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

Rat Cell Cycle

Cat. no. 249955 UPRN-020ZA

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	LOC100909750	Atm	Aurka	Aurkb	Bcl2	Birc5	Brca1	Brca2	Casp3	Ccna1	Ccna2	Ccnb1
B	Ccnb3	Ccnc	Ccnd1	Ccnd2	Ccnd3	Ccne1	Ccnf	Cdc20	Cdc25a	Cdc25b	Cdc25c	Cdc6
C	Cdc7	Cdk1	Cdk2	Cdk4	Cdk5rap1	Cdk6	Cdkn1a	Cdkn1b	Cdkn2a	Cdkn2b	Cdkn3	Stt3a
D	Chek2	Ddit3	Dst	E2f1	E2f3	E2f4	Gadd45a	Gpr132	Hus1	Inha	Itgb1	Mcm3
E	Mad2l1	Mcm2	Mcm4	Mdm2	Mki67	Mre11a	Msh2	Nbn	Nek2	Notch2	Pkd1	Pmp22
F	Ppm1d	Rad17	Rad21	Rad51	Rad9a	Ran	Rb1	Rbl1	Rbl2	Nfatc1	Sesn2	Sfn
G	Shc1	Skp2	AC128859.3	Smc1a	Stag1	Stmn1	Terf1	Tfdp2	Tp53	Tp63	Tsg101	Wee1
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFR1117746	ENSRNOT00000042495.5	LOC100909750	ENSRNOG00000047356	tyrosine-protein kinase ABL1-like Source RGD Symbol Acc 6502032
A02	UPFR1064948	ENSRNOT00000086812.1	Atm	ENSRNOG00000029773	ATM serine/threonine kinase Source RGD Symbol Acc 1593265
A03	UPFR1017973	ENSRNOT00000055102.4	Aurka	ENSRNOG00000004479	aurora kinase A Source RGD Symbol Acc 628895
A04	UPFR1038690	ENSRNOT00000091016.1	Aurkb	ENSRNOG00000005659	aurora kinase B Source RGD Symbol Acc 621625
A05	UPFR1082998	ENSRNOT00000003768.2	Bcl2	ENSRNOG00000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A06	UPFR1053500	ENSRNOT00000072387.1	Birc5	ENSRNOG00000050819	baculoviral IAP repeat-containing 5 Source RGD Symbol Acc 70499
A07	UPFR1018614	ENSRNOT00000083111.1	Brca1	ENSRNOG00000020701	BRCA1, DNA repair associated Source RGD Symbol Acc 2218
A08	UPFR1085218	ENSRNOT00000001475.7	Brca2	ENSRNOG00000001111	BRCA2, DNA repair associated Source RGD Symbol Acc 2219
A09	UPFR1091664	ENSRNOT00000014095.5	Casp3	ENSRNOG00000010475	caspase 3 Source RGD Symbol Acc 2275
A10	UPFR1094876	ENSRNOT00000040002.4	Ccna1	ENSRNOG00000014052	cyclin A1 Source RGD Symbol Acc 1310639
A11	UPFR1066997	ENSRNOT00000021156.6	Ccna2	ENSRNOG00000015423	cyclin A2 Source RGD Symbol Acc 621059
A12	UPFR1042030	ENSRNOT00000082846.1	Ccnb1	ENSRNOG00000058539	cyclin B1 Source RGD Symbol Acc 2291
B01	UPFR1114410	ENSRNOT00000003954.6	Ccnb3	ENSRNOG00000002951	cyclin B3 Source RGD Symbol Acc 1564367
B02	UPFR1060446	ENSRNOT00000011442.6	Ccnc	ENSRNOG00000007719	cyclin C Source RGD Symbol Acc 70905
B03	UPFR1042457	ENSRNOT00000088588.1	Ccnd1	ENSRNOG00000020918	cyclin D1 Source RGD Symbol Acc 68384
B04	UPFR1088052	ENSRNOT00000086440.1	Ccnd2	ENSRNOG00000057710	cyclin D2 Source RGD Symbol Acc 621083
B05	UPFR1115909	ENSRNOT00000074217.1	Ccnd3	ENSRNOG00000050258	cyclin D3 Source RGD Symbol Acc 2293
B06	UPFR1117418	ENSRNOT00000020014.4	Ccne1	ENSRNOG00000014786	cyclin E1 Source RGD Symbol Acc 2294
B07	UPFR1092109	ENSRNOT00000064392.1	Ccnf	ENSRNOG00000007483	cyclin F Source RGD Symbol Acc 67401
B08	UPFR1101685	ENSRNOT00000036151.4	Cdc20	ENSRNOG00000028415	cell division cycle 20 Source RGD Symbol Acc 620477
B09	UPFR1024541	ENSRNOT00000028141.7	Cdc25a	ENSRNOG00000020737	cell division cycle 25A Source RGD Symbol Acc 621498
B10	UPFR1087717	ENSRNOT00000051064.2	Cdc25b	ENSRNOG00000021248	cell division cycle 25B Source RGD Symbol Acc 621500
B11	UPFR1053484	ENSRNOT00000037368.6	Cdc25c	ENSRNOG00000024008	cell division cycle 25C Source RGD Symbol Acc 1311875
B12	UPFR1060553	ENSRNOT00000038228.4	Cdc6	ENSRNOG00000027787	cell division cycle 6 Source RGD Symbol Acc 1309157
C01	UPFR1081832	ENSRNOT00000068520.1	Cdc7	ENSRNOG00000002105	cell division cycle 7 Source RGD Symbol Acc 1308351
C02	UPFR1047122	ENSRNOT00000081113.1	Cdk1	ENSRNOG00000000632	cyclin-dependent kinase 1 Source RGD Symbol Acc 2319
C03	UPFR1076908	ENSRNOT00000031963.3	Cdk2	ENSRNOG00000006469	cyclin dependent kinase 2 Source RGD Symbol Acc 70486
C04	UPFR1035170	ENSRNOT00000031796.4	Cdk4	ENSRNOG00000025602	cyclin-dependent kinase 4 Source RGD Symbol Acc 621120
C05	UPFR1033858	ENSRNOT00000021418.6	Cdk5rap1	ENSRNOG00000015696	CDK5 regulatory subunit associated protein 1 Source RGD Symbol Acc 708387
C06	UPFR1110184	ENSRNOT00000012597.6	Cdk6	ENSRNOG00000009258	cyclin-dependent kinase 6 Source RGD Symbol Acc 621121
C07	UPFR1028644	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG00000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
C08	UPFR1069360	ENSRNOT00000049848.1	Cdkn1b	ENSRNOG00000007249	cyclin-dependent kinase inhibitor 1B Source RGD Symbol Acc 69062
C09	UPFR1104432	ENSRNOT00000079251.1	Cdkn2a	ENSRNOG00000059837	cyclin-dependent kinase inhibitor 2A Source RGD Symbol Acc 2323
C10	UPFR1115067	ENSRNOT00000092196.1	Cdkn2b	ENSRNOG00000006735	cyclin-dependent kinase inhibitor 2B Source RGD Symbol Acc 2324
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1012846	012985.6	Cdkn3	000009785	cyclin-dependent kinase inhibitor 3 Source RGD Symbol Acc 1307781
C12	UPFR1067768	ENSRNOT00000 082086.1	Stt3a	ENSRNOG00 000031896	STT3A, catalytic subunit of the oligosaccharyltransferase complex Source RGD Symbol Acc 1565793
D01	UPFR1077555	ENSRNOT00000 085591.1	Chek2	ENSRNOG00 000037509	checkpoint kinase 2 Source RGD Symbol Acc 621543
D02	UPFR1119718	ENSRNOT00000 008941.5	Ddit3	ENSRNOG00 000006789	DNA-damage inducible transcript 3 Source RGD Symbol Acc 62391
D03	UPFR1063771	ENSRNOT00000 044452.6	Dst	ENSRNOG00 000012207	dystonin Source RGD Symbol Acc 1306566
D04	UPFR1077824	ENSRNOT00000 022428.6	E2f1	ENSRNOG00 000016708	N-terminal EF-hand calcium binding protein 3 Source RGD Symbol Acc 1310124
D05	UPFR1062133	ENSRNOT00000 081368.1	E2f3	ENSRNOG00 000029273	E2F transcription factor 3 Source RGD Symbol Acc 1561600
D06	UPFR1044911	ENSRNOT00000 021145.7	E2f4	ENSRNOG00 000015708	E2F transcription factor 4 Source RGD Symbol Acc 2322129
D07	UPFR1092990	ENSRNOT00000 007698.6	Gadd45a	ENSRNOG00 000005615	growth arrest and DNA-damage-inducible, alpha Source RGD Symbol Acc 2654
D08	UPFR1071919	ENSRNOT00000 018613.3	Gpr132	ENSRNOG00 000013914	G protein-coupled receptor 132 Source RGD Symbol Acc 1310817
D09	UPFR1092540	ENSRNOT00000 006852.7	Hus1	ENSRNOG00 000005141	HUS1 checkpoint clamp component Source RGD Symbol Acc 1591976
D10	UPFR1056586	ENSRNOT00000 027227.4	Inha	ENSRNOG00 000020097	inhibin subunit alpha Source RGD Symbol Acc 2912
D11	UPFR1091655	ENSRNOT00000 014785.5	Itgb1	ENSRNOG00 000010966	integrin subunit beta 1 Source RGD Symbol Acc 2927
D12	UPFR1058364	ENSRNOT00000 017081.7	Mcm3	ENSRNOG00 000012543	minichromosome maintenance complex component 3 Source RGD Symbol Acc 1305168
E01	UPFR1026730	ENSRNOT00000 007285.5	Mad2l1	ENSRNOG00 000005376	mitotic arrest deficient 2 like 1 Source RGD Symbol Acc 1310889
E02	UPFR1049442	ENSRNOT00000 022231.6	Mcm2	ENSRNOG00 000016316	minichromosome maintenance complex component 2 Source RGD Symbol Acc 1305577
E03	UPFR1117629	ENSRNOT00000 002510.6	Mcm4	ENSRNOG00 000001833	minichromosome maintenance complex component 4 Source RGD Symbol Acc 3060
E04	UPFR1073822	ENSRNOT00000 066767.2	Mdm2	ENSRNOG00 000006304	MDM2 proto-oncogene Source RGD Symbol Acc 1305332
E05	UPFR1066912	ENSRNOT00000 038176.5	Mki67	ENSRNOG00 000028137	marker of proliferation Ki-67 Source RGD Symbol Acc 1305476
E06	UPFR1015459	ENSRNOT00000 012940.4	Mre11a	ENSRNOG00 000009506	MRE11 homolog A, double strand break repair nuclease Source RGD Symbol Acc 69263
E07	UPFR1084978	ENSRNOT00000 021538.7	Msh2	ENSRNOG00 000015796	mutS homolog 2 Source RGD Symbol Acc 620786
E08	UPFR1078597	ENSRNOT00000 012377.4	Nbn	ENSRNOG00 000008580	nibrin Source RGD Symbol Acc 621420
E09	UPFR1112145	ENSRNOT00000 006235.5	Nek2	ENSRNOG00 000004487	NIMA-related kinase 2 Source RGD Symbol Acc 619792
E10	UPFR1064592	ENSRNOT00000 025718.4	Notch2	ENSRNOG00 000018835	notch 2 Source RGD Symbol Acc 3188
E11	UPFR1019707	ENSRNOT00000 015092.7	Pkd1	ENSRNOG00 000010771	polycystin 1, transient receptor potential channel interacting Source RGD Symbol Acc 3333
E12	UPFR1090185	ENSRNOT00000 081415.1	Pmp22	ENSRNOG00 000003338	peripheral myelin protein 22 Source RGD Symbol Acc 3359
F01	UPFR1052968	ENSRNOT00000 004540.6	Ppm1d	ENSRNOG00 000003329	protein phosphatase, Mg2+/Mn2+ dependent, 1D Source RGD Symbol Acc 1305460
F02	UPFR1120798	ENSRNOT00000 024801.4	Rad17	ENSRNOG00 000018353	RAD17 checkpoint clamp loader component Source RGD Symbol Acc 1309515
F03	UPFR1038991	ENSRNOT00000 006209.5	Rad21	ENSRNOG00 000004420	RAD21 cohesin complex component Source RGD Symbol Acc 1594529
F04	UPFR1036915	ENSRNOT00000 056432.2	Rad51	ENSRNOG00 000037302	RAD51 recombinase Source RGD Symbol Acc 1563603
F05	UPFR1020465	ENSRNOT00000 025317.5	Rad9a	ENSRNOG00 000018729	RAD9 checkpoint clamp component A Source RGD Symbol Acc 2319938
F06	UPFR1055070	ENSRNOT00000 001247.7	Ran	ENSRNOG00 000000938	RAN, member RAS oncogene family Source RGD Symbol Acc 620367
F07	UPFR1039430	ENSRNOT00000 021752.5	Rb1	ENSRNOG00 000016029	RB transcriptional corepressor 1 Source RGD Symbol Acc 3540
F08	UPFR1052306	ENSRNOT00000 064824.3	Rbl1	ENSRNOG00 000006921	RB transcriptional corepressor like 1 Source RGD Symbol Acc 1595511
F09	UPFR1077781	ENSRNOT00000 017361.3	Rbl2	ENSRNOG00 000012153	RB transcriptional corepressor like 2 Source RGD Symbol Acc 3541
F10	UPFR1086713	ENSRNOT00000 058382.4	Nfatc1	ENSRNOG00 000017146	nuclear factor of activated T-cells 1 Source RGD Symbol Acc 2319357

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1060595	ENSRNOT00000067455.3	Sesn2	ENSRNOG00000042785	sestrin 2 Source RGD Symbol Acc 1566319
F12	UPFR1042676	ENSRNOT00000043959.4	Sfn	ENSRNOG00000033153	stratifin Source RGD Symbol Acc 1304729
G01	UPFR1103707	ENSRNOT00000028038.6	Shc1	ENSRNOG00000020657	SHC adaptor protein 1 Source RGD Symbol Acc 620446
G02	UPFR1041501	ENSRNOT00000089178.1	Skp2	ENSRNOG00000059059	S-phase kinase associated protein 2 Source RGD Symbol Acc 1562456
G03	UPFR1099654	ENSRNOT00000075851.1	AC128859.3	ENSRNOG00000048053	
G04	UPFR1121562	ENSRNOT00000004364.7	Smc1a	ENSRNOG00000003139	structural maintenance of chromosomes 1A Source RGD Symbol Acc 61991
G05	UPFR1012967	ENSRNOT00000079618.1	Stag1	ENSRNOG00000015389	stromal antigen 1 Source RGD Symbol Acc 1310744
G06	UPFR1042874	ENSRNOT00000022574.5	Stmn1	ENSRNOG00000016810	stathmin 1 Source RGD Symbol Acc 2992
G07	UPFR1097355	ENSRNOT00000049741.2	Terf1	ENSRNOG00000007291	telomeric repeat binding factor 1 Source RGD Symbol Acc 1311574
G08	UPFR1091015	ENSRNOT00000015015.6	Tfdp2	ENSRNOG00000011241	transcription factor Dp-2 Source RGD Symbol Acc 1305814
G09	UPFR1095007	ENSRNOT00000085115.1	Tp53	ENSRNOG00000010756	tumor protein p53 Source RGD Symbol Acc 3889
G10	UPFR1051192	ENSRNOT00000002636.7	Tp63	ENSRNOG00000001924	tumor protein p63 Source RGD Symbol Acc 620863
G11	UPFR1082111	ENSRNOT00000018194.6	Tsg101	ENSRNOG00000013381	tumor susceptibility 101 Source RGD Symbol Acc 3909
G12	UPFR1029258	ENSRNOT00000013362.5	Wee1	ENSRNOG00000010017	WEE1 G2 checkpoint kinase Source RGD Symbol Acc 1307895
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	UPFR1126610	UPL_RGDC	RGDC	UPL_RGDC	Rat 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 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.