

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

Human WNT Signaling Pathway

Cat. no. 249955 UPHS-043ZA

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 for further details.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|----------|-------|-------|--------|--------|---------|----------|-------|---------|---------|--------|--------|
| A | AES | APC | AXIN1 | AXIN2 | BCL9 | BTRC | CCND1 | CCND2 | CSNK1A1 | CSNK2A1 | CTBP1 | CTNNB1 |
| B | CTNNBIP1 | CXCC4 | DAAM1 | DAB2 | DIXDC1 | DKK1 | DKK3 | DVL1 | DVL2 | EP300 | FBXW11 | FBXW4 |
| C | FGF4 | FOSL1 | FOXP1 | FRAT1 | FRZB | FZD1 | FZD2 | FZD3 | FZD4 | FZD5 | FZD6 | FZD7 |
| D | FZD8 | FZD9 | GSK3A | GSK3B | JUN | KREMEN1 | LEF1 | LRP5 | LRP6 | MAPK8 | MMP7 | MYC |
| E | NFATC1 | NKD1 | NLK | PITX2 | PORCN | PPARD | PRICKLE1 | PYGO1 | RHOA | RHOU | RUVBL1 | SFRP1 |
| F | SFRP4 | SOX17 | TCF7 | TCF7L1 | TLE1 | VANGL2 | WIF1 | CCN4 | WNT1 | WNT10A | WNT11 | WNT16 |
| G | WNT2 | WNT2B | WNT3 | WNT3A | WNT4 | WNT5A | WNT5B | WNT6 | WNT7A | WNT7B | WNT8A | WNT9A |
| 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 | UPFH0305322 | ENST00000327 141.8 | AES | ENSG000000 104964 | amino-terminal enhancer of split Source HGNC Symbol Acc HGNC 307 |
| A02 | UPFH1132236 | ENST00000257 430.9 | APC | ENSG000000 134982 | APC, WNT signaling pathway regulator Source HGNC Symbol Acc HGNC 583 |
| A03 | UPFH1132262 | ENST00000262 320.8 | AXIN1 | ENSG000000 103126 | axin 1 Source HGNC Symbol Acc HGNC 903 |
| A04 | UPFH1132263 | ENST00000375 702.5 | AXIN2 | ENSG000000 168646 | axin 2 Source HGNC Symbol Acc HGNC 904 |
| A05 | UPFH1132272 | ENST00000234 739.8 | BCL9 | ENSG000000 116128 | BCL9, transcription coactivator Source HGNC Symbol Acc HGNC 1008 |
| A06 | UPFH0358747 | ENST00000370 187.8 | BTRC | ENSG000000 166167 | beta-transducin repeat containing E3 ubiquitin protein ligase Source HGNC Symbol Acc HGNC 1144 |
| A07 | UPFH0430337 | ENST00000227 507.2 | CCND1 | ENSG000000 110092 | cyclin D1 Source HGNC Symbol Acc HGNC 1582 |
| A08 | UPFH1132296 | ENST00000261 254.8 | CCND2 | ENSG000000 118971 | cyclin D2 Source HGNC Symbol Acc HGNC 1583 |
| A09 | UPFH0546143 | ENST00000377 843.6 | CSNK1A1 | ENSG000000 113712 | casein kinase 1 alpha 1 Source HGNC Symbol Acc HGNC 2451 |
| A10 | UPFH0055149 | ENST00000645 249.1 | CSNK2A1 | ENSG000000 101266 | casein kinase 2 alpha 1 Source HGNC Symbol Acc HGNC 2457 |
| A11 | UPFH1132339 | ENST00000382 952.7 | CTBP1 | ENSG000000 159692 | C-terminal binding protein 1 Source HGNC Symbol Acc HGNC 2494 |
| A12 | UPFH0097734 | ENST00000396 183.7 | CTNNB1 | ENSG000000 168036 | catenin beta 1 Source HGNC Symbol Acc HGNC 2514 |
| B01 | UPFH1132341 | ENST00000377 258.5 | CTNNBIP1 | ENSG000000 178585 | catenin beta interacting protein 1 Source HGNC Symbol Acc HGNC 16913 |
| B02 | UPFH0576231 | ENST00000394 767.3 | CXXC4 | ENSG000000 168772 | CXXC finger protein 4 Source HGNC Symbol Acc HGNC 24593 |
| B03 | UPFH1132352 | ENST00000360 909.7 | DAAM1 | ENSG000000 100592 | dishevelled associated activator of morphogenesis 1 Source HGNC Symbol Acc HGNC 18142 |
| B04 | UPFH1132353 | ENST00000509 337.5 | DAB2 | ENSG000000 153071 | DAB2, clathrin adaptor protein Source HGNC Symbol Acc HGNC 2662 |
| B05 | UPFH1132361 | ENST00000440 460.6 | DIXDC1 | ENSG000000 150764 | DIX domain containing 1 Source HGNC Symbol Acc HGNC 23695 |
| B06 | UPFH1132868 | ENST00000373 970.4 | DKK1 | ENSG000000 107984 | dickkopf WNT signaling pathway inhibitor 1 Source HGNC Symbol Acc HGNC 2891 |
| B07 | UPFH1132869 | ENST00000525 493.5 | DKK3 | ENSG000000 050165 | dickkopf WNT signaling pathway inhibitor 3 Source HGNC Symbol Acc HGNC 2893 |
| B08 | UPFH0264310 | ENST00000378 891.9 | DVL1 | ENSG000000 107404 | dishevelled segment polarity protein 1 Source HGNC Symbol Acc HGNC 3084 |
| B09 | UPFH1132373 | ENST00000575 458.5 | DVL2 | ENSG000000 004975 | dishevelled segment polarity protein 2 Source HGNC Symbol Acc HGNC 3086 |
| B10 | UPFH0118049 | ENST00000635 691.1 | EP300 | ENSG000000 100393 | E1A binding protein p300 Source HGNC Symbol Acc HGNC 3373 |
| B11 | UPFH0321621 | ENST00000265 094.9 | FBXW11 | ENSG000000 072803 | F-box and WD repeat domain containing 11 Source HGNC Symbol Acc HGNC 13607 |
| B12 | UPFH1132398 | ENST00000331 272.8 | FBXW4 | ENSG000000 107829 | F-box and WD repeat domain containing 4 Source HGNC Symbol Acc HGNC 10847 |
| C01 | UPFH1172907 | ENST00000168 712.3 | FGF4 | ENSG000000 075388 | fibroblast growth factor 4 Source HGNC Symbol Acc HGNC 3682 |
| C02 | UPFH0457684 | ENST00000312 562.6 | FOSL1 | ENSG000000 175592 | FOS like 1, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 13718 |
| C03 | UPFH0482655 | ENST00000579 795.5 | FOXN1 | ENSG000000 109101 | forkhead box N1 Source HGNC Symbol Acc HGNC 12765 |
| C04 | UPFH0606332 | ENST00000371 021.4 | FRAT1 | ENSG000000 165879 | FRAT1, WNT signaling pathway regulator Source HGNC Symbol Acc HGNC 3944 |
| C05 | UPFH1132870 | ENST00000295 113.5 | FRZB | ENSG000000 162998 | frizzled related protein Source HGNC Symbol Acc HGNC 3959 |
| C06 | UPFH0039775 | ENST00000287 934.3 | FZD1 | ENSG000000 157240 | frizzled class receptor 1 Source HGNC Symbol Acc HGNC 4038 |
| C07 | UPFH0607599 | ENST00000315 323.4 | FZD2 | ENSG000000 180340 | frizzled class receptor 2 Source HGNC Symbol Acc HGNC 4040 |
| C08 | UPFH1132405 | ENST00000537 916.2 | FZD3 | ENSG000000 104290 | frizzled class receptor 3 Source HGNC Symbol Acc HGNC 4041 |
| C09 | UPFH1132406 | ENST00000531 380.2 | FZD4 | ENSG000000 174804 | frizzled class receptor 4 Source HGNC Symbol Acc HGNC 4042 |
| C10 | UPFH1132407 | ENST00000295 417.4 | FZD5 | ENSG000000 163251 | frizzled class receptor 5 Source HGNC Symbol Acc HGNC 4043 |
| | | ENST00000523 | | ENSG000000 | |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|-------------|--------------------|----------|-----------------|--|
| C11 | UPFH1132408 | 739.5 | FZD6 | 164930 | frizzled class receptor 6 Source HGNC Symbol Acc HGNC 4044 |
| C12 | UPFH0485950 | ENST00000286201.2 | FZD7 | ENSG00000155760 | frizzled class receptor 7 Source HGNC Symbol Acc HGNC 4045 |
| D01 | UPFH0494687 | ENST00000374694.2 | FZD8 | ENSG00000177283 | frizzled class receptor 8 Source HGNC Symbol Acc HGNC 4046 |
| D02 | UPFH0444740 | ENST00000344575.4 | FZD9 | ENSG00000188763 | frizzled class receptor 9 Source HGNC Symbol Acc HGNC 4047 |
| D03 | UPFH1132428 | ENST00000398249.8 | GSK3A | ENSG00000105723 | glycogen synthase kinase 3 alpha Source HGNC Symbol Acc HGNC 4616 |
| D04 | UPFH0470775 | ENST00000316626.5 | GSK3B | ENSG00000082701 | glycogen synthase kinase 3 beta Source HGNC Symbol Acc HGNC 4617 |
| D05 | UPFH0569765 | ENST00000371222.3 | JUN | ENSG00000177606 | Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204 |
| D06 | UPFH0433367 | ENST00000400335.8 | KREMEN1 | ENSG00000183762 | kringle containing transmembrane protein 1 Source HGNC Symbol Acc HGNC 17550 |
| D07 | UPFH1132518 | ENST00000438313.6 | LEF1 | ENSG00000138795 | lymphoid enhancer binding factor 1 Source HGNC Symbol Acc HGNC 6551 |
| D08 | UPFH1132877 | ENST00000294304.12 | LRP5 | ENSG00000162337 | LDL receptor related protein 5 Source HGNC Symbol Acc HGNC 6697 |
| D09 | UPFH1132525 | ENST00000543091.1 | LRP6 | ENSG00000070018 | LDL receptor related protein 6 Source HGNC Symbol Acc HGNC 6698 |
| D10 | UPFH1132535 | ENST00000374179.8 | MAPK8 | ENSG00000107643 | mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881 |
| D11 | UPFH0230006 | ENST00000260227.5 | MMP7 | ENSG00000137673 | matrix metalloproteinase 7 Source HGNC Symbol Acc HGNC 7174 |
| D12 | UPFH1132563 | ENST00000517291.1 | MYC | ENSG00000136997 | MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553 |
| E01 | UPFH0595445 | ENST00000591814.5 | NFATC1 | ENSG00000131196 | nuclear factor of activated T cells 1 Source HGNC Symbol Acc HGNC 7775 |
| E02 | UPFH1132895 | ENST00000268459.6 | NKD1 | ENSG00000140807 | NKD1, WNT signaling pathway inhibitor Source HGNC Symbol Acc HGNC 17045 |
| E03 | UPFH1132593 | ENST00000407008.8 | NLK | ENSG00000087095 | nemo like kinase Source HGNC Symbol Acc HGNC 29858 |
| E04 | UPFH0543151 | ENST00000607868.1 | PITX2 | ENSG00000164093 | paired like homeodomain 2 Source HGNC Symbol Acc HGNC 9005 |
| E05 | UPFH1132626 | ENST00000361988.7 | PORCN | ENSG00000102312 | porcupine O-acyltransferase Source HGNC Symbol Acc HGNC 17652 |
| E06 | UPFH1132629 | ENST00000448077.6 | PPARD | ENSG00000112033 | peroxisome proliferator activated receptor delta Source HGNC Symbol Acc HGNC 9235 |
| E07 | UPFH1132633 | ENST00000445766.7 | PRICKLE1 | ENSG00000139174 | prickle planar cell polarity protein 1 Source HGNC Symbol Acc HGNC 17019 |
| E08 | UPFH1125818 | ENST00000302000.10 | PYGO1 | ENSG00000171016 | pygopus family PHD finger 1 Source HGNC Symbol Acc HGNC 30256 |
| E09 | UPFH1132657 | ENST00000445425.4 | RHOA | ENSG00000067560 | ras homolog family member A Source HGNC Symbol Acc HGNC 667 |
| E10 | UPFH0350717 | ENST00000366691.4 | RHOU | ENSG00000116574 | ras homolog family member U Source HGNC Symbol Acc HGNC 17794 |
| E11 | UPFH1132666 | ENST00000478892.1 | RUVBL1 | ENSG00000175792 | RuvB like AAA ATPase 1 Source HGNC Symbol Acc HGNC 10474 |
| E12 | UPFH1132676 | ENST00000220772.8 | SFRP1 | ENSG00000104332 | secreted frizzled related protein 1 Source HGNC Symbol Acc HGNC 10776 |
| F01 | UPFH1132677 | ENST00000436072.7 | SFRP4 | ENSG00000106483 | secreted frizzled related protein 4 Source HGNC Symbol Acc HGNC 10778 |
| F02 | UPFH1132969 | ENST00000297316.5 | SOX17 | ENSG00000164736 | SRY-box 17 Source HGNC Symbol Acc HGNC 18122 |
| F03 | UPFH1132709 | ENST00000520958.5 | TCF7 | ENSG00000081059 | transcription factor 7 Source HGNC Symbol Acc HGNC 11639 |
| F04 | UPFH1132710 | ENST00000282111.4 | TCF7L1 | ENSG00000152284 | transcription factor 7 like 1 Source HGNC Symbol Acc HGNC 11640 |
| F05 | UPFH1132727 | ENST00000376499.8 | TLE1 | ENSG00000196781 | TLE family member 1, transcriptional corepressor Source HGNC Symbol Acc HGNC 11837 |
| F06 | UPFH1132754 | ENST00000368061.3 | VANGL2 | ENSG00000162738 | VANGL planar cell polarity protein 2 Source HGNC Symbol Acc HGNC 15511 |
| F07 | UPFH1132759 | ENST00000286574.9 | WIF1 | ENSG00000156076 | WNT inhibitory factor 1 Source HGNC Symbol Acc HGNC 18081 |
| F08 | UPFH0155085 | ENST00000220856.6 | CCN4 | ENSG00000104415 | cellular communication network factor 4 Source HGNC Symbol Acc HGNC 12769 |
| F09 | UPFH0344484 | ENST00000293549.3 | WNT1 | ENSG00000125084 | Wnt family member 1 Source HGNC Symbol Acc HGNC 12774 |
| F10 | UPFH1172916 | ENST00000258411.8 | WNT10A | ENSG00000135925 | Wnt family member 10A Source HGNC Symbol Acc HGNC 13829 |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|-------------|--------------------|--------|-----------------|--|
| F11 | UPFH1132929 | ENST00000322563.8 | WNT11 | ENSG00000085741 | Wnt family member 11 Source HGNC Symbol Acc HGNC 12776 |
| F12 | UPFH1132761 | ENST00000361301.6 | WNT16 | ENSG00000002745 | Wnt family member 16 Source HGNC Symbol Acc HGNC 16267 |
| G01 | UPFH0138379 | ENST00000265441.7 | WNT2 | ENSG00000105989 | Wnt family member 2 Source HGNC Symbol Acc HGNC 12780 |
| G02 | UPFH0204669 | ENST00000369686.9 | WNT2B | ENSG00000134245 | Wnt family member 2B Source HGNC Symbol Acc HGNC 12781 |
| G03 | UPFH1132762 | ENST00000225512.6 | WNT3 | ENSG00000108379 | Wnt family member 3 Source HGNC Symbol Acc HGNC 12782 |
| G04 | UPFH0486867 | ENST00000284523.2 | WNT3A | ENSG00000154342 | Wnt family member 3A Source HGNC Symbol Acc HGNC 15983 |
| G05 | UPFH1132763 | ENST00000290167.11 | WNT4 | ENSG00000162552 | Wnt family member 4 Source HGNC Symbol Acc HGNC 12783 |
| G06 | UPFH0355989 | ENST00000264634.8 | WNT5A | ENSG00000114251 | Wnt family member 5A Source HGNC Symbol Acc HGNC 12784 |
| G07 | UPFH1132764 | ENST00000537031.5 | WNT5B | ENSG00000111186 | Wnt family member 5B Source HGNC Symbol Acc HGNC 16265 |
| G08 | UPFH1132765 | ENST00000233948.4 | WNT6 | ENSG00000115596 | Wnt family member 6 Source HGNC Symbol Acc HGNC 12785 |
| G09 | UPFH0406663 | ENST00000285018.4 | WNT7A | ENSG00000154764 | Wnt family member 7A Source HGNC Symbol Acc HGNC 12786 |
| G10 | UPFH1132766 | ENST00000410058.1 | WNT7B | ENSG00000188064 | Wnt family member 7B Source HGNC Symbol Acc HGNC 12787 |
| G11 | UPFH0320758 | ENST00000398754.1 | WNT8A | ENSG00000061492 | Wnt family member 8A Source HGNC Symbol Acc HGNC 12788 |
| G12 | UPFH0030443 | ENST00000272164.6 | WNT9A | ENSG00000143816 | Wnt family member 9A Source HGNC Symbol Acc HGNC 12778 |
| 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 μ l reactions: 20 μ l 8x gDNA Removal Mix, 10 μ l Reverse Transcription Enzyme, 40 μ l Reverse Transcription Mix (containing RT primers), 20 μ l Internal Control RNA, 1.9 ml RNase-Free Water | 205410 |
| QuantiNova Probe RT-PCR Kit (100)* | For 100 x 20 μ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 μ l QuantiNova Probe RT Mix, 20 μ l Internal Control RNA, 500 μ l Yellow Template Dilution Buffer, 250 μ l ROX Reference Dye, 1.9 μ l RNase-Free Water | 208352 |
| QuantiNova Probe PCR Kit (100)* | For 100 x 20 μ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ 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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