

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

Mouse Angiogenic Growth Factors

Cat. no. 330231 PAMM-072ZA

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 Mouse Angiogenic Growth Factors RT² 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 *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	Adams1	Aggf1	Amot	Angpt1	Angpt2	Angptl1	Angptl3	Angptl4	Bai1	Btg1	Cd55	Cd59b
B	Cga	Chga	Cited1	Col18a1	Col4a3	Crhr2	Csf3	Cxcl10	Cxcl2	Edil3	Egfl7	Erap1
C	ErbB2	Ereg	Fgf1	Fgf2	Fgf	Fn1	Foxf1a	Foxm1	Foxo4	Fst	Glmn	Grn
D	Hey1	Hey2	Hgf	Hpse	Ifnb1	Ifng	Il12a	Il12b	Kdr	Lep	Mdk	Myocd
E	Ntrk2	Pdgfb	Pf4	Pgf	Ptg	Prl	Prl7d1	Ptn	Ptpbj	Qk	Rasa1	Rhob
F	Rnase4	Rnh1	Runx1	Serpinc1	Serpine1	Serpil1	Shh	Smo	Stab1	Tdgf1	Tgfa	Tgfb1
G	Thbs1	Tie1	Timp1	Timp2	Timp3	Timp4	Tnf	Tnni2	Tnni3	Vegfa	Wars2	Wt1
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Mm.1421	NM_009621	Adams1	A disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 1
A02	Mm.36785	NM_025630	Aggf1	Angiogenic factor with G patch and FHA domains 1
A03	Mm.100068	NM_153319	Amot	Angiomotin
A04	Mm.309336	NM_009640	Angpt1	Angiopoietin 1
A05	Mm.439874	NM_007426	Angpt2	Angiopoietin 2
A06	Mm.389206	NM_028333	Angptl1	Angiopoietin-like 1
A07	Mm.28341	NM_013913	Angptl3	Angiopoietin-like 3
A08	Mm.196189	NM_020581	Angptl4	Angiopoietin-like 4
A09	Mm.43133	NM_174991	Bai1	Brain-specific angiogenesis inhibitor 1
A10	Mm.23811	NM_007569	Btg1	B-cell translocation gene 1, anti-proliferative
A11	Mm.101591	NM_010016	Cd55	CD55 antigen
A12	Mm.359026	NM_181858	Cd59b	CD59b antigen
B01	Mm.1361	NM_009889	Cga	Glycoprotein hormones, alpha subunit
B02	Mm.4137	NM_007693	Chga	Chromogranin A
B03	Mm.2390	NM_007709	Cited1	Cbp/p300-interacting transactivator with Glu/Asp-rich carboxy-terminal domain 1
B04	Mm.4352	NM_009929	Col18a1	Collagen, type XVIII, alpha 1
B05	Mm.389135	NM_007734	Col4a3	Collagen, type IV, alpha 3
B06	Mm.236081	NM_009953	Crhr2	Corticotropin releasing hormone receptor 2
B07	Mm.1238	NM_009971	Csf3	Colony stimulating factor 3 (granulocyte)
B08	Mm.877	NM_021274	Cxcl10	Chemokine (C-X-C motif) ligand 10
B09	Mm.4979	NM_009140	Cxcl2	Chemokine (C-X-C motif) ligand 2
B10	Mm.125580	NM_001037987	Edil3	EGF-like repeats and discoidin I-like domains 3
B11	Mm.268933	NM_178444	Egfl7	EGF-like domain 7
B12	Mm.83526	NM_030711	Erap1	Endoplasmic reticulum aminopeptidase 1
C01	Mm.290822	NM_001003817	ErbB2	V-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian)
C02	Mm.4791	NM_007950	Ereg	Epiregulin
C03	Mm.241282	NM_010197	Fgf1	Fibroblast growth factor 1
C04	Mm.473689	NM_008006	Fgf2	Fibroblast growth factor 2
C05	Mm.297978	NM_010216	Fgf	C-fos induced growth factor
C06	Mm.193099	NM_010233	Fn1	Fibronectin 1
C07	Mm.33897	NM_010426	Foxf1a	Forkhead box F1a
C08	Mm.42148	NM_008021	Foxm1	Forkhead box M1
C09	Mm.240299	NM_018789	Foxo4	Forkhead box O4
C10	Mm.4913	NM_008046	Fst	Follistatin
C11	Mm.41417	NM_133248	Glmn	Glomulin, FKBP associated protein
C12	Mm.1568	NM_008175	Grn	Granulin
D01	Mm.29581	NM_010423	Hey1	Hairy/enhancer-of-split related with YRPW motif 1
D02	Mm.103573	NM_013904	Hey2	Hairy/enhancer-of-split related with YRPW motif 2
D03	Mm.267078	NM_010427	Hgf	Hepatocyte growth factor
D04	Mm.265786	NM_152803	Hpse	Heparanase
D05	Mm.1245	NM_010510	Ifnb1	Interferon beta 1, fibroblast
D06	Mm.240327	NM_008337	Ifng	Interferon gamma

Position	UniGene	GenBank	Symbol	Description
D07	Mm.103783	NM_008351	Il12a	Interleukin 12A
D08	Mm.239707	NM_008352	Il12b	Interleukin 12B
D09	Mm.285	NM_010612	Kdr	Kinase insert domain protein receptor
D10	Mm.277072	NM_008493	Lep	Leptin
D11	Mm.906	NM_010784	Mdk	Midkine
D12	Mm.32257	NM_145136	Myocd	Myocardin
E01	Mm.130054	NM_008745	Ntrk2	Neurotrophic tyrosine kinase, receptor, type 2
E02	Mm.144089	NM_011057	Pdgfb	Platelet derived growth factor, B polypeptide
E03	Mm.332490	NM_019932	Pf4	Platelet factor 4
E04	Mm.4809	NM_008827	Pgf	Placental growth factor
E05	Mm.971	NM_008877	Plg	Plasminogen
E06	Mm.1270	NM_011164	Prl	Prolactin
E07	Mm.3258	NM_011120	Prl7d1	Prolactin family 7, subfamily d, member 1
E08	Mm.279690	NM_008973	Ptn	Pleiotrophin
E09	Mm.330393	NM_008982	Ptpri	Protein tyrosine phosphatase, receptor type, J
E10	Mm.384135	NM_021881	Qk	Quaking
E11	Mm.259653	NM_145452	Rasa1	RAS p21 protein activator 1
E12	Mm.687	NM_007483	Rhob	Ras homolog gene family, member B
F01	Mm.202665	NM_021472	Rnase4	Ribonuclease, RNase A family 4
F02	Mm.279485	NM_145135	Rnh1	Ribonuclease/angiogenin inhibitor 1
F03	Mm.4081	NM_009821	Runx1	Runt related transcription factor 1
F04	Mm.260770	NM_080844	Serpinc1	Serine (or cysteine) peptidase inhibitor, clade C (antithrombin), member 1
F05	Mm.250422	NM_008871	Serpine1	Serine (or cysteine) peptidase inhibitor, clade E, member 1
F06	Mm.2044	NM_011340	Serpinf1	Serine (or cysteine) peptidase inhibitor, clade F, member 1
F07	Mm.57202	NM_009170	Shh	Sonic hedgehog
F08	Mm.29279	NM_176996	Smo	Smoothed homolog (Drosophila)
F09	Mm.220821	NM_138672	Stab1	Stabilin 1
F10	Mm.5090	NM_011562	Tdgf1	Teratocarcinoma-derived growth factor 1
F11	Mm.137222	NM_031199	Tgfa	Transforming growth factor alpha
F12	Mm.248380	NM_011577	Tgfb1	Transforming growth factor, beta 1
G01	Mm.4159	NM_011580	Thbs1	Thrombospondin 1
G02	Mm.4345	NM_011587	Tie1	Tyrosine kinase with immunoglobulin-like and EGF-like domains 1
G03	Mm.8245	NM_011593	Timp1	Tissue inhibitor of metalloproteinase 1
G04	Mm.206505	NM_011594	Timp2	Tissue inhibitor of metalloproteinase 2
G05	Mm.4871	NM_011595	Timp3	Tissue inhibitor of metalloproteinase 3
G06	Mm.255607	NM_080639	Timp4	Tissue inhibitor of metalloproteinase 4
G07	Mm.1293	NM_013693	Tnf	Tumor necrosis factor
G08	Mm.39469	NM_009405	Tnni2	Troponin I, skeletal, fast 2
G09	Mm.27674	NM_009406	Tnni3	Troponin I, cardiac 3
G10	Mm.282184	NM_009505	Vegfa	Vascular endothelial growth factor A
G11	Mm.316754	NM_027462	Wars2	Tryptophanyl tRNA synthetase 2 (mitochondrial)
G12	Mm.389339	NM_144783	Wt1	Wilms tumor 1 homolog
H01	Mm.328431	NM_007393	Actb	Actin, beta
H02	Mm.163	NM_009735	B2m	Beta-2 microglobulin
H03	Mm.343110	NM_008084	Gapdh	Glyceraldehyde-3-phosphate dehydrogenase
H04	Mm.3317	NM_010368	Gusb	Glucuronidase, beta
H05	Mm.2180	NM_008302	Hsp90ab1	Heat shock protein 90 alpha (cytosolic), class B member 1
H06	N/A	SA_00106	MGDC	Mouse 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.
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.

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