

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

## Mouse Antiviral Response

Cat. no. 249955 UPMM-122ZA

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 (96-well): QuantiNova LNA Probe PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. Refer to the QuantiNova LNA Probe PCR 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	Aim2	Atg12	Atg5	Azi2	Card9	Casp1	Casp8	Ccl3	Ccl4	Ccl5	Cd40	Cd80
B	Cd86	Chuk	Cnpy3	Ctsb	Ctsl	Ctss	Cxcl10	Cxcl11	Cxcl9	Cyld	Tkfc	Ddx3x
C	Ddx58	Dhx58	Fadd	Fos	Hsp90aa1	Ifih1	Ifna2	Ifnar1	Ifnb1	Ikbbk	Il12a	Il12b
D	Il15	Il18	Il1b	Il6	Irak1	Irf3	Irf5	Irf7	Isg15	Jun	Map2k1	Map2k3
E	Map3k1	Map3k7	Mapk1	Mapk14	Mapk3	Mapk8	Mavs	Mefv	Mx1	Myd88	NfkB1	NfkBia
F	Nlrp3	Nod2	Oas2	Pin1	Pstpip1	Pycard	Rela	Ripk1	Spp1	Stat1	Sugt1	Tank
G	Tbk1	Tbkbp1	Ticam1	Tlr3	Tlr7	Tlr8	Tlr9	Tnf	Tradd	Traf3	Traf6	Trim25
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	UPFM090680 7	ENSMUST00000 147604.7	Aim2	ENSMUSG00 000037860	absent in melanoma 2 Source MGI Symbol Acc MGI 2686159
A02	UPFM072021 1	ENSMUST00000 035648.5	Atg12	ENSMUSG00 000032905	autophagy related 12 Source MGI Symbol Acc MGI 1914776
A03	UPFM076810 1	ENSMUST00000 039286.4	Atg5	ENSMUSG00 000038160	autophagy related 5 Source MGI Symbol Acc MGI 1277186
A04	UPFM074024 1	ENSMUST00000 133580.7	Azi2	ENSMUSG00 000039285	5-azacytidine induced gene 2 Source MGI Symbol Acc MGI 1351332
A05	UPFM095810 0	ENSMUST00000 100303.9	Card9	ENSMUSG00 000026928	caspase recruitment domain family, member 9 Source MGI Symbol Acc MGI 2685628
A06	UPFM095374 8	ENSMUST00000 027015.5	Casp1	ENSMUSG00 000025888	caspase 1 Source MGI Symbol Acc MGI 96544
A07	UPFM067082 6	ENSMUST00000 191201.6	Casp8	ENSMUSG00 000026029	caspase 8 Source MGI Symbol Acc MGI 1261423
A08	UPFM100418 5	ENSMUST00000 001008.5	Ccl3	ENSMUSG00 000000982	chemokine (C-C motif) ligand 3 Source MGI Symbol Acc MGI 98260
A09	UPFM085192 5	ENSMUST00000 019074.3	Ccl4	ENSMUSG00 000018930	chemokine (C-C motif) ligand 4 Source MGI Symbol Acc MGI 98261
A10	UPFM078318 2	ENSMUST00000 035938.2	Ccl5	ENSMUSG00 000035042	chemokine (C-C motif) ligand 5 Source MGI Symbol Acc MGI 98262
A11	UPFM072215 7	ENSMUST00000 153105.1	Cd40	ENSMUSG00 000017652	CD40 antigen Source MGI Symbol Acc MGI 88336
A12	UPFM091778 2	ENSMUST00000 099816.2	Cd80	ENSMUSG00 000075122	CD80 antigen Source MGI Symbol Acc MGI 101775
B01	UPFM099543 4	ENSMUST00000 089620.10	Cd86	ENSMUSG00 000022901	CD86 antigen Source MGI Symbol Acc MGI 101773
B02	UPFM100719 5	ENSMUST00000 146861.1	Chuk	ENSMUSG00 000025199	conserved helix-loop-helix ubiquitous kinase Source MGI Symbol Acc MGI 99484
B03	UPFM092429 9	ENSMUST00000 148656.1	Cnpy3	ENSMUSG00 000023973	canopy FGF signaling regulator 3 Source MGI Symbol Acc MGI 1919279
B04	UPFM062902 6	ENSMUST00000 006235.8	Ctsb	ENSMUSG00 000021939	cathepsin B Source MGI Symbol Acc MGI 88561
B05	UPFM090433 9	ENSMUST00000 222971.1	Ctsl	ENSMUSG00 000021477	cathepsin L Source MGI Symbol Acc MGI 88564
B06	UPFM067305 8	ENSMUST00000 015667.8	Ctss	ENSMUSG00 000038642	cathepsin S Source MGI Symbol Acc MGI 107341
B07	UPFM098980 6	ENSMUST00000 038816.12	Cxcl10	ENSMUSG00 000034855	chemokine (C-X-C motif) ligand 10 Source MGI Symbol Acc MGI 1352450
B08	UPFM089321 1	ENSMUST00000 122808.1	Cxcl11	ENSMUSG00 000060183	chemokine (C-X-C motif) ligand 11 Source MGI Symbol Acc MGI 1860203
B09	UPFM094088 9	ENSMUST00000 202404.1	Cxcl9	ENSMUSG00 000029417	chemokine (C-X-C motif) ligand 9 Source MGI Symbol Acc MGI 1352449
B10	UPFM101231 6	ENSMUST00000 209532.1	Cyld	ENSMUSG00 000036712	CYLD lysine 63 deubiquitinase Source MGI Symbol Acc MGI 1921506
B11	UPFM089329 4	ENSMUST00000 037678.6	Tkfc	ENSMUSG00 000034371	triokinase, FMN cyclase Source MGI Symbol Acc MGI 2385084
B12	UPFM064846 1	ENSMUST00000 153611.1	Ddx3x	ENSMUSG00 000000787	DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 3, X-linked Source MGI Symbol Acc MGI 103064
C01	UPFM068634 3	ENSMUST00000 139583.7	Ddx58	ENSMUSG00 000040296	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58 Source MGI Symbol Acc MGI 2442858
C02	UPFM092619 0	ENSMUST00000 149869.1	Dhx58	ENSMUSG00 000017830	DEXH (Asp-Glu-X-His) box polypeptide 58 Source MGI Symbol Acc MGI 1931560
C03	UPFM075310 6	ENSMUST00000 033394.7	Fadd	ENSMUSG00 000031077	Fas (TNFRSF6)-associated via death domain Source MGI Symbol Acc MGI 109324
C04	UPFM076456 3	ENSMUST00000 136122.7	Fos	ENSMUSG00 000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
C05	UPFM099789 5	ENSMUST00000 155242.7	Hsp90aa1	ENSMUSG00 000021270	heat shock protein 90, alpha (cytosolic), class A member 1 Source MGI Symbol Acc MGI 96250
C06	UPFM070359 8	ENSMUST00000 028259.11	Ifih1	ENSMUSG00 000026896	interferon induced with helicase C domain 1 Source MGI Symbol Acc MGI 1918836
C07	UPFM071862 7	ENSMUST00000 105147.1	Ifna2	ENSMUSG00 000078354	interferon alpha 2 Source MGI Symbol Acc MGI 107666
C08	UPFM070304 1	ENSMUST00000 123196.8	Ifnar1	ENSMUSG00 000022967	interferon (alpha and beta) receptor 1 Source MGI Symbol Acc MGI 107658
C09	UPFM063944 2	ENSMUST00000 055671.4	Ifnb1	ENSMUSG00 000048806	interferon beta 1, fibroblast Source MGI Symbol Acc MGI 107657
C10	UPFM086154 1	ENSMUST00000 146212.7	Ikbbk	ENSMUSG00 000031537	inhibitor of kappaB kinase beta Source MGI Symbol Acc MGI 1338071
	UPFM083114	ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	0	029345.11	Il12a	000027776	interleukin 12a Source MGI Symbol Acc MGI 96539
C12	UPFM078502 0	ENSMUST00000 170513.2	Il12b	ENSMUSG00 000004296	interleukin 12b Source MGI Symbol Acc MGI 96540
D01	UPFM090675 6	ENSMUST00000 209687.1	Il15	ENSMUSG00 000031712	interleukin 15 Source MGI Symbol Acc MGI 103014
D02	UPFM093943 0	ENSMUST00000 180021.1	Il18	ENSMUSG00 000039217	interleukin 18 Source MGI Symbol Acc MGI 107936
D03	UPFM067128 1	ENSMUST00000 155994.1	Il1b	ENSMUSG00 000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
D04	UPFM072909 9	ENSMUST00000 195978.4	Il6	ENSMUSG00 000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
D05	UPFM067566 8	ENSMUST00000 138397.7	Irak1	ENSMUSG00 000031392	interleukin-1 receptor-associated kinase 1 Source MGI Symbol Acc MGI 107420
D06	UPFM097246 1	ENSMUST00000 207521.1	Irf3	ENSMUSG00 000003184	interferon regulatory factor 3 Source MGI Symbol Acc MGI 1859179
D07	UPFM079524 6	ENSMUST00000 164922.2	Irf5	ENSMUSG00 000029771	interferon regulatory factor 5 Source MGI Symbol Acc MGI 1350924
D08	UPFM089456 5	ENSMUST00000 123525.1	Irf7	ENSMUSG00 000025498	interferon regulatory factor 7 Source MGI Symbol Acc MGI 1859212
D09	UPFM079289 6	ENSMUST00000 085425.4	Isg15	ENSMUSG00 000035692	ISG15 ubiquitin-like modifier Source MGI Symbol Acc MGI 1855694
D10	UPFM097521 6	ENSMUST00000 107094.1	Jun	ENSMUSG00 000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
D11	UPFM066592 5	ENSMUST00000 005066.8	Map2k1	ENSMUSG00 000004936	mitogen-activated protein kinase kinase 1 Source MGI Symbol Acc MGI 1346866
D12	UPFM079587 4	ENSMUST00000 126043.1	Map2k3	ENSMUSG00 000018932	mitogen-activated protein kinase kinase 3 Source MGI Symbol Acc MGI 1346868
E01	UPFM071337 6	ENSMUST00000 109267.8	Map3k1	ENSMUSG00 000021754	mitogen-activated protein kinase kinase kinase 1 Source MGI Symbol Acc MGI 1346872
E02	UPFM069246 5	ENSMUST00000 126632.7	Map3k7	ENSMUSG00 000028284	mitogen-activated protein kinase kinase kinase 7 Source MGI Symbol Acc MGI 1346877
E03	UPFM066625 9	ENSMUST00000 232611.1	Mapk1	ENSMUSG00 000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
E04	UPFM074684 8	ENSMUST00000 004990.13	Mapk14	ENSMUSG00 000053436	mitogen-activated protein kinase 14 Source MGI Symbol Acc MGI 1346865
E05	UPFM094029 9	ENSMUST00000 205657.1	Mapk3	ENSMUSG00 000063065	mitogen-activated protein kinase 3 Source MGI Symbol Acc MGI 1346859
E06	UPFM091565 7	ENSMUST00000 111944.9	Mapk8	ENSMUSG00 000021936	mitogen-activated protein kinase 8 Source MGI Symbol Acc MGI 1346861
E07	UPFM080911 1	ENSMUST00000 132694.1	Mavs	ENSMUSG00 000037523	mitochondrial antiviral signaling protein Source MGI Symbol Acc MGI 2444773
E08	UPFM080770 1	ENSMUST00000 229725.1	Mefv	ENSMUSG00 000022534	Mediterranean fever Source MGI Symbol Acc MGI 1859396
E09	UPFM064063 2	ENSMUST00000 232193.1	Mx1	ENSMUSG00 000000386	MX dynamin-like GTPase 1 Source MGI Symbol Acc MGI 97243
E10	UPFM117295 8	ENSMUST00000 035092.6	Myd88	ENSMUSG00 000032508	myeloid differentiation primary response gene 88 Source MGI Symbol Acc MGI 108005
E11	UPFM098758 7	ENSMUST00000 029812.13	Nfkb1	ENSMUSG00 000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E12	UPFM072174 5	ENSMUST00000 021413.8	Nfkbia	ENSMUSG00 000021025	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, alpha Source MGI Symbol Acc MGI 104741
F01	UPFM077169 7	ENSMUST00000 149126.1	Nlrp3	ENSMUSG00 000032691	NLR family, pyrin domain containing 3 Source MGI Symbol Acc MGI 2653833
F02	UPFM065455 6	ENSMUST00000 118370.7	Nod2	ENSMUSG00 000055994	nucleotide-binding oligomerization domain containing 2 Source MGI Symbol Acc MGI 2429397
F03	UPFM072811 0	ENSMUST00000 147941.1	Oas2	ENSMUSG00 000032690	2'-5' oligoadenylate synthetase 2 Source MGI Symbol Acc MGI 2180852
F04	UPFM067644 5	ENSMUST00000 034689.7	Pin1	ENSMUSG00 000032171	protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 Source MGI Symbol Acc MGI 1346036
F05	UPFM089562 4	ENSMUST00000 144638.7	Pstpip1	ENSMUSG00 000032322	proline-serine-threonine phosphatase-interacting protein 1 Source MGI Symbol Acc MGI 1321396
F06	UPFM084237 4	ENSMUST00000 033056.4	Pycard	ENSMUSG00 000030793	PYD and CARD domain containing Source MGI Symbol Acc MGI 1931465
F07	UPFM081915 5	ENSMUST00000 025867.5	Rela	ENSMUSG00 000024927	v-rel reticuloendotheliosis viral oncogene homolog A (avian) Source MGI Symbol Acc MGI 103290
F08	UPFM086562 4	ENSMUST00000 167374.8	Ripk1	ENSMUSG00 000021408	receptor (TNFRSF)-interacting serine-threonine kinase 1 Source MGI Symbol Acc MGI 108212
F09	UPFM075924 9	ENSMUST00000 112746.7	Spp1	ENSMUSG00 000029304	secreted phosphoprotein 1 Source MGI Symbol Acc MGI 98389
F10	UPFM071531 5	ENSMUST00000 186574.6	Stat1	ENSMUSG00 000026104	signal transducer and activator of transcription 1 Source MGI Symbol Acc MGI 103063

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM088216 2	ENSMUST00000 226320.1	Sugf1	ENSMUSG00 000022024	SGT1, suppressor of G2 allele of SKP1 ( <i>S. cerevisiae</i> ) Source MGI Symbol Acc MGI 1915205
F12	UPFM082021 8	ENSMUST00000 154693.1	Tank	ENSMUSG00 000064289	TRAF family member-associated Nf-kappa B activator Source MGI Symbol Acc MGI 107676
G01	UPFM087455 7	ENSMUST00000 020316.3	Tbk1	ENSMUSG00 000020115	TANK-binding kinase 1 Source MGI Symbol Acc MGI 1929658
G02	UPFM093118 2	ENSMUST00000 066078.11	Tbkbp1	ENSMUSG00 000038517	TBK1 binding protein 1 Source MGI Symbol Acc MGI 1920424
G03	UPFM090439 0	ENSMUST00000 058136.8	Ticam1	ENSMUSG00 000047123	toll-like receptor adaptor molecule 1 Source MGI Symbol Acc MGI 2147032
G04	UPFM067679 7	ENSMUST00000 210996.1	Tlr3	ENSMUSG00 000031639	toll-like receptor 3 Source MGI Symbol Acc MGI 2156367
G05	UPFM091123 2	ENSMUST00000 060719.11	Tlr7	ENSMUSG00 000044583	toll-like receptor 7 Source MGI Symbol Acc MGI 2176882
G06	UPFM095833 2	ENSMUST00000 049023.2	Tlr8	ENSMUSG00 000040522	toll-like receptor 8 Source MGI Symbol Acc MGI 2176887
G07	UPFM065075 2	ENSMUST00000 062241.10	Tlr9	ENSMUSG00 000045322	toll-like receptor 9 Source MGI Symbol Acc MGI 1932389
G08	UPFM063847 1	ENSMUST00000 025263.14	Tnf	ENSMUSG00 000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G09	UPFM088738 2	ENSMUST00000 144762.7	Tradd	ENSMUSG00 000031887	TNFRSF1A-associated via death domain Source MGI Symbol Acc MGI 109200
G10	UPFM080793 8	ENSMUST00000 021706.10	Traf3	ENSMUSG00 000021277	TNF receptor-associated factor 3 Source MGI Symbol Acc MGI 108041
G11	UPFM076055 2	ENSMUST00000 144063.1	Traf6	ENSMUSG00 000027164	TNF receptor-associated factor 6 Source MGI Symbol Acc MGI 108072
G12	UPFM073932 0	ENSMUST00000 107896.9	Trim25	ENSMUSG00 000000275	tripartite motif-containing 25 Source MGI Symbol Acc MGI 102749
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 $\mu$ 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 Probe RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 $\mu$ l QuantiNova Probe 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	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ 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.

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