

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

Rat Wound Healing

Cat. no. 249950 SBRN-121ZR

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 | Acta2 | Actc1 | Angpt1 | Ccl12 | Ccl7 | Cd40lg | Cdh1 | Col14a1 | Col1a1 | Col1a2 | Col3a1 | Col4a1 |
| B | Col4a3 | Col5a1 | Col5a2 | Col5a3 | Csf2 | Csf3 | Ccn2 | Ctnnb1 | Ctsq | Ctsk | Ctsl | Cxcl1 |
| C | Cxcl11 | Cxcl3 | Cxcl6 | Egf | Egfr | F13a1 | F3 | Fga | Fgf10 | Fgf2 | Fgf7 | Hbegf |
| D | Hgf | Ifng | Igf1 | Il10 | Il1b | Il2 | Il4 | Il6 | Il6st | Itga1 | Itga2 | Itga3 |
| E | Itga4 | Itga5 | Itga6 | Itgav | Itgb1 | Itgb3 | Itgb5 | Itgb6 | Mapk1 | Mapk3 | LOC1036948 77 | Mmp1 |
| F | Mmp2 | Mmp7 | Mmp9 | Pdgfra | Plat | Plau | Plaur | Plg | Pten | Ptgs2 | Rac1 | Rhoa |
| G | Serpine1 | Stat3 | Tagln | Tgfa | Tgfb1 | Tgfb3 | Timp1 | LOC1036943 80 | Vegfa | Vtn | Ccn4 | Wnt5a |
| H | Actb | 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 | SBR1176923 | ENSRNOT00000083468.1 | Acta2 | ENSRNOG0000058039 | actin, alpha 2, smooth muscle, aorta Source RGD Symbol Acc 621676 |
| A02 | SBR1156709 | ENSRNOT00000011773.4 | Actc1 | ENSRNOG0000008536 | actin, alpha, cardiac muscle 1 Source RGD Symbol Acc 2026 |
| A03 | SBR1097173 | ENSRNOT00000007979.6 | Angpt1 | ENSRNOG0000005854 | angiopoietin 1 Source RGD Symbol Acc 628896 |
| A04 | SBR1129555 | ENSRNOT00000031626.5 | Ccl12 | ENSRNOG0000029768 | chemokine (C-C motif) ligand 12 Source RGD Symbol Acc 1309255 |
| A05 | SBR1105598 | ENSRNOT00000000256.4 | Ccl7 | ENSRNOG0000000239 | C-C motif chemokine ligand 7 Source RGD Symbol Acc 1359152 |
| A06 | SBR1110042 | ENSRNOT00000001162.4 | Cd40lg | ENSRNOG0000000871 | CD40 ligand Source RGD Symbol Acc 708418 |
| A07 | SBR1170192 | ENSRNOT00000027346.2 | Cdh1 | ENSRNOG0000020151 | cadherin 1 Source RGD Symbol Acc 69279 |
| A08 | SBR1163347 | ENSRNOT00000067649.3 | Col14a1 | ENSRNOG0000026415 | collagen type XIV alpha 1 chain Source RGD Symbol Acc 1305806 |
| A09 | SBR1113220 | ENSRNOT00000005311.6 | Col1a1 | ENSRNOG0000003897 | collagen type I alpha 1 chain Source RGD Symbol Acc 61817 |
| A10 | SBR1097834 | ENSRNOT00000089292.1 | Col1a2 | ENSRNOG0000011292 | collagen type I alpha 2 chain Source RGD Symbol Acc 621351 |
| A11 | SBR1150486 | ENSRNOT00000004956.4 | Col3a1 | ENSRNOG0000003357 | collagen type III alpha 1 chain Source RGD Symbol Acc 71029 |
| A12 | SBR1106782 | ENSRNOT00000057386.2 | Col4a1 | ENSRNOG0000016281 | collagen type IV alpha 1 chain Source RGD Symbol Acc 1307148 |
| B01 | SBR1147922 | ENSRNOT00000020669.5 | Col4a3 | ENSRNOG0000015365 | collagen type IV alpha 3 chain Source RGD Symbol Acc 71085 |
| B02 | SBR1207090 | ENSRNOT00000086352.1 | Col5a1 | ENSRNOG0000008749 | collagen type V alpha 1 chain Source RGD Symbol Acc 70920 |
| B03 | SBR1216685 | ENSRNOT00000005073.7 | Col5a2 | ENSRNOG0000003736 | collagen type V alpha 2 chain Source RGD Symbol Acc 70921 |
| B04 | SBR1168261 | ENSRNOT00000027897.4 | Col5a3 | ENSRNOG0000020525 | collagen type V alpha 3 chain Source RGD Symbol Acc 70922 |
| B05 | SBR1136894 | ENSRNOT00000032333.3 | Csf2 | ENSRNOG0000026805 | colony stimulating factor 2 Source RGD Symbol Acc 621065 |
| B06 | SBR1124341 | ENSRNOT00000011509.3 | Csf3 | ENSRNOG0000008525 | colony stimulating factor 3 Source RGD Symbol Acc 2426 |
| B07 | SBR1133606 | ENSRNOT00000089196.1 | Ccn2 | ENSRNOG0000015036 | cellular communication network factor 2 Source RGD Symbol Acc 621392 |
| B08 | SBR1143136 | ENSRNOT00000079085.1 | Ctnnb1 | ENSRNOG00000054172 | catenin beta 1 Source RGD Symbol Acc 70487 |
| B09 | SBR1152150 | ENSRNOT00000059677.2 | Ctsg | ENSRNOG0000020647 | cathepsin G Source RGD Symbol Acc 1307681 |
| B10 | SBR1174118 | ENSRNOT00000028730.6 | Ctsk | ENSRNOG0000021155 | cathepsin K Source RGD Symbol Acc 61810 |
| B11 | SBR1210366 | ENSRNOT00000025462.6 | Ctsl | ENSRNOG0000018566 | cathepsin L Source RGD Symbol Acc 2448 |
| B12 | SBR1198580 | ENSRNOT00000003778.3 | Cxcl1 | ENSRNOG0000002802 | C-X-C motif chemokine ligand 1 Source RGD Symbol Acc 619869 |
| C01 | SBR1210202 | ENSRNOT00000031667.4 | Cxcl11 | ENSRNOG0000022298 | C-X-C motif chemokine ligand 11 Source RGD Symbol Acc 727827 |
| C02 | SBR1116913 | ENSRNOT00000034090.3 | Cxcl3 | ENSRNOG0000028043 | chemokine (C-X-C motif) ligand 3 Source RGD Symbol Acc 621812 |
| C03 | SBR1137423 | ENSRNOT00000003823.3 | Cxcl6 | ENSRNOG0000002843 | C-X-C motif chemokine ligand 6 Source RGD Symbol Acc 708540 |
| C04 | SBR1200927 | ENSRNOT00000087007.1 | Egf | ENSRNOG0000053979 | epidermal growth factor Source RGD Symbol Acc 2542 |
| C05 | SBR1196436 | ENSRNOT00000006087.2 | Egfr | ENSRNOG0000004332 | epidermal growth factor receptor Source RGD Symbol Acc 2543 |
| C06 | SBR1184783 | ENSRNOT00000021568.4 | F13a1 | ENSRNOG0000015957 | coagulation factor XIII A1 chain Source RGD Symbol Acc 621495 |
| C07 | SBR1148832 | ENSRNOT00000015836.5 | F3 | ENSRNOG0000011800 | coagulation factor III, tissue factor Source RGD Symbol Acc 2587 |
| C08 | SBR1198729 | ENSRNOT00000064091.3 | Fga | ENSRNOG0000024848 | fibrinogen alpha chain Source RGD Symbol Acc 2603 |
| C09 | SBR1145306 | ENSRNOT00000016485.3 | Fgf10 | ENSRNOG0000012278 | fibroblast growth factor 10 Source RGD Symbol Acc 2606 |
| C10 | SBR1185708 | ENSRNOT00000023388.5 | Fgf2 | ENSRNOG0000017392 | fibroblast growth factor 2 Source RGD Symbol Acc 2609 |
| | | ENSRNOT000000 | | ENSRNOG00 | |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|--------------------------|------------------|------------------------|--|
| C11 | SBR1128388 | 012700.4 | Fgf7 | 000009425 | fibroblast growth factor 7 Source RGD Symbol Acc 61805 |
| C12 | SBR1150704 | ENSRNOT00000 025157.6 | Hbegf | ENSRNOG00 000018646 | heparin-binding EGF-like growth factor Source RGD Symbol Acc 2526 |
| D01 | SBR1147127 | ENSRNOT00000 009763.5 | Hgf | ENSRNOG00 000007027 | hepatocyte growth factor Source RGD Symbol Acc 2794 |
| D02 | SBR1108917 | ENSRNOT00000 009919.2 | lfng | ENSRNOG00 000007468 | interferon gamma Source RGD Symbol Acc 2866 |
| D03 | SBR1185495 | ENSRNOT00000 038780.6 | lgf1 | ENSRNOG00 000004517 | insulin-like growth factor 1 Source RGD Symbol Acc 2868 |
| D04 | SBR1123238 | ENSRNOT00000 006246.5 | Il10 | ENSRNOG00 000004647 | interleukin 10 Source RGD Symbol Acc 2886 |
| D05 | SBR1196387 | ENSRNOT00000 006308.4 | Il1b | ENSRNOG00 000004649 | interleukin 1 beta Source RGD Symbol Acc 2891 |
| D06 | SBR1102170 | ENSRNOT00000 023327.2 | Il2 | ENSRNOG00 000017348 | interleukin 2 Source RGD Symbol Acc 620047 |
| D07 | SBR1101847 | ENSRNOT00000 010029.3 | Il4 | ENSRNOG00 000007624 | interleukin 4 Source RGD Symbol Acc 2898 |
| D08 | SBR1156877 | ENSRNOT00000 013732.6 | Il6 | ENSRNOG00 000010278 | interleukin 6 Source RGD Symbol Acc 2901 |
| D09 | SBR1177389 | ENSRNOT00000 018877.7 | Il6st | ENSRNOG00 000013963 | interleukin 6 signal transducer Source RGD Symbol Acc 2903 |
| D10 | SBR1162885 | ENSRNOT00000 086114.1 | Itga1 | ENSRNOG00 000053550 | integrin subunit alpha 1 Source RGD Symbol Acc 2923 |
| D11 | SBR1203459 | ENSRNOT00000 077401.1 | Itga2 | ENSRNOG00 000058111 | integrin subunit alpha 2 Source RGD Symbol Acc 621632 |
| D12 | SBR1140121 | ENSRNOT00000 035894.7 | Itga3 | ENSRNOG00 000004276 | integrin subunit alpha 3 Source RGD Symbol Acc 1310333 |
| E01 | SBR1153753 | ENSRNOT00000 006880.6 | Itga4 | ENSRNOG00 000004861 | integrin subunit alpha 4 Source RGD Symbol Acc 1593249 |
| E02 | SBR1211134 | ENSRNOT00000 087748.1 | Itga5 | ENSRNOG00 000057451 | integrin subunit alpha 5 Source RGD Symbol Acc 2925 |
| E03 | SBR1106472 | ENSRNOT00000 002075.4 | Itga6 | ENSRNOG00 000001518 | integrin subunit alpha 6 Source RGD Symbol Acc 621633 |
| E04 | SBR1162857 | ENSRNOT00000 006961.7 | Itgav | ENSRNOG00 000004912 | integrin subunit alpha V Source RGD Symbol Acc 1310613 |
| E05 | SBR1105686 | ENSRNOT00000 014785.5 | Itgb1 | ENSRNOG00 000010966 | integrin subunit beta 1 Source RGD Symbol Acc 2927 |
| E06 | SBR1124401 | ENSRNOT00000 073350.2 | Itgb3 | ENSRNOG00 000048449 | integrin subunit beta 3 Source RGD Symbol Acc 628868 |
| E07 | SBR1156192 | ENSRNOT00000 076955.2 | Itgb5 | ENSRNOG00 000001795 | integrin subunit beta 5 Source RGD Symbol Acc 628869 |
| E08 | SBR1162472 | ENSRNOT00000 086576.1 | Itgb6 | ENSRNOG00 000008346 | integrin subunit beta 6 Source RGD Symbol Acc 1303119 |
| E09 | SBR1202944 | ENSRNOT00000 002533.7 | Mapk1 | ENSRNOG00 000001849 | mitogen activated protein kinase 1 Source RGD Symbol Acc 70500 |
| E10 | SBR1209281 | ENSRNOT00000 087625.1 | Mapk3 | ENSRNOG00 000053583 | mitogen activated protein kinase 3 Source RGD Symbol Acc 3046 |
| E11 | SBR1136891 | ENSRNOT00000 008608.4 | LOC10369 4877 | ENSRNOG00 000006589 | macrophage migration inhibitory factor Source RGD Symbol Acc 621163 |
| E12 | SBR1179779 | ENSRNOT00000 012595.3 | Mmp1 | ENSRNOG00 000032353 | matrix metalloproteinase 1 Source RGD Symbol Acc 1307917 |
| F01 | SBR1120605 | ENSRNOT00000 022679.6 | Mmp2 | ENSRNOG00 000016695 | matrix metalloproteinase 2 Source RGD Symbol Acc 621316 |
| F02 | SBR1116320 | ENSRNOT00000 014041.5 | Mmp7 | ENSRNOG00 000010507 | matrix metalloproteinase 7 Source RGD Symbol Acc 3100 |
| F03 | SBR1206750 | ENSRNOT00000 023965.3 | Mmp9 | ENSRNOG00 000017539 | matrix metalloproteinase 9 Source RGD Symbol Acc 621320 |
| F04 | SBR1210315 | ENSRNOT00000 042117.6 | Pdgfa | ENSRNOG00 000001312 | platelet derived growth factor subunit A Source RGD Symbol Acc 3282 |
| F05 | SBR1162717 | ENSRNOT00000 025763.6 | Plat | ENSRNOG00 000019018 | plasminogen activator, tissue type Source RGD Symbol Acc 3342 |
| F06 | SBR1186883 | ENSRNOT00000 014273.5 | Plau | ENSRNOG00 000010516 | plasminogen activator, urokinase Source RGD Symbol Acc 3343 |
| F07 | SBR1209735 | ENSRNOT00000 075167.3 | Plaur | ENSRNOG00 000037931 | plasminogen activator, urokinase receptor Source RGD Symbol Acc 620597 |
| F08 | SBR1165120 | ENSRNOT00000 080352.1 | Plg | ENSRNOG00 000017223 | plasminogen Source RGD Symbol Acc 619893 |
| F09 | SBR1174124 | ENSRNOT00000 028143.3 | Pten | ENSRNOG00 000020723 | phosphatase and tensin homolog Source RGD Symbol Acc 61995 |
| F10 | SBR1122148 | ENSRNOT00000 003567.4 | Ptgs2 | ENSRNOG00 000002525 | prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349 |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|----------------------|--------------|--------------------|---|
| F11 | SBR1123146 | ENSRNOT0000001417.5 | Rac1 | ENSRNOG0000001068 | Rac family small GTPase 1 Source RGD Symbol Acc 619755 |
| F12 | SBR1125110 | ENSRNOT00000071664.2 | Rhoa | ENSRNOG00000050519 | ras homolog family member A Source RGD Symbol Acc 619921 |
| G01 | SBR1126485 | ENSRNOT00000001916.2 | Serpine1 | ENSRNOG0000001414 | serpin family E member 1 Source RGD Symbol Acc 3249 |
| G02 | SBR1138417 | ENSRNOT00000026760.4 | Stat3 | ENSRNOG00000019742 | signal transducer and activator of transcription 3 Source RGD Symbol Acc 3772 |
| G03 | SBR1189114 | ENSRNOT00000024030.6 | Tagln | ENSRNOG00000017628 | transgelin Source RGD Symbol Acc 3723 |
| G04 | SBR1118717 | ENSRNOT00000057441.4 | Tgfa | ENSRNOG00000016182 | transforming growth factor alpha Source RGD Symbol Acc 3849 |
| G05 | SBR1143485 | ENSRNOT00000028051.4 | Tgfb1 | ENSRNOG00000020652 | transforming growth factor, beta 1 Source RGD Symbol Acc 69051 |
| G06 | SBR1149356 | ENSRNOT00000002867.4 | Tgfb3 | ENSRNOG0000002093 | transforming growth factor beta receptor 3 Source RGD Symbol Acc 61821 |
| G07 | SBR1154276 | ENSRNOT00000013745.7 | Timp1 | ENSRNOG00000010208 | TIMP metalloproteinase inhibitor 1 Source RGD Symbol Acc 621675 |
| G08 | SBR1187845 | ENSRNOT00000079677.1 | LOC103694380 | ENSRNOG0000005156 | tumor necrosis factor-like Source RGD Symbol Acc 9404643 |
| G09 | SBR1108862 | ENSRNOT00000044163.4 | Vegfa | ENSRNOG00000019598 | vascular endothelial growth factor A Source RGD Symbol Acc 619991 |
| G10 | SBR1184358 | ENSRNOT00000039954.5 | Vtn | ENSRNOG00000010031 | vitronectin Source RGD Symbol Acc 3967 |
| G11 | SBR1172041 | ENSRNOT00000009673.7 | Ccn4 | ENSRNOG00000007078 | cellular communication network factor 4 Source RGD Symbol Acc 69431 |
| G12 | SBR1212833 | ENSRNOT00000021164.3 | Wnt5a | ENSRNOG00000015618 | Wnt family member 5A Source RGD Symbol Acc 69250 |
| H01 | SBR1220567 | ENSRNOT00000042459.4 | Actb | ENSRNOG00000034254 | actin, beta Source RGD Symbol Acc 628837 |
| H02 | SBR1220568 | ENSRNOT00000023017.5 | B2m | ENSRNOG00000017123 | beta-2 microglobulin Source RGD Symbol Acc 2189 |
| H03 | SBR1225377 | ENSRNOT00000065935.3 | Hprt1 | ENSRNOG00000048561 | hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826 |
| H04 | SBR1122313 | ENSRNOT00000017468.2 | Ldha | ENSRNOG00000013009 | lactate dehydrogenase A Source RGD Symbol Acc 2996 |
| H05 | SBR1220572 | ENSRNOT00000018820.5 | Rplp1 | ENSRNOG00000013874 | 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.

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.