

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

Human Lipoprotein Signaling & Cholesterol Metabolism

Cat. no. 249950 SBHS-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	ABCG1	ACAA2	AKR1D1	ANGPTL3	ANKRA2	APOA1	APOA2	APOA4	APOB	APOC3	APOD
B	APOE	APOF	APOL1	APOL2	APOL5	CDH13	CEL	CELA3A	CELA3B	CETP	CNBP	COLEC12
C	CXCL16	CY5R3	CYP11A1	CYP39A1	CYP46A1	CYP51A1	CYP7A1	CYP7B1	DHCR24	DHCR7	FDFT1	FDPS
D	HDLBP	HMGCR	HMGCS1	HMGCS2	IDI1	IDI2	IL4	INSIG1	INSIG2	LCAT	LDLR	LDLRAP1
E	LEP	LIPE	LRP10	LRP12	LRP1B	LRP6	LRPAP1	MBTPS1	MVD	MVK	NPC1L1	NROB2
F	NR1H4	NSDHL	OLR1	OSBPL1A	OSBPL5	PCSK9	PMVK	PPARD	PRKAA1	PRKAA2	PRKAG2	SCAP
G	SCARF1	SNX17	SOAT1	SORL1	SREBF1	SREBF2	STAB1	STAB2	STARD3	TM7SF2	TREMF1	VLDLR
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBH0311739	ENST00000423487.6	ABCA1	ENSG00000165029	ATP binding cassette subfamily A member 1 Source HGNC Symbol Acc HGNC 29
A02	SBH0552320	ENST00000361802.6	ABCG1	ENSG00000160179	ATP binding cassette subfamily G member 1 Source HGNC Symbol Acc HGNC 73
A03	SBH0372581	ENST00000285093.15	ACAA2	ENSG00000167315	acetyl-CoA acyltransferase 2 Source HGNC Symbol Acc HGNC 83
A04	SBH0440693	ENST00000438242.1	AKR1D1	ENSG00000122787	aldo-keto reductase family 1 member D1 Source HGNC Symbol Acc HGNC 388
A05	SBH0355191	ENST00000493994.1	ANGPTL3	ENSG00000132855	angiotensinogen like 3 Source HGNC Symbol Acc HGNC 491
A06	SBH0013970	ENST00000515804.1	ANKRA2	ENSG00000164331	ankyrin repeat family A member 2 Source HGNC Symbol Acc HGNC 13208
A07	SBH0583640	ENST00000375320.5	APOA1	ENSG00000118137	apolipoprotein A1 Source HGNC Symbol Acc HGNC 600
A08	SBH0495949	ENST00000491350.1	APOA2	ENSG00000158874	apolipoprotein A2 Source HGNC Symbol Acc HGNC 601
A09	SBH0061386	ENST00000357780.5	APOA4	ENSG00000110244	apolipoprotein A4 Source HGNC Symbol Acc HGNC 602
A10	SBH0382003	ENST00000399256.4	APOB	ENSG00000084674	apolipoprotein B Source HGNC Symbol Acc HGNC 603
A11	SBH0457302	ENST00000375345.3	APOC3	ENSG00000110245	apolipoprotein C3 Source HGNC Symbol Acc HGNC 610
A12	SBH0082437	ENST00000421243.5	APOD	ENSG00000189058	apolipoprotein D Source HGNC Symbol Acc HGNC 612
B01	SBH0562930	ENST00000434152.5	APOE	ENSG00000130203	apolipoprotein E Source HGNC Symbol Acc HGNC 613
B02	SBH0056985	ENST00000398189.4	APOF	ENSG00000175336	apolipoprotein F Source HGNC Symbol Acc HGNC 615
B03	SBH0006433	ENST00000319136.8	APOL1	ENSG00000100342	apolipoprotein L1 Source HGNC Symbol Acc HGNC 618
B04	SBH0263814	ENST00000529194.5	APOL2	ENSG00000128335	apolipoprotein L2 Source HGNC Symbol Acc HGNC 619
B05	SBH0382666	ENST00000249044.2	APOL5	ENSG00000128313	apolipoprotein L5 Source HGNC Symbol Acc HGNC 14869
B06	SBH0542083	ENST00000268613.14	CDH13	ENSG00000140945	cadherin 13 Source HGNC Symbol Acc HGNC 1753
B07	SBH0083490	ENST00000372080.6	CEL	ENSG00000170835	carboxyl ester lipase Source HGNC Symbol Acc HGNC 1848
B08	SBH0175879	ENST00000290122.7	CELA3A	ENSG00000142789	chymotrypsin like elastase family member 3A Source HGNC Symbol Acc HGNC 15944
B09	SBH0361709	ENST00000374666.1	CELA3B	ENSG00000219073	chymotrypsin like elastase family member 3B Source HGNC Symbol Acc HGNC 15945
B10	SBH0093509	ENST00000650358.1	CETP	ENSG00000087237	cholesteryl ester transfer protein Source HGNC Symbol Acc HGNC 1869
B11	SBH0555395	ENST00000446936.6	CNBP	ENSG00000169714	CCHC-type zinc finger nucleic acid binding protein Source HGNC Symbol Acc HGNC 13164
B12	SBH0470980	ENST00000582147.1	COLEC12	ENSG00000158270	collectin subfamily member 12 Source HGNC Symbol Acc HGNC 16016
C01	SBH1219928	ENST00000293778.11	CXCL16	ENSG00000161921	C-X-C motif chemokine ligand 16 Source HGNC Symbol Acc HGNC 16642
C02	SBH0387979	ENST00000361740.8	CYB5R3	ENSG00000100243	cytochrome b5 reductase 3 Source HGNC Symbol Acc HGNC 2873
C03	SBH0521137	ENST00000450547.1	CYP11A1	ENSG00000140459	cytochrome P450 family 11 subfamily A member 1 Source HGNC Symbol Acc HGNC 2590
C04	SBH0195359	ENST00000619708.4	CYP39A1	ENSG00000146233	cytochrome P450 family 39 subfamily A member 1 Source HGNC Symbol Acc HGNC 17449
C05	SBH0625309	ENST00000554176.5	CYP46A1	ENSG00000036530	cytochrome P450 family 46 subfamily A member 1 Source HGNC Symbol Acc HGNC 2641
C06	SBH0529491	ENST00000482924.1	CYP51A1	ENSG00000001630	cytochrome P450 family 51 subfamily A member 1 Source HGNC Symbol Acc HGNC 2649
C07	SBH0038066	ENST00000301645.4	CYP7A1	ENSG00000167910	cytochrome P450 family 7 subfamily A member 1 Source HGNC Symbol Acc HGNC 2651
C08	SBH0455426	ENST00000523954.1	CYP7B1	ENSG00000172817	cytochrome P450 family 7 subfamily B member 1 Source HGNC Symbol Acc HGNC 2652
C09	SBH1219947	ENST00000371269.9	DHCR24	ENSG00000116133	24-dehydrocholesterol reductase Source HGNC Symbol Acc HGNC 2859
C10	SBH0631322	ENST00000526780.5	DHCR7	ENSG00000172893	7-dehydrocholesterol reductase Source HGNC Symbol Acc HGNC 2860
		ENST00000531		ENSG000000	farnesyl-diphosphate farnesyltransferase 1 Source HGNC Symbol Acc HGNC

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0340489	249.2	FDFT1	079459	3629
C12	SBH0470554	ENST00000612683.1	FDPS	ENSG00000160752	farnesyl diphosphate synthase Source HGNC Symbol Acc HGNC 3631
D01	SBH0647619	ENST00000423693.5	HDLBP	ENSG00000115677	high density lipoprotein binding protein Source HGNC Symbol Acc HGNC 4857
D02	SBH0118882	ENST00000511206.5	HMGCR	ENSG00000113161	3-hydroxy-3-methylglutaryl-CoA reductase Source HGNC Symbol Acc HGNC 5006
D03	SBH0203453	ENST00000514610.1	HMGCS1	ENSG00000112972	3-hydroxy-3-methylglutaryl-CoA synthase 1 Source HGNC Symbol Acc HGNC 5007
D04	SBH0048516	ENST00000544913.2	HMGCS2	ENSG00000134240	3-hydroxy-3-methylglutaryl-CoA synthase 2 Source HGNC Symbol Acc HGNC 5008
D05	SBH0601152	ENST00000429642.2	IDI1	ENSG00000067064	isopentenyl-diphosphate delta isomerase 1 Source HGNC Symbol Acc HGNC 5387
D06	SBH0221982	ENST00000277517.2	IDI2	ENSG00000148377	isopentenyl-diphosphate delta isomerase 2 Source HGNC Symbol Acc HGNC 23487
D07	SBH1220109	ENST00000350025.2	IL4	ENSG00000113520	interleukin 4 Source HGNC Symbol Acc HGNC 6014
D08	SBH0221610	ENST00000344756.8	INSIG1	ENSG00000186480	insulin induced gene 1 Source HGNC Symbol Acc HGNC 6083
D09	SBH0239121	ENST00000467223.5	INSIG2	ENSG00000125629	insulin induced gene 2 Source HGNC Symbol Acc HGNC 20452
D10	SBH0199395	ENST00000576450.1	LCAT	ENSG00000213398	lecithin-cholesterol acyltransferase Source HGNC Symbol Acc HGNC 6522
D11	SBH0324029	ENST00000558013.5	LDLR	ENSG00000130164	low density lipoprotein receptor Source HGNC Symbol Acc HGNC 6547
D12	SBH0437045	ENST00000374338.4	LDLRAP1	ENSG00000157978	low density lipoprotein receptor adaptor protein 1 Source HGNC Symbol Acc HGNC 18640
E01	SBH1220169	ENST00000308868.5	LEP	ENSG00000174697	leptin Source HGNC Symbol Acc HGNC 6553
E02	SBH0638061	ENST00000601189.1	LIPE	ENSG00000079435	lipase E, hormone sensitive type Source HGNC Symbol Acc HGNC 6621
E03	SBH0197773	ENST00000470660.1	LRP10	ENSG00000197324	LDL receptor related protein 10 Source HGNC Symbol Acc HGNC 14553
E04	SBH0345926	ENST00000518375.1	LRP12	ENSG00000147650	LDL receptor related protein 12 Source HGNC Symbol Acc HGNC 31708
E05	SBH0615224	ENST00000437977.5	LRP1B	ENSG00000168702	LDL receptor related protein 1B Source HGNC Symbol Acc HGNC 6693
E06	SBH1220178	ENST00000261349.9	LRP6	ENSG00000070018	LDL receptor related protein 6 Source HGNC Symbol Acc HGNC 6698
E07	SBH0664994	ENST00000509198.1	LRPAP1	ENSG00000163956	LDL receptor related protein associated protein 1 Source HGNC Symbol Acc HGNC 6701
E08	SBH0172798	ENST00000565863.1	MBTPS1	ENSG00000140943	membrane bound transcription factor peptidase, site 1 Source HGNC Symbol Acc HGNC 15456
E09	SBH0074265	ENST00000567064.5	MVD	ENSG00000167508	mevalonate diphosphate decarboxylase Source HGNC Symbol Acc HGNC 7529
E10	SBH0367949	ENST00000392727.7	MVK	ENSG00000110921	mevalonate kinase Source HGNC Symbol Acc HGNC 7530
E11	SBH0059429	ENST00000381160.7	NPC1L1	ENSG00000015520	NPC1 like intracellular cholesterol transporter 1 Source HGNC Symbol Acc HGNC 7898
E12	SBH0031318	ENST00000254227.4	NR0B2	ENSG00000131910	nuclear receptor subfamily 0 group B member 2 Source HGNC Symbol Acc HGNC 7961
F01	SBH0164181	ENST00000548884.5	NR1H4	ENSG00000012504	nuclear receptor subfamily 1 group H member 4 Source HGNC Symbol Acc HGNC 7967
F02	SBH0502293	ENST00000370274.8	NSDHL	ENSG00000147383	NAD(P) dependent steroid dehydrogenase-like Source HGNC Symbol Acc HGNC 13398
F03	SBH1220286	ENST00000545927.5	OLR1	ENSG00000173391	oxidized low density lipoprotein receptor 1 Source HGNC Symbol Acc HGNC 8133
F04	SBH0377242	ENST00000399443.7	OSBPL1A	ENSG00000141447	oxysterol binding protein like 1A Source HGNC Symbol Acc HGNC 16398
F05	SBH0250462	ENST00000530372.5	OSBPL5	ENSG00000021762	oxysterol binding protein like 5 Source HGNC Symbol Acc HGNC 16392
F06	SBH0599907	ENST00000302118.5	PCSK9	ENSG00000169174	proprotein convertase subtilisin/kexin type 9 Source HGNC Symbol Acc HGNC 20001
F07	SBH0003320	ENST00000368467.4	PMVK	ENSG00000163344	phosphomevalonate kinase Source HGNC Symbol Acc HGNC 9141
F08	SBH1220323	ENST00000418635.6	PPARD	ENSG00000112033	peroxisome proliferator activated receptor delta Source HGNC Symbol Acc HGNC 9235
F09	SBH1220332	ENST00000397128.6	PRKAA1	ENSG00000132356	protein kinase AMP-activated catalytic subunit alpha 1 Source HGNC Symbol Acc HGNC 9376
F10	SBH0060864	ENST00000371244.9	PRKAA2	ENSG00000162409	protein kinase AMP-activated catalytic subunit alpha 2 Source HGNC Symbol Acc HGNC 9377

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0170149	ENST00000652136.1	PRKAG2	ENSG00000106617	protein kinase AMP-activated non-catalytic subunit gamma 2 Source HGNC Symbol Acc HGNC 9386
F12	SBH0292378	ENST00000485967.1	SCAP	ENSG00000114650	SREBF chaperone Source HGNC Symbol Acc HGNC 30634
G01	SBH0435868	ENST00000573852.5	SCARF1	ENSG00000074660	scavenger receptor class F member 1 Source HGNC Symbol Acc HGNC 16820
G02	SBH0517844	ENST00000453453.1	SNX17	ENSG00000115234	sorting nexin 17 Source HGNC Symbol Acc HGNC 14979
G03	SBH0265131	ENST00000367619.8	SOAT1	ENSG00000057252	sterol O-acyltransferase 1 Source HGNC Symbol Acc HGNC 11177
G04	SBH0201096	ENST00000528339.5	SORL1	ENSG00000137642	sortilin related receptor 1 Source HGNC Symbol Acc HGNC 11185
G05	SBH0652491	ENST00000423161.3	SREBF1	ENSG00000072310	sterol regulatory element binding transcription factor 1 Source HGNC Symbol Acc HGNC 11289
G06	SBH0331510	ENST00000424354.5	SREBF2	ENSG00000198911	sterol regulatory element binding transcription factor 2 Source HGNC Symbol Acc HGNC 11290
G07	SBH0209017	ENST00000462741.5	STAB1	ENSG00000010327	stabilin 1 Source HGNC Symbol Acc HGNC 18628
G08	SBH0118028	ENST00000388887.7	STAB2	ENSG00000136011	stabilin 2 Source HGNC Symbol Acc HGNC 18629
G09	SBH0026620	ENST00000581894.5	STARD3	ENSG00000131748	STAR related lipid transfer domain containing 3 Source HGNC Symbol Acc HGNC 17579
G10	SBH0591810	ENST00000534371.5	TM7SF2	ENSG00000149809	transmembrane 7 superfamily member 2 Source HGNC Symbol Acc HGNC 11863
G11	SBH0609543	ENST00000340840.6	TRERF1	ENSG00000124496	transcriptional regulating factor 1 Source HGNC Symbol Acc HGNC 18273
G12	SBH0483127	ENST00000382099.2	VLDLR	ENSG00000147852	very low density lipoprotein receptor Source HGNC Symbol Acc HGNC 12698
H01	SBH1220543	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	SBH1220550	ENST00000558401.6	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	SBH1220545	ENST00000396861.5	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	SBH1220546	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	SBH1220553	ENST00000546989.5	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	SBH1218553	Sybr_HGDC	HGDC	Sybr_HGDC	Human 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.