

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

Rat Chemokines & Receptors

Cat. no. 330231 PARN-022ZA

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 Rat Chemokines & Receptors RT² Profiler PCR Array profiles the expression of 84 genes that encode chemokines and their receptors. The array contains members of the C-C and C-X-C motif subfamilies of small inducible cytokines and their receptors as well as other related genes. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to the immune system 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	C5	C5ar1	Ccbp2	Ccl11	Ccl12	Ccl17	Ccl19	Ccl2	Ccl20	Ccl21	Ccl22	Ccl24
B	Ccl25	Ccl28	Ccl3	Ccl4	Ccl5	Ccl6	Ccl7	Ccl9	Ccr1	Ccr10	Ccr11	Ccr2
C	Ccr3	Ccr4	Ccr5	Ccr6	Ccr7	Ccr8	Ccr9	Ccr12	Cklf	Cmklr1	Cmtm2a	Cmtm3
D	Cmtm5	Cx3cl1	Cx3cr1	Cxcl1	Cxcl10	Cxcl11	Cxcl12	Cxcl13	Cxcl14	Cxcl16	Cxcl2	Cxcl3
E	Cxcl5	Cxcl9	Cxcr2	Cxcr3	Cxcr4	Cxcr5	Cxcr6	Cxcr7	Fgf2	Fpr1	Gpr17	Hif1a
F	Ifng	Il10	Il16	Il1b	Il4	Il6	Il8ra	Ilgam	Ilgb2	Kdr	Mapk1	Mapk14
G	Pf4	Plau	Ppibp	Prkca	Sllr2	Tgfb1	Tlr2	Tlr4	Tnf	Tymp	Vegfa	Xcl1
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Rn.21259	XM_342421	C5	Complement component 5
A02	Rn.10680	NM_053619	C5ar1	Complement component 5a receptor 1
A03	Rn.10771	NM_078621	Ccbp2	Chemokine binding protein 2
A04	Rn.10632	NM_019205	Ccl11	Chemokine (C-C motif) ligand 11
A05	Rn.137780	NM_001105822	Ccl12	Chemokine (C-C motif) ligand 12
A06	Rn.46679	NM_057151	Ccl17	Chemokine (C-C motif) ligand 17
A07	Rn.12445	NM_001108661	Ccl19	Chemokine (C-C motif) ligand 19
A08	Rn.4772	NM_031530	Ccl2	Chemokine (C-C motif) ligand 2
A09	Rn.10722	NM_019233	Ccl20	Chemokine (C-C motif) ligand 20
A10	Rn.39658	NM_001008513	Ccl21	Chemokine (C-C motif) ligand 21
A11	Rn.48727	NM_057203	Ccl22	Chemokine (C-C motif) ligand 22
A12	Rn.138822	NM_001013045	Ccl24	Chemokine (C-C motif) ligand 24
B01	Rn.140677	NM_001037203	Ccl25	Chemokine (C-C motif) ligand 25
B02	Rn.195764	NM_053700	Ccl28	Chemokine (C-C motif) ligand 28
B03	Rn.10139	NM_013025	Ccl3	Chemokine (C-C motif) ligand 3
B04	Rn.37880	NM_053858	Ccl4	Chemokine (C-C motif) ligand 4
B05	Rn.8019	NM_031116	Ccl5	Chemokine (C-C motif) ligand 5
B06	Rn.7857	NM_001004202	Ccl6	Chemokine (C-C motif) ligand 6
B07	Rn.26815	NM_001007612	Ccl7	Chemokine (C-C motif) ligand 7
B08	Rn.145427	NM_001012357	Ccl9	Chemokine (C-C motif) ligand 9
B09	Rn.34673	NM_020542	Ccr1	Chemokine (C-C motif) receptor 1
B10	Rn.49607	NM_001108836	Ccr10	Chemokine (C-C motif) receptor 10
B11	Rn.218537	NM_001106872	Ccr11	Chemokine (C-C motif) receptor 1-like 1
B12	Rn.211983	NM_021866	Ccr2	Chemokine (C-C motif) receptor 2
C01	Rn.9890	NM_053958	Ccr3	Chemokine (C-C motif) receptor 3
C02	Rn.81076	NM_133532	Ccr4	Chemokine (C-C motif) receptor 4
C03	Rn.10736	NM_053960	Ccr5	Chemokine (C-C motif) receptor 5
C04	Rn.161767	NM_001013145	Ccr6	Chemokine (C-C motif) receptor 6
C05	Rn.16815	NM_199489	Ccr7	Chemokine (C-C motif) receptor 7
C06	N/A	XM_236704	Ccr8	Chemokine (C-C motif) receptor 8
C07	Rn.91140	NM_172329	Ccr9	Chemokine (C-C motif) receptor 9
C08	Rn.67232	NM_001108191	Ccr12	Chemokine (C-C motif) receptor-like 2
C09	Rn.81197	NM_139111	Cklf	Chemokine-like factor
C10	Rn.44465	NM_022218	Cmklr1	Chemokine-like receptor 1
C11	Rn.163394	NM_001013142	Cmtm2a	CKLF-like MARVEL transmembrane domain containing 2A
C12	Rn.15332	NM_001106164	Cmtm3	CKLF-like MARVEL transmembrane domain containing 3
D01	Rn.100853	NM_001106034	Cmtm5	CKLF-like MARVEL transmembrane domain containing 5
D02	Rn.107266	NM_134455	Cx3cl1	Chemokine (C-X3-C motif) ligand 1
D03	Rn.10482	NM_133534	Cx3cr1	Chemokine (C-X3-C motif) receptor 1
D04	Rn.10907	NM_030845	Cxcl1	Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)
D05	Rn.10584	NM_139089	Cxcl10	Chemokine (C-X-C motif) ligand 10
D06	Rn.13664	NM_182952	Cxcl11	Chemokine (C-X-C motif) ligand 11
D07	Rn.54439	NM_022177	Cxcl12	Chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1)
D08	Rn.6917	NM_001017496	Cxcl13	Chemokine (C-X-C motif) ligand 13
D09	Rn.3130	NM_001013137	Cxcl14	Chemokine (C-X-C motif) ligand 14

Position	UniGene	GenBank	Symbol	Description
D10	Rn.7070	NM_001017478	Cxcl16	Chemokine (C-X-C motif) ligand 16
D11	Rn.10230	NM_053647	Cxcl2	Chemokine (C-X-C motif) ligand 2
D12	Rn.10525	NM_138522	Cxcl3	Chemokine (C-X-C motif) ligand 3
E01	Rn.44449	NM_022214	Cxcl5	Chemokine (C-X-C motif) ligand 5
E02	Rn.7391	NM_145672	Cxcl9	Chemokine (C-X-C motif) ligand 9
E03	Rn.90347	NM_017183	Cxcr2	Chemokine (C-X-C motif) receptor 2
E04	Rn.24787	NM_053415	Cxcr3	Chemokine (C-X-C motif) receptor 3
E05	Rn.44431	NM_022205	Cxcr4	Chemokine (C-X-C motif) receptor 4
E06	Rn.127121	NM_053303	Cxcr5	Chemokine (C-X-C motif) receptor 5
E07	Rn.217921	NM_001102587	Cxcr6	Chemokine receptor CXCR6
E08	Rn.12959	NM_053352	Cxcr7	Chemokine (C-X-C motif) receptor 7
E09	Rn.31808	NM_019305	Fgf2	Fibroblast growth factor 2
E10	Rn.218643	NM_001106216	Fpr1	Formyl peptide receptor 1
E11	Rn.212749	NM_001071777	Gpr17	G protein-coupled receptor 17
E12	Rn.10852	NM_024359	Hif1a	Hypoxia-inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)
F01	Rn.10795	NM_138880	Ifng	Interferon gamma
F02	Rn.9868	NM_012854	Il10	Interleukin 10
F03	Rn.104665	NM_001105749	Il16	Interleukin 16
F04	Rn.9869	NM_031512	Il1b	Interleukin 1 beta
F05	Rn.108255	NM_201270	Il4	Interleukin 4
F06	Rn.9873	NM_012589	Il6	Interleukin 6
F07	Rn.138115	NM_019310	Il8ra	Interleukin 8 receptor, alpha
F08	Rn.54465	NM_012711	Itgam	Integrin, alpha M
F09	Rn.42962	NM_001037780	Itgb2	Integrin, beta 2
F10	Rn.88869	NM_013062	Kdr	Kinase insert domain receptor
F11	Rn.34914	NM_053842	Mapk1	Mitogen activated protein kinase 1
F12	Rn.88085	NM_031020	Mapk14	Mitogen activated protein kinase 14
G01	Rn.6800	NM_001007729	Pf4	Platelet factor 4
G02	Rn.6064	NM_013085	Plau	Plasminogen activator, urokinase
G03	Rn.67082	NM_153721	Ppbp	Pro-platelet basic protein (chemokine (C-X-C motif) ligand 7)
G04	Rn.207908	NM_001105713	Prkca	Protein kinase C, alpha
G05	Rn.146652	NM_022632	Slit2	Slit homolog 2 (Drosophila)
G06	Rn.40136	NM_021578	Tgfb1	Transforming growth factor, beta 1
G07	Rn.46387	NM_198769	Tlr2	Toll-like receptor 2
G08	Rn.14534	NM_019178	Tlr4	Toll-like receptor 4
G09	Rn.2275	NM_012675	Tnf	Tumor necrosis factor (TNF superfamily, member 2)
G10	Rn.219088	NM_001012122	Tymp	Thymidine phosphorylase
G11	Rn.1923	NM_031836	Vegfa	Vascular endothelial growth factor A
G12	Rn.90962	NM_134361	Xcl1	Chemokine (C motif) ligand 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.
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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