

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

Mouse Drug Metabolism: Phase I Enzymes

Cat. no. 249955 UPMM-068ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light 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 Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

Panel layout (Rotor-Gene): QuantiNova LNA Probe 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 Probe PCR 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 Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFM087496 9	ENSMUST000000 029325.4	Aadac	ENSMUSG00 000027761	arylacetamide deacetylase Source MGI Symbol Acc MGI 1915008
A02	UPFM098557 8	ENSMUST000000 004232.9	Adh1	ENSMUSG00 000074207	alcohol dehydrogenase 1 (class I) Source MGI Symbol Acc MGI 87921
A03	UPFM063770 0	ENSMUST000000 013458.8	Adh4	ENSMUSG00 000037797	alcohol dehydrogenase 4 (class II), pi polypeptide Source MGI Symbol Acc MGI 1349472
A04	UPFM087144 9	ENSMUST000000 162024.1	Adh5	ENSMUSG00 000028138	alcohol dehydrogenase 5 (class III), chi polypeptide Source MGI Symbol Acc MGI 87929
A05	UPFM078584 6	ENSMUST000000 196133.1	Adh7	ENSMUSG00 000055301	alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide Source MGI Symbol Acc MGI 87926
A06	UPFM077566 5	ENSMUST000000 225337.2	Aldh1a1	ENSMUSG00 000053279	aldehyde dehydrogenase family 1, subfamily A1 Source MGI Symbol Acc MGI 1353450
A07	UPFM097076 4	ENSMUST000000 034723.5	Aldh1a2	ENSMUSG00 000013584	aldehyde dehydrogenase family 1, subfamily A2 Source MGI Symbol Acc MGI 107928
A08	UPFM065840 9	ENSMUST000000 174215.1	Aldh1a3	ENSMUSG00 000015134	aldehyde dehydrogenase family 1, subfamily A3 Source MGI Symbol Acc MGI 1861722
A09	UPFM064046 9	ENSMUST000000 025656.3	Aldh1a7	ENSMUSG00 000024747	aldehyde dehydrogenase family 1, subfamily A7 Source MGI Symbol Acc MGI 1347050
A10	UPFM075371 0	ENSMUST000000 172750.1	Aldh1b1	ENSMUSG00 000035561	aldehyde dehydrogenase 1 family, member B1 Source MGI Symbol Acc MGI 1919785
A11	UPFM066581 7	ENSMUST000000 200541.4	Aldh2	ENSMUSG00 000029455	aldehyde dehydrogenase 2, mitochondrial Source MGI Symbol Acc MGI 99600
A12	UPFM086572 6	ENSMUST000000 019246.3	Aldh3a1	ENSMUSG00 000019102	aldehyde dehydrogenase family 3, subfamily A1 Source MGI Symbol Acc MGI 1353451
B01	UPFM090071 0	ENSMUST000000 141368.7	Aldh3a2	ENSMUSG00 000010025	aldehyde dehydrogenase family 3, subfamily A2 Source MGI Symbol Acc MGI 1353452
B02	UPFM063702 6	ENSMUST000000 051803.7	Aldh3b1	ENSMUSG00 000024885	aldehyde dehydrogenase 3 family, member B1 Source MGI Symbol Acc MGI 1914939
B03	UPFM086537 8	ENSMUST000000 143380.2	Aldh3b2	ENSMUSG00 000075296	aldehyde dehydrogenase 3 family, member B2 Source MGI Symbol Acc MGI 2147613
B04	UPFM100708 6	ENSMUST000000 146309.7	Aldh4a1	ENSMUSG00 000028737	aldehyde dehydrogenase 4 family, member A1 Source MGI Symbol Acc MGI 2443883
B05	UPFM089070 3	ENSMUST000000 037615.6	Aldh5a1	ENSMUSG00 000035936	aldehyde dehydrogenase family 5, subfamily A1 Source MGI Symbol Acc MGI 2441982
B06	UPFM085459 1	ENSMUST000000 085192.6	Aldh6a1	ENSMUSG00 000021238	aldehyde dehydrogenase family 6, subfamily A1 Source MGI Symbol Acc MGI 1915077
B07	UPFM094592 0	ENSMUST000000 171844.2	Aldh7a1	ENSMUSG00 000053644	aldehyde dehydrogenase family 7, member A1 Source MGI Symbol Acc MGI 108186
B08	UPFM074586 0	ENSMUST000000 159163.1	Aldh8a1	ENSMUSG00 000037542	aldehyde dehydrogenase 8 family, member A1 Source MGI Symbol Acc MGI 2653900
B09	UPFM081735 0	ENSMUST000000 191715.1	Aldh9a1	ENSMUSG00 000026687	aldehyde dehydrogenase 9, subfamily A1 Source MGI Symbol Acc MGI 1861622
B10	UPFM072981 7	ENSMUST000000 124756.1	Cel	ENSMUSG00 000026818	carboxyl ester lipase Source MGI Symbol Acc MGI 88374
B11	UPFM100116 7	ENSMUST000000 188116.6	Cyp11a1	ENSMUSG00 000032323	cytochrome P450, family 11, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88582
B12	UPFM067218 1	ENSMUST000000 170259.2	Cyp11b1	ENSMUSG00 000075604	cytochrome P450, family 11, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 88583
C01	UPFM094748 5	ENSMUST000000 167634.1	Cyp11b2	ENSMUSG00 000022589	cytochrome P450, family 11, subfamily b, polypeptide 2 Source MGI Symbol Acc MGI 88584
C02	UPFM063420 5	ENSMUST000000 026012.7	Cyp17a1	ENSMUSG00 000003555	cytochrome P450, family 17, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88586
C03	UPFM074620 1	ENSMUST000000 215736.1	Cyp19a1	ENSMUSG00 000032274	cytochrome P450, family 19, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88587
C04	UPFM076795 1	ENSMUST000000 034865.5	Cyp1a1	ENSMUSG00 000032315	cytochrome P450, family 1, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88588
C05	UPFM085894 9	ENSMUST000000 034860.4	Cyp1a2	ENSMUSG00 000032310	cytochrome P450, family 1, subfamily a, polypeptide 2 Source MGI Symbol Acc MGI 88589
C06	UPFM112630 0	ENSMUST000000 234361.1	Cyp1b1	ENSMUSG00 000024087	cytochrome P450, family 1, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 88590
C07	UPFM097818 2	ENSMUST000000 173394.1	Cyp21a1	ENSMUSG00 000024365	cytochrome P450, family 21, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88591
C08	UPFM063750 8	ENSMUST000000 038824.5	Cyp24a1	ENSMUSG00 000038567	cytochrome P450, family 24, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88593
C09	UPFM094834 2	ENSMUST000000 025946.6	Cyp26a1	ENSMUSG00 000024987	cytochrome P450, family 26, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 1096359
C10	UPFM077140 7	ENSMUST000000 077705.5	Cyp26b1	ENSMUSG00 000063415	cytochrome P450, family 26, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 2176159
	UPFM068653	ENSMUST000000		ENSMUSG00	cytochrome P450, family 26, subfamily c, polypeptide 1 Source MGI Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	4	073391.4	Cyp26c1	000062432	MGI 2679699
C12	UPFM1003248	ENSMUST00000027356.6	Cyp27a1	ENSMUSG0000026170	cytochrome P450, family 27, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 88594
D01	UPFM0820497	ENSMUST00000165764.7	Cyp27b1	ENSMUSG0000006724	cytochrome P450, family 27, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 1098274
D02	UPFM0978250	ENSMUST00000098657.4	Cyp2a4	ENSMUSG0000074254	cytochrome P450, family 2, subfamily a, polypeptide 4 Source MGI Symbol Acc MGI 88596
D03	UPFM1003480	ENSMUST00000005685.14	Cyp2a5	ENSMUSG0000005547	cytochrome P450, family 2, subfamily a, polypeptide 5 Source MGI Symbol Acc MGI 88597
D04	UPFM0900018	ENSMUST00000003137.14	Cyp2c29	ENSMUSG0000003053	cytochrome P450, family 2, subfamily c, polypeptide 29 Source MGI Symbol Acc MGI 103238
D05	UPFM0735996	ENSMUST00000035488.2	Cyp2c38	ENSMUSG0000032808	cytochrome P450, family 2, subfamily c, polypeptide 38 Source MGI Symbol Acc MGI 1306819
D06	UPFM0843893	ENSMUST00000025968.4	Cyp2c39	ENSMUSG0000025003	cytochrome P450, family 2, subfamily c, polypeptide 39 Source MGI Symbol Acc MGI 1306818
D07	UPFM0692739	ENSMUST00000048959.4	Cyp2c54	ENSMUSG0000067225	cytochrome P450, family 2, subfamily c, polypeptide 54 Source MGI Symbol Acc MGI 3642960
D08	UPFM0661610	ENSMUST00000025966.4	Cyp2c55	ENSMUSG0000025002	cytochrome P450, family 2, subfamily c, polypeptide 55 Source MGI Symbol Acc MGI 1919332
D09	UPFM0747057	ENSMUST00000087236.4	Cyp2c65	ENSMUSG0000067231	cytochrome P450, family 2, subfamily c, polypeptide 65 Source MGI Symbol Acc MGI 1919553
D10	UPFM0779595	ENSMUST000000146494.1	Cyp2c66	ENSMUSG0000067229	cytochrome P450, family 2, subfamily c, polypeptide 66 Source MGI Symbol Acc MGI 1917138
D11	UPFM0968607	ENSMUST000000230663.1	Cyp2d22	ENSMUSG0000061740	cytochrome P450, family 2, subfamily d, polypeptide 22 Source MGI Symbol Acc MGI 1929474
D12	UPFM0815665	ENSMUST000000210403.1	Cyp2e1	ENSMUSG0000025479	cytochrome P450, family 2, subfamily e, polypeptide 1 Source MGI Symbol Acc MGI 88607
E01	UPFM0758989	ENSMUST000000206552.1	Cyp2f2	ENSMUSG0000052974	cytochrome P450, family 2, subfamily f, polypeptide 2 Source MGI Symbol Acc MGI 88608
E02	UPFM0993009	ENSMUST000000128587.7	Cyp2r1	ENSMUSG0000030670	cytochrome P450, family 2, subfamily r, polypeptide 1 Source MGI Symbol Acc MGI 2449771
E03	UPFM0982976	ENSMUST00000043314.9	Cyp2s1	ENSMUSG0000040703	cytochrome P450, family 2, subfamily s, polypeptide 1 Source MGI Symbol Acc MGI 1921384
E04	UPFM1002463	ENSMUST00000035918.7	Cyp3a11	ENSMUSG0000056035	cytochrome P450, family 3, subfamily a, polypeptide 11 Source MGI Symbol Acc MGI 88609
E05	UPFM0762102	ENSMUST00000031741.7	Cyp3a13	ENSMUSG0000029727	cytochrome P450, family 3, subfamily a, polypeptide 13 Source MGI Symbol Acc MGI 88610
E06	UPFM1009847	ENSMUST00000031633.4	Cyp3a16	ENSMUSG0000038656	cytochrome P450, family 3, subfamily a, polypeptide 16 Source MGI Symbol Acc MGI 106099
E07	UPFM1003564	ENSMUST00000068317.12	Cyp3a25	ENSMUSG0000029630	cytochrome P450, family 3, subfamily a, polypeptide 25 Source MGI Symbol Acc MGI 1930638
E08	UPFM0676125	ENSMUST00000067479.5	Cyp3a44	ENSMUSG0000054417	cytochrome P450, family 3, subfamily a, polypeptide 44 Source MGI Symbol Acc MGI 2449818
E09	UPFM0802170	ENSMUST00000079268.8	Cyp3a57	ENSMUSG0000070419	cytochrome P450, family 3, subfamily a, polypeptide 57 Source MGI Symbol Acc MGI 3646373
E10	UPFM0733408	ENSMUST00000094886.3	Cyp4a10	ENSMUSG0000066072	cytochrome P450, family 4, subfamily a, polypeptide 10 Source MGI Symbol Acc MGI 88611
E11	UPFM0874092	ENSMUST00000084343.3	Cyp4a12a	ENSMUSG0000066071	cytochrome P450, family 4, subfamily a, polypeptide 12a Source MGI Symbol Acc MGI 88612
E12	UPFM0936690	ENSMUST000000135569.7	Cyp4b1	ENSMUSG0000028713	cytochrome P450, family 4, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 103225
F01	UPFM0895782	ENSMUST000000234538.1	Cyp4f14	ENSMUSG0000024292	cytochrome P450, family 4, subfamily f, polypeptide 14 Source MGI Symbol Acc MGI 1927669
F02	UPFM0824530	ENSMUST00000008801.6	Cyp4f15	ENSMUSG0000073424	cytochrome P450, family 4, subfamily f, polypeptide 15 Source MGI Symbol Acc MGI 2146921
F03	UPFM0723156	ENSMUST000000125448.1	Cyp4f18	ENSMUSG0000003484	cytochrome P450, family 4, subfamily f, polypeptide 18 Source MGI Symbol Acc MGI 1919304
F04	UPFM0785191	ENSMUST000000147346.1	Cyp7a1	ENSMUSG0000028240	cytochrome P450, family 7, subfamily a, polypeptide 1 Source MGI Symbol Acc MGI 106091
F05	UPFM0705650	ENSMUST00000035625.6	Cyp7b1	ENSMUSG0000039519	cytochrome P450, family 7, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 104978
F06	UPFM0998691	ENSMUST00000062474.4	Cyp8b1	ENSMUSG0000050445	cytochrome P450, family 8, subfamily b, polypeptide 1 Source MGI Symbol Acc MGI 1338044
F07	UPFM0679261	ENSMUST000000165432.1	Dhrs2	ENSMUSG0000022209	dehydrogenase/reductase member 2 Source MGI Symbol Acc MGI 1918662
F08	UPFM0642293	ENSMUST000000126254.7	Dpyd	ENSMUSG0000033308	dihydropyrimidine dehydrogenase Source MGI Symbol Acc MGI 2139667
F09	UPFM0921426	ENSMUST000000176726.1	Esd	ENSMUSG0000021996	esterase D/formylglutathione hydrolase Source MGI Symbol Acc MGI 95421
F10	UPFM0685803	ENSMUST000000134098.7	Fmo1	ENSMUSG0000040181	flavin containing monooxygenase 1 Source MGI Symbol Acc MGI 1310002

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM095565 5	ENSMUST00000 194061.1	Fmo2	ENSMUSG00 000040170	flavin containing monooxygenase 2 Source MGI Symbol Acc MGI 1916776
F12	UPFM095377 4	ENSMUST00000 028010.8	Fmo3	ENSMUSG00 000026691	flavin containing monooxygenase 3 Source MGI Symbol Acc MGI 1100496
G01	UPFM092097 8	ENSMUST00000 111525.7	Fmo4	ENSMUSG00 000026692	flavin containing monooxygenase 4 Source MGI Symbol Acc MGI 2429497
G02	UPFM062327 9	ENSMUST00000 140283.1	Fmo5	ENSMUSG00 000028088	flavin containing monooxygenase 5 Source MGI Symbol Acc MGI 1310004
G03	UPFM072275 9	ENSMUST00000 023897.6	Gzma	ENSMUSG00 000023132	granzyme A Source MGI Symbol Acc MGI 109266
G04	UPFM076196 3	ENSMUST00000 015581.5	Gzmb	ENSMUSG00 000015437	granzyme B Source MGI Symbol Acc MGI 109267
G05	UPFM072383 3	ENSMUST00000 026289.9	Hsd17b10	ENSMUSG00 000025260	hydroxysteroid (17-beta) dehydrogenase 10 Source MGI Symbol Acc MGI 1333871
G06	UPFM072891 5	ENSMUST00000 026013.5	Maoa	ENSMUSG00 000025037	monoamine oxidase A Source MGI Symbol Acc MGI 96915
G07	UPFM070987 7	ENSMUST00000 040820.12	Maob	ENSMUSG00 000040147	monoamine oxidase B Source MGI Symbol Acc MGI 96916
G08	UPFM062184 9	ENSMUST00000 149930.2	Ptgs1	ENSMUSG00 000047250	prostaglandin-endoperoxide synthase 1 Source MGI Symbol Acc MGI 97797
G09	UPFM100449 2	ENSMUST00000 190784.1	Ptgs2	ENSMUSG00 000032487	prostaglandin-endoperoxide synthase 2 Source MGI Symbol Acc MGI 97798
G10	UPFM080966 9	ENSMUST00000 031131.10	Uchl1	ENSMUSG00 000029223	ubiquitin carboxy-terminal hydrolase L1 Source MGI Symbol Acc MGI 103149
G11	UPFM075842 5	ENSMUST00000 227815.1	Uchl3	ENSMUSG00 000022111	ubiquitin carboxyl-terminal esterase L3 (ubiquitin thiolesterase) Source MGI Symbol Acc MGI 1355274
G12	UPFM084844 7	ENSMUST00000 233449.1	Xdh	ENSMUSG00 000024066	xanthine dehydrogenase Source MGI Symbol Acc MGI 98973
H01	UPFM113294 6	ENSMUST00000 163829.1	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	UPFM113294 7	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	UPFM113294 8	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	UPFM113294 9	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	UPFM113295 0	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	UPFM112660 9	UPL_MGDC	MGDC	UPL_MGDC	Mouse Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
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 Probe RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 μ l QuantiNova Probe 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	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l QN ROX Reference Dye, 1.9 ml Water	208252

*Larger kit sizes available.

The QuantiNova LNA Probe 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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