

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

Human Cellular Senescence

Cat. no. 249955 UPHS-050ZR

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	AKT1	ALDH1A3	ATM	BMI1	CALR	CCNA2	CCNB1	CCND1	CCNE1	CD44	CDC25C
B	CDK2	CDK4	CDK6	CDKN1A	CDKN1B	CDKN1C	CDKN2A	CDKN2B	CDKN2C	CDKN2D	CHEK1	CHEK2
C	CITED2	COL1A1	COL3A1	CREG1	E2F1	E2F3	EGR1	ETS1	ETS2	FN1	GADD45A	GLB1
D	GSK3B	HRA5	ID1	IFNG	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	SERPINB2	SERPINE1	SIRT1	SOD1	SOD2
G	SPARC	TBX2	TBX3	TERF2	TERT	TGFB1	TGFB111	THBS1	TP53	TP53BP1	TWIST1	VIM
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	UPFH0453992	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A03	UPFH0310463	ENST00000329841.10	ALDH1A3	ENSG00000184254	aldehyde dehydrogenase 1 family member A3 Source HGNC Symbol Acc HGNC 409
A04	UPFH1132252	ENST00000527805.5	ATM	ENSG00000149311	ATM serine/threonine kinase Source HGNC Symbol Acc HGNC 795
A05	UPFH0503163	ENST00000602358.5	BMI1	ENSG00000168283	BMI1 proto-oncogene, polycomb ring finger Source HGNC Symbol Acc HGNC 1066
A06	UPFH0025967	ENST00000316448.9	CALR	ENSG00000179218	calreticulin Source HGNC Symbol Acc HGNC 1455
A07	UPFH0122485	ENST00000618014.1	CCNA2	ENSG00000145386	cyclin A2 Source HGNC Symbol Acc HGNC 1578
A08	UPFH1132293	ENST00000505500.5	CCNB1	ENSG00000134057	cyclin B1 Source HGNC Symbol Acc HGNC 1579
A09	UPFH0430337	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
A10	UPFH1132297	ENST00000444983.6	CCNE1	ENSG00000105173	cyclin E1 Source HGNC Symbol Acc HGNC 1589
A11	UPFH0253499	ENST00000428726.7	CD44	ENSG00000026508	CD44 molecule (Indian blood group) Source HGNC Symbol Acc HGNC 1681
A12	UPFH1132304	ENST00000513970.5	CDC25C	ENSG00000158402	cell division cycle 25C Source HGNC Symbol Acc HGNC 1727
B01	UPFH1132961	ENST00000266970.9	CDK2	ENSG00000123374	cyclin dependent kinase 2 Source HGNC Symbol Acc HGNC 1771
B02	UPFH0291148	ENST00000549606.5	CDK4	ENSG00000135446	cyclin dependent kinase 4 Source HGNC Symbol Acc HGNC 1773
B03	UPFH0172654	ENST00000265734.8	CDK6	ENSG00000105810	cyclin dependent kinase 6 Source HGNC Symbol Acc HGNC 1777
B04	UPFH0312181	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
B05	UPFH1132964	ENST00000228872.9	CDKN1B	ENSG00000111276	cyclin dependent kinase inhibitor 1B Source HGNC Symbol Acc HGNC 1785
B06	UPFH0327918	ENST00000440480.7	CDKN1C	ENSG00000129757	cyclin dependent kinase inhibitor 1C Source HGNC Symbol Acc HGNC 1786
B07	UPFH0246593	ENST00000494262.5	CDKN2A	ENSG00000147889	cyclin dependent kinase inhibitor 2A Source HGNC Symbol Acc HGNC 1787
B08	UPFH0150846	ENST00000579591.1	CDKN2B	ENSG00000147883	cyclin dependent kinase inhibitor 2B Source HGNC Symbol Acc HGNC 1788
B09	UPFH0543408	ENST00000371761.4	CDKN2C	ENSG00000123080	cyclin dependent kinase inhibitor 2C Source HGNC Symbol Acc HGNC 1789
B10	UPFH0295297	ENST00000335766.2	CDKN2D	ENSG00000129355	cyclin dependent kinase inhibitor 2D Source HGNC Symbol Acc HGNC 1790
B11	UPFH1132313	ENST00000427383.6	CHEK1	ENSG00000149554	checkpoint kinase 1 Source HGNC Symbol Acc HGNC 1925
B12	UPFH1132314	ENST00000439200.5	CHEK2	ENSG00000183765	checkpoint kinase 2 Source HGNC Symbol Acc HGNC 16627
C01	UPFH0308632	ENST00000536159.2	CITED2	ENSG00000164442	Cbp/p300 interacting transactivator with Glu/Asp rich carboxy-terminal domain 2 Source HGNC Symbol Acc HGNC 1987
C02	UPFH0361104	ENST00000225964.9	COL1A1	ENSG00000108821	collagen type I alpha 1 chain Source HGNC Symbol Acc HGNC 2197
C03	UPFH0067087	ENST00000304636.7	COL3A1	ENSG00000168542	collagen type III alpha 1 chain Source HGNC Symbol Acc HGNC 2201
C04	UPFH0071126	ENST00000466652.2	CREG1	ENSG00000143162	cellular repressor of E1A stimulated genes 1 Source HGNC Symbol Acc HGNC 2351
C05	UPFH1132375	ENST00000343380.6	E2F1	ENSG00000101412	E2F transcription factor 1 Source HGNC Symbol Acc HGNC 3113
C06	UPFH0317034	ENST00000613242.4	E2F3	ENSG00000112242	E2F transcription factor 3 Source HGNC Symbol Acc HGNC 3115
C07	UPFH0558832	ENST00000239938.5	EGR1	ENSG00000120738	early growth response 1 Source HGNC Symbol Acc HGNC 3238
C08	UPFH0570530	ENST00000392668.8	ETS1	ENSG00000134954	ETS proto-oncogene 1, transcription factor Source HGNC Symbol Acc HGNC 3488
C09	UPFH1132389	ENST00000360214.7	ETS2	ENSG00000157557	ETS proto-oncogene 2, transcription factor Source HGNC Symbol Acc HGNC 3489
C10	UPFH0605066	ENST00000336916.8	FN1	ENSG00000115414	fibronectin 1 Source HGNC Symbol Acc HGNC 3778
		ENST000003370		ENSG000000	growth arrest and DNA damage inducible alpha Source HGNC Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132413	985.4	GADD45A	116717	HGNC 4095
C12	UPFH0411488	ENST00000473477.1	GLB1	ENSG00000170266	galactosidase beta 1 Source HGNC Symbol Acc HGNC 4298
D01	UPFH0470775	ENST00000316626.5	GSK3B	ENSG00000082701	glycogen synthase kinase 3 beta Source HGNC Symbol Acc HGNC 4617
D02	UPFH1132981	ENST00000311189.8	HRAS	ENSG00000174775	HRas proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 5173
D03	UPFH1132463	ENST00000376112.4	ID1	ENSG00000125968	inhibitor of DNA binding 1, HLH protein Source HGNC Symbol Acc HGNC 5360
D04	UPFH1132473	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
D05	UPFH0229443	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D06	UPFH0237955	ENST00000650285.1	IGF1R	ENSG00000140443	insulin like growth factor 1 receptor Source HGNC Symbol Acc HGNC 5465
D07	UPFH1132893	ENST00000275521.10	IGFBP3	ENSG00000146674	insulin like growth factor binding protein 3 Source HGNC Symbol Acc HGNC 5472
D08	UPFH1132475	ENST00000449583.1	IGFBP5	ENSG00000115461	insulin like growth factor binding protein 5 Source HGNC Symbol Acc HGNC 5474
D09	UPFH0195059	ENST00000295666.6	IGFBP7	ENSG00000163453	insulin like growth factor binding protein 7 Source HGNC Symbol Acc HGNC 5476
D10	UPFH0379255	ENST00000333219.8	ING1	ENSG00000153487	inhibitor of growth family member 1 Source HGNC Symbol Acc HGNC 6062
D11	UPFH0390278	ENST00000599144.5	IRF3	ENSG00000126456	interferon regulatory factor 3 Source HGNC Symbol Acc HGNC 6118
D12	UPFH1132492	ENST00000479582.5	IRF5	ENSG00000128604	interferon regulatory factor 5 Source HGNC Symbol Acc HGNC 6120
E01	UPFH1132493	ENST00000348655.11	IRF7	ENSG00000185507	interferon regulatory factor 7 Source HGNC Symbol Acc HGNC 6122
E02	UPFH1132932	ENST00000307102.9	MAP2K1	ENSG00000169032	mitogen-activated protein kinase kinase 1 Source HGNC Symbol Acc HGNC 6840
E03	UPFH0309340	ENST00000361818.9	MAP2K3	ENSG00000034152	mitogen-activated protein kinase kinase 3 Source HGNC Symbol Acc HGNC 6843
E04	UPFH0154305	ENST00000586641.5	MAP2K6	ENSG00000108984	mitogen-activated protein kinase kinase 6 Source HGNC Symbol Acc HGNC 6846
E05	UPFH0068247	ENST00000229795.7	MAPK14	ENSG00000112062	mitogen-activated protein kinase 14 Source HGNC Symbol Acc HGNC 6876
E06	UPFH1132546	ENST00000393416.6	MDM2	ENSG00000135679	MDM2 proto-oncogene Source HGNC Symbol Acc HGNC 6973
E07	UPFH0512274	ENST00000487909.5	MORC3	ENSG00000159256	MORC family CW-type zinc finger 3 Source HGNC Symbol Acc HGNC 23572
E08	UPFH1132563	ENST00000517291.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
E09	UPFH0612261	ENST00000265433.7	NBN	ENSG00000104320	nibrin Source HGNC Symbol Acc HGNC 7652
E10	UPFH1132828	ENST00000226574.9	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E11	UPFH0055322	ENST00000531342.5	NOX4	ENSG00000086991	NADPH oxidase 4 Source HGNC Symbol Acc HGNC 7891
E12	UPFH1132607	ENST00000379160.3	PCNA	ENSG00000132646	proliferating cell nuclear antigen Source HGNC Symbol Acc HGNC 8729
F01	UPFH0109251	ENST00000462255.1	PIK3CA	ENSG00000121879	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source HGNC Symbol Acc HGNC 8975
F02	UPFH1132831	ENST00000446342.5	PLAU	ENSG00000122861	plasminogen activator, urokinase Source HGNC Symbol Acc HGNC 9052
F03	UPFH0316461	ENST00000651505.1	PRKCD	ENSG00000163932	protein kinase C delta Source HGNC Symbol Acc HGNC 9399
F04	UPFH1132982	ENST00000371953.8	PTEN	ENSG00000171862	phosphatase and tensin homolog Source HGNC Symbol Acc HGNC 9588
F05	UPFH0001483	ENST00000267163.5	RB1	ENSG00000139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
F06	UPFH0109902	ENST00000373664.7	RBL1	ENSG00000080839	RB transcriptional corepressor like 1 Source HGNC Symbol Acc HGNC 9893
F07	UPFH1132654	ENST00000544405.6	RBL2	ENSG00000103479	RB transcriptional corepressor like 2 Source HGNC Symbol Acc HGNC 9894
F08	UPFH1132670	ENST00000299502.9	SERPINF2	ENSG00000197632	serpin family B member 2 Source HGNC Symbol Acc HGNC 8584
F09	UPFH0384736	ENST00000223095.4	SERPINE1	ENSG00000106366	serpin family E member 1 Source HGNC Symbol Acc HGNC 8583
F10	UPFH0388476	ENST00000212015.11	SIRT1	ENSG00000096717	sirtuin 1 Source HGNC Symbol Acc HGNC 14929

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0220920	ENST00000270142.10	SOD1	ENSG00000142168	superoxide dismutase 1 Source HGNC Symbol Acc HGNC 11179
F12	UPFH1132692	ENST00000367055.8	SOD2	ENSG00000112096	superoxide dismutase 2 Source HGNC Symbol Acc HGNC 11180
G01	UPFH0385149	ENST00000231061.9	SPARC	ENSG00000113140	secreted protein acidic and cysteine rich Source HGNC Symbol Acc HGNC 11219
G02	UPFH1132707	ENST00000240328.4	TBX2	ENSG00000121068	T-box 2 Source HGNC Symbol Acc HGNC 11597
G03	UPFH0011501	ENST00000349155.7	TBX3	ENSG00000135111	T-box 3 Source HGNC Symbol Acc HGNC 11602
G04	UPFH0210309	ENST00000567296.6	TERF2	ENSG00000132604	telomeric repeat binding factor 2 Source HGNC Symbol Acc HGNC 11729
G05	UPFH0248987	ENST00000310581.9	TERT	ENSG00000164362	telomerase reverse transcriptase Source HGNC Symbol Acc HGNC 11730
G06	UPFH0193430	ENST00000221930.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G07	UPFH0013326	ENST00000394858.6	TGFB11	ENSG00000140682	transforming growth factor beta 1 induced transcript 1 Source HGNC Symbol Acc HGNC 11767
G08	UPFH1132847	ENST00000260356.5	THBS1	ENSG00000137801	thrombospondin 1 Source HGNC Symbol Acc HGNC 11785
G09	UPFH0565795	ENST00000269305.8	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G10	UPFH0035611	ENST00000263801.7	TP53BP1	ENSG000001067369	tumor protein p53 binding protein 1 Source HGNC Symbol Acc HGNC 11999
G11	UPFH1132743	ENST00000242261.6	TWIST1	ENSG00000122691	twist family bHLH transcription factor 1 Source HGNC Symbol Acc HGNC 12428
G12	UPFH1132857	ENST00000544301.7	VIM	ENSG000001026025	vimentin Source HGNC Symbol Acc HGNC 12692
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG000001075624	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	ENSG000001089157	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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