

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

Rat Cellular Senescence

Cat. no. 249955 UPRN-050ZA

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	Akt1	Aldh1a3	Atm	Bmi1	Calr	Ccna2	Ccnb1	Ccnd1	Ccne1	Cd44	Cdc25c
B	Cdk2	Cdk4	Cdk6	Cdkn1a	Cdkn1b	Cdkn1c	Cdkn2a	Cdkn2b	Cdkn2c	Nuak1	Str3a	Chek2
C	Cited2	Col1a1	Col3a1	Creg1	E2f1	E2f3	Egr1	Ets1	Ets2	Fn1	Gadd45a	Glb1
D	Gsk3b	Hras	Id1	Irfg	Igf1	Igf1r	Igfbp3	Igfbp5	Igfbp7	Ing1	Irf3	Irf5
E	Irf7	Map2k1	Map2k3	Map2k6	Mapk14	Mdm2	Morc3	Myc	Nbn	Nfkb1	Nox4	Pcna
F	Pik3ca	Plau	Prkcd	Pten	Rb1	Rbl1	Rbl2	Serpib2	Serpine1	AABR07044925.1	Sod1	Sod2
G	Sparc	Tbx2	Tbx3	Terf2	Tert	Tgfb1	Tgfb1i1	Thbs1	Tp53	Tp53bp1	Twist1	Vim
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	UPFR1083196	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A03	UPFR1080324	ENSRNOT00000085158.1	Aldh1a3	ENSRNOG0000052070	aldehyde dehydrogenase 1 family, member A3 Source RGD Symbol Acc 628662
A04	UPFR1064948	ENSRNOT00000086812.1	Atm	ENSRNOG0000029773	ATM serine/threonine kinase Source RGD Symbol Acc 1593265
A05	UPFR1103597	ENSRNOT00000064257.2	Bmi1	ENSRNOG0000016585	BMI1 proto-oncogene, polycomb ring finger Source RGD Symbol Acc 1307403
A06	UPFR1077775	ENSRNOT00000004091.6	Calr	ENSRNOG0000003029	calreticulin Source RGD Symbol Acc 620288
A07	UPFR1066997	ENSRNOT00000021156.6	Ccna2	ENSRNOG0000015423	cyclin A2 Source RGD Symbol Acc 621059
A08	UPFR1042030	ENSRNOT00000082846.1	Ccnb1	ENSRNOG0000058539	cyclin B1 Source RGD Symbol Acc 2291
A09	UPFR1042457	ENSRNOT00000088588.1	Ccnd1	ENSRNOG0000020918	cyclin D1 Source RGD Symbol Acc 68384
A10	UPFR1117418	ENSRNOT00000020014.4	Ccne1	ENSRNOG0000014786	cyclin E1 Source RGD Symbol Acc 2294
A11	UPFR1040363	ENSRNOT00000009073.7	Cd44	ENSRNOG0000006094	CD44 molecule (Indian blood group) Source RGD Symbol Acc 2307
A12	UPFR1053484	ENSRNOT00000037368.6	Cdc25c	ENSRNOG0000024008	cell division cycle 25C Source RGD Symbol Acc 1311875
B01	UPFR1076908	ENSRNOT00000031963.3	Cdk2	ENSRNOG0000006469	cyclin dependent kinase 2 Source RGD Symbol Acc 70486
B02	UPFR1035170	ENSRNOT00000031796.4	Cdk4	ENSRNOG0000025602	cyclin-dependent kinase 4 Source RGD Symbol Acc 621120
B03	UPFR1110184	ENSRNOT00000012597.6	Cdk6	ENSRNOG0000009258	cyclin-dependent kinase 6 Source RGD Symbol Acc 621121
B04	UPFR1028644	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG0000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
B05	UPFR1069360	ENSRNOT00000049848.1	Cdkn1b	ENSRNOG0000007249	cyclin-dependent kinase inhibitor 1B Source RGD Symbol Acc 69062
B06	UPFR1068211	ENSRNOT00000078944.1	Cdkn1c	ENSRNOG0000059500	cyclin-dependent kinase inhibitor 1C Source RGD Symbol Acc 727892
B07	UPFR1104432	ENSRNOT00000079251.1	Cdkn2a	ENSRNOG0000059837	cyclin-dependent kinase inhibitor 2A Source RGD Symbol Acc 2323
B08	UPFR1115067	ENSRNOT00000092196.1	Cdkn2b	ENSRNOG0000006735	cyclin-dependent kinase inhibitor 2B Source RGD Symbol Acc 2324
B09	UPFR1024713	ENSRNOT00000012088.7	Cdkn2c	ENSRNOG0000008956	cyclin-dependent kinase inhibitor 2C Source RGD Symbol Acc 2325
B10	UPFR1064038	ENSRNOT00000010636.6	Nuak1	ENSRNOG0000008061	NUAK family kinase 1 Source RGD Symbol Acc 1309956
B11	UPFR1067768	ENSRNOT00000082086.1	Stt3a	ENSRNOG0000031896	STT3A, catalytic subunit of the oligosaccharyltransferase complex Source RGD Symbol Acc 1565793
B12	UPFR1077555	ENSRNOT00000085591.1	Chek2	ENSRNOG0000037509	checkpoint kinase 2 Source RGD Symbol Acc 621543
C01	UPFR1017367	ENSRNOT00000086790.1	Cited2	ENSRNOG0000056940	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2 Source RGD Symbol Acc 620112
C02	UPFR1053469	ENSRNOT00000005311.6	Col1a1	ENSRNOG0000003897	collagen type I alpha 1 chain Source RGD Symbol Acc 61817
C03	UPFR1066020	ENSRNOT00000004956.4	Col3a1	ENSRNOG0000003357	collagen type III alpha 1 chain Source RGD Symbol Acc 71029
C04	UPFR1072826	ENSRNOT00000004394.6	Creg1	ENSRNOG0000003291	cellular repressor of E1A-stimulated genes 1 Source RGD Symbol Acc 1306804
C05	UPFR1077824	ENSRNOT00000022428.6	E2f1	ENSRNOG0000016708	N-terminal EF-hand calcium binding protein 3 Source RGD Symbol Acc 1310124
C06	UPFR1062133	ENSRNOT00000081368.1	E2f3	ENSRNOG0000029273	E2F transcription factor 3 Source RGD Symbol Acc 1561600
C07	UPFR1034050	ENSRNOT00000026303.4	Egr1	ENSRNOG0000019422	early growth response 1 Source RGD Symbol Acc 2544
C08	UPFR1072908	ENSRNOT000000111925.4	Ets1	ENSRNOG0000008941	ETS proto-oncogene 1, transcription factor Source RGD Symbol Acc 2583
C09	UPFR1103791	ENSRNOT00000002247.6	Ets2	ENSRNOG0000001647	ETS proto-oncogene 2, transcription factor Source RGD Symbol Acc 1584977
C10	UPFR1089380	ENSRNOT00000057585.4	Fn1	ENSRNOG0000014288	fibronectin 1 Source RGD Symbol Acc 2624
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1092990	007698.6	Gadd45a	000005615	growth arrest and DNA-damage-inducible, alpha Source RGD Symbol Acc 2654
C12	UPFR1106249	ENSRNOT00000013632.5	Glb1	ENSRNOG0000010196	galactosidase, beta 1 Source RGD Symbol Acc 1597145
D01	UPFR1109626	ENSRNOT00000077612.1	Gsk3b	ENSRNOG0000002833	glycogen synthase kinase 3 beta Source RGD Symbol Acc 70982
D02	UPFR1076419	ENSRNOT00000022363.6	Hras	ENSRNOG0000016611	HRas proto-oncogene, GTPase Source RGD Symbol Acc 2827
D03	UPFR1039525	ENSRNOT00000029660.5	Id1	ENSRNOG0000021750	inhibitor of DNA binding 1, HLH protein Source RGD Symbol Acc 2858
D04	UPFR1084134	ENSRNOT00000009919.2	Ifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
D05	UPFR1050099	ENSRNOT00000038780.6	Igf1	ENSRNOG0000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
D06	UPFR1018620	ENSRNOT00000019267.6	Igf1r	ENSRNOG0000014187	insulin-like growth factor 1 receptor Source RGD Symbol Acc 2869
D07	UPFR1013429	ENSRNOT00000088355.1	Igfbp3	ENSRNOG0000061910	insulin-like growth factor binding protein 3 Source RGD Symbol Acc 2874
D08	UPFR1090111	ENSRNOT00000079493.1	Igfbp5	ENSRNOG0000017206	insulin-like growth factor binding protein 5 Source RGD Symbol Acc 2876
D09	UPFR1107856	ENSRNOT00000002809.4	Igfbp7	ENSRNOG0000002050	insulin-like growth factor binding protein 7 Source RGD Symbol Acc 1306201
D10	UPFR1028569	ENSRNOT00000019454.7	Ing1	ENSRNOG0000014520	inhibitor of growth family, member 1 Source RGD Symbol Acc 1306330
D11	UPFR1094379	ENSRNOT00000027786.6	Irf3	ENSRNOG0000043388	interferon regulatory factor 3 Source RGD Symbol Acc 1549774
D12	UPFR1052261	ENSRNOT00000010001.6	Irf5	ENSRNOG0000007437	interferon regulatory factor 5 Source RGD Symbol Acc 1310447
E01	UPFR1018556	ENSRNOT00000023504.6	Irf7	ENSRNOG0000017414	interferon regulatory factor 7 Source RGD Symbol Acc 1307828
E02	UPFR1053192	ENSRNOT00000013933.6	Map2k1	ENSRNOG0000010176	mitogen activated protein kinase kinase 1 Source RGD Symbol Acc 70495
E03	UPFR1058261	ENSRNOT00000073792.2	Map2k3	ENSRNOG0000049132	mitogen activated protein kinase kinase 3 Source RGD Symbol Acc 1306620
E04	UPFR1098004	ENSRNOT00000006217.6	Map2k6	ENSRNOG0000004437	mitogen-activated protein kinase kinase 6 Source RGD Symbol Acc 620666
E05	UPFR1036984	ENSRNOT00000000617.8	Mapk14	ENSRNOG0000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
E06	UPFR1073822	ENSRNOT000000066767.2	Mdm2	ENSRNOG0000006304	MDM2 proto-oncogene Source RGD Symbol Acc 1305332
E07	UPFR1109509	ENSRNOT00000076473.2	Morc3	ENSRNOG0000026236	MORC family CW-type zinc finger 3 Source RGD Symbol Acc 1307924
E08	UPFR1101439	ENSRNOT00000006188.5	Myc	ENSRNOG0000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
E09	UPFR1078597	ENSRNOT00000012377.4	Nbn	ENSRNOG0000008580	nibrin Source RGD Symbol Acc 621420
E10	UPFR1116688	ENSRNOT00000036838.4	Nfkb1	ENSRNOG0000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E11	UPFR1087720	ENSRNOT00000018990.6	Nox4	ENSRNOG0000013925	NADPH oxidase 4 Source RGD Symbol Acc 620600
E12	UPFR1093185	ENSRNOT00000028887.6	Pcna	ENSRNOG0000021264	proliferating cell nuclear antigen Source RGD Symbol Acc 3269
F01	UPFR1035210	ENSRNOT00000083720.1	Pik3ca	ENSRNOG0000056371	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha Source RGD Symbol Acc 620916
F02	UPFR1088915	ENSRNOT00000014273.5	Plau	ENSRNOG0000010516	plasminogen activator, urokinase Source RGD Symbol Acc 3343
F03	UPFR1045135	ENSRNOT00000025858.7	Prkcd	ENSRNOG0000016346	protein kinase C, delta Source RGD Symbol Acc 67383
F04	UPFR1043890	ENSRNOT00000028143.3	Pten	ENSRNOG0000020723	phosphatase and tensin homolog Source RGD Symbol Acc 61995
F05	UPFR1039430	ENSRNOT00000021752.5	Rb1	ENSRNOG0000016029	RB transcriptional corepressor 1 Source RGD Symbol Acc 3540
F06	UPFR1052306	ENSRNOT00000064824.3	Rbl1	ENSRNOG0000006921	RB transcriptional corepressor like 1 Source RGD Symbol Acc 1595511
F07	UPFR1077781	ENSRNOT00000017361.3	Rbl2	ENSRNOG0000012153	RB transcriptional corepressor like 2 Source RGD Symbol Acc 3541
F08	UPFR1020681	ENSRNOT00000003409.5	Serpinb2	ENSRNOG0000002460	serpin family B member 2 Source RGD Symbol Acc 621823
F09	UPFR1051798	ENSRNOT00000001916.2	Serpine1	ENSRNOG0000001414	serpin family E member 1 Source RGD Symbol Acc 3249
F10	UPFR1112360	ENSRNOT00000078739.1	AABR07044925.1	ENSRNOG0000051592	sirtuin 1 Source NCBI gene Acc 309757

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1062096	ENSRNOT0000002885.6	Sod1	ENSRNOG0000002115	superoxide dismutase 1 Source RGD Symbol Acc 3731
F12	UPFR1090502	ENSRNOT00000025794.4	Sod2	ENSRNOG0000019048	superoxide dismutase 2 Source RGD Symbol Acc 3732
G01	UPFR1099979	ENSRNOT00000017486.7	Sparc	ENSRNOG0000012840	secreted protein acidic and cysteine rich Source RGD Symbol Acc 3742
G02	UPFR1025058	ENSRNOT00000004698.7	Tbx2	ENSRNOG0000003517	T-box 2 Source RGD Symbol Acc 1311014
G03	UPFR1105120	ENSRNOT00000084018.1	Tbx3	ENSRNOG0000008706	T-box 3 Source RGD Symbol Acc 735203
G04	UPFR1097812	ENSRNOT00000027695.6	Terf2	ENSRNOG0000020435	telomeric repeat binding factor 2 Source RGD Symbol Acc 1310881
G05	UPFR1102859	ENSRNOT00000022683.4	Tert	ENSRNOG0000025327	telomerase reverse transcriptase Source RGD Symbol Acc 70494
G06	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G07	UPFR1045420	ENSRNOT00000054980.3	Tgfb1i1	ENSRNOG0000019965	transforming growth factor beta 1 induced transcript 1 Source RGD Symbol Acc 620173
G08	UPFR1104745	ENSRNOT00000083351.1	Thbs1	ENSRNOG0000045829	thrombospondin 1 Source RGD Symbol Acc 1588455
G09	UPFR1095007	ENSRNOT00000085115.1	Tp53	ENSRNOG0000010756	tumor protein p53 Source RGD Symbol Acc 3889
G10	UPFR1103017	ENSRNOT00000019025.8	Tp53bp1	ENSRNOG0000013837	tumor protein p53 binding protein 1 Source RGD Symbol Acc 1308039
G11	UPFR1038411	ENSRNOT00000014763.6	Twist1	ENSRNOG0000011101	twist family bHLH transcription factor 1 Source RGD Symbol Acc 621455
G12	UPFR1091277	ENSRNOT00000024430.5	Vim	ENSRNOG0000018087	vimentin Source RGD Symbol Acc 621646
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG0000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG0000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG0000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG0000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG0000013874	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.

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