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

# Human Antifungal Response

## Cat. no. 249955 UPHS-147ZR

## 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 | BCL10 | C3 | C5AR1 | CARD9 | CASP1 | CASP8 | CCL2 | CCL20 | CCL5 | CCR1 | CD14 | CD207 |
| B | CD209 | CD36 | CD40 | CD5 | CD83 | CHIA | CLEC6A | CLEC7A | COLEC12 | CSF2 | CSF3 | CXCL1 |
| C | CXCL10 | CXCL11 | CXCL2 | CXCL9 | F2RL1 | F3 | FCGR1A | FCGR2A | FCGR3A | FCN1 | FOS | IFNG |
| D | IKBKB | IL10 | IL12A | IL12B | IL18 | IL1A | IL1B | IL1R1 | IL2 | IL23A | IL6 | CXCL8 |
| E | IRAK1 | IRAK4 | ITGAM | ITGB2 | JUN | LYN | MALT1 | MAP2K4 | MAP3K7 | MAPK14 | MAPK8 | MBL2 |
| F | MRC1 | MYD88 | NFKB1 | NFKBIA | NLRP3 | NPTX1 | PLCG2 | PTGS2 | PTPN6 | PTX3 | PYCARD | RAF1 |
| G | SCARF1 | SFTPD | SOCS3 | ST3GAL5 | STAT1 | SYK | TIRAP | TLR2 | TLR4 | TLR9 | TNF | TRAF6 |
| 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 | UPFH1132269 | ENST00000620248.2 | BCL10 | ENSG00000142867 | BCL10, immune signaling adaptor Source HGNC Symbol Acc HGNC 989 |
| A02 | UPFH1132902 | ENST00000596548.1 | C3 | ENSG00000125730 | complement C3 Source HGNC Symbol Acc HGNC 1318 |
| A03 | UPFH0279350 | ENST00000355085.4 | C5AR1 | ENSG00000197405 | complement C5a receptor 1 Source HGNC Symbol Acc HGNC 1338 |
| A04 | UPFH0389718 | ENST00000371732.9 | CARD9 | ENSG00000187796 | caspase recruitment domain family member 9 Source HGNC Symbol Acc HGNC 16391 |
| A05 | UPFH0285144 | ENST00000436863.7 | CASP1 | ENSG00000137752 | caspase 1 Source HGNC Symbol Acc HGNC 1499 |
| A06 | UPFH0522971 | ENST00000264275.9 | CASP8 | ENSG00000064012 | caspase 8 Source HGNC Symbol Acc HGNC 1509 |
| A07 | UPFH1132783 | ENST00000225831.4 | CCL2 | ENSG00000108691 | C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618 |
| A08 | UPFH1132289 | ENST00000358813.5 | CCL20 | ENSG00000115009 | C-C motif chemokine ligand 20 Source HGNC Symbol Acc HGNC 10619 |
| A09 | UPFH1132786 | ENST00000603197.6 | CCL5 | ENSG00000271503 | C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632 |
| A10 | UPFH0327828 | ENST00000296140.4 | CCR1 | ENSG00000163823 | C-C motif chemokine receptor 1 Source HGNC Symbol Acc HGNC 1602 |
| A11 | UPFH0199310 | ENST00000302014.11 | CD14 | ENSG00000170458 | CD14 molecule Source HGNC Symbol Acc HGNC 1628 |
| A12 | UPFH0551851 | ENST00000410009.5 | CD207 | ENSG00000116031 | CD207 molecule Source HGNC Symbol Acc HGNC 17935 |
| B01 | UPFH0023634 | ENST00000315591.12 | CD209 | ENSG00000090659 | CD209 molecule Source HGNC Symbol Acc HGNC 1641 |
| B02 | UPFH1125151 | ENST00000433696.6 | CD36 | ENSG00000135218 | CD36 molecule Source HGNC Symbol Acc HGNC 1663 |
| B03 | UPFH0317626 | ENST00000372285.7 | CD40 | ENSG00000101017 | CD40 molecule Source HGNC Symbol Acc HGNC 11919 |
| B04 | UPFH0144986 | ENST00000347785.8 | CD5 | ENSG00000110448 | CD5 molecule Source HGNC Symbol Acc HGNC 1685 |
| B05 | UPFH0041131 | ENST00000612003.4 | CD83 | ENSG00000112149 | CD83 molecule Source HGNC Symbol Acc HGNC 1703 |
| B06 | UPFH0466962 | ENST00000369740.6 | CHIA | ENSG00000134216 | chitinase, acidic Source HGNC Symbol Acc HGNC 17432 |
| B07 | UPFH0263231 | ENST00000382073.3 | CLEC6A | ENSG00000205846 | C-type lectin domain containing 6A Source HGNC Symbol Acc HGNC 14556 |
| B08 | UPFH0521742 | ENST00000528799.1 | CLEC7A | ENSG00000172243 | C-type lectin domain containing 7A Source HGNC Symbol Acc HGNC 14558 |
| B09 | UPFH0006004 | ENST00000582147.1 | COLEC12 | ENSG00000158270 | collectin subfamily member 12 Source HGNC Symbol Acc HGNC 16016 |
| B10 | UPFH1132793 | ENST00000296871.4 | CSF2 | ENSG00000164400 | colony stimulating factor 2 Source HGNC Symbol Acc HGNC 2434 |
| B11 | UPFH1132794 | ENST00000225474.6 | CSF3 | ENSG00000108342 | colony stimulating factor 3 Source HGNC Symbol Acc HGNC 2438 |
| B12 | UPFH0494346 | ENST00000395761.3 | CXCL1 | ENSG00000163739 | C-X-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 4602 |
| C01 | UPFH0196315 | ENST00000306602.3 | CXCL10 | ENSG00000169245 | C-X-C motif chemokine ligand 10 Source HGNC Symbol Acc HGNC 10637 |
| C02 | UPFH0421123 | ENST00000306621.7 | CXCL11 | ENSG00000169248 | C-X-C motif chemokine ligand 11 Source HGNC Symbol Acc HGNC 10638 |
| C03 | UPFH1132349 | ENST00000508487.3 | CXCL2 | ENSG00000081041 | C-X-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 4603 |
| C04 | UPFH0222764 | ENST00000264888.5 | CXCL9 | ENSG00000138755 | C-X-C motif chemokine ligand 9 Source HGNC Symbol Acc HGNC 7098 |
| C05 | UPFH0070936 | ENST00000514165.1 | F2RL1 | ENSG00000164251 | F2R like trypsin receptor 1 Source HGNC Symbol Acc HGNC 3538 |
| C06 | UPFH1132393 | ENST00000334047.12 | F3 | ENSG00000117525 | coagulation factor III, tissue factor Source HGNC Symbol Acc HGNC 3541 |
| C07 | UPFH0313882 | ENST00000444948.5 | FCGR1A | ENSG00000150337 | Fc fragment of IgG receptor Ia Source HGNC Symbol Acc HGNC 3613 |
| C08 | UPFH0461243 | ENST00000536731.5 | FCGR2A | ENSG00000143226 | Fc fragment of IgG receptor IIa Source HGNC Symbol Acc HGNC 3616 |
| C09 | UPFH0354034 | ENST00000476031.1 | FCGR3A | ENSG00000203747 | Fc fragment of IgG receptor IIIa Source HGNC Symbol Acc HGNC 3619 |
| C10 | UPFH0127136 | ENST00000371806.4 | FCN1 | ENSG00000085265 | ficolin 1 Source HGNC Symbol Acc HGNC 3623 |
| | | ENST00000555 | | ENSG00000 | Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|---|---|---|---|---|---|
| C11 | UPFH1132401 | 242.1 | FOS | 170345 | Acc HGNC 3796 |
| C12 | UPFH1132473 | ENST00000229135.4 | IFNG | ENSG00000111537 | interferon gamma Source HGNC Symbol Acc HGNC 5438 |
| D01 | UPFH0596293 | ENST00000649612.2 | IKBKB | ENSG00000104365 | inhibitor of nuclear factor kappa B kinase subunit beta Source HGNC Symbol Acc HGNC 5960 |
| D02 | UPFH0028177 | ENST00000423557.1 | IL10 | ENSG00000136634 | interleukin 10 Source HGNC Symbol Acc HGNC 5962 |
| D03 | UPFH1132478 | ENST00000466512.1 | IL12A | ENSG00000168811 | interleukin 12A Source HGNC Symbol Acc HGNC 5969 |
| D04 | UPFH0131869 | ENST00000231228.2 | IL12B | ENSG00000113302 | interleukin 12B Source HGNC Symbol Acc HGNC 5970 |
| D05 | UPFH1132481 | ENST00000528832.1 | IL18 | ENSG00000150782 | interleukin 18 Source HGNC Symbol Acc HGNC 5986 |
| D06 | UPFH0436255 | ENST00000263339.3 | IL1A | ENSG00000115008 | interleukin 1 alpha Source HGNC Symbol Acc HGNC 5991 |
| D07 | UPFH0163764 | ENST00000263341.6 | IL1B | ENSG00000125538 | interleukin 1 beta Source HGNC Symbol Acc HGNC 5992 |
| D08 | UPFH1132482 | ENST00000442590.5 | IL1R1 | ENSG00000115594 | interleukin 1 receptor type 1 Source HGNC Symbol Acc HGNC 5993 |
| D09 | UPFH0116492 | ENST00000226730.4 | IL2 | ENSG00000109471 | interleukin 2 Source HGNC Symbol Acc HGNC 6001 |
| D10 | UPFH1132809 | ENST00000228534.6 | IL23A | ENSG00000110944 | interleukin 23 subunit alpha Source HGNC Symbol Acc HGNC 15488 |
| D11 | UPFH1172910 | ENST00000258743.10 | IL6 | ENSG00000136244 | interleukin 6 Source HGNC Symbol Acc HGNC 6018 |
| D12 | UPFH0120553 | ENST00000307407.8 | CXCL8 | ENSG00000169429 | C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025 |
| E01 | UPFH1132489 | ENST00000393687.6 | IRAK1 | ENSG00000184216 | interleukin 1 receptor associated kinase 1 Source HGNC Symbol Acc HGNC 6112 |
| E02 | UPFH0352633 | ENST00000613694.4 | IRAK4 | ENSG00000198001 | interleukin 1 receptor associated kinase 4 Source HGNC Symbol Acc HGNC 17967 |
| E03 | UPFH0542903 | ENST00000287497.13 | ITGAM | ENSG00000169896 | integrin subunit alpha M Source HGNC Symbol Acc HGNC 6149 |
| E04 | UPFH1132499 | ENST00000397850.6 | ITGB2 | ENSG00000160255 | integrin subunit beta 2 Source HGNC Symbol Acc HGNC 6155 |
| E05 | UPFH0569765 | ENST00000371222.3 | JUN | ENSG00000177606 | Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204 |
| E06 | UPFH0169490 | ENST00000420292.1 | LYN | ENSG00000254087 | LYN proto-oncogene, Src family tyrosine kinase Source HGNC Symbol Acc HGNC 6735 |
| E07 | UPFH0582926 | ENST00000348428.7 | MALT1 | ENSG00000172175 | MALT1 paracaspase Source HGNC Symbol Acc HGNC 6819 |
| E08 | UPFH1132531 | ENST00000353533.10 | MAP2K4 | ENSG00000065559 | mitogen-activated protein kinase kinase 4 Source HGNC Symbol Acc HGNC 6844 |
| E09 | UPFH0381277 | ENST00000369327.7 | MAP3K7 | ENSG00000135341 | mitogen-activated protein kinase kinase kinase 7 Source HGNC Symbol Acc HGNC 6859 |
| E10 | UPFH0068247 | ENST00000229795.7 | MAPK14 | ENSG00000112062 | mitogen-activated protein kinase 14 Source HGNC Symbol Acc HGNC 6876 |
| E11 | UPFH1132535 | ENST00000374179.8 | MAPK8 | ENSG00000107643 | mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881 |
| E12 | UPFH0432165 | ENST00000373968.3 | MBL2 | ENSG00000165471 | mannose binding lectin 2 Source HGNC Symbol Acc HGNC 6922 |
| F01 | UPFH0254696 | ENST00000569591.3 | MRC1 | ENSG00000260314 | mannose receptor C-type 1 Source HGNC Symbol Acc HGNC 7228 |
| F02 | UPFH1125930 | ENST00000648963.1 | MYD88 | ENSG00000172936 | MYD88, innate immune signal transduction adaptor Source HGNC Symbol Acc HGNC 7562 |
| F03 | UPFH1132828 | ENST00000226574.9 | NFKB1 | ENSG00000109320 | nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794 |
| F04 | UPFH0444462 | ENST00000216797.9 | NFKBIA | ENSG00000100906 | NFKB inhibitor alpha Source HGNC Symbol Acc HGNC 7797 |
| F05 | UPFH0575199 | ENST00000348069.6 | NLRP3 | ENSG00000162711 | NLR family pyrin domain containing 3 Source HGNC Symbol Acc HGNC 16400 |
| F06 | UPFH0041766 | ENST00000571100.1 | NPTX1 | ENSG00000171246 | neuronal pentraxin 1 Source NCBI gene Acc 4884 |
| F07 | UPFH0213401 | ENST00000359376.7 | PLCG2 | ENSG00000197943 | phospholipase C gamma 2 Source HGNC Symbol Acc HGNC 9066 |
| F08 | UPFH1132642 | ENST00000367468.10 | PTGS2 | ENSG00000073756 | prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605 |
| F09 | UPFH0053531 | ENST00000540740.5 | PTPN6 | ENSG00000111679 | protein tyrosine phosphatase, non-receptor type 6 Source HGNC Symbol Acc HGNC 9658 |
| F10 | UPFH0405569 | ENST00000295927.4 | PTX3 | ENSG00000163661 | pentraxin 3 Source HGNC Symbol Acc HGNC 9692 |
| | | | | | |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|---|---|---|---|---|---|
| F11 | UPFH1133183 | ENST00000247470.10 | PYCARD | ENSG00000103490 | PYD and CARD domain containing Source HGNC Symbol Acc HGNC 16608 |
| F12 | UPFH0380839 | ENST00000416093.1 | RAF1 | ENSG00000132155 | Raf-1 proto-oncogene, serine/threonine kinase Source HGNC Symbol Acc HGNC 9829 |
| G01 | UPFH0110073 | ENST00000434376.6 | SCARF1 | ENSG00000074660 | scavenger receptor class F member 1 Source HGNC Symbol Acc HGNC 16820 |
| G02 | UPFH1132678 | ENST00000372292.8 | SFTPD | ENSG00000133661 | surfactant protein D Source HGNC Symbol Acc HGNC 10803 |
| G03 | UPFH1132974 | ENST00000330871.3 | SOCS3 | ENSG00000184557 | suppressor of cytokine signaling 3 Source HGNC Symbol Acc HGNC 19391 |
| G04 | UPFH1124515 | ENST00000639432.1 | ST3GAL5 | ENSG00000115525 | ST3 beta-galactoside alpha-2,3-sialyltransferase 5 Source HGNC Symbol Acc HGNC 10872 |
| G05 | UPFH1132696 | ENST00000392323.6 | STAT1 | ENSG00000115415 | signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362 |
| G06 | UPFH0221786 | ENST00000375751.8 | SYK | ENSG00000165025 | spleen associated tyrosine kinase Source HGNC Symbol Acc HGNC 11491 |
| G07 | UPFH0331111 | ENST00000392680.6 | TIRAP | ENSG00000150455 | TIR domain containing adaptor protein Source HGNC Symbol Acc HGNC 17192 |
| G08 | UPFH0035742 | ENST00000642700.1 | TLR2 | ENSG00000137462 | toll like receptor 2 Source HGNC Symbol Acc HGNC 11848 |
| G09 | UPFH1132859 | ENST00000645071.1 | TLR4 | ENSG00000136869 | toll like receptor 4 Source HGNC Symbol Acc HGNC 11850 |
| G10 | UPFH1172915 | ENST00000360658.2 | TLR9 | ENSG00000239732 | toll like receptor 9 Source HGNC Symbol Acc HGNC 15633 |
| G11 | UPFH1132978 | ENST00000449264.3 | TNF | ENSG00000232810 | tumor necrosis factor Source HGNC Symbol Acc HGNC 11892 |
| G12 | UPFH1132739 | ENST00000348124.5 | TRAF6 | ENSG00000175104 | TNF receptor associated factor 6 Source HGNC Symbol Acc HGNC 12036 |
| 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 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water | 205410 |
| QuantiNova Probe RT-PCR Kit (100)* | For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water | 208352 |
| QuantiNova Probe PCR Kit (100)* | For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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.