

# RT<sup>2</sup> Profiler PCR Array (Rotor-Gene® Format)

## Rat miR-221 & miR-222 Targets

Cat. no. 330231 PARN-6007ZR

For pathway expression analysis

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

### Description

The Rat miR-221 & miR-222 Targets RT<sup>2</sup> Profiler PCR Array profiles the expression of 84 rno-miR-221-3p and rno-miR-222-3p target genes. This panel of 84 genes includes currently known experimentally verified plus bioinformatically predicted target genes regulated by rno-miR-221-3p and rno-miR-222-3p. 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-221 and miR-222 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 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 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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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: RT<sup>2</sup> Profiler PCR Array

| Position | UniGene   | GenBank      | Symbol    | Description                                                                                            |
|----------|-----------|--------------|-----------|--------------------------------------------------------------------------------------------------------|
| A01      | Rn.3734   | NM_001135596 | Agfg1     | ArfGAP with FG repeats 1                                                                               |
| A02      | Rn.162660 | NM_133569    | Angptl2   | Angiopoietin-like 2                                                                                    |
| A03      | Rn.11853  | NM_001204053 | Ankhd1    | Ankyrin repeat and KH domain containing 1                                                              |
| A04      | Rn.2999   | NM_001134781 | Ankib1    | Ankyrin repeat and IBR domain containing 1                                                             |
| A05      | Rn.30154  | XM_341466    | Ankrd10   | Ankyrin repeat domain 10                                                                               |
| A06      | Rn.35935  | NM_024151    | Arf4      | ADP-ribosylation factor 4                                                                              |
| A07      | Rn.3366   | NM_198737    | Arl6ip1   | ADP-ribosylation factor-like 6 interacting protein 1                                                   |
| A08      | Rn.25176  | NM_173837    | Bbc3      | Bcl-2 binding component 3                                                                              |
| A09      | Rn.82709  | NM_022612    | Bcl2l1    | BCL2-like 11 (apoptosis facilitator)                                                                   |
| A10      | Rn.213264 | NM_139258    | Bmf       | Bcl2 modifying factor                                                                                  |
| A11      | Rn.220522 | NM_001107368 | Bmi1      | Bmi1 polycomb ring finger oncogene                                                                     |
| A12      | Rn.103861 | XM_573559    | Bmp2k     | BMP-2 inducible kinase                                                                                 |
| B01      | Rn.2060   | NM_053420    | Bnip3     | BCL2/adenovirus E1B interacting protein 3                                                              |
| B02      | Rn.7308   | NM_001013191 | Cbfb      | Core-binding factor, beta subunit                                                                      |
| B03      | Rn.7409   | NM_019195    | Cd47      | Cd47 molecule                                                                                          |
| B04      | Rn.29897  | NM_031762    | Cdkn1b    | Cyclin-dependent kinase inhibitor 1B                                                                   |
| B05      | Rn.162507 | NM_182735    | Cdkn1c    | Cyclin-dependent kinase inhibitor 1C                                                                   |
| B06      | Rn.13788  | NM_001106268 | Chsy1     | Chondroitin sulfate synthase 1                                                                         |
| B07      | Rn.35776  | NM_001106279 | Crebzf    | CREB/ATF bZIP transcription factor                                                                     |
| B08      | Rn.22129  | NM_031327    | Cyr61     | Cysteine-rich, angiogenic inducer, 61                                                                  |
| B09      | Rn.220265 | NM_001107057 | Dcaf7     | DDB1 and CUL4 associated factor 7                                                                      |
| B10      | Rn.116073 | NM_001107668 | Dcun1d1   | DCN1, defective in cullin neddylation 1, domain containing 1 ( <i>S. cerevisiae</i> )                  |
| B11      | Rn.9775   | NM_080906    | Ddit4     | DNA-damage-inducible transcript 4                                                                      |
| B12      | Rn.44861  | NM_001106472 | Dkk2      | Dickkopf homolog 2 ( <i>Xenopus laevis</i> )                                                           |
| C01      | Rn.17532  | NM_001108159 | Dpp8      | Dipeptidylpeptidase 8                                                                                  |
| C02      | Rn.162681 | NM_001077670 | Eif3j     | Eukaryotic translation initiation factor 3, subunit J                                                  |
| C03      | Rn.10595  | NM_012689    | Esr1      | Estrogen receptor 1                                                                                    |
| C04      | Rn.164554 | NM_001107107 | Ets2      | V-ets erythroblastosis virus E26 oncogene homolog 2 (avian)                                            |
| C05      | Rn.40595  | NM_052804    | Fmr1      | Fragile X mental retardation 1                                                                         |
| C06      | Rn.103750 | NM_022197    | Fos       | FBJ osteosarcoma oncogene                                                                              |
| C07      | Rn.24593  | NM_001106395 | Foxo3     | Forkhead box O3                                                                                        |
| C08      | Rn.48145  | XM_001067249 | Gal3st4   | Galactose-3-O-sulfotransferase 4                                                                       |
| C09      | Rn.3036   | NM_031035    | Gnai2     | Guanine nucleotide binding protein (G protein), alpha inhibiting 2                                     |
| C10      | Rn.63942  | NM_001109093 | Grb10     | Growth factor receptor bound protein 10                                                                |
| C11      | Rn.219294 | NM_001107608 | Hectd2    | HECT domain containing 2                                                                               |
| C12      | Rn.12     | NM_012967    | Icam1     | Intercellular adhesion molecule 1                                                                      |
| D01      | Rn.7029   | NM_001107783 | Kif16b    | Kinesin family member 16B                                                                              |
| D02      | Rn.54004  | NM_022264    | Kit       | V-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog                                          |
| D03      | Rn.88457  | NM_031622    | Mapk6     | Mitogen-activated protein kinase 6                                                                     |
| D04      | Rn.141485 | NM_001107940 | Megf9     | Multiple EGF-like-domains 9                                                                            |
| D05      | Rn.203250 | NM_001047743 | MGC112883 | LOC500651                                                                                              |
| D06      | Rn.45925  | NM_001191577 | Midn      | Midnolin                                                                                               |
| D07      | Rn.25100  | XM_239329    | Mllt6     | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, <i>Drosophila</i> ); translocated to, 6 |
| D08      | Rn.79007  | NM_001134530 | Mmp1a     | Matrix metalloproteinase 1a (interstitial collagenase)                                                 |
| D09      | Rn.2641   | NM_053814    | Mrip      | Myosin phosphatase Rho interacting protein                                                             |
| D10      | Rn.218701 | NM_001106632 | Mybl1     | Myeloblastosis oncogene-like 1                                                                         |
| D11      | Rn.90077  | NM_031553    | Nfyb      | Nuclear transcription factor-Y beta                                                                    |
| D12      | Rn.113514 | NM_001191924 | Nlk       | Nemo like kinase                                                                                       |
| E01      | Rn.9715   | NM_031073    | Ntf3      | Neurotrophin 3                                                                                         |
| E02      | Rn.9450   | NM_001108937 | Paip1     | Poly(A) binding protein interacting protein 1                                                          |
| E03      | Rn.22308  | NM_053940    | Pcdha12   | Protocadherin alpha 12                                                                                 |
| E04      | Rn.41405  | NM_001107984 | Pdik1l    | PDLIM1 interacting kinase 1 like                                                                       |
| E05      | Rn.166379 | NM_001107342 | Phf2      | PHD finger protein 2                                                                                   |
| E06      | Rn.10599  | NM_013005    | Pik3r1    | Phosphoinositide-3-kinase, regulatory subunit 1 (alpha)                                                |
| E07      | Rn.204118 | NM_001106880 | Plcl2     | Phospholipase C-like 2                                                                                 |
| E08      | Rn.7829   | NM_001108744 | Plxnc1    | Plexin C1                                                                                              |

| Position | UniGene   | GenBank      | Symbol   | Description                                                                                       |
|----------|-----------|--------------|----------|---------------------------------------------------------------------------------------------------|
| E09      | Rn.81155  | NM_053999    | Ppp2r2a  | Protein phosphatase 2 (formerly 2A), regulatory subunit B, alpha isoform                          |
| E10      | Rn.24394  | NM_001106740 | Ppp2r5e  | Protein phosphatase 2, regulatory subunit B', epsilon isoform                                     |
| E11      | Rn.22158  | NM_031606    | Pten     | Phosphatase and tensin homolog                                                                    |
| E12      | Rn.106743 | NM_031090    | Rab1     | RAB1, member RAS oncogene family                                                                  |
| F01      | Rn.205059 | NM_019182    | Rnf4     | Ring finger protein 4                                                                             |
| F02      | Rn.21345  | NM_001024795 | Rnf44    | Ring finger protein 44                                                                            |
| F03      | Rn.139850 | NM_001135872 | Rsbp1l   | Round spermatid basic protein 1-like                                                              |
| F04      | Rn.98327  | NM_001034129 | Sec62    | SEC62 homolog (S. cerevisiae)                                                                     |
| F05      | Rn.165946 | NM_001107641 | Sim1     | Single-minded homolog 1 (Drosophila)                                                              |
| F06      | Rn.3477   | NM_001007608 | Skp1     | S-phase kinase-associated protein 1                                                               |
| F07      | Rn.102664 | NM_001013996 | Slc25a37 | Solute carrier family 25, member 37                                                               |
| F08      | Rn.162022 | NM_138832    | Slc38a1  | Solute carrier family 38, member 1                                                                |
| F09      | Rn.5641   | NM_131906    | Slco1a4  | Solute carrier organic anion transporter family, member 1a4                                       |
| F10      | Rn.221918 | NM_001107419 | Smarca5  | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5 |
| F11      | Rn.2645   | NM_001127550 | Snx4     | Sorting nexin 4                                                                                   |
| F12      | Rn.10488  | NM_017051    | Sod2     | Superoxide dismutase 2, mitochondrial                                                             |
| G01      | Rn.105397 | NM_001127494 | Stk24    | Serine/threonine kinase 24 (STE20 homolog, yeast)                                                 |
| G02      | Rn.30683  | NM_001106786 | Tbk1     | TANK-binding kinase 1                                                                             |
| G03      | Rn.9916   | NM_013176    | Tcf12    | Transcription factor 12                                                                           |
| G04      | Rn.6114   | NM_001107734 | Tlk1     | Tousled-like kinase 1                                                                             |
| G05      | Rn.198698 | XM_232287    | Tmcc1    | Transmembrane and coiled-coil domain family 1                                                     |
| G06      | Rn.161967 | NM_001108654 | Tox      | Thymocyte selection-associated high mobility group box                                            |
| G07      | Rn.21970  | NM_031345    | Tsc22d3  | TSC22 domain family, member 3                                                                     |
| G08      | Rn.163149 | NM_022690    | Ube2g1   | Ubiquitin-conjugating enzyme E2G 1 (UBC7 homolog, yeast)                                          |
| G09      | Rn.2240   | XM_235483    | Unc84b   | Unc-84 homolog B (C. elegans)                                                                     |
| G10      | Rn.198892 | XM_213421    | Vezf1    | Vascular endothelial zinc finger 1                                                                |
| G11      | Rn.18637  | NM_001100702 | Wdr47    | WD repeat domain 47                                                                               |
| G12      | Rn.4063   | NM_001007616 | Wsb2     | WD repeat and SOCS box-containing 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, 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 ROX <sup>™</sup> 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.

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.

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](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

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