

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

Mouse Autophagy

Cat. no. 249955 UPMM-084ZA

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 (96-well): QuantiNova LNA Probe PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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	Akt1	Ambra1	App	Atg10	Atg12	Atg16l1	Atg16l2	Atg3	Atg4a	Atg4b	Atg4c	Atg4d
B	Atg5	Atg7	Atg9a	Atg9b	Bad	Bak1	Bax	Bcl2	Bcl2l1	Becn1	Bid	Bnip3
C	Casp3	Casp8	Cdkn1b	Cdkn2a	Cln3	Ctsb	Ctsd	Ctss	Cxcr4	Dapk1	Dram1	Dram2
D	Eif2ak3	Eif4g1	Esr1	Fadd	Fos	Gaa	Gabarap	Gabarapl1	Gabarapl2	Hdac1	Hdac6	Hgs
E	Hsp90aa1	Hspa8	Htt	Iifg	Igf1	Ins2	Irgm1	Lamp1	Map11c3a	Map11c3b	Mapk14	Mapk8
F	Mtor	Nfkb1	Npc1	Pik3c3	Pik3cg	Pik3r4	Prkaa1	Pen	Rab24	Rb1	Rgs19	Rps6kb1
G	Snca	Sqstm1	Tgfb1	Tgm2	Tmem74	Tnf	Tnfrsf10	Trp53	Ulk1	Ulk2	Uvrag	Wipi1
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	UPFM082786 0	ENSMUST00000 139388.2	Akt1	ENSMUSG00 000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A02	UPFM073673 4	ENSMUST00000 045705.13	Ambra1	ENSMUSG00 000040506	autophagy/beclin 1 regulator 1 Source MGI Symbol Acc MGI 2443564
A03	UPFM081516 9	ENSMUST00000 227723.1	App	ENSMUSG00 000022892	amyloid beta (A4) precursor protein Source MGI Symbol Acc MGI 88059
A04	UPFM068265 3	ENSMUST00000 022119.5	Atg10	ENSMUSG00 000021619	autophagy related 10 Source MGI Symbol Acc MGI 1914045
A05	UPFM072021 1	ENSMUST00000 035648.5	Atg12	ENSMUSG00 000032905	autophagy related 12 Source MGI Symbol Acc MGI 1914776
A06	UPFM075748 8	ENSMUST00000 127884.1	Atg16l1	ENSMUSG00 000026289	autophagy related 16-like 1 (S. cerevisiae) Source MGI Symbol Acc MGI 1924290
A07	UPFM100435 8	ENSMUST00000 143630.7	Atg16l2	ENSMUSG00 000047767	autophagy related 16-like 2 (S. cerevisiae) Source MGI Symbol Acc MGI 1920933
A08	UPFM085216 2	ENSMUST00000 023343.3	Atg3	ENSMUSG00 000022663	autophagy related 3 Source MGI Symbol Acc MGI 1915091
A09	UPFM093775 9	ENSMUST00000 112971.1	Atg4a	ENSMUSG00 000079418	autophagy related 4A, cysteine peptidase Source MGI Symbol Acc MGI 2147903
A10	UPFM093876 7	ENSMUST00000 187824.6	Atg4b	ENSMUSG00 000026280	autophagy related 4B, cysteine peptidase Source MGI Symbol Acc MGI 1913865
A11	UPFM075612 5	ENSMUST00000 180278.1	Atg4c	ENSMUSG00 000028550	autophagy related 4C, cysteine peptidase Source MGI Symbol Acc MGI 2651854
A12	UPFM065520 4	ENSMUST00000 217591.1	Atg4d	ENSMUSG00 000002820	autophagy related 4D, cysteine peptidase Source MGI Symbol Acc MGI 2444308
B01	UPFM076810 1	ENSMUST00000 039286.4	Atg5	ENSMUSG00 000038160	autophagy related 5 Source MGI Symbol Acc MGI 1277186
B02	UPFM066950 4	ENSMUST00000 032457.16	Atg7	ENSMUSG00 000030314	autophagy related 7 Source MGI Symbol Acc MGI 1921494
B03	UPFM096760 7	ENSMUST00000 040689.14	Atg9a	ENSMUSG00 000033124	autophagy related 9A Source MGI Symbol Acc MGI 2138446
B04	UPFM063701 6	ENSMUST00000 138716.7	Atg9b	ENSMUSG00 000038295	autophagy related 9B Source MGI Symbol Acc MGI 2685420
B05	UPFM070030 3	ENSMUST00000 025910.12	Bad	ENSMUSG00 000024959	BCL2-associated agonist of cell death Source MGI Symbol Acc MGI 1096330
B06	UPFM100989 2	ENSMUST00000 078691.11	Bak1	ENSMUSG00 000057789	BCL2-antagonist/killer 1 Source MGI Symbol Acc MGI 1097161
B07	UPFM090386 1	ENSMUST00000 211195.1	Bax	ENSMUSG00 000003873	BCL2-associated X protein Source MGI Symbol Acc MGI 99702
B08	UPFM063585 3	ENSMUST00000 112751.1	Bcl2	ENSMUSG00 000057329	B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138
B09	UPFM066341 1	ENSMUST00000 156688.1	Bcl2l1	ENSMUSG00 000007659	BCL2-like 1 Source MGI Symbol Acc MGI 88139
B10	UPFM083292 5	ENSMUST00000 140706.7	Becn1	ENSMUSG00 000035086	beclin 1, autophagy related Source MGI Symbol Acc MGI 1891828
B11	UPFM069030 4	ENSMUST00000 161594.1	Bid	ENSMUSG00 000004446	BH3 interacting domain death agonist Source MGI Symbol Acc MGI 108093
B12	UPFM076925 5	ENSMUST00000 148970.1	Bnip3	ENSMUSG00 000078566	BCL2/adenovirus E1B interacting protein 3 Source MGI Symbol Acc MGI 109326
C01	UPFM072895 1	ENSMUST00000 210534.1	Casp3	ENSMUSG00 000031628	caspase 3 Source MGI Symbol Acc MGI 107739
C02	UPFM067082 6	ENSMUST00000 191201.6	Casp8	ENSMUSG00 000026029	caspase 8 Source MGI Symbol Acc MGI 1261423
C03	UPFM072528 3	ENSMUST00000 204807.1	Cdkn1b	ENSMUSG00 000003031	cyclin-dependent kinase inhibitor 1B Source MGI Symbol Acc MGI 104565
C04	UPFM070277 6	ENSMUST00000 107131.1	Cdkn2a	ENSMUSG00 000044303	cyclin dependent kinase inhibitor 2A Source MGI Symbol Acc MGI 104738
C05	UPFM074930 9	ENSMUST00000 150587.7	Cln3	ENSMUSG00 000030720	ceroid lipofuscinosis, neuronal 3, juvenile (Batten, Spielmeier-Vogt disease) Source MGI Symbol Acc MGI 107537
C06	UPFM062902 6	ENSMUST00000 006235.8	Ctsb	ENSMUSG00 000021939	cathepsin B Source MGI Symbol Acc MGI 88561
C07	UPFM096800 2	ENSMUST00000 153679.1	Ctsd	ENSMUSG00 000007891	cathepsin D Source MGI Symbol Acc MGI 88562
C08	UPFM067305 8	ENSMUST00000 015667.8	Ctss	ENSMUSG00 000038642	cathepsin S Source MGI Symbol Acc MGI 107341
C09	UPFM077457 5	ENSMUST00000 052172.6	Cxcr4	ENSMUSG00 000045382	chemokine (C-X-C motif) receptor 4 Source MGI Symbol Acc MGI 109563
C10	UPFM088410 1	ENSMUST00000 077453.12	Dapk1	ENSMUSG00 000021559	death associated protein kinase 1 Source MGI Symbol Acc MGI 1916885
	UPFM092321	ENSMUST00000		ENSMUSG00	DNA-damage regulated autophagy modulator 1 Source MGI Symbol Acc MGI

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	9	156097.1	Dram1	000020057	1918962
C12	UPFM075456 5	ENSMUST00000 067630.12	Dram2	ENSMUSG00 000027900	DNA-damage regulated autophagy modulator 2 Source MGI Symbol Acc MGI 1914421
D01	UPFM098943 8	ENSMUST00000 159401.1	Eif2ak3	ENSMUSG00 000031668	eukaryotic translation initiation factor 2 alpha kinase 3 Source MGI Symbol Acc MGI 1341830
D02	UPFM075634 3	ENSMUST00000 154950.7	Eif4g1	ENSMUSG00 000045983	eukaryotic translation initiation factor 4, gamma 1 Source MGI Symbol Acc MGI 2384784
D03	UPFM083226 3	ENSMUST00000 105590.7	Esr1	ENSMUSG00 000019768	estrogen receptor 1 (alpha) Source MGI Symbol Acc MGI 1352467
D04	UPFM075310 6	ENSMUST00000 033394.7	Fadd	ENSMUSG00 000031077	Fas (TNFRSF6)-associated via death domain Source MGI Symbol Acc MGI 109324
D05	UPFM099578 7	ENSMUST00000 235709.1	Fas	ENSMUSG00 000024778	Fas (TNF receptor superfamily member 6) Source MGI Symbol Acc MGI 95484
D06	UPFM064637 4	ENSMUST00000 128753.1	Gaa	ENSMUSG00 000025579	glucosidase, alpha, acid Source MGI Symbol Acc MGI 95609
D07	UPFM084683 8	ENSMUST00000 018711.14	Gabarap	ENSMUSG00 000018567	gamma-aminobutyric acid receptor associated protein Source MGI Symbol Acc MGI 1861742
D08	UPFM064566 2	ENSMUST00000 204487.2	Gabarap1	ENSMUSG00 000030161	gamma-aminobutyric acid (GABA) A receptor-associated protein-like 1 Source MGI Symbol Acc MGI 1914980
D09	UPFM085063 6	ENSMUST00000 133628.1	Gabarap2	ENSMUSG00 000031950	gamma-aminobutyric acid (GABA) A receptor-associated protein-like 2 Source MGI Symbol Acc MGI 1890602
D10	UPFM093590 7	ENSMUST00000 125718.7	Hdac1	ENSMUSG00 000028800	histone deacetylase 1 Source MGI Symbol Acc MGI 108086
D11	UPFM084292 0	ENSMUST00000 154200.1	Hdac6	ENSMUSG00 000031161	histone deacetylase 6 Source MGI Symbol Acc MGI 1333752
D12	UPFM084489 7	ENSMUST00000 140862.6	Hgs	ENSMUSG00 000025793	HGF-regulated tyrosine kinase substrate Source MGI Symbol Acc MGI 104681
E01	UPFM099789 5	ENSMUST00000 155242.7	Hsp90aa1	ENSMUSG00 000021270	heat shock protein 90, alpha (cytosolic), class A member 1 Source MGI Symbol Acc MGI 96250
E02	UPFM074399 3	ENSMUST00000 215526.1	Hspa8	ENSMUSG00 000015656	heat shock protein 8 Source MGI Symbol Acc MGI 105384
E03	UPFM094501 1	ENSMUST00000 156490.1	Htt	ENSMUSG00 000029104	huntingtin Source MGI Symbol Acc MGI 96067
E04	UPFM117295 0	ENSMUST00000 068592.4	Ifnf	ENSMUSG00 000055170	interferon gamma Source MGI Symbol Acc MGI 107656
E05	UPFM092941 8	ENSMUST00000 121161.7	Igf1	ENSMUSG00 000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
E06	UPFM100267 5	ENSMUST00000 210288.1	Ins2	ENSMUSG00 000000215	insulin II Source MGI Symbol Acc MGI 96573
E07	UPFM064502 1	ENSMUST00000 097271.3	Irgm1	ENSMUSG00 000046879	immunity-related GTPase family M member 1 Source MGI Symbol Acc MGI 107567
E08	UPFM088245 7	ENSMUST00000 033824.7	Lamp1	ENSMUSG00 000031447	lysosomal-associated membrane protein 1 Source MGI Symbol Acc MGI 96745
E09	UPFM095537 9	ENSMUST00000 029128.3	Map1lc3a	ENSMUSG00 000027602	microtubule-associated protein 1 light chain 3 alpha Source MGI Symbol Acc MGI 1915661
E10	UPFM081258 0	ENSMUST00000 181948.1	Map1lc3b	ENSMUSG00 000031812	microtubule-associated protein 1 light chain 3 beta Source MGI Symbol Acc MGI 1914693
E11	UPFM074684 8	ENSMUST00000 004990.13	Mapk14	ENSMUSG00 000053436	mitogen-activated protein kinase 14 Source MGI Symbol Acc MGI 1346865
E12	UPFM091565 7	ENSMUST00000 111944.9	Mapk8	ENSMUSG00 000021936	mitogen-activated protein kinase 8 Source MGI Symbol Acc MGI 1346861
F01	UPFM062102 3	ENSMUST00000 057580.7	Mtor	ENSMUSG00 000028991	mechanistic target of rapamycin kinase Source MGI Symbol Acc MGI 1928394
F02	UPFM098758 7	ENSMUST00000 029812.13	Nfkb1	ENSMUSG00 000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
F03	UPFM090186 4	ENSMUST00000 025279.5	Npc1	ENSMUSG00 000024413	NPC intracellular cholesterol transporter 1 Source MGI Symbol Acc MGI 1097712
F04	UPFM091116 0	ENSMUST00000 115812.9	Pik3c3	ENSMUSG00 000033628	phosphatidylinositol 3-kinase catalytic subunit type 3 Source MGI Symbol Acc MGI 2445019
F05	UPFM080212 7	ENSMUST00000 053215.13	Pik3cg	ENSMUSG00 000020573	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma Source MGI Symbol Acc MGI 1353576
F06	UPFM069311 8	ENSMUST00000 186943.1	Pik3r4	ENSMUSG00 000032571	phosphoinositide-3-kinase regulatory subunit 4 Source MGI Symbol Acc MGI 1922919
F07	UPFM089479 8	ENSMUST00000 228218.1	Prkaa1	ENSMUSG00 000050697	protein kinase, AMP-activated, alpha 1 catalytic subunit Source MGI Symbol Acc MGI 2145955
F08	UPFM089742 6	ENSMUST00000 013807.7	Pten	ENSMUSG00 000013663	phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583
F09	UPFM093698 2	ENSMUST00000 035242.8	Rab24	ENSMUSG00 000034789	RAB24, member RAS oncogene family Source MGI Symbol Acc MGI 105065
F10	UPFM077278 8	ENSMUST00000 022701.6	Rb1	ENSMUSG00 000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM0643850	ENSMUST00000143510.7	Rgs19	ENSMUSG0000002458	regulator of G-protein signaling 19 Source MGI Symbol Acc MGI 1915153
F12	UPFM0633380	ENSMUST00000020824.14	Rps6kb1	ENSMUSG0000020516	ribosomal protein S6 kinase, polypeptide 1 Source MGI Symbol Acc MGI 1270849
G01	UPFM0643662	ENSMUST00000163779.7	Snca	ENSMUSG0000025889	synuclein, alpha Source MGI Symbol Acc MGI 1277151
G02	UPFM0660206	ENSMUST00000143379.1	Sqstm1	ENSMUSG0000015837	sequestosome 1 Source MGI Symbol Acc MGI 107931
G03	UPFM0666880	ENSMUST00000171757.1	Tgfb1	ENSMUSG000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G04	UPFM0689649	ENSMUST00000174718.1	Tgm2	ENSMUSG0000037820	transglutaminase 2, C polypeptide Source MGI Symbol Acc MGI 98731
G05	UPFM0755367	ENSMUST00000067469.5	Tmem74	ENSMUSG0000054409	transmembrane protein 74 Source MGI Symbol Acc MGI 2443417
G06	UPFM0638471	ENSMUST00000025263.14	Tnf	ENSMUSG0000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G07	UPFM0682099	ENSMUST00000174840.1	Tnfsf10	ENSMUSG0000039304	tumor necrosis factor (ligand) superfamily, member 10 Source MGI Symbol Acc MGI 107414
G08	UPFM0669133	ENSMUST00000171247.7	Trp53	ENSMUSG0000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G09	UPFM0771258	ENSMUST00000198561.1	Ulk1	ENSMUSG0000029512	unc-51 like kinase 1 Source MGI Symbol Acc MGI 1270126
G10	UPFM0862536	ENSMUST00000157049.1	Ulk2	ENSMUSG0000004798	unc-51 like kinase 2 Source MGI Symbol Acc MGI 1352758
G11	UPFM0983998	ENSMUST00000208992.1	Uvrag	ENSMUSG0000035354	UV radiation resistance associated gene Source MGI Symbol Acc MGI 1925860
G12	UPFM0693332	ENSMUST00000106689.1	Wipi1	ENSMUSG0000041895	WD repeat domain, phosphoinositide interacting 1 Source MGI Symbol Acc MGI 1261864
H01	UPFM1132946	ENSMUST00000163829.1	Actb	ENSMUSG0000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	UPFM1132947	ENSMUST00000102476.4	B2m	ENSMUSG0000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	UPFM1132948	ENSMUST00000117757.8	Gapdh	ENSMUSG0000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	UPFM1132949	ENSMUST00000026613.13	Gusb	ENSMUSG0000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	UPFM1132950	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG0000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	UPFM1126609	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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