

RT² Profiler PCR Array (96-Well Format and 384-Well [4 x 96] Format)

Mouse Cell Surface Markers

Cat. no. 330231 PAMM-055ZA

For pathway expression analysis

Format	For use with the following real-time cyclers
RT ² Profiler PCR Array, Format A	Applied Biosystems® models 5700, 7000, 7300, 7500, 7700, 7900HT, ViiA™ 7 (96-well block); Bio-Rad® models iCycler®, iQ™ 5, MyiQ™, MyiQ2; Bio-Rad/MJ Research Chromo4™; Eppendorf® Mastercycler® ep realplex models 2, 2s, 4, 4s; Stratagene® models Mx3005P®, Mx3000P®; Takara TP-800
RT ² Profiler PCR Array, Format C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)
RT ² Profiler PCR Array, Format D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®
RT ² Profiler PCR Array, Format E	Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™
RT ² Profiler PCR Array, Format F	Roche® LightCycler® 480 (96-well block)
RT ² Profiler PCR Array, Format G	Roche LightCycler 480 (384-well block)
RT ² Profiler PCR Array, Format H	Fluidigm® BioMark™



Description

The Mouse Cell Surface Markers RT² Profiler PCR Array profiles the expression of 84 genes relevant to research at the cell surface marker level. These markers have been used in studies including: 1) determination of the extent of leukocyte infiltration among cancer tissues; 2) characterization of cell populations isolated from patients with chronic inflammatory diseases such as atherosclerosis, asthma, inflammatory bowel disease, and arthritis; 3) determination of T- and B-cell lineage and clonality; 4) characterization of leukocyte populations for use in the prognosis of disease stage and progression; and 5) analysis of the composition of immune infiltrates and their association with organ rejection. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to cell surface markers with this array.

For further details, consult the *RT² Profiler PCR Array Handbook*.

Shipping and storage

RT² Profiler PCR Arrays in formats A, C, D, E, F, and G are shipped at ambient temperature, on dry ice, or blue ice packs depending on destination and accompanying products. RT² Profiler PCR Arrays in format H are shipped on dry ice or blue ice packs.

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 (96-well)

For 384-well 4 x 96 PCR arrays, genes are present in a staggered format. Refer to the *RT² Profiler PCR Array Handbook* for layout.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Alcam	C5ar1	Cd160	Cd163	Cd19	Cd1d1	Cd1d2	Cd2	Cd200r1	Cd209a	Cd22	Cd244
B	Cd247	Cd24a	Cd276	Cd28	Cd34	Cd37	Cd38	Cd3d	Cd3g	Cd4	Cd40	Cd40lg
C	Cd5	Cd6	Cd63	Cd69	Cd7	Cd70	Cd72	Cd74	Cd79a	Cd79b	Cd80	Cd83
D	Cd86	Cd8a	Cd8b1	Cd96	Chst10	Col1a1	Col1a2	Cr2	Csf1r	Ctla4	Dpp4	Eng
E	Epcam	Fas	Fcer1a	Fcer2a	Fcgr1	H2-Q10	Icam2	Il12rb1	Il1r2	Il2ra	Ilg1	Ilg2
F	Ilg3	Klrc1	Klrd1	Klr18	Klr5	Klr8	Ms4a1	Myh10	Myh9	Myocd	Ncam1	Nos3
G	Nf5e	Pecam1	Reln	S100a8	Selp	St6gal1	Tek	Tnfrsf4	Tnfrsf8	Tpsab1	Vcam1	Vwf
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Mm.288282	NM_009655	Alcam	Activated leukocyte cell adhesion molecule
A02	Mm.247623	NM_007577	C5ar1	Complement component 5a receptor 1
A03	Mm.34693	NM_018767	Cd160	CD160 antigen
A04	Mm.37426	NM_053094	Cd163	CD163 antigen
A05	Mm.4360	NM_009844	Cd19	CD19 antigen
A06	Mm.1894	NM_007639	Cd1d1	CD1d1 antigen
A07	Mm.389465	NM_007640	Cd1d2	CD1d2 antigen
A08	Mm.22842	NM_013486	Cd2	CD2 antigen
A09	Mm.416152	NM_021325	Cd200r1	CD200 receptor 1
A10	Mm.32510	NM_133238	Cd209a	CD209a antigen
A11	Mm.260994	NM_009845	Cd22	CD22 antigen
A12	Mm.2299	NM_018729	Cd244	CD244 natural killer cell receptor 2B4
B01	Mm.217308	NM_031162	Cd247	CD247 antigen
B02	Mm.29742	NM_009846	Cd24a	CD24a antigen
B03	Mm.5356	NM_133983	Cd276	CD276 antigen
B04	Mm.255003	NM_007642	Cd28	CD28 antigen
B05	Mm.29798	NM_133654	Cd34	CD34 antigen
B06	Mm.3689	NM_007645	Cd37	CD37 antigen
B07	Mm.249873	NM_007646	Cd38	CD38 antigen
B08	Mm.4527	NM_013487	Cd3d	CD3 antigen, delta polypeptide
B09	Mm.335106	NM_009850	Cd3g	CD3 antigen, gamma polypeptide
B10	Mm.2209	NM_013488	Cd4	CD4 antigen
B11	Mm.271833	NM_011611	Cd40	CD40 antigen
B12	Mm.4861	NM_011616	Cd40lg	CD40 ligand
C01	Mm.779	NM_007650	Cd5	CD5 antigen
C02	Mm.290897	NM_009852	Cd6	CD6 antigen
C03	Mm.371552	NM_007653	Cd63	CD63 antigen
C04	Mm.74745	NM_001033122	Cd69	CD69 antigen
C05	Mm.4100	NM_009854	Cd7	CD7 antigen
C06	Mm.42228	NM_011617	Cd70	CD70 antigen
C07	Mm.188157	NM_007654	Cd72	CD72 antigen
C08	Mm.439737	NM_010545	Cd74	CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated)
C09	Mm.1355	NM_007655	Cd79a	CD79A antigen (immunoglobulin-associated alpha)
C10	Mm.2987	NM_008339	Cd79b	CD79B antigen
C11	Mm.89474	NM_009855	Cd80	CD80 antigen
C12	Mm.57175	NM_009856	Cd83	CD83 antigen
D01	Mm.1452	NM_019388	Cd86	CD86 antigen
D02	Mm.1858	NM_001081110	Cd8a	CD8 antigen, alpha chain
D03	Mm.333148	NM_009858	Cd8b1	CD8 antigen, beta chain 1
D04	Mm.29204	NM_032465	Cd96	CD96 antigen
D05	Mm.260054	NM_145142	Chst10	Carbohydrate sulfotransferase 10
D06	Mm.277735	NM_007742	Col1a1	Collagen, type I, alpha 1
D07	Mm.277792	NM_007743	Col1a2	Collagen, type I, alpha 2
D08	Mm.235387	NM_007758	Cr2	Complement receptor 2

Position	UniGene	GenBank	Symbol	Description
D09	Mm.22574	NM_001037859	Csf1r	Colony stimulating factor 1 receptor
D10	Mm.390	NM_009843	Ctla4	Cytotoxic T-lymphocyte-associated protein 4
D11	Mm.1151	NM_010074	Dpp4	Dipeptidylpeptidase 4
D12	Mm.225297	NM_007932	Eng	Endoglin
E01	Mm.4259	NM_008532	Epcam	Epithelial cell adhesion molecule
E02	Mm.1626	NM_007987	Fas	Fas (TNF receptor superfamily member 6)
E03	Mm.5266	NM_010184	Fcer1a	Fc receptor, IgE, high affinity I, alpha polypeptide
E04	Mm.1233	NM_013517	Fcer2a	Fc receptor, IgE, low affinity II, alpha polypeptide
E05	Mm.150	NM_010186	Fcgr1	Fc receptor, IgG, high affinity I
E06	Mm.88795	NM_010391	H2-Q10	Histocompatibility 2, Q region locus 10
E07	Mm.394	NM_010494	Icam2	Intercellular adhesion molecule 2
E08	Mm.731	NM_008353	Il12rb1	Interleukin 12 receptor, beta 1
E09	Mm.1349	NM_010555	Il1r2	Interleukin 1 receptor, type II
E10	Mm.915	NM_008367	Il2ra	Interleukin 2 receptor, alpha chain
E11	Mm.482186	NM_001033228	Itga1	Integrin alpha 1
E12	Mm.5007	NM_008396	Itga2	Integrin alpha 2
F01	Mm.57035	NM_013565	Itga3	Integrin alpha 3
F02	Mm.56899	NM_010652	Klrc1	Killer cell lectin-like receptor subfamily C, member 1
F03	Mm.391515	NM_010654	Klrd1	Killer cell lectin-like receptor, subfamily D, member 1
F04	Mm.22479	NM_010664	Krt18	Keratin 18
F05	Mm.451847	NM_027011	Krt5	Keratin 5
F06	Mm.358618	NM_031170	Krt8	Keratin 8
F07	Mm.4046	NM_007641	Ms4a1	Membrane-spanning 4-domains, subfamily A, member 1
F08	Mm.218233	NM_175260	Myh10	Myosin, heavy polypeptide 10, non-muscle
F09	Mm.29677	NM_022410	Myh9	Myosin, heavy polypeptide 9, non-muscle
F10	Mm.32257	NM_145136	Myocd	Myocardin
F11	Mm.4974	NM_010875	Ncam1	Neural cell adhesion molecule 1
F12	Mm.258415	NM_008713	Nos3	Nitric oxide synthase 3, endothelial cell
G01	Mm.244235	NM_011851	Nr5e	5' nucleotidase, ecto
G02	Mm.343951	NM_008816	Pecam1	Platelet/endothelial cell adhesion molecule 1
G03	Mm.1181	NM_022984	Refn	Resistin
G04	Mm.21567	NM_013650	S100a8	S100 calcium binding protein A8 (calgranulin A)
G05	Mm.3337	NM_011347	Selp	Selectin, platelet
G06	Mm.149029	NM_145933	St6gal1	Beta galactoside alpha 2,6 sialyltransferase 1
G07	Mm.14313	NM_013690	Tek	Endothelial-specific receptor tyrosine kinase
G08	Mm.13885	NM_011659	Tnfrsf4	Tumor necrosis factor receptor superfamily, member 4
G09	Mm.12810	NM_009401	Tnfrsf8	Tumor necrosis factor receptor superfamily, member 8
G10	Mm.3301	NM_031187	Tpsab1	Tryptase alpha/beta 1
G11	Mm.76649	NM_011693	Vcam1	Vascular cell adhesion molecule 1
G12	Mm.22339	NM_011708	Vwf	Von Willebrand factor homolog
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 qPCR Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with real-time cyclers that do not require a reference dye, including: Bio-Rad models CFX96, CFX384, DNA Engine Opticon 2; Bio-Rad/MJ Research Chromo4; Roche LightCycler 480 (96-well and 384-well); all other cyclers	330500
RT ² SYBR Green ROX™ qPCR Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Applied Biosystems models 5700, 7000, 7300, 7500 [Standard and FAST], 7700, 7900HT 96-well block [Standard and FAST] and 384-well block, StepOnePlus; Eppendorf Mastercycler ep realplex models 2, 2S, 4, 4S; Stratagene models Mx3000P, Mx3005P, Mx4000; Takara TP-800	330520
RT ² SYBR Green Fluor qPCR Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Bio-Rad models iCycler, iQ5, MyiQ, MyiQ2	330510

* 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.

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