

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

Rat Fatty Liver

Cat. no. 249950 SBRN-157ZA

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	Abcg1	Acaca	Acadl	Acy	Acox1	Acsl5	Acsm3	Adipor1	Adipor2	Akt1	Apoa1
B	Apob	Apoc3	Apoe	Taf3	Casp3	RGD1565355	Cebpb	Cnbp	Cpt1a	Cpt2	Cyp2e1	Cyp7a1
C	Dgat2	Fabp1	Fabp3	Fabp5	Fas	Fasn	Foxa2	G6pc	G6pd	Gck	Gk	Gsk3b
D	Hmgcr	Hnf4a	Iifng	Igf1	Igf1bp1	Il10	Il1b	Il6	Insr	Irs1	Ldlr	Lepr
E	Lpl	Mapk1	Mapk8	AABR0703583 9.1	Mtor	Ndufb6	Nfk1	Nr1h2	Nr1h3	Nr1h4	Pck2	Pdk4
F	Pik3ca	Pik3r1	Plkr	Ppa1	Ppara	Ppard	Pparg	Ppargc1a	Pknox1	Ptpn1	Rbp4	Rxra
G	Scd	Serpine1	Slc27a5	Slc2a1	Slc2a2	Slc2a4	Socs3	Sreb1	Sreb2	Stat3	LOC1036943 80	Xbp1
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	SBR1189903	ENSRNOT00000078031.1	Abcg1	ENSRNOG0000001158	ATP binding cassette subfamily G member 1 Source RGD Symbol Acc 620294
A03	SBR1187866	ENSRNOT00000088138.1	Acaca	ENSRNOG0000034013	acetyl-CoA carboxylase alpha Source RGD Symbol Acc 621248
A04	SBR1208722	ENSRNOT00000017686.7	Acadl	ENSRNOG0000012966	acyl-CoA dehydrogenase, long chain Source RGD Symbol Acc 2011
A05	SBR1145899	ENSRNOT00000023447.6	Acly	ENSRNOG0000016924	ATP citrate lyase Source RGD Symbol Acc 2018
A06	SBR1129649	ENSRNOT00000042372.6	Acox1	ENSRNOG0000008755	acyl-CoA oxidase 1 Source RGD Symbol Acc 619757
A07	SBR1205852	ENSRNOT00000022126.6	Acsf5	ENSRNOG0000016265	acyl-CoA synthetase long-chain family member 5 Source RGD Symbol Acc 69402
A08	SBR1151471	ENSRNOT00000020039.6	Acsm3	ENSRNOG0000032246	acyl-CoA synthetase medium-chain family member 3 Source RGD Symbol Acc 62086
A09	SBR1163886	ENSRNOT00000005551.4	Adipor1	ENSRNOG0000004143	adiponectin receptor 1 Source RGD Symbol Acc 1303151
A10	SBR1107135	ENSRNOT00000010556.5	Adipor2	ENSRNOG0000007990	adiponectin receptor 2 Source RGD Symbol Acc 1307891
A11	SBR1163078	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A12	SBR1146824	ENSRNOT00000074357.2	Apoa1	ENSRNOG0000045679	apolipoprotein A1 Source RGD Symbol Acc 2130
B01	SBR1117274	ENSRNOT00000007371.6	Apob	ENSRNOG0000005542	apolipoprotein B Source RGD Symbol Acc 2129
B02	SBR1177510	ENSRNOT00000090985.1	Apoc3	ENSRNOG0000047503	apolipoprotein C3 Source RGD Symbol Acc 2136
B03	SBR1123572	ENSRNOT00000080453.1	ApoE	ENSRNOG0000018454	apolipoprotein E Source RGD Symbol Acc 2138
B04	SBR1162009	ENSRNOT00000064802.3	Taf3	ENSRNOG0000019223	ATP synthase F1 subunit gamma Source RGD Symbol Acc 620011
B05	SBR1123217	ENSRNOT00000014095.5	Casp3	ENSRNOG0000010475	caspase 3 Source RGD Symbol Acc 2275
B06	SBR1160418	ENSRNOT00000076573.2	RGD1565355	ENSRNOG0000040108	similar to fatty acid translocase/CD36 Source RGD Symbol Acc 1565355
B07	SBR1114232	ENSRNOT00000083876.1	Cebpb	ENSRNOG0000057347	CCAAT/enhancer binding protein beta Source RGD Symbol Acc 2327
B08	SBR1139311	ENSRNOT00000013884.6	Cnbp	ENSRNOG0000010239	CCHC-type zinc finger, nucleic acid binding protein Source RGD Symbol Acc 621807
B09	SBR1143879	ENSRNOT00000019652.3	Cpt1a	ENSRNOG0000014254	carnitine palmitoyltransferase 1A Source RGD Symbol Acc 2396
B10	SBR1129520	ENSRNOT00000016954.3	Cpt2	ENSRNOG0000012443	carnitine palmitoyltransferase 2 Source RGD Symbol Acc 2398
B11	SBR1157610	ENSRNOT00000078080.1	Cyp2e1	ENSRNOG0000012458	cytochrome P450, family 2, subfamily e, polypeptide 1 Source RGD Symbol Acc 2475
B12	SBR1177796	ENSRNOT00000012819.4	Cyp7a1	ENSRNOG0000009488	cytochrome P450 family 7 subfamily A member 1 Source RGD Symbol Acc 2482
C01	SBR1136644	ENSRNOT00000022557.6	Dgat2	ENSRNOG0000016573	diacylglycerol O-acyltransferase 2 Source RGD Symbol Acc 620329
C02	SBR1208364	ENSRNOT00000008840.5	Fabp1	ENSRNOG0000006675	fatty acid binding protein 1 Source RGD Symbol Acc 2590
C03	SBR1147343	ENSRNOT00000017325.5	Fabp3	ENSRNOG0000012879	fatty acid binding protein 3 Source RGD Symbol Acc 69048
C04	SBR1194696	ENSRNOT00000075493.2	Fabp5	ENSRNOG0000049075	fatty acid binding protein 5 Source RGD Symbol Acc 70997
C05	SBR1159525	ENSRNOT00000025928.5	Fas	ENSRNOG0000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
C06	SBR1216475	ENSRNOT00000073321.2	Fasn	ENSRNOG0000045636	fatty acid synthase Source RGD Symbol Acc 620665
C07	SBR1102800	ENSRNOT00000017742.3	Foxa2	ENSRNOG0000013133	forkhead box A2 Source RGD Symbol Acc 2808
C08	SBR1115882	ENSRNOT00000028033.6	G6pc	ENSRNOG0000051171	glucose-6-phosphatase, catalytic subunit Source RGD Symbol Acc 2644
C09	SBR1179522	ENSRNOT00000080887.1	G6pd	ENSRNOG0000056728	glucose-6-phosphate dehydrogenase Source RGD Symbol Acc 2645
C10	SBR1114343	ENSRNOT00000080147.1	Gck	ENSRNOG0000061527	glucokinase Source RGD Symbol Acc 2670
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1168527	064340.3	Gk	000034116	glycerol kinase Source RGD Symbol Acc 70893
C12	SBR1155736	ENSRNOT00000 077612.1	Gsk3b	ENSRNOG00 000002833	glycogen synthase kinase 3 beta Source RGD Symbol Acc 70982
D01	SBR1198292	ENSRNOT00000 022055.4	Hmgcr	ENSRNOG00 000016122	3-hydroxy-3-methylglutaryl-CoA reductase Source RGD Symbol Acc 2803
D02	SBR1193762	ENSRNOT00000 089893.1	Hnf4a	ENSRNOG00 000008895	hepatocyte nuclear factor 4, alpha Source RGD Symbol Acc 2810
D03	SBR1108917	ENSRNOT00000 009919.2	lfng	ENSRNOG00 000007468	interferon gamma Source RGD Symbol Acc 2866
D04	SBR1185495	ENSRNOT00000 038780.6	lgf1	ENSRNOG00 000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
D05	SBR1203028	ENSRNOT00000 077177.1	lgfbp1	ENSRNOG00 000058780	insulin-like growth factor binding protein 1 Source RGD Symbol Acc 2872
D06	SBR1123238	ENSRNOT00000 006246.5	Il10	ENSRNOG00 000004647	interleukin 10 Source RGD Symbol Acc 2886
D07	SBR1196387	ENSRNOT00000 006308.4	Il1b	ENSRNOG00 000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D08	SBR1156877	ENSRNOT00000 013732.6	Il6	ENSRNOG00 000010278	interleukin 6 Source RGD Symbol Acc 2901
D09	SBR1131460	ENSRNOT00000 041155.3	Insr	ENSRNOG00 000029986	insulin receptor Source RGD Symbol Acc 2917
D10	SBR1132302	ENSRNOT00000 019579.5	Irs1	ENSRNOG00 000014597	insulin receptor substrate 1 Source RGD Symbol Acc 2922
D11	SBR1193091	ENSRNOT00000 013496.3	Ldlr	ENSRNOG00 000009946	low density lipoprotein receptor Source RGD Symbol Acc 2998
D12	SBR1152097	ENSRNOT00000 093574.1	Lepr	ENSRNOG00 000023664	leptin receptor Source RGD Symbol Acc 3001
E01	SBR1197775	ENSRNOT00000 016543.3	Lpl	ENSRNOG00 000012181	lipoprotein lipase Source RGD Symbol Acc 3017
E02	SBR1202944	ENSRNOT00000 002533.7	Mapk1	ENSRNOG00 000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
E03	SBR1144517	ENSRNOT00000 065216.3	Mapk8	ENSRNOG00 000020155	mitogen-activated protein kinase 8 Source RGD Symbol Acc 621506
E04	SBR1136918	ENSRNOT00000 076958.1	AABR0703 5839.1	ENSRNOG00 000046171	
E05	SBR1220576	ENSRNOT00000 014167.7	Mtor	ENSRNOG00 000009615	mechanistic target of rapamycin kinase Source RGD Symbol Acc 68371
E06	SBR1157353	ENSRNOT00000 029712.4	Ndufb6	ENSRNOG00 000024539	NADH ubiquinone oxidoreductase subunit B6 Source RGD Symbol Acc 1311354
E07	SBR1111134	ENSRNOT00000 036838.4	Nfkb1	ENSRNOG00 000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E08	SBR1209278	ENSRNOT00000 026862.5	Nr1h2	ENSRNOG00 000019812	nuclear receptor subfamily 1, group H, member 2 Source RGD Symbol Acc 61906
E09	SBR1117087	ENSRNOT00000 018154.5	Nr1h3	ENSRNOG00 000013172	nuclear receptor subfamily 1, group H, member 3 Source RGD Symbol Acc 61909
E10	SBR1206357	ENSRNOT00000 009910.4	Nr1h4	ENSRNOG00 000007197	nuclear receptor subfamily 1, group H, member 4 Source RGD Symbol Acc 628831
E11	SBR1137508	ENSRNOT00000 025260.7	Pck2	ENSRNOG00 000018536	phosphoenolpyruvate carboxykinase 2 (mitochondrial) Source MGI Symbol Acc MGI 1860456
E12	SBR1096444	ENSRNOT00000 012760.4	Pdk4	ENSRNOG00 000009565	pyruvate dehydrogenase kinase 4 Source RGD Symbol Acc 69061
F01	SBR1193587	ENSRNOT00000 083720.1	Pik3ca	ENSRNOG00 000056371	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha Source RGD Symbol Acc 620916
F02	SBR1155861	ENSRNOT00000 025687.7	Pik3r1	ENSRNOG00 000018903	phosphoinositide-3-kinase regulatory subunit 1 Source RGD Symbol Acc 3329
F03	SBR1145166	ENSRNOT00000 027700.6	Pklr	ENSRNOG00 000020420	pyruvate kinase L/R Source RGD Symbol Acc 3336
F04	SBR1181965	ENSRNOT00000 000674.6	Ppa1	ENSRNOG00 000000557	pyrophosphatase (inorganic) 1 Source RGD Symbol Acc 1589773
F05	SBR1163064	ENSRNOT00000 078928.1	Ppara	ENSRNOG00 000021463	peroxisome proliferator activated receptor alpha Source RGD Symbol Acc 3369
F06	SBR1197924	ENSRNOT00000 083109.1	Ppard	ENSRNOG00 000000503	peroxisome proliferator-activated receptor delta Source RGD Symbol Acc 3370
F07	SBR1131520	ENSRNOT00000 082969.1	Pparg	ENSRNOG00 000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371
F08	SBR1191958	ENSRNOT00000 006071.5	Ppargc1a	ENSRNOG00 000004473	PPARG coactivator 1 alpha Source RGD Symbol Acc 620925
F09	SBR1120460	ENSRNOT00000 017626.5	Prkaa1	ENSRNOG00 000012799	protein kinase AMP-activated catalytic subunit alpha 1 Source RGD Symbol Acc 3387
F10	SBR1146496	ENSRNOT00000 014309.4	Ptfn1	ENSRNOG00 000010574	protein tyrosine phosphatase, non-receptor type 1 Source RGD Symbol Acc 61965

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1124636	ENSRNOT00000021055.7	Rbp4	ENSRNOG0000015518	retinol binding protein 4 Source RGD Symbol Acc 3546
F12	SBR1218516	ENSRNOT00000012892.4	Rxra	ENSRNOG0000009446	retinoid X receptor alpha Source RGD Symbol Acc 3610
G01	SBR1116635	ENSRNOT00000018447.5	Scd	ENSRNOG0000013552	stearoyl-CoA desaturase Source RGD Symbol Acc 621176
G02	SBR1126485	ENSRNOT00000001916.2	Serpine1	ENSRNOG0000001414	serpin family E member 1 Source RGD Symbol Acc 3249
G03	SBR1180937	ENSRNOT00000026575.4	Slc27a5	ENSRNOG0000019626	solute carrier family 27 member 5 Source RGD Symbol Acc 708535
G04	SBR1109042	ENSRNOT00000064452.2	Slc2a1	ENSRNOG0000007284	solute carrier family 2 member 1 Source RGD Symbol Acc 3704
G05	SBR1115527	ENSRNOT00000015866.6	Slc2a2	ENSRNOG0000011875	solute carrier family 2 member 2 Source RGD Symbol Acc 3705
G06	SBR1096562	ENSRNOT00000023256.5	Slc2a4	ENSRNOG0000017226	solute carrier family 2 member 4 Source RGD Symbol Acc 2711
G07	SBR1139184	ENSRNOT00000003940.3	Socs3	ENSRNOG0000002946	suppressor of cytokine signaling 3 Source RGD Symbol Acc 621087
G08	SBR1114531	ENSRNOT00000047053.6	Srebf1	ENSRNOG0000003463	sterol regulatory element binding transcription factor 1 Source RGD Symbol Acc 69423
G09	SBR1106475	ENSRNOT00000056041.2	Srebf2	ENSRNOG0000007400	sterol regulatory element binding transcription factor 2 Source RGD Symbol Acc 1307751
G10	SBR1138417	ENSRNOT00000026760.4	Stat3	ENSRNOG0000019742	signal transducer and activator of transcription 3 Source RGD Symbol Acc 3772
G11	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G12	SBR1176433	ENSRNOT00000014044.6	Xbp1	ENSRNOG0000010298	X-box binding protein 1 Source RGD Symbol Acc 1303073
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.

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.