

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

Chinese Hamster Ovary (CHO) cell Housekeeping Genes

Cat. no. 330231 PAJJ-000ZA

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 Chinese Hamster Ovary (CHO) cell Housekeeping Genes RT² Profiler PCR Array profiles the expression of 8 identical sets of 12 commonly used housekeeping genes. This array can be easily used to identify genes with a constant level of expression among different experimental conditions for use in normalizing relative gene expression profiling experiment. Housekeeping genes encode proteins that are usually essential for the maintenance of cellular function. Their expression often, but not always, remains constant under most experimental conditions. Some of these genes may be regulated under certain circumstances and may vary with cell type. Using real-time PCR, research studies can easily and reliably analyze the expression of these housekeeping genes among different experimental conditions 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	Actb	Actr5	B2m	Gapdh	Gusb	LOC1006893 95	LOC1006894 67	LOC1007545 09	LOC1007562 01	LOC1007697 68	Nono	Sdha
B	Actb	Actr5	B2m	Gapdh	Gusb	LOC1006893 95	LOC1006894 67	LOC1007545 09	LOC1007562 01	LOC1007697 68	Nono	Sdha
C	Actb	Actr5	B2m	Gapdh	Gusb	LOC1006893 95	LOC1006894 67	LOC1007545 09	LOC1007562 01	LOC1007697 68	Nono	Sdha
D	Actb	Actr5	B2m	Gapdh	Gusb	LOC1006893 95	LOC1006894 67	LOC1007545 09	LOC1007562 01	LOC1007697 68	Nono	Sdha
E	Actb	Actr5	B2m	Gapdh	Gusb	LOC1006893 95	LOC1006894 67	LOC1007545 09	LOC1007562 01	LOC1007697 68	Nono	Sdha
F	Actb	Actr5	B2m	Gapdh	Gusb	LOC1006893 95	LOC1006894 67	LOC1007545 09	LOC1007562 01	LOC1007697 68	Nono	Sdha
G	Actb	Actr5	B2m	Gapdh	Gusb	LOC1006893 95	LOC1006894 67	LOC1007545 09	LOC1007562 01	LOC1007697 68	Nono	Sdha
H	Actb	Actr5	B2m	Gapdh	Gusb	LOC1006893 95	LOC1006894 67	LOC1007545 09	LOC1007562 01	LOC1007697 68	Nono	Sdha

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	N/A	NM_001244575	Actb	Actin, beta
A02	N/A	XM_003497123	Actr5	ARP5 actin-related protein 5 homolog (yeast)
A03	N/A	NM_001246674	B2m	Beta-2 microglobulin
A04	N/A	NM_001244854	Gapdh	Glyceraldehyde-3-phosphate dehydrogenase
A05	N/A	XM_003512985	Gusb	Glucuronidase, beta
A06	N/A	NM_001246819	LOC100689395	Transferrin receptor
A07	N/A	NM_001246725	LOC100689467	Phosphoglycerate kinase
A08	N/A	XM_003501668	LOC100754509	Heat shock protein HSP 90-beta-like
A09	N/A	XM_003495915	LOC100756201	60S acidic ribosomal protein P0-like
A10	N/A	XM_003503017	LOC100769768	Hypoxanthine-guanine phosphoribosyltransferase-like
A11	N/A	XM_003511050	Nono	Non-POU-domain-containing, octamer binding protein
A12	N/A	XM_003513635	Sdha	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
B01	N/A	NM_001244575	Actb	Actin, beta
B02	N/A	XM_003497123	Actr5	ARP5 actin-related protein 5 homolog (yeast)
B03	N/A	NM_001246674	B2m	Beta-2 microglobulin
B04	N/A	NM_001244854	Gapdh	Glyceraldehyde-3-phosphate dehydrogenase
B05	N/A	XM_003512985	Gusb	Glucuronidase, beta
B06	N/A	NM_001246819	LOC100689395	Transferrin receptor
B07	N/A	NM_001246725	LOC100689467	Phosphoglycerate kinase
B08	N/A	XM_003501668	LOC100754509	Heat shock protein HSP 90-beta-like
B09	N/A	XM_003495915	LOC100756201	60S acidic ribosomal protein P0-like
B10	N/A	XM_003503017	LOC100769	Hypoxanthine-guanine phosphoribosyltransferase-like

Position	UniGene	GenBank	Symbol	Description
			768	
B11	N/A	XM_003511050	Nono	Non-POU-domain-containing, octamer binding protein
B12	N/A	XM_003513635	Sdha	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
C01	N/A	NM_001244575	Actb	Actin, beta
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C04	N/A	NM_001244854	Gapdh	Glyceraldehyde-3-phosphate dehydrogenase
C05	N/A	XM_003512985	Gusb	Glucuronidase, beta
C06	N/A	NM_001246819	LOC100689395	Transferrin receptor
C07	N/A	NM_001246725	LOC100689467	Phosphoglycerate kinase
C08	N/A	XM_003501668	LOC100754509	Heat shock protein HSP 90-beta-like
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D02	N/A	XM_003497123	Actr5	ARP5 actin-related protein 5 homolog (yeast)
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D04	N/A	NM_001244854	Gapdh	Glyceraldehyde-3-phosphate dehydrogenase
D05	N/A	XM_003512985	Gusb	Glucuronidase, beta
D06	N/A	NM_001246819	LOC100689395	Transferrin receptor
D07	N/A	NM_001246725	LOC100689467	Phosphoglycerate kinase
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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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