

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

Mouse Fatty Acid Metabolism

Cat. no. 249955 UPMM-007ZA

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	Acaa1a	Acaa2	Acad10	Acad11	Acad9	Acadl	Acadm	Acads	Acadsb	Acadvl	Acat1	Acat2
B	Acat12	Acat2	Acat3	Acat6	Acat7	Acat8	Acat9	Acox1	Acox2	Acox3	Acsbg1	Acsbg2
C	Acs1	Acs3	Acs4	Acs5	Acs6	Acsm2	Acsm3	Acsm4	Acsm5	Aldh2	Bdh1	Bdh2
D	Cpt1a	Cpt1b	Cpt1c	Cpt2	Crot	Crot	Decr1	Decr2	Echs1	Eci2	Ehhadh	Fabp1
E	Fabp2	Fabp3	Fabp4	Fabp5	Fabp6	Gcdh	Gk2	Gpd1	Gpd2	Gk	Hadha	Hmgcl
F	Hmgcs1	Hmgcs2	Lipe	Lpl	Mcee	Mut	Oxcl2a	Pecr	Ppa1	Prkaa1	Prkaa2	Prkab1
G	Prkab2	Prkaca	Prkacb	Prkag1	Prkag2	Prkag3	Slc27a1	Slc27a2	Slc27a3	Slc27a4	Slc27a5	Slc27a6
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	UPFM072219 1	ENSMUST00000 176397.7	Acaa1a	ENSMUSG00 000036138	acetyl-Coenzyme A acyltransferase 1A Source MGI Symbol Acc MGI 2148491
A02	UPFM081199 2	ENSMUST00000 041053.10	Acaa2	ENSMUSG00 000036880	acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase) Source MGI Symbol Acc MGI 1098623
A03	UPFM079324 7	ENSMUST00000 111770.1	Acad10	ENSMUSG00 000029456	acyl-Coenzyme A dehydrogenase family, member 10 Source MGI Symbol Acc MGI 1919235
A04	UPFM076427 9	ENSMUST00000 189998.2	Acad11	ENSMUSG00 000090150	acyl-Coenzyme A dehydrogenase family, member 11 Source MGI Symbol Acc MGI 2143169
A05	UPFM084723 0	ENSMUST00000 011492.14	Acad9	ENSMUSG00 000027710	acyl-Coenzyme A dehydrogenase family, member 9 Source MGI Symbol Acc MGI 1914272
A06	UPFM092091 0	ENSMUST00000 139208.1	Acadl	ENSMUSG00 000026003	acyl-Coenzyme A dehydrogenase, long-chain Source MGI Symbol Acc MGI 87866
A07	UPFM070833 0	ENSMUST00000 199342.1	Acadm	ENSMUSG00 000062908	acyl-Coenzyme A dehydrogenase, medium chain Source MGI Symbol Acc MGI 87867
A08	UPFM065623 5	ENSMUST00000 031524.10	Acads	ENSMUSG00 000029545	acyl-Coenzyme A dehydrogenase, short chain Source MGI Symbol Acc MGI 87868
A09	UPFM080098 3	ENSMUST00000 151995.1	Acadsb	ENSMUSG00 000030861	acyl-Coenzyme A dehydrogenase, short/branched chain Source MGI Symbol Acc MGI 1914135
A10	UPFM090580 7	ENSMUST00000 137187.7	Acadvl	ENSMUSG00 000018574	acyl-Coenzyme A dehydrogenase, very long chain Source MGI Symbol Acc MGI 895149
A11	UPFM090978 1	ENSMUST00000 169317.1	Acat1	ENSMUSG00 000032047	acetyl-Coenzyme A acetyltransferase 1 Source MGI Symbol Acc MGI 87870
A12	UPFM064865 6	ENSMUST00000 007005.13	Acat2	ENSMUSG00 000023832	acetyl-Coenzyme A acetyltransferase 2 Source MGI Symbol Acc MGI 87871
B01	UPFM080199 5	ENSMUST00000 159214.1	Acot12	ENSMUSG00 000021620	acyl-CoA thioesterase 12 Source MGI Symbol Acc MGI 1921406
B02	UPFM090075 1	ENSMUST00000 021649.7	Acot2	ENSMUSG00 000021226	acyl-CoA thioesterase 2 Source MGI Symbol Acc MGI 2159605
B03	UPFM065612 0	ENSMUST00000 223080.1	Acot3	ENSMUSG00 000021228	acyl-CoA thioesterase 3 Source MGI Symbol Acc MGI 2159619
B04	UPFM085215 6	ENSMUST00000 056822.3	Acot6	ENSMUSG00 000043487	acyl-CoA thioesterase 6 Source MGI Symbol Acc MGI 1921287
B05	UPFM093702 5	ENSMUST00000 075363.9	Acot7	ENSMUSG00 000028937	acyl-CoA thioesterase 7 Source MGI Symbol Acc MGI 1917275
B06	UPFM112616 6	ENSMUST00000 103094.10	Acot8	ENSMUSG00 000017307	acyl-CoA thioesterase 8 Source MGI Symbol Acc MGI 2158201
B07	UPFM076365 7	ENSMUST00000 026324.9	Acot9	ENSMUSG00 000025287	acyl-CoA thioesterase 9 Source MGI Symbol Acc MGI 1928939
B08	UPFM092748 8	ENSMUST00000 066587.11	Acox1	ENSMUSG00 000020777	acyl-Coenzyme A oxidase 1, palmitoyl Source MGI Symbol Acc MGI 1330812
B09	UPFM069263 2	ENSMUST00000 164412.1	Acox2	ENSMUSG00 000021751	acyl-Coenzyme A oxidase 2, branched chain Source MGI Symbol Acc MGI 1934852
B10	UPFM094395 0	ENSMUST00000 154796.1	Acox3	ENSMUSG00 000029098	acyl-Coenzyme A oxidase 3, pristanoyl Source MGI Symbol Acc MGI 1933156
B11	UPFM090672 9	ENSMUST00000 128163.7	Acsbg1	ENSMUSG00 000032281	acyl-CoA synthetase bubblegum family member 1 Source MGI Symbol Acc MGI 2385656
B12	UPFM071368 3	ENSMUST00000 043062.4	Acsbg2	ENSMUSG00 000024207	acyl-CoA synthetase bubblegum family member 2 Source MGI Symbol Acc MGI 3587728
C01	UPFM092757 2	ENSMUST00000 152423.1	Acs1	ENSMUSG00 000018796	acyl-CoA synthetase long-chain family member 1 Source MGI Symbol Acc MGI 102797
C02	UPFM069978 7	ENSMUST00000 134566.7	Acs13	ENSMUSG00 000032883	acyl-CoA synthetase long-chain family member 3 Source MGI Symbol Acc MGI 1921455
C03	UPFM092898 6	ENSMUST00000 112904.7	Acs14	ENSMUSG00 000031278	acyl-CoA synthetase long-chain family member 4 Source MGI Symbol Acc MGI 1354713
C04	UPFM081585 1	ENSMUST00000 224414.1	Acs15	ENSMUSG00 000024981	acyl-CoA synthetase long-chain family member 5 Source MGI Symbol Acc MGI 1919129
C05	UPFM083975 6	ENSMUST00000 093106.11	Acs16	ENSMUSG00 000020333	acyl-CoA synthetase long-chain family member 6 Source MGI Symbol Acc MGI 894291
C06	UPFM090775 8	ENSMUST00000 208019.1	Acsm2	ENSMUSG00 000030945	acyl-CoA synthetase medium-chain family member 2 Source MGI Symbol Acc MGI 2385289
C07	UPFM063933 6	ENSMUST00000 149598.1	Acsm3	ENSMUSG00 000030935	acyl-CoA synthetase medium-chain family member 3 Source MGI Symbol Acc MGI 99538
C08	UPFM082835 5	ENSMUST00000 047045.9	Acsm4	ENSMUSG00 000047026	acyl-CoA synthetase medium-chain family member 4 Source MGI Symbol Acc MGI 2681844
C09	UPFM066635 5	ENSMUST00000 207307.1	Acsm5	ENSMUSG00 000030972	acyl-CoA synthetase medium-chain family member 5 Source MGI Symbol Acc MGI 2444086
C10	UPFM066581 7	ENSMUST00000 200541.4	Aldh2	ENSMUSG00 000029455	aldehyde dehydrogenase 2, mitochondrial Source MGI Symbol Acc MGI 99600
	UPFM067125	ENSMUST00000		ENSMUSG00	3-hydroxybutyrate dehydrogenase, type 1 Source MGI Symbol Acc MGI

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	3	115226.7	Bdh1	000046598	1919161
C12	UPFM070870 4	ENSMUST00000 120397.7	Bdh2	ENSMUSG00 000028167	3-hydroxybutyrate dehydrogenase, type 2 Source MGI Symbol Acc MGI 1917022
D01	UPFM066697 5	ENSMUST00000 238027.1	Cpt1a	ENSMUSG00 000024900	carnitine palmitoyltransferase 1a, liver Source MGI Symbol Acc MGI 1098296
D02	UPFM095459 9	ENSMUST00000 109313.8	Cpt1b	ENSMUSG00 000078937	carnitine palmitoyltransferase 1b, muscle Source MGI Symbol Acc MGI 1098297
D03	UPFM100258 2	ENSMUST00000 212836.1	Cpt1c	ENSMUSG00 000007783	carnitine palmitoyltransferase 1c Source MGI Symbol Acc MGI 2446526
D04	UPFM091584 0	ENSMUST00000 106720.8	Cpt2	ENSMUSG00 000028607	carnitine palmitoyltransferase 2 Source MGI Symbol Acc MGI 109176
D05	UPFM084928 9	ENSMUST00000 102855.7	Crat	ENSMUSG00 000026853	carnitine acetyltransferase Source MGI Symbol Acc MGI 109501
D06	UPFM067588 9	ENSMUST00000 003720.4	Crot	ENSMUSG00 000003623	carnitine O-octanoyltransferase Source MGI Symbol Acc MGI 1921364
D07	UPFM087464 6	ENSMUST00000 029877.8	Decr1	ENSMUSG00 000028223	2,4-dienoyl CoA reductase 1, mitochondrial Source MGI Symbol Acc MGI 1914710
D08	UPFM070169 7	ENSMUST00000 040907.7	Decr2	ENSMUSG00 000036775	2-4-dienoyl-Coenzyme A reductase 2, peroxisomal Source MGI Symbol Acc MGI 1347059
D09	UPFM076024 6	ENSMUST00000 155647.1	Echs1	ENSMUSG00 000025465	enoyl Coenzyme A hydratase, short chain, 1, mitochondrial Source MGI Symbol Acc MGI 2136460
D10	UPFM099501 2	ENSMUST00000 167036.7	Eci2	ENSMUSG00 000021417	enoyl-Coenzyme A delta isomerase 2 Source MGI Symbol Acc MGI 1346064
D11	UPFM074886 8	ENSMUST00000 023559.6	Ehhadh	ENSMUSG00 000022853	enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase Source MGI Symbol Acc MGI 1277964
D12	UPFM072777 3	ENSMUST00000 067492.7	Fabp1	ENSMUSG00 000054422	fatty acid binding protein 1, liver Source MGI Symbol Acc MGI 95479
E01	UPFM067950 1	ENSMUST00000 023820.5	Fabp2	ENSMUSG00 000023057	fatty acid binding protein 2, intestinal Source MGI Symbol Acc MGI 95478
E02	UPFM081597 3	ENSMUST00000 070532.7	Fabp3	ENSMUSG00 000028773	fatty acid binding protein 3, muscle and heart Source MGI Symbol Acc MGI 95476
E03	UPFM075438 9	ENSMUST00000 029041.5	Fabp4	ENSMUSG00 000062515	fatty acid binding protein 4, adipocyte Source MGI Symbol Acc MGI 88038
E04	UPFM090793 9	ENSMUST00000 123744.1	Fabp5	ENSMUSG00 000027533	fatty acid binding protein 5, epidermal Source MGI Symbol Acc MGI 101790
E05	UPFM080497 8	ENSMUST00000 020672.4	Fabp6	ENSMUSG00 000020405	fatty acid binding protein 6 Source MGI Symbol Acc MGI 96565
E06	UPFM064602 3	ENSMUST00000 003907.13	Gcdh	ENSMUSG00 000003809	glutaryl-Coenzyme A dehydrogenase Source MGI Symbol Acc MGI 104541
E07	UPFM062058 2	ENSMUST00000 059657.3	Gk2	ENSMUSG00 000050553	glycerol kinase 2 Source MGI Symbol Acc MGI 1329027
E08	UPFM084379 3	ENSMUST00000 162194.1	Gpd1	ENSMUSG00 000023019	glycerol-3-phosphate dehydrogenase 1 (soluble) Source MGI Symbol Acc MGI 95679
E09	UPFM099799 8	ENSMUST00000 112618.8	Gpd2	ENSMUSG00 000026827	glycerol phosphate dehydrogenase 2, mitochondrial Source MGI Symbol Acc MGI 99778
E10	UPFM097380 1	ENSMUST00000 026039.14	Gk	ENSMUSG00 000025059	glycerol kinase Source MGI Symbol Acc MGI 106594
E11	UPFM078680 9	ENSMUST00000 197491.4	Hadha	ENSMUSG00 000025745	hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), alpha subunit Source MGI Symbol Acc MGI 2135593
E12	UPFM097431 1	ENSMUST00000 151879.1	Hmgcl	ENSMUSG00 000028672	3-hydroxy-3-methylglutaryl-Coenzyme A lyase Source MGI Symbol Acc MGI 96158
F01	UPFM112650 6	ENSMUST00000 224188.1	Hmgcs1	ENSMUSG00 000093930	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1 Source MGI Symbol Acc MGI 107592
F02	UPFM062712 5	ENSMUST00000 090746.2	Hmgcs2	ENSMUSG00 000027875	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 2 Source MGI Symbol Acc MGI 101939
F03	UPFM099108 5	ENSMUST00000 206861.1	Lipe	ENSMUSG00 000003123	lipase, hormone sensitive Source MGI Symbol Acc MGI 96790
F04	UPFM082678 7	ENSMUST00000 169749.1	Lpl	ENSMUSG00 000015568	lipoprotein lipase Source MGI Symbol Acc MGI 96820
F05	UPFM088952 7	ENSMUST00000 206194.1	Mcee	ENSMUSG00 000033429	methylmalonyl CoA epimerase Source MGI Symbol Acc MGI 1920974
F06	UPFM068742 5	ENSMUST00000 169611.3	Mut	ENSMUSG00 000023921	methylmalonyl-Coenzyme A mutase Source MGI Symbol Acc MGI 97239
F07	UPFM087585 7	ENSMUST00000 102640.1	Oxct2a	ENSMUSG00 000076436	3-oxoacid CoA transferase 2A Source MGI Symbol Acc MGI 1891061
F08	UPFM091033 3	ENSMUST00000 134840.7	Pecr	ENSMUSG00 000026189	peroxisomal trans-2-enoyl-CoA reductase Source MGI Symbol Acc MGI 2148199
F09	UPFM087426 1	ENSMUST00000 160607.1	Ppa1	ENSMUSG00 000020089	pyrophosphatase (inorganic) 1 Source MGI Symbol Acc MGI 97831
F10	UPFM089479	ENSMUST00000	Prkaa1	ENSMUSG00	protein kinase, AMP-activated, alpha 1 catalytic subunit Source MGI Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
	8	228218.1		000050697	MGI 2145955
F11	UPFM076091 8	ENSMUST00000 030243.7	Prkaa2	ENSMUSG00 000028518	protein kinase, AMP-activated, alpha 2 catalytic subunit Source MGI Symbol Acc MGI 1336173
F12	UPFM086994 2	ENSMUST00000 133098.8	Prkab1	ENSMUSG00 000029513	protein kinase, AMP-activated, beta 1 non-catalytic subunit Source MGI Symbol Acc MGI 1336167
G01	UPFM073071 8	ENSMUST00000 143927.7	Prkab2	ENSMUSG00 000038205	protein kinase, AMP-activated, beta 2 non-catalytic subunit Source MGI Symbol Acc MGI 1336185
G02	UPFM091850 5	ENSMUST00000 211558.1	Prkaca	ENSMUSG00 000005469	protein kinase, cAMP dependent, catalytic, alpha Source MGI Symbol Acc MGI 97592
G03	UPFM077653 7	ENSMUST00000 197616.1	Prkacb	ENSMUSG00 000005034	protein kinase, cAMP dependent, catalytic, beta Source MGI Symbol Acc MGI 97594
G04	UPFM086361 1	ENSMUST00000 230560.1	Prkag1	ENSMUSG00 000067713	protein kinase, AMP-activated, gamma 1 non-catalytic subunit Source MGI Symbol Acc MGI 108411
G05	UPFM081592 7	ENSMUST00000 114975.7	Prkag2	ENSMUSG00 000028944	protein kinase, AMP-activated, gamma 2 non-catalytic subunit Source MGI Symbol Acc MGI 1336153
G06	UPFM079657 6	ENSMUST00000 081636.12	Prkag3	ENSMUSG00 000006542	protein kinase, AMP-activated, gamma 3 non-catalytic subunit Source MGI Symbol Acc MGI 1891343
G07	UPFM084460 3	ENSMUST00000 212211.1	Slc27a1	ENSMUSG00 000031808	solute carrier family 27 (fatty acid transporter), member 1 Source MGI Symbol Acc MGI 1347098
G08	UPFM100115 4	ENSMUST00000 141482.2	Slc27a2	ENSMUSG00 000027359	solute carrier family 27 (fatty acid transporter), member 2 Source MGI Symbol Acc MGI 1347099
G09	UPFM091071 2	ENSMUST00000 144572.7	Slc27a3	ENSMUSG00 000027932	solute carrier family 27 (fatty acid transporter), member 3 Source MGI Symbol Acc MGI 1347358
G10	UPFM091509 2	ENSMUST00000 080065.2	Slc27a4	ENSMUSG00 000059316	solute carrier family 27 (fatty acid transporter), member 4 Source MGI Symbol Acc MGI 1347347
G11	UPFM066716 0	ENSMUST00000 133977.2	Slc27a5	ENSMUSG00 000030382	solute carrier family 27 (fatty acid transporter), member 5 Source MGI Symbol Acc MGI 1347100
G12	UPFM090698 2	ENSMUST00000 025500.6	Slc27a6	ENSMUSG00 000024600	solute carrier family 27 (fatty acid transporter), member 6 Source MGI Symbol Acc MGI 3036230
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	QuantNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantNova 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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