

RT² Profiler PCR Array (Rotor-Gene® Format)

Cow Housekeeping Genes

Cat. no. 330231 PABT-000ZR

For pathway expression analysis

Format	For use with the following real-time cyclers
RT ² Profiler PCR Array, Format R	Rotor-Gene Q, other Rotor-Gene cyclers

Description

The Cow 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 the Rotor-Gene format are shipped at ambient temperature, on dry ice, or blue ice packs depending on destination and accompanying products.

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.



Sample & Assay Technologies

Array layout

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc™ (plate A1–A12=Rotor-Disc 1–12, plate B1–B12=Rotor-Disc 13–24, etc.). To maintain data analysis compatibility, wells 97–100 do not contain real-time assays but will contain master mix to account for weight balance.

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Bt.14186	NM_173979	ACTB	Actin, beta
A02	Bt.64557	NM_173893	B2M	Beta-2-microglobulin
A03	Bt.87389	NM_001034034	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
A04	Bt.62758	NM_001083436	GUSB	Glucuronidase, beta
A05	Bt.58921	XM_002694063	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
A06	Bt.21218	NM_001046207	HMBS	Hydroxymethylbilane synthase
A07	Bt.49238	NM_001034035	HPRT1	Hypoxanthine phosphoribosyltransferase 1
A08	Bt.64721	NM_001079637	HSP90AB1	Heat shock 90kDa protein 1, beta
A09	Bt.37560	NM_001034299	PGK1	Phosphoglycerate kinase 1
A10	Bt.22662	NM_001075742	TBP	TATA box binding protein
A11	Bt.5070	NM_001206307	UBC	Ubiquitin C
A12	Bt.88043	NM_174814	YWHAZ	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide
B01	Bt.14186	NM_173979	ACTB	Actin, beta
B02	Bt.64557	NM_173893	B2M	Beta-2-microglobulin
B03	Bt.87389	NM_001034034	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
B04	Bt.62758	NM_001083436	GUSB	Glucuronidase, beta
B05	Bt.58921	XM_002694063	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
B06	Bt.21218	NM_001046207	HMBS	Hydroxymethylbilane synthase
B07	Bt.49238	NM_001034035	HPRT1	Hypoxanthine phosphoribosyltransferase 1
B08	Bt.64721	NM_001079637	HSP90AB1	Heat shock 90kDa protein 1, beta
B09	Bt.37560	NM_001034299	PGK1	Phosphoglycerate kinase 1
B10	Bt.22662	NM_001075742	TBP	TATA box binding protein
B11	Bt.5070	NM_001206307	UBC	Ubiquitin C
B12	Bt.88043	NM_174814	YWHAZ	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide
C01	Bt.14186	NM_173979	ACTB	Actin, beta
C02	Bt.64557	NM_173893	B2M	Beta-2-microglobulin
C03	Bt.87389	NM_001034034	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
C04	Bt.62758	NM_001083436	GUSB	Glucuronidase, beta
C05	Bt.58921	XM_002694063	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
C06	Bt.21218	NM_001046207	HMBS	Hydroxymethylbilane synthase
C07	Bt.49238	NM_001034035	HPRT1	Hypoxanthine phosphoribosyltransferase 1
C08	Bt.64721	NM_001079637	HSP90AB1	Heat shock 90kDa protein 1, beta
C09	Bt.37560	NM_001034299	PGK1	Phosphoglycerate kinase 1
C10	Bt.22662	NM_001075742	TBP	TATA box binding protein
C11	Bt.5070	NM_001206307	UBC	Ubiquitin C
C12	Bt.88043	NM_174814	YWHAZ	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide
D01	Bt.14186	NM_173979	ACTB	Actin, beta
D02	Bt.64557	NM_173893	B2M	Beta-2-microglobulin
D03	Bt.87389	NM_001034034	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
D04	Bt.62758	NM_001083436	GUSB	Glucuronidase, beta
D05	Bt.58921	XM_002694063	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
D06	Bt.21218	NM_001046207	HMBS	Hydroxymethylbilane synthase
D07	Bt.49238	NM_001034035	HPRT1	Hypoxanthine phosphoribosyltransferase 1
D08	Bt.64721	NM_001079637	HSP90AB1	Heat shock 90kDa protein 1, beta
D09	Bt.37560	NM_001034299	PGK1	Phosphoglycerate kinase 1
D10	Bt.22662	NM_001075742	TBP	TATA box binding protein
D11	Bt.5070	NM_001206307	UBC	Ubiquitin C
D12	Bt.88043	NM_174814	YWHAZ	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide
E01	Bt.14186	NM_173979	ACTB	Actin, beta
E02	Bt.64557	NM_173893	B2M	Beta-2-microglobulin
E03	Bt.87389	NM_001034034	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
E04	Bt.62758	NM_001083436	GUSB	Glucuronidase, beta
E05	Bt.58921	XM_002694063	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)

Position	UniGene	GenBank	Symbol	Description
E06	Bt.21218	NM_001046207	HMBS	Hydroxymethylbilane synthase
E07	Bt.49238	NM_001034035	HPRT1	Hypoxanthine phosphoribosyltransferase 1
E08	Bt.64721	NM_001079637	HSP90AB1	Heat shock 90kDa protein 1, beta
E09	Bt.37560	NM_001034299	PGK1	Phosphoglycerate kinase 1
E10	Bt.22662	NM_001075742	TBP	TATA box binding protein
E11	Bt.5070	NM_001206307	UBC	Ubiquitin C
E12	Bt.88043	NM_174814	YWHAZ	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide
F01	Bt.14186	NM_173979	ACTB	Actin, beta
F02	Bt.64557	NM_173893	B2M	Beta-2-microglobulin
F03	Bt.87389	NM_001034034	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
F04	Bt.62758	NM_001083436	GUSB	Glucuronidase, beta
F05	Bt.58921	XM_002694063	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
F06	Bt.21218	NM_001046207	HMBS	Hydroxymethylbilane synthase
F07	Bt.49238	NM_001034035	HPRT1	Hypoxanthine phosphoribosyltransferase 1
F08	Bt.64721	NM_001079637	HSP90AB1	Heat shock 90kDa protein 1, beta
F09	Bt.37560	NM_001034299	PGK1	Phosphoglycerate kinase 1
F10	Bt.22662	NM_001075742	TBP	TATA box binding protein
F11	Bt.5070	NM_001206307	UBC	Ubiquitin C
F12	Bt.88043	NM_174814	YWHAZ	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide
G01	Bt.14186	NM_173979	ACTB	Actin, beta
G02	Bt.64557	NM_173893	B2M	Beta-2-microglobulin
G03	Bt.87389	NM_001034034	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
G04	Bt.62758	NM_001083436	GUSB	Glucuronidase, beta
G05	Bt.58921	XM_002694063	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
G06	Bt.21218	NM_001046207	HMBS	Hydroxymethylbilane synthase
G07	Bt.49238	NM_001034035	HPRT1	Hypoxanthine phosphoribosyltransferase 1
G08	Bt.64721	NM_001079637	HSP90AB1	Heat shock 90kDa protein 1, beta
G09	Bt.37560	NM_001034299	PGK1	Phosphoglycerate kinase 1
G10	Bt.22662	NM_001075742	TBP	TATA box binding protein
G11	Bt.5070	NM_001206307	UBC	Ubiquitin C
G12	Bt.88043	NM_174814	YWHAZ	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide
H01	Bt.14186	NM_173979	ACTB	Actin, beta
H02	Bt.64557	NM_173893	B2M	Beta-2-microglobulin
H03	Bt.87389	NM_001034034	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
H04	Bt.62758	NM_001083436	GUSB	Glucuronidase, beta
H05	Bt.58921	XM_002694063	H6PD	Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
H06	Bt.21218	NM_001046207	HMBS	Hydroxymethylbilane synthase
H07	Bt.49238	NM_001034035	HPRT1	Hypoxanthine phosphoribosyltransferase 1
H08	Bt.64721	NM_001079637	HSP90AB1	Heat shock 90kDa protein 1, beta
H09	Bt.37560	NM_001034299	PGK1	Phosphoglycerate kinase 1
H10	Bt.22662	NM_001075742	TBP	TATA box binding protein
H11	Bt.5070	NM_001206307	UBC	Ubiquitin C
H12	Bt.88043	NM_174814	YWHAZ	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide

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 ROX [™] FAST Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the Rotor-Gene Q and other Rotor-Gene cyclers	330620

* 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[®], Rotor-Gene[®], Rotor-Disc[™] (QIAGEN Group); ROX[™] (Applied Biosystems or its subsidiaries); SYBR[®] (Molecular Probes, Inc.).

1067688 03/2011 © 2011 QIAGEN, all rights reserved.

www.qiagen.com

Australia ■ 1-800-243-800

Austria ■ 0800/281010

Belgium ■ 0800-79612

Brazil ■ 0800-557779

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



Sample & Assay Technologies