

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

Rat Oxidative Stress

Cat. no. 249950 SBRN-065ZA

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	Alb	Als2	Aox1	Apc	Apoe	Cat	Cd5	Ccs	Ctsb	Cyba	Cygb	Dhcr24
B	Dnm2	Duox1	Duox2	Ehd2	Epx	Erc2	Erc6	Fanc	Fmo2	Fth1	Gcl	Gclm
C	Gpx1	Gpx2	Gpx3	Gpx4	Gpx5	Gpx6	Gpx7	Gsr	Gstk1	Gstp1	Hba-a1	Hmax1
D	Hspa1a	Idh1	AABR0706328 1.1	Krt1	Atr	Lpo	Mb	Mpo	Ncf1	AABR0702140 2.1	Ngb	Nos2
E	Nox4	Nox1	Nox1	Nqo1	Nudf1	Park7	Prdx1	Prdx2	Prdx3	Prdx4	Prdx5	Prdx6
F	Pmp	Psm5	Ptgs1	Ptgs2	Rag2	Scd	Seleno	Selenop	Serpinb1b	Slc38a1	Slc38a5	Sod1
G	Sod2	Sod3	Sqstm1	AABR0705431 9.1	Tpo	Txn1	Txnip	Txnrd1	Txnrd2	Ucp2	Ucp3	Vim
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	SBR1147524	ENSRNOT00000003921.4	Alb	ENSRNOG0000002911	albumin Source RGD Symbol Acc 2085
A02	SBR1165832	ENSRNOT00000088729.1	Als2	ENSRNOG00000023280	ALS2, alsin Rho guanine nucleotide exchange factor Source RGD Symbol Acc 1310372
A03	SBR1205834	ENSRNOT00000068633.4	Aox1	ENSRNOG0000015354	aldehyde oxidase 1 Source RGD Symbol Acc 620528
A04	SBR1094067	ENSRNOT00000090264.1	Apc	ENSRNOG0000020423	APC, WNT signaling pathway regulator Source RGD Symbol Acc 2123
A05	SBR1123572	ENSRNOT00000080453.1	ApoE	ENSRNOG0000018454	apolipoprotein E Source RGD Symbol Acc 2138
A06	SBR1123529	ENSRNOT00000011230.5	Cat	ENSRNOG0000008364	catalase Source RGD Symbol Acc 2279
A07	SBR1094349	ENSRNOT00000014865.6	Ccl5	ENSRNOG0000010906	C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069
A08	SBR1140988	ENSRNOT00000073983.2	Ccs	ENSRNOG0000047816	copper chaperone for superoxide dismutase Source RGD Symbol Acc 620403
A09	SBR1215406	ENSRNOT00000014177.5	Ctsb	ENSRNOG0000010331	cathepsin B Source RGD Symbol Acc 621509
A10	SBR1159284	ENSRNOT00000017564.6	Cyba	ENSRNOG0000013014	cytochrome b-245 alpha chain Source RGD Symbol Acc 620573
A11	SBR1103712	ENSRNOT00000016067.4	Cygb	ENSRNOG0000011541	cytoglobin Source RGD Symbol Acc 69415
A12	SBR1145371	ENSRNOT00000009402.6	Dhcr24	ENSRNOG0000006787	24-dehydrocholesterol reductase Source RGD Symbol Acc 1306529
B01	SBR1191537	ENSRNOT00000065028.4	Dnm2	ENSRNOG0000007649	dynamins 2 Source RGD Symbol Acc 2513
B02	SBR1109577	ENSRNOT00000046843.3	Duox1	ENSRNOG00000033348	dual oxidase 1 Source RGD Symbol Acc 628760
B03	SBR1183855	ENSRNOT00000023939.4	Duox2	ENSRNOG0000017395	dual oxidase 2 Source RGD Symbol Acc 628761
B04	SBR1192708	ENSRNOT00000017353.5	Ehd2	ENSRNOG0000011346	EH-domain containing 2 Source RGD Symbol Acc 1560856
B05	SBR1104594	ENSRNOT00000011735.4	Epx	ENSRNOG0000008707	eosinophil peroxidase Source RGD Symbol Acc 1311882
B06	SBR1168699	ENSRNOT00000024246.7	Ercc2	ENSRNOG0000017753	ERCC excision repair 2, TFIIH core complex helicase subunit Source RGD Symbol Acc 1309109
B07	SBR1130692	ENSRNOT00000088529.1	Ercc6	ENSRNOG00000030017	ERCC excision repair 6, chromatin remodeling factor Source RGD Symbol Acc 1311509
B08	SBR1162463	ENSRNOT00000022884.6	Fancc	ENSRNOG0000016889	FA complementation group C Source RGD Symbol Acc 2593
B09	SBR1128970	ENSRNOT00000004762.5	Fmo2	ENSRNOG0000003510	flavin containing monooxygenase 2 Source RGD Symbol Acc 628600
B10	SBR1160832	ENSRNOT00000030919.5	Fth1	ENSRNOG0000022619	ferritin heavy chain 1 Source RGD Symbol Acc 2635
B11	SBR1095943	ENSRNOT00000033196.3	Gclc	ENSRNOG0000006302	glutamate-cysteine ligase, catalytic subunit Source RGD Symbol Acc 619868
B12	SBR1197356	ENSRNOT00000018343.4	Gclm	ENSRNOG0000013409	glutamate cysteine ligase, modifier subunit Source RGD Symbol Acc 619871
C01	SBR1185178	ENSRNOT00000073247.2	Gpx1	ENSRNOG0000048812	glutathione peroxidase 1 Source RGD Symbol Acc 2729
C02	SBR1133643	ENSRNOT00000080270.1	Gpx2	ENSRNOG00000055672	glutathione peroxidase 2 Source RGD Symbol Acc 727780
C03	SBR1166361	ENSRNOT00000079830.1	Gpx3	ENSRNOG00000052564	glutathione peroxidase 3 Source RGD Symbol Acc 69224
C04	SBR1097775	ENSRNOT00000093632.1	Gpx4	ENSRNOG0000013604	glutathione peroxidase 4 Source RGD Symbol Acc 69226
C05	SBR1158462	ENSRNOT00000084180.1	Gpx5	ENSRNOG00000057180	glutathione peroxidase 5 Source RGD Symbol Acc 69227
C06	SBR1187444	ENSRNOT00000082782.1	Gpx6	ENSRNOG00000060749	glutathione peroxidase 6 Source RGD Symbol Acc 628789
C07	SBR1129057	ENSRNOT00000013913.6	Gpx7	ENSRNOG0000009751	glutathione peroxidase 7 Source RGD Symbol Acc 1306999
C08	SBR1141526	ENSRNOT00000020252.6	Gsr	ENSRNOG0000014915	glutathione-disulfide reductase Source RGD Symbol Acc 621747
C09	SBR1138442	ENSRNOT00000022275.4	Gstk1	ENSRNOG0000016484	glutathione S-transferase kappa 1 Source RGD Symbol Acc 735188
C10	SBR1125046	ENSRNOT00000024601.4	Gstp1	ENSRNOG0000018237	glutathione S-transferase pi 1 Source RGD Symbol Acc 2758
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1117016	051483.3	Hba-a1	000029886	hemoglobin alpha, adult chain 2 Source RGD Symbol Acc 1359364
C12	SBR1146734	ENSRNOT00000 019192.6	Hmox1	ENSRNOG00 000014117	heme oxygenase 1 Source RGD Symbol Acc 2806
D01	SBR1189015	ENSRNOT00000 081924.1	Hspa1a	ENSRNOG00 000050647	heat shock protein family A (Hsp70) member 1B Source RGD Symbol Acc 2840
D02	SBR1195467	ENSRNOT00000 020322.5	ldh1	ENSRNOG00 000015020	isocitrate dehydrogenase (NADP(+)) 1, cytosolic Source RGD Symbol Acc 2862
D03	SBR1176305	ENSRNOT00000 079762.1	AABR0706 3281.1	ENSRNOG00 000057813	
D04	SBR1214522	ENSRNOT00000 034450.4	Krt1	ENSRNOG00 000028996	keratin 1 Source RGD Symbol Acc 1359664
D05	SBR1199416	ENSRNOT00000 049967.5	Atr	ENSRNOG00 000010027	ATR serine/threonine kinase Source RGD Symbol Acc 1305796
D06	SBR1119957	ENSRNOT00000 011402.4	Lpo	ENSRNOG00 000008422	lactoperoxidase Source RGD Symbol Acc 1310051
D07	SBR1179220	ENSRNOT00000 006184.6	Mb	ENSRNOG00 000004583	myoglobin Source RGD Symbol Acc 620411
D08	SBR1165540	ENSRNOT00000 081951.1	Mpo	ENSRNOG00 000008310	myeloperoxidase Source RGD Symbol Acc 1592081
D09	SBR1182369	ENSRNOT00000 002028.8	Ncf1	ENSRNOG00 000001480	neutrophil cytosolic factor 1 Source RGD Symbol Acc 61307
D10	SBR1166610	ENSRNOT00000 066331.2	AABR0702 1402.1	ENSRNOG00 000028016	neutrophil cytosolic factor 2 Source NCBI gene Acc 364018
D11	SBR1132135	ENSRNOT00000 081727.1	Ngb	ENSRNOG00 000011719	neuroglobin Source RGD Symbol Acc 621461
D12	SBR1197401	ENSRNOT00000 073138.2	Nos2	ENSRNOG00 000057443	similar to Nitric oxide synthase, inducible (NOS type II) (Inducible NO synthase) (Inducible NOS) (iNOS) Source RGD Symbol Acc 1598227
E01	SBR1109066	ENSRNOT00000 018990.6	Nox4	ENSRNOG00 000013925	NADPH oxidase 4 Source RGD Symbol Acc 620600
E02	SBR1179694	ENSRNOT00000 012375.5	Noxa1	ENSRNOG00 000009286	NADPH oxidase activator 1 Source RGD Symbol Acc 1306687
E03	SBR1103282	ENSRNOT00000 029652.3	Noxo1	ENSRNOG00 000025117	NADPH oxidase organizer 1 Source RGD Symbol Acc 1307802
E04	SBR1125692	ENSRNOT00000 017174.5	Nqo1	ENSRNOG00 000012772	NAD(P)H quinone dehydrogenase 1 Source RGD Symbol Acc 2503
E05	SBR1168320	ENSRNOT00000 001700.6	Nudt1	ENSRNOG00 000001260	nudix hydrolase 1 Source RGD Symbol Acc 621080
E06	SBR1103935	ENSRNOT00000 087402.1	Park7	ENSRNOG00 000018289	Parkinsonism associated deglycase Source RGD Symbol Acc 621808
E07	SBR1147176	ENSRNOT00000 023132.5	Prdx1	ENSRNOG00 000017194	peroxiredoxin 1 Source RGD Symbol Acc 620039
E08	SBR1150356	ENSRNOT00000 004799.5	Prdx2	ENSRNOG00 000003520	peroxiredoxin 2 Source RGD Symbol Acc 3838
E09	SBR1127203	ENSRNOT00000 015186.5	Prdx3	ENSRNOG00 000010958	peroxiredoxin 3 Source RGD Symbol Acc 620040
E10	SBR1205037	ENSRNOT00000 005014.4	Prdx4	ENSRNOG00 000003763	peroxiredoxin 4 Source RGD Symbol Acc 620043
E11	SBR1178643	ENSRNOT00000 028687.3	Prdx5	ENSRNOG00 000021125	peroxiredoxin 5 Source RGD Symbol Acc 71007
E12	SBR1108747	ENSRNOT00000 034583.6	Prdx6	ENSRNOG00 000002896	peroxiredoxin 6 Source RGD Symbol Acc 71005
F01	SBR1183130	ENSRNOT00000 028881.2	Prnp	ENSRNOG00 000021259	prion protein Source RGD Symbol Acc 3410
F02	SBR1150329	ENSRNOT00000 018005.7	Psm5	ENSRNOG00 000013386	proteasome subunit beta 5 Source RGD Symbol Acc 61879
F03	SBR1187694	ENSRNOT00000 010218.5	Ptgs1	ENSRNOG00 000007415	prostaglandin-endoperoxide synthase 1 Source RGD Symbol Acc 3439
F04	SBR1122148	ENSRNOT00000 003567.4	Ptgs2	ENSRNOG00 000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
F05	SBR1216106	ENSRNOT00000 006097.5	Rag2	ENSRNOG00 000004623	recombination activating 2 Source RGD Symbol Acc 1305588
F06	SBR1116635	ENSRNOT00000 018447.5	Scd	ENSRNOG00 000013552	stearoyl-CoA desaturase Source RGD Symbol Acc 621176
F07	SBR1160665	ENSRNOT00000 016916.6	Selenos	ENSRNOG00 000012576	selenoprotein S Source RGD Symbol Acc 628897
F08	SBR1213886	ENSRNOT00000 086590.1	Selenop	ENSRNOG00 000053086	selenoprotein P Source RGD Symbol Acc 3660
F09	SBR1209506	ENSRNOT00000 022681.7	Serpinb1b	ENSRNOG00 000034229	serine (or cysteine) peptidase inhibitor, clade B, member 1b Source RGD Symbol Acc 1560658
F10	SBR1105928	ENSRNOT00000 008138.4	Slc38a1	ENSRNOG00 000005291	solute carrier family 38, member 1 Source RGD Symbol Acc 69645

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1168611	ENSRNOT00000079664.1	Slc38a5	ENSRNOG0000027767	solute carrier family 38, member 5 Source RGD Symbol Acc 620702
F12	SBR1136942	ENSRNOT00000002885.6	Sod1	ENSRNOG0000002115	superoxide dismutase 1 Source RGD Symbol Acc 3731
G01	SBR1204773	ENSRNOT00000025794.4	Sod2	ENSRNOG0000019048	superoxide dismutase 2 Source RGD Symbol Acc 3732
G02	SBR1093914	ENSRNOT00000005155.3	Sod3	ENSRNOG0000003869	superoxide dismutase 3 Source RGD Symbol Acc 3733
G03	SBR1193100	ENSRNOT00000059255.5	Sqstm1	ENSRNOG0000003147	sequestosome 1 Source RGD Symbol Acc 69287
G04	SBR1204029	ENSRNOT00000041456.4	AABR07054319.1	ENSRNOG00000031167	sulfiredoxin 1 Source NCBI gene Acc 296271
G05	SBR1161885	ENSRNOT00000006526.3	Tpo	ENSRNOG0000004646	thyroid peroxidase Source RGD Symbol Acc 3900
G06	SBR1107690	ENSRNOT00000016447.6	Txn1	ENSRNOG0000012081	thioredoxin 1 Source RGD Symbol Acc 621157
G07	SBR1211460	ENSRNOT00000028793.6	Txnip	ENSRNOG0000021201	thioredoxin interacting protein Source RGD Symbol Acc 620886
G08	SBR1158608	ENSRNOT00000089545.1	Txnrd1	ENSRNOG0000009088	thioredoxin reductase 1 Source RGD Symbol Acc 61959
G09	SBR1095078	ENSRNOT00000081972.1	Txnrd2	ENSRNOG0000001890	thioredoxin reductase 2 Source RGD Symbol Acc 61960
G10	SBR1104067	ENSRNOT00000024156.5	Ucp2	ENSRNOG0000017854	uncoupling protein 2 Source RGD Symbol Acc 3932
G11	SBR1125659	ENSRNOT00000024005.5	Ucp3	ENSRNOG0000017716	uncoupling protein 3 Source RGD Symbol Acc 3933
G12	SBR1197523	ENSRNOT00000024430.5	Vim	ENSRNOG0000018087	vimentin Source RGD Symbol Acc 621646
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG00000034254	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.