

# RT<sup>2</sup> Profiler PCR Array (96-Well Format and 384-Well [4 x 96] Format)

## Rat miR-34a Targets

Cat. no. 330231 PARN-6006ZA

For pathway expression analysis

Format	For use with the following real-time cyclers
RT <sup>2</sup> 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 <sup>2</sup> Profiler PCR Array, Format C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)
RT <sup>2</sup> Profiler PCR Array, Format D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®
RT <sup>2</sup> Profiler PCR Array, Format E	Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™
RT <sup>2</sup> Profiler PCR Array, Format F	Roche® LightCycler® 480 (96-well block)
RT <sup>2</sup> Profiler PCR Array, Format G	Roche LightCycler 480 (384-well block)
RT <sup>2</sup> Profiler PCR Array, Format H	Fluidigm® BioMark™



Sample & Assay Technologies

## Description

The Rat miR-34a Targets RT<sup>2</sup> Profiler PCR Array profiles the expression of 84 rno-miR-34a-5p target genes. This panel of 84 genes includes currently known experimentally verified plus bioinformatically predicted target genes regulated by rno-miR-34a-5p. This array also includes target genes regulated by other miRNAs that have the same seed sequence as rno-miR-34a-5p, including rno-miR-34b-5p, rno-miR-34c-5p, rno-miR-449a-5p, and rno-miR-449c-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-34a with this array.

For further details, consult the *RT<sup>2</sup> Profiler PCR Array Handbook*.

## Shipping and storage

RT<sup>2</sup> 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. RT<sup>2</sup> Profiler PCR Arrays in format H are shipped on dry ice or blue ice packs.

For long term storage, keep plates at  $-20^{\circ}\text{C}$ .

**Note:** Ensure that you have the correct RT<sup>2</sup> Profiler PCR Array format for your real-time cycler (see table above).

**Note:** Open the package and store the products appropriately immediately on receipt.

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## Array layout (96-well)

For 384-well 4 x 96 PCR arrays, genes are present in a staggered format. Refer to the *RT<sup>2</sup> Profiler PCR Array Handbook* for layout.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Acs1	Akap6	Ankrd52	Arhgap26	Arid4b	Arpp19	Axin2	Bcl11b	Bcl2	Btbd11	Cacna1e	Ccne2
B	Cd44	Cdc25a	Cdk4	Cdk6	Col12a1	Coro1c	Ctnnd2	Ddx17	Dll1	Dmwd	Dnajb1	Dnajc24
C	E2f3	Flot2	Foxp1	Gmfb	Gpr158	Hdac1	Hnf4a	Irfn1	Ing5	Jag1	Klhdc3	Ldha
D	Lef1	Letmd1	LOC685707	Lrrc40	Map2k1	Met	Mgat5b	Mll3	Myc	Mycn	Myh9	Nav3
E	Ndofc2	Neto1	Notch1	Notch2	Nrn1	Nsun6	Pacs1	Pdgfra	Pea15a	Pgm1	Pkp4	Phoc
F	Ppp1r11	Preb	Rcan1	Sar1a	Sarb2	Sirt1	Slc25a27	Slc44a2	Snx15	Srpr	Strn3	Syn2
G	Syr1	Trim67	Trim9	Tsn	Ttc19	Ubp1	Ucn2	Vat1	Vegfa	Wnt1	Yy1	Zdhc17
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	RTC	RTC	RTC	PPC	PPC	PPC

## Gene table: RT<sup>2</sup> Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Rn.6215	NM_012820	Acs1	Acyl-CoA synthetase long-chain family member 1
A02	Rn.147642	NM_022618	Akap6	A kinase (PKA) anchor protein 6
A03	Rn.8972	NM_001191875	Ankrd52	Ankyrin repeat domain 52
A04	Rn.214162	NM_001107389	Arhgap26	Rho GTPase activating protein 26
A05	Rn.47249	NM_053421	Arid4b	AT rich interactive domain 4B (Rbp1 like)
A06	Rn.112577	NM_031660	Arpp19	CAMP-regulated phosphoprotein 19
A07	Rn.162212	NM_024355	Axin2	Axin 2
A08	Rn.162897	NM_001108057	Bcl11b	B-cell CLL/lymphoma 11B (zinc finger protein)
A09	Rn.9996	NM_016993	Bcl2	B-cell CLL/lymphoma 2
A10	Rn.99361	NM_001108078	Btbd11	BTB (POZ) domain containing 11
A11	Rn.10742	NM_019294	Cacna1e	Calcium channel, voltage-dependent, R type, alpha 1E subunit
A12	Rn.98992	NM_001108656	Ccne2	Cyclin E2
B01	Rn.1120	NM_012924	Cd44	Cd44 molecule
B02	Rn.11390	NM_133571	Cdc25a	Cell division cycle 25 homolog A (S. pombe)
B03	Rn.6115	NM_053593	Cdk4	Cyclin-dependent kinase 4
B04	Rn.162731	XM_342638	Cdk6	Cyclin-dependent kinase 6
B05	Rn.11218	XM_243912	Col12a1	Collagen, type XII, alpha 1
B06	Rn.131309	NM_001109327	Coro1c	Coronin, actin binding protein 1C
B07	Rn.15163	XM_001064375	Ctnnd2	Catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein)
B08	Rn.105298	NM_001015018	Ddx17	DEAD (Asp-Glu-Ala-Asp) box polypeptide 17
B09	Rn.10628	NM_032063	Dll1	Delta-like 1 (Drosophila)
B10	Rn.55304	XM_001056337	Dmwd	Dystrophia myotonica, WD repeat containing
B11	Rn.128947	NM_001108441	Dnajb1	DnaJ (Hsp40) homolog, subfamily B, member 1
B12	Rn.221919	XM_342483	Dnajc24	DnaJ (Hsp40) homolog, subfamily C, member 24
C01	Rn.73967	NM_001137626	E2f3	E2F transcription factor 3
C02	Rn.2105	NM_031830	Flot2	Flotillin 2
C03	Rn.33321	NM_001034131	Foxp1	Forkhead box P1
C04	Rn.10454	NM_031032	Gmfb	Glia maturation factor, beta
C05	Rn.146822	NM_001170326	Gpr158	G protein-coupled receptor 158
C06	Rn.1863	NM_001025409	Hdac1	Histone deacetylase 1
C07	Rn.44442	NM_022180	Hnf4a	Hepatocyte nuclear factor 4, alpha
C08	Rn.138105	NM_019127	Irfn1	Interferon beta 1, fibroblast
C09	Rn.214030	NM_001108810	Ing5	Inhibitor of growth family, member 5
C10	Rn.88804	NM_019147	Jag1	Jagged 1
C11	Rn.203058	NM_001012203	Klhdc3	Kelch domain containing 3
C12	Rn.107896	NM_017025	Ldha	Lactate dehydrogenase A
D01	Rn.21926	NM_130429	Lef1	Lymphoid enhancer binding factor 1
D02	Rn.102946	NM_001122781	Letmd1	LETM1 domain containing 1
D03	Rn.154566	XM_003751240	LOC685707	Similar to neuron navigator 1
D04	Rn.106141	NM_001034926	Lrrc40	Leucine rich repeat containing 40
D05	Rn.5850	NM_031643	Map2k1	Mitogen activated protein kinase kinase 1
D06	Rn.10617	NM_031517	Met	Met proto-oncogene
D07	Rn.50582	NM_001107068	Mgat5b	Mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetyl-glucosaminyltransferase, isozyme B

Position	UniGene	GenBank	Symbol	Description
D08	Rn.22828	NM_053718	Mllt3	Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 3
D09	Rn.12072	NM_012603	Myc	Myelocytomatosis oncogene
D10	Rn.81116	NM_001013096	Mycn	V-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)
D11	Rn.11385	NM_013194	Myh9	Myosin, heavy chain 9, non-muscle
D12	Rn.91711	NM_001191782	Nav3	Neuron navigator 3
E01	Rn.62471	NM_001009290	Ndufc2	NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 2
E02	Rn.132678	XM_001062552	Neto1	Neuropilin (NRP) and tolloid (TLL)-like 1
E03	Rn.25046	NM_001105721	Notch1	Notch homolog 1, translocation-associated (Drosophila)
E04	Rn.65930	NM_024358	Notch2	Notch homolog 2 (Drosophila)
E05	Rn.3546	NM_053346	Nrn1	Neuritin 1
E06	Rn.11617	NM_001107367	Nsun6	NOL1/NOP2/Sun domain family, member 6
E07	Rn.154425	NM_134406	Pacs1	Phosphofurin acidic cluster sorting protein 1
E08	Rn.55127	NM_012802	Pdgfra	Platelet derived growth factor receptor, alpha polypeptide
E09	Rn.155339	NM_001013231	Pea15a	Phosphoprotein enriched in astrocytes 15A
E10	Rn.9970	NM_017033	Pgm1	Phosphoglucomutase 1
E11	Rn.17389	NM_001106482	Pkp4	Plakophilin 4
E12	Rn.87935	NM_013007	Pnoc	Prepronociceptin
F01	Rn.63970	NM_212542	Ppp1r11	Protein phosphatase 1, regulatory (inhibitor) subunit 11
F02	Rn.41899	NM_001170708	Preb	Prolactin regulatory element binding
F03	Rn.12942	NM_153724	Rcan1	Regulator of calcineurin 1
F04	Rn.15760	NM_001007739	Sar1a	SAR1 homolog A (S. cerevisiae)
F05	Rn.219670	NM_001109306	Satb2	SATB homeobox 2
F06	Rn.219976	NM_001107627	Sirt1	Sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae)
F07	Rn.163043	NM_053500	Slc25a27	Solute carrier family 25, member 27
F08	Rn.140320	NM_001134715	Slc44a2	Solute carrier family 44, member 2
F09	Rn.104898	NM_001024752	Snx15	Sorting nexin 15
F10	Rn.18349	NM_001034150	Srpr	Signal recognition particle receptor ('docking protein')
F11	Rn.8394	NM_001029897	Strn3	Striatin, calmodulin binding protein 3
F12	Rn.506	NM_019159	Syn2	Synapsin II
G01	Rn.216272	NM_001033680	Syt1	Synaptotagmin I
G02	Rn.221884	XM_001054626	Trim67	Tripartite motif-containing 67
G03	Rn.209223	NM_130420	Trim9	Tripartite motif-containing 9
G04	Rn.156195	NM_021762	Tsn	Translin
G05	Rn.216288	NM_001109644	Ttc19	Tetratricopeptide repeat domain 19
G06	Rn.15705	NM_001191819	Ubp1	Upstream binding protein 1 (LBP-1a)
G07	Rn.212744	NM_133385	Ucn2	Urocortin 2
G08	Rn.9118	NM_001033683	Vat1	Vesicle amine transport protein 1 homolog (T californica)
G09	Rn.1923	NM_031836	Vegfa	Vascular endothelial growth factor A
G10	Rn.138108	NM_001105714	Wnt1	Wingless-type MMTV integration site family, member 1
G11	Rn.162877	NM_173290	Yy1	YY1 transcription factor
G12	Rn.214488	NM_001039340	Zdhhc17	Zinc finger, DHHC-type containing 17
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, RT<sup>2</sup> Profiler PCR Arrays should be used together with the RT<sup>2</sup> First Strand Kit for cDNA synthesis and RT<sup>2</sup> SYBR<sup>®</sup> Green qPCR Mastermixes for PCR.

Product	Contents	Cat. no.
RT <sup>2</sup> First Strand Kit (12)	Enzymes and reagents for cDNA synthesis	330401
RT <sup>2</sup> 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 <sup>2</sup> SYBR Green ROX <sup>™</sup> 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 <sup>2</sup> 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.

RT<sup>2</sup> 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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