

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

Mouse Atherosclerosis

Cat. no. 330231 PAMM-038ZA

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™



Description

The Mouse Atherosclerosis RT² Profiler PCR Array profiles the expression of 84 genes related to atherosclerosis. Genes involved in the processes of blood coagulation and circulation are included as well as genes involved in cell-adhesion and lipid transport and metabolism. Genes involved in the stress response, cell growth and proliferation, and apoptosis are represented as well. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to the atherosclerosis 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	Abca1	Ace	Apoa1	Apob	ApoE	Bax	Bcl2	Bcl2a1a	Bcl2l1	Bid	Birc3	Ccl2
B	Ccl5	Ccr1	Ccr2	Cd44	Cdh5	Cflar	Col3a1	Csf2	Ctgf	Cxcl1	Eln	Eng
C	Fabp3	Fas	Fga	Fgb	Fgf2	Fn1	Hbegf	Icam1	Ifng	Il1a	Il1b	Il1r1
D	Il1r2	Il2	Il3	Il4	Il5	Itga2	Itga5	Itgax	Itgb2	Kdr	Klf2	Lama1
E	Ldlr	Lif	Lpl	Lypla1	Mmp1a	Mmp3	Msr1	NfkB1	Npy	Nr1h3	Pdgfa	Pdgfb
F	Pdgfrb	Plin2	Ppara	Ppard	Pparg	Pigs1	Rxra	Sele	Sell	Selp	Selpg	Serpinc2
G	Serpine1	Sod1	Spp1	Tgfb1	Tgfb2	Thbs4	Tnc	Tnf	Tnfrsf3	Vcam1	Vegfa	Vwf
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.277376	NM_013454	Abca1	ATP-binding cassette, sub-family A (ABC1), member 1
A02	Mm.754	NM_009598	Ace	Angiotensin I converting enzyme (peptidyl-dipeptidase A) 1
A03	Mm.26743	NM_009692	Apoa1	Apolipoprotein A-1
A04	Mm.221239	NM_009693	Apob	Apolipoprotein B
A05	Mm.305152	NM_009696	ApoE	Apolipoprotein E
A06	Mm.19904	NM_007527	Bax	Bcl2-associated X protein
A07	Mm.257460	NM_009741	Bcl2	B-cell leukemia/lymphoma 2
A08	Mm.425593	NM_009742	Bcl2a1a	B-cell leukemia/lymphoma 2 related protein A1a
A09	Mm.238213	NM_009743	Bcl2l1	Bcl2-like 1
A10	Mm.235081	NM_007544	Bid	BH3 interacting domain death agonist
A11	Mm.2026	NM_007464	Birc3	Baculoviral IAP repeat-containing 3
A12	Mm.290320	NM_011333	Ccl2	Chemokine (C-C motif) ligand 2
B01	Mm.284248	NM_013653	Ccl5	Chemokine (C-C motif) ligand 5
B02	Mm.274927	NM_009912	Ccr1	Chemokine (C-C motif) receptor 1
B03	Mm.6272	NM_009915	Ccr2	Chemokine (C-C motif) receptor 2
B04	Mm.423621	NM_009851	Cd44	CD44 antigen
B05	Mm.21767	NM_009868	Cdh5	Cadherin 5
B06	Mm.336848	NM_009805	Cflar	CASP8 and FADD-like apoptosis regulator
B07	Mm.249555	NM_009930	Col3a1	Collagen, type III, alpha 1
B08	Mm.4922	NM_009969	Csf2	Colony stimulating factor 2 (granulocyte-macrophage)
B09	Mm.390287	NM_010217	Ctgf	Connective tissue growth factor
B10	Mm.21013	NM_008176	Cxcl1	Chemokine (C-X-C motif) ligand 1
B11	Mm.275320	NM_007925	Eln	Elastin
B12	Mm.225297	NM_007932	Eng	Endoglin
C01	Mm.388886	NM_010174	Fabp3	Fatty acid binding protein 3, muscle and heart
C02	Mm.1626	NM_007987	Fas	Fas (TNF receptor superfamily member 6)
C03	Mm.88793	NM_010196	Fga	Fibrinogen alpha chain
C04	Mm.30063	NM_181849	Fgb	Fibrinogen beta chain
C05	Mm.473689	NM_008006	Fgf2	Fibroblast growth factor 2
C06	Mm.193099	NM_010233	Fn1	Fibronectin 1
C07	Mm.289681	NM_010415	Hbegf	Heparin-binding EGF-like growth factor
C08	Mm.435508	NM_010493	Icam1	Intercellular adhesion molecule 1
C09	Mm.240327	NM_008337	Ifng	Interferon gamma
C10	Mm.15534	NM_010554	Il1a	Interleukin 1 alpha
C11	Mm.222830	NM_008361	Il1b	Interleukin 1 beta
C12	Mm.896	NM_008362	Il1r1	Interleukin 1 receptor, type I
D01	Mm.1349	NM_010555	Il1r2	Interleukin 1 receptor, type II
D02	Mm.14190	NM_008366	Il2	Interleukin 2
D03	Mm.983	NM_010556	Il3	Interleukin 3
D04	Mm.276360	NM_021283	Il4	Interleukin 4
D05	Mm.4461	NM_010558	Il5	Interleukin 5
D06	Mm.5007	NM_008396	Itga2	Integrin alpha 2
D07	Mm.16234	NM_010577	Itga5	Integrin alpha 5 (fibronectin receptor alpha)
D08	Mm.22378	NM_021334	Itgax	Integrin alpha X
D09	Mm.1137	NM_008404	Itgb2	Integrin beta 2

Position	UniGene	GenBank	Symbol	Description
D10	Mm.285	NM_010612	Kdr	Kinase insert domain protein receptor
D11	Mm.26938	NM_008452	Klf2	Kruppel-like factor 2 (lung)
D12	Mm.303386	NM_008480	Lama1	Laminin, alpha 1
E01	Mm.3213	NM_010700	Ldlr	Low density lipoprotein receptor
E02	Mm.4964	NM_008501	Lif	Leukemia inhibitory factor
E03	Mm.1514	NM_008509	Lpl	Lipoprotein lipase
E04	Mm.299955	NM_008866	Lypla1	Lysophospholipase 1
E05	Mm.156952	NM_032006	Mmp1a	Matrix metalloproteinase 1a (interstitial collagenase)
E06	Mm.4993	NM_010809	Mmp3	Matrix metalloproteinase 3
E07	Mm.239291	NM_031195	Msr1	Macrophage scavenger receptor 1
E08	Mm.256765	NM_008689	Nfkb1	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1, p105
E09	Mm.154796	NM_023456	Npy	Neuropeptide Y
E10	Mm.22690	NM_013839	Nr1h3	Nuclear receptor subfamily 1, group H, member 3
E11	Mm.2675	NM_008808	Pdgfa	Platelet derived growth factor, alpha
E12	Mm.144089	NM_011057	Pdgfb	Platelet derived growth factor, B polypeptide
F01	Mm.4146	NM_008809	Pdgfrb	Platelet derived growth factor receptor, beta polypeptide
F02	Mm.381	NM_007408	Plin2	Perilipin 2
F03	Mm.212789	NM_011144	Ppara	Peroxisome proliferator activated receptor alpha
F04	Mm.328914	NM_011145	Ppard	Peroxisome proliferator activator receptor delta
F05	Mm.3020	NM_011146	Pparg	Peroxisome proliferator activated receptor gamma
F06	Mm.275434	NM_008969	Ptgs1	Prostaglandin-endoperoxide synthase 1
F07	Mm.24624	NM_011305	Rxra	Retinoid X receptor alpha
F08	Mm.5245	NM_011345	Sele	Selectin, endothelial cell
F09	Mm.1461	NM_011346	Sell	Selectin, lymphocyte
F10	Mm.3337	NM_011347	Selp	Selectin, platelet
F11	Mm.332590	NM_009151	Selplg	Selectin, platelet (p-selectin) ligand
F12	Mm.271870	NM_011111	Serpinb2	Serine (or cysteine) peptidase inhibitor, clade B, member 2
G01	Mm.250422	NM_008871	Serpine1	Serine (or cysteine) peptidase inhibitor, clade E, member 1
G02	Mm.276325	NM_011434	Sod1	Superoxide dismutase 1, soluble
G03	Mm.288474	NM_009263	Spp1	Secreted phosphoprotein 1
G04	Mm.248380	NM_011577	Tgfb1	Transforming growth factor, beta 1
G05	Mm.18213	NM_009367	Tgfb2	Transforming growth factor, beta 2
G06	Mm.20865	NM_011582	Thbs4	Thrombospondin 4
G07	Mm.454219	NM_011607	Tnc	Tenascin C
G08	Mm.1293	NM_013693	Tnf	Tumor necrosis factor
G09	Mm.116683	NM_009397	Tnfaip3	Tumor necrosis factor, alpha-induced protein 3
G10	Mm.76649	NM_011693	Vcam1	Vascular cell adhesion molecule 1
G11	Mm.282184	NM_009505	Vegfa	Vascular endothelial growth factor A
G12	Mm.22339	NM_011708	Vwf	Von Willebrand factor 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.

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.

Trademarks: QIAGEN® (QIAGEN Group); Applied Biosystems®, ViiA™, StepOnePlus™, ROX™ (Applied Biosystems Corporation or its subsidiaries); Bio-Rad®, iCycler®, iQ™, MyiQ™, Chromo4™, CFX96™, DNA Engine Opticon®, CFX384™ (Bio-Rad Laboratories, Inc.); Stratagene®, Mx3005P®, Mx3000P®, Mx4000® (Stratagene); Eppendorf®, Mastercycler® (Eppendorf AG); Roche®, LightCycler® (Roche Group); Fluidigm® BioMark™ (Fluidigm Corporation); SYBR® (Molecular Probes, Inc.).

1066029 03/2011 © 2011 QIAGEN, all rights reserved.

www.qiagen.com

Canada ■ 800-572-9613

Ireland ■ 1800 555 049

Norway ■ 800-18859

China ■ 8621-3865-3865

Italy ■ 800-787980

Singapore ■ 1800-742-4368

Denmark ■ 80-885945

Japan ■ 03-6890-7300

Spain ■ 91-630-7050

Australia ■ 1-800-243-800

Finland ■ 0800-914416

Korea (South) ■ 080-000-7145

Sweden ■ 020-790282

Austria ■ 0800/281010

France ■ 01-60-920-930

Luxembourg ■ 8002 2076

Switzerland ■ 055-254-22-11

Belgium ■ 0800-79612

Germany ■ 02103-29-12000

Mexico ■ 01-800-7742-436

UK ■ 01293-422-911

Brazil ■ 0800-557779

Hong Kong ■ 800 933 965

The Netherlands ■ 0800 0229592

USA ■ 800-426-8157



Sample & Assay Technologies