

RT² Profiler PCR Array (Rotor-Gene® Format)

Rat miR-181 Targets

Cat. no. 330231 PARN-6011ZR

For pathway expression analysis

Format	For use with the following real-time cyclers
RT ² Profiler PCR Array, Format R	Rotor-Gene Q, other Rotor-Gene cyclers

Description

The Rat miR-181 Targets RT² Profiler PCR Array profiles the expression of 84 rno-miR-181a-5p target genes. This panel of 84 genes includes currently known experimentally verified plus bioinformatically predicted target genes regulated by rno-miR-181a-5p. This array also includes target genes regulated by other miRNAs that have the same seed sequence as rno-miR-181a-5p, including rno-miR-181b-5p, rno-miR-181c-5p, and rno-miR-181d. 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 $\Delta\Delta C_T$ 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-181 with this array.

For further details, consult the *RT² Profiler PCR Array Handbook*.

Shipping and storage

RT² Profiler PCR Arrays in the Rotor-Gene format are shipped at ambient temperature, on dry ice, or blue ice packs depending on destination and accompanying products.

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.



Sample & Assay Technologies

Array layout

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc™ (plate A1–A12=Rotor-Disc 1–12, plate B1–B12=Rotor-Disc 13–24, etc.). To maintain data analysis compatibility, wells 97–100 do not contain real-time assays but will contain master mix to account for weight balance.

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Rn.161783	NM_031571	Acvr2a	Activin A receptor, type IIA
A02	Rn.89675	NM_012894	Adarb1	Adenosine deaminase, RNA-specific, B1
A03	Rn.214145	NM_001107239	Adcy1	Adenylate cyclase 1 (brain)
A04	Rn.118188	NM_001100779	Aicda	Activation-induced cytidine deaminase
A05	Rn.98385	NM_001014250	Atg5	ATG5 autophagy related 5 homolog (S. cerevisiae)
A06	Rn.214048	NM_001106821	Atm	Ataxia telangiectasia mutated homolog (human)
A07	Rn.9996	NM_016993	Bcl2	B-cell CLL/lymphoma 2
A08	Rn.82709	NM_022612	Bcl2l1	BCL2-like 11 (apoptosis facilitator)
A09	Rn.11266	NM_012513	Bdnf	Brain-derived neurotrophic factor
A10	Rn.59276	NM_080407	Bmpr2	Bone morphogenetic protein receptor, type II (serine/threonine kinase)
A11	Rn.10562	NM_012922	Casp3	Caspase 3
A12	Rn.21799	NM_133601	Cblb	Cas-Br-M (murine) ecotropic retroviral transforming sequence b
B01	Rn.12512	NM_199117	Cbx7	Chromobox homolog 7
B02	Rn.23779	NM_134327	Cd69	Cd69 molecule
B03	Rn.29897	NM_031762	Cdkn1b	Cyclin-dependent kinase inhibitor 1B
B04	Rn.64495	NM_023963	Cdx2	Caudal type homeo box 2
B05	Rn.11556	NM_153297	Cops2	COP9 constitutive photomorphogenic homolog subunit 2 (Arabidopsis)
B06	Rn.199055	XM_214630	Cpne2	Copine II
B07	Rn.24787	NM_053415	Cxcr3	Chemokine (C-X-C motif) receptor 3
B08	Rn.128760	NM_001017380	Cyld	Cylindromatosis (turban tumor syndrome)
B09	Rn.9775	NM_080906	Ddit4	DNA-damage-inducible transcript 4
B10	Rn.214038	NM_175596	Disc1	Disrupted in schizophrenia 1
B11	Rn.10877	NM_133578	Dusp5	Dual specificity phosphatase 5
B12	Rn.4313	NM_053883	Dusp6	Dual specificity phosphatase 6
C01	Rn.143972	NM_001008335	Eif4a2	Eukaryotic translation initiation factor 4A, isoform 2
C02	Rn.108727	NM_001106126	Enkur	Enkurin, TRPC channel interacting protein
C03	Rn.147424	NM_001037353	Etv6	Ets variant 6
C04	Rn.36356	NM_001100568	Fbxl3	F-box and leucine-rich repeat protein 3
C05	Rn.80611	NM_013102	Fkbp1a	FK506 binding protein 1a
C06	Rn.103750	NM_022197	Fos	FBJ osteosarcoma oncogene
C07	Rn.28463	NM_183326	Gabra1	Gamma-aminobutyric acid (GABA) A receptor, alpha 1
C08	Rn.8701	NM_019185	Gata6	GATA binding protein 6
C09	Rn.5762	NM_012569	Gls	Glutaminase
C10	Rn.29971	NM_031608	Gria1	Glutamate receptor, ionotropic, AMPA 1
C11	Rn.91361	NM_017261	Gria2	Glutamate receptor, ionotropic, AMPA 2
C12	Rn.10449	NM_017241	Grik1	Glutamate receptor, ionotropic, kainate 1
D01	Rn.8042	NM_001108622	Hipk2	Homeodomain interacting protein kinase 2
D02	Rn.91375	NM_012735	Hk2	Hexokinase 2
D03	Rn.2874	NM_017187	Hmgb2	High mobility group box 2
D04	Rn.10957	NM_052807	Igf1r	Insulin-like growth factor 1 receptor
D05	Rn.12300	NM_017019	Il1a	Interleukin 1 alpha
D06	Rn.86207	NM_001037197	Kank1	KN motif and ankyrin repeat domains 1
D07	Rn.207159	NM_012971	Kcna4	Potassium voltage-gated channel, shaker-related subfamily, member 4
D08	Rn.11786	XM_214331	Klhl2	Kelch-like 2, Mayven (Drosophila)
D09	Rn.24554	NM_031515	Kras	V-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog
D10	Rn.161786	XM_001057334	Lmbrd2	LMBR1 domain containing 2
D11	Rn.2120	NM_001108555	Lrba	LPS-responsive vesicle trafficking, beach and anchor containing
D12	Rn.98152	NM_019217	Map1b	Microtubule-associated protein 1b
E01	Rn.130504	XM_218368	Map3k10	Mitogen activated protein kinase kinase kinase 10
E02	Rn.102063	NM_001108673	Med8	Mediator complex subunit 8
E03	Rn.9836	NM_012861	Mgmt	O-6-methylguanine-DNA methyltransferase
E04	Rn.162225	NM_001039207	Narf	Nuclear prelamin A recognition factor
E05	Rn.113514	NM_001191924	Nlk	Nemo like kinase
E06	Rn.162255	NM_207590	Nmt2	N-myristoyltransferase 2
E07	Rn.12967	NM_001002827	Notch4	Notch homolog 4 (Drosophila)
E08	Rn.12214	NM_080395	Npepps	Aminopeptidase puromycin sensitive
E09	Rn.22342	XM_226388	Otud4	OTU domain containing 4

Position	UniGene	GenBank	Symbol	Description
E10	Rn.4126	NM_001024252	Pcaf	P300/CBP-associated factor
E11	Rn.39161	NM_001008316	Plag1	Pleiomorphic adenoma gene 1
E12	Rn.6064	NM_013085	Plau	Plasminogen activator, urokinase
F01	Rn.204118	NM_001106880	Plcl2	Phospholipase C-like 2
F02	Rn.98279	NM_133307	Prkcd	Protein kinase C, delta
F03	Rn.26557	NM_001107201	Prox1	Prospero homeobox 1
F04	Rn.98209	NM_013088	Ptpn11	Protein tyrosine phosphatase, non-receptor type 11
F05	Rn.22891	NM_001106460	Ptpn22	Protein tyrosine phosphatase, non-receptor type 22 (lymphoid)
F06	Rn.100380	NM_031093	Rala	V-ral simian leukemia viral oncogene homolog A (ras related)
F07	Rn.3600	NM_031816	Rbbp7	Retinoblastoma binding protein 7
F08	Rn.12969	NM_001134421	RGD130870 6	Similar to RIKEN cDNA 4921524J17
F09	Rn.198902	XR_085974	RGD130931 0	Similar to mKIAA0195 protein
F10	Rn.50631	XM_233485	Rlf	Rearranged L-myc fusion
F11	Rn.19719	NM_001025667	Rnf2	Ring finger protein 2
F12	Rn.219976	NM_001107627	Sirt1	Sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae)
G01	Rn.3205	NM_138827	Slc2a1	Solute carrier family 2 (facilitated glucose transporter), member 1
G02	Rn.33229	NM_032612	Stat1	Signal transducer and activator of transcription 1
G03	Rn.34588	NM_001191653	Tanc2	Tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 2
G04	Rn.25148	NM_001127201	Tbp1l	TATA box binding protein-like 1
G05	Rn.18770	NM_001107390	Tcerg1	Transcription elongation regulator 1
G06	Rn.218634	NM_001109601	Tcl1a	T-cell leukemia/lymphoma 1A
G07	Rn.63731	XM_237056	Tmem131	Transmembrane protein 131
G08	Rn.105934	NM_012686	Vsnl1	Visinin-like 1
G09	Rn.48752	NM_133423	Ythdc1	YTH domain containing 1
G10	Rn.14669	NM_144757	Zfp180	Zinc finger protein 180
G11	Rn.6142	NM_017172	Zfp361l	Zinc finger protein 36, C3H type-like 1
G12	Rn.22055	NM_001036626	Zfp3612	Zinc finger protein 36, C3H type-like 2
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 ROX [™] FAST Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the Rotor-Gene Q and other Rotor-Gene cyclers	330620

* 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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN[®], Rotor-Gene[®], Rotor-Disc[™] (QIAGEN Group); ROX[™] (Applied Biosystems or its subsidiaries); SYBR[®] (Molecular Probes, Inc.).

1067688 03/2011 © 2011 QIAGEN, all rights reserved.

www.qiagen.com

Australia ■ 1-800-243-800

Austria ■ 0800/281010

Belgium ■ 0800-79612

Brazil ■ 0800-557779

Canada ■ 800-572-9613

China ■ 8621-3865-3865

Denmark ■ 80-885945

Finland ■ 0800-914416

France ■ 01-60-920-930

Germany ■ 02103-29-12000

Hong Kong ■ 800 933 965

Ireland ■ 1800 555 049

Italy ■ 800-787980

Japan ■ 03-6890-7300

Korea (South) ■ 080-000-7145

Luxembourg ■ 8002 2076

Mexico ■ 01-800-7742-436

The Netherlands ■ 0800 0229592

Norway ■ 800-18859

Singapore ■ 1800-742-4368

Spain ■ 91-630-7050

Sweden ■ 020-790282

Switzerland ■ 055-254-22-11

UK ■ 01293-422-911

USA ■ 800-426-8157



Sample & Assay Technologies