

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

## Rat Antibacterial Response

Cat. no. 249950 SBRN-148ZR

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

	1	2	3	4	5	6	7	8	9	10	11	12
A	Akt1	Apc	Bcl10	Birc3	Bpi	Camp	Card6	Card9	Casp1	Casp8	Ccl3	Ccl4
B	Cd5	Cd14	Chuk	Crp	Ctsg	Ctsk	Cxcl1	Cxcl3	AABR0700582 1.1	Fadd	Hsp90aa1	Ifnb1
C	Ikbkb	Il12a	Il12b	Il18	Il1b	Il6	Irak1	Irak3	Irft	Irft	Jun	Lbp
D	Lcn2	Lyz2	Map2k1	Map2k3	Map2k4	LOC1009107 71	Tab1	Mapk1	Mapk14	Mapk3	Mapk8	Mefv
E	Mpo	Myd88	AC135826.1	Nfkb1	Nfkbia	Nlrc4	Nlrp1a	Nlrp3	Nod2	Pik3ca	Pik3r1	Prdx2
F	Prin3	PstPIP1	Pycard	Rac1	Rela	Ripk1	Ripk2	Sic11a1	Slpi	Sugt1	Ticam2	Tirap
G	Tlr1	Tlr2	Tlr4	Tlr5	Tlr6	Tlr9	LOC1036943 80	Tnfrsf1a	Tollip	Traf6	Xiap	Zbp1
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	Q1C	Q1C	PPC	PPC	PPC	PPC

## Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBR1163078	ENSRNOT00000 031164.3	Akt1	ENSRNOG00 000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A02	SBR1142966	ENSRNOT00000 012092.6	Apc	ENSRNOG00 000009086	amyloid P component, serum Source RGD Symbol Acc 68322
A03	SBR1160388	ENSRNOT00000 019911.6	Bcl10	ENSRNOG00 000042389	BCL10, immune signaling adaptor Source RGD Symbol Acc 620544
A04	SBR1181460	ENSRNOT00000 090774.1	Birc3	ENSRNOG00 000005731	baculoviral IAP repeat-containing 3 Source RGD Symbol Acc 621282
A05	SBR1181526	ENSRNOT00000 039994.4	Bpi	ENSRNOG00 000034195	bactericidal/permeability-increasing protein Source RGD Symbol Acc 1303179
A06	SBR1132040	ENSRNOT00000 028130.7	Camp	ENSRNOG00 000020733	cathelicidin antimicrobial peptide Source RGD Symbol Acc 1559878
A07	SBR1136677	ENSRNOT00000 039057.3	Card6	ENSRNOG00 000001271	caspase recruitment domain family, member 6 Source RGD Symbol Acc 1305805
A08	SBR1166729	ENSRNOT00000 091484.1	Card9	ENSRNOG00 000051470	caspase recruitment domain family, member 9 Source RGD Symbol Acc 708370
A09	SBR1122190	ENSRNOT00000 009993.6	Casp1	ENSRNOG00 000007372	caspase 1 Source RGD Symbol Acc 2274
A10	SBR1182801	ENSRNOT00000 016613.4	Casp8	ENSRNOG00 000012331	caspase 8 Source RGD Symbol Acc 620945
A11	SBR1146662	ENSRNOT00000 015139.3	Ccl3	ENSRNOG00 000011205	C-C motif chemokine ligand 3 Source RGD Symbol Acc 3647
A12	SBR1202700	ENSRNOT00000 015199.3	Ccl4	ENSRNOG00 000011406	C-C motif chemokine ligand 4 Source RGD Symbol Acc 620441
B01	SBR1094349	ENSRNOT00000 014865.6	Ccl5	ENSRNOG00 000010906	C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069
B02	SBR1200939	ENSRNOT00000 023977.6	Cd14	ENSRNOG00 000017819	CD14 molecule Source RGD Symbol Acc 620588
B03	SBR1132111	ENSRNOT00000 030782.4	Chuk	ENSRNOG00 000022485	conserved helix-loop-helix ubiquitous kinase Source RGD Symbol Acc 1306661
B04	SBR1169897	ENSRNOT00000 000058.6	Crp	ENSRNOG00 000000053	C-reactive protein Source RGD Symbol Acc 2411
B05	SBR1152150	ENSRNOT00000 059677.2	Ctsg	ENSRNOG00 000020647	cathepsin G Source RGD Symbol Acc 1307681
B06	SBR1174118	ENSRNOT00000 028730.6	Csk	ENSRNOG00 000021155	cathepsin K Source RGD Symbol Acc 61810
B07	SBR1198580	ENSRNOT00000 003778.3	Cxcl1	ENSRNOG00 000002802	C-X-C motif chemokine ligand 1 Source RGD Symbol Acc 619869
B08	SBR1116913	ENSRNOT00000 034090.3	Cxcl3	ENSRNOG00 000028043	chemokine (C-X-C motif) ligand 3 Source RGD Symbol Acc 621812
B09	SBR1127059	ENSRNOT00000 054910.3	AABR0700 5821.1	ENSRNOG00 000020560	
B10	SBR1202965	ENSRNOT00000 075089.3	Fadd	ENSRNOG00 000047035	Fas associated via death domain Source RGD Symbol Acc 628700
B11	SBR1113341	ENSRNOT00000 086310.1	Hsp90aa1	ENSRNOG00 000059714	heat shock protein 90 alpha family class A member 1 Source RGD Symbol Acc 631409
B12	SBR1104910	ENSRNOT00000 008224.2	Ifnb1	ENSRNOG00 000006268	interferon beta 1 Source RGD Symbol Acc 2865
C01	SBR1133299	ENSRNOT00000 025851.4	Ikbkb	ENSRNOG00 000019073	inhibitor of nuclear factor kappa B kinase subunit beta Source RGD Symbol Acc 621375
C02	SBR1107831	ENSRNOT00000 012831.3	Il12a	ENSRNOG00 000009468	interleukin 12A Source RGD Symbol Acc 620562
C03	SBR1133771	ENSRNOT00000 005898.6	Il12b	ENSRNOG00 000004380	interleukin 12B Source RGD Symbol Acc 628704
C04	SBR1183288	ENSRNOT00000 013093.6	Il18	ENSRNOG00 000009848	interleukin 18 Source RGD Symbol Acc 2889
C05	SBR1196387	ENSRNOT00000 006308.4	Il1b	ENSRNOG00 000004649	interleukin 1 beta Source RGD Symbol Acc 2891
C06	SBR1156877	ENSRNOT00000 013732.6	Il6	ENSRNOG00 000010278	interleukin 6 Source RGD Symbol Acc 2901
C07	SBR1200697	ENSRNOT00000 092207.1	Irak1	ENSRNOG00 000060869	interleukin-1 receptor-associated kinase 1 Source RGD Symbol Acc 1563841
C08	SBR1122890	ENSRNOT00000 005686.4	Irak3	ENSRNOG00 000004226	interleukin-1 receptor-associated kinase 3 Source RGD Symbol Acc 1308846
C09	SBR1126971	ENSRNOT00000 010001.6	Irf5	ENSRNOG00 000007437	interferon regulatory factor 5 Source RGD Symbol Acc 1310447
C10	SBR1141330	ENSRNOT00000 023504.6	Irf7	ENSRNOG00 000017414	interferon regulatory factor 7 Source RGD Symbol Acc 1307828
		ENSRNOT00000		ENSRNOG00	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc

<b>Position</b>	<b>Assay</b>	<b>Name</b>	<b>Symbol</b>	<b>Ensembl ID</b>	<b>Description</b>
C11	SBR1133226	011731.3	Jun	ENSRNOG0000026293	2943
C12	SBR1203438	ENSRNOT00000019787.2	Lbp	ENSRNOG0000014532	lipopolysaccharide binding protein Source RGD Symbol Acc 61865
D01	SBR1205028	ENSRNOT00000018776.5	Lcn2	ENSRNOG0000013973	lipocalin 2 Source RGD Symbol Acc 69408
D02	SBR1132120	ENSRNOT00000007747.7	Lyz2	ENSRNOG0000005825	lysozyme 2 Source RGD Symbol Acc 3026
D03	SBR1111011	ENSRNOT00000013933.6	Map2k1	ENSRNOG0000010176	mitogen activated protein kinase kinase 1 Source RGD Symbol Acc 70495
D04	SBR1124771	ENSRNOT000000073792.2	Map2k3	ENSRNOG0000049132	mitogen activated protein kinase kinase 3 Source RGD Symbol Acc 1306620
D05	SBR1195777	ENSRNOT00000005293.7	Map2k4	ENSRNOG0000003834	mitogen activated protein kinase kinase 4 Source RGD Symbol Acc 1307040
D06	SBR1093683	ENSRNOT00000007654.5	LOC100910771	ENSRNOG0000005724	mitogen-activated protein kinase kinase kinase 7-like Source RGD Symbol Acc 6496502
D07	SBR1199246	ENSRNOT000000067904.3	Tab1	ENSRNOG0000017285	TGF-beta activated kinase 1/MAP3K7 binding protein 1 Source RGD Symbol Acc 1306216
D08	SBR1202944	ENSRNOT00000002533.7	Mapk1	ENSRNOG0000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
D09	SBR1149566	ENSRNOT00000000618.6	Mapk14	ENSRNOG0000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
D10	SBR1209281	ENSRNOT000000087625.1	Mapk3	ENSRNOG0000053583	mitogen activated protein kinase 3 Source RGD Symbol Acc 3046
D11	SBR1144517	ENSRNOT000000065216.3	Mapk8	ENSRNOG0000020155	mitogen-activated protein kinase 8 Source RGD Symbol Acc 621506
D12	SBR1103201	ENSRNOT000000011073.5	Mefv	ENSRNOG000008134	MEFV, pyrin innate immunity regulator Source RGD Symbol Acc 61889
E01	SBR1165540	ENSRNOT000000081951.1	Mpo	ENSRNOG0000008310	myeloperoxidase Source RGD Symbol Acc 1592081
E02	SBR1185632	ENSRNOT000000018341.5	Myd88	ENSRNOG0000013634	MYD88, innate immune signal transduction adaptor Source RGD Symbol Acc 735043
E03	SBR1205876	ENSRNOT000000072926.3	AC135826.1	ENSRNOG0000033693	NLR family, apoptosis inhibitory protein 2 Source MGI Symbol Acc MGI 1298226
E04	SBR1111134	ENSRNOT000000036838.4	Nfkb1	ENSRNOG0000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E05	SBR1120974	ENSRNOT000000009894.6	Nfkbia	ENSRNOG0000007390	NFKB inhibitor alpha Source RGD Symbol Acc 3171
E06	SBR1103739	ENSRNOT000000007655.7	Nlrc4	ENSRNOG0000005810	NLR family, CARD domain containing 4 Source RGD Symbol Acc 1309831
E07	SBR1174082	ENSRNOT000000037546.6	Nlrp1a	ENSRNOG0000023143	NLR family, pyrin domain containing 1A Source RGD Symbol Acc 1310963
E08	SBR1186072	ENSRNOT000000004280.5	Nlrp3	ENSRNOG0000003170	NLR family, pyrin domain containing 3 Source RGD Symbol Acc 1308314
E09	SBR1140577	ENSRNOT000000065103.2	Nod2	ENSRNOG0000014124	nucleotide-binding oligomerization domain containing 2 Source RGD Symbol Acc 1306368
E10	SBR1193587	ENSRNOT000000083720.1	Pik3ca	ENSRNOG0000056371	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha Source RGD Symbol Acc 620916
E11	SBR1155861	ENSRNOT000000025687.7	Pik3rl	ENSRNOG0000018903	phosphoinositide-3-kinase regulatory subunit 1 Source RGD Symbol Acc 3329
E12	SBR1150356	ENSRNOT000000004799.5	Prdx2	ENSRNOG0000003520	peroxiredoxin 2 Source RGD Symbol Acc 3838
F01	SBR1159361	ENSRNOT000000014687.5	Prtn3	ENSRNOG0000029814	proteinase 3 Source RGD Symbol Acc 1304898
F02	SBR1116603	ENSRNOT000000063930.2	PstPIP1	ENSRNOG0000016413	proline-serine-threonine phosphatase-interacting protein 1 Source RGD Symbol Acc 1307557
F03	SBR1158649	ENSRNOT000000026699.4	Pycard	ENSRNOG0000019675	PYD and CARD domain containing Source RGD Symbol Acc 628637
F04	SBR1123146	ENSRNOT000000001417.5	Rac1	ENSRNOG0000001068	Rac family small GTPase 1 Source RGD Symbol Acc 619755
F05	SBR1138204	ENSRNOT000000045233.3	Rela	ENSRNOG0000030888	RELA proto-oncogene, NF-κB subunit Source RGD Symbol Acc 727889
F06	SBR1174883	ENSRNOT000000023962.5	Ripk1	ENSRNOG0000017787	receptor interacting serine/threonine kinase 1 Source RGD Symbol Acc 1310158
F07	SBR1122908	ENSRNOT000000012963.5	Ripk2	ENSRNOG0000009389	receptor-interacting serine-threonine kinase 2 Source RGD Symbol Acc 1309167
F08	SBR1151212	ENSRNOT000000083421.1	Slc11a1	ENSRNOG0000014956	solute carrier family 11 member 1 Source RGD Symbol Acc 1601463
F09	SBR1167132	ENSRNOT000000076191.1	Slpi	ENSRNOG0000046699	secretory leukocyte peptidase inhibitor Source RGD Symbol Acc 621768
F10	SBR1195294	ENSRNOT000000017086.7	Sugt1	ENSRNOG0000012594	SGT1 homolog, MIS12 kinetochore complex assembly cochaperone Source RGD Symbol Acc 1307550

<b>Position</b>	<b>Assay</b>	<b>Name</b>	<b>Symbol</b>	<b>Ensembl ID</b>	<b>Description</b>
F11	SBR1130378	ENSRNOT00000 059466.2	Ticam2	ENSRNOG00 000042070	toll-like receptor adaptor molecule 2 Source RGD Symbol Acc 1308258
F12	SBR1108614	ENSRNOT00000 038312.5	Tirap	ENSRNOG00 000021420	TIR domain containing adaptor protein Source RGD Symbol Acc 1595496
G01	SBR1137224	ENSRNOT00000 059124.3	Tlr1	ENSRNOG00 000038722	toll-like receptor 1 Source MGI Symbol Acc MGI 1341295
G02	SBR1126190	ENSRNOT00000 013025.4	Tlr2	ENSRNOG00 000009822	toll-like receptor 2 Source RGD Symbol Acc 735138
G03	SBR1180108	ENSRNOT00000 014020.3	Tlr4	ENSRNOG00 000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G04	SBR1140816	ENSRNOT00000 004821.4	Tlr5	ENSRNOG00 000022067	toll-like receptor 5 Source RGD Symbol Acc 631351
G05	SBR1133670	ENSRNOT00000 002933.5	Tlr6	ENSRNOG00 000002161	toll-like receptor 6 Source RGD Symbol Acc 1303030
G06	SBR1143539	ENSRNOT00000 074194.1	Tlr9	ENSRNOG00 000048161	toll-like receptor 9 Source RGD Symbol Acc 631352
G07	SBR1187845	ENSRNOT00000 079677.1	LOC10369 4380	ENSRNOG00 000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G08	SBR1130829	ENSRNOT00000 048529.4	Tnfrsf1a	ENSRNOG00 000031312	TNF receptor superfamily member 1A Source RGD Symbol Acc 621237
G09	SBR1187324	ENSRNOT00000 046344.3	Tollip	ENSRNOG00 000019861	toll interacting protein Source RGD Symbol Acc 1304676
G10	SBR1200335	ENSRNOT00000 006148.5	Traf6	ENSRNOG00 000004639	TNF receptor associated factor 6 Source RGD Symbol Acc 1306853
G11	SBR1144925	ENSRNOT00000 009336.3	Xiap	ENSRNOG00 000006967	X-linked inhibitor of apoptosis Source RGD Symbol Acc 620692
G12	SBR1139559	ENSRNOT00000 081036.1	Zbp1	ENSRNOG00 000006314	Z-DNA binding protein 1 Source RGD Symbol Acc 619956
H01	SBR1220567	ENSRNOT00000 042459.4	Actb	ENSRNOG00 000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000 023017.5	B2m	ENSRNOG00 000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000 065935.3	Hprt1	ENSRNOG00 000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000 017468.2	Ldha	ENSRNOG00 000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000 018820.5	Rplp1	ENSRNOG00 000013874	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 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 µl QuantiNova SYBR Green RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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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