

SUPPLEMENTAL TABLE 2. Genes that change ≥ 20 -fold during RGC development. This is a list of the 175 genes (“present” in at least 10% of the samples) that change more than 20-fold during RGC development.

PROBE	Gene symbol	Gene name	Fold Change
M24852_at	Pcp4	Purkinje cell protein 4	1190
rc_AA874803_g_at	Cxcl14	chemokine (C-X-C motif) ligand 14	386
rc_AI171462_s_at	Cd24	CD24 antigen	363
L20468_at	Gpc2	glypican 2 (cerebroglycan)	222
M16112_at	Camk2b	calcium/calmodulin-dependent protein kinase II, beta	217
rc_AI145494_at	Syn2	synapsin II	208
U23407_at	Crabp2	cellular retinoic acid binding protein 2	172
S76779_s_at	ApoE	apolipoprotein E	159
U72143_i_at	Mcpt9	mast cell protease 9	146
M22253_at	Scn1a	sodium channel, voltage-gated, type I, alpha	143
rc_AA800948_at	Tuba4	tubulin, alpha 4	133
rc_AI029066_at	Cldn5	claudin 5	111
U55816_at	Slc12a5	solute carrier family 12, (potassium-chloride transporter) member 5	101
U22414_at	Ccl3	chemokine (C-C motif) ligand 3	98
rc_AI044668_at	Crtac1	cartilage acidic protein 1	84
rc_AA997327_at	Cbx7	chromobox homolog 7	75
Z75029_s_at	Hspa1b_mapped	heat shock 70kD protein 1B (mapped)	70
rc_AA996977_s_at	Sh3glb1	SH3-domain GRB2-like B1 (endophilin)	70
rc_AI044759_at	RGD1311455_pred	Similar to MAPK-interacting and spindle-stabilizing protein (predicted)	69
rc_AI230247_s_at	Sepp1	selenoprotein P, plasma, 1	68
rc_AI071264_at	Bcl2a1	B-cell leukemia/lymphoma 2 related protein A1	65
rc_AI044838_at	Hpcal4	Hippocalcin-like 4	64
rc_AI233246_at	Igfbp7	insulin-like growth factor binding protein 7	64
rc_AA956689_at	---	Transcribed locus	64
rc_AI009431_at	RGD1309651_pred	similar to 1190005I06Rik protein (predicted)	63

PROBE	Gene symbol	Gene name	Fold Change
rc_AA998683_g_at	Hspb1	heat shock 27kDa protein 1	62
M26744_at	Il6	interleukin 6	59
rc_AA943601_at	---	Transcribed locus	55
rc_AI228050_at	---	Transcribed locus	55
rc_AA924772_at	Mt3	metallothionein 3	54
rc_AI137958_at	---	Transcribed locus	53
M11597_at	Calca	calcitonin/calcitonin-related polypeptide, alpha	52
U45965_at	Cxcl2	chemokine (C-X-C motif) ligand 2	52
rc_AI136858_at	Mybph	Myosin binding protein H	51
rc_AA955132_at	---	---	51
rc_AA891204_s_at	Sparc	secreted acidic cysteine rich glycoprotein	49
rc_AA891302_g_at	Map4k1_pred	mitogen activated protein kinase kinase kinase 1 (predicted)	48
rc_AA943576_at	RGD1305090_pred	Similar to CD2-associated protein (predicted)	48
rc_AI639205_at	Sept8_pred	septin 8 (predicted)	47
rc_AI111406_at	---	Transcribed locus	46
rc_AA924598_at	---	---	46
AF030358_g_at	Cx3cl1	chemokine (C-X3-C motif) ligand 1	46
rc_AA875037_at	MGC94010	similar to SPI6	45
rc_AA859581_at	Crispld2	cysteine-rich secretory protein LCCL domain containing 2	45
rc_AI231489_at	Igf2bp3	insulin-like growth factor 2, binding protein 3	44
rc_AA892854_at	LOC498335	similar to Small inducible cytokine B13 precursor (CXCL13) (B lymphocyte chemoattractant) (CXC chemokine BLC)	44
rc_AA997894_at	Nova1	Neuro-oncological ventral antigen 1	44
rc_AI227991_at	Vsnl1	visinin-like 1	42
X57573_at	Gad1	glutamic acid decarboxylase 1	42
rc_AI228219_at	---	Transcribed locus	40
rc_AI058810_at	---	Transcribed locus	40
rc_AI229073_at	---	Transcribed locus	39
rc_AI030584_at	Ccnb1ip1	cyclin B1 interacting protein 1	38
rc_AA850708_at	Myt1l	Myelin transcription factor 1-like	38

PROBE	Gene symbol	Gene name	Fold Change
rc_AA818677_at	Nefh	neurofilament, heavy polypeptide	38
rc_AI059345_at	Cit	Citron	38
X17053mRNA_s_at	Ccl2	chemokine (C-C motif) ligand 2	37
rc_AI030695_at	Tusc5	tumor suppressor candidate 5	37
rc_AI070278_at	Gpr125_pred	G protein-coupled receptor 125 (predicted)	37
rc_AI235051_at	---	Transcribed locus	37
rc_AA964868_at	LOC680485 // LOC684012	hypothetical protein LOC680485 // hypothetical protein LOC684012	37
rc_AI177962_at	LOC687188	similar to AXL receptor tyrosine kinase	36
Y00396mRNA_at	Myc	myelocytomatosis viral oncogene homolog (avian)	36
rc_AI030028_at	---	Transcribed locus	35
rc_AI176174_at	Tm4sf1_pred	transmembrane 4 superfamily member 1 (predicted)	35
D88250_at	C1s	complement component 1, s subcomponent	34
rc_AI137820_at	Cyr61	Cysteine rich protein 61	34
rc_AA943764_at	---	Transcribed locus	34
rc_AI058869_at	LOC679386 // LOC689931	similar to ovary-specific acidic protein // similar to ovary-specific acidic protein	33
J05510_at	Itpr1	inositol 1,4,5-triphosphate receptor 1	33
U69272_at	Il15	interleukin 15	33
rc_AI137423_at	---	Transcribed locus	33
M36420_s_at	Gria3	glutamate receptor, ionotropic, AMPA3 (alpha 3)	33
rc_AA997533_at	Stra6	stimulated by retinoic acid gene 6 homolog (mouse)	33
rc_AI177026_at	Atp1a2	ATPase, Na ⁺ /K ⁺ transporting, alpha 2 polypeptide	32
rc_AA943054_at	RGD1566090_pred	Similar to hypothetical protein DKFZp761N1114 (predicted)	31
J03179_at	Dbp	D site albumin promoter binding protein	31
rc_AI180206_at	Tradd	TNFRSF1A-associated via death domain	31
Y14933mRNA_s_at	Onecut1	one cut domain, family member 1	31
rc_AI103410_at	Carhsp1	calcium regulated heat stable protein 1	31
L00382cds_at	MGC109519	similar to tropomyosin 1, embryonic fibroblast - rat	30

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U09540_g_at	Cyp1b1	cytochrome P450, family 1, subfamily b, polypeptide 1	30
J04486_at	Igfbp2	insulin-like growth factor binding protein 2	30
rc_AA892864_at	Hp1bp3	Heterochromatin protein 1, binding protein 3	30
rc_AI171983_at	RGD1305117	similar to HN1-like protein	30
rc_AA900704_at	---	Transcribed locus	30
rc_AI102073_at	Mal2	mal, T-cell differentiation protein 2	30
rc_AI229172_s_at	LOC500956	hypothetical protein LOC500956	30
rc_AI059568_g_at	Kbtbd10 // Ppig	Kelch repeat and BTB (POZ) domain containing 10 // Peptidylprolyl isomerase G	29
rc_AI102578_g_at	---	---	29
U27562_at	Sparcl1	SPARC-like 1 (mast9, hevin)	29
X56325mRNA_s_at	Hba-a1 // LOC360504	hemoglobin alpha, adult chain 1 // hemoglobin alpha 2 chain	29
rc_AA956286_at	---	Transcribed locus	29
AF091834_at	Nsf	N-ethylmaleimide sensitive fusion protein	29
rc_AI012354_at	Hist1h2bh	histone 1, H2bh	29
D11445exon#1-4_s_at	Cxcl1	chemokine (C-X-C motif) ligand 1	29
rc_AA942924_at	Kcnip4	Kv channel interacting protein 4	28
rc_AI231423_at	Prkx	protein kinase, X-linked	27
rc_AA891476_at	---	Transcribed locus, weakly similar to NP_766020.1 RIKEN cDNA C030002O17 [Mus musculus]	27
rc_AI009700_at	RGD1305664	Similar to KIAA0672 gene product	27
rc_AI233972_at	Gja4	gap junction membrane channel protein alpha 4	27
rc_AI072247_at	---	Transcribed locus	27
rc_AA819680_at	LOC498951	similar to 2010004A03Rik protein	27
M84488_at	Vcam1	vascular cell adhesion molecule 1	27
X67241cgs_at	Rasgrf1	RAS protein-specific guanine nucleotide-releasing factor 1	27
rc_AI145381_at	Sncb	synuclein, beta	27
rc_AI058975_at	---	Transcribed locus	27
U44845_at	Vtn	vitronectin	27
rc_AI072450_at	---	Transcribed locus	26

PROBE	Gene symbol	Gene name	Fold Change
D84418_s_at	Hmgb2 // RGD1564519_pred // RGD1561694_pred // RGD1559962_pred // LOC680704 // LOC682545	high mobility group box 2 // similar to High mobility group protein 2 (HMG-2) (predicted)	26
rc_AI104303_at	RGD1305627_pred	hypothetical LOC314467 (predicted)	26
rc_AI060167_at	---	Transcribed locus	26
rc_AA964584_at	Omg	oligodendrocyte-myelin glycoprotein	26
rc_AA943784_s_at	Atp2b2	ATPase, Ca ⁺⁺ transporting, plasma membrane 2	26
X62839mRNA_s_at	Kcnc2	potassium voltage gated channel, Shaw-related subfamily, member 2	26
D10693_at	Hnmt	histamine N-methyltransferase	26
rc_AI639118_at	RGD1559440_pred	similar to Ca ²⁺ -dependent activator for secretion protein 2 (predicted)	26
L16764_s_at	Hspa1a // Hspa1b_mapped	heat shock 70kD protein 1A // heat shock 70kD protein 1B (mapped)	26
rc_AA924914_at	LOC363153 // RGD1307215	similar to cyclic AMP-regulated phosphoprotein, 21 isoform 2 // similar to protein phosphatase 1, regulatory (inhibitory) subunit 1C; thymocyte ARPP; DNA segment, Chr 9, Brigham & Womens Genetics 1012 expressed	25
rc_AI169077_at	Slc7a7	solute carrier family 7 (cationic amino acid transporter, y ⁺ system), member 7	25
rc_AA964627_at	---	Transcribed locus	25
rc_AA945737_at	Cxcr4	chemokine (C-X-C motif) receptor 4	25
rc_AI009623_at	Rpp25	ribonuclease P 25 subunit (human)	25
rc_AI170948_at	Gpr4	G protein-coupled receptor 4	25
K02248cds_s_at	Sst	somatostatin	24
rc_AI072228_at	Cd83_pred	CD83 antigen (predicted)	24
rc_AI176592_at	---	Transcribed locus	24
rc_AI012208_at	---	---	24
rc_AA819292_at	---	Transcribed locus	24
rc_AI172567_i_at	---	Transcribed locus	24

PROBE	Gene symbol	Gene name	Fold Change
rc_AI071307_at	Enc1	ectodermal-neural cortex 1	24
rc_AI136674_at	---	Transcribed locus	24
rc_AI228253_at	---	---	24
rc_AA848811_at	B2m	Beta-2 microglobulin	24
rc_AI101112_at	Exoc2	Exocyst complex component 2	24
rc_AI113338_at	---	Transcribed locus, strongly similar to XP_342569.2 PREDICTED: similar to protein tyrosine phosphatase, receptor type, T isoform 1 precursor [Rattus norvegicus]	24
rc_AI145529_at	Acy1	Aminoacylase 1	23
rc_AI101379_at	---	Transcribed locus	23
rc_AI171799_at	Epdr2	ependymin related protein 2 (zebrafish)	23
rc_AI010612_at	Tnc	Tenascin C	23
rc_AI012182_s_at	LOC689064	similar to Hemoglobin beta-2 subunit (Hemoglobin beta-2 chain) (Beta-2-globin) (Hemoglobin beta chain, minor-form)	23
rc_AI175539_at	Pvalb	parvalbumin	23
rc_AA964069_at	---	Transcribed locus	23
M31603_at	Pthlh	parathyroid hormone-like peptide	23
AF098301_at	Fbxo2	F-box only protein 2	23
U09631_at	Vipr2	vasoactive intestinal peptide receptor 2	23
rc_AI009415_f_at	Ctsh	cathepsin H	22
rc_AI029647_at	Acbd4	acyl-Coenzyme A binding domain containing 4	22
rc_AI233904_at	Kbtbd3_pred	Kelch repeat and BTB (POZ) domain containing 3 (predicted)	22
rc_AI012648_at	Cd302	CD302 antigen	22
rc_AI007851_at	RGD1306212_pred	similar to hypothetical protein DKFZp566N034 (predicted)	22
rc_H31363_at	---	Transcribed locus	22
rc_AI029179_at	Pde4a	Phosphodiesterase 4A, cAMP specific	22
U10357_g_at	Pdk2	pyruvate dehydrogenase kinase, isoenzyme 2	22
rc_AI058768_at	Plxdc2_pred	Plexin domain containing 2 (predicted)	22

PROBE	Gene symbol	Gene name	Fold Change
rc_AI014130_at	Tyki_pred	thymidylate kinase family LPS-inducible member (predicted)	21
rc_AA851471_at	---	Transcribed locus	21
rc_AA858520_at	Fst	follistatin	21
rc_AA943229_s_at	Lgi1	leucine-rich repeat LGI family, member 1	21
rc_AI071150_at	Ryr2	Ryanodine receptor 2, cardiac	21
rc_AI010584_f_at	lfitm3	interferon induced transmembrane protein 3	21
rc_AI009783_at	Tfpi	tissue factor pathway inhibitor	21
rc_AI058396_s_at	Ua20	Putative UA20 protein	21
rc_AI229196_g_at	Vamp1	vesicle-associated membrane protein 1	21
rc_AI170353_at	S100a11	S100 calcium binding protein A11 (calizzarin)	21
rc_AA957917_s_at	Slc7a1	solute carrier family 7 (cationic amino acid transporter, y+ system), member 1	21
AF044201_at	Faim2	Fas apoptotic inhibitory molecule 2	21
rc_AI112346_at	RGD1305844	hypothetical LOC294883	21
rc_AI101500_at	---	Transcribed locus	21
rc_AA860043_at	Gng11	guanine nucleotide binding protein (G protein), gamma 11	21
rc_AI028815_at	Fxyd7	FXYP domain-containing ion transport regulator 7	20
rc_AA925373_at	---	Transcribed locus, strongly similar to NP_115833.1 protocadherin 7 isoform c precursor [Homo sapiens]	20
U56261_s_at	Snap25	Synaptosomal-associated protein 25	20
rc_AA943737_at	Edg1	endothelial differentiation sphingolipid G-protein-coupled receptor 1	20
M31178_g_at	Calb1	calbindin 1	20