RT² Profiler PCR Array (Rotor-Gene® Format)

Rat Dendritic & Antigen Presenting Cell

Cat. no. 330231 PARN-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 Rat 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	Rn.10632	NM_019205	Ccl11	Chemokine (C-C motif) ligand 11
A02	Rn.137780	NM_001105822	Ccl12	Chemokine (C-C motif) ligand 12
A03	Rn.46679	NM_057151	Ccl17	Chemokine (C-C motif) ligand 17
A04	Rn.12445	NM_001108661	Ccl19	Chemokine (C-C motif) ligand 19
A05	Rn.4772	NM_031530	Ccl2	Chemokine (C-C motif) ligand 2
A06	Rn.10722	NM_019233	Ccl20	Chemokine (C-C motif) ligand 20
A07	Rn.10139	NM_013025	Ccl3	Chemokine (C-C motif) ligand 3
A08	Rn.37880	NM_053858	Ccl4	Chemokine (C-C motif) ligand 4
A09	Rn.8019	NM_031116	Ccl5	Chemokine (C-C motif) ligand 5
A10	Rn.26815	NM_001007612	Ccl7	Chemokine (C-C motif) ligand 7
A11	Rn.34673	NM_020542	Ccr1	Chemokine (C-C motif) receptor 1
A12	Rn.211983	NM_021866	Ccr2	Chemokine (C-C motif) receptor 2
B01	Rn.9890	NM_053958	Ccr3	Chemokine (C-C motif) receptor 3
B02	Rn.10736	NM_053960	Ccr5	Chemokine (C-C motif) receptor 5
B03	Rn.11120	NM_017079	Cd1d1	CD1d1 molecule
B04	Rn.10328	NM_012830	Cd2	Cd2 molecule
B05	Rn.10327	NM_013121	Cd28	Cd28 molecule
B06	Rn.102418	NM_031561	Cd36	CD36 molecule (thrombospondin receptor)
B07	Rn.10748	NM_012705	Cd4	Cd4 molecule
B08	Rn.25180	NM_134360	Cd40	CD40 molecule, TNF receptor superfamily member 5
B09	Rn.44218	NM_053353	Cd40lg	CD40 ligand
B10	Rn.1120	NM_012924	Cd44	Cd44 molecule
B11	Rn.33804	NM_013069	Cd74	Cd74 molecule, major histocompatibility complex, class II invariant chain
B12	Rn.10138	NM_012926	Cd80	Cd80 molecule
C01	Rn.6734	NM_020081	Cd86	CD86 molecule
C02	Rn.10306	NM_031538	Cd8a	CD8a molecule
C03	Rn.60067	NM_171994	Cdc42	Cell division cycle 42 (GTP binding protein)
C04	Rn.10089	NM_080782	Cdkn1a	Cyclin-dependent kinase inhibitor 1A
C05	Rn.204833	NM_012524	Cebpa	CCAAT/enhancer binding protein (C/EBP), alpha
C06	Rn.129075	NM_001005896	Clec4b2	C-type lectin domain family 4, member b2
C07	Rn.15743	XM_001067977	Clec7a	C-type lectin domain family 7, member a
C08	Rn.44465	NM_022218	Cmklr1	Chemokine-like receptor 1
C09	Rn.72599	NM_001029901	Csf1r	Colony stimulating factor 1 receptor
C10	Rn.44285	XM_340799	Csf2	Colony stimulating factor 2 (granulocyte-macrophage)
C11	Rn.10907	NM_030845	Cxcl1	Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)
C12	Rn.10584	NM_139089	Cxcl10	Chemokine (C-X-C motif) ligand 10
D01	Rn.54439	NM_022177	Cxcl12	Chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1)
D02	Rn.10230	NM_053647	Cxcl2	Chemokine (C-X-C motif) ligand 2
D03	Rn.44431	NM_022205	Cxcr4	Chemokine (C-X-C motif) receptor 4
D04	Rn.93966	NM_017003	Erbb2	V-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian)
D05	Rn.162521	NM_139194	Fas	Fas (TNF receptor superfamily, member 6)
D06	Rn.9677	NM_012724	Fcer1a	Fc fragment of IgE, high affinity I, receptor for; alpha polypeptide
D07	Rn.10326	NM_133550	Fcer2	Fc fragment of IgE, low affinity II, receptor for (CD23)
D08	Rn.16643	NM_001100836	Fcgr1a	Fc fragment of IgG, high affinity Ia, receptor (CD64)
D09	Rn.15845	NM_033351	Fcgrt	Fc fragment of IgG, receptor, transporter, alpha
D10	Rn.6774	NM_001100822	Flt3	Fms-related tyrosine kinase 3
D11	Rn.12	NM_012967	Icam1	Intercellular adhesion molecule 1
D12	Rn.162206	NM_001007725	Icam2	Intercellular adhesion molecule 2
E01	Rn.10795	NM_138880	Ifng	Interferon gamma
E02	Rn.9868	NM_012854	Il10	Interleukin 10
E03	Rn.207199	NM_053390	Il12a	Interleukin 12a
E04	Rn.48686	NM_022611	Il12b	Interleukin 12b
E05	Rn.104665	NM_001105749	Il16	Interleukin 16
E06	Rn.9871	NM_053836	Il2	Interleukin 2
E07	Rn.9873	NM_012589	Il6	Interleukin 6
E08	Rn.138115	NM_019310	Il8ra	Interleukin 8 receptor, alpha

Position	UniGene	GenBank	Symbol	Description
E09	Rn.101159	NM_001033691	Irf7	Interferon regulatory factor 7
E10	Rn.3765	NM_001008722	Irf8	Interferon regulatory factor 8
E11	Rn.54465	NM_012711	Itgam	Integrin, alpha M
E12	Rn.42962	NM_001037780	Itgb2	Integrin, beta 2
F01	Rn.22436	XM_243524	Lrp1	Low density lipoprotein-related protein 1 (alpha-2-macroglobulin receptor)
F02	Rn.4338	NM_030857	Lyn	V-yes-1 Yamaguchi sarcoma viral related oncogene homolog
F03	Rn.2661	NM_031051	Mif	Macrophage migration inhibitory factor
F04	Rn.2411	XM_342346	Nfkb1	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1
F05	Rn.90166	NM_001109887	Ptprc	Protein tyrosine phosphatase, receptor type, C
F06	Rn.29157	NM_134366	Rac1	Ras-related C3 botulinum toxin substrate 1
F07	Rn.92344	NM_053468	Rag1	Recombination activating gene 1
F08	Rn.19480	NM_199267	Rela	V-rel reticuloendotheliosis viral oncogene homolog A (avian)
F09	Rn.35809	NM_198741	RT1-DMa	RT1 class II, locus DMa
F10	Rn.144557	NM_001008848	RT1-Ha	RT1 class II, locus Ha
F11	Rn.10247	NM_012747	Stat3	Signal transducer and activator of transcription 3
F12	Rn.154399	NM_017064	Stat5a	Signal transducer and activator of transcription 5A
G01	Rn.202962	NM_032056	Tap2	Transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)
G02	Rn.51023	NM_033098	Tapbp	TAP binding protein
G03	Rn.40136	NM_021578	Tgfb1	Transforming growth factor, beta 1
G04	Rn.185771	NM_001013062	Thbs1	Thrombospondin 1
G05	Rn.107212	NM_001172120	Tlr1	Toll-like receptor 1
G06	Rn.46387	NM_198769	Tlr2	Toll-like receptor 2
G07	Rn.219862	NM_001097582	Tlr7	Toll-like receptor 7
G08	Rn.92495	NM_198131	Tlr9	Toll-like receptor 9
G09	Rn.2275	NM_012675	Tnf	Tumor necrosis factor (TNF superfamily, member 2)
G10	Rn.64517	NM_057149	Tnfsf11	Tumor necrosis factor (ligand) superfamily, member 11
G11	Rn.218020	NM_001100748	Trpc4ap	Transient receptor potential cation channel, subfamily C, member 4 associated protein
G12	Rn.11267	NM_012889	Vcam1	Vascular cell adhesion molecule 1
H01	Rn.94978	NM_031144	Actb	Actin, beta
H02	Rn.1868	NM_012512	B2m	Beta-2 microglobulin
H03	Rn.47	NM_012583	Hprt1	Hypoxanthine phosphoribosyltransferase 1
H04	Rn.107896	NM_017025	Ldha	Lactate dehydrogenase A
H05	Rn.973	NM_001007604	Rplp1	Ribosomal protein, large, P1
H06	N/A	U26919	RGDC	Rat 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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