

QuantiNova® LNA® PCR Focus Panels (96-Well Format and 384-Well [4 x 96] Format)

Rat Drug Transporters

Cat. no. 249950 SBRN-070ZA

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA PCR Focus Panels are shipped at ambient temperature. Immediately upon receipt, they should be stored 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 PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova SYBR® Green PCR Kit (Mastermix) for PCR.

Panel layout (96-well): QuantiNova LNA PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. Refer to the QuantiNova LNA PCR System 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	Mvtp	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 PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBR1139590	ENSRNOT00000024564.7	Abca1	ENSRNOG0000018126	ATP binding cassette subfamily A member 1 Source RGD Symbol Acc 631344
A02	SBR1140224	ENSRNOT00000035612.6	Abca13	ENSRNOG0000025645	ATP binding cassette subfamily A member 13 Source RGD Symbol Acc 1305895
A03	SBR1142286	ENSRNOT00000060818.2	Abca17	ENSRNOG0000039656	ATP-binding cassette, subfamily A (ABC1), member 17 Source RGD Symbol Acc 1560494
A04	SBR1149423	ENSRNOT00000020339.7	Abca2	ENSRNOG0000014268	ATP binding cassette subfamily A member 2 Source RGD Symbol Acc 620238
A05	SBR1200745	ENSRNOT00000079700.1	Abca3	ENSRNOG0000050057	ATP binding cassette subfamily A member 3 Source RGD Symbol Acc 1307174
A06	SBR1173932	ENSRNOT00000017878.6	Abca4	ENSRNOG0000012892	ATP binding cassette subfamily A member 4 Source RGD Symbol Acc 1309445
A07	SBR1169632	ENSRNOT00000087502.1	Abca9	ENSRNOG0000059326	ATP binding cassette subfamily A member 9 Source RGD Symbol Acc 1305931
A08	SBR1176815	ENSRNOT00000075107.2	Abcb11	ENSRNOG0000050860	ATP binding cassette subfamily B member 11 Source RGD Symbol Acc 619930
A09	SBR1179887	ENSRNOT00000083655.1	Abcb7	ENSRNOG0000002790	ATP binding cassette subfamily B member 7 Source RGD Symbol Acc 1303086
A10	SBR1116067	ENSRNOT00000082359.1	Abcb1a	ENSRNOG0000008012	ATP binding cassette subfamily B member 4 Source RGD Symbol Acc 620248
A11	SBR1118482	ENSRNOT00000074197.2	Abcb5	ENSRNOG0000006398	ATP binding cassette subfamily B member 5 Source RGD Symbol Acc 1566342
A12	SBR1117220	ENSRNOT00000025627.6	Abcb6	ENSRNOG0000018697	ATP binding cassette subfamily B member 6 Source RGD Symbol Acc 71077
B01	SBR1173969	ENSRNOT00000044108.5	Abcc1	ENSRNOG0000022305	ATP binding cassette subfamily C member 1 Source RGD Symbol Acc 3112
B02	SBR1136370	ENSRNOT00000025598.7	Abcc10	ENSRNOG0000018863	ATP binding cassette subfamily C member 10 Source RGD Symbol Acc 1306696
B03	SBR1126424	ENSRNOT00000042077.2	Abcc12	ENSRNOG0000015666	ATP binding cassette subfamily C member 12 Source RGD Symbol Acc 735100
B04	SBR1119829	ENSRNOT00000070861.2	Abcc2	ENSRNOG0000046727	ATP binding cassette subfamily C member 2 Source RGD Symbol Acc 2366
B05	SBR1130301	ENSRNOT00000079711.1	Abcc3	ENSRNOG0000002948	ATP binding cassette subfamily C member 3 Source RGD Symbol Acc 71101
B06	SBR1100129	ENSRNOT00000013366.7	Abcc4	ENSRNOG0000010064	ATP binding cassette subfamily C member 4 Source RGD Symbol Acc 620266
B07	SBR1132742	ENSRNOT00000002316.7	Abcc5	ENSRNOG0000029178	ATP binding cassette subfamily C member 5 Source RGD Symbol Acc 70913
B08	SBR1180470	ENSRNOT00000042115.1	Abcc6	ENSRNOG0000028781	ATP binding cassette subfamily C member 6 Source RGD Symbol Acc 620268
B09	SBR1112598	ENSRNOT00000084088.1	Abcd1	ENSRNOG0000056524	ATP binding cassette subfamily D member 1 Source RGD Symbol Acc 1562128
B10	SBR1189576	ENSRNOT00000016739.6	Abcd3	ENSRNOG0000011929	ATP binding cassette subfamily D member 3 Source RGD Symbol Acc 2007
B11	SBR1126915	ENSRNOT00000016040.7	Abcd4	ENSRNOG0000011964	ATP binding cassette subfamily D member 4 Source RGD Symbol Acc 1307273
B12	SBR1119259	ENSRNOT00000001049.7	Abcf1	ENSRNOG0000000799	ATP binding cassette subfamily F member 1 Source RGD Symbol Acc 620286
C01	SBR1124096	ENSRNOT00000088983.1	Abcg2	ENSRNOG0000007041	ATP binding cassette subfamily G member 2 Source RGD Symbol Acc 631345
C02	SBR1104411	ENSRNOT00000061871.5	Abcg8	ENSRNOG0000005420	ATP binding cassette subfamily G member 8 Source RGD Symbol Acc 620300
C03	SBR1204719	ENSRNOT00000015692.2	Aqp1	ENSRNOG0000011648	aquaporin 1 Source RGD Symbol Acc 2141
C04	SBR1106245	ENSRNOT00000012975.2	Aqp7	ENSRNOG0000009686	aquaporin 7 Source RGD Symbol Acc 2145
C05	SBR1194754	ENSRNOT00000087980.1	Aqp9	ENSRNOG0000061883	aquaporin 9 Source RGD Symbol Acc 68433
C06	SBR1211634	ENSRNOT00000008736.6	Atp6v0c	ENSRNOG0000006542	ATPase H+ transporting V0 subunit C Source RGD Symbol Acc 621394
C07	SBR1144502	ENSRNOT00000089381.1	Atp7a	ENSRNOG0000061367	ATPase copper transporting alpha Source RGD Symbol Acc 2179
C08	SBR1171287	ENSRNOT00000089265.1	Atp7b	ENSRNOG0000012878	ATPase copper transporting beta Source RGD Symbol Acc 2180
C09	SBR1187423	ENSRNOT00000027360.5	Mvp	ENSRNOG0000020182	major vault protein Source RGD Symbol Acc 70932
C10	SBR1123679	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	SBR1194345	081359.1	Slc10a2	000037753	solute carrier family 10 member 2 Source RGD Symbol Acc 3682
C12	SBR1167490	ENSRNOT00000015890.6	Slc15a1	ENSRNOG0000011598	solute carrier family 15 member 1 Source RGD Symbol Acc 621736
D01	SBR1195288	ENSRNOT00000003189.5	Slc15a2	ENSRNOG0000002305	solute carrier family 15 member 2 Source RGD Symbol Acc 61972
D02	SBR1135201	ENSRNOT00000027234.5	Slc16a1	ENSRNOG0000019996	solute carrier family 16 member 1 Source RGD Symbol Acc 3690
D03	SBR1110424	ENSRNOT00000040637.3	Slc16a2	ENSRNOG0000002832	solute carrier family 16 member 2 Source RGD Symbol Acc 628608
D04	SBR1176498	ENSRNOT00000054939.3	Slc16a3	ENSRNOG0000036677	solute carrier family 16 member 3 Source RGD Symbol Acc 620603
D05	SBR1119330	ENSRNOT00000065236.3	Slc19a1	ENSRNOG0000001232	solute carrier family 19 member 1 Source RGD Symbol Acc 3695
D06	SBR1196079	ENSRNOT00000076722.2	Slc19a2	ENSRNOG0000002839	solute carrier family 19 member 2 Source RGD Symbol Acc 1308611
D07	SBR1175002	ENSRNOT00000083667.1	Slc19a3	ENSRNOG0000057256	solute carrier family 19 member 3 Source RGD Symbol Acc 1311413
D08	SBR1174804	ENSRNOT00000022254.5	Slc22a1	ENSRNOG0000016337	solute carrier family 22 member 1 Source RGD Symbol Acc 3224
D09	SBR1178512	ENSRNOT00000051927.5	Slc22a2	ENSRNOG0000016625	solute carrier family 22 member 2 Source RGD Symbol Acc 61936
D10	SBR1142061	ENSRNOT00000037369.2	Slc22a3	ENSRNOG0000002946	solute carrier family 22 member 3 Source RGD Symbol Acc 3701
D11	SBR1153299	ENSRNOT00000024757.4	Slc22a6	ENSRNOG0000018215	solute carrier family 22 member 6 Source RGD Symbol Acc 69338
D12	SBR1146833	ENSRNOT00000025094.5	Slc22a7	ENSRNOG0000018420	solute carrier family 22 member 7 Source RGD Symbol Acc 621699
E01	SBR1164797	ENSRNOT00000024488.5	Slc22a8	ENSRNOG0000018086	solute carrier family 22 member 8 Source RGD Symbol Acc 632286
E02	SBR1093745	ENSRNOT00000091992.1	AABR07006120.1	ENSRNOG0000056396	
E03	SBR1122221	ENSRNOT00000013817.7	Slc25a13	ENSRNOG0000009957	solute carrier family 25 member 13 Source RGD Symbol Acc 1565889
E04	SBR1094201	ENSRNOT00000077441.1	Slc28a1	ENSRNOG0000018940	solute carrier family 28 member 1 Source RGD Symbol Acc 621223
E05	SBR1120735	ENSRNOT00000024658.7	Slc28a2	ENSRNOG0000028668	solute carrier family 28 member 2 Source RGD Symbol Acc 61840
E06	SBR1148214	ENSRNOT00000025745.3	Slc28a3	ENSRNOG0000018853	solute carrier family 28 member 3 Source RGD Symbol Acc 621224
E07	SBR1153743	ENSRNOT00000026831.5	Slc29a1	ENSRNOG0000019752	solute carrier family 29 member 1 Source RGD Symbol Acc 61899
E08	SBR1125563	ENSRNOT00000071891.2	LOC108348052	ENSRNOG0000050201	equilibrative nucleoside transporter 2 Source RGD Symbol Acc 11407640
E09	SBR1109042	ENSRNOT00000064452.2	Slc2a1	ENSRNOG0000007284	solute carrier family 2 member 1 Source RGD Symbol Acc 3704
E10	SBR1115527	ENSRNOT00000015866.6	Slc2a2	ENSRNOG0000011875	solute carrier family 2 member 2 Source RGD Symbol Acc 3705
E11	SBR1211125	ENSRNOT00000088270.1	LOC100909595	ENSRNOG0000008376	solute carrier family 2 member 3 Source RGD Symbol Acc 3706
E12	SBR1129688	ENSRNOT00000019544.4	Slc31a1	ENSRNOG0000014475	solute carrier family 31 member 1 Source RGD Symbol Acc 620059
F01	SBR1143572	ENSRNOT00000039002.3	Slc38a2	ENSRNOG0000006305	solute carrier family 38, member 2 Source RGD Symbol Acc 69420
F02	SBR1168611	ENSRNOT00000079664.1	Slc38a5	ENSRNOG0000027767	solute carrier family 38, member 5 Source RGD Symbol Acc 620702
F03	SBR1166376	ENSRNOT00000009581.4	Slc3a1	ENSRNOG0000007006	solute carrier family 3 member 1 Source RGD Symbol Acc 3709
F04	SBR1199526	ENSRNOT00000025196.3	Slc3a2	ENSRNOG0000018487	solute carrier family 3 member 2 Source RGD Symbol Acc 3073
F05	SBR1169985	ENSRNOT00000024165.6	Slc5a1	ENSRNOG0000017775	solute carrier family 5 member 1 Source RGD Symbol Acc 3713
F06	SBR1094449	ENSRNOT00000072183.2	Slc5a4	ENSRNOG0000049734	solute carrier family 5 member 4 Source RGD Symbol Acc 1306923
F07	SBR1204512	ENSRNOT00000014317.5	Slc7a11	ENSRNOG0000010210	solute carrier family 7 member 11 Source RGD Symbol Acc 1309275
F08	SBR1163989	ENSRNOT00000002560.5	Slc7a4	ENSRNOG0000001874	solute carrier family 7, member 4 Source RGD Symbol Acc 1305905
F09	SBR1165924	ENSRNOT00000025784.2	Slc7a5	ENSRNOG0000018824	solute carrier family 7 member 5 Source RGD Symbol Acc 620639
F10	SBR1131330	ENSRNOT00000027117.4	Slc7a6	ENSRNOG0000019943	solute carrier family 7 member 6 Source RGD Symbol Acc 1309193

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1212064	ENSRNOT00000014391.5	Slc7a7	ENSRNOG00000010296	solute carrier family 7 member 7 Source RGD Symbol Acc 619902
F12	SBR1207519	ENSRNOT00000019618.4	Slc7a8	ENSRNOG00000014311	solute carrier family 7 member 8 Source RGD Symbol Acc 619904
G01	SBR1194717	ENSRNOT00000016919.4	Slc7a9	ENSRNOG00000012344	solute carrier family 7 member 9 Source RGD Symbol Acc 619905
G02	SBR1189172	ENSRNOT00000049569.4	Slco1a2	ENSRNOG00000031249	solute carrier organic anion transporter family, member 1A2 Source RGD Symbol Acc 70985
G03	SBR1179217	ENSRNOT00000048367.2	Slco1a6	ENSRNOG00000030894	solute carrier organic anion transporter family, member 1a6 Source RGD Symbol Acc 69304
G04	SBR1174935	ENSRNOT00000013409.7	Slco1b2	ENSRNOG00000030538	solute carrier organic anion transporter family, member 1B2 Source RGD Symbol Acc 69300
G05	SBR1096350	ENSRNOT00000012162.6	Slco2a1	ENSRNOG0000009005	solute carrier organic anion transporter family, member 2a1 Source RGD Symbol Acc 3051
G06	SBR1159006	ENSRNOT00000024281.5	Slco2b1	ENSRNOG00000017976	solute carrier organic anion transporter family, member 2b1 Source RGD Symbol Acc 621391
G07	SBR1188057	ENSRNOT00000043854.2	Slco3a1	ENSRNOG00000032798	solute carrier organic anion transporter family, member 3a1 Source RGD Symbol Acc 620227
G08	SBR1183726	ENSRNOT00000080656.1	Slco4a1	ENSRNOG00000053430	solute carrier organic anion transporter family, member 4a1 Source RGD Symbol Acc 620228
G09	SBR1103040	ENSRNOT00000000529.6	Tap1	ENSRNOG0000000457	transporter 1, ATP binding cassette subfamily B member Source RGD Symbol Acc 3817
G10	SBR1104130	ENSRNOT00000000527.5	LOC103689996	ENSRNOG0000000455	antigen peptide transporter 2 Source RGD Symbol Acc 9419934
G11	SBR1193148	ENSRNOT00000008477.5	Vdac1	ENSRNOG00000006375	voltage-dependent anion channel 1 Source RGD Symbol Acc 621575
G12	SBR1147977	ENSRNOT00000018462.6	Vdac2	ENSRNOG00000013505	voltage-dependent anion channel 2 Source RGD Symbol Acc 621576
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	SBR1218555	Sybr_RGDC	RGDC	Sybr_RGDC	Rat Genomic DNA Contamination
H07	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H08	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H09	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H10	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H11	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H12	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249940
QuantiNova Reverse Transcription Kit (10)*	For 10 x 20 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 µl QuantiNova SYBR Green RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl QN ROX Reference Dye, 1.9 ml Water	208052

*Larger kit sizes available.

The QuantiNova LNA PCR Focus Panels are intended for molecular biology applications. These products are not intended for the diagnosis, prevention or treatment of a disease.

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