

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

Mouse Insulin Resistance

Cat. no. 249950 SBMM-156ZR

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 (Rotor-Gene): QuantiNova LNA 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 PCR System Handbook at www.qiagen.com for further details.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---------|--------|-------|----------|----------|---------|---------|-------|----------|----------|-------|----------|
| A | Acaca | Acacb | Acs1 | Acs14 | Adipoq | Adipor1 | Adipor2 | Akt3 | Alox5 | Apoe | Casp1 | Ccl12 |
| B | Ccr4 | Ccr5 | Ccr6 | Cd36 | Cd3e | Cebpa | Chuk | Cnbp | Crtf2 | Cs | Cxcr3 | Cxcr4 |
| C | Adgre1 | Fabp4 | Fasn | Cys1 | Hk2 | Ifng | Igf1 | Igf1r | Ikbb | Il18r1 | Il1b | Il1r1 |
| D | Il23r | Il6 | Insr | Irs1 | Irs2 | Jak2 | Lep | Lepr | Lipe | Lpl | Lta4h | Map2k1 |
| E | Mapk3 | Mapk9 | Mtor | Nampt | Nkbia | Nlrp3 | Olr1 | Pck1 | Pde3b | Pdk2 | Pdx1 | Pik3ca |
| F | Pik3r1 | Ppara | Pparg | Ppargc1a | Ptpn1 | Pycard | Rbp4 | Rela | Retn | Rps6kb1 | Scd1 | Serpine1 |
| G | Slc27a1 | Slc2a4 | Socs3 | Srebf1 | Srebf2 | Stat3 | Tlr4 | Tnf | Tnfrsf1a | Tnfrsf1b | Ucp1 | Vldlr |
| 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 | SBM0933576 | ENSMUST00000133811.2 | Acaca | ENSMUSG0000020532 | acetyl-Coenzyme A carboxylase alpha Source MGI Symbol Acc MGI 108451 |
| A02 | SBM0840405 | ENSMUST00000031583.14 | Acacb | ENSMUSG0000042010 | acetyl-Coenzyme A carboxylase beta Source MGI Symbol Acc MGI 2140940 |
| A03 | SBM0793742 | ENSMUST00000211644.1 | Acs1 | ENSMUSG0000018796 | acyl-CoA synthetase long-chain family member 1 Source MGI Symbol Acc MGI 102797 |
| A04 | SBM0931597 | ENSMUST00000033634.4 | Acs14 | ENSMUSG0000031278 | acyl-CoA synthetase long-chain family member 4 Source MGI Symbol Acc MGI 1354713 |
| A05 | SBM0903115 | ENSMUST0000023593.5 | Adipoq | ENSMUSG0000022878 | adiponectin, C1Q and collagen domain containing Source MGI Symbol Acc MGI 106675 |
| A06 | SBM1015976 | ENSMUST00000112237.1 | Adipor1 | ENSMUSG0000026457 | adiponectin receptor 1 Source MGI Symbol Acc MGI 1919924 |
| A07 | SBM0848941 | ENSMUST00000187699.6 | Adipor2 | ENSMUSG0000030168 | adiponectin receptor 2 Source MGI Symbol Acc MGI 93830 |
| A08 | SBM0683049 | ENSMUST0000019843.14 | Akt3 | ENSMUSG0000019699 | thymoma viral proto-oncogene 3 Source MGI Symbol Acc MGI 1345147 |
| A09 | SBM0830704 | ENSMUST0000026795.12 | Alox5 | ENSMUSG0000025701 | arachidonate 5-lipoxygenase Source MGI Symbol Acc MGI 87999 |
| A10 | SBM0912771 | ENSMUST00000173739.7 | ApoE | ENSMUSG0000002985 | apolipoprotein E Source MGI Symbol Acc MGI 88057 |
| A11 | SBM0862549 | ENSMUST0000027015.5 | Casp1 | ENSMUSG0000025888 | caspase 1 Source MGI Symbol Acc MGI 96544 |
| A12 | SBM0687223 | ENSMUST0000000194.3 | Ccl12 | ENSMUSG0000035352 | chemokine (C-C motif) ligand 12 Source MGI Symbol Acc MGI 108224 |
| B01 | SBM0824531 | ENSMUST00000054414.4 | Ccr4 | ENSMUSG0000047898 | chemokine (C-C motif) receptor 4 Source MGI Symbol Acc MGI 107824 |
| B02 | SBM0964476 | ENSMUST00000111442.2 | Ccr5 | ENSMUSG0000079227 | chemokine (C-C motif) receptor 5 Source MGI Symbol Acc MGI 107182 |
| B03 | SBM0879668 | ENSMUST00000164411.9 | Ccr6 | ENSMUSG0000040899 | chemokine (C-C motif) receptor 6 Source MGI Symbol Acc MGI 1333797 |
| B04 | SBM0818786 | ENSMUST00000170051.7 | Cd36 | ENSMUSG0000002944 | CD36 molecule Source MGI Symbol Acc MGI 107899 |
| B05 | SBM0819334 | ENSMUST00000214582.1 | Cd3e | ENSMUSG0000032093 | CD3 antigen, epsilon polypeptide Source MGI Symbol Acc MGI 88332 |
| B06 | SBM0970317 | ENSMUST00000205391.1 | Cebpa | ENSMUSG0000034957 | CCAAT/enhancer binding protein (C/EBP), alpha Source MGI Symbol Acc MGI 99480 |
| B07 | SBM1034080 | ENSMUST0000026217.10 | Chuk | ENSMUSG0000025199 | conserved helix-loop-helix ubiquitous kinase Source MGI Symbol Acc MGI 99484 |
| B08 | SBM1074339 | ENSMUST00000032138.14 | Cnbp | ENSMUSG0000030057 | cellular nucleic acid binding protein Source MGI Symbol Acc MGI 88431 |
| B09 | SBM0959784 | ENSMUST00000198960.1 | Crrf2 | ENSMUSG0000033467 | cytokine receptor-like factor 2 Source MGI Symbol Acc MGI 1889506 |
| B10 | SBM0906169 | ENSMUST00000005826.8 | Cs | ENSMUSG0000005683 | citrate synthase Source MGI Symbol Acc MGI 88529 |
| B11 | SBM0682187 | ENSMUST00000056614.6 | Cxcr3 | ENSMUSG0000050232 | chemokine (C-X-C motif) receptor 3 Source MGI Symbol Acc MGI 1277207 |
| B12 | SBM0923037 | ENSMUST00000052172.6 | Cxcr4 | ENSMUSG0000045382 | chemokine (C-X-C motif) receptor 4 Source MGI Symbol Acc MGI 109563 |
| C01 | SBM0988393 | ENSMUST00000086763.12 | Adgre1 | ENSMUSG0000004730 | adhesion G protein-coupled receptor E1 Source MGI Symbol Acc MGI 106912 |
| C02 | SBM0719045 | ENSMUST00000029041.5 | Fabp4 | ENSMUSG0000062515 | fatty acid binding protein 4, adipocyte Source MGI Symbol Acc MGI 88038 |
| C03 | SBM1047932 | ENSMUST00000206589.1 | Fasn | ENSMUSG0000025153 | fatty acid synthase Source MGI Symbol Acc MGI 95485 |
| C04 | SBM0942563 | ENSMUST00000003964.16 | Gys1 | ENSMUSG0000003865 | glycogen synthase 1, muscle Source MGI Symbol Acc MGI 101805 |
| C05 | SBM1068583 | ENSMUST0000000642.10 | Hk2 | ENSMUSG0000000628 | hexokinase 2 Source MGI Symbol Acc MGI 1315197 |
| C06 | SBM0903694 | ENSMUST00000068592.4 | Ifng | ENSMUSG0000055170 | interferon gamma Source MGI Symbol Acc MGI 107656 |
| C07 | SBM1026650 | ENSMUST00000122386.7 | Igf1 | ENSMUSG0000020053 | insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432 |
| C08 | SBM0769269 | ENSMUST00000207621.1 | Igf1r | ENSMUSG0000005533 | insulin-like growth factor I receptor Source MGI Symbol Acc MGI 96433 |
| C09 | SBM0683235 | ENSMUST00000144583.7 | Ikbbp | ENSMUSG0000031537 | inhibitor of kappaB kinase beta Source MGI Symbol Acc MGI 1338071 |
| C10 | SBM0709309 | ENSMUST00000167723.7 | Il18r1 | ENSMUSG0000026070 | interleukin 18 receptor 1 Source MGI Symbol Acc MGI 105383 |
| | | ENSMUST00000 | | ENSMUSG00 | |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|---------------------------|----------|------------------------|---|
| C11 | SBM0738485 | 028881.13 | Il1b | 000027398 | interleukin 1 beta Source MGI Symbol Acc MGI 96543 |
| C12 | SBM1086348 | ENSMUST00000 027241.10 | Il1r1 | ENSMUSG00 000026072 | interleukin 1 receptor, type I Source MGI Symbol Acc MGI 96545 |
| D01 | SBM0693815 | ENSMUST00000 118364.1 | Il23r | ENSMUSG00 000049093 | interleukin 23 receptor Source MGI Symbol Acc MGI 2181693 |
| D02 | SBM0742623 | ENSMUST00000 026845.11 | Il6 | ENSMUSG00 000025746 | interleukin 6 Source MGI Symbol Acc MGI 96559 |
| D03 | SBM1013137 | ENSMUST00000 207100.1 | Insr | ENSMUSG00 000005534 | insulin receptor Source MGI Symbol Acc MGI 96575 |
| D04 | SBM0923271 | ENSMUST00000 069799.2 | Irs1 | ENSMUSG00 000055980 | insulin receptor substrate 1 Source MGI Symbol Acc MGI 99454 |
| D05 | SBM0792647 | ENSMUST00000 040514.7 | Irs2 | ENSMUSG00 000038894 | insulin receptor substrate 2 Source MGI Symbol Acc MGI 109334 |
| D06 | SBM0844988 | ENSMUST00000 065796.9 | Jak2 | ENSMUSG00 000024789 | Janus kinase 2 Source MGI Symbol Acc MGI 96629 |
| D07 | SBM0718370 | ENSMUST00000 169505.1 | Lep | ENSMUSG00 000059201 | leptin Source MGI Symbol Acc MGI 104663 |
| D08 | SBM1058375 | ENSMUST00000 128948.7 | LepR | ENSMUSG00 000057722 | leptin receptor Source MGI Symbol Acc MGI 104993 |
| D09 | SBM1009382 | ENSMUST00000 003207.10 | Lipe | ENSMUSG00 000003123 | lipase, hormone sensitive Source MGI Symbol Acc MGI 96790 |
| D10 | SBM1060657 | ENSMUST00000 015712.14 | Lpl | ENSMUSG00 000015568 | lipoprotein lipase Source MGI Symbol Acc MGI 96820 |
| D11 | SBM0938378 | ENSMUST00000 016033.8 | Lta4h | ENSMUSG00 000015889 | leukotriene A4 hydrolase Source MGI Symbol Acc MGI 96836 |
| D12 | SBM1025120 | ENSMUST00000 005066.8 | Map2k1 | ENSMUSG00 000004936 | mitogen-activated protein kinase kinase 1 Source MGI Symbol Acc MGI 1346866 |
| E01 | SBM0856900 | ENSMUST00000 206272.1 | Mapk3 | ENSMUSG00 000063065 | mitogen-activated protein kinase 3 Source MGI Symbol Acc MGI 1346859 |
| E02 | SBM1025510 | ENSMUST00000 144857.7 | Mapk9 | ENSMUSG00 000020366 | mitogen-activated protein kinase 9 Source MGI Symbol Acc MGI 1346862 |
| E03 | SBM1220565 | ENSMUST00000 103221.9 | Mtor | ENSMUSG00 000028991 | mechanistic target of rapamycin kinase Source MGI Symbol Acc MGI 1928394 |
| E04 | SBM0859199 | ENSMUST00000 218491.1 | Nampt | ENSMUSG00 000020572 | nicotinamide phosphoribosyltransferase Source MGI Symbol Acc MGI 1929865 |
| E05 | SBM0696431 | ENSMUST00000 021413.8 | Nfkb1a | ENSMUSG00 000021025 | nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, alpha Source MGI Symbol Acc MGI 104741 |
| E06 | SBM0804985 | ENSMUST00000 149126.1 | Nlrp3 | ENSMUSG00 000032691 | NLR family, pyrin domain containing 3 Source MGI Symbol Acc MGI 2653833 |
| E07 | SBM1042162 | ENSMUST00000 183258.7 | Olr1 | ENSMUSG00 000030162 | oxidized low density lipoprotein (lectin-like) receptor 1 Source MGI Symbol Acc MGI 1261434 |
| E08 | SBM0953267 | ENSMUST00000 029017.5 | Pck1 | ENSMUSG00 000027513 | phosphoenolpyruvate carboxykinase 1, cytosolic Source MGI Symbol Acc MGI 97501 |
| E09 | SBM1076925 | ENSMUST00000 149455.1 | Pde3b | ENSMUSG00 000030671 | phosphodiesterase 3B, cGMP-inhibited Source MGI Symbol Acc MGI 1333863 |
| E10 | SBM0921992 | ENSMUST00000 141712.7 | Pdk2 | ENSMUSG00 000038967 | pyruvate dehydrogenase kinase, isoenzyme 2 Source MGI Symbol Acc MGI 1343087 |
| E11 | SBM0814253 | ENSMUST00000 085591.6 | Pdx1 | ENSMUSG00 000029644 | pancreatic and duodenal homeobox 1 Source MGI Symbol Acc MGI 102851 |
| E12 | SBM0905151 | ENSMUST00000 108243.7 | Pik3ca | ENSMUSG00 000027665 | phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source MGI Symbol Acc MGI 1206581 |
| F01 | SBM0805909 | ENSMUST00000 035532.12 | Pik3r1 | ENSMUSG00 000041417 | phosphoinositide-3-kinase regulatory subunit 1 Source MGI Symbol Acc MGI 97583 |
| F02 | SBM0952484 | ENSMUST00000 138813.7 | Ppara | ENSMUSG00 000022383 | peroxisome proliferator activated receptor alpha Source MGI Symbol Acc MGI 104740 |
| F03 | SBM1015614 | ENSMUST00000 205213.2 | Pparg | ENSMUSG00 000000440 | peroxisome proliferator activated receptor gamma Source MGI Symbol Acc MGI 97747 |
| F04 | SBM0984439 | ENSMUST00000 132734.7 | Ppargc1a | ENSMUSG00 000029167 | peroxisome proliferative activated receptor, gamma, coactivator 1 alpha Source MGI Symbol Acc MGI 1342774 |
| F05 | SBM0939941 | ENSMUST00000 142717.1 | Pttn1 | ENSMUSG00 000027540 | protein tyrosine phosphatase, non-receptor type 1 Source MGI Symbol Acc MGI 97805 |
| F06 | SBM0791013 | ENSMUST00000 205594.1 | Pycard | ENSMUSG00 000030793 | PYD and CARD domain containing Source MGI Symbol Acc MGI 1931465 |
| F07 | SBM0806680 | ENSMUST00000 025951.13 | Rbp4 | ENSMUSG00 000024990 | retinol binding protein 4, plasma Source MGI Symbol Acc MGI 97879 |
| F08 | SBM0937498 | ENSMUST00000 237361.1 | Rela | ENSMUSG00 000024927 | v-rel reticuloendotheliosis viral oncogene homolog A (avian) Source MGI Symbol Acc MGI 103290 |
| F09 | SBM0984170 | ENSMUST00000 012849.14 | Retn | ENSMUSG00 000012705 | resistin Source MGI Symbol Acc MGI 1888506 |
| F10 | SBM0853475 | ENSMUST00000 058286.8 | Rps6kb1 | ENSMUSG00 000020516 | ribosomal protein S6 kinase, polypeptide 1 Source MGI Symbol Acc MGI 1270849 |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|-----------------------|----------|-------------------|---|
| F11 | SBM0890897 | ENSMUST00000236824.1 | Scd1 | ENSMUSG0000037071 | stearoyl-Coenzyme A desaturase 1 Source MGI Symbol Acc MGI 98239 |
| F12 | SBM0809699 | ENSMUST00000041388.10 | Serpine1 | ENSMUSG0000037411 | serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608 |
| G01 | SBM0883649 | ENSMUST00000034267.4 | Slc27a1 | ENSMUSG0000031808 | solute carrier family 27 (fatty acid transporter), member 1 Source MGI Symbol Acc MGI 1347098 |
| G02 | SBM0717464 | ENSMUST00000178809.7 | Slc2a4 | ENSMUSG0000018566 | solute carrier family 2 (facilitated glucose transporter), member 4 Source MGI Symbol Acc MGI 95758 |
| G03 | SBM0977814 | ENSMUST00000054002.3 | Socs3 | ENSMUSG0000053113 | suppressor of cytokine signaling 3 Source MGI Symbol Acc MGI 1201791 |
| G04 | SBM0984070 | ENSMUST00000020846.7 | Srebf1 | ENSMUSG0000020538 | sterol regulatory element binding transcription factor 1 Source MGI Symbol Acc MGI 107606 |
| G05 | SBM0762835 | ENSMUST00000229336.1 | Srebf2 | ENSMUSG0000022463 | sterol regulatory element binding factor 2 Source MGI Symbol Acc MGI 107585 |
| G06 | SBM0821931 | ENSMUST00000103114.7 | Stat3 | ENSMUSG0000004040 | signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038 |
| G07 | SBM0745293 | ENSMUST00000107365.2 | Tlr4 | ENSMUSG0000039005 | toll-like receptor 4 Source MGI Symbol Acc MGI 96824 |
| G08 | SBM0788439 | ENSMUST00000025263.14 | Tnf | ENSMUSG0000024401 | tumor necrosis factor Source MGI Symbol Acc MGI 104798 |
| G09 | SBM0837100 | ENSMUST00000134803.1 | Tnfrsf1a | ENSMUSG0000030341 | tumor necrosis factor receptor superfamily, member 1a Source MGI Symbol Acc MGI 1314884 |
| G10 | SBM0979488 | ENSMUST00000143055.1 | Tnfrsf1b | ENSMUSG0000028599 | tumor necrosis factor receptor superfamily, member 1b Source MGI Symbol Acc MGI 1314883 |
| G11 | SBM1037476 | ENSMUST00000034146.4 | Ucp1 | ENSMUSG0000031710 | uncoupling protein 1 (mitochondrial, proton carrier) Source MGI Symbol Acc MGI 98894 |
| G12 | SBM0933550 | ENSMUST00000047645.12 | Vldlr | ENSMUSG0000024924 | very low density lipoprotein receptor Source MGI Symbol Acc MGI 98935 |
| H01 | SBM1220560 | ENSMUST00000100497.10 | Actb | ENSMUSG0000029580 | actin, beta Source MGI Symbol Acc MGI 87904 |
| H02 | SBM0675336 | ENSMUST00000102476.4 | B2m | ENSMUSG0000060802 | beta-2 microglobulin Source MGI Symbol Acc MGI 88127 |
| H03 | SBM1220562 | ENSMUST00000117757.8 | Gapdh | ENSMUSG0000057666 | glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640 |
| H04 | SBM1220563 | ENSMUST00000026613.13 | Gusb | ENSMUSG0000025534 | glucuronidase, beta Source MGI Symbol Acc MGI 95872 |
| H05 | SBM1220564 | ENSMUST00000166469.7 | Hsp90ab1 | ENSMUSG0000023944 | 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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