

**Supplementary Table 2:** TaqMan selected assays, based on differentially expressed genes in Agilent 44K array, and selection of literature based candidate genes.

a) Differentially Expressed genes in Agilent array (FDR = 0.001)

Gene Symbol	TaqMan id	Gene_Name	Differentially Expressed Hypothalamus (number of differentially expressed probes)	TaqMan Fold Change
1700009P03Rik	Mm00612756_m1	RIKEN cDNA 1700009P03 gene	UP (1)	1,08
2510006D16Rik	Mm00513034_m1	RIKEN cDNA 2510006D16 gene	UP (1)	1,01
2610033H07Rik	Mm00804627_m1	RIKEN cDNA 2610033H07 gene	UP (1)	1,16*
2700059D21Rik	Mm00466014_m1	RIKEN cDNA 2700059D21 gene	UP (1)	1,13
3110050K21Rik	Mm00546532_m1	RIKEN cDNA 3110050K21 gene	UP (2)	1,21*
5330430C04Rik	Mm00547202_s1	RIKEN cDNA 5330430C04 gene	UP (1)	1,72*
9330182L06Rik	Mm00554678_m1	RIKEN cDNA 9330182L06 gene	UP (1)	1,05
Alcam	Mm00711623_m1	activated leukocyte cell adhesion molecule	UP (1)	1,34*
Ank2	Mm00618325_m1	ankyrin 2, brain	UP (1)	1,06
App	Mm00431827_m1	amyloid beta (A4) precursor protein	UP (1)	1,48*
Atp2c1	Mm00723486_m1	ATPase, Ca <sup>++</sup> -sequestering	UP (2)	1,13*
AV344025	Mm00619212_s1	expressed sequence AV344025	UP (1)	1,58*
Brunol4	Mm00659682_m1	bruno-like 4, RNA binding protein (Drosophila)	UP (1)	1,19*
C230094A16Rik	Mm00524591_m1	RIKEN cDNA C230094A16 gene	UP (1)	1,3*
Cacna1b	Mm00432226_m1	calcium channel, voltage-dependent, N type, alpha 1B subunit	UP (1)	1,21*
Cdc42ep1	Mm00840486_m1	CDC42 effector protein (Rho GTPase binding) 1	DW (1)	-1,67*
Cebpd	Mm00514291_s1	CCAAT/enhancer binding protein (C/EBP), delta	DW (1)	1,24*

Csnk1a1	Mm00521599_m1	casein kinase 1, alpha 1	UP (2)	-1,1
Cspg6	Mm00484015_m1	chondroitin sulfate proteoglycan 6	UP (1)	1,58*
Cstf3	Mm00523711_m1	cleavage stimulation factor, 3 pre-RNA, subunit 3	UP (1)	-1,26
D13Bwg1146e	Mm00712799_m1	DNA segment, Chr 13, Brigham & Womens Genetics 1146 expressed	UP (1)	1,35*
D19ErtD737e	Mm00547114_m1	DNA segment, Chr 19, ERATO Doi 737, expressed	UP (1)	1,12
D430033N04Rik	Mm00524728_m1	RIKEN cDNA D430033N04 gene	UP (1)	1,14*
D430033N04Rik	Mm00628230_m1	RIKEN cDNA D430033N04 gene	UP (1)	1,45
Ddx1	Mm00506205_m1	DEAD (Asp-Glu-Ala-Asp) box polypeptide 1	UP (1)	1,22*
Dek	Mm00662582_m1	DEK oncogene (DNA binding)	UP (1)	1,4*
Dlgh2	Mm00457160_m1	discs, large homolog 2 (Drosophila)	UP (1)	1,33*
Dmxl2	Mm00555326_m1	Dmx-like 2	UP (1)	1,48*
Em15	Mm00617921_m1	echinoderm microtubule associated protein like 5	UP (1)	1,61*
Endog	Mm00468248_m1	endonuclease G	DW (1)	-1,72*
Epha4	Mm00433056_m1	Eph receptor A4	UP (1)	1,99*
Fign	Mm00517634_m1	fidgetin	UP (1)	1,46*
Gabra2	Mm00433435_m1	gamma-aminobutyric acid (GABA-A) receptor, subunit alpha 2	UP (2)	1,85*
Gad2	Mm00484623_m1	glutamic acid decarboxylase 2	UP (1)	1,1
Golga1	Mm00661510_m1	golgi autoantigen, golgin subfamily a, 1	UP (1)	1,04
Grip1	Mm00503833_m1	glutamate receptor interacting protein 1	UP (1)	1,53*
Gucyl1a3	Mm00517654_m1	guanylate cyclase 1, soluble, alpha 3	UP (2)	1,06
Hnrpa3	Mm00817148_g1	heterogeneous nuclear ribonucleoprotein A3	UP (1)	1,15
Hsd11b1	Mm00476182_m1	hydroxysteroid 11-beta dehydrogenase 1	DW (1)	-1,58*
Igsf4a	Mm00457551_m1	immunoglobulin superfamily, member 4A	UP (1)	1,27*
Kcnab3	Mm00440034_g1	potassium voltage-gated channel, shaker-	DW (1)	-1,38

		related subfamily, beta member 3		
Kcnd2	Mm00498065_m1	potassium voltage-gated channel, Shal-related family, member 2	UP (1)	1,49*
Kif1b	Mm00801813_m1	kinesin family member 1B	UP (1)	-1,06
Lair1	Mm00618113_m1	leukocyte-associated Ig-like receptor 1	UP (1)	1,35*
Las1l	Mm00507677_m1	LAS1-like ( <i>S. cerevisiae</i> )	UP (1)	-1,07
M6prbp1	Mm00482206_m1	mannose-6-phosphate receptor binding protein 1	DW (1)	-1,07
Malt1	Mm00555961_m1	mucosa associated lymphoid tissue lymphoma translocation gene 1	UP (1)	1,51*
March7	Mm00480418_m1	membrane-associated ring finger (C3HC4) 7	UP (1)	1,27*
Mef2b	Mm00484950_m1	myocyte enhancer factor 2B	DW (1)	-1,37
Metrn1	Mm00522681_m1	meteorin, glial cell differentiation regulator-like	DW (1)	-1,85*
Mgat5	Mm00455024_m1	mannoside acetylglucosaminyltransferase 5	UP (1)	-1,25*
Mtdh	Mm00482588_m1	Metadherin	UP (1)	1,28*
Mtpn	Mm00456070_m1	myotrophin	UP (1)	1,28*
Ncam1	Mm00456815_m1	neural cell adhesion molecule 1	UP (1)	-1,18*
Ncor1	Mm00448681_m1	nuclear receptor co-repressor 1	UP (1)	1,22*
Ncor1	Mm00623596_g1	nuclear receptor co-repressor 1	UP (1)	1,42*
Nedd4l	Mm00459584_m1	neural precursor cell expressed, developmentally down-regulated gene 4-like	UP (1)	-1,02
Nisch	Mm00452152_m1	nischarin	UP (1)	-1,23*
Nol3	Mm00446066_m1	nucleolar protein 3 (apoptosis repressor with CARD domain)	DW (1)	-1,44*
Nr2f2	Mm00772789_m1	nuclear receptor subfamily 2, group F, member 2	UP (1)	1,29*
Nucks1	Mm00620696_m1	nuclear casein kinase and cyclin-dependent kinase substrate 1	UP (1)	1,3*
Odz1	Mm00600053_m1	odd Oz/ten-m homolog 1 ( <i>Drosophila</i> )	UP (1)	1,51*

Odz3	Mm00496227_m1	odd Oz/ten-m homolog 3 (Drosophila)	UP (1)	1,61*
Odz4	Mm00496266_m1	odd Oz/ten-m homolog 4 (Drosophila)	UP (1)	-1,15
Pdcd4	Mm00478020_m1	programmed cell death 4	UP (1)	1,07
Pitpnc1	Mm00507575_m1	phosphatidylinositol transfer protein, cytoplasmic 1	UP (1)	1,01
Plcb1	Mm00479987_m1	phospholipase C, beta 1	UP (2)	1,22*
Pop5	Mm00503231_m1	processing of precursor 5, ribonuclease P/MRP family ( <i>S. cerevisiae</i> )	DW (1)	-1,78*
Ppargc1a	Mm00731216_s1	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha	UP(1)	1,22*
Ptprs	Mm00465158_m1	protein tyrosine phosphatase, receptor type, S	UP (1)	1,2
Rbm5	Mm00455721_m1	RNA binding motif protein 5	UP (1)	1,1
Rims2	Mm00453603_m1	regulating synaptic membrane exocytosis 2	UP (1)	-1,17*
Riok1	Mm00458505_m1	RIO kinase 1 (yeast)	UP (1)	1,11
Rnf111	Mm00473889_g1	ring finger 111	UP (1)	1,02
Rnf20	Mm00812895_m1	ring finger protein 20	UP (1)	1,38*
Rpe	Mm00481815_m1	ribulose-5-phosphate-3-epimerase	UP (1)	1,18*
Rufy2	Mm00459110_m1	RUN and FYVE domain-containing 2	UP (1)	1,13
Sfrs11	Mm00804285_m1	splicing factor, arginine/serine-rich 11	UP (1)	1,12
Slc6a6	Mm00436909_m1	solute carrier family 6 (neurotransmitter transporter, taurine), member 6	UP (1)	-1,03
Sp4	Mm00599719_m1	trans-acting transcription factor 4	UP (1)	1,2*
Strbp	Mm00486379_m1	spermatid perinuclear RNA binding protein	UP (1)	1,06
Syt1	Mm00436855_m1	synaptotagmin I	UP (2)	1,56*
Tmem10	Mm00463365_m1	transmembrane protein 10	DW (1)	-1,66*
Tnrc15	Mm00525091_m1	trinucleotide repeat containing 15	UP (1)	1,06
Tpi1	Mm00833691_g1	triosephosphate isomerase 1	UP (1)	-1,67*
Vps36	Mm00660810_m1	vacuolar protein sorting 36 (yeast)	UP (1)	1,08
Ylpm1	Mm00663707_m1	YLP motif containing 1	UP (1)	-1,01

Zc3h11a	Mm00513771_m1	zinc finger CCCH type containing 11A	UP (1)	1,07
Zfp148	Mm00711990_m1	zinc finger protein 148	UP (1)	1,49*
Zfp291	Mm00615854_m1	zinc finger protein 291	UP (1)	1,38*
Zfp533	Mm00724587_m1	zinc finger protein 533	UP (1)	1,01
Zfp608	Mm00558913_m1	zinc finger protein 608	UP (1)	1,38*

\*Significant under FDR 0.05

b) Overlapping literature Based Candidate Genes and Differentially expressed candidate genes

Gene Symbol	TaqMan id	Gene_Name	Pathway-phenotype	Reference	Differentially Expressed Hypothalamus (number of differentially expressed probes)	TaqMan Fold Change (HT)
Ppargc1a	Mm00731216_s1	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha	Activator of UCPs	(Finck et al 2006; Handschin and Spiegelman 2006)	HT UP (1)	1,22*
Gabra2	Mm00433435_m1	gamma-aminobutyric acid (GABA-A) receptor, subunit alpha 2	GABA signalling pathway	(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	HT UP (2)	1,85*
Gad2	Mm00484623_m1	glutamic acid decarboxylase 2	GABA signalling pathway	(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	HT UP (1)	1,1

c) Literature-based candidate gene probes

Gene Symbol	TaqMan id	Gene_Name	Pathway-phenotype	Reference	TaqMan Fold Change (HT/CX)
<b>Activator of UCPs</b>					
Pparg	Mm00440945_m1	peroxisome proliferator activated receptor gamma		(Finck et al 2006; Handschin and Spiegelman 2006)	1,37
Ppargc1a	Mm00731216_s1	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha		(Finck et al 2006; Handschin and Spiegelman 2006; Leone et al 2005; Ridderstrale et al 2006)	1,22
Ppargc1a	Mm00447183_m1	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha		(Finck et al 2006; Handschin and Spiegelman 2006; Leone et al 2005; Ridderstrale et al 2006)	1,05
<b>Adrenergic receptor</b>					
Adra2a	Mm00845383_s1	adrenergic receptor, alpha 2a		(Polak et al 2005)	-1,35*
Adra2b	Mm00477390_s1	adrenergic receptor, alpha 2b		(Cheng and Kuo 2003)	3,65*
Adrb1	Mm00431701_s1	adrenergic receptor, beta 1		(Brandt et al 2006)	-1,88
Adrb3	Mm00442669_m1	adrenergic receptor, beta 3		(Berkowitz et al 1998; Brandt et al 2006; Hinney et al 1997)	1,11

<b>Corticotropin releasing hormone receptor</b>					
Crhr2	Mm00438303_m1	corticotropin releasing hormone receptor 2		(Bale et al 2000)	1,25
<b>Dopamine Signaling</b>					
Drd2	Mm00438541_m1	dopamine receptor 2		(Bergen et al 2005; Frank et al 2005; Kuo 2003; Kuo 2006)	-1,18
Drd3	Mm00432887_m1	dopamine receptor 3		(Bergen et al 2005; Frank et al 2005; Kuo 2003; Kuo 2006)	1,98*
Drd4	Mm00432893_m1	dopamine receptor 4		(Bergen et al 2005; Frank et al 2005; Kuo 2003; Kuo 2006)	1,01
Drd5	Mm00658653_s1	dopamine receptor 5		(Bergen et al 2005; Frank et al 2005; Kuo 2003; Kuo 2006)	1,37*
<b>Endocannabinoid Signaling</b>					
Cnr2	Mm00438286_m1	cannabinoid receptor 2 (macrophage)	Endocannabinoid receptor	(Di Marzo et al 2001; Mechoulam et al 2006)	-1,08
Faah	Mm00515684_m1	fatty acid amide hydrolase	Hydrolisis of endocannabinoids	(Matias and Di Marzo 2007; Puffenbarger 2005)	-1,11
<b>Fatty Acid Metabolism</b>					
Fasn	Mm00662319_m1	fatty acid synthase		(Hu et al 2005)	-1,57*
<b>GABA signaling pathway</b>					
Gabra1	Mm00439040_m1	gamma-aminobutyric acid (GABA-A) receptor, subunit alpha 1		(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	-1,05
Gabra2	Mm00433435_m1	gamma-aminobutyric acid (GABA-A) receptor, subunit alpha 2		(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray	1,85*

			1991)	
Gabra3	Mm00433440_m1	gamma-aminobutyric acid (GABA-A) receptor, subunit alpha 3	(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	1,33*
Gabra4	Mm00802631_m1	gamma-aminobutyric acid (GABA-A) receptor, subunit alpha 4	(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	3,16*
Gabra5	Mm00621092_m1	gamma-aminobutyric acid (GABA-A) receptor, subunit alpha 5	(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	1,64*
Gabra6	Mm00433456_m1	gamma-aminobutyric acid (GABA-A) receptor, subunit alpha 6	(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	-1,8
Gad1	Mm00725661_s1	glutamic acid decarboxylase 1	(Boutin et al 2003)	-1,05
Gad2	Mm00484623_m1	glutamic acid decarboxylase 2	(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	1,1
Gpr158	Mm00558878_m1	G protein-coupled receptor 158	(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	1,04
Jakmip1/Gababrbp	Mm00617809_m1	janus kinase and microtubule interacting protein 1	(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	1,1

<b>Others</b>					
Reln	Mm00465200_m1	reelin	glicoprotein, ligand of VLDLR	(Beverly and Martin 1989; Coscina and Nobrega 1984; Rosmond et al 2002; Squadrito et al 1988; Tsujii and Bray 1991)	1,39*
Nr3c1	Mm00433832_m1	nuclear receptor subfamily 3, group C, member 1	Glucocorticoide receptor	(Lin et al 2003)	1,06
Insig2	Mm00460121_m1	insulin induced gene 2	Regulates lipid synthesis	(Herbert et al 2006; Takaishi et al 2004)	-1,19
<b>Gut hormones</b>					
Ghsr	Mm00616415_m1	growth hormone secretagogue receptor	Ghrelin receptor	(Higgins et al 2007)	-1,14
Cck	Mm00446170_m1	cholecystokinin		(Peters et al 2006)	1,68
Cckbr	Mm00432329_m1	cholecystokinin B receptor		(Peters et al 2006)	-1,27
Ppy	Mm00435889_m1	pancreatic polypeptide		(Batterham et al 2003; Cummings and Overduin 2007)	2,89
Ppyr1	Mm00435894_s1	pancreatic polypeptide receptor 1		(Batterham et al 2003; Cummings and Overduin 2007)	1,3
Pyy	Mm00520715_m1	peptide YY		(Sloth et al 2007)	-1,65
<b>Hypothalamic Fatty acid sensing</b>					
Acadv1	Mm00444296_m1	acyl-Coenzyme A dehydrogenase, very long chain		(Lam et al 2005)	-1,32*
Acs11	Mm00484217_m1	synthetase long-chain family member 1		(Lam et al 2005)	-1,33*
Acs16	Mm00522786_m1	synthetase long-chain family member 6		(Lam et al 2005)	-1,15
Cpt1a	Mm00550438_m1	palmitoyltransferase 1a, liver		(Lam et al 2005; Lopez et al 2007)	-1,11

Cpt1b	Mm00487200_m1	carnitine palmitoyltransferase 1b, muscle		(Lam et al 2005; Lopez et al 2007)	1,11
Fa2h	Mm00626259_m1	fatty acid 2- hydroxylase		(Lam et al 2005)	-1,47*
<b>Genes disrupted in anorexia or obesity mouse models</b>					
Crhr1	Mm00432670_m1	corticotropin releasing hormone receptor 1	knock-out present anorexia/crhr	(Bale et al 2000)	-1,52*
Chrm3	Mm00446300_s1	cholinergic receptor, muscarinic 3, cardiac	knock-out present anorexia/muscarinic receptor	(Yamada et al 2001)	-2,04*
Atrn	Mm00437746_m1	attractin	knock-out present obesity	(Gunn et al 1999; Yeo and Siddle 2003)	-1,13
Cnr1	Mm00432621_s1	cannabinoid receptor 1 (brain)	knock-outs present anorexia/Endocannabinoid receptor	(Di Marzo et al 2001; Mechoulam et al 2006; Siegfried et al 2004)	1,14
Cpe	Mm00516341_m1	carboxypeptidase E	knock-outs present obesity	(Cawley et al 2004)	-1,21
Lep	Mm00434759_m1	leptin	knock-outs present obesity/ Melanocortin pathway	(Shimizu et al 2007b)	-1,03
Gh	Mm00433590_g1	growth hormone	knock-outs present obesity/Growth hormone	(Donahue and Beamer 1993)	277,95*
Tub	Mm00499015_m1	tubby candidate gene	knock-outs present obesity/knock-outs present obesity	(Kleyn et al 1996; Shiri- Sverdlov et al 2006)	-1,01
Lepr	Mm00440174_m1	leptin receptor	knock-outs present obesity/Melanocortin pathway	(Shimizu et al 2007b)	-1,04
Lepr	Mm00440181_m1	leptin receptor	knock-outs present obesity/Melanocortin pathway	(Shimizu et al 2007b)	1,06
Lpin1	Mm00522205_m1	lipin 1	knock-outs present obesity/Regulates lipid synthesis	(Phan and Reue 2005)	-1,33
Lpin1	Mm00550511_m1	lipin 1	knock-outs present obesity/Regulates lipid synthesis	(Phan and Reue 2005)	-1,33*
Cckar	Mm00438060_m1	cholecystokinin A receptor	knock-outs present obesitygut peptide	(Peters et al 2006)	1
<b>Melanocortin pathway</b>					
Agrp	Mm00475829_g1	agouti related protein		(Dardennes et al 2007; Moriya et al 2006; Tolle and Low 2007)	-1,05

Cart	Mm00489086_m1	cocaine and amphetamine regulated transcript		(Hunter et al 2004; Vicentic and Jones 2007)	-1,72*
Mc1r	Mm00434851_s1	melanocortin 1 receptor		(Shimizu et al 2007a)	3,35*
Mc2r	Mm00434865_s1	melanocortin 2 receptor		(Shimizu et al 2007a)	2,6*
Mc3r	Mm00434876_s1	melanocortin 3 receptor		(Shimizu et al 2007a)	1,34
Mc4r	Mm00457483_s1	melanocortin 4 receptor		(Shimizu et al 2007a)	-1,22
Mc5r	Mm00442970_m1	melanocortin 5 receptor		(Shimizu et al 2007a)	1,09
Mchr1	Mm00653044_m1	melanin-concentrating hormone receptor 1		(Luthin 2007)	1,32*
Pomc1	Mm00435874_m1	pro-opiomelanocortin-alpha		(Shimizu et al 2007a)	3,45
Chrm1	Mm00432509_s1	cholinergic receptor, muscarinic 1, CNS	muscarinic receptor	(Yamada et al 2001)	2,63
Chrm4	Mm00432514_s1	cholinergic receptor, muscarinic 4	muscarinic receptor	(Yamada et al 2001)	2,3
Npy	Mm00445771_m1	neuropeptide Y	Neuropeptide Y	(Beck 2006)	-1,05
Npy1r	Mm00650798_g1	neuropeptide Y receptor Y1	Neuropeptide Y	(Beck 2006)	-1,06
Npy2r	Mm00435350_m1	neuropeptide Y receptor Y2	Neuropeptide Y	(Beck 2006)	1,72*
Npy5r	Mm00443855_m1	neuropeptide Y receptor Y5	Neuropeptide Y	(Beck 2006)	1,28
Npy6r	Mm00440546_s1	neuropeptide Y receptor Y6	Neuropeptide Y	(Beck 2006)	8,72*
<b>mitochondrial uncoupling proteins</b>					
Ucp1	Mm00494069_m1	uncoupling protein 1 (mitochondrial, proton carrier)		(Crowley and Vidal-Puig 2001)	-1,15
Ucp2	Mm00495907_g1	uncoupling protein 2 (mitochondrial, proton carrier)		(Crowley and Vidal-Puig 2001)	1,48
Ucp3	Mm00494074_m1	uncoupling protein 3 (mitochondrial, proton carrier)		(Crowley and Vidal-Puig 2001)	1,05

**Neurotrophin Signalling  
Pathway**

Bdnf	Mm00432069_m1	brain derived neurotrophic factor	(Mercader et al 2007a; Pellemounter et al 1995; Ribases et al 2005; Ribases et al 2004)	-1,26
Cntf;Zfp91	Mm00446370_m1	ciliary neurotrophic factor;zinc finger protein 91	(Mercader et al 2007b; Xu et al 1998)	1,12
Cntf;Zfp91	Mm00446373_m1	ciliary neurotrophic factor;zinc finger protein 91	(Mercader et al 2007b; Xu et al 1998)	-1,19
Cntfr	Mm00516697_m1	ciliary neurotrophic factor receptor	(Mercader et al 2007b; Xu et al 1998)	-1,31*
Nradd	Mm00509016_g1	neurotrophin receptor associated death domain	(Bray et al 2000)	1,2*
Ntf3	Mm00435413_s1	neurotrophin 3	(Mercader et al 2007b)	1,59*
Ntrk3	Mm00456222_m1	neurotrophic tyrosine kinase, receptor, type 3	(Bray et al 2000)	1,35*
Pcsk1	Mm00479023_m1	proprotein convertase subtilisin/kexin type 1	(Mercader et al 2007a; Pellemounter et al 1995; Ribases et al 2005; Ribases et al 2004)	-1,4
Pcsk1n	Mm00457410_m1	proprotein convertase subtilisin/kexin type 1 inhibitor	(Mercader et al 2007b; Xu et al 1998)	-1,63*

**Serotonin Pathway**

Htr3a	Mm00442874_m1	5-hydroxytryptamine (serotonin) receptor 3A	(Kaye et al 2005; Levitan et al 2001)	1,37
Htr1b	Mm00439377_s1	5-hydroxytryptamine (serotonin) receptor 1B	(Kaye et al 2005; Levitan et al 2001)	-1,06
Htr1d	Mm00434115_s1	5-hydroxytryptamine (serotonin) receptor 1D	(Bergen et al 2003; Kaye et al 2005)	-1,13
Htr2a	Mm00555764_m1	5-hydroxytryptamine (serotonin) receptor 2 A	(Kaye et al 2005)	1,05
Htr2c	Mm00434127_m1	5-hydroxytryptamine (serotonin) receptor	(Hu et al 2003; Kaye et al 2005)	1,21

Slc6a4	Mm00439391_m1	solute carrier family 6 (neurotransmitter transporter, serotonin), member 4	(Kaye et al 2005)	-1,64*
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\*Significant under FDR 0.05

d) Reference genes

Gene Symbol	TaqMan id	Gene_Name
Actb	Mm00607939_s1	actin, beta, cytoplasmic
B2m	Mm00437762_m1	beta-2 microglobulin
Gusb	Mm00446953_m1	glucuronidase, beta
Hmbs	Mm00660262_g1	hydroxymethylbilane synthase
Hprt1	Mm00446968_m1	hypoxanthine guanine phosphoribosyl transferase 1
Ipo8	Mm01255158_m1	importin 8
Pgk1	Mm00435617_m1	phosphoglycerate kinase 1
Ppia	Mm02342430_g1	peptidylprolyl isomerase A
Tbp	Mm00446973_m1	TATA box binding protein
Tfrc	Mm00441941_m1	transferrin receptor
Ubc	Mm01201237_m1	ubiquitin C
Xpr1	Mm00495501_m1	xenotropic and polytropic retrovirus receptor 1
Ywhaz	Mm01158417_g1	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide

References

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