

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

Rhesus Macaque Type I Interferon Response

Cat. no. 330231 PAQQ-016ZA

For pathway expression analysis

Format	For use with the following real-time cyclers
RT ² 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
RT ² Profiler PCR Array, Format C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)
RT ² Profiler PCR Array, Format D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®
RT ² Profiler PCR Array, Format E	Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™
RT ² Profiler PCR Array, Format F	Roche® LightCycler® 480 (96-well block)
RT ² Profiler PCR Array, Format G	Roche LightCycler 480 (384-well block)
RT ² Profiler PCR Array, Format H	Fluidigm® BioMark™



Sample & Assay Technologies

Description

The Rhesus Macaque Type I Interferon Response RT² Profiler™ PCR Array profiles the expression of genes involved in the interferon- α 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 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	ADAR	BAG3	BST2	CALCOCO2	CASP1	CAV1	CCL2	CCL5	CD70	CD80	CD86	CDC37
B	CDKN1B	CIITA	CRP	CXCL10	CYP27B1	DIABLO	EIF2AK2	GBP1	HLA-G	HPX	IFI27	IFI35
C	IFIH1	IFIT1	IFIT3	IFITM1	IFNA2	IFNAR1	IFNAR2	IFNB1	IFNW1	IL10	IL15	IL6
D	IRF1	IRF2	IRF3	IRF5	IRF7	ISG15	ISG20	JAK1	JAK2	LOC710340	LOC719253	LOC719379
E	LOC721566	MAL	MAMU-A	MAMU-B	MAMU-E	MX1	MX2	MYD88	NMI	NOS2	OAS1	OAS2
F	PML	PRKRA	PSME2	RCBTB1	SAMSN1	SHFM1	SLC11A1	SLC1A2	SNCA	SOC31	SP100	STAT1
G	STAT2	STAT3	TAP1	TICAM1	TLR3	TLR7	TLR8	TLR9	TNFSF10	TRAF3	TYK2	VEGFA
H	ACTB	B2M	GAPDH	LOC709186	RPL13A	QGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Mmu.12042	XM_001111902	ADAR	Adenosine deaminase, RNA-specific
A02	N/A	XM_001104160	BAG3	BCL2-associated athanogene 3
A03	Mmu.12761	NM_001161666	BST2	Bone marrow stromal cell antigen 2
A04	Mmu.15584	XM_001090780	CALCOCO2	Calcium binding and coiled-coil domain 2
A05	Mmu.11508	XM_001094943	CASP1	Caspase 1, apoptosis-related cysteine peptidase (interleukin 1, beta, convertase)
A06	Mmu.11409	NM_001168614	CAV1	Caveolin 1, caveolae protein, 22kDa
A07	Mmu.3491	NM_001032821	CCL2	Chemokine (C-C motif) ligand 2
A08	Mmu.3698	NM_001032850	CCL5	Chemokine (C-C motif) ligand 5
A09	N/A	XM_001088935	CD70	CD70 antigen-like
A10	Mmu.3359	NM_001042642	CD80	CD80 molecule
A11	Mmu.3580	NM_001042644	CD86	CD86 molecule
A12	Mmu.2958	XM_001105596	CDC37	Cell division cycle 37 homolog (S. cerevisiae)
B01	Mmu.1136	XM_001085433	CDKN1B	Cyclin-dependent kinase inhibitor 1B (p27, Kip1)
B02	N/A	XM_001103518	CIITA	Class II, major histocompatibility complex, transactivator
B03	Mmu.3013	XM_001117250	CRP	C-reactive protein, pentraxin-related
B04	Mmu.2740	NM_001032892	CXCL10	Chemokine (C-X-C motif) ligand 10
B05	Mmu.19090	XM_001116450	CYP27B1	Cytochrome P450, family 27, subfamily B, polypeptide 1
B06	Mmu.4430	XM_001096967	DIABLO	Diablo, IAP-binding mitochondrial protein
B07	Mmu.17173	NM_001083948	EIF2AK2	Eukaryotic translation initiation factor 2-alpha kinase 2
B08	Mmu.4176	XM_001083336	GBP1	Guanylate binding protein 1, interferon-inducible, 67kD
B09	N/A	XM_001082552	HLA-G	HLA class I histocompatibility antigen, alpha chain G-like
B10	Mmu.3910	XM_001109797	HPX	Hemopexin
B11	Mmu.4320	NM_001048169	IFI27	ISG12(c) protein-like
B12	N/A	XM_001112861	IFI35	Interferon-induced protein 35
C01	Mmu.10847	NM_001047123	IFIH1	Interferon induced with helicase C domain 1
C02	Mmu.14675	XM_001086535	IFIT1	Interferon-induced protein with tetratricopeptide repeats 1
C03	Mmu.1900	XM_001086192	IFIT3	Interferon-induced protein with tetratricopeptide repeats 3
C04	Mmu.1254	XM_001085444	IFITM1	Interferon induced transmembrane protein 1 (9-27)
C05	Mmu.15665	NM_001135794	IFNA2	Interferon, alpha 2
C06	Mmu.14907	XM_001092098	IFNAR1	Interferon (alpha, beta and omega) receptor 1
C07	N/A	XM_001092342	IFNAR2	Interferon (alpha, beta and omega) receptor 2
C08	Mmu.15664	NM_001135795	IFNB1	Interferon, beta 1, fibroblast
C09	N/A	XM_001108113	IFNW1	Interferon, omega 1
C10	Mmu.3374	NM_001044727	IL10	Interleukin 10
C11	Mmu.3414	NM_001044731	IL15	Interleukin 15
C12	Mmu.3376	NM_001042733	IL6	Interleukin 6 (interferon, beta 2)
D01	Mmu.11578	XM_001104294	IRF1	Interferon regulatory factor 1
D02	Mmu.4085	NM_001135793	IRF2	Interferon regulatory factor 2
D03	Mmu.925	NM_001135797	IRF3	Interferon regulatory factor 3
D04	Mmu.14851	XM_001092569	IRF5	Interferon regulatory factor 5
D05	Mmu.11935	NM_001136100	IRF7	Interferon regulatory factor 7
D06	Mmu.14380	XM_001088541	ISG15	ISG15 ubiquitin-like modifier
D07	Mmu.13407	XM_001090239	ISG20	Interferon stimulated exonuclease gene 20kDa
D08	Mmu.2703	XM_002801620	JAK1	Janus kinase 1
D09	Mmu.12996	XM_001082883	JAK2	Janus kinase 2

Position	UniGene	GenBank	Symbol	Description
D10	N/A	XM_001098955	LOC710340	Protein kinase C zeta type-like
D11	Mmu.1822	XM_001117168	LOC719253	Gamma-interferon-inducible protein 16-like
D12	Mmu.3913	XM_001114116	LOC719379	Gamma-interferon-inducible lysosomal thiol reductase-like
E01	N/A	XM_001117747	LOC721566	C-X-C motif chemokine 16-like
E02	N/A	XM_001095645	MAL	Mal, T-cell differentiation protein
E03	Mmu.16507	NM_001048246	MAMU-A	Major histocompatibility complex, class I, A
E04	Mmu.11212	NM_001048245	MAMU-B	MHC class I antigen
E05	Mmu.4250	NM_001114966	MAMU-E	Major histocompatibility complex, class I, E
E06	Mmu.454	NM_001079693	MX1	Myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse)
E07	Mmu.4024	NM_001079696	MX2	Myxovirus (influenza virus) resistance 2 (mouse)
E08	Mmu.17494	NM_001130681	MYD88	Myeloid differentiation primary response gene (88)
E09	Mmu.13786	XM_001082994	NMI	N-myc (and STAT) interactor
E10	Mmu.3443	XM_001106245	NOS2	Nitric oxide synthase 2, inducible
E11	Mmu.11671	NM_001083949	OAS1	2'-5'-oligoadenylate synthetase 1, 40/46kDa
E12	N/A	XM_001110954	OAS2	2'-5'-oligoadenylate synthetase 2, 69/71kDa
F01	Mmu.8407	NM_001042434	PML	Promyelocytic leukemia
F02	N/A	XM_001098685	PRKRA	Protein kinase, interferon-inducible double stranded RNA dependent activator
F03	Mmu.4214	XM_001112445	PSME2	Proteasome (prosome, macropain) activator subunit 2 (PA28 beta)
F04	Mmu.13571	XM_001103938	RCBTB1	Regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 1
F05	Mmu.12451	XM_001082777	SAMSN1	SAM domain, SH3 domain and nuclear localization signals 1
F06	Mmu.1397	XM_001091523	SHFM1	Split hand/foot malformation (ectrodactyly) type 1
F07	Mmu.12026	XM_001089328	SLC11A1	Solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1
F08	Mmu.4464	XM_001115008	SLC1A2	Solute carrier family 1 (glial high affinity glutamate transporter), member 2
F09	Mmu.445	XM_001095402	SNCA	Alpha-synuclein-like
F10	Mmu.12396	XM_001104595	SOCS1	Suppressor of cytokine signaling 1
F11	Mmu.4192	XM_001112681	SP100	SP100 nuclear antigen
F12	Mmu.3514	XM_002799015	STAT1	Signal transducer and activator of transcription 1, 91kDa
G01	N/A	XM_001115072	STAT2	Signal transducer and activator of transcription 2, 113kDa
G02	Mmu.2929	XM_001109505	STAT3	Signal transducer and activator of transcription 3 (acute-phase response factor)
G03	Mmu.9814	XM_001115506	TAP1	Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)
G04	Mmu.3854	NM_001130428	TICAM1	Toll-like receptor adaptor molecule 1
G05	Mmu.3813	NM_001036685	TLR3	Toll-like receptor 3
G06	Mmu.3817	NM_001130426	TLR7	Toll-like receptor 7
G07	Mmu.3818	NM_001130427	TLR8	Toll-like receptor 8
G08	Mmu.3819	NM_001130431	TLR9	Toll-like receptor 9
G09	Mmu.1012	XM_001084768	TNFSF10	Tumor necrosis factor (ligand) superfamily, member 10
G10	Mmu.1370	XM_001082535	TRAF3	TNF receptor-associated factor 3
G11	Mmu.3516	XM_001101130	TYK2	Tyrosine kinase 2
G12	Mmu.3550	XM_001089925	VEGFA	Vascular endothelial growth factor A
H01	Mmu.4974	NM_001033084	ACTB	Actin, beta
H02	Mmu.5037	NM_001047137	B2M	Beta-2-microglobulin
H03	Mmu.3145	XM_001105471	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
H04	Mmu.12316	XM_001097691	LOC709186	Hypoxanthine-guanine phosphoribosyltransferase-like
H05	Mmu.2512	XM_001115079	RPL13A	Ribosomal protein L13A
H06	N/A	SA_00125	QGDC	Rhesus Macaque 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.
RT ² First Strand Kit (12)	Enzymes and reagents for cDNA synthesis	330401
RT ² 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
RT ² 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
RT ² 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.

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