

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

Mouse p53 Signaling Pathway

Cat. no. 249955 UPMM-027ZR

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 | Apaf1 | Apex1 | Atm | Atr | Bag1 | Bax | Bbc3 | Bcl2 | Bid | Birc5 | Bnip3 | Brc1 |
| B | Brc2 | Btg2 | Casp2 | Casp9 | Ccnb1 | Ccne1 | Ccng1 | Ccnh | Cdc25a | Cdc25c | Cdk1 | Cdk4 |
| C | Cdkn1a | Cdkn2a | Chek1 | Chek2 | Cradd | Cul9 | Dapk1 | Dnm1 | E2f1 | E2f3 | Egfr | Egr1 |
| D | Ep300 | Ercc1 | Esr1 | Fadd | Fas | Fasl | Foxo3 | Gadd45a | Hif1a | Il6 | Jun | Kras |
| E | Lig4 | Mcl1 | Mdm2 | Mdm4 | Mlh1 | Msh2 | Myc | Myod1 | NF1 | NRb1 | Pcna | Pmaip1 |
| F | Ppm1d | Prc1 | Prkca | Pten | Ptfg1 | Rb1 | Rela | Rprm | Serpinb5 | Sesn2 | Sfn | Sirt1 |
| G | Stat1 | Tnf | Tnfrsf10b | Traf1 | Trp53 | Trp53bp2 | Trp63 | Trp73 | Wt1 | Xrcc4 | Xrcc5 | Zmat3 |
| 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 | UPFM087814 1 | ENSMUST00000 160788.1 | Apaf1 | ENSMUSG00 000019979 | apoptotic peptidase activating factor 1 Source MGI Symbol Acc MGI 1306796 |
| A02 | UPFM063954 5 | ENSMUST00000 136753.7 | Apex1 | ENSMUSG00 000035960 | apurinic/apyrimidinic endonuclease 1 Source MGI Symbol Acc MGI 88042 |
| A03 | UPFM070877 3 | ENSMUST00000 150244.1 | Atm | ENSMUSG00 000034218 | ataxia telangiectasia mutated Source MGI Symbol Acc MGI 107202 |
| A04 | UPFM092040 0 | ENSMUST00000 185473.6 | Atr | ENSMUSG00 000032409 | ataxia telangiectasia and Rad3 related Source MGI Symbol Acc MGI 108028 |
| A05 | UPFM068185 5 | ENSMUST00000 108089.7 | Bag1 | ENSMUSG00 000028416 | BCL2-associated athanogene 1 Source MGI Symbol Acc MGI 108047 |
| A06 | UPFM090386 1 | ENSMUST00000 211195.1 | Bax | ENSMUSG00 000003873 | BCL2-associated X protein Source MGI Symbol Acc MGI 99702 |
| A07 | UPFM094693 3 | ENSMUST00000 002152.12 | Bbc3 | ENSMUSG00 000002083 | BCL2 binding component 3 Source MGI Symbol Acc MGI 2181667 |
| A08 | UPFM063585 3 | ENSMUST00000 112751.1 | Bcl2 | ENSMUSG00 000057329 | B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138 |
| A09 | UPFM069030 4 | ENSMUST00000 161594.1 | Bid | ENSMUSG00 000004446 | BH3 interacting domain death agonist Source MGI Symbol Acc MGI 108093 |
| A10 | UPFM085491 3 | ENSMUST00000 081387.10 | Birc5 | ENSMUSG00 000017716 | baculoviral IAP repeat-containing 5 Source MGI Symbol Acc MGI 1203517 |
| A11 | UPFM076925 5 | ENSMUST00000 148970.1 | Bnip3 | ENSMUSG00 000078566 | BCL2/adenovirus E1B interacting protein 3 Source MGI Symbol Acc MGI 109326 |
| A12 | UPFM098990 7 | ENSMUST00000 156843.1 | Brca1 | ENSMUSG00 000017146 | breast cancer 1, early onset Source MGI Symbol Acc MGI 104537 |
| B01 | UPFM077452 2 | ENSMUST00000 201226.1 | Brca2 | ENSMUSG00 000041147 | breast cancer 2, early onset Source MGI Symbol Acc MGI 109337 |
| B02 | UPFM082779 6 | ENSMUST00000 020692.6 | Btg2 | ENSMUSG00 000020423 | B cell translocation gene 2, anti-proliferative Source MGI Symbol Acc MGI 108384 |
| B03 | UPFM092598 0 | ENSMUST00000 139930.7 | Casp2 | ENSMUSG00 000029863 | caspase 2 Source MGI Symbol Acc MGI 97295 |
| B04 | UPFM069330 9 | ENSMUST00000 097805.10 | Casp9 | ENSMUSG00 000028914 | caspase 9 Source MGI Symbol Acc MGI 1277950 |
| B05 | UPFM091925 2 | ENSMUST00000 147790.1 | Ccnb1 | ENSMUSG00 000041431 | cyclin B1 Source MGI Symbol Acc MGI 88302 |
| B06 | UPFM097782 7 | ENSMUST00000 130329.1 | Ccne1 | ENSMUSG00 000002068 | cyclin E1 Source MGI Symbol Acc MGI 88316 |
| B07 | UPFM065653 4 | ENSMUST00000 020576.7 | Ccng1 | ENSMUSG00 000020326 | cyclin G1 Source MGI Symbol Acc MGI 102890 |
| B08 | UPFM093965 8 | ENSMUST00000 022030.10 | Ccnh | ENSMUSG00 000021548 | cyclin H Source MGI Symbol Acc MGI 1913921 |
| B09 | UPFM065474 7 | ENSMUST00000 094324.7 | Cdc25a | ENSMUSG00 000032477 | cell division cycle 25A Source MGI Symbol Acc MGI 103198 |
| B10 | UPFM096467 5 | ENSMUST00000 237620.1 | Cdc25c | ENSMUSG00 000044201 | cell division cycle 25C Source MGI Symbol Acc MGI 88350 |
| B11 | UPFM081094 4 | ENSMUST00000 152448.1 | Cdk1 | ENSMUSG00 000019942 | cyclin-dependent kinase 1 Source MGI Symbol Acc MGI 88351 |
| B12 | UPFM094816 9 | ENSMUST00000 140254.7 | Cdk4 | ENSMUSG00 000006728 | cyclin-dependent kinase 4 Source MGI Symbol Acc MGI 88357 |
| C01 | UPFM086779 1 | ENSMUST00000 122348.2 | Cdkn1a | ENSMUSG00 000023067 | cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556 |
| C02 | UPFM070277 6 | ENSMUST00000 107131.1 | Cdkn2a | ENSMUSG00 000044303 | cyclin dependent kinase inhibitor 2A Source MGI Symbol Acc MGI 104738 |
| C03 | UPFM098368 4 | ENSMUST00000 174105.7 | Chek1 | ENSMUSG00 000032113 | checkpoint kinase 1 Source MGI Symbol Acc MGI 1202065 |
| C04 | UPFM096690 4 | ENSMUST00000 066160.2 | Chek2 | ENSMUSG00 000029521 | checkpoint kinase 2 Source MGI Symbol Acc MGI 1355321 |
| C05 | UPFM073143 9 | ENSMUST00000 220279.1 | Cradd | ENSMUSG00 000045867 | CASP2 and RIPK1 domain containing adaptor with death domain Source MGI Symbol Acc MGI 1336168 |
| C06 | UPFM086489 0 | ENSMUST00000 182799.1 | Cul9 | ENSMUSG00 000040327 | cullin 9 Source MGI Symbol Acc MGI 1925559 |
| C07 | UPFM088410 1 | ENSMUST00000 077453.12 | Dapk1 | ENSMUSG00 000021559 | death associated protein kinase 1 Source MGI Symbol Acc MGI 1916885 |
| C08 | UPFM079807 4 | ENSMUST00000 178110.2 | Dnmt1 | ENSMUSG00 000004099 | DNA methyltransferase (cytosine-5) 1 Source MGI Symbol Acc MGI 94912 |
| C09 | UPFM066128 0 | ENSMUST00000 000894.5 | E2f1 | ENSMUSG00 000027490 | E2F transcription factor 1 Source MGI Symbol Acc MGI 101941 |
| C10 | UPFM062273 9 | ENSMUST00000 222730.1 | E2f3 | ENSMUSG00 000016477 | E2F transcription factor 3 Source MGI Symbol Acc MGI 1096340 |
| | UPFM080878 | ENSMUST00000 | | ENSMUSG00 | |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|-----------------|---------------------------|---------|------------------------|---|
| C11 | 1 | 125984.1 | Egfr | 000020122 | epidermal growth factor receptor Source MGI Symbol Acc MGI 95294 |
| C12 | UPFM085434 3 | ENSMUST00000 165033.1 | Egr1 | ENSMUSG00 000038418 | early growth response 1 Source MGI Symbol Acc MGI 95295 |
| D01 | UPFM063958 2 | ENSMUST00000 185967.2 | Ep300 | ENSMUSG00 000055024 | E1A binding protein p300 Source MGI Symbol Acc MGI 1276116 |
| D02 | UPFM083835 0 | ENSMUST00000 160909.1 | Ercc1 | ENSMUSG00 000003549 | excision repair cross-complementing rodent repair deficiency, complementation group 1 Source MGI Symbol Acc MGI 95412 |
| D03 | UPFM083226 3 | ENSMUST00000 105590.7 | Esr1 | ENSMUSG00 000019768 | estrogen receptor 1 (alpha) Source MGI Symbol Acc MGI 1352467 |
| D04 | UPFM075310 6 | ENSMUST00000 033394.7 | Fadd | ENSMUSG00 000031077 | Fas (TNFRSF6)-associated via death domain Source MGI Symbol Acc MGI 109324 |
| D05 | UPFM099578 7 | ENSMUST00000 235709.1 | Fas | ENSMUSG00 000024778 | Fas (TNF receptor superfamily member 6) Source MGI Symbol Acc MGI 95484 |
| D06 | UPFM074944 2 | ENSMUST00000 193648.1 | FasL | ENSMUSG00 000000817 | Fas ligand (TNF superfamily, member 6) Source MGI Symbol Acc MGI 99255 |
| D07 | UPFM088301 1 | ENSMUST00000 056974.3 | Foxo3 | ENSMUSG00 000048756 | forkhead box O3 Source MGI Symbol Acc MGI 1890081 |
| D08 | UPFM091095 4 | ENSMUST00000 204282.1 | Gadd45a | ENSMUSG00 000036390 | growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc MGI 107799 |
| D09 | UPFM090240 6 | ENSMUST00000 110461.7 | Hif1a | ENSMUSG00 000021109 | hypoxia inducible factor 1, alpha subunit Source MGI Symbol Acc MGI 106918 |
| D10 | UPFM072909 9 | ENSMUST00000 195978.4 | Il6 | ENSMUSG00 000025746 | interleukin 6 Source MGI Symbol Acc MGI 96559 |
| D11 | UPFM097521 6 | ENSMUST00000 107094.1 | Jun | ENSMUSG00 000052684 | jun proto-oncogene Source MGI Symbol Acc MGI 96646 |
| D12 | UPFM100079 9 | ENSMUST00000 032399.11 | Kras | ENSMUSG00 000030265 | Kirsten rat sarcoma viral oncogene homolog Source MGI Symbol Acc MGI 96680 |
| E01 | UPFM089884 4 | ENSMUST00000 095476.5 | Lig4 | ENSMUSG00 000049717 | ligase IV, DNA, ATP-dependent Source MGI Symbol Acc MGI 1335098 |
| E02 | UPFM071261 7 | ENSMUST00000 178686.1 | Mcl1 | ENSMUSG00 000038612 | myeloid cell leukemia sequence 1 Source MGI Symbol Acc MGI 101769 |
| E03 | UPFM075219 5 | ENSMUST00000 137102.7 | Mdm2 | ENSMUSG00 000020184 | transformed mouse 3T3 cell double minute 2 Source MGI Symbol Acc MGI 96952 |
| E04 | UPFM082980 1 | ENSMUST00000 067398.12 | Mdm4 | ENSMUSG00 000054387 | transformed mouse 3T3 cell double minute 4 Source MGI Symbol Acc MGI 107934 |
| E05 | UPFM084504 4 | ENSMUST00000 135695.1 | Mlh1 | ENSMUSG00 000032498 | mutL homolog 1 Source MGI Symbol Acc MGI 101938 |
| E06 | UPFM098287 7 | ENSMUST00000 173097.7 | Msh2 | ENSMUSG00 000024151 | mutS homolog 2 Source MGI Symbol Acc MGI 101816 |
| E07 | UPFM081421 4 | ENSMUST00000 161976.7 | Myc | ENSMUSG00 000022346 | myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250 |
| E08 | UPFM063561 8 | ENSMUST00000 072514.2 | Myod1 | ENSMUSG00 000009471 | myogenic differentiation 1 Source MGI Symbol Acc MGI 97275 |
| E09 | UPFM099655 1 | ENSMUST00000 122917.7 | Nf1 | ENSMUSG00 000020716 | neurofibromin 1 Source MGI Symbol Acc MGI 97306 |
| E10 | 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 |
| E11 | UPFM069101 9 | ENSMUST00000 140338.1 | Pcna | ENSMUSG00 000027342 | proliferating cell nuclear antigen Source MGI Symbol Acc MGI 97503 |
| E12 | UPFM070769 2 | ENSMUST00000 025399.8 | Pmaip1 | ENSMUSG00 000024521 | phorbol-12-myristate-13-acetate-induced protein 1 Source MGI Symbol Acc MGI 1930146 |
| F01 | UPFM093744 8 | ENSMUST00000 020835.15 | Ppm1d | ENSMUSG00 000020525 | protein phosphatase 1D magnesium-dependent, delta isoform Source MGI Symbol Acc MGI 1858214 |
| F02 | UPFM092366 4 | ENSMUST00000 173170.1 | Prc1 | ENSMUSG00 000038943 | protein regulator of cytokinesis 1 Source MGI Symbol Acc MGI 1858961 |
| F03 | UPFM091650 2 | ENSMUST00000 100302.3 | Prkca | ENSMUSG00 000050965 | protein kinase C, alpha Source MGI Symbol Acc MGI 97595 |
| F04 | UPFM089742 6 | ENSMUST00000 013807.7 | Pten | ENSMUSG00 000013663 | phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583 |
| F05 | UPFM092901 7 | ENSMUST00000 020687.14 | Pttg1 | ENSMUSG00 000020415 | pituitary tumor-transforming gene 1 Source MGI Symbol Acc MGI 1353578 |
| F06 | UPFM077278 8 | ENSMUST00000 022701.6 | Rb1 | ENSMUSG00 000022105 | RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874 |
| F07 | UPFM081915 5 | ENSMUST00000 025867.5 | Rela | ENSMUSG00 000024927 | v-rel reticuloendotheliosis viral oncogene homolog A (avian) Source MGI Symbol Acc MGI 103290 |
| F08 | UPFM090429 7 | ENSMUST00000 100089.2 | Rprm | ENSMUSG00 000075334 | reprimin, TP53 dependent G2 arrest mediator candidate Source MGI Symbol Acc MGI 1915124 |
| F09 | UPFM094510 0 | ENSMUST00000 112729.2 | Serpib5 | ENSMUSG00 000067006 | serine (or cysteine) peptidase inhibitor, clade B, member 5 Source MGI Symbol Acc MGI 109579 |
| F10 | UPFM068441 0 | ENSMUST00000 030724.8 | Sesn2 | ENSMUSG00 000028893 | sestrin 2 Source MGI Symbol Acc MGI 2651874 |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|-----------------|---------------------------|-----------|------------------------|--|
| F11 | UPFM094111 4 | ENSMUST00000 057311.3 | Sfn | ENSMUSG00 000047281 | stratifin Source MGI Symbol Acc MGI 1891831 |
| F12 | UPFM091465 7 | ENSMUST00000 177694.7 | Sirt1 | ENSMUSG00 000020063 | sirtuin 1 Source MGI Symbol Acc MGI 2135607 |
| G01 | UPFM071531 5 | ENSMUST00000 186574.6 | Stat1 | ENSMUSG00 000026104 | signal transducer and activator of transcription 1 Source MGI Symbol Acc MGI 103063 |
| G02 | UPFM063847 1 | ENSMUST00000 025263.14 | Tnf | ENSMUSG00 000024401 | tumor necrosis factor Source MGI Symbol Acc MGI 104798 |
| G03 | UPFM064695 8 | ENSMUST00000 022663.6 | Tnfrsf10b | ENSMUSG00 000022074 | tumor necrosis factor receptor superfamily, member 10b Source MGI Symbol Acc MGI 1341090 |
| G04 | UPFM083029 0 | ENSMUST00000 028234.11 | Traf1 | ENSMUSG00 000026875 | TNF receptor-associated factor 1 Source MGI Symbol Acc MGI 101836 |
| G05 | UPFM066913 3 | ENSMUST00000 171247.7 | Trp53 | ENSMUSG00 000059552 | transformation related protein 53 Source MGI Symbol Acc MGI 98834 |
| G06 | UPFM065980 6 | ENSMUST00000 191804.1 | Trp53bp2 | ENSMUSG00 000026510 | transformation related protein 53 binding protein 2 Source MGI Symbol Acc MGI 2138319 |
| G07 | UPFM062121 7 | ENSMUST00000 115308.8 | Trp63 | ENSMUSG00 000022510 | transformation related protein 63 Source MGI Symbol Acc MGI 1330810 |
| G08 | UPFM092417 3 | ENSMUST00000 105643.7 | Trp73 | ENSMUSG00 000029026 | transformation related protein 73 Source MGI Symbol Acc MGI 1336991 |
| G09 | UPFM100747 1 | ENSMUST00000 111098.7 | Wt1 | ENSMUSG00 000016458 | Wilms tumor 1 homolog Source MGI Symbol Acc MGI 98968 |
| G10 | UPFM094070 4 | ENSMUST00000 159199.7 | Xrcc4 | ENSMUSG00 000021615 | X-ray repair complementing defective repair in Chinese hamster cells 4 Source MGI Symbol Acc MGI 1333799 |
| G11 | UPFM083469 4 | ENSMUST00000 027379.8 | Xrcc5 | ENSMUSG00 000026187 | X-ray repair complementing defective repair in Chinese hamster cells 5 Source MGI Symbol Acc MGI 104517 |
| G12 | UPFM077599 7 | ENSMUST00000 139660.1 | Zmat3 | ENSMUSG00 000027663 | zinc finger matrin type 3 Source MGI Symbol Acc MGI 1195270 |
| 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 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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