

QuantiNova® LNA® PCR Focus Panels (96-Well Format and 384-Well [4 x 96] Format)

Rat Molecular Toxicology PathwayFinder

Cat. no. 249950 SBRN-401ZA

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 (96-well): QuantiNova LNA PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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	Abcb1a	Abcc2	Abcc3	Acadm	Acadv1	Acox1	Adh1	Adm2	Akr1c2	Akt1	Armdc3	Asah1
B	Aab1	Asns	Atm	Atp8b1	Bcl2	Bcl2l1	Brc1	Casp8	Casp9	RGD1565355	Cdkn1a	Cpt1a
C	Cpt1b	Cpt2	Cyb5b1d1	Cyld	Cyp1a1	Cyp1a2	Cyp2d4	Cyp2e1	Cyp3a18	Dnajb1	Dnajb9	Erc2
D	F2	Faslg	Fasn	Fhl2	Gclm	Grb2	Herpud1	Hmx1	Hpn	Hpx	Hsf1	Hsp90b1
E	Hspa1a	Edn1	Hspa4	Hspa5	Hspb1	Hspd1	Inhbe	Lpl	Lss	Lyz2	Mag	Mdm2
F	Metap2	Mki67	Ncoa7	Nqa1	Nr5a2	Slc51a	Parp2	Pdyn	Ppara	PVR	Rod51	Rdx
G	Scd	LOC299282	Slc25a25	LOC100909595	Slc7a11	Srebf1	Tagln	Trib3	Trim10	Txn14b	Uhrf1	Wipi1
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	SBR1116067	ENSRNOT00000082359.1	Abcb1a	ENSRNOG0000008012	ATP binding cassette subfamily B member 4 Source RGD Symbol Acc 620248
A02	SBR1119829	ENSRNOT00000070861.2	Abcc2	ENSRNOG00000046727	ATP binding cassette subfamily C member 2 Source RGD Symbol Acc 2366
A03	SBR1130301	ENSRNOT00000079711.1	Abcc3	ENSRNOG0000002948	ATP binding cassette subfamily C member 3 Source RGD Symbol Acc 71101
A04	SBR1212135	ENSRNOT00000013238.3	Acadm	ENSRNOG0000009845	acyl-CoA dehydrogenase medium chain Source RGD Symbol Acc 2012
A05	SBR1197686	ENSRNOT00000024973.6	Acadvl	ENSRNOG0000018114	acyl-CoA dehydrogenase, very long chain Source RGD Symbol Acc 2014
A06	SBR1129649	ENSRNOT00000042372.6	Acox1	ENSRNOG0000008755	acyl-CoA oxidase 1 Source RGD Symbol Acc 619757
A07	SBR1143351	ENSRNOT00000036993.4	Adh1	ENSRNOG0000012436	alcohol dehydrogenase 6 (class V) Source RGD Symbol Acc 1306313
A08	SBR1187375	ENSRNOT00000044854.2	Adm2	ENSRNOG0000029830	adrenomedullin 2 Source RGD Symbol Acc 1302971
A09	SBR1096934	ENSRNOT00000066282.2	Akr1c2	ENSRNOG0000029844	aldo-keto reductase family 1, member C2 Source RGD Symbol Acc 1311841
A10	SBR1163078	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A11	SBR1215523	ENSRNOT00000072849.2	Arrdc3	ENSRNOG0000045649	arrestin domain containing 3 Source RGD Symbol Acc 1359478
A12	SBR1191827	ENSRNOT00000013463.4	Asah1	ENSRNOG0000010034	N-acylsphingosine amidohydrolase 1 Source RGD Symbol Acc 621568
B01	SBR1212611	ENSRNOT00000027528.5	Asb1	ENSRNOG0000020322	ankyrin repeat and SOCS box-containing 1 Source RGD Symbol Acc 1310760
B02	SBR1185392	ENSRNOT00000083481.1	Asns	ENSRNOG0000007546	asparagine synthetase (glutamine-hydrolyzing) Source RGD Symbol Acc 2162
B03	SBR1113073	ENSRNOT00000050555.3	Atm	ENSRNOG0000029773	ATM serine/threonine kinase Source RGD Symbol Acc 1593265
B04	SBR1125252	ENSRNOT00000038652.5	Atp8b1	ENSRNOG0000024952	ATPase phospholipid transporting 8B1 Source RGD Symbol Acc 1308488
B05	SBR1170984	ENSRNOT00000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
B06	SBR1205791	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG0000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
B07	SBR1185089	ENSRNOT00000028109.3	Brca1	ENSRNOG0000020701	BRCA1, DNA repair associated Source RGD Symbol Acc 2218
B08	SBR1182801	ENSRNOT00000016613.4	Casp8	ENSRNOG0000012331	caspase 8 Source RGD Symbol Acc 620945
B09	SBR1175310	ENSRNOT00000085378.1	Casp9	ENSRNOG0000012944	caspase 9 Source RGD Symbol Acc 61867
B10	SBR1160418	ENSRNOT00000076573.2	RGD1565355	ENSRNOG0000040108	similar to fatty acid translocase/CD36 Source RGD Symbol Acc 1565355
B11	SBR1145142	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG0000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
B12	SBR1143879	ENSRNOT00000019652.3	Cpt1a	ENSRNOG0000014254	carnitine palmitoyltransferase 1A Source RGD Symbol Acc 2396
C01	SBR1162370	ENSRNOT00000013985.3	Cpt1b	ENSRNOG0000010438	carnitine palmitoyltransferase 1B Source RGD Symbol Acc 2397
C02	SBR1129520	ENSRNOT00000016954.3	Cpt2	ENSRNOG0000012443	carnitine palmitoyltransferase 2 Source RGD Symbol Acc 2398
C03	SBR1204770	ENSRNOT00000087329.1	Cyb561d1	ENSRNOG0000052232	cytochrome b561 family, member D1 Source RGD Symbol Acc 1310829
C04	SBR1190498	ENSRNOT00000018888.7	Cyld	ENSRNOG0000014048	CYLD lysine 63 deubiquitinase Source RGD Symbol Acc 1308346
C05	SBR1197501	ENSRNOT00000026473.4	Cyp1a1	ENSRNOG0000019500	cytochrome P450, family 1, subfamily a, polypeptide 1 Source RGD Symbol Acc 2458
C06	SBR1120481	ENSRNOT00000021653.7	Cyp1a2	ENSRNOG0000016173	cytochrome P450, family 1, subfamily a, polypeptide 2 Source RGD Symbol Acc 2459
C07	SBR1150695	ENSRNOT00000011880.6	Cyp2d4	ENSRNOG0000032261	cytochrome P450, family 2, subfamily d, polypeptide 4 Source RGD Symbol Acc 620640
C08	SBR1157610	ENSRNOT00000078080.1	Cyp2e1	ENSRNOG0000012458	cytochrome P450, family 2, subfamily e, polypeptide 1 Source RGD Symbol Acc 2475
C09	SBR1122407	ENSRNOT00000075671.3	Cyp3a18	ENSRNOG0000000969	cytochrome P450, family 3, subfamily a, polypeptide 18 Source RGD Symbol Acc 628709
C10	SBR1139977	ENSRNOT00000038879.5	Dnajb1	ENSRNOG0000021824	DnaJ heat shock protein family (Hsp40) member B1 Source RGD Symbol Acc 1304725
		ENSRNOT000000		ENSRNOG00	DnaJ heat shock protein family (Hsp40) member B9 Source RGD Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1109895	005363.5	Dnajb9	000004006	3070
C12	SBR1168699	ENSRNOT00000024246.7	Ercc2	ENSRNOG0000017753	ERCC excision repair 2, TFIIH core complex helicase subunit Source RGD Symbol Acc 1309109
D01	SBR1146218	ENSRNOT00000022233.5	F2	ENSRNOG0000016325	coagulation factor II Source RGD Symbol Acc 61996
D02	SBR1097457	ENSRNOT00000003998.2	Faslg	ENSRNOG0000002978	Fas ligand Source RGD Symbol Acc 3880
D03	SBR1216475	ENSRNOT00000073321.2	Fasn	ENSRNOG0000045636	fatty acid synthase Source RGD Symbol Acc 620665
D04	SBR1162940	ENSRNOT00000023014.3	Fhl2	ENSRNOG0000016866	four and a half LIM domains 2 Source RGD Symbol Acc 61963
D05	SBR1197356	ENSRNOT00000018343.4	Gclm	ENSRNOG0000013409	glutamate cysteine ligase, modifier subunit Source RGD Symbol Acc 619871
D06	SBR1181692	ENSRNOT00000005347.5	Grb2	ENSRNOG0000003990	growth factor receptor bound protein 2 Source RGD Symbol Acc 619758
D07	SBR1209229	ENSRNOT00000025559.5	Herpud1	ENSRNOG0000018796	homocysteine inducible ER protein with ubiquitin like domain 1 Source RGD Symbol Acc 620818
D08	SBR1146734	ENSRNOT00000019192.6	Hmx1	ENSRNOG0000014117	heme oxygenase 1 Source RGD Symbol Acc 2806
D09	SBR1134428	ENSRNOT00000077462.1	Hpn	ENSRNOG0000021097	hepsin Source RGD Symbol Acc 61982
D10	SBR1214615	ENSRNOT00000024710.5	Hpx	ENSRNOG0000018257	hemopexin Source RGD Symbol Acc 62040
D11	SBR1218531	ENSRNOT00000050108.3	Hsf1	ENSRNOG0000021732	heat shock transcription factor 1 Source RGD Symbol Acc 620913
D12	SBR1196985	ENSRNOT00000079731.1	Hsp90b1	ENSRNOG0000026963	heat shock protein 90 beta family member 1 Source RGD Symbol Acc 1310482
E01	SBR1189015	ENSRNOT00000081924.1	Hspa1a	ENSRNOG0000050647	heat shock protein family A (Hsp70) member 1B Source RGD Symbol Acc 2840
E02	SBR1168689	ENSRNOT00000019361.2	Edn1	ENSRNOG0000014361	endothelin 1 Source RGD Symbol Acc 2532
E03	SBR1138708	ENSRNOT00000023628.3	Hspa4	ENSRNOG0000016596	heat shock protein family A member 4 Source RGD Symbol Acc 628878
E04	SBR1166340	ENSRNOT00000025067.6	Hspa5	ENSRNOG0000018294	heat shock protein family A member 5 Source RGD Symbol Acc 2843
E05	SBR1195680	ENSRNOT00000031555.5	Hspb1	ENSRNOG0000023546	heat shock protein family B (small) member 1 Source RGD Symbol Acc 61306
E06	SBR1128872	ENSRNOT00000066589.2	Hspd1	ENSRNOG0000014525	heat shock protein family D member 1 Source RGD Symbol Acc 621314
E07	SBR1184938	ENSRNOT00000010106.4	Inhbe	ENSRNOG0000007601	inhibin subunit beta E Source RGD Symbol Acc 621196
E08	SBR1197775	ENSRNOT00000016543.3	Lpl	ENSRNOG0000012181	lipoprotein lipase Source RGD Symbol Acc 3017
E09	SBR1141758	ENSRNOT00000078412.1	Lss	ENSRNOG0000054549	lanosterol synthase Source RGD Symbol Acc 620955
E10	SBR1132120	ENSRNOT00000007747.7	Lyz2	ENSRNOG0000005825	lysozyme 2 Source RGD Symbol Acc 3026
E11	SBR1138789	ENSRNOT00000028544.5	Mag	ENSRNOG0000021023	myelin-associated glycoprotein Source RGD Symbol Acc 3035
E12	SBR1110929	ENSRNOT00000066767.2	Mdm2	ENSRNOG0000006304	MDM2 proto-oncogene Source RGD Symbol Acc 1305332
F01	SBR1116201	ENSRNOT00000030056.6	Metap2	ENSRNOG0000021881	methionyl aminopeptidase 2 Source RGD Symbol Acc 70995
F02	SBR1114480	ENSRNOT00000038176.5	Mki67	ENSRNOG0000028137	marker of proliferation Ki-67 Source RGD Symbol Acc 1305476
F03	SBR1127975	ENSRNOT00000018849.8	Ncoa7	ENSRNOG0000014004	nuclear receptor coactivator 7 Source RGD Symbol Acc 1566426
F04	SBR1125692	ENSRNOT00000017174.5	Nqo1	ENSRNOG0000012772	NAD(P)H quinone dehydrogenase 1 Source RGD Symbol Acc 2503
F05	SBR1127927	ENSRNOT00000000812.5	Nr5a2	ENSRNOG0000000653	nuclear receptor subfamily 5, group A, member 2 Source RGD Symbol Acc 68353
F06	SBR1127906	ENSRNOT00000002405.5	Slc51a	ENSRNOG0000001765	solute carrier family 51, alpha subunit Source RGD Symbol Acc 1311100
F07	SBR1191091	ENSRNOT00000011840.6	Parp2	ENSRNOG0000008892	poly (ADP-ribose) polymerase 2 Source RGD Symbol Acc 1310568
F08	SBR1179011	ENSRNOT00000037576.3	Pdyn	ENSRNOG0000026036	prodynorphin Source RGD Symbol Acc 62054
F09	SBR1163064	ENSRNOT00000078928.1	Ppara	ENSRNOG0000021463	peroxisome proliferator activated receptor alpha Source RGD Symbol Acc 3369
F10	SBR1108421	ENSRNOT00000064305.3	PVR	ENSRNOG0000019202	poliovirus receptor Source RGD Symbol Acc 3813

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1098144	ENSRNOT00000056432.2	Rad51	ENSRNOG00000037302	RAD51 recombinase Source RGD Symbol Acc 1563603
F12	SBR1193917	ENSRNOT00000034924.5	Rdx	ENSRNOG00000012237	radixin Source RGD Symbol Acc 1359472
G01	SBR1116635	ENSRNOT00000018447.5	Scd	ENSRNOG00000013552	stearoyl-CoA desaturase Source RGD Symbol Acc 621176
G02	SBR1203327	ENSRNOT00000014073.5	LOC299282	ENSRNOG00000010478	Serine protease inhibitor Source RGD Symbol Acc 3745
G03	SBR1170427	ENSRNOT00000020206.5	Slc25a25	ENSRNOG00000014338	solute carrier family 25 member 25 Source RGD Symbol Acc 628666
G04	SBR1211125	ENSRNOT00000088270.1	LOC100909595	ENSRNOG00000008376	solute carrier family 2 member 3 Source RGD Symbol Acc 3706
G05	SBR1204512	ENSRNOT00000014317.5	Slc7a11	ENSRNOG00000010210	solute carrier family 7 member 11 Source RGD Symbol Acc 1309275
G06	SBR1114531	ENSRNOT00000047053.6	Srebf1	ENSRNOG00000003463	sterol regulatory element binding transcription factor 1 Source RGD Symbol Acc 69423
G07	SBR1189114	ENSRNOT00000024030.6	Tagln	ENSRNOG00000017628	transgelin Source RGD Symbol Acc 3723
G08	SBR1167135	ENSRNOT00000009840.5	Trib3	ENSRNOG00000007319	tribbles pseudokinase 3 Source RGD Symbol Acc 708432
G09	SBR1183222	ENSRNOT00000001016.6	Trim10	ENSRNOG00000000782	tripartite motif-containing 10 Source RGD Symbol Acc 1359438
G10	SBR1213913	ENSRNOT00000034676.4	Txn14b	ENSRNOG00000021379	thioredoxin-like 4B Source RGD Symbol Acc 1305127
G11	SBR1170550	ENSRNOT00000075265.2	Uhrf1	ENSRNOG00000048411	ubiquitin-like with PHD and ring finger domains 1 Source RGD Symbol Acc 1595855
G12	SBR1187883	ENSRNOT00000005172.7	Wipi1	ENSRNOG00000003827	WD repeat domain, phosphoinositide interacting 1 Source RGD Symbol Acc 1307754
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG000000034254	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 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.