

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

## Mouse Th17 Response

Cat. no. 249955 UPMM-073ZA

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	Ccl1	Ccl2	Ccl20	Ccl22	Ccl7	Ccr2	Ccr4	Ccr6	Cd2	Cd28	Cd34	Cd4
B	Cd40lg	Cd8a	Cebpb	Clec7a	Csf2	Csf3	Cx3cl1	Cxcl1	Cxcl12	Cxcl2	Cxcl5	Foxp3
C	Gata3	Icam1	Icos	Ifng	Il10	Il12b	Il12rb1	Il12rb2	Il13	Il15	Il17a	Il17c
D	Il17d	Il17f	Il17ra	Il17rb	Il17rc	Il17re	Il18	Il1b	Il1r1	Il2	Il21	Il22
E	Il23a	Il23r	Il25	Il27	Il3	Il4	Il5	Il6	Il6ra	Il7r	Il9	Irf4
F	Isg20	Jak1	Jak2	Mmp3	Mmp9	Myd88	Nfatc2	NfkB1	Rora	Rorc	Rorx1	S1pr1
G	Socs1	Socs3	Stat3	Stat4	Stat5a	Stat6	Syk	Tbx21	Tgfb1	Tlr4	Tnf	Traf6
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	UPFM097069 2	ENSMUST00000 021043.4	Ccl1	ENSMUSG00 000020702	chemokine (C-C motif) ligand 1 Source MGI Symbol Acc MGI 98258
A02	UPFM094573 3	ENSMUST00000 124479.1	Ccl2	ENSMUSG00 000035385	chemokine (C-C motif) ligand 2 Source MGI Symbol Acc MGI 98259
A03	UPFM075149 0	ENSMUST00000 027351.12	Ccl20	ENSMUSG00 000026166	chemokine (C-C motif) ligand 20 Source MGI Symbol Acc MGI 1329031
A04	UPFM072102 5	ENSMUST00000 034231.3	Ccl22	ENSMUSG00 000031779	chemokine (C-C motif) ligand 22 Source MGI Symbol Acc MGI 1306779
A05	UPFM093687 7	ENSMUST00000 021011.2	Ccl7	ENSMUSG00 000035373	chemokine (C-C motif) ligand 7 Source MGI Symbol Acc MGI 99512
A06	UPFM064396 1	ENSMUST00000 168841.2	Ccr2	ENSMUSG00 000049103	chemokine (C-C motif) receptor 2 Source MGI Symbol Acc MGI 106185
A07	UPFM092149 8	ENSMUST00000 054414.4	Ccr4	ENSMUSG00 000047898	chemokine (C-C motif) receptor 4 Source MGI Symbol Acc MGI 107824
A08	UPFM089684 0	ENSMUST00000 231340.1	Ccr6	ENSMUSG00 000040899	chemokine (C-C motif) receptor 6 Source MGI Symbol Acc MGI 1333797
A09	UPFM072120 0	ENSMUST00000 152321.1	Cd2	ENSMUSG00 000027863	CD2 antigen Source MGI Symbol Acc MGI 88320
A10	UPFM073617 9	ENSMUST00000 153207.1	Cd28	ENSMUSG00 000026012	CD28 antigen Source MGI Symbol Acc MGI 88327
A11	UPFM096481 0	ENSMUST00000 194036.1	Cd34	ENSMUSG00 000016494	CD34 antigen Source MGI Symbol Acc MGI 88329
A12	UPFM075548 7	ENSMUST00000 145818.1	Cd4	ENSMUSG00 000023274	CD4 antigen Source MGI Symbol Acc MGI 88335
B01	UPFM091836 0	ENSMUST00000 033466.1	Cd40lg	ENSMUSG00 000031132	CD40 ligand Source MGI Symbol Acc MGI 88337
B02	UPFM078336 6	ENSMUST00000 205054.1	Cd8a	ENSMUSG00 000053977	CD8 antigen, alpha chain Source MGI Symbol Acc MGI 88346
B03	UPFM117294 0	ENSMUST00000 070642.3	Cebpb	ENSMUSG00 000056501	CCAAT/enhancer binding protein (C/EBP), beta Source MGI Symbol Acc MGI 88373
B04	UPFM063913 7	ENSMUST00000 195589.5	Clec7a	ENSMUSG00 000079293	C-type lectin domain family 7, member a Source MGI Symbol Acc MGI 1861431
B05	UPFM064031 3	ENSMUST00000 019060.5	Csf2	ENSMUSG00 000018916	colony stimulating factor 2 (granulocyte-macrophage) Source MGI Symbol Acc MGI 1339752
B06	UPFM089304 3	ENSMUST00000 038886.2	Csf3	ENSMUSG00 000038067	colony stimulating factor 3 (granulocyte) Source MGI Symbol Acc MGI 1339751
B07	UPFM069455 3	ENSMUST00000 150307.1	Cx3cl1	ENSMUSG00 000031778	chemokine (C-X3-C motif) ligand 1 Source MGI Symbol Acc MGI 1097153
B08	UPFM097448 9	ENSMUST00000 031327.8	Cxcl1	ENSMUSG00 000029380	chemokine (C-X-C motif) ligand 1 Source MGI Symbol Acc MGI 108068
B09	UPFM084136 8	ENSMUST00000 112871.7	Cxcl12	ENSMUSG00 000061353	chemokine (C-X-C motif) ligand 12 Source MGI Symbol Acc MGI 103556
B10	UPFM067324 0	ENSMUST00000 200919.1	Cxcl2	ENSMUSG00 000058427	chemokine (C-X-C motif) ligand 2 Source MGI Symbol Acc MGI 1340094
B11	UPFM097509 7	ENSMUST00000 031318.5	Cxcl5	ENSMUSG00 000029371	chemokine (C-X-C motif) ligand 5 Source MGI Symbol Acc MGI 1096868
B12	UPFM072970 2	ENSMUST00000 234479.1	Foxp3	ENSMUSG00 000039521	forkhead box P3 Source MGI Symbol Acc MGI 1891436
C01	UPFM070391 0	ENSMUST00000 151456.1	Gata3	ENSMUSG00 000015619	GATA binding protein 3 Source MGI Symbol Acc MGI 95663
C02	UPFM084326 4	ENSMUST00000 215003.1	Icam1	ENSMUSG00 000037405	intercellular adhesion molecule 1 Source MGI Symbol Acc MGI 96392
C03	UPFM096311 9	ENSMUST00000 102827.3	Icos	ENSMUSG00 000026009	inducible T cell co-stimulator Source MGI Symbol Acc MGI 1858745
C04	UPFM117295 0	ENSMUST00000 068592.4	Iifng	ENSMUSG00 000055170	interferon gamma Source MGI Symbol Acc MGI 107656
C05	UPFM117295 1	ENSMUST00000 016673.5	Il10	ENSMUSG00 000016529	interleukin 10 Source MGI Symbol Acc MGI 96537
C06	UPFM078502 0	ENSMUST00000 170513.2	Il12b	ENSMUSG00 000004296	interleukin 12b Source MGI Symbol Acc MGI 96540
C07	UPFM067749 3	ENSMUST00000 000808.7	Il12rb1	ENSMUSG00 000000791	interleukin 12 receptor, beta 1 Source MGI Symbol Acc MGI 104579
C08	UPFM071325 1	ENSMUST00000 117441.7	Il12rb2	ENSMUSG00 000018341	interleukin 12 receptor, beta 2 Source MGI Symbol Acc MGI 1270861
C09	UPFM117295 2	ENSMUST00000 020650.1	Il13	ENSMUSG00 000020383	interleukin 13 Source MGI Symbol Acc MGI 96541
C10	UPFM090675 6	ENSMUST00000 209687.1	Il15	ENSMUSG00 000031712	interleukin 15 Source MGI Symbol Acc MGI 103014
	UPFM088181	ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	5	027061.4	Il17a	000025929	interleukin 17A Source MGI Symbol Acc MGI 107364
C12	UPFM099724 5	ENSMUST00000 050963.3	Il17c	ENSMUSG00 000046108	interleukin 17C Source MGI Symbol Acc MGI 2446486
D01	UPFM085091 9	ENSMUST00000 089494.5	Il17d	ENSMUSG00 000050222	interleukin 17D Source MGI Symbol Acc MGI 2446510
D02	UPFM091513 3	ENSMUST00000 191111.1	Il17f	ENSMUSG00 000041872	interleukin 17F Source MGI Symbol Acc MGI 2676631
D03	UPFM071935 8	ENSMUST00000 204078.1	Il17ra	ENSMUSG00 000002897	interleukin 17 receptor A Source MGI Symbol Acc MGI 107399
D04	UPFM084824 3	ENSMUST00000 136726.1	Il17rb	ENSMUSG00 000015966	interleukin 17 receptor B Source MGI Symbol Acc MGI 1355292
D05	UPFM062345 4	ENSMUST00000 058300.13	Il17rc	ENSMUSG00 000030281	interleukin 17 receptor C Source MGI Symbol Acc MGI 2159336
D06	UPFM062403 6	ENSMUST00000 058548.13	Il17re	ENSMUSG00 000043088	interleukin 17 receptor E Source MGI Symbol Acc MGI 1889371
D07	UPFM093943 0	ENSMUST00000 180021.1	Il18	ENSMUSG00 000039217	interleukin 18 Source MGI Symbol Acc MGI 107936
D08	UPFM067128 1	ENSMUST00000 155994.1	Il1b	ENSMUSG00 000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
D09	UPFM070319 9	ENSMUST00000 114795.2	Il1r1	ENSMUSG00 000026072	interleukin 1 receptor, type I Source MGI Symbol Acc MGI 96545
D10	UPFM082222 9	ENSMUST00000 029275.5	Il2	ENSMUSG00 000027720	interleukin 2 Source MGI Symbol Acc MGI 96548
D11	UPFM117295 3	ENSMUST00000 029273.7	Il21	ENSMUSG00 000027718	interleukin 21 Source MGI Symbol Acc MGI 1890474
D12	UPFM096213 2	ENSMUST00000 096691.4	Il22	ENSMUSG00 000074695	interleukin 22 Source MGI Symbol Acc MGI 1355307
E01	UPFM117295 4	ENSMUST00000 026449.2	Il23a	ENSMUSG00 000025383	interleukin 23, alpha subunit p19 Source MGI Symbol Acc MGI 1932410
E02	UPFM062338 2	ENSMUST00000 118364.1	Il23r	ENSMUSG00 000049093	interleukin 23 receptor Source MGI Symbol Acc MGI 2181693
E03	UPFM084927 4	ENSMUST00000 037863.5	Il25	ENSMUSG00 000040770	interleukin 25 Source MGI Symbol Acc MGI 2155888
E04	UPFM117295 5	ENSMUST00000 058429.5	Il27	ENSMUSG00 000044701	interleukin 27 Source MGI Symbol Acc MGI 2384409
E05	UPFM084591 6	ENSMUST00000 019058.5	Il3	ENSMUSG00 000018914	interleukin 3 Source MGI Symbol Acc MGI 96552
E06	UPFM095925 1	ENSMUST00000 150568.7	Il4	ENSMUSG00 000000869	interleukin 4 Source MGI Symbol Acc MGI 96556
E07	UPFM066497 9	ENSMUST00000 048605.2	Il5	ENSMUSG00 000036117	interleukin 5 Source MGI Symbol Acc MGI 96557
E08	UPFM072909 9	ENSMUST00000 195978.4	Il6	ENSMUSG00 000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
E09	UPFM100017 7	ENSMUST00000 029559.6	Il6ra	ENSMUSG00 000027947	interleukin 6 receptor, alpha Source MGI Symbol Acc MGI 105304
E10	UPFM083887 3	ENSMUST00000 228782.1	Il7r	ENSMUSG00 000003882	interleukin 7 receptor Source MGI Symbol Acc MGI 96562
E11	UPFM099714 9	ENSMUST00000 022019.3	Il9	ENSMUSG00 000021538	interleukin 9 Source MGI Symbol Acc MGI 96563
E12	UPFM073649 8	ENSMUST00000 110307.2	lrf4	ENSMUSG00 000021356	interferon regulatory factor 4 Source MGI Symbol Acc MGI 1096873
F01	UPFM099647 7	ENSMUST00000 118867.7	lsg20	ENSMUSG00 000039236	interferon-stimulated protein Source MGI Symbol Acc MGI 1928895
F02	UPFM073443 4	ENSMUST00000 155328.7	Jak1	ENSMUSG00 000028530	Janus kinase 1 Source MGI Symbol Acc MGI 96628
F03	UPFM074831 3	ENSMUST00000 065796.9	Jak2	ENSMUSG00 000024789	Janus kinase 2 Source MGI Symbol Acc MGI 96629
F04	UPFM079125 8	ENSMUST00000 034497.7	Mmp3	ENSMUSG00 000043613	matrix metalloproteinase 3 Source MGI Symbol Acc MGI 97010
F05	UPFM079930 8	ENSMUST00000 017881.2	Mmp9	ENSMUSG00 000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
F06	UPFM117295 8	ENSMUST00000 035092.6	Myd88	ENSMUSG00 000032508	myeloid differentiation primary response gene 88 Source MGI Symbol Acc MGI 108005
F07	UPFM080568 2	ENSMUST00000 099067.9	Nfatc2	ENSMUSG00 000027544	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 2 Source MGI Symbol Acc MGI 102463
F08	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
F09	UPFM080274 1	ENSMUST00000 174296.1	Rora	ENSMUSG00 000032238	RAR-related orphan receptor alpha Source MGI Symbol Acc MGI 104661
F10	UPFM092267 4	ENSMUST00000 198793.1	Rorc	ENSMUSG00 000028150	RAR-related orphan receptor gamma Source MGI Symbol Acc MGI 104856

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM072805 9	ENSMUST00000 113956.9	Runx1	ENSMUSG00 000022952	runt related transcription factor 1 Source MGI Symbol Acc MGI 99852
F12	UPFM085771 8	ENSMUST00000 055676.3	S1pr1	ENSMUSG00 000045092	sphingosine-1-phosphate receptor 1 Source MGI Symbol Acc MGI 1096355
G01	UPFM065177 1	ENSMUST00000 229866.1	Socs1	ENSMUSG00 000038037	suppressor of cytokine signaling 1 Source MGI Symbol Acc MGI 1354910
G02	UPFM069413 9	ENSMUST00000 054002.3	Socs3	ENSMUSG00 000053113	suppressor of cytokine signaling 3 Source MGI Symbol Acc MGI 1201791
G03	UPFM098484 5	ENSMUST00000 092671.11	Stat3	ENSMUSG00 000004040	signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038
G04	UPFM062533 9	ENSMUST00000 168302.7	Stat4	ENSMUSG00 000062939	signal transducer and activator of transcription 4 Source MGI Symbol Acc MGI 103062
G05	UPFM096618 6	ENSMUST00000 138083.7	Stat5a	ENSMUSG00 000004043	signal transducer and activator of transcription 5A Source MGI Symbol Acc MGI 103036
G06	UPFM075580 6	ENSMUST00000 092074.11	Stat6	ENSMUSG00 000002147	signal transducer and activator of transcription 6 Source MGI Symbol Acc MGI 103034
G07	UPFM087743 5	ENSMUST00000 118756.7	Syk	ENSMUSG00 000021457	spleen tyrosine kinase Source MGI Symbol Acc MGI 99515
G08	UPFM101162 2	ENSMUST00000 001484.2	Tbx21	ENSMUSG00 000001444	T-box 21 Source MGI Symbol Acc MGI 1888984
G09	UPFM066688 0	ENSMUST00000 171757.1	Tgfb1	ENSMUSG00 000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G10	UPFM075034 5	ENSMUST00000 107365.2	Tlr4	ENSMUSG00 000039005	toll-like receptor 4 Source MGI Symbol Acc MGI 96824
G11	UPFM063847 1	ENSMUST00000 025263.14	Tnf	ENSMUSG00 000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G12	UPFM076055 2	ENSMUST00000 144063.1	Traf6	ENSMUSG00 000027164	TNF receptor-associated factor 6 Source MGI Symbol Acc MGI 108072
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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