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

Rat Oxidative Stress

Cat. no. 249955 UPRN-065ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light 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 Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

Panel layout (Rotor-Gene): QuantiNova LNA Probe 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 Probe PCR 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	Ccl5	Ccs	Ctsb	Cyba	Cygb	Dhcr24
B	Dnm2	Duox1	Duox2	Ehd2	Epx	Ercc2	Ercc6	Fancc	Fmo2	Fth1	Gclc	Gclm
C	Gpx1	Gpx2	Gpx3	Gpx4	Gpx5	Gpx6	Gpx7	Gsr	Gstk1	Gstp1	Hba-a1	Hmox1
D	Hspa1a	Idh1	AABR07063281.1	Krt1	Atr	Lpo	Mb	Mpo	Ncf1	AABR07021402.1	Ngb	Nos2
E	Nox4	Noxa1	Noxo1	Nqo1	Nudt1	Park7	Prdx1	Prdx2	Prdx3	Prdx4	Prdx5	Prdx6
F	Prnp	Psmb5	Ptgs1	Ptgs2	Rag2	Scd	Selenos	Selenop	Serpinb1b	Slc38a1	Slc38a5	Sod1
G	Sod2	Sod3	Sqstm1	AABR07054319.1	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 Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFR1068924	ENSRNOT00000003921.4	Alb	ENSRNOG00000002911	albumin Source RGD Symbol Acc 2085
A02	UPFR1116953	ENSRNOT00000088729.1	Als2	ENSRNOG00000023280	ALS2, alsin Rho guanine nucleotide exchange factor Source RGD Symbol Acc 1310372
A03	UPFR1050426	ENSRNOT00000068633.4	Aox1	ENSRNOG00000015354	aldehyde oxidase 1 Source RGD Symbol Acc 620528
A04	UPFR1090312	ENSRNOT00000090264.1	Apc	ENSRNOG00000020423	APC, WNT signaling pathway regulator Source RGD Symbol Acc 2123
A05	UPFR1073431	ENSRNOT00000091574.1	Apoe	ENSRNOG00000018454	apolipoprotein E Source RGD Symbol Acc 2138
A06	UPFR1119733	ENSRNOT00000011230.5	Cat	ENSRNOG00000008364	catalase Source RGD Symbol Acc 2279
A07	UPFR1019085	ENSRNOT00000014865.6	Ccl5	ENSRNOG00000010906	C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069
A08	UPFR1035526	ENSRNOT00000073983.2	Ccs	ENSRNOG00000047816	copper chaperone for superoxide dismutase Source RGD Symbol Acc 620403
A09	UPFR1121227	ENSRNOT00000014177.5	Ctsb	ENSRNOG00000010331	cathepsin B Source RGD Symbol Acc 621509
A10	UPFR1109790	ENSRNOT00000017564.6	Cyba	ENSRNOG00000013014	cytochrome b-245 alpha chain Source RGD Symbol Acc 620573
A11	UPFR1104229	ENSRNOT00000016067.4	Cygb	ENSRNOG00000011541	cytoglobin Source RGD Symbol Acc 69415
A12	UPFR1087559	ENSRNOT00000009402.6	Dhcr24	ENSRNOG00000006787	24-dehydrocholesterol reductase Source RGD Symbol Acc 1306529
B01	UPFR1058441	ENSRNOT00000010947.5	Dnm2	ENSRNOG00000007649	dynamin 2 Source RGD Symbol Acc 2513
B02	UPFR1048338	ENSRNOT00000046843.3	Duox1	ENSRNOG00000033348	dual oxidase 1 Source RGD Symbol Acc 628760
B03	UPFR1047836	ENSRNOT00000023939.4	Duox2	ENSRNOG00000017395	dual oxidase 2 Source RGD Symbol Acc 628761
B04	UPFR1056919	ENSRNOT00000017353.5	Ehd2	ENSRNOG00000011346	EH-domain containing 2 Source RGD Symbol Acc 1560856
B05	UPFR1065428	ENSRNOT00000011735.4	Epx	ENSRNOG00000008707	eosinophil peroxidase Source RGD Symbol Acc 1311882
B06	UPFR1023073	ENSRNOT00000024246.7	Ercc2	ENSRNOG00000017753	ERCC excision repair 2, TFIIH core complex helicase subunit Source RGD Symbol Acc 1309109
B07	UPFR1063323	ENSRNOT00000088529.1	Ercc6	ENSRNOG00000030017	ERCC excision repair 6, chromatin remodeling factor Source RGD Symbol Acc 1311509
B08	UPFR1115266	ENSRNOT00000022884.6	Fancc	ENSRNOG00000016889	FA complementation group C Source RGD Symbol Acc 2593
B09	UPFR1095257	ENSRNOT00000091389.1	Fmo2	ENSRNOG00000003510	flavin containing monooxygenase 2 Source RGD Symbol Acc 628600
B10	UPFR1072612	ENSRNOT00000030919.5	Fth1	ENSRNOG00000022619	ferritin heavy chain 1 Source RGD Symbol Acc 2635
B11	UPFR1065988	ENSRNOT00000033196.3	Gclc	ENSRNOG00000006302	glutamate-cysteine ligase, catalytic subunit Source RGD Symbol Acc 619868
B12	UPFR1071868	ENSRNOT00000018343.4	Gclm	ENSRNOG00000013409	glutamate cysteine ligase, modifier subunit Source RGD Symbol Acc 619871
C01	UPFR1108384	ENSRNOT00000073247.2	Gpx1	ENSRNOG00000048812	glutathione peroxidase 1 Source RGD Symbol Acc 2729
C02	UPFR1055910	ENSRNOT00000080270.1	Gpx2	ENSRNOG00000055672	glutathione peroxidase 2 Source RGD Symbol Acc 727780
C03	UPFR1072810	ENSRNOT00000079830.1	Gpx3	ENSRNOG00000052564	glutathione peroxidase 3 Source RGD Symbol Acc 69224
C04	UPFR1055483	ENSRNOT00000093632.1	Gpx4	ENSRNOG00000013604	glutathione peroxidase 4 Source RGD Symbol Acc 69226
C05	UPFR1087326	ENSRNOT00000081408.1	Gpx5	ENSRNOG00000057180	glutathione peroxidase 5 Source RGD Symbol Acc 69227
C06	UPFR1074239	ENSRNOT00000079035.1	Gpx6	ENSRNOG00000060749	glutathione peroxidase 6 Source RGD Symbol Acc 628789
C07	UPFR1100273	ENSRNOT00000013913.6	Gpx7	ENSRNOG00000009751	glutathione peroxidase 7 Source RGD Symbol Acc 1306999
C08	UPFR1080300	ENSRNOT00000090036.1	Gsr	ENSRNOG00000014915	glutathione-disulfide reductase Source RGD Symbol Acc 621747
C09	UPFR1022537	ENSRNOT00000022275.4	Gstk1	ENSRNOG00000016484	glutathione S-transferase kappa 1 Source RGD Symbol Acc 735188
C10	UPFR1075260	ENSRNOT00000024601.4	Gstp1	ENSRNOG00000018237	glutathione S-transferase pi 1 Source RGD Symbol Acc 2758
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1014437	051483.3	Hba-a1	000029886	hemoglobin alpha, adult chain 2 Source RGD Symbol Acc 1359364
C12	UPFR1040868	ENSRNOT00000 019192.6	Hmox1	ENSRNOG00 000014117	heme oxygenase 1 Source RGD Symbol Acc 2806
D01	UPFR1057108	ENSRNOT00000 081924.1	Hspa1a	ENSRNOG00 000050647	heat shock protein family A (Hsp70) member 1B Source RGD Symbol Acc 2840
D02	UPFR1044022	ENSRNOT00000 020322.5	Idh1	ENSRNOG00 000015020	isocitrate dehydrogenase (NADP(+)) 1, cytosolic Source RGD Symbol Acc 2862
D03	UPFR1074278	ENSRNOT00000 079762.1	AABR0706 3281.1	ENSRNOG00 000057813	
D04	UPFR1058558	ENSRNOT00000 034450.4	Krt1	ENSRNOG00 000028996	keratin 1 Source RGD Symbol Acc 1359664
D05	UPFR1077171	ENSRNOT00000 049967.5	Atr	ENSRNOG00 000010027	ATR serine/threonine kinase Source RGD Symbol Acc 1305796
D06	UPFR1051162	ENSRNOT00000 011402.4	Lpo	ENSRNOG00 000008422	lactoperoxidase Source RGD Symbol Acc 1310051
D07	UPFR1024846	ENSRNOT00000 006184.6	Mb	ENSRNOG00 000004583	myoglobin Source RGD Symbol Acc 620411
D08	UPFR1055988	ENSRNOT00000 065910.3	Mpo	ENSRNOG00 000008310	myeloperoxidase Source RGD Symbol Acc 1592081
D09	UPFR1035875	ENSRNOT00000 076916.1	Ncf1	ENSRNOG00 000001480	neutrophil cytosolic factor 1 Source RGD Symbol Acc 61307
D10	UPFR1056378	ENSRNOT00000 066331.2	AABR0702 1402.1	ENSRNOG00 000028016	neutrophil cytosolic factor 2 Source NCBI gene Acc 364018
D11	UPFR1116652	ENSRNOT00000 016057.4	Ngb	ENSRNOG00 000011719	neuroglobin Source RGD Symbol Acc 621461
D12	UPFR1092405	ENSRNOT00000 016133.6	Nos2	ENSRNOG00 000057443	similar to Nitric oxide synthase, inducible (NOS type II) (Inducible NO synthase) (Inducible NOS) (iNOS) Source RGD Symbol Acc 1598227
E01	UPFR1087720	ENSRNOT00000 018990.6	Nox4	ENSRNOG00 000013925	NADPH oxidase 4 Source RGD Symbol Acc 620600
E02	UPFR1089418	ENSRNOT00000 012375.5	Noxa1	ENSRNOG00 000009286	NADPH oxidase activator 1 Source RGD Symbol Acc 1306687
E03	UPFR1089689	ENSRNOT00000 029652.3	Noxo1	ENSRNOG00 000025117	NADPH oxidase organizer 1 Source RGD Symbol Acc 1307802
E04	UPFR1111217	ENSRNOT00000 017174.5	Nqo1	ENSRNOG00 000012772	NAD(P)H quinone dehydrogenase 1 Source RGD Symbol Acc 2503
E05	UPFR1063230	ENSRNOT00000 001700.6	Nudt1	ENSRNOG00 000001260	nudix hydrolase 1 Source RGD Symbol Acc 621080
E06	UPFR1045325	ENSRNOT00000 091206.1	Park7	ENSRNOG00 000018289	Parkinsonism associated deglycase Source RGD Symbol Acc 621808
E07	UPFR1112300	ENSRNOT00000 023132.5	Prdx1	ENSRNOG00 000017194	peroxiredoxin 1 Source RGD Symbol Acc 620039
E08	UPFR1094945	ENSRNOT00000 004799.5	Prdx2	ENSRNOG00 000003520	peroxiredoxin 2 Source RGD Symbol Acc 3838
E09	UPFR1110213	ENSRNOT00000 015186.5	Prdx3	ENSRNOG00 000010958	peroxiredoxin 3 Source RGD Symbol Acc 620040
E10	UPFR1113999	ENSRNOT00000 005014.4	Prdx4	ENSRNOG00 000003763	peroxiredoxin 4 Source RGD Symbol Acc 620043
E11	UPFR1117421	ENSRNOT00000 028687.3	Prdx5	ENSRNOG00 000021125	peroxiredoxin 5 Source RGD Symbol Acc 71007
E12	UPFR1087261	ENSRNOT00000 034583.6	Prdx6	ENSRNOG00 000002896	peroxiredoxin 6 Source RGD Symbol Acc 71005
F01	UPFR1114564	ENSRNOT00000 028881.2	Prnp	ENSRNOG00 000021259	prion protein Source RGD Symbol Acc 3410
F02	UPFR1121254	ENSRNOT00000 018005.7	Psmb5	ENSRNOG00 000013386	proteasome subunit beta 5 Source RGD Symbol Acc 61879
F03	UPFR1053064	ENSRNOT00000 010218.5	Ptgs1	ENSRNOG00 000007415	prostaglandin-endoperoxide synthase 1 Source RGD Symbol Acc 3439
F04	UPFR1035449	ENSRNOT00000 003567.4	Ptgs2	ENSRNOG00 000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
F05	UPFR1049563	ENSRNOT00000 006097.5	Rag2	ENSRNOG00 000004623	recombination activating 2 Source RGD Symbol Acc 1305588
F06	UPFR1069413	ENSRNOT00000 018447.5	Scd	ENSRNOG00 000013552	stearoyl-CoA desaturase Source RGD Symbol Acc 621176
F07	UPFR1031170	ENSRNOT00000 016916.6	Selenos	ENSRNOG00 000012576	selenoprotein S Source RGD Symbol Acc 628897
F08	UPFR1109045	ENSRNOT00000 086590.1	Selenop	ENSRNOG00 000053086	selenoprotein P Source RGD Symbol Acc 3660
F09	UPFR1017449	ENSRNOT00000 022681.7	Serpinb1b	ENSRNOG00 000034229	serine (or cysteine) peptidase inhibitor, clade B, member 1b Source RGD Symbol Acc 1560658
F10	UPFR1028124	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	UPFR1117692	ENSRNOT00000038068.5	Slc38a5	ENSRNOG00000027767	solute carrier family 38, member 5 Source RGD Symbol Acc 620702
F12	UPFR1062096	ENSRNOT00000002885.6	Sod1	ENSRNOG00000002115	superoxide dismutase 1 Source RGD Symbol Acc 3731
G01	UPFR1090502	ENSRNOT00000025794.4	Sod2	ENSRNOG00000019048	superoxide dismutase 2 Source RGD Symbol Acc 3732
G02	UPFR1098616	ENSRNOT00000005155.3	Sod3	ENSRNOG00000003869	superoxide dismutase 3 Source RGD Symbol Acc 3733
G03	UPFR1112424	ENSRNOT00000059255.5	Sqstm1	ENSRNOG00000003147	sequestosome 1 Source RGD Symbol Acc 69287
G04	UPFR1103032	ENSRNOT00000041456.4	AABR07054319.1	ENSRNOG00000031167	sulfiredoxin 1 Source NCBI gene Acc 296271
G05	UPFR1107871	ENSRNOT00000006526.3	Tpo	ENSRNOG00000004646	thyroid peroxidase Source RGD Symbol Acc 3900
G06	UPFR1060469	ENSRNOT00000016447.6	Txn1	ENSRNOG00000012081	thioredoxin 1 Source RGD Symbol Acc 621157
G07	UPFR1099909	ENSRNOT00000028793.6	Txnip	ENSRNOG00000021201	thioredoxin interacting protein Source RGD Symbol Acc 620886
G08	UPFR1022916	ENSRNOT00000013613.7	Txnrd1	ENSRNOG00000009088	thioredoxin reductase 1 Source RGD Symbol Acc 61959
G09	UPFR1034288	ENSRNOT00000002593.7	Txnrd2	ENSRNOG00000001890	thioredoxin reductase 2 Source RGD Symbol Acc 61960
G10	UPFR1016940	ENSRNOT00000024156.5	Ucp2	ENSRNOG00000017854	uncoupling protein 2 Source RGD Symbol Acc 3932
G11	UPFR1091274	ENSRNOT00000024005.5	Ucp3	ENSRNOG00000017716	uncoupling protein 3 Source RGD Symbol Acc 3933
G12	UPFR1091277	ENSRNOT00000024430.5	Vim	ENSRNOG00000018087	vimentin Source RGD Symbol Acc 621646
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	UPFR1126610	UPL_RGDC	RGDC	UPL_RGDC	Rat Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
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 Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl QN ROX Reference Dye, 1.9 ml Water	208252

*Larger kit sizes available.

The QuantiNova LNA Probe 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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