

# RT<sup>2</sup> Profiler PCR Array (96-Well Format and 384-Well [4 x 96] Format)

## Horse Housekeeping Genes

Cat. no. 330231 PAEC-000ZA

For pathway expression analysis

Format	For use with the following real-time cyclers
RT <sup>2</sup> Profiler PCR Array, Format A	Applied Biosystems <sup>®</sup> models 5700, 7000, 7300, 7500, 7700, 7900HT, ViiA™ 7 (96-well block); Bio-Rad <sup>®</sup> models iCycler <sup>®</sup> , iQ™ 5, MyiQ™, MyiQ2; Bio-Rad/MJ Research Chromo4™; Eppendorf <sup>®</sup> Mastercycler <sup>®</sup> ep realplex models 2, 2s, 4, 4s; Stratagene <sup>®</sup> models Mx3005P <sup>®</sup> , Mx3000P <sup>®</sup> ; Takara TP-800
RT <sup>2</sup> Profiler PCR Array, Format C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)
RT <sup>2</sup> Profiler PCR Array, Format D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon <sup>®</sup> , DNA Engine Opticon 2; Stratagene Mx4000 <sup>®</sup>
RT <sup>2</sup> Profiler PCR Array, Format E	Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™
RT <sup>2</sup> Profiler PCR Array, Format F	Roche <sup>®</sup> LightCycler <sup>®</sup> 480 (96-well block)
RT <sup>2</sup> Profiler PCR Array, Format G	Roche LightCycler 480 (384-well block)
RT <sup>2</sup> Profiler PCR Array, Format H	Fluidigm <sup>®</sup> BioMark™



Sample & Assay Technologies

## Description

The Horse Housekeeping Genes RT<sup>2</sup> 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 *RT<sup>2</sup> Profiler PCR Array Handbook*.

## Shipping and storage

RT<sup>2</sup> 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. RT<sup>2</sup> Profiler PCR Arrays in format H are shipped on dry ice or blue ice packs.

For long term storage, keep plates at  $-20^{\circ}\text{C}$ .

**Note:** Ensure that you have the correct RT<sup>2</sup> Profiler PCR Array format for your real-time cycler (see table above).

**Note:** Open the package and store the products appropriately immediately on receipt.

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## Array layout (96-well)

For 384-well 4 x 96 PCR arrays, genes are present in a staggered format. Refer to the *RT<sup>2</sup> Profiler PCR Array Handbook* for layout.

	1	2	3	4	5	6	7	8	9	10	11	12
A	ACTB	B2M	GAPDH	GUSB	H6PD	HPRT1	HSP90AB1	LOC1000498 46	LOC1000567 66	NONO	SDHA	UBC
B	ACTB	B2M	GAPDH	GUSB	H6PD	HPRT1	HSP90AB1	LOC1000498 46	LOC1000567 66	NONO	SDHA	UBC
C	ACTB	B2M	GAPDH	GUSB	H6PD	HPRT1	HSP90AB1	LOC1000498 46	LOC1000567 66	NONO	SDHA	UBC
D	ACTB	B2M	GAPDH	GUSB	H6PD	HPRT1	HSP90AB1	LOC1000498 46	LOC1000567 66	NONO	SDHA	UBC
E	ACTB	B2M	GAPDH	GUSB	H6PD	HPRT1	HSP90AB1	LOC1000498 46	LOC1000567 66	NONO	SDHA	UBC
F	ACTB	B2M	GAPDH	GUSB	H6PD	HPRT1	HSP90AB1	LOC1000498 46	LOC1000567 66	NONO	SDHA	UBC
G	ACTB	B2M	GAPDH	GUSB	H6PD	HPRT1	HSP90AB1	LOC1000498 46	LOC1000567 66	NONO	SDHA	UBC
H	ACTB	B2M	GAPDH	GUSB	H6PD	HPRT1	HSP90AB1	LOC1000498 46	LOC1000567 66	NONO	SDHA	UBC

## Gene table: RT<sup>2</sup> Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Eca.15483	NM_001081838	ACTB	Actin, beta
A02	Eca.13489	NM_001082502	B2M	Beta-2-microglobulin
A03	Eca.487	NM_001163856	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
A04	Eca.13373	XM_001493514	GUSB	Glucuronidase, beta
A05	N/A	XM_001490933	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
A06	Eca.12727	XM_001490189	HPRT1	Hypoxanthine phosphoribosyltransferase 1
A07	Eca.1802	NM_001081938	HSP90AB1	Heat shock protein 90
A08	Eca.9990	XM_001499329	LOC100049846	TATA-box-binding protein-like
A09	Eca.13629	XM_001492042	LOC100056766	60S ribosomal protein L32-like
A10	N/A	XM_001492800	NONO	Non-POU domain containing, octamer-binding
A11	N/A	XM_001490889	SDHA	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
A12	Eca.62	NM_001081862	UBC	Ubiquitin C
B01	Eca.15483	NM_001081838	ACTB	Actin, beta
B02	Eca.13489	NM_001082502	B2M	Beta-2-microglobulin
B03	Eca.487	NM_001163856	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
B04	Eca.13373	XM_001493514	GUSB	Glucuronidase, beta
B05	N/A	XM_001490933	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
B06	Eca.12727	XM_001490189	HPRT1	Hypoxanthine phosphoribosyltransferase 1
B07	Eca.1802	NM_001081938	HSP90AB1	Heat shock protein 90
B08	Eca.9990	XM_001499329	LOC100049846	TATA-box-binding protein-like
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B12	Eca.62	NM_001081862	UBC	Ubiquitin C
C01	Eca.15483	NM_001081838	ACTB	Actin, beta
C02	Eca.13489	NM_001082502	B2M	Beta-2-microglobulin
C03	Eca.487	NM_001163856	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase

Position	UniGene	GenBank	Symbol	Description
C04	Eca.13373	XM_001493514	GUSB	Glucuronidase, beta
C05	N/A	XM_001490933	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
C06	Eca.12727	XM_001490189	HPRT1	Hypoxanthine phosphoribosyltransferase 1
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C12	Eca.62	NM_001081862	UBC	Ubiquitin C
D01	Eca.15483	NM_001081838	ACTB	Actin, beta
D02	Eca.13489	NM_001082502	B2M	Beta-2-microglobulin
D03	Eca.487	NM_001163856	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
D04	Eca.13373	XM_001493514	GUSB	Glucuronidase, beta
D05	N/A	XM_001490933	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
D06	Eca.12727	XM_001490189	HPRT1	Hypoxanthine phosphoribosyltransferase 1
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## Related products

For optimal performance, RT<sup>2</sup> Profiler PCR Arrays should be used together with the RT<sup>2</sup> First Strand Kit for cDNA synthesis and RT<sup>2</sup> SYBR<sup>®</sup> Green qPCR Mastermixes for PCR.

Product	Contents	Cat. no.
RT <sup>2</sup> First Strand Kit (12)	Enzymes and reagents for cDNA synthesis	330401
RT <sup>2</sup> 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 <sup>2</sup> 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 <sup>2</sup> 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.

RT<sup>2</sup> Profiler PCR Array products are intended for molecular biology applications. These products are not intended for the diagnosis, prevention, or treatment of a disease.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at [www.qiagen.com](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

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