

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

## Rat Antibacterial Response

Cat. no. 249950 SBRN-148ZA

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](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Akt1	Apcs	Bcl10	Birc3	Bpi	Camp	Card6	Card9	Casp1	Casp8	Ccl3	Ccl4
B	Ccl5	Cd14	Chuk	Crp	Ctsg	Ctsk	Cxcl1	Cxcl3	AABR07005B2 1.1	Fadd	Hsp90aa1	Ifnb1
C	Ikbkb	Il12a	Il12b	Il18	Il1b	Il6	Irak1	Irak3	Irf5	Irf7	Jun	Lbp
D	Lcn2	Lyz2	Map2k1	Map2k3	Map2k4	LOC1009107 71	Tab1	Mapk1	Mapk14	Mapk3	Mapk8	Mefv
E	Mpo	Myd88	AC135826.1	Nfkb1	Nfkbia	Nlr4	Nlrp1a	Nlrp3	Nod2	Plk3ca	Plk3r1	Prdx2
F	Prtn3	Ptpip1	Pycard	Rac1	Rela	Ripk1	Ripk2	Slc11a1	Slpi	Sugt1	Ticom2	Tirap
G	Tlr1	Tlr2	Tlr4	Tlr5	Tlr6	Tlr9	LOC1036943 80	Tnfrsf1a	Tollip	Traf6	Xiap	Zbp1
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	SBR1163078	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A02	SBR1142966	ENSRNOT00000012092.6	Apcs	ENSRNOG0000009086	amyloid P component, serum Source RGD Symbol Acc 68322
A03	SBR1160388	ENSRNOT00000019911.6	Bcl10	ENSRNOG0000042389	BCL10, immune signaling adaptor Source RGD Symbol Acc 620544
A04	SBR1181460	ENSRNOT00000090774.1	Birc3	ENSRNOG0000005731	baculoviral IAP repeat-containing 3 Source RGD Symbol Acc 621282
A05	SBR1181526	ENSRNOT00000039994.4	Bpi	ENSRNOG0000034195	bactericidal/permeability-increasing protein Source RGD Symbol Acc 1303179
A06	SBR1132040	ENSRNOT00000028130.7	Camp	ENSRNOG0000020733	cathelicidin antimicrobial peptide Source RGD Symbol Acc 1559878
A07	SBR1136677	ENSRNOT00000039057.3	Card6	ENSRNOG0000001271	caspase recruitment domain family, member 6 Source RGD Symbol Acc 1305805
A08	SBR1166729	ENSRNOT00000091484.1	Card9	ENSRNOG0000051470	caspase recruitment domain family, member 9 Source RGD Symbol Acc 708370
A09	SBR1122190	ENSRNOT00000009993.6	Casp1	ENSRNOG0000007372	caspase 1 Source RGD Symbol Acc 2274
A10	SBR1182801	ENSRNOT00000016613.4	Casp8	ENSRNOG0000012331	caspase 8 Source RGD Symbol Acc 620945
A11	SBR1146662	ENSRNOT00000015139.3	Ccl3	ENSRNOG0000011205	C-C motif chemokine ligand 3 Source RGD Symbol Acc 3647
A12	SBR1202700	ENSRNOT00000015199.3	Ccl4	ENSRNOG0000011406	C-C motif chemokine ligand 4 Source RGD Symbol Acc 620441
B01	SBR1094349	ENSRNOT00000014865.6	Ccl5	ENSRNOG0000010906	C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069
B02	SBR1200939	ENSRNOT00000023977.6	Cd14	ENSRNOG0000017819	CD14 molecule Source RGD Symbol Acc 620588
B03	SBR1132111	ENSRNOT00000030782.4	Chuk	ENSRNOG0000022485	conserved helix-loop-helix ubiquitous kinase Source RGD Symbol Acc 1306661
B04	SBR1169897	ENSRNOT00000000058.6	Crp	ENSRNOG0000000053	C-reactive protein Source RGD Symbol Acc 2411
B05	SBR1152150	ENSRNOT00000059677.2	Ctsg	ENSRNOG0000020647	cathepsin G Source RGD Symbol Acc 1307681
B06	SBR1174118	ENSRNOT00000028730.6	Ctsk	ENSRNOG0000021155	cathepsin K Source RGD Symbol Acc 61810
B07	SBR1198580	ENSRNOT00000003778.3	Cxcl1	ENSRNOG0000002802	C-X-C motif chemokine ligand 1 Source RGD Symbol Acc 619869
B08	SBR1116913	ENSRNOT00000034090.3	Cxcl3	ENSRNOG0000028043	chemokine (C-X-C motif) ligand 3 Source RGD Symbol Acc 621812
B09	SBR1127059	ENSRNOT00000054910.3	AABR07005821.1	ENSRNOG0000020560	
B10	SBR1202965	ENSRNOT00000075089.3	Fadd	ENSRNOG0000047035	Fas associated via death domain Source RGD Symbol Acc 628700
B11	SBR1113341	ENSRNOT00000086310.1	Hsp90aa1	ENSRNOG0000059714	heat shock protein 90 alpha family class A member 1 Source RGD Symbol Acc 631409
B12	SBR1104910	ENSRNOT00000008224.2	Ifnb1	ENSRNOG0000006268	interferon beta 1 Source RGD Symbol Acc 2865
C01	SBR1133299	ENSRNOT00000025851.4	Ikbbk	ENSRNOG0000019073	inhibitor of nuclear factor kappa B kinase subunit beta Source RGD Symbol Acc 621375
C02	SBR1107831	ENSRNOT00000012831.3	Il12a	ENSRNOG0000009468	interleukin 12A Source RGD Symbol Acc 620562
C03	SBR1133771	ENSRNOT00000005898.6	Il12b	ENSRNOG0000004380	interleukin 12B Source RGD Symbol Acc 628704
C04	SBR1183288	ENSRNOT00000013093.6	Il18	ENSRNOG0000009848	interleukin 18 Source RGD Symbol Acc 2889
C05	SBR1196387	ENSRNOT00000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
C06	SBR1156877	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
C07	SBR1200697	ENSRNOT00000092207.1	Irak1	ENSRNOG0000060869	interleukin-1 receptor-associated kinase 1 Source RGD Symbol Acc 1563841
C08	SBR1122890	ENSRNOT00000005686.4	Irak3	ENSRNOG0000004226	interleukin-1 receptor-associated kinase 3 Source RGD Symbol Acc 1308846
C09	SBR1126971	ENSRNOT00000010001.6	Irf5	ENSRNOG0000007437	interferon regulatory factor 5 Source RGD Symbol Acc 1310447
C10	SBR1141330	ENSRNOT00000023504.6	Irf7	ENSRNOG0000017414	interferon regulatory factor 7 Source RGD Symbol Acc 1307828
		ENSRNOT000000		ENSRNOG00	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1133226	011731.3	Jun	000026293	2943
C12	SBR1203438	ENSRNOT00000 019787.2	Lbp	ENSRNOG00 000014532	lipopolysaccharide binding protein Source RGD Symbol Acc 61865
D01	SBR1205028	ENSRNOT00000 018776.5	Lcn2	ENSRNOG00 000013973	lipocalin 2 Source RGD Symbol Acc 69408
D02	SBR1132120	ENSRNOT00000 007747.7	Lyz2	ENSRNOG00 000005825	lysozyme 2 Source RGD Symbol Acc 3026
D03	SBR1111011	ENSRNOT00000 013933.6	Map2k1	ENSRNOG00 000010176	mitogen activated protein kinase kinase 1 Source RGD Symbol Acc 70495
D04	SBR1124771	ENSRNOT00000 073792.2	Map2k3	ENSRNOG00 000049132	mitogen activated protein kinase kinase 3 Source RGD Symbol Acc 1306620
D05	SBR1195777	ENSRNOT00000 005293.7	Map2k4	ENSRNOG00 000003834	mitogen activated protein kinase kinase 4 Source RGD Symbol Acc 1307040
D06	SBR1093683	ENSRNOT00000 007654.5	LOC10091 0771	ENSRNOG00 000005724	mitogen-activated protein kinase kinase kinase 7-like Source RGD Symbol Acc 6496502
D07	SBR1199246	ENSRNOT00000 067904.3	Tab1	ENSRNOG00 000017285	TGF-beta activated kinase 1/MAP3K7 binding protein 1 Source RGD Symbol Acc 1306216
D08	SBR1202944	ENSRNOT00000 002533.7	Mapk1	ENSRNOG00 000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
D09	SBR1149566	ENSRNOT00000 000618.6	Mapk14	ENSRNOG00 000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
D10	SBR1209281	ENSRNOT00000 087625.1	Mapk3	ENSRNOG00 000053583	mitogen activated protein kinase 3 Source RGD Symbol Acc 3046
D11	SBR1144517	ENSRNOT00000 065216.3	Mapk8	ENSRNOG00 000020155	mitogen-activated protein kinase 8 Source RGD Symbol Acc 621506
D12	SBR1103201	ENSRNOT00000 011073.5	Mefv	ENSRNOG00 000008134	MEFV, pyrin innate immunity regulator Source RGD Symbol Acc 61889
E01	SBR1165540	ENSRNOT00000 081951.1	Mpo	ENSRNOG00 000008310	myeloperoxidase Source RGD Symbol Acc 1592081
E02	SBR1185632	ENSRNOT00000 018341.5	Myd88	ENSRNOG00 000013634	MYD88, innate immune signal transduction adaptor Source RGD Symbol Acc 735043
E03	SBR1205876	ENSRNOT00000 072926.3	AC135826. 1	ENSRNOG00 000033693	NLR family, apoptosis inhibitory protein 2 Source MGI Symbol Acc MGI 1298226
E04	SBR1111134	ENSRNOT00000 036838.4	Nfkb1	ENSRNOG00 000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E05	SBR1120974	ENSRNOT00000 009894.6	Nfkbia	ENSRNOG00 000007390	NFKB inhibitor alpha Source RGD Symbol Acc 3171
E06	SBR1103739	ENSRNOT00000 007655.7	Nlrc4	ENSRNOG00 000005810	NLR family, CARD domain containing 4 Source RGD Symbol Acc 1309831
E07	SBR1174082	ENSRNOT00000 037546.6	Nlrp1a	ENSRNOG00 000023143	NLR family, pyrin domain containing 1A Source RGD Symbol Acc 1310963
E08	SBR1186072	ENSRNOT00000 004280.5	Nlrp3	ENSRNOG00 000003170	NLR family, pyrin domain containing 3 Source RGD Symbol Acc 1308314
E09	SBR1140577	ENSRNOT00000 065103.2	Nod2	ENSRNOG00 000014124	nucleotide-binding oligomerization domain containing 2 Source RGD Symbol Acc 1306368
E10	SBR1193587	ENSRNOT00000 083720.1	Pik3ca	ENSRNOG00 000056371	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha Source RGD Symbol Acc 620916
E11	SBR1155861	ENSRNOT00000 025687.7	Pik3r1	ENSRNOG00 000018903	phosphoinositide-3-kinase regulatory subunit 1 Source RGD Symbol Acc 3329
E12	SBR1150356	ENSRNOT00000 004799.5	Prdx2	ENSRNOG00 000003520	peroxiredoxin 2 Source RGD Symbol Acc 3838
F01	SBR1159361	ENSRNOT00000 014687.5	Prtn3	ENSRNOG00 000029814	proteinase 3 Source RGD Symbol Acc 1304898
F02	SBR1116603	ENSRNOT00000 063930.2	Pstpip1	ENSRNOG00 000016413	proline-serine-threonine phosphatase-interacting protein 1 Source RGD Symbol Acc 1307557
F03	SBR1158649	ENSRNOT00000 026699.4	Pycard	ENSRNOG00 000019675	PYD and CARD domain containing Source RGD Symbol Acc 628637
F04	SBR1123146	ENSRNOT00000 001417.5	Rac1	ENSRNOG00 000001068	Rac family small GTPase 1 Source RGD Symbol Acc 619755
F05	SBR1138204	ENSRNOT00000 045233.3	Rela	ENSRNOG00 000030888	RELA proto-oncogene, NF-kB subunit Source RGD Symbol Acc 727889
F06	SBR1174883	ENSRNOT00000 023962.5	Ripk1	ENSRNOG00 000017787	receptor interacting serine/threonine kinase 1 Source RGD Symbol Acc 1310158
F07	SBR1122908	ENSRNOT00000 012963.5	Ripk2	ENSRNOG00 000009389	receptor-interacting serine-threonine kinase 2 Source RGD Symbol Acc 1309167
F08	SBR1151212	ENSRNOT00000 083421.1	Slc11a1	ENSRNOG00 000014956	solute carrier family 11 member 1 Source RGD Symbol Acc 1601463
F09	SBR1167132	ENSRNOT00000 076191.1	Slpi	ENSRNOG00 000046699	secretory leukocyte peptidase inhibitor Source RGD Symbol Acc 621768
F10	SBR1195294	ENSRNOT00000 017086.7	Sugt1	ENSRNOG00 000012594	SGT1 homolog, MIS12 kinetochore complex assembly cochaperone Source RGD Symbol Acc 1307550

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1130378	ENSRNOT00000059466.2	Ticam2	ENSRNOG0000042070	toll-like receptor adaptor molecule 2 Source RGD Symbol Acc 1308258
F12	SBR1108614	ENSRNOT00000038312.5	Tirap	ENSRNOG0000021420	TIR domain containing adaptor protein Source RGD Symbol Acc 1595496
G01	SBR1137224	ENSRNOT00000059124.3	Tlr1	ENSRNOG0000038722	toll-like receptor 1 Source MGI Symbol Acc MGI 1341295
G02	SBR1126190	ENSRNOT00000013025.4	Tlr2	ENSRNOG0000009822	toll-like receptor 2 Source RGD Symbol Acc 735138
G03	SBR1180108	ENSRNOT00000014020.3	Tlr4	ENSRNOG0000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G04	SBR1140816	ENSRNOT00000004821.4	Tlr5	ENSRNOG0000022067	toll-like receptor 5 Source RGD Symbol Acc 631351
G05	SBR1133670	ENSRNOT00000002933.5	Tlr6	ENSRNOG0000002161	toll-like receptor 6 Source RGD Symbol Acc 1303030
G06	SBR1143539	ENSRNOT00000074194.1	Tlr9	ENSRNOG0000048161	toll-like receptor 9 Source RGD Symbol Acc 631352
G07	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G08	SBR1130829	ENSRNOT00000048529.4	Tnfrsf1a	ENSRNOG0000031312	TNF receptor superfamily member 1A Source RGD Symbol Acc 621237
G09	SBR1187324	ENSRNOT00000046344.3	Tollip	ENSRNOG0000019861	toll interacting protein Source RGD Symbol Acc 1304676
G10	SBR1200335	ENSRNOT00000006148.5	Traf6	ENSRNOG0000004639	TNF receptor associated factor 6 Source RGD Symbol Acc 1306853
G11	SBR1144925	ENSRNOT00000009336.3	Xiap	ENSRNOG0000006967	X-linked inhibitor of apoptosis Source RGD Symbol Acc 620692
G12	SBR1139559	ENSRNOT00000081036.1	Zbp1	ENSRNOG0000006314	Z-DNA binding protein 1 Source RGD Symbol Acc 619956
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 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 $\mu$ l QuantiNova SYBR Green RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ 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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