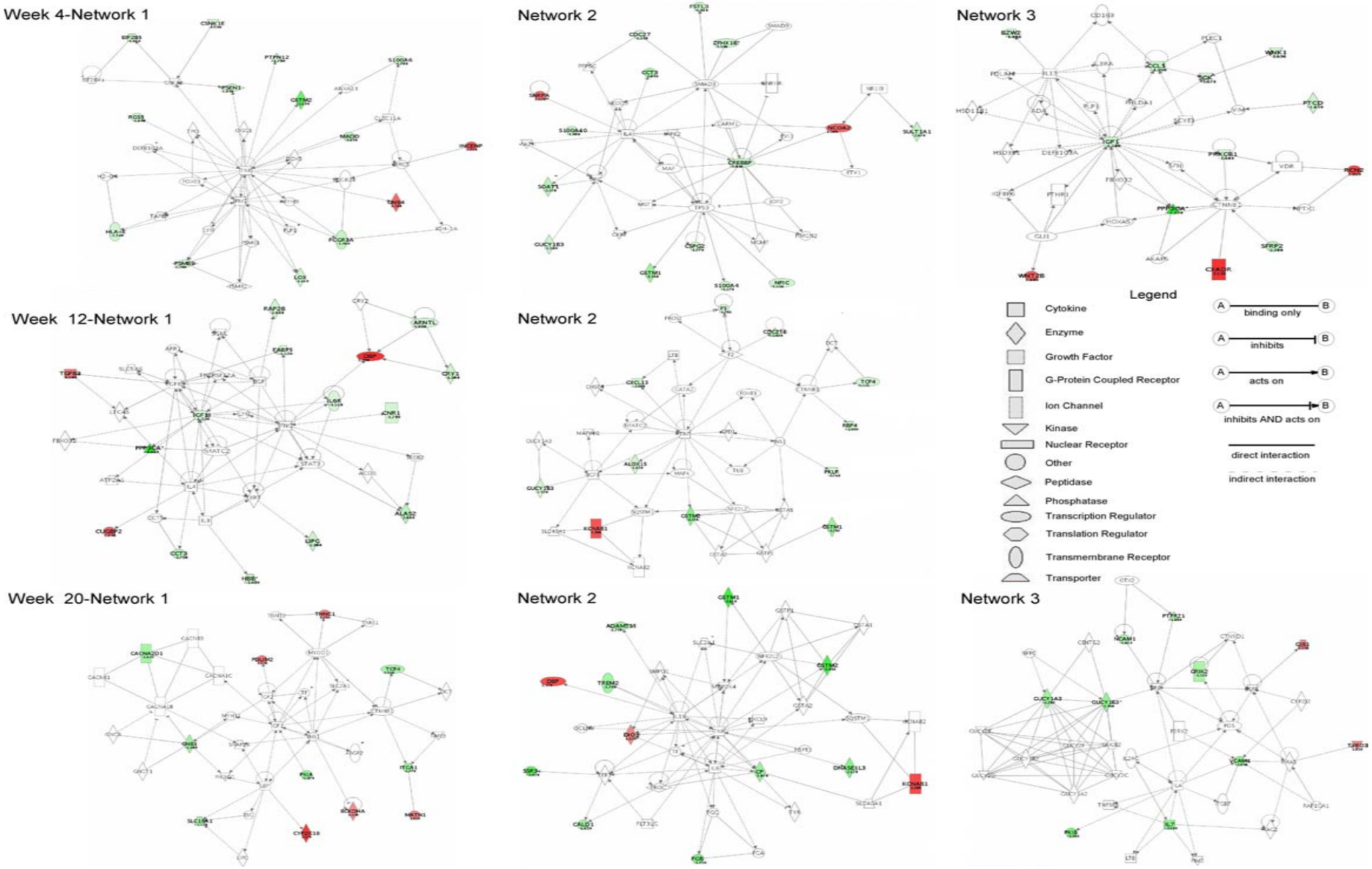
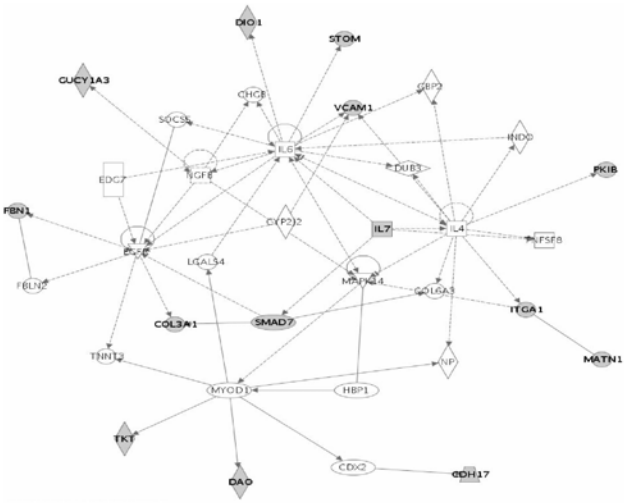
Supplemental Figure 1



Supplemental Figure 2

A

Network 1

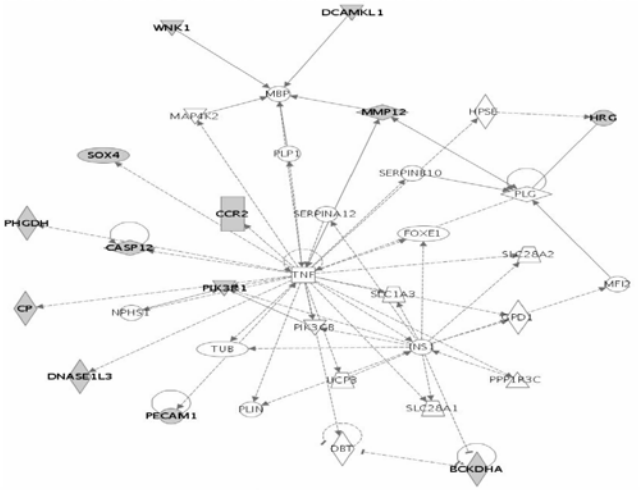


Top Function (All Networks)	Significance
Cellular Assembly and Organization	7.15E-5 - 4.86E-2
Cellular Movement	1.47E-4 - 4.86E-2
Immune and Lymphatic Development and Function	1.48E-4 - 4.86E-2
Immune Response	1.48E-4 - 4.86E-2

High Level Functions	Significance
Cellular Function and Maintenance	1.76E-9 - 6.33E-4
Cancer	7.32E-9 - 3.76E-3
Inflammatory Disease	2.85E-7 - 2..36E-3
Cell Morphology	1.80E-6 - 2..36E-3

B

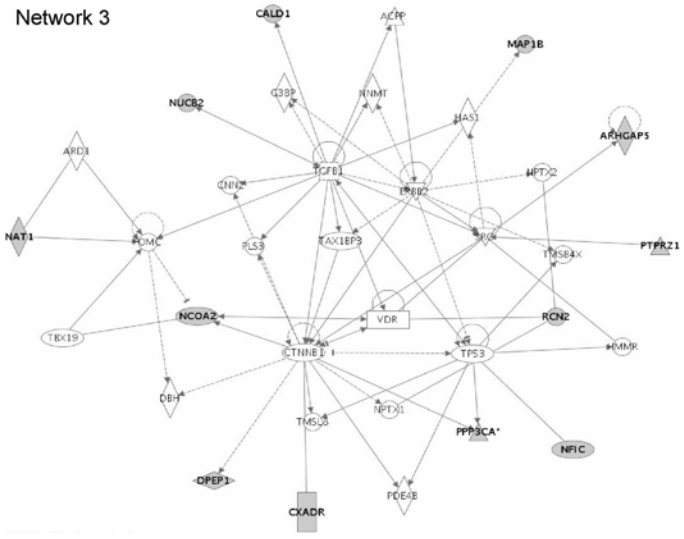
Network 2



High Level Functions	Significance
Molecular Transport	2.07E-7 - 3.84E-3
Carbohydrate Metabolism	2.42E-7 - 3.84E-3
Small Molecular Biochemistry	2.42E-7 - 3.84E-3
Cell Death	1.80E-6 - 3.84E-3

C

Network 3



High Level Functions	Significance
Cellular Movement	2.07E-7 - 3.36E-3
Cellular Growth and Proliferation	2.42E-7 - 3.76E-3
Reproductive System Disease	2.42E-7 - 3.84E-3
Cancer	2.42E-7 - 3.84E-3

Supplemental Figure 1. Functional network analysis of genes differentially expressed between S and S.SHR(2) congenic at week 4, 12 , and 20. Nodes represent genes, with their shape representing the functional class of the gene product (see legend). The lines connecting the nodes indicate the biological relationship between each node (see legend). Nodes are color coded based on degree and direction of fold change [red, S.SHR(2) is overexpressed compared to S; and green, S.SHR(2) is underexpressed compared to S]. Note: each network is numbered (e.g. 1, 2…) based on the number of focus genes it contains. So, network 1 at week 4 and network 1 at week 12 need not be related.

Supplemental Figure 2. Functional network analysis of genes differentially expressed between S and S.SHR(2) and over time (strain X time). Nodes represent genes, with their shape representing the functional class of the gene product (see figure legend , supplemental Fig. 1). The lines connecting the nodes indicate the biological relationship between each node. Shaded nodes are genes found to be differentially expressed between strains and over time. High level functions for each network and significance level are shown. Top functions in the entire data set are also shown.

Type of file: table
Label: Tables S1 - S4
Filename: Copy of SupplementalTables1-4.xls

							Week4			Week12			Week20		
Chromosome	Gene Identifier	Gene ID	Other ID	Position (Mb)	Direction	Ratio	p-value	adjp-value	Ratio	p-value	adjp-value	Direction	p-value	adjp-value	Gene Description
1	BF399429	-	1389026_at	149425862	Up	1.8	0.0157	0.1555							Rattus norvegicus similar to RIKEN cDNA 4933417L02 (LOC293117), mRNA
1	AI599126	-	1383292_at	212326840	Up	1.7	0.0427	0.2103							Rattus norvegicus similar to inner centromere protein-B (LOC293733), mRNA
1	BI289559	-	1393376_at	173556971	Up	1.5	0.0141	0.1498							Rattus norvegicus similar to SOX6 (LOC293165), mRNA
1	AI230728	Snrpa	1388436_at	82265660	Up	1.5	0.0193	0.1677							Rattus norvegicus similar to U1 small nuclear ribonucleoprotein A (U1 snRNP A protein) (LOC292729), mRNA
1	BF389640	-	1379485_at	267369410	Down	2.6	0.0021	0.0604							Rattus norvegicus similar to eukaryotic translation initiation factor 3, subunit 10 theta, 150/170kDa
1	AF394783	Sult1a1	1370019_at	185829205	Down	2.1	0.0298	0.1894							sulfotransferase family 1A, phenol-preferring, member 1
1	AI408286	-	1378193_at	213828862	Down	1.8	0.0461	0.2103							Rattus norvegicus similar to RIKEN cDNA A430103C15 (LOC293744), mRNA
1	NM_019232	Sgk	1367802_at	23501262	Down	1.7	0.0181	0.1640							serum/glucocorticoid regulated kinase
1	AI145746	-	1392249_at	20355444	Down	1.6	0.0007	0.0593							Rattus norvegicus transcribed sequences
1	AA964142	-	1389888_at	157532994	Down	2.1	0.0011	0.0593				**1.7**	0.0044	0.0372	Rattus norvegicus similar to RIKEN cDNA 2610209A20 (LOC368121), mRNA
1	X04440	Prkcb1	1370585_a_at	181118102	Down	1.7	0.0027	0.0711				1.6	0.0302	0.0760	protein kinase C, beta 1
1	AA858962	Rbp4	1371762_at	242443798	Down				2.4	0.0039	0.0217				retinol binding protein 4
1	NM_033234	Hbb	1367553_x_at	161590658	Down				2.4	0.0165	0.0461				hemoglobin beta chain complex
1	BI287300	Hbb	1371245_a_at	161578261	Down				2.4	0.0074	0.0282				Rat hemoglobin beta-chain mRNA
1	U13253	Fabp5	1370281_at	216825748	Down				1.6	0.0059	0.0241				fatty acid binding protein 5, epidermal
1	AI230048	Dbp	1387874_at	96173573	Up				2.3	0.0252	0.0574	2.3	0.0007	0.0216	D site albumin promoter binding protein
1	AB012600	Arntl	1370510_a_at	171132014	Down				1.6	0.0221	0.0538	1.6	0.0120	0.0522	aryl hydrocarbon receptor nuclear translocator-like
1	AI169562	rGK-4	1371080_at	94412803	Up							3.0	0.0204	0.0639	kallikrein
1	NM_019184	Cyp2c	1387328_at	243281320	Up							2.6	0.0034	0.0327	Cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase)
1	BM385272	-	1393139_at	78979034	Up							2.0	0.0051	0.0392	Rattus norvegicus similar to Apolipoprotein C2 (LOC292697), mRNA
1	BI281129	-	1373309_at	97604477	Up							2.0	0.0145	0.0554	Rattus norvegicus similar to RIKEN cDNA 1810054O13 (LOC308602), mRNA
1	BM390571	-	1376248_at	96197898	Up							1.9	0.0410	0.0888	Rattus norvegicus similar to cytosolic sulfotransferase (LOC292915), mRNA
1	AW522786	-	1378887_at	140157974	Up							1.9	0.0082	0.0477	Rattus norvegicus transcribed sequences
1	BF285952	-	1393474_at	96197898	Up							1.7	0.0122	0.0526	Rattus norvegicus similar to cytosolic sulfotransferase (LOC292915), mRNA
1	AI060133	-	1382476_x_at	207556536	Up							1.7	0.0242	0.0700	similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
1	BG378791	-	1390596_at	233410939	Up							1.6	0.0308	0.0760	Rattus norvegicus similar to Melanoma antigen recognized by T-cells 1 (MART-1) (Melan-A protein) (Antigen SK29-AA) (Antigen LB39-AA) (LOC293890), mRNA
1	NM_134369	Cyp2t1	1368265_at	82229589	Up							1.6	0.0017	0.0323	cytochrome P450 monooxygenase CYP2T1
1	BF561222	-	1383242_a_at	87626241	Up							1.6	0.0002	0.0173	Rattus norvegicus transcribed sequence with moderate similarity to protein pir:I60307 (E. coli) I60307 beta-galactosidase, alpha peptide - Escherichia coli
1	NM_031711	Ard2	1368166_at	208909458	Up							1.6	0.0283	0.0742	ADP-ribosylation-like 2
1	AW435479	Aplp1	1389307_at	85390513	Up							1.6	0.0458	0.0937	Rattus norvegicus transcribed sequence with strong similarity to protein ref:NP_005157.1 (H.sapiens) amyloid beta (A4) precursor-like protein 1 [Homo sapiens]
1	BE098025	-	1374924_at	22263990	Up							1.5	0.0093	0.0493	Rattus norvegicus transcribed sequences
1	BE112982	-	1380808_at	201997982	Up							1.5	0.0264	0.0723	Rattus norvegicus similar to TOLLIP protein (LOC361677), mRNA
1	J02827	Bckdha	1370897_at	80837907	Up							1.5	0.0008	0.0221	branched chain keto acid dehydrogenase subunit E1, alpha polypeptide
1	BI283664	-	1377209_at	131370265	Up							1.5	0.0029	0.0327	Rattus norvegicus transcribed sequences
1	AI072405	Aqp11	1384877_at	154973796	Up							1.5	0.0100	0.0493	aquaporin 11
1	BE099174	-	1382115_at	245725493	Up							1.5	0.0031	0.0327	Rattus norvegicus similar to RIKEN cDNA 4930521E07 (LOC309486), mRNA
1	AI008432	-	1392843_at	31940826	Down							2.2	0.0174	0.0610	Rattus norvegicus transcribed sequences
1	BM389322	-	1380768_at	1481655	Down							2.1	0.0082	0.0477	Rattus norvegicus transcribed sequences
1	BM383349	-	1383688_at	168931643	Down							1.9	0.0119	0.0522	Rattus norvegicus transcribed sequences
1	BF397243	-	1395047_at	241156969	Down							1.9	0.0007	0.0216	Rattus norvegicus similar to tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase 2; tankyrase 2 (LOC309512), mRNA
1	AW920064	Ctsc	1397808_at	144640775	Down							1.9	0.0415	0.0888	Rattus norvegicus transcribed sequences
1	BE097460	-	1398700_at	40899401	Down							1.8	0.0068	0.0448	Rattus norvegicus transcribed sequences
1	AI714002	-	1374775_at	95310301	Down							1.8	0.0134	0.0546	Rattus norvegicus similar to KI-67 (LOC291234), mRNA
1	AI511069	-	1378391_at	109033934	Down							1.7	0.0070	0.0448	Rattus norvegicus transcribed sequences
1	AI170394	Mpeg1	1389006_at	215387912	Down							1.7	0.0098	0.0493	macrophage expressed gene 1
1	AA996491	-	1385381_at	46388118	Down							1.7	0.0431	0.0893	Rattus norvegicus transcribed sequences
1	BI289045	-	1381557_at	219904665	Down							1.6	0.0379	0.0846	Rattus norvegicus transcribed sequences
1	AI008409	-	1389986_at	208427738	Down							1.6	0.0257	0.0712	Rattus norvegicus transcribed sequence with strong similarity to protein sp:P00722 (E. coli) BGAL_ECOLI Beta-galactosidase (Lactase)
1	BM390792	-	1397453_at	245429376	Down							1.6	0.0004	0.0182	Rattus norvegicus transcribed sequences
1	AI171480	-	1390909_at	162170846	Down							1.5	0.0007	0.0216	similarity to protein pdb:1JZ5 (E. coli) B Chain B, E. Coli (Lacz) Beta-Galactosidase In Complex With D- Galctopyranosyl-1-On
1	BE113281	Qki	1372542_at	45029384	Down							1.5	0.0326	0.0788	Rattus norvegicus transcribed sequences
1	AF245172	Gda	1387659_at	224579743	Down							1.5	0.0418	0.0888	guanine deaminase
1	BG670294	-	1390107_at	147022234	Down							1.5	0.0095	0.0493	similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
2	AI501417	-	1396831_at	140736218	Up	2.4	0.0312	0.1909							Rattus norvegicus transcribed sequences
2	BF282918	-	1382738_at	180709895	Up	1.9	0.0252	0.1818							Rattus norvegicus transcribed sequences
2	BE112158	-	1374640_at	189287027	Up	1.7	0.0428	0.2103							Rattus norvegicus transcribed sequences
2	BF543355	Iqsf10	1390901_at	148704637	Up	1.6	0.0070	0.1053							bone specific CMF608
2	AI576368	-	1395636_at	232939449	Up	1.6	0.0034	0.0764							Rattus norvegicus transcribed sequences
2	BI284800	-	1371071_at	118791451	Up	1.6	0.0226	0.1748							Rattus norvegicus guanine nucleotide binding protein beta 4 subunit mRNA, partial cds
2	BF408099	-	1384824_at	138616556	Up	1.5	0.0018	0.0604							Rattus norvegicus transcribed sequences
2	BF396545	Sfrp2	1396614_at	175475529	Down	2.4	0.0047	0.0922							secreted frizzled-related protein 2
2	AF140232	S100a6	1367661_at	182895080	Down	1.8	0.0481	0.2103							calcium binding protein A6 (calcyclin)
2	NM_020538	Aadac	1369492_at	149348935	Down	1.7	0.0205	0.1715							arylacetamide deacetylase (esterase)
2	AA893529	-	1380254_at	192441767	Down	1.6	0.0021	0.0604							Rattus norvegicus transcribed sequence with weak similarity to protein sp:Q92664 (H.sapiens) TF3A_HUMAN Transcription factor IIIA (Factor A) (TFIIIA)
2	NM_012618	S100a4	1367846_at	149585070	Down	1.6	0.0276	0.1858							S100 calcium-binding protein A4
2	AI407985	-	1371480_at	112237120	Down	1.6	0.0219	0.1738							Rattus norvegicus transcribed sequence with strong similarity to protein pir:A36670 (H.sapiens) A36670 cell division control protein CKS1 - human
2	BF390321	-	1382282_at	191399944	Down	1.5	0.0110	0.1393							Rattus norvegicus similar to hypothetical protein MGC46719 (LOC295283), mRNA
2	BF553729	Wnt2b	1397820_at	200218630	Up	1.7	0.0012	0.0593				2.7	0.0000	0.0109	Rattus norvegicus transcribed sequences
2	AI555464	Wnt2b	1394801_at	200215823	Up							2.4	0.0055	0.0410	Rattus norvegicus transcribed sequences
2	AI715140	-	1384367_at	191053229	Up	1.6	0.0179	0.1640				2.0	0.0079	0.0470	Rattus norvegicus similar to histone protein Hist2h3c1 (LOC310679), mRNA
2	NM_031114	S100a10	1386890_at	186645674	Down	2.0	0.0470	0.2103				1.9	0.0210	0.0647	S-100 related protein, clone 42C
2	AF084544	Cspg2	1371232_a_at	19712629	Down	1.8	0.0424	0.2103				1.6	0.0140	0.0551	chondroitin sulfate proteoglycan 2 (versican)
2	AI556018	-	1376996_at	231016070	Down	1.6	0.0140	0.1498				1.6	0.0196	0.0632	Rattus norvegicus similar to KIAA1546 protein (LOC310859), mRNA
2	NM_012769	Gucy1b3	1369097_s_at	173684395	Down	1.6	0.0151	0.1530				2.0	0.0025	0.0327	guanylate cyclase 1, soluble, beta 3
2	BF399387	Gucy1b3	1374389_at	173684395	Down				1.5	0.0070	0.0279	1.7	0.0028	0.0327	guanylate cyclase 1, soluble, beta 3
2	BG374101	-	1381262_at	181637899	Up	3.6	0.0061	0.0977	2.7	0.0008	0.0097				Rattus norvegicus transcribed sequences
2	AA859982	-	1385871_at	152124473	Up	2.6	0.0238	0.1788	2.2	0.0003	0.0072				Rattus norvegicus transcribed sequences
2	AA900057	Snx27	1379804_at	189474923	Up	1.9	0.0062	0.0977	1.8	0.0015	0.0134				PDZ protein Mrt1
2	AI176320	-	1373416_at	113315726	Up	1.8	0.0012	0.0593	1.6	0.0048	0.0225				Rattus norvegicus transcribed sequences
2	BF522861	-	1386766_at	212899950	Down	2.1	0.0057	0.0977	2.1	0.0033	0.0214				---
2	BI285792	-	1375909_at	203606404	Down	1.9	0.0020	0.0604	1.6	0.0048	0.0225				similarity to protein pdb:4GTU (H.sapiens) G Chain G, Ligand-Free Homodimeric Human Glutathione S-Transferase M4- 4 (E.C.2.5.1.18)
2	BF402235	Sars1	1392262_at	204000299	Down	1.8	0.0012	0.0593	2.1	0.0005	0.0097				Rattus norvegicus transcribed sequences
2	AI172217	-	1382682_at	225153968	Down	1.8	0.0294	0.1894	2.9	0.0094	0.0340				similarity to protein pir:I60307 (E. coli) I60307 beta-galactosidase, alpha peptide - Escherichia coli
2	BE107904	-	1392040_at	212825827	Down	1.7	0.0292	0.1894	1.7	0.0256	0.0574				Rattus norvegicus similar to 2810453L12Rik protein (LOC310807), mRNA
2	U76206	Gpr105	1370449_at	148502460	Down	1.6	0.0268	0.1826	1.7	0.0099	0.0346				G protein-coupled receptor 105
2	AI234811	-	1394625_at	171237013	Down	1.5	0.0140	0.1498	1.5	0.0452	0.0840				similarity to protein ref:NP_060812.1 (H.sapiens) hypothetical protein FLJ11155 [Homo sapiens]
2	AA945938	-	1382611_at	192382906	Down	1.5	0.0108	0.1393	1.6	0.0007	0.0097				Rattus norvegicus transcribed sequences
2	BI286387	-	1371248_at	185464256	Up				2.2	0.0376	0.0742				Rattus norvegicus similar to Cornifin alpha (Small proline-rich protein 1) (SPRR1) (LOC365848), mRNA
2	BF551322	-	1393178_at	180514438	Up				2.2	0.0040	0.0217				Rattus norvegicus similar to CG5805-PA (LOC365841), mRNA
2	BE111565	-	1390886_at	120116931	Up				1.6	0.0144	0.0432				Rattus norvegicus transcribed sequences
2	BE102993	Snx16	1382643_at	93274839	Up				1.5	0.0053	0.0235				sorting nexin 16
2	BG374304	-	1377310_at	212082882	Up				1.5	0.0156	0.0441				Rattus norvegicus transcribed sequences
2	U86635	Gstm5	1370813_at	203456122	Down				2.1	0.0052	0.0235				glutathione S-transferase, mu 5
2	BM390462	-	1383165_at	204021188	Down				1.9	0.0047	0.0225				Rattus norvegicus similar to KIAA1324 protein (LOC362019), mRNA
2	NM_012624	-	1387263_at	181214402	Down				1.8	0.0036	0.0217				pyruvate kinase, liver and RBC
2	BF286009	-	1383218_at	120996329	Down				1.7	0.0003	0.0078				Rattus norvegicus LOC361928 (LOC361928), mRNA
2	AI602542	-	1382211_at	153116455	Down				1.6	0.0007	0.0097				Rattus norvegicus transcribed sequences
2	AA858645	-	1389469_at	192382906	Down				1.5	0.0013	0.0123				Rattus norvegicus similar to chromodomain helicase DNA binding protein 1-like (LOC310707), mRNA
2	BF415512	-	1396529_at	116866938	Down				1.5	0.0333	0.0676				Rattus norvegicus transcribed sequences
2	BG379771	-	1393262_at	144033146	Up				2.8	0.0038	0.0217	1.7	0.0006	0.0211	Rattus norvegicus transcribed sequences
2	AI578135	-	1383747_at	112970425	Up				2.2	0.0229	0.0552	2.0	0.0191	0.0630	Rattus norvegicus transcribed sequences
2	BE097574	Kcnab1	1378738_at	154697136	Up				1.9	0.0018	0.0151	2.4	0.0097	0.0493	Rattus norvegicus transcribed sequences

							Week4			Week12			Week20		
Chromosome	Gene Identifier	Gene ID	Other ID	Position (Mb)	Direction	Ratio	p-value	adjp-value	Ratio	p-value	adjp-value	Direction	p-value	adjp-value	Gene Description
2	AA819288	-	1382274_at	157331763	Up				1.8	0.0008	0.0097	2.3	0.0031	0.0327	Retinoic acid receptor responder protein 1 (Tazarotene-induced gene 1 protein) (RAR-responsive protein TIG1) (LOC310486), mRNA
2	AW141940	-	1375954_at	182787814	Up				1.7	0.0285	0.0616	1.9	0.0100	0.0493	Rattus norvegicus similar to 8KDa amlexanox-binding protein (LOC295213), mRNA
2	NM_021584	-	1387276_at	144686423	Down				2.0	0.0456	0.0840	2.8	0.0022	0.0327	activity and neurotransmitter-induced early gene protein 4 (ania-4)
2	BE102803	-	1383867_at	116157860	Down				1.9	0.0145	0.0432	1.9	0.0013	0.0282	Rattus norvegicus similar to eIF-5A2 protein (LOC310261), mRNA
2	BF409007	-	1393063_at	116159119	Down				1.7	0.0059	0.0241	1.7	0.0030	0.0327	Rattus norvegicus transcribed sequences
2	BE120508	-	1379781_at	118931483	Down				1.6	0.0209	0.0528	1.6	0.0443	0.0915	Rattus norvegicus similar to BAF53a (LOC361925), mRNA
2	NM_017020	Il6r	1386987_at	182078051	Down				1.5	0.0104	0.0351	1.8	0.0138	0.0549	interleukin 6 receptor
2	BF411765	Celsr2	1371018_at	203960524	Up							2.1	0.0002	0.0173	cadherin EGF LAG seven-pass G-type receptor 2
2	BF549971	-	1377706_x_at	913063	Up							1.9	0.0212	0.0647	---
2	AI112346	-	1380852_at	89037914	Up							1.8	0.0030	0.0327	Rattus norvegicus transcribed sequences
2	AI137898	-	1393330_at	84724179	Up							1.8	0.0153	0.0574	Rattus norvegicus transcribed sequences
2	BI284261	-	1377869_at	140064501	Up							1.7	0.0336	0.0802	Rattus norvegicus similar to carbon catabolite repression 4 protein homolog (LOC310395), mRNA
2	BG371995	-	1383499_at	203756191	Up							1.7	0.0098	0.0493	Rattus norvegicus transcribed sequences
2	AI137642	-	1393164_at	30341592	Up							1.7	0.0311	0.0763	Rattus norvegicus similar to mitochondrial ribosomal protein S27; mitochondrial 28S ribosomal protein S27 (LOC361883), mRNA
2	BI294747	-	1390973_at	195972223	Up							1.7	0.0490	0.0966	Rattus norvegicus similar to tripartite motif-containing 45 (LOC295323), mRNA
2	BG374448	-	1374760_at	83363798	Up							1.6	0.0009	0.0232	Rattus norvegicus transcribed sequences
2	AI602131	-	1384603_at	218712747	Up							1.6	0.0280	0.0740	Rattus norvegicus similar to ATP-binding cassette transporter (LOC310836), mRNA
2	BF284064	Mccc1	1395844_at	122437985	Up							1.6	0.0104	0.0493	Rattus norvegicus similar to methylcrotonoyl-Coenzyme A carboxylase 1 (alpha) (LOC294972), mRNA
2	BE116137	-	1378929_at	180446723	Up							1.6	0.0493	0.0966	Rattus norvegicus transcribed sequences
2	NM_130747	rACH	1369485_at	21984849	Up							1.6	0.0144	0.0554	cytoplasmic acetyl-CoA hydrolase
2	AI228548	S100a1	1388456_at	182784663	Up							1.6	0.0155	0.0575	Rattus norvegicus similar to S-100 protein, alpha chain (LOC295214), mRNA
2	NM_024157	Cfi	1368205_at	227308641	Down							4.0	0.0077	0.0463	complement factor I
2	NM_031120	Ssr3	1369718_at	155149234	Down							2.9	0.0062	0.0428	TRAP-complex gamma subunit
2	BE109107	-	1384969_at	243721308	Down							2.5	0.0468	0.0946	Rattus norvegicus transcribed sequences
2	NM_012532	Cp	1368420_at	105086278	Down							2.3	0.0170	0.0608	ceruloplasmin
2	AF202115	Cp	1368418_a_at	105086278	Down							1.9	0.0189	0.0629	ceruloplasmin
2	AF202115	Cp	1368419_at	105086278	Down							1.9	0.0090	0.0493	ceruloplasmin
2	U05675	Fgb	1370511_at	174767192	Down							2.3	0.0106	0.0493	fibrinogen, beta polypeptide
2	BF290410	-	1386052_at	59105666	Down							2.2	0.0033	0.0327	Rattus norvegicus transcribed sequences
2	AF367210	Il7	1369208_at	96356083	Down							2.1	0.0041	0.0364	interleukin 7
2	AI170450	-	1391587_at	77391890	Down							2.1	0.0218	0.0653	Rattus norvegicus transcribed sequences
2	NM_012889	Vcam1	1368474_at	212277654	Down							2.1	0.0051	0.0392	vascular cell adhesion molecule 1
2	BE120370	-	1384393_at	202489626	Down							2.1	0.0058	0.0417	Rattus norvegicus transcribed sequences
2	NM_053772	Pkia	1368982_at	96524399	Down							2.0	0.0426	0.0893	protein kinase inhibitor, alpha
2	AA893743	Pkia	1373082_at	96521715	Down							2.0	0.0024	0.0327	protein kinase inhibitor, alpha
2	AW528482	-	1381668_at	236366764	Down							2.0	0.0278	0.0740	Rattus norvegicus transcribed sequences
2	BF283694	-	1379444_at	171368285	Down							1.9	0.0111	0.0501	Rattus norvegicus transcribed sequences
2	BE109744	-	1392552_at	182597259	Down							1.9	0.0025	0.0327	Rattus norvegicus similar to transcription repressor p66 (LOC310614), mRNA
2	BM385061	-	1391106_at	56080700	Down							1.9	0.0124	0.0528	Rattus norvegicus transcribed sequences
2	BF282631	C7	1383291_at	54147534	Down							1.9	0.0273	0.0736	Rattus norvegicus similar to Complement component C7 precursor (LOC310126), mRNA
2	BI274436	-	1393109_at	219774188	Down							1.9	0.0292	0.0752	similarity to protein pir:RGECDW (E. coli) RGECDW transcription activator of D-serine dehydratase - Escherichia coli
2	H31722	-	1380404_at	211164026	Down							1.8	0.0259	0.0714	Rattus norvegicus transcribed sequences
2	BI282029	-	1395388_at	88552849	Down							1.8	0.0336	0.0802	Rattus norvegicus transcribed sequences
2	AA957384	Itga1	1377278_at	47172364	Down							1.8	0.0072	0.0448	Rattus norvegicus transcribed sequences
2	NM_030994	Itga1	1387144_at	47107864	Down							1.6	0.0166	0.0598	integrin alpha 1
2	M57405	Gucy1a3	1387079_at	173755007	Down							1.8	0.0003	0.0173	guanylate cyclase 1, soluble, alpha 3
2	NM_019225	Slc1a3	1368565_at	58270236	Down							1.8	0.0286	0.0747	solute carrier family 1, member 3
2	AW535280	-	1370986_s_at	338357	Down							1.8	0.0093	0.0493	Rattus norvegicus retroviral-like c-Ha-ras proto-oncogene mRNA, partial sequence
2	AI237532	-	1385872_at	152125352	Down							1.8	0.0002	0.0173	Rattus norvegicus transcribed sequences
2	U78857	Ania4	1369686_at	144267748	Down							1.7	0.0080	0.0475	activity and neurotransmitter-induced early gene protein 4 (ania-4)
2	BF284922	-	1388557_at	118026379	Down							1.7	0.0106	0.0493	Rattus norvegicus transcribed sequences
2	BM389026	-	1373911_at	143537110	Down							1.7	0.0149	0.0565	Rattus norvegicus similar to osteoblast specific factor 2 precursor (LOC361945), mRNA
2	AW532618	-	1378133_at	139240746	Down							1.7	0.0369	0.0845	Rattus norvegicus transcribed sequences
2	AA858564	-	1379942_at	120969384	Down							1.7	0.0045	0.0376	Rattus norvegicus transcribed sequences
2	BE108581	-	1382746_s_at	224929644	Down							1.7	0.0211	0.0647	Rattus norvegicus transcribed sequences
2	BI281702	Map1b	1373363_at	30415255	Down							1.7	0.0341	0.0803	microtubule-associated protein 1b
2	AA851404	-	1391501_at	158892675	Down							1.7	0.0028	0.0327	Rattus norvegicus similar to RIKEN cDNA 4921524P20 (LOC295106), mRNA
2	AI409635	-	1375028_at	176487312	Down							1.7	0.0172	0.0609	similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
2	BI282157	Cdh6	1378480_at	62543102	Down							1.6	0.0497	0.0966	Rattus norvegicus transcribed sequences
2	AA964378	Cdh6	1379614_at	62544084	Down							1.6	0.0154	0.0574	Rattus norvegicus transcribed sequences
2	AI574991	-	1379356_at	204567499	Down							1.6	0.0019	0.0325	Rattus norvegicus transcribed sequences
2	NM_019243	Ptgfrn	1367986_at	196091505	Down							1.6	0.0228	0.0667	prostaglandin F2 receptor negative regulator
2	BM388077	-	1383146_at	144831075	Down							1.6	0.0275	0.0736	Rattus norvegicus transcribed sequences
2	AA859029	-	1393751_at	93466787	Down							1.6	0.0031	0.0327	similarity to protein sp:P00722 (E. coli) BGAL_ECOLI Beta-galactosidase (Lactase)
2	AI179422	-	1381771_at	148600612	Down							1.6	0.0491	0.0966	Rattus norvegicus transcribed sequences
2	AW915435	-	1392554_a_at	27599983	Down							1.6	0.0016	0.0323	---
2	BM385125	-	1394525_at	4899	Down							1.6	0.0256	0.0712	---
2	BM389035	-	1378453_at	47107864	Down							1.6	0.0477	0.0957	Rattus norvegicus transcribed sequences
2	AA851345	-	1391979_at	55951395	Down							1.6	0.0494	0.0966	Rattus norvegicus transcribed sequences
2	BI282008	-	1389003_at	2911103	Down							1.5	0.0005	0.0182	Rattus norvegicus transcribed sequences
2	BE102621	-	1376153_at	140408472	Down							1.5	0.0197	0.0632	Rattus norvegicus transcribed sequences
2	AW526268	-	1380100_at	116006188	Down							1.5	0.0198	0.0632	similar to misshapen/NIK-related kinase isoform 2; GCK family kinase MINK; serine/threonine protein kinase (LOC294917), mRNA
2	NM_012716	Slc16a1	1386981_at	199860337	Down							1.5	0.0001	0.0109	solute carrier family 16, member 1
2	AI102620	Map3k1	1375673_at	43062252	Down							1.5	0.0177	0.0614	Rattus norvegicus transcribed sequences
2	AI232784	-	1372613_at	232765165	Up							1.5	0.0105	0.0493	Rattus norvegicus similar to RIKEN cDNA 1810026B04 (LOC295458), mRNA
2	BE107853	-	1375497_at	142404403	Up	5.4	0.0013	0.0593	6.4	0.0002	0.0059	1.6	0.0006	0.0207	Rattus norvegicus transcribed sequences
2	BF284175	-	1373810_at	227331056	Up	2.3	0.0007	0.0593	2.4	0.0001	0.0059	2.2	0.0003	0.0173	Rattus norvegicus similar to group XII-1 phospholipase A2 (LOC362039), mRNA
2	AW141832	-	1395589_at	212902947	Up	1.9	0.0243	0.1788	2.1	0.0012	0.0118	1.9	0.0039	0.0362	Rattus norvegicus similar to RIKEN cDNA 2310050P13 (LOC310808), mRNA
2	AI511405	-	1385407_at	155315259	Down	13.2	0.0005	0.0593	6.3	0.0006	0.0097	1.8	0.0020	0.0327	Rattus norvegicus similar to hypothetical protein FLJ22693 (LOC310467), mRNA
2	BF388224	Ppp3ca	1379175_at	234240301	Down	7.4	0.0023	0.0617	8.7	0.0044	0.0225	1.7	0.0256	0.0712	Rattus norvegicus transcribed sequences
2	BI288681	-	1395073_at	114884954	Down	7.3	0.0013	0.0593	6.7	0.0006	0.0097	3.8	0.0012	0.0278	similarity to protein pir:RGECDW (E. coli) RGECDW transcription activator of D-serine dehydratase - Escherichia coli
2	BE100973	-	1377133_at	232935709	Down	5.8	0.0096	0.1324	8.7	0.0001	0.0059	8.4	0.0003	0.0173	Rattus norvegicus transcribed sequences
2	NM_031154	Gstm3	1387023_at	203491368	Down	5.1	0.0037	0.0783	4.7	0.0027	0.0190	3.4	0.0044	0.0375	glutathione S-transferase, mu type 3 (Yb3)
2	AI454769	-	1394671_at	225150560	Down	4.3	0.0186	0.1643	4.8	0.0011	0.0110	3.9	0.0005	0.0182	Rattus norvegicus transcribed sequences
2	AI232217	-	1389896_at	212083663	Down	4.2	0.0211	0.1715	3.7	0.0001	0.0059	2.2	0.0018	0.0323	Rattus norvegicus transcribed sequences
2	M28241	Gstm1	1386985_at	203575444	Down	3.2	0.0071	0.1053	3.8	0.0037	0.0217	3.6	0.0033	0.0327	glutathione S-transferase, mu 1
2	AI043891	Cct3	1392091_at	180425783	Down	2.8	0.0101	0.1324	2.8	0.0019	0.0151	2.0	0.0275	0.0736	---
2	AI454310	-	1382171_at	147798045	Down	2.0	0.0306	0.1906	2.5	0.0002	0.0059	1.6	0.0056	0.0410	Rattus norvegicus transcribed sequences
2	BE116408	-	1376584_at	159661795	Down	1.6	0.0176	0.1640	1.5	0.0419	0.0802	1.7	0.0417	0.0888	Rattus norvegicus transcribed sequences
3	BF284124	-	1377018_at	87795505	Up	1.9	0.0127	0.1473							Rattus norvegicus similar to E430002G05Rik protein (LOC311252), mRNA
3	BE349704	-	1374354_at	13905403	Up	1.7	0.0415	0.2103							Rattus norvegicus transcribed sequences
3	NM_053383	C1qr1	1368393_at	137188915	Up	1.6	0.0352	0.2016							lymphocyte antigen 68
3	BF390450	-	1382267_at	87640753	Up	1.6	0.0468	0.2103							Rattus norvegicus similar to four jointed box 1 (LOC366140), mRNA
3	AI169620	-	1373053_at	85065076	Up	3.0	0.0029	0.0718				2.2	0.0468	0.0852	---
3	NM_053585	Madd	1369066_at	75498321	Down	2.0	0.0242	0.1788							MAP-kinase activating death domain
3	AI170535	-	1375420_at	77598689	Down	1.6	0.0315	0.1909							similar to endoplasmic reticulum membrane protein with at least 3 transmembrane domains of bilaterial origin like (XB300) (LOC311209), mRNA
3	BF400750	-	1395249_at	149100353	Down	1.6	0.0392	0.2103							Rattus norvegicus LOC362256 (LOC362256), mRNA
3	BG377397	-	1393795_at	25513009	Down	1.6	0.0208	0.1715							Rattus norvegicus similar to mKIAA0569 protein (LOC311071), mRNA
3	BF419641	-	1392024_at	64130650	Down	1.6	0.0338	0.2002							Rattus norvegicus transcribed sequences
3	BI275559	-	1393226_at	67024503	Down	1.6	0.0480	0.2103							Rattus norvegicus transcribed sequences

							Week4			Week12			Week20		
Chromosome	Gene Identifier	Gene ID	Other ID	Position (Mb)	Direction	Ratio	p-value	adjp-value	Ratio	p-value	adjp-value	Direction	p-value	adjp-value	Gene Description
3	BF415891	-	1392441_at	25654295	Down	1.5	0.0021	0.0604							similarity to protein sp:O60315 (H.sapiens) SIP1_HUMAN Zinc finger homeobox protein 1b (Smad interacting protein 1) (SMADIP1)
3	BF553538	-	1386123_at	99861095	Down				1.7	0.0303	0.0635				Rattus norvegicus transcribed sequences
3	NM_133572	Cdc25b	1370034_at	118893716	Down				3.0	0.0040	0.0217	1.5	0.0142	0.0551	cell division cycle 25B
3	AI234249	-	1374630_at	3622883	Up							1.7	0.0375	0.0846	Rattus norvegicus similar to chloride intracellular channel 3 (LOC296566), mRNA
3	NM_017092	Tyro3	1367953_at	106309671	Up							1.6	0.0043	0.0372	TYRO3 protein tyrosine kinase 3
3	AI071620	-	1385580_at	142059065	Up							1.6	0.0476	0.0957	Rattus norvegicus transcribed sequences
3	BI275952	-	1377088_at	142360679	Up							1.6	0.0025	0.0327	Rattus norvegicus similar to RIKEN cDNA 2310046K01 (LOC311536), mRNA
3	NM_134403	Abtb2	1368111_at	88858336	Up							1.6	0.0029	0.0327	Cca3 protein
3	AF067650	Sardh	1370573_at	6075853	Up							1.5	0.0211	0.0647	sarcosine dehydrogenase
3	BE105446	Fnbp1	1377342_s_at	10091465	Up							1.5	0.0275	0.0736	rapostlin
3	BI296106	-	1383397_at	75396998	Up							1.5	0.0343	0.0804	Rattus norvegicus similar to nicotinic acetylcholine receptor-associated 46K protein - mouse (LOC362161), mRNA
3	NM_031055	Mmp9	1398275_at	155985473	Up							1.5	0.0208	0.0646	matrix metalloproteinase 9 (gelatinase B, 92-kDa type IV collagenase)
3	BI294934	-	1380612_at	169762453	Down							1.6	0.0174	0.0610	Rattus norvegicus transcribed sequences
3	BF543871	-	1394352_at	44547684	Down							1.6	0.0167	0.0598	---
3	BF565756	-	1386695_at	42002053	Down							1.6	0.0201	0.0639	Rattus norvegicus transcribed sequences
3	BF542618	-	1394845_at	100002831	Down							1.5	0.0068	0.0448	Rattus norvegicus similar to mKIAA0560 protein (LOC366163), mRNA
3	BF552877	-	1372327_at	112387545	Down							1.5	0.0364	0.0837	Rattus norvegicus similar to Na-Ca exchanger 5 (LOC311387), mRNA
4	AI012630	-	1377012_at	94611607	Up	1.6	0.0159	0.1557							Rattus norvegicus transcribed sequences
4	BF397628	-	1396422_at	121746926	Up	1.6	0.0228	0.1748							similarity to protein ref:NP_002680.1 (H.sapiens) polymerase (DNA-directed), alpha (70kD) [Homo sapiens]
4	NM_057115	Ptpn12	1369496_at	9517633	Down	1.8	0.0001	0.0312							protein tyrosine phosphatase, non-receptor type 12
4	AI011345	Prkwnk1	1368140_at	156297841	Down	1.7	0.0372	0.2071							protein kinase, lysine deficient 1
4	BE116205	-	1384795_at	118125137	Down	1.7	0.0283	0.1877							Rattus norvegicus similar to nuclear protein, NP220 (LOC312491), mRNA
4	BE109884	-	1379651_at	133772259	Down	1.7	0.0306	0.1906							Rattus norvegicus similar to forkhead-related transcription factor 1A (LOC297480), mRNA
4	BG670960	MGC95152	1395519_at	83087757	Down	1.6	0.0443	0.2103							Rattus norvegicus similar to B230212L03Rik protein (LOC297109), mRNA
4	BE115521	-	1391170_at	148981770	Down	1.6	0.0472	0.2103							Rattus norvegicus similar to mKIAA1757 protein (LOC297514), mRNA
4	AI714037	-	1394729_at	156304911	Down	1.6	0.0088	0.1249							Rattus norvegicus transcribed sequences
4	NM_017335	Slc6a12	1387295_at	157781292	Down	1.5	0.0414	0.2103							GABA transporter
4	AW529483	-	1378365_at	117432385	Down	1.9	0.0138	0.1498	1.6	0.0218	0.0538				Rattus norvegicus transcribed sequences
4	AI385379	-	1398107_at	83462977	Down				1.9	0.0455	0.0840				Rattus norvegicus similar to RIKEN cDNA A030007L17; EST AA673177 (LOC362370), mRNA
4	BI281250	-	1384960_at	43909617	Down				1.8	0.0124	0.0395				---
4	AI548449	-	1384851_at	94549854	Up							1.7	0.0131	0.0540	similarity to protein ref:NP_064544.1 (H.sapiens) hypothetical protein DKFZp762K2015 [Homo sapiens]
4	BF400819	Galnt11	1396602_at	5272176	Up							1.6	0.0069	0.0448	Rattus norvegicus transcribed sequences
4	AF187814	Cml3	1370991_at	119964675	Up							1.6	0.0034	0.0328	camello-like 3
4	AF023090	-	1372293_at	89649335	Up							1.6	0.0178	0.0614	Rattus norvegicus transcribed sequence
4	AI235658	-	1383023_at	57124082	Up							1.6	0.0380	0.0846	similar to Ubiquitin-conjugating enzyme E2 H (Ubiquitin-protein ligase H) (Ubiquitin carrier protein H) (UBCH2) (E2-20K) (LOC296956), mRNA
4	AI232716	-	1373975_at	83934018	Up							1.5	0.0070	0.0448	Rattus norvegicus similar to thioether S-methyltransferase (LOC297114), mRNA
4	AI230054	-	1373902_at	158901835	Up							1.5	0.0288	0.0749	Rattus norvegicus similar to hypothetical protein MGC47816 (LOC302036), mRNA
4	AA848944	-	1379584_at	166128286	Down							2.1	0.0257	0.0712	Rattus norvegicus transcribed sequences
4	AI639113	-	1392053_at	89856142	Down							2.1	0.0157	0.0575	similarity to protein pir:A57384 (H.sapiens) A57384 multimerin, endothelial cell, precursor - human
4	AW915454	-	1376394_at	166697703	Down							1.9	0.0188	0.0629	Rattus norvegicus transcribed sequences
4	U56863	Kira5	1370740_at	168640017	Down							1.7	0.0110	0.0500	Ly-49.9 antigen
4	AI716194	Fgl2	1392894_at	9176331	Down							1.7	0.0193	0.0630	fibrinogen-like 2
4	NM_013080	Ptprz1	1368350_at	44834202	Down							1.7	0.0003	0.0173	protein tyrosine phosphatase, receptor-type, Z polypeptide 1
4	BM392106	Cald1	1368824_at	62062872	Down							1.6	0.0069	0.0448	Rattus norvegicus similar to talin 2 (LOC315776), mRNA
4	BI291848	Cald1	1371969_at	62062872	Down							1.6	0.0143	0.0554	caldesmon 1
4	AF400662	Cacna2d1	1369649_at	15139876	Down							1.6	0.0108	0.0497	calcium channel, voltage-dependent, alpha2/delta subunit 1
4	BF281550	-	1390810_at	25065233	Down							1.6	0.0197	0.0632	Rattus norvegicus transcribed sequences
4	AA943147	-	1382902_at	87279682	Down							1.6	0.0043	0.0372	Rattus norvegicus similar to hypothetical protein FLJ20637 (LOC362376), mRNA
5	AI598405	-	1389835_at	171879446	Up	1.7	0.0028	0.0711							Rattus norvegicus similar to RER1 homolog (LOC298675), mRNA
5	BF401989	Ncoa2	1396254_at	5248662	Up	1.6	0.0442	0.2103							Rattus norvegicus transcribed sequences
5	AA900547	-	1382718_at	58407667	Up	1.6	0.0118	0.1401							Rattus norvegicus similar to cysteine-rich protein NFX-1 (LOC313166), mRNA
5	AI411618	MGC105681	1373287_at	155656101	Down	2.0	0.0425	0.2103							Rattus norvegicus similar to C1q C chain (LOC362634), mRNA
5	BM386775	-	1379226_at	152821172	Down	1.6	0.0368	0.2071							Rattus norvegicus similar to absent in melanoma 1 (LOC298543), mRNA
5	NM_053718	Mllt3	1368279_at	107070479	Down	1.5	0.0431	0.2103							myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 3
5	BI281950	-	1372911_at	165129561	Up				1.5	0.0294	0.0629				Rattus norvegicus transcribed sequences
5	X55812	Cnr1	1389677_at	50427173	Down				1.7	0.0151	0.0433				cannabinoid receptor 1
5	BI277879	Slc30a2	1378896_at	153087073	Up							2.0	0.0032	0.0327	solute carrier family 30, member 2
5	NM_012890	Slc30a2	1398264_at	153087073	Up							1.9	0.0192	0.0630	solute carrier family 30, member 2
5	BM384214	Matn1	1380579_at	149805644	Up							1.6	0.0005	0.0182	Rattus norvegicus similar to Matrilin 1, cartilage matrix protein 1 (LOC297894), mRNA
5	BF284337	-	1373963_at	79494958	Up							1.6	0.0099	0.0493	Rattus norvegicus similar to RIKEN cDNA 2810435D12 (LOC298097), mRNA
5	NM_021653	Dio1	1369259_at	128385247	Up							1.6	0.0025	0.0327	deiodinase, iodothyronine, type I
5	AI145487	-	1393945_at	40706424	Down							2.2	0.0072	0.0448	Rattus norvegicus transcribed sequences
5	NM_053977	Cdh17	1369224_at	26047160	Down							1.9	0.0126	0.0532	cadherin 17
5	AI230669	Gnb1	1382982_at	172366934	Down							1.7	0.0035	0.0331	Rattus norvegicus transcribed sequences
5	BF396154	-	1378142_at	129921739	Down							1.6	0.0198	0.0632	Rattus norvegicus transcribed sequences
5	AI103530	-	1382431_at	70490031	Down							1.6	0.0041	0.0365	similarity to protein sp:O95477 (H.sapiens) ABC1_HUMAN ATP-binding cassette, sub-family A, member 1 (ATP-binding cassette transporter 1)
5	BF397925	-	1391139_at	105424702	Down							1.6	0.0387	0.0857	Rattus norvegicus transcribed sequences
5	BE115159	-	1384059_at	102304948	Down							1.6	0.0000	0.0109	Rattus norvegicus transcribed sequences
5	AA874945	-	1382987_at	12379423	Down							1.5	0.0128	0.0535	Rattus norvegicus transcribed sequences
6	AI058428	-	1381085_at	96508955	Up	1.6	0.0262	0.1826							Rattus norvegicus transcribed sequences
6	BF386238	-	1397015_at	57765343	Down	2.1	0.0309	0.1906							Rattus norvegicus transcribed sequences
6	BE116294	-	1396253_at	51807151	Down	1.8	0.0098	0.1324							Rattus norvegicus transcribed sequences
6	BI303268	Bzw2	1370258_at	54817272	Down	1.7	0.0444	0.2103							Hfb2 protein
6	BG378238	-	1372524_at	40250862	Down	1.6	0.0330	0.1971							Rattus norvegicus similar to Kiaa0575 (LOC313977), mRNA
6	BM384008	-	1392864_at	72685228	Down	1.6	0.0020	0.0604							Rattus norvegicus similar to p190-B (LOC299012), mRNA
6	NM_019163	Psen1	1368792_at	107725733	Down	1.6	0.0391	0.2103							presenilin 1
6	BM386731	-	1385089_at	42217273	Up	2.2	0.0034	0.0764	2.1	0.0118	0.0383				
6	BM383749	-	1378128_at	42262080	Up	2.0	0.0183	0.1640	1.6	0.0386	0.0746				Rattus norvegicus transcribed sequences
6	NM_013174	Tgfb3	1367859_at	11017443	Up				1.5	0.0098	0.0346				transforming growth factor, beta 3
6	BM391858	Dnahc11	1389755_at	145176836	Down				1.7	0.0191	0.0507				Rattus norvegicus similar to left-right dynein (LOC314527), mRNA
6	AI716595	Rgs6	1379517_at	106987205	Up							1.8	0.0313	0.0764	similarity to protein sp:P49758 (H.sapiens) RGS6_HUMAN REGULATOR OF G-PROTEIN SIGNALING 6 (RGS6) (S914)
6	AI008479	-	1386311_at	111086323	Up							1.6	0.0430	0.0893	---
6	AI013980	-	1382676_at	135520809	Up							1.5	0.0097	0.0493	Rattus norvegicus similar to WD repeat domain 20 isoform 1 (LOC314453), mRNA
6	AA800587	Gpx2	1374070_at	99372423	Down							2.1	0.0323	0.0782	glutathione peroxidase 2
6	BE115243	-	1391039_at	14047672	Down							1.6	0.0036	0.0338	Rattus norvegicus transcribed sequences
7	BI298372	-	1375467_at	140961150	Up	1.5	0.0073	0.1053							Rattus norvegicus similar to oriLyt TD-element binding protein 7 (LOC366994), mRNA
7	AF305418	Col2a1	1387767_a_at	136679219	Up	1.5	0.0442	0.2103							procollagen, type II, alpha 1
7	NM_053629	Fstl3	1370120_at	11437262	Down	1.9	0.0062	0.0977							follistatin-like 3
7	AW534107	-	1394742_at	105805046	Down	1.8	0.0212	0.1715							Rattus norvegicus transcribed sequences
7	BF402538	-	1381189_at	9816510	Down	1.7	0.0130	0.1473							Rattus norvegicus similar to fizzy-related protein (LOC314642), mRNA
7	BF565397	Csnk1e	1386693_at	117401336	Down	1.6	0.0459	0.2103							casein kinase 1, epsilon
7	BG381296	Nfic	1375342_at	9758135	Down	1.6	0.0220	0.1738							nuclear factor I/C
7	M15481	Igf1	1370333_a_at	24531690	Down	1.6	0.0101	0.1324	1.5	0.0072	0.0282				insulin-like growth factor 1
7	AI412155	Cry1	1392640_at	20644316	Down				1.9	0.0025	0.0178				similarity to protein ref:NP_004066.1 (H.sapiens) cryptochrome 1 (photolyase-like) [Homo sapiens]
7	AI554981	-	1394962_at	21768846	Up							1.8	0.0241	0.0700	Rattus norvegicus transcribed sequences
7	AA997236	Tef	1385374_at	120169280	Up							1.7	0.0119	0.0522	---
7	NM_012793	Gamt	1368253_at	10959990	Up							1.5	0.0128	0.0535	guanidinoacetate methyltransferase
7	AI411286	Gna15	1367504_at	9663886	Up							1.5	0.0337	0.0802	similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
7	AW525471	-	1382325_at	117003627	Up							1.5	0.0224	0.0662	Rattus norvegicus similar to 2-amino-3-ketobutyrate-coenzyme A ligase (LOC366959), mRNA
7	BE099085	-	1374474_at	128885958	Down							1.8	0.0271	0.0736	Rattus norvegicus transcribed sequences
7	AI059060	-	1384599_at	62448645	Down							1.6	0.0255	0.0712	Rattus norvegicus transcribed sequences
7	BI294763	-	1378540_at	62754313	Down							1.5	0.0235	0.0685	Rattus norvegicus transcribed sequences

							Week4			Week12			Week20		
Chromosome	Gene Identifier	Gene ID	Other ID	Position (Mb)	Direction	Ratio	p-value	adjp-value	Ratio	p-value	adjp-value	Direction	p-value	adjp-value	Gene Description
7	BI291849	-	1391539_at	25628629	Down							1.5	0.0244	0.0703	similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
8	BI291272	Rcn2	1377512_at	59648572	Up	1.9	0.0265	0.1826							Rattus norvegicus transcribed sequences
8	BF283259	-	1397187_at	63564060	Up	1.6	0.0151	0.1530							Rattus norvegicus transcribed sequence with weak similarity to protein pir:T33900 (C.elegans) T33900 hypothetical protein Y48A5A.1 - Caenorhabditis elegans
8	BF542912	Scn3b	1383435_at	43231453	Up	1.6	0.0204	0.1715							Rattus norvegicus transcribed sequence with moderate similarity to protein sp:P00722 (E. coli) BGAL_ECOLI Beta-galactosidase (Lactase)
8	BF408587	-	1391021_at	76091646	Down	1.5	0.0037	0.0783							Rattus norvegicus similar to KIAA1749 protein (LOC315795), mRNA
8	AW435415	-	1380306_at	51928308	Up				2.9	0.0312	0.0640				Rattus norvegicus transcribed sequences
8	AA875647	-	1397225_at	51926077	Up				2.5	0.0380	0.0742				similarity to protein sp:P00722 (E. coli) BGAL_ECOLI Beta-galactosidase (Lactase)
8	AI232305	Panx1	1392001_at	11812788	Down				1.7	0.0217	0.0538				similarity to protein ref:NP_036135.1 (M.musculus) cofactor required for Sp1 transcriptional activation subunit 2 (150 kDa) [Mus musculus]
8	BM388029	-	1374159_at	115271908	Down				1.6	0.0184	0.0499				Rattus norvegicus transcribed sequences
8	AI502723	-	1393220_at	104382061	Down				1.5	0.0207	0.0528				Rattus norvegicus transcribed sequences
8	BI291842	Cish	1378586_at	112538514	Up							3.3	0.0129	0.0536	Rattus norvegicus transcribed sequences
8	BM385405	-	1381811_at	47052136	Up							2.0	0.0375	0.0846	ubiquitin specific protease 2
8	AF106659	Usp2	1387703_a_at	47052136	Up							1.8	0.0388	0.0857	ubiquitin specific protease 2
8	AA997421	-	1379721_at	21058321	Up							1.8	0.0061	0.0425	Rattus norvegicus similar to 2310047B19Rik protein (LOC363029), mRNA
8	NM_017186	Gcm1	1369506_at	83018975	Up							1.8	0.0459	0.0937	glial cells missing (Drosophila) homolog a
8	BF283108	-	1394389_at	68596965	Up							1.8	0.0308	0.0760	Rattus norvegicus transcribed sequences
8	AI030103	MGC95155	1393061_at	47755143	Up							1.6	0.0009	0.0232	Rattus norvegicus similar to cDNA sequence BC021608 (LOC300676), mRNA
8	BF403998	-	1389166_at	58093942	Up							1.6	0.0076	0.0461	Rattus norvegicus similar to calcium binding protein Kip 2 (LOC300719), mRNA
8	BF386242	-	1382569_at	100650842	Up							1.6	0.0099	0.0493	Rattus norvegicus similar to membrane receptor (5H375) (LOC315904), mRNA
8	AF368860	-	1370349_a_at	36892614	Down							7.3	0.0091	0.0493	ATPase inhibitor
8	NM_130422	Casp12	1387605_at	2083906	Down							2.3	0.0184	0.0622	caspase 12
8	BE110921	-	1385029_at	2112379	Down							2.2	0.0375	0.0846	---
8	AA893518	-	1389270_x_at	36892614	Down							2.1	0.0017	0.0323	Rattus norvegicus similar to Urinary protein 3 precursor (RUP-3) (LOC300504), mRNA
8	NM_053963	Mmp12	1368530_at	4249938	Down							1.8	0.0450	0.0923	matrix metalloproteinase 12
8	BF405592	-	1377531_at	32289429	Down							1.7	0.0146	0.0556	Rattus norvegicus transcribed sequences
8	NM_021866	Ccr2	1387742_at	128892784	Down							1.6	0.0496	0.0966	chemokine receptor CCR2 gene
8	BF395218	Tpm1	1395794_at	71339094	Down							1.6	0.0400	0.0876	tropomyosin 1, alpha
8	BF409530	Ncam1	1397120_at	53014649	Down							1.6	0.0106	0.0493	---
8	BF289445	-	1394659_at	93733149	Down							1.5	0.0280	0.0740	Rattus norvegicus transcribed sequences
8	AI717707	-	1395410_at	106062791	Down							1.5	0.0293	0.0752	similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
8	AI235560	-	1392727_at	92449550	Down							1.5	0.0478	0.0957	Rattus norvegicus similar to KIAA1009 protein (LOC300880), mRNA
9	BE099410	-	1396770_at	73913631	Up	1.8	0.0450	0.2103							Rattus norvegicus transcribed sequences
9	AI385237	-	1378346_at	110454706	Up	1.5	0.0009	0.0593							Rattus norvegicus transcribed sequences
9	AI408959	-	1396942_at	13460327	Down	2.4	0.0032	0.0761							Rattus norvegicus hypothetical LOC301267 (LOC301267), mRNA
9	BF523991	-	1396268_at	84258233	Down	2.3	0.0019	0.0604							Rattus norvegicus similar to putative nuclear protein (LOC301570), mRNA
9	AI556441	-	1395058_at	44843123	Down	2.1	0.0152	0.1530							Rattus norvegicus similar to CG12050-PA (LOC314545), mRNA
9	AA859909	-	1383734_at	4650918	Down	1.9	0.0445	0.2103	4.8	0.0130	0.0407				Rattus norvegicus transcribed sequences
9	BI278550	-	1383439_at	38355753	Down				1.8	0.0256	0.0574				Rattus norvegicus transcribed sequences
9	BE105373	-	1376540_at	1583413	Down				1.6	0.0193	0.0507				Rattus norvegicus transcribed sequences
9	AW527151	-	1374635_at	62252015	Down				2.3	0.0010	0.0109	2.8	0.0030	0.0327	similarity to protein ref:NP_003803.1 (H.sapiens) a disintegrin and metalloproteinase domain 23 preproprotein [Homo sapiens]
9	BE106041	-	1394717_at	4484968	Down				2.6	0.0032	0.0214	2.0	0.0073	0.0448	Rattus norvegicus transcribed sequences
9	AA955211	-	1393271_at	74287921	Up							1.8	0.0116	0.0519	Rattus norvegicus transcribed sequences
9	AI639159	-	1386634_at	74409235	Up							1.8	0.0105	0.0493	Rattus norvegicus similar to YSPL-1 form 1 (LOC367298), mRNA
9	NM_057125	Pex6	1368264_at	10130773	Up							1.6	0.0138	0.0549	peroxisomal biogenesis factor 6
9	BG381010	-	1376104_at	105454273	Up							1.6	0.0308	0.0760	Rattus norvegicus transcribed sequences
9	BF565191	-	1386691_at	84085615	Up							1.6	0.0318	0.0773	Rattus norvegicus similar to DNA segment, Chr 1, ERATO Doi 757, expressed (LOC363268), mRNA
9	NM_019278	Resp18	1367904_at	74551809	Up							1.5	0.0040	0.0364	regulated endocrine-specific protein 18
9	BF566725	-	1385624_at	11492917	Up							1.5	0.0306	0.0760	Rattus norvegicus similar to Transcription initiation protein SPT3 homolog (SPT3-like protein) (LOC301257), mRNA
9	BF288995	-	1382513_at	8059023	Down							1.7	0.0092	0.0493	Rattus norvegicus similar to triggering receptor TREM-2A (LOC301227), mRNA
9	BF284017	-	1374525_at	59083213	Down							1.7	0.0360	0.0833	Rattus norvegicus similar to amyotrophic lateral sclerosis 2 chromosome region candidate 9; putative GTPase regulator (LOC363239), mRNA
9	BM384831	-	1393653_at	83412793	Down							1.7	0.0010	0.0238	Rattus norvegicus transcribed sequences
9	AF053312	Ccl20	1389814_at	82440964	Down							1.6	0.0158	0.0578	small inducible cytokine subfamily A20
9	AI548940	-	1385143_at	79840001	Down							1.6	0.0246	0.0704	Rattus norvegicus transcribed sequence with moderate similarity to protein pir:I60486 (R.norvegicus) I60486 gene trg protein - rat (fragment)
9	BI275716	Col3a1	1370959_at	44281582	Down							1.5	0.0293	0.0752	collagen, type III, alpha 1
9	AA997266	-	1392655_at	84439277	Down							1.5	0.0022	0.0327	Rattus norvegicus similar to Nuclear autoantigen Sp-100 (Speckled 100 kDa) (Nuclear dot-associated Sp100 protein) (LOC363269), mRNA
10	AI703949	-	1397956_at	15129199	Up	1.7	0.0175	0.1640							---
10	BE112998	Emp2	1377752_at	5311157	Up	1.7	0.0462	0.2103							Rattus norvegicus similar to XMP (LOC360468), mRNA
10	BF563316	LOC303163	1396163_at	43828832	Down	2.1	0.0183	0.1640							Rattus norvegicus similar to Ac2-233 (LOC303163), mRNA
10	NM_031116	Ccl5	1369983_at	71605827	Down	2.0	0.0382	0.2095							chemokine (C-C motif) ligand 5
10	NM_138916	Crk7	1387546_at	86972428	Down	1.9	0.0243	0.1788							---
10	BF566908	Crebbp	1385852_at	11598703	Down	1.8	0.0478	0.2103							CREB binding protein
10	AA998678	-	1384890_at	90213177	Down	1.8	0.0115	0.1401							Rattus norvegicus similar to Enx-2 (LOC303547), mRNA
10	AW525662	-	1382664_at	93679262	Down	1.6	0.0267	0.1826							Rattus norvegicus similar to Protein CDC27Hs (Cell division cycle protein 27 homolog) (H-NUC) (LOC360643), mRNA
10	AI236624	-	1390813_at	76775778	Down	1.6	0.0395	0.2103							Rattus norvegicus similar to RNA-binding protein Musashi2-L (LOC360596), mRNA
10	AI407339	-	1391489_at	34132512	Down	1.6	0.0073	0.1053							Rattus norvegicus similar to LRG-47 (LOC303090), mRNA
10	BI285135	-	1374073_at	64576051	Down	1.5	0.0317	0.1909							Rattus norvegicus similar to DNA segment, Chr 11, ERATO Doi 18, expressed (LOC303333), mRNA
10	BG377259	-	1382185_at	28584909	Up				1.6	0.0476	0.0859				C1q and tumor necrosis factor related protein 2; complement-c1q tumor necrosis factor-related protein 2 [Homo sapiens]
10	AI237401	-	1375519_at	15558732	Down				2.5	0.0081	0.0305				Rattus norvegicus similar to alpha globin (LOC287167), mRNA
10	AI577319	Hba-a1	1388608_x_at	15558740	Down				2.4	0.0103	0.0351				hemoglobin, alpha 1
10	NM_031010	Alox15	1387796_at	67185939	Down				1.6	0.0048	0.0225				arachidonate 12-lipoxygenase
10	BM388946	-	1374204_at	65428043	Down				1.6	0.0303	0.0635	1.7	0.0120	0.0522	Rattus norvegicus similar to WSB-1 (LOC303336), mRNA
10	BG376453	-	1385190_at	18406306	Down				1.7	0.0021	0.0167	2.2	0.0105	0.0493	similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
10	NM_012503	Asgr1	1370149_at	56899266	Up							1.9	0.0106	0.0493	asialoglycoprotein receptor 1
10	AI180413	MGC108825	1389350_at	97725096	Up							1.9	0.0060	0.0425	Rattus norvegicus similar to beta-2-glycoprotein I (LOC287774), mRNA
10	M25804	Nr1d1	1370816_at	8754139	Up							1.8	0.0215	0.0647	nuclear receptor subfamily 1, group D, member 1
10	NM_012851	Hsd17b1	1369292_at	90094249	Up							1.8	0.0159	0.0578	hydroxysteroid 17-beta dehydrogenase 1
10	AA925026	Tmprss8	1384775_s_at	13226053	Up							1.7	0.0476	0.0957	transmembrane serine protease-1
10	BE112523	-	1383654_a_at	110673934	Up							1.7	0.0096	0.0493	Rattus norvegicus transcribed sequence with moderate similarity to protein ref:NP_071441.1 (H.sapiens) fructosamine-3-kinase [Homo sapiens]
10	BI275257	-	1375206_at	58616915	Up							1.6	0.0301	0.0760	Rattus norvegicus hypothetical LOC287466 (LOC287466), mRNA
10	L04796	Gcgr	1370522_at	109928085	Up							1.6	0.0115	0.0516	glucagon receptor
10	AA893634	-	1372305_at	85612425	Up							1.5	0.0215	0.0647	Rattus norvegicus similar to nonclathrin coat protein zeta2-COP (LOC360611), mRNA
10	AF035963	Havcr1	1387965_at	31825130	Down							3.2	0.0250	0.0709	kidney injury molecule 1
10	BE107457	-	1379957_at	71192701	Down							2.1	0.0135	0.0546	Rattus norvegicus similar to schlafen 8 (LOC303378), mRNA
10	AI406967	Eif	1394709_at	29836596	Down							2.0	0.0415	0.0888	Rattus norvegicus transcribed sequences
10	BG372455	-	1390117_at	75206538	Down							2.0	0.0016	0.0323	Rattus norvegicus transcribed sequences
10	BG671264	-	1390783_at	99478336	Down							1.8	0.0021	0.0327	Rattus norvegicus similar to ATP-binding cassette transporter sub-family A member 8a (LOC303638), mRNA
10	BM386570	Nf1	1376943_at	65700694	Down							1.6	0.0308	0.0760	Rattus norvegicus transcribed sequence with weak similarity to protein pir:A38445 (H.sapiens) A38445 EV12B protein precursor - human
10	BF398435	-	1381048_at	32085164	Down							1.6	0.0293	0.0752	---
10	BI278962	-	1388880_at	71177086	Down							1.5	0.0400	0.0876	Rattus norvegicus transcribed sequences
10	BG380279	-	1375672_at	62783889	Down	1.8	0.0001	0.0216	1.8	0.0007	0.0097	2.3	0.0001	0.0109	Rattus norvegicus transcribed sequence with weak similarity to protein pir:RGECDW (E. coli) RGECDW transcription activator of D-serine dehydratase
10	AI146250	-	1383744_at	62784324	Down	2.5	0.0002	0.0312	2.3	0.0024	0.0178	2.4	0.0001	0.0109	Rattus norvegicus transcribed sequence with weak similarity to protein pir:RGECDW (E. coli) RGECDW transcription activator of D-serine dehydratase
11	AI137518	Cxadr	1384816_at	17193505	Up	2.1	0.0194	0.1677							Rattus norvegicus transcribed sequences
11	BG665433	Cxadr	1374237_at	17231126	Down							1.6	0.0350	0.0817	Rattus norvegicus transcribed sequence with moderate similarity to protein pir:I60307 (E. coli) I60307 beta-galactosidase, alpha peptide - Escherichia coli
11	AI599448	-	1380049_at	69672555	Up	1.5	0.0445	0.2103							Rattus norvegicus transcribed sequences
11	BI276069	Eif2b5	1376145_at	82535714	Down	1.6	0.0129	0.1473							initiation factor eIF-2Be
11	AA891032	-	1386503_at	84611466	Up							1.6	0.0203	0.0639	---
11	AA818342	-	1373628_at	43736017	Down							2.1	0.0222	0.0658	Rattus norvegicus transcribed sequences
11	AI176265	-	1378032_at	45794262	Down							2.1	0.0360	0.0833	Rattus norvegicus similar to molecule possessing ankyrin-repeats induced by lipopolysaccharide; IkappaB-zeta (LOC304005), mRNA
11	BF291041	-	1382296_at	25498273	Down							2.1	0.0380	0.0846	Rattus norvegicus transcribed sequences
11	BF283405	-	1379779_at	25557901	Down							1.9	0.0033	0.0327	Rattus norvegicus transcribed sequence with moderate similarity to protein sp:P00722 (E. coli) BGAL_ECOLI Beta-galactosidase (Lactase)
11	NM_012696	Kng1	1387050_s_at	80109746	Down							1.9	0.0402	0.0877	T-kininogen
11	AW535310	Adamts5	1394483_at	22503380	Down							1.8	0.0046	0.0376	a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 5 (aggrecanase-2)
11	AI502798	-	1392296_at	56684734	Down							1.7	0.0225	0.0662	---

							Week4			Week12			Week20		
Chromosome	Gene Identifier	Gene ID	Other ID	Position (Mb)	Direction	Ratio	p-value	adjp-value	Ratio	p-value	adjp-value	Direction	p-value	adjp-value	Gene Description
11	AA996697	-	1384122_at	70386039	Down							1.6	0.0204	0.0639	Rattus norvegicus transcribed sequences
11	AA850766	-	1384724_at	25503380	Down							1.6	0.0216	0.0647	Rattus norvegicus transcribed sequences
11	BG669292	-	1388879_at	44854445	Down							1.6	0.0313	0.0764	Rattus norvegicus similar to 5033411B22Rik protein (LOC363767), mRNA
11	BF561264	-	1393285_at	23905377	Down							1.6	0.0251	0.0709	---
11	BE105661	-	1390443_at	17447730	Down							1.6	0.0343	0.0804	Rattus norvegicus transcribed sequences
11	U31554	Lsamp	1370550_at	60165324	Down							1.6	0.0003	0.0173	limbic system-associated membrane protein
11	BM389685	-	1376937_at	43764257	Down							1.6	0.0497	0.0966	Rattus norvegicus similar to downregulated in ovarian cancer 1 (LOC304020), mRNA
11	BI303277	-	1392025_x_at	23905377	Down							1.6	0.0046	0.0376	---
11	BE109290	Dlgh1	1397135_at	70775877	Down							1.5	0.0192	0.0630	Rattus norvegicus transcribed sequences
11	BF388632	-	1385742_at	86161377	Down							1.5	0.0400	0.0876	---
12	NM_053962	Sds	1369864_a_at	37281250	Down	1.9	0.0278	0.1860							serine dehydratase
12	BE103748	-	1392941_at	22421151	Down	1.6	0.0297	0.1894							Rattus norvegicus transcribed sequences
12	AW531730	-	1394764_at	10757471	Up				1.7	0.0108	0.0358				Rattus norvegicus similar to kinase phosphatase inhibitor 2 (LOC304286), mRNA
12	AI235340	-	1384634_at	43276320	Down				1.7	0.0309	0.0640				Rattus norvegicus transcribed sequences
12	BF288115	-	1376688_a_at	19885349	Down				1.6	0.0148	0.0432				Rattus norvegicus similar to paired immunoglobin-like type 2 receptor alpha; cell surface receptor FDF03 (LOC288552), mRNA
12	BF521655	-	1385670_at	37302260	Up							1.5	0.0184	0.0622	Rattus norvegicus similar to serine dehydratase related sequence 1 (LOC360816), mRNA
12	AI060117	-	1381471_at	94144	Down							1.5	0.0336	0.0802	Rattus norvegicus transcribed sequences
13	NM_031118	Soat1	1369002_at	71420862	Down	2.3	0.0402	0.2103							acyl-coenzyme A:cholesterol acyltransferase
13	NM_053843	Fcgr3	1398246_s_at	86809011	Down	2.0	0.0370	0.2071							Fc receptor, IgG, low affinity III
13	AI231826	Rgs5	1393167_at	85445325	Down	1.6	0.0342	0.2009							regulator of G-protein signaling 5
13	AA894335	-	1375590_at	46546034	Down	1.6	0.0049	0.0932							Rattus norvegicus similar to RIKEN cDNA 5730454B08 (LOC310649), mRNA
13	AI704885	-	1381542_at	40948540	Down	1.5	0.0062	0.0977							Rattus norvegicus similar to RIKEN cDNA 1300013G12 (LOC304766), mRNA
13	BF400061	Capon	1396643_at	86360648	Down				1.8	0.0132	0.0407				Rattus norvegicus transcribed sequences
13	AI717113	F5	1374320_at	79992913	Down				1.8	0.0237	0.0563				coagulation factor 5
13	AI406858	-	1390987_at	86139707	Up							1.5	0.0142	0.0551	Rattus norvegicus transcribed sequences
13	AI407002	-	1373908_at		Down							2.2	0.0306	0.0760	---
13	BF288130	Ptprc	1390798_at	51247016	Down							1.9	0.0283	0.0742	protein tyrosine phosphatase, receptor type, C
13	AA893579	-	1392794_at	86131914	Down							1.8	0.0091	0.0493	Rattus norvegicus transcribed sequences
13	BF417625	-	1393187_at	89646247	Down							1.8	0.0416	0.0888	Rattus norvegicus transcribed sequences
13	AI639103	-	1379387_at	58607898	Down							1.7	0.0269	0.0734	Rattus norvegicus transcribed sequences
13	BF406641	-	1377301_at	48378522	Down							1.6	0.0032	0.0327	Rattus norvegicus transcribed sequences
13	BE108956	-	1392489_at		Down							1.6	0.0184	0.0622	Rattus norvegicus transcribed sequences
13	AA943075	-	1382368_at	57586629	Down							1.6	0.0026	0.0327	Rattus norvegicus transcribed sequences
13	BI275261	-	1379497_at	237646	Down							1.6	0.0003	0.0173	---
13	BM390782	-	1394972_at	57586629	Down							1.6	0.0051	0.0392	Rattus norvegicus transcribed sequences
13	NM_017170	Sap	1367804_at	89112726	Down							1.5	0.0172	0.0609	serum amyloid P-component
13	AI012859	Rnasel	1380425_at	68822011	Down							1.5	0.0419	0.0888	ribonuclease L (2, 5-oligoisoadenylate synthetase-dependent)
13	BG380581	-	1371472_at	85484906	Down							1.5	0.0031	0.0327	Rattus norvegicus transcribed sequences
14	BI299600	-	1378313_at	18662186	Up	1.5	0.0014	0.0604							Rattus norvegicus transcribed sequence with weak similarity to protein sp:O08816 (R.norvegicus) WASL_RAT Neural Wiskott-Aldrich syndrome protein (N-WASP)
14	BI290769	-	1380263_at	81898783	Down	1.6	0.0062	0.0977							Rattus norvegicus hypothetical LOC305452 (LOC305452), mRNA
14	AA892854	-	1398390_at	14995496	Down				2.1	0.0176	0.0484				small inducible cytokine B subfamily (Cys-X-Cys motif), member 13 (B-cell chemoattractant); B-cell-homing chemokine (ligand for Burkitts lymphoma re
14	X76456	-	1371266_at	19049664	Up							1.6	0.0054	0.0406	---
14	BI288076	-	1376870_at	83909631	Up							1.6	0.0157	0.0575	Rattus norvegicus similar to transcription factor MAZR (LOC305471), mRNA
14	BI289418	Cd38	1390325_at	72320479	Down							1.7	0.0489	0.0966	CD38 antigen
14	AB001382	Spp1	1367581_a_at	6423008	Down							1.7	0.0425	0.0893	secreted phosphoprotein 1
14	AA964882	-	1384044_at	36959936	Down							1.6	0.0153	0.0574	Rattus norvegicus similar to beta-sarcoglycan (LOC305305), mRNA
14	BF523573	-	1386061_at	110494799	Down							1.6	0.0307	0.0760	Rattus norvegicus transcribed sequences
14	BE110655	-	1388317_at	87224018	Down							1.5	0.0431	0.0893	Rattus norvegicus transcribed sequences
15	BF391447	-	1392162_at	35694709	Up	1.7	0.0148	0.1530							Rattus norvegicus transcribed sequences
15	BM387164	-	1378087_at	56803906	Down				1.6	0.0243	0.0572				Rattus norvegicus transcribed sequences
15	AI411212	Pdlim2	1375367_at	50564108	Up							1.7	0.0093	0.0493	Rattus norvegicus similar to PDZ and LIM domain 2 (LOC290354), mRNA
15	AI111644	-	1383390_at	39469179	Up							1.7	0.0466	0.0946	Rattus norvegicus transcribed sequences
15	AA924588	-	1392725_at	108030444	Up							1.7	0.0466	0.0946	Rattus norvegicus similar to cDNA sequence BC006662 (LOC290500), mRNA
15	NM_012770	Gucy1b2	1368779_a_at	41612400	Up							1.6	0.0264	0.0723	guanylate cyclase, soluble, beta 2
15	AA859589	-	1393869_at	87382731	Up							1.6	0.0187	0.0629	Rattus norvegicus transcribed sequences
15	NM_053907	Dnase1l3	1368294_at	18909363	Down							2.2	0.0058	0.0417	deoxyribonuclease I-like 3
15	BG378310	-	1385099_at	87547816	Down							1.8	0.0073	0.0448	similarity to protein ref:NP_003834.1 (H.sapiens) sciellin [Homo sapiens]
15	BI303923	-	1383708_at	108785601	Down							1.7	0.0031	0.0327	strong similarity to protein ref:NP_004782.1 (H.sapiens) integrin, beta-like 1 (with EGF-like repeat domains) [Homo sapiens]
15	AF314657	Clu	1367784_a_at	45399691	Down							1.6	0.0338	0.0802	clusterin
15	BE104961	-	1379536_at	35487615	Down							1.5	0.0365	0.0837	Rattus norvegicus similar to centromere protein J; centrosomal P4.1-associated protein; LYST-interacting protein LIP1; LAG-3-associated protein (LOC305909), mRNA
16	AI137275	-	1375138_at	10306818	Up	1.6	0.0354	0.2016							Rattus norvegicus similar to wings apart-like CG3707-PA (LOC290577), mRNA
16	AF209114	LOC192253	1388040_a_at	83812189	Up	1.6	0.0256	0.1821							myosin heavy chain Myr 8
16	U02323	Nrg1	1370607_a_at	63053630	Down	1.5	0.0468	0.2103							neurequlin 1
16	AI180253	-	1379411_at	20463328	Up				1.9	0.0266	0.0582	2.2	0.0072	0.0448	Rattus norvegicus similar to putative protein family member (XC177) (LOC306366), mRNA
16	AI710682	-	1371354_at	6639336	Up							1.7	0.0028	0.0327	Rattus norvegicus similar to troponin C, cardiac muscle - mouse (LOC290561), mRNA
16	AI030212	-	1383031_at	62307869	Up							1.6	0.0096	0.0493	---
16	AA892204	-	1386352_at	5892391	Up							1.5	0.0372	0.0846	---
16	BE118080	LOC207125	1371091_at	83402975	Up							1.5	0.0178	0.0614	unknown protein
16	BI303853	-	1381556_at	30959054	Down							1.8	0.0416	0.0888	Rattus norvegicus transcribed sequences
16	NM_013128	Cpe	1386921_at		Down							1.8	0.0357	0.0831	carboxypeptidase E
16	AI237698	-	1382601_at	56307360	Down							1.7	0.0050	0.0392	Rattus norvegicus transcribed sequences
17	BF388256	-	1381316_at	41225418	Up	1.9	0.0346	0.2016							Rattus norvegicus transcribed sequences
17	BF397269	-	1393811_at	6748412	Down	2.3	0.0380	0.2095							Rattus norvegicus LOC361197 (LOC361197), mRNA
17	BF553179	-	1383370_at	11063085	Down	2.1	0.0112	0.1393							Rattus norvegicus similar to nuclear ATP/GTP-binding protein (LOC290886), mRNA
17	AA997691	-	1396180_at	47923987	Down	1.7	0.0019	0.0604							Rattus norvegicus similar to leucine rich repeat containing 16 (LOC306941), mRNA
17	AA997590	-	1385248_a_at	20987962	Down	1.6	0.0487	0.2103							Rattus norvegicus transcribed sequence with moderate similarity to protein pir:B35272 (H.sapiens) B35272 osteoinductive factor - human
17	AW140475	Cugbp2	1388195_at	83026864	Up				1.7	0.0495	0.0886				CUG triplet repeat,RNA-binding protein 2
17	AI029126	-	1379518_at	33137357	Up							1.6	0.0009	0.0232	Rattus norvegicus transcribed sequences
17	AI007775	-	1393348_at	36881748	Up							1.6	0.0059	0.0419	Rattus norvegicus transcribed sequences
17	AA926109	-	1383486_at	57239713	Down							3.0	0.0183	0.0622	similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
17	BI294018	-	1392648_at	88367101	Down							2.1	0.0449	0.0923	Rattus norvegicus similar to macrophage mannose receptor precursor (LOC291327), mRNA
17	AW522589	-	1391162_at	46899255	Down							1.9	0.0068	0.0448	Rattus norvegicus transcribed sequences
17	BE116471	-	1395994_at	7961472	Down							1.7	0.0307	0.0760	Rattus norvegicus transcribed sequences
17	BM383122	LOC191574	1389500_at		Down							1.6	0.0204	0.0639	---
18	BE118820	-	1385202_at	14138699	Up	1.6	0.0258	0.1821							---
18	AW920883	-	1394907_at	56545079	Down	1.9	0.0057	0.0977							Rattus norvegicus transcribed sequences
18	BI304009	Lox	1368172_a_at	47893877	Down	1.6	0.0011	0.0593							lysyl oxidase
18	BM391907	-	1373382_at	29303561	Down	1.6	0.0201	0.1714							similarity to protein ref:NP_003723.1 (H.sapiens) eukaryotic translation initiation factor 4E binding protein 3; eukaryotic initiation factor 4E-binding protein 3
18	BI281497	-	1384177_at	52202307	Up				1.6	0.0008	0.0097				Rattus norvegicus similar to RIKEN cDNA 9130427A09 (LOC307288), mRNA
18	AA964219	-	1390790_a_at	71794564	Down				2.0	0.0055	0.0239				Rattus norvegicus transcribed sequences
18	AA925710	-	1384098_at	12711851	Down				1.7	0.0370	0.0742				Rattus norvegicus similar to hypothetical protein (LOC361296), mRNA
18	BE108561	Tcf4	1396660_at	68272171	Down				1.6	0.0437	0.0827				Rattus norvegicus transcribed sequences
18	AW436211	Tcf4	1397286_at	66240259	Down							1.5	0.0096	0.0493	transcription factor 4
18	BG377887	Gfra3	1377680_at	27167576	Up							1.5	0.0139	0.0551	GDNF-family receptor alpha 3
18	AI231438	MGC93742	1390569_at	81160681	Up							1.5	0.0082	0.0477	Rattus norvegicus transcribed sequences
18	BG378232	Mapk4	1374724_at	70707526	Up							1.5	0.0220	0.0655	Rattus norvegicus transcribed sequences
18	AI501237	-	1377994_at	62920344	Down							1.7	0.0381	0.0846	similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
19	BF405113	-	1390605_at	2354534	Down	1.8	0.0018	0.0604							Rattus norvegicus transcribed sequences
19	AW532828	-	1374167_at	35719480	Down	1.6	0.0118	0.1401							Rattus norvegicus hypothetical LOC291982 (LOC291982), mRNA
19	BI288751	LOC291840	1381543_at	9665175	Up				1.6	0.0058	0.0241				Rattus norvegicus transcribed sequence with moderate similarity to protein ref:NP_060701.1 (H.sapiens) hypothetical protein FLJ10815 [Homo sapiens]
19	BF291194	-	1395122_s_at	53544745	Up							1.6	0.0110	0.0500	Rattus norvegicus similar to PISSLRE (LOC361434), mRNA

							Week4			Week12			Week20		
Chromosome	Gene Identifier	Gene ID	Other ID	Position (Mb)	Direction	Ratio	p-value	adjp-value	Ratio	p-value	adjp-value	Direction	p-value	adjp-value	Gene Description
19	BE108555	ZD10B	1396661_at	40905883	Up							1.6	0.0123	0.0528	Rattus norvegicus similar to Ddx19 protein (LOC292022), mRNA
19	BE105838	-	1379078_at	40888933	Up							1.6	0.0408	0.0886	Rattus norvegicus transcribed sequences
19	AI575458	-	1383083_at	52213643	Up							1.5	0.0105	0.0493	Rattus norvegicus similar to SMAR1 (LOC292064), mRNA
19	BI289613	-	1372600_at		Up							1.5	0.0028	0.0327	---
19	AI071216	-	1383973_at	36520052	Up							1.5	0.0215	0.0647	Rattus norvegicus similar to hypothetical protein E330010G16 (LOC307816), mRNA
19	BF414702	-	1383641_at	32107286	Down							1.6	0.0420	0.0888	endothelin receptor type A
19	BI275867	-	1390733_at	44899645	Down							1.6	0.0431	0.0893	Rattus norvegicus transcribed sequences
19	BF548891	-	1393415_at	32046233	Down							1.6	0.0062	0.0428	endothelin receptor type A
20	AI012393	Btnl7	1376373_at	4522079	Up	1.6	0.0446	0.2103							similarity to protein sp:P14373 (H.sapiens) RFP_HUMAN Zinc-finger protein RFP (Ret finger protein) (Tripartite motif protein 27)
20	BE096729	Ftcd	1387877_at	12470290	Down	1.6	0.0040	0.0809							formiminotransferase cyclodeaminase
20	AI599350	Psmb9	1370186_at	4801220	Down	1.6	0.0048	0.0922							proteosome (prosome, macropain) subunit, beta type 9
20	AW252296	Col18a1	1381431_at	11974608	Down	1.6	0.0000	0.0216							Rattus norvegicus transcribed sequences
20	BE108058	Col18a1	1398394_at	11973497	Down							1.6	0.0250	0.0709	Rattus norvegicus transcribed sequences
20	AJ243973	RT1.S3	1388213_a_at	2815982	Down	1.5	0.0499	0.2103							MHC class Ib RT1.S3
20	AI548626	-	1398128_at	43870890	Down	1.5	0.0176	0.1640							Rattus norvegicus transcribed sequences
20	BI290161	-	1382041_at	10731287	Up							1.7	0.0019	0.0325	Rattus norvegicus similar to 1-acylglycerol-3-phosphate-gamma (LOC294324), mRNA
20	AI113219	Spql1	1382843_at	28459734	Up							1.6	0.0087	0.0493	sphingosine-1-phosphate lyase 1
20	AF413572	Pkib	1369105_a_at	36655515	Down							2.4	0.0091	0.0493	protein kinase (cAMP dependent, catalytic) inhibitor beta
20	AI411352	Gja1	1372002_at	35409815	Down							1.8	0.0299	0.0760	gap junction membrane channel protein alpha 1
20	AW532939	-	1392736_at	30044615	Down							1.8	0.0136	0.0546	---
20	BM383464	-	1382437_at	3423932	Down							1.7	0.0124	0.0528	RT1 class Ib gene(Aw2)
20	NM_019309	Grik2	1369036_at	53229999	Down							1.5	0.0013	0.0282	glutamate receptor, ionotropic, kainate 2
X	AI169241	-	1372637_at	39886845	Up	1.9	0.0459	0.2103							Rattus norvegicus transcribed sequence with weak similarity to protein pir:I38488 (H.sapiens) I38488 trophinin - human
X	BG371620	-	1383675_at	147273184	Up	1.5	0.0481	0.2103							---
X	NM_053428	Fgf13	1368114_at	144200839	Up	1.5	0.0351	0.2016							fibroblast growth factor 13
X	BF396777	MGC94181	1395291_at	48895398	Up	1.5	0.0227	0.1748							Rattus norvegicus transcribed sequences
X	AI170324	-	1373882_at	50829626	Down	1.5	0.0057	0.0977							similarity to protein sp:P97946 (M.musculus) VEGD_MOUSE Vascular endothelial growth factor D precursor (VEGF-D) (c-fos induced growth factor) (FIGF)
X	NM_013197	Alas2	1367985_at	39799426	Down				2.7	0.0201	0.0523	1.9	0.0341	0.0803	aminolevulinic acid synthase 2
X	NM_021670	Bmp15	1387734_at	29003933	Up							1.9	0.0425	0.0893	bone morphogenetic protein 15
X	NM_012521	Calb3	1368339_at	52446817	Up							1.8	0.0247	0.0704	calbindin 3
X	BF389476	MGC94465	1380835_at	110744008	Up							1.8	0.0133	0.0546	Rattus norvegicus similar to hypothetical protein FLJ12671 (LOC317205), mRNA
X	BG379491	-	1374218_at	41701219	Up							1.6	0.0007	0.0216	Rattus norvegicus transcribed sequences
X	BI274139	-	1375276_at	26630886	Up							1.6	0.0019	0.0325	Rattus norvegicus similar to mitochondrial inner membrane translocase component Tim17b (LOC317374), mRNA
X	NM_017251	Gjb1	1387145_at	89448909	Up							1.6	0.0050	0.0392	gap junction membrane channel protein beta 1
X	BG373822	-	1376706_at	67548001	Down							1.6	0.0486	0.0966	Rattus norvegicus transcribed sequences
X	BF415976	-	1380693_at	56821495	Down							1.6	0.0482	0.0962	---
UN	BM388500	-	1383977_a_at		Up	1.9	0.0252	0.1818							---
UN	BF551160	-	1394056_at		Down	1.7	0.0299	0.1894							---
UN	U15660	Nr1d2	1370540_at		Up				2.2	0.0086	0.0318				nuclear receptor subfamily 1, group D, member 2
UN	U20796	Nr1d2	1370541_at		Up				1.7	0.0149	0.0432				nuclear receptor subfamily 1, group D, member 2
UN	BF284190	Nr1d2	1390430_at		Up				1.6	0.0380	0.0742				---
UN	AI237240	-	1395238_at		Down				2.7	0.0253	0.0574				---
UN	BE116619	Rap2b	1392922_at		Down				1.7	0.0259	0.0574				Rattus norvegicus transcribed sequences
UN	AF361355	Pr1	1388103_at		Up				1.5	0.0048	0.0225	1.7	0.0026	0.0327	voltage-dependent calcium channel gamma subunit-like protein
UN	AI712791	-	1384303_s_at		Up							1.7	0.0376	0.0846	---
UN	AI712791	-	1384302_at		Up							1.6	0.0049	0.0391	---
UN	BF416508	Abp10	1389441_at		Down							1.5	0.0010	0.0238	annexin V-binding protein ABP-10

Week	Total Networks	Top Networks	High Level Functions	Significance	Top Function	Significance	Canonical Pathway (p<0.05)	Node
4	10	1	Immune Response	3.87E-8 - 2.88E-2	Development Disorder	3.46E-15 - 3.15E-5	Wnt/B-catenin Signaling	Crebbp(2), Csnk1e(1), Sfrp2(3), Wnt2b(3)
			Cell-to-Cell Signaling and Interaction	1.27E-6 - 2.88E-2	Cellular Growth and Proliferation	2.09E-14 - 5.88E-5	Amyoid Processing	Csnk1e(1), Psen(1)
			Immune and Lymphatic Development and Function	1.27E-6 - 2.88E-2	Cell Death	1.87E-13 - 5.88E-5	Antigen Presentation	HLA-E(1), Psmb9(1)
					Cellular Development	8.90E-13 - 6.36E-5		
		2	Gene Expression	1.15E-7 - 3.84E-3				
			Viral Function	6.30E-6 - 3.84E-3				
			Cancer	1.43E-5 - 3.84E-3				
		3	Cellular Development	8.04E-8 - 3.84E-3				
			Developmental Disorder	2.64E-7 - 3.84E-3				
			Cellular Growth and Proliferation	2.87E-7 - 3.84E-3				
12	6	1	Gene Expression	2.68E-10 - 6.60E-5	Gene Expression	8.19E-13 - 1.04E-5	Wnt/B-catenin Signaling	Tcf4(2), Tqfb3(1)
			Cell-to-Cell Signaling and Interaction	9.15E-10 - 8.57E-5	Cell-to-Cell Signaling and Interaction	2.71E-11 - 8.91E-6	Glutathione Metabolism	Gstm1(2), Gstm2 (2)
			Cellular Growth and Proliferation	9.15E-10 - 8.57E-5	Cellular Growth and Proliferation	2.71E-11 - 1.25E-5	Glycine, Serine, and Threonine Metabolism	Alas2(1), Sars
					Connective Tissue Development and Function	2.71E-11 - 3.42E-6		
		2	Cardiovascular Disease	5.17E-7 - 3.67E-3				
			Drug Metabolism	5.17E-7 - 1.46E-3				
			Hematological Disease	5.17E-7 - 3.84E-3				
			Small Molecule Biochemistry	5.17E-7 - 3.84E-3				
20	10	1	Cell Morpholgy	2.07E-7 - 3.84E-3	Cellular Growth and Proliferation	3.40E-11 - 4.16E-5	Nitric Oxide Signaling in Cardiovascular System	Gucy1a3(3), Gucy1b3(3)
			Cell Cycle	1.03E-6 - 3.84E-3	Connective Tissue Development and Function	7.21E-11 - 4.11E-5		
			Endocrine System Development and Function	1.03E-6 - 2.36E-3	Cellular Movement	8.58E-11 - 3.60E-5		
			Cellular Development	2.18E-6 - 3.49E-3	Immune and Lymphatic Development and Function	1.49E-10 - 4.18E-5		
		2	Gene Expression	1.99E-8 - 9.24E-4				
			Cell Morphology	5.20E-8 - 1.43E-5				
			Cell-to-Cell Signaling and Interaction	2.07E-7 - 9.54E-4				
		3	Cellular Movement	1.31E-8 - 3.16E-3				
			Cellular Development	1.31E-7 - 3.84E-3				
			Immune and Lymphatic Development and Function	1.31E-7 - 3.84E-3				

Chromosome	Gene Identifier	Gene ID	Other ID	Position (Mb)	Gene Description
1	NM_021663	NUCB2_RAT	1370000_at	174624096	NEFA precursor
1	J02827	ODBA_RAT	1370897_at	80837907	branched chain keto acid dehydrogenase subunit E1, alpha polypeptide
1	AI169562	Q63274_RAT	1371080_at	94412803	kallikrein
1	BF389640	Q4G020_RAT	1379485_at	267369410	Rattus norvegicus similar to eukaryotic translation initiation factor 3, subunit 10 theta, 150/170kDa; eukaryotic translation initiation factor 3, subunit 10 (theta, 170kD); Eukaryotic translation initiation factor 3, subunit 10, 170kD; eukaryotic tr
1	BE099664		1381264_at	264609833	Rattus norvegicus transcribed sequences
1	AI060133		1382476_x_at	207557036	Rattus norvegicus transcribed sequence with moderate similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
1	AA956308	XP_218291.3	1384118_at	72699408	Rattus norvegicus similar to RIKEN cDNA 2810439M05 (LOC308361), mRNA
1	BF399429	XP_215000.3	1389026_at	149425862	Rattus norvegicus similar to RIKEN cDNA 4933417L02 (LOC293117), mRNA
1	AI233266	Q2V057_RAT	1389645_at	85545612	Rattus norvegicus similar to proline dehydrogenase (oxidase) 2 (LOC361538), mRNA
1	AA964142	XP_344925.2	1389888_at	157532994	Rattus norvegicus similar to RIKEN cDNA 2610209A20 (LOC368121), mRNA
1	AI412174	CI071_RAT	1390801_at	228097480	Rattus norvegicus transcribed sequences
1	AI145746		1392249_at	20355444	Rattus norvegicus transcribed sequences
1	AA893579		1392794_at	203379419	Rattus norvegicus transcribed sequences
1	AA818059		1392982_at	101801286	Rattus norvegicus transcribed sequences
1	BF285952	NP_001034754.1	1393474_at	96197898	Rattus norvegicus similar to cytosolic sulfotransferase (LOC292915), mRNA
1	AI045155	NP_001013163.1	1393929_at	47115584	Rattus norvegicus similar to G protein-coupled receptor KY411 (LOC308163), mRNA
1	BF284064		1395844_at	103864540	Rattus norvegicus similar to methylcrotonoyl-Coenzyme A carboxylase 1 (alpha) (LOC294972), mRNA
1	BE097460		1398700_at	40899901	Rattus norvegicus transcribed sequences
2	NM_031620	SERA_RAT	1367811_at	124600017	3-phosphoglycerate dehydrogenase
2	NM_017090	GCYA3_RAT	1368154_at	173755007	guanylate cyclase 1, soluble, alpha 3
2	AF202115	CERU_RAT	1368419_at	105086278	ceruloplasmin
2	NM_012889	VCAM1_RAT	1368474_at	212277654	vascular cell adhesion molecule 1
2	AF367210	IL7_RAT	1369208_at	96356083	interleukin 7
2	U78857		1369686_at	144267748	activity and neurotransmitter-induced early gene protein 4 (ania-4)
2	BF411765	CELR2_RAT	1371018_at	203960524	cadherin EGF LAG seven-pass G-type receptor 2
2	BI281702	MAP1B_RAT	1373363_at	30415255	microtubule-associated protein 1b
2	AI176320	XP_226988.3	1373416_at	113315728	Rattus norvegicus transcribed sequences
2	BE107853		1375497_at	142404903	Rattus norvegicus transcribed sequences
2	AA957384		1377278_at	47172864	Rattus norvegicus transcribed sequences
2	BF388224		1379175_at	234240301	Rattus norvegicus transcribed sequences
2	BG374101		1381262_at	181637899	Rattus norvegicus transcribed sequences
2	AA819288		1382274_at	157332263	Rattus norvegicus similar to Retinoic acid receptor responder protein 1 (Tazarotene-induced gene 1 protein) (RAR-responsive protein TIG1) (LOC310486), mRNA
2	BM383464		1382437_at	208517037	RT1 class Ib gene(Aw2)
2	AI511405	XP_227217.3	1385407_at	155315259	Rattus norvegicus similar to hypothetical protein FLJ22693 (LOC310467), mRNA
2	AI237532	XP_227203.2	1385872_at	152125352	Rattus norvegicus transcribed sequences
2	BF290410	XP_226824.3	1386052_at	59105666	Rattus norvegicus transcribed sequences
2	BF284922		1388557_at	118026879	Rattus norvegicus transcribed sequences
2	BI282008		1389003_at	2911603	Rattus norvegicus transcribed sequences
2	BF402235		1392262_at	204000799	Rattus norvegicus transcribed sequences
2	BF409007		1393063_at	116159619	Rattus norvegicus transcribed sequences
2	BF415556		1395436_at	234263853	Rattus norvegicus transcribed sequences
2	BF553729	Q9QXK5_RAT	1397820_at	200218630	Rattus norvegicus transcribed sequences
3	NM_032066	NP_114455.1	1368051_at	78436634	smooth muscle-specific 17 beta-hydroxysteroid dehydrogenase type 3
3	NM_053498	ENP6_RAT	1368315_at	141385480	ectonucleoside triphosphate diphosphohydrolase 6
3	BM389019	NP_114013.1	1368829_at	112608480	fibrillin-1
3	BI295949	NP_001011965.1	1373590_at	14393734	Rattus norvegicus transcribed sequences
3	BF284124	XP_230325.3	1377018_at	87795505	Rattus norvegicus similar to E430002G05Rik protein (LOC311252), mRNA
3	BI273752	XP_216007.3	1379364_at	4100013	Rattus norvegicus similar to CG33130-PA (LOC296580), mRNA
3	BI294934		1380612_at	169762453	Rattus norvegicus transcribed sequences
3	AW527286		1380899_at	143411116	Rattus norvegicus similar to Protein C20orf160 (LOC311550), mRNA
3	BF553538	CXA9_RAT	1386123_at	99861095	Rattus norvegicus transcribed sequences
3	BF565756		1386695_at	42002053	Rattus norvegicus transcribed sequences
4	AI011345	WNK1_RAT	1368140_at	156297841	protein kinase, lysine deficient 1
4	NM_013080	PTPRZ_RAT	1368350_at	49334202	protein tyrosine phosphatase, receptor-type, Z polypeptide 1
4	BI291848		1371969_at	62062872	caldesmon 1
4	BG378920	MET_RAT	1374065_at	43134101	Rattus norvegicus transcribed sequences
4	AI012630	PTGD2_RAT	1377012_at	94611607	Rattus norvegicus transcribed sequences
4	AW529483	NP_997677.1	1378365_at	117432385	Rattus norvegicus transcribed sequences
4	BF389527		1381723_at	182898769	---
4	BI288769	NP_001034433.1	1383401_at	42700914	---
4	BE116205	XP_242556.3	1384795_at	118125137	Rattus norvegicus similar to nuclear protein, NP220 (LOC312491), mRNA
4	AW524822		1390865_at	49659289	Rattus norvegicus transcribed sequence with moderate similarity to protein ref:NP_036191.1 (M.musculus) Ca<2+>dependent activator protein for secretion; Ca2+-dependent activator protein for secretion [Mus musculus]
4	AI639113		1392053_at	89856142	Rattus norvegicus transcribed sequence with moderate similarity to protein pir:A57384 (H.sapiens) A57384 multimerin, endothelial cell, precursor - human
4	BF283618		1392510_at	62729242	Rattus norvegicus similar to hypothetical protein B230314O19 (LOC362336), mRNA
4	BF400819		1396602_at	5272676	Rattus norvegicus transcribed sequences
5	NM_053977	CAD17_RAT	1369224_at	26047160	cadherin 17
5	NM_021653	IOD1_RAT	1369259_at	128385247	deiodinase, iodothyronine, type I
5	BF283756	NP_852143.1	1373923_at	2286373	Rattus norvegicus transcribed sequences
5	BF284337		1373963_at	79494958	Rattus norvegicus similar to RIKEN cDNA 2810435D12 (LOC298097), mRNA
5	BE105524		1380487_at	61951151	Rattus norvegicus transcribed sequences
5	BM384214	NP_001006980.1	1380579_at	149805644	Rattus norvegicus similar to Matrilin 1, cartilage matrix protein 1 (LOC297894), mRNA
5	AI028979	Q5BK25_RAT	1383395_at	160646328	Rattus norvegicus similar to Agmatinase, mitochondrial precursor (Agmatine ureohydrolase) (AUH) (LOC298607), mRNA
5	AI547423	BSND_RAT	1393209_at	127542219	barttin
5	BF401989		1396254_at	5249162	Rattus norvegicus transcribed sequences
5	BG378899		1399092_at	148815020	Rattus norvegicus similar to hypothetical protein FLJ10315 (LOC362608), mRNA
6	BG378238		1372524_at	40251362	Rattus norvegicus similar to Kiaa0575 (LOC313977), mRNA
6	BE107255	XP_234275.3	1374480_at	94024421	Rattus norvegicus similar to hypothetical protein E130308H01 (LOC314212), mRNA
6	BG667451		1377185_at	101599793	Rattus norvegicus transcribed sequences
6	AI103284	XP_216791.3	1381376_at	136196829	Rattus norvegicus similar to Tnfaip2 protein (LOC299340), mRNA
6	BM391545		1392733_at	77959323	Rattus norvegicus transcribed sequences
6	BM384008	XP_216688.3	1392864_at	72685228	Rattus norvegicus similar to p190-B (LOC299012), mRNA
7	AA819268		1371776_at	32601895	phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 1
7	BG381296	Q9QY87_RAT	1375342_at	9768135	nuclear factor I/C
7	BI298372		1375467_at	140961650	Rattus norvegicus similar to oriLyt TD-element binding protein 7 (LOC366994), mRNA
7	BM384525	XP_216859.1	1395045_at	16321201	Rattus norvegicus similar to NADH oxidoreductase (LOC299643), mRNA
8	NM_053963	MMP12_RAT	1368530_at	4249938	matrix metalloproteinase 12
8	BI291272		1377512_at	59649072	Rattus norvegicus transcribed sequences
8	BF405592		1377531_at	32289929	Rattus norvegicus transcribed sequences
8	AA997421	XP_343361.2	1379721_at	21058321	Rattus norvegicus similar to 2310047B19Rik protein (LOC363029), mRNA
8	BF542912	SCN3B_RAT	1383435_at	43231453	Rattus norvegicus transcribed sequence with moderate similarity to protein sp:P00722 (E. coli) BGAL_ECOLI Beta-galactosidase (Lactase)
8	NM_130422	NP_569106.1	1387605_at	2083906	caspase 12
8	NM_021866	CCR2_RAT	1387742_at	128892784	chemokine receptor CCR2 gene
8	AA893518	UP3_RAT	1389270_x_at	36892614	Rattus norvegicus similar to Urinary protein 3 precursor (RUP-3) (LOC300504), mRNA
8	AA850618	Q9R0N2_RAT	1390710_x_at	44962880	Rattus norvegicus similar to gp250 precursor (LOC300652), mRNA
8	BF408587		1391021_at	76091646	Rattus norvegicus similar to KIAA1749 protein (LOC315795), mRNA
9	BI275716	CO3A1_RAT	1370959_at	44281582	collagen, type III, alpha 1
9	AW527151		1374635_at	62252515	Rattus norvegicus transcribed sequence with strong similarity to protein ref:NP_003803.1 (H.sapiens) a disintegrin and metalloproteinase domain 23 preproprotein [Homo sapiens]
9	AI385237		1378346_at	110455206	Rattus norvegicus transcribed sequences
9	AI639159	XP_346062.2	1386454_at	74409235	Rattus norvegicus similar to YSPL-1 form 1 (LOC367298), mRNA
9	BM384831		1393653_at	83412793	Rattus norvegicus transcribed sequences
9	BF523991		1396268_at	84258233	Rattus norvegicus similar to putative nuclear protein (LOC301570), mRNA
9	BE099410		1396770_at	73914131	Rattus norvegicus transcribed sequences
9	AI408959		1396942_at	13460537	Rattus norvegicus hypothetical LOC301267 (LOC301267), mRNA
10	AI010414		1371545_at	96056298	Rattus norvegicus transcribed sequences
10	BI285135	HCP1_RAT	1374073_at	64576051	Rattus norvegicus similar to DNA segment, Chr 11, ERATO Doi 18, expressed (LOC303333), mRNA
10	BE116569	XP_340743.2	1374208_at	4372881	Rattus norvegicus similar to RIKEN cDNA A430104C18 (LOC360466), mRNA

10	BI298463		1374356_at	15207723	Rattus norvegicus similar to tripartite motif protein 32 (LOC302999), mRNA
10	BG380279		1375672_at	62782723	Rattus norvegicus transcribed sequence with weak similarity to protein pir:RGECDW (E. coli) RGECDW transcription activator of D-serine dehydratase - Escherichia coli
10	BI294949	NP_001008361.1	1375674_at	10891559	Rattus norvegicus similar to chromosome 16 open reading frame 5 (LOC360480), mRNA
10	BE100978		1379644_at	40248088	Rattus norvegicus transcribed sequences
10	AW528010		1381233_at	97298015	Rattus norvegicus transcribed sequences
10	BF408881	XP_340881.2	1382957_at	82931188	Rattus norvegicus similar to cisplatin resistance-associated overexpressed protein (LOC360602), mRNA
10	BE112523		1383654_a_at	110674434	Rattus norvegicus transcribed sequence with moderate similarity to protein ref:NP_071441.1 (H.sapiens) fructosamine-3-kinase [Homo sapiens]
10	AI180413	APOH_RAT	1389350_at	97725096	Rattus norvegicus similar to beta-2-glycoprotein I (LOC287774), mRNA
10	BF419586		1389982_at	72806191	LIM homeobox protein 1
10	BG372455		1390117_at	75207038	Rattus norvegicus transcribed sequences
10	BG671264		1390783_at	99478336	Rattus norvegicus similar to ATP-binding cassette transporter sub-family A member 8a (LOC303638), mRNA
10	AI703949		1397956_at	15129199	---
11	NM_133428	NP_596919.1	1368583_a_at	80230659	histidine-rich glycoprotein
11	BF283405		1379779_at	25558401	Rattus norvegicus transcribed sequence with moderate similarity to protein sp:P00722 (E. coli) BGAL_ECOLI Beta-galactosidase (Lactase)
11	AI599448		1380049_at	69673055	Rattus norvegicus transcribed sequences
11	AI137518	CXAR_RAT	1384816_at	17193505	Rattus norvegicus transcribed sequences
11	AA891032	XP_341011.2	1386503_at	84611466	---
11	BG669292		1388879_at	44854445	Rattus norvegicus similar to 5033411B22Rik protein (LOC363767), mRNA
11	BI303277		1392025_x_at	23905377	---
12	NM_053626	OXDA_RAT	1369491_at	43628160	D-amino acid oxidase
12	AI103040		1376840_at	9668106	Rattus norvegicus transcribed sequences
12	BF553979	Q6QI44_RAT	1383446_at	36233484	Rattus norvegicus transcribed sequences
12	BF283000	XP_347254.1	1399083_at	22777345	Rattus norvegicus similar to Williams-Beuren syndrome critical region protein 21 (LOC368083), mRNA
13	BE099979	XP_213921.3	1375428_at	81491327	Rattus norvegicus similar to cellular repressor of E1A-stimulated genes CREG (LOC289185), mRNA
13	BF406641		1377301_at	48379022	Rattus norvegicus transcribed sequences
13	BF389856		1377807_a_at	81082440	Rattus norvegicus transcribed sequence with strong similarity to protein sp:P00722 (E. coli) BGAL_ECOLI Beta-galactosidase (Lactase)
13	AI704885	NP_001012025.1	1381542_at	40948540	Rattus norvegicus similar to RIKEN cDNA 1300013G12 (LOC304766), mRNA
13	BF542890		1394400_at	96950732	Rattus norvegicus transcribed sequences
14	AI235294	XP_223611.1	1376161_at	86998069	Rattus norvegicus similar to RIKEN cDNA 1110014L17 (LOC305502), mRNA
14	BI291600		1377262_at	110170474	Rattus norvegicus similar to KIAA2010 protein (LOC360993), mRNA
14	BI299600		1378313_at	18662686	Rattus norvegicus transcribed sequence with weak similarity to protein sp:O08816 (R.norvegicus) WASL_RAT Neural Wiskott-Aldrich syndrome protein (N-WASP)
14	BF401106		1383753_at	110139395	Rattus norvegicus transcribed sequences
14	AI012338	PURB_RAT	1391303_at	87231825	Rattus norvegicus transcribed sequence with strong similarity to protein ref:NP_150093.1 (H.sapiens) purine-rich element binding protein B [Homo sapiens]
15	NM_053907	DNSL3_RAT	1368294_at	18909363	deoxyribonuclease I-like 3
15	BI303923	ITGBL1	1383708_at	108785601	Rattus norvegicus transcribed sequence with strong similarity to protein ref:NP_004782.1 (H.sapiens) integrin, beta-like 1 (with EGF-like repeat domains) [Homo sapiens]
15	AI058292	XP_224283.1	1384415_at	43208046	Rattus norvegicus transcribed sequences
15	BG378310		1385099_at	87547816	Rattus norvegicus transcribed sequence with strong similarity to protein ref:NP_003834.1 (H.sapiens) sciellin [Homo sapiens]
15	AI060175	NP_001012040.1	1393932_at	2569584	Rattus norvegicus similar to RIKEN cDNA 1700010P07 (LOC305684), mRNA
16	BF283341	TKT_RAT	1376635_at	5908757	transketolase
16	BE114427		1377333_at	3758163	Rattus norvegicus transcribed sequences
16	AI180253		1379411_at	20463828	
16	U17260	ARY1_RAT	1387187_a_at	23845894	N-acetyltransferase 1 (arylamine N-acetyltransferase)
17	AI029126		1379518_at	33137857	Rattus norvegicus transcribed sequences
17	AA926109		1383486_at	57240213	Rattus norvegicus transcribed sequence with moderate similarity to protein pdb:1LBG (E. coli) B Chain B, Lactose Operon Repressor Bound To 21-Base Pair Symmetric Operator Dna, Alpha Carbons Only
17	BF560932		1384000_at	42176820	Rattus norvegicus similar to sox-4 protein - mouse (LOC364712), mRNA
18	NM_030858	SMAD7_RAT	1368896_at	72294803	MAD homolog 7 (Drosophila)
18	BM391907		1373692_at	29303561	Rattus norvegicus transcribed sequence with moderate similarity to protein ref:NP_003723.1 (H.sapiens) eukaryotic translation initiation factor 4E binding protein 3; eukaryotic initiation factor 4E-binding protein 3 [Homo sapiens]
18	BI281497	GRAM3_RAT	1384177_at	52202307	Rattus norvegicus similar to RIKEN cDNA 9130427A09 (LOC307288), mRNA
18	AI231438	NP_001007688.1	1390569_at	81160681	Rattus norvegicus transcribed sequences
18	AW920883		1394907_at	56545579	Rattus norvegicus transcribed sequences
19	L07316	MDP1_RAT	1368281_at	53503490	dipeptidase 1
19	AY081218	NP_612513.1	1370336_at	49682142	pregnancy-induced growth inhibitor
19	AW532828	Q6QI93_RAT	1374167_at	35719480	Rattus norvegicus hypothetical LOC291982 (LOC291982), mRNA
19	BF548891	EDNRA_RAT	1393415_at	32046233	endothelin receptor type A
19	BE108555		1396661_at	40906383	Rattus norvegicus similar to Ddx19 protein (LOC292022), mRNA
20	AF413572	IPKB_RAT	1369105_a_at	36655515	protein kinase (cAMP dependent, catalytic) inhibitor beta
20	AB047324	NP_620186.1	1370548_at	44211646	solute carrier family 16, member 10
20	BM383785		1376432_at	8450329	Rattus norvegicus similar to Tex27 protein (LOC361816), mRNA
20	BI290161	XP_215367.2	1382041_at	10731287	Rattus norvegicus similar to 1-acylglycerol-3-phosphate-gamma (LOC294324), mRNA
20	BI289595	VPS26_RAT	1382099_at	29709095	Rattus norvegicus similar to vacuolar protein sorting 26; vacuole protein sorting 26; H beta 58 (LOC361846), mRNA
20	BE096729	FTCD_RAT	1387877_at	12470290	formiminotransferase cyclodeaminase
20	AA901176	XP_215372.3	1398511_at	13435983	Rattus norvegicus similar to Sushi domain (SCR repeat) containing (LOC294335), mRNA
X	AI170324	VEGFD_RAT	1373882_at	50829626	Rattus norvegicus transcribed sequence with moderate similarity to protein sp:P97946 (M.musculus) VEGD_MOUSE Vascular endothelial growth factor D precursor (VEGF-D) (c-fos induced growth factor) (FIGF)
UN	AW535280		1370986_s_at		Rattus norvegicus retroviral-like c-Ha-ras proto-oncogene mRNA, partial sequence
UN	AI716098		1378132_at		Rattus norvegicus transcribed sequences
UN	AI145015		1381418_at		Rattus norvegicus transcribed sequences
UN	BE096055		1383665_at		---
UN	AI169075		1388526_at		---
UN	BF416508		1389441_at		annexin V-binding protein ABP-10
UN	BM383122		1389500_at		---
UN	BI289762		1390174_at		---
UN	AI232305		1392001_at		Rattus norvegicus transcribed sequence with moderate similarity to protein ref:NP_036135.1 (M.musculus) cofactor required for Sp1 transcriptional activation subunit 2 (150 kDa) [Mus musculus]
UN	AW915435		1392554_a_at		---
UN	AI008432		1392843_at		Rattus norvegicus transcribed sequences
UN	AA943800		1394127_at		Rattus norvegicus transcribed sequences
UN	AI236935		1394526_at		Rattus norvegicus transcribed sequences
UN	AI237240		1395238_at		---
UN	BE116471		1395994_at		Rattus norvegicus transcribed sequences
UN	BF288545		1396127_at		---
UN	BI276183		1397744_at		Rattus norvegicus transcribed sequences

Number	Gene Identifier	Gene ID	Position (Mb)		Gene Description
1	XM_579199.1	Fga	174737640	174753599	fibrinogen, alpha polypeptide
2	NM_020071.1	Fgb	174768160	174775103	fibrinogen, B beta polypeptide
3	NM_021757.2	Plrg1	174780415	174796746	pleiotropic regulator 1 homolog (Arabidopsis)
4	XM_227313.3	LOC310550	174836071	175056529	similar to protocadherin 16 precursor; protocadherin 16; fibroblast cadherin FIB1; fibroblast cadherin 1; dachsous homologue
5	**XM_227314.3**	**Sfrp2**	**175479310**	**175486882**	**secreted frizzled-related protein 2**
6	NM_198769.2	Tlr2	175607990	175613992	toll-like receptor 2
7	XM_579995.1	LOC499646	175800216	175801906	LOC499646
8	XM_215595.3	RGD1309007_predicted	175841812	175906450	similar to RIKEN cDNA 2610034E18 gene (predicted)
9	XM_342268.2	Trim2_predicted	175913283	175987825	tripartite motif protein 2 (predicted)
10	XM_215594.3	RGD1311955_predicted	176220891	176253825	similar to CG32384-PA (predicted)
11	NM_021763.1	LOC60382	176275425	176353675	arfaptin 1
12	XM_227318.2	Tigd4_predicted	176369448	176371430	tigger transposable element derived 4 (predicted)
13	XM_579996.1	LOC499647	176437962	176444681	LOC499647
14	XM_342269.2	LOC361972	176445662	176485867	similar to RIKEN cDNA 9930117H01 gene
15	XM_579140.1	Dear	176736639	176739891	dual endothelin 1, angiotensin II receptor
16	XM_574968.1	LOC361973	177242730	177243851	LOC361973
17	XM_342270.2	Pet112l_predicted	177408100	177433793	PET112-like (yeast) (predicted)
18	XM_345227.2	LOC365834	177632475	177669341	similar to KIAA1759 protein
19	XM_227324.3	LOC295167	177769873	177774358	similar to S-ANTIGEN PROTEIN PRECURSOR
20	XM_215597.3	RGD1304885_predicted	177970585	178081504	similar to SH3 domain protein D19 (predicted)
21	NM_017153.1	Rps3a	178092351	178096720	ribosomal protein S3a
22	XM_342271.2	Lrba_predicted	178267690	178787634	LPS-responsive beige-like anchor (predicted)
23	XM_579311.1	RGD1308384_predicted	178793765	178923600	similar to RIKEN cDNA 6330415M09 (predicted)
24	NM_017079.1	Cd1d1	179011165	179014672	CD1d1 antigen
25	XM_574969.1	LOC499649	179088285	179089078	similar to high mobility group protein
26	NM_207606.1	Neph1	179114757	179169185	nephrin 1
27	XM_227485.3	Msr2_predicted	179278607	179293565	macrophage scavenger receptor 2 (predicted)
28	XM_227484.3	Cd5l_predicted	179363734	179425297	CD5 antigen-like (predicted)
29	XM_574970.1	LOC499650	179450738	179452834	LOC499650
30	XM_227483.3	Spap1_predicted	179483570	179576639	SH2 domain containing phosphatase anchor protein 1 (predicted)
31	XM_574971.1	LOC499651	179591714	179603714	similar to FLJ16478 protein
32	XM_227480.3	LOC295295	179624973	179625738	similar to phosphoglycerate mutase (EC 5.4.2.1) B chain - rat
33	NM_023982.1	Arhgef11	179738870	179796785	Rho guanine nucleotide exchange factor (GEF) 11
34	XM_227479.3	RGD1309453_predicted	179798792	179808808	similar to hypothetical protein FLJ32884 (predicted)
35	XM_215648.3	RGD1305653_predicted	179810529	179834374	similar to MEGF12 (predicted)
36	NM_021589.1	Ntrk1	179838740	179855545	neurotrophic tyrosine kinase, receptor, type 1
37	XM_574972.1	Insrr	179857574	179875876	insulin receptor-related receptor
38	NM_207605.3	Sh2d2a	179916108	179924623	SH2 domain protein 2A
39	XM_227476.3	Prcc_predicted	179931946	179957221	papillary renal cell carcinoma (translocation-associated) (predicted)
40	NM_053707.2	Hdgf	179981346	179991892	hepatoma-derived growth factor
41	NM_001007637.1	mrpl24	179995713	180001745	mitochondrial ribosomal protein L24
42	XM_342272.2	RGD1311265_predicted	180001177	180009023	similar to CGI-41 protein (predicted)
43	NM_001007741.1	MGC94465	180009276	180018762	similar to hypothetical protein FLJ12671
44	NM_017244.1	Crabp2	180029801	180034147	cellular retinoic acid binding protein 2
45	NM_012987.1	Nes	180051907	180060947	nestin
46	XM_579358.1	LOC497759	180072888	180080749	hypothetical gene supported by NM_012916
47	NM_022285.1	Hapln2	180104684	180110115	hyaluronan and proteoglycan link protein 2
48	XM_215614.3	RGD1311086_predicted	180117561	180131693	similar to RIKEN cDNA 2610029K21 (predicted)
49	XM_215635.3	Apoa1bp_predicted	180132556	180144393	apolipoprotein A-I binding protein (predicted)
50	XM_227396.3	Iqgap3_predicted	180155674	180198814	IQ motif containing GTPase activating protein 3 (predicted)
51	NM_030860.2	Mef2d	180221078	180246917	myocyte enhancer factor 2D
52	NM_183054.1	Rhbg	180320787	180333050	Rh type B glycoprotein
53	XM_342276.2	RGD1304953_predicted	180371109	180380696	similar to SSTK-interacting protein (predicted)
54	**NM_199091.1**	**Cct3**	**180381044**	**180434156**	**chaperonin containing TCP1, subunit 3 (gamma)**
55	NM_001004226.1	0610031j06rik	180438070	180441660	kidney predominant protein NCU-G1
56	XM_227398.3	RGD1309886_predicted	180442734	180446076	similar to RIKEN cDNA 2310042N02 (predicted)
57	NM_013414.1	Bglap2	180482313	180483290	bone gamma-carboxyglutamate protein 2
58	XM_345231.2	RGD1307244_predicted	180514428	180526708	similar to CG5805-PA (predicted)
59	XM_578027.1	LOC502539	180537560	180545828	similar to IQ motif containing GTPase activating protein 3
60	XM_574973.1	Sema4a_predicted	180552405	180573625	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4A (predicted)
61	NM_001002016.1	Lmna	180595724	180616354	lamin A
62	XM_227403.3	LOC310631	180645534	180653100	similar to KIAA2031 protein
63	XM_227404.3	Rab25_predicted	180657133	180662995	RAB25, member RAS oncogene family (predicted)
64	XM_215630.3	LOC295234	180665358	180668716	similar to late endosomal/lysosomal MP1 interacting protein

Area shown in yellow denotes region of overlap between the rat QTL and all human kidney disease located on human chromosome 1q21

Genes shown in bold denote that these gene were differentially expressed between the S and S.SHR(2) congenic (see supplemental Table 1)