

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

Mouse Fatty Liver

Cat. no. 249950 SBMM-157ZA

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	Abca1	Abcg1	Acaca	Acadl	Acly	Acox1	Acl5	Acm3	Adipor1	Adipor2	Akt1	Apoa1
B	Apob	Apoc3	Apoe	Alp5c1	Casp3	Cd36	Cebpb	Cnbp	Cpt1a	Cpt2	Cyp2e1	Cyp7a1
C	Dgat2	Fabp1	Fabp3	Fabp5	Fas	Fasn	Foxa2	G6pc	G6pdx	Gck	Gsk3b	Gk
D	Hmgcr	Hnf4a	Ilfng	Igf1	Igf1bp1	Il10	Il1b	Il6	Insr	Irs1	Ldlr	Lepr
E	Lpl	Mapk1	Mapk8	Mlxipl	Mtor	Ndufb6	Nfkb1	Nr1h2	Nr1h3	Nr1h4	Pck2	Pdk4
F	Pik3ca	Pik3r1	Pikr	Ppa1	Ppara	Ppard	Pparg	Ppargc1a	Pknox1	Ptpn1	Rbp4	Rora
G	Scd1	Serpine1	Slc27a5	Slc2a1	Slc2a2	Slc2a4	Socs3	Srebf1	Srebf2	Stat3	Tnf	Xbp1
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	SBM1010551	ENSMUST00000030010.3	Abca1	ENSMUSG0000015243	ATP-binding cassette, sub-family A (ABC1), member 1 Source MGI Symbol Acc MGI 99607
A02	SBM0939203	ENSMUST00000024829.7	Abcg1	ENSMUSG0000024030	ATP binding cassette subfamily G member 1 Source MGI Symbol Acc MGI 107704
A03	SBM0933576	ENSMUST00000133811.2	Acaca	ENSMUSG0000020532	acetyl-Coenzyme A carboxylase alpha Source MGI Symbol Acc MGI 108451
A04	SBM0841065	ENSMUST00000027153.5	Acadl	ENSMUSG0000026003	acyl-Coenzyme A dehydrogenase, long-chain Source MGI Symbol Acc MGI 87866
A05	SBM0970496	ENSMUST00000107389.7	Acly	ENSMUSG0000020917	ATP citrate lyase Source MGI Symbol Acc MGI 103251
A06	SBM1069471	ENSMUST00000066587.11	Acox1	ENSMUSG0000020777	acyl-Coenzyme A oxidase 1, palmitoyl Source MGI Symbol Acc MGI 1330812
A07	SBM0675306	ENSMUST00000043150.5	Acsf5	ENSMUSG0000024981	acyl-CoA synthetase long-chain family member 5 Source MGI Symbol Acc MGI 1919129
A08	SBM0904518	ENSMUST00000149598.1	Acsf3	ENSMUSG0000030935	acyl-CoA synthetase medium-chain family member 3 Source MGI Symbol Acc MGI 99538
A09	SBM1015976	ENSMUST00000112237.1	Adipor1	ENSMUSG0000026457	adiponectin receptor 1 Source MGI Symbol Acc MGI 1919924
A10	SBM0848941	ENSMUST00000187699.6	Adipor2	ENSMUSG0000030168	adiponectin receptor 2 Source MGI Symbol Acc MGI 93830
A11	SBM1020452	ENSMUST00000144550.8	Akt1	ENSMUSG0000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A12	SBM0916212	ENSMUST00000132155.1	Apoa1	ENSMUSG0000032083	apolipoprotein A-I Source MGI Symbol Acc MGI 88049
B01	SBM1016873	ENSMUST00000037520.13	ApoB	ENSMUSG0000020609	apolipoprotein B Source MGI Symbol Acc MGI 88052
B02	SBM0912636	ENSMUST00000118649.7	ApoC3	ENSMUSG0000032081	apolipoprotein C-III Source MGI Symbol Acc MGI 88055
B03	SBM0912771	ENSMUST00000173739.7	ApoE	ENSMUSG0000002985	apolipoprotein E Source MGI Symbol Acc MGI 88057
B04	SBM0680382	ENSMUST00000114896.7	Atp5c1	ENSMUSG0000025781	ATP synthase, H+ transporting, mitochondrial F1 complex, gamma polypeptide 1 Source MGI Symbol Acc MGI 1261437
B05	SBM0732165	ENSMUST00000093517.6	Casp3	ENSMUSG0000031628	caspase 3 Source MGI Symbol Acc MGI 107739
B06	SBM0818786	ENSMUST00000170051.7	Cd36	ENSMUSG0000002944	CD36 molecule Source MGI Symbol Acc MGI 107899
B07	SBM0682459	ENSMUST00000070642.3	Cebpb	ENSMUSG0000056501	CCAAT/enhancer binding protein (C/EBP), beta Source MGI Symbol Acc MGI 88373
B08	SBM1074339	ENSMUST00000032138.14	Cnbp	ENSMUSG0000030057	cellular nucleic acid binding protein Source MGI Symbol Acc MGI 88431
B09	SBM1029896	ENSMUST00000238027.1	Cpt1a	ENSMUSG0000024900	carnitine palmitoyltransferase 1a, liver Source MGI Symbol Acc MGI 1098296
B10	SBM0911444	ENSMUST00000030345.14	Cpt2	ENSMUSG0000028607	carnitine palmitoyltransferase 2 Source MGI Symbol Acc MGI 109176
B11	SBM1037941	ENSMUST00000209253.1	Cyp2e1	ENSMUSG0000025479	cytochrome P450, family 2, subfamily e, polypeptide 1 Source MGI Symbol Acc MGI 88607
B12	SBM0922584	ENSMUST00000147346.1	Cyp7a1	ENSMUSG0000028240	cytochrome P450, family 7, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 106091
C01	SBM0925718	ENSMUST00000033001.5	Dgat2	ENSMUSG0000030747	diacylglycerol O-acyltransferase 2 Source MGI Symbol Acc MGI 1915050
C02	SBM0729972	ENSMUST00000067492.7	Fabp1	ENSMUSG0000054422	fatty acid binding protein 1, liver Source MGI Symbol Acc MGI 95479
C03	SBM0915423	ENSMUST00000070532.7	Fabp3	ENSMUSG0000028773	fatty acid binding protein 3, muscle and heart Source MGI Symbol Acc MGI 95476
C04	SBM0695464	ENSMUST00000029046.8	Fabp5	ENSMUSG0000027533	fatty acid binding protein 5, epidermal Source MGI Symbol Acc MGI 101790
C05	SBM0856649	ENSMUST00000112472.3	Fas	ENSMUSG0000024778	Fas (TNF receptor superfamily member 6) Source MGI Symbol Acc MGI 95484
C06	SBM1047932	ENSMUST00000206589.1	Fasn	ENSMUSG0000025153	fatty acid synthase Source MGI Symbol Acc MGI 95485
C07	SBM1016226	ENSMUST00000109964.7	Foxa2	ENSMUSG0000037025	forkhead box A2 Source MGI Symbol Acc MGI 1347476
C08	SBM0872131	ENSMUST00000019469.2	G6pc	ENSMUSG0000078650	glucose-6-phosphatase, catalytic Source MGI Symbol Acc MGI 95607
C09	SBM1034614	ENSMUST00000135894.1	G6pdx	ENSMUSG0000031400	glucose-6-phosphate dehydrogenase X-linked Source MGI Symbol Acc MGI 105979
C10	SBM1029217	ENSMUST00000109822.7	Gck	ENSMUSG0000041798	glucokinase Source MGI Symbol Acc MGI 1270854
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0862470	132057.1	Gsk3b	000022812	glycogen synthase kinase 3 beta Source MGI Symbol Acc MGI 1861437
C12	SBM0796540	ENSMUST00000124386.1	Gk	ENSMUSG0000025059	glycerol kinase Source MGI Symbol Acc MGI 106594
D01	SBM0852758	ENSMUST00000169196.7	Hmgcr	ENSMUSG00000021670	3-hydroxy-3-methylglutaryl-Coenzyme A reductase Source MGI Symbol Acc MGI 96159
D02	SBM0836445	ENSMUST00000109411.7	Hnf4a	ENSMUSG0000017950	hepatic nuclear factor 4, alpha Source MGI Symbol Acc MGI 109128
D03	SBM0903694	ENSMUST00000068592.4	Ifng	ENSMUSG00000055170	interferon gamma Source MGI Symbol Acc MGI 107656
D04	SBM1026650	ENSMUST00000122386.7	Igf1	ENSMUSG0000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D05	SBM0763834	ENSMUST00000020704.7	Igfbp1	ENSMUSG0000020429	insulin-like growth factor binding protein 1 Source MGI Symbol Acc MGI 96436
D06	SBM1004151	ENSMUST00000016673.5	Il10	ENSMUSG0000016529	interleukin 10 Source MGI Symbol Acc MGI 96537
D07	SBM0738485	ENSMUST00000028881.13	Il1b	ENSMUSG0000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
D08	SBM0742623	ENSMUST00000026845.11	Il6	ENSMUSG00000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
D09	SBM1013137	ENSMUST000000207100.1	Insr	ENSMUSG0000005534	insulin receptor Source MGI Symbol Acc MGI 96575
D10	SBM0923271	ENSMUST00000069799.2	Irs1	ENSMUSG00000055980	insulin receptor substrate 1 Source MGI Symbol Acc MGI 99454
D11	SBM0960715	ENSMUST000000217111.1	Ldlr	ENSMUSG00000032193	low density lipoprotein receptor Source MGI Symbol Acc MGI 96765
D12	SBM1058375	ENSMUST000000128948.7	Lepr	ENSMUSG00000057722	leptin receptor Source MGI Symbol Acc MGI 104993
E01	SBM1060657	ENSMUST00000015712.14	Lpl	ENSMUSG0000015568	lipoprotein lipase Source MGI Symbol Acc MGI 96820
E02	SBM0800614	ENSMUST000000231821.1	Mapk1	ENSMUSG00000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
E03	SBM0984642	ENSMUST000000132379.1	Mapk8	ENSMUSG00000021936	mitogen-activated protein kinase 8 Source MGI Symbol Acc MGI 1346861
E04	SBM0844253	ENSMUST000000202431.3	Mlxip1	ENSMUSG00000005373	MLX interacting protein-like Source MGI Symbol Acc MGI 1927999
E05	SBM1220565	ENSMUST000000103221.9	Mtor	ENSMUSG00000028991	mechanistic target of rapamycin kinase Source MGI Symbol Acc MGI 1928394
E06	SBM0707931	ENSMUST000000095128.9	Ndufb6	ENSMUSG00000071014	NADH ubiquinone oxidoreductase subunit B6 Source MGI Symbol Acc MGI 2684983
E07	SBM0841870	ENSMUST000000164430.6	Nfkb1	ENSMUSG00000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E08	SBM0769985	ENSMUST000000073488.11	Nr1h2	ENSMUSG00000060601	nuclear receptor subfamily 1, group H, member 2 Source MGI Symbol Acc MGI 1352463
E09	SBM0913125	ENSMUST000000150654.7	Nr1h3	ENSMUSG00000002108	nuclear receptor subfamily 1, group H, member 3 Source MGI Symbol Acc MGI 1352462
E10	SBM0772834	ENSMUST000000058126.14	Nr1h4	ENSMUSG00000047638	nuclear receptor subfamily 1, group H, member 4 Source MGI Symbol Acc MGI 1352464
E11	SBM1060112	ENSMUST000000228921.1	Pck2	ENSMUSG00000040618	phosphoenolpyruvate carboxykinase 2 (mitochondrial) Source MGI Symbol Acc MGI 1860456
E12	SBM0854468	ENSMUST000000019721.6	Pdk4	ENSMUSG0000019577	pyruvate dehydrogenase kinase, isoenzyme 4 Source MGI Symbol Acc MGI 1351481
F01	SBM0905151	ENSMUST000000108243.7	Pik3ca	ENSMUSG00000027665	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source MGI Symbol Acc MGI 1206581
F02	SBM0805909	ENSMUST000000035532.12	Pik3r1	ENSMUSG00000041417	phosphoinositide-3-kinase regulatory subunit 1 Source MGI Symbol Acc MGI 97583
F03	SBM0893001	ENSMUST000000127058.1	Pklr	ENSMUSG00000041237	pyruvate kinase liver and red blood cell Source MGI Symbol Acc MGI 97604
F04	SBM1006267	ENSMUST000000162028.1	Ppa1	ENSMUSG00000020089	pyrophosphatase (inorganic) 1 Source MGI Symbol Acc MGI 97831
F05	SBM0952484	ENSMUST000000138813.7	Ppara	ENSMUSG0000002383	peroxisome proliferator activated receptor alpha Source MGI Symbol Acc MGI 104740
F06	SBM0865243	ENSMUST000000169040.2	Ppard	ENSMUSG00000002250	peroxisome proliferator activator receptor delta Source MGI Symbol Acc MGI 101884
F07	SBM1015614	ENSMUST000000205213.2	Pparg	ENSMUSG00000000440	peroxisome proliferator activated receptor gamma Source MGI Symbol Acc MGI 97747
F08	SBM0984439	ENSMUST000000132734.7	Ppargc1a	ENSMUSG00000029167	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha Source MGI Symbol Acc MGI 1342774
F09	SBM0905959	ENSMUST000000228218.1	Prkaa1	ENSMUSG00000050697	protein kinase, AMP-activated, alpha 1 catalytic subunit Source MGI Symbol Acc MGI 2145955
F10	SBM0939941	ENSMUST000000142717.1	Ptpn1	ENSMUSG00000027540	protein tyrosine phosphatase, non-receptor type 1 Source MGI Symbol Acc MGI 97805

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0806680	ENSMUST00000025951.13	Rbp4	ENSMUSG00000024990	retinol binding protein 4, plasma Source MGI Symbol Acc MGI 97879
F12	SBM0865579	ENSMUST00000166775.7	Rxra	ENSMUSG0000015846	retinoid X receptor alpha Source MGI Symbol Acc MGI 98214
G01	SBM0890897	ENSMUST00000236824.1	Scd1	ENSMUSG0000037071	stearoyl-Coenzyme A desaturase 1 Source MGI Symbol Acc MGI 98239
G02	SBM0809699	ENSMUST00000041388.10	Serpine1	ENSMUSG0000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
G03	SBM1013002	ENSMUST00000120903.7	Slc27a5	ENSMUSG0000030382	solute carrier family 27 (fatty acid transporter), member 5 Source MGI Symbol Acc MGI 1347100
G04	SBM1008931	ENSMUST00000144329.7	Slc2a1	ENSMUSG0000028645	solute carrier family 2 (facilitated glucose transporter), member 1 Source MGI Symbol Acc MGI 95755
G05	SBM0691206	ENSMUST00000163536.7	Slc2a2	ENSMUSG0000027690	solute carrier family 2 (facilitated glucose transporter), member 2 Source MGI Symbol Acc MGI 1095438
G06	SBM0717464	ENSMUST00000178809.7	Slc2a4	ENSMUSG0000018566	solute carrier family 2 (facilitated glucose transporter), member 4 Source MGI Symbol Acc MGI 95758
G07	SBM0977814	ENSMUST00000054002.3	Socs3	ENSMUSG0000053113	suppressor of cytokine signaling 3 Source MGI Symbol Acc MGI 1201791
G08	SBM0984070	ENSMUST00000020846.7	Srebf1	ENSMUSG0000020538	sterol regulatory element binding transcription factor 1 Source MGI Symbol Acc MGI 107606
G09	SBM0762835	ENSMUST00000229336.1	Srebf2	ENSMUSG0000022463	sterol regulatory element binding factor 2 Source MGI Symbol Acc MGI 107585
G10	SBM0821931	ENSMUST00000103114.7	Stat3	ENSMUSG0000004040	signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038
G11	SBM0788439	ENSMUST00000025263.14	Tnf	ENSMUSG0000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G12	SBM0756103	ENSMUST00000145588.1	Xbp1	ENSMUSG0000020484	X-box binding protein 1 Source MGI Symbol Acc MGI 98970
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 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 µl QuantiNova SYBR Green RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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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