

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

## Human Cell Junction PathwayFinder

Cat. no. 249950 SBHS-213ZR

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](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	CAV1	CAV2	CAV3	CDH1	CDH2	CLDN1	CLDN10	CLDN11	CLDN12	CLDN14	CLDN15	CLDN16
B	CLDN17	CLDN18	CLDN19	CLDN2	CLDN3	CLDN4	CLDN5	CLDN6	CLDN7	CLDN8	CLDN9	DLL1
C	DSC1	DSC2	DSC3	DSG1	DSG2	DSG3	DSG4	DSP	DST	ESAM	F11R	GJA1
D	GJA3	GJA4	GJA5	GJA8	GJB1	GJB2	GJB3	GJB4	GJB5	GJB6	GJC2	GJD2
E	GJC3	ICAM1	ICAM2	ITGA1	ITGA2	ITGA3	ITGA4	ITGA5	ITGA6	ITGA7	ITGA8	ITGA9
F	ITGAL	ITGAM	ITGAV	ITGB1	ITGB2	ITGB3	ITGB4	ITGB5	ITGB6	JAM2	JAM3	JUP
G	NOTCH1	NOTCH2	NOTCH3	NOTCH4	OCLN	PLEC	NECTIN1	NECTIN2	NECTIN3	TJP1	TJP2	TJP3
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	SBH0105254	ENST00000451122.5	CAV1	ENSG00000105974	caveolin 1 Source HGNC Symbol Acc HGNC 1527
A02	SBH0607858	ENST00000484871.5	CAV2	ENSG00000105971	caveolin 2 Source HGNC Symbol Acc HGNC 1528
A03	SBH0244733	ENST00000343849.2	CAV3	ENSG00000182533	caveolin 3 Source HGNC Symbol Acc HGNC 1529
A04	SBH1219869	ENST00000261769.10	CDH1	ENSG00000039068	cadherin 1 Source HGNC Symbol Acc HGNC 1748
A05	SBH1219870	ENST00000269141.8	CDH2	ENSG00000170558	cadherin 2 Source HGNC Symbol Acc HGNC 1759
A06	SBH0351786	ENST00000490800.1	CLDN1	ENSG00000163347	claudin 1 Source HGNC Symbol Acc HGNC 2032
A07	SBH0019450	ENST00000299339.3	CLDN10	ENSG00000134873	claudin 10 Source HGNC Symbol Acc HGNC 2033
A08	SBH0486311	ENST00000064724.7	CLDN11	ENSG00000013297	claudin 11 Source HGNC Symbol Acc HGNC 8514
A09	SBH0608663	ENST00000427904.1	CLDN12	ENSG00000157224	claudin 12 Source HGNC Symbol Acc HGNC 2034
A10	SBH0292742	ENST00000399139.5	CLDN14	ENSG00000159261	claudin 14 Source HGNC Symbol Acc HGNC 2035
A11	SBH0013875	ENST00000414035.5	CLDN15	ENSG00000106404	claudin 15 Source HGNC Symbol Acc HGNC 2036
A12	SBH0658659	ENST00000456423.1	CLDN16	ENSG00000113946	claudin 16 Source HGNC Symbol Acc HGNC 2037
B01	SBH0438106	ENST00000286808.4	CLDN17	ENSG00000156282	claudin 17 Source HGNC Symbol Acc HGNC 2038
B02	SBH0396777	ENST00000479660.1	CLDN18	ENSG00000066405	claudin 18 Source HGNC Symbol Acc HGNC 2039
B03	SBH0224034	ENST00000539749.5	CLDN19	ENSG00000164007	claudin 19 Source HGNC Symbol Acc HGNC 2040
B04	SBH0386095	ENST00000540876.1	CLDN2	ENSG00000165376	claudin 2 Source HGNC Symbol Acc HGNC 2041
B05	SBH0193204	ENST00000395145.3	CLDN3	ENSG00000165215	claudin 3 Source HGNC Symbol Acc HGNC 2045
B06	SBH0232400	ENST00000431918.1	CLDN4	ENSG00000189143	claudin 4 Source HGNC Symbol Acc HGNC 2046
B07	SBH0347353	ENST00000413119.2	CLDN5	ENSG00000184113	claudin 5 Source HGNC Symbol Acc HGNC 2047
B08	SBH0060641	ENST00000328796.5	CLDN6	ENSG00000184697	claudin 6 Source HGNC Symbol Acc HGNC 2048
B09	SBH0220483	ENST00000360325.11	CLDN7	ENSG00000181885	claudin 7 Source HGNC Symbol Acc HGNC 2049
B10	SBH0534444	ENST00000399899.1	CLDN8	ENSG00000156284	claudin 8 Source HGNC Symbol Acc HGNC 2050
B11	SBH0386823	ENST00000445369.3	CLDN9	ENSG00000213937	claudin 9 Source HGNC Symbol Acc HGNC 2051
B12	SBH0070314	ENST00000630500.1	DLL1	ENSG00000198719	delta like canonical Notch ligand 1 Source HGNC Symbol Acc HGNC 2908
C01	SBH0323128	ENST00000257197.7	DSC1	ENSG00000134765	desmocollin 1 Source HGNC Symbol Acc HGNC 3035
C02	SBH1219959	ENST00000280904.10	DSC2	ENSG00000134755	desmocollin 2 Source HGNC Symbol Acc HGNC 3036
C03	SBH0248948	ENST00000434452.5	DSC3	ENSG00000134762	desmocollin 3 Source HGNC Symbol Acc HGNC 3037
C04	SBH0618964	ENST00000462981.2	DSG1	ENSG00000134760	desmoglein 1 Source HGNC Symbol Acc HGNC 3048
C05	SBH0553880	ENST00000261590.13	DSG2	ENSG00000046604	desmoglein 2 Source HGNC Symbol Acc HGNC 3049
C06	SBH0175712	ENST00000257189.5	DSG3	ENSG00000134757	desmoglein 3 Source HGNC Symbol Acc HGNC 3050
C07	SBH0152537	ENST00000308128.8	DSG4	ENSG00000175065	desmoglein 4 Source HGNC Symbol Acc HGNC 21307
C08	SBH1219960	ENST00000379802.8	DSP	ENSG00000096696	desmoplakin Source HGNC Symbol Acc HGNC 3052
C09	SBH0408488	ENST00000370788.6	DST	ENSG00000151914	dystonin Source HGNC Symbol Acc HGNC 1090
C10	SBH0111016	ENST00000485116.5	ESAM	ENSG00000149564	endothelial cell adhesion molecule Source HGNC Symbol Acc HGNC 17474
		ENST00000368		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1219988	026.11	F11R	158769	F11 receptor Source HGNC Symbol Acc HGNC 14685
C12	SBH0022905	ENST00000282561.4	GJA1	ENSG00000152661	gap junction protein alpha 1 Source HGNC Symbol Acc HGNC 4274
D01	SBH0316669	ENST00000241125.4	GJA3	ENSG00000121743	gap junction protein alpha 3 Source HGNC Symbol Acc HGNC 4277
D02	SBH0083575	ENST00000342280.5	GJA4	ENSG00000187513	gap junction protein alpha 4 Source HGNC Symbol Acc HGNC 4278
D03	SBH0280518	ENST00000430508.1	GJA5	ENSG00000265107	gap junction protein alpha 5 Source HGNC Symbol Acc HGNC 4279
D04	SBH0511578	ENST00000369235.1	GJA8	ENSG00000121634	gap junction protein alpha 8 Source HGNC Symbol Acc HGNC 4281
D05	SBH0626155	ENST00000647424.1	GJB1	ENSG00000169562	gap junction protein beta 1 Source HGNC Symbol Acc HGNC 4283
D06	SBH0251315	ENST00000382848.5	GJB2	ENSG00000165474	gap junction protein beta 2 Source HGNC Symbol Acc HGNC 4284
D07	SBH0514711	ENST00000373366.3	GJB3	ENSG00000188910	gap junction protein beta 3 Source HGNC Symbol Acc HGNC 4285
D08	SBH0311592	ENST00000339480.2	GJB4	ENSG00000189433	gap junction protein beta 4 Source HGNC Symbol Acc HGNC 4286
D09	SBH0224819	ENST00000338513.1	GJB5	ENSG00000189280	gap junction protein beta 5 Source HGNC Symbol Acc HGNC 4287
D10	SBH0056879	ENST00000643121.1	GJB6	ENSG00000121742	gap junction protein beta 6 Source HGNC Symbol Acc HGNC 4288
D11	SBH0554749	ENST00000366714.3	GJC2	ENSG00000198835	gap junction protein gamma 2 Source HGNC Symbol Acc HGNC 17494
D12	SBH0142360	ENST00000290374.5	GJD2	ENSG00000159248	gap junction protein delta 2 Source HGNC Symbol Acc HGNC 19154
E01	SBH0150368	ENST00000312891.2	GJC3	ENSG00000176402	gap junction protein gamma 3 Source HGNC Symbol Acc HGNC 17495
E02	SBH1220076	ENST00000264832.8	ICAM1	ENSG00000090339	intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344
E03	SBH0420556	ENST00000579687.5	ICAM2	ENSG00000108622	intercellular adhesion molecule 2 Source HGNC Symbol Acc HGNC 5345
E04	SBH1220129	ENST00000282588.6	ITGA1	ENSG00000213949	integrin subunit alpha 1 Source HGNC Symbol Acc HGNC 6134
E05	SBH1220130	ENST00000296585.10	ITGA2	ENSG00000164171	integrin subunit alpha 2 Source HGNC Symbol Acc HGNC 6137
E06	SBH1220131	ENST00000007722.11	ITGA3	ENSG00000005884	integrin subunit alpha 3 Source HGNC Symbol Acc HGNC 6139
E07	SBH1220132	ENST00000397033.7	ITGA4	ENSG00000115232	integrin subunit alpha 4 Source HGNC Symbol Acc HGNC 6140
E08	SBH1220133	ENST00000293379.9	ITGA5	ENSG00000161638	integrin subunit alpha 5 Source HGNC Symbol Acc HGNC 6141
E09	SBH0096168	ENST00000264107.11	ITGA6	ENSG00000091409	integrin subunit alpha 6 Source HGNC Symbol Acc HGNC 6142
E10	SBH0439269	ENST00000257879.10	ITGA7	ENSG00000135424	integrin subunit alpha 7 Source HGNC Symbol Acc HGNC 6143
E11	SBH1220134	ENST00000378076.4	ITGA8	ENSG00000077943	integrin subunit alpha 8 Source HGNC Symbol Acc HGNC 6144
E12	SBH0123335	ENST00000264741.10	ITGA9	ENSG00000144668	integrin subunit alpha 9 Source HGNC Symbol Acc HGNC 6145
F01	SBH1220135	ENST00000356798.10	ITGAL	ENSG00000005844	integrin subunit alpha L Source HGNC Symbol Acc HGNC 6148
F02	SBH0245852	ENST00000287497.13	ITGAM	ENSG00000169896	integrin subunit alpha M Source HGNC Symbol Acc HGNC 6149
F03	SBH0064907	ENST00000460641.1	ITGAV	ENSG00000138448	integrin subunit alpha V Source HGNC Symbol Acc HGNC 6150
F04	SBH1220136	ENST00000302278.8	ITGB1	ENSG00000150093	integrin subunit beta 1 Source HGNC Symbol Acc HGNC 6153
F05	SBH0032107	ENST00000397857.5	ITGB2	ENSG00000160255	integrin subunit beta 2 Source HGNC Symbol Acc HGNC 6155
F06	SBH1220137	ENST00000559488.5	ITGB3	ENSG00000259207	integrin subunit beta 3 Source HGNC Symbol Acc HGNC 6156
F07	SBH1220138	ENST00000450894.7	ITGB4	ENSG00000132470	integrin subunit beta 4 Source HGNC Symbol Acc HGNC 6158
F08	SBH1220139	ENST00000608657.5	ITGB5	ENSG00000082781	integrin subunit beta 5 Source HGNC Symbol Acc HGNC 6160
F09	SBH1220140	ENST00000409872.1	ITGB6	ENSG00000115221	integrin subunit beta 6 Source HGNC Symbol Acc HGNC 6161
F10	SBH0354240	ENST00000492962.1	JAM2	ENSG00000154721	junctional adhesion molecule 2 Source HGNC Symbol Acc HGNC 14686

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0602489	ENST00000532252.5	JAM3	ENSG00000166086	junctional adhesion molecule 3 Source HGNC Symbol Acc HGNC 15532
F12	SBH0132937	ENST00000424457.5	JUP	ENSG00000173801	junction plakoglobin Source HGNC Symbol Acc HGNC 6207
G01	SBH0615258	ENST00000277541.7	NOTCH1	ENSG00000148400	notch 1 Source HGNC Symbol Acc HGNC 7881
G02	SBH0378554	ENST00000256646.7	NOTCH2	ENSG00000134250	notch 2 Source HGNC Symbol Acc HGNC 7882
G03	SBH0513117	ENST00000597756.1	NOTCH3	ENSG00000074181	notch 3 Source HGNC Symbol Acc HGNC 7883
G04	SBH1220273	ENST00000375023.3	NOTCH4	ENSG00000204301	notch 4 Source HGNC Symbol Acc HGNC 7884
G05	SBH1220284	ENST00000355237.6	OCLN	ENSG00000197822	occludin Source HGNC Symbol Acc HGNC 8104
G06	SBH0316876	ENST00000527816.5	PLEC	ENSG00000178209	plectin Source HGNC Symbol Acc HGNC 9069
G07	SBH0498291	ENST00000340882.2	NECTIN1	ENSG00000110400	nectin cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 9706
G08	SBH0016480	ENST00000591581.1	NECTIN2	ENSG00000130202	nectin cell adhesion molecule 2 Source HGNC Symbol Acc HGNC 9707
G09	SBH0388046	ENST00000491525.5	NECTIN3	ENSG00000177707	nectin cell adhesion molecule 3 Source HGNC Symbol Acc HGNC 17664
G10	SBH0205595	ENST00000346128.10	TJP1	ENSG00000104067	tight junction protein 1 Source HGNC Symbol Acc HGNC 11827
G11	SBH0343445	ENST00000423935.6	TJP2	ENSG00000119139	tight junction protein 2 Source HGNC Symbol Acc HGNC 11828
G12	SBH0319877	ENST00000589378.5	TJP3	ENSG00000105289	tight junction protein 3 Source HGNC Symbol Acc HGNC 11829
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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