

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

Human miR-29 Targets

Cat. no. 330231 PAHS-6012ZA

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 Human miR-29 Targets RT² Profiler PCR Array profiles the expression of 84 hsa-miR-29a-3p target genes. This panel of 84 genes includes currently known experimentally verified plus bioinformatically predicted target genes regulated by hsa-miR-29a-3p. This array also includes target genes regulated by other miRNAs that have the same seed sequence as hsa-miR-29a-3p, including hsa-miR-29b-3p and hsa-miR-29c-3p. miRNA target gene expression analysis provides further insight into the function of these specific miRNAs. A set of controls present on each array enables data analysis using the $\Delta\Delta\text{CT}$ method of relative quantification as well as assessment of reverse transcription performance, genomic DNA contamination, and PCR performance. 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-29 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	ACVR2A	ADAM12	ADAMTS9	AK3	BACE1	BAK1	BBC3	BCL2	BCL2L11	BMF	C5orf13	CD276
B	CDC42	CDK6	COL15A1	COL1A1	COL1A2	COL21A1	COL2A1	COL3A1	COL4A1	COL4A2	COL5A2	COL5A3
C	COL7A1	CTNNBIP1	DGKD	DICER1	DNAJB11	DNMT1	DNMT3A	DNMT3B	DUSP2	ELF2	ELN	EOMES
D	FBN1	FEM1B	FGA	FGB	FGG	FOXJ2	GLUL	GRN	HDAC4	HRK	IFI30	IREB2
E	ITGA11	LAMC1	LPL	MBTD1	MCL1	MMP15	MMP24	MYCN	NAV3	NID1	PCDHA12	PIK3R1
F	PMP22	PPM1D	PPP1R13B	PTEN	PXDN	RLF	S100B	SERPINB9	SESTD1	SFPQ	SP1	SPARC
G	SPRY1	SRSF10	TBX21	TCL1A	TDG	TET1	TFAP2C	TGFB3	TNFAIP3	VEGFA	ZFP36	ZFP36L1
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Hs.470174	NM_001616	ACVR2A	Activin A receptor, type IIA
A02	Hs.594537	NM_003474	ADAM12	ADAM metalloproteinase domain 12
A03	Hs.656071	NM_182920	ADAMTS9	ADAM metalloproteinase with thrombospondin type 1 motif, 9
A04	Hs.10862	NM_001199852	AK3	Adenylate kinase 3
A05	Hs.504003	NM_138973	BACE1	Beta-site APP-cleaving enzyme 1
A06	Hs.485139	NM_001188	BAK1	BCL2-antagonist/killer 1
A07	Hs.467020	NM_014417	BBC3	BCL2 binding component 3
A08	Hs.150749	NM_000633	BCL2	B-cell CLL/lymphoma 2
A09	Hs.469658	NM_006538	BCL2L11	BCL2-like 11 (apoptosis facilitator)
A10	Hs.591104	NM_033503	BMF	Bcl2 modifying factor
A11	Hs.728773	NM_004772	C5orf13	Chromosome 5 open reading frame 13
A12	Hs.77873	NM_025240	CD276	CD276 molecule
B01	Hs.690198	NM_001791	CDC42	Cell division cycle 42 (GTP binding protein, 25kDa)
B02	Hs.119882	NM_001259	CDK6	Cyclin-dependent kinase 6
B03	Hs.409034	NM_001855	COL15A1	Collagen, type XV, alpha 1
B04	Hs.172928	NM_000088	COL1A1	Collagen, type I, alpha 1
B05	Hs.489142	NM_000089	COL1A2	Collagen, type I, alpha 2
B06	Hs.47629	NM_030820	COL21A1	Collagen, type XXI, alpha 1
B07	Hs.408182	NM_001844	COL2A1	Collagen, type II, alpha 1
B08	Hs.443625	NM_000090	COL3A1	Collagen, type III, alpha 1
B09	Hs.17441	NM_001845	COL4A1	Collagen, type IV, alpha 1
B10	Hs.508716	NM_001846	COL4A2	Collagen, type IV, alpha 2
B11	Hs.445827	NM_000393	COL5A2	Collagen, type V, alpha 2
B12	Hs.235368	NM_015719	COL5A3	Collagen, type V, alpha 3
C01	Hs.476218	NM_000094	COL7A1	Collagen, type VII, alpha 1
C02	Hs.463759	NM_020248	CTNNBIP1	Catenin, beta interacting protein 1
C03	Hs.471675	NM_003648	DGKD	Diacylglycerol kinase, delta 130kDa
C04	Hs.87889	NM_177438	DICER1	Dicer 1, ribonuclease type III
C05	Hs.317192	NM_016306	DNAJB11	DnaJ (Hsp40) homolog, subfamily B, member 11
C06	Hs.202672	NM_001379	DNMT1	DNA (cytosine-5-)-methyltransferase 1
C07	Hs.515840	NM_022552	DNMT3A	DNA (cytosine-5-)-methyltransferase 3 alpha
C08	Hs.643024	NM_006892	DNMT3B	DNA (cytosine-5-)-methyltransferase 3 beta
C09	Hs.1183	NM_004418	DUSP2	Dual specificity phosphatase 2
C10	Hs.634040	NM_006874	ELF2	E74-like factor 2 (ets domain transcription factor)
C11	Hs.647061	NM_000501	ELN	Elastin
C12	Hs.591663	NM_005442	EOMES	Eomesodermin
D01	Hs.591133	NM_000138	FBN1	Fibrillin 1
D02	Hs.362733	NM_015322	FEM1B	Fem-1 homolog b (C. elegans)
D03	Hs.351593	NM_000508	FGA	Fibrinogen alpha chain
D04	Hs.300774	NM_005141	FGB	Fibrinogen beta chain
D05	Hs.546255	NM_021870	FGG	Fibrinogen gamma chain
D06	Hs.120844	NM_018416	FOXJ2	Forkhead box J2
D07	Hs.518525	NM_002065	GLUL	Glutamate-ammonia ligase
D08	Hs.514220	NM_002087	GRN	Granulin
D09	Hs.20516	NM_006037	HDAC4	Histone deacetylase 4

Position	UniGene	GenBank	Symbol	Description
D10	Hs.87247	NM_003806	HRK	Harakiri, BCL2 interacting protein (contains only BH3 domain)
D11	Hs.14623	NM_006332	IFI30	Interferon, gamma-inducible protein 30
D12	Hs.436031	NM_004136	IREB2	Iron-responsive element binding protein 2
E01	Hs.436416	NM_001004439	ITGA11	Integrin, alpha 11
E02	Hs.609663	NM_002293	LAMC1	Laminin, gamma 1 (formerly LAMB2)
E03	Hs.180878	NM_000237	LPL	Lipoprotein lipase
E04	Hs.656803	NM_017643	MBTD1	Mbt domain containing 1
E05	Hs.632486	NM_021960	MCL1	Myeloid cell leukemia sequence 1 (BCL2-related)
E06	Hs.80343	NM_002428	MMP15	Matrix metalloproteinase 15 (membrane-inserted)
E07	Hs.567417	NM_006690	MMP24	Matrix metalloproteinase 24 (membrane-inserted)
E08	Hs.25960	NM_005378	MYCN	V-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)
E09	Hs.655301	NM_014903	NAV3	Neuron navigator 3
E10	Hs.356624	NM_002508	NID1	Nidogen 1
E11	N/A	NM_018903	PCDHA12	Protocadherin alpha 12
E12	Hs.132225	NM_181504	PIK3R1	Phosphoinositide-3-kinase, regulatory subunit 1 (alpha)
F01	Hs.372031	NM_000304	PMP22	Peripheral myelin protein 22
F02	Hs.591184	NM_003620	PPM1D	Protein phosphatase, Mg2+/Mn2+ dependent, 1D
F03	Hs.709297	NM_015316	PPP1R13B	Protein phosphatase 1, regulatory (inhibitor) subunit 13B
F04	Hs.500466	NM_000314	PTEN	Phosphatase and tensin homolog
F05	Hs.332197	NM_012293	PXDN	Peroxidasin homolog (Drosophila)
F06	Hs.205627	NM_012421	RLF	Rearranged L-myc fusion
F07	Hs.422181	NM_006272	S100B	S100 calcium binding protein B
F08	Hs.104879	NM_004155	SERPINF9	Serpin peptidase inhibitor, clade B (ovalbumin), member 9
F09	Hs.30977	NM_178123	SESTD1	SEC14 and spectrin domains 1
F10	Hs.355934	NM_005066	SFPQ	Splicing factor proline/glutamine-rich
F11	Hs.620754	NM_138473	SP1	Sp1 transcription factor
F12	Hs.111779	NM_003118	SPARC	Secreted protein, acidic, cysteine-rich (osteonectin)
G01	Hs.436944	NM_005841	SPRY1	Sprouty homolog 1, antagonist of FGF signaling (Drosophila)
G02	Hs.3530	NM_054016	SRSF10	Serine/arginine-rich splicing factor 10
G03	Hs.272409	NM_013351	TBX21	T-box 21
G04	Hs.2484	NM_021966	TCL1A	T-cell leukemia/lymphoma 1A
G05	Hs.584809	NM_003211	TDG	Thymine-DNA glycosylase
G06	Hs.567594	NM_030625	TET1	Tet oncogene 1
G07	Hs.473152	NM_003222	TFAP2C	Transcription factor AP-2 gamma (activating enhancer binding protein 2 gamma)
G08	Hs.592317	NM_003239	TGFB3	Transforming growth factor, beta 3
G09	Hs.211600	NM_006290	TNFAIP3	Tumor necrosis factor, alpha-induced protein 3
G10	Hs.73793	NM_003376	VEGFA	Vascular endothelial growth factor A
G11	Hs.534052	NM_003407	ZFP36	Zinc finger protein 36, C3H type, homolog (mouse)
G12	Hs.85155	NM_004926	ZFP36L1	Zinc finger protein 36, C3H type-like 1
H01	Hs.520640	NM_001101	ACTB	Actin, beta
H02	Hs.534255	NM_004048	B2M	Beta-2-microglobulin
H03	Hs.592355	NM_002046	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
H04	Hs.412707	NM_000194	HPRT1	Hypoxanthine phosphoribosyltransferase 1
H05	Hs.546285	NM_001002	RPLP0	Ribosomal protein, large, P0
H06	N/A	SA_00105	HGDC	Human 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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