

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

Human Cell Cycle

Cat. no. 249955 UPHS-020ZR

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	ABL1	ANAPC2	ATM	ATR	AURKA	AURKB	BCCIP	BCL2	BIRC5	BRCA1	BRCA2	CASP3
B	CCNA2	CCNB1	CCNB2	CCNC	CCND1	CCND2	CCND3	CCNE1	CCNF	CCNG1	CCNG2	CCNH
C	CCNT1	CDC16	CDC20	CDC25A	CDC25C	CDC34	CDC6	CDK1	CDK2	CDK4	CDK5R1	CDK5RAP1
D	CDK6	CDK7	CDK8	CDKN1A	CDKN1B	CDKN2A	CDKN2B	CDKN3	CHEK1	CHEK2	CKS1B	CKS2
E	CUL1	CUL2	CUL3	E2F1	E2F4	GADD45A	GTSE1	HUS1	KNTC1	KPNA2	MAD2L1	MAD2L2
F	MCM2	MCM3	MCM4	MCM5	MDM2	MKI67	MNAT1	MRE11	NBN	RAD1	RAD17	RAD51
G	RAD9A	RB1	RBBP8	RBL1	RBL2	SERTAD1	SKP2	STMN1	TFDP1	TFDP2	TP53	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	UPFH1132770	ENST00000318560.6	ABL1	ENSG00000097007	ABL proto-oncogene 1, non-receptor tyrosine kinase Source HGNC Symbol Acc HGNC 76
A02	UPFH1132230	ENST000003323927.3	ANAPC2	ENSG00000176248	anaphase promoting complex subunit 2 Source HGNC Symbol Acc HGNC 19989
A03	UPFH1132252	ENST00000527805.5	ATM	ENSG00000149311	ATM serine/threonine kinase Source HGNC Symbol Acc HGNC 795
A04	UPFH1132260	ENST000003350721.9	ATR	ENSG00000175054	ATR serine/threonine kinase Source HGNC Symbol Acc HGNC 882
A05	UPFH0528207	ENST000003347343.6	AURKA	ENSG00000087586	aurora kinase A Source HGNC Symbol Acc HGNC 11393
A06	UPFH1132261	ENST000003316199.10	AURKB	ENSG00000178999	aurora kinase B Source HGNC Symbol Acc HGNC 11390
A07	UPFH1172896	ENST000003368759.5	BCCIP	ENSG00000107949	BRCA2 and CDKN1A interacting protein Source HGNC Symbol Acc HGNC 978
A08	UPFH1132900	ENST000003333681.5	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
A09	UPFH1132779	ENST000003301633.8	BIRC5	ENSG00000089685	baculoviral IAP repeat containing 5 Source HGNC Symbol Acc HGNC 593
A10	UPFH1132279	ENST00000461574.1	BRCA1	ENSG000000102048	BRCA1, DNA repair associated Source HGNC Symbol Acc HGNC 1100
A11	UPFH0304950	ENST00000544455.5	BRCA2	ENSG00000139618	BRCA2, DNA repair associated Source HGNC Symbol Acc HGNC 1101
A12	UPFH1132892	ENST00000523916.5	CASP3	ENSG00000164305	caspase 3 Source HGNC Symbol Acc HGNC 1504
B01	UPFH0122485	ENST00000618014.1	CCNA2	ENSG00000145386	cyclin A2 Source HGNC Symbol Acc HGNC 1578
B02	UPFH1132293	ENST00000505500.5	CCNB1	ENSG00000134057	cyclin B1 Source HGNC Symbol Acc HGNC 1579
B03	UPFH1132294	ENST00000621385.1	CCNB2	ENSG00000157456	cyclin B2 Source HGNC Symbol Acc HGNC 1580
B04	UPFH1132295	ENST00000520429.6	CCNC	ENSG00000112237	cyclin C Source HGNC Symbol Acc HGNC 1581
B05	UPFH0430337	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B06	UPFH1132296	ENST00000261254.8	CCND2	ENSG00000118971	cyclin D2 Source HGNC Symbol Acc HGNC 1583
B07	UPFH0023687	ENST000003372991.8	CCND3	ENSG00000112576	cyclin D3 Source HGNC Symbol Acc HGNC 1585
B08	UPFH1132297	ENST00000444983.6	CCNE1	ENSG00000105173	cyclin E1 Source HGNC Symbol Acc HGNC 1589
B09	UPFH1132298	ENST000003397066.9	CCNF	ENSG00000162063	cyclin F Source HGNC Symbol Acc HGNC 1591
B10	UPFH1132299	ENST00000510664.5	CCNG1	ENSG00000113328	cyclin G1 Source HGNC Symbol Acc HGNC 1592
B11	UPFH1132300	ENST00000512918.5	CCNG2	ENSG00000138764	cyclin G2 Source HGNC Symbol Acc HGNC 1593
B12	UPFH1132301	ENST00000504878.1	CCNH	ENSG00000134480	cyclin H Source HGNC Symbol Acc HGNC 1594
C01	UPFH1132931	ENST00000640148.1	CCNT1	ENSG00000129315	cyclin T1 Source HGNC Symbol Acc HGNC 1599
C02	UPFH0331376	ENST000003360383.7	CDC16	ENSG00000130177	cell division cycle 16 Source HGNC Symbol Acc HGNC 1720
C03	UPFH1132303	ENST000003372462.1	CDC20	ENSG00000117399	cell division cycle 20 Source HGNC Symbol Acc HGNC 1723
C04	UPFH0432792	ENST000003302506.7	CDC25A	ENSG00000164045	cell division cycle 25A Source HGNC Symbol Acc HGNC 1725
C05	UPFH1132304	ENST00000513970.5	CDC25C	ENSG00000158402	cell division cycle 25C Source HGNC Symbol Acc HGNC 1727
C06	UPFH1132305	ENST00000215574.9	CDC34	ENSG00000099804	cell division cycle 34 Source HGNC Symbol Acc HGNC 1734
C07	UPFH0076379	ENST00000647931.2	CDC6	ENSG00000094804	cell division cycle 6 Source HGNC Symbol Acc HGNC 1744
C08	UPFH1132307	ENST00000614696.4	CDK1	ENSG00000170312	cyclin dependent kinase 1 Source HGNC Symbol Acc HGNC 1722
C09	UPFH1132961	ENST00000266970.9	CDK2	ENSG00000123374	cyclin dependent kinase 2 Source HGNC Symbol Acc HGNC 1771
C10	UPFH0291148	ENST00000549606.5	CDK4	ENSG00000135446	cyclin dependent kinase 4 Source HGNC Symbol Acc HGNC 1773
		ENST00000313		ENSG000000	cyclin dependent kinase 5 regulatory subunit 1 Source HGNC Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132308	401.4	CDK5R1	176749	HGNC 1775
C12	UPFH1132309	ENST00000473997.5	CDK5RAP1	ENSG00000101391	CDK5 regulatory subunit associated protein 1 Source HGNC Symbol Acc HGNC 15880
D01	UPFH0172654	ENST00000265734.8	CDK6	ENSG00000105810	cyclin dependent kinase 6 Source HGNC Symbol Acc HGNC 1777
D02	UPFH1132310	ENST00000256443.8	CDK7	ENSG00000134058	cyclin dependent kinase 7 Source HGNC Symbol Acc HGNC 1778
D03	UPFH1132311	ENST00000381527.8	CDK8	ENSG00000132964	cyclin dependent kinase 8 Source HGNC Symbol Acc HGNC 1779
D04	UPFH0312181	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
D05	UPFH1132964	ENST00000228872.9	CDKN1B	ENSG00000111276	cyclin dependent kinase inhibitor 1B Source HGNC Symbol Acc HGNC 1785
D06	UPFH0246593	ENST00000494262.5	CDKN2A	ENSG00000147889	cyclin dependent kinase inhibitor 2A Source HGNC Symbol Acc HGNC 1787
D07	UPFH0150846	ENST00000579591.1	CDKN2B	ENSG00000147883	cyclin dependent kinase inhibitor 2B Source HGNC Symbol Acc HGNC 1788
D08	UPFH0367304	ENST00000458126.6	CDKN3	ENSG00000100526	cyclin dependent kinase inhibitor 3 Source HGNC Symbol Acc HGNC 1791
D09	UPFH1132313	ENST00000427383.6	CHEK1	ENSG00000149554	checkpoint kinase 1 Source HGNC Symbol Acc HGNC 1925
D10	UPFH1132314	ENST00000439200.5	CHEK2	ENSG00000183765	checkpoint kinase 2 Source HGNC Symbol Acc HGNC 16627
D11	UPFH1132317	ENST00000368439.5	CKS1B	ENSG00000173207	CDC28 protein kinase regulatory subunit 1B Source HGNC Symbol Acc HGNC 19083
D12	UPFH1132318	ENST00000314355.7	CKS2	ENSG00000123975	CDC28 protein kinase regulatory subunit 2 Source HGNC Symbol Acc HGNC 2000
E01	UPFH1132345	ENST00000617797.1	CUL1	ENSG00000055130	cullin 1 Source HGNC Symbol Acc HGNC 2551
E02	UPFH1132346	ENST00000374746.5	CUL2	ENSG00000108094	cullin 2 Source HGNC Symbol Acc HGNC 2552
E03	UPFH1132347	ENST00000409096.5	CUL3	ENSG00000036257	cullin 3 Source HGNC Symbol Acc HGNC 2553
E04	UPFH1132375	ENST00000343380.6	E2F1	ENSG00000101412	E2F transcription factor 1 Source HGNC Symbol Acc HGNC 3113
E05	UPFH1132376	ENST00000379378.8	E2F4	ENSG00000205250	E2F transcription factor 4 Source HGNC Symbol Acc HGNC 3118
E06	UPFH1132413	ENST00000370985.4	GADD45A	ENSG00000116717	growth arrest and DNA damage inducible alpha Source HGNC Symbol Acc HGNC 4095
E07	UPFH1132432	ENST00000454366.2	GTSE1	ENSG00000075218	G2 and S-phase expressed 1 Source HGNC Symbol Acc HGNC 13698
E08	UPFH1132461	ENST00000258774.10	HUS1	ENSG00000136273	HUS1 checkpoint clamp component Source HGNC Symbol Acc HGNC 5309
E09	UPFH1132512	ENST00000333479.12	KNTC1	ENSG00000184445	kinetochore associated 1 Source HGNC Symbol Acc HGNC 17255
E10	UPFH1132513	ENST00000537025.6	KPNA2	ENSG00000182481	karyopherin subunit alpha 2 Source HGNC Symbol Acc HGNC 6395
E11	UPFH1132528	ENST00000296509.11	MAD2L1	ENSG00000164109	mitotic arrest deficient 2 like 1 Source HGNC Symbol Acc HGNC 6763
E12	UPFH0118959	ENST00000376664.10	MAD2L2	ENSG00000116670	mitotic arrest deficient 2 like 2 Source HGNC Symbol Acc HGNC 6764
F01	UPFH1132539	ENST00000265056.12	MCM2	ENSG00000073111	minichromosome maintenance complex component 2 Source HGNC Symbol Acc HGNC 6944
F02	UPFH1132540	ENST00000616552.4	MCM3	ENSG00000112118	minichromosome maintenance complex component 3 Source HGNC Symbol Acc HGNC 6945
F03	UPFH0302733	ENST00000262105.6	MCM4	ENSG00000104738	minichromosome maintenance complex component 4 Source HGNC Symbol Acc HGNC 6947
F04	UPFH0363410	ENST00000465557.1	MCM5	ENSG00000100297	minichromosome maintenance complex component 5 Source HGNC Symbol Acc HGNC 6948
F05	UPFH1132546	ENST00000393416.6	MDM2	ENSG00000135679	MDM2 proto-oncogene Source HGNC Symbol Acc HGNC 6973
F06	UPFH1132549	ENST00000368653.7	MKI67	ENSG00000148773	marker of proliferation Ki-67 Source HGNC Symbol Acc HGNC 7107
F07	UPFH1132552	ENST00000554002.5	MNAT1	ENSG00000020426	MNAT1, CDK activating kinase assembly factor Source HGNC Symbol Acc HGNC 7181
F08	UPFH1132556	ENST00000323977.7	MRE11	ENSG00000020922	MRE11 homolog, double strand break repair nuclease Source HGNC Symbol Acc HGNC 7230
F09	UPFH0612261	ENST00000265433.7	NBN	ENSG00000104320	nibrin Source HGNC Symbol Acc HGNC 7652
F10	UPFH1132649	ENST00000382038.7	RAD1	ENSG00000113456	RAD1 checkpoint DNA exonuclease Source HGNC Symbol Acc HGNC 9806

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0301660	ENST00000514626.1	RAD17	ENSG00000152942	RAD17 checkpoint clamp loader component Source HGNC Symbol Acc HGNC 9807
F12	UPFH1132651	ENST00000532743.6	RAD51	ENSG00000051180	RAD51 recombinase Source HGNC Symbol Acc HGNC 9817
G01	UPFH0394972	ENST00000529100.5	RAD9A	ENSG00000172613	RAD9 checkpoint clamp component A Source HGNC Symbol Acc HGNC 9827
G02	UPFH0001483	ENST00000267163.5	RB1	ENSG00000139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
G03	UPFH0107667	ENST00000399722.6	RBBP8	ENSG00000101773	RB binding protein 8, endonuclease Source HGNC Symbol Acc HGNC 9891
G04	UPFH0109902	ENST00000373664.7	RBL1	ENSG00000080839	RB transcriptional corepressor like 1 Source HGNC Symbol Acc HGNC 9893
G05	UPFH1132654	ENST00000544405.6	RBL2	ENSG00000103479	RB transcriptional corepressor like 2 Source HGNC Symbol Acc HGNC 9894
G06	UPFH1132671	ENST00000357949.5	SERTAD1	ENSG00000197019	SERTA domain containing 1 Source HGNC Symbol Acc HGNC 17932
G07	UPFH1132886	ENST00000274255.10	SKP2	ENSG00000145604	S-phase kinase associated protein 2 Source HGNC Symbol Acc HGNC 10901
G08	UPFH1132700	ENST00000426559.6	STMN1	ENSG00000117632	stathmin 1 Source HGNC Symbol Acc HGNC 6510
G09	UPFH1132714	ENST00000375370.10	TFDP1	ENSG00000198176	transcription factor Dp-1 Source HGNC Symbol Acc HGNC 11749
G10	UPFH1132715	ENST00000475734.5	TFDP2	ENSG00000114126	transcription factor Dp-2 Source HGNC Symbol Acc HGNC 11751
G11	UPFH0565795	ENST00000269305.8	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
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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