

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

Human miR-21 Targets

Cat. no. 330231 PAHS-6001ZA

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-21 Targets RT² Profiler PCR Array profiles the expression of 84 hsa-miR-21-5p target genes. This panel of 84 genes includes currently known experimentally verified plus bioinformatically predicted target genes regulated by hsa-miR-21-5p. This array also includes target genes regulated by other miRNAs that have the same seed sequence as hsa-miR-21-5p, including hsa-miR-590-5p. 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-21 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	ACAT1	ACVR2A	ADNP	ANKRD46	APAF1	ARHGAP24	ARHGEF12	ARMCX1	ASF1A	BASP1	BCL11B	BCL2
B	BMPR2	BTG2	CDC25A	CDK2AP1	CEP68	CREBL2	DAG1	DAXX	DERL1	E2F1	E2F2	EGR3
C	EIF2S1	EIF4A2	ELF2	FASLG	HNRNPK	ICAM1	IL1B	JAG1	JMY	KLF5	KLHDC5	KRIT1
D	LANCL1	LMBR1	LRRFIP1	MARCKS	MEF2C	MSH2	MSH6	MTAP	MYC	NCAPG	NCOA3	NFIB
E	NTF3	PCBP1	PDCD4	PDHA2	PEL1	PITX2	PLAT	PLOD3	PIPF	PPP1R3A	PTEN	RASA1
F	RASGRP1	RECK	RHOB	RPS7	RTN4	SERPINB5	SOX5	SPATS2L	SPRY1	SPRY2	TGFB1	TGFBR2
G	TGFB3	TIAM1	TIAM3	TM9SF3	TNKS	TOPORS	TP53BP2	TP63	TPM1	UBE2D3	WFS1	WIBG
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.232375	NM_000019	ACAT1	Acetyl-CoA acetyltransferase 1
A02	Hs.470174	NM_001616	ACVR2A	Activin A receptor, type IIA
A03	Hs.570355	NM_181442	ADNP	Activity-dependent neuroprotector homeobox
A04	Hs.530199	NM_198401	ANKRD46	Ankyrin repeat domain 46
A05	Hs.728891	NM_001160	APAF1	Apoptotic peptidase activating factor 1
A06	Hs.444229	NM_031305	ARHGAP24	Rho GTPase activating protein 24
A07	Hs.24598	NM_015313	ARHGEF12	Rho guanine nucleotide exchange factor (GEF) 12
A08	Hs.9728	NM_016608	ARMCX1	Armadillo repeat containing, X-linked 1
A09	Hs.292316	NM_014034	ASF1A	ASF1 anti-silencing function 1 homolog A (S. cerevisiae)
A10	Hs.728962	NM_006317	BASP1	Brain abundant, membrane attached signal protein 1
A11	Hs.709690	NM_022898	BCL11B	B-cell CLL/lymphoma 11B (zinc finger protein)
A12	Hs.150749	NM_000633	BCL2	B-cell CLL/lymphoma 2
B01	Hs.471119	NM_001204	BMPR2	Bone morphogenetic protein receptor, type II (serine/threonine kinase)
B02	Hs.519162	NM_006763	BTG2	BTG family, member 2
B03	Hs.437705	NM_001789	CDC25A	Cell division cycle 25 homolog A (S. pombe)
B04	Hs.433201	NM_004642	CDK2AP1	Cyclin-dependent kinase 2 associated protein 1
B05	Hs.705398	NM_015147	CEP68	Centrosomal protein 68kDa
B06	Hs.591156	NM_001310	CREBL2	CAMP responsive element binding protein-like 2
B07	Hs.707131	NM_004393	DAG1	Dystroglycan 1 (dystrophin-associated glycoprotein 1)
B08	Hs.336916	NM_001350	DAXX	Death-domain associated protein
B09	Hs.241576	NM_024295	DERL1	Der1-like domain family, member 1
B10	Hs.654393	NM_005225	E2F1	E2F transcription factor 1
B11	Hs.194333	NM_004091	E2F2	E2F transcription factor 2
B12	Hs.534313	NM_004430	EGR3	Early growth response 3
C01	Hs.151777	NM_004094	EIF2S1	Eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa
C02	Hs.599481	NM_001967	EIF4A2	Eukaryotic translation initiation factor 4A2
C03	Hs.634040	NM_006874	ELF2	E74-like factor 2 (ets domain transcription factor)
C04	Hs.2007	NM_000639	FASLG	Fas ligand (TNF superfamily, member 6)
C05	Hs.522257	NM_002140	HNRNPK	Heterogeneous nuclear ribonucleoprotein K
C06	Hs.643447	NM_000201	ICAM1	Intercellular adhesion molecule 1
C07	Hs.126256	NM_000576	IL1B	Interleukin 1, beta
C08	Hs.728907	NM_000214	JAG1	Jagged 1
C09	Hs.482605	NM_152405	JMY	Junction mediating and regulatory protein, p53 cofactor
C10	Hs.508234	NM_001730	KLF5	Kruppel-like factor 5 (intestinal)
C11	Hs.505104	NM_020782	KLHDC5	Kelch domain containing 5
C12	Hs.531987	NM_194454	KRIT1	KRIT1, ankyrin repeat containing
D01	Hs.13351	NM_006055	LANCL1	LanC lantibiotic synthetase component C-like 1 (bacterial)
D02	Hs.209989	NM_022458	LMBR1	Limb region 1 homolog (mouse)
D03	Hs.471779	NM_004735	LRRFIP1	Leucine rich repeat (in FHL) interacting protein 1
D04	Hs.519909	NM_002356	MARCKS	Myristoylated alanine-rich protein kinase C substrate
D05	Hs.653394	NM_002397	MEF2C	Myocyte enhancer factor 2C
D06	Hs.597656	NM_000251	MSH2	MutS homolog 2, colon cancer, nonpolyposis type 1 (E. coli)
D07	Hs.445052	NM_000179	MSH6	MutS homolog 6 (E. coli)
D08	Hs.193268	NM_002451	MTAP	Methylthioadenosine phosphorylase
D09	Hs.202453	NM_002467	MYC	V-myc myelocytomatosis viral oncogene homolog (avian)

Position	UniGene	GenBank	Symbol	Description
D10	Hs.567567	NM_022346	NCAPG	Non-SMC condensin I complex, subunit G
D11	Hs.592142	NM_181659	NCOA3	Nuclear receptor coactivator 3
D12	Hs.644095	NM_005596	NFIB	Nuclear factor I/B
E01	Hs.99171	NM_002527	NTF3	Neurotrophin 3
E02	Hs.2853	NM_006196	PCBP1	Poly(rC) binding protein 1
E03	Hs.711490	NM_014456	PDCD4	Programmed cell death 4 (neoplastic transformation inhibitor)
E04	Hs.131361	NM_005390	PDHA2	Pyruvate dehydrogenase (lipoamide) alpha 2
E05	Hs.7886	NM_020651	PELI1	Pellino homolog 1 (Drosophila)
E06	Hs.643588	NM_000325	PITX2	Paired-like homeodomain 2
E07	Hs.491582	NM_000930	PLAT	Plasminogen activator, tissue
E08	Hs.153357	NM_001084	PLOD3	Procollagen-lysine, 2-oxoglutarate 5-dioxygenase 3
E09	Hs.381072	NM_005729	PPIF	Peptidylprolyl isomerase F
E10	Hs.458309	NM_002711	PPP1R3A	Protein phosphatase 1, regulatory (inhibitor) subunit 3A
E11	Hs.500466	NM_000314	PTEN	Phosphatase and tensin homolog
E12	Hs.664080	NM_002890	RASA1	RAS p21 protein activator (GTPase activating protein) 1
F01	Hs.591127	NM_005739	RASGRP1	RAS guanyl releasing protein 1 (calcium and DAG-regulated)
F02	Hs.728961	NM_021111	RECK	Reversion-inducing-cysteine-rich protein with kazal motifs
F03	Hs.502876	NM_004040	RHOB	Ras homolog gene family, member B
F04	Hs.546287	NM_001011	RPS7	Ribosomal protein S7
F05	Hs.704007	NM_007008	RTN4	Reticulon 4
F06	Hs.55279	NM_002639	SERPINB5	Serpin peptidase inhibitor, clade B (ovalbumin), member 5
F07	Hs.657542	NM_006940	SOX5	SRY (sex determining region Y)-box 5
F08	Hs.120323	NM_015535	SPATS2L	Spermatogenesis associated, serine-rich 2-like
F09	Hs.436944	NM_005841	SPRY1	Sprouty homolog 1, antagonist of FGF signaling (Drosophila)
F10	Hs.18676	NM_005842	SPRY2	Sprouty homolog 2 (Drosophila)
F11	Hs.369397	NM_000358	TGFB1	Transforming growth factor, beta-induced, 68kDa
F12	Hs.604277	NM_003242	TGFBR2	Transforming growth factor, beta receptor II (70/80kDa)
G01	Hs.482390	NM_003243	TGFBR3	Transforming growth factor, beta receptor III
G02	Hs.517228	NM_003253	TIAM1	T-cell lymphoma invasion and metastasis 1
G03	Hs.644633	NM_000362	TIMP3	TIMP metalloproteinase inhibitor 3
G04	Hs.500674	NM_020123	TM9SF3	Transmembrane 9 superfamily member 3
G05	Hs.370267	NM_003747	TNKS	Tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase
G06	Hs.589962	NM_005802	TOPORS	Topoisomerase I binding, arginine/serine-rich, E3 ubiquitin protein ligase
G07	Hs.523968	NM_005426	TP53BP2	Tumor protein p53 binding protein, 2
G08	Hs.137569	NM_003722	TP63	Tumor protein p63
G09	Hs.133892	NM_000366	TPM1	Tropomyosin 1 (alpha)
G10	Hs.518773	NM_181893	UBE2D3	Ubiquitin-conjugating enzyme E2D 3
G11	Hs.518602	NM_006005	WFS1	Wolfram syndrome 1 (wolframin)
G12	Hs.505687	NM_032345	WIBG	Within bgcn homolog (Drosophila)
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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