RT² Profiler PCR Array (Rotor-Gene® Format)

Human Th17 Response

Cat. no. 330231 PAHS-073ZR

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 Th17 Response RT² Profiler PCR Array profiles the expression of 84 genes related to the Th17 Regulatory Network. Th17 is a newly defined subset of CD4(+) T cells that is distinct from the traditional Th1, Th2 and Treg. Th17 is highly proinflammatory and induces severe autoimmunity. This array contains surface molecules, cytokines and receptors, chemokines, matrix metalloproteinases, cell signaling molecules and transcriptional factors. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to the Th17 regulatory network 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.72918	NM_002981	CCL1	Chemokine (C-C motif) ligand 1
A02	Hs.303649	NM_002982	CCL2	Chemokine (C-C motif) ligand 2
A03	Hs.75498	NM_004591	CCL20	Chemokine (C-C motif) ligand 20
A04	Hs.534347	NM_002990	CCL22	Chemokine (C-C motif) ligand 22
A05	Hs.251526	NM_006273	CCL7	Chemokine (C-C motif) ligand 7
A06	Hs.511794	NM_001123396	CCR2	Chemokine (C-C motif) receptor 2
A07	Hs.184926	NM_005508	CCR4	Chemokine (C-C motif) receptor 4
A08	Hs.46468	NM_004367	CCR6	Chemokine (C-C motif) receptor 6
A09	Hs.591629	NM_006139	CD28	CD28 molecule
A10	Hs.374990	NM_001773	CD34	CD34 molecule
A11	Hs.631659	NM_000616	CD4	CD4 molecule
A12	Hs.592244	NM_000074	CD40LG	CD40 ligand
B01	Hs.85258	NM_001768	CD8A	CD8a molecule
B02	Hs.517106	NM_005194	CEBPB	CCAAT/enhancer binding protein (C/EBP), beta
B03	Hs.143929	NM_022570	CLEC7A	C-type lectin domain family 7, member A
B04	Hs.1349	NM_000758	CSF2	Colony stimulating factor 2 (granulocyte-macrophage)
B05	Hs.2233	NM_000759	CSF3	Colony stimulating factor 3 (granulocyte)
B06	Hs.531668	NM_002996	CX3CL1	Chemokine (C-X3-C motif) ligand 1
B07	Hs.789	NM_001511	CXCL1	Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)
B08	Hs.522891	NM_000609	CXCL12	Chemokine (C-X-C motif) ligand 12
B09	Hs.590921	NM_002089	CXCL2	Chemokine (C-X-C motif) ligand 2
B10	Hs.89714	NM_002994	CXCL5	Chemokine (C-X-C motif) ligand 5
B11	Hs.164021	NM_002993	CXCL6	Chemokine (C-X-C motif) ligand 6 (granulocyte chemotactic protein 2)
B12	Hs.247700	NM_014009	FOXP3	Forkhead box P3
C01	Hs.524134	NM_002051	GATA3	GATA binding protein 3
C02	Hs.643447	NM_000201	ICAM1	Intercellular adhesion molecule 1
C03	Hs.56247	NM_012092	ICOS	Inducible T-cell co-stimulator
C04	Hs.856	NM_000619	IFNG	Interferon, gamma
C05	Hs.193717	NM_000572	IL10	Interleukin 10
C06	Hs.674	NM_002187	IL12B	Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40)
C07	Hs.567294	NM_005535	IL12RB1	Interleukin 12 receptor, beta 1
C08	Hs.479347	NM_001559	IL12RB2	Interleukin 12 receptor, beta 2
C09	Hs.845	NM_002188	IL13	Interleukin 13
C10	Hs.654378	NM_000585	IL15	Interleukin 15
C11	Hs.41724	NM_002190	IL17A	Interleukin 17A
C12	Hs.278911	NM_013278	IL17C	Interleukin 17C
D01	Hs.655142	NM_138284	IL17D	Interleukin 17D
D02	Hs.272295	NM_052872	IL17F	Interleukin 17F
D03	Hs.129751	NM_014339	IL17RA	Interleukin 17 receptor A
D04	Hs.654970	NM_018725	IL17RB	Interleukin 17 receptor B
D05	Hs.129959	NM_032732	IL17RC	Interleukin 17 receptor C
D06	Hs.390823	NM_153480	IL17RE	Interleukin 17 receptor E
D07	Hs.83077	NM_001562	IL18	Interleukin 18 (interferon-gamma-inducing factor)
D08	Hs.126256	NM_000576	IL1B	Interleukin 1, beta
D09	Hs.701982	NM_000877	IL1R1	Interleukin 1 receptor, type I
D10	Hs.89679	NM_000586	IL2	Interleukin 2
D11	Hs.567559	NM_021803	IL21	Interleukin 21
D12	Hs.287369	NM_020525	IL22	Interleukin 22
E01	Hs.98309	NM_016584	IL23A	Interleukin 23, alpha subunit p19
E02	Hs.677426	NM_144701	IL23R	Interleukin 23 receptor
E03	Hs.302036	NM_022789	IL25	Interleukin 25
E04	Hs.528111	NM_145659	IL27	Interleukin 27
E05	Hs.694	NM_000588	IL3	Interleukin 3 (colony-stimulating factor, multiple)
E06	Hs.73917	NM_000589	IL4	Interleukin 4
E07	Hs.2247	NM_000879	IL5	Interleukin 5 (colony-stimulating factor, eosinophil)
E08	Hs.654458	NM_000600	IL6	Interleukin 6 (interferon, beta 2)

Position	UniGene	GenBank	Symbol	Description
E09	Hs.709210	NM_000565	IL6R	Interleukin 6 receptor
E10	Hs.591742	NM_002185	IL7R	Interleukin 7 receptor
E11	Hs.624	NM_000584	IL8	Interleukin 8
E12	Hs.960	NM_000590	IL9	Interleukin 9
F01	Hs.401013	NM_002460	IRF4	Interferon regulatory factor 4
F02	Hs.459265	NM_002201	ISG20	Interferon stimulated exonuclease gene 20kDa
F03	Hs.207538	NM_002227	JAK1	Janus kinase 1
F04	Hs.656213	NM_004972	JAK2	Janus kinase 2
F05	Hs.375129	NM_002422	MMP3	Matrix metallopeptidase 3 (stromelysin 1, progelatinase)
F06	Hs.297413	NM_004994	MMP9	Matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)
F07	Hs.713650	NM_012340	NFATC2	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2
F08	Hs.654408	NM_003998	NFKB1	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1
F09	Hs.560343	NM_134260	RORA	RAR-related orphan receptor A
F10	Hs.256022	NM_005060	RORC	RAR-related orphan receptor C
F11	Hs.149261	NM_001754	RUNX1	Runt-related transcription factor 1
F12	Hs.154210	NM_001400	S1PR1	Sphingosine-1-phosphate receptor 1
G01	Hs.50640	NM_003745	SOCS1	Suppressor of cytokine signaling 1
G02	Hs.527973	NM_003955	SOCS3	Suppressor of cytokine signaling 3
G03	Hs.463059	NM_003150	STAT3	Signal transducer and activator of transcription 3 (acute-phase response factor)
G04	Hs.80642	NM_003151	STAT4	Signal transducer and activator of transcription 4
G05	Hs.437058	NM_003152	STAT5A	Signal transducer and activator of transcription 5A
G06	Hs.524518	NM_003153	STAT6	Signal transducer and activator of transcription 6, interleukin-4 induced
G07	Hs.371720	NM_003177	SYK	Spleen tyrosine kinase
G08	Hs.272409	NM_013351	TBX21	T-box 21
G09	Hs.645227	NM_000660	TGFB1	Transforming growth factor, beta 1
G10	Hs.174312	NM_138554	TLR4	Toll-like receptor 4
G11	Hs.241570	NM_000594	TNF	Tumor necrosis factor
G12	Hs.591983	NM_004620	TRAF6	TNF receptor-associated factor 6
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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