

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

Dog Housekeeping Genes

Cat. no. 330231 PAFD-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 Dog 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	B2M	GAPDH	GUSB	HPRT1	LDHA	PPIA	RPLP1	SDHA	TBP	TFRC	UBC
B	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PPIA	RPLP1	SDHA	TBP	TFRC	UBC
C	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PPIA	RPLP1	SDHA	TBP	TFRC	UBC
D	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PPIA	RPLP1	SDHA	TBP	TFRC	UBC
E	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PPIA	RPLP1	SDHA	TBP	TFRC	UBC
F	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PPIA	RPLP1	SDHA	TBP	TFRC	UBC
G	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PPIA	RPLP1	SDHA	TBP	TFRC	UBC
H	ACTB	B2M	GAPDH	GUSB	HPRT1	LDHA	PPIA	RPLP1	SDHA	TBP	TFRC	UBC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	N/A	NM_001195845	ACTB	Actin, beta
A02	Cfa.29179	XM_535458	B2M	Beta-2-microglobulin
A03	Cfa.39120	NM_001003142	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
A04	Cfa.3694	NM_001003191	GUSB	Glucuronidase, beta
A05	Cfa.4551	NM_001003357	HPRT1	Hypoxanthine phosphoribosyltransferase 1
A06	Cfa.39354	XM_534084	LDHA	Lactate dehydrogenase A
A07	Cfa.3259	XM_850619	PPIA	Peptidylprolyl isomerase A (cyclophilin A)
A08	Cfa.39145	XM_535529	RPLP1	Ribosomal protein, large, P1
A09	Cfa.18281	XM_535807	SDHA	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
A10	Cfa.36899	XM_863455	TBP	TATA box binding protein
A11	Cfa.33569	NM_001003111	TFRC	Transferrin receptor (p90, CD71)
A12	Cfa.39108	XM_847967	UBC	Ubiquitin C
B01	N/A	NM_001195845	ACTB	Actin, beta
B02	Cfa.29179	XM_535458	B2M	Beta-2-microglobulin
B03	Cfa.39120	NM_001003142	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
B04	Cfa.3694	NM_001003191	GUSB	Glucuronidase, beta
B05	Cfa.4551	NM_001003357	HPRT1	Hypoxanthine phosphoribosyltransferase 1
B06	Cfa.39354	XM_534084	LDHA	Lactate dehydrogenase A
B07	Cfa.3259	XM_850619	PPIA	Peptidylprolyl isomerase A (cyclophilin A)
B08	Cfa.39145	XM_535529	RPLP1	Ribosomal protein, large, P1
B09	Cfa.18281	XM_535807	SDHA	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
B10	Cfa.36899	XM_863455	TBP	TATA box binding protein
B11	Cfa.33569	NM_001003111	TFRC	Transferrin receptor (p90, CD71)
B12	Cfa.39108	XM_847967	UBC	Ubiquitin C
C01	N/A	NM_001195845	ACTB	Actin, beta
C02	Cfa.29179	XM_535458	B2M	Beta-2-microglobulin
C03	Cfa.39120	NM_001003142	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
C04	Cfa.3694	NM_001003191	GUSB	Glucuronidase, beta
C05	Cfa.4551	NM_001003357	HPRT1	Hypoxanthine phosphoribosyltransferase 1
C06	Cfa.39354	XM_534084	LDHA	Lactate dehydrogenase A
C07	Cfa.3259	XM_850619	PPIA	Peptidylprolyl isomerase A (cyclophilin A)
C08	Cfa.39145	XM_535529	RPLP1	Ribosomal protein, large, P1
C09	Cfa.18281	XM_535807	SDHA	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
C10	Cfa.36899	XM_863455	TBP	TATA box binding protein
C11	Cfa.33569	NM_001003111	TFRC	Transferrin receptor (p90, CD71)
C12	Cfa.39108	XM_847967	UBC	Ubiquitin C
D01	N/A	NM_001195845	ACTB	Actin, beta
D02	Cfa.29179	XM_535458	B2M	Beta-2-microglobulin
D03	Cfa.39120	NM_001003142	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
D04	Cfa.3694	NM_001003191	GUSB	Glucuronidase, beta
D05	Cfa.4551	NM_001003357	HPRT1	Hypoxanthine phosphoribosyltransferase 1
D06	Cfa.39354	XM_534084	LDHA	Lactate dehydrogenase A
D07	Cfa.3259	XM_850619	PPIA	Peptidylprolyl isomerase A (cyclophilin A)
D08	Cfa.39145	XM_535529	RPLP1	Ribosomal protein, large, P1
D09	Cfa.18281	XM_535807	SDHA	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)

Position	UniGene	GenBank	Symbol	Description
D10	Cfa.36899	XM_863455	TBP	TATA box binding protein
D11	Cfa.33569	NM_001003111	TFRC	Transferrin receptor (p90, CD71)
D12	Cfa.39108	XM_847967	UBC	Ubiquitin C
E01	N/A	NM_001195845	ACTB	Actin, beta
E02	Cfa.29179	XM_535458	B2M	Beta-2-microglobulin
E03	Cfa.39120	NM_001003142	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
E04	Cfa.3694	NM_001003191	GUSB	Glucuronidase, beta
E05	Cfa.4551	NM_001003357	HPRT1	Hypoxanthine phosphoribosyltransferase 1
E06	Cfa.39354	XM_534084	LDHA	Lactate dehydrogenase A
E07	Cfa.3259	XM_850619	PPIA	Peptidylprolyl isomerase A (cyclophilin A)
E08	Cfa.39145	XM_535529	RPLP1	Ribosomal protein, large, P1
E09	Cfa.18281	XM_535807	SDHA	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
E10	Cfa.36899	XM_863455	TBP	TATA box binding protein
E11	Cfa.33569	NM_001003111	TFRC	Transferrin receptor (p90, CD71)
E12	Cfa.39108	XM_847967	UBC	Ubiquitin C
F01	N/A	NM_001195845	ACTB	Actin, beta
F02	Cfa.29179	XM_535458	B2M	Beta-2-microglobulin
F03	Cfa.39120	NM_001003142	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
F04	Cfa.3694	NM_001003191	GUSB	Glucuronidase, beta
F05	Cfa.4551	NM_001003357	HPRT1	Hypoxanthine phosphoribosyltransferase 1
F06	Cfa.39354	XM_534084	LDHA	Lactate dehydrogenase A
F07	Cfa.3259	XM_850619	PPIA	Peptidylprolyl isomerase A (cyclophilin A)
F08	Cfa.39145	XM_535529	RPLP1	Ribosomal protein, large, P1
F09	Cfa.18281	XM_535807	SDHA	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
F10	Cfa.36899	XM_863455	TBP	TATA box binding protein
F11	Cfa.33569	NM_001003111	TFRC	Transferrin receptor (p90, CD71)
F12	Cfa.39108	XM_847967	UBC	Ubiquitin C
G01	N/A	NM_001195845	ACTB	Actin, beta
G02	Cfa.29179	XM_535458	B2M	Beta-2-microglobulin
G03	Cfa.39120	NM_001003142	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
G04	Cfa.3694	NM_001003191	GUSB	Glucuronidase, beta
G05	Cfa.4551	NM_001003357	HPRT1	Hypoxanthine phosphoribosyltransferase 1
G06	Cfa.39354	XM_534084	LDHA	Lactate dehydrogenase A
G07	Cfa.3259	XM_850619	PPIA	Peptidylprolyl isomerase A (cyclophilin A)
G08	Cfa.39145	XM_535529	RPLP1	Ribosomal protein, large, P1
G09	Cfa.18281	XM_535807	SDHA	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
G10	Cfa.36899	XM_863455	TBP	TATA box binding protein
G11	Cfa.33569	NM_001003111	TFRC	Transferrin receptor (p90, CD71)
G12	Cfa.39108	XM_847967	UBC	Ubiquitin C
H01	N/A	NM_001195845	ACTB	Actin, beta
H02	Cfa.29179	XM_535458	B2M	Beta-2-microglobulin
H03	Cfa.39120	NM_001003142	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
H04	Cfa.3694	NM_001003191	GUSB	Glucuronidase, beta
H05	Cfa.4551	NM_001003357	HPRT1	Hypoxanthine phosphoribosyltransferase 1
H06	Cfa.39354	XM_534084	LDHA	Lactate dehydrogenase A
H07	Cfa.3259	XM_850619	PPIA	Peptidylprolyl isomerase A (cyclophilin A)
H08	Cfa.39145	XM_535529	RPLP1	Ribosomal protein, large, P1
H09	Cfa.18281	XM_535807	SDHA	Succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
H10	Cfa.36899	XM_863455	TBP	TATA box binding protein
H11	Cfa.33569	NM_001003111	TFRC	Transferrin receptor (p90, CD71)
H12	Cfa.39108	XM_847967	UBC	Ubiquitin C

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.

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 or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN® (QIAGEN Group); Applied Biosystems®, ViiA™, StepOnePlus™, ROX™ (Applied Biosystems Corporation or its subsidiaries); Bio-Rad®, iCycler®, iQ™, MyiQ™, Chromo4™, CFX96™, DNA Engine Opticon®, CFX384™ (Bio-Rad Laboratories, Inc.); Stratagene®, Mx3005P®, Mx3000P®, Mx4000® (Stratagene); Eppendorf®, Mastercycler® (Eppendorf AG); Roche®, LightCycler® (Roche Group); Fluidigm® BioMark™ (Fluidigm Corporation); SYBR® (Molecular Probes, Inc.).

1066029 03/2011 © 2011 QIAGEN, all rights reserved.

www.qiagen.com

Canada ■ 800-572-9613

China ■ 8621-3865-3865

Denmark ■ 80-885945

Finland ■ 0800-914416

France ■ 01-60-920-930

Germany ■ 02103-29-12000

Hong Kong ■ 800 933 965

Ireland ■ 1800 555 049

Italy ■ 800-787980

Japan ■ 03-6890-7300

Korea (South) ■ 080-000-7145

Luxembourg ■ 8002 2076

Mexico ■ 01-800-7742-436

The Netherlands ■ 0800 0229592

Norway ■ 800-18859

Singapore ■ 1800-742-4368

Spain ■ 91-630-7050

Sweden ■ 020-790282

Switzerland ■ 055-254-22-11

UK ■ 01293-422-911

USA ■ 800-426-8157

Australia ■ 1-800-243-800

Austria ■ 0800/281010

Belgium ■ 0800-79612

Brazil ■ 0800-557779



Sample & Assay Technologies