Table 4

probe ID	Gene Symbol	Title	*P* value	meanSig placebo	meanSig 24h	maxFC	Location
1423232_at	Etv4	ets variant gene 4 (E1A enhancer bindin	1.68E-07	8.721929086	4.371872805	20.3937656	Chr:11 60.0 cM
1427312_at	2310076E16Rik	RIKEN cDNA 2310076E16 gene	1.68E-07	6.454681971	7.894884822	2.713590173	Chr:13 C3
1417141_at	Igtp	interferon gamma induced GTPase	4.53E-07	12.95696657	10.91748519	4.110977239	Chr:11 32.0 cM
1423358_at	1810009K13Rik	RIKEN cDNA 1810009K13 gene	7.81E-07	8.646171435	7.758843853	1.849746517	Chr:16 A1
1415753_at	BC005632	cDNA sequence BC005632	9.99E-07	12.21720102	10.77705204	2.713488842	Chr:10 C1
1421818_at	Bcl6	B-cell leukemia/lymphoma 6	1.96E-06	6.224568862	8.618980039	5.25762475	Chr:16 13.9 cM
1416366_at	1810004I06Rik	RIKEN cDNA 1810004I06 gene	2.40E-06	12.73018743	11.77142051	1.943647935	Chr:7 E1
1422758_at	Chst2	carbohydrate sulfotransferase 2	2.98E-06	10.2648114	8.10275279	4.475530227	---
1418533_s_at	Fzd2	frizzled homolog 2 (Drosophila)	3.00E-06	7.111577315	7.960435021	1.80107431	Chr:11 E1
1438761_a_at	Odc	ornithine decarboxylase, structural	3.53E-06	12.22307987	10.16627768	4.160630544	Chr:12 6.0 cM
1419042_at	Iigp-pending	interferon-inducible GTPase	3.67E-06	12.24024227	9.670949874	5.935182519	Chr:18 E1
1437711_x_at	Odc	ornithine decarboxylase, structural	3.84E-06	11.00853004	9.395164299	3.059648117	Chr:12 6.0 cM
1421204_a_at	2310041H06Rik	RIKEN cDNA 2310041H06 gene	4.14E-06	7.585506607	8.925264531	2.53108845	Chr:9 F1
1460171_at	Cops5	COP9 (constitutive photomorphogenic) h	5.25E-06	10.0444503	9.415823471	1.546092703	Chr:1 3.6 cM
1416488_at	Ccng2	cyclin G2	5.44E-06	8.881957244	9.890257758	2.011540123	Chr:5 E3.3-F1.3
1419043_a_at	Iigp-pending	interferon-inducible GTPase	5.71E-06	14.02701745	12.09062298	3.827479016	Chr:18 E1
1423628_s_at	Pcdhga12	protocadherin gamma subfamily A, 12	5.76E-06	11.57098412	10.92564811	1.564103527	Chr:18 B3
1416699_at	1110008F13Rik	RIKEN cDNA 1110008F13 gene	6.05E-06	11.87133364	11.2482187	1.54019706	Chr:2 H1
1423549_at	Slc1a4	solute carrier family 1 (glutamate/neutr	6.08E-06	7.179409126	4.548098755	6.195885016	Chr:11 10.92 cM
1449007_at	Btg3	B-cell translocation gene 3	6.10E-06	10.15653421	9.531116401	1.542657519	Chr:16 A1
1451083_s_at	Aars	alanyl-tRNA synthetase	6.32E-06	10.59604858	9.425373731	2.251169745	Chr:8 E1
1424344_s_at	Eif1a	eukaryotic translation initiation factor 1A	7.54E-06	9.44284794	8.633785079	1.752072969	Chr:18 C
1417040_a_at	Bok	Bcl-2-related ovarian killer protein	8.08E-06	11.34369947	9.289199346	4.153996845	Chr:1 D
1426475_at	Hmbs	hydroxymethylbilane synthase	1.06E-05	9.402322532	8.772731692	1.547126154	Chr:9 26.0 cM
1422459_a_at	Psmd13	proteasome (prosome, macropain) 26S	1.11E-05	10.24305732	9.617962864	1.542311805	Chr:7 F4
1418260_at	Hunk	hormonally upregulated Neu-associated	1.21E-05	10.58993125	9.211033732	2.600695545	Chr:16 58.0 cM
1460330_at	Anxa3	annexin A3	1.21E-05	12.95425151	11.76215877	2.284839365	Chr:5 54.0 cM
1448610_a_at	Sod2	superoxide dismutase 2, mitochondrial	1.23E-05	11.40904664	10.81934032	1.504940371	Chr:17 7.6 cM
1448529_at	Thbd	thrombomodulin	1.24E-05	11.46369398	9.823671123	3.116707705	Chr:2 84.0 cM
1426743_at	Dip3b-pending	Dip3 beta	1.25E-05	9.333911902	10.06573428	1.660735564	Chr:10 C1
1448566_at	Slc40a1	solute carrier family 40 (iron-regulated t	1.31E-05	7.890483252	9.34547042	2.741541225	Chr:1 B
1416445_at	2810405J04Rik	RIKEN cDNA 2810405J04 gene	1.50E-05	10.0146011	9.366062855	1.567579103	Chr:17 E2
1424737_at	Thrsp	thyroid hormone responsive SPOT14 hor	1.55E-05	13.5509319	11.42572496	4.362656671	Chr:7 E1
1426611_at	Psmc2	proteasome (prosome, macropain) 26S	1.62E-05	11.25296596	10.58179915	1.5923603	Chr:5 9.0 cM
1415984_at	Acadm	acetyl-Coenzyme A dehydrogenase, me	1.66E-05	10.68662847	11.37574137	1.612291829	Chr:3 73.6 cM
1426546_at	Tesk2	testis-specific kinase 2	1.69E-05	6.755676175	7.640473861	1.846505662	Chr:4 D1
1418244_at	1500004D14Rik	RIKEN cDNA 1500004D14 gene	1.78E-05	10.54384152	9.807124086	1.66638001	Chr:2 G1
1455019_x_at	5630400A09Rik	RIKEN cDNA 5630400A09 gene	1.79E-05	11.2805539	10.17880119	2.146152675	Chr:10 C1
1416606_s_at	D11Ertd175e	DNA segment, Chr 11, ERATO Doi 175, e	1.80E-05	10.17971891	9.392932694	1.725227019	Chr:11 28.5 cM
1419817_s_at	D1Ertd161e	DNA segment, Chr 1, ERATO Doi 161, ex	1.85E-05	7.263358758	7.91637324	1.572450368	Chr:1 41.0 cM
1429379_at	Xlkd1	extra cellular link domain-containing 1	1.92E-05	12.82179544	11.6697845	2.222234308	Chr:7 E3
1422137_at	9030623N16Rik	RIKEN cDNA 9030623N16 gene	2.08E-05	5.566384175	7.191445214	3.084552151	Chr:2 E5
1423695_at	9530090G24Rik	RIKEN cDNA 9530090G24 gene	2.10E-05	8.340045607	8.976317787	1.554307747	Chr:2 H1
1420543_at	ORF28	open reading frame 28	2.10E-05	7.209211605	7.996661648	1.72602103	Chr:16 A1
1418825_at	Ifi1	interferon inducible protein 1	2.25E-05	11.49998817	9.876548424	3.081087694	Chr:11 B1.2
1422818_at	Nedd9	neural precursor cell expressed, develop	2.26E-05	9.47389865	10.58608054	2.161723331	Chr:13 A4
1424182_at	Acat1	acetyl-Coenzyme A acetyltransferase 1	2.33E-05	9.787039964	8.684679956	2.147056278	Chr:9 30.0 cM
1426381_at	BC013720	cDNA sequence BC013720	2.50E-05	8.219876184	7.509648254	1.636062576	Chr:19 C3
1416048_at	Phc2	polyhomeotic-like 2 (Drosophila)	2.53E-05	10.9416649	10.01130294	1.905754076	Chr:4 61.0 cM
1424464_s_at	AW212394	expressed sequence AW212394	2.66E-05	5.713530494	6.931038701	2.325447237	Chr:1 C1.1
1426640_s_at	AW319517	expressed sequence AW319517	2.66E-05	11.60737514	9.995324541	3.056860248	Chr:12 A1.1
1422886_a_at	Clk4	CDC like kinase 4	2.75E-05	8.208330861	9.108167159	1.865854253	Chr:11 B1.3
1433691_at	Ppp1r3c	protein phosphatase 1, regulatory (inhib	2.75E-05	4.819756573	8.823564284	16.04228465	Chr:19 C2
1437239_x_at	Phc2	polyhomeotic-like 2 (Drosophila)	2.79E-05	11.72024614	10.90697066	1.757196435	Chr:4 61.0 cM
1418285_at	Efnb1	ephrin B1	2.83E-05	7.117178637	8.268941582	2.221852346	Chr:X 37.0 cM
1451542_at	Ssbp2	single-stranded DNA binding protein 2	2.94E-05	6.816991137	7.9288524	2.161242958	Chr:13 C3
1426499_at	Sh3glb2	SH3-domain GRB2-like endophilin B2	3.11E-05	11.38283025	10.49204005	1.854191434	Chr:2 B
1416584_at	Man2b2	mannosidase 2, alpha B2	3.21E-05	7.012625128	7.772455998	1.693292105	Chr:5 B2-13.3
1424645_at	9930033H14Rik	RIKEN cDNA 9930033H14 gene	3.23E-05	8.570234183	9.241211454	1.592151113	Chr:11 E2
1415907_at	Ccnd3	cyclin D3	3.42E-05	11.74414725	10.68689487	2.080964538	Chr:17 28.8 cM
1422973_a_at	Thrsp	thyroid hormone responsive SPOT14 hor	3.48E-05	12.19326238	9.789916665	5.290285991	Chr:7 E1
1425780_a_at	0610041E09Rik	RIKEN cDNA 0610041E09 gene	3.60E-05	10.62133515	9.927186799	1.617929061	Chr:13 C3
1448384_at	BC003494	cDNA sequence BC003494	3.69E-05	9.052240389	8.34986344	1.627183493	Chr:10 C1
1448028_at	C530046L02Rik	RIKEN cDNA C530046L02 gene	3.70E-05	5.478590339	7.007530694	2.885738066	Chr:17 A3.3
1416485_at	Timm23	translocase of inner mitochondrial meml	3.71E-05	11.46500873	10.76698492	1.622281082	Chr:1 93.5 cM
1431086_s_at	Pcmt1	protein-L-isoaspartate (D-aspartate) O-r	3.71E-05	8.599037403	7.864163032	1.664252542	Chr:10 7.0 cM
1427894_at	Slitl2	Slit-like 2 (Drosophila)	3.77E-05	9.366366861	8.504817508	1.816988581	Chr:16 A1
1421260_a_at	Srm	spermidine synthase	3.80E-05	10.56269358	9.345063951	2.325642961	Chr:4 E2
1416034_at	Cd24a	CD24a antigen	3.81E-05	11.81357863	10.4076551	2.649873585	Chr:10 26.0 cM
1430005_a_at	4933430F08Rik	RIKEN cDNA 4933430F08 gene	3.92E-05	10.55427867	8.641979993	3.764083608	Chr:19 A
1434380_at	---	Mus musculus diabetic nephropathy-rela	3.96E-05	11.46460088	9.520895853	3.846923202	---
1433725_at	Acvr1b	activin A receptor, type 1B	4.28E-05	8.17922663	9.316036924	2.198943131	Chr:15 60.4 cM

1449056_at	E330009J07Rik	RIKEN cDNA E330009J07 gene	4.28E-05	7.842898315	8.642957049	1.741172011	Chr:6 B1
1426368_at	Rin2	Ras and Rab interactor 2	4.35E-05	7.160661945	7.852611576	1.615465154	Chr:2 G1
1454862_at	C820004H04Rik	RIKEN cDNA C820004H04 gene	4.35E-05	9.425718696	8.332984942	2.132777926	Chr:16 A1
1434755_at	E130012P22Rik	RIKEN cDNA E130012P22 gene	4.45E-05	10.12439793	9.174690349	1.931481129	Chr:9 C
1448250_at	9030425E11Rik	RIKEN cDNA 9030425E11 gene	4.59E-05	11.20084505	10.24156954	1.94433325	Chr:9 A5.1
1455626_at	Hoxa9	homeo box A9	4.62E-05	9.717841399	10.6201379	1.869038778	Chr:6 26.32 cM
1429246_a_at	Anxa6	annexin A6	4.63E-05	9.935445236	9.303778995	1.549353388	Chr:11 29.5 cM
1426414_a_at	Rnf7	ring finger protein 7	4.68E-05	11.42571066	10.36636665	2.083983716	Chr:9 E3.3
1451798_at	Il1rn	interleukin 1 receptor antagonist	4.77E-05	6.285602609	7.279769037	1.991929279	Chr:2 10.0 cM
1428029_a_at	C530002L11Rik	RIKEN cDNA C530002L11 gene	4.93E-05	10.10270394	10.78422064	1.603824967	Chr:11 A1
1423115_at	Siat7f	sialytransferase 7 ((alpha-N-acetylneura	4.93E-05	8.794363633	10.16925925	2.593491464	Chr:2 B
1435184_at	B430320C24Rik	RIKEN cDNA B430320C24 gene	5.09E-05	10.0923547	8.586173283	2.840571897	Chr:15 A1
1452160_at	AW558171	expressed sequence AW558171	5.27E-05	7.031131483	9.159023316	4.370783241	Chr:3 E1
1416135_at	Apex1	apurinic/apyrimidinic endonuclease 1	5.43E-05	9.170563896	8.326305133	1.795342087	Chr:14 18.5 cM
1429692_s_at	Gch	GTP cyclohydrolase 1	5.57E-05	8.121043669	6.905327931	2.322559792	Chr:14 19.5 cM
1422612_at	Hk2	hexokinase 2	5.69E-05	8.687669211	9.867885803	2.266107956	Chr:6 34.5 cM
1421019_at	1700021F05Rik	RIKEN cDNA 1700021F05 gene	5.85E-05	9.743100511	8.867408097	1.83488852	Chr:10 B2
1427283_at	Mll	myeloid/lymphoid or mixed-lineage leuk	5.92E-05	8.849500889	9.723939958	1.833295149	Chr:9 A5.2
1453128_at	Xlkd1	extra cellular link domain-containing 1	5.96E-05	12.69015838	11.48861932	2.299848868	Chr:7 E3
1419040_at	Cyp2d22	cytochrome P450, family 2, subfamily d	6.16E-05	8.431282258	9.368472924	1.914795958	---
1416241_at	Sec13r	SEC13 related gene (S. cerevisiae)	6.18E-05	10.20108821	9.431344264	1.704967149	Chr:6 52.5 cM
1425704_at	BC022224	cDNA sequence BC022224	6.19E-05	8.675145275	9.499718439	1.771010988	Chr:11 C
1422507_at	Cstb	cystatin B	6.34E-05	11.34752967	10.67687344	1.591796845	Chr:10 42.0 cM
1451346_at	Mtap	methylthioadenosine phosphorylase	6.38E-05	8.61064948	7.738237084	1.830721576	Chr:4 C4
1424970_at	Purg	purine-rich element binding protein G	6.44E-05	7.17466854	8.289147396	2.165167827	Chr:8 A3
1429360_at	Klf3	Kruppel-like factor 3 (basic)	6.53E-05	8.790855625	9.718985937	1.902808418	Chr:5 C3.1
1423508_at	Myst4	MYST histone acetyltransferase (monocy	6.57E-05	7.822547708	8.820468149	1.997119196	Chr:14 A2
1425921_a_at	1810055G02Rik	RIKEN cDNA 1810055G02 gene	6.70E-05	9.344322969	7.959580827	2.611252814	Chr:19 A
1433662_s_at	Timp2	tissue inhibitor of metalloproteinase 2	6.90E-05	10.11583802	10.96092312	1.796370701	Chr:11 72.0 cM
1423685_at	Aars	alanyl-tRNA synthetase	7.43E-05	10.32813399	9.518253112	1.753066693	Chr:8 E1
1448558_a_at	Pla2g4a	phospholipase A2, group IVA (cytosolic,	7.53E-05	10.51008414	8.955594252	2.937298502	Chr:1 76.0 cM
1416291_at	Psmc4	proteasome (prosome, macropain) 26S	7.54E-05	10.3791234	9.780541431	1.514227496	Chr:7 10.0 cM
1456107_x_at	Snrp116-pendin	U5 small nuclear ribonucleoprotein	7.55E-05	12.34620099	10.58164083	3.397703981	Chr:11 E1
1424343_a_at	Eif1a	eukaryotic translation initiation factor 1A	7.60E-05	9.026076372	8.066762963	1.944384325	Chr:18 C
1427364_a_at	Odc	ornithine decarboxylase, structural	7.61E-05	9.941818646	8.501364493	2.714062892	Chr:12 6.0 cM
1423863_at	Abcf2	ATP-binding cassette, sub-family F (GCN	7.83E-05	9.408518931	8.466603082	1.921077671	Chr:13 40.0 cM
1422196_at	Htr5b	5-hydroxytryptamine (serotonin) recept	7.88E-05	8.511839115	4.345768356	17.95197615	Chr:1 63.0 cM
1418439_at	2900055D03Rik	RIKEN cDNA 2900055D03 gene	8.00E-05	11.29151285	10.55853939	1.662061147	Chr:10 C2
1450376_at	Mxi1	Max interacting protein 1	8.05E-05	8.672272154	9.448719991	1.712908202	Chr:19 49.5 cM
1430127_a_at	Ccnd2	cyclin D2	8.12E-05	12.76807105	11.51109459	2.389943415	Chr:6 61.1 cM
1424050_s_at	Fgfr1	fibroblast growth factor receptor 1	8.24E-05	11.73524516	10.31511554	2.676095534	Chr:8 10.0 cM
1437325_x_at	Pycs	pyrroline-5-carboxylate synthetase (glut	8.37E-05	9.691392097	8.87038981	1.766632904	Chr:19 C3
1429947_a_at	Zbp1	Z-DNA binding protein 1	8.60E-05	11.39206598	9.026399574	5.153906662	Chr:2 H4
1449009_at	Tgtp	T-cell specific GTPase	8.73E-05	13.84561104	12.3098303	2.899452977	Chr:11 B1.2
1451056_at	Psmd7	proteasome (prosome, macropain) 26S	8.74E-05	9.858041966	9.239398458	1.535430816	Chr:8 53.5 cM
1436680_s_at	Acp2	acid phosphatase 2, lysosomal	8.82E-05	6.511026838	7.140460503	1.546957611	Chr:2 52.0 cM
1439959_at	---	Mus musculus transcribed sequence with	9.08E-05	6.15823998	7.037978411	1.840041661	---
1454677_at	Timp2	tissue inhibitor of metalloproteinase 2	9.11E-05	9.722704372	10.42975061	1.632458415	Chr:11 72.0 cM
1434150_a_at	3300001H21Rik	RIKEN cDNA 3300001H21 gene	9.20E-05	8.673657074	9.994697642	2.498462506	Chr:15 F1
1455972_x_at	Hadhsc	L-3-hydroxyacyl-Coenzyme A dehydroge	9.39E-05	11.85171468	12.67966173	1.775157519	Chr:3 G3
1434853_x_at	Mkrn1	makorin, ring finger protein, 1	9.48E-05	10.08811595	10.86257394	1.710547293	Chr:6 B1
1449001_at	Ivd	isovaleryl coenzyme A dehydrogenase	9.57E-05	8.164785719	8.905097241	1.67053652	---
1427911_at	2610307O08Rik	RIKEN cDNA 2610307O08 gene	9.70E-05	10.77107388	9.162905035	3.048646445	Chr:18 B2
1431591_s_at	G1p2	interferon, alpha-inducible protein	0.000101879	11.06880345	9.015212671	4.151379368	Chr:4 E2
1425719_a_at	Nmi	N-myc (and STAT) interactor	0.000102868	10.41329936	9.547170687	1.822765129	Chr:2 C1.1
1428872_at	4121402D02Rik	RIKEN cDNA 4121402D02 gene	0.000105328	7.413752315	8.146972083	1.662344931	Chr:11 D
1460196_at	Cbr1	carbonyl reductase 1	0.000106037	9.24449679	10.15389266	1.878258813	Chr:16 67.0 cM
1439423_x_at	U46068	cDNA sequence U46068	0.000106928	8.88810636	7.093866564	3.468326689	Chr:2 H1
1423269_a_at	Nedd4l	neural precursor cell expressed, develop	0.000107715	7.414968128	9.044982201	3.095160179	Chr:18 E1
1443874_at	2810002I04Rik	RIKEN cDNA 2810002I04 gene	0.000110493	6.916171826	8.507305414	3.0128599	Chr:12 D1