RT² Profiler PCR Array (Rotor-Gene® Format)

Rabbit Fibrosis

Cat. no. 330231 PANZ-120ZR

For pathway expression analysis

Format	For use with the following real-time cyclers
RT² Profiler PCR Array, Format R	Rotor-Gene Q, other Rotor-Gene cyclers

Description

The Rabbit Fibrosis RT² Profiler PCR Array profiles the expression of 84 key genes involved in dysregulated tissue remodeling during the repair and healing of wounds. Wound healing consists of three phases: inflammation, granulation and tissue remodeling. During tissue remodeling, apoptosis removes myofibroblasts, and the deposited extracellular matrix (ECM) is remodeled to resemble the original tissue. Fibrosis occurs when inappropriate tissue remodeling results in excess ECM deposition due to inappropriate survival of myofibroblasts or lack of ECM proteolytic degradation. The inflammation and enhanced TGFß signaling often present in fibrotic tissues causes cells to differentiate into myofibroblasts via epithelial-to-mesenchymal transition (EMT). On the other side of the spectrum, chronic wounds feature dysregulated tissue remodeling with enhanced ECM degradation. This array contains genes encoding ECM remodeling enzymes, TGFβ signaling molecules, and inflammatory cytokines, as well as additional genes important for fibrosis. Using real-time PCR, research studies can easily and reliably analyze the expression of a focused panel of genes involved in fibrosis and chronic wounds with this array.

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

Shipping and storage

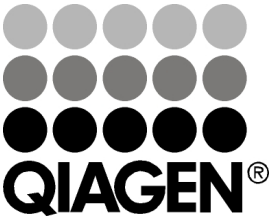
RT² Profiler PCR Arrays in the Rotor-Gene format are shipped at ambient temperature, on dry ice, or blue ice packs depending on destination and accompanying products.

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.



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	Ocu.2601	XM_002724263	BMP7	Bone morphogenetic protein 7
A02	Ocu.2649	NM_001111072	CAV1	Caveolin 1, caveolae protein, 22kDa
A03	Ocu.1921	NM_001082294	CCL2	Chemokine (C-C motif) ligand 2
A04	Ocu.2141	NM_001082196	CCL4	Chemokine (C-C motif) ligand 4
A05	N/A	XM_002709920	CEBPZ	CCAAT/enhancer binding protein (C/EBP), zeta
A06	Ocu.6770	NM_001198947	C-JUN	C-jun transcription factor
A07	Ocu.6518	NM_001195668	COL1A2	Collagen, type I, alpha 2
A08	Ocu.3361	XM_002714820	CTGF	Connective tissue growth factor
A09	N/A	XM_002712124	CXCR4	Chemokine (C-X-C motif) receptor 4
A10	Ocu.1430	NM_001082330	DCN	Decorin
A11	N/A	XM_002722985	ENG	Endoglin
A12	Ocu.5758	NM_001101696	ET-1	Endothelin-1
B01	Ocu.3127	NM_001082661	ETS1	V-ets erythroblastosis virus E26 oncogene homolog 1 (avian)
B02	Ocu.7547	NM_001168707	HGF	Hepatocyte growth factor (hepapoietin A; scatter factor)
B03	Ocu.2149	NM_001081991	IFNG	Interferon, gamma
B04	Ocu.1796	NM_001082045	IL10	Interleukin 10
B05	Ocu.2080	NM_001101684	IL1A	Interleukin 1, alpha
B06	Ocu.1993	NM_001082201	IL1B	Interleukin 1, beta
B07	Ocu.2462	NM_001163177	IL4	Interleukin 4
B08	N/A	XM_002711857	IL4R	Interleukin 4 receptor
B09	N/A	XM_002713967	ITGA1	Integrin, alpha 1
B10	Ocu.3178	XM_002712329	ITGAV	Integrin, alpha V (vitronectin receptor, alpha polypeptide, antigen CD51)
B11	Ocu.3065	XM_002721189	ITGB1	Integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)
B12	Ocu.3879	XM_002716419	ITGB5	Integrin, beta 5
C01	N/A	XM_002712210	ITGB6	Integrin, beta 6
C02	Ocu.1889	NM_001082304	ITGB8	Integrin, beta 8
C03	Ocu.2532	XM_002717184	LOC100008808	Epidermal growth factor
C04	Ocu.178	NM_001082232	LOC100009047	Tissue inhibitor of metalloproteinase 1
C05	Ocu.7187	XM_002713968	LOC100101621	Alpha 2 integrin
C06	N/A	XM_002708849	LOC100338376	Friend leukemia virus integration 1
C07	N/A	XM_002719359	LOC100338432	Chemokine (C-C motif) receptor 7
C08	N/A	XM_002713526	LOC100338818	SMAD family member 7
C09	N/A	XM_002710214	LOC100340384	SAR1a gene homolog 2
C10	Ocu.3483	XM_002708089	LOC100340884	Nuclear factor I/B
C11	N/A	XM_002718005	LOC100342066	Gremlin-1
C12	N/A	XM_002709772	LOC100342431	Latent transforming growth factor beta binding protein 1
D01	N/A	XM_002718438	LOC100343418	SAR1a gene homolog
D02	N/A	XM_002717257	LOC100344172	Interleukin 21-like
D03	N/A	XM_002711944	LOC100345752	Cullin 1
D04	N/A	XM_002708153	LOC100345812	Transforming growth factor beta type 1 receptor-like
D05	N/A	XM_002720202	LOC100348025	Interleukin 13 receptor, alpha 2-like

Position	UniGene	GenBank	Symbol	Description
D06	N/A	XM_002719246	LOC100348776	Chemokine (C-C motif) ligand 3-like
D07	N/A	XM_002716291	LOC100349007	Interleukin 12A-like
D08	N/A	XM_002716942	LOC100350272	Platelet-derived growth factor C-like
D09	N/A	XM_002724293	LOC100352388	Platelet-derived growth factor subunit A-like
D10	N/A	XM_002712188	LOC100352838	Sp3 transcription factor
D11	N/A	XM_002708766	LOC100355759	Integrin-linked kinase-like
D12	N/A	XM_002710146	LOC100357045	Lysyl oxidase
E01	N/A	XM_002710201	LOC100358075	Interleukin-5-like
E02	N/A	XM_002713280	LOC100358097	Chemokine (C-C motif) receptor 2
E03	N/A	XM_002720908	LOC100358469	Inhibin beta C chain preproprotein-like
E04	N/A	XM_002710092	LOC100358676	Interleukin 13 (predicted)-like
E05	Ocu.2695	NM_001171139	MMP1	Matrix metallopeptidase 1 (interstitial collagenase)
E06	Ocu.2263	NM_001082037	MMP13	Matrix metallopeptidase 13 (collagenase 3)
E07	Ocu.6250	NM_001082793	MMP14	Matrix metallopeptidase 14 (membrane-inserted)
E08	Ocu.6274	NM_001082209	MMP2	Matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase)
E09	Ocu.1964	NM_001082280	MMP3	Matrix metallopeptidase 3 (stromelysin 1, progelatinase)
E10	Ocu.1773	NM_001082203	MMP9	Matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)
E11	Ocu.2337	XM_002710544	MYC	V-myc myelocytomatosis viral oncogene homolog (avian)
E12	Ocu.3223	NM_001195762	PDGFD	Platelet derived growth factor D
F01	Ocu.2693	NM_001082769	PLAT	Plasminogen activator, tissue
F02	Ocu.2313	NM_001082011	PLAU	Plasminogen activator, urokinase
F03	N/A	XM_002714966	PLG	Plasminogen
F04	Ocu.3216	XM_002713389	PRKCD	Protein kinase C, delta
F05	Ocu.6529	NM_001171154	SERPINB2	Serpin peptidase inhibitor, clade B (ovalbumin), member 2
F06	Ocu.2301	XM_002722823	SERPINE1	Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1
F07	Ocu.2647	XM_002708499	SERPINH1	Serpin peptidase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1)
F08	N/A	XM_002716410	SKIL	SKI-like oncogene
F09	N/A	XM_002713520	SMAD2	SMAD family member 2
F10	N/A	XM_002719208	SMURF2	SMAD specific E3 ubiquitin protein ligase 2
F11	N/A	XM_002711128	SP1	Sp1 transcription factor
F12	N/A	XM_002712346	STAT1	Signal transducer and activator of transcription 1, 91kDa
G01	N/A	XM_002720937	STAT6	Signal transducer and activator of transcription 6, interleukin-4 induced
G02	Ocu.2133	XM_002722312	TGFB1	Transforming growth factor, beta 1
G03	Ocu.3100	NM_001082660	TGFB2	Transforming growth factor, beta 2
G04	N/A	XM_002719635	TGFB3	Transforming growth factor, beta 3
G05	N/A	XM_002717799	THBS1	Thrombospondin 1
G06	Ocu.2314	XM_002723776	TIMP2	TIMP metallopeptidase inhibitor 2
G07	Ocu.2315	NM_001195682	TIMP3	TIMP metallopeptidase inhibitor 3
G08	Ocu.2316	NM_001195690	TIMP4	TIMP metallopeptidase inhibitor 4
G09	Ocu.1971	NM_001082263	TNF	Tumor necrosis factor
G10	Ocu.2339	XM_002714697	VEGFA	Vascular endothelial growth factor A
G11	Ocu.6201	NM_001082785	YBX1	Y box binding protein 1
G12	N/A	XM_002715095	ZFYVE9	Zinc finger, FYVE domain containing 9
H01	Ocu.2090	NM_001101682	ACTA2	Actin, alpha 2, smooth muscle, aorta
H02	Ocu.734	NM_001101683	ACTB	Actin, beta
H03	Ocu.87	NM_001082253	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
H04	Ocu.1108	NM_001082277	LDHA	Lactate dehydrogenase A
H05	N/A	XM_002723383	LOC100346936	Non-POU domain containing, octamer-binding-like
H06	N/A	SA_00511	NGDC	Rabbit 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.
RT² First Strand Kit (12)	Enzymes and reagents for cDNA synthesis	330401
RT² 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.

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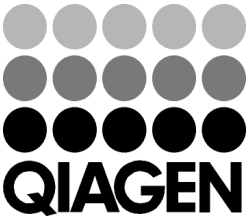

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