RT² Profiler PCR Array (96-Well Format and 384-Well [4 x 96] Format)

Mouse Obesity

Cat. no. 330231 PAMM-017ZA

For pathway expression analysis

Format	For use with the following real-time cyclers
RT² Profiler PCR Array, Format A	Applied Biosystems® models 5700, 7000, 7300, 7500, 7700, 7900HT, ViiA™ 7 (96-well block); Bio-Rad® models iCycler®, iQ™5, MyiQ™, MyiQ2; Bio-Rad/MJ Research Chromo4™; Eppendorf® Mastercycler® ep realplex models 2, 2s, 4, 4s; Stratagene® models Mx3005P®, Mx3000P®; Takara TP-800
RT² Profiler PCR Array, Format C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)
RT² Profiler PCR Array, Format D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®
RT² Profiler PCR Array, Format E	Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™
RT² Profiler PCR Array, Format F	Roche® LightCycler® 480 (96-well block)
RT² Profiler PCR Array, Format G	Roche LightCycler 480 (384-well block)
RT² Profiler PCR Array, Format H	Fluidigm® BioMark™

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Description

The Mouse Obesity RT² Profiler PCR Array profiles the expression of 84 genes related to obesity. The control of a relative stable body weight depends on a complex interaction among the hormone axes in the peripheral nervous system and neurotransmitter signals in the central nervous system that play a crucial role in maintaining a balanced energy metabolism. This PCR Array includes obesity-related genes that are directly involved in the regulation of energy intake and expenditure. The genes encode for orexigenic peptides, hormones, and receptors; anorectic peptides, hormones, receptors; and central and peripheral signaling molecules involved in energy expenditure. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to Obesity with this array.

For further details, consult the *RT² Profiler PCR Array Handbook*.

Shipping and storage

RT² Profiler PCR Arrays in formats A, C, D, E, F, and G are shipped at ambient temperature, on dry ice, or blue ice packs depending on destination and accompanying products. RT² Profiler PCR Arrays in format H are shipped on dry ice or blue ice packs.

For long term storage, keep plates at –20°C.

Note: Ensure that you have the correct RT² Profiler PCR Array format for your real-time cycler (see table above).

Note: Open the package and store the products appropriately immediately on receipt.

Array layout (96-well)

For 384-well 4 x 96 PCR arrays, genes are present in a staggered format. Refer to the *RT² Profiler PCR Array Handbook* for layout.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Adcyap1	Adcyap1r1	Adipoq	Adipor1	Adipor2	Adra2b	Adrb1	Agrp	Apoa4	Atrn	Bdnf	Brs3
B	C3	Calca	Calcr	Cartpt	Cck	Cckar	Clps	Cnr1	Cntfr	Cpd	Cpe	Crhr1
C	Drd1a	Drd2	Gal	Galr1	Gcg	Gcgr	Gh	Ghr	Ghrl	Ghsr	Glp1r	Grp
D	Grpr	Hcrt	Hcrtr1	Hrh1	Htr2c	Iapp	Il1a	Il1b	Il1r1	Il6	Il6ra	Ins1
E	Ins2	Insr	Lep	Lepr	Mc3r	Mchr1	Nmb	Nmbr	Nmu	Nmur1	Npy	Npy1r
F	Nr3c1	Ntrk2	Nts	Ntsr1	Oprk1	Oprm1	Pomc	Ppara	Pparg	Ppargc1a	Prlhr	Ptpn1
G	Pyy	Ramp3	Sigmar1	Sort1	Sst	Sstr2	Thrb	Tnf	Trh	Ucn	Ucp1	Zfp91
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Mm.3407	NM_009625	Adcyap1	Adenylate cyclase activating polypeptide 1
A02	Mm.44245	NM_007407	Adcyap1r1	Adenylate cyclase activating polypeptide 1 receptor 1
A03	Mm.3969	NM_009605	Adipoq	Adiponectin, C1Q and collagen domain containing
A04	Mm.259976	NM_028320	Adipor1	Adiponectin receptor 1
A05	Mm.291826	NM_197985	Adipor2	Adiponectin receptor 2
A06	Mm.347390	NM_009633	Adra2b	Adrenergic receptor, alpha 2b
A07	Mm.46797	NM_007419	Adrb1	Adrenergic receptor, beta 1
A08	Mm.441696	NM_007427	Agrp	Agouti related protein
A09	Mm.4533	NM_007468	Apoa4	Apolipoprotein A-IV
A10	Mm.119936	NM_009730	Atrn	Attractin
A11	Mm.1442	NM_007540	Bdnf	Brain derived neurotrophic factor
A12	Mm.10687	NM_009766	Brs3	Bombesin-like receptor 3
B01	Mm.19131	NM_009778	C3	Complement component 3
B02	Mm.4361	NM_007587	Calca	Calcitonin/calcitonin-related polypeptide, alpha
B03	Mm.4642	NM_007588	Calcr	Calcitonin receptor
B04	Mm.75498	NM_013732	Cartpt	CART prepropeptide
B05	Mm.2619	NM_031161	Cck	Cholecystokinin
B06	Mm.3521	NM_009827	Cckar	Cholecystokinin A receptor
B07	Mm.21160	NM_025469	Clps	Colipase, pancreatic
B08	Mm.7992	NM_007726	Cnr1	Cannabinoid receptor 1 (brain)
B09	Mm.425178	NM_016673	Cntfr	Ciliary neurotrophic factor receptor
B10	Mm.276736	NM_007754	Cpd	Carboxypeptidase D
B11	Mm.31395	NM_013494	Cpe	Carboxypeptidase E
B12	Mm.1892	NM_007762	Crhr1	Corticotropin releasing hormone receptor 1
C01	Mm.54161	NM_010076	Drd1a	Dopamine receptor D1A
C02	Mm.41970	NM_010077	Drd2	Dopamine receptor D2
C03	Mm.4655	NM_010253	Gal	Galanin
C04	Mm.6219	NM_008082	Galr1	Galanin receptor 1
C05	Mm.45494	NM_008100	Gcg	Glucagon
C06	Mm.22329	NM_008101	Gcgr	Glucagon receptor
C07	Mm.343934	NM_008117	Gh	Growth hormone
C08	Mm.3986	NM_010284	Ghr	Growth hormone receptor
C09	Mm.379095	NM_021488	Ghrl	Ghrelin
C10	Mm.194721	NM_177330	Ghsr	Growth hormone secretagogue receptor
C11	Mm.390969	NM_021332	Glp1r	Glucagon-like peptide 1 receptor
C12	Mm.20298	NM_175012	Grp	Gastrin releasing peptide
D01	Mm.4687	NM_008177	Grpr	Gastrin releasing peptide receptor
D02	Mm.10096	NM_010410	Hcrt	Hypocretin
D03	Mm.246595	NM_198959	Hcrtr1	Hypocretin (orexin) receptor 1
D04	Mm.333327	NM_008285	Hrh1	Histamine receptor H1
D05	Mm.439670	NM_008312	Htr2c	5-hydroxytryptamine (serotonin) receptor 2C
D06	Mm.415	NM_010491	Iapp	Islet amyloid polypeptide
D07	Mm.15534	NM_010554	Il1a	Interleukin 1 alpha
D08	Mm.222830	NM_008361	Il1b	Interleukin 1 beta
D09	Mm.896	NM_008362	Il1r1	Interleukin 1 receptor, type I

Position	UniGene	GenBank	Symbol	Description
D10	Mm.1019	NM_031168	Il6	Interleukin 6
D11	Mm.2856	NM_010559	Il6ra	Interleukin 6 receptor, alpha
D12	Mm.46269	NM_008386	Ins1	Insulin I
E01	Mm.4946	NM_008387	Ins2	Insulin II
E02	Mm.268003	NM_010568	Insr	Insulin receptor
E03	Mm.277072	NM_008493	Lep	Leptin
E04	Mm.259282	NM_010704	Lepr	Leptin receptor
E05	Mm.57183	NM_008561	Mc3r	Melanocortin 3 receptor
E06	Mm.323523	NM_145132	Mchr1	Melanin-concentrating hormone receptor 1
E07	Mm.22246	NM_026523	Nmb	Neuromedin B
E08	Mm.425622	NM_008703	Nmbr	Neuromedin B receptor
E09	Mm.154879	NM_019515	Nmu	Neuromedin U
E10	Mm.389159	NM_010341	Nmur1	Neuromedin U receptor 1
E11	Mm.154796	NM_023456	Npy	Neuropeptide Y
E12	Mm.5112	NM_010934	Npy1r	Neuropeptide Y receptor Y1
F01	Mm.129481	NM_008173	Nr3c1	Nuclear receptor subfamily 3, group C, member 1
F02	Mm.130054	NM_008745	Ntrk2	Neurotrophic tyrosine kinase, receptor, type 2
F03	Mm.64201	NM_024435	Nts	Neurotensin
F04	Mm.301712	NM_018766	Ntsr1	Neurotensin receptor 1
F05	Mm.7977	NM_011011	Oprk1	Opioid receptor, kappa 1
F06	Mm.457998	NM_001039652	Oprm1	Opioid receptor, mu 1
F07	Mm.277996	NM_008895	Pomc	Pro-opiomelanocortin-alpha
F08	Mm.212789	NM_011144	Ppara	Peroxisome proliferator activated receptor alpha
F09	Mm.3020	NM_011146	Pparg	Peroxisome proliferator activated receptor gamma
F10	Mm.259072	NM_008904	Ppargc1a	Peroxisome proliferative activated receptor, gamma, coactivator 1 alpha
F11	Mm.377241	NM_201615	Prlhr	Prolactin releasing hormone receptor
F12	Mm.277916	NM_011201	Ptpn1	Protein tyrosine phosphatase, non-receptor type 1
G01	Mm.46248	NM_145435	Pyy	Peptide YY
G02	Mm.39884	NM_019511	Ramp3	Receptor (calcitonin) activity modifying protein 3
G03	Mm.425181	NM_011014	Sigmar1	Sigma non-opioid intracellular receptor 1
G04	Mm.157119	NM_019972	Sort1	Sortilin 1
G05	Mm.2453	NM_009215	Sst	Somatostatin
G06	Mm.454968	NM_009217	Sstr2	Somatostatin receptor 2
G07	Mm.32563	NM_009380	Thrb	Thyroid hormone receptor beta
G08	Mm.1293	NM_013693	Tnf	Tumor necrosis factor
G09	Mm.1363	NM_009426	Trh	Thyrotropin releasing hormone
G10	Mm.377116	NM_021290	Ucn	Urocortin
G11	Mm.4177	NM_009463	Ucp1	Uncoupling protein 1 (mitochondrial, proton carrier)
G12	Mm.290924	NM_053009	Zfp91	Zinc finger protein 91
H01	Mm.328431	NM_007393	Actb	Actin, beta
H02	Mm.163	NM_009735	B2m	Beta-2 microglobulin
H03	Mm.343110	NM_008084	Gapdh	Glyceraldehyde-3-phosphate dehydrogenase
H04	Mm.3317	NM_010368	Gusb	Glucuronidase, beta
H05	Mm.2180	NM_008302	Hsp90ab1	Heat shock protein 90 alpha (cytosolic), class B member 1
H06	N/A	SA_00106	MGDC	Mouse Genomic DNA Contamination
H07	N/A	SA_00104	RTC	Reverse Transcription Control
H08	N/A	SA_00104	RTC	Reverse Transcription Control
H09	N/A	SA_00104	RTC	Reverse Transcription Control
H10	N/A	SA_00103	PPC	Positive PCR Control
H11	N/A	SA_00103	PPC	Positive PCR Control
H12	N/A	SA_00103	PPC	Positive PCR Control

Related products

For optimal performance, RT² Profiler PCR Arrays should be used together with the RT² First Strand Kit for cDNA synthesis and RT2 SYBR® Green qPCR Mastermixes for PCR.

Product	Contents	Cat. no.
RT² First Strand Kit (12)	Enzymes and reagents for cDNA synthesis	330401
RT² SYBR Green qPCR Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with real-time cyclers that do not require a reference dye, including: Bio-Rad models CFX96, CFX384, DNA Engine Opticon 2; Bio-Rad/MJ Research Chromo4; Roche LightCycler 480 (96-well and 384-well); all other cyclers	330500
RT² SYBR Green ROX™ qPCR Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Applied Biosystems models 5700, 7000, 7300, 7500 [Standard and FAST], 7700, 7900HT 96-well block [Standard and FAST] and 384-well block, StepOnePlus; Eppendorf Mastercycler ep realplex models 2, 2S, 4, 4S; Stratagene models Mx3000P, Mx3005P, Mx4000; Takara TP-800	330520
RT² SYBR Green Fluor qPCR Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Bio-Rad models iCycler, iQ5, MyiQ, MyiQ2	330510

* Larger kit sizes available; please inquire.

RT² Profiler PCR Array products are intended for molecular biology applications. These products are not intended for the diagnosis, prevention, or treatment of a disease.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

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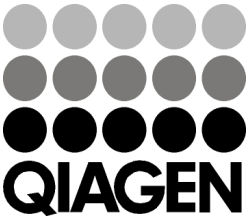

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