

RT² Profiler PCR Array (Rotor-Gene® Format)

Mouse T-Cell & B-Cell Activation

Cat. no. 330231 PAMM-053ZR

For pathway expression analysis

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

Description

The Mouse T-Cell & B-Cell Activation RT² Profiler PCR Array profiles the expression of 84 genes representing T Cell and B Cell Activation, a key part of adaptive immunity. This array includes genes involved B-cell activation as well as genes involved in B-cell proliferation and differentiation. Genes involved in the activation of T-cells and their proliferation and differentiation are also represented along with genes regulating Th1 and Th2 development and T-cell polarization. Genes involved in the activation of macrophages, neutrophils, and natural killer cells are also included. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to T Cell and B Cell Activation 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.



Sample & Assay Technologies

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	Mm.388	NM_007398	Ada	Adenosine deaminase
A02	Mm.384171	NM_007462	Apc	Adenomatosis polyposis coli
A03	Mm.4387	NM_007522	Bad	BCL2-associated agonist of cell death
A04	Mm.257460	NM_009741	Bcl2	B-cell leukemia/lymphoma 2
A05	Mm.12932	NM_007550	Blm	Bloom syndrome, RecQ helicase-like
A06	Mm.34405	NM_009810	Casp3	Caspase 3
A07	Mm.328206	NM_001033238	Cblb	Casitas B-lineage lymphoma b
A08	Mm.246520	NM_007632	Ccnd3	Cyclin D3
A09	Mm.1894	NM_007639	Cd1d1	CD1d1 antigen
A10	Mm.22842	NM_013486	Cd2	CD2 antigen
A11	Mm.255003	NM_007642	Cd28	CD28 antigen
A12	Mm.249873	NM_007646	Cd38	CD38 antigen
B01	Mm.4527	NM_013487	Cd3d	CD3 antigen, delta polypeptide
B02	Mm.210361	NM_007648	Cd3e	CD3 antigen, epsilon polypeptide
B03	Mm.335106	NM_009850	Cd3g	CD3 antigen, gamma polypeptide
B04	Mm.2209	NM_013488	Cd4	CD4 antigen
B05	Mm.271833	NM_011611	Cd40	CD40 antigen
B06	Mm.4861	NM_011616	Cd40lg	CD40 ligand
B07	Mm.31752	NM_010581	Cd47	CD47 antigen (Rh-related antigen, integrin-associated signal transducer)
B08	Mm.1738	NM_007649	Cd48	CD48 antigen
B09	Mm.439737	NM_010545	Cd74	CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated)
B10	Mm.1355	NM_007655	Cd79a	CD79A antigen (immunoglobulin-associated alpha)
B11	Mm.806	NM_133655	Cd81	CD81 antigen
B12	Mm.1858	NM_001081110	Cd8a	CD8 antigen, alpha chain
C01	Mm.333148	NM_009858	Cd8b1	CD8 antigen, beta chain 1
C02	Mm.195663	NM_007669	Cdkn1a	Cyclin-dependent kinase inhibitor 1A (P21)
C03	Mm.235387	NM_007758	Cr2	Complement receptor 2
C04	Mm.795	NM_007778	Csf1	Colony stimulating factor 1 (macrophage)
C05	Mm.4922	NM_009969	Csf2	Colony stimulating factor 2 (granulocyte-macrophage)
C06	Mm.390	NM_009843	Ctla4	Cytotoxic T-lymphocyte-associated protein 4
C07	Mm.303231	NM_021704	Cxcl12	Chemokine (C-X-C motif) ligand 12
C08	Mm.1401	NM_009911	Cxcr4	Chemokine (C-X-C motif) receptor 4
C09	Mm.6246	NM_007551	Cxcr5	Chemokine (C-X-C motif) receptor 5
C10	Mm.1151	NM_010074	Dpp4	Dipeptidylpeptidase 4
C11	Mm.181959	NM_007913	Egr1	Early growth response 1
C12	Mm.194	NM_010229	Fli3	FMS-like tyrosine kinase 3
D01	Mm.182291	NM_054039	Foxp3	Forkhead box P3
D02	Mm.387042	NM_010400	H60a	Histocompatibility 60a
D03	Mm.1843	NM_010480	Hsp90aa1	Heat shock protein 90, alpha (cytosolic), class A member 1
D04	Mm.435508	NM_010493	Icam1	Intercellular adhesion molecule 1
D05	Mm.17819	NM_015790	Icosl	Icos ligand
D06	Mm.240327	NM_008337	Ifng	Interferon gamma
D07	Mm.874	NM_010548	Il10	Interleukin 10
D08	Mm.35814	NM_008350	Il11	Interleukin 11
D09	Mm.239707	NM_008352	Il12b	Interleukin 12B
D10	Mm.4392	NM_008357	Il15	Interleukin 15
D11	Mm.1410	NM_008360	Il18	Interleukin 18
D12	Mm.222830	NM_008361	Il1b	Interleukin 1 beta
E01	Mm.222632	NM_145636	Il27	Interleukin 27
E02	Mm.915	NM_008367	Il2ra	Interleukin 2 receptor, alpha chain
E03	Mm.276360	NM_021283	Il4	Interleukin 4
E04	Mm.1019	NM_031168	Il6	Interleukin 6
E05	Mm.3825	NM_008371	Il7	Interleukin 7
E06	Mm.4677	NM_013674	Irf4	Interferon regulatory factor 4
E07	Mm.4528	NM_008479	Lag3	Lymphocyte-activation gene 3
E08	Mm.293753	NM_010693	Lck	Lymphocyte protein tyrosine kinase

Position	UniGene	GenBank	Symbol	Description
E09	Mm.258589	NM_172688	Map3k7	Mitogen-activated protein kinase kinase kinase 7
E10	Mm.4046	NM_007641	Ms4a1	Membrane-spanning 4-domains, subfamily A, member 1
E11	Mm.181485	NM_010878	Nck1	Non-catalytic region of tyrosine kinase adaptor protein 1
E12	Mm.2893	NM_010927	Nos2	Nitric oxide synthase 2, inducible
F01	Mm.129481	NM_008173	Nr3c1	Nuclear receptor subfamily 3, group C, member 1
F02	Mm.116737	NM_021396	Pdcd1lg2	Programmed cell death 1 ligand 2
F03	Mm.259333	NM_001024955	Pik3r1	Phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 1 (p85 alpha)
F04	Mm.2314	NM_011103	Prkcd	Protein kinase C, delta
F05	Mm.329993	NM_008859	Prkcq	Protein kinase C, theta
F06	Mm.391573	NM_011210	Plprc	Protein tyrosine phosphatase, receptor type, C
F07	Mm.828	NM_009019	Rag1	Recombination activating gene 1
F08	Mm.1741	NM_009046	Relb	Avian reticuloendotheliosis viral (v-rel) oncogene related B
F09	Mm.112765	NM_138952	Ripk2	Receptor (TNFRSF)-interacting serine-threonine kinase 2
F10	Mm.130	NM_009896	Socs1	Suppressor of cytokine signaling 1
F11	Mm.288474	NM_009263	Spp1	Secreted phosphoprotein 1
F12	Mm.248380	NM_011577	Tgfb1	Transforming growth factor, beta 1
G01	Mm.3951	NM_009382	Thy1	Thymus cell antigen 1, theta
G02	Mm.273024	NM_030682	Tlr1	Toll-like receptor 1
G03	Mm.38049	NM_021297	Tlr4	Toll-like receptor 4
G04	Mm.42146	NM_011604	Tlr6	Toll-like receptor 6
G05	Mm.265915	NM_021349	Tnfrsf13b	Tumor necrosis factor receptor superfamily, member 13b
G06	Mm.240047	NM_028075	Tnfrsf13c	Tumor necrosis factor receptor superfamily, member 13c
G07	Mm.28835	NM_033622	Tnfsf13b	Tumor necrosis factor (ligand) superfamily, member 13b
G08	Mm.483369	NM_019418	Tnfsf14	Tumor necrosis factor (ligand) superfamily, member 14
G09	Mm.292729	NM_009424	Traf6	Tnf receptor-associated factor 6
G10	Mm.222	NM_011640	Trp53	Transformation related protein 53
G11	Mm.248172	NM_011691	Vav1	Vav 1 oncogene
G12	Mm.4735	NM_009515	Was	Wiskott-Aldrich syndrome homolog (human)
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, 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.
RT ² First Strand Kit (12)	Enzymes and reagents for cDNA synthesis	330401
RT ² 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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