

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

Mouse Hypoxia Signaling Pathway

Cat. no. 249955 UPMM-032ZA

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	Adm	Adora2b	Aldoa	Angptl4	Ankrd37	Anxa2	Apex1	Arnt	Atr	Bhlhe40	Blim	Bnip3
B	Bnip3l	Blg1	Car9	Ccng2	Cops5	Ctsa	Ddit4	Dnajc5	Edn1	Egln1	Egln2	Egr1
C	Eif4ebp1	Eno1	Epo	Ero1l	F10	F3	Fos	Gbe1	Gpi1	Gys1	Hif1a	Hif1an
D	Hif3a	Hk2	Hmox1	Hnf4a	Ier3	Igf1bp3	Jmjd6	Ldha	Lgals3	Lox	Map3k1	Met
E	Mif	Mmp9	Mxi1	Nampt	Ncoa1	Ndr1	Nfkb1	Nos3	Odc1	P4ha1	P4hb	Pdk1
F	Per1	Pikfb3	Pikfb4	Pikl	Pikp	Pgam1	Pgf	Pgk1	Pim1	Pkm	Plau	Rbpj
G	Ruvbl2	Serpine1	Slc16a3	Slc2a1	Slc2a3	Tfrc	Tpi1	Trp53	Txnip	Usp2	Vdac1	Vegfa
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	UPFM0999954	ENSMUST00000033054.9	Adm	ENSMUSG0000030790	adrenomedullin Source MGI Symbol Acc MGI 108058
A02	UPFM0709472	ENSMUST00000018644.2	Adora2b	ENSMUSG0000018500	adenosine A2b receptor Source MGI Symbol Acc MGI 99403
A03	UPFM0710780	ENSMUST000000106348.7	Aldoa	ENSMUSG0000030695	aldolase A, fructose-bisphosphate Source MGI Symbol Acc MGI 87994
A04	UPFM0953833	ENSMUST000000174872.1	Angptl4	ENSMUSG0000002289	angiopoietin-like 4 Source MGI Symbol Acc MGI 1888999
A05	UPFM0869288	ENSMUST000000053558.9	Ankrd37	ENSMUSG0000050914	ankyrin repeat domain 37 Source MGI Symbol Acc MGI 3603344
A06	UPFM0855203	ENSMUST000000123470.7	Anxa2	ENSMUSG0000032231	annexin A2 Source MGI Symbol Acc MGI 88246
A07	UPFM0639545	ENSMUST000000136753.7	Apex1	ENSMUSG0000035960	apurinic/apyrimidinic endonuclease 1 Source MGI Symbol Acc MGI 88042
A08	UPFM0842446	ENSMUST000000156653.7	Arnt	ENSMUSG0000015522	aryl hydrocarbon receptor nuclear translocator Source MGI Symbol Acc MGI 88071
A09	UPFM0920400	ENSMUST000000185473.6	Atr	ENSMUSG0000032409	ataxia telangiectasia and Rad3 related Source MGI Symbol Acc MGI 108028
A10	UPFM0841689	ENSMUST000000163617.1	Bhlhe40	ENSMUSG0000030103	basic helix-loop-helix family, member e40 Source MGI Symbol Acc MGI 1097714
A11	UPFM0790134	ENSMUST000000081314.10	Blm	ENSMUSG0000030528	Bloom syndrome, RecQ like helicase Source MGI Symbol Acc MGI 1328362
A12	UPFM0769255	ENSMUST000000148970.1	Bnip3	ENSMUSG0000078566	BCL2/adenovirus E1B interacting protein 3 Source MGI Symbol Acc MGI 109326
B01	UPFM0739460	ENSMUST000000151059.7	Bnip3l	ENSMUSG0000022051	BCL2/adenovirus E1B interacting protein 3-like Source MGI Symbol Acc MGI 1332659
B02	UPFM0809809	ENSMUST000000218953.1	Blg1	ENSMUSG0000036478	B cell translocation gene 1, anti-proliferative Source MGI Symbol Acc MGI 88215
B03	UPFM0961234	ENSMUST000000129996.1	Car9	ENSMUSG0000028463	carbonic anhydrase 9 Source MGI Symbol Acc MGI 2447188
B04	UPFM1003767	ENSMUST000000031331.12	Ccng2	ENSMUSG0000029385	cyclin G2 Source MGI Symbol Acc MGI 1095734
B05	UPFM0697919	ENSMUST000000027050.9	Cops5	ENSMUSG0000025917	COP9 signalosome subunit 5 Source MGI Symbol Acc MGI 1349415
B06	UPFM0727698	ENSMUST000000143780.8	Ctsa	ENSMUSG0000017760	cathepsin A Source MGI Symbol Acc MGI 97748
B07	UPFM0979560	ENSMUST000000020308.4	Ddit4	ENSMUSG0000020108	DNA-damage-inducible transcript 4 Source MGI Symbol Acc MGI 1921997
B08	UPFM0806905	ENSMUST000000108796.1	Dnajc5	ENSMUSG0000000826	DnaJ heat shock protein family (Hsp40) member C5 Source MGI Symbol Acc MGI 892995
B09	UPFM0632344	ENSMUST000000021796.8	Edn1	ENSMUSG0000021367	endothelin 1 Source MGI Symbol Acc MGI 95283
B10	UPFM0699980	ENSMUST000000034469.6	Egl-1	ENSMUSG0000031987	egl-9 family hypoxia-inducible factor 1 Source MGI Symbol Acc MGI 1932286
B11	UPFM0669335	ENSMUST000000152021.1	Egl-2	ENSMUSG0000058709	egl-9 family hypoxia-inducible factor 2 Source MGI Symbol Acc MGI 1932287
B12	UPFM0854343	ENSMUST000000165033.1	Egr1	ENSMUSG0000038418	early growth response 1 Source MGI Symbol Acc MGI 95295
C01	UPFM0940838	ENSMUST000000210959.1	Eif4ebp1	ENSMUSG0000031490	eukaryotic translation initiation factor 4E binding protein 1 Source MGI Symbol Acc MGI 103267
C02	UPFM0767213	ENSMUST000000141931.1	Eno1	ENSMUSG0000063524	enolase 1, alpha non-neuron Source MGI Symbol Acc MGI 95393
C03	UPFM0891285	ENSMUST000000111039.2	Epo	ENSMUSG0000029711	erythropoietin Source MGI Symbol Acc MGI 95407
C04	UPFM0993125	ENSMUST000000022378.8	Ero1l	ENSMUSG0000021831	ERO1-like (S. cerevisiae) Source MGI Symbol Acc MGI 1354385
C05	UPFM0881515	ENSMUST000000128418.7	F10	ENSMUSG0000031444	coagulation factor X Source MGI Symbol Acc MGI 103107
C06	UPFM0986569	ENSMUST000000029771.12	F3	ENSMUSG0000058128	coagulation factor III Source MGI Symbol Acc MGI 88381
C07	UPFM0764563	ENSMUST000000136122.7	Fos	ENSMUSG0000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
C08	UPFM0769763	ENSMUST000000163832.7	Gbe1	ENSMUSG0000022707	glucan (1,4-alpha-), branching enzyme 1 Source MGI Symbol Acc MGI 1921435
C09	UPFM0708928	ENSMUST000000205865.1	Gpi1	ENSMUSG0000036427	glucose phosphate isomerase 1 Source MGI Symbol Acc MGI 95797
C10	UPFM0655174	ENSMUST000000003964.16	Gys1	ENSMUSG0000003865	glycogen synthase 1, muscle Source MGI Symbol Acc MGI 101805
	UPFM090240	ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	6	110461.7	Hif1a	000021109	hypoxia inducible factor 1, alpha subunit Source MGI Symbol Acc MGI 106918
C12	UPFM097516 8	ENSMUST00000 040455.4	Hif1an	ENSMUSG00 000036450	hypoxia-inducible factor 1, alpha subunit inhibitor Source MGI Symbol Acc MGI 2442345
D01	UPFM063257 5	ENSMUST00000 108492.8	Hif3a	ENSMUSG00 000004328	hypoxia inducible factor 3, alpha subunit Source MGI Symbol Acc MGI 1859778
D02	UPFM074256 7	ENSMUST00000 000642.10	Hk2	ENSMUSG00 000000628	hexokinase 2 Source MGI Symbol Acc MGI 1315197
D03	UPFM070898 7	ENSMUST00000 005548.7	Hmox1	ENSMUSG00 000005413	heme oxygenase 1 Source MGI Symbol Acc MGI 96163
D04	UPFM089220 5	ENSMUST00000 137449.1	Hnf4a	ENSMUSG00 000017950	hepatic nuclear factor 4, alpha Source MGI Symbol Acc MGI 109128
D05	UPFM112616 3	ENSMUST00000 003635.6	Ier3	ENSMUSG00 000003541	immediate early response 3 Source MGI Symbol Acc MGI 104814
D06	UPFM096898 6	ENSMUST00000 020702.10	Igfbp3	ENSMUSG00 000020427	insulin-like growth factor binding protein 3 Source MGI Symbol Acc MGI 96438
D07	UPFM088980 9	ENSMUST00000 142495.7	Jmjd6	ENSMUSG00 000056962	jumonji domain containing 6 Source MGI Symbol Acc MGI 1858910
D08	UPFM085535 7	ENSMUST00000 125862.7	Ldha	ENSMUSG00 000063229	lactate dehydrogenase A Source MGI Symbol Acc MGI 96759
D09	UPFM084108 3	ENSMUST00000 146468.3	Lgals3	ENSMUSG00 000050335	lectin, galactose binding, soluble 3 Source MGI Symbol Acc MGI 96778
D10	UPFM069839 1	ENSMUST00000 171470.7	Lox	ENSMUSG00 000024529	lysyl oxidase Source MGI Symbol Acc MGI 96817
D11	UPFM071337 6	ENSMUST00000 109267.8	Map3k1	ENSMUSG00 000021754	mitogen-activated protein kinase kinase kinase 1 Source MGI Symbol Acc MGI 1346872
D12	UPFM081794 6	ENSMUST00000 115443.7	Met	ENSMUSG00 000009376	met proto-oncogene Source MGI Symbol Acc MGI 96969
E01	UPFM117294 1	ENSMUST00000 038169.7	Mif	ENSMUSG00 000033307	macrophage migration inhibitory factor (glycosylation-inhibiting factor) Source MGI Symbol Acc MGI 96982
E02	UPFM079930 8	ENSMUST00000 017881.2	Mmp9	ENSMUSG00 000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
E03	UPFM081291 6	ENSMUST00000 003870.14	Mxi1	ENSMUSG00 000025025	MAX interactor 1, dimerization protein Source MGI Symbol Acc MGI 97245
E04	UPFM073692 2	ENSMUST00000 220200.1	Nampt	ENSMUSG00 000020572	nicotinamide phosphoribosyltransferase Source MGI Symbol Acc MGI 1929865
E05	UPFM088014 6	ENSMUST00000 217794.1	Ncoa1	ENSMUSG00 000020647	nuclear receptor coactivator 1 Source MGI Symbol Acc MGI 1276523
E06	UPFM087763 4	ENSMUST00000 172447.7	Ndrp1	ENSMUSG00 000005125	N-myc downstream regulated gene 1 Source MGI Symbol Acc MGI 1341799
E07	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
E08	UPFM067358 1	ENSMUST00000 115090.5	Nos3	ENSMUSG00 000028978	nitric oxide synthase 3, endothelial cell Source MGI Symbol Acc MGI 97362
E09	UPFM075025 3	ENSMUST00000 222617.1	Odc1	ENSMUSG00 000011179	ornithine decarboxylase, structural 1 Source MGI Symbol Acc MGI 97402
E10	UPFM064573 1	ENSMUST00000 105466.2	P4ha1	ENSMUSG00 000019916	procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha 1 polypeptide Source MGI Symbol Acc MGI 97463
E11	UPFM097445 6	ENSMUST00000 026122.10	P4hb	ENSMUSG00 000025130	prolyl 4-hydroxylase, beta polypeptide Source MGI Symbol Acc MGI 97464
E12	UPFM080898 6	ENSMUST00000 134362.7	Pdk1	ENSMUSG00 000006494	pyruvate dehydrogenase kinase, isoenzyme 1 Source MGI Symbol Acc MGI 1926119
F01	UPFM099385 2	ENSMUST00000 142392.7	Per1	ENSMUSG00 000020893	period circadian clock 1 Source MGI Symbol Acc MGI 1098283
F02	UPFM072440 9	ENSMUST00000 195779.5	Pfkfb3	ENSMUSG00 000026773	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 3 Source MGI Symbol Acc MGI 2181202
F03	UPFM082962 3	ENSMUST00000 200015.5	Pfkfb4	ENSMUSG00 000025648	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 4 Source MGI Symbol Acc MGI 2687284
F04	UPFM083765 4	ENSMUST00000 148818.1	Pfkf	ENSMUSG00 000020277	phosphofructokinase, liver, B-type Source MGI Symbol Acc MGI 97547
F05	UPFM087739 6	ENSMUST00000 133041.7	Pfkp	ENSMUSG00 000021196	phosphofructokinase, platelet Source MGI Symbol Acc MGI 1891833
F06	UPFM073630 1	ENSMUST00000 237510.1	Pgam1	ENSMUSG00 000011752	phosphoglycerate mutase 1 Source MGI Symbol Acc MGI 97552
F07	UPFM080457 8	ENSMUST00000 222850.1	Pgf	ENSMUSG00 000004791	placental growth factor Source MGI Symbol Acc MGI 105095
F08	UPFM113295 1	ENSMUST00000 081593.12	Pgk1	ENSMUSG00 000062070	phosphoglycerate kinase 1 Source MGI Symbol Acc MGI 97555
F09	UPFM112627 8	ENSMUST00000 234294.1	Pim1	ENSMUSG00 000024014	proviral integration site 1 Source MGI Symbol Acc MGI 97584
F10	UPFM087867 4	ENSMUST00000 213220.1	Pkm	ENSMUSG00 000032294	pyruvate kinase, muscle Source MGI Symbol Acc MGI 97591

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM083661 6	ENSMUST00000 224141.1	Plau	ENSMUSG00 000021822	plasminogen activator, urokinase Source MGI Symbol Acc MGI 97611
F12	UPFM065182 0	ENSMUST00000 201928.3	Rbpj	ENSMUSG00 000039191	recombination signal binding protein for immunoglobulin kappa J region Source MGI Symbol Acc MGI 96522
G01	UPFM062250 7	ENSMUST00000 211666.1	Ruvbl2	ENSMUSG00 000003868	RuvB-like protein 2 Source MGI Symbol Acc MGI 1342299
G02	UPFM070788 6	ENSMUST00000 041388.10	Serpine1	ENSMUSG00 000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
G03	UPFM068314 7	ENSMUST00000 140467.1	Slc16a3	ENSMUSG00 000025161	solute carrier family 16 (monocarboxylic acid transporters), member 3 Source MGI Symbol Acc MGI 1933438
G04	UPFM099940 7	ENSMUST00000 208090.1	Slc2a1	ENSMUSG00 000028645	solute carrier family 2 (facilitated glucose transporter), member 1 Source MGI Symbol Acc MGI 95755
G05	UPFM100859 5	ENSMUST00000 032476.10	Slc2a3	ENSMUSG00 000003153	solute carrier family 2 (facilitated glucose transporter), member 3 Source MGI Symbol Acc MGI 95757
G06	UPFM092163 1	ENSMUST00000 128285.1	Tfrc	ENSMUSG00 000022797	transferrin receptor Source MGI Symbol Acc MGI 98822
G07	UPFM078671 6	ENSMUST00000 172132.8	Tpi1	ENSMUSG00 000023456	triosephosphate isomerase 1 Source MGI Symbol Acc MGI 98797
G08	UPFM066913 3	ENSMUST00000 171247.7	Trp53	ENSMUSG00 000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G09	UPFM067128 4	ENSMUST00000 074519.12	Txnip	ENSMUSG00 000038393	thioredoxin interacting protein Source MGI Symbol Acc MGI 1889549
G10	UPFM085829 8	ENSMUST00000 166340.1	Usf2	ENSMUSG00 000058239	upstream transcription factor 2 Source MGI Symbol Acc MGI 99961
G11	UPFM095880 1	ENSMUST00000 020673.2	Vdac1	ENSMUSG00 000020402	voltage-dependent anion channel 1 Source MGI Symbol Acc MGI 106919
G12	UPFM117296 6	ENSMUST00000 214739.1	Vegfa	ENSMUSG00 000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
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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