

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

Rat Atherosclerosis

Cat. no. 249950 SBRN-038ZA

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 | Abca1 | Ace | Plin2 | Apoa1 | Apob | Apoe | Bax | Bcl2 | Bcl2a1 | Bcl2l1 | Bid | Birc3 |
| B | Ccl2 | Ccl5 | Ccr1 | Ccr7 | Cd44 | Cdh5 | Cflar | Col3a1 | Csf1 | Csf2 | Ccn2 | Cxcl1 |
| C | Egr1 | Eln | Eng | Fabp3 | Fas | Fga | Fgb | Fgf2 | Fn1 | Hbegf | Icam1 | Ifng |
| D | Il1a | Il1b | Il1r1 | Il1r2 | Il2 | Il3 | Il4 | Il5 | Ilga2 | Ilga5 | Ilgax | Ilgb2 |
| E | Kdr | Klf2 | Lama1 | Ldlr | Lif | Lpl | Lyp1a1 | Mmp3 | Nrb1 | Nos3 | LOC1009122 28 | Nr1h3 |
| F | Pdgfra | Pdgfb | Pdgfrb | Ppara | Ppard | Pparg | Ptgs1 | Rxra | Sele | Sell | Selp | Selp1g |
| G | Serp1b2 | Serp1e1 | Sod1 | Spp1 | Tgfb1 | Tgfb2 | Thbs4 | Tnc | LOC1036943 80 | Vcam1 | Vegfa | Vwf |
| 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 | SBR1139590 | ENSRNOT00000024564.7 | Abca1 | ENSRNOG0000018126 | ATP binding cassette subfamily A member 1 Source RGD Symbol Acc 631344 |
| A02 | SBR1133139 | ENSRNOT00000010627.8 | Ace | ENSRNOG0000062101 | angiotensin I converting enzyme Source RGD Symbol Acc 2493 |
| A03 | SBR1172823 | ENSRNOT00000009749.5 | Plin2 | ENSRNOG0000007060 | perilipin 2 Source RGD Symbol Acc 728889 |
| A04 | SBR1146824 | ENSRNOT00000074357.2 | Apoa1 | ENSRNOG0000045679 | apolipoprotein A1 Source RGD Symbol Acc 2130 |
| A05 | SBR1117274 | ENSRNOT00000007371.6 | Apob | ENSRNOG0000005542 | apolipoprotein B Source RGD Symbol Acc 2129 |
| A06 | SBR1123572 | ENSRNOT000000080453.1 | ApoE | ENSRNOG0000018454 | apolipoprotein E Source RGD Symbol Acc 2138 |
| A07 | SBR1154566 | ENSRNOT00000028328.5 | Bax | ENSRNOG0000020876 | BCL2 associated X, apoptosis regulator Source RGD Symbol Acc 2192 |
| A08 | SBR1170984 | ENSRNOT00000003768.2 | Bcl2 | ENSRNOG0000002791 | BCL2, apoptosis regulator Source RGD Symbol Acc 2199 |
| A09 | SBR1100092 | ENSRNOT00000039850.3 | Bcl2a1 | ENSRNOG0000047606 | BCL2-related protein A1 Source RGD Symbol Acc 620621 |
| A10 | SBR1205791 | ENSRNOT00000010762.7 | Bcl2l1 | ENSRNOG0000007946 | Bcl2-like 1 Source RGD Symbol Acc 2200 |
| A11 | SBR1147619 | ENSRNOT00000016776.2 | Bid | ENSRNOG0000012439 | BH3 interacting domain death agonist Source RGD Symbol Acc 620160 |
| A12 | SBR1181460 | ENSRNOT00000090774.1 | Birc3 | ENSRNOG0000005731 | baculoviral IAP repeat-containing 3 Source RGD Symbol Acc 621282 |
| B01 | SBR1165601 | ENSRNOT00000009448.3 | Ccl2 | ENSRNOG0000007159 | C-C motif chemokine ligand 2 Source RGD Symbol Acc 3645 |
| B02 | SBR1094349 | ENSRNOT00000014865.6 | Ccl5 | ENSRNOG0000010906 | C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069 |
| B03 | SBR1135029 | ENSRNOT00000008772.4 | Ccr1 | ENSRNOG0000006715 | C-C motif chemokine receptor 1 Source RGD Symbol Acc 708446 |
| B04 | SBR1211640 | ENSRNOT00000014163.7 | Ccr7 | ENSRNOG0000010665 | C-C motif chemokine receptor 7 Source RGD Symbol Acc 735151 |
| B05 | SBR1148883 | ENSRNOT00000009000.7 | Cd44 | ENSRNOG0000006094 | CD44 molecule (Indian blood group) Source RGD Symbol Acc 2307 |
| B06 | SBR1122090 | ENSRNOT00000017983.6 | Cdh5 | ENSRNOG0000013324 | cadherin 5 Source RGD Symbol Acc 1307370 |
| B07 | SBR1105415 | ENSRNOT00000016730.5 | Cflar | ENSRNOG0000012473 | CASP8 and FADD-like apoptosis regulator Source RGD Symbol Acc 620847 |
| B08 | SBR1150486 | ENSRNOT00000004956.4 | Col3a1 | ENSRNOG0000003357 | collagen type III alpha 1 chain Source RGD Symbol Acc 71029 |
| B09 | SBR1099651 | ENSRNOT00000025222.6 | Csf1 | ENSRNOG0000018659 | colony stimulating factor 1 Source RGD Symbol Acc 621063 |
| B10 | SBR1136894 | ENSRNOT00000032333.3 | Csf2 | ENSRNOG0000026805 | colony stimulating factor 2 Source RGD Symbol Acc 621065 |
| B11 | SBR1133606 | ENSRNOT000000089196.1 | Ccn2 | ENSRNOG0000015036 | cellular communication network factor 2 Source RGD Symbol Acc 621392 |
| B12 | SBR1198580 | ENSRNOT00000003778.3 | Cxcl1 | ENSRNOG0000002802 | C-X-C motif chemokine ligand 1 Source RGD Symbol Acc 619869 |
| C01 | SBR1216566 | ENSRNOT00000026303.4 | Egr1 | ENSRNOG0000019422 | early growth response 1 Source RGD Symbol Acc 2544 |
| C02 | SBR1117360 | ENSRNOT000000040069.6 | ElN | ENSRNOG0000001469 | elastin Source RGD Symbol Acc 67394 |
| C03 | SBR1127868 | ENSRNOT00000074562.3 | Eng | ENSRNOG0000050190 | endoglin Source RGD Symbol Acc 1593188 |
| C04 | SBR1147343 | ENSRNOT00000017325.5 | Fabp3 | ENSRNOG0000012879 | fatty acid binding protein 3 Source RGD Symbol Acc 69048 |
| C05 | SBR1159525 | ENSRNOT00000025928.5 | Fas | ENSRNOG0000019142 | Fas cell surface death receptor Source RGD Symbol Acc 619831 |
| C06 | SBR1198729 | ENSRNOT00000064091.3 | Fga | ENSRNOG0000024848 | fibrinogen alpha chain Source RGD Symbol Acc 2603 |
| C07 | SBR1202833 | ENSRNOT00000009813.3 | Fgb | ENSRNOG0000007092 | fibrinogen beta chain Source RGD Symbol Acc 2604 |
| C08 | SBR1185708 | ENSRNOT00000023388.5 | Fgf2 | ENSRNOG0000017392 | fibroblast growth factor 2 Source RGD Symbol Acc 2609 |
| C09 | SBR1178912 | ENSRNOT00000019772.6 | Fn1 | ENSRNOG0000014288 | fibronectin 1 Source RGD Symbol Acc 2624 |
| C10 | SBR1150704 | ENSRNOT00000025157.6 | Hbegf | ENSRNOG0000018646 | heparin-binding EGF-like growth factor Source RGD Symbol Acc 2526 |
| | | ENSRNOT000000 | | ENSRNOG00 | |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|----------------------|--------------|-------------------|---|
| C11 | SBR1152534 | 028066.5 | Icam1 | 000020679 | intercellular adhesion molecule 1 Source RGD Symbol Acc 2857 |
| C12 | SBR1108917 | ENSRNOT0000009919.2 | Iifng | ENSRNOG0000007468 | interferon gamma Source RGD Symbol Acc 2866 |
| D01 | SBR1106125 | ENSRNOT00000006113.8 | Il1a | ENSRNOG0000004575 | interleukin 1 alpha Source RGD Symbol Acc 2890 |
| D02 | SBR1196387 | ENSRNOT00000006308.4 | Il1b | ENSRNOG0000004649 | interleukin 1 beta Source RGD Symbol Acc 2891 |
| D03 | SBR1113457 | ENSRNOT00000019673.4 | Il1r1 | ENSRNOG0000014504 | interleukin 1 receptor type 1 Source RGD Symbol Acc 2892 |
| D04 | SBR1130335 | ENSRNOT00000019415.5 | Il1r2 | ENSRNOG0000014378 | interleukin 1 receptor type 2 Source RGD Symbol Acc 621147 |
| D05 | SBR1102170 | ENSRNOT00000023327.2 | Il2 | ENSRNOG0000017348 | interleukin 2 Source RGD Symbol Acc 620047 |
| D06 | SBR1198875 | ENSRNOT00000031762.1 | Il3 | ENSRNOG0000026786 | interleukin 3 Source RGD Symbol Acc 2897 |
| D07 | SBR1101847 | ENSRNOT00000010029.3 | Il4 | ENSRNOG0000007624 | interleukin 4 Source RGD Symbol Acc 2898 |
| D08 | SBR1179555 | ENSRNOT00000010729.4 | Il5 | ENSRNOG0000008111 | interleukin 5 Source RGD Symbol Acc 2900 |
| D09 | SBR1203459 | ENSRNOT00000077401.1 | Itga2 | ENSRNOG0000058111 | integrin subunit alpha 2 Source RGD Symbol Acc 621632 |
| D10 | SBR1211134 | ENSRNOT00000087748.1 | Itga5 | ENSRNOG0000057451 | integrin subunit alpha 5 Source RGD Symbol Acc 2925 |
| D11 | SBR1156619 | ENSRNOT00000054983.4 | Itgax | ENSRNOG0000036703 | integrin subunit alpha X Source RGD Symbol Acc 1561123 |
| D12 | SBR1182978 | ENSRNOT00000001639.6 | Itgb2 | ENSRNOG0000001224 | integrin subunit beta 2 Source RGD Symbol Acc 1305581 |
| E01 | SBR1173378 | ENSRNOT00000071405.2 | Kdr | ENSRNOG0000046829 | kinase insert domain receptor Source RGD Symbol Acc 2965 |
| E02 | SBR1208407 | ENSRNOT00000019052.2 | Klf2 | ENSRNOG0000014205 | Kruppel-like factor 2 Source RGD Symbol Acc 1359220 |
| E03 | SBR1129625 | ENSRNOT00000023226.6 | Lama1 | ENSRNOG0000017237 | laminin subunit alpha 1 Source RGD Symbol Acc 1307207 |
| E04 | SBR1193091 | ENSRNOT00000013496.3 | Ldlr | ENSRNOG0000009946 | low density lipoprotein receptor Source RGD Symbol Acc 2998 |
| E05 | SBR1155933 | ENSRNOT00000009313.4 | Lif | ENSRNOG0000007002 | LIF, interleukin 6 family cytokine Source RGD Symbol Acc 620865 |
| E06 | SBR1197775 | ENSRNOT00000016543.3 | Lpl | ENSRNOG0000012181 | lipoprotein lipase Source RGD Symbol Acc 3017 |
| E07 | SBR1138210 | ENSRNOT00000011312.3 | Lypla1 | ENSRNOG0000008320 | lysophospholipase 1 Source RGD Symbol Acc 3025 |
| E08 | SBR1166091 | ENSRNOT00000091704.1 | Mmp3 | ENSRNOG0000032626 | matrix metalloproteinase 3 Source RGD Symbol Acc 621317 |
| E09 | SBR1111134 | ENSRNOT00000036838.4 | Nfkb1 | ENSRNOG0000023258 | nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498 |
| E10 | SBR1203756 | ENSRNOT00000013058.4 | Nos3 | ENSRNOG0000009348 | nitric oxide synthase 3 Source RGD Symbol Acc 3186 |
| E11 | SBR1096384 | ENSRNOT00000013145.6 | LOC100912228 | ENSRNOG0000009768 | neuropeptide Y Source RGD Symbol Acc 3197 |
| E12 | SBR1117087 | ENSRNOT00000018154.5 | Nr1h3 | ENSRNOG0000013172 | nuclear receptor subfamily 1, group H, member 3 Source RGD Symbol Acc 61909 |
| F01 | SBR1210315 | ENSRNOT00000042117.6 | Pdgfa | ENSRNOG0000001312 | platelet derived growth factor subunit A Source RGD Symbol Acc 3282 |
| F02 | SBR1132695 | ENSRNOT00000023196.5 | Pdgfb | ENSRNOG0000017197 | platelet derived growth factor subunit B Source RGD Symbol Acc 3283 |
| F03 | SBR1100630 | ENSRNOT00000086033.1 | Pdgfrb | ENSRNOG0000018461 | platelet derived growth factor receptor beta Source RGD Symbol Acc 3285 |
| F04 | SBR1163064 | ENSRNOT00000078928.1 | Ppara | ENSRNOG0000021463 | peroxisome proliferator activated receptor alpha Source RGD Symbol Acc 3369 |
| F05 | SBR1197924 | ENSRNOT00000083109.1 | Ppard | ENSRNOG0000000503 | peroxisome proliferator-activated receptor delta Source RGD Symbol Acc 3370 |
| F06 | SBR1131520 | ENSRNOT00000082969.1 | Pparg | ENSRNOG0000008839 | peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371 |
| F07 | SBR1187694 | ENSRNOT00000010218.5 | Ptgs1 | ENSRNOG0000007415 | prostaglandin-endoperoxide synthase 1 Source RGD Symbol Acc 3439 |
| F08 | SBR1218516 | ENSRNOT00000012892.4 | Rxra | ENSRNOG0000009446 | retinoid X receptor alpha Source RGD Symbol Acc 3610 |
| F09 | SBR1131931 | ENSRNOT00000076757.1 | Sele | ENSRNOG0000002723 | selectin E Source RGD Symbol Acc 3654 |
| F10 | SBR1185190 | ENSRNOT00000003733.6 | Sell | ENSRNOG0000002776 | selectin L Source RGD Symbol Acc 3655 |

| Position | Assay | Name | Symbol | Ensembl ID | Description |
|----------|------------|-----------------------|--------------|--------------------|---|
| F11 | SBR1174453 | ENSRNOT00000076879.2 | Selp | ENSRNOG0000002794 | selectin P Source RGD Symbol Acc 3656 |
| F12 | SBR1161756 | ENSRNOT00000000888.5 | Selp1g | ENSRNOG0000000699 | selectin P ligand Source RGD Symbol Acc 1307971 |
| G01 | SBR1169254 | ENSRNOT00000003409.5 | Serp1b2 | ENSRNOG0000002460 | serpin family B member 2 Source RGD Symbol Acc 621823 |
| G02 | SBR1126485 | ENSRNOT00000001916.2 | Serp1e1 | ENSRNOG0000001414 | serpin family E member 1 Source RGD Symbol Acc 3249 |
| G03 | SBR1136942 | ENSRNOT00000002885.6 | Sod1 | ENSRNOG0000002115 | superoxide dismutase 1 Source RGD Symbol Acc 3731 |
| G04 | SBR1210860 | ENSRNOT000000075989.1 | Spp1 | ENSRNOG00000043451 | secreted phosphoprotein 1 Source RGD Symbol Acc 3752 |
| G05 | SBR1143485 | ENSRNOT000000028051.4 | Tgfb1 | ENSRNOG00000020652 | transforming growth factor, beta 1 Source RGD Symbol Acc 69051 |
| G06 | SBR1164140 | ENSRNOT000000087023.1 | Tgfb2 | ENSRNOG0000002418 | transforming growth factor, beta 2 Source RGD Symbol Acc 70491 |
| G07 | SBR1122452 | ENSRNOT000000065224.1 | Thbs4 | ENSRNOG00000012471 | thrombospondin 4 Source RGD Symbol Acc 62046 |
| G08 | SBR1205819 | ENSRNOT000000084563.1 | Tnc | ENSRNOG00000058645 | tenascin C Source RGD Symbol Acc 621057 |
| G09 | SBR1187845 | ENSRNOT000000079677.1 | LOC103694380 | ENSRNOG0000005156 | tumor necrosis factor-like Source RGD Symbol Acc 9404643 |
| G10 | SBR1189462 | ENSRNOT000000077972.1 | Vcam1 | ENSRNOG00000014333 | vascular cell adhesion molecule 1 Source RGD Symbol Acc 3952 |
| G11 | SBR1108862 | ENSRNOT000000044163.4 | Vegfa | ENSRNOG00000019598 | vascular endothelial growth factor A Source RGD Symbol Acc 619991 |
| G12 | SBR1124386 | ENSRNOT000000026643.7 | Vwf | ENSRNOG00000019689 | von Willebrand factor Source RGD Symbol Acc 621759 |
| H01 | SBR1220567 | ENSRNOT000000042459.4 | Actb | ENSRNOG00000034254 | actin, beta Source RGD Symbol Acc 628837 |
| H02 | SBR1220568 | ENSRNOT000000023017.5 | B2m | ENSRNOG00000017123 | beta-2 microglobulin Source RGD Symbol Acc 2189 |
| H03 | SBR1225377 | ENSRNOT000000065935.3 | Hprt1 | ENSRNOG00000048561 | hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826 |
| H04 | SBR1122313 | ENSRNOT000000017468.2 | Ldha | ENSRNOG00000013009 | lactate dehydrogenase A Source RGD Symbol Acc 2996 |
| H05 | SBR1220572 | ENSRNOT000000018820.5 | 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.

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