

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

## Human Antiviral Response

Cat. no. 249955 UPHS-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	APOBEC3G	ATG5	AZI2	CARD9	CASP1	CASP10	CASP8	CCL3	CCL5	CD40	CD80
B	CD86	CHUK	CTSB	CTSL	CTSS	CXCL10	CXCL11	CXCL9	CYLD	TKFC	DDX3X	DDX58
C	DHX58	FADD	FOS	HSP90AA1	IFIH1	IFNA1	IFNA2	IFNAR1	IFNB1	IKBKB	IL12A	IL12B
D	IL15	IL18	IL1B	IL6	CXCL8	IRAK1	IRF3	IRF5	IRF7	ISG15	JUN	MAP2K1
E	MAP2K3	MAP3K1	MAP3K7	MAPK1	MAPK14	MAPK3	MAPK8	MAVS	MEFV	MX1	MYD88	NFKB1
F	NFKBIA	NLRP3	NOD2	OAS2	PIN1	PSTPIP1	PYCARD	PYDC1	RELA	RIPK1	SPP1	STAT1
G	SUGT1	TBK1	TICAM1	TLR3	TLR7	TLR8	TLR9	TNF	TRADD	TRAF3	TRAF6	TRIM25
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	QIC	QIC	QIC	PPC	PPC	PPC

## Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFH1132222	ENST00000368130.9	AIM2	ENSG00000163568	absent in melanoma 2 Source HGNC Symbol Acc HGNC 357
A02	UPFH1132237	ENST00000407997.4	APOBEC3G	ENSG00000239713	apolipoprotein B mRNA editing enzyme catalytic subunit 3G Source HGNC Symbol Acc HGNC 17357
A03	UPFH1132251	ENST00000635758.2	ATG5	ENSG00000057663	autophagy related 5 Source HGNC Symbol Acc HGNC 589
A04	UPFH1132264	ENST00000457172.5	AZI2	ENSG00000163512	5-azacytidine induced 2 Source HGNC Symbol Acc HGNC 24002
A05	UPFH0389718	ENST00000371732.9	CARD9	ENSG00000187796	caspase recruitment domain family member 9 Source HGNC Symbol Acc HGNC 16391
A06	UPFH0285144	ENST00000436863.7	CASP1	ENSG00000137752	caspase 1 Source HGNC Symbol Acc HGNC 1499
A07	UPFH1132283	ENST00000360132.7	CASP10	ENSG00000003400	caspase 10 Source HGNC Symbol Acc HGNC 1500
A08	UPFH0522971	ENST00000264275.9	CASP8	ENSG000000064012	caspase 8 Source HGNC Symbol Acc HGNC 1509
A09	UPFH1132784	ENST00000613922.2	CCL3	ENSG00000277632	C-C motif chemokine ligand 3 Source HGNC Symbol Acc HGNC 10627
A10	UPFH1132786	ENST00000603197.6	CCL5	ENSG00000271503	C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632
A11	UPFH0317626	ENST00000372285.7	CD40	ENSG00000101017	CD40 molecule Source HGNC Symbol Acc HGNC 11919
A12	UPFH1132790	ENST00000264246.8	CD80	ENSG00000121594	CD80 molecule Source HGNC Symbol Acc HGNC 1700
B01	UPFH0045195	ENST00000393627.6	CD86	ENSG00000114013	CD86 molecule Source HGNC Symbol Acc HGNC 1705
B02	UPFH1132316	ENST00000370397.8	CHUK	ENSG00000213341	conserved helix-loop-helix ubiquitous kinase Source HGNC Symbol Acc HGNC 1974
B03	UPFH1132795	ENST00000345125.7	CTSB	ENSG00000164733	cathepsin B Source HGNC Symbol Acc HGNC 2527
B04	UPFH1132904	ENST00000342020.5	CTSL	ENSG00000135047	cathepsin L Source HGNC Symbol Acc HGNC 2537
B05	UPFH1132344	ENST00000368985.8	CTSS	ENSG00000163131	cathepsin S Source HGNC Symbol Acc HGNC 2545
B06	UPFH0196315	ENST00000306602.3	CXCL10	ENSG00000169245	C-X-C motif chemokine ligand 10 Source HGNC Symbol Acc HGNC 10637
B07	UPFH0421123	ENST00000306621.7	CXCL11	ENSG00000169248	C-X-C motif chemokine ligand 11 Source HGNC Symbol Acc HGNC 10638
B08	UPFH0222764	ENST00000264888.5	CXCL9	ENSG00000138755	C-X-C motif chemokine ligand 9 Source HGNC Symbol Acc HGNC 7098
B09	UPFH0025683	ENST00000311559.13	CYLD	ENSG00000083799	CYLD lysine 63 deubiquitinase Source HGNC Symbol Acc HGNC 2584
B10	UPFH1132925	ENST00000529479.5	TKFC	ENSG00000149476	triokinase and FMN cyclase Source HGNC Symbol Acc HGNC 24552
B11	UPFH0201163	ENST00000644876.1	DDX3X	ENSG00000215301	DEAD-box helicase 3 X-linked Source HGNC Symbol Acc HGNC 2745
B12	UPFH1132356	ENST00000379883.3	DDX58	ENSG00000107201	DExD/H-box helicase 58 Source HGNC Symbol Acc HGNC 19102
C01	UPFH1132359	ENST00000251642.8	DHX58	ENSG00000108771	DExH-box helicase 58 Source HGNC Symbol Acc HGNC 29517
C02	UPFH1132906	ENST00000301838.4	FADD	ENSG00000168040	Fas associated via death domain Source HGNC Symbol Acc HGNC 3573
C03	UPFH1132401	ENST00000555242.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
C04	UPFH0292880	ENST00000334701.11	HSP90AA1	ENSG00000080824	heat shock protein 90 alpha family class A member 1 Source HGNC Symbol Acc HGNC 5253
C05	UPFH0315757	ENST00000263642.2	IFIH1	ENSG00000115267	interferon induced with helicase C domain 1 Source HGNC Symbol Acc HGNC 18873
C06	UPFH0577805	ENST00000276927.2	IFNA1	ENSG00000197919	interferon alpha 1 Source HGNC Symbol Acc HGNC 5417
C07	UPFH0206613	ENST00000380206.3	IFNA2	ENSG00000188379	interferon alpha 2 Source HGNC Symbol Acc HGNC 5423
C08	UPFH1132472	ENST00000270139.8	IFNAR1	ENSG00000142166	interferon alpha and beta receptor subunit 1 Source HGNC Symbol Acc HGNC 5432
C09	UPFH1132806	ENST00000380232.4	IFNB1	ENSG00000171855	interferon beta 1 Source HGNC Symbol Acc HGNC 5434
C10	UPFH0596293	ENST00000649612.2	IKKB	ENSG00000104365	inhibitor of nuclear factor kappa B kinase subunit beta Source HGNC Symbol Acc HGNC 5960
		ENST00000466		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132478	512.1	IL12A	168811	interleukin 12A Source HGNC Symbol Acc HGNC 5969
C12	UPFH0131869	ENST00000231228.2	IL12B	ENSG00000113302	interleukin 12B Source HGNC Symbol Acc HGNC 5970
D01	UPFH1132873	ENST00000296545.11	IL15	ENSG00000164136	interleukin 15 Source HGNC Symbol Acc HGNC 5977
D02	UPFH1132481	ENST00000528832.1	IL18	ENSG00000150782	interleukin 18 Source HGNC Symbol Acc HGNC 5986
D03	UPFH0163764	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
D04	UPFH1172910	ENST00000258743.10	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D05	UPFH0120553	ENST00000307407.8	CXCL8	ENSG00000169429	C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025
D06	UPFH1132489	ENST00000393687.6	IRAK1	ENSG00000184216	interleukin 1 receptor associated kinase 1 Source HGNC Symbol Acc HGNC 6112
D07	UPFH0390278	ENST00000599144.5	IRF3	ENSG00000126456	interferon regulatory factor 3 Source HGNC Symbol Acc HGNC 6118
D08	UPFH1132492	ENST00000479582.5	IRF5	ENSG00000128604	interferon regulatory factor 5 Source HGNC Symbol Acc HGNC 6120
D09	UPFH1132493	ENST00000348655.11	IRF7	ENSG00000185507	interferon regulatory factor 7 Source HGNC Symbol Acc HGNC 6122
D10	UPFH1132494	ENST00000379389.4	ISG15	ENSG00000187608	ISG15 ubiquitin-like modifier Source HGNC Symbol Acc HGNC 4053
D11	UPFH0569765	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D12	UPFH1132932	ENST00000307102.9	MAP2K1	ENSG00000169032	mitogen-activated protein kinase kinase 1 Source HGNC Symbol Acc HGNC 6840
E01	UPFH0309340	ENST00000361818.9	MAP2K3	ENSG00000034152	mitogen-activated protein kinase kinase 3 Source HGNC Symbol Acc HGNC 6843
E02	UPFH1132532	ENST00000399503.4	MAP3K1	ENSG00000095015	mitogen-activated protein kinase kinase kinase 1 Source HGNC Symbol Acc HGNC 6848
E03	UPFH0381277	ENST00000369327.7	MAP3K7	ENSG00000013534	mitogen-activated protein kinase kinase kinase 7 Source HGNC Symbol Acc HGNC 6859
E04	UPFH0366815	ENST00000215832.10	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
E05	UPFH0068247	ENST00000229795.7	MAPK14	ENSG00000112062	mitogen-activated protein kinase 14 Source HGNC Symbol Acc HGNC 6876
E06	UPFH1132534	ENST00000481230.1	MAPK3	ENSG00000102882	mitogen-activated protein kinase 3 Source HGNC Symbol Acc HGNC 6877
E07	UPFH1132535	ENST00000374179.8	MAPK8	ENSG00000107643	mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881
E08	UPFH1132914	ENST00000416600.6	MAVS	ENSG00000088888	mitochondrial antiviral signaling protein Source HGNC Symbol Acc HGNC 29233
E09	UPFH0374121	ENST00000219596.5	MEFV	ENSG00000103313	MEFV, pyrin innate immunity regulator Source HGNC Symbol Acc HGNC 6998
E10	UPFH1132561	ENST00000398600.6	MX1	ENSG00000157601	MX dynamin like GTPase 1 Source HGNC Symbol Acc HGNC 7532
E11	UPFH1125930	ENST00000648963.1	MYD88	ENSG00000172936	MYD88, innate immune signal transduction adaptor Source HGNC Symbol Acc HGNC 7562
E12	UPFH1132828	ENST00000226574.9	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
F01	UPFH0444462	ENST00000216797.9	NFKBIA	ENSG00000100906	NFKB inhibitor alpha Source HGNC Symbol Acc HGNC 7797
F02	UPFH0575199	ENST00000348069.6	NLRP3	ENSG00000162711	NLR family pyrin domain containing 3 Source HGNC Symbol Acc HGNC 16400
F03	UPFH0235722	ENST00000300589.6	NOD2	ENSG00000167207	nucleotide binding oligomerization domain containing 2 Source HGNC Symbol Acc HGNC 5331
F04	UPFH1132896	ENST00000620097.1	OAS2	ENSG00000111335	2'-5'-oligoadenylate synthetase 2 Source HGNC Symbol Acc HGNC 8087
F05	UPFH0325267	ENST00000247970.8	PIN1	ENSG00000127445	peptidylprolyl cis/trans isomerase, NIMA-interacting 1 Source HGNC Symbol Acc HGNC 8988
F06	UPFH0535563	ENST00000558012.5	PSTPIP1	ENSG00000140368	proline-serine-threonine phosphatase interacting protein 1 Source HGNC Symbol Acc HGNC 9580
F07	UPFH1133183	ENST00000247470.10	PYCARD	ENSG00000103490	PYD and CARD domain containing Source HGNC Symbol Acc HGNC 16608
F08	UPFH0026079	ENST00000302964.3	PYDC1	ENSG00000169900	pyrin domain containing 1 Source HGNC Symbol Acc HGNC 30261
F09	UPFH1132884	ENST00000615805.4	RELA	ENSG00000173039	RELA proto-oncogene, NF-kB subunit Source HGNC Symbol Acc HGNC 9955
F10	UPFH0390785	ENST00000380409.2	RIPK1	ENSG00000137275	receptor interacting serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 10019

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0044238	ENST00000237623.11	SPP1	ENSG00000118785	secreted phosphoprotein 1 Source HGNC Symbol Acc HGNC 11255
F12	UPFH1132696	ENST00000392323.6	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
G01	UPFH1132702	ENST00000310528.8	SUGT1	ENSG00000165416	SGT1 homolog, MIST2 kinetochore complex assembly cochaperone Source HGNC Symbol Acc HGNC 16987
G02	UPFH1132706	ENST00000652657.1	TBK1	ENSG00000183735	TANK binding kinase 1 Source HGNC Symbol Acc HGNC 11584
G03	UPFH1132848	ENST00000248244.5	TICAM1	ENSG00000127666	toll like receptor adaptor molecule 1 Source NCBI gene Acc 148022
G04	UPFH0561110	ENST00000296795.7	TLR3	ENSG00000164342	toll like receptor 3 Source HGNC Symbol Acc HGNC 11849
G05	UPFH1132849	ENST00000380659.4	TLR7	ENSG00000196664	toll like receptor 7 Source HGNC Symbol Acc HGNC 15631
G06	UPFH0324928	ENST00000218032.6	TLR8	ENSG00000101916	toll like receptor 8 Source HGNC Symbol Acc HGNC 15632
G07	UPFH1172915	ENST00000360658.2	TLR9	ENSG00000239732	toll like receptor 9 Source HGNC Symbol Acc HGNC 15633
G08	UPFH1132978	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G09	UPFH1132738	ENST00000345057.9	TRADD	ENSG00000102871	TNFRSF1A associated via death domain Source HGNC Symbol Acc HGNC 12030
G10	UPFH0301511	ENST00000560371.5	TRAF3	ENSG00000131323	TNF receptor associated factor 3 Source HGNC Symbol Acc HGNC 12033
G11	UPFH1132739	ENST00000348124.5	TRAF6	ENSG00000175104	TNF receptor associated factor 6 Source HGNC Symbol Acc HGNC 12036
G12	UPFH1132740	ENST00000316881.9	TRIM25	ENSG00000121060	tripartite motif containing 25 Source HGNC Symbol Acc HGNC 12932
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST00000544417.5	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	UPFH1132938	ENST00000229239.10	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	UPFH1132939	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	UPFH1132941	ENST00000392514.9	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	UPFH1126608	UPL_HGDC	HGDC	UPL_HGDC	Human 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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