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

Human Stem Cell

Cat. no. 249950 SBHS-405ZA

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** for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	ABCG2	ACAN	ACTC1	ADAR	ALDH1A1	ALDH2	ALPI	APC	ASCL2	AXIN1	BGLAP	BMP1
B	BMP2	BMP3	BTRC	CCNA2	CCND1	CCND2	CCNE1	CD3D	CD4	CD44	CD8A	CD8B
C	CDC42	CDH1	CDH2	CDK1	COL1A1	COL2A1	COL9A1	CTNNA1	CXCL12	DHH	DLL1	DLL3
D	DTX1	DTX2	DVL1	EP300	FGF1	FGF2	FGF3	FGF4	FGFR1	FOXA2	FRAT1	FZD1
E	GDF2	GDF3	GJA1	GJB1	GJB2	HDAC2	HSPA9	IGF1	ISL1	JAG1	KAT2A	KAT7
F	KAT8	KRT15	MME	MSX1	MYC	MYOD1	NCAM1	NEUROG2	NOTCH1	NOTCH2	NUMB	PARD6A
G	PDX1	PPARD	PPARG	RB1	S100B	SIGMAR1	SOX1	SOX2	TBXT	TERT	TUBB3	WNT1
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	SBH0422197	ENST00000503830.2	ABCG2	ENSG00000118777	ATP binding cassette subfamily G member 2 (Junior blood group) Source HGNC Symbol Acc HGNC 74
A02	SBH0370224	ENST00000439576.6	ACAN	ENSG00000157766	aggrecan Source HGNC Symbol Acc HGNC 319
A03	SBH0548789	ENST00000647798.1	ACTC1	ENSG00000159251	actin, alpha, cardiac muscle 1 Source HGNC Symbol Acc HGNC 143
A04	SBH0422508	ENST00000647597.1	ADAR	ENSG00000160710	adenosine deaminase, RNA specific Source HGNC Symbol Acc HGNC 225
A05	SBH0340208	ENST00000482210.5	ALDH1A1	ENSG00000165092	aldehyde dehydrogenase 1 family member A1 Source HGNC Symbol Acc HGNC 402
A06	SBH0048037	ENST00000549106.1	ALDH2	ENSG00000111275	aldehyde dehydrogenase 2 family member Source HGNC Symbol Acc HGNC 404
A07	SBH0485213	ENST00000457560.1	ALPI	ENSG00000163295	alkaline phosphatase, intestinal Source HGNC Symbol Acc HGNC 437
A08	SBH1219746	ENST00000512211.6	APC	ENSG00000134982	APC, WNT signaling pathway regulator Source HGNC Symbol Acc HGNC 583
A09	SBH0462718	ENST00000331289.4	ASCL2	ENSG00000183734	achaete-scute family bHLH transcription factor 2 Source HGNC Symbol Acc HGNC 739
A10	SBH1219777	ENST00000262320.8	AXIN1	ENSG00000103126	axin 1 Source HGNC Symbol Acc HGNC 903
A11	SBH1219793	ENST00000368272.5	BGLAP	ENSG00000242252	bone gamma-carboxyglutamate protein Source HGNC Symbol Acc HGNC 1043
A12	SBH1219801	ENST00000354870.5	BMP1	ENSG00000168487	bone morphogenetic protein 1 Source HGNC Symbol Acc HGNC 1067
B01	SBH1219802	ENST00000378827.5	BMP2	ENSG00000125845	bone morphogenetic protein 2 Source HGNC Symbol Acc HGNC 1069
B02	SBH1219803	ENST00000282701.3	BMP3	ENSG00000152785	bone morphogenetic protein 3 Source HGNC Symbol Acc HGNC 1070
B03	SBH1219819	ENST00000393441.8	BTRC	ENSG00000166167	beta-transducin repeat containing E3 ubiquitin protein ligase Source HGNC Symbol Acc HGNC 1144
B04	SBH0652713	ENST00000274026.10	CCNA2	ENSG00000145386	cyclin A2 Source HGNC Symbol Acc HGNC 1578
B05	SBH0434090	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B06	SBH1219845	ENST00000261254.8	CCND2	ENSG00000118971	cyclin D2 Source HGNC Symbol Acc HGNC 1583
B07	SBH1219846	ENST00000262643.8	CCNE1	ENSG00000105173	cyclin E1 Source HGNC Symbol Acc HGNC 1589
B08	SBH0400296	ENST00000526561.1	CD3D	ENSG00000167286	CD3d molecule Source HGNC Symbol Acc HGNC 1673
B09	SBH1219860	ENST00000011653.9	CD4	ENSG00000010610	CD4 molecule Source HGNC Symbol Acc HGNC 1678
B10	SBH0074994	ENST00000428726.7	CD44	ENSG00000026508	CD44 molecule (Indian blood group) Source HGNC Symbol Acc HGNC 1681
B11	SBH0013530	ENST00000283635.7	CD8A	ENSG00000153563	CD8a molecule Source HGNC Symbol Acc HGNC 1706
B12	SBH0614165	ENST00000390655.11	CD8B	ENSG00000172116	CD8b molecule Source HGNC Symbol Acc HGNC 1707
C01	SBH0651826	ENST00000651171.1	CDC42	ENSG00000070831	cell division cycle 42 Source HGNC Symbol Acc HGNC 1736
C02	SBH1219869	ENST00000261769.10	CDH1	ENSG00000039068	cadherin 1 Source HGNC Symbol Acc HGNC 1748
C03	SBH1219870	ENST00000269141.8	CDH2	ENSG00000170558	cadherin 2 Source HGNC Symbol Acc HGNC 1759
C04	SBH0229893	ENST00000395284.7	CDK1	ENSG00000170312	cyclin dependent kinase 1 Source HGNC Symbol Acc HGNC 1722
C05	SBH0268763	ENST00000225964.9	COL1A1	ENSG00000108821	collagen type I alpha 1 chain Source HGNC Symbol Acc HGNC 2197
C06	SBH0641340	ENST00000380518.8	COL2A1	ENSG00000139219	collagen type II alpha 1 chain Source HGNC Symbol Acc HGNC 2200
C07	SBH0311759	ENST00000447041.6	COL9A1	ENSG00000112280	collagen type IX alpha 1 chain Source HGNC Symbol Acc HGNC 2217
C08	SBH1219918	ENST00000521640.5	CTNNA1	ENSG00000044115	catenin alpha 1 Source HGNC Symbol Acc HGNC 2509
C09	SBH0010818	ENST00000374429.6	CXCL12	ENSG00000107562	C-X-C motif chemokine ligand 12 Source HGNC Symbol Acc HGNC 10672
C10	SBH0519578	ENST00000649637.2	DHH	ENSG00000139549	desert hedgehog signaling molecule Source HGNC Symbol Acc HGNC 2865
		ENST00000630		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0070314	500.1	DLL1	198719	delta like canonical Notch ligand 1 Source HGNC Symbol Acc HGNC 2908
C12	SBH0189720	ENST00000596614.5	DLL3	ENSG00000090932	delta like canonical Notch ligand 3 Source NCBI gene Acc 10683
D01	SBH0055129	ENST00000553140.1	DTX1	ENSG00000135144	deltex E3 ubiquitin ligase 1 Source HGNC Symbol Acc HGNC 3060
D02	SBH0306058	ENST00000429179.1	DTX2	ENSG00000091073	deltex E3 ubiquitin ligase 2 Source HGNC Symbol Acc HGNC 15973
D03	SBH0623008	ENST00000378891.9	DVL1	ENSG00000107404	dishevelled segment polarity protein 1 Source HGNC Symbol Acc HGNC 3084
D04	SBH1219977	ENST00000263253.9	EP300	ENSG00000100393	E1A binding protein p300 Source HGNC Symbol Acc HGNC 3373
D05	SBH0534985	ENST00000612258.4	FGF1	ENSG00000113578	fibroblast growth factor 1 Source HGNC Symbol Acc HGNC 3665
D06	SBH1220000	ENST00000264498.7	FGF2	ENSG00000138685	fibroblast growth factor 2 Source HGNC Symbol Acc HGNC 3676
D07	SBH0363518	ENST00000334134.4	FGF3	ENSG00000186895	fibroblast growth factor 3 Source HGNC Symbol Acc HGNC 3681
D08	SBH0110848	ENST00000168712.3	FGF4	ENSG00000075388	fibroblast growth factor 4 Source HGNC Symbol Acc HGNC 3682
D09	SBH0226356	ENST00000326324.10	FGFR1	ENSG00000077782	fibroblast growth factor receptor 1 Source HGNC Symbol Acc HGNC 3688
D10	SBH0328492	ENST00000419308.6	FOXA2	ENSG00000125798	forkhead box A2 Source HGNC Symbol Acc HGNC 5022
D11	SBH1220008	ENST00000371021.4	FRAT1	ENSG00000165879	FRAT1, WNT signaling pathway regulator Source HGNC Symbol Acc HGNC 3944
D12	SBH0084545	ENST00000287934.3	FZD1	ENSG00000157240	frizzled class receptor 1 Source HGNC Symbol Acc HGNC 4038
E01	SBH0659901	ENST00000581492.2	GDF2	ENSG00000263761	growth differentiation factor 2 Source HGNC Symbol Acc HGNC 4217
E02	SBH1220026	ENST00000329913.4	GDF3	ENSG00000184344	growth differentiation factor 3 Source HGNC Symbol Acc HGNC 4218
E03	SBH0022905	ENST00000282561.4	GJA1	ENSG00000152661	gap junction protein alpha 1 Source HGNC Symbol Acc HGNC 4274
E04	SBH0626155	ENST00000647424.1	GJB1	ENSG00000169562	gap junction protein beta 1 Source HGNC Symbol Acc HGNC 4283
E05	SBH0251315	ENST00000382848.5	GJB2	ENSG00000165474	gap junction protein beta 2 Source HGNC Symbol Acc HGNC 4284
E06	SBH1220050	ENST00000519108.5	HDAC2	ENSG00000196591	histone deacetylase 2 Source HGNC Symbol Acc HGNC 4853
E07	SBH0281690	ENST00000649126.1	HSPA9	ENSG00000113013	heat shock protein family A (Hsp70) member 9 Source HGNC Symbol Acc HGNC 5244
E08	SBH1220091	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
E09	SBH0269954	ENST00000505475.3	ISL1	ENSG00000016082	ISL LIM homeobox 1 Source HGNC Symbol Acc HGNC 6132
E10	SBH0407654	ENST00000254958.10	JAG1	ENSG00000101384	jagged 1 Source HGNC Symbol Acc HGNC 6188
E11	SBH1220144	ENST00000225916.10	KAT2A	ENSG00000108773	lysine acetyltransferase 2A Source HGNC Symbol Acc HGNC 4201
E12	SBH1220148	ENST00000259021.9	KAT7	ENSG00000136504	lysine acetyltransferase 7 Source HGNC Symbol Acc HGNC 17016
F01	SBH1220149	ENST00000219797.9	KAT8	ENSG00000103510	lysine acetyltransferase 8 Source HGNC Symbol Acc HGNC 17933
F02	SBH0497632	ENST00000393976.6	KRT15	ENSG00000171346	keratin 15 Source HGNC Symbol Acc HGNC 6421
F03	SBH0586051	ENST00000462745.5	MME	ENSG00000196549	membrane metalloendopeptidase Source HGNC Symbol Acc HGNC 7154
F04	SBH0065684	ENST00000382723.5	MSX1	ENSG00000163132	msh homeobox 1 Source HGNC Symbol Acc HGNC 7391
F05	SBH0426145	ENST00000524013.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
F06	SBH0342665	ENST00000250003.4	MYOD1	ENSG00000129152	myogenic differentiation 1 Source HGNC Symbol Acc HGNC 7611
F07	SBH1220236	ENST00000618266.4	NCAM1	ENSG00000149294	neural cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 7656
F08	SBH0511587	ENST00000313341.4	NEUROG2	ENSG00000178403	neurogenin 2 Source HGNC Symbol Acc HGNC 13805
F09	SBH0615258	ENST00000277541.7	NOTCH1	ENSG00000148400	notch 1 Source HGNC Symbol Acc HGNC 7881
F10	SBH0378554	ENST00000256646.7	NOTCH2	ENSG00000134250	notch 2 Source HGNC Symbol Acc HGNC 7882

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0378382	ENST00000554546.5	NUMB	ENSG00000133961	NUMB, endocytic adaptor protein Source HGNC Symbol Acc HGNC 8060
F12	SBH0205819	ENST00000219255.3	PARD6A	ENSG00000102981	par-6 family cell polarity regulator alpha Source HGNC Symbol Acc HGNC 15943
G01	SBH0232543	ENST00000381033.5	PDX1	ENSG00000139515	pancreatic and duodenal homeobox 1 Source HGNC Symbol Acc HGNC 6107
G02	SBH1220323	ENST00000418635.6	PPARD	ENSG00000112033	peroxisome proliferator activated receptor delta Source HGNC Symbol Acc HGNC 9235
G03	SBH0521265	ENST00000652522.1	PPARG	ENSG00000132170	peroxisome proliferator activated receptor gamma Source HGNC Symbol Acc HGNC 9236
G04	SBH0093533	ENST00000267163.5	RB1	ENSG00000139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
G05	SBH0183139	ENST00000291700.9	S100B	ENSG00000160307	S100 calcium binding protein B Source HGNC Symbol Acc HGNC 10500
G06	SBH0627788	ENST00000461426.1	SIGMAR1	ENSG00000147955	sigma non-opioid intracellular receptor 1 Source HGNC Symbol Acc HGNC 8157
G07	SBH0661631	ENST00000330949.2	SOX1	ENSG00000182968	SRY-box 1 Source HGNC Symbol Acc HGNC 11189
G08	SBH0499815	ENST00000325404.3	SOX2	ENSG00000181449	SRY-box 2 Source HGNC Symbol Acc HGNC 11195
G09	SBH0142967	ENST00000366871.7	TBXT	ENSG00000164458	T-box transcription factor T Source HGNC Symbol Acc HGNC 11515
G10	SBH0606096	ENST00000334602.10	TERT	ENSG00000164362	telomerase reverse transcriptase Source HGNC Symbol Acc HGNC 11730
G11	SBH0148122	ENST00000557490.5	TUBB3	ENSG00000258947	tubulin beta 3 class III Source HGNC Symbol Acc HGNC 20772
G12	SBH0160221	ENST00000293549.3	WNT1	ENSG00000125084	Wnt family member 1 Source HGNC Symbol Acc HGNC 12774
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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