

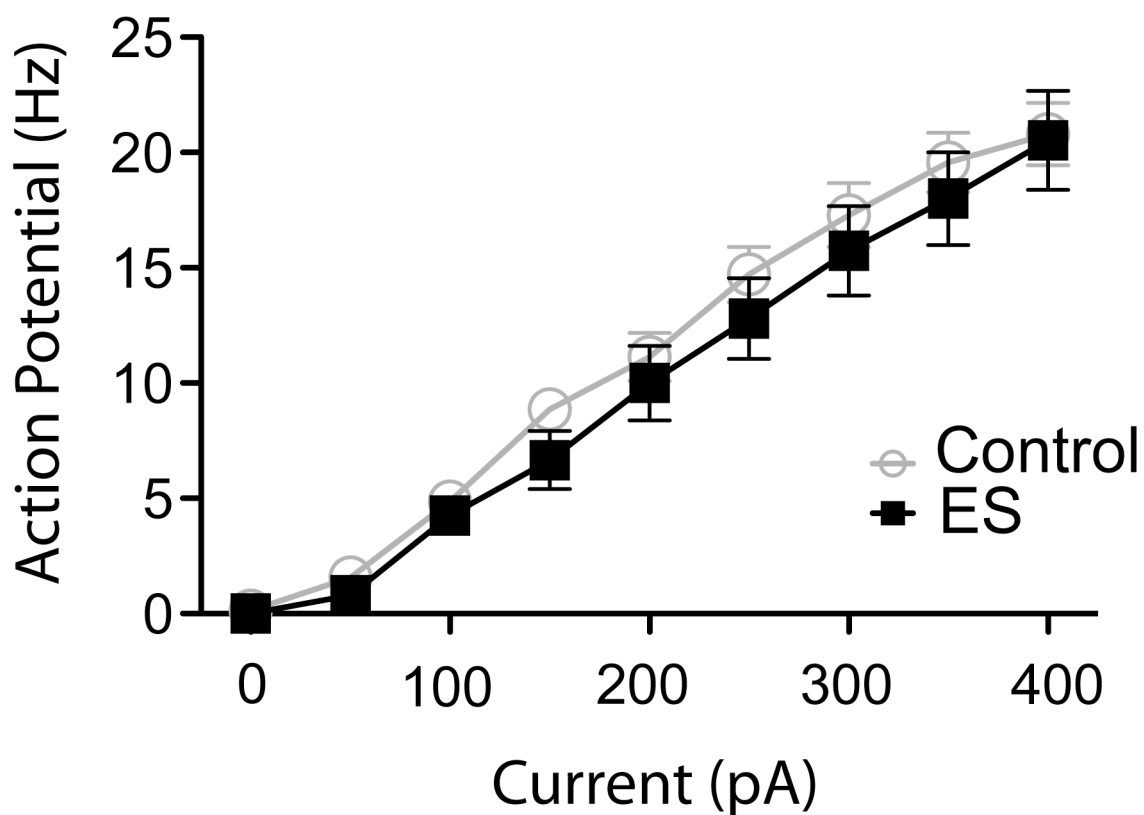
Enhanced function of prefrontal serotonin 5-HT₂ receptors in a rat model of psychiatric vulnerability

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Supplemental information

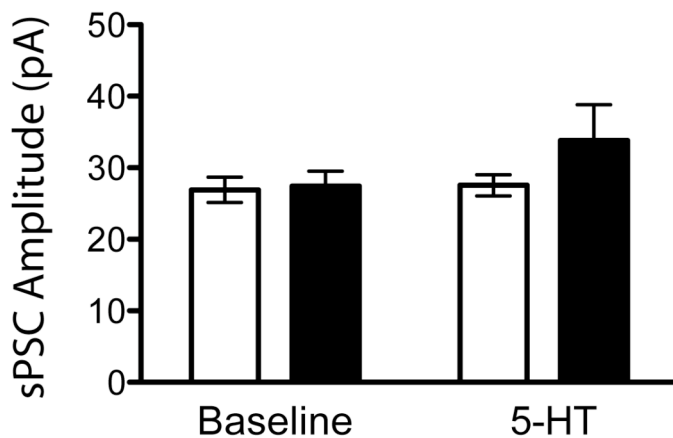
Contents	Page
Supplemental Figure 1: Input-output relationships from -75mV	2
Supplemental Figure 2: Amplitudes of glutamatergic and GABAergic sPSCs	3
Supplemental Table 1: Proportions of neurons showing 5-HT-elicited increases in glutamatergic or GABAergic sPSCs	4
Supplemental Table 2: List of Genes regulated in the microarray experiment within the prefrontal cortex following early stress (ES vs. C).	5
Supplemental Table 3: Functional classification of genes regulated by ES in the prefrontal cortex.	37
Supplemental Table 4: List of Genes regulated in the microarray experiment within the prefrontal cortex following DOI (DOI vs. C).	52
Supplemental Table 5: List of Taqman primers used for quantitative PCR (qPCR)	90
Supplemental Table 6: List of SYBR green primers used for quantitative PCR (qPCR)	91

Supplemental Figure 1: Input-output relationship from -75mV. Since we found a small but significant difference in the membrane potential of ES layer V pyramidal neurons compared to controls, we also tested the input-output relationship of these cells after bringing each neuron to a membrane potential of -75mV. Under these conditions, there is a trend towards neurons from ES animals being less excitable compared to those from controls (slope of 5.70 ± 0.08 Hz/100 pA in controls [n =14] versus slope of 5.55 ± 0.05 Hz/100 pA [n = 15]; unpaired t test, p = 0.054).

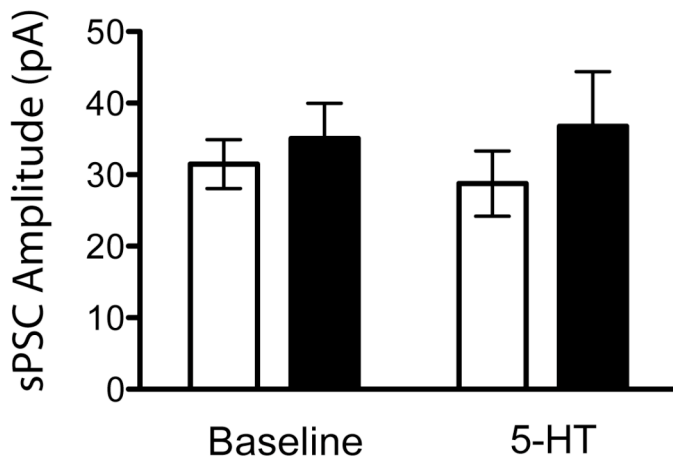


Supplemental Figure 2: Amplitudes of glutamatergic and GABAergic sPSCs. (A) The amplitude of glutamatergic spontaneous postsynaptic currents (sPSCs) is not significantly different between neurons from control and ES animals either at baseline or in the presence of 5-HT (10 μ M, 30 s). (B) The amplitude of GABAergic sPSCs is also not significantly different between neurons from control and ES animals either at baseline or in the presence of 5-HT.

A Glutamatergic sPSCs



B GABAergic sPSCs



Supplemental Table 1: Proportions of neurons showing 5-HT-elicited increases in glutamatergic and GABAergic sPSCs. Early stress (ES) does not alter the proportion of layer V neurons displaying a significant increase in 5-HT-elicited glutamatergic or GABAergic spontaneous postsynaptic currents (sPSCs). Significance in the change in frequency or amplitude of sPSCs within each neuron was assessed by the Kolmogorov-Smirnov test ($p < 0.01$). Comparison between the number of cells displaying significant changes was made with Fisher's exact test.

<u>Neurons with 5-HT-elicited increases in sPSCs</u>		Control	Early stress (ES)	<i>p</i> value
Glutamatergic sPSCs	Frequency (Hz)	13 of 21 (62%)	14 of 21 (67%)	1.0
	Amplitude (pA)	4 of 21 (19%)	7 of 21 (33%)	0.5
GABAergic sPSCs	Frequency (Hz)	5 of 13 (38%)	4 of 13 (31%)	1.0
	Amplitude (pA)	2 of 13 (15%)	4 of 13 (31%)	0.6

Supplemental Table 2: List of Genes regulated in the microarray experiment within the prefrontal cortex(PFC) following early stress (ES vs. C). Animals were subjected to ES and were studied in adulthood as described in Methods. The PFC transcriptome in control and ES animals was analyzed. Shown in the table is the list of all the genes significantly regulated ($P < 0.05$; fold change cut off > 1.5 or < 0.66) in the ES group as compared to control.

GeneName	Ratio – ES	t-test P-value	Synonyms	Description
A2m	1.53	0.00	NM_012488	alpha-2-macroglobulin
A3galt2	2.96	0.02	NM_138524	alpha 1,3-galactosyltransferase 2 (isoglobotriaosylceramide synthase)
AA858752	3.16	0.05	AA858752	cDNA clone UI-R-A0-bb-e-07-0-UI 3'
AA859222	1.68	0.01	AA859222	cDNA clone UI-R-E0-cd-b-07-0-UI 3'
AA875523	1.56	0.01	AA875523	cDNA clone UI-R-E0-cv-e-11-0-UI 3'
AA899496	1.60	0.01	AA899496	cDNA clone UI-R-E0-de-d-09-0-UI 3'
AA925023	2.00	0.00	AA925023	cDNA clone UI-R-A1-ei-g-02-0-UI 3'
AA925792	1.57	0.00	AA925792	cDNA clone UI-R-A1-et-f-06-0-UI 3'
AA945636	1.57	0.01	AA945636	cDNA clone RLUAR18 3'
Aadac	2.04	0.04	NM_020538	arylacetamide deacetylase (esterase)
Abcd3	1.60	0.02	NM_012804	ATP-binding cassette, sub-family D (ALD), member 3
Abcg2	1.69	0.00	NM_181381	ATP-binding cassette, sub-family G (WHITE), member 2
Acaa2	1.56	0.00	NM_130433	acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase)
Acads	1.67	0.01	NM_022512	acetyl-Coenzyme A dehydrogenase, short chain
Acox1	1.67	0.01	NM_017340	acyl-Coenzyme A oxidase 1, palmitoyl
Acs11	1.71	0.00	NM_012820	acyl-CoA synthetase long-chain family member 1
Actl6a	1.58	0.04	NM_001039033	actin-like 6A
Adamts13_predicted	3.62	0.00	XM_218841	ADAMTS-like 3 (predicted)
Add2	1.55	0.02	NM_012491	adducin 2 (beta)
Adm2	1.88	0.03	NM_201426	adrenomedullin 2
AF486617	2.40	0.01	AF486617	beta-catenin (Ctnnb1) gene, promoter region and exon 1
Agpat3_predicted	1.54	0.01	XM_215367	1-acylglycerol-3-phosphate O-acyltransferase 3 (predicted)
Agt	1.76	0.00	NM_134432	angiotensinogen (serpin peptidase inhibitor, clade A, member 8)
AI014087	2.02	0.01	AI014087	cDNA clone RSPBE69 3'
AI170772	1.84	0.02	AI170772	cDNA clone RMUBB32 3'
AI229633	1.53	0.01	AI229633	cDNA clone REMCJ67 3'

Aif1	1.53	0.03	NM_017196	allograft inflammatory factor 1
Ak3l1	2.05	0.03	NM_017135	adenylate kinase 3-like 1
Akap8	1.53	0.01	XM_343176	A kinase (PRKA) anchor protein 8
Akr1c6	2.06	0.04	NM_00103369 7	aldo-keto reductase family 1, member C6
Alad	1.65	0.01	NM_012899	aminolevulinate, delta-, dehydratase
Aldh7a1	1.53	0.00	XM_214535	aldehyde dehydrogenase family 7, member A1
Alg5	3.33	0.00	NM_00102540 7	asparagine-linked glycosylation 5 homolog (yeast, dolichyl-phosphate beta-glucosyltransferase)
Alox5ap	1.54	0.01	NM_017260	arachidonate 5-lipoxygenase activating protein
Alx4_predicted	2.81	0.04	XM_231005	aristaless 4 (predicted)
Amelx	2.25	0.02	NM_019154	amelogenin X chromosome
Ankyf1_predicted	2.18	0.03	XM_239269	ankyrin repeat and FYVE domain containing 1 (predicted)
Ankrd2_predicted	2.31	0.05	XM_219881	ankyrin repeat domain 2 (stretch responsive muscle) (predicted)
Anxa3	1.51	0.01	NM_012823	annexin A3
Aox1	2.12	0.04	NM_019363	aldehyde oxidase 1
Apobec1	1.58	0.01	NM_012907	apolipoprotein B editing complex 1
Apobec2_predicted	1.52	0.00	XM_217334	apolipoprotein B editing complex 2 (predicted)
Apoc1	1.52	0.00	NM_012824	apolipoprotein C-I
Apoe	1.66	0.00	NM_138828	apolipoprotein E
Apol3	1.98	0.01	NM_00101317 5	apolipoprotein L, 3
Aqp3	2.36	0.03	NM_031703	aquaporin 3
Art5	2.62	0.01	NM_00101303 9	ADP-ribosyltransferase 5
Arts1	1.57	0.01	NM_030836	type 1 tumor necrosis factor receptor shedding aminopeptidase regulator
Asah3l_predicted	2.44	0.02	XM_233138	N-acylsphingosine amidohydrolase 3-like (predicted)
Asgr2	1.99	0.00	NM_017189	asialoglycoprotein receptor 2
Atf5	1.64	0.04	NM_172336	activating transcription factor 5
Atp12a	2.14	0.03	NM_133517	ATPase, H ⁺ /K ⁺ transporting, nongastric, alpha polypeptide
Atp5e	1.61	0.00	NM_139099	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, epsilon subunit
Atp5i	1.54	0.05	NM_080481	ATP synthase, H ⁺ transporting, mitochondrial F0 complex, subunit e
Atp6v0d2	2.20	0.03	NM_00101197 2	ATPase, H ⁺ transporting, V0 subunit D, isoform 2
Atp6v0e1	1.67	0.01	NM_053578	ATPase, H ⁺ transporting, V0 subunit E isoform 1

Atpbd1b_predicted	1.50	0.00	XM_342932	ATP binding domain 1 family, member B (predicted)
Bbox1	2.13	0.03	NM_022629	butyrobetaine (gamma), 2-oxoglutarate dioxygenase 1 (gamma-butyrobetaine hydroxylase)
Bclaf1	1.61	0.00	XM_214967	BCL2-associated transcription factor 1
Bglap2	2.12	0.03	NM_013414	bone gamma-carboxyglutamate protein 2
Bgn	1.99	0.01	NM_017087	biglycan
Bhlhb8	2.03	0.04	NM_012863	basic helix-loop-helix domain containing, class B, 8
Bid3	1.54	0.03	NM_057130	BH3 interacting (with BCL2 family) domain, apoptosis agonist
Bpgm	1.53	0.00	NM_199382	2,3-bisphosphoglycerate mutase
BQ201138	2.24	0.00	BQ201138	cDNA clone UI-R-DQ1-clt-c-17-0-UI 3'
Brinp2	1.50	0.04	NM_173115	BMP/retinoic acid-inducible neural-specific protein 2
Brms1	1.52	0.00	NM_001009605	breast cancer metastasis-suppressor 1
Bst2	2.73	0.01	NM_198134	bone marrow stromal cell antigen 2
Btg4	2.07	0.04	NM_001013176	B-cell translocation gene 4
C1qa	1.63	0.00	NM_001008515	complement component 1, q subcomponent, alpha polypeptide
C1qb	1.73	0.00	NM_019262	complement component 1, q subcomponent, beta polypeptide
C1qg	1.64	0.00	NM_001008524	complement component 1, q subcomponent, gamma polypeptide
C1qtnf1	2.63	0.01	NM_001007675	C1q and tumor necrosis factor related protein 1
C1qtnf6	2.21	0.05	NM_001034932	C1q and tumor necrosis factor related protein 6
C1r	1.51	0.02	XM_242644	complement component 1, r subcomponent
C2	1.68	0.00	NM_172222	complement component 2
C5	2.17	0.03	XM_345342	complement component 5
C6	2.14	0.03	NM_176074	complement component 6
Calb2	1.54	0.00	NM_053988	calbindin 2
Calcr	1.98	0.01	NM_053816	calcitonin receptor, transcript variant 1
Calu	1.89	0.03	NM_022535	calumenin
Camk1g	1.55	0.01	NM_182842	calcium/calmodulin-dependent protein kinase I gamma
Capn8	1.99	0.05	NM_133309	calpain 8
Caps2_predicted	2.90	0.04	XM_345822	calcyphosphine 2 (predicted)
Capzb	2.02	0.00	NM_001005903	capping protein (actin filament) muscle Z-line, beta
Casp2	1.53	0.00	NM_022522	caspase 2
Cbr1	1.51	0.00	NM_019170	carbonyl reductase 1

Cckar	3.36	0.00	NM_012688	cholecystokinin A receptor
Ccl20	2.01	0.04	NM_019233	chemokine (C-C motif) ligand 20
Ccl6	2.79	0.01	NM_00100420 2	chemokine (C-C motif) ligand 6
Ccndbp1	1.50	0.03	NM_00101320 4	cyclin D-type binding-protein 1
Ccng1	7.43	0.00	NM_012923	cyclin G1
Ccs	1.50	0.02	NM_053425	copper chaperone for superoxide dismutase
Cct3	2.52	0.00	AA964625	cDNA clone UI-R-C0-gv-d-10-0-UI 3'
Cd163_predicted	2.33	0.02	XM_232342	CD163 antigen (predicted)
Cd1d1	1.53	0.01	NM_017079	CD1d1 antigen
Cd226_predicted	2.23	0.02	XM_225664	CD226 antigen (predicted)
Cd3g	1.97	0.04	XM_217136	CD3 antigen, gamma polypeptide
Cd44	1.76	0.00	NM_012924	CD44 antigen
Cd47	2.15	0.00	NM_019195	CD47 antigen (Rh-related antigen, integrin-associated signal transducer)
Cd48	1.74	0.01	NM_139103	CD48 antigen
Cd63	1.62	0.00	NM_017125	CD63 antigen
Cd82	1.56	0.02	NM_031797	CD82 antigen
Cdc14a_predicted	2.03	0.04	XM_227618	CDC14 cell division cycle 14 homolog A (S. cerevisiae) (predicted)
Cdc73	2.80	0.05	NM_00102476 9	cell division cycle 73, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae)
Cdh15	1.59	0.00	NM_207613	cadherin 15
Cdkn1b	2.57	0.02	NM_031762	cyclin-dependent kinase inhibitor 1B
Cdtw1	1.52	0.01	NM_134395	P11 protein
Centd3_predicted	2.03	0.04	XM_00106616 7	centaurin, delta 3 (predicted)
Cetn1	2.17	0.02	BE103209	cDNA clone UI-R-BT1-aqx-d-09-0-UI 3'
Cfb	2.41	0.03	NM_212466	complement factor B
Cfd	4.79	0.00	XM_343169	complement factor D (adipsin)
Cfh	1.61	0.00	NM_130409	complement component factor H
Cga	1.81	0.03	NM_053918	glycoprotein hormones, alpha subunit
Chaf1b	1.83	0.04	NM_00102474 1	chromatin assembly factor 1, subunit B (p60)
Chgb	1.50	0.02	NM_012526	chromogranin B
Chpt1	1.60	0.01	NM_00100775 0	choline phosphotransferase 1
Chrn3	2.13	0.03	NM_133597	cholinergic receptor, nicotinic, beta polypeptide 3
Cib1	1.64	0.01	NM_031145	calcium and integrin binding 1 (calmyrin)
Cit	2.08	0.00	AF039218	postsynaptic density protein (citron)

Cklfsf5_pre dicted	1.54	0.02	XM_214187	chemokine-like factor super family 5 (predicted)
Clasp1	1.71	0.04	XM_00105371 5	cytoplasmic linker associated protein 1
Clca6	2.03	0.04	NM_201419	chloride channel calcium activated 6
Cml3	1.52	0.00	XM_575585	camello-like 3
Cml5	1.93	0.01	XM_00106061 6	camello-like 5
Cnga1	2.24	0.02	NM_053497	cyclic nucleotide gated channel alpha 1
Cog4_predi cted	1.63	0.00	XM_341688	component of oligomeric golgi complex 4 (predicted)
Coll5a1	4.48	0.00	XM_216399	procollagen, type XV
Coll6a1	3.87	0.01	XM_345584	procollagen, type XVI, alpha 1
Cotl1_predi cted	1.55	0.01	XM_341700	coactosin-like 1 (Dictyostelium) (predicted)
Cpb1	2.25	0.02	NM_012533	carboxypeptidase B1 (tissue)
CPG2	1.96	0.00	AF452647	nesprin-1
Cpxm2_pre dicted	1.69	0.03	XM_215106	carboxypeptidase X 2 (M14 family) (predicted)
CR754507	1.55	0.00	CR754507	cDNA clone GP0AAA16ZH02
Crry	1.57	0.00	NM_00100533 0	complement receptor related protein, transcript variant 1
Cryab	1.94	0.04	NM_012935	crystallin, alpha B
Csflr	2.25	0.01	X61479	colony stimulating factor 1 receptor
Csn10	1.95	0.04	NM_031562	casein kappa
Csng	2.07	0.04	XM_341197	casein gamma
Csnk1g1	2.00	0.00	NM_022288	casein kinase 1, gamma 1
Cspg2	1.81	0.01	XM_215451	chondroitin sulfate proteoglycan 2
Csrp2	1.62	0.00	NM_177425	cysteine and glycine-rich protein 2
Cst3	1.56	0.00	NM_012837	cystatin C
Cst9_predic ted	2.18	0.03	XM_342537	cystatin 9 (predicted)
Ctrc	1.85	0.00	XM_00107320 8	chymotrypsin C (caldecrin)
Ctsh	1.57	0.01	NM_012939	cathepsin H
Ctsj	2.70	0.04	NM_017121	cathepsin J
Ctss	1.72	0.00	NM_017320	cathepsin S
Cxcl10	2.88	0.04	NM_139089	chemokine (C-X-C motif) ligand 10
Cxcl14	1.67	0.00	NM_00101313 7	chemokine (C-X-C motif) ligand 14
Cyb5	2.03	0.00	NM_022245	cytochrome b-5
Cyb5b	1.78	0.00	NM_030586	cytochrome b5, outer mitochondrial membrane isoform
Cyba	1.57	0.01	NM_024160	cytochrome b-245, alpha polypeptide

Cybrd1	1.50	0.01	NM_001011954	cytochrome b reductase 1
Cyp4a14	2.06	0.04	NM_175760	cytochrome P450, family 4, subfamily a, polypeptide 14
Cyp4f2	1.50	0.01	NM_019623	cytochrome P450, family 4, subfamily F, polypeptide 2
Cysltr1	2.09	0.03	NM_053641	cysteinyl leukotriene receptor 1
Dbi	1.73	0.01	NM_031853	diazepam binding inhibitor
Dbp	1.53	0.00	NM_012543	D site albumin promoter binding protein
Dcc	2.09	0.04	NM_012841	deleted in colorectal carcinoma
Ddah2	1.78	0.00	NM_212532	dimethylarginine dimethylaminohydrolase 2
Ddc	1.72	0.00	NM_012545	dopa decarboxylase
Ddx21a	1.63	0.02	NM_001037201	DEAD (Asp-Glu-Ala-Asp) box polypeptide 21a
Ddx4	2.11	0.03	XM_001074861	DEAD (Asp-Glu-Ala-Asp) box polypeptide 4
Decr1	1.55	0.03	NM_057197	2,4-dienoyl CoA reductase 1, mitochondrial
Defb1	2.11	0.03	NM_031810	defensin beta 1
Dhrs8	1.66	0.04	NM_001004209	dehydrogenase/reductase (SDR family) member 8
Dnah7	2.44	0.01	XM_001065965	dynein, axonemal, heavy polypeptide 7
Dnase1l3	1.88	0.04	NM_053907	deoxyribonuclease I-like 3
Dpf3_predicted	2.07	0.04	XM_238462	D4, zinc and double PHD fingers, family 3 (predicted)
Drg1	1.54	0.00	NM_001009685	developmentally regulated GTP binding protein 1
Dusp22_predicted	1.54	0.00	XM_341523	dual specificity phosphatase 22 (predicted)
Efemp2	1.50	0.00	NM_001005907	EGF-containing fibulin-like extracellular matrix protein 2
Egfl7	1.53	0.00	NM_139104	EGF-like domain 7
Eif2c3_predicted	3.10	0.03	XM_233543	eukaryotic translation initiation factor 2C, 3 (predicted)
Eif3s12_predicted	1.58	0.04	XM_214886	eukaryotic translation initiation factor 3, subunit 12 (predicted)
Elk1	1.54	0.00	BG377323	cDNA clone UI-R-CU0-bvc-b-03-0-UI 3'
Emcn	1.95	0.00	NM_001004228	endomucin
Emr1	1.58	0.05	NM_001007557	EGF-like module containing, mucin-like, hormone receptor-like sequence 1
Enpp1	1.56	0.02	NM_053535	ectonucleotide pyrophosphatase/phosphodiesterase 1
ErbB2	1.54	0.01	NM_017003	v-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian)

Exosc5_predicted	1.53	0.00	XM_218343	exosome component 5 (predicted)
Exosc8_predicted	1.97	0.05	XM_215566	exosome component 8 (predicted)
Fabp5	1.52	0.01	NM_145878	fatty acid binding protein 5, epidermal
Fads2	1.53	0.01	NM_031344	fatty acid desaturase 2
Fath2	2.19	0.02	NM_022954	fat tumor suppressor homolog 2 (Drosophila)
Fbxo5_predicted	2.10	0.04	XM_214756	F-box only protein 5 (predicted)
Fcgr1	2.23	0.00	AF416291	high-affinity immunoglobulin gamma Fc receptor I
Fcgr3	1.82	0.01	XM_001077008	Fc receptor, IgG, low affinity III
Fcgr3a	1.52	0.01	NM_207603	Fc fragment of IgG, low affinity IIIa, receptor
Fcna	2.37	0.00	NM_031348	ficolin A
Fez2	1.61	0.01	NM_053600	fasciculation and elongation protein zeta 2 (zygin II)
Fgg	2.68	0.01	NM_012559	fibrinogen, gamma polypeptide
Fnta	1.52	0.00	NM_012847	farnesyltransferase, CAAX box, alpha
Fxyd6	1.54	0.00	NM_022005	FXDYD domain-containing ion transport regulator 6
G0s2	1.64	0.00	NM_001009632	G0/G1 switch gene 2
G1p2_predicted	5.06	0.01	XM_216605	interferon, alpha-inducible protein (clone IFI-15K) (predicted)
Gab1_predicted	2.27	0.05	XM_341667	growth factor receptor bound protein 2-associated protein 1 (predicted)
Gabarap	1.57	0.00	NM_172036	gamma-aminobutyric acid receptor associated protein
Gabbr1	2.08	0.01	NM_017291	gamma-aminobutyric acid (GABA-C) receptor, subunit rho 1
Gamt	1.92	0.02	NM_012793	guanidinoacetate methyltransferase
Gbp2	2.32	0.01	NM_133624	guanylate nucleotide binding protein 2
Gimap1	1.51	0.02	NM_001034849	GTPase, IMAP family member 1
Gjb3	1.94	0.05	NM_019240	gap junction membrane channel protein beta 3
Gjb6	1.59	0.00	NM_053388	gap junction membrane channel protein beta 6
Gmfg	1.67	0.04	NM_181091	glia maturation factor, gamma
Gml_predicted	2.86	0.01	XM_235422	GPI anchored molecule like protein (predicted) (Gml_predicted)
Gnat2_predicted	2.32	0.02	XM_345271	guanine nucleotide binding protein, alpha transducing 2 (predicted)
Gpnmb	1.62	0.02	NM_133298	glycoprotein (transmembrane) nmb
Gpr176	3.33	0.02	XM_342493	G protein-coupled receptor 176
Gpx4	1.67	0.00	NM_017165	glutathione peroxidase 4, transcript variant 1
Grin2d	1.89	0.00	NM_022797	glutamate receptor, ionotropic, N-methyl D-aspartate 2D

Grp	1.63	0.00	NM_133570	gastrin releasing peptide
Gss	1.55	0.00	NM_012962	glutathione synthetase
Gsta4	1.54	0.00	XM_217195	glutathione S-transferase, alpha 4
Gstm6_predicted	1.96	0.05	XM_215682	glutathione S-transferase, mu 6 (predicted)
Gstt2	1.53	0.04	NM_012796	glutathione S-transferase, theta 2
Gucy2c	2.42	0.02	NM_013170	guanylate cyclase 2C
Gys2	2.31	0.02	NM_013089	glycogen synthase 2
Gzmm	1.78	0.00	XM_001076783	granzyme M (lymphocyte met-ase 1)
H2a	1.50	0.00	NM_021840	histone 2a
Hadha	1.98	0.03	AA800240	cDNA clone RHEAM82 3' end
Hadhsc	2.06	0.05	NM_057186	L-3-hydroxyacyl-Coenzyme A dehydrogenase, short chain
Hao1_mapped	2.49	0.05	XM_230613	hydroxyacid oxidase 1 (mapped)
Hig1	1.53	0.00	NM_080902	hypoxia induced gene 1
Hist1h2ao_predicted	1.56	0.00	XM_344599	histone 1, H2ao (predicted)
Hist2h2aa_predicted	1.58	0.00	XM_345255	histone 2, H2aa (predicted)
Hnrpm	1.56	0.00	NM_053876	heterogeneous nuclear ribonucleoprotein M
Homez	2.71	0.02	NM_152849	homeodomain leucine zipper-encoding gene
Hoxc12_predicted	2.94	0.04	XM_235696	homeo box C12 (predicted)
Hsd11b1	1.56	0.00	NM_017080	hydroxysteroid 11-beta dehydrogenase 1
Hsd17b12	1.74	0.00	NM_032066	hydroxysteroid (17-beta) dehydrogenase 12
Hspa1a	1.52	0.04	NM_031971	heat shock 70kD protein 1A
Iag2	1.86	0.00	NM_053946	implantation-associated protein
Icos	3.11	0.03	NM_022610	inducible T-cell co-stimulator
Id3	1.97	0.00	NM_013058	inhibitor of DNA binding 3
Idh3B	2.66	0.00	NM_053581	isocitrate dehydrogenase 3 (NAD+) beta
Ifi44	2.89	0.03	XM_227821	interferon-induced protein 44
Igfbp6	1.69	0.00	NM_013104	insulin-like growth factor binding protein 6
Igsf1	2.32	0.02	NM_175763	immunoglobulin superfamily, member 1
Il17rb_predicted	2.06	0.04	XM_224604	interleukin 17 receptor B (predicted)
Il1f8_predicted	2.19	0.03	XM_342377	interleukin 1 family, member 8 (predicted)
Il2	2.00	0.04	NM_053836	interleukin 2
Il20ra_predicted	2.27	0.02	XM_218776	interleukin 20 receptor, alpha (predicted)
Il5ra	2.11	0.03	NM_053645	interleukin 5 receptor, alpha
Impa1	2.27	0.00	NM_032057	Inositol (myo)-1(or 4)-monophosphatase 1

Inhbc	2.05	0.02	NM_022614	inhibin beta C
Inpp5e	2.64	0.00	XM_342391	inositol polyphosphate 5-phosphatase
Insr	2.24	0.00	NM_017071	insulin receptor
Irf7	5.20	0.01	NM_00103369 1	interferon regulatory factor 7
Irgm	1.90	0.01	NM_00101200 7	immunity-related GTPase family, M
Isg20	1.93	0.01	NM_00100851 0	interferon stimulated exonuclease 20
Isgf3g	1.75	0.01	NM_00101204 1	interferon dependent positive acting transcription factor 3 gamma
Isoc1	1.52	0.05	NM_00101424 2	isochorismatase domain containing 1
Itih1_predicted	3.25	0.03	XM_224609	inter-alpha trypsin inhibitor, heavy chain 1 (predicted)
Itih4	1.99	0.04	NM_019369	inter alpha-trypsin inhibitor, heavy chain 4
Kazald1	1.53	0.01	NM_00103306 4	Kazal-type serine peptidase inhibitor domain 1
Kcnh2	2.16	0.04	NM_053949	potassium voltage-gated channel, subfamily H (eag-related), member 2
Kcnj2	2.09	0.04	NM_017296	potassium inwardly-rectifying channel, subfamily J, member 2
Kl	1.94	0.05	NM_031336	Klotho
Klf4	1.51	0.03	NM_053713	Kruppel-like factor 4
Klf5	2.52	0.01	NM_053394	Kruppel-like factor 5
Klrd1	1.91	0.05	NM_012745	killer cell lectin-like receptor, subfamily D, member 1
Lama5	1.75	0.00	XM_215963	laminin, alpha 5
Laptm4a	1.76	0.00	NM_199384	lysosomal-associated protein transmembrane 4A
Laptm5	1.55	0.00	NM_053538	lysosomal-associated protein transmembrane 5
Lcn7	1.58	0.02	NM_053582	lipocalin 7
Lcp1	1.70	0.04	NM_00101204 4	lymphocyte cytosolic protein 1
Ldlrad3_predicted	3.43	0.03	XM_345406	similar to hypothetical protein LOC143458
Lect1	2.20	0.02	NM_030854	leukocyte cell derived chemotaxin 1
Lect2_predicted	2.02	0.04	XM_341486	leukocyte cell-derived chemotaxin 2 (predicted)
Lep	2.40	0.00	NM_013076	leptin
Lepr	2.24	0.00	NM_012596	leptin receptor
Leprel	1.68	0.00	NM_053667	leprecan 1
Leprel2_predicted	2.73	0.05	XM_216278	leprecan-like 2 (predicted)
Leprot	1.70	0.04	NM_020099	leptin receptor overlapping transcript
Lgals1	2.05	0.01	NM_019904	lectin, galactose binding, soluble 1

Lgals3bp	1.85	0.01	NM_139096	lectin, galactoside-binding, soluble, 3 binding protein
Lgals5	1.94	0.00	NM_012976	lectin, galactose binding, soluble 5
Lhx3	1.75	0.02	XM_001059910	LIM homeobox protein 3
Limk2	2.08	0.05	NM_024135	LIM motif-containing protein kinase 2
LOC191574	3.10	0.03	NM_138547	3-alpha-hydroxysteroid dehydrogenase
LOC266771	2.85	0.05	NM_153729	putative pheromone receptor VN6
LOC290549	1.63	0.01	NM_207589	heat shock protein
LOC498185	1.83	0.00	NM_001017488	similar to sodium/calcium exchanger protein
LOC499924	2.43	0.01	XM_575268	Long palate, lung and nasal epithelium carcinoma associated protein 3
LOC679437	1.62	0.00	XM_001056340	similar to solute carrier family 25, member 28
LOC680097	2.26	0.00	XM_001055696	similar to germinal histone H4 gene
LOC680174	2.23	0.03	XM_001056002	similar to seminal vesicle antigen-like 1
LOC680404	1.55	0.02	XM_001057045	similar to Complement C1q-like protein 3 precursor
LOC680423	1.60	0.00	XM_001057104	similar to Ancient ubiquitous protein 1 precursor
LOC680945	1.56	0.00	XM_001059596	similar to stromal cell-derived factor 2-like 1
LOC681314	1.51	0.00	XM_001061020	similar to BAX protein, cytoplasmic isoform delta, transcript variant 2
LOC681867	1.66	0.00	XM_001056889	similar to NADH-ubiquinone oxidoreductase PDSW subunit (Complex I-PDSW) (CI-PDSW), transcript variant 2
LOC681942	1.54	0.00	XM_001059166	similar to Ubiquitin-conjugating enzyme E2 I (Ubiquitin-protein ligase I) (Ubiquitin carrier protein I) (SUMO-1-protein ligase) (SUMO-1-conjugating enzyme) (Ubiquitin-conjugating enzyme UbcE2A)
LOC683383	1.78	0.01	XM_001063050	similar to vang, van gogh-like 1, transcript variant 1
LOC683917	1.64	0.00	XM_001068997	similar to gamma-aminobutyric acid (GABA(A)) receptor-associated protein-like 1
LOC687008	1.61	0.01	XM_001075496	similar to Propionyl-CoA carboxylase alpha chain, mitochondrial precursor (PCCase alpha subunit) (Propanoyl-CoA:carbon dioxide ligase alpha subunit)
LOC689116	1.91	0.03	XM_001064621	similar to nuclear cap binding protein subunit 2, transcript variant 4
LOC689377	2.48	0.04	XM_001070580	similar to Ras-related protein Rab-20

LOC691098	1.67	0.02	XM_00107243 3	similar to ribosomal protein L37
Loxl1	1.63	0.02	NM_00101212 5	lysyl oxidase-like 1
Ltb	1.51	0.00	NM_212507	lymphotoxin B
Ltb4dh	1.57	0.01	NM_138863	leukotriene B4 12-hydroxydehydrogenase
Lum	2.94	0.00	NM_031050	lumican
M61004	1.96	0.00	M61004	Rat transforming oncogene neu, 5' end
Mapk8	1.70	0.01	XM_341399	mitogen-activated protein kinase 8 (Mapk8)
Mc4r	1.86	0.00	NM_013099	melanocortin 4 receptor
Mcam	2.44	0.01	NM_023983	melanoma cell adhesion molecule, transcript variant 1
Mcp	2.12	0.03	NM_019190	membrane cofactor protein
Mcpt1	2.15	0.01	U67915	mast cell protease 1 precursor
Mcpt8	2.07	0.01	NM_021598	mast cell protease 8
Mcsp	1.99	0.04	NM_031536	mitochondrial capsule selenoprotein
Mdm4	1.98	0.05	NM_00101202 6	transformed mouse 3T3 cell double minute 4
Megf10	3.04	0.04	XM_238019	Megf10 protein
Meox2	2.04	0.04	NM_017149	mesenchyme homeobox 2
Metrn	1.65	0.01	NM_00100996 2	meteorin, glial cell differentiation regulator
Mfng	1.51	0.00	NM_199110	manic fringe homolog
Mgat4c_predicted	1.52	0.03	XM_235099	mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isozyme C (predicted)
MGC10560 1	1.68	0.00	NM_00100962 0	similar to hypothetical protein FLJ20898
MGC10874 7	2.98	0.04	NM_00100962 8	similar to alpha-1 major acute phase protein prepeptide
MGC10882 7	2.13	0.03	NM_00101749 1	similar to RIKEN cDNA E430019B13
MGC10951 9	2.58	0.02	NM_00102434 5	similar to tropomyosin 1, embryonic fibroblast
MGC72957	1.72	0.00	NM_212510	similar to 60S ribosomal protein L18a
Mgl1	5.10	0.00	NM_022393	macrophage galactose N-acetyl-galactosamine specific lectin 1
Mgp	2.04	0.03	NM_012862	matrix Gla protein
Mmp7	2.08	0.04	NM_012864	matrix metalloproteinase 7
Mos	2.02	0.04	NM_020102	v-mos moloney murine sarcoma viral oncogene homolog
Mpp4	1.75	0.00	AB030501	DLG6 gamma
Mrgprb2	2.48	0.04	NM_00100228 5	MAS-related G protein-coupled receptor, member B2

Mrpl37	1.53	0.01	NM_001004235	mitochondrial ribosomal protein L37
Mrpl43_predicted	2.67	0.00	XM_219938	mitochondrial ribosomal protein L43 (predicted)
Mrps25	1.58	0.01	NM_001025408	mitochondrial ribosomal protein S25 (
Mrps27_predicted	1.64	0.00	XM_342180	mitochondrial ribosomal protein S27 (predicted)
Ms4a2	2.06	0.04	NM_012845	membrane-spanning 4-domains, subfamily A, member 2
Ms4a6b	2.34	0.00	NM_001006975	membrane-spanning 4-domains, subfamily A, member 6B
Msn	2.15	0.05	NM_030863	moesin
Mss4	2.04	0.01	NM_001007678	Mss4 protein
Mst1	2.00	0.04	NM_024352	Macrophage stimulating 1 (hepatocyte growth factor-like)
Mt1a	1.60	0.00	NM_138826	metallothionein 1a
Mt3	1.56	0.00	NM_053968	metallothionein 3
Mtch1	1.80	0.00	XM_215358	mitochondrial carrier homolog 1
Mx1	2.73	0.04	NM_173096	myxovirus (influenza virus) resistance 1
Mx2	1.97	0.04	NM_134350	myxovirus (influenza virus) resistance 2
Mycs	2.11	0.05	NM_021837	myc-like oncogene, s-myc protein
Myh10	2.19	0.04	NM_031520	myosin, heavy polypeptide 10, non-muscle
Myl9_predicted	2.03	0.00	XM_215905	myosin, light polypeptide 9, regulatory (predicted)
Myo1e	2.56	0.04	NM_173101	myosin IE
Nalp6	1.96	0.05	XM_577848	NACHT, leucine rich repeat and PYD containing 6
Nckap11_predicted	1.52	0.01	XM_235709	NCK associated protein 1 like (predicted)
Ndrp2	1.81	0.01	NM_133583	N-myc downstream regulated gene 2
Ndufa12_predicted	1.54	0.02	XM_216880	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 12 (predicted)
Ndufa7_predicted	1.50	0.04	XM_216859	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7 (B14.5a) (predicted)
Ndufb3_predicted	1.59	0.00	XM_217400	NADH dehydrogenase (ubiquinone) 1 beta subcomplex 3 (predicted)
Ndufb4	1.57	0.04	NM_001037338	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4, 15kDa
Ndufb8_predicted	1.64	0.01	XM_215269	NADH dehydrogenase (ubiquinone) 1 beta subcomplex 8 (predicted)
Ndufb9_predicted	1.55	0.02	XM_216929	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9 (predicted)
Necap2	1.50	0.00	NM_199096	NECAP endocytosis associated 2

Nek3_predi cted	3.28	0.03	XM_224971	NIMA (never in mitosis gene a)-related expressed kinase 3 (predicted)
Nfkbia	2.07	0.02	XM_343065	nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha
Ngb	1.78	0.00	NM_033359	neuroglobin
Ngfg	2.01	0.04	NM_031523	nerve growth factor, gamma
Niban	2.04	0.04	NM_022242	niban protein
Ninj1	1.50	0.00	NM_012867	ninjurin 1
Nlgn1	1.84	0.00	NM_053868	neuroligin 1
NM_02263 2	2.08	0.04	NM_022632	slit homolog 2
Nmu	2.11	0.03	NM_022239	neuromedin U
Np_mapped	1.62	0.01	XM_214155	nucleoside phosphorylase
Npff	1.72	0.03	NM_022586	neuropeptide FF-amide peptide precursor
Nppb	1.87	0.02	NM_031545	natriuretic peptide precursor type B
Nr1h3	1.78	0.00	NM_031627	nuclear receptor subfamily 1, group H, member 3
Nr4a3	2.12	0.05	NM_017352	nuclear receptor subfamily 4, group A, member 3, transcript variant 2
Nrp2	2.04	0.04	NM_030869	neuropilin 2
Ntf5	2.26	0.02	NM_013184	neurotrophin 5
Nthl1_predi cted	1.64	0.00	XM_213228	nth (endonuclease III)-like 1 (E.coli) (predicted)
Nucks	1.54	0.05	NM_022799	nuclear ubiquitous casein kinase and cyclin-dependent kinase substrate
Nudc	1.51	0.00	NM_017271	nuclear distribution gene C homolog (Aspergillus)
Oas1	3.38	0.01	NM_138913	2',5'-oligoadenylate synthetase 1, 40/46kDa
Olfml3_pre dicted	2.70	0.05	XM_227535	olfactomedin-like 3 (predicted)
Olr1060_pr edicted	2.81	0.04	NM_00100069 8	olfactory receptor 1060 (predicted)
Olr1223_pr edicted	2.39	0.01	NM_00100044 1	olfactory receptor 1223 (predicted)
Olr1230_pr edicted	1.91	0.01	NM_00100059 5	olfactory receptor 1230 (predicted)
Olr137_pre dicted	2.16	0.01	NM_00100128 3	olfactory receptor 137 (predicted)
Olr1455_pr edicted	3.32	0.00	NM_00100077 1	olfactory receptor 1455 (predicted)
Olr1463_pr edicted	2.89	0.02	NM_00100002 3	olfactory receptor 1463 (predicted)
Olr1468	2.09	0.04	NM_00100072 4	olfactory receptor 1468
Olr1482_pr edicted	2.27	0.02	NM_00100002 6	olfactory receptor 1482 (predicted)

Olr1490_predicted	3.75	0.02	NM_001000718	olfactory receptor 1490 (predicted)
Olr1496	2.23	0.03	NM_001000716	olfactory receptor 1496
Olr1504	2.01	0.04	NM_001000495	olfactory receptor 1504
Olr1507_predicted	2.00	0.04	NM_001000033	olfactory receptor 1507 (predicted)
Olr1567_predicted	2.23	0.05	NM_001000043	olfactory receptor 1567 (predicted)
Olr1582_predicted	2.52	0.01	NM_001000079	olfactory receptor 1582 (predicted)
Olr1701_predicted	3.41	0.02	NM_001001114	olfactory receptor 1701 (predicted)
Olr1765_predicted	2.66	0.04	NM_001000489	olfactory receptor 1765 (predicted)
Olr184_predicted	3.75	0.02	NM_001000182	olfactory receptor 184 (predicted)
Olr240_predicted	2.85	0.04	XM_219206	olfactory receptor 240 (predicted)
Olr289_predicted	2.21	0.03	NM_001000767	olfactory receptor 289 (predicted)
Olr308_predicted	3.03	0.04	NM_001000955	olfactory receptor 308 (predicted)
Olr325_predicted	2.42	0.03	NM_001000247	olfactory receptor 325 (predicted)
Olr357_predicted	3.75	0.00	NM_001000257	olfactory receptor 357 (predicted)
Olr400_predicted	2.59	0.02	NM_001000379	olfactory receptor 400 (predicted)
Olr473_predicted	2.95	0.01	NM_001000302	olfactory receptor 473 (predicted)
Olr510_predicted	3.95	0.00	NM_001000312	olfactory receptor 510 (predicted)
Olr541_predicted	3.14	0.03	NM_001000565	olfactory receptor 541 (predicted)
Olr551_predicted	3.24	0.00	NM_001000670	olfactory receptor 551 (predicted)
Olr557_predicted	1.51	0.04	NM_001000669	olfactory receptor 557 (predicted)
Olr587_predicted	2.83	0.03	NM_001000659	olfactory receptor 587 (predicted)
Olr6_predicted	2.97	0.00	NM_001000539	olfactory receptor 6 (predicted)
Olr657_predicted	2.94	0.03	NM_001000343	olfactory receptor 657 (predicted)

Olr698_predicted	3.08	0.03	NM_001000513	olfactory receptor 698 (predicted)
Olr735_predicted	2.66	0.03	NM_001000922	olfactory receptor 735 (predicted)
Olr773_predicted	1.84	0.02	NM_001000373	olfactory receptor 773 (predicted)]
Olr906_predicted	2.66	0.04	NM_001000706	olfactory receptor 906 (predicted)
Olr916_predicted	2.88	0.02	NM_001000587	olfactory receptor 916 (predicted)
Olr92_predicted	3.86	0.01	NM_001000140	olfactory receptor 92 (predicted)
Oprk1	2.24	0.02	NM_017167	opioid receptor, kappa 1
Otx2	2.37	0.05	XM_224009	orthodenticle homolog 2
P2ry14	2.43	0.04	NM_133577	purinergic receptor P2Y, G-protein coupled, 14
P2ry6	1.50	0.00	NM_057124	pyrimidinergic receptor P2Y, G-protein coupled, 6 (
Padi2	2.29	0.03	NM_017226	peptidyl arginine deiminase, type II
Parp9_predicted	2.28	0.03	XM_221404	poly (ADP-ribose) polymerase family, member 9 (predicted)
Parvb_predicted	1.62	0.02	XM_343303	parvin, beta (predicted)
Pcbp4_predicted	1.54	0.00	XM_343468	poly(rC) binding protein 4 (predicted)
Pcdhgc3	2.51	0.01	NM_053943	protocadherin gamma subfamily C, 3
Pde3a	2.14	0.03	NM_017337	phosphodiesterase 3A (Pde3a)
Pdlim3	1.67	0.01	NM_053650	PDZ and LIM domain 3
Pebp1	1.51	0.00	NM_017236	phosphatidylethanolamine binding protein 1
Pfdn1_predicted	1.53	0.01	XM_341596	prefoldin 1 (predicted)
Pgam1	6.00	0.02	NM_053290	phosphoglycerate mutase 1
Pgsg	1.61	0.00	NM_020074	proteoglycan peptide core protein
Phf5a	1.57	0.04	NM_138888	PHD finger protein 5A
Phgdh	1.53	0.04	NM_031620	3-phosphoglycerate dehydrogenase
Phkg1	2.05	0.01	NM_031573	phosphorylase kinase gamma 1
Pirb	3.69	0.04	NM_031713	paired-Ig-like receptor B
Plek	1.74	0.02	NM_001025750	pleckstrin
Plekhb1	1.52	0.04	NM_172033	pleckstrin homology domain containing, family B (eectins) member 1
Plfr	2.12	0.03	NM_053364	proliferin related protein
Plp2_mapped	1.66	0.00	NM_207601	proteolipid protein 2 (mapped)
Plxnb2	1.73	0.00	XM_243652	plexin B2
Pmm1	1.73	0.03	NM_001008323	phosphomannomutase 1

Pmpcb	1.60	0.03	NM_022395	peptidase (mitochondrial processing) beta
Pmvk	1.63	0.01	NM_00100835 2	phosphomevalonate kinase
Pon2	1.62	0.00	NM_00101308 2	paraoxonase 2
Pop7_predicted	1.54	0.03	XM_213733	processing of precursor 7, ribonuclease P family, (S. cerevisiae) (predicted)
Ppm1f	2.30	0.04	NM_175755	protein phosphatase 1F (PP2C domain containing)
Ppp1r14b	1.55	0.00	NM_172045	protein phosphatase 1, regulatory (inhibitor) subunit 14B
Ppp3ca	2.43	0.00	NM_017041	protein phosphatase 3, catalytic subunit, alpha isoform
Ppp3r2	2.18	0.03	NM_021701	protein phosphatase 3, regulatory subunit B, alpha isoform (calcineurin B, type II)
Prdx1	2.05	0.02	NM_057114	peroxiredoxin 1
Prfl	2.83	0.03	NM_017330	perforin 1 (pore forming protein)
Prkacb_predicted	2.24	0.02	XM_215070	protein kinase, cAMP dependent, catalytic, beta (predicted)
Prlpf	2.17	0.03	NM_022530	prolactin-like protein F
Prlpi	2.12	0.03	NM_031316	prolactin-like protein 1
Prodh2	1.58	0.00	XM_341825	proline dehydrogenase
Prom1	1.67	0.01	NM_021751	prominin 1
Prosc_predicted	1.60	0.00	XM_224947	proline synthetase co-transcribed (predicted)
Prr3	1.71	0.02	NM_212544	proline-rich polypeptide 3
Prrx2_predicted	2.61	0.04	XM_238327	paired related homeobox 2 (predicted)
Prss2	1.70	0.00	NM_012729	protease, serine, 2
Psbpc2	2.05	0.04	NM_207593	prostatic steroid-binding protein C2
Psen2	1.51	0.05	NM_031087	presenilin 2
Psma3	1.54	0.04	NM_017280	proteasome (prosome, macropain) subunit, alpha type 3
Psbm8	1.99	0.03	NM_080767	proteasome (prosome, macropain) subunit, beta type 8
Psbm9	2.07	0.01	NM_012708	proteasome (prosome, macropain) subunit, beta type 9
Psmc5	1.64	0.02	NM_031149	peptidase (prosome, macropain) 26S subunit, ATPase 5
Psm10	1.72	0.03	NM_053925	proteasome (prosome, macropain) 26S subunit, non-ATPase, 10
Psm9	1.52	0.01	NM_130430	proteasome (prosome, macropain) 26S subunit, non-ATPase, 9
Psm1	1.56	0.00	NM_017264	proteasome (prosome, macropain) 28 subunit, alpha
Psm2	1.51	0.00	NM_017257	proteasome (prosome, macropain) 28 subunit, beta
Psp	2.34	0.02	NM_052808	parotid secretory protein

Pthr1	1.66	0.01	NM_020073	parathyroid hormone receptor 1
Ptpn6	1.51	0.00	NM_053908	protein tyrosine phosphatase, non-receptor type 6
Pvrl2	1.71	0.01	NM_001012064	poliovirus receptor-related 2 (herpesvirus entry mediator B)
Pxmp2	1.52	0.01	NM_031587	peroxisomal membrane protein 2
Rab13	1.56	0.00	NM_031092	RAB13, member RAS oncogene family
Rab25_predicted	2.20	0.03	XM_227404	RAB25, member RAS oncogene family (predicted)
Rarres2	1.66	0.02	NM_001013427	retinoic acid receptor responder (tazarotene induced) 2
Rasl12_predicted	1.56	0.03	XM_236351	RAS-like, family 12 (predicted)
Rbm19_predicted	1.97	0.00	XM_222200	RNA binding motif protein 19 (predicted)
Rcvrn	2.11	0.03	NM_080901	recoverin
Resp18	1.87	0.00	NM_019278	regulated endocrine-specific protein 18
Retnla	2.09	0.03	NM_053333	resistin like alpha
Rg9mtd3	1.51	0.03	NM_001013090	RNA (guanine-9-) methyltransferase domain containing 3
RGD1305679	1.76	0.03	NM_001014144	similar to 9530008L14Rik protein
RGD1306028	1.52	0.00	XM_001066308	similar to hypothetical protein FLJ30473, transcript variant 3
RGD1306660_predicted	1.66	0.00	XM_214304	similar to RIKEN cDNA 2010315L10 (predicted)
RGD1307279	1.51	0.04	NM_001008343	similar to RIKEN cDNA 2700002I20
RGD1307506_predicted	1.90	0.00	XM_215486	similar to RIKEN cDNA 2310016C16 (predicted)
RGD1307583_predicted	1.68	0.00	XM_341397	LOC361111 (predicted)
RGD1308876_predicted	1.67	0.00	XM_342915	similar to 2610027C15Rik protein (predicted)
RGD1309007_predicted	2.89	0.04	XM_215595	similar to RIKEN cDNA 2610034E18 gene (predicted)
RGD1309362	3.44	0.00	NM_001024884	similar to interferon-inducible GTPase
RGD1309578	2.87	0.00	NM_001014162	similar to Aa2-174

RGD1310159_predicted	1.50	0.00	XM_222190	similar to acetyl-coA dehydrogenase -related (111.6 kD)
RGD1310170_predicted	1.69	0.04	XM_226431	similar to beta-1,3-galactosyltransferase-related protein (predicted)
RGD1311784_predicted	1.68	0.01	XM_213539	similar to p150 target of rapamycin (TOR)-scaffold protein containing WD-repeats (predicted)
RGD1565363_predicted	1.56	0.00	XM_001079962	similar to RIKEN cDNA 1110025L05 (predicted)
RGD620382	1.61	0.00	NM_133525	Nucleoside 2-deoxyribosyltransferase domain containing protein
Rgn	1.92	0.04	NM_031546	regucalcin
Rgs5	1.57	0.00	NM_019341	regulator of G-protein signaling 5
Rnaset2_predicted	1.73	0.00	XM_214769	ribonuclease T2 (predicted)
rnfl141	3.11	0.03	NM_001001800	ring finger protein 141
Rom1	1.51	0.02	NM_001009690	rod outer segment membrane protein 1
Ror2_predicted	1.63	0.04	XM_225181	receptor tyrosine kinase-like orphan receptor 2 (predicted)
Rpl10a	1.54	0.00	NM_031065	ribosomal protein L10A
Rpl13	1.63	0.00	NM_031101	ribosomal protein L13
Rpl13a	1.65	0.01	NM_173340	ribosomal protein L13A
Rpl14	1.51	0.00	NM_022949	ribosomal protein L14
Rpl18	1.60	0.01	NM_031102	ribosomal protein L18
Rpl23	1.54	0.00	NM_001007599	ribosomal protein L23
Rpl26	1.64	0.04	XM_213346	ribosomal protein L26
Rpl27a_predicted	1.57	0.00	XM_215041	ribosomal protein L27a (predicted)
Rpl30	1.56	0.00	NM_022699	ribosomal protein L30
Rpl32	1.63	0.00	NM_013226	ribosomal protein L32
Rpl41	1.62	0.01	NM_139083	ribosomal protein L41
Rpl7	1.51	0.01	XM_216318	ribosomal protein L7
Rpl9	1.70	0.02	NM_001007598	ribosomal protein L9
Rplp1	1.80	0.01	NM_001007604	ribosomal protein, large, P1
Rplp2	1.71	0.04	NM_001030021	ribosomal protein, large P2
Rps11	1.67	0.00	NM_031110	ribosomal protein S11

Rps12	1.58	0.00	NM_031709	ribosomal protein S12
Rps14	1.76	0.01	NM_022672	ribosomal protein S14
Rps15a	1.58	0.01	NM_053982	ribosomal protein S15a
Rps16	1.72	0.00	XM_341815	ribosomal protein S16
Rps17	1.52	0.00	NM_017152	ribosomal protein S17
Rps18	1.69	0.01	NM_213557	ribosomal protein S18
Rps20	1.56	0.01	NM_00100760 3	ribosomal protein S20
Rps23	1.69	0.01	NM_078617	ribosomal protein S23
Rps27	1.79	0.00	NM_053597	ribosomal protein S27
Rps27a	1.55	0.01	NM_031113	ribosomal protein S27a
Rps29	1.54	0.00	NM_012876	ribosomal protein S29
Rps3	1.59	0.02	NM_00100923 9	ribosomal protein S3
Rps3a	1.57	0.00	NM_017153	ribosomal protein S3a
Rps4x	1.54	0.00	NM_00100760 0	ribosomal protein S4, X-linked
Rps6	1.70	0.01	NM_017160	ribosomal protein S6
Rps6kc1	1.56	0.00	XM_213966	ribosomal protein S6 kinase, polypeptide 1
Rps8	1.62	0.02	NM_031706	ribosomal protein S8
Rps9	1.85	0.01	NM_031108	ribosomal protein S9
Rpsa	1.69	0.00	NM_017138	ribosomal protein SA
Rras_predicted	1.58	0.00	XM_341851	Harvey rat sarcoma oncogene, subgroup R (predicted) (Rras_predicted)
RT1-Aw2	1.66	0.03	NM_012645	RT1 class Ib, locus Aw2 (RT1-Aw2)
RT1-CI	1.72	0.01	NM_206848	RT1 class Ib, locus CI (RT1-CI)
RT1-DOb	2.69	0.05	NM_00100884 6	RT1 class II, locus DOb (RT1-DOb)
RT1-S3	1.87	0.00	XM_215303	RT1 class Ib, locus S3 (RT1-S3)
RT1-T24-1	1.96	0.02	NM_00100885 8	histocompatibility 2, T region locus 24 (RT1-T24-1),
Rtkn	1.50	0.00	NM_184046	rhotekin
Rup2	2.86	0.04	NM_00103495 0	urinary protein 2
S100a13_predicted	1.55	0.03	XM_215607	S100 calcium binding protein A13 (predicted)
S100a16_predicted	1.51	0.00	XM_342291	S100 calcium binding protein A16 (predicted)
S100a6	2.04	0.00	NM_053485	S100 calcium binding protein A6 (calcyclin)
Sat2_predicted	1.53	0.00	XM_340825	spermidine/spermine N1-acetyl transferase 2 (predicted)
Scarf2_predicted	2.33	0.02	XM_237825	scavenger receptor class F, member 2 (predicted)

Scn7a	2.08	0.04	NM_031686	sodium channel, voltage-gated, type VII, alpha (Scn7a)
Scrn2	2.03	0.01	NM_001012142	secernin 2
Sdc1	1.99	0.00	NM_013026	syndecan 1
Sdcbp	1.60	0.02	NM_031986	syndecan binding protein
Sdha	1.50	0.00	NM_130428	succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
Sdro	2.88	0.04	XM_343224	orphan short chain dehydrogenase/reductase
Selenbp1	1.58	0.00	NM_080892	selenium binding protein 2
Serpind1	1.99	0.04	NM_024382	serine (or cysteine) peptidase inhibitor, clade D, member 1
Sgca_predicted	1.95	0.00	XM_220884	sarcoglycan, alpha (dystrophin-associated glycoprotein) (predicted)
Sip1	1.62	0.01	NM_053389	survival of motor neuron protein interacting protein 1
Siva_predicted	1.64	0.00	XM_343117	Cd27 binding protein (Hindu God of destruction) (predicted)
Slc18a1	2.14	0.03	NM_013152	solute carrier family 18 (vesicular monoamine), member 1
Slc21a1	2.24	0.02	NM_017111	solute carrier family 21, member 1
Slc22a8	2.13	0.04	NM_031332	solute carrier family 22 (organic anion transporter), member 8
Slc23a1	2.13	0.03	NM_017315	solute carrier family 23 (nucleobase transporters), member 1
Slc23a2	1.65	0.01	NM_017316	solute carrier family 23 (nucleobase transporters), member 2
Slc27a5	1.58	0.03	NM_024143	solute carrier family 27 (fatty acid transporter), member 5
Slc35b2	1.50	0.00	NM_199111	solute carrier family 35, member B2
Slc35f2_predicted	2.60	0.03	XM_236243	solute carrier family 35, member F2 (predicted)
Slc5a4b	2.99	0.03	XM_228086	similar to SGLT3-b
Slc5a5	1.61	0.00	NM_052983	solute carrier family 5 (sodium iodide symporter), member 5
Slc7a2	2.14	0.03	NM_022619	solute carrier family 7 (cationic amino acid transporter, γ^+ system), member 2
Slc7a3	1.56	0.01	NM_017217	solute carrier family 7 (cationic amino acid transporter, γ^+ system), member 3
Slc9a2	1.72	0.05	NM_012653	solute carrier family 9 (sodium/hydrogen exchanger), member 2
Slco1a4	1.52	0.01	NM_131906	solute carrier organic anion transporter family, member 1a4
Slco2b1	1.70	0.00	NM_080786	solute carrier organic anion transporter family, member 2b1

Slfn2_predi cted	2.16	0.01	XM_220779	schlafen 2 (predicted)
Smpdl3a	1.58	0.00	NM_00100553 9	sphingomyelin phosphodiesterase, acid-like 3A
Sncg	2.30	0.00	NM_031688	synuclein, gamma
Snf8	1.51	0.00	NM_00100780 4	SNF8, ESCRT-II complex subunit, homolog (S. cerevisiae)
Sp4	2.87	0.05	NM_012761	Sp4 transcription factor
Spint2	1.98	0.05	NM_199087	serine protease inhibitor, Kunitz type 2
Ssh3	1.64	0.02	NM_00101221 7	slingshot homolog 3 (Drosophila)
St3gal6	1.58	0.00	NM_207602	ST3 beta-galactoside alpha-2,3-sialyltransferase 6
St8sia4	1.61	0.03	XM_346078	ST8 alpha-N-acetyl-neuraminide alpha-2,8- sialyltransferase 4
Stat5a	1.60	0.00	NM_017064	signal transducer and activator of transcription 5A (Stat5a)
Stk16	1.53	0.00	NM_173142	serine/threonine kinase 16
Stk38	1.53	0.00	NM_00101502 5	serine/threonine kinase 38
Sult1a1	2.09	0.04	NM_031834	sulfotransferase family 1A, phenol-preferring, member 1
Syt9	2.01	0.04	NM_053324	synaptotagmin IX
Taar7g	1.91	0.04	NM_175588	trace-amine-associated receptor 7g
Tac1	1.55	0.01	NM_012666	tachykinin 1
Tagln	2.71	0.02	AI104443	cDNA clone RHECD48 3' end
Tap2	2.20	0.01	NM_032056	transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)
Tas2r105	1.95	0.05	NM_023999	taste receptor, type 2, member 105
Tcirlg1	1.65	0.00	BC061859	T-cell, immune regulator 1, mRNA
Tcrb	2.10	0.03	BC091428	T-cell receptor beta chain
Tctex1	1.51	0.04	NM_031318	t-complex testis expressed 1
Tec	1.61	0.00	XM_341208	tec protein tyrosine kinase
Tekt2	2.32	0.01	NM_00101197 7	tektin 2
Tepp	1.52	0.00	NM_201655	testis/prostate/placenta-expressed protein
Tff2	2.11	0.03	NM_053844	trefoil factor 2 (spasmolytic protein 1)
Tgm1	2.57	0.00	NM_031659	transglutaminase 1
Tgm2	1.60	0.01	NM_019386	transglutaminase 2, C polypeptide
Timm8a	1.52	0.01	NM_053370	translocase of inner mitochondrial membrane 8 homolog a (yeast)
Timp2	1.55	0.00	NM_021989	tissue inhibitor of metalloproteinase 2 (Timp2)
Tkt	1.59	0.05	NM_022592	transketolase
Tlr2	1.62	0.00	NM_198769	toll-like receptor 2
Tlr6	1.52	0.00	NM_207604	toll-like receptor 6

Tm4sf1_pre dicted	2.03	0.00	XM_215576	transmembrane 4 superfamily member 1 (predicted)
Tm6p1	1.75	0.00	NM_139107	fasting-inducible integral membrane protein TM6P1
Tmed3	1.58	0.00	NM_00100424 9	transmembrane emp24 domain containing 3
Tmem50a_p redicted	1.59	0.02	XM_216545	transmembrane protein 50A (predicted)
Tmem54	2.28	0.02	NM_00103415 1	transmembrane protein 54
Tmsb4x	1.53	0.00	NM_031136	thymosin, beta 4
Tnfaip8l2	1.69	0.00	NM_00101403 9	tumor necrosis factor, alpha-induced protein 8-like 2
Tnfrsf1b	2.08	0.00	NM_130426	tumor necrosis factor receptor superfamily, member 1b
Tnfrsf8	2.21	0.02	NM_019135	tumor necrosis factor receptor superfamily, member 8
Tnfsf10	2.03	0.04	NM_145681	tumor necrosis factor (ligand) superfamily, member 10
Tnnc2	1.74	0.00	NM_00103735 1	troponin C type 2 (fast)
Tomm20	2.70	0.00	BU946530	RALUTXL01 Rattus norvegicus cDNA
Trappc4	1.50	0.00	NM_00100370 8	trafficking protein particle complex 4
Trdn	1.98	0.05	AJ243303	triadin 51 kDa
Trem2_pred icted	1.68	0.00	XM_217335	triggering receptor expressed on myeloid cells 2 (predicted)
Trim25_ma pped	1.58	0.04	NM_00100953 6	tripartite motif protein 25 (mapped)
Trim42	1.74	0.01	NM_00101395 5	tripartite motif-containing 42
Tspan8	1.87	0.02	NM_133526	tetraspanin 8
Tsx	2.05	0.04	NM_019203	testis specific X-linked gene
Txndc8	2.15	0.03	NM_00100409 2	thioredoxin domain containing 8
Uap1l1_pre dicted	1.54	0.01	XM_216004	UDP-N-acteylglucosamine pyrophosphorylase 1-like 1 (predicted)
Ubb	2.00	0.03	NM_138895	polyubiquitin
Ube2a	1.63	0.00	NM_00101393 3	ubiquitin-conjugating enzyme E2A, RAD6 homolog (<i>S. cerevisiae</i>)
Ube2i	1.55	0.00	NM_013050	ubiquitin-conjugating enzyme E2I
Ube2l6	1.76	0.04	NM_00102475 5	ubiquitin-conjugating enzyme E2L 6
Ugt2b10_pr edicted	2.96	0.03	XM_223299	UDP glycosyltransferase 2 family, polypeptide B10 (predicted)
Uhrf2_predi cted	2.81	0.05	XM_219801	similar to nuclear zinc finger protein Np97

Upk3a_predicted	1.92	0.05	XM_235546	uroplakin 3A (predicted)
Ushbp1	2.02	0.00	NM_001033687	Usher syndrome 1C binding protein 1
Usp18	3.16	0.02	NM_001014058	ubiquitin specific peptidase 18
Usp36_predicted	1.63	0.05	XM_221143	ubiquitin specific protease 36 (predicted)
Vamp3	1.60	0.02	NM_057097	vesicle-associated membrane protein 3
Vamp5	2.22	0.01	NM_053555	vesicle-associated membrane protein 5
Vamp8	1.54	0.00	NM_031827	vesicle-associated membrane protein 8
Vcam1	1.74	0.04	NM_012889	vascular cell adhesion molecule 1
VeZF1_predicted	2.23	0.00	XM_213421	vascular endothelial zinc finger 1 (predicted)
Vmp_predicted	1.57	0.02	XM_225314	vesicular membrane protein p24 (predicted)
Wap	2.22	0.02	NM_053751	whey acidic protein
Wnt6_predicted	3.01	0.04	XM_237295	wingless-related MMTV integration site 6 (predicted) (Wnt6_predicted)
X82202	1.67	0.00	X82202	RPL19 gene
XM_213295	1.50	0.01	XM_213295	similar to RIKEN cDNA 0610009B22
XM_214528	1.61	0.01	XM_214528	similar to dim1
XM_215265	1.79	0.00	XM_215265	similar to sideroflexin 2
XM_215402	2.10	0.03	XM_215402	similar to RIKEN cDNA 5730402C02
XM_217106	1.62	0.00	XM_217106	similar to hypothetical protein FLJ25530
XM_217321	2.06	0.04	XM_217321	similar to PCAF acetyltransferase; p300/CBP-associated factor
XM_218295	1.98	0.04	XM_218295	similar to Zinc finger protein 305
XM_233741	1.52	0.01	XM_233741	similar to tyrosine kinase TYK2
XM_340867	1.66	0.04	XM_340867	similar to thyroid hormone receptor interactor 3; thyroid receptor interacting protein 3; zinc finger, HIT domain containing 3
XM_341175	1.61	0.01	XM_341175	similar to RIKEN cDNA 6030423D04
XM_343003	1.55	0.01	XM_343003	similar to 9430065L19Rik protein
XM_343288	2.61	0.04	XM_343288	similar to CG11259-PA

Zdhhc4	1.54	0.00	NM_001013123	zinc finger, DHHC domain containing 4
Zfyve21_predicted	1.54	0.00	XM_343115	zinc finger, FYVE domain containing 21 (predicted)
Aanat	0.59	0.01	NM_012818	arylalkylamine N-acetyltransferase
Adam7	0.65	0.01	NM_020301	a disintegrin and metalloprotease domain 7
Adprt11	0.44	0.02	XM_341326	ADP-ribosyltransferase (NAD ⁺ ; poly (ADP-ribose) polymerase)-like 1
Adrb3	0.60	0.04	NM_013108	adrenergic receptor, beta 3
Amh	0.30	0.03	NM_012902	anti-Mullerian hormone
Amy2_predicted	0.36	0.00	XM_345278	similar to amylase 1; amylase 1, salivary
Anxa6	0.53	0.01	NM_024156	annexin A6
Apcs	0.57	0.04	NM_017170	serum amyloid P-component
Arsj	0.43	0.04	XM_227873	arylsulfatase J
Art1_predicted	0.51	0.00	XM_218975	ADP-ribosyltransferase 1 (predicted)
Atp6v0a1	0.58	0.01	NM_031604	ATPase, H ⁺ transporting, lysosomal V0 subunit A1
Atp6v1e1	0.65	0.02	NM_198745	ATPase, H ⁺ transporting, V1 subunit E isoform 1
B3gnt7	0.59	0.04	NM_001012134	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 7)
Barx1_predicted	0.40	0.04	XM_344575	BarH-like homeobox 1 (predicted)
BF389602	0.63	0.02	BF389602	cDNA clone UI-R-CJ0-bfd-f-04-0-UI 3'
Bicc1_predicted	0.49	0.01	XM_342126	bicaudal C homolog 1 (Drosophila) (predicted)
Birc4	0.49	0.02	NM_022231	baculoviral IAP repeat-containing 4
Bmp2	0.36	0.01	NM_017178	bone morphogenetic protein 2
Boll_predicted	0.63	0.03	XM_220155	bol, boule-like (Drosophila) (predicted)
Bpi	0.45	0.02	NM_001004079	bactericidal/permeability-increasing protein
Bpil2_predicted	0.50	0.00	XM_235012	bactericidal/permeability-increasing protein-like 2 (predicted)
C9	0.59	0.03	NM_057146	complement component 9
Ccl22	0.42	0.01	NM_057203	chemokine (C-C motif) ligand 22
Ccni_predicted	0.64	0.04	XM_214007	cyclin I (predicted)
Cdk2ap1_predicted	0.34	0.03	XM_341076	CDK2 (cyclin-dependent kinase 2)-associated protein 1 (predicted)
Cdkn2a	0.64	0.01	NM_031550	cyclin-dependent kinase inhibitor 2A
Cebpz_predicted	0.65	0.01	XM_343002	similar to putative CCAAT binding factor 1; alternatively spliced transcript mCBF1
Celsr3	0.59	0.00	NM_031320	cadherin EGF LAG seven-pass G-type receptor 3
Chrn4	0.48	0.01	NM_052806	cholinergic receptor, nicotinic, beta polypeptide 4

Cldn22_predicted	0.37	0.03	XM_224843	claudin 22 (predicted)
Creb3l2	0.50	0.02	NM_001012188	cAMP responsive element binding protein 3-like 2
Crybb1	0.38	0.05	NM_012936	crystallin, beta B1
Ctns_predicted	0.43	0.03	XM_001080248	cystinosis, nephropathic (predicted)
Cutl2_predicted	0.65	0.02	XM_222184	cut-like 2 (Drosophila) (predicted)
Cyp2j9	0.54	0.04	NM_175766	cytochrome P450, family 2, subfamily j, polypeptide 9
D00634	0.49	0.00	D00634	beta-1 adrenergic receptor
Ddb1	0.41	0.03	NM_171995	damage-specific DNA binding protein 1
Drd3	0.54	0.05	NM_017140	dopamine receptor D3 (Drd3)
Dscam11_predicted	0.63	0.01	XM_236203	Down syndrome cell adhesion molecule-like 1 (predicted) (Dscam11_predicted)
Egr2	0.40	0.01	NM_053633	early growth response 2
Eif4g3_predicted	0.56	0.03	XM_216563	eukaryotic translation initiation factor 4 gamma, 3 (predicted)
ENSRNOT00000046889	0.60	0.00	ENSRNOT00000046889	voltage-gated calcium channel pore forming subunit CaV1.3alpha1 IVS3-IVS4 extracellular linker mRNA, partial cds, alternatively spliced
Epha2_predicted	0.48	0.04	XM_345596	Eph receptor A2 (predicted)
Epha8	0.47	0.01	XM_342952	Eph receptor A8
Exosc7	0.40	0.02	XM_236745	exosome component 7
Extl3	0.63	0.03	NM_020097	exostoses (multiple)-like 3
Fbxl7_predicted	0.32	0.00	XM_342204	F-box and leucine-rich repeat protein 7 (predicted)
Fbxo33_predicted	0.56	0.03	XM_234205	F-box only protein 33 (predicted)
Fbxo34_predicted	0.55	0.01	XM_223938	F-box only protein 34 (predicted)
Fcar	0.53	0.02	NM_201992	IgA Fc receptor
Flt1	0.49	0.01	NM_019306	FMS-like tyrosine kinase 1
Fosb	0.47	0.01	XM_001057199	FBJ osteosarcoma oncogene B
Foxn1_mapped	0.46	0.02	XM_220632	forkhead box N1 (mapped)
Fstl3	0.65	0.03	NM_053629	follistatin-like 3
Ghrl	0.40	0.00	NM_021669	ghrelin precursor
Gli2_predicted	0.34	0.03	XM_222557	GLI-Kruppel family member GLI2 (predicted)
Glrp1_predicted	0.57	0.02	XM_227165	glutamine repeat protein 1 (predicted)

Glt6d1_predicted	0.30	0.03	XM_231076	glycosyltransferase 6 domain containing 1 (predicted)
Gm1960	0.57	0.05	NM_138522	gene model 1960
Gnb1	0.37	0.04	NM_030987	guanine nucleotide binding protein, beta 1
Gpatc2	0.66	0.03	NM_001011909	G patch domain containing 2
Gpr25_predicted	0.62	0.02	XM_344146	G protein-coupled receptor 25 (predicted)
Gpr45_predicted	0.63	0.01	XM_237112	G protein-coupled receptor 45 (predicted)
Gpr87_predicted	0.44	0.04	XM_227177	G protein-coupled receptor 87 (predicted)
Gpx6	0.53	0.04	NM_147165	glutathione peroxidase 6
Gzmb	0.48	0.00	X76996	granzyme-like protein III
Hcrt	0.43	0.01	NM_013179	hypocretin
Hdac4	0.52	0.00	AF321132	histone deacetylase 4
Hrg	0.60	0.03	NM_133428	histidine-rich glycoprotein
Hsd3b1	0.63	0.04	NM_017265	hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 1
Htr5b	0.59	0.03	XM_341111	5-hydroxytryptamine (serotonin) receptor 5B
Ifna4_predicted	0.47	0.02	XM_001053305	interferon, alpha 4 (predicted)
Ing3	0.43	0.04	NM_001034107	inhibitor of growth family, member 3
Ins2	0.60	0.04	NM_019130	insulin 2
Itgad	0.54	0.01	NM_031691	integrin, alpha D
Kcna3	0.47	0.02	NM_019270	potassium voltage-gated channel, shaker-related subfamily, member 3
Kcnd2	0.59	0.02	NM_031730	potassium voltage gated channel, Shal-related family, member 2
Kcnh7	0.61	0.00	NM_131912	potassium voltage-gated channel, subfamily H (eag-related), member 7
Kcnj3	0.53	0.03	U42423	G-protein gated potassium channel mRNA, partial CDS
kif13B	0.55	0.00	NM_213626	kinesin 13B
Kynu	0.55	0.02	NM_053902	kynureninase (L-kynurenine hydrolase)
Lars	0.34	0.00	NM_001009637	leucyl-tRNA synthetase
Lhfpl2_predicted	0.38	0.00	XM_226668	lipoma HMGIC fusion partner-like 2 (predicted)
Lmx1b	0.61	0.03	XM_342419	LIM homeobox transcription factor 1 beta, transcript variant 2
LOC171412	0.58	0.00	NM_134391	E-3 epididymal fluid protein
LOC286987	0.49	0.02	NM_173321	hemiferrin, transferrin-like protein

LOC305691	0.51	0.02	NM_00101399 2	similar to hypothetical protein FLJ22419
LOC679370	0.54	0.01	XM_00105605 7	similar to Myelin P2 protein
LOC681211	0.60	0.00	XM_00106076 6	similar to monoacylglycerol O-acyltransferase 2
LOC684984	0.45	0.01	XM_00106177 9	similar to triggering receptor expressed on myeloid cells 4
Ly6g5c	0.54	0.00	NM_198739	lymphocyte antigen 6 complex, locus G5C
Mapk4	0.61	0.05	XM_225726	mitogen-activated protein kinase 4
March8_predicted	0.50	0.02	XM_232293	membrane-associated ring finger (C3HC4) 8 (predicted)
Matr3	0.52	0.01	NM_019149	matrin 3
Mfi2_predicted	0.65	0.03	XM_237839	antigen p97 (melanoma associated) identified by monoclonal antibodies 133.2 and 96.5 (predicted)
Myl7_predicted	0.63	0.00	XM_214074	myosin, light polypeptide 7, regulatory (predicted)
Mypn_predicted	0.52	0.02	XM_228149	myopalladin (predicted)
Nfkb2	0.43	0.00	NM_00100834 9	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2, p49/p100
Nudt9	0.45	0.00	NM_00100699 1	nudix (nucleoside diphosphate linked moiety X)-type motif 9
Olig3_predicted	0.64	0.01	XM_218772	similar to Olig3 bHLH protein
Olr1070_predicted	0.65	0.01	NM_00100059 1	olfactory receptor 1070 (predicted)
Olr1071_predicted	0.33	0.02	NM_00100006 3	olfactory receptor 1071 (predicted)
Olr1078	0.63	0.00	NM_207597	olfactory receptor 1078
Olr1096_predicted	0.58	0.02	NM_00100048 5	olfactory receptor 1096 (predicted)
Olr1117_predicted	0.64	0.02	NM_00100088 4	olfactory receptor 1117 (predicted)
Olr1142_predicted	0.52	0.01	NM_00100087 7	olfactory receptor 1142 (predicted)
Olr120_predicted	0.58	0.00	NM_00100015 4	olfactory receptor 120 (predicted)
Olr1218_predicted	0.36	0.02	NM_00100048 8	olfactory receptor 1218 (predicted)
Olr1226	0.45	0.01	NM_00100044 2	olfactory receptor 1226
Olr1229_predicted	0.52	0.03	NM_00100044 4	olfactory receptor 1229 (predicted)
Olr127_predicted	0.51	0.02	NM_00100102 6	olfactory receptor 127 (predicted)

Olr1273_predicted	0.55	0.00	NM_001000458	olfactory receptor 1273 (predicted)
Olr1332_predicted	0.33	0.01	NM_001000477	olfactory receptor 1332 (predicted)
Olr1335_predicted	0.58	0.00	NM_001000479	olfactory receptor 1335 (predicted)
Olr1341_predicted	0.42	0.01	NM_001000482	olfactory receptor 1341 (predicted)
Olr1398	0.58	0.00	NM_001000002	olfactory receptor 1398
Olr1401_predicted	0.62	0.01	NM_001000003	olfactory receptor 1401 (predicted)
Olr1433_predicted	0.54	0.00	NM_001000525	olfactory receptor 1433 (predicted)
Olr1439_predicted	0.55	0.03	NM_001000016	olfactory receptor 1439 (predicted)
Olr1462_predicted	0.54	0.01	NM_001001097	olfactory receptor 1462 (predicted)
Olr1570_predicted	0.36	0.04	NM_001000041	olfactory receptor 1570 (predicted)
Olr1631_predicted	0.63	0.02	NM_001000837	olfactory receptor 1631 (predicted)
Olr1750_predicted	0.51	0.01	NM_212493	olfactory receptor 1750 (predicted)
Olr197_predicted	0.61	0.02	NM_001000188	olfactory receptor 197 (predicted)
Olr276_predicted	0.59	0.02	NM_001000227	olfactory receptor 276 (predicted)
Olr306_predicted	0.58	0.05	NM_001000766	olfactory receptor 306 (predicted)
Olr309_predicted	0.62	0.05	NM_001000242	olfactory receptor 309 (predicted)
Olr379_predicted	0.48	0.04	NM_001000261	olfactory receptor 379 (predicted)
Olr386_predicted	0.60	0.00	NM_001000856	olfactory receptor 386 (predicted)
Olr463_predicted	0.43	0.04	NM_001000934	olfactory receptor 463 (predicted)
Olr575_predicted	0.41	0.01	NM_001000327	olfactory receptor 575 (predicted)
Olr60_predicted	0.60	0.01	NM_001000748	olfactory receptor 60 (predicted)
Olr663_predicted	0.66	0.01	NM_001000346	olfactory receptor 663 (predicted)
Olr715_predicted	0.55	0.03	NM_001000623	olfactory receptor 715 (predicted)

Olr741_predicted	0.42	0.03	NM_001000575	olfactory receptor 741 (predicted)
Olr744_predicted	0.59	0.01	NM_001000577	olfactory receptor 744 (predicted)
Olr750_predicted	0.36	0.02	NM_001000366	olfactory receptor 750 (predicted)
Olr760_predicted	0.50	0.04	NM_001001069	olfactory receptor 760 (predicted)
Olr769_predicted	0.60	0.00	NM_001000371	olfactory receptor 769 (predicted)
Olr789_predicted	0.58	0.00	NM_001000377	olfactory receptor 789 (predicted)
Olr821_predicted	0.51	0.04	NM_001000842	olfactory receptor 821 (predicted)
Olr825_predicted	0.49	0.01	NM_001000904	olfactory receptor 825 (predicted)
Olr883_predicted	0.65	0.00	NM_001001358	olfactory receptor 883 (predicted)
Olr93_predicted	0.64	0.00	NM_001000141	olfactory receptor 93 (predicted)
Opcml	0.61	0.02	NM_053848	opioid binding protein/cell adhesion molecule-like
Osbp2_predicted	0.62	0.02	XM_223556	oxysterol binding protein 2 (predicted)
P2ry4	0.41	0.01	NM_031680	pyrimidinergic receptor P2Y, G-protein coupled, 4
Pcdh7	0.64	0.02	NM_001004087	protocadherin 7
Pcm1	0.56	0.00	XM_344524	pericentriolar material 1
Pcp2	0.46	0.00	XM_221787	Purkinje cell protein 2 (L7)
Pde11a	0.58	0.02	NM_080893	phosphodiesterase 11A
Pdia4	0.52	0.02	NM_053849	protein disulfide isomerase associated 4
Pdzk1ip1	0.29	0.01	NM_130401	PDZK1 interacting protein 1
Pgam2	0.66	0.03	NM_017328	phosphoglycerate mutase 2
Pgc	0.59	0.01	NM_133284	progastricsin (pepsinogen C)
Pglyrp1	0.60	0.01	NM_053373	peptidoglycan recognition protein 1
Phr1_predicted	0.64	0.01	XM_214245	pam, highwire, rpm 1 (predicted)
Ppfibp1_predicted	0.59	0.04	XM_232536	PTPRF interacting protein, binding protein 1 (liprin beta 1) (predicted)
Ppm1e	0.47	0.00	NM_198773	protein phosphatase 1E (PP2C domain containing)
Ptch1	0.43	0.02	NM_053566	patched homolog 1 (Drosophila)
Ptch1_predicted	0.58	0.01	XM_345570	patched homolog 1 (predicted)
Ptpn14_predicted	0.48	0.01	XM_223062	protein tyrosine phosphatase, non-receptor type 14 (predicted)
Ptprq	0.60	0.04	NM_022925	protein tyrosine phosphatase, receptor type, Q

PVR	0.54	0.02	NM_017076	poliovirus receptor
Rapgef1	0.53	0.01	XM_216018	Rap guanine nucleotide exchange factor (GEF) 1
Rapgef5	0.56	0.00	AY390379	gb Rattus norvegicus guanine nucleotide exchange factor (Mrgef) mRNA, complete cds. [AY390379]
Rasal1_predicted	0.61	0.00	XM_341088	similar to RAS protein activator like 1 (GAP1 like)
Rblcc1_predicted	0.61	0.00	XM_232667	RB1-inducible coiled-coil 1 (predicted)
Rbpsuhl_predicted	0.58	0.00	XM_342576	recombining binding protein suppressor of hairless-like (Drosophila) (predicted)
Ren1	0.31	0.01	NM_012642	renin 1
RGD1306008_predicted	0.53	0.02	XM_228035	similar to RIKEN cDNA 4930511I11 (predicted)
RGD1306862_predicted	0.56	0.02	XM_213430	similar to RIKEN cDNA 1200011M11 (predicted)
RGD1307729_predicted	0.28	0.02	XM_224295	similar to KIAA0853 protein (predicted)
RGD1307909_predicted	0.55	0.05	XM_215865	similar to Hypothetical BAF-like protein C20orf179 (predicted)
RGD1308535_predicted	0.63	0.01	XM_227419	similar to Pygopus homolog 2 (predicted)
RGD1308556	0.57	0.00	NM_001014200	similar to SPPL2b; presenilin-like protein 1
RGD1309403_predicted	0.66	0.04	XM_227140	similar to hypothetical protein FLJ12661 (predicted)
RGD1309644_predicted	0.54	0.00	XM_237394	similar to Hypothetical protein KIAA0469 (predicted)
RGD1309886	0.62	0.02	NM_001033896	similar to RIKEN cDNA 2310042N02
RGD1311793_predicted	0.47	0.04	XM_224908	similar to DNA segment, Chr 8, ERATO Doi 82, expressed (predicted)
RGD1560587_predicted	0.65	0.05	XM_244186	similar to Eph receptor A4 (predicted)
RGD1560732_predicted	0.62	0.04	XM_574766	similar to LIM and senescent cell antigen-like domains 1 (predicted)
Rhced	0.64	0.00	NM_022505	Rhesus blood group CE and D

Rln3r1	0.53	0.03	NM_001008310	relaxin 3 receptor 1
Rnd1	0.60	0.01	NM_001013222	Rho family GTPase 1
Rpl11_predicted	0.34	0.04	XM_001066326	retinitis pigmentosa 1-like 1 (predicted)
Scgb3a1	0.34	0.00	NM_001013180	secretoglobin, family 3A, member 1
Scnn1a	0.49	0.04	NM_031548	sodium channel, nonvoltage-gated 1 alpha
Sema7a_predicted	0.55	0.00	XM_243863	sema domain, immunoglobulin domain (Ig), and GPI membrane anchor, (semaphorin) 7A (predicted)
Serpinc1	0.53	0.05	NM_001012027	serine (or cysteine) peptidase inhibitor, clade C (antithrombin), member 1
Slc12a1	0.18	0.01	NM_019134	solute carrier family 12, member 1
Slc14a2	0.54	0.00	NM_177962	solute carrier family 14 (urea transporter), member 2
Slc16a10	0.35	0.05	NM_138831	solute carrier family 16 (monocarboxylic acid transporters), member 10
Slc24a2	0.54	0.01	NM_031743	solute carrier family 24 (sodium/potassium/calcium exchanger), member 2
Slc34a1	0.34	0.00	NM_013030	solute carrier family 34 (sodium phosphate), member 1
Slc39a4_predicted	0.65	0.00	XM_216970	solute carrier family 39 (zinc transporter), member 4 (predicted)
Slc43a2_predicted	0.60	0.05	XM_213381	solute carrier family 43, member 2 (predicted)
Slc7a9	0.55	0.03	NM_053929	solute carrier family 7 (cationic amino acid transporter, y+ system), member 9
Slc9a3	0.49	0.01	NM_012654	solute carrier family 9 (sodium/hydrogen exchanger), member 3
Smug1	0.34	0.03	NM_177934	single-strand selective monofunctional uracil DNA glycosylase
Sox14_predicted	0.53	0.04	XM_236605	SRY-box containing gene 14 (predicted)
Spap1_predicted	0.65	0.02	XM_227483	similar to BXMAS1-like protein 2
Stk3	0.48	0.03	NM_031735	serine/threonine kinase 3 (STE20 homolog, yeast)
Sycn	0.61	0.03	NM_139086	syncollin
Tbx19_predicted	0.41	0.04	XM_222834	T-box 19 (predicted)
TC523276	0.46	0.05	TC523276	Retinal cone rhodopsin-sensitive cGMP 3',5'-cyclic phosphodiesterase gamma-subunit (GMP-PDE gamma) , complete
TC560921	0.48	0.03	TC560921	Dihydroorotate dehydrogenase (Dihydroorotate oxidase) (DHODEHase) (DHODase) (DHOD) , partial (6%)
Tgfb3	0.34	0.01	NM_017256	transforming growth factor, beta receptor III

Tiam1	0.39	0.00	XM_221672	T-cell lymphoma invasion and metastasis 1
Tpt1	0.53	0.02	NM_053867	tumor protein, translationally-controlled 1
Treh	0.32	0.00	XM_343380	trehalase (brush-border membrane glycoprotein)
Tspan2	0.47	0.04	NM_022589	tetraspanin 2
Ttc3_predicted	0.46	0.04	XM_340973	tetratricopeptide repeat domain 3 (predicted)
Tubal3_predicted	0.46	0.04	XM_225547	tubulin, alpha-like 3 (predicted)
Tulp1_predicted	0.47	0.02	XM_228360	tubby like protein 1 (predicted)
Ung	0.60	0.02	NM_001013124	uracil-DNA glycosylase
Usp6nl_predicted	0.58	0.01	XM_214508	similar to Expressed sequence AI316785
Wbp2	0.66	0.01	NM_138975	WW domain binding protein 2
XM_213470	0.34	0.04	XM_213470	similar to type I intermediate filament cytokeratin
XM_217407	0.30	0.00	XM_217407	similar to NIF3L1
XM_219411	0.57	0.00	XM_219411	similar to phosphatidylinositolglycan class N
XM_220714	0.63	0.05	XM_220714	similar to spinster-like protein
XM_222110	0.63	0.01	XM_222110	similar to zinc finger protein 11
XM_228010	0.60	0.00	XM_228010	similar to HLA class II histocompatibility antigen, SB beta chain
XM_234553	0.60	0.02	XM_234553	similar to DNA-repair protein XRCC3 (X-ray repair cross-complementing protein 3)
Xylt1	0.55	0.03	XM_341912	xylosyltransferase 1
Y00054	0.56	0.00	Y00054	hsc73 , the major hsp70-like protein
Zc3h8	0.62	0.03	NM_001012090	zinc finger CCCH type containing 8
Zfp189_predicted	0.55	0.00	XM_232972	zinc finger protein 189 (predicted)
Zfp260	0.58	0.04	NM_017364	zinc finger protein 260
Zg16	0.55	0.04	NM_134409	zymogen granule protein 16 (
Zhx3	0.63	0.01	XM_230811	zinc fingers and homeoboxes 3, transcript variant 2

Supplemental Table 3: Functional classification of genes regulated by early stress (ES) in the prefrontal cortex. The prefrontal transcriptome in rats subjected to ES was analyzed. All the ES regulated genes were subjected to functional analysis using DAVID. Given in the table is a list of selected important functional categories that were significantly enriched in the ES group.

Term	No of ES regulated Genes in category	PValue	Fold Enrichment
GO:0007200~G-protein signaling, coupled to IP3 second messenger (phospholipase C activating)	12	0.010106	2.423548
GO:0006874~cellular calcium ion homeostasis	16	0.00907	2.099229
GO:0009967~positive regulation of signal transduction	19	0.001923	2.246831
GO:0005886~plasma membrane	137	7.23E-04	1.298394
GO:0009605~response to external stimulus	82	1.68E-10	2.102598
GO:0006950~response to stress	93	3.24E-06	1.616675
GO:0048869~cellular developmental process	119	4.29E-04	1.350368

GO category

ES regulated genes in the category

ENTREZ_GENE_ID

Gene Name

GO:0007200~G-protein signaling, coupled to IP3 second messenger (phospholipase C activating)

- 25316 Membrane-spanning 4-domains, subfamily A, member 2
- 117264 Pyrimidinergic receptor P2Y, G-protein coupled, 6
- 56083 Transglutaminase 2, C polypeptide
- 116562 Interleukin 2
- 116506 Calcitonin receptor
- 25723 Hypocretin
- 294807 Similar to somatostatin- and angiogenin-like peptide receptor (G-protein coupled receptor SALPR)
- 24179 Angiotensinogen
- 63843 Pyrimidinergic receptor P2Y, G-protein coupled, 4
- 24889 Cholecystokinin A receptor
- 24400 Guanine nucleotide binding protein, beta 1

**GO:0006874~cellular
calcium ion homeostasis**

56813 Parathyroid hormone receptor 1
59299 Triadin
25106 Regucalcin
56083 Transglutaminase 2, C polypeptide
116562 Interleukin 2
25723 Hypocretin
56813 Parathyroid hormone receptor 1
24400 Guanine nucleotide binding protein, beta 1
114099 Cysteinyl leukotriene receptor 1
365901 Guanine nucleotide binding protein, alpha
transducing 2 (predicted)
25316 Membrane-spanning 4-domains, subfamily
A, member 2
25728 Apolipoprotein E
63843 Pyrimidinergic receptor P2Y, G-protein
coupled, 4
294807 Similar to somatostatin- and angiogenin-
like peptide receptor (G-protein coupled
receptor SALPR)
362119 Complement component 5
24889 Cholecystikinin a receptor
116646 Tumor protein, translationally-controlled 1

**GO:0009967~positive
regulation of signal
transduction**

294257 B-factor, properdin
56646 Lectin, galactose binding, soluble 1
24231 Complement component 2
56083 Transglutaminase 2, C polypeptide
29543 Tissue inhibitor of metalloproteinase 2
24337 V-erb-b2 erythroblastic leukemia viral
oncogene homolog 2, neuro/glioblastoma
derived oncogene homolog (avian)
116562 Interleukin 2
29610 Transforming growth factor, beta receptor
iii
361795 Lymphotoxin B
25645 Adrenergic receptor, Beta 3
315108 Apolipoprotein L, 3
29427 Allograft inflammatory factor 1
294239 Dimethylarginine dimethylaminohydrolase
2
24820 T-cell receptor beta chain

**GO:0005886~plasma
membrane**

- 24737 RT1 class Ib, locus AW2
- 24472 Heat shock 70kd protein 1A
- 294245 Epididymal secretory protein 8
- 361242 Dual specificity phosphatase 22 (predicted)
- 24179 Angiotensinogen

- 89818 Vesicle-associated membrane protein 5

- 293650 T-cell, immune regulator 1
- 300678 Cd3 antigen, gamma polypeptide
- 25548 Solute carrier family 34 (sodium phosphate), member 1
- 24400 Guanine nucleotide binding protein, beta 1
- 116726 Solute carrier family 7 (cationic amino acid transporter, Y⁺ system), member 9
- 84353 Catenin (cadherin associated protein), beta 1, 88kda
- 58974 Gamma-aminobutyric acid receptor associated protein
- 60589 Eph receptor A8
- 25728 Apolipoprotein E
- 25103 Cholinergic receptor, nicotinic, beta polypeptide 4
- 306071 Lymphocyte cytosolic protein 1
- 294228 RT1 class Ib, locus bm1
- 65133 Aquaporin 3
- 85259 Cyclic nucleotide-gated cation channel
- 24783 Solute carrier family 9, member 2
- 25288 Acyl-coa synthetase long-chain family member 1
- 25110 Killer cell lectin-like receptor, subfamily d, member 1
- 24536 Leptin receptor
- 117512 Complement component 9
- 29335 Opioid receptor, kappa 1
- 83841 Syndecan binding protein
- 310553 Toll-like receptor 2
- 60576 Trehalase (brush-border membrane glycoprotein)
- 79125 Annexin A6
- 83500 Solute carrier family 22 (organic anion transporter), member 8
- 300019 Gpi anchored molecule like protein (predicted)

245962 Cd48 antigen
 50599 Potassium inwardly-rectifying channel, subfamily J, member 3
 315348 Hematopoietic protein 1 (predicted)
 24337 V-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian)
 171028 Atpase, H⁺/K⁺ transporting, nongastric, alpha polypeptide
 60414 Rhesus blood group CE and D
 25122 Sodium channel, nonvoltage-gated, type I, alpha polypeptide
 50621 Solute carrier family 23 (nucleobase transporters), member 1
 287532 Similar to hypothetical protein mgc28931 (predicted)
 361795 Lymphotoxin b
 29585 Gap junction membrane channel protein beta 3
 116597 Opioid-binding protein/cell adhesion molecule-like
 114200 Leprecan 1
 171131 Cholinergic receptor, nicotinic, beta polypeptide 3
 297566 Atpase, H⁺ transporting, V1 subunit E isoform 1
 309201 Rod outer segment membrane protein 1
 303468 Sarcoglycan, alpha (dystrophin-associated glycoprotein) (predicted)
 63843 Pyrimidinergic receptor P2Y, G-protein coupled, 4
 25216 Syndecan 1
 50622 Solute carrier family 23 (nucleobase transporters), member 2
 116591 Fc receptor, IgG, low affinity III
 89830 Patched homolog 1 (drosophila)
 361787 Histocompatibility 2, T region locus 24
 302822 Immunoglobulin superfamily, member 1
 25316 Membrane-spanning 4-domains, subfamily A, member 2
 60335 Transglutaminase 1
 155012 Complement component factor H
 64554 Solute carrier family 7 (cationic amino acid transporter, Y⁺ system), member 2
 79129 Cytochrome B-245, alpha polypeptide
 306782 Receptor tyrosine kinase-like orphan

receptor 2 (predicted)
 25406 Cd44 antigen
 64155 Sodium channel, voltage-gated, type 6,
 alpha polypeptide
 25711 Guanylate cyclase 2c
 29364 Cd47 antigen (rh-related antigen, integrin-
 associated signal transducer)
 60357 Prominin 1
 56766 Leptin receptor overlapping transcript
 29186 Cd63 antigen
 83512 Fatty acid desaturase 2
 300051 Solute carrier family 39 (zinc transporter),
 member 4 (predicted)
 289240 Olfactory receptor 1582 (predicted)
 316137 Egf-like module containing, mucin-like,
 hormone receptor-like sequence 1
 116506 Calcitonin receptor
 308417 Poliovirus receptor-related 2 (herpesvirus
 entry mediator B)
 24889 Cholecystokinin A receptor
 361788 Proline-rich polypeptide 3
 171358 Calcium/calmodulin-dependent protein
 kinase I gamma
 25109 Cd1d1 antigen
 25311 Deleted in colorectal carcinoma
 295490 Endomucin
 56083 Transglutaminase 2, C polypeptide
 81751 Presenilin 2
 117059 Calbindin 2
 24954 Insulin receptor
 29641 A disintegrin and metalloprotease domain 7
 29610 Transforming growth factor, beta receptor
 III
 294204 Olfactory receptor 1750 (predicted)
 56813 Parathyroid hormone receptor 1
 117018 Potassium voltage-gated channel, subfamily
 h (eag-related), member 2
 114099 Cysteinyl leukotriene receptor 1
 25645 Adrenergic receptor, beta 3
 54251 Fms-like tyrosine kinase 1
 24925 Adrenergic receptor, beta 1
 365901 Guanine nucleotide binding protein, alpha
 transducing 2 (predicted)
 29427 Allograft inflammatory factor 1
 81521 Moesin

362053 Chloride channel calcium activated 6
 116655 Heterogeneous nuclear ribonucleoprotein m
 24737 RT1 class Ib, locus aw2
 295279 Fc receptor, IgG, high affinity I
 362993 Rho family Gtpase 1
 81756 Rab13, member ras oncogene family
 25065 Solute carrier family 12, member 1
 64545 Inducible T-cell co-stimulator
 24784 Solute carrier family 9, member 3
 81527 Neuropilin 2
 117264 Pyrimidinergic receptor P2Y, G-protein
 coupled, 6
 29238 Dopamine receptor D3
 378947 Bone marrow stromal cell antigen 2
 24977 RT1 class Ib, locus Cl
 79433 Myosin heavy chain 10, non-muscle
 308873 Adp-ribosyltransferase 1 (predicted)
 65180 Potassium voltage gated channel, shal-
 related family, member 2
 304109 T-cell lymphoma invasion and metastasis 1
 288038 Antigen p97 (melanoma associated)
 identified by monoclonal antibodies 133.2
 and 96.5 (predicted)
 114613 Solute carrier family 5 (sodium iodide
 symporter), member 5
 24820 T-cell receptor beta chain
 24412 Glutamate receptor, ionotropic, NMDA2D
 25420 Crystallin, alpha B
 84403 Gap junction membrane channel protein
 beta 6
 365542 RT1 class II, locus dob
 307403 Colony stimulating factor 1 receptor
 29731 Potassium voltage-gated channel, shaker-
 related subfamily, member 3
 307199 Cd226 antigen (predicted)
 113955 Glycoprotein (transmembrane) nmb
 366492 Eph receptor A2 (predicted)
 295061 Transmembrane 4 superfamily member 1
 (predicted)
 171048 Tetraspanin 8
 54404 Inter alpha-trypsin inhibitor, heavy chain 4
 29257 Ribosomal protein l9
 298598 Unknown (protein for Mgc:72598)
 78967 Melanoma cell adhesion molecule
 89783 Lysosomal-associated protein

GO:0009605~response to external stimulus

- transmembrane 5
- 304966 Fc fragment of IgG, low affinity IIIa, receptor
- 25635 Melanocortin 4 receptor
- 29333 Membrane cofactor protein
- 306247 Interleukin 17 receptor b (predicted)
- 114089 Inositol polyphosphate-5-phosphatase e
- 116647 Neuroligin 1
- 294807 Similar to somatostatin- and angiogenin-like peptide receptor (G-protein coupled receptor salpr)
- 64350 Integrin, alpha d

- 245920 Chemokine (C-X-C motif) ligand 10
- 29538 Chemokine (C-C motif) ligand 20
- 114122 Chondroitin sulfate proteoglycan 2
- 305353 Toll-like receptor 6
- 64304 Acetyl-coenzyme A dehydrogenase, short chain
- 24367 Fibrinogen, gamma polypeptide
- 29339 Serum amyloid P-component
- 308716 Interleukin 20 receptor, alpha (predicted)
- 25585 Inhibitor of DNA binding 3
- 315108 Apolipoprotein I, 3
- 24153 Alpha-2-macroglobulin
- 25728 Apolipoprotein E
- 29328 Glutathione peroxidase 4
- 24889 Cholecystokinin A receptor
- 140868 Fatty acid binding protein 5, epidermal
- 25109 Cd1d1 antigen
- 25052 Protease, serine, 2
- 25333 Matrix Gla protein
- 83504 Klotho
- 24231 Complement component 2
- 56083 Transglutaminase 2, C polypeptide
- 25288 Acyl-CoA synthetase long-chain family member 1
- 59301 Ghrelin precursor
- 24536 Leptin receptor
- 117512 Complement component 9
- 117551 Chemokine (C-C motif) ligand 22
- 25608 Leptin
- 54349 Aldehyde oxidase 1

114099 Cysteinyl leukotriene receptor 1
 25120 Arylalkylamine n-acetyltransferase
 310553 Toll-like receptor 2
 365901 Guanine nucleotide binding protein, alpha
 transducing 2 (predicted)
 306748 Chemokine (C-X-C motif) ligand 14
 29427 Allograft inflammatory factor 1
 24918 Signal transducer and activator of
 transcription 5A
 309900 Tubby like protein 1 (predicted)
 24737 RT1 class Ib, locus AW2
 295279 Fc receptor, IgG, high affinity I
 24786 Superoxide dismutase 1
 294245 Epididymal secretory protein 8
 293677 EGF-containing fibulin-like extracellular
 matrix protein 2
 362119 Complement component 5
 79224 Serine (or cysteine) proteinase inhibitor,
 clade D, member 1
 362076 Interleukin 1 family, member 8 (predicted)
 81527 Neuropilin 2
 84492 Tec protein tyrosine kinase
 116689 Protein tyrosine phosphatase, non-receptor
 type 6
 54249 Adipsin
 24337 V-erb-b2 erythroblastic leukemia viral
 oncogene homolog 2, neuro/glioblastoma
 derived oncogene homolog (avian)
 25338 Ninjurin 1
 116562 Interleukin 2
 140936 Recoverin
 79433 Myosin heavy chain 10, non-muscle
 361795 Lymphotoxin B
 116554 Mitogen-activated protein kinase 8
 25105 Natriuretic peptide precursor type B
 24237 Complement component 6
 29160 Amelogenin X chromosome
 24806 Tachykinin 1
 24566 Macrophage stimulating 1 (hepatocyte
 growth factor-like)
 156767 Tumor necrosis factor receptor superfamily,
 member 1b
 298566 Complement component 1, q
 subcomponent, alpha polypeptide
 29624 Arachidonate 5-lipoxygenase activating

protein

116591 Fc receptor, IgG, low affinity III

294257 B-factor, properdin

84387 Peptidoglycan recognition protein 1

29687 Complement component 1, q subcomponent, beta polypeptide

171048 Tetraspanin 8

25374 Aminolevulinate, delta-, dehydratase

287910 Chemokine (C-C motif) ligand 6

304917 Serine (or cysteine) proteinase inhibitor, clade c (antithrombin), member 1

171551 Gene model 1960

25316 Membrane-spanning 4-domains, subfamily A, member 2

54243 Complement receptor related protein

294239 Dimethylarginine dimethylaminohydrolase 2

24472 Heat shock 70kd protein 1A

155012 Complement component factor H

29333 Membrane cofactor protein

29373 Bone morphogenetic protein 2

288001 Similar to alpha-1 major acute phase protein prepeptide

361205 Leukocyte cell-derived chemotaxin 2 (predicted)

362634 Complement component 1, q subcomponent, gamma polypeptide

245920 Chemokine (C-X-C motif) ligand 10

114122 Chondroitin sulfate proteoglycan 2

29538 Chemokine (C-C motif) ligand 20

305353 Toll-like receptor 6

64304 Acetyl-coenzyme A dehydrogenase, short chain

25723 Hypocretin

24367 Fibrinogen, gamma polypeptide

83783 Sulfotransferase family 1A, phenol-preferring, member 1

29339 Serum amyloid P-component

308716 Interleukin 20 receptor, alpha (predicted)

25585 Inhibitor of DNA binding 3

315108 Apolipoprotein I, 3

24153 Alpha-2-macroglobulin

25728 Apolipoprotein E

GO:0006950~response to stress

298317 Similar to ubiquitin-conjugating enzyme
hr6a
 259233 Glutathione peroxidase 6
 29328 Glutathione peroxidase 4
 24179 Angiotensinogen
 25458 Glutathione synthetase
 304577 Uracil-DNAglycosylase
 140868 Fatty acid binding protein 5, epidermal
 83504 Klotho
 24231 Complement component 2
 54302 Solute carrier family 14 (urea transporter),
member 2
 56083 Transglutaminase 2, C polypeptide
 117512 Complement component 9
 81751 Presenilin 2
 117551 Chemokine (C-C motif) ligand 22
 29610 Transforming growth factor, beta receptor
III
 54349 Aldehyde oxidase 1
 114099 Cysteinyl leukotriene receptor 1
 310553 Toll-like receptor 2
 24925 Adrenergic receptor, beta 1
 54251 Fms-like tyrosine kinase 1
 25645 Adrenergic receptor, beta 3
 29427 Allograft inflammatory factor 1
 306748 Chemokine (C-X-C motif) ligand 14
 24918 Signal transducer and activator of
transcription 5A
 24737 RT1 class Ib, locus AW2
 295279 Fc receptor, IgG, high affinity I
 24786 Superoxide dismutase 1
 300850 Glutathione s-transferase, alpha 4
 362339 cAMP responsive element binding protein
3-like 2
 300019 Gpi anchored molecule like protein
(predicted)
 294245 Epididymal secretory protein 8
 293677 EGF-containing fibulin-like extracellular
matrix protein 2
 362119 Complement component 5
 79224 Serine (or cysteine) proteinase inhibitor,
clade D, member 1
 362076 Interleukin 1 family, member 8 (predicted)
 84492 Tec protein tyrosine kinase
 116689 Protein tyrosine phosphatase, non-receptor

type 6
 54249 Adipsin
 24337 V-erb-b2 erythroblastic leukemia viral
 oncogene homolog 2, neuro/glioblastoma
 derived oncogene homolog (avian)
 25338 Ninjurin 1
 116562 Interleukin 2
 79433 Myosin heavy chain 10, non-muscle
 315344 Single-strand selective monofunctional
 uracil DNA glycosylase
 361795 Lymphotoxin b
 116554 Mitogen-activated protein kinase 8
 25105 Natriuretic peptide precursor type b
 24237 Complement component 6
 24674 Protein phosphatase 3, catalytic subunit,
 alpha isoform
 25420 Crystallin, alpha b
 24806 Tachykinin 1
 81823 Calcium and integrin binding 1 (calmyrin)
 24566 Macrophage stimulating 1 (hepatocyte
 growth factor-like)
 156767 Tumor necrosis factor receptor superfamily,
 member 1b
 298566 Complement component 1, q
 subcomponent, alpha polypeptide
 29624 Arachidonate 5-lipoxygenase activating
 protein
 50622 Solute carrier family 23 (nucleobase
 transporters), member 2
 116591 Fc receptor, IgG, low affinity III
 29541 Thymine glycol DNA glycosylase/ap lyase
 (predicted)
 294257 B-factor, properdin
 29687 Complement component 1, q
 subcomponent, beta polypeptide
 361388 Growth factor receptor bound protein 2-
 associated protein 1 (predicted)
 171048 Tetraspanin 8
 25307 Cystatin c
 24506 Insulin 2
 304917 Serine (or cysteine) proteinase inhibitor,
 clade c (antithrombin), member 1
 171551 Gene model 1960
 25316 Membrane-spanning 4-domains, subfamily
 A, member 2
 54243 Complement receptor related protein

**GO:0048869~cellular
developmental process**

294239 Dimethylarginine dimethylaminohydrolase
2
117254 Peroxiredoxin 1
24472 Heat shock 70kd protein 1A
155012 Complement component factor H
29333 Membrane cofactor protein
64470 Damage-specific DNA binding protein 1
29373 Bone morphogenetic protein 2
114089 Inositol polyphosphate-5-phosphatase E
288001 Similar to alpha-1 major acute phase protein
prepeptide
117038 Metallothionein 3
362634 Complement component 1, q
subcomponent, gamma polypeptide

89818 Vesicle-associated membrane protein 5

56646 Lectin, galactose binding, soluble 1
300678 Cd3 antigen, gamma polypeptide
29252 Granzyme M (lymphocyte met-ase 1)
24581 Myc-like oncogene, s-myc protein
29542 Phosphatidylethanolamine binding protein
94269 Fasciculation and elongation protein zeta 2
(Zygin II)
25585 Inhibitor of DNAbinding 3
84353 Catenin (cadherin associated protein), beta
1, 88kda
25728 Apolipoprotein E
116687 Deoxyribonuclease i-like 3
50678 Phosphodiesterase 3a
292263 F-box only protein 5 (predicted)
361242 Dual specificity phosphatase 22 (predicted)
24179 Angiotensinogen
304577 Uracil-DNA glycosylase
114090 Early growth response 2
63879 Baculoviral IAP repeat-containing 4
65189 Serine/threonine kinase 3 (ste20 homolog,
yeast)
83782 Expressed in non-metastatic cells 2
81814 Thymosin, beta 4
117512 Complement component 9
315217 Plexin b2
25608 Leptin
29288 Ribosomal protein S3A
24918 Signal transducer and activator of

transcription 5a

315190 Uroplakin 3a (predicted)

300019 Gpi anchored molecule like protein
(predicted)

362119 Complement component 5

65146 Paired-iIg-like receptor b

287615 Vascular endothelial zinc finger 1
(predicted)

304729 Gli-kruppel family member Gli2 (predicted)

24337 V-erb-b2 erythroblastic leukemia viral
oncogene homolog 2, neuro/glioblastoma
derived oncogene homolog (avian)

140433 Laminin, alpha 5

361795 Lymphotoxin B

85247 S100 calcium binding protein A6
(calcyclin)

24237 Complement component 6

116554 Mitogen-activated protein kinase 8

29524 Lim motif-containing protein kinase 2

50669 Perforin 1 (pore forming protein)

81823 Calcium and integrin binding 1 (calmyrin)

287151 Similar to 1810034b16RIK protein

116591 Fc receptor, IgG, low affinity III

83620 Citron

80897 Type 1 tumor necrosis factor receptor
shedding aminopeptidase regulator

25493 Nuclear factor of kappa light chain gene
enhancer in B-cells inhibitor, alpha

25307 Cystatin C

24506 Insulin 2

25334 Muscle, intestine and stomach expression 1

287910 Chemokine (C-C motif) ligand 6

60335 Transglutaminase 1

306782 Receptor tyrosine kinase-like orphan
receptor 2 (predicted)

29373 Bone morphogenetic protein 2

362525 Spermatocyte/spermatid-specific
thioredoxin-3

294313 Mitochondrial carrier homolog 1 (c.
Elegans)

29543 Tissue inhibitor of metalloproteinase 2

114122 Chondroitin sulfate proteoglycan 2

81512 Leukocyte cell derived chemotaxin 1

304935 T-box 19 (predicted)

117271 Bh3 interacting (with Bcl2 family) domain,

apoptosis agonist
 64314 Caspase 2
 246775 Tumor necrosis factor (ligand) superfamily,
 member 10
 315615 Down syndrome cell adhesion molecule-
 like 1 (predicted)
 64471 Evcetin-1
 81827 Peptidase (prosome, macropain) 26s
 subunit, ATPase 5
 282840 Activating transcription factor 5
 25730 Neurotrophin 5
 315650 B-cell translocation gene 4
 171528 Granzyme B
 316137 EGF-like module containing, mucin-like,
 hormone receptor-like sequence 1
 24889 Cholecystokinin a receptor
 25295 Bone gamma-carboxyglutamate protein 2
 25109 Cd1d1 antigen
 25311 Deleted in colorectal carcinoma
 25333 Matrix gla protein
 56083 Transglutaminase 2, C polypeptide
 287931 Protein phosphatase 1f (Pp2c domain
 containing)
 81751 Presenilin 2
 29610 Transforming growth factor, beta receptor
 III
 294204 Olfactory receptor 1750 (predicted)
 56813 Parathyroid hormone receptor 1
 25645 Adrenergic receptor, beta 3
 54251 Fms-like tyrosine kinase 1
 24925 Adrenergic receptor, beta 1
 83466 Cadherin EGF lag seven-pass g-type
 receptor 3
 29427 Allograft inflammatory factor 1
 362791 Cd27 binding protein (hindu god of
 destruction)
 24737 RT1 class Ib, locus AW2
 295279 Fc receptor, IgG, high affinity I
 24786 Superoxide dismutase 1
 64521 Tetraspan 2
 362993 Rho family GTPase 1
 116646 Tumor protein, translationally-controlled 1
 364680 Barh-like homeobox 1 (predicted)
 81527 Neuropilin 2
 171114 N-myc downstream regulated gene 2

116689 Protein tyrosine phosphatase, non-receptor
type 6
245963 EGF-like domain 7
116562 Interleukin 2
79433 Myosin heavy chain 10, non-muscle
304109 T-cell lymphoma invasion and metastasis 1
25420 Crystallin, alpha B
84403 Gap junction membrane channel protein
beta 6
114501 Lim homeobox transcription factor 1 beta
29317 Cysteine and glycine-rich protein 2
304798 Transformed mouse 3T3 cell double minute
4
295213 S100 calcium binding protein a13
(predicted)
156767 Tumor necrosis factor receptor superfamily,
member 1b
113955 Glycoprotein (transmembrane) nmb
366492 Eph receptor A2 (predicted)
296973 2,3-bisphosphoglycerate mutase
25163 Cyclin-dependent kinase inhibitor 2A
305858 Orthodenticle homolog 2 (drosophila)
24472 Heat shock 70kd protein 1A
56782 Proteoglycan peptide core protein
116647 Neuroligin 1
117038 Metallothionein 3
29236 Laminin receptor 1 (ribosomal protein sa)
24715 Renin 1

Supplemental Table 4: List of Genes regulated in the microarray experiment within the prefrontal cortex following DOI (DOI vs. C). Rats were treated with the 5HT_{2A/C} antagonist, DOI or vehicle and the prefrontal cortex was subjected to microarray analysis. The list of all the significantly regulated genes is shown in the table ($P < 0.05$; Fold change < 0.66 or > 1.5).

GeneName	Ratio_D	t-test P-value	Synonyms	Description
AA818888	1.51	0.00	AA818888	cDNA clone UI-R-A0-av-c-08-0-UI 3' similar to emb
AA819418	2.00	0.00	AA819418	cDNA clone UI-R-A0-bl-f-10-0-UI 3' similar to emb
AA859222	1.61	0.01	AA859222	cDNA clone UI-R-E0-cd-b-07-0-UI 3' similar to emb
AA874977	1.57	0.02	AA874977	cDNA clone UI-R-E0-cf-c-01-0-UI 3' similar to gi
AA892264	1.90	0.02	AA892264	cDNA clone RKIAO36 3'
AA925023	1.76	0.00	AA925023	cDNA clone UI-R-A1-ei-g-02-0-UI 3' similar to gi
AA996504	2.38	0.02	AA996504	cDNA clone UI-R-C0-he-b-07-0-UI 3'
Abra	1.94	0.00	NM_175844	actin-binding Rho activating protein
Accn3	1.95	0.01	NM_173135	amiloride-sensitive cation channel 3
Acox1	1.61	0.00	NM_017340	acyl-Coenzyme A oxidase 1, palmitoyl
Acp6	1.52	0.00	NM_001031645	acid phosphatase 6, lysophosphatidic
Adamts3_predicted	2.48	0.02	XM_223279	a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 3 (predicted)
Adamts9_predicted	3.58	0.00	XM_232202	similar to a disintegrin-like and metalloprotease with thrombospondin type 1 motifs 9B
Adamtsl3_predicted	3.42	0.00	XM_218841	ADAMTS-like 3 (predicted)
Add2	1.82	0.00	NM_012491	adducin 2 (beta)
Adora3	1.90	0.00	NM_012896	adenosine A3 receptor
Afp	1.79	0.00	NM_012493	alpha-fetoprotein
Ahsa2_predicted	1.70	0.02	XM_223680	activator of heat shock protein ATPase homolog 2 (yeast) (predicted)
AI014087	2.12	0.00	AI014087	cDNA clone RSPBE69 3' end
AI170772	2.34	0.00	AI170772	cDNA clone RMUBB32 3' end
AI171274	2.32	0.04	AI171274	cDNA clone RMUBI41 3' end
AI233749	1.55	0.01	AI233749	cDNA clone RKIDJ59 3' end
Akr1c18	1.86	0.03	NM_138510	aldo-keto reductase family 1, member C18
Alg5	4.01	0.00	NM_001025407	asparagine-linked glycosylation 5 homolog (yeast, dolichyl-phosphate beta-

				glucosyltransferase)
Ankrd12_predicted	1.54	0.04	XM_237588	ankyrin repeat domain 12 (predicted)
Anp32a	1.59	0.00	NM_012903	acidic (leucine-rich) nuclear phosphoprotein 32 family, member A
Ap3d1	1.94	0.00	XM_234908	adaptor-related protein complex 3, delta 1 subunit
Ap3m1	1.51	0.00	NM_133593	adaptor-related protein complex 3, mu 1 subunit
Apc	1.53	0.00	NM_012499	adenomatosis polyposis coli
Apeg3	1.57	0.00	XM_218226	similar to mKIAA0287 protein
Apeh	1.53	0.00	NM_012500	acylpeptide hydrolase
Apoh	2.33	0.00	NM_001009626	apolipoprotein H
Apol3	1.73	0.02	NM_001013175	apolipoprotein L, 3
Aqp1	1.89	0.02	NM_012778	aquaporin 1
Aqp3	1.74	0.03	NM_031703	aquaporin 3
Aqp7	1.87	0.01	NM_019157	aquaporin 7
Arc	2.31	0.01	NM_019361	activity regulated cytoskeletal-associated protein
Arl4a	1.71	0.00	NM_019186	ADP-ribosylation factor-like 4A
Art5	2.54	0.04	NM_001013039	ADP-ribosyltransferase 5
Arts1	1.61	0.00	NM_030836	type 1 tumor necrosis factor receptor shedding aminopeptidase regulator
Asah31_predicted	1.55	0.01	XM_233138	N-acylsphingosine amidohydrolase 3-like (predicted)
Ascc3_predicted	1.60	0.01	XM_228345	activating signal cointegrator 1 complex subunit 3 (predicted)
Atf3	3.40	0.00	NM_012912	activating transcription factor 3
Atf4	1.54	0.00	NM_024403	activating transcription factor 4
Atp6ap1	1.51	0.00	NM_031785	ATPase, H ⁺ transporting, lysosomal accessory protein 1
Atp6v1b1_predicted	1.67	0.01	XM_232119	ATPase, H transporting, lysosomal V1 subunit B1 (predicted)
Atp7a	1.57	0.02	NM_052803	ATPase, Cu ⁺⁺ transporting, alpha polypeptide
Atxn1	1.59	0.01	NM_012726	ataxin 1
B3gnt1_predicted	1.53	0.00	XM_223674	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 1 (predicted)
Baz1a_predicted	1.80	0.03	XM_234156	bromodomain adjacent to zinc finger domain, 1A (predicted)
Bcl2l2	1.54	0.00	NM_021850	Bcl2-like 2
Bcl6_predicted	1.69	0.00	XM_221333	B-cell leukemia/lymphoma 6 (predicted)
Bdnf	1.78	0.00	NM_012513	brain derived neurotrophic factor

Bdp1_predicted	1.65	0.01	XM_226738	B double prime 1, subunit of RNA polymerase III transcription initiation factor IIIB (predicted)
BE113966	2.11	0.00	BE113966	cDNA clone UI-R-BJ1-awi-e-05-0-UI 3'
Bglap2	1.86	0.04	NM_013414	bone gamma-carboxyglutamate protein 2
BI281080	2.10	0.02	BI281080	cDNA clone UI-R-DD0-bzr-a-04-0-UI 3'
Birc2	1.61	0.05	NM_021752	baculoviral IAP repeat-containing 2
BM384018	2.80	0.00	BM384018	cDNA clone UI-R-DM1-ckb-g-10-0-UI 3'
BQ201138	2.33	0.00	BQ201138	cDNA clone UI-R-DQ1-clt-c-17-0-UI 3'
Brinp2	1.62	0.00	NM_173115	BMP/retinoic acid-inducible neural-specific protein 2
Bst2	2.01	0.02	NM_198134	bone marrow stromal cell antigen 2
C4bpa	1.75	0.04	NM_012516	complement component 4 binding protein, alpha
Cacnb2	1.91	0.00	NM_053851	calcium channel, voltage-dependent, beta 2 subunit
Calr	1.58	0.02	NM_022399	calreticulin
Casp6	1.64	0.00	NM_031775	caspase 6
Cbl11_predicted	1.84	0.00	XM_234039	Casitas B-lineage lymphoma-like 1 (predicted)
Ccl6	1.74	0.02	NM_00100420 2	chemokine (C-C motif) ligand 6
Ccng1	5.68	0.00	NM_012923	cyclin G1
Ccn11	1.78	0.02	NM_053662	cyclin L1
Cd44	2.55	0.00	NM_012924	CD44 antigen
Cd79b	1.57	0.05	NM_133533	CD79B antigen
Cebpb	1.63	0.00	NM_024125	CCAAT/enhancer binding protein (C/EBP), beta
Cebpd	2.61	0.01	NM_013154	CCAAT/enhancer binding protein (C/EBP), delta
Cenpc1	1.74	0.01	NM_00100409 8	centromere protein C 1
Cfhl1	2.36	0.01	AY325206	Ab2-142
Ch25h	2.46	0.03	NM_00102541 5	cholesterol 25-hydroxylase
Chordc1_predicted	1.68	0.01	XM_235878	cysteine and histidine-rich domain (CHORD)-containing, zinc-binding protein 1 (predicted)
Cited2	2.05	0.00	NM_053698	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2
Cldn1	2.09	0.02	NM_031699	claudin 1
Clk1	1.80	0.01	XM_217405	CDC-like kinase 1
Clk4	1.60	0.03	NM_00101304 1	CDC like kinase 4
Cngb1	1.99	0.03	NM_031809	cyclic nucleotide gated channel beta 1
Cnot4	1.70	0.00	NM_00103778 2	CCR4-NOT transcription complex, subunit 4

Col15a1	2.96	0.01	XM_216399	procollagen, type XV
Col4a1	1.58	0.01	XM_214400	procollagen, type IV, alpha 1
Comp	3.18	0.00	NM_012834	cartilage oligomeric matrix protein
Cox4i2	1.53	0.00	NM_053472	cytochrome c oxidase subunit IV isoform 2
Cpeb4_predicted	1.54	0.03	XM_220269	cytoplasmic polyadenylation element binding protein 4 (predicted)
Crebbp	1.54	0.00	NM_133381	CREB binding protein
Cryab	1.98	0.00	NM_012935	crystallin, alpha B
Cryge	1.72	0.02	NM_173289	crystallin, gamma E
Csnk1g1	1.77	0.02	NM_022288	casein kinase 1, gamma 1
Csta_predicted	3.21	0.01	XM_213616	cystatin A (stefin A) (predicted)
Ctnnd1_predicted	1.55	0.00	XM_242062	catenin (cadherin associated protein), delta 1 (predicted)
Ctsj	2.85	0.00	NM_017121	cathepsin J
Cxcr3	2.41	0.03	NM_053415	chemokine (C-X-C motif) receptor 3
Cyb5	1.54	0.00	NM_022245	cytochrome b-5
Cyp7b1	1.76	0.00	XM_342218	cytochrome P450, family 7, subfamily b, polypeptide 1
Cyr61	2.39	0.00	NM_031327	cysteine rich protein 61
Dnah10	1.62	0.03	XM_001071882	dynein, axonemal, heavy polypeptide 10
Dnah9	1.83	0.04	XM_213354	dynein, axonemal, heavy polypeptide 9
Dpt_predicted	2.24	0.04	XM_213925	dermatopontin (predicted)
Dpyd	1.91	0.01	NM_031027	dihydropyrimidine dehydrogenase
Duox2	1.79	0.03	NM_024141	dual oxidase 2
Dusp6	1.93	0.00	NM_053883	dual specificity phosphatase 6
DV728383	1.73	0.00	DV728383	RVL21016 Wackym-Soares normalized rat vestibular cDNA 5'
DY320879	1.52	0.00	DY320879	cDNA clone IMAGE:8366768 5'
Dysf_predicted	1.80	0.01	XM_232123	dysferlin (predicted)
Ebf1	1.72	0.00	NM_053820	early B-cell factor 1
Edg7	2.07	0.02	NM_023969	putative G protein-coupled receptor snGPCR32
Egr2	1.98	0.00	NM_053633	early growth response 2
Eif5b	1.66	0.04	XM_218162	eukaryotic translation initiation factor 5B, transcript variant 2
Ela3b_predicted	1.72	0.01	XM_216566	elastase 3B, pancreatic (predicted)
Elk1	3.70	0.03	BG377323	cDNA clone UI-R-CU0-bvc-b-03-0-UI 3',
F2rl1	1.92	0.05	NM_053897	coagulation factor II (thrombin) receptor-like 1
Fbxo39	1.95	0.00	NM_001039018	F-box protein 39
Fgf1	1.61	0.01	NM_012846	fibroblast growth factor 1
Fmo2	2.44	0.01	NM_144737	flavin containing monooxygenase 2
Fmo3	1.56	0.02	NM_053433	flavin containing monooxygenase 3

Fn1	1.69	0.00	NM_019143	fibronectin 1
Fos	1.69	0.00	NM_022197	FBJ murine osteosarcoma viral oncogene homolog
Foxa2	1.76	0.00	NM_012743	forkhead box A2
Fshb	2.80	0.03	M36804	follicle stimulating hormone beta-subunit
Fzd1	1.76	0.00	NM_021266	frizzled homolog 1 (Drosophila)
G0s2	1.51	0.03	NM_00100963 2	G0/G1 switch gene 2
Gabbr1	1.93	0.01	NM_017291	gamma-aminobutyric acid (GABA-C) receptor, subunit rho 1
Gadd45g	2.29	0.00	XM_237999	growth arrest and DNA-damage-inducible 45 gamma
Gata4	1.60	0.00	NM_144730	GATA binding protein 4
Gbp4_predicted	2.65	0.03	XM_227762	guanylate nucleotide binding protein 4 (predicted)
Gdf8	1.53	0.01	NM_019151	growth differentiation factor 8
Gfra3	1.93	0.02	NM_053398	glial cell line derived neurotrophic factor family receptor alpha 3
Gja5	2.43	0.05	NM_019280	gap junction membrane channel protein alpha 5
Gnai3	1.71	0.01	NM_013106	guanine nucleotide binding protein, alpha inhibiting 3
Gnb3	1.71	0.00	NM_021858	guanine nucleotide binding protein, beta 3
Gnl3	1.57	0.00	NM_175580	guanine nucleotide binding protein-like 3 (nucleolar)
Gpc2	1.60	0.00	NM_138511	glypican 2 (cerebroglycan)
Gpm6b	1.55	0.00	NM_138846	glycoprotein m6b
Gpr44	2.19	0.00	NM_00101207 0	G protein-coupled receptor 44
Grin2d	1.64	0.03	NM_022797	glutamate receptor, ionotropic, N-methyl D-aspartate 2D
Grin3b	1.71	0.03	NM_133308	glutamate receptor, ionotropic, N-methyl-D-aspartate 3B
Grin1a	1.71	0.00	NM_183402	glutamate receptor, ionotropic, N-methyl D-aspartate-like 1A
Grm1	1.56	0.00	NM_017011	glutamate receptor, metabotropic 1
Gtpbp4	1.67	0.00	NM_053689	GTP binding protein 4
Gyk	1.59	0.04	NM_024381	glycerol kinase
Gys2	1.98	0.00	NM_013089	glycogen synthase 2
Habp2	1.81	0.01	NM_00100150 5	hyaluronic acid binding protein 2
Hbegf	1.79	0.04	NM_012945	heparin-binding EGF-like growth factor
Helz_predicted	1.51	0.03	XM_237808	helicase with zinc finger domain (predicted)
Hmgn3	1.60	0.03	NM_00100702 0	high mobility group nucleosomal binding domain 3
Hnrpf	1.65	0.00	NM_022397	heterogeneous nuclear ribonucleoprotein F,

				transcript variant 3
Hnrpu	1.55	0.00	NM_057139	heterogeneous nuclear ribonucleoprotein U
Hpgd	1.67	0.00	NM_024390	hydroxyprostaglandin dehydrogenase 15 (NAD)
Hrasls_predicted	2.35	0.04	XM_213590	HRAS-like suppressor (predicted)
Hrasls3	1.56	0.03	NM_017060	HRAS like suppressor 3
Hspa5	1.82	0.00	NM_013083	heat shock 70kDa protein 5 (glucose-regulated protein)
Hspb1	2.83	0.04	NM_031970	heat shock 27kDa protein 1
Hspca	1.57	0.00	NM_175761	heat shock protein 1, alpha
Hspe1	1.52	0.00	NM_012966	heat shock 10 kDa protein 1 (chaperonin 10)
Htr1d	1.63	0.04	NM_012852	5-hydroxytryptamine (serotonin) receptor 1D
Htr2b	1.74	0.03	NM_017250	5-hydroxytryptamine (serotonin) receptor 2B
Icam5_predicted	1.57	0.03	XM_233737	intercellular adhesion molecule 5, telencephalin (predicted)
Ier2	1.68	0.00	NM_001009541	immediate early response 2
Ikbkg	2.08	0.04	NM_199103	inhibitor of kappaB kinase gamma
Il1rl2	2.37	0.00	NM_133575	interleukin 1 receptor-like 2
Il24	1.63	0.03	NM_133311	interleukin 24
Inhba	1.52	0.02	NM_017128	inhibin beta-A
Inhbc	1.90	0.02	NM_022614	inhibin beta C
Inpp4b	1.88	0.00	NM_053917	inositol polyphosphate-4-phosphatase, type II
Inpp5e	2.56	0.00	XM_342391	inositol polyphosphate 5-phosphatase
Itga2	1.50	0.00	XM_345156	integrin, alpha 2
Itpr1	1.51	0.00	NM_001007235	inositol 1,4,5-triphosphate receptor 1
Jun	2.10	0.00	NM_021835	Jun oncogene
Junb	1.53	0.00	NM_021836	Jun-B oncogene
K02813	1.98	0.00	K02813	glucagon gene, exon 6
Kcna2	2.40	0.01	NM_012970	potassium voltage-gated channel, shaker-related subfamily, member 2
Kcnh4	1.66	0.02	NM_053630	potassium voltage-gated channel, subfamily H (eag-related), member 4
Kcnn2	1.70	0.01	NM_019314	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 2
Kif3b_predicted	2.00	0.04	XM_215883	kinesin family member 3B (predicted)
Kir3dl1	1.54	0.03	NM_181479	killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail,
Klf4	2.62	0.00	NM_053713	Kruppel-like factor 4 (gut)
Klk12_predicted	1.78	0.00	XM_218644	kallikrein 12 (predicted)

Klk5	1.76	0.00	XM_574439	kallikrein 5
Klrc2	1.80	0.01	NM_019261	killer cell lectin-like receptor subfamily C, member 2
Krt1-4	1.70	0.04	NM_001008758	keratin complex 1, acidic, gene 4
L04739	2.75	0.04	L04739	plasma membrane calcium ATPase isoform 1
Lama5	1.57	0.00	XM_215963	laminin, alpha 5
Lamb3	1.58	0.00	XM_223087	similar to Lamb3 protein
Lcn7	1.54	0.01	NM_053582	lipocalin 7
Lepr	1.74	0.00	NM_012596	leptin receptor
Lhx3	1.63	0.00	XM_001059910	LIM homeobox protein 3
Lipc	2.41	0.02	NM_012597	lipase, hepatic
LOC246266	2.85	0.03	NM_144750	lysophospholipase
LOC314393	1.58	0.02	XM_001065684	similar to thyroid hormone receptor interactor 11
LOC367314	2.09	0.00	NM_001014269	similar to FLI-LRR associated protein-1
LOC498185	1.57	0.01	NM_001017488	similar to sodium/calcium exchanger protein
LOC502603	1.52	0.02	NM_001035255	similar to splicing factor p54
LOC678807	1.94	0.05	XM_001053242	similar to alpha-interferon
LOC679712	1.63	0.00	XM_001054154	similar to Myelin expression factor 2
LOC680097	2.08	0.00	XM_001055696	similar to germinal histone H4 gene
LOC680102	1.85	0.00	XM_001055031	similar to mab-21-like 2
LOC680117	1.50	0.00	XM_001054603	similar to T-cell leukemia homeobox protein 2 (Homeobox protein Hox-11L1)
LOC680404	1.87	0.00	XM_001057045	similar to Complement C1q-like protein 3 precursor (Gliacolin)
LOC680537	1.69	0.00	XM_001058413	similar to Wolf-Hirschhorn syndrome candidate 1 protein isoform 1, transcript variant 2
LOC680611	2.85	0.02	XM_001057993	similar to B-cell leukemia/lymphoma 3
LOC680945	1.80	0.01	XM_001059596	similar to stromal cell-derived factor 2-like 1
LOC681467	2.06	0.01	XM_001057746	similar to Beta crystallin S (Gamma crystallin S)
LOC681867	1.58	0.00	XM_001056889	similar to NADH-ubiquinone oxidoreductase PDSW subunit (Complex I-PDSW) (CI-PDSW), transcript variant 2

LOC682196	1.53	0.01	XM_001060366	similar to ribosomal protein S12
LOC691291	2.80	0.00	XM_001077581	similar to peptidoglycan recognition protein 2
Lsamp	1.72	0.00	NM_017242	limbic system-associated membrane protein
Luc7l	1.81	0.00	NM_001024269	LUC7-like (<i>S. cerevisiae</i>)
Ly6g6e	1.84	0.02	NM_001001972	lymphocyte antigen 6 complex, locus G6E
Ly9_predicted	2.09	0.00	XM_222892	lymphocyte antigen 9 (predicted)
M23948	1.93	0.01	M23948	carboxypeptidase B gene, intron 1, middle region A
Map3k6_predicted	2.41	0.01	XM_232732	mitogen-activated protein kinase kinase kinase 6 (predicted)
Map3k8	3.28	0.00	NM_053847	mitogen-activated protein kinase kinase kinase 8
Mcee_predicted	1.68	0.00	XM_215213	methylmalonyl CoA epimerase (predicted)
Mepe	1.52	0.00	NM_024142	matrix extracellular phosphoglycoprotein with ASARM motif (bone)
MGC109519	1.96	0.03	NM_001024345	similar to tropomyosin 1, embryonic fibroblast -
MGC95208	2.40	0.00	NM_001005552	similar to 4930453N24Rik protein
Mgl1	2.70	0.04	NM_022393	macrophage galactose N-acetyl-galactosamine specific lectin 1
Mia1	1.83	0.02	NM_030852	melanoma inhibitory activity 1
Mll_mapped	1.74	0.03	XM_236194	myeloid/lymphoid or mixed-lineage leukemia (mapped)
Mmp12	2.13	0.01	NM_053963	matrix metalloproteinase 12
Mpdz	1.50	0.00	NM_019196	multiple PDZ domain protein
Mpp4	2.08	0.01	AB030501	DLG6 gamma,
Mrgprb2	2.28	0.04	NM_001002285	MAS-related G protein-coupled receptor, member B2
Mrgprb4	1.82	0.04	NM_001002287	MAS-related G protein-coupled receptor, member B4
Mrgprb5	1.99	0.00	NM_001002284	MAS-related G protein-coupled receptor, member B5
Mrgprh	3.25	0.00	NM_001002281	MAS-related G-protein coupled receptor, member H
Mrps25	1.52	0.00	NM_001025408	mitochondrial ribosomal protein S25
Ms4a12_predicted	3.39	0.01	XM_219588	membrane-spanning 4-domains, subfamily A, member 12 (predicted)
Ms4a6a_predicted	1.65	0.03	XM_215145	membrane-spanning 4-domains, subfamily A, member 6A (predicted)
Msx1	1.82	0.04	NM_031059	homeo box, msh-like 1

Mtap2	1.52	0.00	NM_013066	microtubule-associated protein 2
Mup5	2.95	0.00	AB039828	alpha-2u globulin, complete cds, clone:PGCL7.
Myh10	2.42	0.01	NM_031520	myosin, heavy polypeptide 10, non-muscle
Myog	1.70	0.02	NM_017115	myogenin
Nanos3_predicted	1.71	0.03	XM_222459	nanos homolog 3 (Drosophila) (predicted)
Nap111	1.95	0.00	NM_053561	nucleosome assembly protein 1-like 1
Ndubf3_predicted	1.55	0.00	XM_217400	NADH dehydrogenase (ubiquinone) 1 beta subcomplex 3 (predicted)
Neto2_predicted	1.60	0.00	XM_226349	neuropilin (NRP) and tolloid (TLL)-like 2 (predicted)
Nfic	1.91	0.05	XM_345789	nuclear factor I/C
Nhlh1_predicted	2.19	0.03	XM_222898	similar to helix-loop-helix protein
Nip7	1.53	0.00	NM_138847	nuclear import 7 homolog (S. cerevisiae)
Nlgn1	2.04	0.00	NM_053868	neuroligin 1
Nox1_predicted	2.41	0.03	XM_220221	NADPH oxidase organizer 1 (predicted)
Npas3_predicted	1.78	0.01	XM_234124	neuronal PAS domain protein 3 (predicted)
Npff	1.96	0.04	NM_022586	neuropeptide FF-amide peptide precursor
Nppb	1.76	0.02	NM_031545	natriuretic peptide precursor type B
Nr2f2	3.21	0.02	NM_080778	nuclear receptor subfamily 2, group F, member 2
Nr4a1	2.07	0.00	NM_024388	nuclear receptor subfamily 4, group A, member 1
Nr4a2	1.57	0.00	NM_019328	nuclear receptor subfamily 4, group A, member 2
Nr4a3	2.46	0.00	NM_017352	nuclear receptor subfamily 4, group A, member 3, transcript variant 2,
Ntrk1	1.79	0.00	NM_021589	neurotrophic tyrosine kinase, receptor, type 1
Nup160_predicted	1.63	0.02	XM_230286	nucleoporin 160 (predicted)
Olr1007_predicted	2.94	0.00	NM_001000076	olfactory receptor 1007 (predicted)
Olr1051_predicted	1.82	0.00	NM_001001364	olfactory receptor 1051 (predicted)]
Olr1055_predicted	2.42	0.03	NM_001000067	olfactory receptor 1055 (predicted)
Olr1082	2.62	0.04	NM_173335	olfactory receptor 1082
Olr1088_predicted	1.98	0.00	XM_234873	similar to olfactory receptor GA_x6K02T2QGN0-3289955-3289014
Olr1091_predicted	1.70	0.00	NM_001000593	olfactory receptor 1091 (predicted)
Olr1122_predicted	1.55	0.04	NM_001000088	olfactory receptor 1122 (predicted)

ted			2	
Olr113_predicted	2.53	0.00	NM_001000151	olfactory receptor 113 (predicted)
Olr1130_predicted	3.20	0.00	NM_001000428	olfactory receptor 1130 (predicted)
Olr1132_predicted	2.07	0.02	NM_0010000986	olfactory receptor 1132 (predicted)
Olr1144_predicted	1.96	0.01	NM_0010000876	olfactory receptor 1144 (predicted)
Olr1156_predicted	1.93	0.01	NM_0010000873	olfactory receptor 1156 (predicted)
Olr1163_predicted	2.84	0.00	NM_0010000869	olfactory receptor 1163 (predicted)
Olr1172	1.85	0.00	NM_0010000983	olfactory receptor 1172
Olr1194_predicted	1.93	0.00	NM_0010000820	olfactory receptor 1194 (predicted)
Olr1220_predicted	2.03	0.01	NM_0010000814	olfactory receptor 1220 (predicted)
Olr1236_predicted	3.39	0.00	NM_0010000812	olfactory receptor 1236 (predicted)
Olr1251_predicted	2.21	0.00	NM_0010000453	olfactory receptor 1251 (predicted)
Olr1265_predicted	1.88	0.03	NM_0010000457	olfactory receptor 1265 (predicted)
Olr1292_predicted	1.76	0.04	NM_0010000960	olfactory receptor 1292 (predicted)
Olr1306_predicted	1.66	0.00	NM_0010000465	olfactory receptor 1306 (predicted)
Olr1309_predicted	1.68	0.01	NM_0010000466	olfactory receptor 1309 (predicted)
Olr1346	1.50	0.04	NM_0010000520	olfactory receptor 1346
Olr1352_predicted	1.56	0.00	NM_0010000953	olfactory receptor 1352 (predicted)
Olr1353_predicted	2.39	0.00	NM_0010000750	olfactory receptor 1353 (predicted)
Olr1362	2.32	0.04	NM_0010006598	olfactory receptor 1362
Olr1382_predicted	1.81	0.02	NM_214831	olfactory receptor 1382 (predicted)
Olr1388_predicted	1.86	0.03	NM_0010000788	olfactory receptor 1388 (predicted)
Olr1405_predicted	1.55	0.01	NM_0010001012	olfactory receptor 1405 (predicted)
Olr1409_predicted	1.59	0.01	NM_001000000	olfactory receptor 1409 (predicted)

ted			4	
Olr1418_predicted	2.02	0.03	NM_001000008	olfactory receptor 1418 (predicted)
Olr143_predicted	1.83	0.03	NM_001000163	olfactory receptor 143 (predicted)
Olr1443_predicted	1.57	0.03	NM_001000018	olfactory receptor 1443 (predicted)
Olr1455_predicted	2.23	0.03	NM_001000771	olfactory receptor 1455 (predicted)
Olr1475_predicted	2.05	0.00	NM_001000027	olfactory receptor 1475 (predicted)
Olr148_predicted	2.16	0.05	NM_001000165	olfactory receptor 148 (predicted)
Olr1486_predicted	2.29	0.01	NM_001000720	olfactory receptor 1486 (predicted)
Olr1498_predicted	1.52	0.03	NM_001000030	olfactory receptor 1498 (predicted)
Olr1515_predicted	1.71	0.00	NM_001001098	olfactory receptor 1515 (predicted)
Olr1521_predicted	2.25	0.05	NM_001000039	olfactory receptor 1521 (predicted)
Olr1523	1.71	0.03	NM_001000713	olfactory receptor 1523
Olr1543_predicted	1.60	0.00	NM_001001104	olfactory receptor 1543 (predicted)
Olr1608_predicted	2.25	0.00	NM_001000093	olfactory receptor 1608 (predicted)
Olr1617_predicted	1.63	0.04	NM_001000839	olfactory receptor 1617 (predicted)
Olr1658_predicted	1.52	0.04	NM_001000105	olfactory receptor 1658 (predicted)
Olr1671_predicted	2.35	0.00	NM_001000266	olfactory receptor 1671 (predicted)
Olr1679_predicted	1.84	0.04	NM_001000892	olfactory receptor 1679 (predicted)
Olr1682_predicted	1.54	0.01	NM_001000890	olfactory receptor 1682 (predicted)
Olr1687	1.56	0.03	NM_001000508	olfactory receptor 1687
Olr1701_predicted	3.97	0.04	NM_001001114	olfactory receptor 1701 (predicted)
Olr1722_predicted	1.99	0.03	NM_001001117	olfactory receptor 1722 (predicted)
Olr1729_predicted	2.71	0.00	XM_227932	olfactory receptor 1729 (predicted)
Olr1748_predicted	3.37	0.00	NM_001001142	olfactory receptor 1748 (predicted)

ted			8	
Olr1765_predicted	2.97	0.01	NM_001000489	olfactory receptor 1765 (predicted)
Olr211_predicted	1.71	0.01	NM_001000196	olfactory receptor 211 (predicted)
Olr223_predicted	2.37	0.01	NM_001000202	olfactory receptor 223 (predicted)
Olr285_predicted	1.52	0.01	NM_001000223	olfactory receptor 285 (predicted)
Olr324_predicted	2.46	0.01	NM_001000246	olfactory receptor 324 (predicted)
Olr337	1.92	0.01	NM_001000507	olfactory receptor 337
Olr363_predicted	2.03	0.00	NM_001000754	olfactory receptor 363 (predicted)
Olr371_predicted	1.89	0.00	NM_001000258	olfactory receptor 371 (predicted)
Olr374_predicted	2.64	0.02	NM_001001289	olfactory receptor 374 (predicted)
Olr375_predicted	1.72	0.05	NM_001000259	olfactory receptor 375 (predicted)
Olr390_predicted	2.43	0.00	NM_001000558	olfactory receptor 390 (predicted)
Olr396_predicted	2.31	0.00	NM_001000831	olfactory receptor 396 (predicted)
Olr416_predicted	1.55	0.01	NM_001000387	olfactory receptor 416 (predicted)
Olr419_predicted	2.27	0.00	NM_001000968	olfactory receptor 419 (predicted)
Olr428_predicted	1.53	0.00	NM_001000394	olfactory receptor 428 (predicted)
Olr443_predicted	1.84	0.05	NM_001000285	olfactory receptor 443 (predicted)
Olr446_predicted	1.70	0.00	NM_001001050	olfactory receptor 446 (predicted)
Olr450_predicted	2.05	0.00	NM_001000288	olfactory receptor 450 (predicted)
Olr46_predicted	1.83	0.02	NM_001001001	olfactory receptor 46 (predicted)
Olr463_predicted	1.58	0.00	NM_001000934	olfactory receptor 463 (predicted)
Olr473_predicted	2.75	0.00	NM_001000302	olfactory receptor 473 (predicted)
Olr484_predicted	1.91	0.03	NM_001000306	olfactory receptor 484 (predicted)
Olr510_predicted	2.04	0.04	NM_00100031	olfactory receptor 510 (predicted)

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Olr514_predicted	2.83	0.00	NM_001000314	olfactory receptor 514 (predicted)
Olr531_predicted	1.51	0.02	NM_001001051	olfactory receptor 531 (predicted)
Olr535_predicted	2.28	0.03	NM_001000672	olfactory receptor 535 (predicted)
Olr541_predicted	2.19	0.02	NM_001000565	olfactory receptor 541 (predicted)
Olr550_predicted	1.90	0.00	NM_001000322	olfactory receptor 550 (predicted)
Olr554_predicted	1.62	0.02	NM_001000323	olfactory receptor 554 (predicted)
Olr56_predicted	3.20	0.00	NM_001000130	olfactory receptor 56 (predicted)
Olr560_predicted	2.43	0.03	NM_001000325	olfactory receptor 560 (predicted)
Olr597_predicted	3.15	0.00	NM_001000331	olfactory receptor 597 (predicted)
Olr62_predicted	1.79	0.00	NM_001000129	olfactory receptor 62 (predicted)
Olr661_predicted	2.11	0.02	NM_001000925	olfactory receptor 661 (predicted)
Olr662_predicted	1.83	0.02	NM_001001060	olfactory receptor 662 (predicted)
Olr690_predicted	1.68	0.00	NM_001000569	olfactory receptor 690 (predicted)
Olr694_predicted	1.70	0.00	NM_001000357	olfactory receptor 694 (predicted)
Olr697_predicted	1.99	0.01	NM_001001064	olfactory receptor 697 (predicted)
Olr701_predicted	2.42	0.00	NM_001000627	olfactory receptor 701 (predicted)
Olr704_predicted	1.56	0.01	NM_001000626	olfactory receptor 704 (predicted)
Olr714_predicted	1.75	0.00	NM_001000923	olfactory receptor 714 (predicted)
Olr718_predicted	1.77	0.01	NM_001000361	olfactory receptor 718 (predicted)
Olr757_predicted	1.71	0.01	NM_001000613	olfactory receptor 757 (predicted)
Olr85_predicted	2.42	0.00	NM_001000138	olfactory receptor 85 (predicted)
Olr851_predicted	2.16	0.01	NM_001000400	olfactory receptor 851 (predicted)
Olr852_predicted	1.57	0.03	NM_00100039	olfactory receptor 852 (predicted)

d			9	
Olr862_predicted	1.60	0.00	NM_001001071	olfactory receptor 862 (predicted)
Olr869_predicted	1.82	0.01	NM_001000413	olfactory receptor 869 (predicted)
Olr878_predicted	1.64	0.02	NM_001000497	olfactory receptor 878 (predicted)
Olr906_predicted	2.53	0.01	NM_001000706	olfactory receptor 906 (predicted)
Olr91_predicted	1.68	0.01	NM_001000139	olfactory receptor 91 (predicted)
Olr932_predicted	2.00	0.00	NM_001001386	olfactory receptor 932 (predicted)
Olr951_predicted	1.55	0.00	NM_001000073	olfactory receptor 951 (predicted)
Olr982_predicted	2.03	0.02	NM_001000702	olfactory receptor 982 (predicted)
Orc3l	1.99	0.04	NM_001025282	origin recognition complex, subunit 3-like (S. cerevisiae)
Osm_mapped	2.38	0.03	NM_001006961	oncostatin M (mapped)
P2rx1	2.81	0.00	NM_012997	purinergic receptor P2X, ligand-gated ion channel, 1
P2ry14	2.17	0.01	NM_133577	purinergic receptor P2Y, G-protein coupled, 14
P4ha2_predicted	1.50	0.00	XM_340798	procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha II polypeptide (predicted)
Padi2	1.84	0.00	NM_017226	peptidyl arginine deiminase, type II
Pard6b_predicted	2.28	0.04	XM_342589	par-6 (partitioning defective 6) homolog beta (C. elegans) (predicted)
Parp12_predicted	3.53	0.02	XM_342663	similar to 9930021O16 protein
Pdha1	1.61	0.02	NM_001004072	pyruvate dehydrogenase E1 alpha 1
Pdik11_predicted	2.17	0.03	XM_233567	PDLIM1 interacting kinase 1 like (predicted)
Pdx1	1.80	0.01	NM_022852	pancreatic and duodenal homeobox gene 1
Pecr	1.56	0.01	NM_133299	peroxisomal trans-2-enoyl-CoA reductase
Pet112l_predicted	1.74	0.01	XM_342270	similar to RIKEN cDNA 9430026F02
Pgam1	9.39	0.00	NM_053290	phosphoglycerate mutase 1
Pggt1b	1.57	0.04	NM_031082	protein geranylgeranyltransferase type I, beta subunit
Phax	1.93	0.00	NM_173133	phosphorylated adaptor for RNA export
Pigl	1.53	0.01	NM_138901	phosphatidylinositol glycan, class L
Pim3	1.88	0.00	NM_022602	serine/threonine-protein kinase pim-3

Plcl1	1.69	0.01	NM_053456	phospholipase C-like 1
Plekhf1	1.55	0.00	NM_001013148	pleckstrin homology domain containing, family F (with FYVE domain) member 1
Plp2_mapped	1.80	0.00	NM_207601	proteolipid protein 2 (mapped)
Plscr1	1.58	0.00	NM_057194	phospholipid scramblase 1
Pmfbp1	2.17	0.00	NM_134393	polyamine modulated factor 1 binding protein 1
Pmm1	1.67	0.00	NM_001008323	phosphomannomutase 1
Polb	1.69	0.01	NM_017141	polymerase (DNA directed), beta
Pop1_predicted	1.53	0.00	XM_235391	processing of precursor 1, ribonuclease P/MRP family, (<i>S. cerevisiae</i>) (predicted)
Ppargc1a	1.60	0.00	NM_031347	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha
Ppig	1.62	0.03	NM_031793	peptidylprolyl isomerase G
Ppm1h	1.71	0.05	NM_001013173	protein phosphatase 1H (PP2C domain containing)
Ppp3ca	2.42	0.01	NM_017041	protein phosphatase 3, catalytic subunit, alpha isoform
Prap1	1.60	0.04	NM_031669	proline-rich acidic protein 1
Prfl	2.65	0.02	NM_017330	perforin 1 (pore forming protein)
Prg1	1.77	0.00	NM_001001508	plasticity related gene 1
Prg3_predicted	2.09	0.00	XM_230054	proteoglycan 3 (predicted)
Prlhr	2.54	0.00	NM_139193	prolactin releasing hormone receptor
Prlpc2	1.90	0.05	NM_134385	prolactin-like protein C 2
Prnd	1.91	0.03	XM_230542	prion protein dublet
Prr3	1.63	0.00	NM_212544	proline-rich polypeptide 3
Prss1	2.68	0.04	NM_012635	pancreatic trypsin 1
Prss12	2.49	0.03	NM_053504	peptidase, serine, 12 (neurotrypsin, motopsin)
Psmb10	1.60	0.00	NM_001025637	proteasome (prosome, macropain) subunit, beta type 10
Ptgs2	2.51	0.01	NM_017232	prostaglandin-endoperoxide synthase 2
Ptn	1.73	0.00	NM_017066	pleiotrophin
Ptpmt1	1.73	0.00	XM_342460	protein tyrosine phosphatase, mitochondrial 1
Pvrl3_predicted	1.60	0.01	XM_213626	poliovirus receptor-related 3 (predicted)
Pygl	2.45	0.03	NM_022268	liver glycogen phosphorylase
Rab2	1.54	0.00	NM_031718	RAB2, member RAS oncogene family
Rabggb	1.67	0.01	NM_138708	RAB geranylgeranyl transferase, b subunit
Racgap1_predicted	1.73	0.01	XM_235650	Rac GTPase-activating protein 1 (predicted)
Rapgef1	1.66	0.00	XM_216018	Rap guanine nucleotide exchange factor (GEF) 1
Rasd1	1.66	0.00	XM_340809	RAS, dexamethasone-induced 1
Rbp3	2.36	0.00	XM_341400	retinol binding protein 3, interstitial

Rg9mtd3	1.52	0.00	NM_001013090	RNA (guanine-9-) methyltransferase domain containing 3
RGD1305160	1.59	0.02	NM_001025124	similar to N-terminal asparagine amidohydrolase
RGD1305254_predicted	2.43	0.03	XM_218855	similar to transmembrane protein 2 (predicted)
RGD1305326_predicted	1.66	0.00	XM_215707	similar to hypothetical protein FLJ20647 (predicted)
RGD1307235_predicted	1.55	0.00	XM_219401	similar to RIKEN cDNA 2310035C23
RGD1307418_predicted	1.93	0.04	XM_226401	similar to cDNA sequence BC026374 (predicted) (RGD1307418_predicted), mRNA [XM_226401]
RGD1307506_predicted	1.53	0.01	XM_215486	similar to RIKEN cDNA 2310016C16 (predicted)
RGD1307658_predicted	1.80	0.01	XM_232819	similar to 3000004N20Rik protein (predicted)
RGD1307904_predicted	1.58	0.00	XM_341920	similar to RIKEN cDNA 3230401I01 (predicted)
RGD1308877_predicted	1.87	0.00	XM_230548	similar to CGI-09 protein (predicted)
RGD1309007_predicted	3.43	0.01	XM_215595	similar to RIKEN cDNA 2610034E18 gene (predicted)
RGD1309578	1.79	0.00	NM_001014162	similar to Aa2-174
RGD1310712_predicted	1.86	0.00	XM_001064849	similar to EMSY protein (predicted)
RGD1311100_predicted	1.54	0.00	XM_221376	similar to RIKEN cDNA D630035O19 (predicted)
RGD1311310_predicted	1.56	0.00	XM_235517	similar to hypothetical protein supported by AL449243 (predicted)
RGD1311406_predicted	2.74	0.00	XM_346015	similar to RIKEN cDNA B430306N03 gene
RGD1311881	1.77	0.00	NM_001035251	similar to hypothetical protein FLJ90709
RGD1359349	2.58	0.01	NM_001007738	similar to hypothetical protein MGC34760
RGD1359460	1.55	0.00	NM_001006959	MMR_HSR1 domain containing protein
Rgs2	1.67	0.00	NM_053453	regulator of G-protein signaling 2
Rock1	1.70	0.04	NM_031098	Rho-associated coiled-coil forming kinase 1
Rplp2	1.62	0.00	NM_001030021	ribosomal protein, large P2
Rps14	1.61	0.00	NM_022672	ribosomal protein S14
Rps27a	2.16	0.00	NM_031113	ribosomal protein S27a
Rps6kc1	1.65	0.00	XM_213966	ribosomal protein S6 kinase, polypeptide 1

Rrh_predicted	1.53	0.00	XM_227718	retinal pigment epithelium derived rhodopsin homolog (predicted)
Rsrc1	1.52	0.00	NM_001014172	arginine/serine-rich coiled-coil 1
RT1-DOb	2.48	0.02	NM_001008846	RT1 class II, locus DOb
S100a3	1.81	0.01	NM_053681	S100 calcium binding protein A3
S100a6	1.57	0.03	NM_053485	S100 calcium binding protein A6 (calyculin)
Scara5_predicted	1.94	0.04	XM_224299	scavenger receptor class A, member 5 (putative) (predicted)
Scn2a1	1.84	0.01	NM_012647	sodium channel, voltage-gated, type 2, alpha 1 polypeptide
Scn3a	1.74	0.00	NM_013119	sodium channel, voltage-gated, type III, alpha polypeptide
Sct	1.75	0.04	NM_022670	secretin
Sdc1	1.85	0.00	NM_013026	syndecan 1
Sdcbp	1.55	0.00	NM_031986	syndecan binding protein
Sdpr	1.79	0.04	NM_001007712	serum deprivation response protein
Sec22l1	1.78	0.00	NM_001025686	SEC22 vesicle trafficking protein-like 1 (<i>S. cerevisiae</i>)
Serpina12	2.88	0.00	NM_138825	serine (or cysteine) peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 12
Serpina3n	2.61	0.00	NM_031531	serine (or cysteine) peptidase inhibitor, clade A, member 3N
Sfrs2	2.00	0.02	NM_001009720	similar to splicing factor, arginine/serine-rich 2
Sgk	1.50	0.03	NM_019232	serum/glucocorticoid regulated kinase
Shoc2	2.01	0.00	NM_001013155	soc-2 (suppressor of clear) homolog (<i>C. elegans</i>)
Sin3a_predicted	1.83	0.00	XM_343395	transcriptional regulator, SIN3A (yeast) (predicted)
Sipa1l1	1.63	0.00	NM_139330	signal-induced proliferation-associated 1 like 1
Slc16a10	1.83	0.00	NM_138831	solute carrier family 16 (monocarboxylic acid transporters), member 10
Slc21a1	1.88	0.05	NM_017111	solute carrier family 21, member 1
Slc22a14_predicted	1.51	0.01	XM_236684	solute carrier family 22 (organic cation transporter), member 14 (predicted)
Slc24a5_predicted	2.78	0.00	XM_230584	solute carrier family 24, member 5 (predicted)
Slc25a27	1.86	0.04	NM_053500	solute carrier family 25, member 27
Slc27a5	1.52	0.01	NM_024143	solute carrier family 27 (fatty acid transporter), member 5
Slc28a2	2.52	0.04	U67084	sodium/nucleoside cotransporter (rCNT2) mRNA, partial cds

Slc2a2	1.88	0.00	NM_012879	solute carrier family 2 (facilitated glucose transporter), member 2
Slc38a4	1.82	0.01	NM_130748	solute carrier family 38, member 4
Slc43a3_predicted	1.69	0.03	XM_230052	solute carrier family 43, member 3 (predicted)
Slc5a1	1.75	0.03	NM_013033	solute carrier family 5 (sodium/glucose cotransporter), member 1
Slc5a4b	2.91	0.01	XM_228086	similar to SGLT3-b
Slc5a7	1.68	0.00	NM_053521	solute carrier family 5 (choline transporter), member 7
Smarca5_predicted	1.79	0.00	XM_226380	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5 (predicted)
Smurf2_predicted	1.78	0.00	XM_221048	SMAD specific E3 ubiquitin protein ligase 2 (predicted)
Snai1	2.42	0.00	NM_053805	snail homolog 1 (Drosophila)
Sncg	1.53	0.05	NM_031688	synuclein, gamma
Snf1lk	2.16	0.00	NM_021693	SNF1-like kinase
Sox11	1.87	0.00	NM_053349	SRY-box containing gene 11
Sphk1	1.83	0.01	NM_133386	sphingosine kinase 1
Spry4_predicted	1.85	0.02	XM_225969	sprouty homolog 4 (Drosophila) (predicted)
Ssh3	1.62	0.04	NM_001012217	slingshot homolog 3 (Drosophila)
Stab2	2.08	0.03	AY007370	hyaluronan receptor for endocytosis HARE precursor
Sugt1	1.61	0.00	XM_214242	SGT1, suppressor of G2 allele of SKP1 (S. cerevisiae)
Sumo1	1.52	0.00	NM_001009672	SMT3 suppressor of mif two 3 homolog 1 (yeast)
Taar7d	2.07	0.01	NM_175591	trace-amine-associated receptor 7d
Taar7g	1.68	0.04	NM_175588	trace-amine-associated receptor 7g
Tacr1	1.77	0.05	NM_012667	tachykinin receptor 1
Tagln	1.78	0.03	AI104443	cDNA clone RHECD48 3' end
Tap2	1.89	0.00	NM_032056	transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)
Tas2r7	2.04	0.04	NM_023997	taste receptor, type 2, member 7
Tead3	1.50	0.01	XM_215356	TEA domain family member 3
Tec	1.65	0.00	XM_341208	tec protein tyrosine kinase
Tff3	1.88	0.03	NM_013042	trefoil factor 3
Thbd	1.99	0.02	NM_031771	thrombomodulin
Timp1	1.93	0.02	NM_053819	tissue inhibitor of metalloproteinase 1
Tle3	1.67	0.00	NM_053400	transducin-like enhancer of split 3, E(spl) homolog (Drosophila)
Tm7sf3	1.52	0.00	NM_00101197	transmembrane 7 superfamily member 3

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Tm9sf2	1.95	0.00	NM_001005554	transmembrane 9 superfamily member 2
Tmc1_predicted	2.66	0.02	XM_342033	transmembrane channel-like 1 (predicted)
Tmsb10	2.44	0.04	NM_021261	thymosin, beta 10
Tnfrsf1b	2.40	0.00	NM_130426	tumor necrosis factor receptor superfamily, member 1b
Trim34_predicted	1.80	0.02	XM_219045	tripartite motif protein 34 (predicted)
Trim39	1.53	0.03	NM_213562	tripartite motif protein 39
Ttl3_predicted	1.56	0.00	XM_342736	tubulin tyrosine ligase-like family, member 3 (predicted)
Ttn	2.57	0.00	U89530	titin protein homolog
Tyr_mapped	2.09	0.00	XM_238901	tyrosinase (albino coat color) (mapped)
U14522	2.65	0.01	U14522	clone NOS1 CA satellite
Ubb	1.84	0.04	NM_138895	polyubiquitin
Ube2d3	1.56	0.00	NM_031237	ubiquitin-conjugating enzyme E2D 3 (UBC4/5 homolog, yeast)
Usp36_predicted	2.11	0.00	XM_221143	ubiquitin specific protease 36 (predicted)
Usp42_predicted	1.56	0.01	XM_237865	ubiquitin specific protease 42 (predicted)
Vcam1	1.52	0.00	NM_012889	vascular cell adhesion molecule 1
Vcsa1	2.16	0.00	NM_012684	variable coding sequence A1
Verge	2.63	0.01	NM_001003403	vascular early response gene protein
Vpreb1_mapped	2.35	0.03	XM_221258	pre-B lymphocyte gene 1 (mapped)
Wasf2	1.62	0.00	NM_001013167	WAS protein family, member 2
Wdfy2_predicted	1.79	0.01	XM_224296	similar to WD repeat- and FYVE domain-containing protein 2; WD40 and FYVE domain containing 2
Wfdc3_predicted	1.99	0.00	XM_215938	WAP four-disulfide core domain 3 (predicted)
X76129	1.68	0.03	X76129	uPAR-3 gene
X80508	1.65	0.00	X80508	YAP65
XM_214528	1.50	0.00	XM_214528	similar to dim1
XM_215027	2.04	0.02	XM_215027	similar to tripartite motif protein 6
XM_238205	1.89	0.02	XM_238205	similar to paladin
XM_343003	1.60	0.00	XM_343003	similar to 9430065L19Rik protein
XM_343338	1.59	0.00	XM_343338	similar to nucleic acid binding protein
XM_344567	2.39	0.02	XM_344567	similar to heterogeneous nuclear ribonucleoprotein A0; hnRNA binding protein
XM_345338	1.67	0.01	XM_345338	similar to RIKEN cDNA 1200002K10 gene

Yipf4	1.52	0.00	NM_001009712	Yip1 domain family, member 4
Zcchc10	1.63	0.00	XM_346887	zinc finger, CCHC domain containing 10, transcript variant 2
Zcchc11_predicted	1.52	0.00	XM_233345	zinc finger, CCHC domain containing 11 (predicted)
Zcchc9	1.66	0.00	NM_001013156	zinc finger, CCHC domain containing 9
Zfp131	1.58	0.00	XM_227104	zinc finger protein 131
Zfp206_predicted	1.52	0.00	XM_220198	zinc finger protein 206 (predicted)
Zfp3611	1.64	0.00	NM_017172	zinc finger protein 36, C3H type-like 1
AA799778	0.53	0.00	AA799778	cDNA clone RHEAF23 3'
Aaas_predicted	0.53	0.00	XM_217063	achalasia, adrenocortical insufficiency, alacrimia (Allgrove, triple-A) (predicted)
Abca8a_predicted	0.54	0.02	XM_221100	ATP-binding cassette, sub-family A (ABC1), member 8a (predicted)
Accn1	0.57	0.00	NM_012892	amiloride-sensitive cation channel 1, neuronal (degenerin), transcript variant 1
Acss2_predicted	0.64	0.00	XM_230773	acyl-CoA synthetase short-chain family member 2 (predicted)
Adck4	0.61	0.00	NM_001012065	aarF domain containing kinase 4
Adck5	0.63	0.00	XM_343273	aarF domain containing kinase 5
Adcy1_predicted	0.60	0.01	XM_223616	adenylate cyclase 1 (predicted)
Adcy9_predicted	0.55	0.00	XM_220178	adenylate cyclase 9 (predicted)
Adrb3	0.62	0.01	NM_013108	adrenergic receptor, beta 3
Aff1_predicted	0.34	0.04	XM_223161	AF4/FMR2 family, member 1 (predicted)
AI044410	0.63	0.01	AI044410	cDNA clone UI-R-C0-is-g-03-0-UI 3'
Akt2	0.47	0.00	NM_017093	thymoma viral proto-oncogene 2
Alg2	0.63	0.04	XM_232987	asparagine-linked glycosylation 2 homolog (yeast, alpha-1,3-mannosyltransferase)
Amfr_predicted	0.61	0.01	XM_341644	autocrine motility factor receptor (predicted)
Anapc1_predicted	0.52	0.01	XM_230589	anaphase promoting complex subunit 1 (predicted)
Anapc7_predicted	0.65	0.00	XM_222171	anaphase promoting complex subunit 7 (predicted)
Ank	0.39	0.00	NM_053714	progressive ankylosis homolog (mouse)
Apbb3	0.59	0.00	NM_053957	amyloid beta (A4) precursor protein-binding, family B, member 3
Arcn1	0.63	0.00	NM_001007662	archain 1
Arfip2	0.66	0.00	NM_00100422	ADP-ribosylation factor interacting protein 2

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Arhgap21_predicted	0.65	0.00	XM_225628	Rho GTPase activating protein 21 (predicted)
Arhgef11	0.54	0.00	NM_023982	Rho guanine nucleotide exchange factor (GEF) 11
Arpc4_predicted	0.58	0.00	XM_238365	actin related protein 2/3 complex, subunit 4 (predicted)
Asna1	0.49	0.00	XM_001066031	arsA arsenite transporter, ATP-binding, homolog 1 (bacterial)
Ass	0.65	0.00	NM_013157	argininosuccinate synthetase
Astn1	0.64	0.01	XM_222785	astrotactin 1
Atp1a1	0.46	0.03	NM_012504	ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide
Atp6v0a2_predicted	0.61	0.04	NM_053775	ATPase, H ⁺ transporting, lysosomal V0 subunit a isoform 2 (predicted)
Atp6v0b_predicted	0.63	0.00	XM_216510	ATPase, H ⁺ transporting, V0 subunit B (predicted)
Atp6v1a1_predicted	0.62	0.03	XM_001060277	ATPase, H transporting, lysosomal V1 subunit A (predicted)
Axl	0.63	0.01	NM_001013147	AXL receptor tyrosine kinase, transcript variant 2
Aytl2_predicted	0.43	0.02	XM_341747	acyltransferase like 2 (predicted)
B3gnt6_predicted	0.64	0.01	XM_219693	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 6 (predicted)
B4galt2_predicted	0.64	0.00	XM_242992	UDP-Gal:betaGlcNAc beta 1,4-galactosyltransferase, polypeptide 2 (predicted)
Bap1_predicted	0.61	0.00	XM_224614	Bra1 associated protein 1 (predicted)
Bat2	0.45	0.02	NM_212462	HLA-B associated transcript 2
Bcan	0.61	0.02	NM_012916	brevican, transcript variant 2
Bcas1	0.26	0.01	BC103480	breast carcinoma amplified sequence 1 (cDNA clone IMAGE:7939378)
Bckdk	0.64	0.00	NM_019244	branched chain ketoacid dehydrogenase kinase
Bcl2l13_predicted	0.66	0.00	XM_232252	BCL2-like 13 (apoptosis facilitator) (predicted)
BE119829	0.34	0.02	BE119829	cDNA clone UI-R-CA0-ban-e-05-0-UI 3'
Begain	0.64	0.00	NM_024163	brain-enriched guanylate kinase-associated
Bmp4	0.55	0.00	NM_012827	bone morphogenetic protein 4
Bmsc-UbP	0.47	0.00	NM_001004247	bone marrow stromal cell-derived ubiquitin-like protein
Bmyc_mapped	0.63	0.00	NM_001013163	brain expressed myelocytomatosis oncogene (mapped)
Brf1_predicted	0.48	0.00	XM_216801	BRF1 homolog, subunit of RNA polymerase III transcription initiation factor IIIB (<i>S. cerevisiae</i>) (predicted)
Btbd9	0.55	0.00	NM_00101307	BTB (POZ) domain containing 9

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Bzrap1	0.52	0.01	XM_213427	RIM binding protein 1
C1ql1_predicted	0.59	0.00	XM_343971	complement component 1, q subcomponent-like 1 (predicted)
C9	0.66	0.01	NM_057146	complement component 9
Cables1_predicted	0.57	0.00	XM_226165	Cdk5 and Abl enzyme substrate 1 (predicted)
Cabp1	0.61	0.01	NM_133529	calcium binding protein 1, transcript variant 1
Cacna1g	0.66	0.02	NM_031601	calcium channel, voltage-dependent, T type, alpha 1G subunit
Cacng3	0.54	0.00	NM_080691	calcium channel, voltage-dependent, gamma subunit 3
Cacng7	0.49	0.00	NM_080695	calcium channel, voltage-dependent, gamma subunit 7
Calcoco1	0.57	0.00	NM_139190	calcium binding and coiled coil domain 1
Camk2g	0.58	0.00	NM_133605	calcium/calmodulin-dependent protein kinase II gamma
Camk2n2	0.47	0.00	NM_021678	calcium/calmodulin-dependent protein kinase II inhibitor 2
Camkk2	0.57	0.00	NM_031338	calcium/calmodulin-dependent protein kinase kinase 2, beta
Camta2_predicted	0.49	0.01	XM_213362	similar to Calmodulin binding transcription activator 2
Cap1	0.56	0.00	NM_022383	CAP, adenylate cyclase-associated protein 1 (yeast)
Cat	0.60	0.00	NM_012520	catalase
Cd14	0.47	0.00	NM_021744	CD14 antigen
Cdk9	0.60	0.00	NM_00100774 3	cyclin-dependent kinase 9 (CDC2-related kinase)
Ceacam10	0.35	0.04	NM_173339	CEA-related cell adhesion molecule 10
Cenpb_predicted	0.62	0.00	XM_342521	centromere autoantigen B (predicted)
Cfl1	0.65	0.00	NM_017147	cofilin 1, non-muscle
Chl1	0.50	0.05	XM_00107784 3	cell adhesion molecule with homology to L1CAM
Chrna5	0.58	0.00	NM_017078	cholinergic receptor, nicotinic, alpha polypeptide 5
Chst2_predicted	0.66	0.00	XM_345970	carbohydrate sulfotransferase 2 (predicted)
Cirbp	0.62	0.00	NM_031147	cold inducible RNA binding protein
Clca3_predicted	0.66	0.03	XM_217689	chloride channel calcium activated 3 (predicted)
Cldn11	0.52	0.00	NM_053457	claudin 11
Clstn1	0.44	0.01	XM_243040	calsyntenin 1
Clybl	0.65	0.00	XM_240311	citrate lyase beta like
Cnih2	0.63	0.00	NM_00102513	cornichon homolog 2 (Drosophila)

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Cnksr1	0.52	0.02	NM_001039011	connector enhancer of kinase suppressor of Ras 1
Cnp1	0.48	0.00	NM_012809	cyclic nucleotide phosphodiesterase 1
Col11a2_mapped	0.61	0.04	NM_212528	procollagen, type XI, alpha 2 (mapped)
Cpsf1_predicted	0.66	0.00	XM_345849	cleavage and polyadenylation specific factor 1, 160kDa (predicted)
Crat	0.42	0.01	NM_001004085	carnitine acetyltransferase
Crmp1	0.48	0.00	NM_012932	collapsin response mediator protein 1
Cry2	0.66	0.00	NM_133405	cryptochrome 2 (photolyase-like)
Csdc2	0.48	0.01	XM_345860	cold shock domain containing C2, RNA binding
Csh111	0.49	0.03	NM_033233	chorionic somatomammotropin hormone 1-like 1
Csnk1g2	0.55	0.00	NM_023102	casein kinase 1, gamma 2, (transcript variant 2
Ctnna2_predicted	0.60	0.00	XM_232077	catenin (cadherin associated protein), alpha 2 (predicted)
Ctps_predicted	0.65	0.00	XM_233467	cytidine 5'-triphosphate synthase (predicted)
Ctxn	0.55	0.00	XM_001065365	cortexin
Cugbp1	0.41	0.01	NM_001025421	CUG triplet repeat, RNA binding protein 1
Cull1_predicted	0.58	0.00	XM_342679	cullin 1 (predicted)
Dbccr1	0.63	0.00	NM_080482	deleted in bladder cancer chromosome region candidate 1 (human)
Dcamk13_predicted	0.65	0.00	XM_236661	doublecortin and CaM kinase-like 3 (predicted)
Ddb1	0.64	0.01	NM_171995	damage-specific DNA binding protein 1
Ddhd1	0.60	0.03	NM_001033066	DDHD domain containing 1
Ddn	0.48	0.00	NM_030993	dendrin
Ddx28_predicted	0.57	0.01	XM_344762	DEAD (Asp-Glu-Ala-Asp) box polypeptide 28 (predicted)
Depdc1b_predicted	0.54	0.04	XM_226798	DEP domain containing 1B (predicted)
Dhx8	0.57	0.01	XM_213460	DEAH (Asp-Glu-Ala-His) box polypeptide 8
Dlgap3	0.42	0.00	NM_173138	discs, large (Drosophila) homolog-associated protein 3
Dlgh3	0.45	0.00	NM_031639	discs, large homolog 3 (Drosophila)
Dmwd	0.35	0.00	XM_001075375	dystrophia myotonica-containing WD repeat motif
Dnajb11	0.63	0.00	NM_001015021	DnaJ (Hsp40) homolog, subfamily B, member 11

Dnajc14	0.62	0.00	NM_053690	DnaJ (Hsp40) homolog, subfamily C, member 14
Dnajc17_predicted	0.53	0.01	XM_230468	DnaJ (Hsp40) homolog, subfamily C, member 17 (predicted)
Dnalc4	0.33	0.03	NM_001009666	dynein, axonemal, light chain 4
Dpf2_predicted	0.54	0.00	XM_341998	D4, zinc and double PHD fingers family 2 (predicted) =
Dscam11_predicted	0.45	0.01	XM_236203	Down syndrome cell adhesion molecule-like 1 (predicted)
Dullard	0.65	0.00	XM_001080620	Dullard homolog (<i>Xenopus laevis</i>)
Dusp15_predicted	0.32	0.03	XM_342545	dual specificity phosphatase-like 15 (predicted)
Dusp8_predicted	0.60	0.02	XM_341963	dual specificity phosphatase 8 (predicted)
Edg1	0.62	0.01	NM_017301	endothelial differentiation sphingolipid G-protein-coupled receptor 1
Eef1a2	0.58	0.00	NM_012660	eukaryotic translation elongation factor 1 alpha 2
Efhd2	0.57	0.00	NM_001031648	EF hand domain containing 2
Efna3	0.62	0.00	XM_001072657	ephrin A3, transcript variant 2
Ehbp1_predicted	0.62	0.00	XM_223664	EH domain binding protein 1 (predicted)
Ei24	0.60	0.00	NM_001025660	etoposide induced 2.4
Eif2ak3	0.65	0.01	NM_031599	eukaryotic translation initiation factor 2 alpha kinase 3
Eif2b1	0.65	0.00	NM_172029	eukaryotic translation initiation factor 2B, subunit 1 alpha
Eif4g3_predicted	0.43	0.02	XM_216563	eukaryotic translation initiation factor 4 gamma, 3 (predicted)
Elmo2	0.50	0.00	XM_342579	engulfment and cell motility 2, ced-12 homolog (<i>C. elegans</i>)
Entpd4_predicted	0.63	0.00	XM_341346	ectonucleoside triphosphate diphosphohydrolase 4 (predicted)
Epb4.9_predicted	0.32	0.04	XM_341352	erythrocyte protein band 4.9 (predicted)
Epdr2	0.65	0.00	NM_001007625	ependymin related protein 2 (zebrafish)
Epha8	0.64	0.03	XM_342952	Eph receptor A8
Ephb3_predicted	0.60	0.02	XM_221311	Eph receptor B3 (predicted)
Eral1	0.50	0.00	NM_00101322	Era (G-protein)-like 1 (<i>E. coli</i>)

			9	
Ercc6_predicted	0.57	0.01	XM_224627	excision repair cross-complementing rodent repair deficiency, complementation group 6 (predicted)
Exosc6_predicted	0.52	0.01	XM_226471	exosome component 6 (predicted)
Faim2	0.63	0.02	NM_144756	Fas apoptotic inhibitory molecule 2
Fbxl4_predicted	0.51	0.00	XM_232833	F-box and leucine-rich repeat protein 4 (predicted)
Fech_predicted	0.60	0.00	XM_341622	ferrochelatase (predicted)
Fgfr1	0.62	0.00	NM_024146	Fibroblast growth factor receptor 1
Fgfr3	0.46	0.00	NM_053429	fibroblast growth factor receptor 3
Fibp	0.66	0.00	NM_172334	fibroblast growth factor (acidic) intracellular binding protein
Fjx1_predicted	0.54	0.00	XM_345408	four jointed box 1 (Drosophila) (predicted)
Fkbp8	0.45	0.00	NM_001037180	FK506 binding protein 8
Fkbp9	0.65	0.03	NM_001007646	FK506 binding protein 9
Fln29	0.57	0.00	XM_341086	FLN29 gene product
Fmn2_predicted	0.60	0.02	XM_001058601	formin 2 (predicted)
Folr4_predicted	0.56	0.02	XM_345898	similar to folate receptor 3
Foxe1	0.27	0.00	NM_138909	forkhead box E1 (thyroid transcription factor 2)
Fstl4_predicted	0.56	0.01	XM_220408	follicle-stimulating-like 4 (predicted)
Ftsj2_predicted	0.59	0.02	XM_221949	FtsJ homolog 2 (E. coli) (predicted)
Fxr2h_predicted	0.65	0.00	XM_213335	fragile X mental retardation gene 2, autosomal homolog (predicted)
Fzd2	0.56	0.01	NM_172035	frizzled homolog 2 (Drosophila)
Fzr1_predicted	0.63	0.00	XM_243390	fizzy/cell division cycle 20 related 1 (Drosophila) (predicted)
Gabra5	0.61	0.01	NM_017295	gamma-aminobutyric acid (GABA-A) receptor, subunit alpha 5
Gbl	0.55	0.04	NM_022404	G protein beta subunit-like
Gcn5l2_predicted	0.64	0.00	XM_239340	GCN5 general control of amino acid synthesis-like 2 (yeast) (predicted)
Gdi1	0.39	0.00	NM_017088	guanosine diphosphate dissociation inhibitor 1
Ghrl	0.53	0.02	NM_021669	ghrelin precursor
Gja12_predicted	0.57	0.00	XM_573100	gap junction protein, alpha 12, 47kDa (predicted) (Gja12_predicted), mRNA
Gjb1	0.45	0.02	NM_017251	gap junction membrane channel protein beta 1
Gje1	0.65	0.02	XM_221997	gap junction membrane channel protein epsilon 1
Gna12	0.49	0.00	NM_031034	guanine nucleotide binding protein, alpha 12
Gnaq	0.64	0.01	NM_031036	guanine nucleotide binding protein, alpha q

				polypeptide
Gnb2	0.63	0.00	NM_031037	guanine nucleotide binding protein, beta polypeptide 2
Gng7	0.50	0.00	NM_024138	guanine nucleotide binding protein, gamma 7
Gnl1	0.64	0.00	NM_212500	guanine nucleotide binding protein-like 1
Gnl2	0.56	0.00	NM_001025736	guanine nucleotide binding protein-like 2 (nucleolar)
Gnptg	0.56	0.01	XM_213240	N-acetylglucosamine-1-phosphotransferase, gamma subunit
Gorasp2	0.56	0.01	NM_001007720	golgi reassembly stacking protein 2
Gp5	0.34	0.04	NM_012795	glycoprotein 5, platelet
Gpr123_predicted	0.65	0.00	XM_219468	G protein-coupled receptor 123 (predicted)
Gpr56	0.63	0.03	NM_152242	G protein-coupled receptor 56
Gpsn2	0.55	0.00	NM_138549	glycoprotein, synaptic 2
Grifin	0.51	0.05	NM_057187	galectin-related inter-fiber protein
Grik3	0.41	0.03	NM_181373	glutamate receptor, ionotropic, kainate 3
Grik5	0.59	0.00	NM_017262	glutamate receptor, ionotropic, kainate 5
Grm5	0.57	0.00	NM_017012	glutamate receptor, metabotropic 5
Grwd1	0.64	0.00	NM_001012067	glutamate-rich WD repeat containing 1
Gstm1	0.63	0.00	NM_017014	glutathione S-transferase, mu 1
Gtf2h4	0.65	0.00	NM_212501	general transcription factor II H, polypeptide 4
Gtf3c1	0.62	0.00	NM_133541	general transcription factor III C 1
Gylt1b	0.59	0.01	NM_199107	glycosyltransferase-like 1B
Hapln4_predicted	0.60	0.01	XM_341416	hyaluronan and proteoglycan link protein 4 (predicted)
Hcn2	0.37	0.00	NM_053684	hyperpolarization activated cyclic nucleotide-gated potassium channel 2
Hes5	0.50	0.00	NM_024383	hairy and enhancer of split 5 (Drosophila)
Hes7_predicted	0.42	0.02	XM_220597	hairy and enhancer of split 7 (Drosophila) (predicted)
Hibch	0.65	0.00	NM_001013112	3-hydroxyisobutyryl-Coenzyme A hydrolase
Hnrpl	0.56	0.00	XM_001068191	heterogeneous nuclear ribonucleoprotein L
Hpcal4	0.64	0.01	NM_017357	hippocalcin-like 4
Hs3st1	0.64	0.01	NM_053391	heparan sulfate (glucosamine) 3-O-sulfotransferase 1
Hs3st5_predicted	0.59	0.01	XM_228219	heparan sulfate (glucosamine) 3-O-sulfotransferase 5 (predicted)
Hspb6	0.61	0.04	NM_138887	heat shock protein, alpha-crystallin-related, B6
Iars2_predicted	0.64	0.00	XM_001065536	isoleucine-tRNA synthetase 2, mitochondrial (predicted)

Igsf4b_predicted	0.59	0.03	XM_341157	immunoglobulin superfamily, member 4B (predicted)
Il17r_predicted	0.44	0.01	XM_232247	interleukin 17 receptor (predicted)
Il1rl1	0.37	0.04	NM_001013432	interleukin 1 receptor-like 1 ligand
Il3ra	0.62	0.01	NM_139260	interleukin 3 receptor, alpha chain (Il3ra)
Il6st	0.58	0.01	NM_001008725	interleukin 6 signal transducer
Inhbb	0.54	0.03	XM_344130	inhibin beta-B
Inpp1	0.53	0.00	NM_022944	inositol polyphosphate phosphatase-like 1
Insig1	0.64	0.02	NM_022392	insulin induced gene 1
Irx11_predicted	0.53	0.01	XM_214497	iroquois homeobox protein-like 1 (predicted)
Itm2c	0.57	0.03	NM_001009674	integral membrane protein 2C
Itsn1	0.61	0.00	XM_573259	intersectin 1
Jph3_predicted	0.61	0.00	XM_226549	junctionophilin 3 (predicted)
Kcna5	0.65	0.02	NM_012972	potassium voltage-gated channel, shaker-related subfamily, member 5
Kcnip2	0.58	0.02	NM_020094	Kv channel-interacting protein 2, transcript variant a
Kcnk3	0.54	0.01	NM_033376	potassium channel, subfamily K, member 3
Kcnk4	0.65	0.01	NM_053804	potassium channel, subfamily K, member 4
Kcnn1	0.64	0.04	NM_019313	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 1
Kif5c_predicted	0.51	0.00	XM_241981	kinesin family member 5C (predicted)
Kifc3	0.48	0.00	XM_240978	kinesin family member C3
Kirrel3_predicted	0.60	0.02	XM_235986	kin of IRRE like 3 (Drosophila) (predicted)
Klc2_predicted	0.53	0.00	XM_219696	similar to Klc2 protein
Klhdc3	0.54	0.00	NM_001012203	kelch domain containing 3
Klhl22_predicted	0.44	0.01	XM_221268	kelch-like 22 (Drosophila) (predicted)
Klhl5	0.62	0.00	XM_223418	kelch-like 5 (Drosophila)
Klk6	0.48	0.00	NM_019175	kallikrein 6
Kynu	0.64	0.02	NM_053902	kynureninase (L-kynurenine hydrolase)
Large_predicted	0.49	0.00	XM_341645	like-glycosyltransferase (predicted)
Lars	0.64	0.00	NM_001009637	leucyl-tRNA synthetase
Lass2	0.55	0.00	NM_001033700	longevity assurance homolog 2 (S. cerevisiae)
Lcmt2	0.62	0.01	NM_001011956	leucine carboxyl methyltransferase 2
Lhfp12_predicted	0.56	0.03	XM_226668	lipoma HMGIC fusion partner-like 2

d				(predicted)
Lman2l_predicted	0.65	0.00	XM_217385	lectin, mannose-binding 2-like (predicted)
LOC246295	0.58	0.01	XM_575968	glycine-, glutamate-, thienylcyclohexylpiperidine-binding protein
LOC364637	0.48	0.02	NM_001014239	similar to F-box only protein 25
LOC365842	0.60	0.00	NM_001014254	similar to CDC-like kinase 2
LOC501281	0.62	0.04	XM_576696	similar to RAN binding protein 3 isoform RANBP3-b
LOC501619	0.65	0.01	NM_001024367	similar to 40S ribosomal protein S29
LOC502382	0.61	0.05	XM_001077835	similar to forkhead box B1
LOC686098	0.49	0.00	XM_001066536	similar to sorbin and SH3 domain containing 1 isoform 3
LOC689788	0.59	0.03	XM_001072014	similar to PR domain containing 5
LOC690297	0.65	0.00	XM_001074000	similar to PWP2 periodic tryptophan protein homolog
Lrfn5_predicted	0.63	0.00	XM_234219	leucine rich repeat and fibronectin type III domain containing 5 (predicted)
Lrpprc	0.39	0.04	NM_001008519	leucine-rich PPR-motif containing
Lrrc8d	0.62	0.03	NM_001008338	leucine rich repeat containing 8 family, member D
Lyn	0.59	0.03	NM_030857	Yamaguchi sarcoma viral (v-yes-1) oncogene homolog
Lynx1_predicted	0.63	0.00	XM_216965	Ly6/neurotoxin 1 (predicted)
M6pr	0.61	0.00	BU759970	cDNA clone IMAGE:7362542 3'
Madd	0.52	0.00	NM_053585	MAP-kinase activating death domain (Madd),
Mag	0.65	0.04	NM_017190	myelin-associated glycoprotein
Mal	0.48	0.00	NM_012798	myelin and lymphocyte protein, T-cell differentiation protein
Man1c1_predicted	0.46	0.01	XM_342943	mannosidase, alpha, class 1C, member 1 (predicted)
Maob	0.57	0.00	NM_013198	monoamine oxidase B
Map1b	0.36	0.00	XM_215469	microtubule-associated protein 1b
Map3k3_predicted	0.54	0.02	XM_221034	mitogen activated protein kinase kinase kinase 3 (predicted)
Mapk3	0.29	0.00	NM_017347	mitogen activated protein kinase 3
Mapk8ip2	0.60	0.03	XM_235565	mitogen-activated protein kinase 8 interacting protein 2
Mapkapk3	0.64	0.02	NM_00101212	mitogen-activated protein kinase-activated

			7	protein kinase 3
Mapre3	0.49	0.00	NM_001007656	microtubule-associated protein, RP/EB family, member 3
March8_predicted	0.43	0.00	XM_232293	membrane-associated ring finger (C3HC4) 8 (predicted)
Max	0.63	0.01	NM_022210	Max protein
Mbp	0.44	0.00	NM_001025291	myelin basic protein, transcript variant 1,
Mfn2	0.46	0.04	NM_130894	mitofusin 2
Mgat3	0.58	0.00	NM_019239	mannoside acetyl glucosaminyltransferase 3
Mgat5b_predicted	0.52	0.03	XM_221136	mannoside acetylglucosaminyltransferase 5, isoenzyme B (predicted)
MGC72997	0.41	0.04	NM_001009537	similar to 6030490I01Rik
Mlh1	0.47	0.05	NM_031053	mutL homolog 1 (E. coli)
Mmp17_predicted	0.48	0.00	XM_239639	matrix metalloproteinase 17 (predicted)
Mocs3_predicted	0.55	0.00	XM_230874	molybdenum cofactor synthesis 3 (predicted)
Mpped1_predicted	0.54	0.00	XM_343301	metallophosphoesterase domain containing 1 (predicted)
Mrpl3_predicted	0.66	0.01	XM_217239	mitochondrial ribosomal protein L3 (predicted)
Mrpl38	0.63	0.00	NM_001009369	mitochondrial ribosomal protein L38
Mtap6	0.62	0.01	NM_017204	microtubule-associated protein 6
Mtmr7_predicted	0.65	0.00	XM_240417	myotubularin related protein 7 (predicted)
Myo5b	0.63	0.01	NM_017083	myosin 5B
Mypn_predicted	0.35	0.00	XM_228149	myopalladin (predicted)
Myst2	0.59	0.02	NM_181081	MYST histone acetyltransferase 2
Ncdn	0.46	0.00	NM_053543	neurochondrin
Nei1	0.51	0.03	NM_001025754	nei endonuclease VIII-like 1 (E. coli)
Nek6	0.54	0.00	NM_182953	NIMA (never in mitosis gene a)-related expressed kinase 6
Neu3	0.60	0.03	NM_054010	neuraminidase 3
Nfkb2	0.63	0.00	NM_001008349	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2, p49/p100
Nisch	0.46	0.02	XM_240330	nischarin
Nkx6-2_predicted	0.53	0.00	XM_219447	NK6 transcription factor related, locus 2 (Drosophila) (predicted) (Nkx6-2_predicted), mRNA [XM_219447]
Nmnat1	0.64	0.01	NM_00103755	nicotinamide nucleotide adenylyltransferase 1

			6	
Npepl1_predicted	0.40	0.01	XM_230892	aminopeptidase-like 1 (predicted)
Nr1d1	0.65	0.01	NM_145775	nuclear receptor subfamily 1, group D, member 1
Nr2c2	0.50	0.04	NM_017323	nuclear receptor subfamily 2, group C, member 2
Nr2f1	0.54	0.04	NM_031130	nuclear receptor subfamily 2, group F, member 1
Nrgn	0.57	0.00	NM_024140	neurogranin
Nup62	0.57	0.01	NM_023098	nucleoporin 62
Ogdhl_predicted	0.63	0.01	XM_214261	oxoglutarate dehydrogenase-like (predicted)
Olr1071_predicted	0.35	0.05	NM_001000063	olfactory receptor 1071 (predicted)
Olr1093_predicted	0.49	0.02	NM_001001388	olfactory receptor 1093 (predicted)
Olr112_predicted	0.53	0.04	NM_001000150	olfactory receptor 112 (predicted)
Olr1485_predicted	0.40	0.03	NM_001000028	olfactory receptor 1485 (predicted)
Olr471_predicted	0.55	0.03	NM_001001125	olfactory receptor 471 (predicted)
Olr821_predicted	0.55	0.00	NM_001000842	olfactory receptor 821 (predicted)
Omg	0.65	0.00	NM_001005898	oligodendrocyte-myelin glycoprotein
Opcml	0.63	0.00	NM_053848	opioid binding protein/cell adhesion molecule-like
Pabpc4	0.60	0.00	XM_216517	similar to poly(A)-binding protein, cytoplasmic 4-like
Pak3	0.60	0.00	NM_019210	p21 (CDKN1A)-activated kinase 3
Palm	0.43	0.00	NM_130829	paralemmin
Parg	0.37	0.01	NM_031339	poly (ADP-ribose) glycohydrolase
Pcdh17_predicted	0.49	0.00	XM_224389	protocadherin 17 (predicted)
Pcdha4	0.58	0.03	NM_053933	protocadherin alpha 4
Pcdhga11	0.58	0.02	NM_001037153	protocadherin gamma subfamily A, 11
Pcsk1n	0.49	0.00	NM_019279	proprotein convertase subtilisin/kexin type 1 inhibitor
Pfn1	0.64	0.00	NM_022511	profilin 1
Phyhipl	0.61	0.01	NM_001012076	phytanoyl-CoA hydroxylase interacting protein-like
Pias4	0.59	0.00	XM_343155	protein inhibitor of activated STAT, 4

Picalm	0.54	0.05	NM_053554	phosphatidylinositol binding clathrin assembly protein
Pigo_predicted	0.64	0.00	XM_233141	phosphatidylinositol glycan, class O (predicted)
Pigw	0.59	0.04	NM_194461	phosphatidylinositol glycan, class W
Pik3ca	0.64	0.01	XM_001059350	phosphatidylinositol 3-kinase, catalytic, alpha polypeptide, transcript variant 2
Pld2	0.52	0.05	NM_033299	phospholipase D2
Plekhb2_predicted	0.45	0.00	XM_217372	pleckstrin homology domain containing, family B (evectins) member 2 (predicted)
Pltp_predicted	0.66	0.01	XM_215939	phospholipid transfer protein (predicted)
Polr3c	0.62	0.03	NM_001012081	polymerase (RNA) III (DNA directed) polypeptide C
Ppfia3	0.46	0.00	XM_341856	protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), alpha 3
Ppp1r13b_predicted	0.62	0.01	XM_234555	protein phosphatase 1, regulatory (inhibitor) subunit 13B (predicted)
Ppp1r14a	0.61	0.00	NM_130403	protein phosphatase 1, regulatory (inhibitor) subunit 14A
Ppp1r1b	0.56	0.00	NM_138521	protein phosphatase 1, regulatory (inhibitor) subunit 1B
Ppp2r4_predicted	0.60	0.01	XM_342405	protein phosphatase 2A, regulatory subunit B (PR 53) (predicted)
Ppp3cb	0.64	0.00	NM_017042	protein phosphatase 3, catalytic subunit, beta isoform
Ppp5c	0.66	0.02	NM_031729	protein phosphatase 5, catalytic subunit
Prdm4	0.63	0.00	NM_133312	PR domain containing 4
Prkag2	0.56	0.00	NM_184051	protein kinase, AMP-activated, gamma 2 non-catalytic subunit
Prkcc	0.49	0.01	NM_012628	protein kinase C, gamma
PRKCQ	0.49	0.01	XM_341553	protein kinase C, theta, transcript variant 2
Prop1	0.38	0.05	NM_153627	paired like homeodomain factor 1
Prpf8	0.49	0.04	XM_213385	pre-mRNA processing factor 8
Psap	0.64	0.01	NM_013013	prosaposin
Psd	0.46	0.00	XM_001066749	pleckstrin and Sec7 domain containing, transcript variant 2
Ptk9	0.64	0.00	NM_001008521	protein tyrosine kinase 9
Ptpn5	0.65	0.00	NM_019253	protein tyrosine phosphatase, non-receptor type 5
Ptprt_predicted	0.52	0.01	XM_342568	protein tyrosine phosphatase, receptor type, T (predicted)
Qars	0.53	0.00	NM_001007624	glutaminyl-tRNA synthetase
R3hdm1	0.53	0.00	XM_573442	R3H domain containing 1

Rab11b	0.54	0.00	NM_032617	RAB11B, member RAS oncogene family
Rab15	0.38	0.03	M83679	(clone LRB9) RAB15
Rab3a	0.58	0.00	NM_013018	RAB3A, member RAS oncogene family
Rab40c	0.44	0.03	NM_182675	Rab40c, member RAS oncogene family
Rac1	0.64	0.01	NM_134366	ras-related C3 botulinum toxin substrate 1
Rangap1	0.59	0.02	NM_00101219 9	RAN GTPase activating protein 1
Rap1ga1	0.36	0.04	XM_233609	RAP1, GTPase activating protein 1
Rarb	0.55	0.03	XM_223843	retinoic acid receptor, beta
Rasa3	0.27	0.03	XM_225020	RAS p21 protein activator 3
Rasl11b	0.56	0.00	NM_00100283 0	RAS-like family 11 member B
Rassf2	0.57	0.02	NM_00103709 6	Ras association (RalGDS/AF-6) domain family 2
Rbbp4_predicted	0.55	0.00	XM_00106108 7	retinoblastoma binding protein 4 (predicted)
Recql	0.64	0.00	NM_00101209 8	RecQ protein-like
Rev3l	0.65	0.02	XM_228273	REV3-like, catalytic subunit of DNA polymerase zeta RAD54 like (<i>S. cerevisiae</i>)
RGD1304598_predicted	0.64	0.02	XM_220745	similar to abhydrolase domain containing 1; alpha/beta hydrolase-1; lung alpha/beta hydrolase 1 (predicted)
RGD1304816_predicted	0.57	0.00	XM_342846	similar to mKIAA0674 protein (predicted)
RGD1304842_predicted	0.50	0.00	XM_232266	similar to FLJ22405 protein (predicted)
RGD1305090_predicted	0.53	0.04	XM_342916	similar to CD2-associated protein (predicted)
RGD1305733	0.64	0.00	NM_00101411 4	similar to RIKEN cDNA 2900011O08
RGD1306214_predicted	0.47	0.01	XM_229993	similar to TGF-beta induced apoptosis protein 2 (predicted)
RGD1306755_predicted	0.58	0.00	XM_341301	similar to 5730420B22Rik protein (predicted)
RGD1306841	0.60	0.00	NM_00103389 2	similar to RIKEN cDNA 2410006F12
RGD1306924_predicted	0.46	0.01	XM_00107653 7	similar to Gamma-tubulin complex component 4 (GCP-4) (predicted)
RGD1306962_predicted	0.66	0.01	XM_220112	similar to dJ55C23.6 gene product (predicted)
RGD1307225_predicted	0.36	0.04	XM_226983	similar to MEGF6 (predicted)
RGD1307801	0.34	0.02	NM_00101403 1	similar to RIKEN cDNA 1300018I05
RGD1307929	0.35	0.00	XM_220636	similar to CG14967-PA

RGD1308350	0.51	0.01	XM_001072750	similar to hypothetical protein MGC13251
RGD1308915	0.66	0.02	NM_001014226	similar to RIKEN cDNA 1200013P24
RGD1309054_predicted	0.66	0.04	XM_214707	similar to FKSG26 protein (predicted)
RGD1309401	0.65	0.03	NM_001014163	similar to BM88 antigen
RGD1309744_predicted	0.60	0.00	XM_230574	similar to hypothetical protein FLJ20507 (predicted), transcript variant 2
RGD1309823_predicted	0.63	0.00	XM_001067111	similar to hypothetical protein FLJ21156 (predicted)
RGD1310147_predicted	0.65	0.00	XM_340793	similar to TBC1 domain family, member 8; BUB2-like protein 1; vascular Rab-GAP/TBC-containing (predicted)
RGD1310800_predicted	0.64	0.02	XM_342577	similar to RIKEN cDNA F730014I05 (predicted)
RGD1310827	0.44	0.03	NM_001034010	similar to RIKEN cDNA 1200009O22; EST AI316813
RGD1311375_predicted	0.64	0.00	XM_228301	similar to RIKEN cDNA A530089I17 (predicted)
RGD1311552_predicted	0.57	0.00	XM_230503	similar to KIAA0377-like protein (predicted)
RGD1311793_predicted	0.40	0.04	XM_224908	similar to DNA segment, Chr 8, ERATO Doi 82, expressed (predicted)
RGD1311937_predicted	0.64	0.02	XM_233470	similar to hypothetical protein MGC17299 (predicted)
RGD1562258_predicted	0.56	0.01	XM_575576	similar to PAP-1 binding protein (predicted)
RGD1563141_predicted	0.56	0.00	XM_001076724	similar to SUN2 (predicted)
RGD1565985_predicted	0.62	0.05	XM_576070	similar to mKIAA0227 protein (predicted)
Rhbd11	0.60	0.00	XM_340773	rhomboid, veinlet-like 1 (Drosophila)
Rhog	0.53	0.00	NM_001037195	Ras homolog gene family, member G
RICS_predicted	0.63	0.00	XM_236020	RhoGAP involved in beta-catenin-N-cadherin and NMDA receptor signaling (predicted)
Rin1	0.54	0.01	NM_139038	Ras and Rab interactor 1
Ring1	0.54	0.00	NM_212549	ring finger protein 1
Rln3	0.41	0.04	NM_170667	relaxin 3
Rnf26_predicted	0.53	0.04	XM_236181	ring finger protein 26 (predicted)
Rps6ka4_predicted	0.52	0.01	XM_342004	ribosomal protein S6 kinase, polypeptide 4 (predicted)
Rpsud1_predict	0.62	0.01	XM_213253	RNA pseudouridylylate synthase domain

ed				containing 1 (predicted)
Rtn4r12	0.38	0.02	NM_181380	reticulon 4 receptor-like 2
Rufy1	0.62	0.00	XM_340794	RUN and FYVE domain containing 1
Rxrb	0.63	0.01	NM_206849	retinoid X receptor beta
Scamp3	0.55	0.00	XM_342279	secretory carrier membrane protein 3
Scd2	0.58	0.00	NM_031841	stearoyl-Coenzyme A desaturase 2
Scn1b	0.55	0.03	NM_017288	sodium channel, voltage-gated, type I, beta
Scyl1	0.51	0.01	NM_00101193 8	SCY1-like 1 (<i>S. cerevisiae</i>)
Sdccag10	0.65	0.00	NM_00101319 9	serologically defined colon cancer antigen 10
Sec31l1	0.55	0.00	NM_033021	SEC31-like 1 (<i>S. cerevisiae</i>)
Sec61a1	0.57	0.01	NM_199256	Sec61 alpha 1 subunit (<i>S. cerevisiae</i>)
Sema6a_predicted	0.65	0.01	XM_341612	sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A (predicted)
Sema7a_predicted	0.56	0.00	XM_243863	sema domain, immunoglobulin domain (Ig), and GPI membrane anchor, (semaphorin) 7A (predicted)
Sephs2	0.60	0.01	XM_219347	selenophosphate synthetase 2
Sept8_predicted	0.50	0.00	XM_220423	septin 8 (predicted)
Sh2bpsm1	0.66	0.01	NM_134456	SH2-B PH domain containing signaling mediator 1
Sh3bp1	0.58	0.00	XM_235500	reg I binding protein I
Sh3gl1	0.61	0.01	NM_031239	SH3-domain GRB2-like 1
Sh3gl2	0.54	0.00	XM_342857	SH3-domain GRB2-like 2
Sirt2	0.57	0.01	NM_00100836 8	sirtuin (silent mating type information regulation 2 homolog) 2 (<i>S. cerevisiae</i>)
Slc17a7	0.49	0.00	NM_053859	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 7
Slc22a3	0.38	0.04	NM_019230	solute carrier family 22, member 3
Slc24a2	0.56	0.01	NM_031743	solute carrier family 24 (sodium/potassium/calcium exchanger), member 2
Slc25a1	0.59	0.00	NM_017307	solute carrier family 25, member 1, nuclear gene encoding mitochondrial protein, mRNA
Slc25a12_predicted	0.44	0.04	XM_342445	solute carrier family 25 (mitochondrial carrier, Aralar), member 12 (predicted)
Slc2a8	0.61	0.01	NM_053494	solute carrier family 2, (facilitated glucose transporter) member 8
Slc38a1	0.61	0.00	NM_138832	solute carrier family 38, member 1
Slc4a2	0.41	0.03	NM_017048	solute carrier family 4, member 2
Slc7a5	0.52	0.00	NM_017353	solute carrier family 7 (cationic amino acid transporter, γ^+ system), member 5
Slc9a3	0.65	0.03	NM_012654	solute carrier family 9 (sodium/hydrogen

				exchanger), member 3
Slc9a3r1	0.60	0.01	NM_021594	solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulator 1
Smardc1_predicted	0.40	0.04	XM_343332	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1 (predicted)
Smug1	0.60	0.02	NM_177934	single-strand selective monofunctional uracil DNA glycosylase
Snape2	0.43	0.00	NM_001013121	small nuclear RNA activating complex, polypeptide 2
Snip	0.60	0.01	NM_019378	SNAP25-interacting protein
Snta1	0.54	0.00	XM_342548	syntrophin, acidic 1
Snx25	0.48	0.01	XM_224863	sorting nexin 25
Snx27	0.50	0.00	NM_152847	sorting nexin family member 27
Son	0.53	0.02	XM_221656	Son cell proliferation protein
Sox21_predicted	0.60	0.00	XM_224521	SRY-box containing gene 21 (predicted)
Sox5	0.63	0.01	XM_342784	SRY-box containing gene 5
Spag9_predicted	0.55	0.01	XM_340879	sperm associated antigen 9 (predicted)
Spata6	0.64	0.04	NM_134392	spermatogenesis associated 6
Spnb4	0.55	0.00	XM_218364	spectrin beta 4
Spock1	0.64	0.02	XM_225160	sparc/osteonectin, cwcv and kazal-like domains proteoglycan 1
Spon1	0.53	0.00	NM_172067	spondin 1
Sqstm1	0.58	0.04	NM_181550	sequestosome 1, transcript variant 2
Srebf2_predicted	0.43	0.05	NM_001033694	sterol regulatory element binding factor 2 (predicted)
Stim2_predicted	0.54	0.02	XM_223454	stromal interaction molecule 2 (predicted)
Stip1	0.57	0.00	NM_138911	stress-induced phosphoprotein 1
Stk25	0.64	0.00	NM_184049	serine/threonine kinase 25 (STE20 homolog, yeast)
Stx5a	0.56	0.04	NM_031704	syntaxin 5a
Sulf2	0.55	0.03	XM_230861	sulfatase 2
Supt6h	0.57	0.01	XM_239258	suppressor of Ty 6 homolog (S. cerevisiae)
Syp	0.52	0.00	NM_012664	synaptophysin
Syt3	0.49	0.00	NM_019122	synaptotagmin III
Tbx2_predicted	0.46	0.03	XM_220810	T-box 2 (predicted)
Tbx4_predicted	0.60	0.05	XM_220811	T-box 4 (predicted)
TC537677	0.66	0.00	TC537677	Chimerin (Chimaerin) 2, partial (33%)
Tcf20_mapped	0.35	0.04	XM_345861	transcription factor 20 (mapped)
Tcfef	0.59	0.00	NM_001025707	transcription factor EB

Tdh_predicted	0.29	0.02	XM_214217	L-threonine dehydrogenase (predicted)
Terf2_predicted	0.64	0.00	XM_341683	telomeric repeat binding factor 2 (predicted)
Tfpt	0.45	0.00	NM_138870	TCF3 (E2A) fusion partner
Tjp3_predicted	0.39	0.03	XM_234924	tight junction protein 3 (predicted)
Tm9sf1	0.60	0.00	NM_00101215 5	transmembrane 9 superfamily member 1
Tom1	0.45	0.01	NM_00100836 5	target of myb1 homolog (chicken)
Tp53	0.65	0.00	NM_030989	tumor protein p53
Tpd52_predicte d	0.65	0.00	XM_215524	tumor protein D52 (predicted)
Tpst2	0.61	0.00	NM_00100850 8	tyrosylprotein sulfotransferase 2
Tpx2_predicted	0.42	0.05	XM_230735	TPX2, microtubule-associated protein homolog (Xenopus laevis) (predicted)
Treh	0.53	0.03	XM_343380	trehalase (brush-border membrane glycoprotein)
Trim28	0.42	0.00	AI178993	cDNA clone RSPCA16 3'
Trim3	0.35	0.00	NM_031786	tripartite motif protein 3
Trim32	0.65	0.00	NM_00101210 3	tripartite motif protein 32
Trpc4ap	0.39	0.00	XM_342553	transient receptor potential cation channel, subfamily C, member 4 associated protein, transcript variant 2
Ttc3_predicted	0.47	0.03	XM_340973	tetratricopeptide repeat domain 3 (predicted)
Tyro3	0.59	0.00	NM_017092	TYRO3 protein tyrosine kinase 3
Ubd	0.43	0.01	NM_053299	ubiquitin D
Uble1b	0.57	0.01	XM_218502	ubiquitin-like 1 (sentrin) activating enzyme E1B
Ubqln4_predicte d	0.47	0.01	XM_227405	ubiquilin 4 (predicted)
Ubtf	0.65	0.00	XM_340913	upstream binding transcription factor, RNA polymerase I
Unc84a	0.50	0.00	NM_00100714 7	unc-84 homolog A (C. elegans)
Ung	0.54	0.00	NM_00101312 4	uracil-DNA glycosylase
Usp5_predicted	0.63	0.03	XM_238380	ubiquitin specific protease 5 (isopeptidase T) (predicted)
Vapb	0.46	0.03	NM_021847	vesicle-associated membrane protein, associated protein B and C
Vars2	0.58	0.01	XM_00107661 6	valyl-tRNA synthetase 2
Vil2	0.58	0.04	NM_019357	villin 2
Vps11_predicte	0.32	0.00	XM_236189	vacuolar protein sorting 11 (yeast) (predicted)

d				
Vps33a	0.48	0.00	NM_022961	vacuolar protein sorting 33A (yeast)
Vps33b	0.54	0.00	NM_022286	vacuolar protein sorting 33B (yeast)
Vps72_predicted	0.64	0.00	XM_227428	vacuolar protein sorting 72 (yeast) (predicted)
Wbscr16_predicted	0.53	0.00	XM_341066	Williams-Beuren syndrome chromosome region 16 homolog (human) (predicted)
Wbscr21	0.58	0.00	XM_341104	Williams Beuren syndrome chromosome region 21
Wdr5	0.61	0.00	NM_001039034	WD repeat domain 5
Whsc111_predicted	0.48	0.04	XM_214371	Wolf-Hirschhorn syndrome candidate 1-like 1 (predicted)
Wsb2	0.57	0.00	NM_001007616	WD repeat and SOCS box-containing 2
Xab2	0.51	0.00	NM_139109	XPA binding protein 2
XM_213470	0.47	0.05	XM_213470	similar to type I intermediate filament cytokeratin
XM_214361	0.59	0.01	XM_214361	similar to WRN type I
XM_217407	0.57	0.03	XM_217407	similar to NIF3L1
XM_217851	0.61	0.01	XM_217851	similar to sif and Tiam1-like exchange factor
XM_223739	0.63	0.02	XM_223739	similar to Diacylglycerol kinase, theta (Diglyceride kinase) (DGK-theta) (DAG kinase theta)
XM_230900	0.43	0.00	XM_230900	similar to nuclear DNA binding factor
XM_235679	0.32	0.00	XM_235679	similar to keratin type II, hair (b4) - mouse
XM_236187	0.65	0.01	XM_236187	similar to MBD2 (methyl-CpG-binding protein)-interacting zinc finger protein
XM_237097	0.54	0.01	XM_237097	similar to RIKEN cDNA 2310066K2
XM_341008	0.59	0.00	XM_341008	similar to hypothetical protein MGC21688
XM_343572	0.55	0.00	XM_343572	similar to basic leucine zipper and W2 domains 1
XM_344175	0.63	0.00	XM_344175	similar to phosphoprotein enriched in astrocytes 15
Xpo6	0.64	0.01	XM_574559	exportin 6
XRG4	0.63	0.01	NM_001011971	XK-related protein 4
Zbtb5_predicted	0.55	0.02	XM_233005	zinc finger and BTB domain containing 5 (predicted)
Zdhhc18	0.28	0.00	NM_001039339	zinc finger, DHHC domain containing 18
Zfp13_predicted	0.48	0.00	XM_220197	zinc finger protein 13 (predicted)
Zfp289	0.60	0.00	NM_001033707	zinc finger protein 289

Znf251_predicted	0.65	0.01	XM_345851	zinc finger protein 251 (predicted)
Znf532_predicted	0.30	0.03	XM_225923	zinc finger protein 532 (predicted)
Zw10	0.59	0.04	NM_001024801	ZW10 homolog, centromere/kinetochore protein (Drosophila)
Zyg11bl	0.52	0.00	XM_242300	zyg-11 homolog B (C. elegans)-like, transcript variant 2

Supplemental Table 5: List of Taqman primers used for quantitative PCR (qPCR). Shown in the table is the list of taqman assays used for qPCR validation of microarray results.

Taqman Assay ID	Gene Symbol	Gene Name
Hs99999901_s1	18S	18 s RNA
Rn00667869_m1	Actb	beta actin
Rn00565393_m1	Adrb3	adrenergic receptor, beta 3
Rn01510663_g1	Art5	ADP-ribosyltransferase 5
Rn00788224_m1	Camk1g	calcium/calmodulin-dependent protein kinase I gamma
Rn99999916_s1	Gapdh	glyceraldehyde-3-phosphate dehydrogenase
Rn00821225_g1	Gnb1	guanine nucleotide binding protein (G protein), beta 1
Rn00575638_m1	Grin2d	glutamate receptor, ionotropic, N-methyl D-aspartate 2D
Rn01527840_m1	Hprt1	hypoxanthine-Guanine Phosphoribosyl Transferase 1
Rn01468302_m1	Htr2a	5-hydroxytryptamine (serotonin) receptor 2A
Rn00562748_m1	Htr2c	5-hydroxytryptamine (serotonin) receptor 2C
Rn00583189_m1	Impa1	inositol (myo)-1(or 4)-monophosphatase 1
Rn00570552_s1	Kcna3	potassium voltage-gated channel, shaker-related subfamily, member 3
Rn00588515_m1	Kcnh2	potassium voltage-gated channel, subfamily H (eag-related), member 2
Rn00590940_m1	Kcnh7	potassium voltage-gated channel, subfamily H (eag-related), member 7
Rn00587892_m1	Nlgn1	neuroligin 1
Rn00566855_m1	Ppp3ca	protein phosphatase 3, catalytic subunit, alpha isoform
Rn00572597_g1	Ppp3r2	protein phosphatase 3, regulatory subunit B, alpha isoform (calcineurin B, type II)
Rn00709830_m1	Tnfrsf1b	tumor necrosis factor receptor superfamily, member 1b

Supplemental Table 6: List of SYBR green primers used for quantitative PCR (qPCR). Shown in the table is the list of SYBR Green primers used for qPCR validation of microarray results.

Gene Name	Gene Symbol	Primer sequence (F- forward; R-reverse)
18 s RNA	18S	F- TTTCGAGGCCCTGTAATTGG R - CCCAAGATCCAACCTACGAGC
adrenergic receptor, beta 3	Adrb3	F- AGCAAGGAGCCTGACTTCTG R - CCTGGGAACCTCACTCTGAGC
calcium/calmodulin-dependent protein kinase I gamma	Camk1g	F - GCCATCTGCTTGAGAAGGAC R - ATCTGGAGGCTGACAGATGG
glyceraldehyde-3-phosphate dehydrogenase	Gapdh	F - TTCTTGTGCAGTGCCAGCC R – AGAGAAGGCAGCCCTGGTAAC
guanine nucleotide binding protein (G protein), beta 1	Gnb1	F - AATGCGAACCCAGGAGAACAC R – TGGCATGAACCTTGTTTGTG
hypoxanthine-Guanine Phosphoribosyl Transferase 1	Hprt1	F – GCAGACTTTGCTTTCCTTGG R – GTCTGGCCTGTATCCAACACT
inositol (myo)-1(or 4)-monophosphatase 1	Impa1	F - CAACTTTGTGCACCGGTTTC R – CCGAAGCTTCTGACCGTTAC
potassium voltage-gated channel, subfamily H (eag-related), member 2	Kcnh2	F - CCACAATGTCACCGAGAAGG R – AGAATGAGCCAGTCCCACAC
neuroligin 1	Nlgn1	F - GAGGGAGATAGACCCACAGC R – ATGCCGGATCTTCAATCATC
tumor necrosis factor receptor superfamily, member 1b	Tnfrsf1b	F - GACTGGCGAACTGCTTCATC R - CTGGGTGCTGTGGTCAATAG