

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

## Human Innate & Adaptive Immune Responses

Cat. no. 249955 UPHS-052ZA

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	APCS	C3	CASP1	CCL2	CCL5	CCR4	CCR5	CCR6	CCR8	CD14	CD4	CD40
B	CD40LG	CD80	CD86	CD8A	CRP	CSF2	CXCL10	CXCR3	DDX58	FASLG	FOXP3	GATA3
C	HLA-A	HLA-E	ICAM1	IFNA1	IFNAR1	IFNB1	IFNG	IFNGR1	IL10	IL13	IL17A	IL18
D	IL1A	IL1B	IL1R1	IL2	IL23A	IL4	IL5	IL6	CXCL8	IRAK1	IRF3	IRF7
E	ITGAM	JAK2	LY96	LYZ	MAPK1	MAPK8	MBL2	MPO	MX1	MYD88	NFKB1	NFKBIA
F	NLRP3	NOD1	NOD2	RAG1	RORC	SLC11A1	STAT1	STAT3	STAT4	STAT6	TBX21	TICAM1
G	TLR1	TLR2	TLR3	TLR4	TLR5	TLR6	TLR7	TLR8	TLR9	TNF	TRAF6	TYK2
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	UPFH1132777	ENST00000255040.3	APCS	ENSG00000132703	amyloid P component, serum Source HGNC Symbol Acc HGNC 584
A02	UPFH1132902	ENST00000596548.1	C3	ENSG00000125730	complement C3 Source HGNC Symbol Acc HGNC 1318
A03	UPFH0285144	ENST00000436863.7	CASP1	ENSG00000137752	caspase 1 Source HGNC Symbol Acc HGNC 1499
A04	UPFH1132783	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
A05	UPFH1132786	ENST00000603197.6	CCL5	ENSG00000271503	C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632
A06	UPFH0179708	ENST00000330953.5	CCR4	ENSG00000183813	C-C motif chemokine receptor 4 Source HGNC Symbol Acc HGNC 1605
A07	UPFH1132860	ENST00000292303.4	CCR5	ENSG00000160791	C-C motif chemokine receptor 5 (gene/pseudogene) Source HGNC Symbol Acc HGNC 1606
A08	UPFH1172903	ENST00000349984.6	CCR6	ENSG00000112486	C-C motif chemokine receptor 6 Source HGNC Symbol Acc HGNC 1607
A09	UPFH0583026	ENST00000414803.1	CCR8	ENSG00000179934	C-C motif chemokine receptor 8 Source HGNC Symbol Acc HGNC 1609
A10	UPFH0199310	ENST00000302014.11	CD14	ENSG00000170458	CD14 molecule Source HGNC Symbol Acc HGNC 1628
A11	UPFH1132302	ENST00000541982.5	CD4	ENSG00000101610	CD4 molecule Source HGNC Symbol Acc HGNC 1678
A12	UPFH0317626	ENST00000372285.7	CD40	ENSG00000101017	CD40 molecule Source HGNC Symbol Acc HGNC 11919
B01	UPFH0592498	ENST00000370629.6	CD40LG	ENSG00000102245	CD40 ligand Source HGNC Symbol Acc HGNC 11935
B02	UPFH1132790	ENST00000264246.8	CD80	ENSG00000121594	CD80 molecule Source HGNC Symbol Acc HGNC 1700
B03	UPFH0045195	ENST00000393627.6	CD86	ENSG00000114013	CD86 molecule Source HGNC Symbol Acc HGNC 1705
B04	UPFH0396984	ENST00000409781.1	CD8A	ENSG00000153563	CD8a molecule Source HGNC Symbol Acc HGNC 1706
B05	UPFH0143745	ENST00000255030.9	CRP	ENSG00000132693	C-reactive protein Source HGNC Symbol Acc HGNC 2367
B06	UPFH1132793	ENST00000296871.4	CSF2	ENSG00000164400	colony stimulating factor 2 Source HGNC Symbol Acc HGNC 2434
B07	UPFH0196315	ENST00000306602.3	CXCL10	ENSG00000169245	C-X-C motif chemokine ligand 10 Source HGNC Symbol Acc HGNC 10637
B08	UPFH1132799	ENST00000373693.4	CXCR3	ENSG00000186810	C-X-C motif chemokine receptor 3 Source HGNC Symbol Acc HGNC 4540
B09	UPFH1132356	ENST00000379883.3	DDX58	ENSG00000107201	DExD/H-box helicase 58 Source HGNC Symbol Acc HGNC 19102
B10	UPFH1132396	ENST00000367721.3	FASLG	ENSG00000117560	Fas ligand Source HGNC Symbol Acc HGNC 11936
B11	UPFH1132403	ENST00000557224.6	FOXP3	ENSG00000049768	forkhead box P3 Source HGNC Symbol Acc HGNC 6106
B12	UPFH1132416	ENST00000645492.1	GATA3	ENSG00000107485	GATA binding protein 3 Source HGNC Symbol Acc HGNC 4172
C01	UPFH1132449	ENST00000376809.10	HLA-A	ENSG00000206503	major histocompatibility complex, class I, A Source HGNC Symbol Acc HGNC 4931
C02	UPFH1132451	ENST00000376630.5	HLA-E	ENSG00000204592	major histocompatibility complex, class I, E Source HGNC Symbol Acc HGNC 4962
C03	UPFH1132462	ENST00000264832.8	ICAM1	ENSG00000090339	intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344
C04	UPFH0577805	ENST00000276927.2	IFNA1	ENSG00000197919	interferon alpha 1 Source HGNC Symbol Acc HGNC 5417
C05	UPFH1132472	ENST00000270139.8	IFNAR1	ENSG00000142166	interferon alpha and beta receptor subunit 1 Source HGNC Symbol Acc HGNC 5432
C06	UPFH1132806	ENST00000380232.4	IFNB1	ENSG00000171855	interferon beta 1 Source HGNC Symbol Acc HGNC 5434
C07	UPFH1132473	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
C08	UPFH0492557	ENST00000367739.8	IFNGR1	ENSG00000027697	interferon gamma receptor 1 Source HGNC Symbol Acc HGNC 5439
C09	UPFH0028177	ENST00000423557.1	IL10	ENSG00000136634	interleukin 10 Source HGNC Symbol Acc HGNC 5962
C10	UPFH1132807	ENST00000617259.2	IL13	ENSG00000169194	interleukin 13 Source HGNC Symbol Acc HGNC 5973
		ENST00000648		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0091505	244.1	IL17A	112115	interleukin 17A Source HGNC Symbol Acc HGNC 5981
C12	UPFH1132481	ENST00000528832.1	IL18	ENSG00000150782	interleukin 18 Source HGNC Symbol Acc HGNC 5986
D01	UPFH0436255	ENST00000263339.3	IL1A	ENSG00000115008	interleukin 1 alpha Source HGNC Symbol Acc HGNC 5991
D02	UPFH0163764	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
D03	UPFH1132482	ENST00000442590.5	IL1R1	ENSG00000115594	interleukin 1 receptor type 1 Source HGNC Symbol Acc HGNC 5993
D04	UPFH0116492	ENST00000226730.4	IL2	ENSG00000109471	interleukin 2 Source HGNC Symbol Acc HGNC 6001
D05	UPFH1132809	ENST00000228534.6	IL23A	ENSG00000110944	interleukin 23 subunit alpha Source HGNC Symbol Acc HGNC 15488
D06	UPFH0226437	ENST00000231449.7	IL4	ENSG00000113520	interleukin 4 Source HGNC Symbol Acc HGNC 6014
D07	UPFH1132811	ENST00000231454.6	IL5	ENSG00000113525	interleukin 5 Source HGNC Symbol Acc HGNC 6016
D08	UPFH1172910	ENST00000258743.10	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D09	UPFH0120553	ENST00000307407.8	CXCL8	ENSG00000169429	C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025
D10	UPFH1132489	ENST00000393687.6	IRAK1	ENSG00000184216	interleukin 1 receptor associated kinase 1 Source HGNC Symbol Acc HGNC 6112
D11	UPFH0390278	ENST00000599144.5	IRF3	ENSG00000126456	interferon regulatory factor 3 Source HGNC Symbol Acc HGNC 6118
D12	UPFH1132493	ENST00000348655.11	IRF7	ENSG00000185507	interferon regulatory factor 7 Source HGNC Symbol Acc HGNC 6122
E01	UPFH0542903	ENST00000287497.13	ITGAM	ENSG00000169896	integrin subunit alpha M Source HGNC Symbol Acc HGNC 6149
E02	UPFH1132818	ENST00000381652.3	JAK2	ENSG00000096968	Janus kinase 2 Source HGNC Symbol Acc HGNC 6192
E03	UPFH0180748	ENST00000284818.6	LY96	ENSG00000154589	lymphocyte antigen 96 Source HGNC Symbol Acc HGNC 17156
E04	UPFH0398421	ENST00000261267.6	LYZ	ENSG00000090382	lysozyme Source HGNC Symbol Acc HGNC 6740
E05	UPFH0366815	ENST00000215832.10	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
E06	UPFH1132535	ENST00000374179.8	MAPK8	ENSG00000107643	mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881
E07	UPFH0432165	ENST00000373968.3	MBL2	ENSG00000165471	mannose binding lectin 2 Source HGNC Symbol Acc HGNC 6922
E08	UPFH0147710	ENST00000225275.3	MPO	ENSG00000005381	myeloperoxidase Source HGNC Symbol Acc HGNC 7218
E09	UPFH1132561	ENST00000398600.6	MX1	ENSG00000157601	MX dynamin like GTPase 1 Source HGNC Symbol Acc HGNC 7532
E10	UPFH1125930	ENST00000648963.1	MYD88	ENSG00000172936	MYD88, innate immune signal transduction adaptor Source HGNC Symbol Acc HGNC 7562
E11	UPFH1132828	ENST00000226574.9	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E12	UPFH0444462	ENST00000216797.9	NFKBIA	ENSG00000100906	NFKB inhibitor alpha Source HGNC Symbol Acc HGNC 7797
F01	UPFH0575199	ENST00000348069.6	NLRP3	ENSG00000162711	NLR family pyrin domain containing 3 Source HGNC Symbol Acc HGNC 16400
F02	UPFH1132916	ENST00000222823.9	NOD1	ENSG00000106100	nucleotide binding oligomerization domain containing 1 Source HGNC Symbol Acc HGNC 16390
F03	UPFH0235722	ENST00000300589.6	NOD2	ENSG00000167207	nucleotide binding oligomerization domain containing 2 Source HGNC Symbol Acc HGNC 5331
F04	UPFH1132837	ENST00000299440.5	RAG1	ENSG00000166349	recombination activating 1 Source HGNC Symbol Acc HGNC 9831
F05	UPFH1132662	ENST00000318247.7	RORC	ENSG00000143365	RAR related orphan receptor C Source HGNC Symbol Acc HGNC 10260
F06	UPFH1132682	ENST00000233202.11	SLC11A1	ENSG00000018280	solute carrier family 11 member 1 Source HGNC Symbol Acc HGNC 10907
F07	UPFH1132696	ENST00000392323.6	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
F08	UPFH0531262	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
F09	UPFH1132697	ENST00000392320.7	STAT4	ENSG00000138378	signal transducer and activator of transcription 4 Source HGNC Symbol Acc HGNC 11365
F10	UPFH1132845	ENST00000553533.2	STAT6	ENSG00000166888	signal transducer and activator of transcription 6 Source HGNC Symbol Acc HGNC 11368

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0331267	ENST00000177694.2	TBX21	ENSG00000073861	T-box 21 Source HGNC Symbol Acc HGNC 11599
F12	UPFH1132848	ENST00000248244.5	TICAM1	ENSG000000127666	toll like receptor adaptor molecule 1 Source NCBI gene Acc 148022
G01	UPFH0034752	ENST00000308979.7	TLR1	ENSG000000174125	toll like receptor 1 Source HGNC Symbol Acc HGNC 11847
G02	UPFH0035742	ENST00000642700.1	TLR2	ENSG000000137462	toll like receptor 2 Source HGNC Symbol Acc HGNC 11848
G03	UPFH0561110	ENST00000296795.7	TLR3	ENSG000000164342	toll like receptor 3 Source HGNC Symbol Acc HGNC 11849
G04	UPFH1132859	ENST00000645071.1	TLR4	ENSG000000136869	toll like receptor 4 Source HGNC Symbol Acc HGNC 11850
G05	UPFH1132729	ENST00000366881.6	TLR5	ENSG000000187554	toll like receptor 5 Source HGNC Symbol Acc HGNC 11851
G06	UPFH1172914	ENST00000508254.5	TLR6	ENSG000000174130	toll like receptor 6 Source HGNC Symbol Acc HGNC 16711
G07	UPFH1132849	ENST00000380659.4	TLR7	ENSG000000196664	toll like receptor 7 Source HGNC Symbol Acc HGNC 15631
G08	UPFH0324928	ENST00000218032.6	TLR8	ENSG000000101916	toll like receptor 8 Source HGNC Symbol Acc HGNC 15632
G09	UPFH1172915	ENST00000360658.2	TLR9	ENSG000000239732	toll like receptor 9 Source HGNC Symbol Acc HGNC 15633
G10	UPFH1132978	ENST00000449264.3	TNF	ENSG000000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G11	UPFH1132739	ENST00000348124.5	TRAF6	ENSG000000175104	TNF receptor associated factor 6 Source HGNC Symbol Acc HGNC 12036
G12	UPFH0496191	ENST00000525621.5	TYK2	ENSG000000105397	tyrosine kinase 2 Source HGNC Symbol Acc HGNC 12440
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG000000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST00000544417.5	B2M	ENSG000000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	UPFH1132938	ENST00000229239.10	GAPDH	ENSG000000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	UPFH1132939	ENST00000298556.8	HPRT1	ENSG000000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	UPFH1132941	ENST00000392514.9	RPLP0	ENSG000000089157	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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