

Table 4. Gene expression Profile in P2 CR Cells

No.	gene name	abbreviated name	GenBank No.	category	ratio (P2/E13.5)	P2		
						ratio (CR/non-CR)	signal	
							CR	non-CR
1	early B-cell factor 3	Ebf3	AK014058	transcription regulator/nuclear protein	0.59	248	2342	9
2	LIM homeobox protein 5	Lhx5	NM_008499	transcription regulator/nuclear protein	0.71	28	1045	37
3	transformation related protein 73	p73	AK014503	transcription regulator/nuclear protein	0.76	26	3882	150
4	zinc finger protein of the cerebellum 1	Zic1	BB361162	transcription regulator/nuclear protein	0.95	11	4464	418
5	leucine, glutamic acid, lysine family 1 protein	Lek1	BB049243	transcription regulator/nuclear protein	2.1	9.9	6033	610
6	nuclear receptor subfamily 2, group F, member 2	Nr2f2	U07635	transcription regulator/nuclear protein	0.64	8.2	2110	256
7	DNA methyltransferase 3A	Dnmt3a	BB044612	transcription regulator/nuclear protein	1.4	6.0	2084	345
8	peroxisome proliferative activated receptor, gamma, coactivator	Ppargc1	BB745167	transcription regulator/nuclear protein	4.5	6.0	1203	201
9	poly(rC) binding protein 3	Pcbp3	NM_021568	transcription regulator/nuclear protein	1.2	5.8	1986	340
10	RNA binding motif, single stranded interacting protein 1	Rbms1	AW541585	transcription regulator/nuclear protein	3.0	5.5	2704	488
11	bruno-like 4, RNA binding protein	Bruno4	BB748921	transcription regulator/nuclear protein	1.6	5.2	2439	467
12	growth differentiation factor 5	Gdf5	NM_008109	extracellular signaling molecule	20	91	3253	36
13	carbonic anhydrase 10	Car10	BC017606	extracellular signaling molecule	15	61	2159	35
14	acetylcholinesterase	Ache	NM_009599	extracellular signaling molecule	93	60	2010	33
15	chemokine (C-X-C motif) ligand 12	Cxcl12	BC006640	extracellular signaling molecule	26	41	12676	311
16	nephronectin	Npnt	AA223007	extracellular signaling molecule	29	24	2253	94
17	reelin	Reln	NM_011261	extracellular signaling molecule	0.90	16	15546	979
18	prepronociceptin	Pnoc	D50055	extracellular signaling molecule	66	13	1188	91
19	nephrilysin (enkephalinase)	Nep	AV174022	extracellular signaling molecule	22	12	1266	104
20	protein related to DAN and cerberus	Prdc	NM_011825	extracellular signaling molecule	9.2	11	2765	241
21	melanoma inhibitory activity	Mia	NM_019394	extracellular signaling molecule	5.1	9.1	1367	150
22	tuftelin 1	Tuft1	NM_011656	extracellular signaling molecule	3.2	8.6	1702	199
23	growth arrest specific 6	Gas6	NM_019521	extracellular signaling molecule	2.6	7.9	2859	364
24	GTL2, imprinted maternally expressed untranslated mRNA	Gtl2	Y13832	extracellular signaling molecule	2.6	6.9	6959	1006
25	olfactomedin 1	Olfm1	D78264	extracellular signaling molecule	1.1	6.7	5882	884
26	procollagen, type VI, alpha 2	Col6a2	BI455189	extracellular signaling molecule	8.5	6.5	2825	432
27	testis expressed gene 264	Tex264	BC002248	extracellular signaling molecule	1.2	6.3	2724	431
28	EGF-like repeats and discordin I-like domains 3	Edil3	BB377340	extracellular signaling molecule	2.4	5.8	2480	426
29	platelet derived growth factor, alpha	Pdgfa	NM_008808	extracellular signaling molecule	2.5	5.7	1407	247
30	carbonic anhydrase 11	Car11	BC019393	extracellular signaling molecule	3.5	5.5	1216	223
31	programmed cell death 1 ligand 1	PD-L1	NM_021893	receptor/channel/transmembrane protein	25	237	1892	8
32	contactin associated protein-like 2	Cntnap2	BE651445	receptor/channel/transmembrane protein	2.6	28	5653	200
33	calcium channel, voltage-dependent, alpha 2/delta subunit 2	Cacna2d2	AF247139	receptor/channel/transmembrane protein	0.91	19	7894	410
34	purinergic receptor P2X, ligand-gated ion channel, 5	P2x5	NM_033321	receptor/channel/transmembrane protein	4.3	18	1906	104
35	receptor (calcitonin) activity modifying protein 1	Ramp1	NM_016894	receptor/channel/transmembrane protein	32	16	6234	395
36	protein tyrosine phosphatase, receptor type, N	Ptprn	NM_008985	receptor/channel/transmembrane protein	3.4	13	1710	128
37	unc-5 homolog 2	Unc5h2	BG065285	receptor/channel/transmembrane protein	1.0	12	3237	280
38	thymus cell antigen 1, theta	Thy-1	AV028402	receptor/channel/transmembrane protein	27	10	3087	299
39	plexin D1	Plxnd1	BC019530	receptor/channel/transmembrane protein	0.88	9.7	2164	224
40	chemokine (C-X-C motif) receptor 4	Cxcr4	D87747	receptor/channel/transmembrane protein	0.98	8.7	1014	117
41	calcium channel, voltage dependent, alpha 2/delta subunit 3	Cacna2d3	NM_009785	receptor/channel/transmembrane protein	0.98	7.8	2052	264
42	calyntenin 2	Clstn2	NM_022319	receptor/channel/transmembrane protein	3.7	7.6	1851	244
43	reticulon 4 receptor	Rtn4r	NM_022982	receptor/channel/transmembrane protein	2.0	6.8	1431	209
44	CD47 antigen	Cd47	BQ256022	receptor/channel/transmembrane protein	7.3	6.7	3811	569
45	calcium channel, voltage-dependent, alpha 2/delta subunit 1	Cacna2d1	NM_009784	receptor/channel/transmembrane protein	1.9	6.6	1709	257
46	Eph receptor B6	Ephb6	NM_007680	receptor/channel/transmembrane protein	3.8	6.6	1678	255
47	kit oncogene	Kit	X65997	receptor/channel/transmembrane protein	1.5	6.3	1700	271
48	cadherin 4	Cdh4	NM_009867	receptor/channel/transmembrane protein	1.6	5.4	2118	391
49	crystallin, alpha B	Cryab	AV016515	trafficking/organelle protein	351	23	2249	98
50	sialyltransferase 9	Siat9	BB829192	trafficking/organelle protein	2.6	12	2391	197
51	vesicular glutamate transporter 2	Vglut2	NM_080853	trafficking/organelle protein	2.2	8.7	3390	391
52	ATPase, H+ transporting, V1 subunit G isoform 2	Atp6v1g2	BC020190	trafficking/organelle protein	9.7	7.1	2930	410
53	CDP-diacylglycerol synthase 2	Cds2	BB027654	trafficking/organelle protein	1.0	7.0	4421	635
54	dystrobrevin binding protein 1	Dtnbp1	AK017400	trafficking/organelle protein	2.3	5.2	2302	447
55	SEC24 related gene family, member D	Sec24d	AK009425	trafficking/organelle protein	7.2	5.1	1985	392
56	ankyrin repeat domain 3	Ankrd3	AF302127	intracellular signaling molecule	14	269	2155	8
57	mab-21-like 1	Mab2111	AF228913	intracellular signaling molecule	0.80	112	1027	9
58	down syndrome critical region gene 1-like 1	Dscr111	AB061524	intracellular signaling molecule	0.78	39	5763	150
59	calretinin	Calr	BC017646	intracellular signaling molecule	1.8	26	9035	349
60	Purkinje cell protein 4	Pcp4	NM_008791	intracellular signaling molecule	5.8	14	8716	608
61	regulator of G-protein signaling 4	Rgs4	BC003882	intracellular signaling molecule	11	12	5189	427
62	Ras-like without CAAX 2	Rit2	NM_009065	intracellular signaling molecule	9.1	11	1733	156
63	phosphoinositol 3-phosphate-binding protein-3 homolog	Pbp3h	BI905111	intracellular signaling molecule	3.6	11	2093	196
64	diablo homolog	Diablo	NM_023232	intracellular signaling molecule	4.1	7.3	4509	619
65	spleen tyrosine kinase	Syk	NM_011518	intracellular signaling molecule	16	7.2	1070	148
66	Rho GTPase activating protein 12	Arhgap12	BG064038	intracellular signaling molecule	0.89	6.9	1253	181
67	hippocalcin	Hpcal	AK002992	intracellular signaling molecule	6.9	6.4	2342	366
68	homer homolog 2	Homer2	AB017136	intracellular signaling molecule	0.70	5.7	3425	598
69	adenylate cyclase 2	Adcy2	AV025455	intracellular signaling molecule	1.9	5.3	2725	515
70	visinin-like 1	Vsnl1	AK005091	intracellular signaling molecule	21	5.2	2197	422
71	unc119 homolog	Unc119	BC001990	intracellular signaling molecule	1.7	7.6	3413	447
72	desmoplakin	Dsp	AV297961	cytoskeletal protein	0.70	16	1746	110
73	synapsin II	Syn2	NM_013681	cytoskeletal protein	6.5	9.6	4030	421
74	dynammin	Dnm	L31397	cytoskeletal protein	5.0	7.2	4581	637
75	intracisternal A particle-promoted polypeptide homolog	Ipph	BC011135	cytoskeletal protein	1.9	7.1	1137	160
76	microtubule-associated protein 4	Mtap4	BB280360	cytoskeletal protein	3.7	5.9	2669	454
77	3-ketoacyl-CoA thiolase B	Kctb	BC019882	metabolism	0.92	25	1075	42
78	galactosidase, beta 1	Glb1	NM_009752	metabolism	3.5	9.5	1417	149
79	4-aminobutyrate aminotransferase	Abat	BF462185	metabolism	4.7	7.9	2210	280
80	enolase 2, gamma neuronal	Eno2	NM_013509	metabolism	4.9	5.8	1313	225
81	phosphofructokinase, platelet	Pfkb	NM_019703	metabolism	3.8	5.7	2051	357
82	glucose phosphate isomerase 1	Gpi1	NM_008155	metabolism	3.7	5.1	6737	1320
83	eukaryotic translation elongation factor 1 alpha 2	Eef1a2	NM_007906	others/undefined	6.5	9.7	7530	779
84	BM88 antigen	Bm88a	BC023032	others/undefined	3.0	6.8	1543	227
85	heme binding protein 2	Hebp2	NM_019487	others/undefined	2.2	6.6	1431	217
86	deleted in polyposis 1	Dp1	BG069654	others/undefined	3.6	5.8	1440	251
87	WD repeat domain 8	Wdr8	BC016120	others/undefined	0.82	5.3	2602	494

Eighty-seven genes which showed more than 5 times increase in CR cells over non-CR cells at P2 are listed. For other explanations, see Fig. 2.