

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

Rabbit Innate & Adaptive Immune Responses

Cat. no. 330231 PANZ-052ZA

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 Rabbit Innate & Adaptive Immune Responses RT² Profiler™ PCR Array profiles the expression of 84 genes involved in the host response to bacterial infection and sepsis. This array includes genes related to the IL-1R and Toll-like Receptor (TLR) Signaling Pathways including IL-1R and TLR genes involved in the detection of pathogens. Genes related to the host defense to bacteria are represented on this array including genes involved in the detection of bacteria, and genes involved in the acute-phase response, complement activation, the inflammatory response, and the antibacterial humoral response. Genes involved in the innate immune response and septic shock are also included on this array. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to the innate and adaptive immune responses 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	C3	CCL2	CCR5	CD14	CD1A	CD1D	CD28	CD4	CD80	CD86	C-JUN	CRP
B	CXCR4	DDX58	FAS	GATA3	IFNG	IL10	IL15	IL18	IL1A	IL1B	IL1R1	IL2
C	IL4	IL6	IL8	IRF1	IRF6	ITGAM	LBP	LOC1001015 88	LOC1003386 96	LOC1003387 01	LOC1003390 19	LOC1003390 49
D	LOC1003393 22	LOC1003395 37	LOC1003399 28	LOC1003408 11	LOC1003423 34	LOC1003435 60	LOC1003446 22	LOC1003455 00	LOC1003473 28	LOC1003473 45	LOC1003482 70	LOC1003485 61
E	LOC1003487 76	LOC1003491 06	LOC1003498 63	LOC1003518 14	LOC1003520 65	LOC1003531 37	LOC1003547 43	LOC1003560 58	LOC1003573 41	LOC1003580 75	LOC1003581 34	LOC1003583 88
F	LOC1003586 76	LOC1003590 14	LY96	MAPK14	MAPK8	MEFV	MPO	NLRP3	NOD1	NOD2	PTGS2	RAG1
G	RORC	STAT1	STAT3	STAT4	STAT6	TICAM2	TLR2	TLR3	TLR4	TLR6	TNF	TRAF6
H	ACTA2	ACTB	GAPDH	LDHA	LOC1003469 36	NGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Ocu.1841	NM_001082286	C3	Complement component 3
A02	Ocu.1921	NM_001082294	CCL2	Chemokine (C-C motif) ligand 2
A03	Ocu.7154	NM_001171125	CCR5	Chemokine (C-C motif) receptor 5 (gene/pseudogene)
A04	Ocu.1842	NM_001082195	CD14	CD14 molecule
A05	Ocu.2515	NM_001089311	CD1A	CD1a molecule
A06	Ocu.7541	NM_001160282	CD1D	CD1d molecule
A07	Ocu.3056	NM_001082207	CD28	CD28 molecule
A08	Ocu.1843	NM_001082313	CD4	CD4 molecule
A09	Ocu.3057	NM_001082663	CD80	CD80 molecule
A10	Ocu.3058	NM_001082208	CD86	CD86 molecule
A11	Ocu.6770	NM_001198947	C-JUN	C-jun transcription factor
A12	Ocu.1848	NM_001082265	CRP	C-reactive protein, pentraxin-related
B01	N/A	XM_002712124	CXCR4	Chemokine (C-X-C motif) receptor 4
B02	N/A	XM_002708040	DDX58	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58
B03	Ocu.2354	NM_001081995	FAS	Fas (TNF receptor superfamily, member 6)
B04	N/A	XM_002717361	GATA3	GATA binding protein 3
B05	Ocu.2149	NM_001081991	IFNG	Interferon, gamma
B06	Ocu.1796	NM_001082045	IL10	Interleukin 10
B07	Ocu.1795	NM_001082216	IL15	Interleukin 15
B08	Ocu.7345	NM_001122940	IL18	Interleukin 18 (interferon-gamma-inducing factor)
B09	Ocu.2080	NM_001101684	IL1A	Interleukin 1, alpha
B10	Ocu.1993	NM_001082201	IL1B	Interleukin 1, beta
B11	Ocu.1916	NM_001082770	IL1R1	Interleukin 1 receptor, type I
B12	Ocu.2461	NM_001163180	IL2	Interleukin 2
C01	Ocu.2462	NM_001163177	IL4	Interleukin 4
C02	Ocu.2447	NM_001082064	IL6	Interleukin 6 (interferon, beta 2)
C03	Ocu.1938	NM_001082293	IL8	Interleukin 8
C04	Ocu.7500	NM_001171347	IRF1	Interferon regulatory factor 1
C05	N/A	XM_002717421	IRF6	Interferon regulatory factor 6
C06	N/A	XM_002721749	ITGAM	Integrin, alpha M (complement component 3 receptor 3 subunit)
C07	Ocu.2065	NM_001195719	LBP	Lipopolysaccharide binding protein
C08	Ocu.7184	XM_002708417	LOC100101588	Caspase 1
C09	N/A	XM_002722022	LOC100338696	Putative CD209 protein-like
C10	N/A	XM_002722561	LOC100338	Macrophage migration inhibitory factor

Position	UniGene	GenBank	Symbol	Description
			701	
C11	N/A	XM_002718365	LOC100339019	Soluble mannose-binding lectin-like
C12	N/A	XM_002724155	LOC100339049	Integrin beta-2-like
D01	N/A	XM_002714498	LOC100339322	Interleukin 17A-like
D02	N/A	XM_002723866	LOC100339537	Chemokine (C-C motif) receptor 6-like
D03	N/A	XM_002718628	LOC100339928	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 2
D04	N/A	XM_002723869	LOC100340811	Myeloid differentiation primary response gene 88-like
D05	N/A	XM_002720515	LOC100342334	Fas ligand (TNF superfamily, member 6)-like
D06	N/A	XM_002712221	LOC100343560	Interferon induced with helicase C domain 1
D07	N/A	XM_002722842	LOC100344622	Tyrosine kinase 2-like
D08	N/A	XM_002713106	LOC100345500	Chemokine (C-C motif) receptor 8
D09	N/A	XM_002716251	LOC100347328	Chemokine (C-C motif) receptor 4
D10	N/A	XM_002719731	LOC100347345	Mitogen-activated protein kinase 1-like
D11	N/A	XM_002719910	LOC100348270	Forkhead box P3
D12	N/A	XM_002711889	LOC100348561	Mitogen activated protein kinase 3-like
E01	N/A	XM_002719246	LOC100348776	Chemokine (C-C motif) ligand 3-like
E02	Ocu.835	XM_002721199	LOC100349106	CD40 antigen
E03	N/A	XM_002720089	LOC100349863	Chemokine (C-X-C motif) receptor 3
E04	N/A	XM_002709270	LOC100351814	Toll-like receptor 1-like
E05	N/A	XM_002711079	LOC100352065	Interleukin 23, alpha subunit p19-like
E06	N/A	XM_002708055	LOC100353137	Interferon type I-like
E07	N/A	XM_002722638	LOC100354743	Interleukin 1 receptor-associated kinase 1-like
E08	N/A	XM_002717290	LOC100356058	Lysozyme-like 1-like
E09	N/A	XM_002718142	LOC100357341	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha
E10	N/A	XM_002710201	LOC100358075	Interleukin-5-like
E11	N/A	XM_002708002	LOC100358134	Janus kinase 2
E12	N/A	NM_001256781	LOC100358388	CD40 ligand
F01	N/A	XM_002710092	LOC100358676	Interleukin 13 (predicted)-like
F02	N/A	XM_002723759	LOC100359014	Myxovirus resistance protein 1
F03	Ocu.3359	NM_001082787	LY96	Lymphocyte antigen 96
F04	N/A	XM_002714645	MAPK14	Mitogen-activated protein kinase 14
F05	N/A	XM_002722670	MAPK8	Mitogen-activated protein kinase 8
F06	N/A	XM_002722790	MEFV	Mediterranean fever
F07	N/A	XM_002719094	MPO	Myeloperoxidase
F08	N/A	XM_002723157	NLRP3	NLR family, pyrin domain containing 3
F09	N/A	XM_002713735	NOD1	Nucleotide-binding oligomerization domain containing 1
F10	N/A	XM_002721345	NOD2	Nucleotide-binding oligomerization domain containing 2
F11	Ocu.2173	NM_001082388	PTGS2	Prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)
F12	Ocu.7703	NM_001171140	RAG1	Recombination activating gene 1
G01	N/A	XM_002715354	RORC	RAR-related orphan receptor C
G02	N/A	XM_002712346	STAT1	Signal transducer and activator of transcription 1, 91kDa
G03	N/A	XM_002719395	STAT3	Signal transducer and activator of transcription 3 (acute-phase response factor)

Position	UniGene	GenBank	Symbol	Description
G04	N/A	XM_002712347	STAT4	Signal transducer and activator of transcription 4
G05	N/A	XM_002720937	STAT6	Signal transducer and activator of transcription 6, interleukin-4 induced
G06	N/A	NM_001204346	TICAM2	Toll-like receptor adaptor molecule 2
G07	Ocu.3358	NM_001082781	TLR2	Toll-like receptor 2
G08	Ocu.6507	NM_001082219	TLR3	Toll-like receptor 3
G09	Ocu.3357	NM_001082732	TLR4	Toll-like receptor 4
G10	N/A	XM_002709388	TLR6	Toll-like receptor 6
G11	Ocu.1971	NM_001082263	TNF	Tumor necrosis factor
G12	N/A	XM_002709054	TRAF6	TNF receptor-associated factor 6, E3 ubiquitin protein ligase
H01	Ocu.2090	NM_001101682	ACTA2	Actin, alpha 2, smooth muscle, aorta
H02	Ocu.734	NM_001101683	ACTB	Actin, beta
H03	Ocu.87	NM_001082253	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
H04	Ocu.1108	NM_001082277	LDHA	Lactate dehydrogenase A
H05	N/A	XM_002723383	LOC100346936	Non-POU domain containing, octamer-binding-like
H06	N/A	SA_00511	NGDC	Rabbit 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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