

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

Human Endothelial Cell Biology

Cat. no. 249955 UPHS-015ZR

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 | ACE | ADAM17 | AGT | AGTR1 | ALOX5 | ANGPT1 | ANXA5 | APOE | BAX | BCL2 | BCL2L1 | CALCA |
| B | CASP1 | CASP3 | CAV1 | CCL2 | CCL5 | CDH5 | CFLAR | COL18A1 | CX3CL1 | EDN1 | EDN2 | EDNRA |
| C | ENG | F2R | F3 | FAS | FASLG | FGF1 | FGF2 | FLT1 | FN1 | HIF1A | HMOX1 | ICAM1 |
| D | IL11 | IL1B | IL3 | IL6 | IL7 | ITGA5 | ITGAV | ITGB1 | ITGB3 | KDR | KIT | KLK3 |
| E | MMP1 | MMP2 | MMP9 | NOS3 | NPPB | NPR1 | OCLN | PDGFRA | PECAM1 | PF4 | PGF | PLAT |
| F | PLAU | PLG | PROCR | PTGIS | PTGS2 | PTK2 | SELE | SELL | SELPLG | SERPINE1 | SOD1 | SPHK1 |
| G | TEK | TFPI | TGFB1 | THBD | THBS1 | TIMP1 | TNF | TNFSF10 | TYMP | VCAM1 | VEGFA | VWF |
| H | ACTB | B2M | GAPDH | HRPT1 | RPLP0 | HGDC | QIC | QIC | QIC | PPC | PPC | PPC |

Gene table: QuantiNova LNA Probe PCR Focus Panel

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|-------------|--------------------|---------|------------------|---|
| A01 | UPFH1132210 | ENST00000428043.5 | ACE | ENSG00000159640 | angiotensin I converting enzyme Source HGNC Symbol Acc HGNC 2707 |
| A02 | UPFH1132216 | ENST00000497134.6 | ADAM17 | ENSG00000151694 | ADAM metalloproteinase domain 17 Source HGNC Symbol Acc HGNC 195 |
| A03 | UPFH1132773 | ENST00000366667.5 | AGT | ENSG00000135744 | angiotensinogen Source HGNC Symbol Acc HGNC 333 |
| A04 | UPFH1132221 | ENST00000418473.6 | AGTR1 | ENSG00000144891 | angiotensin II receptor type 1 Source HGNC Symbol Acc HGNC 336 |
| A05 | UPFH1132227 | ENST00000612635.4 | ALOX5 | ENSG00000012779 | arachidonate 5-lipoxygenase Source HGNC Symbol Acc HGNC 435 |
| A06 | UPFH1132231 | ENST00000517746.6 | ANGPT1 | ENSG00000154188 | angiotensinogen converting enzyme 1 Source HGNC Symbol Acc HGNC 484 |
| A07 | UPFH1132775 | ENST00000515017.5 | ANXA5 | ENSG00000164111 | annexin A5 Source HGNC Symbol Acc HGNC 543 |
| A08 | UPFH0539669 | ENST00000425718.1 | APOE | ENSG00000130203 | apolipoprotein E Source HGNC Symbol Acc HGNC 613 |
| A09 | UPFH0540159 | ENST00000293288.12 | BAX | ENSG00000087088 | BCL2 associated X, apoptosis regulator Source HGNC Symbol Acc HGNC 959 |
| A10 | UPFH1132900 | ENST00000333681.5 | BCL2 | ENSG00000171791 | BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990 |
| A11 | UPFH1132271 | ENST00000376062.6 | BCL2L1 | ENSG00000171552 | BCL2 like 1 Source HGNC Symbol Acc HGNC 992 |
| A12 | UPFH0317713 | ENST00000331587.8 | CALCA | ENSG00000110680 | calcitonin related polypeptide alpha Source HGNC Symbol Acc HGNC 1437 |
| B01 | UPFH0285144 | ENST00000436863.7 | CASP1 | ENSG00000137752 | caspase 1 Source HGNC Symbol Acc HGNC 1499 |
| B02 | UPFH1132892 | ENST00000523916.5 | CASP3 | ENSG00000164305 | caspase 3 Source HGNC Symbol Acc HGNC 1504 |
| B03 | UPFH0192343 | ENST00000393468.1 | CAV1 | ENSG00000105974 | caveolin 1 Source HGNC Symbol Acc HGNC 1527 |
| B04 | UPFH1132783 | ENST00000225831.4 | CCL2 | ENSG00000108691 | C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618 |
| B05 | UPFH1132786 | ENST00000603197.6 | CCL5 | ENSG00000271503 | C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632 |
| B06 | UPFH1132306 | ENST00000563425.2 | CDH5 | ENSG00000179776 | cadherin 5 Source HGNC Symbol Acc HGNC 1764 |
| B07 | UPFH1132312 | ENST00000479953.6 | CFLAR | ENSG00000003402 | CASP8 and FADD like apoptosis regulator Source HGNC Symbol Acc HGNC 1876 |
| B08 | UPFH1132325 | ENST00000359759.8 | COL18A1 | ENSG00000182871 | collagen type XVIII alpha 1 chain Source HGNC Symbol Acc HGNC 2195 |
| B09 | UPFH1132348 | ENST00000006053.7 | CX3CL1 | ENSG00000006210 | C-X3-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 10647 |
| B10 | UPFH1132801 | ENST00000379375.6 | EDN1 | ENSG000000078401 | endothelin 1 Source HGNC Symbol Acc HGNC 3176 |
| B11 | UPFH1132378 | ENST00000372587.5 | EDN2 | ENSG00000127129 | endothelin 2 Source HGNC Symbol Acc HGNC 3177 |
| B12 | UPFH1132379 | ENST00000511804.5 | EDNRA | ENSG00000151617 | endothelin receptor type A Source HGNC Symbol Acc HGNC 3179 |
| C01 | UPFH0535657 | ENST00000344849.4 | ENG | ENSG00000106991 | endoglin Source HGNC Symbol Acc HGNC 3349 |
| C02 | UPFH1132392 | ENST00000319211.5 | F2R | ENSG00000181104 | coagulation factor II thrombin receptor Source HGNC Symbol Acc HGNC 3537 |
| C03 | UPFH1132393 | ENST00000334047.12 | F3 | ENSG00000117525 | coagulation factor III, tissue factor Source HGNC Symbol Acc HGNC 3541 |
| C04 | UPFH1132395 | ENST00000357339.6 | FAS | ENSG00000026103 | Fas cell surface death receptor Source HGNC Symbol Acc HGNC 11920 |
| C05 | UPFH1132396 | ENST00000367721.3 | FASLG | ENSG00000117560 | Fas ligand Source HGNC Symbol Acc HGNC 11936 |
| C06 | UPFH0087975 | ENST00000612258.4 | FGF1 | ENSG00000113578 | fibroblast growth factor 1 Source HGNC Symbol Acc HGNC 3665 |
| C07 | UPFH0613093 | ENST00000264498.7 | FGF2 | ENSG00000138685 | fibroblast growth factor 2 Source HGNC Symbol Acc HGNC 3676 |
| C08 | UPFH1132400 | ENST00000541932.5 | FLT1 | ENSG00000102755 | fms related tyrosine kinase 1 Source HGNC Symbol Acc HGNC 3763 |
| C09 | UPFH0605066 | ENST00000336916.8 | FN1 | ENSG00000115414 | fibronectin 1 Source HGNC Symbol Acc HGNC 3778 |
| C10 | UPFH1132447 | ENST00000394997.5 | HIF1A | ENSG00000100644 | hypoxia inducible factor 1 subunit alpha Source HGNC Symbol Acc HGNC 4910 |
| | | ENST00000216 | | ENSG000000 | |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|-------------|--------------------|----------|-----------------|--|
| C11 | UPFH0433285 | 117.9 | HMOX1 | 100292 | heme oxygenase 1 Source HGNC Symbol Acc HGNC 5013 |
| C12 | UPFH1132462 | ENST00000264832.8 | ICAM1 | ENSG00000090339 | intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344 |
| D01 | UPFH1132477 | ENST00000585513.1 | IL11 | ENSG00000095752 | interleukin 11 Source HGNC Symbol Acc HGNC 5966 |
| D02 | UPFH0163764 | ENST00000263341.6 | IL1B | ENSG00000125538 | interleukin 1 beta Source HGNC Symbol Acc HGNC 5992 |
| D03 | UPFH0282899 | ENST00000296870.2 | IL3 | ENSG00000164399 | interleukin 3 Source HGNC Symbol Acc HGNC 6011 |
| D04 | UPFH1172910 | ENST00000258743.10 | IL6 | ENSG00000136244 | interleukin 6 Source HGNC Symbol Acc HGNC 6018 |
| D05 | UPFH1132812 | ENST00000263851.9 | IL7 | ENSG00000104432 | interleukin 7 Source HGNC Symbol Acc HGNC 6023 |
| D06 | UPFH1132497 | ENST00000293379.9 | ITGA5 | ENSG00000161638 | integrin subunit alpha 5 Source HGNC Symbol Acc HGNC 6141 |
| D07 | UPFH1132816 | ENST00000261023.8 | ITGAV | ENSG00000138448 | integrin subunit alpha V Source HGNC Symbol Acc HGNC 6150 |
| D08 | UPFH1132498 | ENST00000423113.5 | ITGB1 | ENSG00000150093 | integrin subunit beta 1 Source HGNC Symbol Acc HGNC 6153 |
| D09 | UPFH1132500 | ENST00000559488.5 | ITGB3 | ENSG00000259207 | integrin subunit beta 3 Source HGNC Symbol Acc HGNC 6156 |
| D10 | UPFH0596732 | ENST00000263923.5 | KDR | ENSG00000128052 | kinase insert domain receptor Source HGNC Symbol Acc HGNC 6307 |
| D11 | UPFH0545239 | ENST00000288135.5 | KIT | ENSG00000157404 | KIT proto-oncogene receptor tyrosine kinase Source HGNC Symbol Acc HGNC 6342 |
| D12 | UPFH1132511 | ENST00000617027.4 | KLK3 | ENSG00000142515 | kallikrein related peptidase 3 Source HGNC Symbol Acc HGNC 6364 |
| E01 | UPFH0322484 | ENST00000315274.7 | MMP1 | ENSG00000196611 | matrix metalloproteinase 1 Source HGNC Symbol Acc HGNC 7155 |
| E02 | UPFH1132551 | ENST00000437642.6 | MMP2 | ENSG00000087245 | matrix metalloproteinase 2 Source HGNC Symbol Acc HGNC 7166 |
| E03 | UPFH0367626 | ENST00000372330.3 | MMP9 | ENSG00000100985 | matrix metalloproteinase 9 Source HGNC Symbol Acc HGNC 7176 |
| E04 | UPFH1132897 | ENST00000297494.8 | NOS3 | ENSG00000164867 | nitric oxide synthase 3 Source HGNC Symbol Acc HGNC 7876 |
| E05 | UPFH1132597 | ENST00000376468.4 | NPPB | ENSG00000120937 | natriuretic peptide B Source HGNC Symbol Acc HGNC 7940 |
| E06 | UPFH1132933 | ENST00000368680.4 | NPR1 | ENSG00000169418 | natriuretic peptide receptor 1 Source HGNC Symbol Acc HGNC 7943 |
| E07 | UPFH1132600 | ENST00000355237.6 | OCLN | ENSG00000197822 | occludin Source HGNC Symbol Acc HGNC 8104 |
| E08 | UPFH1132609 | ENST00000508170.5 | PDGFRA | ENSG00000134853 | platelet derived growth factor receptor alpha Source HGNC Symbol Acc HGNC 8803 |
| E09 | UPFH1132613 | ENST00000563924.6 | PECAM1 | ENSG00000261371 | platelet and endothelial cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 8823 |
| E10 | UPFH0614943 | ENST00000296029.3 | PF4 | ENSG00000163737 | platelet factor 4 Source HGNC Symbol Acc HGNC 8861 |
| E11 | UPFH1132616 | ENST00000555567.6 | PGF | ENSG00000119630 | placental growth factor Source HGNC Symbol Acc HGNC 8893 |
| E12 | UPFH1132830 | ENST00000352041.7 | PLAT | ENSG00000104368 | plasminogen activator, tissue type Source HGNC Symbol Acc HGNC 9051 |
| F01 | UPFH1132831 | ENST00000446342.5 | PLAU | ENSG00000122861 | plasminogen activator, urokinase Source HGNC Symbol Acc HGNC 9052 |
| F02 | UPFH0091404 | ENST00000308192.13 | PLG | ENSG00000122194 | plasminogen Source HGNC Symbol Acc HGNC 9071 |
| F03 | UPFH1132638 | ENST00000216968.5 | PROCR | ENSG00000101000 | protein C receptor Source HGNC Symbol Acc HGNC 9452 |
| F04 | UPFH1132641 | ENST00000244043.5 | PTGIS | ENSG00000124212 | prostaglandin I2 synthase Source HGNC Symbol Acc HGNC 9603 |
| F05 | UPFH1132642 | ENST00000367468.10 | PTGS2 | ENSG00000073756 | prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605 |
| F06 | UPFH1132643 | ENST00000522684.5 | PTK2 | ENSG00000169398 | protein tyrosine kinase 2 Source HGNC Symbol Acc HGNC 9611 |
| F07 | UPFH1132838 | ENST00000367777.5 | SELE | ENSG00000007908 | selectin E Source HGNC Symbol Acc HGNC 10718 |
| F08 | UPFH0444664 | ENST00000236147.5 | SELL | ENSG00000188404 | selectin L Source HGNC Symbol Acc HGNC 10720 |
| F09 | UPFH0032702 | ENST00000550948.1 | SELPLG | ENSG00000110876 | selectin P ligand Source HGNC Symbol Acc HGNC 10722 |
| F10 | UPFH0384736 | ENST00000223095.4 | SERPINE1 | ENSG00000106366 | serpin family E member 1 Source HGNC Symbol Acc HGNC 8583 |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|-------------|--------------------|---------|-----------------|--|
| F11 | UPFH0220920 | ENST00000270142.10 | SOD1 | ENSG00000142168 | superoxide dismutase 1 Source HGNC Symbol Acc HGNC 11179 |
| F12 | UPFH0560569 | ENST00000590959.5 | SPHK1 | ENSG00000176170 | sphingosine kinase 1 Source NCBI gene Acc 8877 |
| G01 | UPFH1132711 | ENST00000380036.9 | TEK | ENSG00000120156 | TEK receptor tyrosine kinase Source HGNC Symbol Acc HGNC 11724 |
| G02 | UPFH1132716 | ENST00000392365.5 | TFPI | ENSG00000003436 | tissue factor pathway inhibitor Source HGNC Symbol Acc HGNC 11760 |
| G03 | UPFH0193430 | ENST00000221930.5 | TGFB1 | ENSG00000105329 | transforming growth factor beta 1 Source NCBI gene Acc 7040 |
| G04 | UPFH0356052 | ENST00000377103.2 | THBD | ENSG00000178726 | thrombomodulin Source HGNC Symbol Acc HGNC 11784 |
| G05 | UPFH1132847 | ENST00000260356.5 | THBS1 | ENSG00000137801 | thrombospondin 1 Source HGNC Symbol Acc HGNC 11785 |
| G06 | UPFH1132725 | ENST00000456754.6 | TIMP1 | ENSG00000102265 | TIMP metalloproteinase inhibitor 1 Source HGNC Symbol Acc HGNC 11820 |
| G07 | UPFH1132978 | ENST00000449264.3 | TNF | ENSG00000232810 | tumor necrosis factor Source HGNC Symbol Acc HGNC 11892 |
| G08 | UPFH1132733 | ENST00000241261.7 | TNFSF10 | ENSG00000121858 | TNF superfamily member 10 Source HGNC Symbol Acc HGNC 11925 |
| G09 | UPFH1132746 | ENST00000252029.8 | TYMP | ENSG00000025708 | thymidine phosphorylase Source HGNC Symbol Acc HGNC 3148 |
| G10 | UPFH1132856 | ENST00000294728.7 | VCAM1 | ENSG00000162692 | vascular cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 12663 |
| G11 | UPFH0281656 | ENST00000425836.6 | VEGFA | ENSG00000112715 | vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680 |
| G12 | UPFH0533670 | ENST00000261405.9 | VWF | ENSG00000110799 | von Willebrand factor Source HGNC Symbol Acc HGNC 12726 |
| 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.

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.

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.