

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

Pig Housekeeping Genes

Cat. no. 330231 PASS-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 Pig 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	ACTA1	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PGK1	PPIA	RPL13A	RPLP1	TFRC
B	ACTA1	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PGK1	PPIA	RPL13A	RPLP1	TFRC
C	ACTA1	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PGK1	PPIA	RPL13A	RPLP1	TFRC
D	ACTA1	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PGK1	PPIA	RPL13A	RPLP1	TFRC
E	ACTA1	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PGK1	PPIA	RPL13A	RPLP1	TFRC
F	ACTA1	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PGK1	PPIA	RPL13A	RPLP1	TFRC
G	ACTA1	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PGK1	PPIA	RPL13A	RPLP1	TFRC
H	ACTA1	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PGK1	PPIA	RPL13A	RPLP1	TFRC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Ssc.37707	NM_001167795	ACTA1	Actin, alpha 1, skeletal muscle
A02	Ssc.10316	XM_003357928	ACTB	Actin, beta
A03	Ssc.73773	NM_213978	B2M	Beta-2-microglobulin
A04	Ssc.16135	NM_001206359	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
A05	Ssc.18585	NM_001123121	GUSB	Glucuronidase, beta
A06	Ssc.4158	NM_001032376	HPRT1	Hypoxanthine phosphoribosyltransferase 1
A07	Ssc.50275	NM_001172363	LDHA	Lactate dehydrogenase A
A08	Ssc.23800	NM_001099932	PGK1	Phosphoglycerate kinase 1
A09	Ssc.55440	NM_214353	PPIA	Peptidylprolyl isomerase A (cyclophilin A)
A10	Ssc.27927	XM_003127305	RPL13A	Ribosomal protein L13a
A11	N/A	XM_003360434	RPLP1	Ribosomal protein, large, P1
A12	Ssc.38	NM_214001	TFRC	Transferrin receptor (p90, CD71)
B01	Ssc.37707	NM_001167795	ACTA1	Actin, alpha 1, skeletal muscle
B02	Ssc.10316	XM_003357928	ACTB	Actin, beta
B03	Ssc.73773	NM_213978	B2M	Beta-2-microglobulin
B04	Ssc.16135	NM_001206359	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
B05	Ssc.18585	NM_001123121	GUSB	Glucuronidase, beta
B06	Ssc.4158	NM_001032376	HPRT1	Hypoxanthine phosphoribosyltransferase 1
B07	Ssc.50275	NM_001172363	LDHA	Lactate dehydrogenase A
B08	Ssc.23800	NM_001099932	PGK1	Phosphoglycerate kinase 1
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B11	N/A	XM_003360434	RPLP1	Ribosomal protein, large, P1
B12	Ssc.38	NM_214001	TFRC	Transferrin receptor (p90, CD71)
C01	Ssc.37707	NM_001167795	ACTA1	Actin, alpha 1, skeletal muscle
C02	Ssc.10316	XM_003357928	ACTB	Actin, beta
C03	Ssc.73773	NM_213978	B2M	Beta-2-microglobulin
C04	Ssc.16135	NM_001206359	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
C05	Ssc.18585	NM_001123121	GUSB	Glucuronidase, beta
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D03	Ssc.73773	NM_213978	B2M	Beta-2-microglobulin
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D05	Ssc.18585	NM_001123121	GUSB	Glucuronidase, beta
D06	Ssc.4158	NM_001032376	HPRT1	Hypoxanthine phosphoribosyltransferase 1
D07	Ssc.50275	NM_001172363	LDHA	Lactate dehydrogenase A
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H11	N/A	XM_003360434	RPLP1	Ribosomal protein, large, P1
H12	Ssc.38	NM_214001	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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