

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

Rat Notch Signaling Pathway

Cat. no. 249950 SBRN-059ZR

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	Adam10	Adam17	Aes	Aph1a	Wnt1	Cbl	Ccnd1	Ccne1	Cd44	Cdkn1a	Cflar	Chuk
B	Ctnnb1	Dll1	Dll3	Dll4	Dvl1	AABR0705853 9.1	ErbB2	Vegfd	Fos	Fosl1	Fzd2	Fzd3
C	Fzd4	Fzd5	Fzd6	Fzd7	Gbp2	Gli1	Gsk3b	Hdac1	Hes1	Hes5	Hey1	Hey2
D	Heyl	Hoxb4	Hr	Id1	Ifng	Il17b	Il2ra	Il6st	Jag1	Jag2	Krt1	Lfng
E	Lmo2	Lrp5	Maml1	Mfng	Mmp7	Ncor2	Ncstn	Neur1	Nrk1	Nrk2	Notch1	Notch2
F	Notch3	Notch4	Nr4a2	Numb	AABR0706618 0.1	Pofut1	Pparg	Psen1	Psen2	Psenen	Picra	Rbpil
G	Rfng	Runx1	Sel1l	Shh	Smo	Stat6	Sufu	Supt6h	Tle1	Ccn4	Wnt11	Zic2
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	SBR1129039	ENSRNOT00000083255.1	Adam10	ENSRNOG0000054257	ADAM metallopeptidase domain 10 Source RGD Symbol Acc 2032
A02	SBR1157595	ENSRNOT00000081110.1	Adam17	ENSRNOG0000060694	ADAM metallopeptidase domain 17 Source RGD Symbol Acc 620404
A03	SBR1189847	ENSRNOT00000092061.1	Aes	ENSRNOG0000052025	amino-terminal enhancer of split Source RGD Symbol Acc 2731
A04	SBR1127485	ENSRNOT00000081383.1	Aph1a	ENSRNOG0000023816	aph-1 homolog A, gamma secretase subunit Source RGD Symbol Acc 1311546
A05	SBR1167539	ENSRNOT00000090156.1	Wnt1	ENSRNOG0000061818	Wnt family member 1 Source RGD Symbol Acc 1597195
A06	SBR1169005	ENSRNOT00000067902.3	Cbl	ENSRNOG000008444	Cbl proto-oncogene Source RGD Symbol Acc 1561386
A07	SBR1211432	ENSRNOT00000028411.3	Ccnd1	ENSRNOG0000020918	cyclin D1 Source RGD Symbol Acc 68384
A08	SBR1171340	ENSRNOT00000020014.4	Ccne1	ENSRNOG0000014786	cyclin E1 Source RGD Symbol Acc 2294
A09	SBR1148883	ENSRNOT00000009000.7	Cd44	ENSRNOG0000006094	CD44 molecule (Indian blood group) Source RGD Symbol Acc 2307
A10	SBR1145142	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG0000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
A11	SBR1105415	ENSRNOT00000016730.5	Cflar	ENSRNOG0000012473	CASP8 and FADD-like apoptosis regulator Source RGD Symbol Acc 620847
A12	SBR1132111	ENSRNOT00000030782.4	Chuk	ENSRNOG0000022485	conserved helix-loop-helix ubiquitous kinase Source RGD Symbol Acc 1306661
B01	SBR1143136	ENSRNOT00000079085.1	Ctnnb1	ENSRNOG0000054172	catenin beta 1 Source RGD Symbol Acc 70487
B02	SBR1168167	ENSRNOT00000080429.1	Dll1	ENSRNOG0000059984	delta like canonical Notch ligand 1 Source RGD Symbol Acc 70949
B03	SBR1204853	ENSRNOT00000026182.4	Dll3	ENSRNOG0000019338	delta like canonical Notch ligand 3 Source RGD Symbol Acc 70953
B04	SBR1215025	ENSRNOT00000018970.6	Dll4	ENSRNOG0000014011	delta like canonical Notch ligand 4 Source RGD Symbol Acc 1309740
B05	SBR1096624	ENSRNOT00000026439.5	Dvl1	ENSRNOG0000019423	dishevelled segment polarity protein 1 Source RGD Symbol Acc 620632
B06	SBR1104886	ENSRNOT00000000206.7	AABR07058539.1	ENSRNOG0000000190	
B07	SBR1175639	ENSRNOT00000049070.3	ErbB2	ENSRNOG0000006450	erb-b2 receptor tyrosine kinase 2 Source RGD Symbol Acc 2561
B08	SBR1202124	ENSRNOT00000068601.2	Vegfd	ENSRNOG0000003587	vascular endothelial growth factor D Source RGD Symbol Acc 620695
B09	SBR1110295	ENSRNOT00000010712.3	Fos	ENSRNOG0000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
B10	SBR1182363	ENSRNOT00000027891.2	Fos1	ENSRNOG0000020552	FOS like 1, AP-1 transcription factor subunit Source RGD Symbol Acc 2627
B11	SBR1173917	ENSRNOT00000032944.2	Fzd2	ENSRNOG0000021962	frizzled class receptor 2 Source RGD Symbol Acc 71012
B12	SBR1128931	ENSRNOT00000071464.1	Fzd3	ENSRNOG0000047211	frizzled class receptor 3 Source RGD Symbol Acc 628814
C01	SBR1187184	ENSRNOT00000023205.6	Fzd4	ENSRNOG0000016848	frizzled class receptor 4 Source RGD Symbol Acc 71017
C02	SBR1176179	ENSRNOT00000019698.4	Fzd5	ENSRNOG0000014678	frizzled class receptor 5 Source RGD Symbol Acc 631406
C03	SBR1204901	ENSRNOT00000006195.5	Fzd6	ENSRNOG0000004660	frizzled class receptor 6 Source RGD Symbol Acc 628816
C04	SBR1124398	ENSRNOT00000021569.6	Fzd7	ENSRNOG0000016119	frizzled class receptor 7 Source RGD Symbol Acc 2321905
C05	SBR1180834	ENSRNOT00000068683.3	Gbp2	ENSRNOG0000031743	guanylate binding protein 2 Source RGD Symbol Acc 621810
C06	SBR1126418	ENSRNOT00000009803.7	Gli1	ENSRNOG0000025120	GLI family zinc finger 1 Source RGD Symbol Acc 621673
C07	SBR1155736	ENSRNOT00000077612.1	Gsk3b	ENSRNOG0000002833	glycogen synthase kinase 3 beta Source RGD Symbol Acc 70982
C08	SBR1151584	ENSRNOT00000012854.6	Hdac1	ENSRNOG0000009568	histone deacetylase 1 Source RGD Symbol Acc 1309799
C09	SBR1103177	ENSRNOT00000002346.7	Hes1	ENSRNOG0000001720	hes family bHLH transcription factor 1 Source RGD Symbol Acc 62081
C10	SBR1154086	ENSRNOT00000018769.2	Hes5	ENSRNOG0000013850	hes family bHLH transcription factor 5 Source RGD Symbol Acc 621340
		ENSRNOT000000		ENSRNOG00	hes-related family bHLH transcription factor with YRPW motif 1 Source NCBI

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1112803	015537.7	Hey1	000011593	gene Acc 155437
C12	SBR1143993	ENSRNOT00000018718.6	Hey2	ENSRNOG0000013364	hes-related family bHLH transcription factor with YRPW motif 2 Source RGD Symbol Acc 621405
D01	SBR1124485	ENSRNOT00000020929.3	Heyl	ENSRNOG0000015318	hes-related family bHLH transcription factor with YRPW motif-like Source RGD Symbol Acc 1305022
D02	SBR1118455	ENSRNOT00000010965.4	Hoxb4	ENSRNOG0000008191	homeo box B4 Source RGD Symbol Acc 1560113
D03	SBR1098263	ENSRNOT00000015716.4	Hr	ENSRNOG0000011427	HR, lysine demethylase and nuclear receptor corepressor Source RGD Symbol Acc 620634
D04	SBR1135399	ENSRNOT00000029660.5	Id1	ENSRNOG0000021750	inhibitor of DNA binding 1, HLH protein Source RGD Symbol Acc 2858
D05	SBR1108917	ENSRNOT00000009919.2	Ifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
D06	SBR1144269	ENSRNOT00000026679.6	Il17b	ENSRNOG0000019695	interleukin 17B Source RGD Symbol Acc 620614
D07	SBR1164904	ENSRNOT00000073144.2	Il2ra	ENSRNOG0000047647	interleukin 2 receptor subunit alpha Source RGD Symbol Acc 2895
D08	SBR1177389	ENSRNOT00000018877.7	Il6st	ENSRNOG0000013963	interleukin 6 signal transducer Source RGD Symbol Acc 2903
D09	SBR1173778	ENSRNOT00000010638.7	Jag1	ENSRNOG0000007443	jagged 1 Source RGD Symbol Acc 2937
D10	SBR1202127	ENSRNOT00000019213.6	Jag2	ENSRNOG0000013927	jagged 2 Source RGD Symbol Acc 2938
D11	SBR1214522	ENSRNOT00000034450.4	Krt1	ENSRNOG0000028996	keratin 1 Source RGD Symbol Acc 1359664
D12	SBR1205678	ENSRNOT00000001682.6	Lfng	ENSRNOG000001250	LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase Source RGD Symbol Acc 620587
E01	SBR1113975	ENSRNOT00000012625.6	Lmo2	ENSRNOG0000009401	LIM domain only 2 Source RGD Symbol Acc 1307101
E02	SBR1166179	ENSRNOT00000022213.7	Lrp5	ENSRNOG0000015911	LDL receptor related protein 5 Source RGD Symbol Acc 1309329
E03	SBR1179405	ENSRNOT00000004361.6	Maml1	ENSRNOG0000003268	mastermind-like transcriptional coactivator 1 Source RGD Symbol Acc 1308631
E04	SBR1146609	ENSRNOT00000011079.4	Mfng	ENSRNOG0000008133	MFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase Source RGD Symbol Acc 735126
E05	SBR1116320	ENSRNOT00000014041.5	Mmp7	ENSRNOG0000010507	matrix metalloproteinase 7 Source RGD Symbol Acc 3100
E06	SBR1170228	ENSRNOT00000001334.6	Ncor2	ENSRNOG000001004	nuclear receptor co-repressor 2 Source RGD Symbol Acc 1310293
E07	SBR1175821	ENSRNOT00000008150.5	Ncstn	ENSRNOG0000005355	nicastrin Source RGD Symbol Acc 631418
E08	SBR1204041	ENSRNOT00000076452.2	Neur1	ENSRNOG0000020339	neuralized E3 ubiquitin protein ligase 1 Source RGD Symbol Acc 1307021
E09	SBR1111134	ENSRNOT00000036838.4	Nfkb1	ENSRNOG0000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E10	SBR1164776	ENSRNOT00000026235.3	Nfkb2	ENSRNOG0000019311	nuclear factor kappa B subunit 2 Source RGD Symbol Acc 1307189
E11	SBR1183596	ENSRNOT00000026212.7	Notch1	ENSRNOG0000019322	notch 1 Source RGD Symbol Acc 3187
E12	SBR1107240	ENSRNOT00000025718.4	Notch2	ENSRNOG0000018835	notch 2 Source RGD Symbol Acc 3188
F01	SBR1195114	ENSRNOT00000037456.4	Notch3	ENSRNOG0000004346	notch 3 Source RGD Symbol Acc 620761
F02	SBR1192212	ENSRNOT00000000513.4	Notch4	ENSRNOG0000000442	notch 4 Source RGD Symbol Acc 1303282
F03	SBR1175072	ENSRNOT00000041394.3	Nr4a2	ENSRNOG0000005600	nuclear receptor subfamily 4, group A, member 2 Source RGD Symbol Acc 3202
F04	SBR1158522	ENSRNOT00000049481.5	Numb	ENSRNOG0000009653	NUMB, endocytic adaptor protein Source RGD Symbol Acc 620107
F05	SBR1142420	ENSRNOT00000061882.4	AABR07066180.1	ENSRNOG0000011871	
F06	SBR1108647	ENSRNOT00000013730.3	Pofut1	ENSRNOG0000010104	protein O-fucosyltransferase 1 Source RGD Symbol Acc 1303001
F07	SBR1131520	ENSRNOT00000082969.1	Pparg	ENSRNOG0000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371
F08	SBR1180916	ENSRNOT00000012495.7	Psen1	ENSRNOG0000009110	presenilin 1 Source RGD Symbol Acc 3425
F09	SBR1213143	ENSRNOT00000040203.4	Psen2	ENSRNOG0000002879	presenilin 2 Source RGD Symbol Acc 621060
F10	SBR1118064	ENSRNOT00000028438.4	Psenen	ENSRNOG0000020941	presenilin enhancer gamma secretase subunit Source RGD Symbol Acc 1312037

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1139670	ENSRNOT00000067894.3	Ptcr	ENSRNOG0000042581	pre T-cell antigen receptor alpha Source RGD Symbol Acc 621388
F12	SBR1108732	ENSRNOT00000019127.5	Rbpil	ENSRNOG0000026295	recombination signal binding protein for immunoglobulin kappa J region-like Source RGD Symbol Acc 1304786
G01	SBR1162541	ENSRNOT00000075041.1	Rfng	ENSRNOG0000050298	RFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase Source RGD Symbol Acc 621322
G02	SBR1123632	ENSRNOT00000002313.4	Runx1	ENSRNOG0000001704	runt-related transcription factor 1 Source RGD Symbol Acc 2283
G03	SBR1130262	ENSRNOT00000006143.6	Sel1l	ENSRNOG0000004464	SEL1L ERAD E3 ligase adaptor subunit Source RGD Symbol Acc 620147
G04	SBR1130647	ENSRNOT00000008497.2	Shh	ENSRNOG0000006120	sonic hedgehog signaling molecule Source RGD Symbol Acc 3673
G05	SBR1198492	ENSRNOT00000080223.1	Smo	ENSRNOG0000008332	smoothened, frizzled class receptor Source RGD Symbol Acc 3726
G06	SBR1207811	ENSRNOT00000085350.1	Stat6	ENSRNOG0000025023	signal transducer and activator of transcription 6 Source RGD Symbol Acc 1309063
G07	SBR1164474	ENSRNOT00000026987.5	Sufu	ENSRNOG0000019807	SUFU negative regulator of hedgehog signaling Source RGD Symbol Acc 1559462
G08	SBR1202878	ENSRNOT00000016759.6	Supt6h	ENSRNOG0000012240	SPT6 homolog, histone chaperone Source RGD Symbol Acc 1309290
G09	SBR1149395	ENSRNOT00000058906.3	Tle1	ENSRNOG0000005882	TLE family member 1, transcriptional corepressor Source RGD Symbol Acc 1309237
G10	SBR1172041	ENSRNOT00000009673.7	Ccn4	ENSRNOG0000007078	cellular communication network factor 4 Source RGD Symbol Acc 69431
G11	SBR1196784	ENSRNOT00000021674.5	Wnt11	ENSRNOG0000015982	Wnt family member 11 Source RGD Symbol Acc 621463
G12	SBR1113317	ENSRNOT00000089455.1	Zic2	ENSRNOG0000054879	Zic family member 2 Source RGD Symbol Acc 1311174
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 μ l reactions: 20 μ l 8x gDNA Removal Mix, 10 μ l Reverse Transcription Enzyme, 40 μ l Reverse Transcription Mix (containing RT primers), 20 μ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 μ l QuantiNova SYBR Green RT Mix, 20 μ l Internal Control RNA, 500 μ l Yellow Template Dilution Buffer, 250 μ l ROX Reference Dye, 1.9 μ l RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ 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.

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.