

# RT<sup>2</sup> Profiler PCR Array (Rotor-Gene® Format)

## Chinese Hamster Ovary (CHO) Cell EGF & PDGF Signaling

Cat. no. 330231 PAJJ-040ZR

For pathway expression analysis

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

### Description

The Chinese Hamster Ovary (CHO) Cell EGF / PDGF Signaling RT<sup>2</sup> Profiler™ PCR Array profiles the expression of 84 genes related to EGF / PDGF-mediated signal transduction. This array includes genes that encode members of the Epidermal Growth Factor (EGF) and Platelet-Derived Growth Factor (PDGF) Signaling Pathways. The array represents growth factors and their receptors, proteins involved in signaling downstream of the growth factors, and the genes targeted by growth factor-mediated stimulation. Members of the MAP Kinase pathway, the AKT / PI3K pathway, and other downstream signaling cascades are included as well. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to EGF / PDGF signaling 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 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 RT<sup>2</sup> Profiler PCR Array format for your real-time cyclers (see table above).

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

## 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.

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

Position	UniGene	GenBank	Symbol	Description
1	N/A	XM_003498102	Actr2	ARP2 actin-related protein 2 homolog (yeast)
2	N/A	XM_003498742	Akt1	V-akt murine thymoma viral oncogene homolog 1
3	N/A	XM_007618035	Akt2	Thymoma viral proto-oncogene 2
4	N/A	XM_003508130	Akt3	V-akt murine thymoma viral oncogene homolog 3
5	N/A	XM_003515929	Araf	Serine/threonine-protein kinase A-Raf-like
6	N/A	XM_003507834	Atf1	Cyclic AMP-dependent transcription factor ATF-1-like
7	N/A	XM_003498324	Atf2	Activating transcription factor 2
8	N/A	XM_003511281	Bad	BCL2-associated agonist of cell death
9	N/A	XM_007636308	Bcar1	Breast cancer anti-estrogen resistance protein 1-like
10	N/A	XM_007613164	Bcl2	B-cell CLL/lymphoma 2
11	N/A	XM_007623592	Braf	Braf transforming gene
12	N/A	NM_001244046	Casp3	Caspase 3
13	N/A	XM_007633128	Cbl	Casitas B-lineage lymphoma
14	N/A	NM_001244048	Ccnd1	Cyclin D1
15	N/A	XM_007619859	Chuk	Conserved helix-loop-helix ubiquitous kinase
16	N/A	XM_003503960	Col1a1	Collagen, type I, alpha 1
17	N/A	XM_003506920	Creb1	CAMP responsive element binding protein 1
18	N/A	XM_003511492	Csnk2a1	Casein kinase II subunit alpha-like
19	N/A	XM_003508482	Csnk2b	Casein kinase II subunit beta-like
20	N/A	XM_003500819	Dusp1	Dual specificity phosphatase 1
21	N/A	XM_003504321	Dusp6	Dual specificity protein phosphatase 6-like
22	N/A	XM_007613789	Egf	Epidermal growth factor
23	N/A	XM_007637494	Egfr	Epidermal growth factor receptor
24	N/A	XM_003502541	Egr1	Early growth response 1
25	N/A	XM_007630818	Eif4e	Uncharacterized LOC100773768
26	N/A	XM_003507942	Elk1	ELK1, member of ETS oncogene family
27	N/A	XM_003500911	Eps8	Epidermal growth factor receptor pathway substrate 8
28	N/A	XM_003499588	ErbB2	Receptor tyrosine-protein kinase erbB-2-like
29	N/A	XM_003497659	Faslg	Fas ligand (TNF superfamily, member 6)
30	N/A	XM_003509268	Fn1	Fibronectin 1
31	N/A	NM_001246683	Fos	FBJ osteosarcoma oncogene
32	N/A	XM_003496983	Foxo3	Forkhead box protein O3-like
33	N/A	XM_003506286	Gab1	GRB2-associated-binding protein 1-like
34	N/A	XM_003495657	Grb2	Growth factor receptor-bound protein 2
35	N/A	XM_007616698	Gsk3a	Glycogen synthase kinase 3 alpha
36	N/A	XM_007622006	Gsk3b	Glycogen synthase kinase 3 beta
37	N/A	XM_007631708	Hbegf	Heparin-binding epidermal growth factor-like growth factor
38	N/A	XM_003509750	Hras	GTPase HRas-like

Position	UniGene	GenBank	Symbol	Description
39	N/A	XM_003503314	Ikbkb	Inhibitor of nuclear factor kappa-B kinase subunit beta-like
40	N/A	XM_003506764	Il2	Interleukin 2
41	N/A	XM_003508136	Jak1	Janus kinase 1
42	N/A	XM_007610108	Jun	Jun proto-oncogene
43	N/A	XM_003498803	Kras	Kirsten rat sarcoma viral oncogene homolog
44	N/A	NM_001246797	LOC100689370	Caspase-9
45	N/A	XM_003515791	Nfkb1	Nuclear factor kappa B subunit 1
46	N/A	XM_003508488	Lta	Lymphotoxin alpha
47	N/A	NM_001246827	Map2k1	Mitogen-activated protein kinase kinase 1
48	N/A	XM_007613222	Map2k4	Mitogen-activated protein kinase kinase 4
49	N/A	XM_007609658	Map2k7	Dual specificity mitogen-activated protein kinase kinase 7-like
50	N/A	XM_003504201	Map3k2	Mitogen-activated protein kinase kinase kinase 2-like
51	N/A	XM_007624835	Mapk1	Mitogen-activated protein kinase 1
52	N/A	XM_003513867	Mapk10	Mitogen-activated protein kinase 10-like
53	N/A	XM_007616212	Mapk3	Mitogen-activated protein kinase 3-like
54	N/A	XM_003495315	Mapk8	Mitogen-activated protein kinase 8
55	N/A	XM_003505367	Mapk9	Mitogen-activated protein kinase 9
56	N/A	XM_003497398	Mknk1	MAP kinase-interacting serine/threonine kinase 1
57	N/A	XM_007639555	Mmp7	Matrix metalloproteinase 7 (matrilysin, uterine)
58	N/A	XM_007618235	Nck2	Cytoplasmic protein NCK2-like
59	N/A	XM_003504312	Nfatc3	Nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 3
60	N/A	XM_003505807	Nras	GTPase NRas-like
61	N/A	XM_003510883	Nup62	Nucleoporin 62
62	N/A	XM_007613704	Pdgfa	Platelet-derived growth factor subunit A-like
63	N/A	XM_003509470	Pdgfb	Platelet-derived growth factor subunit B-like
64	N/A	NM_001260516	Pdgfra	Platelet derived growth factor receptor, alpha polypeptide
65	N/A	XM_003509536	Pdpk1	3-phosphoinositide-dependent protein kinase 1-like
66	N/A	XM_003509075	Pik3ca	Phosphatidylinositol 3-kinase, catalytic, alpha polypeptide
67	N/A	XM_003499203	Pik3r1	Phosphatidylinositol 3-kinase regulatory subunit alpha-like
68	N/A	XM_007612902	Pik3r2	Phosphatidylinositol 3-kinase regulatory subunit beta-like
69	N/A	XM_003503315	Plat	Plasminogen activator, tissue
70	N/A	XM_003507684	Plcg1	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma-1-like
71	N/A	XM_007628611	Ppp2ca	Protein phosphatase 2, catalytic subunit, alpha isozyme
72	N/A	XM_003501851	Prkca	Protein kinase C, alpha
73	N/A	XM_003510310	Pten	Phosphatase and tensin homolog
74	N/A	XM_003507343	Raf1	RAF proto-oncogene serine/threonine-protein kinase-like
75	N/A	XM_003512255	Rap1a	Ras-related protein Rap-1A-like
76	N/A	XM_003505549	Rasa1	Ras GTPase-activating protein 1-like
77	N/A	XM_007634798	Rhoa	Ras homolog family member A
78	N/A	XM_003503811	Rps6kb1	Ribosomal protein S6 kinase beta-1-like

Position	UniGene	GenBank	Symbol	Description
79	N/A	XM_003501596	Shc1	Src homology 2 domain-containing transforming protein C1
80	N/A	XM_003497098	Src	Rous sarcoma oncogene
81	N/A	XM_003511621	Stat1	Signal transducer and activator of transcription 1
82	N/A	XM_003504646	Stat3	Signal transducer and activator of transcription 3
83	N/A	XM_003504645	Stat5a	Signal transducer and activator of transcription 5A
84	N/A	NM_001243976	Tp53	Tumor protein p53
85	N/A	NM_001244575	Actb	Actin, beta
86	N/A	XM_007607973	Actr5	ARP5 actin-related protein 5 homolog (yeast)
87	N/A	NM_001246674	B2m	Beta-2 microglobulin
88	N/A	NM_001244854	Gapdh	Glyceraldehyde-3-phosphate dehydrogenase
89	N/A	XM_007623161	Hprt1	Hypoxanthine-guanine phosphoribosyltransferase-like
90	N/A	SA_00519	JGDC	Hamster Genomic DNA Contamination
91	N/A	SA_00104	RTC	Reverse Transcription Control
92	N/A	SA_00104	RTC	Reverse Transcription Control
93	N/A	SA_00104	RTC	Reverse Transcription Control
94	N/A	SA_00103	PPC	Positive PCR Control
95	N/A	SA_00103	PPC	Positive PCR Control
96	N/A	SA_00103	PPC	Positive PCR Control

## 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 ROX <sup>™</sup> 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.

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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