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

Rat Stem Cell

Cat. no. 249950 SBRN-405ZR

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	Abcg2	Acan	Actc1	Adar	Aldh1a1	Aldh2	Alpi	Apc	Ascl2	Ctnnb1	Bglap	Bmp1
B	Bmp2	Bmp3	Btrc	Ctnna1	Ccna2	Ccnd1	Ccnd2	Ccne1	Cd19	Cd3d	Cd3e	Cd4
C	Cd44	Cd8a	Cd8b	Cdc42	Cdh1	Cdh2	Cdk1	Col1a1	Col2a1	Col9a1	Cxcl12	Dhh
D	Dll1	Dll3	Dtx2	Dvl1	AABR0705853 9.1	Fgf1	Fgf2	Fgf3	Fgf4	Fgfr1	Foxa2	Fzd1
E	Gdf3	Gja1	Gjb1	Hdac1	Hdac2	Hspa9	Igf1	Ihh	Isl1	Jag1	Kat2a	Krt15
F	LOC683469	Mme	Msx1	Myc	Myod1	Kat8	Kat7	Ncam1	Neurog2	Notch1	Notch2	Numb
G	Pard6a	Pdx1	Ppard	Pparg	Rb1	S100b	Sigmar1	Sox2	Tbxt	Tert	Tubb3	Wnt1
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	SBR1124096	ENSRNOT00000088983.1	Abcg2	ENSRNOG00000007041	ATP binding cassette subfamily G member 2 Source RGD Symbol Acc 631345
A02	SBR1136453	ENSRNOT00000047848.4	Acan	ENSRNOG00000028992	aggrecan Source RGD Symbol Acc 68358
A03	SBR1156709	ENSRNOT00000011773.4	Actc1	ENSRNOG00000008536	actin, alpha, cardiac muscle 1 Source RGD Symbol Acc 2026
A04	SBR1214125	ENSRNOT00000028181.5	Adar	ENSRNOG00000020744	adenosine deaminase, RNA-specific Source RGD Symbol Acc 71099
A05	SBR1184560	ENSRNOT00000024000.6	Aldh1a1	ENSRNOG00000017619	aldehyde dehydrogenase 1 family, member A1 Source RGD Symbol Acc 2087
A06	SBR1166914	ENSRNOT00000001816.6	Aldh2	ENSRNOG00000001344	aldehyde dehydrogenase 2 family (mitochondrial) Source RGD Symbol Acc 69219
A07	SBR1139705	ENSRNOT00000026190.4	Alpi	ENSRNOG00000030020	alkaline phosphatase, intestinal Source RGD Symbol Acc 2099
A08	SBR1094067	ENSRNOT00000090264.1	Apc	ENSRNOG00000020423	APC, WNT signaling pathway regulator Source RGD Symbol Acc 2123
A09	SBR1136698	ENSRNOT00000027688.4	Ascl2	ENSRNOG00000020434	achaete-scute family bHLH transcription factor 2 Source RGD Symbol Acc 2159
A10	SBR1143136	ENSRNOT00000079085.1	Ctnnb1	ENSRNOG00000054172	catenin beta 1 Source RGD Symbol Acc 70487
A11	SBR1199255	ENSRNOT00000026530.3	Bglap	ENSRNOG00000019607	bone gamma-carboxyglutamate protein Source RGD Symbol Acc 2206
A12	SBR1170880	ENSRNOT00000046054.4	Bmp1	ENSRNOG00000010890	bone morphogenetic protein 1 Source RGD Symbol Acc 620739
B01	SBR1127251	ENSRNOT00000028904.4	Bmp2	ENSRNOG00000021276	bone morphogenetic protein 2 Source RGD Symbol Acc 2211
B02	SBR1184728	ENSRNOT00000038872.3	Bmp3	ENSRNOG00000002381	bone morphogenetic protein 3 Source RGD Symbol Acc 2212
B03	SBR1214609	ENSRNOT00000022426.7	Btrc	ENSRNOG00000016280	beta-transducin repeat containing E3 ubiquitin protein ligase Source RGD Symbol Acc 1359721
B04	SBR1154761	ENSRNOT00000008041.7	Ctnna1	ENSRNOG00000005796	catenin alpha 1 Source RGD Symbol Acc 1359485
B05	SBR1106408	ENSRNOT00000021156.6	Ccna2	ENSRNOG00000015423	cyclin A2 Source RGD Symbol Acc 621059
B06	SBR1211432	ENSRNOT00000028411.3	Ccnd1	ENSRNOG00000020918	cyclin D1 Source RGD Symbol Acc 68384
B07	SBR1095869	ENSRNOT00000086440.1	Ccnd2	ENSRNOG00000057710	cyclin D2 Source RGD Symbol Acc 621083
B08	SBR1171340	ENSRNOT00000020014.4	Ccne1	ENSRNOG00000014786	cyclin E1 Source RGD Symbol Acc 2294
B09	SBR1159510	ENSRNOT00000055027.4	Cd19	ENSRNOG00000018311	CD19 molecule Source RGD Symbol Acc 1309086
B10	SBR1162364	ENSRNOT00000021488.5	Cd3d	ENSRNOG00000015994	CD3d molecule Source RGD Symbol Acc 2304
B11	SBR1196726	ENSRNOT00000091190.1	Cd3e	ENSRNOG00000016069	CD3e molecule Source RGD Symbol Acc 1309222
B12	SBR1197766	ENSRNOT00000021915.2	Cd4	ENSRNOG00000016294	Cd4 molecule Source RGD Symbol Acc 2306
C01	SBR1148883	ENSRNOT00000009000.7	Cd44	ENSRNOG00000006094	CD44 molecule (Indian blood group) Source RGD Symbol Acc 2307
C02	SBR1107267	ENSRNOT00000009515.4	Cd8a	ENSRNOG00000007178	CD8a molecule Source RGD Symbol Acc 2316
C03	SBR1112088	ENSRNOT00000009392.7	Cd8b	ENSRNOG00000007129	CD8b molecule Source RGD Symbol Acc 2317
C04	SBR1159831	ENSRNOT00000029025.5	Cdc42	ENSRNOG00000013536	cell division cycle 42 Source RGD Symbol Acc 71043
C05	SBR1170192	ENSRNOT00000027346.2	Cdh1	ENSRNOG00000020151	cadherin 1 Source RGD Symbol Acc 69279
C06	SBR1148414	ENSRNOT00000021170.6	Cdh2	ENSRNOG00000015602	cadherin 2 Source RGD Symbol Acc 69280
C07	SBR1169863	ENSRNOT00000081113.1	Cdk1	ENSRNOG00000000632	cyclin-dependent kinase 1 Source RGD Symbol Acc 2319
C08	SBR1113220	ENSRNOT00000005311.6	Col1a1	ENSRNOG00000003897	collagen type I alpha 1 chain Source RGD Symbol Acc 61817
C09	SBR1135343	ENSRNOT00000086062.1	Col2a1	ENSRNOG00000058560	collagen type II alpha 1 chain Source RGD Symbol Acc 2375
C10	SBR1120253	ENSRNOT00000018116.6	Col9a1	ENSRNOG00000012920	collagen type IX alpha 1 chain Source RGD Symbol Acc 1309425
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1209894	066670.3	Cxcl12	000013589	C-X-C motif chemokine ligand 12 Source RGD Symbol Acc 3651
C12	SBR1130399	ENSRNOT00000 087327.1	Dhh	ENSRNOG00 000053675	desert hedgehog signaling molecule Source RGD Symbol Acc 620711
D01	SBR1168167	ENSRNOT00000 080429.1	Dll1	ENSRNOG00 000059984	delta like canonical Notch ligand 1 Source RGD Symbol Acc 70949
D02	SBR1204853	ENSRNOT00000 026182.4	Dll3	ENSRNOG00 000019338	delta like canonical Notch ligand 3 Source RGD Symbol Acc 70953
D03	SBR1204116	ENSRNOT00000 085911.1	Dtx2	ENSRNOG00 000001432	deltex E3 ubiquitin ligase 2 Source RGD Symbol Acc 1561790
D04	SBR1096624	ENSRNOT00000 026439.5	Dvl1	ENSRNOG00 000019423	dishevelled segment polarity protein 1 Source RGD Symbol Acc 620632
D05	SBR1104886	ENSRNOT00000 000206.7	AABR0705 8539.1	ENSRNOG00 000000190	
D06	SBR1111274	ENSRNOT00000 087408.1	Fgf1	ENSRNOG00 000013867	fibroblast growth factor 1 Source RGD Symbol Acc 2605
D07	SBR1185708	ENSRNOT00000 023388.5	Fgf2	ENSRNOG00 000017392	fibroblast growth factor 2 Source RGD Symbol Acc 2609
D08	SBR1167698	ENSRNOT00000 028343.4	Fgf3	ENSRNOG00 000020888	fibroblast growth factor 3 Source RGD Symbol Acc 620126
D09	SBR1161582	ENSRNOT00000 028355.5	Fgf4	ENSRNOG00 000020890	fibroblast growth factor 4 Source RGD Symbol Acc 620127
D10	SBR1139072	ENSRNOT00000 029284.4	Fgfr1	ENSRNOG00 000016050	Fibroblast growth factor receptor 1 Source RGD Symbol Acc 620713
D11	SBR1102800	ENSRNOT00000 017742.3	Foxa2	ENSRNOG00 000013133	forkhead box A2 Source RGD Symbol Acc 2808
D12	SBR1176606	ENSRNOT00000 021979.4	Fzd1	ENSRNOG00 000016242	frizzled class receptor 1 Source RGD Symbol Acc 61916
E01	SBR1099783	ENSRNOT00000 041552.3	Gdf3	ENSRNOG00 000015331	growth differentiation factor 3 Source RGD Symbol Acc 1564178
E02	SBR1181138	ENSRNOT00000 001054.4	Gja1	ENSRNOG00 000000805	gap junction protein, alpha 1 Source RGD Symbol Acc 2690
E03	SBR1173856	ENSRNOT00000 076816.1	Gjb1	ENSRNOG00 000003746	gap junction protein, beta 1 Source RGD Symbol Acc 61926
E04	SBR1151584	ENSRNOT00000 012854.6	Hdac1	ENSRNOG00 000009568	histone deacetylase 1 Source RGD Symbol Acc 1309799
E05	SBR1179979	ENSRNOT00000 000742.5	Hdac2	ENSRNOG00 000000604	histone deacetylase 2 Source RGD Symbol Acc 619976
E06	SBR1135337	ENSRNOT00000 026696.6	Hspa9	ENSRNOG00 000019525	heat shock protein family A member 9 Source RGD Symbol Acc 1311806
E07	SBR1185495	ENSRNOT00000 038780.6	Igf1	ENSRNOG00 000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
E08	SBR1195762	ENSRNOT00000 024419.4	Ihh	ENSRNOG00 000018059	Indian hedgehog signaling molecule Source RGD Symbol Acc 620021
E09	SBR1117691	ENSRNOT00000 017305.5	Isl1	ENSRNOG00 000012556	ISL LIM homeobox 1 Source RGD Symbol Acc 61957
E10	SBR1173778	ENSRNOT00000 010638.7	Jag1	ENSRNOG00 000007443	jagged 1 Source RGD Symbol Acc 2937
E11	SBR1162729	ENSRNOT00000 055250.3	Kat2a	ENSRNOG00 000018364	lysine acetyltransferase 2A Source RGD Symbol Acc 1307242
E12	SBR1099406	ENSRNOT00000 019037.6	Krt15	ENSRNOG00 000014099	keratin 15 Source RGD Symbol Acc 1303044
F01	SBR1206562	ENSRNOT00000 060703.3	LOC68346 9	ENSRNOG00 000039601	similar to RNA polymerase II transcription factor SIII subunit A2 (Elongin A2) (EloA2) (Transcription elongation factor B polypeptide 3B) Source RGD Symbol Acc 1586821
F02	SBR1198073	ENSRNOT00000 088565.1	Mme	ENSRNOG00 000009514	membrane metallo-endopeptidase Source RGD Symbol Acc 3098
F03	SBR1158976	ENSRNOT00000 009101.5	Msx1	ENSRNOG00 000006876	msh homeobox 1 Source RGD Symbol Acc 620929
F04	SBR1106364	ENSRNOT00000 006188.5	Myc	ENSRNOG00 000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
F05	SBR1143996	ENSRNOT00000 015109.2	Myod1	ENSRNOG00 000011306	myogenic differentiation 1 Source RGD Symbol Acc 631429
F06	SBR1178466	ENSRNOT00000 026527.4	Kat8	ENSRNOG00 000019585	lysine acetyltransferase 8 Source RGD Symbol Acc 1311512
F07	SBR1107496	ENSRNOT00000 082160.1	Kat7	ENSRNOG00 000022664	K(lysine) acetyltransferase 7 Source MGI Symbol Acc MGI 2182799
F08	SBR1143497	ENSRNOT00000 042281.6	Ncam1	ENSRNOG00 000031890	neural cell adhesion molecule 1 Source RGD Symbol Acc 67378
F09	SBR1211900	ENSRNOT00000 014570.4	Neurog2	ENSRNOG00 000010972	neurogenin 2 Source RGD Symbol Acc 1309061
F10	SBR1183596	ENSRNOT00000	Notch1	ENSRNOG00	notch 1 Source RGD Symbol Acc 3187

Position	Assay	Name	Symbol	Ensembl ID	Description
		026212.7		000019322	
F11	SBR1107240	ENSRNOT00000025718.4	Notch2	ENSRNOG00000018835	notch 2 Source RGD Symbol Acc 3188
F12	SBR1158522	ENSRNOT00000049481.5	Numb	ENSRNOG00000009653	NUMB, endocytic adaptor protein Source RGD Symbol Acc 620107
G01	SBR1131616	ENSRNOT00000084970.1	Pard6a	ENSRNOG00000017746	par-6 family cell polarity regulator alpha Source RGD Symbol Acc 1303273
G02	SBR1185476	ENSRNOT00000071942.1	Pdx1	ENSRNOG00000046458	pancreatic and duodenal homeobox 1 Source RGD Symbol Acc 62387
G03	SBR1197924	ENSRNOT00000083109.1	Ppard	ENSRNOG00000000503	peroxisome proliferator-activated receptor delta Source RGD Symbol Acc 3370
G04	SBR1131520	ENSRNOT00000082969.1	Pparg	ENSRNOG00000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371
G05	SBR1123205	ENSRNOT00000021752.5	Rb1	ENSRNOG00000016029	RB transcriptional corepressor 1 Source RGD Symbol Acc 3540
G06	SBR1099560	ENSRNOT00000001743.2	S100b	ENSRNOG00000001295	S100 calcium binding protein B Source RGD Symbol Acc 3615
G07	SBR1103586	ENSRNOT00000019795.4	Sigmar1	ENSRNOG00000014604	sigma non-opioid intracellular receptor 1 Source RGD Symbol Acc 68364
G08	SBR1125680	ENSRNOT00000016236.3	Sox2	ENSRNOG00000012199	SRY box 2 Source RGD Symbol Acc 1565646
G09	SBR1165283	ENSRNOT00000016471.3	Tbxt	ENSRNOG00000012229	T-box transcription factor T Source RGD Symbol Acc 1310141
G10	SBR1196369	ENSRNOT00000022683.4	Tert	ENSRNOG00000025327	telomerase reverse transcriptase Source RGD Symbol Acc 70494
G11	SBR1115458	ENSRNOT00000023452.6	Tubb3	ENSRNOG00000017209	tubulin, beta 3 class III Source RGD Symbol Acc 628595
G12	SBR1167539	ENSRNOT00000090156.1	Wnt1	ENSRNOG00000061818	Wnt family member 1 Source RGD Symbol Acc 1597195
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	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.

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