

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

Rat miR-17 & miR-20a Targets

Cat. no. 330231 PARN-6003ZA

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 Rat miR-17 & miR-20a Targets RT² Profiler PCR Array profiles the expression of 84 rno-miR-17-5p and rno-miR-20a-5p target genes. This panel of 84 genes includes currently known experimentally verified plus bioinformatically predicted target genes regulated by rno-miR-17-5p and rno-miR-20a-5p. This array also includes target genes regulated by other miRNAs that have the same seed sequence as mmu-miR-17-5p and rno-miR-20a-5p, including rno-miR-20b-5p, rno-miR-93-5p, and rno-miR-106b-5p. miRNA target gene expression analysis provides further insight into the function of these specific miRNAs. Using real-time PCR, research studies can easily and reliably analyze the expression of a focused panel of genes likely to be regulated by miR-17 and miR-20a 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	Aicda	Alx4	Ankrd9	App	Arhgap1	Arid4b	Bahd1	Bambi	Bcl2	Bcl2l1	Bmpr2	Bnip2
B	Cald1	Ccl1	Ccnd1	Ccnd2	Ccng2	Cdkn1a	Crim1	Crot	Dnajc27	E2f1	Elk3	Esr1
C	Fbxo31	Gpr137b	Hif1a	Hipk3	Icam1	Il10	Itgb8	Jak1	LOC298980	LOC686779	Map3k12	Map3k2
D	Map3k5	Map3k8	Mapk14	Mef2d	Mterfd2	Mylip	Ncoa3	Npat	Obfc2a	Pak7	Pbx3	Pcaf
E	Pde3b	Pkd2	Polq	Ppara	Pparg	Pten	Ptpro	Rab12	Rb1	Rbl1	Rbl2	RGD1309707
F	Rps6ka5	Runx1	Sele	Smad4	St6galnac3	Stat3	Tcf3	Tgfb2	Tnfsf12	Tnks2	Tp53inp1	Trip10
G	Tusc2	Usp3	Vegfa	Vldlr	Wee1	Xrn1	Yes1	Zbtb7a	Zfp148	Zfpm2	Zfyve26	Znfx1
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Rn.118188	NM_001100779	Aicda	Activation-induced cytidine deaminase
A02	Rn.218669	NM_001106553	Alx4	ALX homeobox 4
A03	Rn.20951	NM_001012112	Ankrd9	Ankyrin repeat domain 9
A04	Rn.2104	NM_019288	App	Amyloid beta (A4) precursor protein
A05	Rn.64898	NM_001107747	Arhgap1	Rho GTPase activating protein 1
A06	Rn.47249	NM_053421	Arid4b	AT rich interactive domain 4B (Rbp1 like)
A07	Rn.6925	XM_347035	Bahd1	Bromo adjacent homology domain containing 1
A08	Rn.25267	NM_139082	Bambi	BMP and activin membrane-bound inhibitor, homolog (Xenopus laevis)
A09	Rn.9996	NM_016993	Bcl2	B-cell CLL/lymphoma 2
A10	Rn.82709	NM_022612	Bcl2l1	BCL2-like 11 (apoptosis facilitator)
A11	Rn.59276	NM_080407	Bmpr2	Bone morphogenetic protein receptor, type II (serine/threonine kinase)
A12	Rn.11821	NM_001106835	Bnip2	BCL2/adenovirus E1B interacting protein 2
B01	Rn.204926	NM_013146	Cald1	Caldesmon 1
B02	Rn.157282	XM_001067590	Ccl1	Chemokine (C-C motif) ligand 1
B03	Rn.22279	NM_171992	Ccnd1	Cyclin D1
B04	Rn.96083	NM_022267	Ccnd2	Cyclin D2
B05	Rn.162246	NM_001105725	Ccng2	Cyclin G2
B06	Rn.10089	NM_080782	Cdkn1a	Cyclin-dependent kinase inhibitor 1A
B07	Rn.54364	NM_001169103	Crim1	Cysteine rich transmembrane BMP regulator 1 (chordin like)
B08	Rn.4896	NM_031987	Crot	Carnitine O-octanoyltransferase
B09	Rn.103503	NM_206845	Dnajc27	DnaJ (Hsp40) homolog, subfamily C, member 27
B10	Rn.72471	NM_001100778	E2f1	E2F transcription factor 1
B11	Rn.196088	NM_001108743	Elk3	ELK3, ETS-domain protein
B12	Rn.10595	NM_012689	Esr1	Estrogen receptor 1
C01	Rn.163412	XM_001077219	Fbxo31	F-box protein 31
C02	Rn.60453	NM_001105978	Gpr137b	G protein-coupled receptor 137B
C03	Rn.10852	NM_024359	Hif1a	Hypoxia-inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)
C04	Rn.8099	NM_031787	Hipk3	Homeodomain interacting protein kinase 3
C05	Rn.12	NM_012967	Icam1	Intercellular adhesion molecule 1
C06	Rn.9868	NM_012854	Il10	Interleukin 10
C07	Rn.212213	NM_001108726	Itgb8	Integrin, beta 8
C08	Rn.90191	NM_053466	Jak1	Janus kinase 1
C09	Rn.104982	XM_234081	LOC298980	Similar to Dedicator of cytokinesis protein 4
C10	N/A	XM_003749873	LOC686779	Similar to C1q domain containing 1 isoform 1
C11	Rn.146082	NM_013055	Map3k12	Mitogen activated protein kinase kinase kinase 12
C12	Rn.213212	NM_138503	Map3k2	Mitogen activated protein kinase kinase kinase 2
D01	Rn.108921	XM_218780	Map3k5	Mitogen-activated protein kinase kinase kinase 5
D02	Rn.9939	NM_053847	Map3k8	Mitogen-activated protein kinase kinase kinase 8
D03	Rn.88085	NM_031020	Mapk14	Mitogen activated protein kinase 14
D04	Rn.89018	NM_030860	Mef2d	Myocyte enhancer factor 2D
D05	Rn.41249	NM_001037209	Mterfd2	MTERF domain containing 2
D06	Rn.1844	NM_001107344	Mylip	Myosin regulatory light chain interacting protein
D07	Rn.20691	XM_215947	Ncoa3	Nuclear receptor coactivator 3
D08	Rn.18968	NM_001108147	Npat	Nuclear protein, ataxia-telangiectasia locus

Position	UniGene	GenBank	Symbol	Description
D09	Rn.21433	NM_001014216	Obfc2a	Oligonucleotide/oligosaccharide-binding fold containing 2A
D10	Rn.151869	NM_001107781	Pak7	P21 protein (Cdc42/Rac)-activated kinase 7
D11	Rn.162662	NM_001107834	Pbx3	Pre-B-cell leukemia homeobox 3
D12	Rn.4126	NM_001024252	Pcaf	P300/CBP-associated factor
E01	Rn.10322	NM_017229	Pde3b	Phosphodiesterase 3B, cGMP-inhibited
E02	Rn.198353	XM_573552	Pkd2	Polycystic kidney disease 2
E03	Rn.131176	NM_001105878	Polq	Polymerase (DNA directed), theta
E04	Rn.9753	NM_013196	Ppara	Peroxisome proliferator activated receptor alpha
E05	Rn.23443	NM_013124	Pparg	Peroxisome proliferator-activated receptor gamma
E06	Rn.22158	NM_031606	Pten	Phosphatase and tensin homolog
E07	Rn.10163	NM_017336	Ptpro	Protein tyrosine phosphatase, receptor type, O
E08	Rn.11021	NM_013017	Rab12	RAB12, member RAS oncogene family
E09	Rn.55115	NM_017045	Rb1	Retinoblastoma 1
E10	Rn.208977	XM_001055763	Rbl1	Retinoblastoma-like 1 (p107)
E11	Rn.11020	NM_031094	Rbl2	Retinoblastoma-like 2
E12	Rn.13503	NM_001109598	RGD130970 7	Similar to RIKEN cDNA 4930431E10
F01	Rn.8940	NM_001108048	Rps6ka5	Ribosomal protein S6 kinase, polypeptide 5
F02	Rn.11201	NM_017325	Runx1	Runt-related transcription factor 1
F03	Rn.10359	NM_138879	Sele	Selectin E
F04	Rn.9774	NM_019275	Smad4	SMAD family member 4
F05	Rn.88072	NM_019123	St6galnac3	ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-, 3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 3
F06	Rn.10247	NM_012747	Stat3	Signal transducer and activator of transcription 3
F07	Rn.33103	NM_001107865	Tcf3	Transcription factor 3
F08	Rn.9954	NM_031132	Tgfb2	Transforming growth factor, beta receptor II
F09	Rn.3211	NM_001001513	Tnfsf12	Tumor necrosis factor ligand superfamily member 12
F10	Rn.75288	NM_001107607	Tnks2	Tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase 2
F11	Rn.48267	NM_181084	Tp53inp1	Tumor protein p53 inducible nuclear protein 1
F12	Rn.10814	NM_053920	Trip10	Thyroid hormone receptor interactor 10
G01	Rn.120731	NM_001109297	Tusc2	Tumor suppressor candidate 2
G02	Rn.164920	NM_001025424	Usp3	Ubiquitin specific peptidase 3
G03	Rn.1923	NM_031836	Vegfa	Vascular endothelial growth factor A
G04	Rn.9975	NM_013155	Vldlr	Very low density lipoprotein receptor
G05	Rn.208255	NM_001012742	Wee1	Wee 1 homolog (S. pombe)
G06	Rn.13214	XM_217233	Xrn1	5'-3' exoribonuclease 1
G07	Rn.214217	NM_033298	Yes1	Yamaguchi sarcoma viral (v-yes) oncogene homolog 1
G08	Rn.162908	NM_054002	Zbtb7a	Zinc finger and BTB domain containing 7a
G09	Rn.64671	NM_031615	Zfp148	Zinc finger protein 148
G10	Rn.135463	NM_001130501	Zfp2	Zinc finger protein, multitype 2
G11	Rn.16048	NM_001108038	Zfyve26	Zinc finger, FYVE domain containing 26
G12	Rn.202742	NM_001047860	Znfx1	Zinc finger, NFX1-type containing 1
H01	Rn.94978	NM_031144	Actb	Actin, beta
H02	Rn.1868	NM_012512	B2m	Beta-2 microglobulin
H03	Rn.47	NM_012583	Hprt1	Hypoxanthine phosphoribosyltransferase 1
H04	Rn.107896	NM_017025	Ldha	Lactate dehydrogenase A
H05	Rn.973	NM_001007604	Rplp1	Ribosomal protein, large, P1
H06	N/A	U26919	RGDC	Rat 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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