

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

## Mouse Hepatotoxicity

Cat. no. 249950 SBMM-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](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Abcb11	Abcb1a	Abcb4	Abcc2	Abcc3	Aldoa	Apex1	Asah1	Atp8b1	Avpr1a	Fam214a	Bhmt
B	Blg2	Car3	Casp3	Ceng1	Cd36	Cd68	Cdc14b	Cdkn1a	Col4a1	Cry11	Cxcl12	Cyp11a2
C	Ddit4l	Ddx39	Dnajb11	Dnajc3	Fabp1	Fads1	Emc9	Fasn	Fmo1	Timm10b	Gadd45a	Gclc
D	Gsr	Hao2	Hmox1	Hpn	Hyou1	Icam1	Igfals	Il6st	Ipo4	Krt18	Krt8	L2hgdh
E	Lgr5	Lpl	Lss	Maob	Map3k6	Mbl2	Mcm10	Mxipl	Mmps18b	Nqa1	Nus1	Osmr
F	Slc51a	Pdyn	Pla2g12a	Ppara	Psme3	Pygl	Rb1	Rdx	Rhbg	S100a8	Scd1	Serpina3n
G	Serpine1	Skil	Slc17a3	Slc2a3	Slc39a6	Srebf1	Tagln	Thrsp	Cemip2	Txnrd1	Wipi1	Yrdc
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	PPC	PPC	PPC



Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0962210	151958.1	Gadd45a	000036390	MGI 107799
C12	SBM1048397	ENSMUST00000 034905.8	Gclc	ENSMUSG00 000032350	glutamate-cysteine ligase, catalytic subunit Source MGI Symbol Acc MGI 104990
D01	SBM0942303	ENSMUST00000 033992.8	Gsr	ENSMUSG00 000031584	glutathione reductase Source MGI Symbol Acc MGI 95804
D02	SBM0931326	ENSMUST00000 029464.8	Hao2	ENSMUSG00 000027870	hydroxyacid oxidase 2 Source MGI Symbol Acc MGI 96012
D03	SBM0936413	ENSMUST00000 005548.7	Hmox1	ENSMUSG00 000005413	heme oxygenase 1 Source MGI Symbol Acc MGI 96163
D04	SBM1074749	ENSMUST00000 165124.7	Hpn	ENSMUSG00 000001249	hepsin Source MGI Symbol Acc MGI 1196620
D05	SBM0809259	ENSMUST00000 160902.7	Hyo1	ENSMUSG00 000032115	hypoxia up-regulated 1 Source MGI Symbol Acc MGI 108030
D06	SBM0806584	ENSMUST00000 215003.1	Icam1	ENSMUSG00 000037405	intercellular adhesion molecule 1 Source MGI Symbol Acc MGI 96392
D07	SBM0731547	ENSMUST00000 234754.1	Igfals	ENSMUSG00 000046070	insulin-like growth factor binding protein, acid labile subunit Source MGI Symbol Acc MGI 107973
D08	SBM0823451	ENSMUST00000 183829.7	Il6st	ENSMUSG00 000021756	interleukin 6 signal transducer Source MGI Symbol Acc MGI 96560
D09	SBM1045274	ENSMUST00000 047131.15	Ipo4	ENSMUSG00 000002319	importin 4 Source MGI Symbol Acc MGI 1923001
D10	SBM0961106	ENSMUST00000 023803.7	Krt18	ENSMUSG00 000023043	keratin 18 Source MGI Symbol Acc MGI 96692
D11	SBM0683062	ENSMUST00000 023952.9	Krt8	ENSMUSG00 000049382	keratin 8 Source MGI Symbol Acc MGI 96705
D12	SBM0680605	ENSMUST00000 223387.1	L2hgdh	ENSMUSG00 000020988	L-2-hydroxyglutarate dehydrogenase Source MGI Symbol Acc MGI 2384968
E01	SBM0685019	ENSMUST00000 173619.1	Lgr5	ENSMUSG00 000020140	leucine rich repeat containing G protein coupled receptor 5 Source MGI Symbol Acc MGI 1341817
E02	SBM1060657	ENSMUST00000 015712.14	Lpl	ENSMUSG00 000015568	lipoprotein lipase Source MGI Symbol Acc MGI 96820
E03	SBM0789895	ENSMUST00000 159013.7	Lss	ENSMUSG00 000033105	lanosterol synthase Source MGI Symbol Acc MGI 1336155
E04	SBM0839056	ENSMUST00000 040820.12	Maob	ENSMUSG00 000040147	monoamine oxidase B Source MGI Symbol Acc MGI 96916
E05	SBM0841444	ENSMUST00000 030677.6	Map3k6	ENSMUSG00 000028862	mitogen-activated protein kinase kinase 6 Source MGI Symbol Acc MGI 1855691
E06	SBM0936795	ENSMUST00000 025797.6	Mbl2	ENSMUSG00 000024863	mannose-binding lectin (protein C) 2 Source MGI Symbol Acc MGI 96924
E07	SBM0888681	ENSMUST00000 150091.7	Mcm10	ENSMUSG00 000026669	minichromosome maintenance 10 replication initiation factor Source MGI Symbol Acc MGI 1917274
E08	SBM0844253	ENSMUST00000 202431.3	Mlxip1	ENSMUSG00 000005373	MLX interacting protein-like Source MGI Symbol Acc MGI 1927999
E09	SBM0753802	ENSMUST00000 025305.15	Mrps18b	ENSMUSG00 000024436	mitochondrial ribosomal protein S18B Source MGI Symbol Acc MGI 1914223
E10	SBM0878519	ENSMUST00000 003947.8	Nqo1	ENSMUSG00 000003849	NAD(P)H dehydrogenase, quinone 1 Source MGI Symbol Acc MGI 103187
E11	SBM0903446	ENSMUST00000 218983.1	Nus1	ENSMUSG00 000023068	NUS1 dehydrodolichyl diphosphate synthase subunit Source MGI Symbol Acc MGI 1196365
E12	SBM0732075	ENSMUST00000 177478.1	Osmr	ENSMUSG00 000022146	oncostatin M receptor Source MGI Symbol Acc MGI 1330819
F01	SBM0676636	ENSMUST00000 042042.8	Slc51a	ENSMUSG00 000035699	solute carrier family 51, alpha subunit Source MGI Symbol Acc MGI 2146634
F02	SBM0795904	ENSMUST00000 152113.1	Pdyn	ENSMUSG00 000027400	prodynorphin Source MGI Symbol Acc MGI 97535
F03	SBM0797975	ENSMUST00000 196838.4	Pla2g12a	ENSMUSG00 000027999	phospholipase A2, group X1A Source MGI Symbol Acc MGI 1913600
F04	SBM0952484	ENSMUST00000 138813.7	Ppara	ENSMUSG00 000022383	peroxisome proliferator activated receptor alpha Source MGI Symbol Acc MGI 104740
F05	SBM0960617	ENSMUST00000 019470.13	Psme3	ENSMUSG00 000078652	proteasome (prosome, macropain) activator subunit 3 (PA28 gamma, Ki) Source MGI Symbol Acc MGI 1096366
F06	SBM0822392	ENSMUST00000 166609.1	Pygl	ENSMUSG00 000021069	liver glycogen phosphorylase Source MGI Symbol Acc MGI 97829
F07	SBM0795530	ENSMUST00000 168495.1	Rb1	ENSMUSG00 000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F08	SBM0856664	ENSMUST00000 061352.10	Rdx	ENSMUSG00 000032050	radixin Source MGI Symbol Acc MGI 97887
F09	SBM0944005	ENSMUST00000 171887.3	Rhbg	ENSMUSG00 000104445	Rhesus blood group-associated B glycoprotein Source MGI Symbol Acc MGI 1927379
F10	SBM0822839	ENSMUST00000 198156.1	S100a8	ENSMUSG00 000056054	S100 calcium binding protein A8 (calgranulin A) Source MGI Symbol Acc MGI 88244

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0890897	ENSMUST00000236824.1	Scd1	ENSMUSG0000037071	stearoyl-Coenzyme A desaturase 1 Source MGI Symbol Acc MGI 98239
F12	SBM0672861	ENSMUST0000021506.5	Serpina3n	ENSMUSG0000021091	serine (or cysteine) peptidase inhibitor, clade A, member 3N Source MGI Symbol Acc MGI 105045
G01	SBM0809699	ENSMUST0000041388.10	Serpine1	ENSMUSG0000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
G02	SBM0711751	ENSMUST0000029194.11	Skil	ENSMUSG0000027660	SKI-like Source MGI Symbol Acc MGI 106203
G03	SBM0917537	ENSMUST00000110422.2	Slc17a3	ENSMUSG0000036083	solute carrier family 17 (sodium phosphate), member 3 Source MGI Symbol Acc MGI 2389216
G04	SBM1000736	ENSMUST00000168801.1	Slc2a3	ENSMUSG0000003153	solute carrier family 2 (facilitated glucose transporter), member 3 Source MGI Symbol Acc MGI 95757
G05	SBM1087377	ENSMUST00000070726.9	Slc39a6	ENSMUSG0000024270	solute carrier family 39 (metal ion transporter), member 6 Source MGI Symbol Acc MGI 2147279
G06	SBM0984070	ENSMUST0000020846.7	Srebf1	ENSMUSG0000020538	sterol regulatory element binding transcription factor 1 Source MGI Symbol Acc MGI 107606
G07	SBM0866636	ENSMUST00000216035.1	Tagln	ENSMUSG0000032085	transgelin Source MGI Symbol Acc MGI 106012
G08	SBM0873145	ENSMUST0000043077.7	Thrsp	ENSMUSG0000035686	thyroid hormone responsive Source MGI Symbol Acc MGI 109126
G09	SBM0767489	ENSMUST00000096194.8	Cemip2	ENSMUSG0000024754	cell migration inducing hyaluronidase 2 Source MGI Symbol Acc MGI 1890373
G10	SBM1225401	ENSMUST00000218694.1	Txnrd1	ENSMUSG0000020250	thioredoxin reductase 1 Source MGI Symbol Acc MGI 1354175
G11	SBM0944548	ENSMUST00000103060.9	Wipi1	ENSMUSG0000041895	WD repeat domain, phosphoinositide interacting 1 Source MGI Symbol Acc MGI 1261864
G12	SBM0993980	ENSMUST00000102628.10	Yrdc	ENSMUSG0000028889	yrdC domain containing (E.coli) Source MGI Symbol Acc MGI 2387201
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG0000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG0000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG0000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST0000026613.13	Gusb	ENSMUSG0000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG0000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	SBM1218554	Sybr_MGDC	MGDC	Sybr_MGDC	Mouse 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 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 $\mu$ l QuantiNova SYBR Green RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ 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](http://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.