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

Human NFkB Signaling Pathway

Cat. no. 249950 SBHS-025ZR

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	AGT	AKT1	ATF1	BCL10	BCL2A1	BCL2L1	BCL3	BIRC2	BIRC3	CARD11	CASP1	CASP8
B	CCL2	CCL5	CD27	CD40	CFLAR	CHUK	CSF1	CSF2	CSF3	EGFR	EGR1	ELK1
C	F2R	FADD	FASLG	FOS	HMOX1	ICAM1	IFNA1	IFNG	IKBKB	IKBKE	IKBKG	IL10
D	IL1A	IL1B	IL1R1	CXCL8	IRAK1	IRAK2	IRF1	JUN	LTA	LTBR	MALT1	MAP3K1
E	MYD88	NFKB1	NFKB2	NFKBIA	NFKBIB	NFKBIE	NOD1	PSIP1	RAF1	REL	RELA	RELB
F	RHOA	RIPK1	STAT1	TBK1	TICAM1	TICAM2	TIMP1	TLR1	TLR2	TLR3	TLR4	TLR6
G	TLR9	TNF	TNFAIP3	TNFRSF10A	TNFRSF10B	TNFRSF1A	TNFSF10	TNFSF14	TRADD	TRAF2	TRAF3	TRAF6
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	SBH1219729	ENST00000366667.5	AGT	ENSG00000135744	angiotensinogen Source HGNC Symbol Acc HGNC 333
A02	SBH0095396	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A03	SBH0226075	ENST00000552510.5	ATF1	ENSG00000123268	activating transcription factor 1 Source HGNC Symbol Acc HGNC 783
A04	SBH1219785	ENST00000648566.1	BCL10	ENSG00000142867	BCL10, immune signaling adaptor Source HGNC Symbol Acc HGNC 989
A05	SBH1219787	ENST00000267953.4	BCL2A1	ENSG00000140379	BCL2 related protein A1 Source HGNC Symbol Acc HGNC 991
A06	SBH0216029	ENST00000450273.1	BCL2L1	ENSG00000171552	BCL2 like 1 Source HGNC Symbol Acc HGNC 992
A07	SBH0078675	ENST00000444487.1	BCL3	ENSG00000069399	BCL3, transcription coactivator Source HGNC Symbol Acc HGNC 998
A08	SBH1219795	ENST00000530675.5	BIRC2	ENSG00000110330	baculoviral IAP repeat containing 2 Source HGNC Symbol Acc HGNC 590
A09	SBH1219796	ENST00000263464.8	BIRC3	ENSG00000023445	baculoviral IAP repeat containing 3 Source HGNC Symbol Acc HGNC 591
A10	SBH0395193	ENST00000355508.3	CARD11	ENSG00000198286	caspase recruitment domain family member 11 Source HGNC Symbol Acc HGNC 16393
A11	SBH0054226	ENST00000526568.5	CASP1	ENSG00000137752	caspase 1 Source HGNC Symbol Acc HGNC 1499
A12	SBH0075404	ENST00000358485.8	CASP8	ENSG00000064012	caspase 8 Source HGNC Symbol Acc HGNC 1509
B01	SBH0228134	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
B02	SBH1219840	ENST00000603197.6	CCL5	ENSG00000271503	C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632
B03	SBH1219859	ENST00000266557.3	CD27	ENSG00000139193	CD27 molecule Source HGNC Symbol Acc HGNC 11922
B04	SBH1219861	ENST00000372285.7	CD40	ENSG00000101017	CD40 molecule Source HGNC Symbol Acc HGNC 11919
B05	SBH1219883	ENST00000462763.5	CFLAR	ENSG00000003402	CASP8 and FADD like apoptosis regulator Source HGNC Symbol Acc HGNC 1876
B06	SBH1219887	ENST00000370397.8	CHUK	ENSG00000213341	conserved helix-loop-helix ubiquitous kinase Source HGNC Symbol Acc HGNC 1974
B07	SBH1219913	ENST00000420111.6	CSF1	ENSG00000184371	colony stimulating factor 1 Source HGNC Symbol Acc HGNC 2432
B08	SBH1219914	ENST00000296871.4	CSF2	ENSG00000164400	colony stimulating factor 2 Source HGNC Symbol Acc HGNC 2434
B09	SBH0378721	ENST00000225474.6	CSF3	ENSG00000108342	colony stimulating factor 3 Source HGNC Symbol Acc HGNC 2438
B10	SBH1219970	ENST00000454757.6	EGFR	ENSG00000146648	epidermal growth factor receptor Source HGNC Symbol Acc HGNC 3236
B11	SBH0290504	ENST00000239938.5	EGR1	ENSG00000120738	early growth response 1 Source HGNC Symbol Acc HGNC 3238
B12	SBH1219973	ENST00000376983.8	ELK1	ENSG00000126767	ELK1, ETS transcription factor Source HGNC Symbol Acc HGNC 3321
C01	SBH1219989	ENST00000319211.5	F2R	ENSG00000181104	coagulation factor II thrombin receptor Source HGNC Symbol Acc HGNC 3537
C02	SBH0294674	ENST00000301838.4	FADD	ENSG00000168040	Fas associated via death domain Source HGNC Symbol Acc HGNC 3573
C03	SBH1219995	ENST00000367721.3	FASLG	ENSG00000117560	Fas ligand Source HGNC Symbol Acc HGNC 11936
C04	SBH1220004	ENST00000554617.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
C05	SBH1220067	ENST00000216117.9	HMOX1	ENSG00000100292	heme oxygenase 1 Source HGNC Symbol Acc HGNC 5013
C06	SBH1220076	ENST00000264832.8	ICAM1	ENSG00000090339	intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344
C07	SBH0388912	ENST00000276927.2	IFNA1	ENSG00000197919	interferon alpha 1 Source HGNC Symbol Acc HGNC 5417
C08	SBH1220090	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
C09	SBH0241248	ENST00000520810.6	IKBKB	ENSG00000104365	inhibitor of nuclear factor kappa B kinase subunit beta Source HGNC Symbol Acc HGNC 5960
C10	SBH0503812	ENST00000579827.6	IKBKE	ENSG00000263528	inhibitor of nuclear factor kappa B kinase subunit epsilon Source HGNC Symbol Acc HGNC 14552
		ENST00000422		ENSG00000	inhibitor of nuclear factor kappa B kinase subunit gamma Source HGNC

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0411490	680.5	IKBKG	269335	Symbol Acc HGNC 5961
C12	SBH1220095	ENST00000423557.1	IL10	ENSG00000136634	interleukin 10 Source HGNC Symbol Acc HGNC 5962
D01	SBH0663647	ENST00000263339.3	IL1A	ENSG00000115008	interleukin 1 alpha Source HGNC Symbol Acc HGNC 5991
D02	SBH0079231	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
D03	SBH1220104	ENST00000424272.5	IL1R1	ENSG00000115594	interleukin 1 receptor type 1 Source HGNC Symbol Acc HGNC 5993
D04	SBH1219932	ENST00000401931.1	CXCL8	ENSG00000169429	C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025
D05	SBH1220119	ENST00000393687.6	IRAK1	ENSG00000184216	interleukin 1 receptor associated kinase 1 Source HGNC Symbol Acc HGNC 6112
D06	SBH1220120	ENST00000256458.5	IRAK2	ENSG00000134070	interleukin 1 receptor associated kinase 2 Source HGNC Symbol Acc HGNC 6113
D07	SBH1220122	ENST00000245414.9	IRF1	ENSG00000125347	interferon regulatory factor 1 Source HGNC Symbol Acc HGNC 6116
D08	SBH0613340	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D09	SBH0249281	ENST00000418386.2	LTA	ENSG00000226979	lymphotoxin alpha Source HGNC Symbol Acc HGNC 6709
D10	SBH1220181	ENST00000228918.9	LTBR	ENSG00000111321	lymphotoxin beta receptor Source HGNC Symbol Acc HGNC 6718
D11	SBH0557342	ENST00000587438.1	MALT1	ENSG00000172175	MALT1 paracaspase Source HGNC Symbol Acc HGNC 6819
D12	SBH1220190	ENST00000399503.4	MAP3K1	ENSG00000095015	mitogen-activated protein kinase kinase kinase 1 Source HGNC Symbol Acc HGNC 6848
E01	SBH0303234	ENST00000648963.1	MYD88	ENSG00000172936	MYD88, innate immune signal transduction adaptor Source HGNC Symbol Acc HGNC 7562
E02	SBH1220264	ENST00000651197.1	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E03	SBH1220265	ENST00000652277.1	NFKB2	ENSG00000077150	nuclear factor kappa B subunit 2 Source HGNC Symbol Acc HGNC 7795
E04	SBH0552847	ENST00000216797.9	NFKBIA	ENSG00000100906	NFKB inhibitor alpha Source HGNC Symbol Acc HGNC 7797
E05	SBH0044332	ENST00000509705.3	NFKBIB	ENSG00000104825	NFKB inhibitor beta Source HGNC Symbol Acc HGNC 7798
E06	SBH0236753	ENST00000477930.2	NFKBIE	ENSG00000146232	NFKB inhibitor epsilon Source HGNC Symbol Acc HGNC 7799
E07	SBH1220271	ENST00000222823.9	NOD1	ENSG00000106100	nucleotide binding oligomerization domain containing 1 Source HGNC Symbol Acc HGNC 16390
E08	SBH0529043	ENST00000380733.9	PSIP1	ENSG00000164985	PC4 and SFRS1 interacting protein 1 Source HGNC Symbol Acc HGNC 9527
E09	SBH0573752	ENST00000416093.1	RAF1	ENSG00000132155	Raf-1 proto-oncogene, serine/threonine kinase Source HGNC Symbol Acc HGNC 9829
E10	SBH1220362	ENST00000394479.3	REL	ENSG00000162924	REL proto-oncogene, NF-kB subunit Source HGNC Symbol Acc HGNC 9954
E11	SBH1220363	ENST00000532999.5	RELA	ENSG00000173039	RELA proto-oncogene, NF-kB subunit Source HGNC Symbol Acc HGNC 9955
E12	SBH0657475	ENST00000625761.2	RELB	ENSG00000104856	RELB proto-oncogene, NF-kB subunit Source HGNC Symbol Acc HGNC 9956
F01	SBH1220367	ENST00000418115.6	RHOA	ENSG00000067560	ras homolog family member A Source HGNC Symbol Acc HGNC 667
F02	SBH1220369	ENST00000259808.9	RIPK1	ENSG00000137275	receptor interacting serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 10019
F03	SBH0333289	ENST00000361099.7	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
F04	SBH1220433	ENST00000652657.1	TBK1	ENSG00000183735	TANK binding kinase 1 Source HGNC Symbol Acc HGNC 11584
F05	SBH1220451	ENST00000248244.5	TICAM1	ENSG00000127666	toll like receptor adaptor molecule 1 Source NCBI gene Acc 148022
F06	SBH1220452	ENST00000427199.2	TICAM2	ENSG00000243414	toll like receptor adaptor molecule 2 Source HGNC Symbol Acc HGNC 21354
F07	SBH1220454	ENST00000218388.9	TIMP1	ENSG00000102265	TIMP metallopeptidase inhibitor 1 Source HGNC Symbol Acc HGNC 11820
F08	SBH1220460	ENST00000506146.5	TLR1	ENSG00000174125	toll like receptor 1 Source HGNC Symbol Acc HGNC 11847
F09	SBH0671922	ENST00000642700.1	TLR2	ENSG00000137462	toll like receptor 2 Source HGNC Symbol Acc HGNC 11848
F10	SBH1220462	ENST00000513189.1	TLR3	ENSG00000164342	toll like receptor 3 Source HGNC Symbol Acc HGNC 11849

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0092782	ENST00000355622.8	TLR4	ENSG00000136869	toll like receptor 4 Source HGNC Symbol Acc HGNC 11850
F12	SBH1220464	ENST00000436693.6	TLR6	ENSG00000174130	toll like receptor 6 Source HGNC Symbol Acc HGNC 16711
G01	SBH1220466	ENST00000360658.2	TLR9	ENSG00000239732	toll like receptor 9 Source HGNC Symbol Acc HGNC 15633
G02	SBH1220471	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G03	SBH0348756	ENST00000614035.4	TNFAIP3	ENSG00000118503	TNF alpha induced protein 3 Source HGNC Symbol Acc HGNC 11896
G04	SBH1220472	ENST00000221132.7	TNFRSF10A	ENSG00000104689	TNF receptor superfamily member 10a Source HGNC Symbol Acc HGNC 11904
G05	SBH1220473	ENST00000347739.3	TNFRSF10B	ENSG00000120889	TNF receptor superfamily member 10b Source HGNC Symbol Acc HGNC 11905
G06	SBH0080951	ENST00000162749.6	TNFRSF1A	ENSG00000067182	TNF receptor superfamily member 1A Source HGNC Symbol Acc HGNC 11916
G07	SBH1220477	ENST00000241261.7	TNFSF10	ENSG00000121858	TNF superfamily member 10 Source HGNC Symbol Acc HGNC 11925
G08	SBH1220480	ENST00000599359.1	TNFSF14	ENSG00000125735	TNF superfamily member 14 Source HGNC Symbol Acc HGNC 11930
G09	SBH1220491	ENST00000345057.9	TRADD	ENSG00000102871	TNFRSF1A associated via death domain Source HGNC Symbol Acc HGNC 12030
G10	SBH1220492	ENST00000247668.7	TRAF2	ENSG00000127191	TNF receptor associated factor 2 Source HGNC Symbol Acc HGNC 12032
G11	SBH0271159	ENST00000560371.5	TRAF3	ENSG00000131323	TNF receptor associated factor 3 Source HGNC Symbol Acc HGNC 12033
G12	SBH1220493	ENST00000526995.6	TRAF6	ENSG00000175104	TNF receptor associated factor 6 Source HGNC Symbol Acc HGNC 12036
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 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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