

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

Mouse Stress & Toxicity PathwayFinder

Cat. no. 249955 UPM-003ZR

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	Adm	Akr1b3	Aqp1	Aqp2	Aqp4	Arnt	Atf4	Atf6	Atf6b	Atg12	Atg5	Atg7
B	Atm	Atr	Becn1	Bid	Bnip3l	Calr	Car9	Casp1	Ccl12	Cd40lg	Cdkn1a	Citr
C	Chek1	Chek2	Crp	Ddb2	Ddit3	Dnajc3	Edn1	Epo	Fas	Fih1	Gadd45a	Gadd45g
D	Gclc	Gclm	Grb2	Gsr	Gstp1	Hmox1	Hsp90aa1	Hsp90b1	Hspa4	Hspa4l	Hspa5	Hus1
E	Ifng	Il1a	Il1b	Il6	Ldha	Mcl1	Mmp9	Mre11a	Nbn	Nfat5	Nqo1	Parp1
F	Prdx1	Pvr	Rad17	Rad51	Rad9a	Ripk1	Ripk3	Serpine1	Slc2a1	Slc5a3	Slc9a3	Sqstm1
G	Tlr4	Tnf	Tnfrsf10b	Tnfrsf1a	Trp53	Txn1	Txn14b	Txnrd1	Ulk1	Vegfa	Xbp1	Xpc
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	UPFM099954	ENSMUST00000033054.9	Adm	ENSMUSG0000030790	adrenomedullin Source MGI Symbol Acc MGI 108058
A02	UPFM0995449	ENSMUST000000136559.7	Akr1b3	ENSMUSG0000001642	aldo-keto reductase family 1, member B3 (aldose reductase) Source MGI Symbol Acc MGI 1353494
A03	UPFM0933902	ENSMUST000000004774.3	Aqp1	ENSMUSG0000004655	aquaporin 1 Source MGI Symbol Acc MGI 103201
A04	UPFM0679270	ENSMUST000000023752.5	Aqp2	ENSMUSG0000023013	aquaporin 2 Source MGI Symbol Acc MGI 1096865
A05	UPFM0633268	ENSMUST000000235044.1	Aqp4	ENSMUSG0000024411	aquaporin 4 Source MGI Symbol Acc MGI 107387
A06	UPFM0842446	ENSMUST000000156653.7	Arnt	ENSMUSG0000015522	aryl hydrocarbon receptor nuclear translocator Source MGI Symbol Acc MGI 88071
A07	UPFM0752517	ENSMUST000000229828.1	Atf4	ENSMUSG0000042406	activating transcription factor 4 Source MGI Symbol Acc MGI 88096
A08	UPFM0839396	ENSMUST000000027974.6	Atf6	ENSMUSG0000026663	activating transcription factor 6 Source MGI Symbol Acc MGI 1926157
A09	UPFM0879562	ENSMUST000000173984.1	Atf6b	ENSMUSG0000015461	activating transcription factor 6 beta Source MGI Symbol Acc MGI 105121
A10	UPFM0720211	ENSMUST000000035648.5	Atg12	ENSMUSG0000032905	autophagy related 12 Source MGI Symbol Acc MGI 1914776
A11	UPFM0768101	ENSMUST000000039286.4	Atg5	ENSMUSG0000038160	autophagy related 5 Source MGI Symbol Acc MGI 1277186
A12	UPFM0669504	ENSMUST000000032457.16	Atg7	ENSMUSG0000030314	autophagy related 7 Source MGI Symbol Acc MGI 1921494
B01	UPFM0708773	ENSMUST000000150244.1	Atm	ENSMUSG0000034218	ataxia telangiectasia mutated Source MGI Symbol Acc MGI 107202
B02	UPFM0920400	ENSMUST000000185473.6	Atr	ENSMUSG0000032409	ataxia telangiectasia and Rad3 related Source MGI Symbol Acc MGI 108028
B03	UPFM0832925	ENSMUST000000140706.7	Becn1	ENSMUSG0000035086	beclin 1, autophagy related Source MGI Symbol Acc MGI 1891828
B04	UPFM0690304	ENSMUST000000161594.1	Bid	ENSMUSG0000004446	BH3 interacting domain death agonist Source MGI Symbol Acc MGI 108093
B05	UPFM0739460	ENSMUST000000151059.7	Bnip3l	ENSMUSG0000022051	BCL2/adenovirus E1B interacting protein 3-like Source MGI Symbol Acc MGI 1332659
B06	UPFM0808361	ENSMUST000000003912.6	Calr	ENSMUSG0000003814	calreticulin Source MGI Symbol Acc MGI 88252
B07	UPFM0961234	ENSMUST000000129996.1	Car9	ENSMUSG0000028463	carbonic anhydrase 9 Source MGI Symbol Acc MGI 2447188
B08	UPFM0953748	ENSMUST000000027015.5	Casp1	ENSMUSG0000025888	caspase 1 Source MGI Symbol Acc MGI 96544
B09	UPFM0781898	ENSMUST000000124916.1	Ccl12	ENSMUSG0000035352	chemokine (C-C motif) ligand 12 Source MGI Symbol Acc MGI 108224
B10	UPFM0918360	ENSMUST000000033466.1	Cd40lg	ENSMUSG0000031132	CD40 ligand Source MGI Symbol Acc MGI 88337
B11	UPFM0867791	ENSMUST000000122348.2	Cdkn1a	ENSMUSG0000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B12	UPFM0931832	ENSMUST000000140407.7	Cftr	ENSMUSG0000041301	cystic fibrosis transmembrane conductance regulator Source MGI Symbol Acc MGI 88388
C01	UPFM0983684	ENSMUST000000174105.7	Chek1	ENSMUSG0000032113	checkpoint kinase 1 Source MGI Symbol Acc MGI 1202065
C02	UPFM0966904	ENSMUST000000066160.2	Chek2	ENSMUSG0000029521	checkpoint kinase 2 Source MGI Symbol Acc MGI 1355321
C03	UPFM0866773	ENSMUST000000038495.4	Crp	ENSMUSG0000037942	C-reactive protein, pentraxin-related Source MGI Symbol Acc MGI 88512
C04	UPFM0801365	ENSMUST000000152277.7	Ddb2	ENSMUSG0000002109	damage specific DNA binding protein 2 Source MGI Symbol Acc MGI 1355314
C05	UPFM0766569	ENSMUST000000026475.14	Ddit3	ENSMUSG0000025408	DNA-damage inducible transcript 3 Source MGI Symbol Acc MGI 109247
C06	UPFM0959999	ENSMUST000000022734.8	Dnajc3	ENSMUSG0000022136	DnaJ heat shock protein family (Hsp40) member C3 Source MGI Symbol Acc MGI 107373
C07	UPFM0632344	ENSMUST000000021796.8	Edn1	ENSMUSG0000021367	endothelin 1 Source MGI Symbol Acc MGI 95283
C08	UPFM0891285	ENSMUST000000111039.2	Epo	ENSMUSG0000029711	erythropoietin Source MGI Symbol Acc MGI 95407
C09	UPFM0995787	ENSMUST000000235709.1	Fas	ENSMUSG0000024778	Fas (TNF receptor superfamily member 6) Source MGI Symbol Acc MGI 95484
C10	UPFM0652014	ENSMUST000000237465.1	Fth1	ENSMUSG0000024661	ferritin heavy polypeptide 1 Source MGI Symbol Acc MGI 95588
	UPFM091095	ENSMUST000000		ENSMUSG00	growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	4	204282.1	Gadd45a	000036390	MGI 107799
C12	UPFM066256 2	ENSMUST00000 021903.2	Gadd45g	ENSMUSG00 000021453	growth arrest and DNA-damage-inducible 45 gamma Source MGI Symbol Acc MGI 1346325
D01	UPFM078991 4	ENSMUST00000 216848.1	Gclc	ENSMUSG00 000032350	glutamate-cysteine ligase, catalytic subunit Source MGI Symbol Acc MGI 104990
D02	UPFM075137 1	ENSMUST00000 149983.3	Gclm	ENSMUSG00 000028124	glutamate-cysteine ligase, modifier subunit Source MGI Symbol Acc MGI 104995
D03	UPFM076228 3	ENSMUST00000 135065.1	Grb2	ENSMUSG00 000059923	growth factor receptor bound protein 2 Source MGI Symbol Acc MGI 95805
D04	UPFM072352 2	ENSMUST00000 033992.8	Gsr	ENSMUSG00 000031584	glutathione reductase Source MGI Symbol Acc MGI 95804
D05	UPFM078306 5	ENSMUST00000 237893.1	Gstp1	ENSMUSG00 000060803	glutathione S-transferase, pi 1 Source MGI Symbol Acc MGI 95865
D06	UPFM070898 7	ENSMUST00000 005548.7	Hmox1	ENSMUSG00 000005413	heme oxygenase 1 Source MGI Symbol Acc MGI 96163
D07	UPFM099789 5	ENSMUST00000 155242.7	Hsp90aa1	ENSMUSG00 000021270	heat shock protein 90, alpha (cytosolic), class A member 1 Source MGI Symbol Acc MGI 96250
D08	UPFM077168 0	ENSMUST00000 129413.1	Hsp90b1	ENSMUSG00 000020048	heat shock protein 90, beta (Grp94), member 1 Source MGI Symbol Acc MGI 98817
D09	UPFM062819 4	ENSMUST00000 020630.7	Hspa4	ENSMUSG00 000020361	heat shock protein 4 Source MGI Symbol Acc MGI 1342292
D10	UPFM085183 7	ENSMUST00000 203353.2	Hspa4l	ENSMUSG00 000025757	heat shock protein 4 like Source MGI Symbol Acc MGI 107422
D11	UPFM100460 3	ENSMUST00000 100171.2	Hspa5	ENSMUSG00 000026864	heat shock protein 5 Source MGI Symbol Acc MGI 95835
D12	UPFM068804 0	ENSMUST00000 127578.1	Hus1	ENSMUSG00 000020413	HUS1 checkpoint clamp component Source MGI Symbol Acc MGI 1277962
E01	UPFM117295 0	ENSMUST00000 068592.4	Ifng	ENSMUSG00 000055170	interferon gamma Source MGI Symbol Acc MGI 107656
E02	UPFM090388 7	ENSMUST00000 028882.1	Il1a	ENSMUSG00 000027399	interleukin 1 alpha Source MGI Symbol Acc MGI 96542
E03	UPFM067128 1	ENSMUST00000 155994.1	Il1b	ENSMUSG00 000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
E04	UPFM072909 9	ENSMUST00000 195978.4	Il6	ENSMUSG00 000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
E05	UPFM085535 7	ENSMUST00000 125862.7	Ldha	ENSMUSG00 000063229	lactate dehydrogenase A Source MGI Symbol Acc MGI 96759
E06	UPFM071261 7	ENSMUST00000 178686.1	Mcl1	ENSMUSG00 000038612	myeloid cell leukemia sequence 1 Source MGI Symbol Acc MGI 101769
E07	UPFM079930 8	ENSMUST00000 017881.2	Mmp9	ENSMUSG00 000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
E08	UPFM112631 8	ENSMUST00000 215820.1	Mre11a	ENSMUSG00 000031928	MRE11A homolog A, double strand break repair nuclease Source MGI Symbol Acc MGI 1100512
E09	UPFM098128 4	ENSMUST00000 149069.1	Nbn	ENSMUSG00 000028224	nibrin Source MGI Symbol Acc MGI 1351625
E10	UPFM079466 4	ENSMUST00000 125721.7	Nfat5	ENSMUSG00 000003847	nuclear factor of activated T cells 5 Source MGI Symbol Acc MGI 1859333
E11	UPFM063067 7	ENSMUST00000 003947.8	Nqo1	ENSMUSG00 000003849	NAD(P)H dehydrogenase, quinone 1 Source MGI Symbol Acc MGI 103187
E12	UPFM093642 0	ENSMUST00000 193238.1	Parp1	ENSMUSG00 000026496	poly (ADP-ribose) polymerase family, member 1 Source MGI Symbol Acc MGI 1340806
F01	UPFM090118 1	ENSMUST00000 129315.7	Prdx1	ENSMUSG00 000028691	peroxiredoxin 1 Source MGI Symbol Acc MGI 99523
F02	UPFM093070 0	ENSMUST00000 159413.1	Pvr	ENSMUSG00 000040511	poliovirus receptor Source MGI Symbol Acc MGI 107741
F03	UPFM084827 5	ENSMUST00000 226050.1	Rad17	ENSMUSG00 000021635	RAD17 checkpoint clamp loader component Source MGI Symbol Acc MGI 1333807
F04	UPFM093244 8	ENSMUST00000 110828.1	Rad51	ENSMUSG00 000027323	RAD51 recombinase Source MGI Symbol Acc MGI 97890
F05	UPFM098627 6	ENSMUST00000 237467.1	Rad9a	ENSMUSG00 000024824	RAD9 checkpoint clamp component A Source MGI Symbol Acc MGI 1328356
F06	UPFM086562 4	ENSMUST00000 167374.8	Ripk1	ENSMUSG00 000021408	receptor (TNFRSF)-interacting serine-threonine kinase 1 Source MGI Symbol Acc MGI 108212
F07	UPFM070524 5	ENSMUST00000 227072.1	Ripk3	ENSMUSG00 000022221	receptor-interacting serine-threonine kinase 3 Source MGI Symbol Acc MGI 2154952
F08	UPFM070788 6	ENSMUST00000 041388.10	Serpine1	ENSMUSG00 000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
F09	UPFM099940 7	ENSMUST00000 208090.1	Slc2a1	ENSMUSG00 000028645	solute carrier family 2 (facilitated glucose transporter), member 1 Source MGI Symbol Acc MGI 95755
F10	UPFM070686 7	ENSMUST00000 113975.2	Slc5a3	ENSMUSG00 000089774	solute carrier family 5 (inositol transporters), member 3 Source MGI Symbol Acc MGI 1858226

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM081998 2	ENSMUST00000 036208.6	Slc9a3	ENSMUSG00 000036123	solute carrier family 9 (sodium/hydrogen exchanger), member 3 Source MGI Symbol Acc MGI 105064
F12	UPFM066020 6	ENSMUST00000 143379.1	Sqstm1	ENSMUSG00 000015837	sequestosome 1 Source MGI Symbol Acc MGI 107931
G01	UPFM075034 5	ENSMUST00000 107365.2	Tlr4	ENSMUSG00 000039005	toll-like receptor 4 Source MGI Symbol Acc MGI 96824
G02	UPFM063847 1	ENSMUST00000 025263.14	Tnf	ENSMUSG00 000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G03	UPFM064695 8	ENSMUST00000 022663.6	Tnfrsf10b	ENSMUSG00 000022074	tumor necrosis factor receptor superfamily, member 10b Source MGI Symbol Acc MGI 1341090
G04	UPFM070484 6	ENSMUST00000 144524.1	Tnfrsf1a	ENSMUSG00 000030341	tumor necrosis factor receptor superfamily, member 1a Source MGI Symbol Acc MGI 1314884
G05	UPFM066913 3	ENSMUST00000 171247.7	Trp53	ENSMUSG00 000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G06	UPFM071943 3	ENSMUST00000 030051.5	Txn1	ENSMUSG00 000028367	thioredoxin 1 Source MGI Symbol Acc MGI 98874
G07	UPFM065536 3	ENSMUST00000 034159.7	Txn14b	ENSMUSG00 000031723	thioredoxin-like 4B Source MGI Symbol Acc MGI 2443724
G08	UPFM075333 7	ENSMUST00000 020484.7	Txnrd1	ENSMUSG00 000020250	thioredoxin reductase 1 Source MGI Symbol Acc MGI 1354175
G09	UPFM077125 8	ENSMUST00000 198561.1	Ulk1	ENSMUSG00 000029512	unc-51 like kinase 1 Source MGI Symbol Acc MGI 1270126
G10	UPFM117296 6	ENSMUST00000 214739.1	Vegfa	ENSMUSG00 000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
G11	UPFM075379 9	ENSMUST00000 149623.7	Xbp1	ENSMUSG00 000020484	X-box binding protein 1 Source MGI Symbol Acc MGI 98970
G12	UPFM063746 9	ENSMUST00000 150279.2	Xpc	ENSMUSG00 000030094	xeroderma pigmentosum, complementation group C Source MGI Symbol Acc MGI 103557
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 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 Probe RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 μ l QuantiNova Probe 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	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l 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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