QuantiNova® LNA® PCR Focus Panels (Rotor-Gene® Format)

Human Cardiovascular Disease

Cat. no. 249950 SBHS-174ZR

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 (Rotor-Gene): QuantiNova LNA PCR Focus Panel

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc® (plate A1–A12=Rotor-Disc 1–12, plate B1–B12=Rotor-Disc 13–24, etc.). To maintain data analysis compatibility, wells 97–100 do not contain real-time assays but will contain master mix to account for weight balance. 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	ACE	ACTC1	ADRA1A	ADRA1B	ADRA1D	ADRB1	ADRB2	ADRB3	AEBP1	AGTR1	ANXA4	AR
B	ATP2A2	ATP5F1A	C6	CCL11	CCL18	CCL2	CCND1	CDKN1B	COL11A1	COL1A1	COL3A1	CREB5
C	CREM	CRYAB	CRYM	CCN2	DCN	DMD	DUSP6	ENAH	EPOR	F2R	FN1	FRZB
D	G0S2	GJA1	HMGCL	HMGCR	HMGN2	KLHL3	MAOA	MAPK1	MAPK8	MMP13	MSI2	MT1X
E	MYH10	MYH6	NDUFB5	NEBL	NFIA	NKX2-5	NPPA	NPPB	NPR1	NPR2	NPR3	NR3C1
F	NR3C2	PDE3A	PDE3B	PDE5A	PDE7A	POSTN	PTN	RARRES1	RASSF1	REN	RTN4	S100A1
G	SERPINA3	SFRP4	SLC12A1	SNCA	SPOCK1	STAT1	TCF4	THBS2	TNNI3	TNNT2	UBB	ZYX
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	SBH1219717	ENST00000428043.5	ACE	ENSG00000159640	angiotensin I converting enzyme Source HGNC Symbol Acc HGNC 2707
A02	SBH0548789	ENST00000647798.1	ACTC1	ENSG00000159251	actin, alpha, cardiac muscle 1 Source HGNC Symbol Acc HGNC 143
A03	SBH0604482	ENST00000380573.3	ADRA1A	ENSG00000120907	adrenoceptor alpha 1A Source HGNC Symbol Acc HGNC 277
A04	SBH0418597	ENST00000306675.5	ADRA1B	ENSG00000170214	adrenoceptor alpha 1B Source HGNC Symbol Acc HGNC 278
A05	SBH0314853	ENST00000379453.5	ADRA1D	ENSG00000171873	adrenoceptor alpha 1D Source HGNC Symbol Acc HGNC 280
A06	SBH0305943	ENST00000369295.3	ADRB1	ENSG00000043591	adrenoceptor beta 1 Source HGNC Symbol Acc HGNC 285
A07	SBH0519738	ENST00000305988.5	ADRB2	ENSG00000169252	adrenoceptor beta 2 Source HGNC Symbol Acc HGNC 286
A08	SBH0064559	ENST00000345060.5	ADRB3	ENSG00000188778	adrenoceptor beta 3 Source HGNC Symbol Acc HGNC 288
A09	SBH0087280	ENST00000450684.2	AEBP1	ENSG00000106624	AE binding protein 1 Source HGNC Symbol Acc HGNC 303
A10	SBH0123687	ENST00000418473.6	AGTR1	ENSG00000144891	angiotensin II receptor type 1 Source HGNC Symbol Acc HGNC 336
A11	SBH0169675	ENST00000394295.6	ANXA4	ENSG00000196975	annexin A4 Source HGNC Symbol Acc HGNC 542
A12	SBH0056376	ENST00000374690.8	AR	ENSG00000169083	androgen receptor Source HGNC Symbol Acc HGNC 644
B01	SBH0372412	ENST00000539276.7	ATP2A2	ENSG00000174437	ATPase sarcoplasmic/endoplasmic reticulum Ca2+ transporting 2 Source HGNC Symbol Acc HGNC 812
B02	SBH1219765	ENST00000590665.5	ATP5F1A	ENSG00000152234	ATP synthase F1 subunit alpha Source HGNC Symbol Acc HGNC 823
B03	SBH0634876	ENST00000511470.1	C6	ENSG00000039537	complement C6 Source HGNC Symbol Acc HGNC 1339
B04	SBH0204041	ENST00000305869.3	CCL11	ENSG00000172156	C-C motif chemokine ligand 11 Source HGNC Symbol Acc HGNC 10610
B05	SBH0292440	ENST00000616054.1	CCL18	ENSG00000275385	C-C motif chemokine ligand 18 Source HGNC Symbol Acc HGNC 10616
B06	SBH0228134	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
B07	SBH0434090	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B08	SBH1219879	ENST00000442489.1	CDKN1B	ENSG00000111276	cyclin dependent kinase inhibitor 1B Source HGNC Symbol Acc HGNC 1785
B09	SBH0251687	ENST00000358392.6	COL11A1	ENSG00000060718	collagen type XI alpha 1 chain Source HGNC Symbol Acc HGNC 2186
B10	SBH0268763	ENST00000225964.9	COL1A1	ENSG00000108821	collagen type I alpha 1 chain Source HGNC Symbol Acc HGNC 2197
B11	SBH0521348	ENST00000304636.7	COL3A1	ENSG00000168542	collagen type III alpha 1 chain Source HGNC Symbol Acc HGNC 2201
B12	SBH0379152	ENST00000461921.5	CREB5	ENSG00000146592	cAMP responsive element binding protein 5 Source HGNC Symbol Acc HGNC 16844
C01	SBH0192533	ENST00000474362.5	CREM	ENSG00000095794	cAMP responsive element modulator Source HGNC Symbol Acc HGNC 2352
C02	SBH0502900	ENST00000531198.5	CRYAB	ENSG00000109846	crystallin alpha B Source HGNC Symbol Acc HGNC 2389
C03	SBH0409731	ENST00000571666.1	CRYM	ENSG00000103316	crystallin mu Source HGNC Symbol Acc HGNC 2418
C04	SBH1219917	ENST00000367976.4	CCN2	ENSG00000118523	cellular communication network factor 2 Source HGNC Symbol Acc HGNC 2500
C05	SBH1219942	ENST00000420120.6	DCN	ENSG00000011465	decorin Source HGNC Symbol Acc HGNC 2705
C06	SBH0339261	ENST00000619831.4	DMD	ENSG00000198947	dystrophin Source HGNC Symbol Acc HGNC 2928
C07	SBH0100832	ENST00000547140.1	DUSP6	ENSG00000139318	dual specificity phosphatase 6 Source HGNC Symbol Acc HGNC 3072
C08	SBH0493404	ENST00000497899.6	ENAH	ENSG00000154380	ENAH, actin regulator Source HGNC Symbol Acc HGNC 18271
C09	SBH0577732	ENST00000592375.6	EPOR	ENSG00000187266	erythropoietin receptor Source HGNC Symbol Acc HGNC 3416
C10	SBH1219989	ENST00000319211.5	F2R	ENSG00000181104	coagulation factor II thrombin receptor Source HGNC Symbol Acc HGNC 3537
		ENST00000354		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1220003	785.9	FN1	115414	fibronectin 1 Source HGNC Symbol Acc HGNC 3778
C12	SBH1220009	ENST00000295113.5	FRZB	ENSG00000162998	frizzled related protein Source HGNC Symbol Acc HGNC 3959
D01	SBH0609023	ENST00000367029.5	G0S2	ENSG00000123689	G0/G1 switch 2 Source HGNC Symbol Acc HGNC 30229
D02	SBH0022905	ENST00000282561.4	GJA1	ENSG00000152661	gap junction protein alpha 1 Source HGNC Symbol Acc HGNC 4274
D03	SBH0475182	ENST00000235958.4	HMGCL	ENSG00000117305	3-hydroxy-3-methylglutaryl-CoA lyase Source HGNC Symbol Acc HGNC 5005
D04	SBH0118882	ENST00000511206.5	HMGCR	ENSG00000113161	3-hydroxy-3-methylglutaryl-CoA reductase Source HGNC Symbol Acc HGNC 5006
D05	SBH0187094	ENST00000361427.6	HMGN2	ENSG00000198830	high mobility group nucleosomal binding domain 2 Source HGNC Symbol Acc HGNC 4986
D06	SBH0153296	ENST00000506873.5	KLHL3	ENSG00000146021	kelch like family member 3 Source HGNC Symbol Acc HGNC 6354
D07	SBH0491214	ENST00000542639.5	MAOA	ENSG00000189221	monoamine oxidase A Source HGNC Symbol Acc HGNC 6833
D08	SBH1220192	ENST00000544786.1	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
D09	SBH0294318	ENST00000395611.7	MAPK8	ENSG00000107643	mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881
D10	SBH1220218	ENST00000615555.4	MMP13	ENSG00000137745	matrix metallopeptidase 13 Source HGNC Symbol Acc HGNC 7159
D11	SBH0096483	ENST00000416426.6	MSI2	ENSG00000153944	musashi RNA binding protein 2 Source HGNC Symbol Acc HGNC 18585
D12	SBH0641990	ENST00000394485.5	MT1X	ENSG00000187193	metallothionein 1X Source HGNC Symbol Acc HGNC 7405
E01	SBH0109230	ENST00000465458.1	MYH10	ENSG00000133026	myosin heavy chain 10 Source HGNC Symbol Acc HGNC 7568
E02	SBH0399897	ENST00000557461.2	MYH6	ENSG00000197616	myosin heavy chain 6 Source HGNC Symbol Acc HGNC 7576
E03	SBH1220250	ENST00000611971.4	NDUFB5	ENSG00000136521	NADH ubiquinone oxidoreductase subunit B5 Source HGNC Symbol Acc HGNC 7700
E04	SBH0547457	ENST00000493005.5	NEBL	ENSG00000078114	nebulette Source HGNC Symbol Acc HGNC 16932
E05	SBH0087853	ENST00000485903.6	NFIA	ENSG00000162599	nuclear factor I A Source HGNC Symbol Acc HGNC 7784
E06	SBH0461083	ENST00000521848.1	NKX2-5	ENSG00000183072	NK2 homeobox 5 Source HGNC Symbol Acc HGNC 2488
E07	SBH0369836	ENST00000610706.1	NPPA	ENSG00000175206	natriuretic peptide A Source HGNC Symbol Acc HGNC 7939
E08	SBH1220277	ENST00000376468.4	NPPB	ENSG00000120937	natriuretic peptide B Source HGNC Symbol Acc HGNC 7940
E09	SBH1220278	ENST00000368680.4	NPR1	ENSG00000169418	natriuretic peptide receptor 1 Source HGNC Symbol Acc HGNC 7943
E10	SBH0169931	ENST00000464810.5	NPR2	ENSG00000159899	natriuretic peptide receptor 2 Source HGNC Symbol Acc HGNC 7944
E11	SBH0070120	ENST00000265074.13	NPR3	ENSG00000113389	natriuretic peptide receptor 3 Source HGNC Symbol Acc HGNC 7945
E12	SBH1220280	ENST00000652686.1	NR3C1	ENSG00000113580	nuclear receptor subfamily 3 group C member 1 Source HGNC Symbol Acc HGNC 7978
F01	SBH0060773	ENST00000344721.8	NR3C2	ENSG00000151623	nuclear receptor subfamily 3 group C member 2 Source HGNC Symbol Acc HGNC 7979
F02	SBH0372566	ENST00000359062.3	PDE3A	ENSG00000172572	phosphodiesterase 3A Source HGNC Symbol Acc HGNC 8778
F03	SBH0236379	ENST00000455098.2	PDE3B	ENSG00000152270	phosphodiesterase 3B Source HGNC Symbol Acc HGNC 8779
F04	SBH0155927	ENST00000354960.8	PDE5A	ENSG00000138735	phosphodiesterase 5A Source HGNC Symbol Acc HGNC 8784
F05	SBH0342011	ENST00000396642.7	PDE7A	ENSG00000205268	phosphodiesterase 7A Source HGNC Symbol Acc HGNC 8791
F06	SBH0466638	ENST00000379749.8	POSTN	ENSG00000133110	periostin Source HGNC Symbol Acc HGNC 16953
F07	SBH0080420	ENST00000348225.6	PTN	ENSG00000105894	pleiotrophin Source HGNC Symbol Acc HGNC 9630
F08	SBH0302871	ENST00000237696.10	RARRES1	ENSG00000118849	retinoic acid receptor responder 1 Source HGNC Symbol Acc HGNC 9867
F09	SBH0462049	ENST00000359365.8	RASSF1	ENSG00000068028	Ras association domain family member 1 Source HGNC Symbol Acc HGNC 9882
F10	SBH0543746	ENST00000638118.1	REN	ENSG00000143839	renin Source HGNC Symbol Acc HGNC 9958

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0428400	ENST00000486085.5	RTN4	ENSG00000115310	reticulon 4 Source HGNC Symbol Acc HGNC 14085
F12	SBH0319479	ENST00000292169.5	S100A1	ENSG00000160678	S100 calcium binding protein A1 Source HGNC Symbol Acc HGNC 10486
G01	SBH0032295	ENST00000393078.4	SERPINA3	ENSG00000196136	serpin family A member 3 Source HGNC Symbol Acc HGNC 16
G02	SBH1220395	ENST00000436072.7	SFRP4	ENSG00000106483	secreted frizzled related protein 4 Source HGNC Symbol Acc HGNC 10778
G03	SBH0109503	ENST00000560692.5	SLC12A1	ENSG00000074803	solute carrier family 12 member 1 Source HGNC Symbol Acc HGNC 10910
G04	SBH0118819	ENST00000394991.7	SNCA	ENSG00000145335	synuclein alpha Source HGNC Symbol Acc HGNC 11138
G05	SBH0134045	ENST00000394945.6	SPOCK1	ENSG00000152377	SPARC (osteonectin), cwcv and kazal like domains proteoglycan 1 Source HGNC Symbol Acc HGNC 11251
G06	SBH0333289	ENST00000361099.7	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
G07	SBH0089633	ENST00000356073.8	TCF4	ENSG00000196628	transcription factor 4 Source HGNC Symbol Acc HGNC 11634
G08	SBH0457929	ENST00000366787.7	THBS2	ENSG00000186340	thrombospondin 2 Source HGNC Symbol Acc HGNC 11786
G09	SBH0283529	ENST00000344887.9	TNNI3	ENSG00000129991	troponin I3, cardiac type Source NCBI gene Acc 7137
G10	SBH0423442	ENST00000360372.8	TNNT2	ENSG00000118194	troponin T2, cardiac type Source HGNC Symbol Acc HGNC 11949
G11	SBH0421370	ENST00000577958.1	UBB	ENSG00000170315	ubiquitin B Source HGNC Symbol Acc HGNC 12463
G12	SBH0382988	ENST00000436448.1	ZYX	ENSG00000159840	zyxin Source HGNC Symbol Acc HGNC 13200
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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.