

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

## Human Common Cytokines

Cat. no. 249950 SBHS-021ZA

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	BMP1	BMP2	BMP3	BMP4	BMP5	BMP6	BMP7	CD40LG	CD70	CNTF	CSF1
B	CSF2	CSF3	FAM3B	FASLG	VEGFD	GDF2	GDF5	GDF9	IFNA1	IFNA2	IFNA4	IFNA5
C	IFNB1	IFNG	IL10	IL11	IL12A	IL12B	IL13	IL15	IL16	IL17A	IL17B	IL17C
D	IL18	IL19	IL1A	IL1B	IL1RN	IL2	IL20	IL21	IL22	IL23A	IL24	IL25
E	IL27	IL3	IL4	IL5	IL6	IL7	CXCL8	IL9	INH1A	INH1B	LEFTY2	LIF
F	LTA	LTB	MSTN	NODAL	OSM	PDGFA	SPP1	TGFA	TGFB1	TGFB2	TGFB3	THPO
G	TNF	TNFRSF11B	TNFSF10	TNFSF11	TNFSF12	TNFSF13	TNFSF13B	TNFSF14	TNFSF4	TNFSF8	TXLNA	VEGFA
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	SBH1219801	ENST00000354870.5	BMP1	ENSG00000168487	bone morphogenetic protein 1 Source HGNC Symbol Acc HGNC 1067
A03	SBH1219802	ENST00000378827.5	BMP2	ENSG00000125845	bone morphogenetic protein 2 Source HGNC Symbol Acc HGNC 1069
A04	SBH1219803	ENST00000282701.3	BMP3	ENSG00000152785	bone morphogenetic protein 3 Source HGNC Symbol Acc HGNC 1070
A05	SBH0613995	ENST00000417573.5	BMP4	ENSG00000125378	bone morphogenetic protein 4 Source HGNC Symbol Acc HGNC 1071
A06	SBH1219804	ENST00000370830.4	BMP5	ENSG00000112175	bone morphogenetic protein 5 Source HGNC Symbol Acc HGNC 1072
A07	SBH1219805	ENST00000283147.7	BMP6	ENSG00000153162	bone morphogenetic protein 6 Source HGNC Symbol Acc HGNC 1073
A08	SBH1219806	ENST00000450594.6	BMP7	ENSG00000101144	bone morphogenetic protein 7 Source HGNC Symbol Acc HGNC 1074
A09	SBH1219862	ENST00000370629.6	CD40LG	ENSG00000102245	CD40 ligand Source HGNC Symbol Acc HGNC 11935
A10	SBH1219863	ENST00000245903.4	CD70	ENSG00000125726	CD70 molecule Source NCBI gene Acc 970
A11	SBH1219893	ENST00000361987.6	CNTF	ENSG00000242689	ciliary neurotrophic factor Source HGNC Symbol Acc HGNC 2169
A12	SBH1219913	ENST00000420111.6	CSF1	ENSG00000184371	colony stimulating factor 1 Source HGNC Symbol Acc HGNC 2432
B01	SBH1219914	ENST00000296871.4	CSF2	ENSG00000164400	colony stimulating factor 2 Source HGNC Symbol Acc HGNC 2434
B02	SBH0378721	ENST00000225474.6	CSF3	ENSG00000108342	colony stimulating factor 3 Source HGNC Symbol Acc HGNC 2438
B03	SBH0331890	ENST00000357985.6	FAM3B	ENSG00000183844	family with sequence similarity 3 member B Source HGNC Symbol Acc HGNC 1253
B04	SBH1219995	ENST00000367721.3	FASLG	ENSG00000117560	Fas ligand Source HGNC Symbol Acc HGNC 11936
B05	SBH1220001	ENST00000297904.4	VEGFD	ENSG00000165197	vascular endothelial growth factor D Source HGNC Symbol Acc HGNC 3708
B06	SBH0659901	ENST00000581492.2	GDF2	ENSG00000263761	growth differentiation factor 2 Source HGNC Symbol Acc HGNC 4217
B07	SBH1220027	ENST00000374372.1	GDF5	ENSG00000125965	growth differentiation factor 5 Source HGNC Symbol Acc HGNC 4220
B08	SBH0404985	ENST00000621295.4	GDF9	ENSG00000164404	growth differentiation factor 9 Source HGNC Symbol Acc HGNC 4224
B09	SBH0388912	ENST00000276927.2	IFNA1	ENSG00000197919	interferon alpha 1 Source HGNC Symbol Acc HGNC 5417
B10	SBH0359836	ENST00000380206.3	IFNA2	ENSG00000188379	interferon alpha 2 Source HGNC Symbol Acc HGNC 5423
B11	SBH0303037	ENST00000421715.2	IFNA4	ENSG00000236637	interferon alpha 4 Source HGNC Symbol Acc HGNC 5425
B12	SBH0303029	ENST00000610521.1	IFNA5	ENSG00000147873	interferon alpha 5 Source HGNC Symbol Acc HGNC 5426
C01	SBH1220089	ENST00000380232.4	IFNB1	ENSG00000171855	interferon beta 1 Source HGNC Symbol Acc HGNC 5434
C02	SBH1220090	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
C03	SBH1220095	ENST00000423557.1	IL10	ENSG00000136634	interleukin 10 Source HGNC Symbol Acc HGNC 5962
C04	SBH1220097	ENST00000585513.1	IL11	ENSG00000095752	interleukin 11 Source HGNC Symbol Acc HGNC 5966
C05	SBH1220098	ENST00000305579.7	IL12A	ENSG00000168811	interleukin 12A Source HGNC Symbol Acc HGNC 5969
C06	SBH1220099	ENST00000231228.2	IL12B	ENSG00000113302	interleukin 12B Source HGNC Symbol Acc HGNC 5970
C07	SBH0375568	ENST00000304506.7	IL13	ENSG00000169194	interleukin 13 Source HGNC Symbol Acc HGNC 5973
C08	SBH1220101	ENST00000296545.11	IL15	ENSG00000164136	interleukin 15 Source HGNC Symbol Acc HGNC 5977
C09	SBH1220102	ENST00000394660.6	IL16	ENSG00000172349	interleukin 16 Source HGNC Symbol Acc HGNC 5980
C10	SBH0451354	ENST00000340057.1	IL17A	ENSG00000112115	interleukin 17A Source HGNC Symbol Acc HGNC 5981
		ENST00000505		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0542310	432.1	IL17B	127743	interleukin 17B Source HGNC Symbol Acc HGNC 5982
C12	SBH0371753	ENST00000244 241.4	IL17C	ENSG00000 124391	interleukin 17C Source HGNC Symbol Acc HGNC 5983
D01	SBH1220103	ENST00000524 595.5	IL18	ENSG00000 150782	interleukin 18 Source HGNC Symbol Acc HGNC 5986
D02	SBH0581176	ENST00000270 218.10	IL19	ENSG00000 142224	interleukin 19 Source HGNC Symbol Acc HGNC 5990
D03	SBH0663647	ENST00000263 339.3	IL1A	ENSG00000 115008	interleukin 1 alpha Source HGNC Symbol Acc HGNC 5991
D04	SBH0079231	ENST00000263 341.6	IL1B	ENSG00000 125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
D05	SBH0473919	ENST00000354 115.6	IL1RN	ENSG00000 136689	interleukin 1 receptor antagonist Source HGNC Symbol Acc HGNC 6000
D06	SBH0225582	ENST00000226 730.4	IL2	ENSG00000 109471	interleukin 2 Source HGNC Symbol Acc HGNC 6001
D07	SBH0348023	ENST00000391 930.3	IL20	ENSG00000 162891	interleukin 20 Source HGNC Symbol Acc HGNC 6002
D08	SBH1220106	ENST00000611 104.2	IL21	ENSG00000 138684	interleukin 21 Source HGNC Symbol Acc HGNC 6005
D09	SBH0349355	ENST00000328 087.6	IL22	ENSG00000 127318	interleukin 22 Source HGNC Symbol Acc HGNC 14900
D10	SBH1220107	ENST00000228 534.6	IL23A	ENSG00000 110944	interleukin 23 subunit alpha Source HGNC Symbol Acc HGNC 15488
D11	SBH0273018	ENST00000294 984.6	IL24	ENSG00000 162892	interleukin 24 Source HGNC Symbol Acc HGNC 11346
D12	SBH0573219	ENST00000329 715.2	IL25	ENSG00000 166090	interleukin 25 Source HGNC Symbol Acc HGNC 13765
E01	SBH0629895	ENST00000356 897.1	IL27	ENSG00000 197272	interleukin 27 Source HGNC Symbol Acc HGNC 19157
E02	SBH0584080	ENST00000296 870.2	IL3	ENSG00000 164399	interleukin 3 Source HGNC Symbol Acc HGNC 6011
E03	SBH1220109	ENST00000350 025.2	IL4	ENSG00000 113520	interleukin 4 Source HGNC Symbol Acc HGNC 6014
E04	SBH1220110	ENST00000231 454.6	IL5	ENSG00000 113525	interleukin 5 Source HGNC Symbol Acc HGNC 6016
E05	SBH1220111	ENST00000401 630.7	IL6	ENSG00000 136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
E06	SBH1220113	ENST00000541 183.2	IL7	ENSG00000 104432	interleukin 7 Source HGNC Symbol Acc HGNC 6023
E07	SBH1219932	ENST00000401 931.1	CXCL8	ENSG00000 169429	C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025
E08	SBH1220114	ENST00000274 520.1	IL9	ENSG00000 145839	interleukin 9 Source HGNC Symbol Acc HGNC 6029
E09	SBH1220115	ENST00000243 786.3	INH1A	ENSG00000 123999	inhibin subunit alpha Source HGNC Symbol Acc HGNC 6065
E10	SBH1220116	ENST00000242 208.5	INH1B	ENSG00000 122641	inhibin subunit beta A Source HGNC Symbol Acc HGNC 6066
E11	SBH1221132	ENST00000366 820.10	LEFTY2	ENSG00000 143768	left-right determination factor 2 Source HGNC Symbol Acc HGNC 3122
E12	SBH1220172	ENST00000249 075.4	LIF	ENSG00000 128342	LIF, interleukin 6 family cytokine Source HGNC Symbol Acc HGNC 6596
F01	SBH0249281	ENST00000418 386.2	LTA	ENSG00000 226979	lymphotoxin alpha Source HGNC Symbol Acc HGNC 6709
F02	SBH1220578	ENST00000429 299.2	LTB	ENSG00000 227507	lymphotoxin beta Source HGNC Symbol Acc HGNC 6711
F03	SBH0389766	ENST00000260 950.4	MSTN	ENSG00000 138379	myostatin Source HGNC Symbol Acc HGNC 4223
F04	SBH0463463	ENST00000287 139.7	NODAL	ENSG00000 156574	nodal growth differentiation factor Source HGNC Symbol Acc HGNC 7865
F05	SBH1220287	ENST00000215 781.3	OSM	ENSG00000 099985	oncostatin M Source HGNC Symbol Acc HGNC 8506
F06	SBH0498934	ENST00000354 513.9	PDGFA	ENSG00000 197461	platelet derived growth factor subunit A Source HGNC Symbol Acc HGNC 8799
F07	SBH0180162	ENST00000237 623.11	SPP1	ENSG00000 118785	secreted phosphoprotein 1 Source HGNC Symbol Acc HGNC 11255
F08	SBH1220442	ENST00000445 399.5	TGFA	ENSG00000 163235	transforming growth factor alpha Source HGNC Symbol Acc HGNC 11765
F09	SBH1220443	ENST00000598 758.5	TGFB1	ENSG00000 105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
F10	SBH1220444	ENST00000366 930.9	TGFB2	ENSG00000 092969	transforming growth factor beta 2 Source HGNC Symbol Acc HGNC 11768

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0179529	ENST00000238682.7	TGFB3	ENSG00000119699	transforming growth factor beta 3 Source HGNC Symbol Acc HGNC 11769
F12	SBH0321723	ENST00000647395.1	THPO	ENSG00000090534	thrombopoietin Source HGNC Symbol Acc HGNC 11795
G01	SBH1220471	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G02	SBH1220474	ENST00000297350.9	TNFRSF11B	ENSG00000164761	TNF receptor superfamily member 11b Source HGNC Symbol Acc HGNC 11909
G03	SBH1220477	ENST00000241261.7	TNFSF10	ENSG00000121858	TNF superfamily member 10 Source HGNC Symbol Acc HGNC 11925
G04	SBH1220478	ENST00000239849.8	TNFSF11	ENSG00000120659	TNF superfamily member 11 Source HGNC Symbol Acc HGNC 11926
G05	SBH0415653	ENST00000322272.11	TNFSF12	ENSG00000239697	TNF superfamily member 12 Source HGNC Symbol Acc HGNC 11927
G06	SBH1220479	ENST00000436057.5	TNFSF13	ENSG00000161955	TNF superfamily member 13 Source HGNC Symbol Acc HGNC 11928
G07	SBH0113173	ENST00000375887.8	TNFSF13B	ENSG00000102524	TNF superfamily member 13b Source HGNC Symbol Acc HGNC 11929
G08	SBH1220480	ENST00000599359.1	TNFSF14	ENSG00000125735	TNF superfamily member 14 Source HGNC Symbol Acc HGNC 11930
G09	SBH1220481	ENST00000367718.5	TNFSF4	ENSG00000117586	TNF superfamily member 4 Source HGNC Symbol Acc HGNC 11934
G10	SBH0593682	ENST00000223795.2	TNFSF8	ENSG00000106952	TNF superfamily member 8 Source HGNC Symbol Acc HGNC 11938
G11	SBH0333713	ENST00000373610.8	TXLNA	ENSG00000084652	taxilin alpha Source HGNC Symbol Acc HGNC 30685
G12	SBH0420322	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
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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