

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

Mouse Circadian Rhythms

Cat. no. 249955 UPMM-153ZR

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	Aanat	Alas1	Arntl	Arntl2	Bhlhe40	Bhlhe41	Camk2a	Camk2b	Camk2d	Camk2g	Carpt	Noct
B	Chrb2	Clock	Creb1	Creb3	Crx	Cry1	Cry2	Csnk1a1	Csnk1d	Csnk1e	Csnk2a1	Csnk2a2
C	Dbp	Egr1	Egr3	Epo	Esrra	Fbxl21	Fbxl3	Hebp1	Hlf	Htr7	Irf1	Kcnma1
D	Mapk1	Mapk14	Mapk3	Mat2a	Mtnr1a	Mtnr1b	Myod1	Ncoa3	Nfil3	Nkx2-5	Nms	Npas2
E	Nr1d1	Nr1d2	Nr2f6	Opn3	Opn4	Pax4	Per1	Per2	Per3	Pou2f1	Ppara	Ppargc1a
F	Ptf1	Prkaca	Prkacb	Prkar1a	Prkar1b	Prkar2a	Prkar2b	Prkca	Prkcb	Prokr2	Ptgds	Rora
G	Rorb	Rorc	Slc9a3	Smad4	Sp1	Srebf1	Stat5a	Tfap2a	Tef	Tgfb1	Timeless	Wee1
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	UPFM070445 6	ENSMUST00000 153476.7	Aanat	ENSMUSG00 000020804	arylalkylamine N-acetyltransferase Source MGI Symbol Acc MGI 1328365
A02	UPFM075904 9	ENSMUST00000 219340.1	Alas1	ENSMUSG00 000032786	aminolevulinic acid synthase 1 Source MGI Symbol Acc MGI 87989
A03	UPFM097061 5	ENSMUST00000 210074.1	Arntl	ENSMUSG00 000055116	aryl hydrocarbon receptor nuclear translocator-like Source MGI Symbol Acc MGI 1096381
A04	UPFM090264 5	ENSMUST00000 111639.7	Arntl2	ENSMUSG00 000040187	aryl hydrocarbon receptor nuclear translocator-like 2 Source MGI Symbol Acc MGI 2684845
A05	UPFM084168 9	ENSMUST00000 163617.1	Bhlhe40	ENSMUSG00 000030103	basic helix-loop-helix family, member e40 Source MGI Symbol Acc MGI 1097714
A06	UPFM065442 2	ENSMUST00000 111703.1	Bhlhe41	ENSMUSG00 000030256	basic helix-loop-helix family, member e41 Source MGI Symbol Acc MGI 1930704
A07	UPFM099124 3	ENSMUST00000 115297.7	Camk2a	ENSMUSG00 000024617	calcium/calmodulin-dependent protein kinase II alpha Source MGI Symbol Acc MGI 88256
A08	UPFM069364 2	ENSMUST00000 130427.7	Camk2b	ENSMUSG00 000057897	calcium/calmodulin-dependent protein kinase II, beta Source MGI Symbol Acc MGI 88257
A09	UPFM062884 2	ENSMUST00000 143383.7	Camk2d	ENSMUSG00 000053819	calcium/calmodulin-dependent protein kinase II, delta Source MGI Symbol Acc MGI 1341265
A10	UPFM094428 2	ENSMUST00000 224245.1	Camk2g	ENSMUSG00 000021820	calcium/calmodulin-dependent protein kinase II gamma Source MGI Symbol Acc MGI 88259
A11	UPFM070355 1	ENSMUST00000 224142.1	Cartpt	ENSMUSG00 000021647	CART prepropeptide Source MGI Symbol Acc MGI 1351330
A12	UPFM093233 6	ENSMUST00000 193018.1	Noct	ENSMUSG00 000023087	nocturnin Source MGI Symbol Acc MGI 109382
B01	UPFM086991 8	ENSMUST00000 029562.4	Chrn2	ENSMUSG00 000027950	cholinergic receptor, nicotinic, beta polypeptide 2 (neuronal) Source MGI Symbol Acc MGI 87891
B02	UPFM068884 7	ENSMUST00000 075159.4	Clock	ENSMUSG00 000029238	circadian locomotor output cycles kaput Source MGI Symbol Acc MGI 99698
B03	UPFM085293 8	ENSMUST00000 087366.10	Creb1	ENSMUSG00 000025958	cAMP responsive element binding protein 1 Source MGI Symbol Acc MGI 88494
B04	UPFM069561 9	ENSMUST00000 167751.1	Creb3	ENSMUSG00 000028466	cAMP responsive element binding protein 3 Source MGI Symbol Acc MGI 99946
B05	UPFM070865 3	ENSMUST00000 172758.2	Crx	ENSMUSG00 000041578	cone-rod homeobox Source MGI Symbol Acc MGI 1194883
B06	UPFM090788 9	ENSMUST00000 214675.1	Cry1	ENSMUSG00 000020038	cryptochrome 1 (photolyase-like) Source MGI Symbol Acc MGI 1270841
B07	UPFM099763 1	ENSMUST00000 111278.1	Cry2	ENSMUSG00 000068742	cryptochrome 2 (photolyase-like) Source MGI Symbol Acc MGI 1270859
B08	UPFM067250 2	ENSMUST00000 165721.7	Csnk1a1	ENSMUSG00 000024576	casein kinase 1, alpha 1 Source MGI Symbol Acc MGI 1934950
B09	UPFM070913 8	ENSMUST00000 146837.1	Csnk1d	ENSMUSG00 000025162	casein kinase 1, delta Source MGI Symbol Acc MGI 1355272
B10	UPFM098065 2	ENSMUST00000 117786.7	Csnk1e	ENSMUSG00 000022433	casein kinase 1, epsilon Source MGI Symbol Acc MGI 1351660
B11	UPFM093398 7	ENSMUST00000 136063.1	Csnk2a1	ENSMUSG00 000074698	casein kinase 2, alpha 1 polypeptide Source MGI Symbol Acc MGI 88543
B12	UPFM100968 5	ENSMUST00000 212615.1	Csnk2a2	ENSMUSG00 000046707	casein kinase 2, alpha prime polypeptide Source MGI Symbol Acc MGI 88547
C01	UPFM075989 6	ENSMUST00000 210120.1	Dbp	ENSMUSG00 000059824	D site albumin promoter binding protein Source MGI Symbol Acc MGI 94866
C02	UPFM085434 3	ENSMUST00000 165033.1	Egr1	ENSMUSG00 000038418	early growth response 1 Source MGI Symbol Acc MGI 95295
C03	UPFM081883 4	ENSMUST00000 225200.1	Egr3	ENSMUSG00 000033730	early growth response 3 Source MGI Symbol Acc MGI 1306780
C04	UPFM089128 5	ENSMUST00000 111039.2	Epo	ENSMUSG00 000029711	erythropoietin Source MGI Symbol Acc MGI 95407
C05	UPFM095603 4	ENSMUST00000 173635.1	Esrra	ENSMUSG00 000024955	estrogen related receptor, alpha Source MGI Symbol Acc MGI 1346831
C06	UPFM088179 1	ENSMUST00000 121871.7	Fbxl21	ENSMUSG00 000035509	F-box and leucine-rich repeat protein 21 Source MGI Symbol Acc MGI 2442921
C07	UPFM065498 7	ENSMUST00000 132004.7	Fbxl3	ENSMUSG00 000022124	F-box and leucine-rich repeat protein 3 Source MGI Symbol Acc MGI 1354702
C08	UPFM091802 4	ENSMUST00000 204000.1	Hebp1	ENSMUSG00 000042770	heme binding protein 1 Source MGI Symbol Acc MGI 1333880
C09	UPFM078067 5	ENSMUST00000 137957.1	Hlf	ENSMUSG00 000003949	hepatic leukemia factor Source MGI Symbol Acc MGI 96108
C10	UPFM093812 7	ENSMUST00000 164781.1	Htr7	ENSMUSG00 000024798	5-hydroxytryptamine (serotonin) receptor 7 Source MGI Symbol Acc MGI 99841
	UPFM062425	ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	2	142221.7	Irf1	000018899	interferon regulatory factor 1 Source MGI Symbol Acc MGI 96590
C12	UPFM082331 1	ENSMUST00000 225305.1	Kcnma1	ENSMUSG00 000063142	potassium large conductance calcium-activated channel, subfamily M, alpha member 1 Source MGI Symbol Acc MGI 99923
D01	UPFM066625 9	ENSMUST00000 232611.1	Mapk1	ENSMUSG00 000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
D02	UPFM074684 8	ENSMUST00000 004990.13	Mapk14	ENSMUSG00 000053436	mitogen-activated protein kinase 14 Source MGI Symbol Acc MGI 1346865
D03	UPFM094029 9	ENSMUST00000 205657.1	Mapk3	ENSMUSG00 000063065	mitogen-activated protein kinase 3 Source MGI Symbol Acc MGI 1346859
D04	UPFM100500 4	ENSMUST00000 205384.1	Mat2a	ENSMUSG00 000053907	methionine adenosyltransferase II, alpha Source MGI Symbol Acc MGI 2443731
D05	UPFM065931 5	ENSMUST00000 130141.1	Mtnr1a	ENSMUSG00 000054764	melatonin receptor 1A Source MGI Symbol Acc MGI 102967
D06	UPFM086763 5	ENSMUST00000 057920.6	Mtnr1b	ENSMUSG00 000050901	melatonin receptor 1B Source MGI Symbol Acc MGI 2181726
D07	UPFM063561 8	ENSMUST00000 072514.2	Myod1	ENSMUSG00 000009471	myogenic differentiation 1 Source MGI Symbol Acc MGI 97275
D08	UPFM096085 0	ENSMUST00000 139394.1	Ncoa3	ENSMUSG00 000027678	nuclear receptor coactivator 3 Source MGI Symbol Acc MGI 1276535
D09	UPFM095957 5	ENSMUST00000 071065.7	Nfil3	ENSMUSG00 000056749	nuclear factor, interleukin 3, regulated Source MGI Symbol Acc MGI 109495
D10	UPFM075936 1	ENSMUST00000 015723.4	Nkx2-5	ENSMUSG00 000015579	NK2 homeobox 5 Source MGI Symbol Acc MGI 97350
D11	UPFM089729 3	ENSMUST00000 088029.7	Nms	ENSMUSG00 000067604	neuromedin S Source MGI Symbol Acc MGI 3583618
D12	UPFM092486 2	ENSMUST00000 056815.8	Npas2	ENSMUSG00 000026077	neuronal PAS domain protein 2 Source MGI Symbol Acc MGI 109232
E01	UPFM089468 3	ENSMUST00000 064941.6	Nr1d1	ENSMUSG00 000020889	nuclear receptor subfamily 1, group D, member 1 Source MGI Symbol Acc MGI 2444210
E02	UPFM071789 9	ENSMUST00000 090543.5	Nr1d2	ENSMUSG00 000021775	nuclear receptor subfamily 1, group D, member 2 Source MGI Symbol Acc MGI 2449205
E03	UPFM099944 3	ENSMUST00000 127443.1	Nr2f6	ENSMUSG00 000002393	nuclear receptor subfamily 2, group F, member 6 Source MGI Symbol Acc MGI 1352453
E04	UPFM079628 3	ENSMUST00000 027809.7	Opn3	ENSMUSG00 000026525	opsin 3 Source MGI Symbol Acc MGI 1338022
E05	UPFM071438 4	ENSMUST00000 022331.2	Opn4	ENSMUSG00 000021799	opsin 4 (melanopsin) Source MGI Symbol Acc MGI 1353425
E06	UPFM100876 6	ENSMUST00000 031718.13	Pax4	ENSMUSG00 000029706	paired box 4 Source MGI Symbol Acc MGI 97488
E07	UPFM099385 2	ENSMUST00000 142392.7	Per1	ENSMUSG00 000020893	period circadian clock 1 Source MGI Symbol Acc MGI 1098283
E08	UPFM073851 6	ENSMUST00000 069620.9	Per2	ENSMUSG00 000055866	period circadian clock 2 Source MGI Symbol Acc MGI 1195265
E09	UPFM099342 2	ENSMUST00000 103204.10	Per3	ENSMUSG00 000028957	period circadian clock 3 Source MGI Symbol Acc MGI 1277134
E10	UPFM065209 1	ENSMUST00000 111429.10	Pou2f1	ENSMUSG00 000026565	POU domain, class 2, transcription factor 1 Source MGI Symbol Acc MGI 101898
E11	UPFM096943 9	ENSMUST00000 138813.7	Ppara	ENSMUSG00 000022383	peroxisome proliferator activated receptor alpha Source MGI Symbol Acc MGI 104740
E12	UPFM095044 2	ENSMUST00000 031059.13	Ppargc1a	ENSMUSG00 000029167	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha Source MGI Symbol Acc MGI 1342774
F01	UPFM063459 2	ENSMUST00000 035419.6	Prf1	ENSMUSG00 000037202	perforin 1 (pore forming protein) Source MGI Symbol Acc MGI 97551
F02	UPFM091850 5	ENSMUST00000 211558.1	Prkaca	ENSMUSG00 000005469	protein kinase, cAMP dependent, catalytic, alpha Source MGI Symbol Acc MGI 97592
F03	UPFM077653 7	ENSMUST00000 197616.1	Prkacb	ENSMUSG00 000005034	protein kinase, cAMP dependent, catalytic, beta Source MGI Symbol Acc MGI 97594
F04	UPFM061847 4	ENSMUST00000 106676.7	Prkar1a	ENSMUSG00 000020612	protein kinase, cAMP dependent regulatory, type I, alpha Source MGI Symbol Acc MGI 104878
F05	UPFM061880 5	ENSMUST00000 147505.7	Prkar1b	ENSMUSG00 000025855	protein kinase, cAMP dependent regulatory, type I beta Source MGI Symbol Acc MGI 97759
F06	UPFM090469 8	ENSMUST00000 195405.5	Prkar2a	ENSMUSG00 000032601	protein kinase, cAMP dependent regulatory, type II alpha Source MGI Symbol Acc MGI 108025
F07	UPFM097055 2	ENSMUST00000 036497.15	Prkar2b	ENSMUSG00 000002997	protein kinase, cAMP dependent regulatory, type II beta Source MGI Symbol Acc MGI 97760
F08	UPFM091650 2	ENSMUST00000 100302.3	Prkca	ENSMUSG00 000050965	protein kinase C, alpha Source MGI Symbol Acc MGI 97595
F09	UPFM080540 4	ENSMUST00000 143692.7	Prkcb	ENSMUSG00 000052889	protein kinase C, beta Source MGI Symbol Acc MGI 97596
F10	UPFM080583 0	ENSMUST00000 142766.1	Prokr2	ENSMUSG00 000050558	prokineticin receptor 2 Source MGI Symbol Acc MGI 2181363

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM099114 0	ENSMUST00000 137417.1	Ptgds	ENSMUSG00 000015090	prostaglandin D2 synthase (brain) Source MGI Symbol Acc MGI 99261
F12	UPFM080274 1	ENSMUST00000 174296.1	Rora	ENSMUSG00 000032238	RAR-related orphan receptor alpha Source MGI Symbol Acc MGI 104661
G01	UPFM100640 8	ENSMUST00000 112828.7	Rorb	ENSMUSG00 000036192	RAR-related orphan receptor beta Source MGI Symbol Acc MGI 1343464
G02	UPFM092267 4	ENSMUST00000 198793.1	Rorc	ENSMUSG00 000028150	RAR-related orphan receptor gamma Source MGI Symbol Acc MGI 104856
G03	UPFM081998 2	ENSMUST00000 036208.6	Slc9a3	ENSMUSG00 000036123	solute carrier family 9 (sodium/hydrogen exchanger), member 3 Source MGI Symbol Acc MGI 105064
G04	UPFM098632 8	ENSMUST00000 114939.1	Smad4	ENSMUSG00 000024515	SMAD family member 4 Source MGI Symbol Acc MGI 894293
G05	UPFM083079 3	ENSMUST00000 001326.6	Sp1	ENSMUSG00 000001280	trans-acting transcription factor 1 Source MGI Symbol Acc MGI 98372
G06	UPFM063110 3	ENSMUST00000 149238.1	Srebf1	ENSMUSG00 000020538	sterol regulatory element binding transcription factor 1 Source MGI Symbol Acc MGI 107606
G07	UPFM096618 6	ENSMUST00000 138083.7	Stat5a	ENSMUSG00 000004043	signal transducer and activator of transcription 5A Source MGI Symbol Acc MGI 103036
G08	UPFM074872 1	ENSMUST00000 021787.6	Tfap2a	ENSMUSG00 000021359	transcription factor AP-2, alpha Source MGI Symbol Acc MGI 104671
G09	UPFM089222 1	ENSMUST00000 168632.1	Tef	ENSMUSG00 000022389	thyrotroph embryonic factor Source MGI Symbol Acc MGI 98663
G10	UPFM066688 0	ENSMUST00000 171757.1	Tgfb1	ENSMUSG00 000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G11	UPFM070582 0	ENSMUST00000 055539.10	Timeless	ENSMUSG00 000039994	timeless circadian clock 1 Source MGI Symbol Acc MGI 1321393
G12	UPFM069624 3	ENSMUST00000 033326.9	Wee1	ENSMUSG00 000031016	WEE 1 homolog 1 (S. pombe) Source MGI Symbol Acc MGI 103075
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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