

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

Rat Tight Junctions

Cat. no. 249950 SBRN-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	Actn3	Actn4	Amod1	Arhgef2	Ash11	LOC100910506	Cdc42	Cdh5	Cdk4	Cldn1	Cldn10
B	Cldn11	Cldn12	Cldn14	Cldn15	Cldn16	Cldn17	Cldn18	Cldn19	Cldn2	Cldn3	Cldn4	Cldn5
C	Cldn6	Cldn7	Cldn8	Cldn9	Crb1	Crb3	Ybx3	Csnk2a1	Csnk2a2	Csnk2b	Ctnna2	Ctnnb1
D	Cttn	Epb4111	Epb4113	Esam	F11r	Gnai1	Gnai2	Gsk3a	Gsk3b	Hcls1	Icam1	Icam2
E	Ilk	Jam3	Ugl1	Ugl2	Igsf5	Magi2	Magi3	Mark2	Afdn	Mpdz	Mpp5	Mpp6
F	Ocln	Pard3	Pard6a	Pard6b	Epcam	Prkci	Prkcz	Pten	Rac1	Smurf1	Rhoa	Spta1
G	Sptan1	Splb	Splbn1	Splbn2	Splbn4	Sympk	Tiam1	Tjp1	Tjp1	Tjp2	Tjp3	Vapa
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBR1154429	ENSRNOT00000088795.1	Actn1	ENSRNOG0000056756	actinin, alpha 1 Source RGD Symbol Acc 70907
A02	SBR1122331	ENSRNOT00000026812.5	Actn3	ENSRNOG0000019745	actinin alpha 3 Source RGD Symbol Acc 621792
A03	SBR1128038	ENSRNOT00000027773.7	Actn4	ENSRNOG0000020433	actinin alpha 4 Source RGD Symbol Acc 61816
A04	SBR1114513	ENSRNOT00000061616.4	Amotl1	ENSRNOG0000008990	angiomin-like 1 Source MGI Symbol Acc MGI 1922973
A05	SBR1216116	ENSRNOT00000027182.7	Arhgef2	ENSRNOG0000020027	Rho/Rac guanine nucleotide exchange factor 2 Source RGD Symbol Acc 1304659
A06	SBR1146041	ENSRNOT00000027629.7	Ash1l	ENSRNOG0000020386	ASH1 like histone lysine methyltransferase Source RGD Symbol Acc 1306350
A07	SBR1130072	ENSRNOT00000091382.1	LOC100910506	ENSRNOG0000060946	calcium/calmodulin dependent serine protein kinase Source RGD Symbol Acc 62004
A08	SBR1159831	ENSRNOT00000029025.5	Cdc42	ENSRNOG0000013536	cell division cycle 42 Source RGD Symbol Acc 71043
A09	SBR1122090	ENSRNOT00000017983.6	Cdh5	ENSRNOG0000013324	cadherin 5 Source RGD Symbol Acc 1307370
A10	SBR1175190	ENSRNOT00000031796.4	Cdk4	ENSRNOG0000025602	cyclin-dependent kinase 4 Source RGD Symbol Acc 621120
A11	SBR1165025	ENSRNOT00000002640.5	Cldn1	ENSRNOG0000001926	claudin 1 Source RGD Symbol Acc 68422
A12	SBR1211110	ENSRNOT00000093403.1	Cldn10	ENSRNOG0000010085	claudin 10 Source RGD Symbol Acc 1308027
B01	SBR1119694	ENSRNOT00000014359.5	Cldn11	ENSRNOG0000010263	claudin 11 Source RGD Symbol Acc 71081
B02	SBR1103962	ENSRNOT00000061199.2	Cldn12	ENSRNOG0000039862	claudin 12 Source RGD Symbol Acc 1561053
B03	SBR1143244	ENSRNOT00000002297.3	Cldn14	ENSRNOG0000001691	claudin 14 Source RGD Symbol Acc 1309165
B04	SBR1211778	ENSRNOT00000001923.7	Cldn15	ENSRNOG0000001419	claudin 15 Source RGD Symbol Acc 1310678
B05	SBR1173748	ENSRNOT00000083319.1	Cldn16	ENSRNOG0000055138	claudin 16 Source RGD Symbol Acc 620322
B06	SBR1116626	ENSRNOT00000032663.2	Cldn17	ENSRNOG0000027691	claudin 17 Source RGD Symbol Acc 1307462
B07	SBR1174618	ENSRNOT00000052043.4	Cldn18	ENSRNOG0000030386	claudin 18 Source RGD Symbol Acc 1359696
B08	SBR1137349	ENSRNOT00000047151.2	Cldn19	ENSRNOG0000007922	claudin 19 Source RGD Symbol Acc 1305000
B09	SBR1185482	ENSRNOT00000085078.1	Cldn2	ENSRNOG0000054495	claudin 2 Source RGD Symbol Acc 1560247
B10	SBR1152588	ENSRNOT00000075280.2	Cldn3	ENSRNOG0000046007	claudin 3 Source RGD Symbol Acc 68425
B11	SBR1196299	ENSRNOT00000002003.4	Cldn4	ENSRNOG0000001476	claudin 4 Source RGD Symbol Acc 1307932
B12	SBR1108592	ENSRNOT00000071806.2	Cldn5	ENSRNOG0000045811	claudin 5 Source RGD Symbol Acc 68431
C01	SBR1161214	ENSRNOT00000004845.4	Cldn6	ENSRNOG0000003648	claudin 6 Source RGD Symbol Acc 1308837
C02	SBR1194006	ENSRNOT00000079237.1	Cldn7	ENSRNOG0000017325	claudin 7 Source RGD Symbol Acc 68432
C03	SBR1119003	ENSRNOT00000002138.5	Cldn8	ENSRNOG0000001571	claudin 8 Source RGD Symbol Acc 1308575
C04	SBR1203677	ENSRNOT00000004848.3	Cldn9	ENSRNOG0000003654	claudin 9 Source RGD Symbol Acc 1308999
C05	SBR1108905	ENSRNOT00000032122.5	Crb1	ENSRNOG0000010903	crumbs cell polarity complex component 1 Source RGD Symbol Acc 1309947
C06	SBR1114033	ENSRNOT00000071780.1	Crb3	ENSRNOG0000047322	crumbs cell polarity complex component 3 Source RGD Symbol Acc 1565035
C07	SBR1155676	ENSRNOT00000007427.8	Ybx3	ENSRNOG0000005480	Y box binding protein 3 Source RGD Symbol Acc 621056
C08	SBR1124723	ENSRNOT00000007558.5	Csnk2a1	ENSRNOG0000005276	casein kinase 2 alpha 1 Source RGD Symbol Acc 621663
C09	SBR1148547	ENSRNOT00000016386.7	Csnk2a2	ENSRNOG0000011933	casein kinase 2 alpha 2 Source RGD Symbol Acc 1306882
C10	SBR1127266	ENSRNOT00000076528.1	Csnk2b	ENSRNOG0000000847	casein kinase 2 beta Source RGD Symbol Acc 619978
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1110269	007971.7	Ctnna2	000006003	catenin alpha 2 Source RGD Symbol Acc 1305060
C12	SBR1143136	ENSRNOT00000079085.1	Ctnnb1	ENSRNOG0000054172	catenin beta 1 Source RGD Symbol Acc 70487
D01	SBR1181436	ENSRNOT00000054859.5	Ctn	ENSRNOG00000047280	cortactin Source RGD Symbol Acc 619839
D02	SBR1138013	ENSRNOT00000089719.1	Epb411i	ENSRNOG0000057817	erythrocyte membrane protein band 4.1-like 1 Source RGD Symbol Acc 71087
D03	SBR1146018	ENSRNOT00000022849.5	Epb411i3	ENSRNOG0000016724	erythrocyte membrane protein band 4.1-like 3 Source RGD Symbol Acc 71089
D04	SBR1173462	ENSRNOT00000083778.1	Esam	ENSRNOG00000033217	endothelial cell adhesion molecule Source RGD Symbol Acc 1303286
D05	SBR1115759	ENSRNOT00000006141.5	F11r	ENSRNOG0000004414	F11 receptor Source RGD Symbol Acc 621842
D06	SBR1166173	ENSRNOT00000091004.1	Gnai1	ENSRNOG0000057096	G protein subunit alpha i1 Source RGD Symbol Acc 2713
D07	SBR1127491	ENSRNOT00000078720.1	Gnai2	ENSRNOG0000016592	G protein subunit alpha i2 Source RGD Symbol Acc 620243
D08	SBR1194620	ENSRNOT00000027677.5	Gsk3a	ENSRNOG0000020417	glycogen synthase kinase 3 alpha Source RGD Symbol Acc 620351
D09	SBR1155736	ENSRNOT00000077612.1	Gsk3b	ENSRNOG0000002833	glycogen synthase kinase 3 beta Source RGD Symbol Acc 70982
D10	SBR1126248	ENSRNOT00000003326.5	Hcls1	ENSRNOG0000038881	hematopoietic cell specific Lyn substrate 1 Source RGD Symbol Acc 1304754
D11	SBR1152534	ENSRNOT00000028066.5	Icam1	ENSRNOG0000020679	intercellular adhesion molecule 1 Source RGD Symbol Acc 2857
D12	SBR1171048	ENSRNOT00000035474.3	Icam2	ENSRNOG0000025143	intercellular adhesion molecule 2 Source RGD Symbol Acc 1359660
E01	SBR1108626	ENSRNOT00000025906.4	Ilk	ENSRNOG0000018993	integrin-linked kinase Source RGD Symbol Acc 620063
E02	SBR1179697	ENSRNOT00000012247.4	Jam3	ENSRNOG0000009149	junctional adhesion molecule 3 Source RGD Symbol Acc 1303248
E03	SBR1115243	ENSRNOT00000005366.5	Llg1	ENSRNOG0000003948	LLGL scribble cell polarity complex component 1 Source RGD Symbol Acc 3012
E04	SBR1158862	ENSRNOT00000006519.4	Llg2	ENSRNOG0000004834	LLGL scribble cell polarity complex component 2 Source RGD Symbol Acc 1560307
E05	SBR1145867	ENSRNOT00000032566.6	Igsf5	ENSRNOG0000028216	immunoglobulin superfamily, member 5 Source RGD Symbol Acc 1359642
E06	SBR1116863	ENSRNOT00000066643.3	Magi2	ENSRNOG0000013962	membrane associated guanylate kinase, WW and PDZ domain containing 2 Source RGD Symbol Acc 621855
E07	SBR1154213	ENSRNOT00000026952.6	Magi3	ENSRNOG0000019885	membrane associated guanylate kinase, WW and PDZ domain containing 3 Source RGD Symbol Acc 621362
E08	SBR1130509	ENSRNOT00000091990.1	Mark2	ENSRNOG0000021184	microtubule affinity regulating kinase 2 Source RGD Symbol Acc 708483
E09	SBR1126848	ENSRNOT00000032667.7	Afdn	ENSRNOG0000023753	afadin, adherens junction formation factor Source RGD Symbol Acc 708561
E10	SBR1157958	ENSRNOT00000089235.1	Mpdz	ENSRNOG0000007894	multiple PDZ domain crumbs cell polarity complex component Source RGD Symbol Acc 3105
E11	SBR1153746	ENSRNOT00000092157.1	Mpp5	ENSRNOG0000008788	membrane palmitoylated protein 5 Source RGD Symbol Acc 1308071
E12	SBR1213158	ENSRNOT00000029332.6	Mpp6	ENSRNOG0000021579	membrane palmitoylated protein 6 Source RGD Symbol Acc 1311833
F01	SBR1197094	ENSRNOT00000084667.1	Ocln	ENSRNOG0000018297	occludin Source RGD Symbol Acc 620089
F02	SBR1151717	ENSRNOT00000078559.1	Pard3	ENSRNOG0000032437	par-3 family cell polarity regulator Source RGD Symbol Acc 620374
F03	SBR1131616	ENSRNOT00000084970.1	Pard6a	ENSRNOG0000017746	par-6 family cell polarity regulator alpha Source RGD Symbol Acc 1303273
F04	SBR1138439	ENSRNOT00000014568.4	Pard6b	ENSRNOG0000010883	par-6 family cell polarity regulator beta Source RGD Symbol Acc 1308205
F05	SBR1103276	ENSRNOT00000021135.6	Epcam	ENSRNOG0000015667	epithelial cell adhesion molecule Source RGD Symbol Acc 621365
F06	SBR1149371	ENSRNOT00000012924.5	Prkci	ENSRNOG0000009652	protein kinase C, iota Source RGD Symbol Acc 620961
F07	SBR1208170	ENSRNOT00000021285.6	Prkcz	ENSRNOG0000015480	protein kinase C, zeta Source RGD Symbol Acc 3399
F08	SBR1174124	ENSRNOT00000028143.3	Pten	ENSRNOG0000020723	phosphatase and tensin homolog Source RGD Symbol Acc 61995
F09	SBR1123146	ENSRNOT00000001417.5	Rac1	ENSRNOG0000001068	Rac family small GTPase 1 Source RGD Symbol Acc 619755
F10	SBR1103926	ENSRNOT00000082989.1	Smurf1	ENSRNOG0000009999	SMAD specific E3 ubiquitin protein ligase 1 Source RGD Symbol Acc 1594738

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1125110	ENSRNOT00000071664.2	Rhoa	ENSRNOG0000050519	ras homolog family member A Source RGD Symbol Acc 619921
F12	SBR1118309	ENSRNOT00000004716.6	Spta1	ENSRNOG0000003537	spectrin, alpha, erythrocytic 1 Source RGD Symbol Acc 1305194
G01	SBR1207014	ENSRNOT00000091697.1	Sptan1	ENSRNOG0000015396	spectrin, alpha, non-erythrocytic 1 Source RGD Symbol Acc 621714
G02	SBR1114687	ENSRNOT00000009028.7	Sptb	ENSRNOG0000006911	spectrin, beta, erythrocytic Source RGD Symbol Acc 1303243
G03	SBR1165791	ENSRNOT00000008210.6	Sptbn1	ENSRNOG0000005434	spectrin, beta, non-erythrocytic 1 Source RGD Symbol Acc 727922
G04	SBR1140964	ENSRNOT00000088288.1	Sptbn2	ENSRNOG0000058842	spectrin, beta, non-erythrocytic 2 Source RGD Symbol Acc 3751
G05	SBR1206867	ENSRNOT00000077651.1	Sptbn4	ENSRNOG0000055371	spectrin, beta, non-erythrocytic 4 Source RGD Symbol Acc 1304682
G06	SBR1116543	ENSRNOT00000084985.1	Sympk	ENSRNOG0000014353	symplekin Source RGD Symbol Acc 1306735
G07	SBR1095684	ENSRNOT00000046486.5	Tiam1	ENSRNOG0000021569	T-cell lymphoma invasion and metastasis 1 Source RGD Symbol Acc 1307455
G08	SBR1144881	ENSRNOT00000091113.1	Tjap1	ENSRNOG0000018980	tight junction associated protein 1 Source RGD Symbol Acc 1308708
G09	SBR1153932	ENSRNOT00000014988.7	Tjp1	ENSRNOG0000011077	tight junction protein 1 Source RGD Symbol Acc 1306305
G10	SBR1160358	ENSRNOT00000065921.3	Tjp2	ENSRNOG0000015030	tight junction protein 2 Source RGD Symbol Acc 619807
G11	SBR1157906	ENSRNOT00000089004.1	Tjp3	ENSRNOG0000020501	tight junction protein 3 Source RGD Symbol Acc 1309247
G12	SBR1144015	ENSRNOT00000020681.6	Vapa	ENSRNOG0000014765	VAMP associated protein A Source RGD Symbol Acc 61803
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000023017.5	B2m	ENSRNOG0000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000065935.3	Hprt1	ENSRNOG0000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000017468.2	Ldha	ENSRNOG0000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000018820.5	Rplp1	ENSRNOG0000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	SBR1218555	Sybr_RGDC	RGDC	Sybr_RGDC	Rat 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.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.