RT² Profiler PCR Array (Rotor-Gene® Format)

Human Neurotrophins & Receptors

Cat. no. 330231 PAHS-031ZR

For pathway expression analysis

Format	For use with the following real-time cyclers
RT² Profiler PCR Array, Format R	Rotor-Gene Q, other Rotor-Gene cyclers

Description

The Human Neurotrophin & Receptors RT² 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 *RT² Profiler PCR Array Handbook*.

Shipping and storage

RT² 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 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

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: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Hs.377783	NM_001118	ADCYAP1R1	Adenylate cyclase activating polypeptide 1 (pituitary) receptor type I
A02	Hs.632404	NM_001136215	ARTN	Artemin
A03	Hs.624291	NM_004324	BAX	BCL2-associated X protein
A04	Hs.150749	NM_000633	BCL2	B-cell CLL/lymphoma 2
A05	Hs.502182	NM_001709	BDNF	Brain-derived neurotrophic factor
A06	Hs.458423	NM_004352	CBLN1	Cerebellin 1 precursor
A07	Hs.129	NM_000730	CCKAR	Cholecystokinin A receptor
A08	Hs.472860	NM_001250	CD40	CD40 molecule, TNF receptor superfamily member 5
A09	Hs.715806	NM_000614	CNTF	Ciliary neurotrophic factor
A10	Hs.129966	NM_001842	CNTFR	Ciliary neurotrophic factor receptor
A11	Hs.75294	NM_000756	CRH	Corticotropin releasing hormone
A12	Hs.115617	NM_001882	CRHBP	Corticotropin releasing hormone binding protein
B01	Hs.417628	NM_004382	CRHR1	Corticotropin releasing hormone receptor 1
B02	Hs.729970	NM_001883	CRHR2	Corticotropin releasing hormone receptor 2
B03	Hs.78913	NM_001337	CX3CR1	Chemokine (C-X3-C motif) receptor 1
B04	Hs.593413	NM_003467	CXCR4	Chemokine (C-X-C motif) receptor 4
B05	Hs.244139	NM_000043	FAS	Fas (TNF receptor superfamily, member 6)
B06	Hs.284244	NM_002006	FGF2	Fibroblast growth factor 2 (basic)
B07	Hs.111	NM_002010	FGF9	Fibroblast growth factor 9 (glia-activating factor)
B08	Hs.264887	NM_015850	FGFR1	Fibroblast growth factor receptor 1
B09	Hs.728789	NM_005252	FOS	FBJ murine osteosarcoma viral oncogene homolog
B10	Hs.593446	NM_006654	FRS2	Fibroblast growth factor receptor substrate 2
B11	Hs.194208	NM_006653	FRS3	Fibroblast growth factor receptor substrate 3
B12	Hs.513522	NM_004960	FUS	Fused in sarcoma
C01	Hs.272191	NM_001480	GALR1	Galanin receptor 1
C02	Hs.666366	NM_003857	GALR2	GALANIN RECEPTOR 2
C03	Hs.248114	NM_000514	GDNF	Glial cell derived neurotrophic factor
C04	Hs.388347	NM_005264	GFRA1	GDNF family receptor alpha 1
C05	Hs.441202	NM_001495	GFRA2	GDNF family receptor alpha 2
C06	Hs.58042	NM_001496	GFRA3	GDNF family receptor alpha 3
C07	Hs.151413	NM_004124	GMFB	Glia maturation factor, beta
C08	Hs.5210	NM_004877	GMFG	Glia maturation factor, gamma
C09	Hs.567282	NM_005314	GRPR	Gastrin-releasing peptide receptor
C10	Hs.158348	NM_001524	HCRT	Hypocretin (orexin) neuropeptide precursor
C11	Hs.520973	NM_001540	HSPB1	Heat shock 27kDa protein 1
C12	Hs.193717	NM_000572	IL10	Interleukin 10
D01	Hs.504035	NM_001558	IL10RA	Interleukin 10 receptor, alpha
D02	Hs.126256	NM_000576	IL1B	Interleukin 1, beta
D03	Hs.701982	NM_000877	IL1R1	Interleukin 1 receptor, type I
D04	Hs.654458	NM_000600	IL6	Interleukin 6 (interferon, beta 2)
D05	Hs.709210	NM_000565	IL6R	Interleukin 6 receptor
D06	Hs.532082	NM_002184	IL6ST	Interleukin 6 signal transducer (gp130, oncostatin M receptor)
D07	Hs.2250	NM_002309	LIF	Leukemia inhibitory factor (cholinergic differentiation factor)
D08	Hs.133421	NM_002310	LIFR	Leukemia inhibitory factor receptor alpha
D09	Hs.5258	NM_006986	MAGED1	Melanoma antigen family D, 1
D10	Hs.248144	NM_000529	MC2R	Melanocortin 2 receptor (adrenocorticotropic hormone)
D11	Hs.653394	NM_002397	MEF2C	Myocyte enhancer factor 2C
D12	Hs.73133	NM_005954	MT3	Metallothionein 3
E01	Hs.202453	NM_002467	MYC	V-myc myelocytomatosis viral oncogene homolog (avian)
E02	Hs.657172	NM_006157	NELL1	NEL-like 1 (chicken)
E03	Hs.113577	NM_000267	NF1	Neurofibromin 1
E04	Hs.2561	NM_002506	NGF	Nerve growth factor (beta polypeptide)
E05	Hs.415768	NM_002507	NGFR	Nerve growth factor receptor
E06	Hs.448588	NM_014380	NGFRAP1	Nerve growth factor receptor (TNFRSF16) associated protein 1
E07	Hs.104555	NM_003717	NPFF	Neuropeptide FF-amide peptide precursor
E08	Hs.99231	NM_053036	NPFFR2	Neuropeptide FF receptor 2
E09	Hs.1832	NM_000905	NPY	Neuropeptide Y

Position	UniGene	GenBank	Symbol	Description
E10	Hs.519057	NM_000909	NPY1R	Neuropeptide Y receptor Y1
E11	Hs.37125	NM_000910	NPY2R	Neuropeptide Y receptor Y2
E12	Hs.7303	NM_022002	NR1I2	Nuclear receptor subfamily 1, group I, member 2
F01	Hs.453951	NM_013957	NRG1	Neuregulin 1
F02	Hs.408515	NM_013982	NRG2	Neuregulin 2
F03	Hs.696574	NM_138573	NRG4	Neuregulin 4
F04	Hs.99171	NM_002527	NTF3	Neurotrophin 3
F05	Hs.730176	NM_006179	NTF4	Neurotrophin 4
F06	Hs.406293	NM_002529	NTRK1	Neurotrophic tyrosine kinase, receptor, type 1
F07	Hs.494312	NM_006180	NTRK2	Neurotrophic tyrosine kinase, receptor, type 2
F08	Hs.590869	NM_002531	NTSR1	Neurotensin receptor 1 (high affinity)
F09	Hs.88218	NM_006228	PNOC	Prepronociceptin
F10	Hs.524719	NM_005972	PPYR1	Pancreatic polypeptide receptor 1
F11	Hs.248159	NM_004158	PSPN	Persephin
F12	Hs.2090	NM_000956	PTGER2	Prostaglandin E receptor 2 (subtype EP2), 53kDa
G01	Hs.642990	NM_007315	STAT1	Signal transducer and activator of transcription 1, 91kDa
G02	Hs.530595	NM_005419	STAT2	Signal transducer and activator of transcription 2, 113kDa
G03	Hs.463059	NM_003150	STAT3	Signal transducer and activator of transcription 3 (acute-phase response factor)
G04	Hs.80642	NM_003151	STAT4	Signal transducer and activator of transcription 4
G05	Hs.633301	NM_001058	TACR1	Tachykinin receptor 1
G06	Hs.518123	NM_006070	TFG	TRK-fused gene
G07	Hs.170009	NM_003236	TGFA	Transforming growth factor, alpha
G08	Hs.645227	NM_000660	TGFB1	Transforming growth factor, beta 1
G09	Hs.654481	NM_000546	TP53	Tumor protein p53
G10	Hs.633653	NM_016157	TRO	Trophinin
G11	Hs.534363	NM_003353	UCN	Urocortin
G12	Hs.718797	NM_003378	VGF	VGF nerve growth factor inducible
H01	Hs.520640	NM_001101	ACTB	Actin, beta
H02	Hs.534255	NM_004048	B2M	Beta-2-microglobulin
H03	Hs.592355	NM_002046	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
H04	Hs.412707	NM_000194	HPRT1	Hypoxanthine phosphoribosyltransferase 1
H05	Hs.546285	NM_001002	RPLP0	Ribosomal protein, large, P0
H06	N/A	SA_00105	HGDC	Human 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 ROX™ 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.

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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