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

Human Growth Factors

Cat. no. 330231 PAHS-041ZA

For pathway expression analysis

Format	For use with the following real-time cyclers
RT² 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
RT² Profiler PCR Array, Format C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)
RT² Profiler PCR Array, Format D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®
RT² Profiler PCR Array, Format E	Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™
RT² Profiler PCR Array, Format F	Roche® LightCycler® 480 (96-well block)
RT² Profiler PCR Array, Format G	Roche LightCycler 480 (384-well block)
RT² Profiler PCR Array, Format H	Fluidigm® BioMark™

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Description

The Human Growth Factors RT² Profiler PCR Array profiles the expression of 84 genes related to growth factors. Growth factors play a vital role in various normal biological processes such as embryogenesis, wound healing and inflammation. This array contains angiogenic growth factors and regulators of apoptosis. Genes involved in cell differentiation are included as well. Also represented are genes related to embryonic development as well as genes involved in tissue-specific development. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to the growth factors 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	AMH	BDNF	BMP1	BMP10	BMP2	BMP3	BMP4	BMP5	BMP6	BMP7	BMP8B	CECR1
B	CLC	CSF1	CSF2	CSF3	CSPG5	CXCL1	DKK1	ERAP1	EREG	FGF1	FGF11	FGF13
C	FGF14	FGF17	FGF19	FGF2	FGF22	FGF23	FGF5	FGF6	FGF7	FGF9	FIGF	GDF10
D	GDF11	GDNF	GPI	HBEGF	IGF1	IGF2	IL10	IL11	IL12B	IL18	IL1A	IL1B
E	IL2	IL3	IL4	INHA	INHBA	INHBB	JAG1	JAG2	LEFTY1	LEFTY2	LIF	LTBP4
F	MDK	MSTN	NDP	NGF	NODAL	NRG1	NRG2	NRG3	NRTN	NTF3	OSGIN1	PDGFC
G	PGF	PSPN	PTN	SLCO1A2	SPP1	TDGF1	TGFB1	THPO	TNNT1	TYMP	VEGFA	VEGFC
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Hs.112432	NM_000479	AMH	Anti-Mullerian hormone
A02	Hs.502182	NM_001709	BDNF	Brain-derived neurotrophic factor
A03	Hs.1274	NM_006129	BMP1	Bone morphogenetic protein 1
A04	Hs.158317	NM_014482	BMP10	Bone morphogenetic protein 10
A05	Hs.73853	NM_001200	BMP2	Bone morphogenetic protein 2
A06	Hs.387411	NM_001201	BMP3	Bone morphogenetic protein 3
A07	Hs.68879	NM_130851	BMP4	Bone morphogenetic protein 4
A08	Hs.296648	NM_021073	BMP5	Bone morphogenetic protein 5
A09	Hs.285671	NM_001718	BMP6	Bone morphogenetic protein 6
A10	Hs.473163	NM_001719	BMP7	Bone morphogenetic protein 7
A11	Hs.664022	NM_001720	BMP8B	Bone morphogenetic protein 8b
A12	Hs.170310	NM_177405	CECR1	Cat eye syndrome chromosome region, candidate 1
B01	Hs.889	NM_001828	CLC	Charcot-Leyden crystal protein
B02	Hs.591402	NM_000757	CSF1	Colony stimulating factor 1 (macrophage)
B03	Hs.1349	NM_000758	CSF2	Colony stimulating factor 2 (granulocyte-macrophage)
B04	Hs.2233	NM_000759	CSF3	Colony stimulating factor 3 (granulocyte)
B05	Hs.45127	NM_006574	CSPG5	Chondroitin sulfate proteoglycan 5 (neuroglycan C)
B06	Hs.789	NM_001511	CXCL1	Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)
B07	Hs.40499	NM_012242	DKK1	Dickkopf homolog 1 (Xenopus laevis)
B08	Hs.436186	NM_016442	ERAP1	Endoplasmic reticulum aminopeptidase 1
B09	Hs.115263	NM_001432	EREG	Epiregulin
B10	Hs.483635	NM_000800	FGF1	Fibroblast growth factor 1 (acidic)
B11	Hs.655193	NM_004112	FGF11	Fibroblast growth factor 11
B12	Hs.6540	NM_004114	FGF13	Fibroblast growth factor 13
C01	Hs.508616	NM_004115	FGF14	Fibroblast growth factor 14
C02	Hs.248192	NM_003867	FGF17	Fibroblast growth factor 17
C03	Hs.249200	NM_005117	FGF19	Fibroblast growth factor 19
C04	Hs.284244	NM_002006	FGF2	Fibroblast growth factor 2 (basic)
C05	Hs.248087	NM_020637	FGF22	Fibroblast growth factor 22
C06	Hs.287370	NM_020638	FGF23	Fibroblast growth factor 23
C07	Hs.37055	NM_004464	FGF5	Fibroblast growth factor 5
C08	Hs.166015	NM_020996	FGF6	Fibroblast growth factor 6
C09	Hs.567268	NM_002009	FGF7	Fibroblast growth factor 7
C10	Hs.111	NM_002010	FGF9	Fibroblast growth factor 9 (glia-activating factor)
C11	Hs.11392	NM_004469	FIGF	C-fos induced growth factor (vascular endothelial growth factor D)
C12	Hs.2171	NM_004962	GDF10	Growth differentiation factor 10
D01	Hs.643604	NM_005811	GDF11	Growth differentiation factor 11
D02	Hs.248114	NM_000514	GDNF	Glial cell derived neurotrophic factor
D03	Hs.466471	NM_000175	GPI	Glucose-6-phosphate isomerase
D04	Hs.799	NM_001945	HBEGF	Heparin-binding EGF-like growth factor
D05	Hs.160562	NM_000618	IGF1	Insulin-like growth factor 1 (somatomedin C)
D06	Hs.523414	NM_000612	IGF2	Insulin-like growth factor 2 (somatomedin A)
D07	Hs.193717	NM_000572	IL10	Interleukin 10
D08	Hs.467304	NM_000641	IL11	Interleukin 11
				Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte

Position	UniGene	GenBank	Symbol	Description
D09	Hs.674	NM_002187	IL12B	maturation factor 2, p40)
D10	Hs.83077	NM_001562	IL18	Interleukin 18 (interferon-gamma-inducing factor)
D11	Hs.1722	NM_000575	IL1A	Interleukin 1, alpha
D12	Hs.126256	NM_000576	IL1B	Interleukin 1, beta
E01	Hs.89679	NM_000586	IL2	Interleukin 2
E02	Hs.694	NM_000588	IL3	Interleukin 3 (colony-stimulating factor, multiple)
E03	Hs.73917	NM_000589	IL4	Interleukin 4
E04	Hs.407506	NM_002191	INHA	Inhibin, alpha
E05	Hs.583348	NM_002192	INHBA	Inhibin, beta A
E06	Hs.1735	NM_002193	INHBB	Inhibin, beta B
E07	Hs.728907	NM_000214	JAG1	Jagged 1
E08	Hs.433445	NM_002226	JAG2	Jagged 2
E09	Hs.656214	NM_020997	LEFTY1	Left-right determination factor 1
E10	Hs.520187	NM_003240	LEFTY2	Left-right determination factor 2
E11	Hs.2250	NM_002309	LIF	Leukemia inhibitory factor (cholinergic differentiation factor)
E12	Hs.466766	NM_003573	LTBP4	Latent transforming growth factor beta binding protein 4
F01	Hs.82045	NM_002391	MDK	Midkine (neurite growth-promoting factor 2)
F02	Hs.41565	NM_005259	MSTN	Myostatin
F03	Hs.522615	NM_000266	NDP	Norrie disease (pseudoglioma)
F04	Hs.2561	NM_002506	NGF	Nerve growth factor (beta polypeptide)
F05	Hs.370414	NM_018055	NODAL	Nodal homolog (mouse)
F06	Hs.453951	NM_013957	NRG1	Neuregulin 1
F07	Hs.408515	NM_013982	NRG2	Neuregulin 2
F08	Hs.125119	NM_001010848	NRG3	Neuregulin 3
F09	Hs.234775	NM_004558	NRTN	Neurturin
F10	Hs.99171	NM_002527	NTF3	Neurotrophin 3
F11	Hs.128055	NM_182981	OSGIN1	Oxidative stress induced growth inhibitor 1
F12	Hs.570855	NM_016205	PDGFC	Platelet derived growth factor C
G01	Hs.252820	NM_002632	PGF	Placental growth factor
G02	Hs.248159	NM_004158	PSPN	Persephin
G03	Hs.371249	NM_002825	PTN	Pleiotrophin
G04	Hs.46440	NM_021094	SLCO1A2	Solute carrier organic anion transporter family, member 1A2
G05	Hs.313	NM_000582	SPP1	Secreted phosphoprotein 1
G06	Hs.385870	NM_003212	TDGF1	Teratocarcinoma-derived growth factor 1
G07	Hs.645227	NM_000660	TGFB1	Transforming growth factor, beta 1
G08	Hs.1166	NM_000460	THPO	Thrombopoietin
G09	Hs.631558	NM_003283	TNNT1	Troponin T type 1 (skeletal, slow)
G10	Hs.592212	NM_001953	TYMP	Thymidine phosphorylase
G11	Hs.73793	NM_003376	VEGFA	Vascular endothelial growth factor A
G12	Hs.435215	NM_005429	VEGFC	Vascular endothelial growth factor C
H01	Hs.520640	NM_001101	ACTB	Actin, beta
H02	Hs.534255	NM_004048	B2M	Beta-2-microglobulin
H03	Hs.592355	NM_002046	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
H04	Hs.412707	NM_000194	HPRT1	Hypoxanthine phosphoribosyltransferase 1
H05	Hs.546285	NM_001002	RPLP0	Ribosomal protein, large, P0
H06	N/A	SA_00105	HGDC	Human Genomic DNA Contamination
H07	N/A	SA_00104	RTC	Reverse Transcription Control
H08	N/A	SA_00104	RTC	Reverse Transcription Control
H09	N/A	SA_00104	RTC	Reverse Transcription Control
H10	N/A	SA_00103	PPC	Positive PCR Control
H11	N/A	SA_00103	PPC	Positive PCR Control
H12	N/A	SA_00103	PPC	Positive PCR Control

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.
RT² First Strand Kit (12)	Enzymes and reagents for cDNA synthesis	330401
RT² 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
RT² 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
RT² 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.

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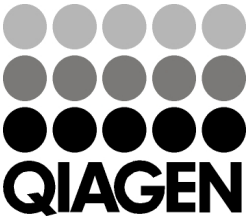

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