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

Cat. no. 330231 PAHS-021ZR

#### For pathway expression analysis

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

#### **Description**

The Human 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-ß 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<sup>™</sup> (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	Hs.80485	NM_004797	ADIPOQ	Adiponectin, C1Q and collagen domain containing	
A02	Hs.1274	NM_006129	BMP1	Bone morphogenetic protein 1	
A03	Hs.73853	NM_001200	BMP2	Bone morphogenetic protein 2	
A04	Hs.387411	NM 001201	ВМР3	Bone morphogenetic protein 3	
A05	Hs.68879	NM 130851	BMP4	Bone morphogenetic protein 4	
A06	Hs.296648	NM 021073	BMP5	Bone morphogenetic protein 5	
A07	Hs.285671	NM 001718	BMP6	Bone morphogenetic protein 6	
A08	Hs.473163	NM 001719	BMP7	Bone morphogenetic protein 7	
A09	Hs.592244	NM 000074	CD40LG	CD40 ligand	
A10	Hs.501497	NM 001252	CD70	CD70 molecule	
A11	Hs.715806	NM 000614	CNTF	Ciliary neurotrophic factor	
A12	Hs.591402	NM 000757	CSF1	Colony stimulating factor 1 (macrophage)	
B01	Hs.1349	NM 000758	CSF2	Colony stimulating factor 2 (granulocyte-macrophage)	
B02	Hs.2233	NM 000759	CSF3	Colony stimulating factor 3 (granulocyte)	
B03	Hs.473877	NM 058186	FAM3B	Family with sequence similarity 3, member B	
B03	Hs.2007	NM 000639	FASLG	Fas ligand (TNF superfamily, member 6)	
B05			FIGF		
B05 B06	Hs.11392 Hs.279463	NM_004469	GDF2	C-fos induced growth factor (vascular endothelial growth factor D)	
		NM_016204		Growth differentiation factor 2	
B07	Hs.1573	NM_000557	GDF5	Growth differentiation factor 5	
B08	Hs.25022	NM_005260	GDF9	Growth differentiation factor 9	
B09	Hs.37026	NM_024013	IFNA1	Interferon, alpha 1	
B10	Hs.211575	NM_000605	IFNA2	Interferon, alpha 2	
B11	Hs.1510	NM_021068	IFNA4	Interferon, alpha 4	
B12	Hs.37113	NM_002169	IFNA5	Interferon, alpha 5	
C01	Hs.93177	NM_002176	IFNB1	Interferon, beta 1, fibroblast	
C02	Hs.856	NM_000619	IFNG	Interferon, gamma	
C03	Hs.193717	NM_000572	IL10	Interleukin 10	
C04	Hs.467304	NM_000641	IL11	Interleukin 11	
C05	Hs.673	NM_000882	IL12A	Interleukin 12A (natural killer cell stimulatory factor 1, cytotoxic lymphocyte maturation factor 1, p35)	
C06	Hs.674	NM_002187	IL12B	Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40)	
C07	Hs.845	NM 002188	IL13	Interleukin 13	
C08	Hs.654378	NM 000585	IL15	Interleukin 15	
C09	Hs.459095	NM 004513	IL16	Interleukin 16	
C10	Hs.41724	NM 002190	IL17A	Interleukin 17A	
C11	Hs.156979	NM 014443	IL17B	Interleukin 17B	
C12	Hs.278911	NM 013278	IL17C	Interleukin 17C	
D01	Hs.83077	NM 001562	IL18	Interleukin 18 (interferon-gamma-inducing factor)	
D01	Hs.661017	NM 013371	IL19	Interleukin 19	
D02	Hs.1722	NM 000575	IL1A	Interleukin 1, alpha	
D03	Hs.126256	NM 000576	IL1B	Interleukin 1, dipita	
D04	Hs.81134	NM 000577	IL1RN	Interleukin 1 receptor antagonist	
D05	Hs.89679	NM 000586	IL1KIN	Interleukin 1 recepior dinagonisi	
D06	Hs.272373	NM_000586 NM_018724	IL20	Interleukin 2 Interleukin 20	
		_	IL20		
D08	Hs.567559	NM_021803	IL21	Interleukin 21	
D09	Hs.287369	NM_020525		Interleukin 22	
D10	Hs.98309	NM_016584	IL23A	Interleukin 23, alpha subunit p19	
D11	Hs.411311	NM_006850	IL24	Interleukin 24	
D12	Hs.302036	NM_022789	IL25	Interleukin 25	
E01	Hs.528111	NM_145659	IL27	Interleukin 27	
E02	Hs.694	NM_000588	IL3	Interleukin 3 (colony-stimulating factor, multiple)	
E03	Hs.73917	NM_000589	IL4	Interleukin 4	
E04	Hs.2247	NM_000879	IL5	Interleukin 5 (colony-stimulating factor, eosinophil)	
E05	Hs.654458	NM_000600	IL6	Interleukin 6 (interferon, beta 2)	
E06	Hs.591873	NM_000880	IL7	Interleukin 7	
E07	Hs.624	NM 000584	IL8	Interleukin 8	

Position	UniGene	GenBank	Symbol	Description	
E08	Hs.960	NM_000590	IL9	Interleukin 9	
E09	Hs.407506	NM_002191	INHA	Inhibin, alpha	
E10	Hs.583348	NM_002192	INHBA	Inhibin, beta A	
E11	Hs.520187	NM_003240	LEFTY2	Left-right determination factor 2	
E12	Hs.2250	NM_002309	LIF	Leukemia inhibitory factor (cholinergic differentiation factor)	
F01	Hs.36	NM_000595	LTA	Lymphotoxin alpha (TNF superfamily, member 1)	
F02	Hs.376208	NM_002341	LTB	Lymphotoxin beta (TNF superfamily, member 3)	
F03	Hs.41565	NM_005259	MSTN	Myostatin	
F04	Hs.370414	NM_018055	NODAL	Nodal homolog (mouse)	
F05	Hs.248156	NM_020530	OSM	Oncostatin M	
F06	Hs.535898	NM_002607	PDGFA	Platelet-derived growth factor alpha polypeptide	
F07	Hs.313	NM_000582	SPP1	Secreted phosphoprotein 1	
F08	Hs.170009	NM_003236	TGFA	Transforming growth factor, alpha	
F09	Hs.645227	NM_000660	TGFB1	Transforming growth factor, beta 1	
F10	Hs.133379	NM_003238	TGFB2	Transforming growth factor, beta 2	
F11	Hs.592317	NM_003239	TGFB3	Transforming growth factor, beta 3	
F12	Hs.1166	NM_000460	THPO	Thrombopoietin	
G01	Hs.241570	NM_000594	TNF	Tumor necrosis factor	
G02	Hs.81791	NM_002546	TNFRSF11B	Tumor necrosis factor receptor superfamily, member 11b	
G03	Hs.478275	NM_003810	TNFSF10	Tumor necrosis factor (ligand) superfamily, member 10	
G04	Hs.333791	NM_003701	TNFSF11	Tumor necrosis factor (ligand) superfamily, member 11	
G05	Hs.415839	NM_003809	TNFSF12	Tumor necrosis factor (ligand) superfamily, member 12	
G06	Hs.54673	NM_003808	TNFSF13	Tumor necrosis factor (ligand) superfamily, member 13	
G07	Hs.525157	NM_006573	TNFSF13B	Tumor necrosis factor (ligand) superfamily, member 13b	
G08	Hs.129708	NM_003807	TNFSF14	Tumor necrosis factor (ligand) superfamily, member 14	
G09	Hs.181097	NM_003326	TNFSF4	Tumor necrosis factor (ligand) superfamily, member 4	
G10	Hs.654445	NM_001244	TNFSF8	Tumor necrosis factor (ligand) superfamily, member 8	
G11	Hs.699306	NM_175852	TXLNA	Taxilin alpha	
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, PO	
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 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

<sup>\*</sup> 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.giagen. com or can be requested from QIAGEN Technical Services or your local distributor.

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