

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

Mouse Amino Acid Metabolism I

Cat. no. 249955 UPMM-129ZA

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	Aadat	Aanat	Aoc1	Acadm	Acat1	Acmsd	Acy1	Adil1	Agmat	Ahcy	Aldh18a1	Aldh4a1
B	Aldh9a1	Amd1	Aox1	Apip	Arg2	Asl	Ass1	Auh	Bcat2	Bckdha	Bhmt	Cad
C	Cat	Cbs	Cdo1	Ckb	Cps1	Cfh	Cyp11b1	Dao	Dbt	Ddc	Dld	Dnmt1
D	Ehadh	Enoph1	Gamt	Gatm	Gcdh	Gfpt1	Gls	Glud1	Gof2	Haoa	Hmgcl	Hmgcs1
E	Ido1	Inmt	Ivd	Kmo	Kynu	Lap3	Lars	Ldha	Maob	Mat1a	Mccc2	Mpst
F	Mtap	Mtr	Nags	Nit2	Nos2	Oat	Odc1	Ogdhl	Otc	Oxct2a	P4ha1	Pdhb
G	Ppat	Prodh	Prodh2	Pycr1	Pycr1	Sat1	Sds	Srm	Tat	Tdo2	Tph2	Wars
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	UPFM0681590	ENSMUST00000211032.1	Aadat	ENSMUSG0000057228	aminoadipate aminotransferase Source MGI Symbol Acc MGI 1345167
A02	UPFM0704456	ENSMUST00000153476.7	Aanat	ENSMUSG0000020804	arylalkylamine N-acetyltransferase Source MGI Symbol Acc MGI 1328365
A03	UPFM0684395	ENSMUST00000162948.6	Aoc1	ENSMUSG0000029811	amine oxidase, copper-containing 1 Source MGI Symbol Acc MGI 1923757
A04	UPFM0708330	ENSMUST00000199342.1	Acadm	ENSMUSG0000062908	acyl-Coenzyme A dehydrogenase, medium chain Source MGI Symbol Acc MGI 87867
A05	UPFM0909781	ENSMUST00000169317.1	Acat1	ENSMUSG0000032047	acetyl-Coenzyme A acetyltransferase 1 Source MGI Symbol Acc MGI 87870
A06	UPFM0657023	ENSMUST00000038006.7	Acmsd	ENSMUSG0000026348	amino carboxymuconate semialdehyde decarboxylase Source MGI Symbol Acc MGI 2386323
A07	UPFM0923886	ENSMUST00000187324.7	Acy1	ENSMUSG0000023262	aminoacylase 1 Source MGI Symbol Acc MGI 87913
A08	UPFM0961914	ENSMUST00000138081.1	Adi1	ENSMUSG0000020629	acireductone dioxygenase 1 Source MGI Symbol Acc MGI 2144929
A09	UPFM0792375	ENSMUST00000038161.4	Agmat	ENSMUSG0000040706	agmatine ureohydrolase (agmatinase) Source MGI Symbol Acc MGI 1923236
A10	UPFM0978861	ENSMUST00000137242.1	Ahcy	ENSMUSG0000027597	S-adenosylhomocysteine hydrolase Source MGI Symbol Acc MGI 87968
A11	UPFM0785821	ENSMUST00000134749.7	Aldh18a1	ENSMUSG0000025007	aldehyde dehydrogenase 18 family, member A1 Source MGI Symbol Acc MGI 1888908
A12	UPFM1007086	ENSMUST00000146309.7	Aldh4a1	ENSMUSG0000028737	aldehyde dehydrogenase 4 family, member A1 Source MGI Symbol Acc MGI 2443883
B01	UPFM0817350	ENSMUST00000191715.1	Aldh9a1	ENSMUSG0000026687	aldehyde dehydrogenase 9, subfamily A1 Source MGI Symbol Acc MGI 1861622
B02	UPFM0991766	ENSMUST00000214698.1	Amd1	ENSMUSG0000075232	S-adenosylmethionine decarboxylase 1 Source MGI Symbol Acc MGI 88004
B03	UPFM0826891	ENSMUST00000001027.6	Aox1	ENSMUSG0000063558	aldehyde oxidase 1 Source MGI Symbol Acc MGI 88035
B04	UPFM0899928	ENSMUST00000011055.6	Apip	ENSMUSG0000010911	APAF1 interacting protein Source MGI Symbol Acc MGI 1926788
B05	UPFM0700491	ENSMUST00000021550.6	Arg2	ENSMUSG0000021125	arginase type II Source MGI Symbol Acc MGI 1330806
B06	UPFM0861631	ENSMUST00000159619.7	Asl	ENSMUSG0000025533	argininosuccinate lyase Source MGI Symbol Acc MGI 88084
B07	UPFM0894617	ENSMUST00000130195.1	Ass1	ENSMUSG0000076441	argininosuccinate synthetase 1 Source MGI Symbol Acc MGI 88090
B08	UPFM0764061	ENSMUST00000110031.3	Auh	ENSMUSG0000021460	AU RNA binding protein/enoyl-coenzyme A hydratase Source MGI Symbol Acc MGI 1338011
B09	UPFM0852126	ENSMUST00000209204.1	Bcat2	ENSMUSG0000030826	branched chain aminotransferase 2, mitochondrial Source MGI Symbol Acc MGI 1276534
B10	UPFM0843818	ENSMUST00000205808.1	Bckdha	ENSMUSG0000060376	branched chain ketoacid dehydrogenase E1, alpha polypeptide Source MGI Symbol Acc MGI 107701
B11	UPFM0752582	ENSMUST00000124193.1	Bhmt	ENSMUSG0000074768	betaine-homocysteine methyltransferase Source MGI Symbol Acc MGI 1339972
B12	UPFM0885559	ENSMUST00000201844.1	Cad	ENSMUSG0000013629	carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase Source MGI Symbol Acc MGI 1916969
C01	UPFM0992839	ENSMUST00000028610.9	Cat	ENSMUSG0000027187	catalase Source MGI Symbol Acc MGI 88271
C02	UPFM0969024	ENSMUST00000151718.2	Cbs	ENSMUSG0000024039	cystathionine beta-synthase Source MGI Symbol Acc MGI 88285
C03	UPFM0899361	ENSMUST00000035804.8	Cdo1	ENSMUSG0000033022	cysteine dioxygenase 1, cytosolic Source MGI Symbol Acc MGI 105925
C04	UPFM1004939	ENSMUST00000001304.8	Ckb	ENSMUSG0000001270	creatine kinase, brain Source MGI Symbol Acc MGI 88407
C05	UPFM0986322	ENSMUST00000027144.7	Cps1	ENSMUSG0000025991	carbamoyl-phosphate synthetase 1 Source MGI Symbol Acc MGI 891996
C06	UPFM0671241	ENSMUST00000118539.1	Cth	ENSMUSG0000028179	cystathionase (cystathionine gamma-lyase) Source MGI Symbol Acc MGI 1339968
C07	UPFM1126300	ENSMUST00000234361.1	Cyp1b1	ENSMUSG0000024087	cytochrome P450, family 1, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 88590
C08	UPFM0830705	ENSMUST00000161610.5	Dao	ENSMUSG0000042096	D-amino acid oxidase Source MGI Symbol Acc MGI 94859
C09	UPFM0883519	ENSMUST00000196376.1	Dbt	ENSMUSG0000000340	dihydrolipoamide branched chain transacylase E2 Source MGI Symbol Acc MGI 105386
C10	UPFM0945518	ENSMUST00000136810.7	Ddc	ENSMUSG0000020182	dopa decarboxylase Source MGI Symbol Acc MGI 94876
	UPFM062966	ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	1	218624.1	Dld	000020664	dihydrolipoamide dehydrogenase Source MGI Symbol Acc MGI 107450
C12	UPFM079807 4	ENSMUST00000 178110.2	Dnmt1	ENSMUSG00 000004099	DNA methyltransferase (cytosine-5) 1 Source MGI Symbol Acc MGI 94912
D01	UPFM074886 8	ENSMUST00000 023559.6	Ehhadh	ENSMUSG00 000022853	enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase Source MGI Symbol Acc MGI 1277964
D02	UPFM071391 9	ENSMUST00000 200223.1	Enoph1	ENSMUSG00 000029326	enolase-phosphatase 1 Source MGI Symbol Acc MGI 1915120
D03	UPFM079058 3	ENSMUST00000 020359.6	Gamt	ENSMUSG00 000020150	guanidinoacetate methyltransferase Source MGI Symbol Acc MGI 1098221
D04	UPFM067739 3	ENSMUST00000 154598.7	Gatm	ENSMUSG00 000027199	glycine amidinotransferase (L-arginine glycine amidinotransferase) Source MGI Symbol Acc MGI 1914342
D05	UPFM064602 3	ENSMUST00000 003907.13	Gcdh	ENSMUSG00 000003809	glutaryl-Coenzyme A dehydrogenase Source MGI Symbol Acc MGI 104541
D06	UPFM064103 6	ENSMUST00000 113658.7	Gfpt1	ENSMUSG00 000029992	glutamine fructose-6-phosphate transaminase 1 Source MGI Symbol Acc MGI 95698
D07	UPFM069608 4	ENSMUST00000 114509.7	Gls	ENSMUSG00 000026103	glutaminase Source MGI Symbol Acc MGI 95752
D08	UPFM081670 0	ENSMUST00000 022322.16	Glud1	ENSMUSG00 000021794	glutamate dehydrogenase 1 Source MGI Symbol Acc MGI 95753
D09	UPFM095098 2	ENSMUST00000 034097.7	Got2	ENSMUSG00 000031672	glutamatic-oxaloacetic transaminase 2, mitochondrial Source MGI Symbol Acc MGI 95792
D10	UPFM074391 2	ENSMUST00000 006687.8	Haa0	ENSMUSG00 000000673	3-hydroxyanthranilate 3,4-dioxygenase Source MGI Symbol Acc MGI 1349444
D11	UPFM097431 1	ENSMUST00000 151879.1	Hmgcl	ENSMUSG00 000028672	3-hydroxy-3-methylglutaryl-Coenzyme A lyase Source MGI Symbol Acc MGI 96158
D12	UPFM112650 6	ENSMUST00000 224188.1	Hmgcs1	ENSMUSG00 000093930	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1 Source MGI Symbol Acc MGI 107592
E01	UPFM088098 3	ENSMUST00000 110667.7	Ido1	ENSMUSG00 000031551	indoleamine 2,3-dioxygenase 1 Source MGI Symbol Acc MGI 96416
E02	UPFM096447 1	ENSMUST00000 003569.5	Inmt	ENSMUSG00 000003477	indolethylamine N-methyltransferase Source MGI Symbol Acc MGI 102963
E03	UPFM086483 3	ENSMUST00000 028807.5	Ivd	ENSMUSG00 000027332	isovaleryl coenzyme A dehydrogenase Source MGI Symbol Acc MGI 1929242
E04	UPFM075401 4	ENSMUST00000 140474.7	Kmo	ENSMUSG00 000039783	kynurenine 3-monoxygenase (kynurenine 3-hydroxylase) Source MGI Symbol Acc MGI 2138151
E05	UPFM091160 2	ENSMUST00000 028223.8	Kynu	ENSMUSG00 000026866	kynureninase Source MGI Symbol Acc MGI 1918039
E06	UPFM094372 5	ENSMUST00000 135413.7	Lap3	ENSMUSG00 000039682	leucine aminopeptidase 3 Source MGI Symbol Acc MGI 1914238
E07	UPFM084317 3	ENSMUST00000 236304.1	Lars	ENSMUSG00 000024493	leucyl-tRNA synthetase Source MGI Symbol Acc MGI 1913808
E08	UPFM085535 7	ENSMUST00000 125862.7	Ldha	ENSMUSG00 000063229	lactate dehydrogenase A Source MGI Symbol Acc MGI 96759
E09	UPFM070987 7	ENSMUST00000 040820.12	Maob	ENSMUSG00 000040147	monoamine oxidase B Source MGI Symbol Acc MGI 96916
E10	UPFM085398 7	ENSMUST00000 225720.1	Mat1a	ENSMUSG00 000037798	methionine adenosyltransferase I, alpha Source MGI Symbol Acc MGI 88017
E11	UPFM089951 0	ENSMUST00000 221034.1	Mccc2	ENSMUSG00 000021646	methylcrotonoyl-Coenzyme A carboxylase 2 (beta) Source MGI Symbol Acc MGI 1925288
E12	UPFM067504 3	ENSMUST00000 043865.7	Mpst	ENSMUSG00 000071711	mercaptopyruvate sulfurtransferase Source MGI Symbol Acc MGI 2179733
F01	UPFM083899 2	ENSMUST00000 058030.9	Mtap	ENSMUSG00 000062937	methylthioadenosine phosphorylase Source MGI Symbol Acc MGI 1914152
F02	UPFM075250 5	ENSMUST00000 220473.1	Mtr	ENSMUSG00 000021311	5-methyltetrahydrofolate-homocysteine methyltransferase Source MGI Symbol Acc MGI 894292
F03	UPFM084356 1	ENSMUST00000 129799.7	Nags	ENSMUSG00 000048217	N-acetylglutamate synthase Source MGI Symbol Acc MGI 2387600
F04	UPFM094795 6	ENSMUST00000 231423.1	Nit2	ENSMUSG00 000022751	nitrilase family, member 2 Source MGI Symbol Acc MGI 1261838
F05	UPFM076964 2	ENSMUST00000 208783.1	Nos2	ENSMUSG00 000020826	nitric oxide synthase 2, inducible Source MGI Symbol Acc MGI 97361
F06	UPFM090004 3	ENSMUST00000 084500.7	Oat	ENSMUSG00 000030934	ornithine aminotransferase Source MGI Symbol Acc MGI 97394
F07	UPFM075025 3	ENSMUST00000 222617.1	Odc1	ENSMUSG00 000011179	ornithine decarboxylase, structural 1 Source MGI Symbol Acc MGI 97402
F08	UPFM089667 6	ENSMUST00000 228529.1	Ogdhl	ENSMUSG00 000021913	oxoglutarate dehydrogenase-like Source MGI Symbol Acc MGI 3616088
F09	UPFM092928 3	ENSMUST00000 115528.2	Otc	ENSMUSG00 000031173	ornithine transcarbamylase Source MGI Symbol Acc MGI 97448
F10	UPFM087585 7	ENSMUST00000 102640.1	Oxct2a	ENSMUSG00 000076436	3-oxoacid CoA transferase 2A Source MGI Symbol Acc MGI 1891061

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	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
F12	UPFM066502 2	ENSMUST00000 022268.9	Pdhb	ENSMUSG00 000021748	pyruvate dehydrogenase (lipoamide) beta Source MGI Symbol Acc MGI 1915513
G01	UPFM096178 7	ENSMUST00000 031158.8	Ppat	ENSMUSG00 000029246	phosphoribosyl pyrophosphate amidotransferase Source MGI Symbol Acc MGI 2387203
G02	UPFM087449 7	ENSMUST00000 123969.2	Prodh	ENSMUSG00 000003526	proline dehydrogenase Source MGI Symbol Acc MGI 97770
G03	UPFM084524 2	ENSMUST00000 142514.7	Prodh2	ENSMUSG00 000036892	proline dehydrogenase (oxidase) 2 Source MGI Symbol Acc MGI 1929093
G04	UPFM070862 2	ENSMUST00000 139706.1	Pycr1	ENSMUSG00 000025140	pyrroline-5-carboxylate reductase 1 Source MGI Symbol Acc MGI 2384795
G05	UPFM087592 0	ENSMUST00000 053918.8	Pycr1	ENSMUSG00 000022571	pyrroline-5-carboxylate reductase-like Source MGI Symbol Acc MGI 1913444
G06	UPFM071658 6	ENSMUST00000 026318.14	Sat1	ENSMUSG00 000025283	spermidine/spermine N1-acetyl transferase 1 Source MGI Symbol Acc MGI 98233
G07	UPFM069694 8	ENSMUST00000 066540.13	Sds	ENSMUSG00 000029597	serine dehydratase Source MGI Symbol Acc MGI 98270
G08	UPFM073885 4	ENSMUST00000 006611.8	Srm	ENSMUSG00 000006442	spermidine synthase Source MGI Symbol Acc MGI 102690
G09	UPFM091477 0	ENSMUST00000 143741.1	Tat	ENSMUSG00 000001670	tyrosine aminotransferase Source MGI Symbol Acc MGI 98487
G10	UPFM079062 1	ENSMUST00000 137974.1	Tdo2	ENSMUSG00 000028011	tryptophan 2,3-dioxygenase Source MGI Symbol Acc MGI 1928486
G11	UPFM086949 9	ENSMUST00000 006949.8	Tph2	ENSMUSG00 000006764	tryptophan hydroxylase 2 Source MGI Symbol Acc MGI 2651811
G12	UPFM080063 1	ENSMUST00000 160477.7	Wars	ENSMUSG00 000021266	tryptophanyl-tRNA synthetase Source MGI Symbol Acc MGI 104630
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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