

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

Human Housekeeping Genes

Cat. no. 330231 PAHS-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 Human Housekeeping Genes RT² Profiler PCR Array profiles the expression of eight (8) identical sets of twelve (12) commonly used housekeeping genes. This array can be easily used to identify genes with a constant level of expression among your different experimental conditions for use in normalizing your 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, you can easily and reliably evaluate the expression of these housekeeping genes among your different experiment 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	B2M	GAPDH	GUSB	HPRT1	HSP90AB1	LDHA	NONO	PGK1	PPIH	RPLP0	TFRC
B	ACTB	B2M	GAPDH	GUSB	HPRT1	HSP90AB1	LDHA	NONO	PGK1	PPIH	RPLP0	TFRC
C	ACTB	B2M	GAPDH	GUSB	HPRT1	HSP90AB1	LDHA	NONO	PGK1	PPIH	RPLP0	TFRC
D	ACTB	B2M	GAPDH	GUSB	HPRT1	HSP90AB1	LDHA	NONO	PGK1	PPIH	RPLP0	TFRC
E	ACTB	B2M	GAPDH	GUSB	HPRT1	HSP90AB1	LDHA	NONO	PGK1	PPIH	RPLP0	TFRC
F	ACTB	B2M	GAPDH	GUSB	HPRT1	HSP90AB1	LDHA	NONO	PGK1	PPIH	RPLP0	TFRC
G	ACTB	B2M	GAPDH	GUSB	HPRT1	HSP90AB1	LDHA	NONO	PGK1	PPIH	RPLP0	TFRC
H	ACTB	B2M	GAPDH	GUSB	HPRT1	HSP90AB1	LDHA	NONO	PGK1	PPIH	RPLP0	TFRC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Hs.520640	NM_001101	ACTB	Actin, beta
A02	Hs.534255	NM_004048	B2M	Beta-2-microglobulin
A03	Hs.592355	NM_002046	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
A04	Hs.255230	NM_000181	GUSB	Glucuronidase, beta
A05	Hs.412707	NM_000194	HPRT1	Hypoxanthine phosphoribosyltransferase 1
A06	Hs.509736	NM_007355	HSP90AB1	Heat shock protein 90kDa alpha (cytosolic), class B member 1
A07	Hs.2795	NM_005566	LDHA	Lactate dehydrogenase A
A08	Hs.533282	NM_007363	NONO	Non-POU domain containing, octamer-binding
A09	Hs.78771	NM_000291	PGK1	Phosphoglycerate kinase 1
A10	Hs.256639	NM_006347	PPIH	Peptidylprolyl isomerase H (cyclophilin H)
A11	Hs.546285	NM_001002	RPLP0	Ribosomal protein, large, P0
A12	Hs.529618	NM_003234	TFRC	Transferrin receptor (p90, CD71)
B01	Hs.520640	NM_001101	ACTB	Actin, beta
B02	Hs.534255	NM_004048	B2M	Beta-2-microglobulin
B03	Hs.592355	NM_002046	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
B04	Hs.255230	NM_000181	GUSB	Glucuronidase, beta
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H11	Hs.546285	NM_001002	RPLP0	Ribosomal protein, large, P0
H12	Hs.529618	NM_003234	TFRC	Transferrin receptor (p90, CD71)

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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