

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

## Human Cytokines & Chemokines

Cat. no. 249950 SBHS-150ZA

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	ADIPOQ	BMP2	BMP4	BMP6	BMP7	C5	CCL1	CCL11	CCL13	CCL17	CCL18	CCL19
B	CCL2	CCL20	CCL21	CCL22	CCL24	CCL3	CCL5	CCL7	CCL8	CD40LG	CNTF	CSF1
C	CSF2	CSF3	CX3CL1	CXCL1	CXCL10	CXCL11	CXCL12	CXCL13	CXCL16	CXCL2	CXCL5	CXCL9
D	FASLG	GPI	IFNA2	IFNG	IL10	IL11	IL12A	IL12B	IL13	IL15	IL16	IL17A
E	IL17F	IL18	IL1A	IL1B	IL1RN	IL2	IL21	IL22	IL23A	IL24	IL27	IL3
F	IL4	IL5	IL6	IL7	CXCL8	IL9	LIF	LTA	LTB	MIF	MSTN	NODAL
G	OSM	PPBP	SPP1	TGFB2	THPO	TNF	TNFRSF11B	TNFSF10	TNFSF11	TNFSF13B	VEGFA	XCL1
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	SBH1219727	ENST00000320741.7	ADIPOQ	ENSG00000181092	adiponectin, C1Q and collagen domain containing Source HGNC Symbol Acc HGNC 13633
A02	SBH1219802	ENST000003378827.5	BMP2	ENSG00000125845	bone morphogenetic protein 2 Source HGNC Symbol Acc HGNC 1069
A03	SBH0613995	ENST00000417573.5	BMP4	ENSG00000125378	bone morphogenetic protein 4 Source HGNC Symbol Acc HGNC 1071
A04	SBH1219805	ENST00000283147.7	BMP6	ENSG00000153162	bone morphogenetic protein 6 Source HGNC Symbol Acc HGNC 1073
A05	SBH1219806	ENST00000450594.6	BMP7	ENSG00000101144	bone morphogenetic protein 7 Source HGNC Symbol Acc HGNC 1074
A06	SBH0105500	ENST00000223642.2	C5	ENSG00000106804	complement C5 Source HGNC Symbol Acc HGNC 1331
A07	SBH0608459	ENST00000225842.3	CCL1	ENSG00000108702	C-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 10609
A08	SBH0204041	ENST00000305869.3	CCL11	ENSG00000172156	C-C motif chemokine ligand 11 Source HGNC Symbol Acc HGNC 10610
A09	SBH1219830	ENST00000225844.7	CCL13	ENSG00000181374	C-C motif chemokine ligand 13 Source HGNC Symbol Acc HGNC 10611
A10	SBH0262255	ENST00000219244.8	CCL17	ENSG00000102970	C-C motif chemokine ligand 17 Source HGNC Symbol Acc HGNC 10615
A11	SBH0292440	ENST00000616054.1	CCL18	ENSG00000275385	C-C motif chemokine ligand 18 Source HGNC Symbol Acc HGNC 10616
A12	SBH1219833	ENST00000311925.7	CCL19	ENSG00000172724	C-C motif chemokine ligand 19 Source HGNC Symbol Acc HGNC 10617
B01	SBH0228134	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
B02	SBH1219834	ENST00000409189.7	CCL20	ENSG00000115009	C-C motif chemokine ligand 20 Source HGNC Symbol Acc HGNC 10619
B03	SBH1219835	ENST00000259607.7	CCL21	ENSG00000137077	C-C motif chemokine ligand 21 Source HGNC Symbol Acc HGNC 10620
B04	SBH1219836	ENST00000219235.5	CCL22	ENSG00000102962	C-C motif chemokine ligand 22 Source HGNC Symbol Acc HGNC 10621
B05	SBH0329993	ENST00000222902.6	CCL24	ENSG00000106178	C-C motif chemokine ligand 24 Source HGNC Symbol Acc HGNC 10623
B06	SBH1219838	ENST00000613922.2	CCL3	ENSG00000277632	C-C motif chemokine ligand 3 Source HGNC Symbol Acc HGNC 10627
B07	SBH1219840	ENST00000603197.6	CCL5	ENSG00000271503	C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632
B08	SBH0098305	ENST00000378569.2	CCL7	ENSG00000108688	C-C motif chemokine ligand 7 Source HGNC Symbol Acc HGNC 10634
B09	SBH1219841	ENST00000394620.2	CCL8	ENSG00000108700	C-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 10635
B10	SBH1219862	ENST00000370629.6	CD40LG	ENSG00000102245	CD40 ligand Source HGNC Symbol Acc HGNC 11935
B11	SBH1219893	ENST00000361987.6	CNTF	ENSG00000242689	ciliary neurotrophic factor Source HGNC Symbol Acc HGNC 2169
B12	SBH1219913	ENST00000420111.6	CSF1	ENSG00000184371	colony stimulating factor 1 Source HGNC Symbol Acc HGNC 2432
C01	SBH1219914	ENST00000296871.4	CSF2	ENSG00000164400	colony stimulating factor 2 Source HGNC Symbol Acc HGNC 2434
C02	SBH0378721	ENST00000225474.6	CSF3	ENSG00000108342	colony stimulating factor 3 Source HGNC Symbol Acc HGNC 2438
C03	SBH1219926	ENST00000563383.1	CX3CL1	ENSG00000006210	C-X3-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 10647
C04	SBH0404660	ENST00000395761.3	CXCL1	ENSG00000163739	C-X-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 4602
C05	SBH1219927	ENST00000306602.3	CXCL10	ENSG00000169245	C-X-C motif chemokine ligand 10 Source HGNC Symbol Acc HGNC 10637
C06	SBH0419056	ENST00000306621.7	CXCL11	ENSG00000169248	C-X-C motif chemokine ligand 11 Source HGNC Symbol Acc HGNC 10638
C07	SBH0010818	ENST00000374429.6	CXCL12	ENSG00000107562	C-X-C motif chemokine ligand 12 Source HGNC Symbol Acc HGNC 10672
C08	SBH0479528	ENST00000286758.4	CXCL13	ENSG00000156234	C-X-C motif chemokine ligand 13 Source HGNC Symbol Acc HGNC 10639
C09	SBH1219928	ENST00000293778.11	CXCL16	ENSG00000161921	C-X-C motif chemokine ligand 16 Source HGNC Symbol Acc HGNC 16642
C10	SBH1219929	ENST00000508487.3	CXCL2	ENSG00000081041	C-X-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 4603
		ENST00000296		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1219930	027.5	CXCL5	163735	C-X-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10642
C12	SBH0383348	ENST00000264888.5	CXCL9	ENSG00000138755	C-X-C motif chemokine ligand 9 Source HGNC Symbol Acc HGNC 7098
D01	SBH1219995	ENST00000367721.3	FASLG	ENSG00000117560	Fas ligand Source HGNC Symbol Acc HGNC 11936
D02	SBH1220031	ENST00000644934.1	GPI	ENSG00000105220	glucose-6-phosphate isomerase Source HGNC Symbol Acc HGNC 4458
D03	SBH0359836	ENST00000380206.3	IFNA2	ENSG00000188379	interferon alpha 2 Source HGNC Symbol Acc HGNC 5423
D04	SBH1220090	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
D05	SBH1220095	ENST00000423557.1	IL10	ENSG00000136634	interleukin 10 Source HGNC Symbol Acc HGNC 5962
D06	SBH1220097	ENST00000585513.1	IL11	ENSG00000095752	interleukin 11 Source HGNC Symbol Acc HGNC 5966
D07	SBH1220098	ENST00000305579.7	IL12A	ENSG00000168811	interleukin 12A Source HGNC Symbol Acc HGNC 5969
D08	SBH1220099	ENST00000231228.2	IL12B	ENSG00000113302	interleukin 12B Source HGNC Symbol Acc HGNC 5970
D09	SBH0375568	ENST00000304506.7	IL13	ENSG00000169194	interleukin 13 Source HGNC Symbol Acc HGNC 5973
D10	SBH1220101	ENST00000296545.11	IL15	ENSG00000164136	interleukin 15 Source HGNC Symbol Acc HGNC 5977
D11	SBH1220102	ENST00000394660.6	IL16	ENSG00000172349	interleukin 16 Source HGNC Symbol Acc HGNC 5980
D12	SBH0451354	ENST00000340057.1	IL17A	ENSG00000112115	interleukin 17A Source HGNC Symbol Acc HGNC 5981
E01	SBH0137232	ENST00000336123.4	IL17F	ENSG00000112116	interleukin 17F Source HGNC Symbol Acc HGNC 16404
E02	SBH1220103	ENST00000524595.5	IL18	ENSG00000150782	interleukin 18 Source HGNC Symbol Acc HGNC 5986
E03	SBH0663647	ENST00000263339.3	IL1A	ENSG00000115008	interleukin 1 alpha Source HGNC Symbol Acc HGNC 5991
E04	SBH0079231	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
E05	SBH0473919	ENST00000354115.6	IL1RN	ENSG00000136689	interleukin 1 receptor antagonist Source HGNC Symbol Acc HGNC 6000
E06	SBH0225582	ENST00000226730.4	IL2	ENSG00000109471	interleukin 2 Source HGNC Symbol Acc HGNC 6001
E07	SBH1220106	ENST00000611104.2	IL21	ENSG00000138684	interleukin 21 Source HGNC Symbol Acc HGNC 6005
E08	SBH0349355	ENST00000328087.6	IL22	ENSG00000127318	interleukin 22 Source HGNC Symbol Acc HGNC 14900
E09	SBH1220107	ENST00000228534.6	IL23A	ENSG00000110944	interleukin 23 subunit alpha Source HGNC Symbol Acc HGNC 15488
E10	SBH0273018	ENST00000294984.6	IL24	ENSG00000162892	interleukin 24 Source HGNC Symbol Acc HGNC 11346
E11	SBH0629895	ENST00000356897.1	IL27	ENSG00000197272	interleukin 27 Source HGNC Symbol Acc HGNC 19157
E12	SBH0584080	ENST00000296870.2	IL3	ENSG00000164399	interleukin 3 Source HGNC Symbol Acc HGNC 6011
F01	SBH1220109	ENST00000350025.2	IL4	ENSG00000113520	interleukin 4 Source HGNC Symbol Acc HGNC 6014
F02	SBH1220110	ENST00000231454.6	IL5	ENSG00000113525	interleukin 5 Source HGNC Symbol Acc HGNC 6016
F03	SBH1220111	ENST00000401630.7	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
F04	SBH1220113	ENST00000541183.2	IL7	ENSG00000104432	interleukin 7 Source HGNC Symbol Acc HGNC 6023
F05	SBH1219932	ENST00000401931.1	CXCL8	ENSG00000169429	C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025
F06	SBH1220114	ENST00000274520.1	IL9	ENSG00000145839	interleukin 9 Source HGNC Symbol Acc HGNC 6029
F07	SBH1220172	ENST00000249075.4	LIF	ENSG00000128342	LIF, interleukin 6 family cytokine Source HGNC Symbol Acc HGNC 6596
F08	SBH0249281	ENST00000418386.2	LTA	ENSG00000226979	lymphotoxin alpha Source HGNC Symbol Acc HGNC 6709
F09	SBH1220578	ENST00000429299.2	LTB	ENSG00000227507	lymphotoxin beta Source HGNC Symbol Acc HGNC 6711
F10	SBH1220212	ENST00000215754.8	MIF	ENSG00000240972	macrophage migration inhibitory factor Source HGNC Symbol Acc HGNC 7097

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0389766	ENST00000260950.4	MSTN	ENSG00000138379	myostatin Source HGNC Symbol Acc HGNC 4223
F12	SBH0463463	ENST00000287139.7	NODAL	ENSG00000156574	nodal growth differentiation factor Source HGNC Symbol Acc HGNC 7865
G01	SBH1220287	ENST00000215781.3	OSM	ENSG00000099985	oncostatin M Source HGNC Symbol Acc HGNC 8506
G02	SBH1220324	ENST00000296028.4	PPBP	ENSG00000163736	pro-platelet basic protein Source HGNC Symbol Acc HGNC 9240
G03	SBH0180162	ENST00000237623.11	SPP1	ENSG00000118785	secreted phosphoprotein 1 Source HGNC Symbol Acc HGNC 11255
G04	SBH1220444	ENST000003366930.9	TGFB2	ENSG00000092969	transforming growth factor beta 2 Source HGNC Symbol Acc HGNC 11768
G05	SBH0321723	ENST00000647395.1	THPO	ENSG00000090534	thrombopoietin Source HGNC Symbol Acc HGNC 11795
G06	SBH1220471	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G07	SBH1220474	ENST00000297350.9	TNFRSF11B	ENSG00000164761	TNF receptor superfamily member 11b Source HGNC Symbol Acc HGNC 11909
G08	SBH1220477	ENST00000241261.7	TNFSF10	ENSG00000121858	TNF superfamily member 10 Source HGNC Symbol Acc HGNC 11925
G09	SBH1220478	ENST00000239849.8	TNFSF11	ENSG00000120659	TNF superfamily member 11 Source HGNC Symbol Acc HGNC 11926
G10	SBH0113173	ENST00000375887.8	TNFSF13B	ENSG00000102524	TNF superfamily member 13b Source HGNC Symbol Acc HGNC 11929
G11	SBH0420322	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G12	SBH0434671	ENST00000367818.4	XCL1	ENSG00000143184	X-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 10645
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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