

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

Rat Telomeres & Telomerase

Cat. no. 249955 UPRN-010ZR

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	LOC100909750	Acid	Akt1	Atm	Taf3	Bcl2	Blm	Cdk2	Stt3a	Chk2	Dclre1b	Dclre1c
B	Dkc1	Egf	Eme1	Ercc1	AABR07029002.2	Esf1	Hat1	Heatr1	Hnmpa2b1	Hnmpd	Hsp90aa1	Hspa11
C	Igf1	Impdh2	Kras	Krit1	Mapre1	Men1	Mre11a	Msh2	Msh3	Mus81	Myc	Nbn
D	Nhp2	Nop56	Stn1	Parp1	Pax8	Pimx1	Plk1	Pparg	Ppp2r1a	Ppp2r1b	Ppp2r2b	Prkca
E	Prkcb	Prkdc	Ptges3l1	Pura	Rad17	Rad50	Rap1a	Rapgef1	Rasa1	Rassf1	Rb1	Rfc1
F	Sart1	Sirt2	Sirt6	Smad3	Smg6	Snrpn	Sp1	Ssb	Tep1	Terf1	Terf2	Terf2ip
G	Tert	Tgfb1	Tinf2	Tnks	Pot1	Tp53	Tp53bp1	Tpp1	Sun1	Wrap53	Xrcc5	Xrcc6
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	ENSRNOG0000047356	tyrosine-protein kinase ABL1-like Source RGD Symbol Acc 6502032
A02	UPFR1095562	ENSRNOT00000059577.2	Acd	ENSRNOG0000038973	ACD, shelterin complex subunit and telomerase recruitment factor Source RGD Symbol Acc 1565053
A03	UPFR1083196	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A04	UPFR1064948	ENSRNOT00000086812.1	Atm	ENSRNOG0000029773	ATM serine/threonine kinase Source RGD Symbol Acc 1593265
A05	UPFR1047234	ENSRNOT00000041346.4	Taf3	ENSRNOG0000019223	ATP synthase F1 subunit gamma Source RGD Symbol Acc 620011
A06	UPFR1082998	ENSRNOT00000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A07	UPFR1014979	ENSRNOT00000015065.7	Blm	ENSRNOG0000011213	BLM RecQ like helicase Source RGD Symbol Acc 1308810
A08	UPFR1076908	ENSRNOT00000031963.3	Cdk2	ENSRNOG0000006469	cyclin dependent kinase 2 Source RGD Symbol Acc 70486
A09	UPFR1067768	ENSRNOT00000082086.1	Stt3a	ENSRNOG0000031896	STT3A, catalytic subunit of the oligosaccharyltransferase complex Source RGD Symbol Acc 1565793
A10	UPFR1077555	ENSRNOT00000085591.1	Chek2	ENSRNOG0000037509	checkpoint kinase 2 Source RGD Symbol Acc 621543
A11	UPFR1025612	ENSRNOT00000080702.1	Dclre1b	ENSRNOG0000019367	DNA cross-link repair 1B Source RGD Symbol Acc 1310343
A12	UPFR1095911	ENSRNOT00000021506.4	Dclre1c	ENSRNOG0000015980	DNA cross-link repair 1C Source RGD Symbol Acc 708574
B01	UPFR1035204	ENSRNOT00000089847.1	Dkc1	ENSRNOG0000055562	dyskerin pseudouridine synthase 1 Source RGD Symbol Acc 621780
B02	UPFR1045222	ENSRNOT00000087007.1	Egf	ENSRNOG0000053979	epidermal growth factor Source RGD Symbol Acc 2542
B03	UPFR1113520	ENSRNOT00000032693.3	Eme1	ENSRNOG0000024420	essential meiotic structure-specific endonuclease 1 Source RGD Symbol Acc 1309067
B04	UPFR1053097	ENSRNOT00000024113.5	Ercc1	ENSRNOG0000017839	ERCC excision repair 1, endonuclease non-catalytic subunit Source RGD Symbol Acc 1306992
B05	UPFR1084293	ENSRNOT00000004563.6	AABR07029002.2	ENSRNOG0000048121	ERCC excision repair 4, endonuclease catalytic subunit Source NCBI gene Acc 304719
B06	UPFR1114166	ENSRNOT00000034487.5	Esf1	ENSRNOG0000004777	ESF1 nucleolar pre-rRNA processing protein homolog Source RGD Symbol Acc 1306067
B07	UPFR1035337	ENSRNOT00000002085.6	Hat1	ENSRNOG0000001524	histone acetyltransferase 1 Source RGD Symbol Acc 1305716
B08	UPFR1047775	ENSRNOT00000071829.2	Heatr1	ENSRNOG0000047594	HEAT repeat-containing protein 1 Source RGD Symbol Acc 11474378
B09	UPFR1059896	ENSRNOT00000015325.6	Hnrnpa2b1	ENSRNOG0000011175	heterogeneous nuclear ribonucleoprotein A2/B1 Source RGD Symbol Acc 1310403
B10	UPFR1055184	ENSRNOT00000003158.6	Hnrnpd	ENSRNOG0000002292	heterogeneous nuclear ribonucleoprotein D Source RGD Symbol Acc 620365
B11	UPFR1014170	ENSRNOT00000086310.1	Hsp90aa1	ENSRNOG0000059714	heat shock protein 90 alpha family class A member 1 Source RGD Symbol Acc 631409
B12	UPFR1120774	ENSRNOT00000074223.2	Hspa1l	ENSRNOG0000047966	heat shock protein family A (Hsp70) member 1 like Source RGD Symbol Acc 1595925
C01	UPFR1050099	ENSRNOT00000038780.6	Igf1	ENSRNOG0000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
C02	UPFR1030854	ENSRNOT00000047717.4	Impdh2	ENSRNOG0000031965	inosine monophosphate dehydrogenase 2 Source RGD Symbol Acc 735092
C03	UPFR1088461	ENSRNOT00000012588.4	Kras	ENSRNOG0000009338	KRAS proto-oncogene, GTPase Source RGD Symbol Acc 2981
C04	UPFR1095670	ENSRNOT00000032505.4	Krit1	ENSRNOG0000007937	KRIT1, ankyrin repeat containing Source RGD Symbol Acc 1305929
C05	UPFR1090345	ENSRNOT00000016220.6	Mapre1	ENSRNOG0000011798	microtubule-associated protein, RP/EB family, member 1 Source RGD Symbol Acc 621781
C06	UPFR1037929	ENSRNOT00000028592.6	Men1	ENSRNOG0000021054	menin 1 Source RGD Symbol Acc 3078
C07	UPFR1015459	ENSRNOT00000012940.4	Mre11a	ENSRNOG0000009506	MRE11 homolog A, double strand break repair nuclease Source RGD Symbol Acc 69263
C08	UPFR1084978	ENSRNOT00000021538.7	Msh2	ENSRNOG0000015796	mutS homolog 2 Source RGD Symbol Acc 620786
C09	UPFR1101725	ENSRNOT00000018449.7	Msh3	ENSRNOG0000013673	mutS homolog 3 Source RGD Symbol Acc 1563954
C10	UPFR1015740	ENSRNOT00000028015.6	Mus81	ENSRNOG0000020617	MUS81 structure-specific endonuclease subunit Source RGD Symbol Acc 1311957
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1101439	006188.5	Myc	000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
C12	UPFR1078597	ENSRNOT00000012377.4	Nbn	ENSRNOG0000008580	nibrin Source RGD Symbol Acc 621420
D01	UPFR1112013	ENSRNOT00000064984.2	Nhp2	ENSRNOG0000004247	NHP2 ribonucleoprotein Source RGD Symbol Acc 1309435
D02	UPFR1034297	ENSRNOT00000009564.5	Nop56	ENSRNOG0000007128	NOP56 ribonucleoprotein Source RGD Symbol Acc 1308892
D03	UPFR1061180	ENSRNOT00000027614.7	Stn1	ENSRNOG00000020376	STN1, CST complex subunit Source RGD Symbol Acc 1305637
D04	UPFR1022638	ENSRNOT00000004232.5	Parp1	ENSRNOG0000003084	poly (ADP-ribose) polymerase 1 Source RGD Symbol Acc 2053
D05	UPFR1042370	ENSRNOT00000086447.1	Pax8	ENSRNOG0000026203	paired box 8 Source RGD Symbol Acc 620434
D06	UPFR1014948	ENSRNOT00000016027.5	Pinx1	ENSRNOG0000012012	PIN2/TERF1 interacting, telomerase inhibitor 1 Source RGD Symbol Acc 1566025
D07	UPFR1047913	ENSRNOT00000025629.7	Plk1	ENSRNOG0000018815	polo-like kinase 1 Source RGD Symbol Acc 3352
D08	UPFR1091351	ENSRNOT00000051858.5	Pparg	ENSRNOG0000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371
D09	UPFR1075057	ENSRNOT00000015019.6	Ppp2r1a	ENSRNOG0000011282	protein phosphatase 2 scaffold subunit A alpha Source RGD Symbol Acc 620907
D10	UPFR1072545	ENSRNOT00000064290.2	Ppp2r1b	ENSRNOG0000010922	protein phosphatase 2 scaffold subunit A beta Source RGD Symbol Acc 1304764
D11	UPFR1035056	ENSRNOT00000041188.4	Ppp2r2b	ENSRNOG0000018851	protein phosphatase 2, regulatory subunit B, beta Source RGD Symbol Acc 631441
D12	UPFR1034906	ENSRNOT00000004699.8	Prkca	ENSRNOG0000003491	protein kinase C, alpha Source RGD Symbol Acc 3395
E01	UPFR1083743	ENSRNOT00000016418.6	Prkcb	ENSRNOG0000012061	protein kinase C, beta Source RGD Symbol Acc 3396
E02	UPFR1035960	ENSRNOT00000035247.7	Prkdc	ENSRNOG0000025028	protein kinase, DNA-activated, catalytic subunit Source RGD Symbol Acc 1308982
E03	UPFR1120366	ENSRNOT00000087509.1	Ptges3l1	ENSRNOG0000060486	prostaglandin E synthase 3-like 1 Source RGD Symbol Acc 1359350
E04	UPFR1084651	ENSRNOT00000025756.6	Pura	ENSRNOG0000019062	purine rich element binding protein A Source RGD Symbol Acc 1308543
E05	UPFR1120798	ENSRNOT00000024801.4	Rad17	ENSRNOG0000018353	RAD17 checkpoint clamp loader component Source RGD Symbol Acc 1309515
E06	UPFR1036827	ENSRNOT00000063772.2	Rad50	ENSRNOG0000033065	RAD50 double strand break repair protein Source RGD Symbol Acc 621542
E07	UPFR1051806	ENSRNOT00000047836.4	Rap1a	ENSRNOG0000032463	RAP1A, member of RAS oncogene family Source RGD Symbol Acc 1359694
E08	UPFR1027676	ENSRNOT00000060977.5	Rapgef1	ENSRNOG0000014316	Rap guanine nucleotide exchange factor 1 Source RGD Symbol Acc 619793
E09	UPFR1085068	ENSRNOT00000046251.2	Rasa1	ENSRNOG0000029185	RAS p21 protein activator 1 Source RGD Symbol Acc 3537
E10	UPFR1115677	ENSRNOT00000037375.6	Rassf1	ENSRNOG0000021548	Ras association domain family member 1 Source RGD Symbol Acc 1359383
E11	UPFR1039430	ENSRNOT00000021752.5	Rb1	ENSRNOG0000016029	RB transcriptional corepressor 1 Source RGD Symbol Acc 3540
E12	UPFR1043507	ENSRNOT00000003907.7	Rfc1	ENSRNOG0000002855	replication factor C subunit 1 Source RGD Symbol Acc 620619
F01	UPFR1024921	ENSRNOT00000027811.3	Sart1	ENSRNOG0000020475	spliceosome associated factor 1, recruiter of U4/U6.U5 tri-snRNP Source RGD Symbol Acc 61930
F02	UPFR1049217	ENSRNOT00000084839.1	Sirt2	ENSRNOG0000020102	sirtuin 2 Source RGD Symbol Acc 621481
F03	UPFR1073178	ENSRNOT00000008758.5	Sirt6	ENSRNOG0000006393	sirtuin 6 Source RGD Symbol Acc 1305216
F04	UPFR1033812	ENSRNOT00000039730.4	Smad3	ENSRNOG0000008620	SMAD family member 3 Source RGD Symbol Acc 3032
F05	UPFR1043797	ENSRNOT00000004058.8	Smg6	ENSRNOG0000003041	SMG6 nonsense mediated mRNA decay factor Source RGD Symbol Acc 1595918
F06	UPFR1018496	ENSRNOT00000077253.1	Snrpn	ENSRNOG0000059764	small nuclear ribonucleoprotein polypeptide N Source RGD Symbol Acc 621306
F07	UPFR1092400	ENSRNOT00000019403.6	Sp1	ENSRNOG0000014084	Sp1 transcription factor Source RGD Symbol Acc 3738
F08	UPFR1055372	ENSRNOT00000011174.5	Ssb	ENSRNOG0000007998	Sjogren syndrome antigen B Source RGD Symbol Acc 620804
F09	UPFR1079677	ENSRNOT00000088981.1	Tep1	ENSRNOG0000051706	telomerase associated protein 1 Source RGD Symbol Acc 3869
F10	UPFR1097355	ENSRNOT00000049741.2	Terf1	ENSRNOG0000007291	telomeric repeat binding factor 1 Source RGD Symbol Acc 1311574

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1097812	ENSRNOT00000027695.6	Terf2	ENSRNOG00000020435	telomeric repeat binding factor 2 Source RGD Symbol Acc 1310881
F12	UPFR1083683	ENSRNOT00000014660.6	Terf2ip	ENSRNOG00000010712	TERF2 interacting protein Source RGD Symbol Acc 1309684
G01	UPFR1102859	ENSRNOT00000022683.4	Tert	ENSRNOG00000025327	telomerase reverse transcriptase Source RGD Symbol Acc 70494
G02	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG00000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G03	UPFR1103806	ENSRNOT00000027362.5	Tinf2	ENSRNOG00000020189	TERF1 interacting nuclear factor 2 Source RGD Symbol Acc 1359192
G04	UPFR1048206	ENSRNOT00000015813.6	Tnks	ENSRNOG00000011625	tankyrase Source RGD Symbol Acc 1308784
G05	UPFR1059977	ENSRNOT00000079130.1	Pot1	ENSRNOG00000019986	protection of telomeres 1 Source RGD Symbol Acc 1562696
G06	UPFR1095007	ENSRNOT00000085115.1	Tp53	ENSRNOG00000010756	tumor protein p53 Source RGD Symbol Acc 3889
G07	UPFR1103017	ENSRNOT00000019025.8	Tp53bp1	ENSRNOG00000013837	tumor protein p53 binding protein 1 Source RGD Symbol Acc 1308039
G08	UPFR1045365	ENSRNOT00000026280.4	Tpp1	ENSRNOG00000019212	tripeptidyl peptidase 1 Source RGD Symbol Acc 621296
G09	UPFR1070080	ENSRNOT00000089418.1	Sun1	ENSRNOG0000001299	Sad1 and UNC84 domain containing 1 Source RGD Symbol Acc 1359142
G10	UPFR1049294	ENSRNOT00000014261.5	Wrap53	ENSRNOG00000010520	WD repeat containing, antisense to TP53 Source RGD Symbol Acc 1359624
G11	UPFR1030423	ENSRNOT00000021656.4	Xrcc5	ENSRNOG00000016105	X-ray repair cross complementing 5 Source RGD Symbol Acc 3976
G12	UPFR1051599	ENSRNOT00000066849.1	Xrcc6	ENSRNOG0000006392	X-ray repair cross complementing 6 Source RGD Symbol Acc 2643
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 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.

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.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.