

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

## Rat miR-146a Targets

Cat. no. 330231 PARN-6004ZA

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-146a Targets RT<sup>2</sup> Profiler PCR Array profiles the expression of 84 rno-miR-146a-5p target genes. This panel of 84 genes includes currently known experimentally verified plus bioinformatically predicted target genes regulated by rno-miR-146a-5p. This array also includes target genes regulated by other miRNAs that have the same seed sequence as rno-miR-146a-5p, including rno-miR-146b-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-146a 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
<b>A</b>	Adams3	Adarb1	Arl5b	Arl8a	Atg12	Bcl11a	Bcor1	Brcal	Brcal2	Btg2	Cask	Cd40lg
<b>B</b>	Cd80	Cdc42bpa	Cfh	Cln4-2	Cnfr	Csflr	Cugbp2	Cux1	Dctn5	Dlst	Dnpep	Dot1l
<b>C</b>	Eif4g2	Elavl1	ErbB4	Fadd	Fas	Fbxo28	Fbxw2	Flot2	Gas7	Gga2	Gosr1	Hnrpd
<b>D</b>	Igf2bp1	Irak1	Irak2	Ilgav	Klf7	Kpna6	Lin7a	LOC500726	Lrrc15	Med1	Mmp16	Myf1
<b>E</b>	Notch2	Novo1	Numb	Phox2b	Plknox1	Pm20d2	Ppp2r3a	Psmc3	RGD735029	Rgs20	Rims2	Robo1
<b>F</b>	Rpsp	Runx1l1	Sema3g	Sh3gl2	Slc10a3	Slc2a3	Slc38a1	Smad4	Sort1	Sphk2	Stat1	Stc1
<b>G</b>	Strbp	Stx3	Taf9b	Tanc2	Tdkh	Tln2	Traf6	Usp3	Usp47	Var1	Zfyve1	Znf512b
<b>H</b>	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.218557	NM_001107212	Adams3	ADAM metalloproteinase with thrombospondin type 1, motif 3
A02	Rn.89675	NM_012894	Adarb1	Adenosine deaminase, RNA-specific, B1
A03	Rn.160014	NM_001015031	Arl5b	ADP-ribosylation factor-like 5B
A04	Rn.138927	XM_001062708	Arl8a	ADP-ribosylation factor-like 8A
A05	Rn.6224	NM_001038495	Atg12	ATG12 autophagy related 12 homolog (S. cerevisiae)
A06	Rn.16729	XM_223693	Bcl11a	B-cell CLL/lymphoma 11A (zinc finger protein)
A07	Rn.88521	NM_001191587	Bcor1	BCL6 co-repressor-like 1
A08	Rn.48840	NM_012514	Brcal	Breast cancer 1
A09	Rn.103225	NM_031542	Brcal2	Breast cancer 2
A10	Rn.27923	NM_017259	Btg2	BTG family, member 2
A11	Rn.72627	NM_022184	Cask	Calcium/calmodulin-dependent serine protein kinase (MAGUK family)
A12	Rn.44218	NM_053353	Cd40lg	CD40 ligand
B01	Rn.10138	NM_012926	Cd80	Cd80 molecule
B02	Rn.10871	NM_053657	Cdc42bpa	CDC42 binding protein kinase alpha
B03	Rn.101777	NM_130409	Cfh	Complement factor H
B04	Rn.44406	NM_022198	Cln4-2	Chloride channel 4-2
B05	Rn.55036	NM_001003929	Cnfr	Ciliary neurotrophic factor receptor
B06	Rn.72599	NM_001029901	Csflr	Colony stimulating factor 1 receptor
B07	Rn.162247	NM_017197	Cugbp2	CUG triplet repeat, RNA binding protein 2
B08	Rn.10455	XM_347163	Cux1	Cut-like homeobox 1
B09	Rn.25812	NM_001037778	Dctn5	Dynactin 5
B10	Rn.99702	NM_001006981	Dlst	Dihydropyrimidinase 5-succinyltransferase (E2 component of 2-oxo-glutarate complex)
B11	Rn.65448	NM_001024879	Dnpep	Aspartyl aminopeptidase
B12	Rn.18027	NM_001108733	Dot1l	DOT1-like, histone H3 methyltransferase (S. cerevisiae)
C01	Rn.121213	NM_001017374	Eif4g2	Eukaryotic translation initiation factor 4, gamma 2
C02	Rn.216517	NM_001108848	Elavl1	ELAV (embryonic lethal, abnormal vision, Drosophila)-like 1 (Hu antigen R)
C03	Rn.163078	NM_021687	ErbB4	V-erb-a erythroblastic leukemia viral oncogene homolog 4 (avian)
C04	Rn.16183	NM_152937	Fadd	Fas (TNFRSF6)-associated via death domain
C05	Rn.162521	NM_139194	Fas	Fas (TNF receptor superfamily, member 6)
C06	Rn.12792	NM_001107203	Fbxo28	F-box protein 28
C07	Rn.103250	NM_001107835	Fbxw2	F-box and WD repeat domain containing 2
C08	Rn.2105	NM_031830	Flot2	Flotillin 2
C09	Rn.17160	NM_053484	Gas7	Growth arrest specific 7
C10	Rn.18248	NM_001100519	Gga2	Golgi associated, gamma adaptin ear containing, ARF binding protein 2
C11	Rn.8228	NM_053584	Gosr1	Golgi SNAP receptor complex member 1
C12	Rn.94022	NM_024404	Hnrpd	Heterogeneous nuclear ribonucleoprotein D
D01	Rn.77572	NM_175594	Igf2bp1	Insulin-like growth factor 2 mRNA binding protein 1
D02	Rn.22238	NM_001127555	Irak1	Interleukin-1 receptor-associated kinase 1
D03	Rn.17123	NM_001025422	Irak2	Interleukin-1 receptor-associated kinase 2
D04	Rn.23339	NM_001106549	Ilgav	Integrin, alpha V
D05	Rn.219339	NM_001108800	Klf7	Kruppel-like factor 7 (ubiquitous)
D06	Rn.139167	NM_001015029	Kpna6	Karyopherin alpha 6 (importin alpha 7)
D07	Rn.31766	NM_053514	Lin7a	Lin-7 homolog a (C. elegans)
D08	Rn.124261	XM_001072852	LOC500726	Similar to KARP-1 binding protein 1

Position	UniGene	GenBank	Symbol	Description
D09	Rn.213072	NM_145083	Lrrc15	Leucine rich repeat containing 15
D10	Rn.4262	NM_001134361	Med1	Mediator complex subunit 1
D11	Rn.208361	NM_080776	Mmp16	Matrix metalloproteinase 16
D12	Rn.102945	NM_001108615	Myt1	Myelin transcription factor 1
E01	Rn.65930	NM_024358	Notch2	Notch homolog 2 (Drosophila)
E02	Rn.206187	XM_234098	Nova1	Neuro-oncological ventral antigen 1
E03	Rn.102078	NM_133287	Numb	Numb homolog (Drosophila)
E04	Rn.106225	XM_344239	Phox2b	Paired-like homeobox 2b
E05	Rn.204913	NM_001013074	Pknox1	PBX/knotted 1 homeobox 1
E06	Rn.43474	NM_001107922	Pm20d2	Peptidase M20 domain containing 2
E07	Rn.93024	NM_001012202	Ppp2r3a	Protein phosphatase 2, regulatory subunit B', alpha
E08	Rn.101332	NM_001008281	Psmc3	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 3
E09	Rn.12899	NM_199493	RGD735029	SEL1 domain containing protein RGD735029
E10	Rn.125947	NM_001127495	Rgs20	Regulator of G-protein signaling 20
E11	Rn.161948	NM_053945	Rims2	Regulating synaptic membrane exocytosis 2
E12	Rn.44468	NM_022188	Robo1	Roundabout homolog 1 (Drosophila)
F01	Rn.144410	XM_216317	Rpesp	RPE-spondin
F02	Rn.218117	NM_001108657	Runx1f1	Runt-related transcription factor 1; translocated to, 1 (cyclin D-related)
F03	Rn.32183	NM_001100882	Sema3g	Sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3G
F04	Rn.10787	XM_342857	Sh3gl2	SH3-domain GRB2-like 2
F05	Rn.140462	NM_001024368	Slc10a3	Solute carrier family 10 (sodium/bile acid cotransporter family), member 3
F06	Rn.95055	NM_017102	Slc2a3	Solute carrier family 2 (facilitated glucose transporter), member 3
F07	Rn.162022	NM_138832	Slc38a1	Solute carrier family 38, member 1
F08	Rn.9774	NM_019275	Smad4	SMAD family member 4
F09	Rn.11286	NM_031767	Sort1	Sortilin 1
F10	Rn.41053	NM_001012066	Sphk2	Sphingosine kinase 2
F11	Rn.33229	NM_032612	Stat1	Signal transducer and activator of transcription 1
F12	Rn.10647	NM_031123	Stc1	Stanniocalcin 1
G01	Rn.214596	NM_053416	Strbp	Spermatid perinuclear RNA binding protein
G02	Rn.10951	NM_031124	Stx3	Syntaxin 3
G03	Rn.11270	NM_133615	Taf9b	TAF9B RNA polymerase II, TATA box binding protein (TBP)-associated factor
G04	Rn.34588	NM_001191653	Tanc2	Tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 2
G05	Rn.98848	NM_001014038	Tdrkh	Tudor and KH domain containing
G06	Rn.147817	XM_236367	Tln2	Talin 2
G07	Rn.220435	NM_001107754	Traf6	Tnf receptor-associated factor 6
G08	Rn.164920	NM_001025424	Usp3	Ubiquitin specific peptidase 3
G09	Rn.101536	NM_001107542	Usp47	Ubiquitin specific peptidase 47
G10	Rn.9118	NM_001033683	Vai1	Vesicle amine transport protein 1 homolog (T californica)
G11	Rn.205587	NM_001106743	Zfyve1	Zinc finger, FYVE domain containing 1
G12	Rn.160649	NM_001107809	Znf512b	Zinc finger protein 512B
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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