

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

Mouse Oxidative Stress and Antioxidant Defense

Cat. no. 249955 UPMM-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	Atr	Cat	Cd5	Ccs	Ctsb	Cyba	Cygb
B	Dnm2	Duox1	Ehd2	Epx	Ercc2	Ercc6	Fancc	Fmo2	Fth1	Gclc	Gclm	Gpx1
C	Gpx2	Gpx3	Gpx4	Gpx5	Gpx6	Gpx7	Gsr	Gss	Gstk1	Gstp1	Hmax1	Hspa1a
D	Idh1	Ifi172	Il19	Il22	Krt1	Lpo	Mb	Mpo	Ncf1	Ncf2	Ngb	Nos2
E	Nox1	Nox4	Noxa1	Noxo1	Nqo1	Park7	Prdx1	Prdx2	Prdx3	Prdx4	Prdx5	Prdx6
F	Pmp	Psmb5	Plgs1	Plgs2	Rag2	Recq4	Scd1	Serp1nb1b	Slc38a1	Sod1	Sod2	Sod3
G	Sqstm1	Srxn1	Tpo	Txn1	Txnip	Txnrd1	Txnrd2	Txnrd3	Ucp2	Ucp3	Vim	Xpa
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFM080918 1	ENSMUST000000 201356.1	Alb	ENSMUSG00 000029368	albumin Source MGI Symbol Acc MGI 87991
A02	UPFM071103 2	ENSMUST000000 027178.12	Als2	ENSMUSG00 000026024	alsin Rho guanine nucleotide exchange factor Source MGI Symbol Acc MGI 1921268
A03	UPFM082689 1	ENSMUST000000 001027.6	Aox1	ENSMUSG00 000063558	aldehyde oxidase 1 Source MGI Symbol Acc MGI 88035
A04	UPFM082281 4	ENSMUST000000 163295.1	Apc	ENSMUSG00 000005871	APC, WNT signaling pathway regulator Source MGI Symbol Acc MGI 88039
A05	UPFM092642 1	ENSMUST000000 172808.1	ApoE	ENSMUSG00 000002985	apolipoprotein E Source MGI Symbol Acc MGI 88057
A06	UPFM092040 0	ENSMUST000000 185473.6	Atr	ENSMUSG00 000032409	ataxia telangiectasia and Rad3 related Source MGI Symbol Acc MGI 108028
A07	UPFM099283 9	ENSMUST000000 028610.9	Cat	ENSMUSG00 000027187	catalase Source MGI Symbol Acc MGI 88271
A08	UPFM078318 2	ENSMUST000000 035938.2	Ccl5	ENSMUSG00 000035042	chemokine (C-C motif) ligand 5 Source MGI Symbol Acc MGI 98262
A09	UPFM101023 3	ENSMUST000000 238136.1	Ccs	ENSMUSG00 000034108	copper chaperone for superoxide dismutase Source MGI Symbol Acc MGI 1333783
A10	UPFM062902 6	ENSMUST000000 006235.8	Ctsb	ENSMUSG00 000021939	cathepsin B Source MGI Symbol Acc MGI 88561
A11	UPFM066515 3	ENSMUST000000 017604.9	Cyba	ENSMUSG00 000006519	cytochrome b-245, alpha polypeptide Source MGI Symbol Acc MGI 1316658
A12	UPFM085436 5	ENSMUST000000 021166.5	Cygb	ENSMUSG00 000020810	cytoglobin Source MGI Symbol Acc MGI 2149481
B01	UPFM098662 1	ENSMUST000000 172833.1	Dnm2	ENSMUSG00 000033335	dynamitin 2 Source MGI Symbol Acc MGI 109547
B02	UPFM064728 8	ENSMUST000000 099461.3	Duox1	ENSMUSG00 000033268	dual oxidase 1 Source MGI Symbol Acc MGI 2139422
B03	UPFM086249 8	ENSMUST000000 098799.4	Ehd2	ENSMUSG00 000074364	EH-domain containing 2 Source MGI Symbol Acc MGI 2154274
B04	UPFM089346 3	ENSMUST000000 125590.1	Epx	ENSMUSG00 000052234	eosinophil peroxidase Source MGI Symbol Acc MGI 107569
B05	UPFM092894 1	ENSMUST000000 128167.1	Ercc2	ENSMUSG00 000030400	excision repair cross-complementing rodent repair deficiency, complementation group 2 Source MGI Symbol Acc MGI 95413
B06	UPFM075607 5	ENSMUST000000 066807.7	Ercc6	ENSMUSG00 000054051	excision repair cross-complementing rodent repair deficiency, complementation group 6 Source MGI Symbol Acc MGI 1100494
B07	UPFM093973 9	ENSMUST000000 163091.7	Fancc	ENSMUSG00 000021461	Fanconi anemia, complementation group C Source MGI Symbol Acc MGI 95480
B08	UPFM095565 5	ENSMUST000000 194061.1	Fmo2	ENSMUSG00 000040170	flavin containing monooxygenase 2 Source MGI Symbol Acc MGI 1916776
B09	UPFM065201 4	ENSMUST000000 237465.1	Fth1	ENSMUSG00 000024661	ferritin heavy polypeptide 1 Source MGI Symbol Acc MGI 95588
B10	UPFM078991 4	ENSMUST000000 216848.1	Gclc	ENSMUSG00 000032350	glutamate-cysteine ligase, catalytic subunit Source MGI Symbol Acc MGI 104990
B11	UPFM075137 1	ENSMUST000000 149983.3	Gclm	ENSMUSG00 000028124	glutamate-cysteine ligase, modifier subunit Source MGI Symbol Acc MGI 104995
B12	UPFM091057 8	ENSMUST000000 193987.1	Gpx1	ENSMUSG00 000063856	glutathione peroxidase 1 Source MGI Symbol Acc MGI 104887
C01	UPFM099994 6	ENSMUST000000 221421.1	Gpx2	ENSMUSG00 000042808	glutathione peroxidase 2 Source MGI Symbol Acc MGI 106609
C02	UPFM087429 4	ENSMUST000000 149324.1	Gpx3	ENSMUSG00 000018339	glutathione peroxidase 3 Source MGI Symbol Acc MGI 105102
C03	UPFM100136 7	ENSMUST000000 183037.1	Gpx4	ENSMUSG00 000075706	glutathione peroxidase 4 Source MGI Symbol Acc MGI 104767
C04	UPFM097898 8	ENSMUST000000 110491.8	Gpx5	ENSMUSG00 000004344	glutathione peroxidase 5 Source MGI Symbol Acc MGI 104886
C05	UPFM085669 1	ENSMUST000000 136668.1	Gpx6	ENSMUSG00 000004341	glutathione peroxidase 6 Source MGI Symbol Acc MGI 1922762
C06	UPFM117294 9	ENSMUST000000 184609.1	Gpx7	ENSMUSG00 000028597	glutathione peroxidase 7 Source MGI Symbol Acc MGI 1914555
C07	UPFM072352 2	ENSMUST000000 033992.8	Gsr	ENSMUSG00 000031584	glutathione reductase Source MGI Symbol Acc MGI 95804
C08	UPFM098006 2	ENSMUST000000 126322.7	Gss	ENSMUSG00 000027610	glutathione synthetase Source MGI Symbol Acc MGI 95852
C09	UPFM087234 5	ENSMUST000000 204792.1	Gstk1	ENSMUSG00 000029864	glutathione S-transferase kappa 1 Source MGI Symbol Acc MGI 1923513
C10	UPFM078306 5	ENSMUST000000 237893.1	Gstp1	ENSMUSG00 000060803	glutathione S-transferase, pi 1 Source MGI Symbol Acc MGI 95865
	UPFM070898	ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	7	005548.7	Hmox1	000005413	heme oxygenase 1 Source MGI Symbol Acc MGI 96163
C12	UPFM0921553	ENSMUST00000087328.3	Hspa1a	ENSMUSG0000091971	heat shock protein 1A Source MGI Symbol Acc MGI 96244
D01	UPFM0828208	ENSMUST00000188109.6	Idh1	ENSMUSG0000025950	isocitrate dehydrogenase 1 (NADP+), soluble Source MGI Symbol Acc MGI 96413
D02	UPFM0781397	ENSMUST00000201274.1	Ifi172	ENSMUSG0000038564	intraflagellar transport 172 Source MGI Symbol Acc MGI 2682064
D03	UPFM0840194	ENSMUST00000187410.6	Il19	ENSMUSG0000016524	interleukin 19 Source MGI Symbol Acc MGI 1890472
D04	UPFM0962132	ENSMUST00000096691.4	Il22	ENSMUSG0000074695	interleukin 22 Source MGI Symbol Acc MGI 1355307
D05	UPFM0971852	ENSMUST00000023790.4	Krt1	ENSMUSG0000046834	keratin 1 Source MGI Symbol Acc MGI 96698
D06	UPFM0833583	ENSMUST00000157004.1	Lpo	ENSMUSG0000009356	lactoperoxidase Source MGI Symbol Acc MGI 1923363
D07	UPFM0808803	ENSMUST00000230031.1	Mb	ENSMUSG0000018893	myoglobin Source MGI Symbol Acc MGI 96922
D08	UPFM0973241	ENSMUST00000121303.7	Mpo	ENSMUSG0000009350	myeloperoxidase Source MGI Symbol Acc MGI 97137
D09	UPFM0823895	ENSMUST00000139249.8	Ncf1	ENSMUSG0000015950	neutrophil cytosolic factor 1 Source MGI Symbol Acc MGI 97283
D10	UPFM0741123	ENSMUST00000189135.1	Ncf2	ENSMUSG0000026480	neutrophil cytosolic factor 2 Source MGI Symbol Acc MGI 97284
D11	UPFM1172959	ENSMUST00000110176.1	Ngb	ENSMUSG0000021032	neuroglobin Source MGI Symbol Acc MGI 2151886
D12	UPFM0769642	ENSMUST00000208783.1	Nos2	ENSMUSG0000020826	nitric oxide synthase 2, inducible Source MGI Symbol Acc MGI 97361
E01	UPFM0999505	ENSMUST00000159231.2	Nox1	ENSMUSG0000031257	NADPH oxidase 1 Source MGI Symbol Acc MGI 2450016
E02	UPFM0939308	ENSMUST00000124269.7	Nox4	ENSMUSG0000030562	NADPH oxidase 4 Source MGI Symbol Acc MGI 1354184
E03	UPFM0857027	ENSMUST00000044018.7	Noxa1	ENSMUSG0000036805	NADPH oxidase activator 1 Source MGI Symbol Acc MGI 2449980
E04	UPFM0635936	ENSMUST00000019464.7	Noxo1	ENSMUSG0000019320	NADPH oxidase organizer 1 Source MGI Symbol Acc MGI 1919143
E05	UPFM0630677	ENSMUST00000003947.8	Nqo1	ENSMUSG0000003849	NAD(P)H dehydrogenase, quinone 1 Source MGI Symbol Acc MGI 103187
E06	UPFM0676006	ENSMUST00000146184.2	Park7	ENSMUSG0000028964	Parkinson disease (autosomal recessive, early onset) 7 Source MGI Symbol Acc MGI 2135637
E07	UPFM0901181	ENSMUST00000129315.7	Prdx1	ENSMUSG0000028691	peroxiredoxin 1 Source MGI Symbol Acc MGI 99523
E08	UPFM0959454	ENSMUST00000127215.1	Prdx2	ENSMUSG0000005161	peroxiredoxin 2 Source MGI Symbol Acc MGI 109486
E09	UPFM0954615	ENSMUST00000025961.6	Prdx3	ENSMUSG0000024997	peroxiredoxin 3 Source MGI Symbol Acc MGI 88034
E10	UPFM0892910	ENSMUST00000026328.10	Prdx4	ENSMUSG0000025289	peroxiredoxin 4 Source MGI Symbol Acc MGI 1859815
E11	UPFM0808760	ENSMUST00000173091.1	Prdx5	ENSMUSG0000024953	peroxiredoxin 5 Source MGI Symbol Acc MGI 1859821
E12	UPFM0877686	ENSMUST00000155135.1	Prdx6	ENSMUSG0000026701	peroxiredoxin 6 Source MGI Symbol Acc MGI 894320
F01	UPFM0884833	ENSMUST00000091288.12	Prnp	ENSMUSG0000079037	prion protein Source MGI Symbol Acc MGI 97769
F02	UPFM0979347	ENSMUST00000022803.5	Psmb5	ENSMUSG0000022193	proteasome (prosome, macropain) subunit, beta type 5 Source MGI Symbol Acc MGI 1194513
F03	UPFM0621849	ENSMUST00000149930.2	Ptgs1	ENSMUSG0000047250	prostaglandin-endoperoxide synthase 1 Source MGI Symbol Acc MGI 97797
F04	UPFM1004492	ENSMUST00000190784.1	Ptgs2	ENSMUSG0000032487	prostaglandin-endoperoxide synthase 2 Source MGI Symbol Acc MGI 97798
F05	UPFM0767259	ENSMUST00000044031.3	Rag2	ENSMUSG0000032864	recombination activating gene 2 Source MGI Symbol Acc MGI 97849
F06	UPFM0922407	ENSMUST00000230544.1	Recq14	ENSMUSG0000033762	RecQ protein-like 4 Source MGI Symbol Acc MGI 1931028
F07	UPFM0642890	ENSMUST00000236824.1	Scd1	ENSMUSG0000037071	stearoyl-Coenzyme A desaturase 1 Source MGI Symbol Acc MGI 98239
F08	UPFM0942673	ENSMUST00000016951.7	Serpinb1b	ENSMUSG0000051029	serine (or cysteine) peptidase inhibitor, clade B, member 1b Source MGI Symbol Acc MGI 2445361
F09	UPFM1002639	ENSMUST00000088454.12	Slc38a1	ENSMUSG0000023169	solute carrier family 38, member 1 Source MGI Symbol Acc MGI 2145895
F10	UPFM0927620	ENSMUST00000023707.10	Sod1	ENSMUSG0000022982	superoxide dismutase 1, soluble Source MGI Symbol Acc MGI 98351

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM095033 7	ENSMUST00000 233897.1	Sod2	ENSMUSG00 000006818	superoxide dismutase 2, mitochondrial Source MGI Symbol Acc MGI 98352
F12	UPFM068829 0	ENSMUST00000 101208.5	Sod3	ENSMUSG00 000072941	superoxide dismutase 3, extracellular Source MGI Symbol Acc MGI 103181
G01	UPFM066020 6	ENSMUST00000 143379.1	Sqstm1	ENSMUSG00 000015837	sequestosome 1 Source MGI Symbol Acc MGI 107931
G02	UPFM081831 0	ENSMUST00000 041500.7	Srxn1	ENSMUSG00 000032802	sulfiredoxin 1 homolog (S. cerevisiae) Source MGI Symbol Acc MGI 104971
G03	UPFM067455 0	ENSMUST00000 021005.14	Tpo	ENSMUSG00 000020673	thyroid peroxidase Source MGI Symbol Acc MGI 98813
G04	UPFM071943 3	ENSMUST00000 030051.5	Txn1	ENSMUSG00 000028367	thioredoxin 1 Source MGI Symbol Acc MGI 98874
G05	UPFM067128 4	ENSMUST00000 074519.12	Txnip	ENSMUSG00 000038393	thioredoxin interacting protein Source MGI Symbol Acc MGI 1889549
G06	UPFM075333 7	ENSMUST00000 020484.7	Txnrd1	ENSMUSG00 000020250	thioredoxin reductase 1 Source MGI Symbol Acc MGI 1354175
G07	UPFM079664 2	ENSMUST00000 115604.7	Txnrd2	ENSMUSG00 000075704	thioredoxin reductase 2 Source MGI Symbol Acc MGI 1347023
G08	UPFM079454 4	ENSMUST00000 101171.1	Txnrd3	ENSMUSG00 000000811	thioredoxin reductase 3 Source MGI Symbol Acc MGI 2386711
G09	UPFM096647 2	ENSMUST00000 129324.7	Ucp2	ENSMUSG00 000033685	uncoupling protein 2 (mitochondrial, proton carrier) Source MGI Symbol Acc MGI 109354
G10	UPFM072555 8	ENSMUST00000 128044.7	Ucp3	ENSMUSG00 000032942	uncoupling protein 3 (mitochondrial, proton carrier) Source MGI Symbol Acc MGI 1099787
G11	UPFM099766 2	ENSMUST00000 028062.7	Vim	ENSMUSG00 000026728	vimentin Source MGI Symbol Acc MGI 98932
G12	UPFM087790 3	ENSMUST00000 142380.1	Xpa	ENSMUSG00 000028329	xeroderma pigmentosum, complementation group A Source MGI Symbol Acc MGI 99135
H01	UPFM113294 6	ENSMUST00000 163829.1	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	UPFM113294 7	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	UPFM113294 8	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	UPFM113294 9	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	UPFM113295 0	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	UPFM112660 9	UPL_MGDC	MGDC	UPL_MGDC	Mouse 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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