

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

Mouse Fatty Acid Metabolism

Cat. no. 249950 SBMM-007ZA

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA PCR Focus Panels are shipped at ambient temperature. Immediately upon receipt, they should be stored 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 PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova SYBR® Green PCR Kit (Mastermix) for PCR.

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

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. Refer to the QuantiNova LNA PCR System 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	Acadslb	Acadvl	Acat1	Acat2
B	Acat12	Acat2	Acat3	Acat6	Acat7	Acat8	Acat9	Acax1	Acax2	Acax3	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	Oxct2a	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 PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBM0891536	ENSMUST00000039784.11	Acaa1a	ENSMUSG0000036138	acetyl-Coenzyme A acyltransferase 1A Source MGI Symbol Acc MGI 2148491
A02	SBM0980968	ENSMUST00000041053.10	Acaa2	ENSMUSG0000036880	acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase) Source MGI Symbol Acc MGI 1098623
A03	SBM0799765	ENSMUST00000133775.7	Acad10	ENSMUSG0000029456	acyl-Coenzyme A dehydrogenase family, member 10 Source MGI Symbol Acc MGI 1919235
A04	SBM1061324	ENSMUST00000154431.1	Acad11	ENSMUSG0000090150	acyl-Coenzyme A dehydrogenase family, member 11 Source MGI Symbol Acc MGI 2143169
A05	SBM0683976	ENSMUST00000195896.4	Acad9	ENSMUSG0000027710	acyl-Coenzyme A dehydrogenase family, member 9 Source MGI Symbol Acc MGI 1914272
A06	SBM0841065	ENSMUST00000027153.5	Acadl	ENSMUSG0000026003	acyl-Coenzyme A dehydrogenase, long-chain Source MGI Symbol Acc MGI 87866
A07	SBM0928276	ENSMUST00000156310.1	Acadm	ENSMUSG0000062908	acyl-Coenzyme A dehydrogenase, medium chain Source MGI Symbol Acc MGI 87867
A08	SBM0721433	ENSMUST00000131726.7	Acads	ENSMUSG0000029545	acyl-Coenzyme A dehydrogenase, short chain Source MGI Symbol Acc MGI 87868
A09	SBM0949271	ENSMUST00000117518.1	Acadsb	ENSMUSG0000030861	acyl-Coenzyme A dehydrogenase, short/branched chain Source MGI Symbol Acc MGI 1914135
A10	SBM1038802	ENSMUST00000137187.7	Acadvl	ENSMUSG0000018574	acyl-Coenzyme A dehydrogenase, very long chain Source MGI Symbol Acc MGI 895149
A11	SBM0848017	ENSMUST00000034547.5	Acat1	ENSMUSG0000032047	acetyl-Coenzyme A acetyltransferase 1 Source MGI Symbol Acc MGI 87870
A12	SBM0672935	ENSMUST00000007005.13	Acat2	ENSMUSG0000023832	acetyl-Coenzyme A acetyltransferase 2 Source MGI Symbol Acc MGI 87871
B01	SBM0818126	ENSMUST00000161337.1	Acot12	ENSMUSG0000021620	acyl-CoA thioesterase 12 Source MGI Symbol Acc MGI 1921406
B02	SBM0974967	ENSMUST00000021649.7	Acot2	ENSMUSG0000021226	acyl-CoA thioesterase 2 Source MGI Symbol Acc MGI 2159605
B03	SBM0793826	ENSMUST00000223080.1	Acot3	ENSMUSG0000021228	acyl-CoA thioesterase 3 Source MGI Symbol Acc MGI 2159619
B04	SBM1048852	ENSMUST00000056822.3	Acot6	ENSMUSG0000043487	acyl-CoA thioesterase 6 Source MGI Symbol Acc MGI 1921287
B05	SBM0830083	ENSMUST00000167926.7	Acot7	ENSMUSG0000028937	acyl-CoA thioesterase 7 Source MGI Symbol Acc MGI 1917275
B06	SBM0797043	ENSMUST00000103094.10	Acot8	ENSMUSG0000017307	acyl-CoA thioesterase 8 Source MGI Symbol Acc MGI 2158201
B07	SBM0813199	ENSMUST00000026324.9	Acot9	ENSMUSG0000025287	acyl-CoA thioesterase 9 Source MGI Symbol Acc MGI 1928939
B08	SBM1069471	ENSMUST00000066587.11	Acox1	ENSMUSG0000020777	acyl-Coenzyme A oxidase 1, palmitoyl Source MGI Symbol Acc MGI 1330812
B09	SBM1069424	ENSMUST00000116361.2	Acox2	ENSMUSG0000021751	acyl-Coenzyme A oxidase 2, branched chain Source MGI Symbol Acc MGI 1934852
B10	SBM0895502	ENSMUST00000201106.2	Acox3	ENSMUSG0000029098	acyl-Coenzyme A oxidase 3, pristanoyl Source MGI Symbol Acc MGI 1933156
B11	SBM0802202	ENSMUST00000128163.7	Acsbg1	ENSMUSG0000032281	acyl-CoA synthetase bubblegum family member 1 Source MGI Symbol Acc MGI 2385656
B12	SBM0900367	ENSMUST00000043062.4	Acsbg2	ENSMUSG0000024207	acyl-CoA synthetase bubblegum family member 2 Source MGI Symbol Acc MGI 3587728
C01	SBM0793742	ENSMUST00000211644.1	Acs1	ENSMUSG0000018796	acyl-CoA synthetase long-chain family member 1 Source MGI Symbol Acc MGI 102797
C02	SBM0941480	ENSMUST00000142704.7	Acs13	ENSMUSG0000032883	acyl-CoA synthetase long-chain family member 3 Source MGI Symbol Acc MGI 1921455
C03	SBM0931597	ENSMUST00000033634.4	Acs14	ENSMUSG0000031278	acyl-CoA synthetase long-chain family member 4 Source MGI Symbol Acc MGI 1354713
C04	SBM0675306	ENSMUST00000043150.5	Acs15	ENSMUSG0000024981	acyl-CoA synthetase long-chain family member 5 Source MGI Symbol Acc MGI 1919129
C05	SBM0897511	ENSMUST00000108899.7	Acs16	ENSMUSG0000020333	acyl-CoA synthetase long-chain family member 6 Source MGI Symbol Acc MGI 894291
C06	SBM0798177	ENSMUST00000098084.10	Acsm2	ENSMUSG0000030945	acyl-CoA synthetase medium-chain family member 2 Source MGI Symbol Acc MGI 2385289
C07	SBM0904518	ENSMUST00000149598.1	Acsm3	ENSMUSG0000030935	acyl-CoA synthetase medium-chain family member 3 Source MGI Symbol Acc MGI 99538
C08	SBM0905265	ENSMUST00000047045.9	Acsm4	ENSMUSG0000047026	acyl-CoA synthetase medium-chain family member 4 Source MGI Symbol Acc MGI 2681844
C09	SBM0857950	ENSMUST00000207387.1	Acsm5	ENSMUSG0000030972	acyl-CoA synthetase medium-chain family member 5 Source MGI Symbol Acc MGI 2444086
C10	SBM0700925	ENSMUST00000129753.7	Aldh2	ENSMUSG0000029455	aldehyde dehydrogenase 2, mitochondrial Source MGI Symbol Acc MGI 99600
		ENSMUST000000		ENSMUSG00	3-hydroxybutyrate dehydrogenase, type 1 Source MGI Symbol Acc MGI

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0715369	149039.1	Bdh1	000046598	1919161
C12	SBM0693955	ENSMUST00000120397.7	Bdh2	ENSMUSG0000028167	3-hydroxybutyrate dehydrogenase, type 2 Source MGI Symbol Acc MGI 1917022
D01	SBM1029896	ENSMUST00000238027.1	Cpt1a	ENSMUSG0000024900	carnitine palmitoyltransferase 1a, liver Source MGI Symbol Acc MGI 1098296
D02	SBM0949787	ENSMUST00000109313.8	Cpt1b	ENSMUSG0000078937	carnitine palmitoyltransferase 1b, muscle Source MGI Symbol Acc MGI 1098297
D03	SBM0735655	ENSMUST00000212836.1	Cpt1c	ENSMUSG0000007783	carnitine palmitoyltransferase 1c Source MGI Symbol Acc MGI 2446526
D04	SBM0911444	ENSMUST00000030345.14	Cpt2	ENSMUSG0000028607	carnitine palmitoyltransferase 2 Source MGI Symbol Acc MGI 109176
D05	SBM0937309	ENSMUST00000028207.12	Crat	ENSMUSG0000026853	carnitine acetyltransferase Source MGI Symbol Acc MGI 109501
D06	SBM1023596	ENSMUST00000157024.1	Crot	ENSMUSG0000003623	carnitine O-octanoyltransferase Source MGI Symbol Acc MGI 1921364
D07	SBM0873361	ENSMUST00000029877.8	Decr1	ENSMUSG0000028223	2,4-dienoyl CoA reductase 1, mitochondrial Source MGI Symbol Acc MGI 1914710
D08	SBM0722889	ENSMUST00000237875.1	Decr2	ENSMUSG00000036775	2-4-dienoyl-Coenzyme A reductase 2, peroxisomal Source MGI Symbol Acc MGI 1347059
D09	SBM0733156	ENSMUST00000026538.12	Echs1	ENSMUSG0000025465	enoyl Coenzyme A hydratase, short chain, 1, mitochondrial Source MGI Symbol Acc MGI 2136460
D10	SBM0889585	ENSMUST00000167036.7	Eci2	ENSMUSG0000021417	enoyl-Coenzyme A delta isomerase 2 Source MGI Symbol Acc MGI 1346064
D11	SBM0992271	ENSMUST00000023559.6	Ehhadh	ENSMUSG0000022853	enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase Source MGI Symbol Acc MGI 1277964
D12	SBM0729972	ENSMUST00000067492.7	Fabp1	ENSMUSG0000054422	fatty acid binding protein 1, liver Source MGI Symbol Acc MGI 95479
E01	SBM0934592	ENSMUST00000023820.5	Fabp2	ENSMUSG0000023057	fatty acid binding protein 2, intestinal Source MGI Symbol Acc MGI 95478
E02	SBM0915423	ENSMUST00000070532.7	Fabp3	ENSMUSG0000028773	fatty acid binding protein 3, muscle and heart Source MGI Symbol Acc MGI 95476
E03	SBM0719045	ENSMUST00000029041.5	Fabp4	ENSMUSG0000062515	fatty acid binding protein 4, adipocyte Source MGI Symbol Acc MGI 88038
E04	SBM0695464	ENSMUST00000029046.8	Fabp5	ENSMUSG0000027533	fatty acid binding protein 5, epidermal Source MGI Symbol Acc MGI 101790
E05	SBM1030650	ENSMUST00000020672.4	Fabp6	ENSMUSG0000020405	fatty acid binding protein 6 Source MGI Symbol Acc MGI 96565
E06	SBM0678044	ENSMUST00000139180.1	Gcdh	ENSMUSG0000003809	glutaryl-Coenzyme A dehydrogenase Source MGI Symbol Acc MGI 104541
E07	SBM0779741	ENSMUST00000059657.3	Gk2	ENSMUSG0000050553	glycerol kinase 2 Source MGI Symbol Acc MGI 1329027
E08	SBM0849967	ENSMUST00000161768.1	Gpd1	ENSMUSG0000023019	glycerol-3-phosphate dehydrogenase 1 (soluble) Source MGI Symbol Acc MGI 95679
E09	SBM0713021	ENSMUST00000141536.7	Gpd2	ENSMUSG0000026827	glycerol phosphate dehydrogenase 2, mitochondrial Source MGI Symbol Acc MGI 99778
E10	SBM0796540	ENSMUST00000124386.1	Gk	ENSMUSG0000025059	glycerol kinase Source MGI Symbol Acc MGI 106594
E11	SBM0911559	ENSMUST00000026843.11	Hadha	ENSMUSG0000025745	hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), alpha subunit Source MGI Symbol Acc MGI 2135593
E12	SBM0909636	ENSMUST00000030432.7	Hmgcl	ENSMUSG0000028672	3-hydroxy-3-methylglutaryl-Coenzyme A lyase Source MGI Symbol Acc MGI 96158
F01	SBM1074266	ENSMUST00000224188.1	Hmgcs1	ENSMUSG0000093930	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1 Source MGI Symbol Acc MGI 107592
F02	SBM0862891	ENSMUST00000090746.2	Hmgcs2	ENSMUSG0000027875	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 2 Source MGI Symbol Acc MGI 101939
F03	SBM1009382	ENSMUST00000003207.10	Lipe	ENSMUSG0000003123	lipase, hormone sensitive Source MGI Symbol Acc MGI 96790
F04	SBM1060657	ENSMUST00000015712.14	Lpl	ENSMUSG0000015568	lipoprotein lipase Source MGI Symbol Acc MGI 96820
F05	SBM0673391	ENSMUST00000206882.1	Mcee	ENSMUSG0000033429	methylmalonyl CoA epimerase Source MGI Symbol Acc MGI 1920974
F06	SBM0932264	ENSMUST00000169611.3	Mut	ENSMUSG0000023921	methylmalonyl-Coenzyme A mutase Source MGI Symbol Acc MGI 97239
F07	SBM0874193	ENSMUST00000102640.1	Oxct2a	ENSMUSG0000076436	3-oxoacid CoA transferase 2A Source MGI Symbol Acc MGI 1891061
F08	SBM0988793	ENSMUST00000134840.7	Pecr	ENSMUSG0000026189	peroxisomal trans-2-enoyl-CoA reductase Source MGI Symbol Acc MGI 2148199
F09	SBM1006267	ENSMUST00000162028.1	Ppa1	ENSMUSG0000020089	pyrophosphatase (inorganic) 1 Source MGI Symbol Acc MGI 97831
F10	SBM0905959	ENSMUST00000	Prkaa1	ENSMUSG00	protein kinase, AMP-activated, alpha 1 catalytic subunit Source MGI Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
		228218.1		000050697	MGI 2145955
F11	SBM0859779	ENSMUST00000030243.7	Prkaa2	ENSMUSG0000028518	protein kinase, AMP-activated, alpha 2 catalytic subunit Source MGI Symbol Acc MGI 1336173
F12	SBM0933984	ENSMUST00000141018.1	Prkab1	ENSMUSG0000029513	protein kinase, AMP-activated, beta 1 non-catalytic subunit Source MGI Symbol Acc MGI 1336167
G01	SBM0898406	ENSMUST00000132719.1	Prkab2	ENSMUSG0000038205	protein kinase, AMP-activated, beta 2 non-catalytic subunit Source MGI Symbol Acc MGI 1336185
G02	SBM0941812	ENSMUST00000211558.1	Prkaca	ENSMUSG0000005469	protein kinase, cAMP dependent, catalytic, alpha Source MGI Symbol Acc MGI 97592
G03	SBM0782290	ENSMUST00000102515.9	Prkacb	ENSMUSG0000005034	protein kinase, cAMP dependent, catalytic, beta Source MGI Symbol Acc MGI 97594
G04	SBM0922630	ENSMUST00000229346.1	Prkag1	ENSMUSG0000067713	protein kinase, AMP-activated, gamma 1 non-catalytic subunit Source MGI Symbol Acc MGI 108411
G05	SBM0764294	ENSMUST00000150135.7	Prkag2	ENSMUSG0000028944	protein kinase, AMP-activated, gamma 2 non-catalytic subunit Source MGI Symbol Acc MGI 1336153
G06	SBM1026091	ENSMUST00000160732.7	Prkag3	ENSMUSG0000006542	protein kinase, AMP-activated, gamma 3 non-catalytic subunit Source MGI Symbol Acc MGI 1891343
G07	SBM0883649	ENSMUST00000034267.4	Slc27a1	ENSMUSG00000031808	solute carrier family 27 (fatty acid transporter), member 1 Source MGI Symbol Acc MGI 1347098
G08	SBM0878546	ENSMUST00000061491.13	Slc27a2	ENSMUSG0000027359	solute carrier family 27 (fatty acid transporter), member 2 Source MGI Symbol Acc MGI 1347099
G09	SBM0850777	ENSMUST00000144572.7	Slc27a3	ENSMUSG0000027932	solute carrier family 27 (fatty acid transporter), member 3 Source MGI Symbol Acc MGI 1347358
G10	SBM0823234	ENSMUST00000136444.1	Slc27a4	ENSMUSG0000059316	solute carrier family 27 (fatty acid transporter), member 4 Source MGI Symbol Acc MGI 1347347
G11	SBM1013002	ENSMUST00000120903.7	Slc27a5	ENSMUSG0000030382	solute carrier family 27 (fatty acid transporter), member 5 Source MGI Symbol Acc MGI 1347100
G12	SBM1017101	ENSMUST00000025500.6	Slc27a6	ENSMUSG0000024600	solute carrier family 27 (fatty acid transporter), member 6 Source MGI Symbol Acc MGI 3036230
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG0000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG0000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG0000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG0000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG0000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	SBM1218554	Sybr_MGDC	MGDC	Sybr_MGDC	Mouse Genomic DNA Contamination
H07	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H08	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H09	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H10	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H11	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H12	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249940
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 SYBR Green RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 μ l QuantiNova SYBR Green 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	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l QN ROX Reference Dye, 1.9 ml Water	208052

*Larger kit sizes available.

The QuantiNova LNA 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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