

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

Mouse Cytoskeleton Regulators

Cat. no. 249950 SBMM-088ZA

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA PCR Focus Panels are shipped at ambient temperature. Immediately upon receipt, they should be stored 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 PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova SYBR® Green PCR Kit (Mastermix) for PCR.

Panel layout (96-well): QuantiNova LNA PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. Refer to the QuantiNova LNA PCR System Handbook at www.qiagen.com for further details.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|----------|---------|--------|--------|----------|---------|----------|----------|----------|--------|----------|----------|
| A | Actr2 | Actr3 | Arap1 | Arfp2 | Arhgap6 | Arhgdib | Arhgef11 | Arpc1b | Arpc2 | Arpc3 | Arpc4 | Arpc5 |
| B | Aurka | Aurkb | Aurkc | Baiap2 | Cald1 | Colm1 | Cask | Ccna1 | Ccnb2 | Cdc42 | Cdc42bpa | Cdc42ep2 |
| C | Cdc42ep3 | Cdk5 | Cdk5r1 | Cfil1 | Cit | Clasp1 | Clasp2 | Clip1 | Clip2 | Crk | Ctnn | Cyfp1 |
| D | Cyfp2 | Diaph1 | Dslm | Ezr | Fnbp11 | Fscn2 | Gsn | Iqgap1 | Iqgap2 | Limk1 | Limk2 | Llg1 |
| E | Mad1 | Map3k11 | Mapk13 | Mapre1 | Mapre2 | Mopt | Mark2 | Mid1 | Msn | Map4 | Mylk | Mylk2 |
| F | Nck1 | Nck2 | Pak1 | Pak4 | Pfn2 | Phldb2 | Pikfyve | Ppp1r12a | Ppp1r12b | Ppp3ca | Ppp3cb | Rac1 |
| G | Racgap1 | Rdx | Rhoa | Rock1 | Shh1 | Shh2 | Stmn1 | Tiam1 | Vasp | Was | Wasf1 | Wasf |
| H | Actb | B2m | Gapdh | Gusb | Hsp90ab1 | MGDC | QIC | QIC | QIC | PPC | PPC | PPC |

Gene table: QuantiNova LNA PCR Focus Panel

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|------------------------|----------|-------------------|---|
| A01 | SBM0738261 | ENSMUST0000000137.7 | Actr2 | ENSMUSG0000020152 | ARP2 actin-related protein 2 Source MGI Symbol Acc MGI 1913963 |
| A02 | SBM0673509 | ENSMUST00000027579.16 | Actr3 | ENSMUSG0000026341 | ARP3 actin-related protein 3 Source MGI Symbol Acc MGI 1921367 |
| A03 | SBM0706580 | ENSMUST000000155754.1 | Arap1 | ENSMUSG0000032812 | ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 1 Source MGI Symbol Acc MGI 1916960 |
| A04 | SBM0900202 | ENSMUST000000142173.7 | Arfp2 | ENSMUSG0000030881 | ADP-ribosylation factor interacting protein 2 Source MGI Symbol Acc MGI 1924182 |
| A05 | SBM1014144 | ENSMUST000000139146.7 | Arhgap6 | ENSMUSG0000031355 | Rho GTPase activating protein 6 Source MGI Symbol Acc MGI 1196332 |
| A06 | SBM0987438 | ENSMUST000000032344.11 | Arhgdib | ENSMUSG0000030220 | Rho, GDP dissociation inhibitor (GDI) beta Source MGI Symbol Acc MGI 101940 |
| A07 | SBM0825604 | ENSMUST000000142799.1 | Arhgef11 | ENSMUSG0000041977 | Rho guanine nucleotide exchange factor (GEF) 11 Source MGI Symbol Acc MGI 2441869 |
| A08 | SBM0740267 | ENSMUST000000138922.1 | Arpc1b | ENSMUSG0000029622 | actin related protein 2/3 complex, subunit 1B Source MGI Symbol Acc MGI 1343142 |
| A09 | SBM0761299 | ENSMUST000000113820.8 | Arpc2 | ENSMUSG0000006304 | actin related protein 2/3 complex, subunit 2 Source MGI Symbol Acc MGI 1923959 |
| A10 | SBM0896448 | ENSMUST000000102525.10 | Arpc3 | ENSMUSG0000029465 | actin related protein 2/3 complex, subunit 3 Source MGI Symbol Acc MGI 1928375 |
| A11 | SBM0748032 | ENSMUST000000171058.7 | Arpc4 | ENSMUSG0000079426 | actin related protein 2/3 complex, subunit 4 Source MGI Symbol Acc MGI 1915339 |
| A12 | SBM0916924 | ENSMUST000000077755.10 | Arpc5 | ENSMUSG0000008475 | actin related protein 2/3 complex, subunit 5 Source MGI Symbol Acc MGI 1915021 |
| B01 | SBM0964097 | ENSMUST000000028997.7 | Aurka | ENSMUSG0000027496 | aurora kinase A Source MGI Symbol Acc MGI 894678 |
| B02 | SBM0735299 | ENSMUST000000126576.1 | Aurkb | ENSMUSG0000020897 | aurora kinase B Source MGI Symbol Acc MGI 107168 |
| B03 | SBM0824224 | ENSMUST000000208518.1 | Aurkc | ENSMUSG0000070837 | aurora kinase C Source MGI Symbol Acc MGI 1321119 |
| B04 | SBM0869408 | ENSMUST000000106231.7 | Baiap2 | ENSMUSG0000025372 | brain-specific angiogenesis inhibitor 1-associated protein 2 Source MGI Symbol Acc MGI 2137336 |
| B05 | SBM0900619 | ENSMUST000000115027.7 | Cald1 | ENSMUSG0000029761 | caldesmon 1 Source MGI Symbol Acc MGI 88250 |
| B06 | SBM0858583 | ENSMUST000000153524.1 | Calm1 | ENSMUSG0000001175 | calmodulin 1 Source MGI Symbol Acc MGI 88251 |
| B07 | SBM1044698 | ENSMUST000000132240.1 | Cask | ENSMUSG0000031012 | calcium/calmodulin-dependent serine protein kinase (MAGUK family) Source MGI Symbol Acc MGI 1309489 |
| B08 | SBM0877611 | ENSMUST000000197238.4 | Ccna1 | ENSMUSG0000027793 | cyclin A1 Source MGI Symbol Acc MGI 108042 |
| B09 | SBM0976587 | ENSMUST000000034742.7 | Ccnb2 | ENSMUSG0000032218 | cyclin B2 Source MGI Symbol Acc MGI 88311 |
| B10 | SBM1071094 | ENSMUST000000030417.9 | Cdc42 | ENSMUSG0000006699 | cell division cycle 42 Source MGI Symbol Acc MGI 106211 |
| B11 | SBM1051321 | ENSMUST000000145181.1 | Cdc42bpa | ENSMUSG0000026490 | CDC42 binding protein kinase alpha Source MGI Symbol Acc MGI 2441841 |
| B12 | SBM0950492 | ENSMUST000000055458.5 | Cdc42ep2 | ENSMUSG0000045664 | CDC42 effector protein (Rho GTPase binding) 2 Source MGI Symbol Acc MGI 1929744 |
| C01 | SBM0874241 | ENSMUST000000068958.8 | Cdc42ep3 | ENSMUSG0000036533 | CDC42 effector protein (Rho GTPase binding) 3 Source MGI Symbol Acc MGI 2384718 |
| C02 | SBM0737657 | ENSMUST000000198990.1 | Cdk5 | ENSMUSG0000028969 | cyclin-dependent kinase 5 Source MGI Symbol Acc MGI 101765 |
| C03 | SBM0768274 | ENSMUST000000147694.1 | Cdk5r1 | ENSMUSG0000048895 | cyclin-dependent kinase 5, regulatory subunit 1 (p35) Source MGI Symbol Acc MGI 101764 |
| C04 | SBM1037893 | ENSMUST000000236645.1 | Cfl1 | ENSMUSG0000056201 | cofilin 1, non-muscle Source MGI Symbol Acc MGI 101757 |
| C05 | SBM0812285 | ENSMUST000000102560.6 | Cit | ENSMUSG0000029516 | citron Source MGI Symbol Acc MGI 105313 |
| C06 | SBM1032735 | ENSMUST000000188710.6 | Clasp1 | ENSMUSG0000064302 | CLIP associating protein 1 Source MGI Symbol Acc MGI 1923957 |
| C07 | SBM1011115 | ENSMUST000000166734.9 | Clasp2 | ENSMUSG0000033392 | CLIP associating protein 2 Source MGI Symbol Acc MGI 1923749 |
| C08 | SBM1017917 | ENSMUST000000137363.7 | Clip1 | ENSMUSG0000049550 | CAP-GLY domain containing linker protein 1 Source MGI Symbol Acc MGI 1928401 |
| C09 | SBM0678127 | ENSMUST000000202408.1 | Clip2 | ENSMUSG0000063146 | CAP-GLY domain containing linker protein 2 Source MGI Symbol Acc MGI 1313136 |
| C10 | SBM0856740 | ENSMUST000000108425.7 | Crk | ENSMUSG0000017776 | v-crk avian sarcoma virus CT10 oncogene homolog Source MGI Symbol Acc MGI 88508 |
| | | ENSMUST000000 | | ENSMUSG00 | |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|-----------------------|----------|--------------------|---|
| C11 | SBM0987219 | 033407.12 | Ctn | 000031078 | cortactin Source MGI Symbol Acc MGI 99695 |
| C12 | SBM0805533 | ENSMUST00000173267.7 | Cyfp1 | ENSMUSG0000030447 | cytoplasmic FMR1 interacting protein 1 Source MGI Symbol Acc MGI 1338801 |
| D01 | SBM1040184 | ENSMUST00000093165.11 | Cyfp2 | ENSMUSG00000020340 | cytoplasmic FMR1 interacting protein 2 Source MGI Symbol Acc MGI 1924134 |
| D02 | SBM0886537 | ENSMUST00000129688.1 | Diaph1 | ENSMUSG00000024456 | diaphanous related formin 1 Source MGI Symbol Acc MGI 1194490 |
| D03 | SBM0753656 | ENSMUST00000103172.3 | Dstn | ENSMUSG00000015932 | destrin Source MGI Symbol Acc MGI 1929270 |
| D04 | SBM0980731 | ENSMUST00000064234.6 | Ezr | ENSMUSG00000052397 | ezrin Source MGI Symbol Acc MGI 98931 |
| D05 | SBM0709542 | ENSMUST00000162947.1 | Fnbp1l | ENSMUSG00000039735 | formin binding protein 1-like Source MGI Symbol Acc MGI 1925642 |
| D06 | SBM1016639 | ENSMUST00000026445.2 | Fscn2 | ENSMUSG00000025380 | fascin actin-bundling protein 2 Source MGI Symbol Acc MGI 2443337 |
| D07 | SBM0793570 | ENSMUST00000142324.7 | Gsn | ENSMUSG00000026879 | gelsolin Source MGI Symbol Acc MGI 95851 |
| D08 | SBM0952609 | ENSMUST00000205813.1 | lqgap1 | ENSMUSG00000030536 | IQ motif containing GTPase activating protein 1 Source MGI Symbol Acc MGI 1352757 |
| D09 | SBM0900823 | ENSMUST00000068603.6 | lqgap2 | ENSMUSG00000021676 | IQ motif containing GTPase activating protein 2 Source MGI Symbol Acc MGI 2449975 |
| D10 | SBM0769302 | ENSMUST00000134093.1 | Limk1 | ENSMUSG00000029674 | LIM-domain containing, protein kinase Source MGI Symbol Acc MGI 104572 |
| D11 | SBM0781004 | ENSMUST00000101638.3 | Limk2 | ENSMUSG00000020451 | LIM motif-containing protein kinase 2 Source MGI Symbol Acc MGI 1197517 |
| D12 | SBM0791464 | ENSMUST00000052346.9 | Llg1 | ENSMUSG00000020536 | LLGL1 scribble cell polarity complex component Source MGI Symbol Acc MGI 102682 |
| E01 | SBM0982083 | ENSMUST00000082108.11 | Macf1 | ENSMUSG00000028649 | microtubule-actin crosslinking factor 1 Source MGI Symbol Acc MGI 108559 |
| E02 | SBM0821245 | ENSMUST00000004156.9 | Map3k11 | ENSMUSG00000004054 | mitogen-activated protein kinase kinase kinase 11 Source MGI Symbol Acc MGI 1346880 |
| E03 | SBM1018712 | ENSMUST00000233051.1 | Mapk13 | ENSMUSG00000004864 | mitogen-activated protein kinase 13 Source MGI Symbol Acc MGI 1346864 |
| E04 | SBM0783545 | ENSMUST00000123570.1 | Mapre1 | ENSMUSG00000027479 | microtubule-associated protein, RP/EB family, member 1 Source MGI Symbol Acc MGI 891995 |
| E05 | SBM0855753 | ENSMUST00000155708.7 | Mapre2 | ENSMUSG00000024277 | microtubule-associated protein, RP/EB family, member 2 Source MGI Symbol Acc MGI 106271 |
| E06 | SBM1092220 | ENSMUST00000106992.9 | Mapt | ENSMUSG00000018411 | microtubule-associated protein tau Source MGI Symbol Acc MGI 97180 |
| E07 | SBM0852288 | ENSMUST00000025921.14 | Mark2 | ENSMUSG00000024969 | MAP/microtubule affinity regulating kinase 2 Source MGI Symbol Acc MGI 99638 |
| E08 | SBM0741474 | ENSMUST00000036753.11 | Mid1 | ENSMUSG00000035299 | midline 1 Source MGI Symbol Acc MGI 1100537 |
| E09 | SBM1071206 | ENSMUST00000149985.7 | Msn | ENSMUSG00000031207 | moesin Source MGI Symbol Acc MGI 97167 |
| E10 | SBM0970000 | ENSMUST00000199548.4 | Map4 | ENSMUSG00000027479 | microtubule-associated protein 4 Source MGI Symbol Acc MGI 97178 |
| E11 | SBM0720049 | ENSMUST00000231589.1 | Mylk | ENSMUSG00000022836 | myosin, light polypeptide kinase Source MGI Symbol Acc MGI 894806 |
| E12 | SBM0689951 | ENSMUST00000028970.7 | Mylk2 | ENSMUSG00000027470 | myosin, light polypeptide kinase 2, skeletal muscle Source MGI Symbol Acc MGI 2139434 |
| F01 | SBM0730618 | ENSMUST00000188670.1 | Nck1 | ENSMUSG00000032475 | non-catalytic region of tyrosine kinase adaptor protein 1 Source MGI Symbol Acc MGI 109601 |
| F02 | SBM1084012 | ENSMUST00000114744.2 | Nck2 | ENSMUSG00000066877 | non-catalytic region of tyrosine kinase adaptor protein 2 Source MGI Symbol Acc MGI 1306821 |
| F03 | SBM0746109 | ENSMUST00000033040.11 | Pak1 | ENSMUSG00000030774 | p21 (RAC1) activated kinase 1 Source MGI Symbol Acc MGI 1339975 |
| F04 | SBM0701424 | ENSMUST00000108283.7 | Pak4 | ENSMUSG00000030602 | p21 (RAC1) activated kinase 4 Source MGI Symbol Acc MGI 1917834 |
| F05 | SBM0900355 | ENSMUST00000066882.9 | Pfn2 | ENSMUSG00000027805 | profilin 2 Source MGI Symbol Acc MGI 97550 |
| F06 | SBM0966865 | ENSMUST00000151300.1 | Phldb2 | ENSMUSG00000033149 | pleckstrin homology like domain, family B, member 2 Source MGI Symbol Acc MGI 2444981 |
| F07 | SBM0997086 | ENSMUST00000186404.6 | Pikfyve | ENSMUSG00000025949 | phosphoinositide kinase, FYVE type zinc finger containing Source MGI Symbol Acc MGI 1335106 |
| F08 | SBM0906016 | ENSMUST00000218161.1 | Ppp1r12a | ENSMUSG00000019907 | protein phosphatase 1, regulatory subunit 12A Source MGI Symbol Acc MGI 1309528 |
| F09 | SBM1003940 | ENSMUST00000168381.7 | Ppp1r12b | ENSMUSG00000073557 | protein phosphatase 1, regulatory subunit 12B Source MGI Symbol Acc MGI 1916417 |
| F10 | SBM1084664 | ENSMUST00000070198.13 | Ppp3ca | ENSMUSG00000028161 | protein phosphatase 3, catalytic subunit, alpha isoform Source MGI Symbol Acc MGI 107164 |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|-----------------------|----------|--------------------|---|
| F11 | SBM1078561 | ENSMUST00000159027.7 | PPP3cb | ENSMUSG00000021816 | protein phosphatase 3, catalytic subunit, beta isoform Source MGI Symbol Acc MGI 107163 |
| F12 | SBM0680406 | ENSMUST00000145709.7 | Rac1 | ENSMUSG0000001847 | Rac family small GTPase 1 Source MGI Symbol Acc MGI 97845 |
| G01 | SBM0710413 | ENSMUST00000169810.7 | Racgap1 | ENSMUSG00000023015 | Rac GTPase-activating protein 1 Source MGI Symbol Acc MGI 1349423 |
| G02 | SBM0856664 | ENSMUST00000061352.10 | Rdx | ENSMUSG00000032050 | radixin Source MGI Symbol Acc MGI 97887 |
| G03 | SBM0943773 | ENSMUST00000194701.5 | Rhoa | ENSMUSG0000007815 | ras homolog family member A Source MGI Symbol Acc MGI 1096342 |
| G04 | SBM0761820 | ENSMUST00000067947.6 | Rock1 | ENSMUSG00000024290 | Rho-associated coiled-coil containing protein kinase 1 Source MGI Symbol Acc MGI 107927 |
| G05 | SBM1000219 | ENSMUST00000159510.1 | Ssh1 | ENSMUSG00000042121 | slingshot protein phosphatase 1 Source MGI Symbol Acc MGI 2686240 |
| G06 | SBM0704267 | ENSMUST00000180554.1 | Ssh2 | ENSMUSG00000037926 | slingshot protein phosphatase 2 Source MGI Symbol Acc MGI 2679255 |
| G07 | SBM0820556 | ENSMUST00000130253.1 | Stmn1 | ENSMUSG00000028832 | stathmin 1 Source MGI Symbol Acc MGI 96739 |
| G08 | SBM0797666 | ENSMUST00000144691.8 | Tiam1 | ENSMUSG0000002489 | T cell lymphoma invasion and metastasis 1 Source MGI Symbol Acc MGI 103306 |
| G09 | SBM0686532 | ENSMUST00000032561.8 | Vasp | ENSMUSG00000030403 | vasodilator-stimulated phosphoprotein Source MGI Symbol Acc MGI 109268 |
| G10 | SBM0977884 | ENSMUST00000033505.6 | Was | ENSMUSG00000031165 | Wiskott-Aldrich syndrome Source MGI Symbol Acc MGI 105059 |
| G11 | SBM1018765 | ENSMUST00000105509.1 | Wasf1 | ENSMUSG00000019831 | WAS protein family, member 1 Source MGI Symbol Acc MGI 1890563 |
| G12 | SBM0962503 | ENSMUST00000041737.7 | Wasl | ENSMUSG00000029684 | Wiskott-Aldrich syndrome-like (human) Source MGI Symbol Acc MGI 1920428 |
| H01 | SBM1220560 | ENSMUST00000100497.10 | Actb | ENSMUSG00000029580 | actin, beta Source MGI Symbol Acc MGI 87904 |
| H02 | SBM0675336 | ENSMUST00000102476.4 | B2m | ENSMUSG00000060802 | beta-2 microglobulin Source MGI Symbol Acc MGI 88127 |
| H03 | SBM1220562 | ENSMUST00000117757.8 | Gapdh | ENSMUSG00000057666 | glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640 |
| H04 | SBM1220563 | ENSMUST00000026613.13 | Gusb | ENSMUSG00000025534 | glucuronidase, beta Source MGI Symbol Acc MGI 95872 |
| H05 | SBM1220564 | ENSMUST00000166469.7 | Hsp90ab1 | ENSMUSG00000023944 | heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247 |
| H06 | SBM1218554 | Sybr_MGDC | MGDC | Sybr_MGDC | Mouse Genomic DNA Contamination |
| H07 | SBH1218551 | Sybr_QIC | QIC | Sybr_QIC | QuantiNova Internal Control |
| H08 | SBH1218551 | Sybr_QIC | QIC | Sybr_QIC | QuantiNova Internal Control |
| H09 | SBH1218551 | Sybr_QIC | QIC | Sybr_QIC | QuantiNova Internal Control |
| H10 | SBH1218550 | Sybr_PPC | PPC | Sybr_PPC | Positive PCR Control |
| H11 | SBH1218550 | Sybr_PPC | PPC | Sybr_PPC | Positive PCR Control |
| H12 | SBH1218550 | Sybr_PPC | PPC | Sybr_PPC | Positive PCR Control |



Related products

| Product | Contents | Cat. no. |
|--|--|----------|
| QuantiNova LNA PCR QC Panel | These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats | 249940 |
| 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 SYBR Green RT-PCR Kit (100)* | For 100 x 20 μ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 μ l QuantiNova SYBR Green 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 | 208152 |
| QuantiNova SYBR Green PCR Kit (100)* | For 100 x 20 μ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l QN ROX Reference Dye, 1.9 ml Water | 208052 |

*Larger kit sizes available.

The QuantiNova LNA 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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