

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

Rat WNT Signaling Targets

Cat. no. 249950 SBRN-243ZA

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 | Abcb1a | Ahr | Angptl4 | Antr1 | Axin2 | Bglap | Birc5 | Bmp4 | Btrc | Cacna2d3 | Ccnd1 | Ccnd2 |
| B | Cd44 | Cdh1 | Cdkn2a | Cdon | Cebpd | Ccn2 | Cubn | Dab2 | Dkk1 | Dlk1 | Dpp10 | Efnb1 |
| C | Egfr | Egr1 | Enpp2 | Ets2 | Fgf20 | Fgf4 | Fgf7 | Fgf9 | Fn1 | Fosl1 | Fst | Gdf5 |
| D | Gdnf | Gja1 | Id2 | Igf1 | Igf2 | Il6 | Irs1 | Jag1 | Klf5 | Lef1 | Lrp1 | Met |
| E | Mmp2 | Mmp7 | Mmp9 | Myc | Nanog | Nrcam | Nrp1 | Ntrk2 | Pdgfra | Pitx2 | Plaur | Pou5f1 |
| F | Ptpp3 | Ppard | Ptch1 | Ptgs2 | Runx2 | Sfrp2 | Six1 | Smo | Sox2 | Sox9 | Tbxt | Tcf7l1 |
| G | Tcf4 | Tcf7 | Tcf7l2 | Tgfb3 | Tle1 | Twist1 | Vegfa | Ccn4 | Ccn5 | Wnt3a | Wnt5a | Wnt9a |
| H | Aclb | B2m | Hprt1 | Ldha | Rplp1 | RGDC | QIC | QIC | QIC | PPC | PPC | PPC |

Gene table: QuantiNova LNA PCR Focus Panel

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|----------------------|----------|-------------------|---|
| A01 | SBR1116067 | ENSRNOT00000082359.1 | Abcb1a | ENSRNOG0000008012 | ATP binding cassette subfamily B member 4 Source RGD Symbol Acc 620248 |
| A02 | SBR1103616 | ENSRNOT00000006618.7 | Ahr | ENSRNOG0000004342 | aryl hydrocarbon receptor Source RGD Symbol Acc 2074 |
| A03 | SBR1186322 | ENSRNOT00000010031.6 | Angptl4 | ENSRNOG0000007545 | angiopoietin-like 4 Source RGD Symbol Acc 735058 |
| A04 | SBR1195063 | ENSRNOT00000011675.4 | Antxr1 | ENSRNOG0000008678 | ANTXR cell adhesion molecule 1 Source RGD Symbol Acc 1307144 |
| A05 | SBR1121880 | ENSRNOT00000088599.1 | Axin2 | ENSRNOG0000055010 | axin 2 Source RGD Symbol Acc 69259 |
| A06 | SBR1199255 | ENSRNOT00000026530.3 | Bglap | ENSRNOG0000019607 | bone gamma-carboxylglutamate protein Source RGD Symbol Acc 2206 |
| A07 | SBR1130503 | ENSRNOT00000072387.1 | Birc5 | ENSRNOG0000050819 | baculoviral IAP repeat-containing 5 Source RGD Symbol Acc 70499 |
| A08 | SBR1132271 | ENSRNOT00000012957.6 | Bmp4 | ENSRNOG0000009694 | bone morphogenetic protein 4 Source RGD Symbol Acc 2213 |
| A09 | SBR1214609 | ENSRNOT00000022426.7 | Btrc | ENSRNOG0000016280 | beta-transducin repeat containing E3 ubiquitin protein ligase Source RGD Symbol Acc 1359721 |
| A10 | SBR1142711 | ENSRNOT00000048043.3 | Cacna2d3 | ENSRNOG0000031287 | calcium voltage-gated channel auxiliary subunit alpha2delta 3 Source RGD Symbol Acc 631361 |
| A11 | SBR1211432 | ENSRNOT00000028411.3 | Ccnd1 | ENSRNOG0000020918 | cyclin D1 Source RGD Symbol Acc 68384 |
| A12 | SBR1095869 | ENSRNOT00000086440.1 | Ccnd2 | ENSRNOG0000057710 | cyclin D2 Source RGD Symbol Acc 621083 |
| B01 | SBR1148883 | ENSRNOT00000009000.7 | Cd44 | ENSRNOG0000006094 | CD44 molecule (Indian blood group) Source RGD Symbol Acc 2307 |
| B02 | SBR1170192 | ENSRNOT00000027346.2 | Cdh1 | ENSRNOG0000020151 | cadherin 1 Source RGD Symbol Acc 69279 |
| B03 | SBR1138605 | ENSRNOT00000084293.1 | Cdkn2a | ENSRNOG0000059837 | cyclin-dependent kinase inhibitor 2A Source RGD Symbol Acc 2323 |
| B04 | SBR1140227 | ENSRNOT00000016248.4 | Cdon | ENSRNOG0000011789 | cell adhesion associated, oncogene regulated Source RGD Symbol Acc 708433 |
| B05 | SBR1129981 | ENSRNOT00000074586.2 | Cebpd | ENSRNOG0000050869 | CCAAT/enhancer binding protein delta Source RGD Symbol Acc 2328 |
| B06 | SBR1133606 | ENSRNOT00000089196.1 | Ccn2 | ENSRNOG0000015036 | cellular communication network factor 2 Source RGD Symbol Acc 621392 |
| B07 | SBR1096556 | ENSRNOT00000040052.4 | Cubn | ENSRNOG0000029047 | cubilin Source RGD Symbol Acc 68355 |
| B08 | SBR1170520 | ENSRNOT00000050655.5 | Dab2 | ENSRNOG0000028930 | DAB2, clathrin adaptor protein Source RGD Symbol Acc 621007 |
| B09 | SBR1171972 | ENSRNOT00000015771.7 | Dkk1 | ENSRNOG0000011692 | dickkopf WNT signaling pathway inhibitor 1 Source RGD Symbol Acc 1307313 |
| B10 | SBR1102845 | ENSRNOT00000006339.6 | Dlk1 | ENSRNOG0000019584 | delta like non-canonical Notch ligand 1 Source RGD Symbol Acc 619931 |
| B11 | SBR1178038 | ENSRNOT00000003527.5 | Dpp10 | ENSRNOG0000002595 | dipeptidylpeptidase 10 Source RGD Symbol Acc 1306427 |
| B12 | SBR1138402 | ENSRNOT00000009635.6 | Efnb1 | ENSRNOG0000006877 | ephrin B1 Source RGD Symbol Acc 2540 |
| C01 | SBR1196436 | ENSRNOT00000006087.2 | Egfr | ENSRNOG0000004332 | epidermal growth factor receptor Source RGD Symbol Acc 2543 |
| C02 | SBR1216566 | ENSRNOT00000026303.4 | Egr1 | ENSRNOG0000019422 | early growth response 1 Source RGD Symbol Acc 2544 |
| C03 | SBR1165819 | ENSRNOT00000051139.5 | Enpp2 | ENSRNOG0000004089 | ectonucleotide pyrophosphatase/phosphodiesterase 2 Source RGD Symbol Acc 69298 |
| C04 | SBR1209269 | ENSRNOT00000002247.6 | Ets2 | ENSRNOG0000001647 | ETS proto-oncogene 2, transcription factor Source RGD Symbol Acc 1584977 |
| C05 | SBR1139753 | ENSRNOT00000000121.2 | Fgf20 | ENSRNOG0000000109 | fibroblast growth factor 20 Source RGD Symbol Acc 71068 |
| C06 | SBR1161582 | ENSRNOT00000028355.5 | Fgf4 | ENSRNOG0000020890 | fibroblast growth factor 4 Source RGD Symbol Acc 620127 |
| C07 | SBR1128388 | ENSRNOT00000012700.4 | Fgf7 | ENSRNOG0000009425 | fibroblast growth factor 7 Source RGD Symbol Acc 61805 |
| C08 | SBR1156754 | ENSRNOT00000015367.5 | Fgf9 | ENSRNOG0000011471 | fibroblast growth factor 9 Source RGD Symbol Acc 2610 |
| C09 | SBR1178912 | ENSRNOT00000019772.6 | Fn1 | ENSRNOG0000014288 | fibronectin 1 Source RGD Symbol Acc 2624 |
| C10 | SBR1182363 | ENSRNOT00000027891.2 | Fosl1 | ENSRNOG0000020552 | FOS like 1, AP-1 transcription factor subunit Source RGD Symbol Acc 2627 |
| | | ENSRNOT000000 | | ENSRNOG00 | |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|-----------------------|--------|-------------------|---|
| C11 | SBR1138330 | 015680.4 | Fst | 000011631 | follistatin Source RGD Symbol Acc 2633 |
| C12 | SBR1201122 | ENSRNOT0000071099.1 | Gdf5 | ENSRNOG0000050123 | growth differentiation factor 5 Source RGD Symbol Acc 620102 |
| D01 | SBR1188150 | ENSRNOT0000041288.2 | Gdnf | ENSRNOG0000012819 | glial cell derived neurotrophic factor Source RGD Symbol Acc 2677 |
| D02 | SBR1181138 | ENSRNOT0000001054.4 | Gja1 | ENSRNOG0000000805 | gap junction protein, alpha 1 Source RGD Symbol Acc 2690 |
| D03 | SBR1195349 | ENSRNOT00000009491.6 | Id2 | ENSRNOG0000007237 | inhibitor of DNA binding 2 Source RGD Symbol Acc 2859 |
| D04 | SBR1185495 | ENSRNOT00000038780.6 | Igf1 | ENSRNOG0000004517 | insulin-like growth factor 1 Source RGD Symbol Acc 2868 |
| D05 | SBR1106101 | ENSRNOT00000050760.3 | Igf2 | ENSRNOG0000020369 | insulin-like growth factor 2 Source RGD Symbol Acc 2870 |
| D06 | SBR1156877 | ENSRNOT00000013732.6 | Il6 | ENSRNOG0000010278 | interleukin 6 Source RGD Symbol Acc 2901 |
| D07 | SBR1132302 | ENSRNOT00000019579.5 | Irs1 | ENSRNOG0000014597 | insulin receptor substrate 1 Source RGD Symbol Acc 2922 |
| D08 | SBR1173778 | ENSRNOT00000010638.7 | Jag1 | ENSRNOG0000007443 | jagged 1 Source RGD Symbol Acc 2937 |
| D09 | SBR1095677 | ENSRNOT00000090637.1 | Klf5 | ENSRNOG0000008785 | Kruppel-like factor 5 Source RGD Symbol Acc 621446 |
| D10 | SBR1100877 | ENSRNOT00000013694.3 | Lef1 | ENSRNOG0000010121 | lymphoid enhancer binding factor 1 Source RGD Symbol Acc 620241 |
| D11 | SBR1203456 | ENSRNOT00000031005.5 | Lrp1 | ENSRNOG0000025053 | LDL receptor related protein 1 Source RGD Symbol Acc 1307535 |
| D12 | SBR1107950 | ENSRNOT00000086902.1 | Met | ENSRNOG0000052745 | MET proto-oncogene, receptor tyrosine kinase Source RGD Symbol Acc 3082 |
| E01 | SBR1120605 | ENSRNOT00000022679.6 | Mmp2 | ENSRNOG0000016695 | matrix metalloproteinase 2 Source RGD Symbol Acc 621316 |
| E02 | SBR1116320 | ENSRNOT00000014041.5 | Mmp7 | ENSRNOG0000010507 | matrix metalloproteinase 7 Source RGD Symbol Acc 3100 |
| E03 | SBR1206750 | ENSRNOT00000023965.3 | Mmp9 | ENSRNOG0000017539 | matrix metalloproteinase 9 Source RGD Symbol Acc 621320 |
| E04 | SBR1106364 | ENSRNOT00000006188.5 | Myc | ENSRNOG0000004500 | MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130 |
| E05 | SBR1194871 | ENSRNOT000000060937.3 | Nanog | ENSRNOG0000008368 | Nanog homeobox Source RGD Symbol Acc 1303178 |
| E06 | SBR1138548 | ENSRNOT000000050222.7 | Nrcam | ENSRNOG0000004067 | neuronal cell adhesion molecule Source RGD Symbol Acc 3209 |
| E07 | SBR1157725 | ENSRNOT00000014492.5 | Nrp1 | ENSRNOG0000010744 | neuropilin 1 Source RGD Symbol Acc 621588 |
| E08 | SBR1097948 | ENSRNOT000000090914.1 | Ntrk2 | ENSRNOG0000018839 | neurotrophic receptor tyrosine kinase 2 Source RGD Symbol Acc 3213 |
| E09 | SBR1195557 | ENSRNOT00000003077.5 | Pdgfra | ENSRNOG0000002244 | platelet derived growth factor receptor alpha Source RGD Symbol Acc 3284 |
| E10 | SBR1186889 | ENSRNOT000000051009.4 | Pitx2 | ENSRNOG0000010681 | paired-like homeodomain 2 Source RGD Symbol Acc 3331 |
| E11 | SBR1209735 | ENSRNOT000000075167.3 | Plaur | ENSRNOG0000037931 | plasminogen activator, urokinase receptor Source RGD Symbol Acc 620597 |
| E12 | SBR1115832 | ENSRNOT000000072288.2 | Pou5f1 | ENSRNOG0000046487 | POU class 5 homeobox 1 Source RGD Symbol Acc 1359491 |
| F01 | SBR1163344 | ENSRNOT000000011237.5 | Plpp3 | ENSRNOG0000008116 | phospholipid phosphatase 3 Source RGD Symbol Acc 620454 |
| F02 | SBR1197924 | ENSRNOT000000083109.1 | Ppard | ENSRNOG0000000503 | peroxisome proliferator-activated receptor delta Source RGD Symbol Acc 3370 |
| F03 | SBR1146307 | ENSRNOT000000026287.5 | Ptch1 | ENSRNOG0000019354 | patched 1 Source RGD Symbol Acc 621425 |
| F04 | SBR1122148 | ENSRNOT000000003567.4 | Ptgs2 | ENSRNOG0000002525 | prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349 |
| F05 | SBR1103643 | ENSRNOT000000061014.4 | Runx2 | ENSRNOG0000020193 | runt-related transcription factor 2 Source RGD Symbol Acc 2282 |
| F06 | SBR1157148 | ENSRNOT000000012658.6 | Sfrp2 | ENSRNOG0000009465 | secreted frizzled-related protein 2 Source RGD Symbol Acc 735163 |
| F07 | SBR1147242 | ENSRNOT000000034338.4 | Six1 | ENSRNOG0000022777 | SIX homeobox 1 Source RGD Symbol Acc 620906 |
| F08 | SBR1198492 | ENSRNOT000000080223.1 | Smo | ENSRNOG0000008332 | smoothed, frizzled class receptor Source RGD Symbol Acc 3726 |
| F09 | SBR1125680 | ENSRNOT000000016236.3 | Sox2 | ENSRNOG0000012199 | SRY box 2 Source RGD Symbol Acc 1565646 |
| F10 | SBR1186301 | ENSRNOT000000003511.6 | Sox9 | ENSRNOG0000002607 | SRY box 9 Source RGD Symbol Acc 620474 |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|----------------------|--------|-------------------|--|
| F11 | SBR1165283 | ENSRNOT00000016471.3 | Tbxt | ENSRNOG0000012229 | T-box transcription factor T Source RGD Symbol Acc 1310141 |
| F12 | SBR1154852 | ENSRNOT00000020005.7 | Tcf711 | ENSRNOG0000014753 | transcription factor 7 like 1 Source RGD Symbol Acc 1311671 |
| G01 | SBR1134900 | ENSRNOT00000081797.1 | Tcf4 | ENSRNOG0000012405 | transcription factor 4 Source RGD Symbol Acc 69271 |
| G02 | SBR1172406 | ENSRNOT00000008022.7 | Tcf7 | ENSRNOG0000005872 | transcription factor 7 Source RGD Symbol Acc 1305894 |
| G03 | SBR1184563 | ENSRNOT00000019681.6 | Tcf712 | ENSRNOG0000049232 | transcription factor 7 like 2 Source RGD Symbol Acc 1583621 |
| G04 | SBR1115193 | ENSRNOT00000013516.5 | Tgfb3 | ENSRNOG0000009867 | transforming growth factor, beta 3 Source RGD Symbol Acc 3851 |
| G05 | SBR1149395 | ENSRNOT00000058906.3 | Tle1 | ENSRNOG0000005882 | TLE family member 1, transcriptional corepressor Source RGD Symbol Acc 1309237 |
| G06 | SBR1200999 | ENSRNOT00000014763.6 | Twist1 | ENSRNOG0000011101 | twist family bHLH transcription factor 1 Source RGD Symbol Acc 621455 |
| G07 | SBR1108862 | ENSRNOT00000044163.4 | Vegfa | ENSRNOG0000019598 | vascular endothelial growth factor A Source RGD Symbol Acc 619991 |
| G08 | SBR1172041 | ENSRNOT00000009673.7 | Ccn4 | ENSRNOG0000007078 | cellular communication network factor 4 Source RGD Symbol Acc 69431 |
| G09 | SBR1169669 | ENSRNOT00000014346.6 | Ccn5 | ENSRNOG0000010666 | cellular communication network factor 5 Source RGD Symbol Acc 621867 |
| G10 | SBR1178408 | ENSRNOT00000064505.3 | Wnt3a | ENSRNOG0000003039 | Wnt family member 3A Source RGD Symbol Acc 1308057 |
| G11 | SBR1212833 | ENSRNOT00000021164.3 | Wnt5a | ENSRNOG0000015618 | Wnt family member 5A Source RGD Symbol Acc 69250 |
| G12 | SBR1108175 | ENSRNOT00000058327.3 | Wnt9a | ENSRNOG0000003066 | Wnt family member 9A Source RGD Symbol Acc 1305018 |
| H01 | SBR1220567 | ENSRNOT00000042459.4 | Actb | ENSRNOG0000034254 | actin, beta Source RGD Symbol Acc 628837 |
| H02 | SBR1220568 | ENSRNOT00000023017.5 | B2m | ENSRNOG0000017123 | beta-2 microglobulin Source RGD Symbol Acc 2189 |
| H03 | SBR1225377 | ENSRNOT00000065935.3 | Hprt1 | ENSRNOG0000048561 | hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826 |
| H04 | SBR1122313 | ENSRNOT00000017468.2 | Ldha | ENSRNOG0000013009 | lactate dehydrogenase A Source RGD Symbol Acc 2996 |
| H05 | SBR1220572 | ENSRNOT00000018820.5 | Rplp1 | ENSRNOG0000013874 | ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774 |
| H06 | SBR1218555 | Sybr_RGDC | RGDC | Sybr_RGDC | Rat 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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