.0	667	647	
43	zinc finger protein of the cerebellum 3	Zic3	BB732077	transcription regulator/nuclear protein	0.27	4.7	1659	355	0.74	452	613	
44	E74-like factor 2	Elf2	BC027739	transcription regulator/nuclear protein	0.27	1.1	1294	1217	0.73	353	485	
45	H2A histone family, member V	H2av	BC028539	transcription regulator/nuclear protein	0.28	0.53	3386	6416	0.38	935	2470	
46	splicing factor, arginine/serine-rich 10 homolog	Sfar10h	BG229318	transcription regulator/nuclear protein	0.28	0.94	1525	1626	0.43	424	983	
47	histone 3, H2ba	Hist3h2ba	NM_030082	transcription regulator/nuclear protein	0.29	1.4	2408	1663	1.2	692	565	
48	RNA binding motif protein, X chromosome	Rbmx	NM_011252	transcription regulator/nuclear protein	0.30	0.67	1605	2416	0.23	477	2036	
49	LIM homeobox protein 1	Lhx1	NM_008498	transcription regulator/nuclear protein	0.30	323	2431	8	163	728	4	
50	jumonji domain containing 1	Jmjd1	BC026605	transcription regulator/nuclear protein	0.30	0.79	1583	1998	0.42	479	1138	
51	immediate early response 5	Ier5	NM_010500	transcription regulator/nuclear protein	0.30	1.0	1909	1868	0.82	578	704	
52	zinc finger protein 532	Znf532	BB404446	transcription regulator/nuclear protein	0.30	1.2	1581	1281	0.59	480	817	
53	p35 (cyclin-dependent kinase 5, regulatory subunit)	p35	BB177836	transcription regulator/nuclear protein	0.30	3.5	7205	2082	0.93	2191	2364	
54	mbt domain containing 1	Mbt1	NM_134012	transcription regulator/nuclear protein	0.31	0.91	2082	2300	0.42	636	1532	
55	stress induced protein homolog	Siph	AK003956	transcription regulator/nuclear protein	0.31	2.2	1833	822	0.96	563	586	
56	poly(rC) binding protein 4	Pcbp4	NM_021567	transcription regulator/nuclear protein	0.31	1.0	1156	1108	0.91	357	391	
57	quaking	Qk	AF090403	transcription regulator/nuclear protein	0.31	0.58	2447	4221	0.23	757	3261	
58	ASF1 anti-silencing function 1 homolog A	Asf1a	AK007804	transcription regulator/nuclear protein	0.31	0.63	1162	1850	0.32	364	1122	
59	high mobility group box 3	Hmgb3	NM_008253	transcription regulator/nuclear protein	0.32	0.78	5168	6635	0.39	1639	4229	
60	glia derived growth factor	Gdn	NM_009255	extracellular signaling molecule	0.06	36	3508	98	0.06	196	3277	
61	insulin-like growth factor binding protein 2	Igf1bp2	AK011784	extracellular signaling molecule	0.08	0.63	1364	2161	0.06	111	1756	
62	thrombospondin-like gene homolog	Tslh	BG067392	extracellular signaling molecule	0.11	6.1	1252	207	0.41	132	322	
63	sulfate 2	Sulf2	AK008108	extracellular signaling molecule	0.11	6.3	1902	300	0.71	212	300	
64	lamin B1	Lmnb1	AA270173	extracellular signaling molecule	0.22	1.1	1916	1798	0.36	415	1144	
65	chondroitin sulfate proteoglycan 2	Cspg2	BI692925	extracellular signaling molecule	0.23	4.8	4499	928	0.66	1050	1594	
66	matrix metalloproteinase 14	Mmp14	NM_008608	extracellular signaling molecule	0.27	1.4	1149	804	0.27	309	1129	
67	chemokine orphan receptor 1	Cmkor1	BC015254	receptor/channel/transmembrane protein	0.01	5.8	3138	544	0.11	46	411	
68	growth arrest specific 1	Gas1	NM_008086	receptor/channel/transmembrane protein	0.04	0.28	1289	4680	0.02	56	2836	
69	transforming growth factor, beta receptor I	Tgfb1	BM248342	receptor/channel/transmembrane protein	0.09	0.64	1135	1783	0.09	106	1199	
70	calcium channel, voltage-dependent, gamma subunit 4	Cacng4	BB333636	receptor/channel/transmembrane protein	0.12	5.6	2138	382	0.37	246	661	
71	neuropilin 2	Nrp2	BQ176723	receptor/channel/transmembrane protein	0.12	4.5	1741	390	0.94	213	226	
72	CD24a antigen	Cd24a	NM_009846	receptor/channel/transmembrane protein	0.13	1.2	8208	6986	0.15	1053	7046	
73	protein tyrosine phosphatase, receptor type, O	Ptpro	NM_011216	receptor/channel/transmembrane protein	0.14	1.2	1087	914	0.09	154	1700	
74	activin receptor IIB	Acrv11b	NM_007397	receptor/channel/transmembrane protein	0.16	1.2	1372	1150	0.83	214	260	
75	delta-like 1	Dll1	NM_007865	receptor/channel/transmembrane protein	0.16	1.1	2012	1880	0.42	318	759	
76	ephrin B1	Efnb1	AI789778	receptor/channel/transmembrane protein	0.16	0.71	1116	1575	0.22	177	821	
77	immunoglobulin superfamily, member 4	Igsf4	BB832194	receptor/channel/transmembrane protein	0.17	0.68	1035	1517	0.12	180	1487	
78	transmembrane protein 2	Tmem2	BC019745	receptor/channel/transmembrane protein	0.22	0.75	1354	1810	0.52	292	565	
79	podocalyxin-like	Podxl	AF290209	receptor/channel/transmembrane protein	0.22	2.0	1452	719	0.43	314	731	
80	transmembrane 4 superfamily member 9	Tm4sf9	NM_019571	receptor/channel/transmembrane protein	0.26	1.5	1915	1264	0.19	496	2598	
81	ephrin B2	Efnb2	BB452953	receptor/channel/transmembrane protein	0.26	1.2	1864	1599	0.37	485	1307	
82	plexin B2	Plxn2	NM_138749	receptor/channel/transmembrane protein	0.26	1.7	2772	1614	0.72	733	1014	
83	discoidin domain receptor family, member 1	Ddr1	BB234940	receptor/channel/transmembrane protein	0.28	1.4	1960	1378	0.36	555	1536	
84	protein C20orf103 homolog precursor	6330527006Rik	BC004791	trafficking/organellar protein	0.01	107	1257	12	0.10	12	121	
85	sialyltransferase 8B	Siat8b	NM_009181	trafficking/organellar protein	0.10	1.7	2979	1717	0.12	305	2504	
86	EH-domain containing 1	Ehd1	NM_010119	trafficking/organellar protein	0.23	1.9	1163	626	0.81	273	339	
87	golgi phosphoprotein 2	Golph2	BC011152	trafficking/organellar protein	0.27	0.60	1082	1799	0.40	296	744	
88	SEC63-like	Sec63	BM251069	trafficking/organellar protein	0.30	1.1	1079	989	0.46	319	696	
89	thioredoxin domain containing 7	Txnd7	BC006865	trafficking/organellar protein	0.31	1.2	3490	3013	0.60	1098	1844	
90	regulator of G-protein signaling 16	Rgs16	BB100249	intracellular signaling molecule	0.07	1.7	1061	616	0.11	77	704	
91	doublecortin	Dcx	AB011678	intracellular signaling molecule	0.09	1.6	7088	4437	0.12	641	5190	
92	signal-induced proliferation-associated 1 like 2	Sipa112	AV228782	intracellular signaling molecule	0.10	2.2	2836	1288	0.36	287	790	
93	intersectin	Itsn	BM248471	intracellular signaling molecule	0.11	1.2	1566	1326	0.17	166	985	
94	testin	Tes	BC010465	intracellular signaling molecule	0.13	2.5	1079	431	0.43	145	338	
95	differential display and activated by p53	Dda3	NM_019976	intracellular signaling molecule	0.14	0.91	1380	1524	0.51	199	390	
96	RCC1-like	Rcc1	AV122997	intracellular signaling molecule	0.15	0.54	1583	2935	0.21	242	1177	
97	cezanne 2	Cezanne 2	NM_130880	intracellular signaling molecule	0.17	4.6	1916	419	0.79	322	406	
98	tripartite motif protein 37	Trim37	BM119247	intracellular signaling molecule	0.18	1.2	5237	4314	0.47	919	1970	
99	growth factor receptor bound protein 10	Grb10	AK017862	intracellular signaling molecule	0.19	0.27	1449	5341	0.19	274	1434	
100	calcium regulated heat stable protein 1	Carhsp1	NM_025821	intracellular signaling molecule	0.23	6.7	3517	525	0.72	812	1128	
101	protein kinase C, nu	Prkcn	BF160591	intracellular signaling molecule	0.23	0.64	1063	1672	0.20	249	1222	
102	SH3-binding kinase	Sbk	BC025837	intracellular signaling molecule	0.24	1.3	3100	2458	0.50	747	1503	
103	tax-interacting protein-1	Tip1	AV139821	intracellular signaling molecule	0.24	1.9	3017	1596	0.51	735	1441	
104	SPRY domain-containing SOCS box protein SSB-1	Ssb1	AI596360	intracellular signaling molecule	0.25	6.9	1804					