

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

Human Hepatotoxicity

Cat. no. 249950 SBHS-093ZA

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	ABCB1	ABCB11	ABCB4	ABCC2	ABCC3	ALDOA	APEX1	ASAH1	ATP8B1	AVPR1A	BHMT	BTG2
B	CA3	CASP3	CCNG1	CD36	CD68	CDC14B	CDKN1A	COL4A1	CRYL1	CXCL12	CYP1A2	DDIT4L
C	DDX39A	DNAJB11	DNAJC3	FABP1	FADS1	EMC9	FASN	FMO1	TIMM10B	GADD45A	GCLC	GSR
D	HAO2	HMOX1	HPN	HYOU1	ICAM1	IGFALS	IL6ST	IPO4	FAM214A	KRT18	KRT8	LZHGDDH
E	LGR5	LPL	LSS	MAOB	MAP3K6	MBL2	MCM10	MLXPL	MRPS18B	NQO1	NUS1	OSMR
F	SLC51A	PDYN	PLA2G12A	PPARA	PSME3	PYGL	RB1	RDX	RHBG	S100A8	SCD	SERPINA3
G	SERPINE1	SKIL	SLC17A3	SLC2A3	SLC39A6	SREBF1	TAGLN	THRSP	CEMIP2	TXNRD1	WIP1	YRDC
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	SBH0346091	ENST00000622132.4	ABCB1	ENSG00000085563	ATP binding cassette subfamily B member 1 Source HGNC Symbol Acc HGNC 40
A02	SBH0651110	ENST00000650372.1	ABCB11	ENSG00000073734	ATP binding cassette subfamily B member 11 Source HGNC Symbol Acc HGNC 42
A03	SBH0585650	ENST00000469770.1	ABCB4	ENSG00000005471	ATP binding cassette subfamily B member 4 Source HGNC Symbol Acc HGNC 45
A04	SBH0620483	ENST00000649932.1	ABCC2	ENSG00000023839	ATP binding cassette subfamily C member 2 Source HGNC Symbol Acc HGNC 53
A05	SBH0597013	ENST00000503337.1	ABCC3	ENSG000000108846	ATP binding cassette subfamily C member 3 Source HGNC Symbol Acc HGNC 54
A06	SBH0597315	ENST00000564546.6	ALDOA	ENSG000000149925	aldolase, fructose-bisphosphate A Source HGNC Symbol Acc HGNC 414
A07	SBH0279561	ENST00000555414.5	APEX1	ENSG000000100823	apurinic/apyrimidinic endodeoxyribonuclease 1 Source HGNC Symbol Acc HGNC 587
A08	SBH0260442	ENST000005018746.2	ASAHI	ENSG000000104763	N-acylsphingosine amidohydrolase 1 Source HGNC Symbol Acc HGNC 735
A09	SBH0429998	ENST00000283684.9	ATP8B1	ENSG000000081923	ATPase phospholipid transporting 8B1 Source HGNC Symbol Acc HGNC 3706
A10	SBH0085505	ENST00000550940.1	AVPR1A	ENSG000000166148	arginine vasopressin receptor 1A Source HGNC Symbol Acc HGNC 895
A11	SBH0183479	ENST00000520703.1	BHMT	ENSG000000145692	betaine--homocysteine S-methyltransferase Source HGNC Symbol Acc HGNC 1047
A12	SBH1219818	ENST00000290551.5	BTG2	ENSG000000159388	BTG anti-proliferation factor 2 Source HGNC Symbol Acc HGNC 1131
B01	SBH0462441	ENST00000520921.1	CA3	ENSG000000164879	carbonic anhydrase 3 Source HGNC Symbol Acc HGNC 1374
B02	SBH1219824	ENST00000308394.9	CASP3	ENSG000000164305	caspase 3 Source HGNC Symbol Acc HGNC 1504
B03	SBH1219847	ENST00000393929.5	CCNG1	ENSG000000113328	cyclin G1 Source HGNC Symbol Acc HGNC 1592
B04	SBH0074710	ENST00000441109.6	CD36	ENSG000000135218	CD36 molecule Source HGNC Symbol Acc HGNC 1663
B05	SBH0042038	ENST00000584502.1	CD68	ENSG000000129226	CD68 molecule Source HGNC Symbol Acc HGNC 1693
B06	SBH0367718	ENST00000474602.5	CDC14B	ENSG000000081377	cell division cycle 14B Source HGNC Symbol Acc HGNC 1719
B07	SBH0608500	ENST00000244741.9	CDKN1A	ENSG000000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
B08	SBH0114999	ENST00000649484.1	COL4A1	ENSG000000187498	collagen type IV alpha 1 chain Source HGNC Symbol Acc HGNC 2202
B09	SBH0608168	ENST00000644593.1	CRYL1	ENSG000000165475	crystallin lambda 1 Source HGNC Symbol Acc HGNC 18246
B10	SBH0010818	ENST00000374429.6	CXCL12	ENSG000000107562	C-X-C motif chemokine ligand 12 Source HGNC Symbol Acc HGNC 10672
B11	SBH0642290	ENST00000343932.5	CYP1A2	ENSG000000140505	cytochrome P450 family 1 subfamily A member 2 Source HGNC Symbol Acc HGNC 2596
B12	SBH0120315	ENST00000513992.1	DDIT4L	ENSG000000145358	DNA damage inducible transcript 4 like Source HGNC Symbol Acc HGNC 30555
C01	SBH0156517	ENST00000592632.5	DDX39A	ENSG000000123136	DEAD-box helicase 39A Source HGNC Symbol Acc HGNC 17821
C02	SBH0561581	ENST00000265028.7	DNAJB11	ENSG000000090520	DnaJ heat shock protein family (Hsp40) member B11 Source HGNC Symbol Acc HGNC 14889
C03	SBH1219956	ENST00000602402.6	DNAJC3	ENSG000000102580	DnaJ heat shock protein family (Hsp40) member C3 Source HGNC Symbol Acc HGNC 9439
C04	SBH1219991	ENST00000393750.3	FABP1	ENSG000000163586	fatty acid binding protein 1 Source HGNC Symbol Acc HGNC 3555
C05	SBH0548809	ENST00000350997.11	FADS1	ENSG000000149485	fatty acid desaturase 1 Source HGNC Symbol Acc HGNC 3574
C06	SBH0559424	ENST00000216799.9	EMC9	ENSG000000100908	ER membrane protein complex subunit 9 Source HGNC Symbol Acc HGNC 20273
C07	SBH0282662	ENST00000635197.1	FASN	ENSG000000169710	fatty acid synthase Source HGNC Symbol Acc HGNC 3594
C08	SBH0628645	ENST00000354841.4	FMO1	ENSG000000010932	flavin containing monooxygenase 1 Source HGNC Symbol Acc HGNC 3769
C09	SBH0302184	ENST00000254616.11	TIMM10B	ENSG000000132286	translocase of inner mitochondrial membrane 10B Source HGNC Symbol Acc HGNC 4022
C10	SBH1220019	ENST00000370985.4	GADD45A	ENSG000000116717	growth arrest and DNA damage inducible alpha Source HGNC Symbol Acc HGNC 4095
		ENST0000020229		ENSG000000	glutamate-cysteine ligase catalytic subunit Source HGNC Symbol Acc HGNC

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0482856	416.10	GCLC	001084	4311
C12	SBH1220042	ENST00000546342.5	GSR	ENSG00000104687	glutathione-disulfide reductase Source HGNC Symbol Acc HGNC 4623
D01	SBH0177174	ENST00000622548.4	HAO2	ENSG00000116882	hydroxyacid oxidase 2 Source HGNC Symbol Acc HGNC 4810
D02	SBH1220067	ENST00000216117.9	HMOX1	ENSG00000100292	heme oxygenase 1 Source HGNC Symbol Acc HGNC 5013
D03	SBH0607801	ENST00000597419.1	HPN	ENSG00000105707	hepsin Source HGNC Symbol Acc HGNC 5155
D04	SBH0666279	ENST00000530473.5	HYOU1	ENSG00000149428	hypoxia up-regulated 1 Source HGNC Symbol Acc HGNC 16931
D05	SBH1220076	ENST00000264832.8	ICAM1	ENSG00000090339	intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344
D06	SBH0483227	ENST00000215539.3	IGFALS	ENSG00000099769	insulin like growth factor binding protein acid labile subunit Source HGNC Symbol Acc HGNC 5468
D07	SBH0280973	ENST00000503773.6	IL6ST	ENSG00000134352	interleukin 6 signal transducer Source HGNC Symbol Acc HGNC 6021
D08	SBH0382925	ENST00000561090.5	IPO4	ENSG00000196497	importin 4 Source HGNC Symbol Acc HGNC 19426
D09	SBH0370874	ENST00000561543.5	FAM214A	ENSG00000047346	family with sequence similarity 214 member A Source HGNC Symbol Acc HGNC 25609
D10	SBH0247700	ENST00000550600.5	KRT18	ENSG00000111057	keratin 18 Source HGNC Symbol Acc HGNC 6430
D11	SBH0594835	ENST00000547176.3	KRT8	ENSG00000170421	keratin 8 Source HGNC Symbol Acc HGNC 6446
D12	SBH0394102	ENST00000267436.9	L2HGDH	ENSG00000087299	L-2-hydroxyglutarate dehydrogenase Source HGNC Symbol Acc HGNC 20499
E01	SBH0253661	ENST00000266674.10	LGR5	ENSG00000139292	leucine rich repeat containing G protein-coupled receptor 5 Source HGNC Symbol Acc HGNC 4504
E02	SBH1220175	ENST00000311322.10	LPL	ENSG00000175445	lipoprotein lipase Source HGNC Symbol Acc HGNC 6677
E03	SBH0650854	ENST00000522411.5	LSS	ENSG00000160285	lanosterol synthase Source HGNC Symbol Acc HGNC 6708
E04	SBH0081757	ENST00000487544.1	MAOB	ENSG00000069535	monoamine oxidase B Source HGNC Symbol Acc HGNC 6834
E05	SBH0376133	ENST00000470890.1	MAP3K6	ENSG00000142733	mitogen-activated protein kinase kinase kinase 6 Source HGNC Symbol Acc HGNC 6858
E06	SBH0384612	ENST00000373968.3	MBL2	ENSG00000165471	mannose binding lectin 2 Source HGNC Symbol Acc HGNC 6922
E07	SBH0070144	ENST00000378694.1	MCM10	ENSG00000065328	minichromosome maintenance 10 replication initiation factor Source HGNC Symbol Acc HGNC 18043
E08	SBH0379475	ENST00000476404.5	MLXIPL	ENSG00000009950	MLX interacting protein like Source HGNC Symbol Acc HGNC 12744
E09	SBH0614269	ENST00000492316.5	MRPS18B	ENSG00000020456	mitochondrial ribosomal protein S18B Source HGNC Symbol Acc HGNC 14516
E10	SBH1220279	ENST00000320623.10	NQO1	ENSG00000181019	NAD(P)H quinone dehydrogenase 1 Source HGNC Symbol Acc HGNC 2874
E11	SBH0020186	ENST00000368494.4	NUS1	ENSG00000153989	NUS1, dehydrolipichyl diphosphate synthase subunit Source HGNC Symbol Acc HGNC 21042
E12	SBH0407115	ENST00000274276.8	OSMR	ENSG00000145623	oncostatin M receptor Source HGNC Symbol Acc HGNC 8507
F01	SBH0497660	ENST00000296327.10	SLC51A	ENSG00000163959	solute carrier family 51 alpha subunit Source HGNC Symbol Acc HGNC 29955
F02	SBH0477068	ENST00000650824.1	PDYN	ENSG00000101327	prodynorphin Source HGNC Symbol Acc HGNC 8820
F03	SBH0169953	ENST00000502772.1	PLA2G12A	ENSG00000123739	phospholipase A2 group X1A Source HGNC Symbol Acc HGNC 18554
F04	SBH1220322	ENST00000407236.5	PPARA	ENSG00000186951	peroxisome proliferator activated receptor alpha Source HGNC Symbol Acc HGNC 9232
F05	SBH0610467	ENST00000593111.1	PSME3	ENSG00000131467	proteasome activator subunit 3 Source HGNC Symbol Acc HGNC 9570
F06	SBH1220349	ENST00000544180.6	PYGL	ENSG00000100504	glycogen phosphorylase L Source HGNC Symbol Acc HGNC 9725
F07	SBH0093533	ENST00000267163.5	RB1	ENSG00000139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
F08	SBH0480501	ENST00000534683.1	RDX	ENSG00000137710	radixin Source HGNC Symbol Acc HGNC 9944
F09	SBH0407703	ENST00000494874.1	RHBG	ENSG00000132677	Rh family B glycoprotein (gene/pseudogene) Source HGNC Symbol Acc HGNC 14572
F10	SBH0133006	ENST00000477801.1	S100A8	ENSG00000143546	S100 calcium binding protein A8 Source HGNC Symbol Acc HGNC 10498

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0541153	ENST00000370355.3	SCD	ENSG00000099194	stearoyl-CoA desaturase Source HGNC Symbol Acc HGNC 10571
F12	SBH0032295	ENST00000393078.4	SERPINA3	ENSG00000196136	serpin family A member 3 Source HGNC Symbol Acc HGNC 16
G01	SBH1220389	ENST00000223095.4	SERPINE1	ENSG00000106366	serpin family E member 1 Source HGNC Symbol Acc HGNC 8583
G02	SBH0189759	ENST00000259119.9	SKIL	ENSG00000136603	SKI like proto-oncogene Source HGNC Symbol Acc HGNC 10897
G03	SBH0615048	ENST00000397060.8	SLC17A3	ENSG00000124564	solute carrier family 17 member 3 Source HGNC Symbol Acc HGNC 10931
G04	SBH0631058	ENST00000476634.1	SLC2A3	ENSG00000059804	solute carrier family 2 member 3 Source HGNC Symbol Acc HGNC 11007
G05	SBH0662313	ENST00000586829.1	SLC39A6	ENSG00000141424	solute carrier family 39 member 6 Source HGNC Symbol Acc HGNC 18607
G06	SBH0652491	ENST00000423161.3	SREBF1	ENSG00000072310	sterol regulatory element binding transcription factor 1 Source HGNC Symbol Acc HGNC 11289
G07	SBH0194372	ENST00000529622.1	TAGLN	ENSG00000149591	transgelin Source HGNC Symbol Acc HGNC 11553
G08	SBH0550229	ENST00000281030.2	THRSP	ENSG00000151365	thyroid hormone responsive Source HGNC Symbol Acc HGNC 11800
G09	SBH0261700	ENST00000377066.9	CEMP2	ENSG00000135048	cell migration inducing hyaluronidase 2 Source HGNC Symbol Acc HGNC 11869
G10	SBH0296369	ENST00000526691.5	TXNRD1	ENSG00000198431	thioredoxin reductase 1 Source HGNC Symbol Acc HGNC 12437
G11	SBH0518264	ENST00000586815.1	WIPI1	ENSG00000070540	WD repeat domain, phosphoinositide interacting 1 Source HGNC Symbol Acc HGNC 25471
G12	SBH0414648	ENST00000373044.3	YRDC	ENSG00000196449	yrnC N6-threonylcarbamoyltransferase domain containing Source HGNC Symbol Acc HGNC 28905
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.

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