

QuantiNova® LNA® PCR Focus Panels (Rotor-Gene® Format)

Mouse Drug Metabolism: Phase I Enzymes

Cat. no. 249950 SBMM-068ZR

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 (Rotor-Gene): QuantiNova LNA PCR Focus Panel

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc® (plate A1–A12=Rotor-Disc 1–12, plate B1–B12=Rotor-Disc 13–24, etc.). To maintain data analysis compatibility, wells 97–100 do not contain real-time assays but will contain master mix to account for weight balance. 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	Aadac	Adh1	Adh4	Adh5	Adh7	Aldh1a1	Aldh1a2	Aldh1a3	Aldh1a7	Aldh1b1	Aldh2	Aldh3a1
B	Aldh3a2	Aldh3b1	Aldh3b2	Aldh4a1	Aldh5a1	Aldh6a1	Aldh7a1	Aldh8a1	Aldh9a1	Cel	Cyp11a1	Cyp11b1
C	Cyp11b2	Cyp17a1	Cyp19a1	Cyp1a1	Cyp1a2	Cyp1b1	Cyp21a1	Cyp24a1	Cyp26a1	Cyp26b1	Cyp26c1	Cyp27a1
D	Cyp27b1	Cyp2a4	Cyp2a5	Cyp2c29	Cyp2c38	Cyp2c39	Cyp2c54	Cyp2c55	Cyp2c65	Cyp2c66	Cyp2d22	Cyp2e1
E	Cyp2f2	Cyp2r1	Cyp2s1	Cyp3a11	Cyp3a13	Cyp3a16	Cyp3a25	Cyp3a44	Cyp3a57	Cyp4a10	Cyp4a12a	Cyp4b1
F	Cyp4f14	Cyp4f15	Cyp4f18	Cyp7a1	Cyp7b1	Cyp8b1	Dhrs2	Dpyd	Esd	Fmo1	Fmo2	Fmo3
G	Fmo4	Fmo5	Gzma	Gzmb	Hsd17b10	Maoa	Maob	Ptgs1	Ptgs2	Uchl1	Uchl3	Xdh
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	SBM0830101	ENSMUST00000029325.4	Aadac	ENSMUSG0000027761	arylacetamide deacetylase Source MGI Symbol Acc MGI 1915008
A02	SBM0686762	ENSMUST00000004232.9	Adh1	ENSMUSG00000074207	alcohol dehydrogenase 1 (class I) Source MGI Symbol Acc MGI 87921
A03	SBM1051665	ENSMUST00000161312.7	Adh4	ENSMUSG00000037797	alcohol dehydrogenase 4 (class II), pi polypeptide Source MGI Symbol Acc MGI 1349472
A04	SBM0683903	ENSMUST00000198126.1	Adh5	ENSMUSG00000028138	alcohol dehydrogenase 5 (class III), chi polypeptide Source MGI Symbol Acc MGI 87929
A05	SBM1084856	ENSMUST00000090171.6	Adh7	ENSMUSG00000055301	alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide Source MGI Symbol Acc MGI 87926
A06	SBM0801506	ENSMUST00000225337.2	Aldh1a1	ENSMUSG00000053279	aldehyde dehydrogenase family 1, subfamily A1 Source MGI Symbol Acc MGI 1353450
A07	SBM0722689	ENSMUST00000034723.5	Aldh1a2	ENSMUSG0000013584	aldehyde dehydrogenase family 1, subfamily A2 Source MGI Symbol Acc MGI 107928
A08	SBM0881559	ENSMUST00000174209.7	Aldh1a3	ENSMUSG0000015134	aldehyde dehydrogenase family 1, subfamily A3 Source MGI Symbol Acc MGI 1861722
A09	SBM0687568	ENSMUST00000025656.3	Aldh1a7	ENSMUSG00000024747	aldehyde dehydrogenase family 1, subfamily A7 Source MGI Symbol Acc MGI 1347050
A10	SBM0835870	ENSMUST00000172750.1	Aldh1b1	ENSMUSG00000035561	aldehyde dehydrogenase 1 family, member B1 Source MGI Symbol Acc MGI 1919785
A11	SBM0700925	ENSMUST00000129753.7	Aldh2	ENSMUSG00000029455	aldehyde dehydrogenase 2, mitochondrial Source MGI Symbol Acc MGI 99600
A12	SBM0947400	ENSMUST00000108716.7	Aldh3a1	ENSMUSG0000019102	aldehyde dehydrogenase family 3, subfamily A1 Source MGI Symbol Acc MGI 1353451
B01	SBM0895686	ENSMUST00000147291.7	Aldh3a2	ENSMUSG0000010025	aldehyde dehydrogenase family 3, subfamily A2 Source MGI Symbol Acc MGI 1353452
B02	SBM0837627	ENSMUST00000051803.7	Aldh3b1	ENSMUSG00000024885	aldehyde dehydrogenase 3 family, member B1 Source MGI Symbol Acc MGI 1914939
B03	SBM0701126	ENSMUST00000143380.2	Aldh3b2	ENSMUSG00000075296	aldehyde dehydrogenase 3 family, member B2 Source MGI Symbol Acc MGI 2147613
B04	SBM1047956	ENSMUST00000039818.9	Aldh4a1	ENSMUSG00000028737	aldehyde dehydrogenase 4 family, member A1 Source MGI Symbol Acc MGI 2443883
B05	SBM0680255	ENSMUST00000037615.6	Aldh5a1	ENSMUSG00000035936	aldehyde dehydrogenase family 5, subfamily A1 Source MGI Symbol Acc MGI 2441982
B06	SBM0909188	ENSMUST00000222656.1	Aldh6a1	ENSMUSG00000021238	aldehyde dehydrogenase family 6, subfamily A1 Source MGI Symbol Acc MGI 1915077
B07	SBM0742989	ENSMUST00000172734.7	Aldh7a1	ENSMUSG00000053644	aldehyde dehydrogenase family 7, member A1 Source MGI Symbol Acc MGI 108186
B08	SBM0730170	ENSMUST00000161285.1	Aldh8a1	ENSMUSG00000037542	aldehyde dehydrogenase 8 family, member A1 Source MGI Symbol Acc MGI 2653900
B09	SBM0724453	ENSMUST00000191715.1	Aldh9a1	ENSMUSG00000026687	aldehyde dehydrogenase 9, subfamily A1 Source MGI Symbol Acc MGI 1861622
B10	SBM0827569	ENSMUST00000028161.5	Cel	ENSMUSG00000026818	carboxyl ester lipase Source MGI Symbol Acc MGI 88374
B11	SBM1025581	ENSMUST00000034874.13	Cyp11a1	ENSMUSG00000032323	cytochrome P450, family 11, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88582
B12	SBM0707811	ENSMUST00000170259.2	Cyp11b1	ENSMUSG00000075604	cytochrome P450, family 11, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 88583
C01	SBM0983746	ENSMUST00000167634.1	Cyp11b2	ENSMUSG00000022589	cytochrome P450, family 11, subfamily b, polypeptide 2 Source MGI Symbol Acc MGI 88584
C02	SBM0719547	ENSMUST00000236174.1	Cyp17a1	ENSMUSG00000003555	cytochrome P450, family 17, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88586
C03	SBM0796819	ENSMUST00000034811.7	Cyp19a1	ENSMUSG00000032274	cytochrome P450, family 19, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88587
C04	SBM0687229	ENSMUST00000216433.1	Cyp1a1	ENSMUSG00000032315	cytochrome P450, family 1, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88588
C05	SBM0864852	ENSMUST00000034860.4	Cyp1a2	ENSMUSG00000032310	cytochrome P450, family 1, subfamily a, polypeptide 2 Source MGI Symbol Acc MGI 88589
C06	SBM0735361	ENSMUST00000234927.1	Cyp1b1	ENSMUSG00000024087	cytochrome P450, family 1, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 88590
C07	SBM0695199	ENSMUST00000173394.1	Cyp21a1	ENSMUSG00000024365	cytochrome P450, family 21, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88591
C08	SBM0698673	ENSMUST00000038824.5	Cyp24a1	ENSMUSG00000038567	cytochrome P450, family 24, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88593
C09	SBM1016184	ENSMUST00000025946.6	Cyp26a1	ENSMUSG00000024987	cytochrome P450, family 26, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 1096359
C10	SBM0778594	ENSMUST00000204109.1	Cyp26b1	ENSMUSG00000063415	cytochrome P450, family 26, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 2176159
		ENSMUST00000		ENSMUSG00	cytochrome P450, family 26, subfamily c, polypeptide 1 Source MGI Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0891041	073391.4	Cyp26c1	000062432	MGI 2679699
C12	SBM1013045	ENSMUST00000027356.6	Cyp27a1	ENSMUSG0000026170	cytochrome P450, family 27, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88594
D01	SBM0821726	ENSMUST00000172069.1	Cyp27b1	ENSMUSG0000006724	cytochrome P450, family 27, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 1098274
D02	SBM0928194	ENSMUST00000098657.4	Cyp2a4	ENSMUSG00000074254	cytochrome P450, family 2, subfamily a, polypeptide 4 Source MGI Symbol Acc MGI 88596
D03	SBM0831757	ENSMUST00000165641.1	Cyp2a5	ENSMUSG0000005547	cytochrome P450, family 2, subfamily a, polypeptide 5 Source MGI Symbol Acc MGI 88597
D04	SBM0759111	ENSMUST00000176624.7	Cyp2c29	ENSMUSG0000003053	cytochrome P450, family 2, subfamily c, polypeptide 29 Source MGI Symbol Acc MGI 103238
D05	SBM1048013	ENSMUST00000035488.2	Cyp2c38	ENSMUSG0000032808	cytochrome P450, family 2, subfamily c, polypeptide 38 Source MGI Symbol Acc MGI 1306819
D06	SBM0723818	ENSMUST00000025968.4	Cyp2c39	ENSMUSG0000025003	cytochrome P450, family 2, subfamily c, polypeptide 39 Source MGI Symbol Acc MGI 1306818
D07	SBM0684360	ENSMUST00000048959.4	Cyp2c54	ENSMUSG0000067225	cytochrome P450, family 2, subfamily c, polypeptide 54 Source MGI Symbol Acc MGI 3642960
D08	SBM0873574	ENSMUST00000025966.4	Cyp2c55	ENSMUSG0000025002	cytochrome P450, family 2, subfamily c, polypeptide 55 Source MGI Symbol Acc MGI 1919332
D09	SBM0810092	ENSMUST00000087236.4	Cyp2c65	ENSMUSG0000067231	cytochrome P450, family 2, subfamily c, polypeptide 65 Source MGI Symbol Acc MGI 1919553
D10	SBM0889668	ENSMUST00000146494.1	Cyp2c66	ENSMUSG0000067229	cytochrome P450, family 2, subfamily c, polypeptide 66 Source MGI Symbol Acc MGI 1917138
D11	SBM0892868	ENSMUST00000228986.1	Cyp2d22	ENSMUSG0000061740	cytochrome P450, family 2, subfamily d, polypeptide 22 Source MGI Symbol Acc MGI 1929474
D12	SBM1037941	ENSMUST00000209253.1	Cyp2e1	ENSMUSG0000025479	cytochrome P450, family 2, subfamily e, polypeptide 1 Source MGI Symbol Acc MGI 88607
E01	SBM0712875	ENSMUST00000206552.1	Cyp2f2	ENSMUSG0000052974	cytochrome P450, family 2, subfamily f, polypeptide 2 Source MGI Symbol Acc MGI 88608
E02	SBM0884573	ENSMUST00000211506.1	Cyp2r1	ENSMUSG0000030670	cytochrome P450, family 2, subfamily r, polypeptide 1 Source MGI Symbol Acc MGI 2449771
E03	SBM0729851	ENSMUST00000108395.7	Cyp2s1	ENSMUSG0000040703	cytochrome P450, family 2, subfamily s, polypeptide 1 Source MGI Symbol Acc MGI 1921384
E04	SBM0724906	ENSMUST00000035918.7	Cyp3a11	ENSMUSG0000056035	cytochrome P450, family 3, subfamily a, polypeptide 11 Source MGI Symbol Acc MGI 88609
E05	SBM0974793	ENSMUST00000031741.7	Cyp3a13	ENSMUSG0000029727	cytochrome P450, family 3, subfamily a, polypeptide 13 Source MGI Symbol Acc MGI 88610
E06	SBM0931035	ENSMUST00000031633.4	Cyp3a16	ENSMUSG0000038656	cytochrome P450, family 3, subfamily a, polypeptide 16 Source MGI Symbol Acc MGI 106099
E07	SBM1062892	ENSMUST00000138870.1	Cyp3a25	ENSMUSG0000029630	cytochrome P450, family 3, subfamily a, polypeptide 25 Source MGI Symbol Acc MGI 1930638
E08	SBM1080250	ENSMUST00000067479.5	Cyp3a44	ENSMUSG0000054417	cytochrome P450, family 3, subfamily a, polypeptide 44 Source MGI Symbol Acc MGI 2449818
E09	SBM1081890	ENSMUST00000174696.7	Cyp3a57	ENSMUSG0000070419	cytochrome P450, family 3, subfamily a, polypeptide 57 Source MGI Symbol Acc MGI 3646373
E10	SBM0792650	ENSMUST00000058785.9	Cyp4a10	ENSMUSG0000066072	cytochrome P450, family 4, subfamily a, polypeptide 10 Source MGI Symbol Acc MGI 88611
E11	SBM0917115	ENSMUST00000084343.3	Cyp4a12a	ENSMUSG0000066071	cytochrome P450, family 4, subfamily a, polypeptide 12a Source MGI Symbol Acc MGI 88612
E12	SBM0839189	ENSMUST00000143237.1	Cyp4b1	ENSMUSG0000028713	cytochrome P450, family 4, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 103225
F01	SBM1029193	ENSMUST00000234797.1	Cyp4f14	ENSMUSG0000024292	cytochrome P450, family 4, subfamily f, polypeptide 14 Source MGI Symbol Acc MGI 1927669
F02	SBM1091223	ENSMUST00000167789.7	Cyp4f15	ENSMUSG0000073424	cytochrome P450, family 4, subfamily f, polypeptide 15 Source MGI Symbol Acc MGI 2146921
F03	SBM1069544	ENSMUST00000125448.1	Cyp4f18	ENSMUSG0000003484	cytochrome P450, family 4, subfamily f, polypeptide 18 Source MGI Symbol Acc MGI 1919304
F04	SBM0922584	ENSMUST00000147346.1	Cyp7a1	ENSMUSG0000028240	cytochrome P450, family 7, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 106091
F05	SBM0824492	ENSMUST00000035625.6	Cyp7b1	ENSMUSG0000039519	cytochrome P450, family 7, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 104978
F06	SBM0736054	ENSMUST00000062474.4	Cyp8b1	ENSMUSG0000050445	cytochrome P450, family 8, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 1338044
F07	SBM0869060	ENSMUST00000165432.1	Dhrs2	ENSMUSG0000022209	dehydrogenase/reductase member 2 Source MGI Symbol Acc MGI 1918662
F08	SBM0813504	ENSMUST00000126254.7	Dpyd	ENSMUSG0000033308	dihydropyrimidine dehydrogenase Source MGI Symbol Acc MGI 2139667
F09	SBM0938023	ENSMUST00000177137.7	Esd	ENSMUSG0000021996	esterase D/formylglutathione hydrolase Source MGI Symbol Acc MGI 95421
F10	SBM0866045	ENSMUST00000131058.7	Fmo1	ENSMUSG0000040181	flavin containing monooxygenase 1 Source MGI Symbol Acc MGI 1310002

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0841573	ENSMUST00000111510.7	Fmo2	ENSMUSG0000040170	flavin containing monooxygenase 2 Source MGI Symbol Acc MGI 1916776
F12	SBM0982616	ENSMUST00000028010.8	Fmo3	ENSMUSG0000026691	flavin containing monooxygenase 3 Source MGI Symbol Acc MGI 1100496
G01	SBM0807543	ENSMUST00000111525.7	Fmo4	ENSMUSG0000026692	flavin containing monooxygenase 4 Source MGI Symbol Acc MGI 2429497
G02	SBM0814021	ENSMUST00000107049.1	Fmo5	ENSMUSG0000028088	flavin containing monooxygenase 5 Source MGI Symbol Acc MGI 1310004
G03	SBM1086274	ENSMUST00000023897.6	Gzma	ENSMUSG0000023132	granzyme A Source MGI Symbol Acc MGI 109266
G04	SBM1051832	ENSMUST00000015581.5	Gzmb	ENSMUSG0000015437	granzyme B Source MGI Symbol Acc MGI 109267
G05	SBM0912931	ENSMUST00000151200.7	Hsd17b10	ENSMUSG0000025260	hydroxysteroid (17-beta) dehydrogenase 10 Source MGI Symbol Acc MGI 1333871
G06	SBM0886215	ENSMUST00000026013.5	Maoa	ENSMUSG0000025037	monoamine oxidase A Source MGI Symbol Acc MGI 96915
G07	SBM0839056	ENSMUST00000040820.12	Maob	ENSMUSG0000040147	monoamine oxidase B Source MGI Symbol Acc MGI 96916
G08	SBM0775877	ENSMUST00000149930.2	Ptgs1	ENSMUSG0000047250	prostaglandin-endoperoxide synthase 1 Source MGI Symbol Acc MGI 97797
G09	SBM0782881	ENSMUST00000035065.8	Ptgs2	ENSMUSG0000032487	prostaglandin-endoperoxide synthase 2 Source MGI Symbol Acc MGI 97798
G10	SBM0909454	ENSMUST00000202339.1	Uchl1	ENSMUSG0000029223	ubiquitin carboxy-terminal hydrolase L1 Source MGI Symbol Acc MGI 103149
G11	SBM0674165	ENSMUST00000002289.7	Uchl3	ENSMUSG0000022111	ubiquitin carboxyl-terminal esterase L3 (ubiquitin thiolesterase) Source MGI Symbol Acc MGI 1355274
G12	SBM1090997	ENSMUST00000233621.1	Xdh	ENSMUSG0000024066	xanthine dehydrogenase Source MGI Symbol Acc MGI 98973
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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