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

Mouse Stem Cell

Cat. no. 330231 PAMM-405ZA

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 Stem Cell RT² Profiler PCR Array profiles the expression of 84 genes related to the identification, growth and differentiation of stem cells. Stem-cell specific markers are included as well as stem cell differentiation markers. genes in signaling pathways important for stem cells maintenance are also contained on this array. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to stem cell biology 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	Abcg2	Acan	Actc1	Adar	Aldh1a1	Aldh2	Apc	Ascl2	Axin1	Bglap	Bmp1	Bmp2
B	Bmp3	Btrc	Ccna2	Ccnd1	Ccnd2	Ccne1	Cd19	Cd3d	Cd4	Cd44	Cd8a	Cd8b1
C	Cdc42	Cdh1	Cdh2	Cdk1	Col1a1	Col2a1	Col9a1	Ctnna1	Cxcl12	Dhh	Dll1	Dll3
D	Dtx1	Dtx2	Dvl1	Ep300	Fgf1	Fgf2	Fgf3	Fgf4	Fgfr1	Foxa2	Frat1	Fzd1
E	Gdf2	Gdf3	Gja1	Gjb1	Hdac1	Hdac2	Hspa9	Igf1	Isl1	Jag1	Kat2a	Krt15
F	Mme	Msx1	Myc	Myod1	Myst1	Myst2	Ncam1	Neurog2	Notch1	Notch2	Numb	Pard6a
G	Pdx1	Ppard	Pparg	Rb1	S100b	Sigmar1	Sox1	Sox2	T	Tert	Tubb3	Wnt1
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.333096	NM_011920	Abcg2	ATP-binding cassette, sub-family G (WHITE), member 2
A02	Mm.358571	NM_007424	Acan	Aggrecan
A03	Mm.686	NM_009608	Actc1	Actin, alpha, cardiac muscle 1
A04	Mm.316628	NM_019655	Adar	Adenosine deaminase, RNA-specific
A05	Mm.250866	NM_013467	Aldh1a1	Aldehyde dehydrogenase family 1, subfamily A1
A06	Mm.284446	NM_009656	Aldh2	Aldehyde dehydrogenase 2, mitochondrial
A07	Mm.384171	NM_007462	Apc	Adenomatosis polyposis coli
A08	Mm.196417	NM_008554	Ascl2	Achaete-scute complex homolog 2 (Drosophila)
A09	Mm.23684	NM_009733	Axin1	Axin 1
A10	Mm.389459	NM_007541	Bglap	Bone gamma carboxyglutamate protein
A11	Mm.27757	NM_009755	Bmp1	Bone morphogenetic protein 1
A12	Mm.103205	NM_007553	Bmp2	Bone morphogenetic protein 2
B01	Mm.209571	NM_173404	Bmp3	Bone morphogenetic protein 3
B02	Mm.119717	NM_009771	Btrc	Beta-transducin repeat containing protein
B03	Mm.4189	NM_009828	Ccna2	Cyclin A2
B04	Mm.273049	NM_007631	Ccnd1	Cyclin D1
B05	Mm.333406	NM_009829	Ccnd2	Cyclin D2
B06	Mm.16110	NM_007633	Ccne1	Cyclin E1
B07	Mm.4360	NM_009844	Cd19	CD19 antigen
B08	Mm.4527	NM_013487	Cd3d	CD3 antigen, delta polypeptide
B09	Mm.2209	NM_013488	Cd4	CD4 antigen
B10	Mm.423621	NM_009851	Cd44	CD44 antigen
B11	Mm.1858	NM_001081110	Cd8a	CD8 antigen, alpha chain
B12	Mm.333148	NM_009858	Cd8b1	CD8 antigen, beta chain 1
C01	Mm.1022	NM_009861	Cdc42	Cell division cycle 42 homolog (S. cerevisiae)
C02	Mm.35605	NM_009864	Cdh1	Cadherin 1
C03	Mm.257437	NM_007664	Cdh2	Cadherin 2
C04	Mm.281367	NM_007659	Cdk1	Cyclin-dependent kinase 1
C05	Mm.277735	NM_007742	Col1a1	Collagen, type I, alpha 1
C06	Mm.2423	NM_031163	Col2a1	Collagen, type II, alpha 1
C07	Mm.154662	NM_007740	Col9a1	Collagen, type IX, alpha 1
C08	Mm.18962	NM_009818	Ctnna1	Catenin (cadherin associated protein), alpha 1
C09	Mm.303231	NM_021704	Cxcl12	Chemokine (C-X-C motif) ligand 12
C10	Mm.324688	NM_007857	Dhh	Desert hedgehog
C11	Mm.4875	NM_007865	Dll1	Delta-like 1 (Drosophila)
C12	Mm.12896	NM_007866	Dll3	Delta-like 3 (Drosophila)
D01	Mm.1645	NM_008052	Dtx1	Deltex 1 homolog (Drosophila)
D02	Mm.275574	NM_023742	Dtx2	Deltex 2 homolog (Drosophila)
D03	Mm.3400	NM_010091	Dvl1	Dishevelled, dsh homolog 1 (Drosophila)
D04	Mm.258397	NM_177821	Ep300	E1A binding protein p300
D05	Mm.241282	NM_010197	Fgf1	Fibroblast growth factor 1
D06	Mm.473689	NM_008006	Fgf2	Fibroblast growth factor 2
D07	Mm.4947	NM_008007	Fgf3	Fibroblast growth factor 3
D08	Mm.4956	NM_010202	Fgf4	Fibroblast growth factor 4
D09	Mm.265716	NM_010206	Fgfr1	Fibroblast growth factor receptor 1

Position	UniGene	GenBank	Symbol	Description
D10	Mm.938	NM_010446	Foxa2	Forkhead box A2
D11	Mm.4573	NM_008043	Frat1	Frequently rearranged in advanced T-cell lymphomas
D12	Mm.246003	NM_021457	Fzd1	Frizzled homolog 1 (Drosophila)
E01	Mm.422844	NM_019506	Gdf2	Growth differentiation factor 2
E02	Mm.299742	NM_008108	Gdf3	Growth differentiation factor 3
E03	Mm.378921	NM_010288	Gja1	Gap junction protein, alpha 1
E04	Mm.21198	NM_008124	Gjb1	Gap junction protein, beta 1
E05	Mm.202504	NM_008228	Hdac1	Histone deacetylase 1
E06	Mm.19806	NM_008229	Hdac2	Histone deacetylase 2
E07	Mm.209419	NM_010481	Hspa9	Heat shock protein 9
E08	Mm.268521	NM_010512	Igf1	Insulin-like growth factor 1
E09	Mm.42242	NM_021459	Isl1	ISL1 transcription factor, LIM/homeodomain
E10	Mm.22398	NM_013822	Jag1	Jagged 1
E11	Mm.218837	NM_020004	Kat2a	K(lysine) acetyltransferase 2A
E12	Mm.440010	NM_008469	Krt15	Keratin 15
F01	Mm.296022	NM_008604	Mme	Membrane metallo endopeptidase
F02	Mm.256509	NM_010835	Msx1	Homeobox, msh-like 1
F03	Mm.2444	NM_010849	Myc	Myelocytomatosis oncogene
F04	Mm.1526	NM_010866	Myod1	Myogenic differentiation 1
F05	Mm.425492	NM_026370	Myst1	MYST histone acetyltransferase 1
F06	Mm.90213	NM_177619	Myst2	MYST histone acetyltransferase 2
F07	Mm.4974	NM_010875	Ncam1	Neural cell adhesion molecule 1
F08	Mm.42017	NM_009718	Neurog2	Neurogenin 2
F09	Mm.290610	NM_008714	Notch1	Notch gene homolog 1 (Drosophila)
F10	Mm.254017	NM_010928	Notch2	Notch gene homolog 2 (Drosophila)
F11	Mm.4390	NM_010949	Numb	Numb gene homolog (Drosophila)
F12	Mm.472753	NM_019695	Pard6a	Par-6 (partitioning defective 6,) homolog alpha (C. elegans)
G01	Mm.389714	NM_008814	Pdx1	Pancreatic and duodenal homeobox 1
G02	Mm.328914	NM_011145	Ppard	Peroxisome proliferator activator receptor delta
G03	Mm.3020	NM_011146	Pparg	Peroxisome proliferator activated receptor gamma
G04	Mm.273862	NM_009029	Rb1	Retinoblastoma 1
G05	Mm.235998	NM_009115	S100b	S100 protein, beta polypeptide, neural
G06	Mm.425181	NM_011014	Sigmar1	Sigma non-opioid intracellular receptor 1
G07	Mm.39088	NM_009233	Sox1	SRY-box containing gene 1
G08	Mm.65396	NM_011443	Sox2	SRY-box containing gene 2
G09	Mm.913	NM_009309	T	Brachyury
G10	Mm.10109	NM_009354	Tert	Telomerase reverse transcriptase
G11	Mm.40068	NM_023279	Tubb3	Tubulin, beta 3
G12	Mm.1123	NM_021279	Wnt1	Wingless-related MMTV integration site 1
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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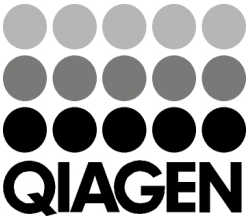

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