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

Mouse Growth Factors

Cat. no. 330231 PAMM-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 Mouse 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	Artn	Bdnf	Bmp1	Bmp10	Bmp2	Bmp3	Bmp4	Bmp5	Bmp6	Bmp7	Bmp8a
B	Bmp8b	Csf1	Csf2	Csf3	Cxcl1	Cxcl12	Egf	Ereg	Fgf1	Fgf10	Fgf11	Fgf13
C	Fgf14	Fgf15	Fgf17	Fgf18	Fgf2	Fgf22	Fgf3	Fgf4	Fgf5	Fgf6	Fgf7	Fgf8
D	Fgf9	Figf	Gdf10	Gdf11	Gdf5	Gdnf	Hgf	Igf1	Igf2	Il11	Il12a	Il18
E	Il1a	Il1b	Il2	Il3	Il4	Il6	Il7	Inha	Inhba	Inhbb	Kitl	Lefty1
F	Lefty2	Lep	Lif	Mdk	Mstn	Ngf	Nodal	Ntf3	Ntf5	Pdgfa	Pgf	Rabep1
G	S100a6	Spp1	Tdgf1	Tff1	Tgfa	Tgfb1	Tgfb2	Tgfb3	Vegfa	Vegfb	Vegfc	Zfp91
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.376094	NM_007445	Amh	Anti-Mullerian hormone
A02	Mm.56897	NM_009711	Artn	Artemin
A03	Mm.1442	NM_007540	Bdnf	Brain derived neurotrophic factor
A04	Mm.27757	NM_009755	Bmp1	Bone morphogenetic protein 1
A05	Mm.483321	NM_009756	Bmp10	Bone morphogenetic protein 10
A06	Mm.103205	NM_007553	Bmp2	Bone morphogenetic protein 2
A07	Mm.209571	NM_173404	Bmp3	Bone morphogenetic protein 3
A08	Mm.6813	NM_007554	Bmp4	Bone morphogenetic protein 4
A09	Mm.428950	NM_007555	Bmp5	Bone morphogenetic protein 5
A10	Mm.385759	NM_007556	Bmp6	Bone morphogenetic protein 6
A11	Mm.595	NM_007557	Bmp7	Bone morphogenetic protein 7
A12	Mm.439749	NM_007558	Bmp8a	Bone morphogenetic protein 8a
B01	Mm.439764	NM_007559	Bmp8b	Bone morphogenetic protein 8b
B02	Mm.795	NM_007778	Csf1	Colony stimulating factor 1 (macrophage)
B03	Mm.4922	NM_009969	Csf2	Colony stimulating factor 2 (granulocyte-macrophage)
B04	Mm.1238	NM_009971	Csf3	Colony stimulating factor 3 (granulocyte)
B05	Mm.21013	NM_008176	Cxcl1	Chemokine (C-X-C motif) ligand 1
B06	Mm.303231	NM_021704	Cxcl12	Chemokine (C-X-C motif) ligand 12
B07	Mm.252481	NM_010113	Egf	Epidermal growth factor
B08	Mm.4791	NM_007950	Ereg	Epiregulin
B09	Mm.241282	NM_010197	Fgf1	Fibroblast growth factor 1
B10	Mm.317323	NM_008002	Fgf10	Fibroblast growth factor 10
B11	Mm.269011	NM_010198	Fgf11	Fibroblast growth factor 11
B12	Mm.7995	NM_010200	Fgf13	Fibroblast growth factor 13
C01	Mm.439768	NM_010201	Fgf14	Fibroblast growth factor 14
C02	Mm.3904	NM_008003	Fgf15	Fibroblast growth factor 15
C03	Mm.12814	NM_008004	Fgf17	Fibroblast growth factor 17
C04	Mm.339812	NM_008005	Fgf18	Fibroblast growth factor 18
C05	Mm.473689	NM_008006	Fgf2	Fibroblast growth factor 2
C06	Mm.154211	NM_023304	Fgf22	Fibroblast growth factor 22
C07	Mm.4947	NM_008007	Fgf3	Fibroblast growth factor 3
C08	Mm.4956	NM_010202	Fgf4	Fibroblast growth factor 4
C09	Mm.5055	NM_010203	Fgf5	Fibroblast growth factor 5
C10	Mm.3403	NM_010204	Fgf6	Fibroblast growth factor 6
C11	Mm.330557	NM_008008	Fgf7	Fibroblast growth factor 7
C12	Mm.4012	NM_010205	Fgf8	Fibroblast growth factor 8
D01	Mm.8846	NM_013518	Fgf9	Fibroblast growth factor 9
D02	Mm.297978	NM_010216	Figf	C-fos induced growth factor
D03	Mm.432071	NM_145741	Gdf10	Growth differentiation factor 10
D04	Mm.299218	NM_010272	Gdf11	Growth differentiation factor 11
D05	Mm.4744	NM_008109	Gdf5	Growth differentiation factor 5
D06	Mm.4679	NM_010275	Gdnf	Glial cell line derived neurotrophic factor
D07	Mm.267078	NM_010427	Hgf	Hepatocyte growth factor
D08	Mm.268521	NM_010512	Igf1	Insulin-like growth factor 1
D09	Mm.3862	NM_010514	Igf2	Insulin-like growth factor 2

Position	UniGene	GenBank	Symbol	Description
D10	Mm.35814	NM_008350	Il11	Interleukin 11
D11	Mm.103783	NM_008351	Il12a	Interleukin 12A
D12	Mm.1410	NM_008360	Il18	Interleukin 18
E01	Mm.15534	NM_010554	Il1a	Interleukin 1 alpha
E02	Mm.222830	NM_008361	Il1b	Interleukin 1 beta
E03	Mm.14190	NM_008366	Il2	Interleukin 2
E04	Mm.983	NM_010556	Il3	Interleukin 3
E05	Mm.276360	NM_021283	Il4	Interleukin 4
E06	Mm.1019	NM_031168	Il6	Interleukin 6
E07	Mm.3825	NM_008371	Il7	Interleukin 7
E08	Mm.1100	NM_010564	Inha	Inhibin alpha
E09	Mm.8042	NM_008380	Inhba	Inhibin beta-A
E10	Mm.3092	NM_008381	Inhbb	Inhibin beta-B
E11	Mm.45124	NM_013598	Kitl	Kit ligand
E12	Mm.378911	NM_010094	Lefty1	Left right determination factor 1
F01	Mm.87078	NM_177099	Lefty2	Left-right determination factor 2
F02	Mm.277072	NM_008493	Lep	Leptin
F03	Mm.4964	NM_008501	Lif	Leukemia inhibitory factor
F04	Mm.906	NM_010784	Mdk	Midkine
F05	Mm.3514	NM_010834	Mstn	Myostatin
F06	Mm.1259	NM_013609	Ngf	Nerve growth factor
F07	Mm.57195	NM_013611	Nodal	Nodal
F08	Mm.267570	NM_008742	Ntf3	Neurotrophin 3
F09	Mm.20344	NM_198190	Ntf5	Neurotrophin 5
F10	Mm.2675	NM_008808	Pdgfa	Platelet derived growth factor, alpha
F11	Mm.4809	NM_008827	Pgf	Placental growth factor
F12	Mm.7087	NM_019400	Rabep1	Rabaptin, RAB GTPase binding effector protein 1
G01	Mm.100144	NM_011313	S100a6	S100 calcium binding protein A6 (calcyclin)
G02	Mm.288474	NM_009263	Spp1	Secreted phosphoprotein 1
G03	Mm.5090	NM_011562	Tdgf1	Teratocarcinoma-derived growth factor 1
G04	Mm.2854	NM_009362	Tff1	Trefoil factor 1
G05	Mm.137222	NM_031199	Tgfa	Transforming growth factor alpha
G06	Mm.248380	NM_011577	Tgfb1	Transforming growth factor, beta 1
G07	Mm.18213	NM_009367	Tgfb2	Transforming growth factor, beta 2
G08	Mm.3992	NM_009368	Tgfb3	Transforming growth factor, beta 3
G09	Mm.282184	NM_009505	Vegfa	Vascular endothelial growth factor A
G10	Mm.15607	NM_011697	Vegfb	Vascular endothelial growth factor B
G11	Mm.1402	NM_009506	Vegfc	Vascular endothelial growth factor C
G12	Mm.290924	NM_053009	Zfp91	Zinc finger protein 91
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.
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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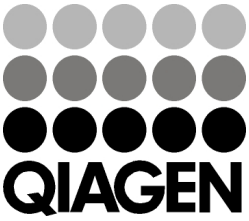

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