

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

Mouse Th17 Response

Cat. no. 330231 PAMM-073ZA

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™



Sample & Assay Technologies

Description

The Mouse 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 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	Ccl1	Ccl2	Ccl20	Ccl22	Ccl7	Ccr2	Ccr4	Ccr6	Cd2	Cd28	Cd34	Cd4
B	Cd40lg	Cd8a	Cebpb	Clec7a	Csf2	Csf3	Cx3cl1	Cxcl1	Cxcl12	Cxcl2	Cxcl5	Foxp3
C	Gata3	Icam1	Icos	Iifng	Il10	Il12b	Il12rb1	Il12rb2	Il13	Il15	Il17a	Il17c
D	Il17d	Il17f	Il17ra	Il17rb	Il17rc	Il17re	Il18	Il1b	Il1r1	Il2	Il21	Il22
E	Il23a	Il23r	Il25	Il27	Il3	Il4	Il5	Il6	Il6ra	Il7r	Il9	Irf4
F	Isg20	Jak1	Jak2	Mmp3	Mmp9	Myd88	Nfatc2	NfkB1	Rora	Rorc	Runx1	S1pr1
G	Socs1	Socs3	Stat3	Stat4	Stat5a	Stat6	Sykb	Tbx21	Tgfb1	Tlr4	Tnf	Traf6
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.1283	NM_011329	Ccl1	Chemokine (C-C motif) ligand 1
A02	Mm.290320	NM_011333	Ccl2	Chemokine (C-C motif) ligand 2
A03	Mm.116739	NM_016960	Ccl20	Chemokine (C-C motif) ligand 20
A04	Mm.12895	NM_009137	Ccl22	Chemokine (C-C motif) ligand 22
A05	Mm.341574	NM_013654	Ccl7	Chemokine (C-C motif) ligand 7
A06	Mm.6272	NM_009915	Ccr2	Chemokine (C-C motif) receptor 2
A07	Mm.1337	NM_009916	Ccr4	Chemokine (C-C motif) receptor 4
A08	Mm.8007	NM_009835	Ccr6	Chemokine (C-C motif) receptor 6
A09	Mm.22842	NM_013486	Cd2	CD2 antigen
A10	Mm.255003	NM_007642	Cd28	CD28 antigen
A11	Mm.29798	NM_133654	Cd34	CD34 antigen
A12	Mm.2209	NM_013488	Cd4	CD4 antigen
B01	Mm.4861	NM_011616	Cd40lg	CD40 ligand
B02	Mm.1858	NM_001081110	Cd8a	CD8 antigen, alpha chain
B03	Mm.439656	NM_009883	Cebpb	CCAAT/enhancer binding protein (C/EBP), beta
B04	Mm.239516	NM_020008	Clec7a	C-type lectin domain family 7, member a
B05	Mm.4922	NM_009969	Csf2	Colony stimulating factor 2 (granulocyte-macrophage)
B06	Mm.1238	NM_009971	Csf3	Colony stimulating factor 3 (granulocyte)
B07	Mm.103711	NM_009142	Cx3cl1	Chemokine (C-X3-C motif) ligand 1
B08	Mm.21013	NM_008176	Cxcl1	Chemokine (C-X-C motif) ligand 1
B09	Mm.303231	NM_021704	Cxcl12	Chemokine (C-X-C motif) ligand 12
B10	Mm.4979	NM_009140	Cxcl2	Chemokine (C-X-C motif) ligand 2
B11	Mm.4660	NM_009141	Cxcl5	Chemokine (C-X-C motif) ligand 5
B12	Mm.182291	NM_054039	Foxp3	Forkhead box P3
C01	Mm.313866	NM_008091	Gata3	GATA binding protein 3
C02	Mm.435508	NM_010493	Icam1	Intercellular adhesion molecule 1
C03	Mm.42044	NM_017480	Icos	Inducible T-cell co-stimulator
C04	Mm.240327	NM_008337	Iifng	Interferon gamma
C05	Mm.874	NM_010548	Il10	Interleukin 10
C06	Mm.239707	NM_008352	Il12b	Interleukin 12B
C07	Mm.731	NM_008353	Il12rb1	Interleukin 12 receptor, beta 1
C08	Mm.188337	NM_008354	Il12rb2	Interleukin 12 receptor, beta 2
C09	Mm.1284	NM_008355	Il13	Interleukin 13
C10	Mm.4392	NM_008357	Il15	Interleukin 15
C11	Mm.5419	NM_010552	Il17a	Interleukin 17A
C12	Mm.222808	NM_145834	Il17c	Interleukin 17C
D01	Mm.390726	NM_145837	Il17d	Interleukin 17D
D02	Mm.222807	NM_145856	Il17f	Interleukin 17F
D03	Mm.4481	NM_008359	Il17ra	Interleukin 17 receptor A
D04	Mm.269363	NM_019583	Il17rb	Interleukin 17 receptor B
D05	Mm.213397	NM_134159	Il17rc	Interleukin 17 receptor C
D06	Mm.131781	NM_145826	Il17re	Interleukin 17 receptor E
D07	Mm.1410	NM_008360	Il18	Interleukin 18
D08	Mm.222830	NM_008361	Il1b	Interleukin 1 beta
D09	Mm.896	NM_008362	Il1r1	Interleukin 1 receptor, type I

Position	UniGene	GenBank	Symbol	Description
D10	Mm.14190	NM_008366	Il2	Interleukin 2
D11	Mm.157689	NM_021782	Il21	Interleukin 21
D12	Mm.103585	NM_016971	Il22	Interleukin 22
E01	Mm.125482	NM_031252	Il23a	Interleukin 23, alpha subunit p19
E02	Mm.221227	NM_144548	Il23r	Interleukin 23 receptor
E03	Mm.90154	NM_080729	Il25	Interleukin 25
E04	Mm.222632	NM_145636	Il27	Interleukin 27
E05	Mm.983	NM_010556	Il3	Interleukin 3
E06	Mm.276360	NM_021283	Il4	Interleukin 4
E07	Mm.4461	NM_010558	Il5	Interleukin 5
E08	Mm.1019	NM_031168	Il6	Interleukin 6
E09	Mm.2856	NM_010559	Il6ra	Interleukin 6 receptor, alpha
E10	Mm.389	NM_008372	Il7r	Interleukin 7 receptor
E11	Mm.3006	NM_008373	Il9	Interleukin 9
E12	Mm.4677	NM_013674	Irf4	Interferon regulatory factor 4
F01	Mm.322843	NM_020583	Isg20	Interferon-stimulated protein
F02	Mm.289657	NM_146145	Jak1	Janus kinase 1
F03	Mm.275839	NM_008413	Jak2	Janus kinase 2
F04	Mm.4993	NM_010809	Mmp3	Matrix metalloproteinase 3
F05	Mm.4406	NM_013599	Mmp9	Matrix metalloproteinase 9
F06	Mm.213003	NM_010851	Myd88	Myeloid differentiation primary response gene 88
F07	Mm.116802	NM_010899	Nfatc2	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2
F08	Mm.256765	NM_008689	Nfkb1	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1, p105
F09	Mm.378450	NM_013646	Rora	RAR-related orphan receptor alpha
F10	Mm.4372	NM_011281	Rorc	RAR-related orphan receptor gamma
F11	Mm.4081	NM_009821	Runx1	Runt related transcription factor 1
F12	Mm.982	NM_007901	S1pr1	Sphingosine-1-phosphate receptor 1
G01	Mm.130	NM_009896	Socs1	Suppressor of cytokine signaling 1
G02	Mm.3468	NM_007707	Socs3	Suppressor of cytokine signaling 3
G03	Mm.249934	NM_011486	Stat3	Signal transducer and activator of transcription 3
G04	Mm.1550	NM_011487	Stat4	Signal transducer and activator of transcription 4
G05	Mm.277403	NM_011488	Stat5a	Signal transducer and activator of transcription 5A
G06	Mm.121721	NM_009284	Stat6	Signal transducer and activator of transcription 6
G07	Mm.375031	NM_011518	Sykb	Spleen tyrosine kinase
G08	Mm.477879	NM_019507	Tbx21	T-box 21
G09	Mm.248380	NM_011577	Tgfb1	Transforming growth factor, beta 1
G10	Mm.38049	NM_021297	Tlr4	Toll-like receptor 4
G11	Mm.1293	NM_013693	Tnf	Tumor necrosis factor
G12	Mm.292729	NM_009424	Traf6	Tnf receptor-associated factor 6
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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