

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

Rat Male Infertility

Cat. no. 249950 SBRN-165ZR

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	Acbg2	Adcy10	Ahr	Akap14	Akap4	Amh	Apob	Ar	AC098547.1	Brdt	Carhsp1	Catsper4
B	Ccnb1	Cd46	Cdo1	Creb1	Crem	Crisp2	Cul3	Cyp19a1	Dazl	Ddx25	Ddx4	Dmrt1
C	Dnajb8	Dnajc28	Eif2b4	Eif4g3	Fos	Fbxo5	Fos	Glil3	Adgrg2	Gpx1	Hdac1	Hmox1
D	Hsd17b7	Hsf2	Hspa4l	Il16	Kiln10	Lama5	Lep	Lhcgr	Lmna	Mcm8	Miln3	Muc1
E	Ndufs7	Nrkbia	Npc2	Odf1	Park7	Pcsk4	Pdzd8	Pgk2	Pin1	Pwil1	Plcz1	Pole
F	Prdx3	Prm1	Prm2	Serpina5	Slc26a8	Smarca2	Sod1	Sod2	Spo11	Spp1	Srpk1	Stag3
G	Sycp3	Top1	Tbp	Tcp11	Tex11	Tnp1	LOC103690131	Trim36	Tsga10	Ubap2	Uchl1	Zp3
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	SBR1099221	ENSRNOT00000074555.2	Acsbg2	ENSRNOG0000045947	acyl-CoA synthetase bubblemeg family member 2 Source RGD Symbol Acc 1588580
A02	SBR1212927	ENSRNOT00000082677.1	Adcy10	ENSRNOG0000053410	adenylate cyclase 10 Source RGD Symbol Acc 708450
A03	SBR1103616	ENSRNOT00000006618.7	Ahr	ENSRNOG0000004342	aryl hydrocarbon receptor Source RGD Symbol Acc 2074
A04	SBR1155343	ENSRNOT00000009123.5	Akap14	ENSRNOG0000006899	A-kinase anchoring protein 14 Source RGD Symbol Acc 708510
A05	SBR1100942	ENSRNOT00000003939.6	Akap4	ENSRNOG0000002921	A-kinase anchoring protein 4 Source RGD Symbol Acc 620828
A06	SBR1161107	ENSRNOT00000026220.2	Amh	ENSRNOG0000019377	anti-Mullerian hormone Source RGD Symbol Acc 2108
A07	SBR1117274	ENSRNOT00000007371.6	Apob	ENSRNOG0000005542	apolipoprotein B Source RGD Symbol Acc 2129
A08	SBR1193668	ENSRNOT00000009129.7	Ar	ENSRNOG0000005639	androgen receptor Source RGD Symbol Acc 2147
A09	SBR1132188	ENSRNOT00000077454.1	AC098547.1	ENSRNOG0000045877	bromodomain-containing protein 2-like Source NCBI gene Acc 100909544
A10	SBR1190258	ENSRNOT00000080901.1	Brd1	ENSRNOG0000002073	bromodomain, testis-specific Source MGI Symbol Acc MGI 1891374
A11	SBR1174674	ENSRNOT00000003514.5	Carhsp1	ENSRNOG0000002610	calcium regulated heat stable protein 1 Source RGD Symbol Acc 708415
A12	SBR1213807	ENSRNOT00000021919.6	Catsper4	ENSRNOG0000016312	cation channel, sperm associated 4 Source RGD Symbol Acc 1565213
B01	SBR1142548	ENSRNOT00000082846.1	Ccnb1	ENSRNOG0000058539	cyclin B1 Source RGD Symbol Acc 2291
B02	SBR1110996	ENSRNOT00000057151.3	Cd46	ENSRNOG0000007917	CD46 molecule Source RGD Symbol Acc 3061
B03	SBR1158136	ENSRNOT00000000172.5	Cdo1	ENSRNOG0000000158	cysteine dioxygenase type 1 Source RGD Symbol Acc 69262
B04	SBR1179341	ENSRNOT00000049654.4	Creb1	ENSRNOG0000013412	cAMP responsive element binding protein 1 Source RGD Symbol Acc 620218
B05	SBR1147022	ENSRNOT00000020160.8	Crem	ENSRNOG0000014900	cAMP responsive element modulator Source RGD Symbol Acc 2402
B06	SBR1198963	ENSRNOT00000017996.6	Crisp2	ENSRNOG0000013225	cysteine-rich secretory protein 2 Source RGD Symbol Acc 621653
B07	SBR1113906	ENSRNOT00000093730.1	Cul3	ENSRNOG0000015633	cullin 3 Source RGD Symbol Acc 1308190
B08	SBR1101306	ENSRNOT00000000212.7	Cyp19a1	ENSRNOG0000000196	cytochrome P450, family 19, subfamily a, polypeptide 1 Source RGD Symbol Acc 2457
B09	SBR1127127	ENSRNOT00000066517.2	Dazl	ENSRNOG0000023474	deleted in azoospermia-like Source RGD Symbol Acc 1591714
B10	SBR1105808	ENSRNOT00000017307.4	Ddx25	ENSRNOG0000012260	DEAD-box helicase 25 Source RGD Symbol Acc 68381
B11	SBR1097486	ENSRNOT00000013035.6	Ddx4	ENSRNOG0000026686	DEAD-box helicase 4 Source RGD Symbol Acc 1308793
B12	SBR1156880	ENSRNOT00000085356.1	Dmr1	ENSRNOG0000016075	doublesex and mab-3 related transcription factor 1 Source RGD Symbol Acc 621640
C01	SBR1120723	ENSRNOT00000050584.4	Dnajb8	ENSRNOG0000034088	DnaJ heat shock protein family (Hsp40) member B8 Source RGD Symbol Acc 1561981
C02	SBR1103547	ENSRNOT00000002771.4	Dnajc28	ENSRNOG0000002026	DnaJ heat shock protein family (Hsp40) member C28 Source RGD Symbol Acc 1359589
C03	SBR1190152	ENSRNOT00000007763.5	Eif2b4	ENSRNOG0000005301	eukaryotic translation initiation factor 2B subunit delta Source RGD Symbol Acc 620208
C04	SBR1182660	ENSRNOT00000090232.1	Eif4g3	ENSRNOG0000014368	eukaryotic translation initiation factor 4 gamma, 3 Source RGD Symbol Acc 1311370
C05	SBR1159525	ENSRNOT00000025928.5	Fas	ENSRNOG0000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
C06	SBR1179205	ENSRNOT00000029416.6	Fbxo5	ENSRNOG0000024077	F-box protein 5 Source RGD Symbol Acc 1309405
C07	SBR1110295	ENSRNOT00000010712.3	Fos	ENSRNOG0000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
C08	SBR1156607	ENSRNOT00000019396.7	Gli3	ENSRNOG0000014395	GLI family zinc finger 3 Source RGD Symbol Acc 620272
C09	SBR1194482	ENSRNOT00000040770.5	Adgrg2	ENSRNOG0000032472	adhesion G protein-coupled receptor G2 Source RGD Symbol Acc 628618
C10	SBR1185178	ENSRNOT00000073247.2	Gpx1	ENSRNOG0000048812	glutathione peroxidase 1 Source RGD Symbol Acc 2729
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1151584	012854.6	Hdac1	00009568	histone deacetylase 1 Source RGD Symbol Acc 1309799
C12	SBR1146734	ENSRNOT00000019192.6	Hmox1	ENSRNOG0000014117	heme oxygenase 1 Source RGD Symbol Acc 2806
D01	SBR1107472	ENSRNOT00000003812.5	Hsd17b7	ENSRNOG0000002826	hydroxysteroid (17-beta) dehydrogenase 7 Source RGD Symbol Acc 2837
D02	SBR1197745	ENSRNOT00000001059.4	Hsf2	ENSRNOG0000000808	heat shock transcription factor 2 Source RGD Symbol Acc 68395
D03	SBR1146380	ENSRNOT00000015474.6	Hspa4l	ENSRNOG0000010819	heat shock protein family A (Hsp70) member 4 like Source RGD Symbol Acc 1306528
D04	SBR1105763	ENSRNOT00000016289.4	Il16	ENSRNOG0000011680	interleukin 16 Source RGD Symbol Acc 1583872
D05	SBR1186518	ENSRNOT00000022687.4	Klhl10	ENSRNOG0000016749	kelch-like family member 10 Source RGD Symbol Acc 1303290
D06	SBR1144482	ENSRNOT00000081226.1	Lama5	ENSRNOG0000053691	laminin subunit alpha 5 Source RGD Symbol Acc 621023
D07	SBR1209536	ENSRNOT00000071926.1	Lep	ENSRNOG0000045797	leptin Source RGD Symbol Acc 3000
D08	SBR1138702	ENSRNOT00000022481.7	Lhcgr	ENSRNOG0000016712	lutinizing hormone/choriogonadotropin receptor Source RGD Symbol Acc 3007
D09	SBR1110172	ENSRNOT00000082174.1	Lmna	ENSRNOG0000019638	lamin A/C Source RGD Symbol Acc 620456
D10	SBR1188822	ENSRNOT00000028898.5	Mcm8	ENSRNOG0000021272	minichromosome maintenance 8 homologous recombination repair factor Source RGD Symbol Acc 1305218
D11	SBR1112762	ENSRNOT00000015094.6	Mllt3	ENSRNOG0000011280	MLLT3, super elongation complex subunit Source RGD Symbol Acc 620940
D12	SBR1214954	ENSRNOT00000027850.7	Muc1	ENSRNOG0000020539	mucin 1, cell surface associated Source RGD Symbol Acc 3122
E01	SBR1156911	ENSRNOT00000039728.5	Ndufs7	ENSRNOG0000024568	NADH ubiquinone oxidoreductase core subunit S7 Source RGD Symbol Acc 1310013
E02	SBR1120974	ENSRNOT00000009894.6	Nfkbia	ENSRNOG0000007390	NFKB inhibitor alpha Source RGD Symbol Acc 3171
E03	SBR1106934	ENSRNOT00000016076.5	Npc2	ENSRNOG0000012062	NPC intracellular cholesterol transporter 2 Source RGD Symbol Acc 628756
E04	SBR1127874	ENSRNOT00000008700.5	Odf1	ENSRNOG0000006578	outer dense fiber of sperm tails 1 Source RGD Symbol Acc 3228
E05	SBR1103935	ENSRNOT00000087402.1	Park7	ENSRNOG0000018289	Parkinsonism associated deglycase Source RGD Symbol Acc 621808
E06	SBR1141147	ENSRNOT00000022358.7	Pcsk4	ENSRNOG0000016405	proprotein convertase subtilisin/kexin type 4 Source RGD Symbol Acc 620325
E07	SBR1178962	ENSRNOT00000068082.1	Pdzd8	ENSRNOG0000009460	PDZ domain containing 8 Source RGD Symbol Acc 1308622
E08	SBR1096478	ENSRNOT00000018177.5	Pgk2	ENSRNOG0000013600	phosphoglycerate kinase 2 Source RGD Symbol Acc 1306627
E09	SBR1199012	ENSRNOT00000027818.5	Pin1	ENSRNOG0000020474	peptidylprolyl cis/trans isomerase, NIMA-interacting 1 Source RGD Symbol Acc 1310299
E10	SBR1194801	ENSRNOT00000001238.5	Piwil1	ENSRNOG0000000934	piwi-like RNA-mediated gene silencing 1 Source RGD Symbol Acc 1306980
E11	SBR1153392	ENSRNOT00000011376.4	Plcz1	ENSRNOG0000008514	phospholipase C, zeta 1 Source RGD Symbol Acc 1359567
E12	SBR1164317	ENSRNOT00000067453.3	Pole	ENSRNOG0000037449	DNA polymerase epsilon, catalytic subunit Source RGD Symbol Acc 1594540
F01	SBR1127203	ENSRNOT00000015186.5	Prdx3	ENSRNOG0000010958	peroxiredoxin 3 Source RGD Symbol Acc 620040
F02	SBR1193142	ENSRNOT00000003420.3	Prm1	ENSRNOG0000002532	protamine 1 Source RGD Symbol Acc 1583873
F03	SBR1186424	ENSRNOT00000003450.2	Prm2	ENSRNOG0000002539	protamine 2 Source RGD Symbol Acc 3409
F04	SBR1146647	ENSRNOT00000013138.6	Serpina5	ENSRNOG0000009855	serpin family A member 5 Source RGD Symbol Acc 619817
F05	SBR1199194	ENSRNOT00000059264.4	Slc26a8	ENSRNOG0000000512	solute carrier family 26 member 8 Source RGD Symbol Acc 1308898
F06	SBR1188680	ENSRNOT00000080124.1	Smarca2	ENSRNOG0000011931	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2 Source RGD Symbol Acc 1302988
F07	SBR1136942	ENSRNOT00000002885.6	Sod1	ENSRNOG0000002115	superoxide dismutase 1 Source RGD Symbol Acc 3731
F08	SBR1204773	ENSRNOT00000025794.4	Sod2	ENSRNOG0000019048	superoxide dismutase 2 Source RGD Symbol Acc 3732
F09	SBR1095172	ENSRNOT00000081823.1	Spo11	ENSRNOG0000006732	SPO11, initiator of meiotic double stranded breaks Source RGD Symbol Acc 1306454
F10	SBR1210860	ENSRNOT00000075989.1	Spp1	ENSRNOG0000043451	secreted phosphoprotein 1 Source RGD Symbol Acc 3752

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1156076	ENSRNOT00000092641.1	Srpk1	ENSRNOG0000000511	SRSF protein kinase 1 Source RGD Symbol Acc 1308272
F12	SBR1134191	ENSRNOT00000092039.1	Stag3	ENSRNOG0000001360	stromal antigen 3 Source RGD Symbol Acc 621333
G01	SBR1216658	ENSRNOT00000007088.6	Sycp3	ENSRNOG0000005270	synaptonemal complex protein 3 Source RGD Symbol Acc 3795
G02	SBR1103040	ENSRNOT00000000529.6	Tap1	ENSRNOG0000000457	transporter 1, ATP binding cassette subfamily B member Source RGD Symbol Acc 3817
G03	SBR1220573	ENSRNOT00000002038.4	Tbp	ENSRNOG0000001489	TATA box binding protein Source RGD Symbol Acc 67398
G04	SBR1145939	ENSRNOT00000045044.4	Tcp11	ENSRNOG0000000499	t-complex 11 Source RGD Symbol Acc 1359387
G05	SBR1151521	ENSRNOT00000041731.6	Tex11	ENSRNOG00000025672	testis expressed 11 Source RGD Symbol Acc 1560239
G06	SBR1127956	ENSRNOT00000023769.4	Tnp1	ENSRNOG00000017611	transition protein 1 Source RGD Symbol Acc 3884
G07	SBR1145789	ENSRNOT00000066891.2	LOC103690131	ENSRNOG00000042441	tumor protein D55-like Source RGD Symbol Acc 9223097
G08	SBR1136855	ENSRNOT00000080812.1	Trim36	ENSRNOG00000016612	tripartite motif-containing 36 Source RGD Symbol Acc 1308714
G09	SBR1192550	ENSRNOT00000080011.1	Tsga10	ENSRNOG00000058681	testis specific 10 Source RGD Symbol Acc 621142
G10	SBR1109382	ENSRNOT00000092581.1	Ubap2	ENSRNOG00000052087	ubiquitin-associated protein 2 Source RGD Symbol Acc 1311717
G11	SBR1133680	ENSRNOT00000003248.5	Uchl1	ENSRNOG00000002343	ubiquitin C-terminal hydrolase L1 Source RGD Symbol Acc 3928
G12	SBR1097507	ENSRNOT00000001952.4	Zp3	ENSRNOG00000001434	zona pellucida glycoprotein 3 Source RGD Symbol Acc 620606
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.

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.