

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

## Human Wound Healing

Cat. no. 249950 SBHS-121ZA

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	ACTA2	ACTC1	ANGPT1	CCL2	CCL7	CD40LG	CDH1	COL14A1	COL1A1	COL1A2	COL3A1	COL4A1
B	COL4A3	COL5A1	COL5A2	COL5A3	CSF2	CSF3	CCN2	CTNNB1	CTSG	CTSK	CTSV	CXCL1
C	CXCL11	CXCL2	CXCL5	EGF	EGFR	F13A1	F3	FGA	FGF10	FGF2	FGF7	HBEGF
D	HGF	IFNG	IGF1	IL10	IL1B	IL2	IL4	IL6	IL6ST	ITGA1	ITGA2	ITGA3
E	ITGA4	ITGA5	ITGA6	ITGAV	ITGB1	ITGB3	ITGB5	ITGB6	MAPK1	MAPK3	MIF	MMP1
F	MMP2	MMP7	MMP9	PDGFA	PLAT	PLAU	PLAUR	PLG	PTEN	PTGS2	RAC1	RHOA
G	SERPINE1	STAT3	TAGLN	TGFA	TGFB1	TGFBR3	TIMP1	TNF	VEGFA	VTN	CCN4	WNT5A
H	ACTB	B2M	GAPDH	HRPT1	RPLP0	HGDC	QIC	QIC	QIC	PPC	PPC	PPC

## Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBH0247260	ENST00000224784.10	ACTA2	ENSG00000107796	actin, alpha 2, smooth muscle, aorta Source HGNC Symbol Acc HGNC 130
A02	SBH0548789	ENST00000647798.1	ACTC1	ENSG00000159251	actin, alpha, cardiac muscle 1 Source HGNC Symbol Acc HGNC 143
A03	SBH1219739	ENST00000520734.5	ANGPT1	ENSG00000154188	angiotensinogen 1 Source HGNC Symbol Acc HGNC 484
A04	SBH0228134	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
A05	SBH0098305	ENST00000378569.2	CCL7	ENSG00000108688	C-C motif chemokine ligand 7 Source HGNC Symbol Acc HGNC 10634
A06	SBH1219862	ENST00000370629.6	CD40LG	ENSG00000102245	CD40 ligand Source HGNC Symbol Acc HGNC 11935
A07	SBH1219869	ENST00000261769.10	CDH1	ENSG00000039068	cadherin 1 Source HGNC Symbol Acc HGNC 1748
A08	SBH1219896	ENST00000434620.5	COL14A1	ENSG00000187955	collagen type XIV alpha 1 chain Source HGNC Symbol Acc HGNC 2191
A09	SBH0268763	ENST00000225964.9	COL1A1	ENSG00000108821	collagen type I alpha 1 chain Source HGNC Symbol Acc HGNC 2197
A10	SBH0096733	ENST00000297268.10	COL1A2	ENSG00000164692	collagen type I alpha 2 chain Source HGNC Symbol Acc HGNC 2198
A11	SBH0521348	ENST00000304636.7	COL3A1	ENSG00000168542	collagen type III alpha 1 chain Source HGNC Symbol Acc HGNC 2201
A12	SBH0114999	ENST00000649484.1	COL4A1	ENSG00000187498	collagen type IV alpha 1 chain Source HGNC Symbol Acc HGNC 2202
B01	SBH0408970	ENST00000396578.7	COL4A3	ENSG00000169031	collagen type IV alpha 3 chain Source HGNC Symbol Acc HGNC 2204
B02	SBH0069214	ENST00000371817.7	COL5A1	ENSG00000130635	collagen type V alpha 1 chain Source HGNC Symbol Acc HGNC 2209
B03	SBH1219899	ENST00000649066.1	COL5A2	ENSG00000204262	collagen type V alpha 2 chain Source HGNC Symbol Acc HGNC 2210
B04	SBH0546236	ENST00000264828.4	COL5A3	ENSG00000080573	collagen type V alpha 3 chain Source HGNC Symbol Acc HGNC 14864
B05	SBH1219914	ENST00000296871.4	CSF2	ENSG00000164400	colony stimulating factor 2 Source HGNC Symbol Acc HGNC 2434
B06	SBH0378721	ENST00000225474.6	CSF3	ENSG00000108342	colony stimulating factor 3 Source HGNC Symbol Acc HGNC 2438
B07	SBH1219917	ENST00000367976.4	CCN2	ENSG00000118523	cellular communication network factor 2 Source HGNC Symbol Acc HGNC 2500
B08	SBH0588482	ENST00000396183.7	CTNNB1	ENSG00000168036	catenin beta 1 Source HGNC Symbol Acc HGNC 2514
B09	SBH0555648	ENST00000216336.3	CTSG	ENSG00000100448	cathepsin G Source HGNC Symbol Acc HGNC 2532
B10	SBH0609743	ENST00000443913.1	CTSK	ENSG00000143387	cathepsin K Source HGNC Symbol Acc HGNC 2536
B11	SBH0234603	ENST00000479932.1	CTSV	ENSG00000136943	cathepsin V Source HGNC Symbol Acc HGNC 2538
B12	SBH0404660	ENST00000395761.3	CXCL1	ENSG00000163739	C-X-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 4602
C01	SBH0419056	ENST00000306621.7	CXCL11	ENSG00000169248	C-X-C motif chemokine ligand 11 Source HGNC Symbol Acc HGNC 10638
C02	SBH1219929	ENST00000508487.3	CXCL2	ENSG00000081041	C-X-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 4603
C03	SBH1219930	ENST00000296027.5	CXCL5	ENSG00000163735	C-X-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10642
C04	SBH0321686	ENST00000265171.9	EGF	ENSG00000138798	epidermal growth factor Source HGNC Symbol Acc HGNC 3229
C05	SBH1219970	ENST00000454757.6	EGFR	ENSG00000146648	epidermal growth factor receptor Source HGNC Symbol Acc HGNC 3236
C06	SBH0192679	ENST00000431222.6	F13A1	ENSG00000124491	coagulation factor XIII A chain Source HGNC Symbol Acc HGNC 3531
C07	SBH1219990	ENST00000334047.12	F3	ENSG00000117525	coagulation factor III, tissue factor Source HGNC Symbol Acc HGNC 3541
C08	SBH0309650	ENST00000651975.1	FGA	ENSG00000171560	fibrinogen alpha chain Source HGNC Symbol Acc HGNC 3661
C09	SBH0452984	ENST00000264664.4	FGF10	ENSG00000070193	fibroblast growth factor 10 Source HGNC Symbol Acc HGNC 3666
C10	SBH1220000	ENST00000264498.7	FGF2	ENSG00000138685	fibroblast growth factor 2 Source HGNC Symbol Acc HGNC 3676
		ENST00000560		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0051743	979.1	FGF7	140285	fibroblast growth factor 7 Source HGNC Symbol Acc HGNC 3685
C12	SBH0028682	ENST00000230990.7	HBEGF	ENSG00000113070	heparin binding EGF like growth factor Source HGNC Symbol Acc HGNC 3059
D01	SBH1220058	ENST00000457544.7	HGF	ENSG00000019991	hepatocyte growth factor Source HGNC Symbol Acc HGNC 4893
D02	SBH1220090	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
D03	SBH1220091	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D04	SBH1220095	ENST00000423557.1	IL10	ENSG00000136634	interleukin 10 Source HGNC Symbol Acc HGNC 5962
D05	SBH0079231	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
D06	SBH0225582	ENST00000226730.4	IL2	ENSG00000109471	interleukin 2 Source HGNC Symbol Acc HGNC 6001
D07	SBH1220109	ENST00000350025.2	IL4	ENSG00000113520	interleukin 4 Source HGNC Symbol Acc HGNC 6014
D08	SBH1220111	ENST00000401630.7	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D09	SBH0280973	ENST00000503773.6	IL6ST	ENSG00000134352	interleukin 6 signal transducer Source HGNC Symbol Acc HGNC 6021
D10	SBH1220129	ENST00000282588.6	ITGA1	ENSG00000213949	integrin subunit alpha 1 Source HGNC Symbol Acc HGNC 6134
D11	SBH1220130	ENST00000296585.10	ITGA2	ENSG00000164171	integrin subunit alpha 2 Source HGNC Symbol Acc HGNC 6137
D12	SBH1220131	ENST00000007722.11	ITGA3	ENSG00000005884	integrin subunit alpha 3 Source HGNC Symbol Acc HGNC 6139
E01	SBH1220132	ENST00000397033.7	ITGA4	ENSG00000115232	integrin subunit alpha 4 Source HGNC Symbol Acc HGNC 6140
E02	SBH1220133	ENST00000293379.9	ITGA5	ENSG00000161638	integrin subunit alpha 5 Source HGNC Symbol Acc HGNC 6141
E03	SBH0096168	ENST00000264107.11	ITGA6	ENSG00000091409	integrin subunit alpha 6 Source HGNC Symbol Acc HGNC 6142
E04	SBH0064907	ENST00000460641.1	ITGAV	ENSG00000138448	integrin subunit alpha V Source HGNC Symbol Acc HGNC 6150
E05	SBH1220136	ENST00000302278.8	ITGB1	ENSG00000150093	integrin subunit beta 1 Source HGNC Symbol Acc HGNC 6153
E06	SBH1220137	ENST00000559488.5	ITGB3	ENSG00000259207	integrin subunit beta 3 Source HGNC Symbol Acc HGNC 6156
E07	SBH1220139	ENST00000608657.5	ITGB5	ENSG00000082781	integrin subunit beta 5 Source HGNC Symbol Acc HGNC 6160
E08	SBH1220140	ENST00000409872.1	ITGB6	ENSG00000115221	integrin subunit beta 6 Source HGNC Symbol Acc HGNC 6161
E09	SBH1220192	ENST00000544786.1	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
E10	SBH1220194	ENST00000478356.5	MAPK3	ENSG00000102882	mitogen-activated protein kinase 3 Source HGNC Symbol Acc HGNC 6877
E11	SBH1220212	ENST00000215754.8	MIF	ENSG00000240972	macrophage migration inhibitory factor Source HGNC Symbol Acc HGNC 7097
E12	SBH1220215	ENST00000315274.7	MMP1	ENSG00000196611	matrix metalloproteinase 1 Source HGNC Symbol Acc HGNC 7155
F01	SBH1220222	ENST00000570308.5	MMP2	ENSG00000087245	matrix metalloproteinase 2 Source HGNC Symbol Acc HGNC 7166
F02	SBH1220224	ENST00000260227.5	MMP7	ENSG00000137673	matrix metalloproteinase 7 Source HGNC Symbol Acc HGNC 7174
F03	SBH0471278	ENST00000372330.3	MMP9	ENSG00000100985	matrix metalloproteinase 9 Source HGNC Symbol Acc HGNC 7176
F04	SBH0498934	ENST00000354513.9	PDGFA	ENSG00000197461	platelet derived growth factor subunit A Source HGNC Symbol Acc HGNC 8799
F05	SBH0432338	ENST00000220809.8	PLAT	ENSG00000104368	plasminogen activator, tissue type Source HGNC Symbol Acc HGNC 9051
F06	SBH1220315	ENST00000446342.5	PLAU	ENSG00000122861	plasminogen activator, urokinase Source HGNC Symbol Acc HGNC 9052
F07	SBH0270684	ENST00000593939.5	PLAUR	ENSG00000011422	plasminogen activator, urokinase receptor Source HGNC Symbol Acc HGNC 9053
F08	SBH0191454	ENST00000308192.13	PLG	ENSG00000122194	plasminogen Source HGNC Symbol Acc HGNC 9071
F09	SBH1225378	ENST00000371953.8	PTEN	ENSG00000171862	phosphatase and tensin homolog Source HGNC Symbol Acc HGNC 9588
F10	SBH1220344	ENST00000367468.10	PTGS2	ENSG00000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH1220352	ENST00000356142.4	RAC1	ENSG00000136238	Rac family small GTPase 1 Source HGNC Symbol Acc HGNC 9801
F12	SBH1220367	ENST00000418115.6	RHOA	ENSG00000067560	ras homolog family member A Source HGNC Symbol Acc HGNC 667
G01	SBH1220389	ENST00000223095.4	SERPINE1	ENSG00000106366	serpin family E member 1 Source HGNC Symbol Acc HGNC 8583
G02	SBH0341614	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
G03	SBH0194372	ENST00000529622.1	TAGLN	ENSG00000149591	transgelin Source HGNC Symbol Acc HGNC 11553
G04	SBH1220442	ENST00000445399.5	TGFA	ENSG00000163235	transforming growth factor alpha Source HGNC Symbol Acc HGNC 11765
G05	SBH1220443	ENST00000598758.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G06	SBH1220447	ENST00000370399.6	TGFBR3	ENSG00000069702	transforming growth factor beta receptor 3 Source HGNC Symbol Acc HGNC 11774
G07	SBH1220454	ENST00000218388.9	TIMP1	ENSG00000102265	TIMP metalloproteinase inhibitor 1 Source HGNC Symbol Acc HGNC 11820
G08	SBH1220471	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G09	SBH0420322	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G10	SBH1220521	ENST00000226218.9	VTN	ENSG00000109072	vitronectin Source HGNC Symbol Acc HGNC 12724
G11	SBH1220526	ENST00000220856.6	CCN4	ENSG00000104415	cellular communication network factor 4 Source HGNC Symbol Acc HGNC 12769
G12	SBH0548767	ENST00000264634.8	WNT5A	ENSG00000114251	Wnt family member 5A Source HGNC Symbol Acc HGNC 12784
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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