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

Mouse Drug Transporters

Cat. no. 330231 PAMM-070ZA

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 Mouse Drug Transporters RT² Profiler PCR Array contains 84 transporter genes. Transporters play key roles in pharmacology, affecting entry and extrusion of drugs into and out of cells. Transporters important to the absorption, distribution, metabolism and excretion of many drugs are included on this array. In addition, transporters that contribute to sensitivity and resistance of tumor cells to anticancer agents are represented. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to drug transporters 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	Abca1	Abca12	Abca13	Abca2	Abca3	Abca4	Abca9	Abcb11	Abcb1a	Abcb1b	Abcb4	Abcb5
B	Abcb6	Abcc1	Abcc10	Abcc12	Abcc2	Abcc3	Abcc4	Abcc5	Abcc6	Abcd1	Abcd3	Abcd4
C	Abcf1	Abcg2	Abcg8	Aqp1	Aqp7	Aqp9	Atp6v0c	Atp7a	Atp7b	Mvp	Slc10a1	Slc10a2
D	Slc15a1	Slc15a2	Slc16a1	Slc16a2	Slc16a3	Slc19a1	Slc19a2	Slc22a1	Slc22a19	Slc22a2	Slc22a3	Slc22a6
E	Slc22a7	Slc22a8	Slc25a13	Slc28a1	Slc28a2	Slc29a1	Slc29a2	Slc2a1	Slc2a2	Slc2a3	Slc31a1	Slc38a2
F	Slc38a5	Slc3a1	Slc3a2	Slc5a1	Slc5a4a	Slc7a11	Slc7a4	Slc7a5	Slc7a6	Slc7a7	Slc7a8	Slc7a9
G	Slco1a4	Slco1a5	Slco1a6	Slco1b2	Slco2a1	Slco2b1	Slco3a1	Slco4a1	Tap1	Tap2	Vdac1	Vdac2
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene table: RT² Profiler PCR Array

Position	UniGene	GenBank	Symbol	Description
A01	Mm.277376	NM_013454	Abca1	ATP-binding cassette, sub-family A (ABC1), member 1
A02	Mm.159251	NM_175210	Abca12	ATP-binding cassette, sub-family A (ABC1), member 12
A03	Mm.39270	NM_178259	Abca13	ATP-binding cassette, sub-family A (ABC1), member 13
A04	Mm.2210	NM_007379	Abca2	ATP-binding cassette, sub-family A (ABC1), member 2
A05	Mm.477776	NM_013855	Abca3	ATP-binding cassette, sub-family A (ABC1), member 3
A06	Mm.3918	NM_007378	Abca4	ATP-binding cassette, sub-family A (ABC1), member 4
A07	Mm.291459	NM_147220	Abca9	ATP-binding cassette, sub-family A (ABC1), member 9
A08	Mm.439855	NM_021022	Abcb11	ATP-binding cassette, sub-family B (MDR/TAP), member 11
A09	Mm.207354	NM_011076	Abcb1a	ATP-binding cassette, sub-family B (MDR/TAP), member 1A
A10	Mm.146649	NM_011075	Abcb1b	ATP-binding cassette, sub-family B (MDR/TAP), member 1B
A11	Mm.297825	NM_008830	Abcb4	ATP-binding cassette, sub-family B (MDR/TAP), member 4
A12	Mm.261496	NM_029961	Abcb5	ATP-binding cassette, sub-family B (MDR/TAP), member 5
B01	Mm.28663	NM_023732	Abcb6	ATP-binding cassette, sub-family B (MDR/TAP), member 6
B02	Mm.196634	NM_008576	Abcc1	ATP-binding cassette, sub-family C (CFTR/MRP), member 1
B03	Mm.76543	NM_145140	Abcc10	ATP-binding cassette, sub-family C (CFTR/MRP), member 10
B04	Mm.67485	NM_172912	Abcc12	ATP-binding cassette, sub-family C (CFTR/MRP), member 12
B05	Mm.39054	NM_013806	Abcc2	ATP-binding cassette, sub-family C (CFTR/MRP), member 2
B06	Mm.23942	NM_029600	Abcc3	ATP-binding cassette, sub-family C (CFTR/MRP), member 3
B07	Mm.40537	NM_001033336	Abcc4	ATP-binding cassette, sub-family C (CFTR/MRP), member 4
B08	Mm.20845	NM_013790	Abcc5	ATP-binding cassette, sub-family C (CFTR/MRP), member 5
B09	Mm.63514	NM_018795	Abcc6	ATP-binding cassette, sub-family C (CFTR/MRP), member 6
B10	Mm.365	NM_007435	Abcd1	ATP-binding cassette, sub-family D (ALD), member 1
B11	Mm.399042	NM_008991	Abcd3	ATP-binding cassette, sub-family D (ALD), member 3
B12	Mm.229109	NM_008992	Abcd4	ATP-binding cassette, sub-family D (ALD), member 4
C01	Mm.329022	NM_013854	Abcf1	ATP-binding cassette, sub-family F (GCN20), member 1
C02	Mm.333096	NM_011920	Abcg2	ATP-binding cassette, sub-family G (WHITE), member 2
C03	Mm.26581	NM_026180	Abcg8	ATP-binding cassette, sub-family G (WHITE), member 8
C04	Mm.18625	NM_007472	Aqp1	Aquaporin 1
C05	Mm.8728	NM_007473	Aqp7	Aquaporin 7
C06	Mm.449427	NM_022026	Aqp9	Aquaporin 9
C07	Mm.30155	NM_009729	Atp6v0c	ATPase, H+ transporting, lysosomal V0 subunit c
C08	Mm.254297	NM_009726	Atp7a	ATPase, Cu++ transporting, alpha polypeptide
C09	Mm.87854	NM_007511	Atp7b	ATPase, Cu++ transporting, beta polypeptide
C10	Mm.228797	NM_080638	Mvp	Major vault protein
C11	Mm.341781	NM_011387	Slc10a1	Solute carrier family 10 (sodium/bile acid cotransporter family), member 1
C12	Mm.3500	NM_011388	Slc10a2	Solute carrier family 10, member 2
D01	Mm.155618	NM_053079	Slc15a1	Solute carrier family 15 (oligopeptide transporter), member 1
D02	Mm.281804	NM_021301	Slc15a2	Solute carrier family 15 (H+/peptide transporter), member 2
D03	Mm.9086	NM_009196	Slc16a1	Solute carrier family 16 (monocarboxylic acid transporters), member 1
D04	Mm.388973	NM_009197	Slc16a2	Solute carrier family 16 (monocarboxylic acid transporters), member 2
D05	Mm.28632	NM_030696	Slc16a3	Solute carrier family 16 (monocarboxylic acid transporters), member 3
D06	Mm.265060	NM_031196	Slc19a1	Solute carrier family 19 (sodium/hydrogen exchanger), member 1
D07	Mm.35444	NM_054087	Slc19a2	Solute carrier family 19 (thiamine transporter), member 2
D08	Mm.594	NM_009202	Slc22a1	Solute carrier family 22 (organic cation transporter), member 1
D09	Mm.21365	NM_144785	Slc22a19	Solute carrier family 22 (organic anion transporter), member 19

Position	UniGene	GenBank	Symbol	Description
D10	Mm.17322	NM_013667	Slc22a2	Solute carrier family 22 (organic cation transporter), member 2
D11	Mm.99252	NM_011395	Slc22a3	Solute carrier family 22 (organic cation transporter), member 3
D12	Mm.30090	NM_008766	Slc22a6	Solute carrier family 22 (organic anion transporter), member 6
E01	Mm.387538	NM_144856	Slc22a7	Solute carrier family 22 (organic anion transporter), member 7
E02	Mm.285294	NM_031194	Slc22a8	Solute carrier family 22 (organic anion transporter), member 8
E03	Mm.24513	NM_015829	Slc25a13	Solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 13
E04	Mm.389909	NM_001004184	Slc28a1	Solute carrier family 28 (sodium-coupled nucleoside transporter), member 1
E05	Mm.29510	NM_172980	Slc28a2	Solute carrier family 28 (sodium-coupled nucleoside transporter), member 2
E06	Mm.29744	NM_022880	Slc29a1	Solute carrier family 29 (nucleoside transporters), member 1
E07	Mm.4930	NM_007854	Slc29a2	Solute carrier family 29 (nucleoside transporters), member 2
E08	Mm.21002	NM_011400	Slc2a1	Solute carrier family 2 (facilitated glucose transporter), member 1
E09	Mm.18443	NM_031197	Slc2a2	Solute carrier family 2 (facilitated glucose transporter), member 2
E10	Mm.395108	NM_011401	Slc2a3	Solute carrier family 2 (facilitated glucose transporter), member 3
E11	Mm.248637	NM_175090	Slc31a1	Solute carrier family 31, member 1
E12	Mm.46754	NM_175121	Slc38a2	Solute carrier family 38, member 2
F01	Mm.6055	NM_172479	Slc38a5	Solute carrier family 38, member 5
F02	Mm.227176	NM_009205	Slc3a1	Solute carrier family 3, member 1
F03	Mm.4114	NM_008577	Slc3a2	Solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2
F04	Mm.25237	NM_019810	Slc5a1	Solute carrier family 5 (sodium/glucose cotransporter), member 1
F05	Mm.154797	NM_133184	Slc5a4a	Solute carrier family 5, member 4a
F06	Mm.260988	NM_011990	Slc7a11	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 11
F07	Mm.298878	NM_144852	Slc7a4	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 4
F08	Mm.27943	NM_011404	Slc7a5	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 5
F09	Mm.46749	NM_178798	Slc7a6	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 6
F10	Mm.142455	NM_011405	Slc7a7	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 7
F11	Mm.276831	NM_016972	Slc7a8	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 8
F12	Mm.45874	NM_021291	Slc7a9	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 9
G01	Mm.255586	NM_030687	Slco1a4	Solute carrier organic anion transporter family, member 1a4
G02	Mm.206599	NM_130861	Slco1a5	Solute carrier organic anion transporter family, member 1a5
G03	Mm.38953	NM_023718	Slco1a6	Solute carrier organic anion transporter family, member 1a6
G04	Mm.272223	NM_020495	Slco1b2	Solute carrier organic anion transporter family, member 1b2
G05	Mm.207106	NM_033314	Slco2a1	Solute carrier organic anion transporter family, member 2a1
G06	Mm.11249	NM_175316	Slco2b1	Solute carrier organic anion transporter family, member 2b1
G07	Mm.425467	NM_023908	Slco3a1	Solute carrier organic anion transporter family, member 3a1
G08	Mm.133687	NM_148933	Slco4a1	Solute carrier organic anion transporter family, member 4a1
G09	Mm.482076	NM_013683	Tap1	Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)
G10	Mm.14814	NM_011530	Tap2	Transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)
G11	Mm.3555	NM_011694	Vdac1	Voltage-dependent anion channel 1
G12	Mm.262327	NM_011695	Vdac2	Voltage-dependent anion channel 2
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, 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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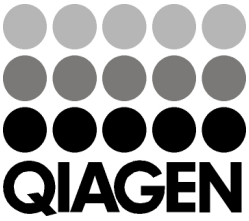

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