RT² Profiler PCR Array (96-Well Format and 384-Well [4 x 96] Format)

Human Alzheimers Disease

Cat. no. 330231 PAHS-057ZA

For pathway expression analysis

Format	For use with the following real-time cyclers
RT² 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
RT² Profiler PCR Array, Format C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)
RT² Profiler PCR Array, Format D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®
RT² Profiler PCR Array, Format E	Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™
RT² Profiler PCR Array, Format F	Roche® LightCycler® 480 (96-well block)
RT² Profiler PCR Array, Format G	Roche LightCycler 480 (384-well block)
RT² Profiler PCR Array, Format H	Fluidigm® BioMark™

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Description

The Human Alzheimer's Disease RT² Profiler PCR Array profiles the expression of 84 genes important in the onset, development, and progression of Alzheimer's disease. The array includes genes that contribute to amyloid beta-peptide (Aß) generation, clearance, and degradation, as well as genes involved in amyloid beta-peptide (Aß) signal transduction leading to neuronal toxicity and inflammation. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to Alzheimer's Disease with this array.

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

Shipping and storage

RT² 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. RT² 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 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 (96-well)

For 384-well 4 x 96 PCR arrays, genes are present in a staggered format. Refer to the *RT² Profiler PCR Array Handbook* for layout.

	1	2	3	4	5	6	7	8	9	10	11	12
A	A2M	ABCA1	ACHE	ADAM10	ADAM9	APBA1	APBA3	APBB1	APBB2	APH1A	APLP1	APLP2
B	APOA1	APOE	APP	BACE1	BACE2	BCHE	BDNF	CAPN1	CASP3	CASP4	CDK1	CDK5
C	CDKL1	CHAT	CLU	CTSB	CTSC	CTSD	CTSG	CTSL1	EP300	ERN1	GAP43	GNAO1
D	GNAZ	GNB1	GNB2	GNB4	GNB5	GNG11	GNG3	GNG4	GNGT1	GNGT2	GSK3A	GSK3B
E	HSD17B10	IDE	IL1A	INS	INSR	LPL	LRP1	LRP6	LRP8	MAP2	MAPT	MPO
F	NAE1	NCSTN	NTRK1	NTRK2	PKP4	PLAT	PLAU	PLG	PRKCA	PRKCB	PRKCD	PRKCE
G	PRKCG	PRKCI	PRKCQ	PRKCZ	PSEN1	PSEN2	SERPINA3	SNCA	SNCB	UBQLN1	UQCRC1	UQCRC2
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Hs.212838	NM_000014	A2M	Alpha-2-macroglobulin
A02	Hs.429294	NM_005502	ABCA1	ATP-binding cassette, sub-family A (ABC1), member 1
A03	Hs.154495	NM_000665	ACHE	Acetylcholinesterase
A04	Hs.578508	NM_001110	ADAM10	ADAM metallopeptidase domain 10
A05	Hs.591852	NM_003816	ADAM9	ADAM metallopeptidase domain 9
A06	Hs.171939	NM_001163	APBA1	Amyloid beta (A4) precursor protein-binding, family A, member 1
A07	Hs.465607	NM_004886	APBA3	Amyloid beta (A4) precursor protein-binding, family A, member 3
A08	Hs.372840	NM_001164	APBB1	Amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65)
A09	Hs.479602	NM_173075	APBB2	Amyloid beta (A4) precursor protein-binding, family B, member 2
A10	Hs.108408	NM_016022	APH1A	Anterior pharynx defective 1 homolog A (C. elegans)
A11	Hs.74565	NM_005166	APLP1	Amyloid beta (A4) precursor-like protein 1
A12	Hs.709184	NM_001642	APLP2	Amyloid beta (A4) precursor-like protein 2
B01	Hs.633003	NM_000039	APOA1	Apolipoprotein A-I
B02	Hs.654439	NM_000041	APOE	Apolipoprotein E
B03	Hs.434980	NM_000484	APP	Amyloid beta (A4) precursor protein
B04	Hs.504003	NM_138973	BACE1	Beta-site APP-cleaving enzyme 1
B05	Hs.529408	NM_012105	BACE2	Beta-site APP-cleaving enzyme 2
B06	Hs.420483	NM_000055	BCHE	Butyrylcholinesterase
B07	Hs.502182	NM_001709	BDNF	Brain-derived neurotrophic factor
B08	Hs.502842	NM_005186	CAPN1	Calpain 1, (mu/I) large subunit
B09	Hs.141125	NM_004346	CASP3	Caspase 3, apoptosis-related cysteine peptidase
B10	Hs.138378	NM_001225	CASP4	Caspase 4, apoptosis-related cysteine peptidase
B11	Hs.334562	NM_001786	CDK1	Cyclin-dependent kinase 1
B12	Hs.647078	NM_004935	CDK5	Cyclin-dependent kinase 5
C01	Hs.679430	NM_004196	CDKL1	Cyclin-dependent kinase-like 1 (CDC2-related kinase)
C02	Hs.302002	NM_020985	CHAT	Choline O-acetyltransferase
C03	Hs.436657	NM_001831	CLU	Clusterin
C04	Hs.520898	NM_001908	CTSB	Cathepsin B
C05	Hs.128065	NM_001814	CTSC	Cathepsin C
C06	Hs.121575	NM_001909	CTSD	Cathepsin D
C07	Hs.421724	NM_001911	CTSG	Cathepsin G
C08	Hs.716407	NM_001912	CTSL1	Cathepsin L1
C09	Hs.517517	NM_001429	EP300	E1A binding protein p300
C10	Hs.133982	NM_001433	ERN1	Endoplasmic reticulum to nucleus signaling 1
C11	Hs.134974	NM_002045	GAP43	Growth associated protein 43
C12	Hs.644524	NM_020988	GNAO1	Guanine nucleotide binding protein (G protein), alpha activating activity polypeptide O
D01	Hs.584760	NM_002073	GNAZ	Guanine nucleotide binding protein (G protein), alpha z polypeptide
D02	Hs.430425	NM_002074	GNB1	Guanine nucleotide binding protein (G protein), beta polypeptide 1
D03	Hs.185172	NM_005273	GNB2	Guanine nucleotide binding protein (G protein), beta polypeptide 2
D04	Hs.173030	NM_021629	GNB4	Guanine nucleotide binding protein (G protein), beta polypeptide 4
D05	Hs.155090	NM_016194	GNB5	Guanine nucleotide binding protein (G protein), beta 5
D06	Hs.83381	NM_004126	GNG11	Guanine nucleotide binding protein (G protein), gamma 11
D07	Hs.179915	NM_012202	GNG3	Guanine nucleotide binding protein (G protein), gamma 3
D08	Hs.159711	NM_004485	GNG4	Guanine nucleotide binding protein (G protein), gamma 4

Position	UniGene	GenBank	Symbol	Description
D09	Hs.702084	NM_021955	GNGT1	Guanine nucleotide binding protein (G protein), gamma transducing activity polypeptide 1
D10	Hs.181781	NM_031498	GNGT2	Guanine nucleotide binding protein (G protein), gamma transducing activity polypeptide 2
D11	Hs.466828	NM_019884	GSK3A	Glycogen synthase kinase 3 alpha
D12	Hs.445733	NM_002093	GSK3B	Glycogen synthase kinase 3 beta
E01	Hs.171280	NM_004493	HSD17B10	Hydroxysteroid (17-beta) dehydrogenase 10
E02	Hs.500546	NM_004969	IDE	Insulin-degrading enzyme
E03	Hs.1722	NM_000575	IL1A	Interleukin 1, alpha
E04	Hs.654579	NM_000207	INS	Insulin
E05	Hs.465744	NM_000208	INSR	Insulin receptor
E06	Hs.180878	NM_000237	LPL	Lipoprotein lipase
E07	Hs.162757	NM_002332	LRP1	Low density lipoprotein receptor-related protein 1
E08	Hs.584775	NM_002336	LRP6	Low density lipoprotein receptor-related protein 6
E09	Hs.576154	NM_004631	LRP8	Low density lipoprotein receptor-related protein 8, apolipoprotein e receptor
E10	Hs.368281	NM_002374	MAP2	Microtubule-associated protein 2
E11	Hs.101174	NM_005910	MAPT	Microtubule-associated protein tau
E12	Hs.458272	NM_000250	MPO	Myeloperoxidase
F01	Hs.460978	NM_003905	NAE1	NEDD8 activating enzyme E1 subunit 1
F02	Hs.517249	NM_015331	NCSTN	Nicastrin
F03	Hs.406293	NM_002529	NTRK1	Neurotrophic tyrosine kinase, receptor, type 1
F04	Hs.494312	NM_006180	NTRK2	Neurotrophic tyrosine kinase, receptor, type 2
F05	Hs.407580	NM_003628	PKP4	Plakophilin 4
F06	Hs.491582	NM_000930	PLAT	Plasminogen activator, tissue
F07	Hs.77274	NM_002658	PLAU	Plasminogen activator, urokinase
F08	Hs.143436	NM_000301	PLG	Plasminogen
F09	Hs.531704	NM_002737	PRKCA	Protein kinase C, alpha
F10	Hs.460355	NM_002738	PRKCB	Protein kinase C, beta
F11	Hs.155342	NM_006254	PRKCD	Protein kinase C, delta
F12	Hs.580351	NM_005400	PRKCE	Protein kinase C, epsilon
G01	Hs.631564	NM_002739	PRKCG	Protein kinase C, gamma
G02	Hs.478199	NM_002740	PRKCI	Protein kinase C, iota
G03	Hs.498570	NM_006257	PRKCQ	Protein kinase C, theta
G04	Hs.496255	NM_002744	PRKCZ	Protein kinase C, zeta
G05	Hs.3260	NM_000021	PSEN1	Presenilin 1
G06	Hs.25363	NM_000447	PSEN2	Presenilin 2 (Alzheimer disease 4)
G07	Hs.534293	NM_001085	SERPINA3	Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3
G08	Hs.271771	NM_000345	SNCA	Synuclein, alpha (non A4 component of amyloid precursor)
G09	Hs.90297	NM_003085	SNCB	Synuclein, beta
G10	Hs.9589	NM_013438	UBQLN1	Ubiquilin 1
G11	Hs.119251	NM_003365	UQCRC1	Ubiquinol-cytochrome c reductase core protein I
G12	Hs.528803	NM_003366	UQCRC2	Ubiquinol-cytochrome c reductase core protein II
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, 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 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
RT² 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
RT² 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.

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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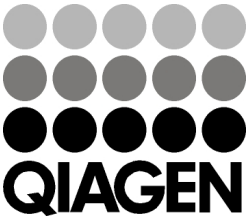

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