

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

Rat Stress & Toxicity PathwayFinder

Cat. no. 249950 SBRN-003ZA

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	Adm	Aqp1	Aqp2	Aqp4	Arnt	Alf4	Alf6	Atg12	Atg7	Alt	Herpud1	Becn1
B	Bid	Bnip3l	Colr	Cor9	Cosp1	Cosp7	Ccl12	Cd40lg	Cdkn1a	Cfr	Sit3a	Chek2
C	Crp	Ddb2	Ddit3	Dnajc3	Edn1	Epo	Fas	Ffh1	Gadd45a	Gadd45g	Gclc	Gclm
D	Grb2	Gsr	Gstp1	Hmx1	Hsp90aa1	Hsp90b1	Hspa1a	Hspa4	Hspa4l	Hspa5	Hus1	Ifng
E	Il1a	Il1b	Il6	Pgk1	Diablo	Mmp9	Mre11a	Nbn	Nfat5	Nqo1	Parp1	Parp2
F	Prdx1	PVR	Rad17	Rad51	Rad9a	Ripk1	Ripk3	Serpine1	Sic2a1	Sic6a6	Sic9a3	Sqstm1
G	Tir4	LOC1036943	AABR0701832	Tnfrsf1a	Tp53	Txn1	Txn4b	Txndl1	Ulk1	Vegfa	Xbp1	Xpc
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	SBR1135593	ENSRNOT00000 036718.1	Adm	ENSRNOG00 000027030	adrenomedullin Source RGD Symbol Acc 2047
A02	SBR1204719	ENSRNOT00000 015692.2	Aqp1	ENSRNOG00 000011648	aquaporin 1 Source RGD Symbol Acc 2141
A03	SBR1138109	ENSRNOT00000 091717.1	Aqp2	ENSRNOG00 000054378	aquaporin 2 Source RGD Symbol Acc 2142
A04	SBR1138496	ENSRNOT00000 077606.1	Aqp4	ENSRNOG00 000016043	aquaporin 4 Source RGD Symbol Acc 2143
A05	SBR1145957	ENSRNOT00000 091681.1	Arnt	ENSRNOG00 000031174	aryl hydrocarbon receptor nuclear translocator Source RGD Symbol Acc 2153
A06	SBR1186510	ENSRNOT00000 065304.4	Atf4	ENSRNOG00 000017801	activating transcription factor 4 Source RGD Symbol Acc 621863
A07	SBR1113797	ENSRNOT00000 029202.5	Atf6	ENSRNOG00 000024632	activating transcription factor 6 Source RGD Symbol Acc 1305471
A08	SBR1115052	ENSRNOT00000 000170.5	Atg12	ENSRNOG00 000000157	autophagy related 12 Source RGD Symbol Acc 1306306
A09	SBR1149690	ENSRNOT00000 067532.2	Atg7	ENSRNOG00 000007486	autophagy related 7 Source RGD Symbol Acc 1304817
A10	SBR1113073	ENSRNOT00000 050555.3	Atm	ENSRNOG00 000029773	ATM serine/threonine kinase Source RGD Symbol Acc 1593265
A11	SBR1209229	ENSRNOT00000 025559.5	Herpud1	ENSRNOG00 000018796	homocysteine inducible ER protein with ubiquitin like domain 1 Source RGD Symbol Acc 620818
A12	SBR1101983	ENSRNOT00000 075886.1	Becn1	ENSRNOG00 000020513	beclin 1 Source RGD Symbol Acc 620190
B01	SBR1147619	ENSRNOT00000 016776.2	Bid	ENSRNOG00 000012439	BH3 interacting domain death agonist Source RGD Symbol Acc 620160
B02	SBR1172499	ENSRNOT00000 014798.5	Bnip3l	ENSRNOG00 000009820	BCL2 interacting protein 3 like Source RGD Symbol Acc 621354
B03	SBR1095160	ENSRNOT00000 004091.6	Calr	ENSRNOG00 000003029	calreticulin Source RGD Symbol Acc 620288
B04	SBR1133743	ENSRNOT00000 023060.5	Car9	ENSRNOG00 000017073	carbonic anhydrase 9 Source RGD Symbol Acc 1306426
B05	SBR1122190	ENSRNOT00000 009993.6	Casp1	ENSRNOG00 000007372	caspase 1 Source RGD Symbol Acc 2274
B06	SBR1124602	ENSRNOT00000 080511.1	Casp7	ENSRNOG00 000056216	caspase 7 Source RGD Symbol Acc 620944
B07	SBR1129555	ENSRNOT00000 031626.5	Ccl12	ENSRNOG00 000029768	chemokine (C-C motif) ligand 12 Source RGD Symbol Acc 1309255
B08	SBR1110042	ENSRNOT00000 001162.4	Cd40lg	ENSRNOG00 000000871	CD40 ligand Source RGD Symbol Acc 708418
B09	SBR1145142	ENSRNOT00000 091731.1	Cdkn1a	ENSRNOG00 000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
B10	SBR1157383	ENSRNOT00000 085043.1	Cfr	ENSRNOG00 000055103	cystic fibrosis transmembrane conductance regulator Source RGD Symbol Acc 2332
B11	SBR1115970	ENSRNOT00000 043518.4	Stt3a	ENSRNOG00 000031896	STT3A, catalytic subunit of the oligosaccharyltransferase complex Source RGD Symbol Acc 1565793
B12	SBR1132181	ENSRNOT00000 085591.1	Chek2	ENSRNOG00 000037509	checkpoint kinase 2 Source RGD Symbol Acc 621543
C01	SBR1169897	ENSRNOT00000 000058.6	Crp	ENSRNOG00 000000053	C-reactive protein Source RGD Symbol Acc 2411
C02	SBR1172394	ENSRNOT00000 018998.8	Ddb2	ENSRNOG00 000014071	damage specific DNA binding protein 2 Source RGD Symbol Acc 1310164
C03	SBR1210119	ENSRNOT00000 083472.1	Ddit3	ENSRNOG00 000006789	DNA-damage inducible transcript 3 Source RGD Symbol Acc 62391
C04	SBR1201517	ENSRNOT00000 093411.1	Dnajc3	ENSRNOG00 000010352	DnaJ heat shock protein family (Hsp40) member C3 Source RGD Symbol Acc 708518
C05	SBR1168689	ENSRNOT00000 019361.2	Edn1	ENSRNOG00 000014361	endothelin 1 Source RGD Symbol Acc 2532
C06	SBR1147729	ENSRNOT00000 001914.4	Epo	ENSRNOG00 000001412	erythropoietin Source RGD Symbol Acc 2559
C07	SBR1159525	ENSRNOT00000 025928.5	Fas	ENSRNOG00 000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
C08	SBR1160832	ENSRNOT00000 030919.5	Fth1	ENSRNOG00 000022619	ferritin heavy chain 1 Source RGD Symbol Acc 2635
C09	SBR1179414	ENSRNOT00000 007698.6	Gadd45a	ENSRNOG00 000005615	growth arrest and DNA-damage-inducible, alpha Source RGD Symbol Acc 2654
C10	SBR1194608	ENSRNOT00000 018252.7	Gadd45g	ENSRNOG00 000013090	growth arrest and DNA-damage-inducible, gamma Source RGD Symbol Acc 1311796
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1095943	033196.3	Gclc	000006302	glutamate-cysteine ligase, catalytic subunit Source RGD Symbol Acc 619868
C12	SBR1197356	ENSRNOT00000 018343.4	Gclm	ENSRNOG00 000013409	glutamate cysteine ligase, modifier subunit Source RGD Symbol Acc 619871
D01	SBR1181692	ENSRNOT00000 005347.5	Grb2	ENSRNOG00 000003990	growth factor receptor bound protein 2 Source RGD Symbol Acc 619758
D02	SBR1141526	ENSRNOT00000 020252.6	Gsr	ENSRNOG00 000014915	glutathione-disulfide reductase Source RGD Symbol Acc 621747
D03	SBR1125046	ENSRNOT00000 024601.4	Gstp1	ENSRNOG00 000018237	glutathione S-transferase pi 1 Source RGD Symbol Acc 2758
D04	SBR1146734	ENSRNOT00000 019192.6	Hmox1	ENSRNOG00 000014117	heme oxygenase 1 Source RGD Symbol Acc 2806
D05	SBR1113341	ENSRNOT00000 086310.1	Hsp90aa1	ENSRNOG00 000059714	heat shock protein 90 alpha family class A member 1 Source RGD Symbol Acc 631409
D06	SBR1196985	ENSRNOT00000 079731.1	Hsp90b1	ENSRNOG00 000026963	heat shock protein 90 beta family member 1 Source RGD Symbol Acc 1310482
D07	SBR1189015	ENSRNOT00000 081924.1	Hspa1a	ENSRNOG00 000050647	heat shock protein family A (Hsp70) member 1B Source RGD Symbol Acc 2840
D08	SBR1138708	ENSRNOT00000 023628.3	Hspa4	ENSRNOG00 000016596	heat shock protein family A member 4 Source RGD Symbol Acc 628878
D09	SBR1146380	ENSRNOT00000 015474.6	Hspa4l	ENSRNOG00 000010819	heat shock protein family A (Hsp70) member 4 like Source RGD Symbol Acc 1306528
D10	SBR1166340	ENSRNOT00000 025067.6	Hspa5	ENSRNOG00 000018294	heat shock protein family A member 5 Source RGD Symbol Acc 2843
D11	SBR1152038	ENSRNOT00000 091671.1	Hus1	ENSRNOG00 000005141	HUS1 checkpoint clamp component Source RGD Symbol Acc 1591976
D12	SBR1108917	ENSRNOT00000 009919.2	Ifng	ENSRNOG00 000007468	interferon gamma Source RGD Symbol Acc 2866
E01	SBR1106125	ENSRNOT00000 006113.8	Il1a	ENSRNOG00 000004575	interleukin 1 alpha Source RGD Symbol Acc 2890
E02	SBR1196387	ENSRNOT00000 006308.4	Il1b	ENSRNOG00 000004649	interleukin 1 beta Source RGD Symbol Acc 2891
E03	SBR1156877	ENSRNOT00000 013732.6	Il6	ENSRNOG00 000010278	interleukin 6 Source RGD Symbol Acc 2901
E04	SBR1149927	ENSRNOT00000 077604.1	Pgk1	ENSRNOG00 000058249	phosphoglycerate kinase 1 Source RGD Symbol Acc 619878
E05	SBR1124639	ENSRNOT00000 047861.4	Diablo	ENSRNOG00 000029197	diablo, IAP-binding mitochondrial protein Source RGD Symbol Acc 1310885
E06	SBR1206750	ENSRNOT00000 023965.3	Mmp9	ENSRNOG00 000017539	matrix metallopeptidase 9 Source RGD Symbol Acc 621320
E07	SBR1133175	ENSRNOT00000 012940.4	Mre11a	ENSRNOG00 000009506	MRE11 homolog A, double strand break repair nuclease Source RGD Symbol Acc 69263
E08	SBR1194336	ENSRNOT00000 012377.4	Nbn	ENSRNOG00 000008580	nibrin Source RGD Symbol Acc 621420
E09	SBR1141053	ENSRNOT00000 017005.5	Nfat5	ENSRNOG00 000011879	nuclear factor of activated T-cells 5 Source RGD Symbol Acc 1309142
E10	SBR1125692	ENSRNOT00000 017174.5	Nqo1	ENSRNOG00 000012772	NAD(P)H quinone dehydrogenase 1 Source RGD Symbol Acc 2503
E11	SBR1161994	ENSRNOT00000 004232.5	Parp1	ENSRNOG00 000003084	poly (ADP-ribose) polymerase 1 Source RGD Symbol Acc 2053
E12	SBR1191091	ENSRNOT00000 011840.6	Parp2	ENSRNOG00 000008892	poly (ADP-ribose) polymerase 2 Source RGD Symbol Acc 1310568
F01	SBR1147176	ENSRNOT00000 023132.5	Prdx1	ENSRNOG00 000017194	peroxiredoxin 1 Source RGD Symbol Acc 620039
F02	SBR1108421	ENSRNOT00000 064305.3	PVR	ENSRNOG00 000019202	poliovirus receptor Source RGD Symbol Acc 3813
F03	SBR1186209	ENSRNOT00000 024801.4	Rad17	ENSRNOG00 000018353	RAD17 checkpoint clamp loader component Source RGD Symbol Acc 1309515
F04	SBR1098144	ENSRNOT00000 056432.2	Rad51	ENSRNOG00 000037302	RAD51 recombinase Source RGD Symbol Acc 1563603
F05	SBR1187108	ENSRNOT00000 025317.5	Rad9a	ENSRNOG00 000018729	RAD9 checkpoint clamp component A Source RGD Symbol Acc 2319938
F06	SBR1174883	ENSRNOT00000 023962.5	Ripk1	ENSRNOG00 000017787	receptor interacting serine/threonine kinase 1 Source RGD Symbol Acc 1310158
F07	SBR1213689	ENSRNOT00000 027759.4	Ripk3	ENSRNOG00 000020465	receptor-interacting serine/threonine kinase 3 Source RGD Symbol Acc 628899
F08	SBR1126485	ENSRNOT00000 001916.2	Serpine1	ENSRNOG00 000001414	serpin family E member 1 Source RGD Symbol Acc 3249
F09	SBR1109042	ENSRNOT00000 064452.2	Slc2a1	ENSRNOG00 000007284	solute carrier family 2 member 1 Source RGD Symbol Acc 3704
F10	SBR1142717	ENSRNOT00000 012875.6	Slc6a6	ENSRNOG00 000009019	solute carrier family 6 member 6 Source RGD Symbol Acc 61912

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1168632	ENSRNOT00000 020711.3	Slc9a3	ENSRNOG00 000015159	solute carrier family 9 member A3 Source RGD Symbol Acc 3720
F12	SBR1193100	ENSRNOT00000 059255.5	Sqstm1	ENSRNOG00 000003147	sequestosome 1 Source RGD Symbol Acc 69287
G01	SBR1180108	ENSRNOT00000 014020.3	Tlr4	ENSRNOG00 000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G02	SBR1187845	ENSRNOT00000 079677.1	LOC10369 4380	ENSRNOG00 000051516	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G03	SBR1211981	ENSRNOT00000 066128.4	AABR0701 8323.1	ENSRNOG00 000038483	
G04	SBR1130829	ENSRNOT00000 048529.4	Tnfrsf1a	ENSRNOG00 000031312	TNF receptor superfamily member 1A Source RGD Symbol Acc 621237
G05	SBR1172374	ENSRNOT00000 046490.3	Tp53	ENSRNOG00 000010756	tumor protein p53 Source RGD Symbol Acc 3889
G06	SBR1107690	ENSRNOT00000 016447.6	Txn1	ENSRNOG00 000012081	thioredoxin 1 Source RGD Symbol Acc 621157
G07	SBR1213913	ENSRNOT00000 034676.4	Txn1b	ENSRNOG00 000021379	thioredoxin-like 4B Source RGD Symbol Acc 1305127
G08	SBR1158608	ENSRNOT00000 089545.1	Txndl1	ENSRNOG00 000009088	thioredoxin reductase 1 Source RGD Symbol Acc 61959
G09	SBR1188200	ENSRNOT00000 056790.3	Uik1	ENSRNOG00 000037505	unc-51 like autophagy activating kinase 1 Source RGD Symbol Acc 1589743
G10	SBR1108862	ENSRNOT00000 044163.4	Vegfa	ENSRNOG00 000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
G11	SBR1176433	ENSRNOT00000 014044.6	Xbp1	ENSRNOG00 000010298	X-box binding protein 1 Source RGD Symbol Acc 1303073
G12	SBR1133388	ENSRNOT00000 011490.3	Xpc	ENSRNOG00 000008274	XPC complex subunit, DNA damage recognition and repair factor Source RGD Symbol Acc 1305760
H01	SBR1220567	ENSRNOT00000 042459.4	Actb	ENSRNOG00 000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000 023017.5	B2m	ENSRNOG00 000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000 065935.3	Hprt1	ENSRNOG00 000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000 017468.2	Ldha	ENSRNOG00 000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000 018820.5	Rplp1	ENSRNOG00 000013874	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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