

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

## Human Antibacterial Response

Cat. no. 249950 SBHS-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	BIRC3	BPI	CAMP	CARD6	CARD9	CASP1	CASP8	CCL3	CCL5	CD14
B	CHUK	CRP	CTSG	CXCL1	CXCL2	DMBT1	FADD	HSP90AA1	IFNA1	IFNB1	IKKBK	IL12A
C	IL12B	IL18	IL1B	IL6	CXCL8	IRAK1	IRAK3	IRF5	IRF7	JUN	LBP	LCN2
D	LTF	LY96	LYZ	MAP2K1	MAP2K3	MAP2K4	MAP3K7	MAPK1	MAPK14	MAPK3	MAPK8	MEFV
E	MPO	MYD88	NAIP	NFKB1	NFKBIA	NLR4	NLRP1	NLRP3	NOD1	NOD2	PIK3CA	PRTN3
F	PSTPIP1	PYCARD	RAC1	RELA	RIPK1	RIPK2	SLC11A1	SLPI	SUGT1	TICAM1	TICAM2	TIRAP
G	TLR1	TLR2	TLR4	TLR5	TLR6	TLR9	TNF	TNFRSF1A	TOLLIP	TRAF6	XIAP	ZBP1
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	QIC	QIC	QIC	PPC	PPC	PPC

## Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBH0095396	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A02	SBH1219747	ENST00000255040.3	APCS	ENSG00000132703	amyloid P component, serum Source HGNC Symbol Acc HGNC 584
A03	SBH1219796	ENST00000263464.8	BIRC3	ENSG00000023445	baculoviral IAP repeat containing 3 Source HGNC Symbol Acc HGNC 591
A04	SBH0669439	ENST00000642449.1	BPI	ENSG00000101425	bactericidal permeability increasing protein Source HGNC Symbol Acc HGNC 1095
A05	SBH0060203	ENST00000296435.2	CAMP	ENSG00000164047	cathelicidin antimicrobial peptide Source HGNC Symbol Acc HGNC 1472
A06	SBH0548680	ENST00000254691.10	CARD6	ENSG00000132357	caspase recruitment domain family member 6 Source HGNC Symbol Acc HGNC 16394
A07	SBH1219822	ENST00000371732.9	CARD9	ENSG00000187796	caspase recruitment domain family member 9 Source HGNC Symbol Acc HGNC 16391
A08	SBH0054226	ENST00000526568.5	CASP1	ENSG00000137752	caspase 1 Source HGNC Symbol Acc HGNC 1499
A09	SBH0075404	ENST00000358485.8	CASP8	ENSG00000064012	caspase 8 Source HGNC Symbol Acc HGNC 1509
A10	SBH1219838	ENST00000613922.2	CCL3	ENSG00000277632	C-C motif chemokine ligand 3 Source HGNC Symbol Acc HGNC 10627
A11	SBH1219840	ENST00000603197.6	CCL5	ENSG00000271503	C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632
A12	SBH1219857	ENST00000512545.1	CD14	ENSG00000170458	CD14 molecule Source HGNC Symbol Acc HGNC 1628
B01	SBH1219887	ENST00000370397.8	CHUK	ENSG00000213341	conserved helix-loop-helix ubiquitous kinase Source HGNC Symbol Acc HGNC 1974
B02	SBH0187022	ENST00000255030.9	CRP	ENSG00000132693	C-reactive protein Source HGNC Symbol Acc HGNC 2367
B03	SBH0555648	ENST00000216336.3	CTSG	ENSG00000100448	cathepsin G Source HGNC Symbol Acc HGNC 2532
B04	SBH0404660	ENST00000395761.3	CXCL1	ENSG00000163739	C-X-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 4602
B05	SBH1219929	ENST00000508487.3	CXCL2	ENSG00000081041	C-X-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 4603
B06	SBH0420701	ENST00000330163.8	DMBT1	ENSG00000187908	deleted in malignant brain tumors 1 Source HGNC Symbol Acc HGNC 2926
B07	SBH0294674	ENST00000301838.4	FADD	ENSG00000168040	Fas associated via death domain Source HGNC Symbol Acc HGNC 3573
B08	SBH0323386	ENST00000334701.11	HSP90AA1	ENSG00000080824	heat shock protein 90 alpha family class A member 1 Source HGNC Symbol Acc HGNC 5253
B09	SBH0388912	ENST00000276927.2	IFNA1	ENSG00000197919	interferon alpha 1 Source HGNC Symbol Acc HGNC 5417
B10	SBH1220089	ENST00000380232.4	IFNB1	ENSG00000171855	interferon beta 1 Source HGNC Symbol Acc HGNC 5434
B11	SBH0241248	ENST00000520810.6	IKBKB	ENSG00000104365	inhibitor of nuclear factor kappa B kinase subunit beta Source HGNC Symbol Acc HGNC 5960
B12	SBH1220098	ENST00000305579.7	IL12A	ENSG00000168811	interleukin 12A Source HGNC Symbol Acc HGNC 5969
C01	SBH1220099	ENST00000231228.2	IL12B	ENSG00000113302	interleukin 12B Source HGNC Symbol Acc HGNC 5970
C02	SBH1220103	ENST00000524595.5	IL18	ENSG00000150782	interleukin 18 Source HGNC Symbol Acc HGNC 5986
C03	SBH0079231	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
C04	SBH1220111	ENST00000401630.7	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
C05	SBH1219932	ENST00000401931.1	CXCL8	ENSG00000169429	C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025
C06	SBH1220119	ENST00000393687.6	IRAK1	ENSG00000184216	interleukin 1 receptor associated kinase 1 Source HGNC Symbol Acc HGNC 6112
C07	SBH0576891	ENST00000261233.8	IRAK3	ENSG00000090376	interleukin 1 receptor associated kinase 3 Source HGNC Symbol Acc HGNC 17020
C08	SBH1220125	ENST00000357234.10	IRF5	ENSG00000128604	interferon regulatory factor 5 Source HGNC Symbol Acc HGNC 6120
C09	SBH0251148	ENST00000397574.7	IRF7	ENSG00000185507	interferon regulatory factor 7 Source HGNC Symbol Acc HGNC 6122
C10	SBH0613340	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
		ENST00000217		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0499821	407.3	LBP	129988	lipopolysaccharide binding protein Source HGNC Symbol Acc HGNC 6517
C12	SBH0084573	ENST00000494317.1	LCN2	ENSG00000148346	lipocalin 2 Source HGNC Symbol Acc HGNC 6526
D01	SBH0051832	ENST00000426532.6	LTF	ENSG00000012223	lactotransferrin Source HGNC Symbol Acc HGNC 6720
D02	SBH1220183	ENST00000284818.6	LY96	ENSG00000154589	lymphocyte antigen 96 Source HGNC Symbol Acc HGNC 17156
D03	SBH1220184	ENST00000261267.6	LYZ	ENSG00000090382	lysozyme Source HGNC Symbol Acc HGNC 6740
D04	SBH0671782	ENST00000307102.9	MAP2K1	ENSG00000169032	mitogen-activated protein kinase kinase 1 Source HGNC Symbol Acc HGNC 6840
D05	SBH1220188	ENST00000613338.4	MAP2K3	ENSG00000034152	mitogen-activated protein kinase kinase 3 Source HGNC Symbol Acc HGNC 6843
D06	SBH1220189	ENST00000353533.10	MAP2K4	ENSG00000065559	mitogen-activated protein kinase kinase 4 Source HGNC Symbol Acc HGNC 6844
D07	SBH1220191	ENST00000369329.8	MAP3K7	ENSG00000135341	mitogen-activated protein kinase kinase 7 Source HGNC Symbol Acc HGNC 6859
D08	SBH1220192	ENST00000544786.1	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
D09	SBH0102441	ENST00000229795.7	MAPK14	ENSG00000112062	mitogen-activated protein kinase 14 Source HGNC Symbol Acc HGNC 6876
D10	SBH1220194	ENST00000478356.5	MAPK3	ENSG00000102882	mitogen-activated protein kinase 3 Source HGNC Symbol Acc HGNC 6877
D11	SBH0294318	ENST00000395611.7	MAPK8	ENSG00000107643	mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881
D12	SBH1220209	ENST00000219596.5	MEFV	ENSG00000103313	MEFV, pyrin innate immunity regulator Source HGNC Symbol Acc HGNC 6998
E01	SBH0239322	ENST00000225275.3	MPO	ENSG00000005381	myeloperoxidase Source HGNC Symbol Acc HGNC 7218
E02	SBH0303234	ENST00000648963.1	MYD88	ENSG00000172936	MYD88, innate immune signal transduction adaptor Source HGNC Symbol Acc HGNC 7562
E03	SBH1220235	ENST00000523981.5	NAIP	ENSG00000249437	NLR family apoptosis inhibitory protein Source HGNC Symbol Acc HGNC 7634
E04	SBH1220264	ENST00000651197.1	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E05	SBH0552847	ENST00000216797.9	NFKBIA	ENSG00000100906	NFKB inhibitor alpha Source HGNC Symbol Acc HGNC 7797
E06	SBH0227132	ENST00000342905.10	NLRC4	ENSG00000091106	NLR family CARD domain containing 4 Source HGNC Symbol Acc HGNC 16412
E07	SBH0359752	ENST00000345221.7	NLRP1	ENSG00000091592	NLR family pyrin domain containing 1 Source HGNC Symbol Acc HGNC 14374
E08	SBH1220270	ENST00000391828.7	NLRP3	ENSG00000162711	NLR family pyrin domain containing 3 Source HGNC Symbol Acc HGNC 16400
E09	SBH1220271	ENST00000222823.9	NOD1	ENSG00000106100	nucleotide binding oligomerization domain containing 1 Source HGNC Symbol Acc HGNC 16390
E10	SBH0193609	ENST00000300589.6	NOD2	ENSG00000167207	nucleotide binding oligomerization domain containing 2 Source HGNC Symbol Acc HGNC 5331
E11	SBH0121428	ENST00000462255.1	PIK3CA	ENSG00000121879	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source HGNC Symbol Acc HGNC 8975
E12	SBH0357079	ENST00000544537.2	PRTN3	ENSG00000196415	proteinase 3 Source HGNC Symbol Acc HGNC 9495
F01	SBH0650439	ENST00000558012.5	PSTPIP1	ENSG00000140368	proline-serine-threonine phosphatase interacting protein 1 Source HGNC Symbol Acc HGNC 9580
F02	SBH1220348	ENST00000247470.10	PYCARD	ENSG00000103490	PYD and CARD domain containing Source HGNC Symbol Acc HGNC 16608
F03	SBH1220352	ENST00000356142.4	RAC1	ENSG00000136238	Rac family small GTPase 1 Source HGNC Symbol Acc HGNC 9801
F04	SBH1220363	ENST00000532999.5	RELA	ENSG00000173039	RELA proto-oncogene, NF-kB subunit Source HGNC Symbol Acc HGNC 9955
F05	SBH1220369	ENST00000259808.9	RIPK1	ENSG00000137275	receptor interacting serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 10019
F06	SBH1220370	ENST00000220751.5	RIPK2	ENSG00000104312	receptor interacting serine/threonine kinase 2 Source HGNC Symbol Acc HGNC 10020
F07	SBH1220401	ENST00000233202.11	SLC11A1	ENSG00000018280	solute carrier family 11 member 1 Source HGNC Symbol Acc HGNC 10907
F08	SBH0425519	ENST00000338380.2	SLPI	ENSG00000124107	secretory leukocyte peptidase inhibitor Source HGNC Symbol Acc HGNC 11092
F09	SBH1220429	ENST00000310528.8	SUGT1	ENSG00000165416	SGT1 homolog, MIS12 kinetochore complex assembly cochaperone Source HGNC Symbol Acc HGNC 16987
F10	SBH1220451	ENST00000248244.5	TICAM1	ENSG00000127666	toll like receptor adaptor molecule 1 Source NCBI gene Acc 148022

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH1220452	ENST00000427199.2	TICAM2	ENSG00000243414	toll like receptor adaptor molecule 2 Source HGNC Symbol Acc HGNC 21354
F12	SBH0413608	ENST00000392680.6	TIRAP	ENSG00000150455	TIR domain containing adaptor protein Source HGNC Symbol Acc HGNC 17192
G01	SBH1220460	ENST00000506146.5	TLR1	ENSG00000174125	toll like receptor 1 Source HGNC Symbol Acc HGNC 11847
G02	SBH0671922	ENST00000642700.1	TLR2	ENSG00000137462	toll like receptor 2 Source HGNC Symbol Acc HGNC 11848
G03	SBH0092782	ENST00000355622.8	TLR4	ENSG00000136869	toll like receptor 4 Source HGNC Symbol Acc HGNC 11850
G04	SBH1220463	ENST00000366881.6	TLR5	ENSG00000187554	toll like receptor 5 Source HGNC Symbol Acc HGNC 11851
G05	SBH1220464	ENST00000436693.6	TLR6	ENSG00000174130	toll like receptor 6 Source HGNC Symbol Acc HGNC 16711
G06	SBH1220466	ENST00000360658.2	TLR9	ENSG00000239732	toll like receptor 9 Source HGNC Symbol Acc HGNC 15633
G07	SBH1220471	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G08	SBH0080951	ENST00000162749.6	TNFRSF1A	ENSG00000067182	TNF receptor superfamily member 1A Source HGNC Symbol Acc HGNC 11916
G09	SBH1220484	ENST00000530541.1	TOLLIP	ENSG00000078902	toll interacting protein Source HGNC Symbol Acc HGNC 16476
G10	SBH1220493	ENST00000526995.6	TRAF6	ENSG00000175104	TNF receptor associated factor 6 Source HGNC Symbol Acc HGNC 12036
G11	SBH1220539	ENST00000434753.7	XIAP	ENSG00000101966	X-linked inhibitor of apoptosis Source HGNC Symbol Acc HGNC 592
G12	SBH0314445	ENST00000395822.7	ZBP1	ENSG00000124256	Z-DNA binding protein 1 Source HGNC Symbol Acc HGNC 16176
H01	SBH1220543	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	SBH1220550	ENST00000558401.6	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	SBH1220545	ENST00000396861.5	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	SBH1220546	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	SBH1220553	ENST00000546989.5	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	SBH1218553	Sybr_HGDC	HGDC	Sybr_HGDC	Human 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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