

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

## Rat Adherens Junctions

Cat. no. 249950 SBRN-146ZR

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	Actn1	Actn3	Actn4	Anapc1	Arf6	Baiap2	Cbl11	Cdc16	Cdc23	Cdc27	Cdc42	Cdh1
B	Cdh2	Cdh3	Cdh4	Cdh5	Clip1	Csnk2a1	Csnk2a2	Csnk2b	Ctnna2	AABR0704490 0.1	Ctnnb1	Ctnnd1
C	Dlg5	Dll1	Dnm1	Dnm2	Disc1	Dsc2	Dsc3	Dsg1	Dsg3	Dsg4	Dsp	Exoc2
D	Farp2	Fer	Flna	Flnb	Fyn	Hgs	Iggap1	Jup	Lmo7	Mapre1	Mapre3	Afdn
E	Nme1	Notch1	Notch2	Notch3	Notch4	P2rx6	Pard3	Perp	Pik3cg	Pkp1	AABR0703476 7.1	Pkp3
F	Pkp4	Pnn	Pipp3	Ppl	Nectin1	Nectin2	Nectin3	Rac1	Rac2	Rala	Rhoa	Sorbs1
G	Src	Ssx2ip	Tjp1	Tln1	Vcl	Vezt	Was	Waf1	Waf2	Wasl	Yes1	Zyx
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	SBR1185841	ENSRNOT00000055875.3	Anapc1	ENSRNOG0000016965	anaphase promoting complex subunit 1 Source RGD Symbol Acc 1306629
A05	SBR1177352	ENSRNOT00000006355.5	Arf6	ENSRNOG0000004791	ADP-ribosylation factor 6 Source RGD Symbol Acc 621279
A06	SBR1169469	ENSRNOT00000068437.4	Baiap2	ENSRNOG0000004049	BAI1-associated protein 2 Source RGD Symbol Acc 619814
A07	SBR1169844	ENSRNOT00000009566.4	Cbl1	ENSRNOG0000007253	Cbl proto-oncogene like 1 Source RGD Symbol Acc 1310703
A08	SBR1147576	ENSRNOT00000090674.1	Cdc16	ENSRNOG0000017536	cell division cycle 16 Source RGD Symbol Acc 1305076
A09	SBR1138651	ENSRNOT00000037888.4	Cdc23	ENSRNOG0000024241	cell division cycle 23 Source RGD Symbol Acc 1304819
A10	SBR1124192	ENSRNOT00000007963.5	Cdc27	ENSRNOG0000005904	cell division cycle 27 Source RGD Symbol Acc 1304921
A11	SBR1159831	ENSRNOT00000029025.5	Cdc42	ENSRNOG0000013536	cell division cycle 42 Source RGD Symbol Acc 71043
A12	SBR1170192	ENSRNOT00000027346.2	Cdh1	ENSRNOG0000020151	cadherin 1 Source RGD Symbol Acc 69279
B01	SBR1148414	ENSRNOT00000021170.6	Cdh2	ENSRNOG0000015602	cadherin 2 Source RGD Symbol Acc 69280
B02	SBR1144284	ENSRNOT00000027273.7	Cdh3	ENSRNOG0000020129	cadherin 3 Source RGD Symbol Acc 621089
B03	SBR1109604	ENSRNOT00000088026.1	Cdh4	ENSRNOG0000052405	cadherin 4 Source NCBI gene Acc 114588
B04	SBR1122090	ENSRNOT00000017983.6	Cdh5	ENSRNOG0000013324	cadherin 5 Source RGD Symbol Acc 1307370
B05	SBR1167405	ENSRNOT00000088002.1	Clip1	ENSRNOG0000001247	CAP-GLY domain containing linker protein 1 Source RGD Symbol Acc 67404
B06	SBR1124723	ENSRNOT00000007558.5	Csnk2a1	ENSRNOG0000005276	casein kinase 2 alpha 1 Source RGD Symbol Acc 621663
B07	SBR1148547	ENSRNOT00000016386.7	Csnk2a2	ENSRNOG0000011933	casein kinase 2 alpha 2 Source RGD Symbol Acc 1306882
B08	SBR1127266	ENSRNOT00000076528.1	Csnk2b	ENSRNOG0000000847	casein kinase 2 beta Source RGD Symbol Acc 619978
B09	SBR1110269	ENSRNOT00000007971.7	Ctlna2	ENSRNOG0000006003	catenin alpha 2 Source RGD Symbol Acc 1305060
B10	SBR1171259	ENSRNOT00000057950.4	AABR07044900.1	ENSRNOG0000000373	
B11	SBR1143136	ENSRNOT00000079085.1	Ctlnb1	ENSRNOG0000054172	catenin beta 1 Source RGD Symbol Acc 70487
B12	SBR1155078	ENSRNOT00000081400.1	Ctnd1	ENSRNOG0000030790	catenin delta 1 Source RGD Symbol Acc 1305643
C01	SBR1107947	ENSRNOT00000007828.8	Dlg5	ENSRNOG0000005783	discs large MAGUK scaffold protein 5 Source RGD Symbol Acc 1308753
C02	SBR1168167	ENSRNOT00000080429.1	Dll1	ENSRNOG0000059984	delta like canonical Notch ligand 1 Source RGD Symbol Acc 70949
C03	SBR1097960	ENSRNOT00000047921.5	Dnm1	ENSRNOG0000033835	dynamamin 1 Source RGD Symbol Acc 71096
C04	SBR1191537	ENSRNOT00000065028.4	Dnm2	ENSRNOG0000007649	dynamamin 2 Source RGD Symbol Acc 2513
C05	SBR1161171	ENSRNOT00000078207.1	Dsc1	ENSRNOG0000056258	desmocollin 1 Source RGD Symbol Acc 1310768
C06	SBR1154049	ENSRNOT00000082891.1	Dsc2	ENSRNOG0000039969	desmocollin 2 Source RGD Symbol Acc 1309426
C07	SBR1100564	ENSRNOT00000077304.1	Dsc3	ENSRNOG0000017159	desmocollin 3 Source RGD Symbol Acc 1311782
C08	SBR1165006	ENSRNOT00000061344.4	Dsg1	ENSRNOG0000016853	desmoglein 1 Source RGD Symbol Acc 1309925
C09	SBR1118739	ENSRNOT00000022584.4	Dsg3	ENSRNOG0000016632	desmoglein 3 Source RGD Symbol Acc 1592103
C10	SBR1193801	ENSRNOT00000038450.2	Dsg4	ENSRNOG0000022364	desmoglein 4 Source RGD Symbol Acc 735015
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1121361	018649.6	Dsp	000013928	desmoplakin Source RGD Symbol Acc 1305794
C12	SBR1117560	ENSRNOT00000077110.1	Exoc2	ENSRNOG0000060266	exocyst complex component 2-like Source RGD Symbol Acc 9258978
D01	SBR1185312	ENSRNOT00000024440.5	Farp2	ENSRNOG0000018051	FERM, ARH/RhoGEF and pleckstrin domain protein 2 Source RGD Symbol Acc 1308003
D02	SBR1188854	ENSRNOT00000021758.7	Fer	ENSRNOG0000015898	FER tyrosine kinase Source RGD Symbol Acc 1306273
D03	SBR1201602	ENSRNOT00000079889.1	Flna	ENSRNOG0000054890	filamin A Source RGD Symbol Acc 1560614
D04	SBR1195701	ENSRNOT00000066546.1	Flnb	ENSRNOG0000009470	filamin B Source RGD Symbol Acc 1311915
D05	SBR1167996	ENSRNOT00000085987.1	Fyn	ENSRNOG0000000596	FYN proto-oncogene, Src family tyrosine kinase Source RGD Symbol Acc 2641
D06	SBR1188703	ENSRNOT00000054966.4	Hgs	ENSRNOG0000036696	hepatocyte growth factor-regulated tyrosine kinase substrate Source RGD Symbol Acc 69225
D07	SBR1196460	ENSRNOT00000018021.5	Iqgap1	ENSRNOG0000012002	IQ motif containing GTPase activating protein 1 Source RGD Symbol Acc 1311884
D08	SBR1193534	ENSRNOT00000040845.2	Jup	ENSRNOG0000015380	junction plakoglobin Source RGD Symbol Acc 620412
D09	SBR1215529	ENSRNOT00000090727.1	Lmo7	ENSRNOG0000060775	LIM domain 7 Source RGD Symbol Acc 1302984
D10	SBR1172341	ENSRNOT00000016220.6	Mapre1	ENSRNOG0000011798	microtubule-associated protein, RP/EB family, member 1 Source RGD Symbol Acc 621781
D11	SBR1172274	ENSRNOT00000011874.4	Mapre3	ENSRNOG0000008961	microtubule-associated protein, RP/EB family, member 3 Source RGD Symbol Acc 1359297
D12	SBR1126848	ENSRNOT00000032667.7	Afdn	ENSRNOG0000023753	afadin, adherens junction formation factor Source RGD Symbol Acc 708561
E01	SBR1213049	ENSRNOT00000003658.2	Nme1	ENSRNOG0000002693	NME/NM23 nucleoside diphosphate kinase 1 Source RGD Symbol Acc 70497
E02	SBR1183596	ENSRNOT00000026212.7	Notch1	ENSRNOG0000019322	notch 1 Source RGD Symbol Acc 3187
E03	SBR1107240	ENSRNOT00000025718.4	Notch2	ENSRNOG0000018835	notch 2 Source RGD Symbol Acc 3188
E04	SBR1195114	ENSRNOT00000037456.4	Notch3	ENSRNOG0000004346	notch 3 Source RGD Symbol Acc 620761
E05	SBR1192212	ENSRNOT00000000513.4	Notch4	ENSRNOG0000000442	notch 4 Source RGD Symbol Acc 1303282
E06	SBR1128665	ENSRNOT00000002558.6	P2rx6	ENSRNOG0000001873	purinergic receptor P2X 6 Source RGD Symbol Acc 3243
E07	SBR1151717	ENSRNOT00000078559.1	Pard3	ENSRNOG0000032437	par-3 family cell polarity regulator Source RGD Symbol Acc 620374
E08	SBR1211853	ENSRNOT00000016037.6	Perp	ENSRNOG0000011994	PERP, TP53 apoptosis effector Source RGD Symbol Acc 1310294
E09	SBR1140914	ENSRNOT00000012487.5	Pik3cg	ENSRNOG0000009385	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit gamma Source RGD Symbol Acc 1306468
E10	SBR1192517	ENSRNOT00000013531.5	Pkp1	ENSRNOG0000010076	plakophilin 1 Source RGD Symbol Acc 1307472
E11	SBR1146096	ENSRNOT00000002498.7	AABR07034767.1	ENSRNOG0000001825	
E12	SBR1159440	ENSRNOT00000020864.4	Pkp3	ENSRNOG0000015152	plakophilin 3 Source RGD Symbol Acc 1309133
F01	SBR1131592	ENSRNOT00000059246.5	Pkp4	ENSRNOG0000005504	plakophilin 4 Source RGD Symbol Acc 1307840
F02	SBR1124538	ENSRNOT00000005439.5	Pnn	ENSRNOG0000004061	pinin, desmosome associated protein Source RGD Symbol Acc 1597086
F03	SBR1163344	ENSRNOT00000011237.5	Plpp3	ENSRNOG0000008116	phospholipid phosphatase 3 Source RGD Symbol Acc 620454
F04	SBR1172532	ENSRNOT00000004026.4	Ppl	ENSRNOG0000002930	periplakin Source RGD Symbol Acc 1305511
F05	SBR1114807	ENSRNOT00000008614.7	Nectin1	ENSRNOG0000006403	nectin cell adhesion molecule 1 Source RGD Symbol Acc 620791
F06	SBR1135089	ENSRNOT00000025388.6	Nectin2	ENSRNOG0000018730	nectin cell adhesion molecule 2 Source RGD Symbol Acc 1309505
F07	SBR1116386	ENSRNOT00000002957.5	Nectin3	ENSRNOG0000002176	nectin cell adhesion molecule 3 Source RGD Symbol Acc 1309516
F08	SBR1123146	ENSRNOT00000001417.5	Rac1	ENSRNOG0000001068	Rac family small GTPase 1 Source RGD Symbol Acc 619755
F09	SBR1105258	ENSRNOT00000009994.5	Rac2	ENSRNOG0000007350	Rac family small GTPase 2 Source RGD Symbol Acc 1307568
F10	SBR1110595	ENSRNOT00000018190.4	Rala	ENSRNOG0000013454	RAS like proto-oncogene A Source RGD Symbol Acc 619851

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1125110	ENSRNOT00000071664.2	Rhoa	ENSRNOG0000050519	ras homolog family member A Source RGD Symbol Acc 619921
F12	SBR1178002	ENSRNOT00000021289.8	Sorbs1	ENSRNOG0000015658	sorbin and SH3 domain containing 1 Source RGD Symbol Acc 1586598
G01	SBR1192294	ENSRNOT00000012739.4	Src	ENSRNOG0000009495	SRC proto-oncogene, non-receptor tyrosine kinase Source RGD Symbol Acc 620795
G02	SBR1169496	ENSRNOT00000041186.5	Ssx2ip	ENSRNOG0000015425	SSX family member 2 interacting protein Source RGD Symbol Acc 708490
G03	SBR1153932	ENSRNOT00000014988.7	Tjp1	ENSRNOG0000011077	tight junction protein 1 Source RGD Symbol Acc 1306305
G04	SBR1122860	ENSRNOT00000022400.5	Tln1	ENSRNOG0000016630	talin 1 Source RGD Symbol Acc 1306247
G05	SBR1137193	ENSRNOT00000015179.7	Vcl	ENSRNOG0000010765	vinculin Source RGD Symbol Acc 1311217
G06	SBR1107592	ENSRNOT00000030015.4	Vezt	ENSRNOG0000006514	vezatin, adherens junctions transmembrane protein Source RGD Symbol Acc 1359117
G07	SBR1126078	ENSRNOT00000073289.3	Was	ENSRNOG0000031058	Wiskott-Aldrich syndrome Source RGD Symbol Acc 1563567
G08	SBR1106427	ENSRNOT00000073091.2	Wasf1	ENSRNOG0000047476	WAS protein family, member 1 Source RGD Symbol Acc 1561954
G09	SBR1122917	ENSRNOT00000077083.1	Wasf2	ENSRNOG0000009805	WAS protein family, member 2 Source RGD Symbol Acc 1307299
G10	SBR1162147	ENSRNOT00000009261.6	Wasl	ENSRNOG0000006975	Wiskott-Aldrich syndrome-like Source RGD Symbol Acc 735144
G11	SBR1122031	ENSRNOT00000056250.4	Yes1	ENSRNOG0000037227	YES proto-oncogene 1, Src family tyrosine kinase Source RGD Symbol Acc 3977
G12	SBR1195346	ENSRNOT00000023537.5	Zyx	ENSRNOG0000017354	zyxin Source RGD Symbol Acc 620698
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG0000034254	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 $\mu$ 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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