

# RT<sup>2</sup> Profiler PCR Array (Rotor-Gene® Format)

## Mouse Neurotrophins & Receptors

Cat. no. 330231 PAMM-031ZR

For pathway expression analysis

Format	For use with the following real-time cyclers
RT <sup>2</sup> Profiler PCR Array, Format R	Rotor-Gene Q, other Rotor-Gene cyclers

### Description

The Mouse Neurotrophin & Receptors RT<sup>2</sup> Profiler PCR Array profiles the expression of 84 genes related to neuronal processes. Neurotrophic signaling molecules are represented on this array including neurotrophins and neuropeptides along with their receptors. Genes involved in the normal functions of the neuronal system including neuronal cell growth and differentiation and neuronal regeneration and survival are included. The cytokines and receptors involved in neuronal signaling are contained on this array along with genes involved in the transmission of nerve impulses, genes involved in neuronal apoptosis in response to neurotrophic factors and transcription factors and regulators indicative of the activation pathways downstream of the neuronal system. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to the neuronal system with this array.

For further details, consult the *RT<sup>2</sup> Profiler PCR Array Handbook*.

### Shipping and storage

RT<sup>2</sup> Profiler PCR Arrays in the Rotor-Gene format are shipped at ambient temperature, on dry ice, or blue ice packs depending on destination and accompanying products.

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

**Note:** Ensure that you have the correct RT<sup>2</sup> Profiler PCR Array format for your real-time cycler (see table above).

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



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Sample & Assay Technologies

## Array layout

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc™ (plate A1–A12=Rotor-Disc 1–12, plate B1–B12=Rotor-Disc 13–24, etc.). To maintain data analysis compatibility, wells 97–100 do not contain real-time assays but will contain master mix to account for weight balance.

## Gene table: RT<sup>2</sup> Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Mm.44245	NM_007407	Adcyap1r1	Adenylate cyclase activating polypeptide 1 receptor 1
A02	Mm.56897	NM_009711	Artn	Artemin
A03	Mm.19904	NM_007527	Bax	Bcl2-associated X protein
A04	Mm.257460	NM_009741	Bcl2	B-cell leukemia/lymphoma 2
A05	Mm.1442	NM_007540	Bdnf	Brain derived neurotrophic factor
A06	Mm.4880	NM_019626	Cbln1	Cerebellin 1 precursor protein
A07	Mm.3521	NM_009827	Cckar	Cholecystokinin A receptor
A08	Mm.271833	NM_011611	Cd40	CD40 antigen
A09	Mm.290924	NM_170786	Cnlf	Ciliary neurotrophic factor
A10	Mm.425178	NM_016673	Cnfr	Ciliary neurotrophic factor receptor
A11	Mm.290689	NM_205769	Crh	Corticotropin releasing hormone
A12	Mm.316614	NM_198408	Crhbp	Corticotropin releasing hormone binding protein
B01	Mm.1892	NM_007762	Crhr1	Corticotropin releasing hormone receptor 1
B02	Mm.236081	NM_009953	Crhr2	Corticotropin releasing hormone receptor 2
B03	Mm.44065	NM_009987	Cx3cr1	Chemokine (C-X3-C) receptor 1
B04	Mm.1401	NM_009911	Cxcr4	Chemokine (C-X-C motif) receptor 4
B05	Mm.1626	NM_007987	Fas	Fas (TNF receptor superfamily member 6)
B06	Mm.473689	NM_008006	Fgf2	Fibroblast growth factor 2
B07	Mm.8846	NM_013518	Fgf9	Fibroblast growth factor 9
B08	Mm.265716	NM_010206	Fgfr1	Fibroblast growth factor receptor 1
B09	Mm.246513	NM_010234	Fos	FBJ osteosarcoma oncogene
B10	Mm.135965	NM_177798	Frs2	Fibroblast growth factor receptor substrate 2
B11	Mm.392206	NM_144939	Frs3	Fibroblast growth factor receptor substrate 3
B12	Mm.277680	NM_139149	Fus	Fusion, derived from t(12;16) malignant liposarcoma (human)
C01	Mm.6219	NM_008082	Galr1	Galanin receptor 1
C02	Mm.57149	NM_010254	Galr2	Galanin receptor 2
C03	Mm.4679	NM_010275	Gdnf	Glial cell line derived neurotrophic factor
C04	Mm.88367	NM_010279	Gfra1	Glial cell line derived neurotrophic factor family receptor alpha 1
C05	Mm.32619	NM_008115	Gfra2	Glial cell line derived neurotrophic factor family receptor alpha 2
C06	Mm.16520	NM_010280	Gfra3	Glial cell line derived neurotrophic factor family receptor alpha 3
C07	Mm.87312	NM_022023	Gmfb	Glia maturation factor, beta
C08	Mm.194536	NM_022024	Gmfg	Glia maturation factor, gamma
C09	Mm.4687	NM_008177	Grpr	Gastrin releasing peptide receptor
C10	Mm.10096	NM_010410	Hcrt	Hypocretin
C11	Mm.246595	NM_198959	Hcrt1	Hypocretin (orexin) receptor 1
C12	Mm.335300	NM_198962	Hcrt2	Hypocretin (orexin) receptor 2
D01	Mm.13849	NM_013560	Hspb1	Heat shock protein 1
D02	Mm.874	NM_010548	Il10	Interleukin 10
D03	Mm.379327	NM_008348	Il10ra	Interleukin 10 receptor, alpha
D04	Mm.222830	NM_008361	Il1b	Interleukin 1 beta
D05	Mm.896	NM_008362	Il1r1	Interleukin 1 receptor, type I
D06	Mm.1019	NM_031168	Il6	Interleukin 6
D07	Mm.2856	NM_010559	Il6ra	Interleukin 6 receptor, alpha
D08	Mm.4364	NM_010560	Il6st	Interleukin 6 signal transducer
D09	Mm.4964	NM_008501	Lif	Leukemia inhibitory factor
D10	Mm.149720	NM_013584	Lifr	Leukemia inhibitory factor receptor
D11	Mm.27578	NM_019791	Maged1	Melanoma antigen, family D, 1
D12	Mm.426053	NM_008560	Mc2r	Melanocortin 2 receptor
E01	Mm.24001	NM_025282	Mef2c	Myocyte enhancer factor 2C
E02	Mm.2064	NM_013603	Mt3	Metallothionein 3
E03	Mm.2444	NM_010849	Myc	Myelocytomatosis oncogene
E04	Mm.255596	NM_010897	Nf1	Neurofibromatosis 1
E05	Mm.1259	NM_013609	Ngf	Nerve growth factor
E06	Mm.283893	NM_033217	Ngfr	Nerve growth factor receptor (TNFR superfamily, member 16)
E07	Mm.90787	NM_009750	Ngfrap1	Nerve growth factor receptor (TNFRSF16) associated protein 1
E08	Mm.425622	NM_008703	Nmbr	Neuromedin B receptor
E09	Mm.445915	NM_018787	Npff	Neuropeptide FF-amide peptide precursor

Position	UniGene	GenBank	Symbol	Description
E10	Mm.447881	NM_133192	Npffr2	Neuropeptide FF receptor 2
E11	Mm.154796	NM_023456	Npy	Neuropeptide Y
E12	Mm.5112	NM_010934	Npy1r	Neuropeptide Y receptor Y1
F01	Mm.1433	NM_008731	Npy2r	Neuropeptide Y receptor Y2
F02	Mm.8509	NM_010936	Nr1i2	Nuclear receptor subfamily 1, group I, member 2
F03	Mm.153432	NM_178591	Nrg1	Neuregulin 1
F04	Mm.443874	NM_032002	Nrg4	Neuregulin 4
F05	Mm.267570	NM_008742	Ntrf3	Neurotrophin 3
F06	Mm.20344	NM_198190	Ntrf5	Neurotrophin 5
F07	Mm.80682	NM_001033124	Ntrk1	Neurotrophic tyrosine kinase, receptor, type 1
F08	Mm.130054	NM_008745	Ntrk2	Neurotrophic tyrosine kinase, receptor, type 2
F09	Mm.301712	NM_018766	Ntrr1	Neurotensin receptor 1
F10	Mm.57059	NM_008919	Ppyr1	Pancreatic polypeptide receptor 1
F11	Mm.86487	NM_008954	Pspn	Persephin
F12	Mm.4630	NM_008964	Pger2	Prostaglandin E receptor 2 (subtype EP2)
G01	Mm.277406	NM_009283	Stat1	Signal transducer and activator of transcription 1
G02	Mm.293120	NM_019963	Stat2	Signal transducer and activator of transcription 2
G03	Mm.249934	NM_011486	Stat3	Signal transducer and activator of transcription 3
G04	Mm.1550	NM_011487	Stat4	Signal transducer and activator of transcription 4
G05	Mm.8055	NM_009313	Tacr1	Tachykinin receptor 1
G06	Mm.425970	NM_019678	Tfg	Trk-fused gene
G07	Mm.137222	NM_031199	Tgfa	Transforming growth factor alpha
G08	Mm.248380	NM_011577	Tgfb1	Transforming growth factor, beta 1
G09	Mm.3248	NM_009365	Tgfb1i1	Transforming growth factor beta 1 induced transcript 1
G10	Mm.3597	NM_019548	Tro	Trophinin
G11	Mm.222	NM_011640	Trp53	Transformation related protein 53
G12	Mm.377116	NM_021290	Ucn	Urocortin
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, RT<sup>2</sup> Profiler PCR Arrays should be used together with the RT<sup>2</sup> First Strand Kit for cDNA synthesis and RT<sup>2</sup> SYBR<sup>®</sup> Green qPCR Mastermixes for PCR.

Product	Contents	Cat. no.
RT <sup>2</sup> First Strand Kit (12)	Enzymes and reagents for cDNA synthesis	330401
RT <sup>2</sup> SYBR Green ROX <sup>™</sup> FAST Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the Rotor-Gene Q and other Rotor-Gene cyclers	330620

\* Larger kit sizes available; please inquire.

RT<sup>2</sup> 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](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

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