

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

## Human Atherosclerosis

Cat. no. 249950 SBHS-038ZA

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	ABCA1	ACE	APOA1	APOB	APOE	BAX	BCL2	BCL2A1	BCL2L1	BID	BIRC3	CCL2
B	CCL5	CCR1	CCR2	CD44	CDH5	CFLAR	COL3A1	CSF1	CSF2	CCN2	EGR1	ELN
C	ENG	FABP3	FAS	FGA	FGF2	FN1	HBEGF	ICAM1	IFNAR2	IFNG	IL1A	IL1R1
D	IL1R2	IL2	IL3	IL4	IL5	ITGA2	ITGA5	ITGAX	ITGB2	KDR	KLF2	LAMA1
E	LDLR	LIF	LPA	LPL	MMP1	MMP3	MSR1	NFKB1	NOS3	NPY	NR1H3	PDGFA
F	PDGFB	PDGFRB	PLIN2	PPARA	PPARD	PPARG	PTGS1	RXRA	SELE	SELL	SEPLG	SERPINB2
G	SERPINE1	SOD1	SPP1	TGFB1	TGFB2	THBS4	TNC	TNF	TNFAIP3	VCAM1	VEGFA	VWF
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	SBH0311739	ENST00000423487.6	ABCA1	ENSG00000165029	ATP binding cassette subfamily A member 1 Source HGNC Symbol Acc HGNC 29
A02	SBH1219717	ENST00000428043.5	ACE	ENSG00000159640	angiotensin I converting enzyme Source HGNC Symbol Acc HGNC 2707
A03	SBH0583640	ENST00000375320.5	APOA1	ENSG00000118137	apolipoprotein A1 Source HGNC Symbol Acc HGNC 600
A04	SBH0382003	ENST00000399256.4	APOB	ENSG00000084674	apolipoprotein B Source HGNC Symbol Acc HGNC 603
A05	SBH0562930	ENST00000434152.5	APOE	ENSG00000130203	apolipoprotein E Source HGNC Symbol Acc HGNC 613
A06	SBH1219783	ENST00000391871.4	BAX	ENSG00000087088	BCL2 associated X, apoptosis regulator Source HGNC Symbol Acc HGNC 959
A07	SBH1219786	ENST00000398117.1	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
A08	SBH1219787	ENST00000267953.4	BCL2A1	ENSG00000140379	BCL2 related protein A1 Source HGNC Symbol Acc HGNC 991
A09	SBH0216029	ENST00000450273.1	BCL2L1	ENSG00000171552	BCL2 like 1 Source HGNC Symbol Acc HGNC 992
A10	SBH0641141	ENST00000622694.4	BID	ENSG00000015475	BH3 interacting domain death agonist Source HGNC Symbol Acc HGNC 1050
A11	SBH1219796	ENST00000263464.8	BIRC3	ENSG00000023445	baculoviral IAP repeat containing 3 Source HGNC Symbol Acc HGNC 591
A12	SBH0228134	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
B01	SBH1219840	ENST00000603197.6	CCL5	ENSG00000271503	C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632
B02	SBH1219851	ENST00000296140.4	CCR1	ENSG00000163823	C-C motif chemokine receptor 1 Source HGNC Symbol Acc HGNC 1602
B03	SBH0387563	ENST00000445132.2	CCR2	ENSG00000121807	C-C motif chemokine receptor 2 Source HGNC Symbol Acc HGNC 1603
B04	SBH0074994	ENST00000428726.7	CD44	ENSG00000026508	CD44 molecule (Indian blood group) Source HGNC Symbol Acc HGNC 1681
B05	SBH1219871	ENST00000563425.2	CDH5	ENSG00000179776	cadherin 5 Source HGNC Symbol Acc HGNC 1764
B06	SBH1219883	ENST00000462763.5	CFLAR	ENSG00000003402	CASP8 and FADD like apoptosis regulator Source HGNC Symbol Acc HGNC 1876
B07	SBH0521348	ENST00000304636.7	COL3A1	ENSG00000168542	collagen type III alpha 1 chain Source HGNC Symbol Acc HGNC 2201
B08	SBH1219913	ENST00000420111.6	CSF1	ENSG00000184371	colony stimulating factor 1 Source HGNC Symbol Acc HGNC 2432
B09	SBH1219914	ENST00000296871.4	CSF2	ENSG00000164400	colony stimulating factor 2 Source HGNC Symbol Acc HGNC 2434
B10	SBH1219917	ENST00000367976.4	CCN2	ENSG00000118523	cellular communication network factor 2 Source HGNC Symbol Acc HGNC 2500
B11	SBH0290504	ENST00000239938.5	EGR1	ENSG00000120738	early growth response 1 Source HGNC Symbol Acc HGNC 3238
B12	SBH0073042	ENST00000431562.5	ELN	ENSG00000049540	elastin Source HGNC Symbol Acc HGNC 3327
C01	SBH1219975	ENST00000480266.5	ENG	ENSG00000106991	endoglin Source HGNC Symbol Acc HGNC 3349
C02	SBH0060313	ENST00000373713.6	FABP3	ENSG00000121769	fatty acid binding protein 3 Source HGNC Symbol Acc HGNC 3557
C03	SBH1219994	ENST00000652046.1	FAS	ENSG00000026103	Fas cell surface death receptor Source HGNC Symbol Acc HGNC 11920
C04	SBH0309650	ENST00000651975.1	FGA	ENSG00000171560	fibrinogen alpha chain Source HGNC Symbol Acc HGNC 3661
C05	SBH1220000	ENST00000264498.7	FGF2	ENSG00000138685	fibroblast growth factor 2 Source HGNC Symbol Acc HGNC 3676
C06	SBH1220003	ENST00000354785.9	FN1	ENSG00000115414	fibronectin 1 Source HGNC Symbol Acc HGNC 3778
C07	SBH0028682	ENST00000230990.7	HBEGF	ENSG00000113070	heparin binding EGF like growth factor Source HGNC Symbol Acc HGNC 3059
C08	SBH1220076	ENST00000264832.8	ICAM1	ENSG00000090339	intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344
C09	SBH1220088	ENST00000404220.7	IFNAR2	ENSG00000159110	interferon alpha and beta receptor subunit 2 Source HGNC Symbol Acc HGNC 5433
C10	SBH1220090	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
		ENST00000263		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0663647	339.3	IL1A	115008	interleukin 1 alpha Source HGNC Symbol Acc HGNC 5991
C12	SBH1220104	ENST00000424 272.5	IL1R1	ENSG00000 115594	interleukin 1 receptor type 1 Source HGNC Symbol Acc HGNC 5993
D01	SBH0202838	ENST00000332 549.8	IL1R2	ENSG00000 115590	interleukin 1 receptor type 2 Source HGNC Symbol Acc HGNC 5994
D02	SBH0225582	ENST00000226 730.4	IL2	ENSG00000 109471	interleukin 2 Source HGNC Symbol Acc HGNC 6001
D03	SBH0584080	ENST00000296 870.2	IL3	ENSG00000 164399	interleukin 3 Source HGNC Symbol Acc HGNC 6011
D04	SBH1220109	ENST00000350 025.2	IL4	ENSG00000 113520	interleukin 4 Source HGNC Symbol Acc HGNC 6014
D05	SBH1220110	ENST00000231 454.6	IL5	ENSG00000 113525	interleukin 5 Source HGNC Symbol Acc HGNC 6016
D06	SBH1220130	ENST00000296 585.10	ITGA2	ENSG00000 164171	integrin subunit alpha 2 Source HGNC Symbol Acc HGNC 6137
D07	SBH1220133	ENST00000293 379.9	ITGA5	ENSG00000 161638	integrin subunit alpha 5 Source HGNC Symbol Acc HGNC 6141
D08	SBH0462220	ENST00000268 296.8	ITGAX	ENSG00000 140678	integrin subunit alpha X Source HGNC Symbol Acc HGNC 6152
D09	SBH0032107	ENST00000397 857.5	ITGB2	ENSG00000 160255	integrin subunit beta 2 Source HGNC Symbol Acc HGNC 6155
D10	SBH0020198	ENST00000263 923.5	KDR	ENSG00000 128052	kinase insert domain receptor Source HGNC Symbol Acc HGNC 6307
D11	SBH0267292	ENST00000592 003.1	KLF2	ENSG00000 127528	Kruppel like factor 2 Source HGNC Symbol Acc HGNC 6347
D12	SBH1220161	ENST00000389 658.4	LAMA1	ENSG00000 101680	laminin subunit alpha 1 Source HGNC Symbol Acc HGNC 6481
E01	SBH0324029	ENST00000558 013.5	LDLR	ENSG00000 130164	low density lipoprotein receptor Source HGNC Symbol Acc HGNC 6547
E02	SBH1220172	ENST00000249 075.4	LIF	ENSG00000 128342	LIF, interleukin 6 family cytokine Source HGNC Symbol Acc HGNC 6596
E03	SBH0610898	ENST00000447 678.2	LPA	ENSG00000 198670	lipoprotein(a) Source HGNC Symbol Acc HGNC 6667
E04	SBH1220175	ENST00000311 322.10	LPL	ENSG00000 175445	lipoprotein lipase Source HGNC Symbol Acc HGNC 6677
E05	SBH1220215	ENST00000315 274.7	MMP1	ENSG00000 196611	matrix metalloproteinase 1 Source HGNC Symbol Acc HGNC 7155
E06	SBH1220223	ENST00000299 855.10	MMP3	ENSG00000 149968	matrix metalloproteinase 3 Source HGNC Symbol Acc HGNC 7173
E07	SBH0221342	ENST00000262 101.10	MSR1	ENSG00000 038945	macrophage scavenger receptor 1 Source HGNC Symbol Acc HGNC 7376
E08	SBH1220264	ENST00000651 197.1	NFKB1	ENSG00000 109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E09	SBH1220272	ENST00000297 494.8	NOS3	ENSG00000 164867	nitric oxide synthase 3 Source HGNC Symbol Acc HGNC 7876
E10	SBH0377787	ENST00000407 573.5	NPY	ENSG00000 122585	neuropeptide Y Source HGNC Symbol Acc HGNC 7955
E11	SBH0458854	ENST00000616 973.4	NR1H3	ENSG00000 025434	nuclear receptor subfamily 1 group H member 3 Source HGNC Symbol Acc HGNC 7966
E12	SBH0498934	ENST00000354 513.9	PDGFA	ENSG00000 197461	platelet derived growth factor subunit A Source HGNC Symbol Acc HGNC 8799
F01	SBH0091370	ENST00000331 163.10	PDGFB	ENSG00000 100311	platelet derived growth factor subunit B Source HGNC Symbol Acc HGNC 8800
F02	SBH1220293	ENST00000261 799.9	PDGFRB	ENSG00000 113721	platelet derived growth factor receptor beta Source HGNC Symbol Acc HGNC 8804
F03	SBH0295262	ENST00000380 465.7	PLIN2	ENSG00000 147872	perilipin 2 Source HGNC Symbol Acc HGNC 248
F04	SBH1220322	ENST00000407 236.5	PPARA	ENSG00000 186951	peroxisome proliferator activated receptor alpha Source HGNC Symbol Acc HGNC 9232
F05	SBH1220323	ENST00000418 635.6	PPARD	ENSG00000 112033	peroxisome proliferator activated receptor delta Source HGNC Symbol Acc HGNC 9235
F06	SBH0521265	ENST00000652 522.1	PPARG	ENSG00000 132170	peroxisome proliferator activated receptor gamma Source HGNC Symbol Acc HGNC 9236
F07	SBH1220343	ENST00000540 753.6	PTGS1	ENSG00000 095303	prostaglandin-endoperoxide synthase 1 Source HGNC Symbol Acc HGNC 9604
F08	SBH0565802	ENST00000356 384.4	RXRA	ENSG00000 186350	retinoid X receptor alpha Source HGNC Symbol Acc HGNC 10477
F09	SBH1220384	ENST00000367 774.1	SELE	ENSG00000 007908	selectin E Source HGNC Symbol Acc HGNC 10718
F10	SBH0011028	ENST00000236 147.5	SELL	ENSG00000 188404	selectin L Source HGNC Symbol Acc HGNC 10720

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH1220386	ENST00000550948.1	SELPLG	ENSG00000110876	selectin P ligand Source HGNC Symbol Acc HGNC 10722
F12	SBH1220388	ENST00000404622.5	SERPINB2	ENSG00000197632	serpin family B member 2 Source HGNC Symbol Acc HGNC 8584
G01	SBH1220389	ENST00000223095.4	SERPINE1	ENSG00000106366	serpin family E member 1 Source HGNC Symbol Acc HGNC 8583
G02	SBH0278498	ENST00000270142.10	SOD1	ENSG00000142168	superoxide dismutase 1 Source HGNC Symbol Acc HGNC 11179
G03	SBH0180162	ENST00000237623.11	SPP1	ENSG00000118785	secreted phosphoprotein 1 Source HGNC Symbol Acc HGNC 11255
G04	SBH1220443	ENST00000598758.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G05	SBH1220444	ENST00000366930.9	TGFB2	ENSG00000092969	transforming growth factor beta 2 Source HGNC Symbol Acc HGNC 11768
G06	SBH0165676	ENST00000350881.6	THBS4	ENSG00000113296	thrombospondin 4 Source HGNC Symbol Acc HGNC 11788
G07	SBH1220470	ENST00000423613.6	TNC	ENSG00000041982	tenascin C Source HGNC Symbol Acc HGNC 5318
G08	SBH1220471	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G09	SBH0348756	ENST00000614035.4	TNFAIP3	ENSG00000118503	TNF alpha induced protein 3 Source HGNC Symbol Acc HGNC 11896
G10	SBH1220515	ENST00000294728.7	VCAM1	ENSG00000162692	vascular cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 12663
G11	SBH0420322	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G12	SBH1220522	ENST00000261405.9	VWF	ENSG00000110799	von Willebrand factor Source HGNC Symbol Acc HGNC 12726
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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