

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

Mouse Amino Acid Metabolism I

Cat. no. 249950 SBMM-129ZA

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	Aadat	Aanat	Aac1	Acadm	Acat1	Acmsd	Acy1	Adi1	Agmat	Ahcy	Aldh18a1	Aldh4a1
B	Aldh9a1	Amd1	Aox1	Apip	Arg2	Asl	Ass1	Auh	Bcat2	Bckdha	Bhmt	Cad
C	Cat	Cbs	Cdo1	Ckb	Cps1	Cfh	Cyp1b1	Dao	Dbt	Ddc	Dld	Dnmt1
D	Ehhadh	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	Olc	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 PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBM0711516	ENSMUST00000079472.3	Aadat	ENSMUSG0000057228	aminoadipate aminotransferase Source MGI Symbol Acc MGI 1345167
A02	SBM0826691	ENSMUST00000021160.9	Aanat	ENSMUSG0000020804	arylalkylamine N-acetyltransferase Source MGI Symbol Acc MGI 1328365
A03	SBM1011834	ENSMUST00000167529.2	Aoc1	ENSMUSG0000029811	amine oxidase, copper-containing 1 Source MGI Symbol Acc MGI 1923757
A04	SBM0928276	ENSMUST00000156310.1	Acadm	ENSMUSG0000062908	acyl-Coenzyme A dehydrogenase, medium chain Source MGI Symbol Acc MGI 87867
A05	SBM0848017	ENSMUST00000034547.5	Acat1	ENSMUSG0000032047	acetyl-Coenzyme A acetyltransferase 1 Source MGI Symbol Acc MGI 87870
A06	SBM0881472	ENSMUST00000038006.7	Acmsd	ENSMUSG0000026348	amino carboxymuconate semialdehyde decarboxylase Source MGI Symbol Acc MGI 2386323
A07	SBM0737930	ENSMUST00000024031.12	Acy1	ENSMUSG0000023262	aminoacylase 1 Source MGI Symbol Acc MGI 87913
A08	SBM0958948	ENSMUST00000135772.1	Adi1	ENSMUSG0000020629	acireductone dioxygenase 1 Source MGI Symbol Acc MGI 2144929
A09	SBM0938640	ENSMUST00000038161.4	Agmat	ENSMUSG0000040706	agmatine ureohydrolase (agmatinase) Source MGI Symbol Acc MGI 1923236
A10	SBM0947554	ENSMUST00000054607.15	Ahcy	ENSMUSG0000027597	S-adenosylhomocysteine hydrolase Source MGI Symbol Acc MGI 87968
A11	SBM1086703	ENSMUST00000175967.1	Aldh18a1	ENSMUSG0000025007	aldehyde dehydrogenase 18 family, member A1 Source MGI Symbol Acc MGI 1888908
A12	SBM1047956	ENSMUST00000039818.9	Aldh4a1	ENSMUSG0000028737	aldehyde dehydrogenase 4 family, member A1 Source MGI Symbol Acc MGI 2443883
B01	SBM0724453	ENSMUST00000191715.1	Aldh9a1	ENSMUSG0000026687	aldehyde dehydrogenase 9, subfamily A1 Source MGI Symbol Acc MGI 1861622
B02	SBM1075585	ENSMUST00000213620.1	Amd1	ENSMUSG0000075232	S-adenosylmethionine decarboxylase 1 Source MGI Symbol Acc MGI 88004
B03	SBM0865954	ENSMUST00000160168.1	Aox1	ENSMUSG0000063558	aldehyde oxidase 1 Source MGI Symbol Acc MGI 88035
B04	SBM0921797	ENSMUST00000011055.6	Apip	ENSMUSG0000010911	APAF1 interacting protein Source MGI Symbol Acc MGI 1926788
B05	SBM1022583	ENSMUST00000021550.6	Arg2	ENSMUSG0000021125	arginase type II Source MGI Symbol Acc MGI 1330806
B06	SBM1068223	ENSMUST00000161094.7	Asl	ENSMUSG0000025533	argininosuccinate lyase Source MGI Symbol Acc MGI 88084
B07	SBM1054148	ENSMUST00000192802.1	Ass1	ENSMUSG0000076441	argininosuccinate synthetase 1 Source MGI Symbol Acc MGI 88090
B08	SBM1010009	ENSMUST00000021913.15	Auh	ENSMUSG0000021460	AU RNA binding protein/enoyl-coenzyme A hydratase Source MGI Symbol Acc MGI 1338011
B09	SBM0849768	ENSMUST00000209543.1	Bcat2	ENSMUSG0000030826	branched chain aminotransferase 2, mitochondrial Source MGI Symbol Acc MGI 1276534
B10	SBM0739340	ENSMUST00000071329.7	Bckdha	ENSMUSG0000060376	branched chain ketoacid dehydrogenase E1, alpha polypeptide Source MGI Symbol Acc MGI 107701
B11	SBM0965281	ENSMUST00000099309.5	Bhmt	ENSMUSG0000074768	betaine-homocysteine methyltransferase Source MGI Symbol Acc MGI 1339972
B12	SBM0775642	ENSMUST00000200953.3	Cad	ENSMUSG0000013629	carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase Source MGI Symbol Acc MGI 1916969
C01	SBM0711514	ENSMUST00000111168.3	Cat	ENSMUSG0000027187	catalase Source MGI Symbol Acc MGI 88271
C02	SBM0916330	ENSMUST00000135425.8	Cbs	ENSMUSG0000024039	cystathionine beta-synthase Source MGI Symbol Acc MGI 88285
C03	SBM0858164	ENSMUST00000234819.1	Cdo1	ENSMUSG0000033022	cysteine dioxygenase 1, cytosolic Source MGI Symbol Acc MGI 105925
C04	SBM0928872	ENSMUST00000222513.1	Ckb	ENSMUSG0000001270	creatine kinase, brain Source MGI Symbol Acc MGI 88407
C05	SBM1021844	ENSMUST00000027144.7	Cps1	ENSMUSG0000025991	carbamoyl-phosphate synthetase 1 Source MGI Symbol Acc MGI 891996
C06	SBM0685842	ENSMUST00000118539.1	Cth	ENSMUSG0000028179	cystathionase (cystathionine gamma-lyase) Source MGI Symbol Acc MGI 1339968
C07	SBM0735361	ENSMUST00000234927.1	Cyp1b1	ENSMUSG0000024087	cytochrome P450, family 1, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 88590
C08	SBM0958107	ENSMUST00000086599.10	Dao	ENSMUSG0000042096	D-amino acid oxidase Source MGI Symbol Acc MGI 94859
C09	SBM0908066	ENSMUST00000000349.10	Dbt	ENSMUSG0000000340	dihydrolipoamide branched chain transacylase E2 Source MGI Symbol Acc MGI 105386
C10	SBM0826148	ENSMUST00000146359.7	Ddc	ENSMUSG0000020182	dopa decarboxylase Source MGI Symbol Acc MGI 94876
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0825485	220415.1	Dld	000020664	dihydrolipoamide dehydrogenase Source MGI Symbol Acc MGI 107450
C12	SBM0945860	ENSMUST0000017754.8	Dnmt1	ENSMUSG0000004099	DNA methyltransferase (cytosine-5) 1 Source MGI Symbol Acc MGI 94912
D01	SBM0992271	ENSMUST00000023559.6	Ehhadh	ENSMUSG00000022853	enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase Source MGI Symbol Acc MGI 1277964
D02	SBM0988297	ENSMUST00000169390.7	Enoph1	ENSMUSG00000029326	enolase-phosphatase 1 Source MGI Symbol Acc MGI 1915120
D03	SBM0777625	ENSMUST00000148615.1	Gamt	ENSMUSG00000020150	guanidinoacetate methyltransferase Source MGI Symbol Acc MGI 1098221
D04	SBM0722245	ENSMUST00000154598.7	Gatm	ENSMUSG00000027199	glycine amidinotransferase (L-arginine glycine amidinotransferase) Source MGI Symbol Acc MGI 1914342
D05	SBM0678044	ENSMUST00000139180.1	Gcdh	ENSMUSG00000003809	glutaryl-Coenzyme A dehydrogenase Source MGI Symbol Acc MGI 104541
D06	SBM1041241	ENSMUST00000113655.7	Gfpt1	ENSMUSG00000029992	glutamine fructose-6-phosphate transaminase 1 Source MGI Symbol Acc MGI 95698
D07	SBM1053129	ENSMUST00000114509.7	Gls	ENSMUSG00000026103	glutaminase Source MGI Symbol Acc MGI 95752
D08	SBM1042627	ENSMUST00000159784.7	Glud1	ENSMUSG00000021794	glutamate dehydrogenase 1 Source MGI Symbol Acc MGI 95753
D09	SBM0718020	ENSMUST00000034097.7	Got2	ENSMUSG00000031672	glutamatic-oxaloacetic transaminase 2, mitochondrial Source MGI Symbol Acc MGI 95792
D10	SBM0739623	ENSMUST00000234214.1	Haao	ENSMUSG00000000673	3-hydroxyanthranilate 3,4-dioxygenase Source MGI Symbol Acc MGI 1349444
D11	SBM0909636	ENSMUST00000030432.7	Hmgcl	ENSMUSG00000028672	3-hydroxy-3-methylglutaryl-Coenzyme A lyase Source MGI Symbol Acc MGI 96158
D12	SBM1074266	ENSMUST00000224188.1	Hmgcs1	ENSMUSG00000093930	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1 Source MGI Symbol Acc MGI 107592
E01	SBM0877402	ENSMUST00000033956.6	Ido1	ENSMUSG00000031551	indoleamine 2,3-dioxygenase 1 Source MGI Symbol Acc MGI 96416
E02	SBM0858219	ENSMUST00000003569.5	Inmt	ENSMUSG00000003477	indolethylamine N-methyltransferase Source MGI Symbol Acc MGI 102963
E03	SBM0962555	ENSMUST00000152191.7	Ivd	ENSMUSG00000027332	isovaleryl coenzyme A dehydrogenase Source MGI Symbol Acc MGI 1929242
E04	SBM0965395	ENSMUST00000040250.14	Kmo	ENSMUSG00000039783	kynurenine 3-monooxygenase (kynurenine 3-hydroxylase) Source MGI Symbol Acc MGI 2138151
E05	SBM0977832	ENSMUST00000028223.8	Kynu	ENSMUSG00000026866	kynureninase Source MGI Symbol Acc MGI 1918039
E06	SBM1050587	ENSMUST00000046122.10	Lap3	ENSMUSG00000039682	leucine aminopeptidase 3 Source MGI Symbol Acc MGI 1914238
E07	SBM0929312	ENSMUST00000235432.1	Lars	ENSMUSG00000024493	leucyl-tRNA synthetase Source MGI Symbol Acc MGI 1913808
E08	SBM1042883	ENSMUST00000209984.1	Ldha	ENSMUSG00000063229	lactate dehydrogenase A Source MGI Symbol Acc MGI 96759
E09	SBM0839056	ENSMUST00000040820.12	Maob	ENSMUSG00000040147	monoamine oxidase B Source MGI Symbol Acc MGI 96916
E10	SBM1056264	ENSMUST00000224514.1	Mat1a	ENSMUSG00000037798	methionine adenosyltransferase I, alpha Source MGI Symbol Acc MGI 88017
E11	SBM1089580	ENSMUST00000022148.6	Mccc2	ENSMUSG00000021646	methylcrotonoyl-Coenzyme A carboxylase 2 (beta) Source MGI Symbol Acc MGI 1925288
E12	SBM0689928	ENSMUST00000229739.1	Mpst	ENSMUSG00000071711	mercaptopyruvate sulfurtransferase Source MGI Symbol Acc MGI 2179733
F01	SBM0766208	ENSMUST00000058030.9	Mtap	ENSMUSG00000062937	methylthioadenosine phosphorylase Source MGI Symbol Acc MGI 1914152
F02	SBM0704292	ENSMUST00000220473.1	Mtr	ENSMUSG00000021311	5-methyltetrahydrofolate-homocysteine methyltransferase Source MGI Symbol Acc MGI 894292
F03	SBM0774291	ENSMUST00000055409.5	Nags	ENSMUSG00000048217	N-acetylglutamate synthase Source MGI Symbol Acc MGI 2387600
F04	SBM0738385	ENSMUST00000231733.1	Nit2	ENSMUSG00000022751	nitrilase family, member 2 Source MGI Symbol Acc MGI 1261838
F05	SBM0835086	ENSMUST00000208783.1	Nos2	ENSMUSG00000020826	nitric oxide synthase 2, inducible Source MGI Symbol Acc MGI 97361
F06	SBM0744893	ENSMUST00000084500.7	Oat	ENSMUSG00000030934	ornithine aminotransferase Source MGI Symbol Acc MGI 97394
F07	SBM0976238	ENSMUST00000220947.1	Odc1	ENSMUSG00000011179	ornithine decarboxylase, structural 1 Source MGI Symbol Acc MGI 97402
F08	SBM0699126	ENSMUST00000222480.7	Ogdhl	ENSMUSG00000021913	oxoglutarate dehydrogenase-like Source MGI Symbol Acc MGI 3616088
F09	SBM0924804	ENSMUST00000049910.12	Otc	ENSMUSG00000031173	ornithine transcarbamylase Source MGI Symbol Acc MGI 97448
F10	SBM0874193	ENSMUST00000102640.1	Oxct2a	ENSMUSG00000076436	3-oxoacid CoA transferase 2A Source MGI Symbol Acc MGI 1891061

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM1072765	ENSMUST00000092512.10	P4ha1	ENSMUSG00000019916	procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha 1 polypeptide Source MGI Symbol Acc MGI 97463
F12	SBM1053181	ENSMUST00000022268.9	Pdhb	ENSMUSG00000021748	pyruvate dehydrogenase (lipoamide) beta Source MGI Symbol Acc MGI 1915513
G01	SBM1048822	ENSMUST00000140076.1	Ppat	ENSMUSG00000029246	phosphoribosyl pyrophosphate amidotransferase Source MGI Symbol Acc MGI 2387203
G02	SBM0901635	ENSMUST00000126087.1	Prodh	ENSMUSG0000003526	proline dehydrogenase Source MGI Symbol Acc MGI 97770
G03	SBM0784910	ENSMUST00000131040.1	Prodh2	ENSMUSG00000036892	proline dehydrogenase (oxidase) 2 Source MGI Symbol Acc MGI 1929093
G04	SBM0876518	ENSMUST00000139706.1	Pycr1	ENSMUSG00000025140	pyrroline-5-carboxylate reductase 1 Source MGI Symbol Acc MGI 2384795
G05	SBM0755429	ENSMUST00000053918.8	Pycr1	ENSMUSG00000022571	pyrroline-5-carboxylate reductase-like Source MGI Symbol Acc MGI 1913444
G06	SBM0730543	ENSMUST00000134855.7	Sat1	ENSMUSG00000025283	spermidine/spermine N1-acetyl transferase 1 Source MGI Symbol Acc MGI 98233
G07	SBM0863014	ENSMUST00000111898.1	Sds	ENSMUSG00000029597	serine dehydratase Source MGI Symbol Acc MGI 98270
G08	SBM0784583	ENSMUST00000152701.1	Srm	ENSMUSG0000006442	spermidine synthase Source MGI Symbol Acc MGI 102690
G09	SBM1043112	ENSMUST00000001720.13	Tat	ENSMUSG00000001670	tyrosine aminotransferase Source MGI Symbol Acc MGI 98487
G10	SBM1092622	ENSMUST00000137974.1	Tdo2	ENSMUSG00000028011	tryptophan 2,3-dioxygenase Source MGI Symbol Acc MGI 1928486
G11	SBM0901528	ENSMUST00000006949.8	Tph2	ENSMUSG00000006764	tryptophan hydroxylase 2 Source MGI Symbol Acc MGI 2651811
G12	SBM0941370	ENSMUST00000109848.9	Wars	ENSMUSG00000021266	tryptophanyl-tRNA synthetase Source MGI Symbol Acc MGI 104630
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG00000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG00000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG00000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG00000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG00000023944	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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.