

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

Human Circadian Rhythms

Cat. no. 249955 UPHS-153ZA

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 (96-well): QuantiNova LNA Probe PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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	CARTPT	NOCT
B	CHRN2	CLOCK	CREB1	CREB3	CRX	CRY1	CRY2	CSNK1A1	CSNK1D	CSNK1E	CSNK2A1	CSNK2A2
C	DBP	EGR1	EGR3	EPO	ESRRA	FBXL21P	FBXL3	HEBP1	HLF	HTR7	IRF1	KCNMA1
D	MAPK1	MAPK14	MAPK3	MAT2A	MTNR1A	MTNR1B	MYOD1	NCOA3	NFIL3	NIK2-5	NMS	NPAS2
E	NR1D1	NR1D2	NR2F6	OPN3	OPN4	PAX4	PER1	PER2	PER3	POU2F1	PPARA	PPARGC1A
F	PRF1	PRKACB	PRKACG	PRKAR1A	PRKAR1B	PRKAR2A	PRKAR2B	PRKCA	PRKCB	PROKR2	PTGD5	RORA
G	RORB	RORC	SLC9A3	SMAD4	SP1	SREBF1	STAT5A	TEF	TFAP2A	TGFB1	TIMELESS	WEE1
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFH0470317	ENST00000392492.7	AANAT	ENSG00000129673	aralkylamine N-acetyltransferase Source HGNC Symbol Acc HGNC 19
A02	UPFH0230815	ENST00000493402.1	ALAS1	ENSG00000023330	5-aminolevulinic acid synthase 1 Source HGNC Symbol Acc HGNC 396
A03	UPFH0107429	ENST00000472842.1	ARNTL	ENSG00000133794	aryl hydrocarbon receptor nuclear translocator like 1 Source HGNC Symbol Acc HGNC 701
A04	UPFH0378650	ENST00000266503.9	ARNTL2	ENSG00000029153	aryl hydrocarbon receptor nuclear translocator like 2 Source HGNC Symbol Acc HGNC 18984
A05	UPFH0490613	ENST00000460806.1	BHLHE40	ENSG00000134107	basic helix-loop-helix family member e40 Source HGNC Symbol Acc HGNC 1046
A06	UPFH0500572	ENST00000242728.5	BHLHE41	ENSG00000123095	basic helix-loop-helix family member e41 Source HGNC Symbol Acc HGNC 16617
A07	UPFH0197566	ENST00000398376.7	CAMK2A	ENSG00000070808	calcium/calmodulin dependent protein kinase II alpha Source HGNC Symbol Acc HGNC 1460
A08	UPFH0063265	ENST00000258682.10	CAMK2B	ENSG00000058404	calcium/calmodulin dependent protein kinase II beta Source HGNC Symbol Acc HGNC 1461
A09	UPFH0589701	ENST00000342666.9	CAMK2D	ENSG00000145349	calcium/calmodulin dependent protein kinase II delta Source HGNC Symbol Acc HGNC 1462
A10	UPFH0501608	ENST00000423381.5	CAMK2G	ENSG00000148660	calcium/calmodulin dependent protein kinase II gamma Source HGNC Symbol Acc HGNC 1463
A11	UPFH0559459	ENST00000513096.1	CARTPT	ENSG00000164326	CART prepropeptide Source HGNC Symbol Acc HGNC 24323
A12	UPFH0457523	ENST00000280614.4	NOCT	ENSG00000151014	nocturnin Source HGNC Symbol Acc HGNC 14254
B01	UPFH0476909	ENST00000368476.3	CHRN2	ENSG00000160716	cholinergic receptor nicotinic beta 2 subunit Source HGNC Symbol Acc HGNC 1962
B02	UPFH0374338	ENST00000511124.1	CLOCK	ENSG00000134852	clock circadian regulator Source HGNC Symbol Acc HGNC 2082
B03	UPFH0199960	ENST00000480189.5	CREB1	ENSG00000118260	cAMP responsive element binding protein 1 Source HGNC Symbol Acc HGNC 2345
B04	UPFH0611876	ENST00000486056.1	CREB3	ENSG00000107175	cAMP responsive element binding protein 3 Source HGNC Symbol Acc HGNC 2347
B05	UPFH0216762	ENST00000539067.5	CRX	ENSG00000105392	cone-rod homeobox Source HGNC Symbol Acc HGNC 2383
B06	UPFH1132336	ENST00000008527.10	CRY1	ENSG00000008405	cryptochrome circadian regulator 1 Source HGNC Symbol Acc HGNC 2384
B07	UPFH0260549	ENST00000473199.5	CRY2	ENSG00000121671	cryptochrome circadian regulator 2 Source HGNC Symbol Acc HGNC 2385
B08	UPFH0546143	ENST00000377843.6	CSNK1A1	ENSG00000113712	casein kinase 1 alpha 1 Source HGNC Symbol Acc HGNC 2451
B09	UPFH1125358	ENST00000580446.1	CSNK1D	ENSG00000141551	casein kinase 1 delta Source HGNC Symbol Acc HGNC 2452
B10	UPFH0538939	ENST00000396832.6	CSNK1E	ENSG00000213923	casein kinase 1 epsilon Source HGNC Symbol Acc HGNC 2453
B11	UPFH0055149	ENST00000645249.1	CSNK2A1	ENSG00000101266	casein kinase 2 alpha 1 Source HGNC Symbol Acc HGNC 2457
B12	UPFH0043887	ENST00000563307.1	CSNK2A2	ENSG00000070770	casein kinase 2 alpha 2 Source HGNC Symbol Acc HGNC 2459
C01	UPFH0127536	ENST00000599385.5	DBP	ENSG00000105516	D-box binding PAR bZIP transcription factor Source HGNC Symbol Acc HGNC 2697
C02	UPFH0558832	ENST00000239938.5	EGR1	ENSG00000120738	early growth response 1 Source HGNC Symbol Acc HGNC 3238
C03	UPFH0445244	ENST00000522910.1	EGR3	ENSG00000179388	early growth response 3 Source HGNC Symbol Acc HGNC 3240
C04	UPFH0083071	ENST00000252723.3	EPO	ENSG00000130427	erythropoietin Source HGNC Symbol Acc HGNC 3415
C05	UPFH0612502	ENST00000539594.5	ESRRA	ENSG00000173153	estrogen related receptor alpha Source HGNC Symbol Acc HGNC 3471
C06	UPFH0375006	ENST00000478939.1	FBXL21P	ENSG00000164616	F-box and leucine rich repeat protein 21, pseudogene Source HGNC Symbol Acc HGNC 13600
C07	UPFH0258085	ENST00000355619.10	FBXL3	ENSG00000005812	F-box and leucine rich repeat protein 3 Source HGNC Symbol Acc HGNC 13599
C08	UPFH0076922	ENST00000647702.1	HEBP1	ENSG00000013583	heme binding protein 1 Source HGNC Symbol Acc HGNC 17176
C09	UPFH0174873	ENST00000570962.1	HLF	ENSG00000108924	HLF, PAR bZIP transcription factor Source HGNC Symbol Acc HGNC 4977
C10	UPFH0231778	ENST0000027874.10	HTR7	ENSG00000148680	5-hydroxytryptamine receptor 7 Source HGNC Symbol Acc HGNC 5302
		ENST00000476		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132490	613.1	IRF1	125347	interferon regulatory factor 1 Source HGNC Symbol Acc HGNC 6116
C12	UPFH0028258	ENST00000639090.1	KCNMA1	ENSG00000156113	potassium calcium-activated channel subfamily M alpha 1 Source HGNC Symbol Acc HGNC 6284
D01	UPFH0366815	ENST00000215832.10	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
D02	UPFH0068247	ENST00000229795.7	MAPK14	ENSG00000112062	mitogen-activated protein kinase 14 Source HGNC Symbol Acc HGNC 6876
D03	UPFH1132534	ENST00000481230.1	MAPK3	ENSG00000102882	mitogen-activated protein kinase 3 Source HGNC Symbol Acc HGNC 6877
D04	UPFH0143761	ENST00000306434.8	MAT2A	ENSG00000168906	methionine adenosyltransferase 2A Source HGNC Symbol Acc HGNC 6904
D05	UPFH0036054	ENST00000307161.5	MTNR1A	ENSG00000168412	melatonin receptor 1A Source HGNC Symbol Acc HGNC 7463
D06	UPFH0320876	ENST00000257068.2	MTNR1B	ENSG00000134640	melatonin receptor 1B Source HGNC Symbol Acc HGNC 7464
D07	UPFH0179986	ENST00000250003.4	MYOD1	ENSG00000129152	myogenic differentiation 1 Source HGNC Symbol Acc HGNC 7611
D08	UPFH1132566	ENST00000372004.7	NCOA3	ENSG00000124151	nuclear receptor coactivator 3 Source HGNC Symbol Acc HGNC 7670
D09	UPFH0541839	ENST00000297689.4	NFIL3	ENSG00000165030	nuclear factor, interleukin 3 regulated Source HGNC Symbol Acc HGNC 7787
D10	UPFH0227465	ENST00000521848.1	NKX2-5	ENSG00000183072	NK2 homeobox 5 Source HGNC Symbol Acc HGNC 2488
D11	UPFH0362725	ENST00000376865.1	NMS	ENSG00000204640	neuromedin S Source HGNC Symbol Acc HGNC 32203
D12	UPFH0447970	ENST00000486017.5	NPAS2	ENSG00000170485	neuronal PAS domain protein 2 Source HGNC Symbol Acc HGNC 7895
E01	UPFH0117748	ENST00000246672.4	NR1D1	ENSG00000126368	nuclear receptor subfamily 1 group D member 1 Source HGNC Symbol Acc HGNC 7962
E02	UPFH0016842	ENST00000492552.5	NR1D2	ENSG00000174738	nuclear receptor subfamily 1 group D member 2 Source HGNC Symbol Acc HGNC 7963
E03	UPFH0198907	ENST00000291442.3	NR2F6	ENSG00000160113	nuclear receptor subfamily 2 group F member 6 Source HGNC Symbol Acc HGNC 7977
E04	UPFH0018966	ENST00000490673.5	OPN3	ENSG00000054277	opsin 3 Source HGNC Symbol Acc HGNC 14007
E05	UPFH0525702	ENST00000443292.1	OPN4	ENSG00000122375	opsin 4 Source HGNC Symbol Acc HGNC 14449
E06	UPFH0459383	ENST00000341640.6	PAX4	ENSG00000106331	paired box 4 Source HGNC Symbol Acc HGNC 8618
E07	UPFH0100494	ENST00000581395.5	PER1	ENSG00000179094	period circadian regulator 1 Source NCBI gene Acc 5187
E08	UPFH0006664	ENST00000355768.6	PER2	ENSG00000132326	period circadian regulator 2 Source HGNC Symbol Acc HGNC 8846
E09	UPFH0597792	ENST00000377532.7	PER3	ENSG00000049246	period circadian regulator 3 Source HGNC Symbol Acc HGNC 8847
E10	UPFH0286995	ENST00000557909.5	POU2F1	ENSG00000143190	POU class 2 homeobox 1 Source HGNC Symbol Acc HGNC 9212
E11	UPFH0327373	ENST00000262735.9	PPARA	ENSG00000186951	peroxisome proliferator activated receptor alpha Source HGNC Symbol Acc HGNC 9232
E12	UPFH0403608	ENST00000264867.7	PPARGC1A	ENSG00000109819	PPARG coactivator 1 alpha Source HGNC Symbol Acc HGNC 9237
F01	UPFH0120472	ENST00000639390.1	PRF1	ENSG00000180644	perforin 1 Source HGNC Symbol Acc HGNC 9360
F02	UPFH0554579	ENST00000470673.5	PRKACB	ENSG00000142875	protein kinase cAMP-activated catalytic subunit beta Source HGNC Symbol Acc HGNC 9381
F03	UPFH0342843	ENST00000377276.4	PRKACG	ENSG00000165059	protein kinase cAMP-activated catalytic subunit gamma Source HGNC Symbol Acc HGNC 9382
F04	UPFH0050183	ENST00000586397.5	PRKAR1A	ENSG00000108946	protein kinase cAMP-dependent type I regulatory subunit alpha Source HGNC Symbol Acc HGNC 9388
F05	UPFH0248599	ENST00000417852.5	PRKAR1B	ENSG00000188191	protein kinase cAMP-dependent type I regulatory subunit beta Source HGNC Symbol Acc HGNC 9390
F06	UPFH0265010	ENST00000454963.5	PRKAR2A	ENSG00000114302	protein kinase cAMP-dependent type II regulatory subunit alpha Source HGNC Symbol Acc HGNC 9391
F07	UPFH0532424	ENST00000488792.1	PRKAR2B	ENSG00000005249	protein kinase cAMP-dependent type II regulatory subunit beta Source HGNC Symbol Acc HGNC 9392
F08	UPFH0607768	ENST00000578063.5	PRKCA	ENSG00000154229	protein kinase C alpha Source HGNC Symbol Acc HGNC 9393
F09	UPFH0529104	ENST00000646168.1	PRKCB	ENSG00000166501	protein kinase C beta Source HGNC Symbol Acc HGNC 9395
F10	UPFH0339342	ENST00000217270.3	PROKR2	ENSG00000101292	prokineticin receptor 2 Source HGNC Symbol Acc HGNC 15836

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0495855	ENST00000492068.2	PTGDS	ENSG00000107317	prostaglandin D2 synthase Source HGNC Symbol Acc HGNC 9592
F12	UPFH0374720	ENST00000335670.11	RORA	ENSG00000069667	RAR related orphan receptor A Source HGNC Symbol Acc HGNC 10258
G01	UPFH0495525	ENST00000396204.2	RORB	ENSG00000198963	RAR related orphan receptor B Source HGNC Symbol Acc HGNC 10259
G02	UPFH1132662	ENST00000318247.7	RORC	ENSG00000143365	RAR related orphan receptor C Source HGNC Symbol Acc HGNC 10260
G03	UPFH0332414	ENST00000644203.1	SLC9A3	ENSG00000066230	solute carrier family 9 member A3 Source HGNC Symbol Acc HGNC 11073
G04	UPFH0151428	ENST000003342988.7	SMAD4	ENSG00000141646	SMAD family member 4 Source HGNC Symbol Acc HGNC 6770
G05	UPFH1132843	ENST00000327443.9	SP1	ENSG00000185591	Sp1 transcription factor Source HGNC Symbol Acc HGNC 11205
G06	UPFH0380685	ENST00000490796.1	SREBF1	ENSG00000072310	sterol regulatory element binding transcription factor 1 Source HGNC Symbol Acc HGNC 11289
G07	UPFH0458805	ENST00000591556.1	STAT5A	ENSG00000126561	signal transducer and activator of transcription 5A Source HGNC Symbol Acc HGNC 11366
G08	UPFH0216878	ENST00000406644.7	TEF	ENSG00000167074	TEF, PAR bZIP transcription factor Source HGNC Symbol Acc HGNC 11722
G09	UPFH0483123	ENST00000498450.2	TFAP2A	ENSG00000137203	transcription factor AP-2 alpha Source HGNC Symbol Acc HGNC 11742
G10	UPFH0193430	ENST00000221930.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G11	UPFH0059807	ENST00000553314.1	TIMELESS	ENSG00000111602	timeless circadian regulator Source HGNC Symbol Acc HGNC 11813
G12	UPFH1132757	ENST00000450114.7	WEE1	ENSG00000166483	WEE1 G2 checkpoint kinase Source HGNC Symbol Acc HGNC 12761
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST00000544417.5	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	UPFH1132938	ENST00000229239.10	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	UPFH1132939	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	UPFH1132941	ENST00000392514.9	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	UPFH1126608	UPL_HGDC	HGDC	UPL_HGDC	Human 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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