

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

## Human Dendritic & Antigen Presenting Cell

Cat. no. 249955 UPHS-406ZA

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 | CCL11   | CCL13    | CCL16 | CCL19 | CCL2  | CCL3   | CCL5   | CCL7   | CCL8   | CCR1 | CCR2    | CCR3   |
| B | CCR5    | CD1A     | CD18  | CD1C  | CD1D  | CD2    | CD209  | CD28   | CD4    | CD40 | CD40LG  | CD44   |
| C | CD74    | CD80     | CD86  | CD8A  | CDC42 | CDKN1A | CEBPA  | CLEC4C | CSF1R  | CSF2 | CXCL1   | CXCL10 |
| D | CXCL12  | CXCL2    | CXCR1 | CXCR4 | ERBB2 | FAS    | FCER1A | FCER2  | FCGR1A | FLT3 | FLT3LG  | HLA-A  |
| E | HLA-DMA | HLA-DPA1 | ICAM1 | ICAM2 | IFNG  | IL10   | IL12A  | IL12B  | IL16   | IL2  | IL6     | CXCL8  |
| F | IRF7    | IRF8     | ITGAM | ITGB2 | LRP1  | LYN    | MIF    | NFKB1  | PTPRC  | RAC1 | RELA    | RELB   |
| G | STAT3   | TAP2     | TAPBP | TGFB1 | THBS1 | TLR1   | TLR2   | TLR7   | TLR9   | TNF  | TNFSF11 | VCAM1  |
| 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      | UPFH0201571 | ENST00000305869.3  | CCL11  | ENSG00000172156 | C-C motif chemokine ligand 11 Source HGNC Symbol Acc HGNC 10610                   |
| A02      | UPFH1132286 | ENST00000225844.7  | CCL13  | ENSG00000181374 | C-C motif chemokine ligand 13 Source HGNC Symbol Acc HGNC 10611                   |
| A03      | UPFH0253338 | ENST00000611905.2  | CCL16  | ENSG00000275152 | C-C motif chemokine ligand 16 Source HGNC Symbol Acc HGNC 10614                   |
| A04      | UPFH1132288 | ENST00000378800.3  | CCL19  | ENSG00000172724 | C-C motif chemokine ligand 19 Source HGNC Symbol Acc HGNC 10617                   |
| A05      | UPFH1132783 | ENST00000225831.4  | CCL2   | ENSG00000108691 | C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618                    |
| A06      | UPFH1132784 | ENST00000613922.2  | CCL3   | ENSG00000277632 | C-C motif chemokine ligand 3 Source HGNC Symbol Acc HGNC 10627                    |
| A07      | UPFH1132786 | ENST00000603197.6  | CCL5   | ENSG00000271503 | C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632                    |
| A08      | UPFH0186519 | ENST00000378569.2  | CCL7   | ENSG00000108688 | C-C motif chemokine ligand 7 Source HGNC Symbol Acc HGNC 10634                    |
| A09      | UPFH1132787 | ENST00000394620.2  | CCL8   | ENSG00000108700 | C-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 10635                    |
| A10      | UPFH0327828 | ENST00000296140.4  | CCR1   | ENSG00000163823 | C-C motif chemokine receptor 1 Source HGNC Symbol Acc HGNC 1602                   |
| A11      | UPFH0175349 | ENST00000445132.2  | CCR2   | ENSG00000121807 | C-C motif chemokine receptor 2 Source HGNC Symbol Acc HGNC 1603                   |
| A12      | UPFH1132788 | ENST00000395940.3  | CCR3   | ENSG00000183625 | C-C motif chemokine receptor 3 Source HGNC Symbol Acc HGNC 1604                   |
| B01      | UPFH1132860 | ENST00000292303.4  | CCR5   | ENSG00000160791 | C-C motif chemokine receptor 5 (gene/pseudogene) Source HGNC Symbol Acc HGNC 1606 |
| B02      | UPFH0253297 | ENST00000289429.6  | CD1A   | ENSG00000158477 | CD1a molecule Source HGNC Symbol Acc HGNC 1634                                    |
| B03      | UPFH0605049 | ENST00000451207.5  | CD1B   | ENSG00000158485 | CD1b molecule Source HGNC Symbol Acc HGNC 1635                                    |
| B04      | UPFH0444693 | ENST00000368170.8  | CD1C   | ENSG00000158481 | CD1c molecule Source HGNC Symbol Acc HGNC 1636                                    |
| B05      | UPFH0227496 | ENST00000368171.3  | CD1D   | ENSG00000158473 | CD1d molecule Source HGNC Symbol Acc HGNC 1637                                    |
| B06      | UPFH0412753 | ENST00000369478.4  | CD2    | ENSG00000116824 | CD2 molecule Source HGNC Symbol Acc HGNC 1639                                     |
| B07      | UPFH0023634 | ENST00000315591.12 | CD209  | ENSG00000090659 | CD209 molecule Source HGNC Symbol Acc HGNC 1641                                   |
| B08      | UPFH0310921 | ENST00000458610.6  | CD28   | ENSG00000178562 | CD28 molecule Source HGNC Symbol Acc HGNC 1653                                    |
| B09      | UPFH1132302 | ENST00000541982.5  | CD4    | ENSG00000010610 | CD4 molecule Source HGNC Symbol Acc HGNC 1678                                     |
| B10      | UPFH0317626 | ENST0000037285.7   | CD40   | ENSG00000101017 | CD40 molecule Source HGNC Symbol Acc HGNC 11919                                   |
| B11      | UPFH0592498 | ENST00000370629.6  | CD40LG | ENSG00000102245 | CD40 ligand Source HGNC Symbol Acc HGNC 11935                                     |
| B12      | UPFH0253499 | ENST00000428726.7  | CD44   | ENSG00000026508 | CD44 molecule (Indian blood group) Source HGNC Symbol Acc HGNC 1681               |
| C01      | UPFH0164282 | ENST00000523208.5  | CD74   | ENSG00000019582 | CD74 molecule Source HGNC Symbol Acc HGNC 1697                                    |
| C02      | UPFH1132790 | ENST00000264246.8  | CD80   | ENSG00000121594 | CD80 molecule Source HGNC Symbol Acc HGNC 1700                                    |
| C03      | UPFH0045195 | ENST00000393627.6  | CD86   | ENSG00000114013 | CD86 molecule Source HGNC Symbol Acc HGNC 1705                                    |
| C04      | UPFH0396984 | ENST00000409781.1  | CD8A   | ENSG00000153563 | CD8a molecule Source HGNC Symbol Acc HGNC 1706                                    |
| C05      | UPFH0571108 | ENST00000400259.5  | CDC42  | ENSG00000070831 | cell division cycle 42 Source HGNC Symbol Acc HGNC 1736                           |
| C06      | UPFH0312181 | ENST00000244741.9  | CDKN1A | ENSG00000124762 | cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784             |
| C07      | UPFH0223943 | ENST00000498907.3  | CEBPA  | ENSG00000245848 | CCAAT enhancer binding protein alpha Source HGNC Symbol Acc HGNC 1833             |
| C08      | UPFH0005200 | ENST00000540085.5  | CLEC4C | ENSG00000198178 | C-type lectin domain family 4 member C Source HGNC Symbol Acc HGNC 13258          |
| C09      | UPFH0123457 | ENST00000504875.5  | CSF1R  | ENSG00000182578 | colony stimulating factor 1 receptor Source HGNC Symbol Acc HGNC 2433             |
| C10      | UPFH1132793 | ENST00000296871.4  | CSF2   | ENSG00000164400 | colony stimulating factor 2 Source HGNC Symbol Acc HGNC 2434                      |
|          |             | ENST00000395       |        | ENSG000000      |                                                                                   |

| Position | Assay       | Name               | Symbol   | Ensembl ID      | Description                                                                             |
|----------|-------------|--------------------|----------|-----------------|-----------------------------------------------------------------------------------------|
| C11      | UPFH0494346 | 761.3              | CXCL1    | 163739          | C-X-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 4602                         |
| C12      | UPFH0196315 | ENST00000306602.3  | CXCL10   | ENSG00000169245 | C-X-C motif chemokine ligand 10 Source HGNC Symbol Acc HGNC 10637                       |
| D01      | UPFH0092551 | ENST00000374429.6  | CXCL12   | ENSG00000107562 | C-X-C motif chemokine ligand 12 Source HGNC Symbol Acc HGNC 10672                       |
| D02      | UPFH1132349 | ENST00000508487.3  | CXCL2    | ENSG00000081041 | C-X-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 4603                         |
| D03      | UPFH0449544 | ENST00000295683.2  | CXCR1    | ENSG00000163464 | C-X-C motif chemokine receptor 1 Source HGNC Symbol Acc HGNC 6026                       |
| D04      | UPFH0570418 | ENST00000241393.3  | CXCR4    | ENSG00000121966 | C-X-C motif chemokine receptor 4 Source HGNC Symbol Acc HGNC 2561                       |
| D05      | UPFH1132388 | ENST00000541774.5  | ERBB2    | ENSG00000141736 | erb-b2 receptor tyrosine kinase 2 Source HGNC Symbol Acc HGNC 3430                      |
| D06      | UPFH1132395 | ENST00000357339.6  | FAS      | ENSG00000026103 | Fas cell surface death receptor Source HGNC Symbol Acc HGNC 11920                       |
| D07      | UPFH0001018 | ENST00000368115.5  | FCER1A   | ENSG00000179639 | Fc fragment of IgE receptor Ia Source HGNC Symbol Acc HGNC 3609                         |
| D08      | UPFH0089548 | ENST00000346664.9  | FCER2    | ENSG00000104921 | Fc fragment of IgE receptor II Source HGNC Symbol Acc HGNC 3612                         |
| D09      | UPFH0313882 | ENST00000444948.5  | FCGR1A   | ENSG00000150337 | Fc fragment of IgG receptor Ia Source HGNC Symbol Acc HGNC 3613                         |
| D10      | UPFH0141553 | ENST00000241453.11 | FLT3     | ENSG00000122025 | fms related tyrosine kinase 3 Source HGNC Symbol Acc HGNC 3765                          |
| D11      | UPFH0489783 | ENST00000600084.5  | FLT3LG   | ENSG00000090554 | fms related tyrosine kinase 3 ligand Source HGNC Symbol Acc HGNC 3766                   |
| D12      | UPFH1132449 | ENST00000376809.10 | HLA-A    | ENSG00000206503 | major histocompatibility complex, class I, A Source HGNC Symbol Acc HGNC 4931           |
| E01      | UPFH0257251 | ENST00000477541.1  | HLA-DMA  | ENSG00000204257 | major histocompatibility complex, class II, DM alpha Source HGNC Symbol Acc HGNC 4934   |
| E02      | UPFH0344178 | ENST00000419277.5  | HLA-DPA1 | ENSG00000231389 | major histocompatibility complex, class II, DP alpha 1 Source HGNC Symbol Acc HGNC 4938 |
| E03      | UPFH1132462 | ENST00000264832.8  | ICAM1    | ENSG00000090339 | intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344                      |
| E04      | UPFH0413963 | ENST00000449662.6  | ICAM2    | ENSG00000108622 | intercellular adhesion molecule 2 Source HGNC Symbol Acc HGNC 5345                      |
| E05      | UPFH1132473 | ENST00000229135.4  | IFNG     | ENSG00000111537 | interferon gamma Source HGNC Symbol Acc HGNC 5438                                       |
| E06      | UPFH0028177 | ENST00000423557.1  | IL10     | ENSG00000136634 | interleukin 10 Source HGNC Symbol Acc HGNC 5962                                         |
| E07      | UPFH1132478 | ENST00000466512.1  | IL12A    | ENSG00000168811 | interleukin 12A Source HGNC Symbol Acc HGNC 5969                                        |
| E08      | UPFH0131869 | ENST00000231228.2  | IL12B    | ENSG00000113302 | interleukin 12B Source HGNC Symbol Acc HGNC 5970                                        |
| E09      | UPFH0104353 | ENST00000394652.6  | IL16     | ENSG00000172349 | interleukin 16 Source HGNC Symbol Acc HGNC 5980                                         |
| E10      | UPFH0116492 | ENST00000226730.4  | IL2      | ENSG00000109471 | interleukin 2 Source HGNC Symbol Acc HGNC 6001                                          |
| E11      | UPFH1172910 | ENST00000258743.10 | IL6      | ENSG00000136244 | interleukin 6 Source HGNC Symbol Acc HGNC 6018                                          |
| E12      | UPFH0120553 | ENST00000307407.8  | CXCL8    | ENSG00000169429 | C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025                         |
| F01      | UPFH1132493 | ENST00000348655.11 | IRF7     | ENSG00000185507 | interferon regulatory factor 7 Source HGNC Symbol Acc HGNC 6122                         |
| F02      | UPFH0264126 | ENST00000564056.1  | IRF8     | ENSG00000140968 | interferon regulatory factor 8 Source HGNC Symbol Acc HGNC 5358                         |
| F03      | UPFH0542903 | ENST00000287497.13 | ITGAM    | ENSG00000169896 | integrin subunit alpha M Source HGNC Symbol Acc HGNC 6149                               |
| F04      | UPFH1132499 | ENST00000397850.6  | ITGB2    | ENSG00000160255 | integrin subunit beta 2 Source HGNC Symbol Acc HGNC 6155                                |
| F05      | UPFH1125057 | ENST00000338962.8  | LRP1     | ENSG00000123384 | LDL receptor related protein 1 Source HGNC Symbol Acc HGNC 6692                         |
| F06      | UPFH0169490 | ENST00000420292.1  | LYN      | ENSG00000254087 | LYN proto-oncogene, Src family tyrosine kinase Source HGNC Symbol Acc HGNC 6735         |
| F07      | UPFH1132548 | ENST00000215754.8  | MIF      | ENSG00000240972 | macrophage migration inhibitory factor Source HGNC Symbol Acc HGNC 7097                 |
| F08      | UPFH1132828 | ENST00000226574.9  | NFKB1    | ENSG00000109320 | nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794                       |
| F09      | UPFH0448301 | ENST00000367367.8  | PTPRC    | ENSG00000081237 | protein tyrosine phosphatase, receptor type C Source HGNC Symbol Acc HGNC 9666          |
| F10      | UPFH1132648 | ENST00000348035.9  | RAC1     | ENSG00000136238 | Rac family small GTPase 1 Source HGNC Symbol Acc HGNC 9801                              |

| Position | Assay       | Name               | Symbol  | Ensembl ID      | Description                                                                           |
|----------|-------------|--------------------|---------|-----------------|---------------------------------------------------------------------------------------|
| F11      | UPFH1132884 | ENST00000615805.4  | RELA    | ENSG00000173039 | RELA proto-oncogene, NF-kB subunit Source HGNC Symbol Acc HGNC 9955                   |
| F12      | UPFH0241038 | ENST00000625761.2  | RELB    | ENSG00000104856 | RELB proto-oncogene, NF-kB subunit Source HGNC Symbol Acc HGNC 9956                   |
| G01      | UPFH0531262 | ENST00000404395.3  | STAT3   | ENSG00000168610 | signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364  |
| G02      | UPFH0019635 | ENST00000374897.3  | TAP2    | ENSG00000204267 | transporter 2, ATP binding cassette subfamily B member Source HGNC Symbol Acc HGNC 44 |
| G03      | UPFH0481990 | ENST00000434618.6  | TAPBP   | ENSG00000231925 | TAP binding protein Source HGNC Symbol Acc HGNC 11566                                 |
| G04      | UPFH0193430 | ENST00000221930.5  | TGFB1   | ENSG00000105329 | transforming growth factor beta 1 Source NCBI gene Acc 7040                           |
| G05      | UPFH1132847 | ENST00000260356.5  | THBS1   | ENSG00000137801 | thrombospondin 1 Source HGNC Symbol Acc HGNC 11785                                    |
| G06      | UPFH0034752 | ENST00000308979.7  | TLR1    | ENSG00000174125 | toll like receptor 1 Source HGNC Symbol Acc HGNC 11847                                |
| G07      | UPFH0035742 | ENST00000642700.1  | TLR2    | ENSG00000137462 | toll like receptor 2 Source HGNC Symbol Acc HGNC 11848                                |
| G08      | UPFH1132849 | ENST00000380659.4  | TLR7    | ENSG00000196664 | toll like receptor 7 Source HGNC Symbol Acc HGNC 15631                                |
| G09      | UPFH1172915 | ENST00000360658.2  | TLR9    | ENSG00000239732 | toll like receptor 9 Source HGNC Symbol Acc HGNC 15633                                |
| G10      | UPFH1132978 | ENST00000449264.3  | TNF     | ENSG00000232810 | tumor necrosis factor Source HGNC Symbol Acc HGNC 11892                               |
| G11      | UPFH1132852 | ENST00000544862.5  | TNFSF11 | ENSG00000120659 | TNF superfamily member 11 Source HGNC Symbol Acc HGNC 11926                           |
| G12      | UPFH1132856 | ENST00000294728.7  | VCAM1   | ENSG00000162692 | vascular cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 12663                   |
| 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.

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](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.