# RT<sup>2</sup> Profiler PCR Array (Rotor-Gene® Format) Human Nuclear Receptors & Coregulators

### For pathway expression analysis

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

## Description

The Human Nuclear Receptors & Coregulators RT<sup>2</sup> Profiler PCR Array profiles the expression of 84 genes encoding nuclear receptors and their coregulators. The array includes receptors for thyroid and steroid hormones, receptors for retinoids and vitamin D, as well as orphan receptors. Coactivators and corepressors of nuclear receptor activity are also included on this array as well as chromatin modifying enzymes. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of nuclear receptors and coregulators 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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## Array layout

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc<sup>™</sup> (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	Hs.171189	NM 001621	AHR	Aryl hydrocarbon receptor
A02	Hs.496240	NM 000044	AR	Androgen receptor
A03	Hs.632446	NM 001668	ARNT	Aryl hydrocarbon receptor nuclear translocator
A04	Hs.519337	NM 006696	BRD8	Bromodomain containing 8
A05	Hs.369614	NM 004236	COPS2	COP9 constitutive photomorphogenic homolog subunit 2 (Arabidopsis)
A06	Hs.459759	NM 004380	CREBBP	CREB binding protein
A07	Hs.279806	NM 004396	DDX5	DEAD (Asp-Glu-Ala-Asp) box polypeptide 5
A08	Hs.208124	NM 000125	ESR1	Estrogen receptor 1
A08 A09	Hs.729020	NM 001437	ESR2	Estrogen receptor 2 (ER beta)
A09 A10	Hs.110849	NM 004451	ESRRA	Estrogen-related receptor alpha
A10	Hs.435845	NM 004451	ESRRB	Estrogen-related receptor beta
		-		
A12	Hs.444225	NM_001438	ESRRG	Estrogen-related receptor gamma
B01	Hs.88556	NM_004964	HDAC1	Histone deacetylase 1
B02	Hs.3352	NM_001527	HDAC2	Histone deacetylase 2
B03	Hs.519632	NM_003883	HDAC3	Histone deacetylase 3
B04	Hs.20516	NM_006037	HDAC4	Histone deacetylase 4
B05	Hs.438782	NM_005474	HDAC5	Histone deacetylase 5
B06	Hs.6764	NM_006044	HDAC6	Histone deacetylase 6
B07	Hs.200063	NM_001098416	HDAC7	Histone deacetylase 7
B08	Hs.518805	NM_002131	HMGA1	High mobility group AT-hook 1
B09	Hs.116462	NM_178849	HNF4A	Hepatocyte nuclear factor 4, alpha
B10	Hs.166539	NM_014288	ITGB3BP	Integrin beta 3 binding protein (beta3-endonexin)
B11	Hs.533055	NM_003884	KAT2B	K(lysine) acetyltransferase 2B
B12	Hs.528299	NM_006388	KAT5	K(lysine) acetyltransferase 5
C01	Hs.643754	NM_004774	MED1	Mediator complex subunit 1
C02	Hs.409226	NM 005120	MED12	Mediator complex subunit 12
C03	Hs.282678	NM 005121	MED13	Mediator complex subunit 13
C04	Hs.407604	NM 004229	MED14	Mediator complex subunit 14
C05	Hs.365207	NM 005481	MED16	Mediator complex subunit 16
C06	Hs.444931	NM 004268	MED17	Mediator complex subunit 17
C07	Hs.462983	NM 014815	MED24	Mediator complex subunit 24
C08	Hs.181112	NM 014166	MED4	Mediator complex subunit 4
C09	Hs.525629	NM 004689	MTA1	Metastasis associated 1
C10	Hs.596314	NM 003743	NCOA1	Nuclear receptor coactivator 1
C11	Hs.446678	NM 006540	NCOA2	Nuclear receptor coactivator 2
C12	Hs.592142	NM 181659	NCOA3	Nuclear receptor coactivator 3
D01	Hs.643658	NM 005437	NCOA4	Nuclear receptor coactivator 4
D01	Hs.368971	NM 014071	NCOA6	Nuclear receptor coactivator 6
D02	Hs.462323	NM 006311	NCOR1	· ·
D03	Hs.462323 Hs.137510	NM 006312	NCORT NCOR2	Nuclear receptor corepressor 1 Nuclear receptor corepressor 2
D04 D05		-		· ·
	Hs.73090	NM_002502	NFKB2	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100)
D06	Hs.533282	NM_007363	NONO	Non-POU domain containing, octamer-binding
D07	Hs.487360	NM_024408	NOTCH2	Notch 2
D08	Hs.268490	NM_000475	NR0B1	Nuclear receptor subfamily 0, group B, member 1
D09	Hs.427055	NM_021969	NR0B2	Nuclear receptor subfamily 0, group B, member 2
D10	Hs.592130	NM_021724	NR1D1	Nuclear receptor subfamily 1, group D, member 1
D11	Hs.37288	NM_005126	NR1D2	Nuclear receptor subfamily 1, group D, member 2
D12	Hs.432976	NM_007121	NR1H2	Nuclear receptor subfamily 1, group H, member 2
E01	Hs.438863	NM_005693	NR1H3	Nuclear receptor subfamily 1, group H, member 3
E02	Hs.282735	NM_005123	NR1H4	Nuclear receptor subfamily 1, group H, member 4
E03	Hs.7303	NM_022002	NR112	Nuclear receptor subfamily 1, group I, member 2
E04	Hs.349642	NM_005122	NR113	Nuclear receptor subfamily 1, group I, member 3
E05	Hs.108301	NM_003297	NR2C1	Nuclear receptor subfamily 2, group C, member 1
E06	Hs.591667	NM_003298	NR2C2	Nuclear receptor subfamily 2, group C, member 2
E07	Hs.187354	NM 014249	NR2E3	Nuclear receptor subfamily 2, group E, member 3
E08	Hs.519445	NM 005654	NR2F1	Nuclear receptor subfamily 2, group F, member 1
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Position	UniGene	GenBank	Symbol	Description	
E10	Hs.466148	NM_005234	NR2F6	Nuclear receptor subfamily 2, group F, member 6	
E11	Hs.122926	NM_000176	NR3C1	Nuclear receptor subfamily 3, group C, member 1 (glucocorticoid receptor)	
E12	Hs.163924	NM_000901	NR3C2	Nuclear receptor subfamily 3, group C, member 2	
F01	Hs.524430	NM_002135	NR4A1	Nuclear receptor subfamily 4, group A, member 1	
F02	Hs.495108	NM_004959	NR5A1	Nuclear receptor subfamily 5, group A, member 1	
F03	Hs.586460	NM_001489	NR6A1	Nuclear receptor subfamily 6, group A, member 1	
F04	Hs.155017	NM_003489	NRIP1	Nuclear receptor interacting protein 1	
F05	Hs.103110	NM_005036	PPARA	Peroxisome proliferator-activated receptor alpha	
F06	Hs.696032	NM_006238	PPARD	Peroxisome proliferator-activated receptor delta	
F07	Hs.162646	NM_015869	PPARG	Peroxisome proliferator-activated receptor gamma	
F08	Hs.527078	NM_013261	PPARGC1A	Peroxisome proliferator-activated receptor gamma, coactivator 1 alpha	
F09	Hs.591261	NM_133263	PPARGC1B	Peroxisome proliferator-activated receptor gamma, coactivator 1 beta	
F10	Hs.250758	NM_002804	PSMC3	Proteasome (prosome, macropain) 26S subunit, ATPase, 3	
F11	Hs.79387	NM_002805	PSMC5	Proteasome (prosome, macropain) 26S subunit, ATPase, 5	
F12	Hs.654583	NM_000964	RARA	Retinoic acid receptor, alpha	
G01	Hs.654490	NM_000965	RARB	Retinoic acid receptor, beta	
G02	Hs.1497	NM_000966	RARG	Retinoic acid receptor, gamma	
G03	Hs.479396	NM_005349	RBPJ	Recombination signal binding protein for immunoglobulin kappa J region	
G04	Hs.560343	NM_134260	RORA	RAR-related orphan receptor A	
G05	Hs.590886	NM_002957	RXRA	Retinoid X receptor, alpha	
G06	Hs.388034	NM_021976	RXRB	Retinoid X receptor, beta	
G07	Hs.26550	NM_006917	RXRG	Retinoid X receptor, gamma	
G08	Hs.335068	NM_024831	TGS1	Trimethylguanosine synthase 1	
G09	Hs.724	NM_003250	THRA	Thyroid hormone receptor, alpha	
G10	Hs.187861	NM_000461	THRB	Thyroid hormone receptor, beta (erythroblastic leukemia viral (v-erb-a) oncogene homolog 2, avian)	
G11	Hs.500340	NM_016213	TRIP4	Thyroid hormone receptor interactor 4	
G12	Hs.524368	NM_000376	VDR	Vitamin D (1,25- dihydroxyvitamin D3) receptor	
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	RPLPO	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, 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
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.

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 <u>www.qiagen.</u> <u>com</u> or can be requested from QIAGEN Technical Services or your local distributor.

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