RT² Profiler PCR Array (Rotor-Gene® Format)

Human Type I Interferon Response

Cat. no. 330231 PAHS-016ZR

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 Type I Interferon Response RT² Profiler PCR Array profiles the expression of genes involved in the interferon-a and interferon-β immune responses. This array contains the alpha and beta interferons (IFNs) and their receptors. It also includes signaling molecules involved in the interferon α, β response and IFN-responsive genes. Genes associated with virally induced and intrinsic interferon resistance are included as well. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to Interferon α, β Response 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.12341	NM_001111	ADAR	Adenosine deaminase, RNA-specific
A02	Hs.523309	NM_004281	BAG3	BCL2-associated athanogene 3
A03	Hs.118110	NM_004335	BST2	Bone marrow stromal cell antigen 2
A04	Hs.2490	NM_033292	CASP1	Caspase 1, apoptosis-related cysteine peptidase (interleukin 1, beta, convertase)
A05	Hs.74034	NM_001753	CAV1	Caveolin 1, caveolae protein, 22kDa
A06	Hs.303649	NM_002982	CCL2	Chemokine (C-C motif) ligand 2
A07	Hs.514821	NM_002985	CCL5	Chemokine (C-C motif) ligand 5
A08	Hs.501497	NM_001252	CD70	CD70 molecule
A09	Hs.838	NM_005191	CD80	CD80 molecule
A10	Hs.171182	NM_006889	CD86	CD86 molecule
A11	Hs.238990	NM_004064	CDKN1B	Cyclin-dependent kinase inhibitor 1B (p27, Kip1)
A12	Hs.701991	NM_000246	CIITA	Class II, major histocompatibility complex, transactivator
B01	Hs.709456	NM_000567	CRP	C-reactive protein, pentraxin-related
B02	Hs.632586	NM_001565	CXCL10	Chemokine (C-X-C motif) ligand 10
B03	Hs.190622	NM_014314	DDX58	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58
B04	Hs.131431	NM_002759	EIF2AK2	Eukaryotic translation initiation factor 2-alpha kinase 2
B05	Hs.62661	NM_002053	GBP1	Guanylate binding protein 1, interferon-inducible
B06	Hs.181244	NM_002116	HLA-A	Major histocompatibility complex, class I, A
B07	Hs.654404	NM_005514	HLA-B	Major histocompatibility complex, class I, B
B08	Hs.650174	NM_005516	HLA-E	Major histocompatibility complex, class I, E
B09	Hs.512152	NM_002127	HLA-G	Major histocompatibility complex, class I, G
B10	Hs.380250	NM_005531	IFI16	Interferon, gamma-inducible protein 16
B11	Hs.532634	NM_005532	IFI27	Interferon, alpha-inducible protein 27
B12	Hs.14623	NM_006332	IFI30	Interferon, gamma-inducible protein 30
C01	Hs.730125	NM_002038	IFI6	Interferon, alpha-inducible protein 6
C02	Hs.163173	NM_022168	IFIH1	Interferon induced with helicase C domain 1
C03	Hs.20315	NM_001548	IFIT1	Interferon-induced protein with tetratricopeptide repeats 1
C04	Hs.437609	NM_001547	IFIT2	Interferon-induced protein with tetratricopeptide repeats 2
C05	Hs.714337	NM_001549	IFIT3	Interferon-induced protein with tetratricopeptide repeats 3
C06	Hs.458414	NM_003641	IFITM1	Interferon induced transmembrane protein 1 (9-27)
C07	Hs.709321	NM_006435	IFITM2	Interferon induced transmembrane protein 2 (1-8D)
C08	Hs.374650	NM_021034	IFITM3	Interferon induced transmembrane protein 3
C09	Hs.37026	NM_024013	IFNA1	Interferon, alpha 1
C10	Hs.211575	NM_000605	IFNA2	Interferon, alpha 2
C11	Hs.1510	NM_021068	IFNA4	Interferon, alpha 4
C12	Hs.529400	NM_000629	IFNAR1	Interferon (alpha, beta and omega) receptor 1
D01	Hs.708195	NM_000874	IFNAR2	Interferon (alpha, beta and omega) receptor 2
D02	Hs.93177	NM_002176	IFNB1	Interferon, beta 1, fibroblast
D03	Hs.682604	NM_176891	IFNE	Interferon, epsilon
D04	Hs.73010	NM_002177	IFNW1	Interferon, omega 1
D05	Hs.193717	NM_000572	IL10	Interleukin 10
D06	Hs.654378	NM_000585	IL15	Interleukin 15
D07	Hs.654458	NM_000600	IL6	Interleukin 6 (interferon, beta 2)
D08	Hs.436061	NM_002198	IRF1	Interferon regulatory factor 1
D09	Hs.654566	NM_002199	IRF2	Interferon regulatory factor 2
D10	Hs.75254	NM_001571	IRF3	Interferon regulatory factor 3
D11	Hs.521181	NM_001098629	IRF5	Interferon regulatory factor 5
D12	Hs.166120	NM_001572	IRF7	Interferon regulatory factor 7
E01	Hs.1706	NM_006084	IRF9	Interferon regulatory factor 9
E02	Hs.458485	NM_005101	ISG15	ISG15 ubiquitin-like modifier
E03	Hs.459265	NM_002201	ISG20	Interferon stimulated exonuclease gene 20kDa
E04	Hs.207538	NM_002227	JAK1	Janus kinase 1
E05	Hs.656213	NM_004972	JAK2	Janus kinase 2
E06	Hs.80395	NM_002371	MAL	Mal, T-cell differentiation protein
E07	Hs.132966	NM_000245	MET	Met proto-oncogene (hepatocyte growth factor receptor)
E08	Hs.153837	NM_002432	MNDA	Myeloid cell nuclear differentiation antigen
E09	Hs.517307	NM_002462	MX1	Myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse)

Position	UniGene	GenBank	Symbol	Description
E10	Hs.926	NM_002463	MX2	Myxovirus (influenza virus) resistance 2 (mouse)
E11	Hs.82116	NM_002468	MYD88	Myeloid differentiation primary response gene (88)
E12	Hs.54483	NM_004688	NMI	N-myc (and STAT) interactor
F01	Hs.709191	NM_000625	NOS2	Nitric oxide synthase 2, inducible
F02	Hs.524760	NM_002534	OAS1	2'-5'-oligoadenylate synthetase 1, 40/46kDa
F03	Hs.414332	NM_002535	OAS2	2'-5'-oligoadenylate synthetase 2, 69/71kDa
F04	Hs.526464	NM_033238	PML	Promyelocytic leukemia
F05	Hs.496255	NM_002744	PRKCZ	Protein kinase C, zeta
F06	Hs.434081	NM_002818	PSME2	Proteasome (prosome, macropain) activator subunit 2 (PA28 beta)
F07	Hs.349094	NM_002351	SH2D1A	SH2 domain containing 1A
F08	Hs.521482	NM_003028	SHB	Src homology 2 domain containing adaptor protein B
F09	Hs.50640	NM_003745	SOCS1	Suppressor of cytokine signaling 1
F10	Hs.642990	NM_007315	STAT1	Signal transducer and activator of transcription 1, 91kDa
F11	Hs.530595	NM_005419	STAT2	Signal transducer and activator of transcription 2, 113kDa
F12	Hs.463059	NM_003150	STAT3	Signal transducer and activator of transcription 3 (acute-phase response factor)
G01	Hs.352018	NM_000593	TAP1	Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)
G02	Hs.29344	NM_182919	TICAM1	Toll-like receptor adaptor molecule 1
G03	Hs.522632	NM_003254	TIMP1	TIMP metallopeptidase inhibitor 1
G04	Hs.657724	NM_003265	TLR3	Toll-like receptor 3
G05	Hs.659215	NM_016562	TLR7	Toll-like receptor 7
G06	Hs.660543	NM_138636	TLR8	Toll-like receptor 8
G07	Hs.87968	NM_017442	TLR9	Toll-like receptor 9
G08	Hs.379754	NM_198282	TMEM173	Transmembrane protein 173
G09	Hs.478275	NM_003810	TNFSF10	Tumor necrosis factor (ligand) superfamily, member 10
G10	Hs.510528	NM_003300	TRAF3	TNF receptor-associated factor 3
G11	Hs.75516	NM_003331	TYK2	Tyrosine kinase 2
G12	Hs.73793	NM_003376	VEGFA	Vascular endothelial growth factor A
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.

www.qiagen.com

Australia ▪ 1-800-243-800
Austria ▪ 0800/281010
Belgium ▪ 0800-79612
Brazil ▪ 0800-557779
Canada ▪ 800-572-9613
China ▪ 8621-3865-3865
Denmark ▪ 80-885945
Finland ▪ 0800-914416
France ▪ 01-60-920-930
Germany ▪ 02103-29-12000
Hong Kong ▪ 800 933 965
Ireland ▪ 1800 555 049
Italy ▪ 800-787980
Japan ▪ 03-6890-7300
Korea (South) ▪ 080-000-7145
Luxembourg ▪ 8002 2076
Mexico ▪ 01-800-7742-436
The Netherlands ▪ 0800 0229592
Norway ▪ 800-18859
Singapore ▪ 1800-742-4368
Spain ▪ 91-630-7050
Sweden ▪ 020-790282
Switzerland ▪ 055-254-22-11
UK ▪ 01293-422-911
USA ▪ 800-426-8157