RT² Profiler PCR Array (Rotor-Gene® Format)

Human Dendritic & Antigen Presenting Cell

Cat. no. 330231 PAHS-406ZR

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 Dendritic and Antigen Presenting Cell RT² Profiler PCR Array profiles the expression of 84 genes focused on dendritic cell activation and maturation. Genes important for dendritic cell activation and maturation such as cytokines, chemokines and their receptors are included on this array along with other related cell surface receptors and signal transduction molecules. Genes involved in antigen uptake, processing, and presentation are also represented on this array. In addition to being functionally defined, many of these genes on the array are highly expressed in mature dendritic cells or show significant changes in expression during cell differentiation. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to dendritic and antigen presenting cells 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.54460	NM_002986	CCL11	Chemokine (C-C motif) ligand 11
A02	Hs.414629	NM_005408	CCL13	Chemokine (C-C motif) ligand 13
A03	Hs.10458	NM_004590	CCL16	Chemokine (C-C motif) ligand 16
A04	Hs.50002	NM_006274	CCL19	Chemokine (C-C motif) ligand 19
A05	Hs.303649	NM_002982	CCL2	Chemokine (C-C motif) ligand 2
A06	Hs.514107	NM_002983	CCL3	Chemokine (C-C motif) ligand 3
A07	Hs.514821	NM_002985	CCL5	Chemokine (C-C motif) ligand 5
A08	Hs.251526	NM_006273	CCL7	Chemokine (C-C motif) ligand 7
A09	Hs.271387	NM_005623	CCL8	Chemokine (C-C motif) ligand 8
A10	Hs.301921	NM_001295	CCR1	Chemokine (C-C motif) receptor 1
A11	Hs.511794	NM_001123396	CCR2	Chemokine (C-C motif) receptor 2
A12	Hs.506190	NM_001837	CCR3	Chemokine (C-C motif) receptor 3
B01	Hs.450802	NM_000579	CCR5	Chemokine (C-C motif) receptor 5
B02	Hs.1309	NM_001763	CD1A	CD1a molecule
B03	Hs.1310	NM_001764	CD1B	CD1b molecule
B04	Hs.132448	NM_001765	CD1C	CD1c molecule
B05	Hs.1799	NM_001766	CD1D	CD1d molecule
B06	Hs.523500	NM_001767	CD2	CD2 molecule
B07	Hs.278694	NM_021155	CD209	CD209 molecule
B08	Hs.591629	NM_006139	CD28	CD28 molecule
B09	Hs.631659	NM_000616	CD4	CD4 molecule
B10	Hs.472860	NM_001250	CD40	CD40 molecule, TNF receptor superfamily member 5
B11	Hs.592244	NM_000074	CD40LG	CD40 ligand
B12	Hs.502328	NM_000610	CD44	CD44 molecule (Indian blood group)
C01	Hs.436568	NM_004355	CD74	CD74 molecule, major histocompatibility complex, class II invariant chain
C02	Hs.838	NM_005191	CD80	CD80 molecule
C03	Hs.171182	NM_006889	CD86	CD86 molecule
C04	Hs.85258	NM_001768	CD8A	CD8a molecule
C05	Hs.690198	NM_001791	CDC42	Cell division cycle 42 (GTP binding protein, 25kDa)
C06	Hs.370771	NM_000389	CDKN1A	Cyclin-dependent kinase inhibitor 1A (p21, Cip1)
C07	Hs.699463	NM_004364	CEBPA	CCAAT/enhancer binding protein (C/EBP), alpha
C08	Hs.351812	NM_130441	CLEC4C	C-type lectin domain family 4, member C
C09	Hs.654394	NM_005211	CSF1R	Colony stimulating factor 1 receptor
C10	Hs.1349	NM_000758	CSF2	Colony stimulating factor 2 (granulocyte-macrophage)
C11	Hs.789	NM_001511	CXCL1	Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)
C12	Hs.632586	NM_001565	CXCL10	Chemokine (C-X-C motif) ligand 10
D01	Hs.522891	NM_000609	CXCL12	Chemokine (C-X-C motif) ligand 12
D02	Hs.590921	NM_002089	CXCL2	Chemokine (C-X-C motif) ligand 2
D03	Hs.194778	NM_000634	CXCR1	Chemokine (C-X-C motif) receptor 1
D04	Hs.593413	NM_003467	CXCR4	Chemokine (C-X-C motif) receptor 4
D05	Hs.446352	NM_004448	ERBB2	V-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian)
D06	Hs.244139	NM_000043	FAS	Fas (TNF receptor superfamily, member 6)
D07	Hs.897	NM_002001	FCER1A	Fc fragment of IgE, high affinity I, receptor for; alpha polypeptide
D08	Hs.465778	NM_002002	FCER2	Fc fragment of IgE, low affinity II, receptor for (CD23)
D09	Hs.77424	NM_000566	FCGR1A	Fc fragment of IgG, high affinity Ia, receptor (CD64)
D10	Hs.507590	NM_004119	FLT3	Fms-related tyrosine kinase 3
D11	Hs.428	NM_001459	FLT3LG	Fms-related tyrosine kinase 3 ligand
D12	Hs.181244	NM_002116	HLA-A	Major histocompatibility complex, class I, A
E01	Hs.728759	NM_006120	HLA-DMA	Major histocompatibility complex, class II, DM alpha
E02	Hs.347270	NM_033554	HLA-DPA1	Major histocompatibility complex, class II, DP alpha 1
E03	Hs.643447	NM_000201	ICAM1	Intercellular adhesion molecule 1
E04	Hs.431460	NM_000873	ICAM2	Intercellular adhesion molecule 2
E05	Hs.856	NM_000619	IFNG	Interferon, gamma
E06	Hs.193717	NM_000572	IL10	Interleukin 10
E07	Hs.673	NM_000882	IL12A	Interleukin 12A (natural killer cell stimulatory factor 1, cytotoxic lymphocyte maturation factor 1, p35)

Position	UniGene	GenBank	Symbol	Description
E08	Hs.674	NM_002187	IL12B	Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40)
E09	Hs.459095	NM_004513	IL16	Interleukin 16
E10	Hs.89679	NM_000586	IL2	Interleukin 2
E11	Hs.654458	NM_000600	IL6	Interleukin 6 (interferon, beta 2)
E12	Hs.624	NM_000584	IL8	Interleukin 8
F01	Hs.166120	NM_001572	IRF7	Interferon regulatory factor 7
F02	Hs.137427	NM_002163	IRF8	Interferon regulatory factor 8
F03	Hs.172631	NM_000632	ITGAM	Integrin, alpha M (complement component 3 receptor 3 subunit)
F04	Hs.375957	NM_000211	ITGB2	Integrin, beta 2 (complement component 3 receptor 3 and 4 subunit)
F05	Hs.162757	NM_002332	LRP1	Low density lipoprotein receptor-related protein 1
F06	Hs.699154	NM_002350	LYN	V-yes-1 Yamaguchi sarcoma viral related oncogene homolog
F07	Hs.407995	NM_002415	MIF	Macrophage migration inhibitory factor (glycosylation-inhibiting factor)
F08	Hs.654408	NM_003998	NFKB1	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1
F09	Hs.654514	NM_002838	PTPRC	Protein tyrosine phosphatase, receptor type, C
F10	Hs.413812	NM_006908	RAC1	Ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1)
F11	Hs.502875	NM_021975	RELA	V-rel reticuloendotheliosis viral oncogene homolog A (avian)
F12	Hs.654402	NM_006509	RELB	V-rel reticuloendotheliosis viral oncogene homolog B
G01	Hs.463059	NM_003150	STAT3	Signal transducer and activator of transcription 3 (acute-phase response factor)
G02	Hs.502	NM_000544	TAP2	Transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)
G03	Hs.714746	NM_003190	TAPBP	TAP binding protein (tapasin)
G04	Hs.645227	NM_000660	TGFB1	Transforming growth factor, beta 1
G05	Hs.164226	NM_003246	THBS1	Thrombospondin 1
G06	Hs.654532	NM_003263	TLR1	Toll-like receptor 1
G07	Hs.519033	NM_003264	TLR2	Toll-like receptor 2
G08	Hs.659215	NM_016562	TLR7	Toll-like receptor 7
G09	Hs.87968	NM_017442	TLR9	Toll-like receptor 9
G10	Hs.241570	NM_000594	TNF	Tumor necrosis factor
G11	Hs.333791	NM_003701	TNFSF11	Tumor necrosis factor (ligand) superfamily, member 11
G12	Hs.109225	NM_001078	VCAM1	Vascular cell adhesion molecule 1
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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