

QuantiNova® LNA® Probe PCR Focus Panels (Rotor-Gene® Format)

Mouse Hepatotoxicity

Cat. no. 249955 UPMM-093ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light 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 Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

Panel layout (Rotor-Gene): QuantiNova LNA Probe PCR Focus Panel

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc® (plate A1–A12=Rotor-Disc 1–12, plate B1–B12=Rotor-Disc 13–24, etc.). To maintain data analysis compatibility, wells 97–100 do not contain real-time assays but will contain master mix to account for weight balance. Refer to the QuantiNova LNA Probe PCR Handbook at 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	Btg2	Cor3	Casp3	Ccng1	Cd36	Cd68	Cdc14b	Cdkn1a	Col4a1	Cry1l	Cxcl12	Cyp1a2
C	Ddit4l	Ddx39	Dnajb11	Dnajc3	Fabp1	Fads1	Emc9	Fasn	Fmo1	Timm10b	Gadd45a	Gdc
D	Gsr	Hao2	Hmox1	Hpn	Hyou1	Icam1	Igfals	Il6st	Ipo4	Krt18	Krt8	L2hgdh
E	Lgr5	Lpl	Lss	Maob	Map3k6	Mbl2	Mcm10	Mxipl	Mrps18b	Nqa1	Nus1	Osmr
F	Slc51a	Pdyn	Pla2g12a	Ppara	Psmc3	Pygl	Rb1	Rdx	Rhbg	S100a8	Scd1	Serpina3n
G	Serpine1	Skil	Slc17a3	Slc2a3	Slc39a6	Sreb1	Tagln	Thrsp	Cemip2	Txnrd1	Wipi1	Yrdc
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFM0904623	ENSMUST00000102710.9	Abcb11	ENSMUSG0000027048	ATP-binding cassette, sub-family B (MDR/TAP), member 11 Source MGI Symbol Acc MGI 1351619
A02	UPFM0783609	ENSMUST00000047753.4	Abcb1a	ENSMUSG0000040584	ATP-binding cassette, sub-family B (MDR/TAP), member 1A Source MGI Symbol Acc MGI 97570
A03	UPFM0710830	ENSMUST00000003717.12	Abcb4	ENSMUSG0000042476	ATP-binding cassette, sub-family B (MDR/TAP), member 4 Source MGI Symbol Acc MGI 97569
A04	UPFM0989363	ENSMUST00000143553.1	Abcc2	ENSMUSG0000025194	ATP-binding cassette, sub-family C (CFTR/MRP), member 2 Source MGI Symbol Acc MGI 1352447
A05	UPFM0934121	ENSMUST00000021231.7	Abcc3	ENSMUSG0000020865	ATP-binding cassette, sub-family C (CFTR/MRP), member 3 Source MGI Symbol Acc MGI 1923658
A06	UPFM0710780	ENSMUST00000106348.7	Aldoa	ENSMUSG0000030695	aldolase A, fructose-bisphosphate Source MGI Symbol Acc MGI 87994
A07	UPFM0639545	ENSMUST00000136753.7	Apex1	ENSMUSG0000035960	apurinic/apyrimidinic endonuclease 1 Source MGI Symbol Acc MGI 88042
A08	UPFM0947044	ENSMUST00000034000.14	Asah1	ENSMUSG0000031591	N-acylsphingosine amidohydrolase 1 Source MGI Symbol Acc MGI 1277124
A09	UPFM0633303	ENSMUST00000025482.9	Atp8b1	ENSMUSG0000039529	ATPase, class I, type 8B, member 1 Source MGI Symbol Acc MGI 1859665
A10	UPFM0949666	ENSMUST00000020323.6	Avpr1a	ENSMUSG0000020123	arginine vasopressin receptor 1A Source MGI Symbol Acc MGI 1859216
A11	UPFM1010835	ENSMUST00000170846.7	Fam214a	ENSMUSG0000034858	family with sequence similarity 214, member A Source MGI Symbol Acc MGI 2387648
A12	UPFM0752582	ENSMUST00000124193.1	Bhmt	ENSMUSG0000074768	betaine-homocysteine methyltransferase Source MGI Symbol Acc MGI 1339972
B01	UPFM0827796	ENSMUST00000020692.6	Btg2	ENSMUSG0000020423	B cell translocation gene 2, anti-proliferative Source MGI Symbol Acc MGI 108384
B02	UPFM0882095	ENSMUST00000029076.5	Car3	ENSMUSG0000027559	carbonic anhydrase 3 Source MGI Symbol Acc MGI 88270
B03	UPFM0728951	ENSMUST00000210534.1	Casp3	ENSMUSG0000031628	caspase 3 Source MGI Symbol Acc MGI 107739
B04	UPFM0656534	ENSMUST00000020576.7	Ccng1	ENSMUSG0000020326	cyclin G1 Source MGI Symbol Acc MGI 102890
B05	UPFM0835508	ENSMUST00000170051.7	Cd36	ENSMUSG0000002944	CD36 molecule Source MGI Symbol Acc MGI 107899
B06	UPFM0640054	ENSMUST00000154124.1	Cd68	ENSMUSG0000018774	CD68 antigen Source MGI Symbol Acc MGI 88342
B07	UPFM0930891	ENSMUST00000109770.1	Cdc14b	ENSMUSG0000033102	CDC14 cell division cycle 14B Source MGI Symbol Acc MGI 2441808
B08	UPFM0867791	ENSMUST00000122348.2	Cdkn1a	ENSMUSG0000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B09	UPFM0633232	ENSMUST00000208386.1	Col4a1	ENSMUSG0000031502	collagen, type IV, alpha 1 Source MGI Symbol Acc MGI 88454
B10	UPFM0838301	ENSMUST00000022517.8	Cry1l	ENSMUSG0000021947	crystallin, lambda 1 Source MGI Symbol Acc MGI 1915881
B11	UPFM0841368	ENSMUST00000112871.7	Cxcl12	ENSMUSG0000061353	chemokine (C-X-C motif) ligand 12 Source MGI Symbol Acc MGI 103556
B12	UPFM0858949	ENSMUST00000034860.4	Cyp1a2	ENSMUSG0000032310	cytochrome P450, family 1, subfamily a, polypeptide 2 Source MGI Symbol Acc MGI 88589
C01	UPFM0882509	ENSMUST00000165845.1	Ddit4l	ENSMUSG0000046818	DNA-damage-inducible transcript 4-like Source MGI Symbol Acc MGI 1920534
C02	UPFM0630750	ENSMUST00000172396.7	Ddx39	ENSMUSG0000005481	DEAD (Asp-Glu-Ala-Asp) box polypeptide 39 Source MGI Symbol Acc MGI 1915528
C03	UPFM0940950	ENSMUST00000133013.1	Dnajb11	ENSMUSG0000004460	DnaJ heat shock protein family (Hsp40) member B11 Source MGI Symbol Acc MGI 1915088
C04	UPFM0959999	ENSMUST00000022734.8	Dnajc3	ENSMUSG0000022136	DnaJ heat shock protein family (Hsp40) member C3 Source MGI Symbol Acc MGI 107373
C05	UPFM0727773	ENSMUST00000067492.7	Fabp1	ENSMUSG0000054422	fatty acid binding protein 1, liver Source MGI Symbol Acc MGI 95479
C06	UPFM0693154	ENSMUST00000235160.1	Fads1	ENSMUSG0000010663	fatty acid desaturase 1 Source MGI Symbol Acc MGI 1923517
C07	UPFM0922456	ENSMUST00000174352.7	Emc9	ENSMUSG0000022217	ER membrane protein complex subunit 9 Source MGI Symbol Acc MGI 1934682
C08	UPFM0812652	ENSMUST00000055655.8	Fasn	ENSMUSG0000025153	fatty acid synthase Source MGI Symbol Acc MGI 95485
C09	UPFM0685803	ENSMUST00000134098.7	Fmo1	ENSMUSG0000040181	flavin containing monooxygenase 1 Source MGI Symbol Acc MGI 1310002
C10	UPFM0897962	ENSMUST00000058333.9	Timm10b	ENSMUSG0000089847	translocase of inner mitochondrial membrane 10B Source MGI Symbol Acc MGI 1315196
	UPFM091095	ENSMUST000000		ENSMUSG00	growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	4	204282.1	Gadd45a	000036390	MGI 107799
C12	UPFM078991 4	ENSMUST00000 216848.1	Gclc	ENSMUSG00 000032350	glutamate-cysteine ligase, catalytic subunit Source MGI Symbol Acc MGI 104990
D01	UPFM072352 2	ENSMUST00000 033992.8	Gsr	ENSMUSG00 000031584	glutathione reductase Source MGI Symbol Acc MGI 95804
D02	UPFM094707 2	ENSMUST00000 029464.8	Hao2	ENSMUSG00 000027870	hydroxyacid oxidase 2 Source MGI Symbol Acc MGI 96012
D03	UPFM070898 7	ENSMUST00000 005548.7	Hmox1	ENSMUSG00 000005413	heme oxygenase 1 Source MGI Symbol Acc MGI 96163
D04	UPFM097217 3	ENSMUST00000 108102.8	Hpn	ENSMUSG00 000001249	hepsin Source MGI Symbol Acc MGI 1196620
D05	UPFM086617 9	ENSMUST00000 066601.12	Hyou1	ENSMUSG00 000032115	hypoxia up-regulated 1 Source MGI Symbol Acc MGI 108030
D06	UPFM084326 4	ENSMUST00000 215003.1	Icam1	ENSMUSG00 000037405	intercellular adhesion molecule 1 Source MGI Symbol Acc MGI 96392
D07	UPFM079352 6	ENSMUST00000 050714.7	Igfals	ENSMUSG00 000046070	insulin-like growth factor binding protein, acid labile subunit Source MGI Symbol Acc MGI 107973
D08	UPFM100226 1	ENSMUST00000 184445.7	Il6st	ENSMUSG00 000021756	interleukin 6 signal transducer Source MGI Symbol Acc MGI 96560
D09	UPFM064738 7	ENSMUST00000 148942.7	Ipo4	ENSMUSG00 000002319	importin 4 Source MGI Symbol Acc MGI 1923001
D10	UPFM090752 8	ENSMUST00000 023803.7	Krt18	ENSMUSG00 000023043	keratin 18 Source MGI Symbol Acc MGI 96692
D11	UPFM066812 9	ENSMUST00000 023952.9	Krt8	ENSMUSG00 000049382	keratin 8 Source MGI Symbol Acc MGI 96705
D12	UPFM094323 1	ENSMUST00000 021370.9	L2hgdh	ENSMUSG00 000020988	L-2-hydroxyglutarate dehydrogenase Source MGI Symbol Acc MGI 2384968
E01	UPFM071165 0	ENSMUST00000 173740.1	Lgr5	ENSMUSG00 000020140	leucine rich repeat containing G protein coupled receptor 5 Source MGI Symbol Acc MGI 1341817
E02	UPFM082678 7	ENSMUST00000 169749.1	Lpl	ENSMUSG00 000015568	lipoprotein lipase Source MGI Symbol Acc MGI 96820
E03	UPFM093563 6	ENSMUST00000 159013.7	Lss	ENSMUSG00 000033105	lanosterol synthase Source MGI Symbol Acc MGI 1336155
E04	UPFM070987 7	ENSMUST00000 040820.12	Maob	ENSMUSG00 000040147	monoamine oxidase B Source MGI Symbol Acc MGI 96916
E05	UPFM068537 5	ENSMUST00000 030677.6	Map3k6	ENSMUSG00 000028862	mitogen-activated protein kinase kinase 6 Source MGI Symbol Acc MGI 1855691
E06	UPFM084280 5	ENSMUST00000 025797.6	Mbl2	ENSMUSG00 000024863	mannose-binding lectin (protein C) 2 Source MGI Symbol Acc MGI 96924
E07	UPFM068860 7	ENSMUST00000 125851.1	Mcm10	ENSMUSG00 000026669	minichromosome maintenance 10 replication initiation factor Source MGI Symbol Acc MGI 1917274
E08	UPFM095871 4	ENSMUST00000 201977.3	Mlxip1	ENSMUSG00 000005373	MLX interacting protein-like Source MGI Symbol Acc MGI 1927999
E09	UPFM084417 3	ENSMUST00000 025305.15	Mrps18b	ENSMUSG00 000024436	mitochondrial ribosomal protein S18B Source MGI Symbol Acc MGI 1914223
E10	UPFM063067 7	ENSMUST00000 003947.8	Nqo1	ENSMUSG00 000003849	NAD(P)H dehydrogenase, quinone 1 Source MGI Symbol Acc MGI 103187
E11	UPFM073417 4	ENSMUST00000 218983.1	Nus1	ENSMUSG00 000023068	NUS1 dehydrodolichyl diphosphate synthase subunit Source MGI Symbol Acc MGI 1196365
E12	UPFM067812 2	ENSMUST00000 177478.1	Osmr	ENSMUSG00 000022146	oncostatin M receptor Source MGI Symbol Acc MGI 1330819
F01	UPFM068502 9	ENSMUST00000 231690.1	Slc51a	ENSMUSG00 000035699	solute carrier family 51, alpha subunit Source MGI Symbol Acc MGI 2146634
F02	UPFM066313 1	ENSMUST00000 152113.1	Pdyn	ENSMUSG00 000027400	prodynorphin Source MGI Symbol Acc MGI 97535
F03	UPFM083782 1	ENSMUST00000 196838.4	Pla2g12a	ENSMUSG00 000027999	phospholipase A2, group X1IA Source MGI Symbol Acc MGI 1913600
F04	UPFM096943 9	ENSMUST00000 138813.7	Ppara	ENSMUSG00 000022383	peroxisome proliferator activated receptor alpha Source MGI Symbol Acc MGI 104740
F05	UPFM070425 3	ENSMUST00000 019470.13	Psme3	ENSMUSG00 000078652	proteasome (prosome, macropain) activator subunit 3 (PA28 gamma, Ki) Source MGI Symbol Acc MGI 1096366
F06	UPFM086691 8	ENSMUST00000 166609.1	Pygl	ENSMUSG00 000021069	liver glycogen phosphorylase Source MGI Symbol Acc MGI 97829
F07	UPFM077278 8	ENSMUST00000 022701.6	Rb1	ENSMUSG00 000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F08	UPFM080294 8	ENSMUST00000 163153.8	Rdx	ENSMUSG00 000032050	radixin Source MGI Symbol Acc MGI 97887
F09	UPFM072840 7	ENSMUST00000 171887.3	Rhbg	ENSMUSG00 000104445	Rhesus blood group-associated B glycoprotein Source MGI Symbol Acc MGI 1927379
F10	UPFM084819 8	ENSMUST00000 069927.9	S100a8	ENSMUSG00 000056054	S100 calcium binding protein A8 (calgranulin A) Source MGI Symbol Acc MGI 88244

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM064289 0	ENSMUST00000 236824.1	Scd1	ENSMUSG00 000037071	stearoyl-Coenzyme A desaturase 1 Source MGI Symbol Acc MGI 98239
F12	UPFM070363 0	ENSMUST00000 021506.5	Serpina3n	ENSMUSG00 000021091	serine (or cysteine) peptidase inhibitor, clade A, member 3N Source MGI Symbol Acc MGI 105045
G01	UPFM070788 6	ENSMUST00000 041388.10	Serpine1	ENSMUSG00 000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
G02	UPFM075472 7	ENSMUST00000 118470.7	Skil	ENSMUSG00 000027660	SKI-like Source MGI Symbol Acc MGI 106203
G03	UPFM068108 3	ENSMUST00000 110422.2	Slc17a3	ENSMUSG00 000036083	solute carrier family 17 (sodium phosphate), member 3 Source MGI Symbol Acc MGI 2389216
G04	UPFM100859 5	ENSMUST00000 032476.10	Slc2a3	ENSMUSG00 000003153	solute carrier family 2 (facilitated glucose transporter), member 3 Source MGI Symbol Acc MGI 95757
G05	UPFM071357 2	ENSMUST00000 128106.1	Slc39a6	ENSMUSG00 000024270	solute carrier family 39 (metal ion transporter), member 6 Source MGI Symbol Acc MGI 2147279
G06	UPFM063110 3	ENSMUST00000 149238.1	Srebf1	ENSMUSG00 000020538	sterol regulatory element binding transcription factor 1 Source MGI Symbol Acc MGI 107606
G07	UPFM079487 9	ENSMUST00000 215509.1	Tagln	ENSMUSG00 000032085	transgelin Source MGI Symbol Acc MGI 106012
G08	UPFM075672 4	ENSMUST00000 043077.7	Thrsp	ENSMUSG00 000035686	thyroid hormone responsive Source MGI Symbol Acc MGI 109126
G09	UPFM066446 2	ENSMUST00000 096194.8	Cemip2	ENSMUSG00 000024754	cell migration inducing hyaluronidase 2 Source MGI Symbol Acc MGI 1890373
G10	UPFM075333 7	ENSMUST00000 020484.7	Txnrd1	ENSMUSG00 000020250	thioredoxin reductase 1 Source MGI Symbol Acc MGI 1354175
G11	UPFM069333 2	ENSMUST00000 106689.1	Wipi1	ENSMUSG00 000041895	WD repeat domain, phosphoinositide interacting 1 Source MGI Symbol Acc MGI 1261864
G12	UPFM076077 8	ENSMUST00000 102628.10	Yrdc	ENSMUSG00 000028889	yrdC domain containing (E.coli) Source MGI Symbol Acc MGI 2387201
H01	UPFM113294 6	ENSMUST00000 163829.1	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	UPFM113294 7	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	UPFM113294 8	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	UPFM113294 9	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	UPFM113295 0	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	UPFM112660 9	UPL_MGDC	MGDC	UPL_MGDC	Mouse Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
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 Probe RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 μ l QuantiNova Probe 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	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l QN ROX Reference Dye, 1.9 ml Water	208252

*Larger kit sizes available.

The QuantiNova LNA Probe 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.