

# RT<sup>2</sup> Profiler PCR Array (96-Well Format and 384-Well [4 x 96] Format)

## Human Nuclear Receptors & Coregulators

Cat. no. 330231 PAHS-056ZA

For pathway expression analysis

Format	For use with the following real-time cyclers
RT <sup>2</sup> Profiler PCR Array, Format A	Applied Biosystems® models 5700, 7000, 7300, 7500, 7700, 7900HT, ViiA™ 7 (96-well block); Bio-Rad® models iCycler®, iQ™ 5, MyiQ™, MyiQ2; Bio-Rad/MJ Research Chromo4™; Eppendorf® Mastercycler® ep realplex models 2, 2s, 4, 4s; Stratagene® models Mx3005P®, Mx3000P®; Takara TP-800
RT <sup>2</sup> Profiler PCR Array, Format C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)
RT <sup>2</sup> Profiler PCR Array, Format D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®
RT <sup>2</sup> Profiler PCR Array, Format E	Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™
RT <sup>2</sup> Profiler PCR Array, Format F	Roche® LightCycler® 480 (96-well block)
RT <sup>2</sup> Profiler PCR Array, Format G	Roche LightCycler 480 (384-well block)
RT <sup>2</sup> Profiler PCR Array, Format H	Fluidigm® BioMark™



Sample & Assay Technologies

## 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 formats A, C, D, E, F, and G are shipped at ambient temperature, on dry ice, or blue ice packs depending on destination and accompanying products. RT<sup>2</sup> Profiler PCR Arrays in format H are shipped on dry ice or blue ice packs.

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 (96-well)

For 384-well 4 x 96 PCR arrays, genes are present in a staggered format. Refer to the *RT<sup>2</sup> Profiler PCR Array Handbook* for layout.

	1	2	3	4	5	6	7	8	9	10	11	12
<b>A</b>	AHR	AR	ARNT	BRD8	COPS2	CREBBP	DDX5	ESR1	ESR2	ESRRA	ESRRB	ESRRG
<b>B</b>	HDAC1	HDAC2	HDAC3	HDAC4	HDAC5	HDAC6	HDAC7	HMG1A	HNF4A	ITGB3BP	KAT2B	KAT5
<b>C</b>	MED1	MED12	MED13	MED14	MED16	MED17	MED24	MED4	MTA1	NCOA1	NCOA2	NCOA3
<b>D</b>	NCOA4	NCOA6	NCOR1	NCOR2	NFKB2	NONO	NOTCH2	NR0B1	NR0B2	NR1D1	NR1D2	NR1H2
<b>E</b>	NR1H3	NR1H4	NR1I2	NR1I3	NR2C1	NR2C2	NR2E3	NR2F1	NR2F2	NR2F6	NR3C1	NR3C2
<b>F</b>	NR4A1	NR5A1	NR6A1	NRIP1	PPARA	PPARD	PPARG	PPARGC1A	PPARGC1B	PSMC3	PSMC5	RARA
<b>G</b>	RARB	RARG	RBPJ	RORA	RXRA	RXRB	RXRG	TGS1	THRA	THRB	TRIP4	VDR
<b>H</b>	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	RTC	RTC	RTC	PPC	PPC	PPC

## 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
A09	Hs.729020	NM_001437	ESR2	Estrogen receptor 2 (ER beta)
A10	Hs.110849	NM_004451	ESRRA	Estrogen-related receptor alpha
A11	Hs.435845	NM_004452	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	HMG1A	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
D02	Hs.368971	NM_014071	NCOA6	Nuclear receptor coactivator 6
D03	Hs.462323	NM_006311	NCOR1	Nuclear receptor corepressor 1
D04	Hs.137510	NM_006312	NCOR2	Nuclear receptor corepressor 2
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

Position	UniGene	GenBank	Symbol	Description
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	NR1I2	Nuclear receptor subfamily 1, group I, member 2
E04	Hs.349642	NM_005122	NR1I3	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
E09	Hs.701977	NM_021005	NR2F2	Nuclear receptor subfamily 2, group F, member 2
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	RPLP0	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
RT <sup>2</sup> SYBR Green qPCR Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with real-time cyclers that do not require a reference dye, including: Bio-Rad models CFX96, CFX384, DNA Engine Opticon 2; Bio-Rad/MJ Research Chromo4; Roche LightCycler 480 (96-well and 384-well); all other cyclers	330500
RT <sup>2</sup> SYBR Green ROX™ qPCR Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Applied Biosystems models 5700, 7000, 7300, 7500 [Standard and FAST], 7700, 7900HT 96-well block [Standard and FAST] and 384-well block, StepOnePlus; Eppendorf Mastercycler ep realplex models 2, 2S, 4, 4S; Stratagene models Mx3000P, Mx3005P, Mx4000; Takara TP-800	330520
RT <sup>2</sup> SYBR Green Fluor qPCR Mastermix (2)*	For 2 x 96 assays in 96-well plates; suitable for use with the following real-time cyclers: Bio-Rad models iCycler, iQ5, MyiQ, MyiQ2	330510

\* 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.

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