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

Human Tight Junctions

Cat. no. 249950 SBHS-143ZR

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	ACTN1	ACTN2	ACTN3	ACTN4	AMOTL1	ARHGEF2	ASH1L	CASK	CD99	CDC42	CDK4	CGN
B	CLDN1	CLDN10	CLDN11	CLDN12	CLDN14	CLDN15	CLDN16	CLDN17	CLDN18	CLDN19	CLDN2	CLDN3
C	CLDN4	CLDN5	CLDN6	CLDN7	CLDN8	CLDN9	CRB1	CRB3	YBX3	CSNK2A1	CSNK2A2	CSNK2B
D	CTNNA1	CTNNA2	CTNNA3	CTNNB1	CTTN	EPB41	ESAM	F11R	GNAI1	HCLS1	ICAM1	ICAM2
E	IGSF5	ILK	PATJ	JAM2	JAM3	LLGL1	LLGL2	MAGI1	MAGI2	MARK2	AFDN	MPDZ
F	MPP5	MPP6	OCLN	PARD3	PARD6A	PARD6B	PECAM1	PRKCI	PRKCZ	PTEN	RAC1	RHOA
G	SMURF1	SPTA1	SPTAN1	SPTB	SYMPK	TIAM1	TJAP1	TJP1	TJP2	TJP3	VAPA	MAP3K20
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	SBH0484630	ENST00000556571.1	ACTN1	ENSG00000072110	actinin alpha 1 Source HGNC Symbol Acc HGNC 163
A02	SBH0614210	ENST00000492634.6	ACTN2	ENSG00000077522	actinin alpha 2 Source HGNC Symbol Acc HGNC 164
A03	SBH0252637	ENST00000502692.5	ACTN3	ENSG00000248746	actinin alpha 3 (gene/pseudogene) Source HGNC Symbol Acc HGNC 165
A04	SBH0569283	ENST00000495553.1	ACTN4	ENSG00000130402	actinin alpha 4 Source HGNC Symbol Acc HGNC 166
A05	SBH0014545	ENST00000537191.1	AMOTL1	ENSG00000166025	angiomotin like 1 Source HGNC Symbol Acc HGNC 17811
A06	SBH0054930	ENST00000313695.11	ARHGEF2	ENSG00000116584	Rho/Rac guanine nucleotide exchange factor 2 Source HGNC Symbol Acc HGNC 682
A07	SBH1219752	ENST00000392403.8	ASH1L	ENSG00000116539	ASH1 like histone lysine methyltransferase Source HGNC Symbol Acc HGNC 19088
A08	SBH0188630	ENST00000644347.1	CASK	ENSG00000147044	calcium/calmodulin dependent serine protein kinase Source HGNC Symbol Acc HGNC 1497
A09	SBH0300684	ENST00000497752.7	CD99	ENSG00000002586	CD99 molecule (Xg blood group) Source HGNC Symbol Acc HGNC 7082
A10	SBH0651826	ENST00000651171.1	CDC42	ENSG00000070831	cell division cycle 42 Source HGNC Symbol Acc HGNC 1736
A11	SBH1219873	ENST00000547281.5	CDK4	ENSG00000135446	cyclin dependent kinase 4 Source HGNC Symbol Acc HGNC 1773
A12	SBH0644386	ENST00000464886.1	CGN	ENSG00000143375	cingulin Source HGNC Symbol Acc HGNC 17429
B01	SBH0351786	ENST00000490800.1	CLDN1	ENSG00000163347	claudin 1 Source HGNC Symbol Acc HGNC 2032
B02	SBH0019450	ENST00000299339.3	CLDN10	ENSG00000134873	claudin 10 Source HGNC Symbol Acc HGNC 2033
B03	SBH0486311	ENST00000064724.7	CLDN11	ENSG00000013297	claudin 11 Source HGNC Symbol Acc HGNC 8514
B04	SBH0608663	ENST00000427904.1	CLDN12	ENSG00000157224	claudin 12 Source HGNC Symbol Acc HGNC 2034
B05	SBH0292742	ENST00000399139.5	CLDN14	ENSG00000159261	claudin 14 Source HGNC Symbol Acc HGNC 2035
B06	SBH0013875	ENST00000414035.5	CLDN15	ENSG00000106404	claudin 15 Source HGNC Symbol Acc HGNC 2036
B07	SBH0658659	ENST00000456423.1	CLDN16	ENSG00000113946	claudin 16 Source HGNC Symbol Acc HGNC 2037
B08	SBH0438106	ENST00000286808.4	CLDN17	ENSG00000156282	claudin 17 Source HGNC Symbol Acc HGNC 2038
B09	SBH0396777	ENST00000479660.1	CLDN18	ENSG00000066405	claudin 18 Source HGNC Symbol Acc HGNC 2039
B10	SBH0224034	ENST00000539749.5	CLDN19	ENSG00000164007	claudin 19 Source HGNC Symbol Acc HGNC 2040
B11	SBH0386095	ENST00000540876.1	CLDN2	ENSG00000165376	claudin 2 Source HGNC Symbol Acc HGNC 2041
B12	SBH0193204	ENST00000395145.3	CLDN3	ENSG00000165215	claudin 3 Source HGNC Symbol Acc HGNC 2045
C01	SBH0232400	ENST00000431918.1	CLDN4	ENSG00000189143	claudin 4 Source HGNC Symbol Acc HGNC 2046
C02	SBH0347353	ENST00000413119.2	CLDN5	ENSG00000184113	claudin 5 Source HGNC Symbol Acc HGNC 2047
C03	SBH0060641	ENST00000328796.5	CLDN6	ENSG00000184697	claudin 6 Source HGNC Symbol Acc HGNC 2048
C04	SBH0220483	ENST00000360325.11	CLDN7	ENSG00000181885	claudin 7 Source HGNC Symbol Acc HGNC 2049
C05	SBH0534444	ENST00000399899.1	CLDN8	ENSG00000156284	claudin 8 Source HGNC Symbol Acc HGNC 2050
C06	SBH0386823	ENST00000445369.3	CLDN9	ENSG00000213937	claudin 9 Source HGNC Symbol Acc HGNC 2051
C07	SBH0203808	ENST00000484075.5	CRB1	ENSG00000134376	crumbs cell polarity complex component 1 Source HGNC Symbol Acc HGNC 2343
C08	SBH0567830	ENST00000356762.7	CRB3	ENSG00000130545	crumbs cell polarity complex component 3 Source HGNC Symbol Acc HGNC 20237
C09	SBH0354946	ENST00000542641.5	YBX3	ENSG00000060138	Y-box binding protein 3 Source HGNC Symbol Acc HGNC 2428
C10	SBH1219915	ENST00000645187.1	CSNK2A1	ENSG00000101266	casein kinase 2 alpha 1 Source HGNC Symbol Acc HGNC 2457
		ENST00000262		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1219916	506.8	CSNK2A2	070770	casein kinase 2 alpha 2 Source HGNC Symbol Acc HGNC 2459
C12	SBH0606437	ENST00000375885.8	CSNK2B	ENSG00000204435	casein kinase 2 beta Source HGNC Symbol Acc HGNC 2460
D01	SBH1219918	ENST00000521640.5	CTNNA1	ENSG00000044115	catenin alpha 1 Source HGNC Symbol Acc HGNC 2509
D02	SBH0295836	ENST00000361291.8	CTNNA2	ENSG00000066032	catenin alpha 2 Source HGNC Symbol Acc HGNC 2510
D03	SBH0309439	ENST00000433211.7	CTNNA3	ENSG00000183230	catenin alpha 3 Source HGNC Symbol Acc HGNC 2511
D04	SBH0588482	ENST00000396183.7	CTNNB1	ENSG00000168036	catenin beta 1 Source HGNC Symbol Acc HGNC 2514
D05	SBH0377002	ENST00000533931.1	CTTN	ENSG00000085733	cortactin Source HGNC Symbol Acc HGNC 3338
D06	SBH0102466	ENST00000644600.1	EPB41	ENSG00000159023	erythrocyte membrane protein band 4.1 Source HGNC Symbol Acc HGNC 3377
D07	SBH0111016	ENST00000485116.5	ESAM	ENSG00000149564	endothelial cell adhesion molecule Source HGNC Symbol Acc HGNC 17474
D08	SBH1219988	ENST00000368026.11	F11R	ENSG00000158769	F11 receptor Source HGNC Symbol Acc HGNC 14685
D09	SBH0569826	ENST00000649922.1	GNAI1	ENSG00000127955	G protein subunit alpha i1 Source HGNC Symbol Acc HGNC 4384
D10	SBH0150318	ENST00000491824.1	HCLS1	ENSG00000180353	hematopoietic cell-specific Lyn substrate 1 Source HGNC Symbol Acc HGNC 4844
D11	SBH1220076	ENST00000264832.8	ICAM1	ENSG00000090339	intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344
D12	SBH0420556	ENST00000579687.5	ICAM2	ENSG00000108622	intercellular adhesion molecule 2 Source HGNC Symbol Acc HGNC 5345
E01	SBH0425775	ENST00000380588.4	IGSF5	ENSG00000183067	immunoglobulin superfamily member 5 Source HGNC Symbol Acc HGNC 5952
E02	SBH0381135	ENST00000299421.8	ILK	ENSG00000166333	integrin linked kinase Source HGNC Symbol Acc HGNC 6040
E03	SBH0616986	ENST00000646453.1	PATJ	ENSG00000132849	PATJ, crumbs cell polarity complex component Source HGNC Symbol Acc HGNC 28881
E04	SBH0354240	ENST00000492962.1	JAM2	ENSG00000154721	junctional adhesion molecule 2 Source HGNC Symbol Acc HGNC 14686
E05	SBH0602489	ENST00000532252.5	JAM3	ENSG00000166086	junctional adhesion molecule 3 Source HGNC Symbol Acc HGNC 15532
E06	SBH0188578	ENST00000479155.1	LLGL1	ENSG00000131899	LLGL scribble cell polarity complex component 1 Source HGNC Symbol Acc HGNC 6628
E07	SBH0402037	ENST00000375227.8	LLGL2	ENSG00000073350	LLGL scribble cell polarity complex component 2 Source HGNC Symbol Acc HGNC 6629
E08	SBH0228161	ENST00000611645.4	MAGI1	ENSG00000151276	membrane associated guanylate kinase, WW and PDZ domain containing 1 Source HGNC Symbol Acc HGNC 946
E09	SBH0181142	ENST00000637282.1	MAGI2	ENSG00000187391	membrane associated guanylate kinase, WW and PDZ domain containing 2 Source HGNC Symbol Acc HGNC 18957
E10	SBH0221276	ENST00000508192.5	MARK2	ENSG00000072518	microtubule affinity regulating kinase 2 Source HGNC Symbol Acc HGNC 3332
E11	SBH0468362	ENST00000447894.6	AFDN	ENSG00000130396	afadin, adherens junction formation factor Source HGNC Symbol Acc HGNC 7137
E12	SBH0660946	ENST00000545857.5	MPDZ	ENSG00000107186	multiple PDZ domain crumbs cell polarity complex component Source HGNC Symbol Acc HGNC 7208
F01	SBH0359138	ENST00000557783.1	MPP5	ENSG00000072415	membrane palmitoylated protein 5 Source HGNC Symbol Acc HGNC 18669
F02	SBH0395679	ENST00000430180.5	MPP6	ENSG00000105926	membrane palmitoylated protein 6 Source HGNC Symbol Acc HGNC 18167
F03	SBH1220284	ENST00000355237.6	OCLN	ENSG00000197822	occludin Source HGNC Symbol Acc HGNC 8104
F04	SBH0638795	ENST00000374789.8	PARD3	ENSG00000148498	par-3 family cell polarity regulator Source HGNC Symbol Acc HGNC 16051
F05	SBH0205819	ENST00000219255.3	PARD6A	ENSG00000102981	par-6 family cell polarity regulator alpha Source HGNC Symbol Acc HGNC 15943
F06	SBH0250900	ENST00000396039.1	PARD6B	ENSG00000124171	par-6 family cell polarity regulator beta Source HGNC Symbol Acc HGNC 16245
F07	SBH1220299	ENST00000563924.6	PECAM1	ENSG00000261371	platelet and endothelial cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 8823
F08	SBH0105783	ENST00000295797.5	PRKCI	ENSG00000163558	protein kinase C iota Source HGNC Symbol Acc HGNC 9404
F09	SBH1220333	ENST00000470596.5	PRKCZ	ENSG00000067606	protein kinase C zeta Source HGNC Symbol Acc HGNC 9412
F10	SBH1225378	ENST00000371953.8	PTEN	ENSG00000171862	phosphatase and tensin homolog Source HGNC Symbol Acc HGNC 9588

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	SBH0364195	ENST00000361125.1	SMURF1	ENSG00000198742	SMAD specific E3 ubiquitin protein ligase 1 Source HGNC Symbol Acc HGNC 16807
G02	SBH0124667	ENST00000498708.1	SPTA1	ENSG00000163554	spectrin alpha, erythrocytic 1 Source HGNC Symbol Acc HGNC 11272
G03	SBH0247589	ENST00000630804.2	SPTAN1	ENSG00000197694	spectrin alpha, non-erythrocytic 1 Source HGNC Symbol Acc HGNC 11273
G04	SBH0172253	ENST00000644917.1	SPTB	ENSG00000070182	spectrin beta, erythrocytic Source HGNC Symbol Acc HGNC 11274
G05	SBH0202124	ENST00000598896.5	SYMPK	ENSG00000125755	symplekin Source HGNC Symbol Acc HGNC 22935
G06	SBH0149027	ENST00000541036.5	TIAM1	ENSG00000156299	T cell lymphoma invasion and metastasis 1 Source HGNC Symbol Acc HGNC 11805
G07	SBH0407016	ENST00000442878.6	TJAP1	ENSG00000137221	tight junction associated protein 1 Source HGNC Symbol Acc HGNC 17949
G08	SBH0205595	ENST00000346128.10	TJP1	ENSG00000104067	tight junction protein 1 Source HGNC Symbol Acc HGNC 11827
G09	SBH0343445	ENST00000423935.6	TJP2	ENSG00000119139	tight junction protein 2 Source HGNC Symbol Acc HGNC 11828
G10	SBH0319877	ENST00000589378.5	TJP3	ENSG00000105289	tight junction protein 3 Source HGNC Symbol Acc HGNC 11829
G11	SBH0056067	ENST00000583475.1	VAPA	ENSG00000101558	VAMP associated protein A Source HGNC Symbol Acc HGNC 12648
G12	SBH0651210	ENST00000468408.5	MAP3K20	ENSG00000091436	mitogen-activated protein kinase kinase kinase 20 Source HGNC Symbol Acc HGNC 17797
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.