

QuantiNova® LNA® Probe PCR Focus Panels (Rotor-Gene® Format)

Rat Drug Transporters

Cat. no. 249955 UPRN-070ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light at 2–8°C for short term storage or at –30°C to –15°C for long time storage. Under these conditions, all components are stable for at least 12 months.

Note: Open the package and store the products appropriately immediately upon receipt.

For optimal performance, QuantiNova LNA Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

Panel layout (Rotor-Gene): QuantiNova LNA Probe PCR Focus Panel

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. Refer to the QuantiNova LNA Probe PCR Handbook at www.qiagen.com for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Abca1	Abca13	Abca17	Abca2	Abca3	Abca4	Abca9	Abcb11	Abcb7	Abcb1a	Abcb5	Abcb6
B	Abcc1	Abcc10	Abcc12	Abcc2	Abcc3	Abcc4	Abcc5	Abcc6	Abcd1	Abcd3	Abcd4	Abcf1
C	Abcg2	Abcg8	Aqp1	Aqp7	Aqp9	Atp6v0c	Atp7a	Atp7b	Mvp	Slc10a1	Slc10a2	Slc15a1
D	Slc15a2	Slc16a1	Slc16a2	Slc16a3	Slc19a1	Slc19a2	Slc19a3	Slc22a1	Slc22a2	Slc22a3	Slc22a6	Slc22a7
E	Slc22a8	AABR0700612 0.1	Slc25a13	Slc28a1	Slc28a2	Slc28a3	Slc29a1	LOC1083480 52	Slc2a1	Slc2a2	LOC1009095 95	Slc31a1
F	Slc38a2	Slc38a5	Slc3a1	Slc3a2	Slc5a1	Slc5a4	Slc7a11	Slc7a4	Slc7a5	Slc7a6	Slc7a7	Slc7a8
G	Slc7a9	Slco1a2	Slco1a6	Slco1b2	Slco2a1	Slco2b1	Slco3a1	Slco4a1	Tap1	LOC1036899 96	Vdac1	Vdac2
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFR1019469	ENSRNOT00000024564.7	Abca1	ENSRNOG0000018126	ATP binding cassette subfamily A member 1 Source RGD Symbol Acc 631344
A02	UPFR1018758	ENSRNOT00000035612.6	Abca13	ENSRNOG0000025645	ATP binding cassette subfamily A member 13 Source RGD Symbol Acc 1305895
A03	UPFR1031984	ENSRNOT00000060818.2	Abca17	ENSRNOG0000039656	ATP-binding cassette, subfamily A (ABC1), member 17 Source RGD Symbol Acc 1560494
A04	UPFR1062601	ENSRNOT00000020339.7	Abca2	ENSRNOG0000014268	ATP binding cassette subfamily A member 2 Source RGD Symbol Acc 620238
A05	UPFR1023226	ENSRNOT00000079700.1	Abca3	ENSRNOG0000050057	ATP binding cassette subfamily A member 3 Source RGD Symbol Acc 1307174
A06	UPFR1103382	ENSRNOT00000017878.6	Abca4	ENSRNOG0000012892	ATP binding cassette subfamily A member 4 Source RGD Symbol Acc 1309445
A07	UPFR1057761	ENSRNOT00000087502.1	Abca9	ENSRNOG0000059326	ATP binding cassette subfamily A member 9 Source RGD Symbol Acc 1305931
A08	UPFR1015665	ENSRNOT00000075107.2	Abcb11	ENSRNOG0000050860	ATP binding cassette subfamily B member 11 Source RGD Symbol Acc 619930
A09	UPFR1063433	ENSRNOT00000003739.6	Abcb7	ENSRNOG0000002790	ATP binding cassette subfamily B member 7 Source RGD Symbol Acc 1303086
A10	UPFR1045141	ENSRNOT00000037712.5	Abcb1a	ENSRNOG0000008012	ATP binding cassette subfamily B member 4 Source RGD Symbol Acc 620248
A11	UPFR1058651	ENSRNOT00000050893.5	Abcb5	ENSRNOG0000006398	ATP binding cassette subfamily B member 5 Source RGD Symbol Acc 1566342
A12	UPFR1118019	ENSRNOT00000025627.6	Abcb6	ENSRNOG0000018697	ATP binding cassette subfamily B member 6 Source RGD Symbol Acc 71077
B01	UPFR1107711	ENSRNOT00000044108.5	Abcc1	ENSRNOG0000022305	ATP binding cassette subfamily C member 1 Source RGD Symbol Acc 3112
B02	UPFR1034621	ENSRNOT00000025598.7	Abcc10	ENSRNOG0000018863	ATP binding cassette subfamily C member 10 Source RGD Symbol Acc 1306696
B03	UPFR1026959	ENSRNOT00000021095.5	Abcc12	ENSRNOG0000015666	ATP binding cassette subfamily C member 12 Source RGD Symbol Acc 735100
B04	UPFR1015892	ENSRNOT00000070861.2	Abcc2	ENSRNOG0000046727	ATP binding cassette subfamily C member 2 Source RGD Symbol Acc 2366
B05	UPFR1023753	ENSRNOT00000003977.6	Abcc3	ENSRNOG0000002948	ATP binding cassette subfamily C member 3 Source RGD Symbol Acc 71101
B06	UPFR1022922	ENSRNOT00000013366.7	Abcc4	ENSRNOG0000010064	ATP binding cassette subfamily C member 4 Source RGD Symbol Acc 620266
B07	UPFR1060323	ENSRNOT00000002316.7	Abcc5	ENSRNOG0000029178	ATP binding cassette subfamily C member 5 Source RGD Symbol Acc 70913
B08	UPFR1082415	ENSRNOT00000042115.1	Abcc6	ENSRNOG0000028781	ATP binding cassette subfamily C member 6 Source RGD Symbol Acc 620268
B09	UPFR1022820	ENSRNOT00000084088.1	Abcd1	ENSRNOG0000056524	ATP binding cassette subfamily D member 1 Source RGD Symbol Acc 1562128
B10	UPFR1057264	ENSRNOT00000016739.6	Abcd3	ENSRNOG0000011929	ATP binding cassette subfamily D member 3 Source RGD Symbol Acc 2007
B11	UPFR1014157	ENSRNOT00000016040.7	Abcd4	ENSRNOG0000011964	ATP binding cassette subfamily D member 4 Source RGD Symbol Acc 1307273
B12	UPFR1113690	ENSRNOT00000001049.7	Abcf1	ENSRNOG0000000799	ATP binding cassette subfamily F member 1 Source RGD Symbol Acc 620286
C01	UPFR1079489	ENSRNOT00000009546.5	Abcg2	ENSRNOG0000007041	ATP binding cassette subfamily G member 2 Source RGD Symbol Acc 631345
C02	UPFR1067969	ENSRNOT00000061871.5	Abcg8	ENSRNOG0000005420	ATP binding cassette subfamily G member 8 Source RGD Symbol Acc 620300
C03	UPFR1107660	ENSRNOT00000015692.2	Aqp1	ENSRNOG0000011648	aquaporin 1 Source RGD Symbol Acc 2141
C04	UPFR1014596	ENSRNOT00000012975.2	Aqp7	ENSRNOG0000009686	aquaporin 7 Source RGD Symbol Acc 2145
C05	UPFR1016120	ENSRNOT00000087980.1	Aqp9	ENSRNOG0000061883	aquaporin 9 Source RGD Symbol Acc 68433
C06	UPFR1088134	ENSRNOT00000008736.6	Atp6v0c	ENSRNOG0000006542	ATPase H+ transporting V0 subunit C Source RGD Symbol Acc 621394
C07	UPFR1057487	ENSRNOT00000085227.1	Atp7a	ENSRNOG0000061367	ATPase copper transporting alpha Source RGD Symbol Acc 2179
C08	UPFR1061730	ENSRNOT00000089265.1	Atp7b	ENSRNOG0000012878	ATPase copper transporting beta Source RGD Symbol Acc 2180
C09	UPFR1068431	ENSRNOT00000027360.5	Mvp	ENSRNOG0000020182	major vault protein Source RGD Symbol Acc 70932
C10	UPFR1113532	ENSRNOT00000007825.3	Slc10a1	ENSRNOG0000005794	solute carrier family 10 member 1 Source RGD Symbol Acc 3681
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1021921	081359.1	Slc10a2	000037753	solute carrier family 10 member 2 Source RGD Symbol Acc 3682
C12	UPFR1036493	ENSRNOT00000 015890.6	Slc15a1	ENSRNOG00 000011598	solute carrier family 15 member 1 Source RGD Symbol Acc 621736
D01	UPFR1036688	ENSRNOT00000 003189.5	Slc15a2	ENSRNOG00 000002305	solute carrier family 15 member 2 Source RGD Symbol Acc 61972
D02	UPFR1102172	ENSRNOT00000 027234.5	Slc16a1	ENSRNOG00 000019996	solute carrier family 16 member 1 Source RGD Symbol Acc 3690
D03	UPFR1060196	ENSRNOT00000 040637.3	Slc16a2	ENSRNOG00 000002832	solute carrier family 16 member 2 Source RGD Symbol Acc 628608
D04	UPFR1085116	ENSRNOT00000 054939.3	Slc16a3	ENSRNOG00 000036677	solute carrier family 16 member 3 Source RGD Symbol Acc 620603
D05	UPFR1034551	ENSRNOT00000 065236.3	Slc19a1	ENSRNOG00 000001232	solute carrier family 19 member 1 Source RGD Symbol Acc 3695
D06	UPFR1014572	ENSRNOT00000 076607.1	Slc19a2	ENSRNOG00 000002839	solute carrier family 19 member 2 Source RGD Symbol Acc 1308611
D07	UPFR1093592	ENSRNOT00000 083667.1	Slc19a3	ENSRNOG00 000057256	solute carrier family 19 member 3 Source RGD Symbol Acc 1311413
D08	UPFR1013459	ENSRNOT00000 022254.5	Slc22a1	ENSRNOG00 000016337	solute carrier family 22 member 1 Source RGD Symbol Acc 3224
D09	UPFR1036648	ENSRNOT00000 051927.5	Slc22a2	ENSRNOG00 000016625	solute carrier family 22 member 2 Source RGD Symbol Acc 61936
D10	UPFR1105557	ENSRNOT00000 037369.2	Slc22a3	ENSRNOG00 000002946	solute carrier family 22 member 3 Source RGD Symbol Acc 3701
D11	UPFR1096502	ENSRNOT00000 024757.4	Slc22a6	ENSRNOG00 000018215	solute carrier family 22 member 6 Source RGD Symbol Acc 69338
D12	UPFR1074111	ENSRNOT00000 025094.5	Slc22a7	ENSRNOG00 000018420	solute carrier family 22 member 7 Source RGD Symbol Acc 621699
E01	UPFR1023526	ENSRNOT00000 024488.5	Slc22a8	ENSRNOG00 000018086	solute carrier family 22 member 8 Source RGD Symbol Acc 632286
E02	UPFR1111129	ENSRNOT00000 091992.1	AABR0700 6120.1	ENSRNOG00 000056396	
E03	UPFR1039229	ENSRNOT00000 013817.7	Slc25a13	ENSRNOG00 000009957	solute carrier family 25 member 13 Source RGD Symbol Acc 1565889
E04	UPFR1036436	ENSRNOT00000 077441.1	Slc28a1	ENSRNOG00 000018940	solute carrier family 28 member 1 Source RGD Symbol Acc 621223
E05	UPFR1021544	ENSRNOT00000 024658.7	Slc28a2	ENSRNOG00 000028668	solute carrier family 28 member 2 Source RGD Symbol Acc 61840
E06	UPFR1070459	ENSRNOT00000 025745.3	Slc28a3	ENSRNOG00 000018853	solute carrier family 28 member 3 Source RGD Symbol Acc 621224
E07	UPFR1057931	ENSRNOT00000 026831.5	Slc29a1	ENSRNOG00 000019752	solute carrier family 29 member 1 Source RGD Symbol Acc 61899
E08	UPFR1107700	ENSRNOT00000 071891.2	LOC10834 8052	ENSRNOG00 000050201	equilibrative nucleoside transporter 2 Source RGD Symbol Acc 11407640
E09	UPFR1052096	ENSRNOT00000 083700.1	Slc2a1	ENSRNOG00 000007284	solute carrier family 2 member 1 Source RGD Symbol Acc 3704
E10	UPFR1053165	ENSRNOT00000 015866.6	Slc2a2	ENSRNOG00 000011875	solute carrier family 2 member 2 Source RGD Symbol Acc 3705
E11	UPFR1014889	ENSRNOT00000 085447.1	LOC10090 9595	ENSRNOG00 000008376	solute carrier family 2 member 3 Source RGD Symbol Acc 3706
E12	UPFR1056737	ENSRNOT00000 019544.4	Slc31a1	ENSRNOG00 000014475	solute carrier family 31 member 1 Source RGD Symbol Acc 620059
F01	UPFR1106183	ENSRNOT00000 039002.3	Slc38a2	ENSRNOG00 000006305	solute carrier family 38, member 2 Source RGD Symbol Acc 69420
F02	UPFR1117692	ENSRNOT00000 038068.5	Slc38a5	ENSRNOG00 000027767	solute carrier family 38, member 5 Source RGD Symbol Acc 620702
F03	UPFR1050927	ENSRNOT00000 009581.4	Slc3a1	ENSRNOG00 000007006	solute carrier family 3 member 1 Source RGD Symbol Acc 3709
F04	UPFR1081766	ENSRNOT00000 025196.3	Slc3a2	ENSRNOG00 000018487	solute carrier family 3 member 2 Source RGD Symbol Acc 3073
F05	UPFR1118995	ENSRNOT00000 024165.6	Slc5a1	ENSRNOG00 000017775	solute carrier family 5 member 1 Source RGD Symbol Acc 3713
F06	UPFR1017015	ENSRNOT00000 072183.2	Slc5a4	ENSRNOG00 000049734	solute carrier family 5 member 4 Source RGD Symbol Acc 1306923
F07	UPFR1111597	ENSRNOT00000 014317.5	Slc7a11	ENSRNOG00 000010210	solute carrier family 7 member 11 Source RGD Symbol Acc 1309275
F08	UPFR1119652	ENSRNOT00000 002560.5	Slc7a4	ENSRNOG00 000001874	solute carrier family 7, member 4 Source RGD Symbol Acc 1305905
F09	UPFR1094736	ENSRNOT00000 025784.2	Slc7a5	ENSRNOG00 000018824	solute carrier family 7 member 5 Source RGD Symbol Acc 620639
F10	UPFR1108000	ENSRNOT00000 027117.4	Slc7a6	ENSRNOG00 000019943	solute carrier family 7 member 6 Source RGD Symbol Acc 1309193

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1013231	ENSRNOT00000014391.5	Slc7a7	ENSRNOG00000010296	solute carrier family 7 member 7 Source RGD Symbol Acc 619902
F12	UPFR1045791	ENSRNOT00000092160.1	Slc7a8	ENSRNOG00000014311	solute carrier family 7 member 8 Source RGD Symbol Acc 619904
G01	UPFR1032947	ENSRNOT00000016919.4	Slc7a9	ENSRNOG00000012344	solute carrier family 7 member 9 Source RGD Symbol Acc 619905
G02	UPFR1050313	ENSRNOT00000049569.4	Slco1a2	ENSRNOG00000031249	solute carrier organic anion transporter family, member 1A2 Source RGD Symbol Acc 70985
G03	UPFR1112375	ENSRNOT00000048367.2	Slco1a6	ENSRNOG00000030894	solute carrier organic anion transporter family, member 1a6 Source RGD Symbol Acc 69304
G04	UPFR1032708	ENSRNOT00000013514.6	Slco1b2	ENSRNOG00000030538	solute carrier organic anion transporter family, member 1B2 Source RGD Symbol Acc 69300
G05	UPFR1065898	ENSRNOT00000012162.6	Slco2a1	ENSRNOG0000009005	solute carrier organic anion transporter family, member 2a1 Source RGD Symbol Acc 3051
G06	UPFR1080892	ENSRNOT00000024281.5	Slco2b1	ENSRNOG00000017976	solute carrier organic anion transporter family, member 2b1 Source RGD Symbol Acc 621391
G07	UPFR1079352	ENSRNOT00000075893.1	Slco3a1	ENSRNOG00000032798	solute carrier organic anion transporter family, member 3a1 Source RGD Symbol Acc 620227
G08	UPFR1026780	ENSRNOT00000080656.1	Slco4a1	ENSRNOG00000053430	solute carrier organic anion transporter family, member 4a1 Source RGD Symbol Acc 620228
G09	UPFR1038592	ENSRNOT00000000529.6	Tap1	ENSRNOG0000000457	transporter 1, ATP binding cassette subfamily B member Source RGD Symbol Acc 3817
G10	UPFR1040144	ENSRNOT00000000527.5	LOC103689996	ENSRNOG0000000455	antigen peptide transporter 2 Source RGD Symbol Acc 9419934
G11	UPFR1102476	ENSRNOT00000008477.5	Vdac1	ENSRNOG00000006375	voltage-dependent anion channel 1 Source RGD Symbol Acc 621575
G12	UPFR1012822	ENSRNOT00000086864.1	Vdac2	ENSRNOG00000013505	voltage-dependent anion channel 2 Source RGD Symbol Acc 621576
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	UPFR1126610	UPL_RGDC	RGDC	UPL_RGDC	Rat Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
QuantiNova Reverse Transcription Kit (10)*	For 10 x 20 μ l reactions: 20 μ l 8x gDNA Removal Mix, 10 μ l Reverse Transcription Enzyme, 40 μ l Reverse Transcription Mix (containing RT primers), 20 μ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 μ l QuantiNova Probe RT Mix, 20 μ l Internal Control RNA, 500 μ l Yellow Template Dilution Buffer, 250 μ l ROX Reference Dye, 1.9 μ l RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l QN ROX Reference Dye, 1.9 ml Water	208252

*Larger kit sizes available.

The QuantiNova LNA Probe PCR Focus Panels 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.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.