

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

## Mouse Common Cytokines

Cat. no. 330231 PAMM-021ZR

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 Common Cytokines RT<sup>2</sup> Profiler PCR Array profiles the expression of 84 important cytokine genes. This array includes interferons and interleukins as well as the bone morphogenetic proteins (BMP) and members of the TGF- $\beta$  family. Also represented are platelet-derived and vascular endothelial growth factors. Tumor necrosis factors are included as well as other cytokine-related genes. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to cytokines 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.



## 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.3969	NM_009605	Adipoq	Adiponectin, C1Q and collagen domain containing
A02	Mm.235137	NM_007926	Aimp1	Aminoacyl tRNA synthetase complex-interacting multifunctional protein 1
A03	Mm.27757	NM_009755	Bmp1	Bone morphogenetic protein 1
A04	Mm.103205	NM_007553	Bmp2	Bone morphogenetic protein 2
A05	Mm.209571	NM_173404	Bmp3	Bone morphogenetic protein 3
A06	Mm.6813	NM_007554	Bmp4	Bone morphogenetic protein 4
A07	Mm.428950	NM_007555	Bmp5	Bone morphogenetic protein 5
A08	Mm.385759	NM_007556	Bmp6	Bone morphogenetic protein 6
A09	Mm.595	NM_007557	Bmp7	Bone morphogenetic protein 7
A10	Mm.4861	NM_011616	Cd40lg	CD40 ligand
A11	Mm.42228	NM_011617	Cd70	CD70 antigen
A12	Mm.290924	NM_170786	Cnlf	Ciliary neurotrophic factor
B01	Mm.795	NM_007778	Csf1	Colony stimulating factor 1 (macrophage)
B02	Mm.4922	NM_009969	Csf2	Colony stimulating factor 2 (granulocyte-macrophage)
B03	Mm.1238	NM_009971	Csf3	Colony stimulating factor 3 (granulocyte)
B04	Mm.389954	NM_007795	Ctf1	Cardiotrophin 1
B05	Mm.3355	NM_010177	Fasf	Fas ligand (TNF superfamily, member 6)
B06	Mm.317323	NM_008002	Fgf10	Fibroblast growth factor 10
B07	Mm.31325	NM_011819	Gdf15	Growth differentiation factor 15
B08	Mm.422844	NM_019506	Gdf2	Growth differentiation factor 2
B09	Mm.4744	NM_008109	Gdf5	Growth differentiation factor 5
B10	Mm.9714	NM_008110	Gdf9	Growth differentiation factor 9
B11	Mm.14091	NM_010503	Ifna2	Interferon alpha 2
B12	Mm.377088	NM_010504	Ifna4	Interferon alpha 4
C01	Mm.1245	NM_010510	Ifnb1	Interferon beta 1, fibroblast
C02	Mm.240327	NM_008337	Ifng	Interferon gamma
C03	Mm.874	NM_010548	Il10	Interleukin 10
C04	Mm.35814	NM_008350	Il11	Interleukin 11
C05	Mm.239707	NM_008352	Il12b	Interleukin 12B
C06	Mm.1284	NM_008355	Il13	Interleukin 13
C07	Mm.4392	NM_008357	Il15	Interleukin 15
C08	Mm.10137	NM_010551	Il16	Interleukin 16
C09	Mm.5419	NM_010552	Il17a	Interleukin 17A
C10	Mm.59313	NM_019508	Il17b	Interleukin 17B
C11	Mm.222808	NM_145834	Il17c	Interleukin 17C
C12	Mm.222807	NM_145856	Il17f	Interleukin 17F
D01	Mm.1410	NM_008360	Il18	Interleukin 18
D02	Mm.131480	NM_001009940	Il19	Interleukin 19
D03	Mm.15534	NM_010554	Il1a	Interleukin 1 alpha
D04	Mm.222830	NM_008361	Il1b	Interleukin 1 beta
D05	Mm.882	NM_031167	Il1rn	Interleukin 1 receptor antagonist
D06	Mm.14190	NM_008366	Il2	Interleukin 2
D07	Mm.103794	NM_021380	Il20	Interleukin 20
D08	Mm.157689	NM_021782	Il21	Interleukin 21
D09	Mm.125482	NM_031252	Il23a	Interleukin 23, alpha subunit p19
D10	Mm.196691	NM_053095	Il24	Interleukin 24
D11	Mm.90154	NM_080729	Il25	Interleukin 25
D12	Mm.222632	NM_145636	Il27	Interleukin 27
E01	Mm.983	NM_010556	Il3	Interleukin 3
E02	Mm.276360	NM_021283	Il4	Interleukin 4
E03	Mm.4461	NM_010558	Il5	Interleukin 5
E04	Mm.1019	NM_031168	Il6	Interleukin 6
E05	Mm.3825	NM_008371	Il7	Interleukin 7
E06	Mm.3006	NM_008373	Il9	Interleukin 9
E07	Mm.1100	NM_010564	Inha	Inhibin alpha
E08	Mm.8042	NM_008380	Inhba	Inhibin beta-A
E09	Mm.378911	NM_010094	Lefty1	Left right determination factor 1

Position	UniGene	GenBank	Symbol	Description
E10	Mm.4964	NM_008501	Lif	Leukemia inhibitory factor
E11	Mm.87787	NM_010735	Lta	Lymphotoxin A
E12	Mm.1715	NM_008518	Ltb	Lymphotoxin B
F01	Mm.2326	NM_010798	Mif	Macrophage migration inhibitory factor
F02	Mm.3514	NM_010834	Mstn	Myostatin
F03	Mm.202727	NM_021524	Nampt	Nicotinamide phosphoribosyltransferase
F04	Mm.131422	NM_001013365	Osm	Oncostatin M
F05	Mm.22802	NM_170727	Scgb3a1	Secretoglobin, family 3A, member 1
F06	Mm.288474	NM_009263	Spp1	Secreted phosphoprotein 1
F07	Mm.248380	NM_011577	Tgfb1	Transforming growth factor, beta 1
F08	Mm.18213	NM_009367	Tgfb2	Transforming growth factor, beta 2
F09	Mm.3943	NM_009379	Thpo	Thrombopoietin
F10	Mm.1293	NM_013693	Tnf	Tumor necrosis factor
F11	Mm.15383	NM_008764	Tnfrsf11b	Tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)
F12	Mm.1062	NM_009425	Tnfsf10	Tumor necrosis factor (ligand) superfamily, member 10
G01	Mm.249221	NM_011613	Tnfsf11	Tumor necrosis factor (ligand) superfamily, member 11
G02	Mm.344820	NM_011614	Tnfsf12	Tumor necrosis factor (ligand) superfamily, member 12
G03	Mm.8983	NM_023517	Tnfsf13	Tumor necrosis factor (ligand) superfamily, member 13
G04	Mm.28835	NM_033622	Tnfsf13b	Tumor necrosis factor (ligand) superfamily, member 13b
G05	Mm.483369	NM_019418	Tnfsf14	Tumor necrosis factor (ligand) superfamily, member 14
G06	Mm.208152	NM_177371	Tnfsf15	Tumor necrosis factor (ligand) superfamily, member 15
G07	Mm.276823	NM_183391	Tnfsf18	Tumor necrosis factor (ligand) superfamily, member 18
G08	Mm.4994	NM_009452	Tnfsf4	Tumor necrosis factor (ligand) superfamily, member 4
G09	Mm.4664	NM_009403	Tnfsf8	Tumor necrosis factor (ligand) superfamily, member 8
G10	Mm.41171	NM_009404	Tnfsf9	Tumor necrosis factor (ligand) superfamily, member 9
G11	Mm.268863	NM_001005506	Txlna	Taxilin alpha
G12	Mm.282184	NM_009505	Vegfa	Vascular endothelial growth factor A
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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