

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

## Mouse Inflammatory Response & Autoimmunity

Cat. no. 330231 PAMM-077ZR

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 Mouse Inflammatory Response & Autoimmunity RT<sup>2</sup> Profiler PCR Array profiles the expression of 84 key genes involved in autoimmune and inflammatory immune responses. It represents the expression of inflammatory cytokines and chemokines as well as their receptors. It also contains genes related to the metabolism of cytokines and involved in cytokine-cytokine receptor interactions. Thoroughly researched panels of genes involved in the acute-phase response, inflammatory response, and humoral immune responses are represented as well. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to inflammatory and autoimmune responses 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.



---

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      | Mm.347398 | NM_009744 | Bcl6   | B-cell leukemia/lymphoma 6                   |
| A02      | Mm.19131  | NM_009778 | C3     | Complement component 3                       |
| A03      | Mm.2408   | NM_009779 | C3ar1  | Complement component 3a receptor 1           |
| A04      | Mm.477109 | NM_009780 | C4b    | Complement component 4B (Chido blood group)  |
| A05      | Mm.1283   | NM_011329 | Ccl1   | Chemokine (C-C motif) ligand 1               |
| A06      | Mm.4686   | NM_011330 | Ccl11  | Chemokine (C-C motif) ligand 11              |
| A07      | Mm.867    | NM_011331 | Ccl12  | Chemokine (C-C motif) ligand 12              |
| A08      | Mm.41988  | NM_011332 | Ccl17  | Chemokine (C-C motif) ligand 17              |
| A09      | Mm.424740 | NM_011888 | Ccl19  | Chemokine (C-C motif) ligand 19              |
| A10      | Mm.290320 | NM_011333 | Ccl2   | Chemokine (C-C motif) ligand 2               |
| A11      | Mm.116739 | NM_016960 | Ccl20  | Chemokine (C-C motif) ligand 20              |
| A12      | Mm.12895  | NM_009137 | Ccl22  | Chemokine (C-C motif) ligand 22              |
| B01      | Mm.31505  | NM_019577 | Ccl24  | Chemokine (C-C motif) ligand 24              |
| B02      | Mm.7275   | NM_009138 | Ccl25  | Chemokine (C-C motif) ligand 25              |
| B03      | Mm.1282   | NM_011337 | Ccl3   | Chemokine (C-C motif) ligand 3               |
| B04      | Mm.244263 | NM_013652 | Ccl4   | Chemokine (C-C motif) ligand 4               |
| B05      | Mm.284248 | NM_013653 | Ccl5   | Chemokine (C-C motif) ligand 5               |
| B06      | Mm.341574 | NM_013654 | Ccl7   | Chemokine (C-C motif) ligand 7               |
| B07      | Mm.42029  | NM_021443 | Ccl8   | Chemokine (C-C motif) ligand 8               |
| B08      | Mm.274927 | NM_009912 | Ccr1   | Chemokine (C-C motif) receptor 1             |
| B09      | Mm.6272   | NM_009915 | Ccr2   | Chemokine (C-C motif) receptor 2             |
| B10      | Mm.57050  | NM_009914 | Ccr3   | Chemokine (C-C motif) receptor 3             |
| B11      | Mm.1337   | NM_009916 | Ccr4   | Chemokine (C-C motif) receptor 4             |
| B12      | Mm.2932   | NM_007719 | Ccr7   | Chemokine (C-C motif) receptor 7             |
| C01      | Mm.3460   | NM_009841 | Cd14   | CD14 antigen                                 |
| C02      | Mm.271833 | NM_011611 | Cd40   | CD40 antigen                                 |
| C03      | Mm.4861   | NM_011616 | Cd40lg | CD40 ligand                                  |
| C04      | Mm.439656 | NM_009883 | Cebpb  | CCAAT/enhancer binding protein (C/EBP), beta |
| C05      | Mm.28767  | NM_007768 | Crp    | C-reactive protein, pentraxin-related        |
| C06      | Mm.795    | NM_007778 | Csf1   | Colony stimulating factor 1 (macrophage)     |
| C07      | Mm.21013  | NM_008176 | Cxcl1  | Chemokine (C-X-C motif) ligand 1             |
| C08      | Mm.877    | NM_021274 | Cxcl10 | Chemokine (C-X-C motif) ligand 10            |
| C09      | Mm.131723 | NM_019494 | Cxcl11 | Chemokine (C-X-C motif) ligand 11            |
| C10      | Mm.4979   | NM_009140 | Cxcl2  | Chemokine (C-X-C motif) ligand 2             |
| C11      | Mm.244289 | NM_203320 | Cxcl3  | Chemokine (C-X-C motif) ligand 3             |
| C12      | Mm.4660   | NM_009141 | Cxcl5  | Chemokine (C-X-C motif) ligand 5             |
| D01      | Mm.766    | NM_008599 | Cxcl9  | Chemokine (C-X-C motif) ligand 9             |
| D02      | Mm.337035 | NM_178241 | Cxcr1  | Chemokine (C-X-C motif) receptor 1           |
| D03      | Mm.234466 | NM_009909 | Cxcr2  | Chemokine (C-X-C motif) receptor 2           |
| D04      | Mm.1401   | NM_009911 | Cxcr4  | Chemokine (C-X-C motif) receptor 4           |
| D05      | Mm.3355   | NM_010177 | FasL   | Fas ligand (TNF superfamily, member 6)       |
| D06      | Mm.246513 | NM_010234 | Fos    | FBJ osteosarcoma oncogene                    |
| D07      | Mm.240327 | NM_008337 | Ifng   | Interferon gamma                             |
| D08      | Mm.874    | NM_010548 | Il10   | Interleukin 10                               |
| D09      | Mm.4154   | NM_008349 | Il10rb | Interleukin 10 receptor, beta                |
| D10      | Mm.5419   | NM_010552 | Il17a  | Interleukin 17A                              |
| D11      | Mm.1410   | NM_008360 | Il18   | Interleukin 18                               |
| D12      | Mm.15534  | NM_010554 | Il1a   | Interleukin 1 alpha                          |
| E01      | Mm.222830 | NM_008361 | Il1b   | Interleukin 1 beta                           |
| E02      | Mm.896    | NM_008362 | Il1r1  | Interleukin 1 receptor, type I               |
| E03      | Mm.253424 | NM_008364 | Il1rap | Interleukin 1 receptor accessory protein     |
| E04      | Mm.882    | NM_031167 | Il1rn  | Interleukin 1 receptor antagonist            |
| E05      | Mm.103585 | NM_016971 | Il22   | Interleukin 22                               |
| E06      | Mm.125482 | NM_031252 | Il23a  | Interleukin 23, alpha subunit p19            |
| E07      | Mm.221227 | NM_144548 | Il23r  | Interleukin 23 receptor                      |
| E08      | Mm.4461   | NM_010558 | Il5    | Interleukin 5                                |
| E09      | Mm.1019   | NM_031168 | Il6    | Interleukin 6                                |

| Position | UniGene   | GenBank   | Symbol   | Description                                                                |
|----------|-----------|-----------|----------|----------------------------------------------------------------------------|
| E10      | Mm.2856   | NM_010559 | Il6ra    | Interleukin 6 receptor, alpha                                              |
| E11      | Mm.3825   | NM_008371 | Il7      | Interleukin 7                                                              |
| E12      | Mm.3006   | NM_008373 | Il9      | Interleukin 9                                                              |
| F01      | Mm.1137   | NM_008404 | Itgb2    | Integrin beta 2                                                            |
| F02      | Mm.2160   | NM_023125 | Kng1     | Kininogen 1                                                                |
| F03      | Mm.87787  | NM_010735 | Lta      | Lymphotoxin A                                                              |
| F04      | Mm.1715   | NM_008518 | Ltb      | Lymphotoxin B                                                              |
| F05      | Mm.116844 | NM_016923 | Ly96     | Lymphocyte antigen 96                                                      |
| F06      | Mm.213003 | NM_010851 | Myd88    | Myeloid differentiation primary response gene 88                           |
| F07      | Mm.256765 | NM_008689 | Nfkb1    | Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1, p105 |
| F08      | Mm.2893   | NM_010927 | Nos2     | Nitric oxide synthase 2, inducible                                         |
| F09      | Mm.129481 | NM_008173 | Nr3c1    | Nuclear receptor subfamily 3, group C, member 1                            |
| F10      | Mm.292547 | NM_011198 | Ptgs2    | Prostaglandin-endoperoxide synthase 2                                      |
| F11      | Mm.112765 | NM_138952 | Ripk2    | Receptor (TNFRSF)-interacting serine-threonine kinase 2                    |
| F12      | Mm.5245   | NM_011345 | Sele     | Selectin, endothelial cell                                                 |
| G01      | Mm.23987  | NM_054096 | Tirap    | Toll-interleukin 1 receptor (TIR) domain-containing adaptor protein        |
| G02      | Mm.273024 | NM_030682 | Tlr1     | Toll-like receptor 1                                                       |
| G03      | Mm.87596  | NM_011905 | Tlr2     | Toll-like receptor 2                                                       |
| G04      | Mm.33874  | NM_126166 | Tlr3     | Toll-like receptor 3                                                       |
| G05      | Mm.38049  | NM_021297 | Tlr4     | Toll-like receptor 4                                                       |
| G06      | Mm.116894 | NM_016928 | Tlr5     | Toll-like receptor 5                                                       |
| G07      | Mm.42146  | NM_011604 | Tlr6     | Toll-like receptor 6                                                       |
| G08      | Mm.23979  | NM_133211 | Tlr7     | Toll-like receptor 7                                                       |
| G09      | Mm.44889  | NM_031178 | Tlr9     | Toll-like receptor 9                                                       |
| G10      | Mm.1293   | NM_013693 | Tnf      | Tumor necrosis factor                                                      |
| G11      | Mm.483369 | NM_019418 | Tnfsf14  | Tumor necrosis factor (ligand) superfamily, member 14                      |
| G12      | Mm.103551 | NM_023764 | Tollip   | Toll interacting protein                                                   |
| H01      | Mm.328431 | NM_007393 | Actb     | Actin, beta                                                                |
| H02      | Mm.163    | NM_009735 | B2m      | Beta-2 microglobulin                                                       |
| H03      | Mm.343110 | NM_008084 | Gapdh    | Glyceraldehyde-3-phosphate dehydrogenase                                   |
| H04      | Mm.3317   | NM_010368 | Gusb     | Glucuronidase, beta                                                        |
| H05      | Mm.2180   | NM_008302 | Hsp90ab1 | Heat shock protein 90 alpha (cytosolic), class B member 1                  |
| H06      | N/A       | SA_00106  | MGDC     | Mouse 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.

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

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

[www.qiagen.com](http://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