

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

Mouse Drug Metabolism

Cat. no. 249950 SBMM-002ZA

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	Abcb1a	Abcb1b	Abcb4	Abcc1	Accl	Adh1	Adh4	Adh5	Ahr	Alad	Aldh1a1	Alox12
B	Alox15	Alox5	Apoe	Armt	Asna1	Blvra	Blvrb	Ces1g	Ces2c	Chst1	Comt	Cyb5r3
C	Cyp11b2	Cyp17a1	Cyp19a1	Cyp1a1	Cyp1a2	Cyp27b1	Cyp2c29	Cyp2e1	Cyp3a11	Cyp3a44	Cyp4b1	Ephx1
D	Ephx2	Faoah	Fbp1	Gad1	Gad2	Gckr	Ggt1	Gpi1	Gpx1	Gpx2	Gpx3	Gpx5
E	Gsr	Gsta1	Gsta3	Gsta4	Gstm1	Gstm2	Gstm3	Gstm4	Gstm5	Gstp1	Gstt1	Gstz1
F	Hk2	Hsd17b1	Hsd17b2	Hsd17b3	Lpo	Mgst1	Mgst2	Mgst3	Mpo	Mt2	Mt3	Mthfr
G	Nat1	Nat2	Nos3	Nqo1	Pdkr	Pkm	Pon1	Pon2	Pon3	Snn	Srd5a1	Srd5a2
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	SBM1065613	ENSMUST00000 126846.1	Abcb1a	ENSMUSG00 000040584	ATP-binding cassette, sub-family B (MDR/TAP), member 1A Source MGI Symbol Acc MGI 97570
A02	SBM1012642	ENSMUST00000 009058.9	Abcb1b	ENSMUSG00 000028970	ATP-binding cassette, sub-family B (MDR/TAP), member 1B Source MGI Symbol Acc MGI 97568
A03	SBM0989061	ENSMUST00000 197458.1	Abcb4	ENSMUSG00 000042476	ATP-binding cassette, sub-family B (MDR/TAP), member 4 Source MGI Symbol Acc MGI 97569
A04	SBM0861683	ENSMUST00000 147759.7	Abcc1	ENSMUSG00 000023088	ATP-binding cassette, sub-family C (CFTR/MRP), member 1 Source MGI Symbol Acc MGI 102676
A05	SBM1011834	ENSMUST00000 167529.2	Aoc1	ENSMUSG00 000029811	amine oxidase, copper-containing 1 Source MGI Symbol Acc MGI 1923757
A06	SBM0686762	ENSMUST00000 004232.9	Adh1	ENSMUSG00 000074207	alcohol dehydrogenase 1 (class I) Source MGI Symbol Acc MGI 87921
A07	SBM1051665	ENSMUST00000 161312.7	Adh4	ENSMUSG00 000037797	alcohol dehydrogenase 4 (class II), pi polypeptide Source MGI Symbol Acc MGI 1349472
A08	SBM0683903	ENSMUST00000 198126.1	Adh5	ENSMUSG00 000028138	alcohol dehydrogenase 5 (class III), chi polypeptide Source MGI Symbol Acc MGI 87929
A09	SBM0733281	ENSMUST00000 110811.2	Ahr	ENSMUSG00 000019256	aryl-hydrocarbon receptor Source MGI Symbol Acc MGI 105043
A10	SBM0965189	ENSMUST00000 030090.3	Alad	ENSMUSG00 000028393	aminolevulinate, delta-, dehydratase Source MGI Symbol Acc MGI 96853
A11	SBM0801506	ENSMUST00000 225337.2	Aldh1a1	ENSMUSG00 000053279	aldehyde dehydrogenase family 1, subfamily A1 Source MGI Symbol Acc MGI 1353450
A12	SBM1027043	ENSMUST00000 108574.2	Alox12	ENSMUSG00 000000320	arachidonate 12-lipoxygenase Source MGI Symbol Acc MGI 87998
B01	SBM0748276	ENSMUST00000 019068.6	Alox15	ENSMUSG00 000018924	arachidonate 15-lipoxygenase Source MGI Symbol Acc MGI 87997
B02	SBM0830704	ENSMUST00000 026795.12	Alox5	ENSMUSG00 000025701	arachidonate 5-lipoxygenase Source MGI Symbol Acc MGI 87999
B03	SBM0912771	ENSMUST00000 173739.7	Apoe	ENSMUSG00 000002985	apolipoprotein E Source MGI Symbol Acc MGI 88057
B04	SBM0815999	ENSMUST00000 140060.1	Arrt	ENSMUSG00 000015522	aryl hydrocarbon receptor nuclear translocator Source MGI Symbol Acc MGI 88071
B05	SBM1027815	ENSMUST00000 211702.1	Asna1	ENSMUSG00 000052456	arsA arsenite transporter, ATP-binding, homolog 1 (bacterial) Source MGI Symbol Acc MGI 1928379
B06	SBM1005966	ENSMUST00000 142861.1	Blvra	ENSMUSG00 000001999	biliverdin reductase A Source MGI Symbol Acc MGI 88170
B07	SBM0839707	ENSMUST00000 108358.7	Blvrb	ENSMUSG00 000040466	biliverdin reductase B (flavin reductase (NADPH)) Source MGI Symbol Acc MGI 2385271
B08	SBM0810558	ENSMUST00000 044602.7	Ces1g	ENSMUSG00 000057074	carboxylesterase 1G Source MGI Symbol Acc MGI 88378
B09	SBM0959620	ENSMUST00000 055052.5	Ces2c	ENSMUSG00 000061825	carboxylesterase 2C Source MGI Symbol Acc MGI 2385905
B10	SBM1080164	ENSMUST00000 065797.6	Chst1	ENSMUSG00 000027221	carbohydrate sulfotransferase 1 Source MGI Symbol Acc MGI 1924219
B11	SBM0791437	ENSMUST00000 000335.11	Comt	ENSMUSG00 000000326	catechol-O-methyltransferase Source MGI Symbol Acc MGI 88470
B12	SBM0917439	ENSMUST00000 162178.7	Cyb5r3	ENSMUSG00 000018042	cytochrome b5 reductase 3 Source MGI Symbol Acc MGI 94893
C01	SBM0983746	ENSMUST00000 167634.1	Cyp11b2	ENSMUSG00 000022589	cytochrome P450, family 11, subfamily b, polypeptide 2 Source MGI Symbol Acc MGI 88584
C02	SBM0719547	ENSMUST00000 236174.1	Cyp17a1	ENSMUSG00 000003555	cytochrome P450, family 17, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88586
C03	SBM0796819	ENSMUST00000 034811.7	Cyp19a1	ENSMUSG00 000032274	cytochrome P450, family 19, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88587
C04	SBM0687229	ENSMUST00000 216433.1	Cyp1a1	ENSMUSG00 000032315	cytochrome P450, family 1, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88588
C05	SBM0864852	ENSMUST00000 034860.4	Cyp1a2	ENSMUSG00 000032310	cytochrome P450, family 1, subfamily a, polypeptide 2 Source MGI Symbol Acc MGI 88589
C06	SBM0821726	ENSMUST00000 172069.1	Cyp27b1	ENSMUSG00 000006724	cytochrome P450, family 27, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 1098274
C07	SBM0759111	ENSMUST00000 176624.7	Cyp2c29	ENSMUSG00 000003053	cytochrome P450, family 2, subfamily c, polypeptide 29 Source MGI Symbol Acc MGI 103238
C08	SBM1037941	ENSMUST00000 209253.1	Cyp2e1	ENSMUSG00 000025479	cytochrome P450, family 2, subfamily e, polypeptide 1 Source MGI Symbol Acc MGI 88607
C09	SBM0724906	ENSMUST00000 035918.7	Cyp3a11	ENSMUSG00 000056035	cytochrome P450, family 3, subfamily a, polypeptide 11 Source MGI Symbol Acc MGI 88609
C10	SBM1080250	ENSMUST00000 067479.5	Cyp3a44	ENSMUSG00 000054417	cytochrome P450, family 3, subfamily a, polypeptide 44 Source MGI Symbol Acc MGI 2449818
		ENSMUST00000		ENSMUSG00	cytochrome P450, family 4, subfamily b, polypeptide 1 Source MGI Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0839189	143237.1	Cyp4b1	ENSMUSG0000028713	MGI 103225
C12	SBM0683548	ENSMUST00000 154133.7	Ephx1	ENSMUSG0000038776	epoxide hydrolase 1, microsomal Source MGI Symbol Acc MGI 95405
D01	SBM1053432	ENSMUST00000 225309.1	Ephx2	ENSMUSG0000022040	epoxide hydrolase 2, cytoplasmic Source MGI Symbol Acc MGI 99500
D02	SBM1047406	ENSMUST00000 150614.1	Faah	ENSMUSG0000034171	fatty acid amide hydrolase Source MGI Symbol Acc MGI 109609
D03	SBM0968769	ENSMUST00000 092888.10	Fbp1	ENSMUSG0000069805	fructose bisphosphatase 1 Source MGI Symbol Acc MGI 95492
D04	SBM0887552	ENSMUST00000 094934.10	Gad1	ENSMUSG0000070880	glutamate decarboxylase 1 Source MGI Symbol Acc MGI 95632
D05	SBM0983792	ENSMUST00000 156728.1	Gad2	ENSMUSG0000026787	glutamic acid decarboxylase 2 Source MGI Symbol Acc MGI 95634
D06	SBM0946513	ENSMUST00000 202909.3	Gckr	ENSMUSG0000059434	glucokinase regulatory protein Source MGI Symbol Acc MGI 1096345
D07	SBM1021320	ENSMUST00000 139459.7	Ggt1	ENSMUSG000006345	gamma-glutamyltransferase 1 Source MGI Symbol Acc MGI 95706
D08	SBM1045586	ENSMUST00000 038027.5	Gpi1	ENSMUSG0000036427	glucose phosphate isomerase 1 Source MGI Symbol Acc MGI 95797
D09	SBM0858533	ENSMUST00000 082429.6	Gpx1	ENSMUSG0000063856	glutathione peroxidase 1 Source MGI Symbol Acc MGI 104887
D10	SBM0899268	ENSMUST00000 082431.3	Gpx2	ENSMUSG0000042808	glutathione peroxidase 2 Source MGI Symbol Acc MGI 106609
D11	SBM0906281	ENSMUST00000 149324.1	Gpx3	ENSMUSG0000018339	glutathione peroxidase 3 Source MGI Symbol Acc MGI 105102
D12	SBM0989192	ENSMUST00000 110491.8	Gpx5	ENSMUSG000004344	glutathione peroxidase 5 Source MGI Symbol Acc MGI 104886
E01	SBM0942303	ENSMUST00000 033992.8	Gsr	ENSMUSG0000031584	glutathione reductase Source MGI Symbol Acc MGI 95804
E02	SBM0760940	ENSMUST00000 098537.3	Gsta1	ENSMUSG0000074183	glutathione S-transferase, alpha 1 (Ya) Source MGI Symbol Acc MGI 1095417
E03	SBM0965916	ENSMUST00000 027067.14	Gsta3	ENSMUSG0000025934	glutathione S-transferase, alpha 3 Source MGI Symbol Acc MGI 95856
E04	SBM0737924	ENSMUST00000 034903.6	Gsta4	ENSMUSG0000032348	glutathione S-transferase, alpha 4 Source MGI Symbol Acc MGI 1309515
E05	SBM1066973	ENSMUST00000 126593.2	Gstm1	ENSMUSG0000058135	glutathione S-transferase, mu 1 Source MGI Symbol Acc MGI 95860
E06	SBM0970167	ENSMUST00000 012348.8	Gstm2	ENSMUSG0000040562	glutathione S-transferase, mu 2 Source MGI Symbol Acc MGI 95861
E07	SBM0812138	ENSMUST00000 004136.9	Gstm3	ENSMUSG0000004038	glutathione S-transferase, mu 3 Source MGI Symbol Acc MGI 106026
E08	SBM0815421	ENSMUST00000 106670.1	Gstm4	ENSMUSG0000027890	glutathione S-transferase, mu 4 Source MGI Symbol Acc MGI 95862
E09	SBM1042079	ENSMUST00000 167387.7	Gstm5	ENSMUSG0000004032	glutathione S-transferase, mu 5 Source MGI Symbol Acc MGI 1309466
E10	SBM1021264	ENSMUST00000 237239.1	Gstp1	ENSMUSG0000060803	glutathione S-transferase, pi 1 Source MGI Symbol Acc MGI 95865
E11	SBM0701691	ENSMUST00000 139724.2	Gstt1	ENSMUSG0000001663	glutathione S-transferase, theta 1 Source MGI Symbol Acc MGI 107379
E12	SBM0788230	ENSMUST00000 063117.9	Gstz1	ENSMUSG0000021033	glutathione transferase zeta 1 (maleylacetate isomerase) Source MGI Symbol Acc MGI 1341859
F01	SBM1068583	ENSMUST00000 000642.10	Hk2	ENSMUSG000000628	hexokinase 2 Source MGI Symbol Acc MGI 1315197
F02	SBM0760736	ENSMUST00000 019445.5	Hsd17b1	ENSMUSG0000019301	hydroxysteroid (17-beta) dehydrogenase 1 Source MGI Symbol Acc MGI 105077
F03	SBM0797562	ENSMUST00000 034304.8	Hsd17b2	ENSMUSG0000031844	hydroxysteroid (17-beta) dehydrogenase 2 Source MGI Symbol Acc MGI 1096386
F04	SBM0787331	ENSMUST00000 222810.1	Hsd17b3	ENSMUSG0000033122	hydroxysteroid (17-beta) dehydrogenase 3 Source MGI Symbol Acc MGI 107177
F05	SBM0751530	ENSMUST00000 157004.1	Lpo	ENSMUSG0000009356	lactoperoxidase Source MGI Symbol Acc MGI 1923363
F06	SBM1051642	ENSMUST00000 120302.7	Mgst1	ENSMUSG000008540	microsomal glutathione S-transferase 1 Source MGI Symbol Acc MGI 1913850
F07	SBM0976305	ENSMUST00000 161590.3	Mgst2	ENSMUSG0000074604	microsomal glutathione S-transferase 2 Source MGI Symbol Acc MGI 2448481
F08	SBM1020815	ENSMUST00000 028005.2	Mgst3	ENSMUSG0000026688	microsomal glutathione S-transferase 3 Source MGI Symbol Acc MGI 1913697
F09	SBM1011865	ENSMUST00000 107930.2	Mpo	ENSMUSG0000009350	myeloperoxidase Source MGI Symbol Acc MGI 97137
F10	SBM0896648	ENSMUST00000 212806.1	Mt2	ENSMUSG0000031762	metallothionein 2 Source MGI Symbol Acc MGI 97172

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0931289	ENSMUST00000 034211.9	Mt3	ENSMUSG00 000031760	metallothionein 3 Source MGI Symbol Acc MGI 97173
F12	SBM0820259	ENSMUST00000 097788.10	Mthfr	ENSMUSG00 000029009	methylenetetrahydrofolate reductase Source MGI Symbol Acc MGI 106639
G01	SBM0891705	ENSMUST00000 212171.1	Nat1	ENSMUSG00 000025588	N-acetyl transferase 1 Source MGI Symbol Acc MGI 97279
G02	SBM0680837	ENSMUST00000 093470.6	Nat2	ENSMUSG00 000051147	N-acetyltransferase 2 (arylamine N-acetyltransferase) Source MGI Symbol Acc MGI 109201
G03	SBM0681619	ENSMUST00000 030834.6	Nos3	ENSMUSG00 000028978	nitric oxide synthase 3, endothelial cell Source MGI Symbol Acc MGI 97362
G04	SBM0878519	ENSMUST00000 003947.8	Nqo1	ENSMUSG00 000003849	NAD(P)H dehydrogenase, quinone 1 Source MGI Symbol Acc MGI 103187
G05	SBM0893001	ENSMUST00000 127058.1	Pkrl	ENSMUSG00 000041237	pyruvate kinase liver and red blood cell Source MGI Symbol Acc MGI 97604
G06	SBM1088066	ENSMUST00000 214571.1	Pkm	ENSMUSG00 000032294	pyruvate kinase, muscle Source MGI Symbol Acc MGI 97591
G07	SBM0804103	ENSMUST00000 176945.1	Pon1	ENSMUSG00 000002588	paraoxonase 1 Source MGI Symbol Acc MGI 103295
G08	SBM0989508	ENSMUST00000 135342.1	Pon2	ENSMUSG00 000032667	paraoxonase 2 Source MGI Symbol Acc MGI 106687
G09	SBM1012826	ENSMUST00000 156848.7	Pon3	ENSMUSG00 000029759	paraoxonase 3 Source MGI Symbol Acc MGI 106686
G10	SBM0751652	ENSMUST00000 228962.1	Snn	ENSMUSG00 000037972	stannin Source MGI Symbol Acc MGI 1276549
G11	SBM0677862	ENSMUST00000 059235.8	Srd5a1	ENSMUSG00 000021594	steroid 5 alpha-reductase 1 Source MGI Symbol Acc MGI 98400
G12	SBM0821488	ENSMUST00000 043458.8	Srd5a2	ENSMUSG00 000038541	steroid 5 alpha-reductase 2 Source MGI Symbol Acc MGI 2150380
H01	SBM1220560	ENSMUST00000 100497.10	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	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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