

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

Rat Lipoprotein Signaling & Cholesterol Metabolism

Cat. no. 249950 SBRN-080ZA

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	Abca2	Abcg1	Acaa2	Akr1d1	Angptl3	LOC1009104 38	Apoa1	Apoa2	Apoa4	Apob	NEWGENE_21 34
B	Apoc3	Apod	Apoe	Apaf	LOC1009118 04	Cdh13	Cel	Cela3b	Cnbp	Colec12	Cxcl16	Cyb5r3
C	Cyp11a1	Cyp39a1	Cyp46a1	Cyp51	Cyp7a1	Cyp7b1	Dhcr24	Dhcr7	Ebp	Fdft1	Fdps	Hdlbp
D	Hmgcr	Hmgcs1	Hmgcs2	Idi1	Ii4	Insig1	Insig2	Lcat	Ldlr	Ldlrap1	Lep	Lipe
E	Lrp10	Lrp12	AABR0705189 2.1	Lrp6	Lrpap1	Mblps1	Mvd	Mvk	Nr0b2	Nr1h2	Nr1h3	Nr1h4
F	Nadh1	Olr1	Osbpl1a	Osbpl5	Pcsk9	Pmk	Ppard	Prkaa1	Prkaa2	Prkag2	LOC291276	Scap
G	Scar1	Snx17	Soat1	Soat2	Lrp5	Srebf1	Srebf2	Stab2	Stard3	Tm7sf2	Trer1	Vldlr
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	SBR1149423	ENSRNOT00000020339.7	Abca2	ENSRNOG0000014268	ATP binding cassette subfamily A member 2 Source RGD Symbol Acc 620238
A03	SBR1189903	ENSRNOT00000078031.1	Abcg1	ENSRNOG0000001158	ATP binding cassette subfamily G member 1 Source RGD Symbol Acc 620294
A04	SBR1105194	ENSRNOT00000067018.3	Acaa2	ENSRNOG0000013766	acetyl-CoA acyltransferase 2 Source RGD Symbol Acc 620482
A05	SBR1118906	ENSRNOT00000017675.7	Akr1d1	ENSRNOG0000013004	aldo-keto reductase family 1, member D1 Source RGD Symbol Acc 620752
A06	SBR1121978	ENSRNOT00000011486.6	Angptl3	ENSRNOG0000008638	angiotensin-like 3 Source RGD Symbol Acc 1564505
A07	SBR1141458	ENSRNOT00000022525.6	LOC100910438	ENSRNOG0000016622	ankyrin repeat family A member 2 Source RGD Symbol Acc 1303108
A08	SBR1146824	ENSRNOT00000074357.2	Apoa1	ENSRNOG0000045679	apolipoprotein A1 Source RGD Symbol Acc 2130
A09	SBR1130686	ENSRNOT00000004662.4	Apoa2	ENSRNOG0000003500	apolipoprotein A2 Source RGD Symbol Acc 2131
A10	SBR1099412	ENSRNOT00000080658.1	Apoa4	ENSRNOG0000055909	apolipoprotein A4 Source RGD Symbol Acc 2132
A11	SBR1117274	ENSRNOT00000007371.6	Apob	ENSRNOG0000005542	apolipoprotein B Source RGD Symbol Acc 2129
A12	SBR1147218	ENSRNOT00000091647.1	NEWGENE_2134	ENSRNOG0000018426	apolipoprotein C1 Source RGD Symbol Acc 2134
B01	SBR1177510	ENSRNOT00000090985.1	Apoc3	ENSRNOG0000047503	apolipoprotein C3 Source RGD Symbol Acc 2136
B02	SBR1133157	ENSRNOT00000073330.2	Apod	ENSRNOG0000048273	apolipoprotein D Source RGD Symbol Acc 2137
B03	SBR1123572	ENSRNOT00000080453.1	Apoe	ENSRNOG0000018454	apolipoprotein E Source RGD Symbol Acc 2138
B04	SBR1129262	ENSRNOT00000041341.3	Apof	ENSRNOG0000033619	apolipoprotein F Source RGD Symbol Acc 1560713
B05	SBR1147066	ENSRNOT00000074293.2	LOC100911804	ENSRNOG0000048451	apolipoprotein L3-like Source RGD Symbol Acc 6490440
B06	SBR1129959	ENSRNOT00000077053.2	Cdh13	ENSRNOG0000014371	cadherin 13 Source RGD Symbol Acc 619745
B07	SBR1133308	ENSRNOT00000014572.4	Cel	ENSRNOG0000010406	carboxyl ester lipase Source RGD Symbol Acc 2331
B08	SBR1208986	ENSRNOT00000036788.4	Cela3b	ENSRNOG0000021619	chymotrypsin-like elastase family, member 3B Source RGD Symbol Acc 1307819
B09	SBR1139311	ENSRNOT00000013884.6	Cnbp	ENSRNOG0000010239	CCHC-type zinc finger, nucleic acid binding protein Source RGD Symbol Acc 621807
B10	SBR1108391	ENSRNOT00000065494.1	Colec12	ENSRNOG0000016366	collectin sub-family member 12 Source RGD Symbol Acc 735039
B11	SBR1184750	ENSRNOT00000032926.4	Cxcl16	ENSRNOG0000026647	C-X-C motif chemokine ligand 16 Source RGD Symbol Acc 1562928
B12	SBR1181279	ENSRNOT00000064700.3	Cyb5r3	ENSRNOG0000009592	cytochrome b5 reductase 3 Source RGD Symbol Acc 2502
C01	SBR1181695	ENSRNOT00000010831.6	Cyp11a1	ENSRNOG0000008074	cytochrome P450, family 11, subfamily a, polypeptide 1 Source RGD Symbol Acc 69325
C02	SBR1145731	ENSRNOT00000014051.3	Cyp39a1	ENSRNOG0000010519	cytochrome P450, family 39, subfamily a, polypeptide 1 Source RGD Symbol Acc 1307471
C03	SBR1159663	ENSRNOT00000081088.1	Cyp46a1	ENSRNOG0000007147	cytochrome P450, family 46, subfamily a, polypeptide 1 Source RGD Symbol Acc 1306605
C04	SBR1214891	ENSRNOT00000009985.5	Cyp51	ENSRNOG0000007234	cytochrome P450, family 51 Source RGD Symbol Acc 2481
C05	SBR1177796	ENSRNOT00000012819.4	Cyp7a1	ENSRNOG0000009488	cytochrome P450 family 7 subfamily A member 1 Source RGD Symbol Acc 2482
C06	SBR1188185	ENSRNOT00000013116.6	Cyp7b1	ENSRNOG0000009730	cytochrome P450 family 7 subfamily B member 1 Source RGD Symbol Acc 2483
C07	SBR1145371	ENSRNOT00000009402.6	Dhcr24	ENSRNOG0000006787	24-dehydrocholesterol reductase Source RGD Symbol Acc 1306529
C08	SBR1146350	ENSRNOT00000028195.5	Dhcr7	ENSRNOG0000020776	7-dehydrocholesterol reductase Source RGD Symbol Acc 621769
C09	SBR1168883	ENSRNOT00000007015.6	Ebp	ENSRNOG0000004903	EBP, cholesterol delta-isomerase Source RGD Symbol Acc 620957
C10	SBR1216676	ENSRNOT00000032089.4	Fdft1	ENSRNOG0000021314	farnesyl diphosphate farnesyl transferase 1 Source RGD Symbol Acc 61834
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1201942	080185.1	Fdps	000043377	farnesyl diphosphate synthase Source RGD Symbol Acc 68953
C12	SBR1160073	ENSRNOT00000 086433.1	Hdlbp	ENSRNOG00 000031479	high density lipoprotein binding protein Source RGD Symbol Acc 620962
D01	SBR1198292	ENSRNOT00000 022055.4	Hmgcr	ENSRNOG00 000016122	3-hydroxy-3-methylglutaryl-CoA reductase Source RGD Symbol Acc 2803
D02	SBR1172529	ENSRNOT00000 023554.6	Hmgcs1	ENSRNOG00 000016552	3-hydroxy-3-methylglutaryl-CoA synthase 1 Source RGD Symbol Acc 70970
D03	SBR1109406	ENSRNOT00000 026121.7	Hmgcs2	ENSRNOG00 000019120	3-hydroxy-3-methylglutaryl-CoA synthase 2 Source RGD Symbol Acc 2804
D04	SBR1175181	ENSRNOT00000 022389.6	Idi1	ENSRNOG00 000016690	isopentenyl-diphosphate delta isomerase 1 Source RGD Symbol Acc 621835
D05	SBR1101847	ENSRNOT00000 010029.3	Il4	ENSRNOG00 000007624	interleukin 4 Source RGD Symbol Acc 2898
D06	SBR1166001	ENSRNOT00000 009233.6	Insig1	ENSRNOG00 000006859	insulin induced gene 1 Source RGD Symbol Acc 708457
D07	SBR1127467	ENSRNOT00000 003391.5	Insig2	ENSRNOG00 000002478	insulin induced gene 2 Source RGD Symbol Acc 631417
D08	SBR1193027	ENSRNOT00000 026585.5	Lcat	ENSRNOG00 000019573	lecithin cholesterol acyltransferase Source RGD Symbol Acc 2993
D09	SBR1193091	ENSRNOT00000 013496.3	Ldlr	ENSRNOG00 000009946	low density lipoprotein receptor Source RGD Symbol Acc 2998
D10	SBR1186241	ENSRNOT00000 000163.7	Ldlrap1	ENSRNOG00 000000151	low density lipoprotein receptor adaptor protein 1 Source RGD Symbol Acc 1563417
D11	SBR1209536	ENSRNOT00000 071926.1	Lep	ENSRNOG00 000045797	leptin Source RGD Symbol Acc 3000
D12	SBR1104445	ENSRNOT00000 027910.2	Lipe	ENSRNOG00 000020546	lipase E, hormone sensitive type Source RGD Symbol Acc 3010
E01	SBR1172158	ENSRNOT00000 015468.5	Lrp10	ENSRNOG00 000011592	LDL receptor related protein 10 Source RGD Symbol Acc 1310471
E02	SBR1188951	ENSRNOT00000 005668.5	Lrp12	ENSRNOG00 000004152	LDL receptor related protein 12 Source RGD Symbol Acc 1304943
E03	SBR1180767	ENSRNOT00000 044209.4	AABR0705 1892.1	ENSRNOG00 000030243	
E04	SBR1122227	ENSRNOT00000 082102.1	Lrp6	ENSRNOG00 000006338	LDL receptor related protein 6 Source RGD Symbol Acc 1304749
E05	SBR1138345	ENSRNOT00000 012665.5	Lrpap1	ENSRNOG00 000009313	LDL receptor related protein associated protein 1 Source RGD Symbol Acc 620700
E06	SBR1130128	ENSRNOT00000 020838.7	Mbtps1	ENSRNOG00 000015173	membrane-bound transcription factor peptidase, site 1 Source RGD Symbol Acc 70935
E07	SBR1109817	ENSRNOT00000 018145.6	Mvd	ENSRNOG00 000013376	mevalonate diphosphate decarboxylase Source RGD Symbol Acc 621292
E08	SBR1142793	ENSRNOT00000 073774.2	Mvk	ENSRNOG00 000049604	mevalonate kinase Source RGD Symbol Acc 621295
E09	SBR1166182	ENSRNOT00000 009683.2	Nr0b2	ENSRNOG00 000007229	nuclear receptor subfamily 0, group B, member 2 Source RGD Symbol Acc 621032
E10	SBR1209278	ENSRNOT00000 026862.5	Nr1h2	ENSRNOG00 000019812	nuclear receptor subfamily 1, group H, member 2 Source RGD Symbol Acc 61906
E11	SBR1117087	ENSRNOT00000 018154.5	Nr1h3	ENSRNOG00 000013172	nuclear receptor subfamily 1, group H, member 3 Source RGD Symbol Acc 61909
E12	SBR1206357	ENSRNOT00000 009910.4	Nr1h4	ENSRNOG00 000007197	nuclear receptor subfamily 1, group H, member 4 Source RGD Symbol Acc 628831
F01	SBR1153305	ENSRNOT00000 091154.1	Nsdhl	ENSRNOG00 000057814	NAD(P) dependent steroid dehydrogenase-like Source RGD Symbol Acc 1359337
F02	SBR1156006	ENSRNOT00000 086390.1	Olr1	ENSRNOG00 000056219	oxidized low density lipoprotein receptor 1 Source RGD Symbol Acc 620515
F03	SBR1164907	ENSRNOT00000 091909.1	Osbpl1a	ENSRNOG00 000054058	oxysterol binding protein-like 1A Source RGD Symbol Acc 628888
F04	SBR1150891	ENSRNOT00000 079454.1	Osbpl5	ENSRNOG00 000020713	oxysterol binding protein-like 5 Source RGD Symbol Acc 1308402
F05	SBR1202912	ENSRNOT00000 008535.5	Pcsk9	ENSRNOG00 000006280	proprotein convertase subtilisin/kexin type 9 Source RGD Symbol Acc 728909
F06	SBR1096217	ENSRNOT00000 028095.5	Pmvk	ENSRNOG00 000020696	phosphomevalonate kinase Source RGD Symbol Acc 1310812
F07	SBR1197924	ENSRNOT00000 083109.1	Ppard	ENSRNOG00 000000503	peroxisome proliferator-activated receptor delta Source RGD Symbol Acc 3370
F08	SBR1120460	ENSRNOT00000 017626.5	Prkaa1	ENSRNOG00 000012799	protein kinase AMP-activated catalytic subunit alpha 1 Source RGD Symbol Acc 3387
F09	SBR1166352	ENSRNOT00000 010680.3	Prkaa2	ENSRNOG00 000007706	protein kinase AMP-activated catalytic subunit alpha 2 Source RGD Symbol Acc 620893
F10	SBR1175590	ENSRNOT00000 067183.3	Prkag2	ENSRNOG00 000009085	protein kinase AMP-activated non-catalytic subunit gamma 2 Source RGD Symbol Acc 727782

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1173022	ENSRNOT00000045035.4	LOC291276	ENSRNOG0000046404	similar to isopentenyl diphosphate delta-isomerase type 2 Source RGD Symbol Acc 1598362
F12	SBR1176791	ENSRNOT00000028295.7	Scap	ENSRNOG0000020853	SREBF chaperone Source RGD Symbol Acc 1309378
G01	SBR1094146	ENSRNOT00000088722.1	Scarf1	ENSRNOG0000059618	scavenger receptor class F, member 1 Source RGD Symbol Acc 1309330
G02	SBR1097752	ENSRNOT00000091264.1	Snx17	ENSRNOG0000026884	sorting nexin 17 Source RGD Symbol Acc 1306424
G03	SBR1178753	ENSRNOT00000005677.3	Soat1	ENSRNOG0000004111	sterol O-acyltransferase 1 Source RGD Symbol Acc 621641
G04	SBR1133802	ENSRNOT00000085896.1	Soat2	ENSRNOG0000053769	sterol O-acyltransferase 2 Source RGD Symbol Acc 628865
G05	SBR1166179	ENSRNOT00000022213.7	Lrp5	ENSRNOG0000015911	LDL receptor related protein 5 Source RGD Symbol Acc 1309329
G06	SBR1114531	ENSRNOT00000047053.6	Srebf1	ENSRNOG0000003463	sterol regulatory element binding transcription factor 1 Source RGD Symbol Acc 69423
G07	SBR1106475	ENSRNOT00000056041.2	Srebf2	ENSRNOG0000007400	sterol regulatory element binding transcription factor 2 Source RGD Symbol Acc 1307751
G08	SBR1187074	ENSRNOT00000059538.3	Stab2	ENSRNOG0000038948	stabilin 2 Source RGD Symbol Acc 628822
G09	SBR1105956	ENSRNOT00000064190.3	Stard3	ENSRNOG0000042044	StAR-related lipid transfer domain containing 3 Source RGD Symbol Acc 1549768
G10	SBR1164565	ENSRNOT00000028485.6	Tm7sf2	ENSRNOG0000020989	transmembrane 7 superfamily member 2 Source RGD Symbol Acc 1311205
G11	SBR1153256	ENSRNOT00000035907.3	Trerf1	ENSRNOG0000022598	transcriptional regulating factor 1 Source RGD Symbol Acc 1307167
G12	SBR1213919	ENSRNOT00000035814.3	Vldlr	ENSRNOG0000027491	very low density lipoprotein receptor Source RGD Symbol Acc 3963
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG0000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000023017.5	B2m	ENSRNOG0000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000065935.3	Hprt1	ENSRNOG0000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000017468.2	Ldha	ENSRNOG0000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000018820.5	Rplp1	ENSRNOG0000013874	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 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 SYBR Green RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 μ l QuantiNova SYBR Green 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	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l 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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