

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

Mouse Cellular Senescence

Cat. no. 249955 UPMM-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	Abi1	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	Hras	Id1	Ilfn3	Igf1	Igf1r	Igfbp3	Igfbp5	Igfbp7	Ing1	Irf3	Irf5
E	Irf7	Map2k1	Map2k3	Map2k6	Mapk14	Mdm2	Morc3	Myc	Nbn	Nfkb1	Nox4	Pcna
F	Plk3ca	Plau	Prkcd	Pten	Rb1	Rbl1	Rbl2	Serpib2	Serpine1	Sirt1	Sod1	Sod2
G	Sparc	Tbx2	Tbx3	Terf2	Tert	Tgfb1	Tgfb1i1	Thbs1	Trp53	Trp53bp1	Twist1	Vim
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFM089352 2	ENSMUST000000 028190.12	Abl1	ENSMUSG00 000026842	c-abl oncogene 1, non-receptor tyrosine kinase Source MGI Symbol Acc MGI 87859
A02	UPFM082786 0	ENSMUST000000 139388.2	Akt1	ENSMUSG00 000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A03	UPFM065840 9	ENSMUST000000 174215.1	Aldh1a3	ENSMUSG00 000015134	aldehyde dehydrogenase family 1, subfamily A3 Source MGI Symbol Acc MGI 1861722
A04	UPFM070877 3	ENSMUST000000 150244.1	Atm	ENSMUSG00 000034218	ataxia telangiectasia mutated Source MGI Symbol Acc MGI 107202
A05	UPFM079385 6	ENSMUST000000 051929.12	Bmi1	ENSMUSG00 000026739	Bmi1 polycomb ring finger oncogene Source MGI Symbol Acc MGI 88174
A06	UPFM080836 1	ENSMUST000000 003912.6	Calr	ENSMUSG00 000003814	calreticulin Source MGI Symbol Acc MGI 88252
A07	UPFM088857 5	ENSMUST000000 029270.9	Ccna2	ENSMUSG00 000027715	cyclin A2 Source MGI Symbol Acc MGI 108069
A08	UPFM091925 2	ENSMUST000000 147790.1	Ccnb1	ENSMUSG00 000041431	cyclin B1 Source MGI Symbol Acc MGI 88302
A09	UPFM093346 3	ENSMUST000000 208193.1	Ccnd1	ENSMUSG00 000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
A10	UPFM097782 7	ENSMUST000000 130329.1	Ccne1	ENSMUSG00 000002068	cyclin E1 Source MGI Symbol Acc MGI 88316
A11	UPFM095220 9	ENSMUST000000 111192.2	Cd44	ENSMUSG00 000005087	CD44 antigen Source MGI Symbol Acc MGI 88338
A12	UPFM096467 5	ENSMUST000000 237620.1	Cdc25c	ENSMUSG00 000044201	cell division cycle 25C Source MGI Symbol Acc MGI 88350
B01	UPFM089823 9	ENSMUST000000 219601.1	Cdk2	ENSMUSG00 000025358	cyclin-dependent kinase 2 Source MGI Symbol Acc MGI 104772
B02	UPFM094816 9	ENSMUST000000 140254.7	Cdk4	ENSMUSG00 000006728	cyclin-dependent kinase 4 Source MGI Symbol Acc MGI 88357
B03	UPFM062634 4	ENSMUST000000 042410.4	Cdk6	ENSMUSG00 000040274	cyclin-dependent kinase 6 Source MGI Symbol Acc MGI 1277162
B04	UPFM086779 1	ENSMUST000000 122348.2	Cdkn1a	ENSMUSG00 000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B05	UPFM072528 3	ENSMUST000000 204807.1	Cdkn1b	ENSMUSG00 000003031	cyclin-dependent kinase inhibitor 1B Source MGI Symbol Acc MGI 104565
B06	UPFM061949 3	ENSMUST000000 037287.7	Cdkn1c	ENSMUSG00 000037664	cyclin-dependent kinase inhibitor 1C (P57) Source MGI Symbol Acc MGI 104564
B07	UPFM070277 6	ENSMUST000000 107131.1	Cdkn2a	ENSMUSG00 000044303	cyclin dependent kinase inhibitor 2A Source MGI Symbol Acc MGI 104738
B08	UPFM092812 3	ENSMUST000000 097981.5	Cdkn2b	ENSMUSG00 000073802	cyclin dependent kinase inhibitor 2B Source MGI Symbol Acc MGI 104737
B09	UPFM089384 1	ENSMUST000000 063531.4	Cdkn2c	ENSMUSG00 000028551	cyclin dependent kinase inhibitor 2C Source MGI Symbol Acc MGI 105388
B10	UPFM100290 3	ENSMUST000000 213407.1	Cdkn2d	ENSMUSG00 000096472	cyclin dependent kinase inhibitor 2D Source MGI Symbol Acc MGI 105387
B11	UPFM098368 4	ENSMUST000000 174105.7	Chek1	ENSMUSG00 000032113	checkpoint kinase 1 Source MGI Symbol Acc MGI 1202065
B12	UPFM096690 4	ENSMUST000000 066160.2	Chek2	ENSMUSG00 000029521	checkpoint kinase 2 Source MGI Symbol Acc MGI 1355321
C01	UPFM088177 2	ENSMUST000000 219558.1	Cited2	ENSMUSG00 000039910	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2 Source MGI Symbol Acc MGI 1306784
C02	UPFM117294 6	ENSMUST000000 001547.7	Col1a1	ENSMUSG00 000001506	collagen, type I, alpha 1 Source MGI Symbol Acc MGI 88467
C03	UPFM093889 4	ENSMUST000000 087883.12	Col3a1	ENSMUSG00 000026043	collagen, type III, alpha 1 Source MGI Symbol Acc MGI 88453
C04	UPFM070957 4	ENSMUST000000 040298.4	Creg1	ENSMUSG00 000040713	cellular repressor of E1A-stimulated genes 1 Source MGI Symbol Acc MGI 1344382
C05	UPFM066128 0	ENSMUST000000 000894.5	E2f1	ENSMUSG00 000027490	E2F transcription factor 1 Source MGI Symbol Acc MGI 101941
C06	UPFM062273 9	ENSMUST000000 222730.1	E2f3	ENSMUSG00 000016477	E2F transcription factor 3 Source MGI Symbol Acc MGI 1096340
C07	UPFM085434 3	ENSMUST000000 165033.1	Egr1	ENSMUSG00 000038418	early growth response 1 Source MGI Symbol Acc MGI 95295
C08	UPFM073575 5	ENSMUST000000 034534.12	Ets1	ENSMUSG00 000032035	E26 avian leukemia oncogene 1, 5 domain Source MGI Symbol Acc MGI 95455
C09	UPFM097328 1	ENSMUST000000 023612.16	Ets2	ENSMUSG00 000022895	E26 avian leukemia oncogene 2, 3 domain Source MGI Symbol Acc MGI 95456
C10	UPFM086511 0	ENSMUST000000 188894.6	Fn1	ENSMUSG00 000026193	fibronectin 1 Source MGI Symbol Acc MGI 95566
	UPFM091095	ENSMUST000000		ENSMUSG00	growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	4	204282.1	Gadd45a	000036390	MGI 107799
C12	UPFM101039 3	ENSMUST00000 063042.10	Glb1	ENSMUSG00 000045594	galactosidase, beta 1 Source MGI Symbol Acc MGI 88151
D01	UPFM098687 7	ENSMUST00000 114750.1	Gsk3b	ENSMUSG00 000022812	glycogen synthase kinase 3 beta Source MGI Symbol Acc MGI 1861437
D02	UPFM099623 4	ENSMUST00000 124314.2	Hras	ENSMUSG00 000025499	Harvey rat sarcoma virus oncogene Source MGI Symbol Acc MGI 96224
D03	UPFM085834 2	ENSMUST00000 109824.1	Id1	ENSMUSG00 000042745	inhibitor of DNA binding 1 Source MGI Symbol Acc MGI 96396
D04	UPFM117295 0	ENSMUST00000 068592.4	Ifng	ENSMUSG00 000055170	interferon gamma Source MGI Symbol Acc MGI 107656
D05	UPFM092941 8	ENSMUST00000 121161.7	Igf1	ENSMUSG00 000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D06	UPFM065329 9	ENSMUST00000 208871.1	Igf1r	ENSMUSG00 000005533	insulin-like growth factor I receptor Source MGI Symbol Acc MGI 96433
D07	UPFM096898 6	ENSMUST00000 020702.10	Igfbp3	ENSMUSG00 000020427	insulin-like growth factor binding protein 3 Source MGI Symbol Acc MGI 96438
D08	UPFM069504 1	ENSMUST00000 137339.1	Igfbp5	ENSMUSG00 000026185	insulin-like growth factor binding protein 5 Source MGI Symbol Acc MGI 96440
D09	UPFM066806 0	ENSMUST00000 163898.5	Igfbp7	ENSMUSG00 000036256	insulin-like growth factor binding protein 7 Source MGI Symbol Acc MGI 1352480
D10	UPFM076481 3	ENSMUST00000 209646.1	Ing1	ENSMUSG00 000045969	inhibitor of growth family, member 1 Source MGI Symbol Acc MGI 1349481
D11	UPFM097246 1	ENSMUST00000 207521.1	Irf3	ENSMUSG00 000003184	interferon regulatory factor 3 Source MGI Symbol Acc MGI 1859179
D12	UPFM079524 6	ENSMUST00000 164922.2	Irf5	ENSMUSG00 000029771	interferon regulatory factor 5 Source MGI Symbol Acc MGI 1350924
E01	UPFM089456 5	ENSMUST00000 123525.1	Irf7	ENSMUSG00 000025498	interferon regulatory factor 7 Source MGI Symbol Acc MGI 1859212
E02	UPFM066592 5	ENSMUST00000 005066.8	Map2k1	ENSMUSG00 000004936	mitogen-activated protein kinase kinase 1 Source MGI Symbol Acc MGI 1346866
E03	UPFM079587 4	ENSMUST00000 126043.1	Map2k3	ENSMUSG00 000018932	mitogen-activated protein kinase kinase 3 Source MGI Symbol Acc MGI 1346868
E04	UPFM069201 6	ENSMUST00000 020949.11	Map2k6	ENSMUSG00 000020623	mitogen-activated protein kinase kinase 6 Source MGI Symbol Acc MGI 1346870
E05	UPFM074684 8	ENSMUST00000 004990.13	Mapk14	ENSMUSG00 000053436	mitogen-activated protein kinase 14 Source MGI Symbol Acc MGI 1346865
E06	UPFM075219 5	ENSMUST00000 137102.7	Mdm2	ENSMUSG00 000020184	transformed mouse 3T3 cell double minute 2 Source MGI Symbol Acc MGI 96952
E07	UPFM086415 4	ENSMUST00000 201097.2	Morc3	ENSMUSG00 000039456	microorchidia 3 Source MGI Symbol Acc MGI 2136841
E08	UPFM081421 4	ENSMUST00000 161976.7	Myc	ENSMUSG00 000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E09	UPFM098128 4	ENSMUST00000 149069.1	Nbn	ENSMUSG00 000028224	nibrin Source MGI Symbol Acc MGI 1351625
E10	UPFM098758 7	ENSMUST00000 029812.13	Nfkb1	ENSMUSG00 000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E11	UPFM093930 8	ENSMUST00000 124269.7	Nox4	ENSMUSG00 000030562	NADPH oxidase 4 Source MGI Symbol Acc MGI 1354184
E12	UPFM069101 9	ENSMUST00000 140338.1	Pcna	ENSMUSG00 000027342	proliferating cell nuclear antigen Source MGI Symbol Acc MGI 97503
F01	UPFM070843 8	ENSMUST00000 108243.7	Pik3ca	ENSMUSG00 000027665	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source MGI Symbol Acc MGI 1206581
F02	UPFM083661 6	ENSMUST00000 224141.1	Plau	ENSMUSG00 000021822	plasminogen activator, urokinase Source MGI Symbol Acc MGI 97611
F03	UPFM081230 3	ENSMUST00000 135714.2	Prkcd	ENSMUSG00 000021948	protein kinase C, delta Source MGI Symbol Acc MGI 97598
F04	UPFM089742 6	ENSMUST00000 013807.7	Pten	ENSMUSG00 000013663	phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583
F05	UPFM077278 8	ENSMUST00000 022701.6	Rb1	ENSMUSG00 000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F06	UPFM089194 0	ENSMUST00000 154721.7	Rbl1	ENSMUSG00 000027641	RB transcriptional corepressor like 1 Source MGI Symbol Acc MGI 103300
F07	UPFM074059 9	ENSMUST00000 147361.7	Rbl2	ENSMUSG00 000031666	RB transcriptional corepressor like 2 Source MGI Symbol Acc MGI 105085
F08	UPFM083377 4	ENSMUST00000 009356.10	Serpinb2	ENSMUSG00 000062345	serine (or cysteine) peptidase inhibitor, clade B, member 2 Source MGI Symbol Acc MGI 97609
F09	UPFM070788 6	ENSMUST00000 041388.10	Serpine1	ENSMUSG00 000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
F10	UPFM091465 7	ENSMUST00000 177694.7	Sirt1	ENSMUSG00 000020063	sirtuin 1 Source MGI Symbol Acc MGI 2135607

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM092762 0	ENSMUST00000 023707.10	Sod1	ENSMUSG00 000022982	superoxide dismutase 1, soluble Source MGI Symbol Acc MGI 98351
F12	UPFM095033 7	ENSMUST00000 233897.1	Sod2	ENSMUSG00 000006818	superoxide dismutase 2, mitochondrial Source MGI Symbol Acc MGI 98352
G01	UPFM087131 6	ENSMUST00000 214685.1	Sparc	ENSMUSG00 000018593	secreted acidic cysteine rich glycoprotein Source MGI Symbol Acc MGI 98373
G02	UPFM074595 5	ENSMUST00000 000095.6	Tbx2	ENSMUSG00 000000093	T-box 2 Source MGI Symbol Acc MGI 98494
G03	UPFM070419 1	ENSMUST00000 145647.1	Tbx3	ENSMUSG00 000018604	T-box 3 Source MGI Symbol Acc MGI 98495
G04	UPFM062820 4	ENSMUST00000 068388.14	Terf2	ENSMUSG00 000031921	telomeric repeat binding factor 2 Source MGI Symbol Acc MGI 1195972
G05	UPFM088336 8	ENSMUST00000 022104.8	Tert	ENSMUSG00 000021611	telomerase reverse transcriptase Source MGI Symbol Acc MGI 1202709
G06	UPFM066688 0	ENSMUST00000 171757.1	Tgfb1	ENSMUSG00 000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G07	UPFM097202 8	ENSMUST00000 167965.7	Tgfb1i1	ENSMUSG00 000030782	transforming growth factor beta 1 induced transcript 1 Source MGI Symbol Acc MGI 102784
G08	UPFM072927 9	ENSMUST00000 039559.8	Thbs1	ENSMUSG00 000040152	thrombospondin 1 Source MGI Symbol Acc MGI 98737
G09	UPFM066913 3	ENSMUST00000 171247.7	Trp53	ENSMUSG00 000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G10	UPFM092106 7	ENSMUST00000 147540.7	Trp53bp1	ENSMUSG00 000043909	transformation related protein 53 binding protein 1 Source MGI Symbol Acc MGI 1351320
G11	UPFM089781 8	ENSMUST00000 049089.6	Twist1	ENSMUSG00 000035799	twist basic helix-loop-helix transcription factor 1 Source MGI Symbol Acc MGI 98872
G12	UPFM099766 2	ENSMUST00000 028062.7	Vim	ENSMUSG00 000026728	vimentin Source MGI Symbol Acc MGI 98932
H01	UPFM113294 6	ENSMUST00000 163829.1	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	UPFM113294 7	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	UPFM113294 8	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	UPFM113294 9	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	UPFM113295 0	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	UPFM112660 9	UPL_MGDC	MGDC	UPL_MGDC	Mouse 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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