

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

## Human Angiogenic Growth Factors

Cat. no. 330231 PAHS-072ZR

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 Human Angiogenic Growth Factors RT<sup>2</sup> Profiler PCR Array profiles the expression of 84 growth factors and inhibitors related to angiogenesis. This array contains the growth factors, cytokines, and chemokines that promote the biogenesis of new blood vessels and the genes that encode inhibitors of this process. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to the promotion and inhibition of angiogenesis 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 cycler (see table above).

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



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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: RT<sup>2</sup> Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Hs.634849	NM_018046	AGGF1	Angiogenic factor with G patch and FHA domains 1
A02	Hs.528051	NM_133265	AMOT	Angiomotin
A03	Hs.283749	NM_001145	ANG	Angiogenin, ribonuclease, RNase A family, 5
A04	Hs.369675	NM_001146	ANGPT1	Angiopoietin 1
A05	Hs.583870	NM_001147	ANGPT2	Angiopoietin 2
A06	Hs.591474	NM_004673	ANGPTL1	Angiopoietin-like 1
A07	Hs.194654	NM_001702	BAI1	Brain-specific angiogenesis inhibitor 1
A08	Hs.73853	NM_001200	BMP2	Bone morphogenetic protein 2
A09	Hs.255935	NM_001731	BTG1	B-cell translocation gene 1, anti-proliferative
A10	Hs.272493	NM_032965	CCL15	Chemokine (C-C motif) ligand 15
A11	Hs.303649	NM_002982	CCL2	Chemokine (C-C motif) ligand 2
A12	Hs.126517	NM_000574	CD55	CD55 molecule, decay accelerating factor for complement (Cromer blood group)
B01	Hs.278573	NM_000611	CD59	CD59 molecule, complement regulatory protein
B02	Hs.150793	NM_001275	CHGA	Chromogranin A (parathyroid secretory protein 1)
B03	Hs.517356	NM_030582	COL18A1	Collagen, type XVIII, alpha 1
B04	Hs.570065	NM_000091	COL4A3	Collagen, type IV, alpha 3 (Goodpasture antigen)
B05	Hs.2233	NM_000759	CSF3	Colony stimulating factor 3 (granulocyte)
B06	Hs.632586	NM_001565	CXCL10	Chemokine (C-X-C motif) ligand 10
B07	Hs.632592	NM_005409	CXCL11	Chemokine (C-X-C motif) ligand 11
B08	Hs.522891	NM_000609	CXCL12	Chemokine (C-X-C motif) ligand 12
B09	Hs.100431	NM_006419	CXCL13	Chemokine (C-X-C motif) ligand 13
B10	Hs.483444	NM_004887	CXCL14	Chemokine (C-X-C motif) ligand 14
B11	Hs.590921	NM_002089	CXCL2	Chemokine (C-X-C motif) ligand 2
B12	Hs.89690	NM_002090	CXCL3	Chemokine (C-X-C motif) ligand 3
C01	Hs.89714	NM_002994	CXCL5	Chemokine (C-X-C motif) ligand 5
C02	Hs.164021	NM_002993	CXCL6	Chemokine (C-X-C motif) ligand 6 (granulocyte chemotactic protein 2)
C03	Hs.77367	NM_002416	CXCL9	Chemokine (C-X-C motif) ligand 9
C04	Hs.482730	NM_005711	EDIL3	EGF-like repeats and discoidin I-like domains 3
C05	Hs.115263	NM_001432	EREG	Epregrulin
C06	Hs.483635	NM_000800	FGF1	Fibroblast growth factor 1 (acidic)
C07	Hs.6540	NM_004114	FGF13	Fibroblast growth factor 13
C08	Hs.284244	NM_002006	FGF2	Fibroblast growth factor 2 (basic)
C09	Hs.1690	NM_005130	FGFBP1	Fibroblast growth factor binding protein 1
C10	Hs.11392	NM_004469	FIGF	C-fos induced growth factor (vascular endothelial growth factor D)
C11	Hs.203717	NM_002026	FN1	Fibronectin 1
C12	Hs.584654	NM_005938	FOXO4	Forkhead box O4
D01	Hs.9914	NM_006350	FST	Follistatin
D02	Hs.514220	NM_002087	GRN	Granulin
D03	Hs.153444	NM_002091	GRP	Gastrin-releasing peptide
D04	Hs.396530	NM_000601	HGF	Hepatocyte growth factor (hepapoietin A; scatter factor)
D05	Hs.37026	NM_024013	IFNA1	Interferon, alpha 1
D06	Hs.93177	NM_002176	IFNB1	Interferon, beta 1, fibroblast
D07	Hs.856	NM_000619	IFNG	Interferon, gamma
D08	Hs.193717	NM_000572	IL10	Interleukin 10
D09	Hs.673	NM_000882	IL12A	Interleukin 12A (natural killer cell stimulatory factor 1, cytotoxic lymphocyte maturation factor 1, p35)
D10	Hs.674	NM_002187	IL12B	Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40)
D11	Hs.272295	NM_052872	IL17F	Interleukin 17F
D12	Hs.654458	NM_000600	IL6	Interleukin 6 (interferon, beta 2)
E01	Hs.624	NM_000584	IL8	Interleukin 8
E02	Hs.1048	NM_003994	KITLG	KIT ligand
E03	Hs.171995	NM_001648	KLK3	Kallikrein-related peptidase 3
E04	Hs.194236	NM_000230	LEP	Leptin
E05	Hs.82045	NM_002391	MDK	Midkine (neurite growth-promoting factor 2)
E06	Hs.219140	NM_002521	NPPB	Natriuretic peptide B

Position	UniGene	GenBank	Symbol	Description
E07	Hs.490330	NM_000906	NPR1	Natriuretic peptide receptor A/guanylate cyclase A (atrionatriuretic peptide receptor A)
E08	Hs.1976	NM_002608	PDGFB	Platelet-derived growth factor beta polypeptide
E09	Hs.352298	NM_025208	PDGFD	Platelet derived growth factor D
E10	Hs.81564	NM_002619	PF4	Platelet factor 4
E11	Hs.252820	NM_002632	PGF	Placental growth factor
E12	Hs.143436	NM_000301	PLG	Plasminogen
F01	Hs.2164	NM_002704	PPBP	Pro-platelet basic protein (chemokine (C-X-C motif) ligand 7)
F02	Hs.1905	NM_000948	PRL	Prolactin
F03	Hs.514793	NM_032414	PROK1	Prokineticin 1
F04	Hs.371249	NM_002825	PTN	Pleiotrophin
F05	Hs.502876	NM_004040	RHOB	Ras homolog gene family, member B
F06	Hs.530687	NM_002939	RNH1	Ribonuclease/angiogenin inhibitor 1
F07	Hs.149261	NM_001754	RUNX1	Runt-related transcription factor 1
F08	Hs.75599	NM_000488	SERPINC1	Serpin peptidase inhibitor, clade C (antithrombin), member 1
F09	Hs.414795	NM_000602	SERPINE1	Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1
F10	Hs.532768	NM_002615	SERPINF1	Serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1
F11	Hs.331555	NM_006846	SPINK5	Serine peptidase inhibitor, Kazal type 5
F12	Hs.301989	NM_015136	STAB1	Stabilin 1
G01	Hs.170009	NM_003236	TGFA	Transforming growth factor, alpha
G02	Hs.645227	NM_000660	TGFB1	Transforming growth factor, beta 1
G03	Hs.164226	NM_003246	THBS1	Thrombospondin 1
G04	Hs.78824	NM_005424	TIE1	Tyrosine kinase with immunoglobulin-like and EGF-like domains 1
G05	Hs.522632	NM_003254	TIMP1	TIMP metalloproteinase inhibitor 1
G06	Hs.633514	NM_003255	TIMP2	TIMP metalloproteinase inhibitor 2
G07	Hs.644633	NM_000362	TIMP3	TIMP metalloproteinase inhibitor 3
G08	Hs.241570	NM_000594	TNF	Tumor necrosis factor
G09	Hs.523403	NM_003282	TNNI2	Troponin I type 2 (skeletal, fast)
G10	Hs.644596	NM_000363	TNNI3	Troponin I type 3 (cardiac)
G11	Hs.592212	NM_001953	TYMP	Thymidine phosphorylase
G12	Hs.73793	NM_003376	VEGFA	Vascular endothelial growth factor A
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, 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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