

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

Mouse Cellular Senescence

Cat. no. 249950 SBMM-050ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA PCR Focus Panels are shipped at ambient temperature. Immediately upon receipt, they should be stored 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 PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova SYBR® Green PCR Kit (Mastermix) for PCR.

Panel layout (Rotor-Gene): QuantiNova LNA 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 PCR System 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	Gilb1
D	Gsk3b	Hras	Id1	Ifng	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	Ter1	Tgfb1	Tgfb1i1	Thbs1	Trp53	Trp53bp1	Twist1	Vim
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBM1025688	ENSMUST00000127714.1	Abl1	ENSMUSG0000026842	c-abl oncogene 1, non-receptor tyrosine kinase Source MGI Symbol Acc MGI 87859
A02	SBM1020452	ENSMUST00000144550.8	Akt1	ENSMUSG0000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A03	SBM0881559	ENSMUST00000174209.7	Aldh1a3	ENSMUSG0000015134	aldehyde dehydrogenase family 1, subfamily A3 Source MGI Symbol Acc MGI 1861722
A04	SBM0745660	ENSMUST00000150244.1	Atm	ENSMUSG0000034218	ataxia telangiectasia mutated Source MGI Symbol Acc MGI 107202
A05	SBM0925658	ENSMUST00000150834.7	Bmi1	ENSMUSG0000026739	Bmi1 polycomb ring finger oncogene Source MGI Symbol Acc MGI 88174
A06	SBM0796075	ENSMUST00000003912.6	Calr	ENSMUSG0000003814	calreticulin Source MGI Symbol Acc MGI 88252
A07	SBM0908421	ENSMUST00000029270.9	Ccna2	ENSMUSG0000027715	cyclin A2 Source MGI Symbol Acc MGI 108069
A08	SBM0677113	ENSMUST000000147790.1	Ccnb1	ENSMUSG0000041431	cyclin B1 Source MGI Symbol Acc MGI 88302
A09	SBM0706150	ENSMUST00000093962.4	Ccnd1	ENSMUSG0000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
A10	SBM0866938	ENSMUST000000124979.2	Ccne1	ENSMUSG0000002068	cyclin E1 Source MGI Symbol Acc MGI 88316
A11	SBM0860996	ENSMUST000000111194.7	Cd44	ENSMUSG0000005087	CD44 antigen Source MGI Symbol Acc MGI 88338
A12	SBM0971821	ENSMUST00000060710.8	Cdc25c	ENSMUSG0000044201	cell division cycle 25C Source MGI Symbol Acc MGI 88350
B01	SBM1030284	ENSMUST000000219601.1	Cdk2	ENSMUSG0000025358	cyclin-dependent kinase 2 Source MGI Symbol Acc MGI 104772
B02	SBM0702559	ENSMUST000000120226.7	Cdk4	ENSMUSG00000006728	cyclin-dependent kinase 4 Source MGI Symbol Acc MGI 88357
B03	SBM0726060	ENSMUST000000165117.7	Cdk6	ENSMUSG0000040274	cyclin-dependent kinase 6 Source MGI Symbol Acc MGI 1277162
B04	SBM1034022	ENSMUST000000023829.7	Cdkn1a	ENSMUSG0000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B05	SBM1006924	ENSMUST00000067327.10	Cdkn1b	ENSMUSG0000003031	cyclin-dependent kinase inhibitor 1B Source MGI Symbol Acc MGI 104565
B06	SBM0762603	ENSMUST000000208137.1	Cdkn1c	ENSMUSG0000037664	cyclin-dependent kinase inhibitor 1C (P57) Source MGI Symbol Acc MGI 104564
B07	SBM0998051	ENSMUST00000060501.4	Cdkn2a	ENSMUSG0000044303	cyclin dependent kinase inhibitor 2A Source MGI Symbol Acc MGI 104738
B08	SBM1002560	ENSMUST00000097981.5	Cdkn2b	ENSMUSG0000073802	cyclin dependent kinase inhibitor 2B Source MGI Symbol Acc MGI 104737
B09	SBM1063743	ENSMUST00000063531.4	Cdkn2c	ENSMUSG0000028551	cyclin dependent kinase inhibitor 2C Source MGI Symbol Acc MGI 105388
B10	SBM0921509	ENSMUST000000215619.1	Cdkn2d	ENSMUSG0000096472	cyclin dependent kinase inhibitor 2D Source MGI Symbol Acc MGI 105387
B11	SBM0725925	ENSMUST000000173963.8	Chek1	ENSMUSG0000032113	checkpoint kinase 1 Source MGI Symbol Acc MGI 1202065
B12	SBM0884188	ENSMUST00000066160.2	Chek2	ENSMUSG0000029521	checkpoint kinase 2 Source MGI Symbol Acc MGI 1355321
C01	SBM0882660	ENSMUST000000219558.1	Cited2	ENSMUSG0000039910	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2 Source MGI Symbol Acc MGI 1306784
C02	SBM0911341	ENSMUST000000139974.1	Col1a1	ENSMUSG0000001506	collagen, type I, alpha 1 Source MGI Symbol Acc MGI 88467
C03	SBM0704935	ENSMUST000000129611.1	Col3a1	ENSMUSG0000026043	collagen, type III, alpha 1 Source MGI Symbol Acc MGI 88453
C04	SBM0838853	ENSMUST000000040298.4	Creg1	ENSMUSG0000040713	cellular repressor of E1A-stimulated genes 1 Source MGI Symbol Acc MGI 1344382
C05	SBM0678575	ENSMUST00000000894.5	E2f1	ENSMUSG0000027490	E2F transcription factor 1 Source MGI Symbol Acc MGI 101941
C06	SBM0884968	ENSMUST000000102948.10	E2f3	ENSMUSG0000016477	E2F transcription factor 3 Source MGI Symbol Acc MGI 1096340
C07	SBM0782056	ENSMUST00000064795.5	Egr1	ENSMUSG0000038418	early growth response 1 Source MGI Symbol Acc MGI 95295
C08	SBM0897035	ENSMUST000000184887.1	Ets1	ENSMUSG0000032035	E26 avian leukemia oncogene 1, 5 domain Source MGI Symbol Acc MGI 95455
C09	SBM0823296	ENSMUST000000023612.16	Ets2	ENSMUSG0000022895	E26 avian leukemia oncogene 2, 3 domain Source MGI Symbol Acc MGI 95456
C10	SBM0934692	ENSMUST000000185408.6	Fn1	ENSMUSG0000026193	fibronectin 1 Source MGI Symbol Acc MGI 95566
		ENSMUST000000		ENSMUSG00	growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0962210	151958.1	Gadd45a	000036390	MGI 107799
C12	SBM0918985	ENSMUST00000217583.1	Glb1	ENSMUSG0000045594	galactosidase, beta 1 Source MGI Symbol Acc MGI 88151
D01	SBM0862470	ENSMUST00000132057.1	Gsk3b	ENSMUSG0000022812	glycogen synthase kinase 3 beta Source MGI Symbol Acc MGI 1861437
D02	SBM0815785	ENSMUST00000097957.10	Hras	ENSMUSG0000025499	Harvey rat sarcoma virus oncogene Source MGI Symbol Acc MGI 96224
D03	SBM0688367	ENSMUST00000109824.1	Id1	ENSMUSG0000042745	inhibitor of DNA binding 1 Source MGI Symbol Acc MGI 96396
D04	SBM0903694	ENSMUST00000068592.4	Ifng	ENSMUSG0000055170	interferon gamma Source MGI Symbol Acc MGI 107656
D05	SBM1026650	ENSMUST00000122386.7	Igf1	ENSMUSG0000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D06	SBM0769269	ENSMUST00000207621.1	Igf1r	ENSMUSG0000005533	insulin-like growth factor I receptor Source MGI Symbol Acc MGI 96433
D07	SBM0693110	ENSMUST00000020702.10	Igfbp3	ENSMUSG0000020427	insulin-like growth factor binding protein 3 Source MGI Symbol Acc MGI 96438
D08	SBM1004323	ENSMUST00000137339.1	Igfbp5	ENSMUSG0000026185	insulin-like growth factor binding protein 5 Source MGI Symbol Acc MGI 96440
D09	SBM1084499	ENSMUST00000046746.9	Igfbp7	ENSMUSG0000036256	insulin-like growth factor binding protein 7 Source MGI Symbol Acc MGI 1352480
D10	SBM0762147	ENSMUST00000209646.1	Ing1	ENSMUSG0000045969	inhibitor of growth family, member 1 Source MGI Symbol Acc MGI 1349481
D11	SBM0803819	ENSMUST00000207129.1	Irf3	ENSMUSG0000003184	interferon regulatory factor 3 Source MGI Symbol Acc MGI 1859179
D12	SBM0896474	ENSMUST00000163511.6	Irf5	ENSMUSG0000029771	interferon regulatory factor 5 Source MGI Symbol Acc MGI 1350924
E01	SBM0775971	ENSMUST00000123525.1	Irf7	ENSMUSG0000025498	interferon regulatory factor 7 Source MGI Symbol Acc MGI 1859212
E02	SBM1025120	ENSMUST00000005066.8	Map2k1	ENSMUSG0000004936	mitogen-activated protein kinase kinase 1 Source MGI Symbol Acc MGI 1346866
E03	SBM0905391	ENSMUST00000130269.1	Map2k3	ENSMUSG0000018932	mitogen-activated protein kinase kinase 3 Source MGI Symbol Acc MGI 1346868
E04	SBM0854481	ENSMUST00000133920.1	Map2k6	ENSMUSG0000020623	mitogen-activated protein kinase kinase 6 Source MGI Symbol Acc MGI 1346870
E05	SBM0683456	ENSMUST00000114754.7	Mapk14	ENSMUSG0000053436	mitogen-activated protein kinase 14 Source MGI Symbol Acc MGI 1346865
E06	SBM0989223	ENSMUST00000020408.15	Mdm2	ENSMUSG0000020184	transformed mouse 3T3 cell double minute 2 Source MGI Symbol Acc MGI 96952
E07	SBM0837397	ENSMUST00000232425.1	Morc3	ENSMUSG0000039456	microorchidia 3 Source MGI Symbol Acc MGI 2136841
E08	SBM0987162	ENSMUST00000159338.1	Myc	ENSMUSG0000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E09	SBM0680530	ENSMUST00000029879.14	Nbn	ENSMUSG0000028224	nibrin Source MGI Symbol Acc MGI 1351625
E10	SBM0841870	ENSMUST00000164430.6	Nfkb1	ENSMUSG0000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E11	SBM0915544	ENSMUST00000126887.7	Nox4	ENSMUSG0000030562	NADPH oxidase 4 Source MGI Symbol Acc MGI 1354184
E12	SBM0823260	ENSMUST00000140338.1	Pcna	ENSMUSG0000027342	proliferating cell nuclear antigen Source MGI Symbol Acc MGI 97503
F01	SBM0905151	ENSMUST00000108243.7	Pik3ca	ENSMUSG0000027665	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source MGI Symbol Acc MGI 1206581
F02	SBM0733272	ENSMUST00000224141.1	Plau	ENSMUSG0000021822	plasminogen activator, urokinase Source MGI Symbol Acc MGI 97611
F03	SBM0672668	ENSMUST00000135714.2	Prkcd	ENSMUSG0000021948	protein kinase C, delta Source MGI Symbol Acc MGI 97598
F04	SBM1220566	ENSMUST00000013807.7	Pten	ENSMUSG0000013663	phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583
F05	SBM0795530	ENSMUST00000168495.1	Rb1	ENSMUSG0000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F06	SBM1034359	ENSMUST00000141296.1	Rbl1	ENSMUSG0000027641	RB transcriptional corepressor like 1 Source MGI Symbol Acc MGI 103300
F07	SBM1089037	ENSMUST00000144190.7	Rbl2	ENSMUSG0000031666	RB transcriptional corepressor like 2 Source MGI Symbol Acc MGI 105085
F08	SBM0738846	ENSMUST00000009356.10	Serpib2	ENSMUSG0000062345	serine (or cysteine) peptidase inhibitor, clade B, member 2 Source MGI Symbol Acc MGI 97609
F09	SBM0809699	ENSMUST00000041388.10	Serpine1	ENSMUSG0000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
F10	SBM1040786	ENSMUST00000020257.12	Sirt1	ENSMUSG0000020063	sirtuin 1 Source MGI Symbol Acc MGI 2135607

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0946306	ENSMUST00000023707.10	Sod1	ENSMUSG00000022982	superoxide dismutase 1, soluble Source MGI Symbol Acc MGI 98351
F12	SBM1063571	ENSMUST00000233791.1	Sod2	ENSMUSG00000006818	superoxide dismutase 2, mitochondrial Source MGI Symbol Acc MGI 98352
G01	SBM0767527	ENSMUST00000108858.7	Sparc	ENSMUSG0000018593	secreted acidic cysteine rich glycoprotein Source MGI Symbol Acc MGI 98373
G02	SBM1061166	ENSMUST00000000095.6	Tbx2	ENSMUSG00000000093	T-box 2 Source MGI Symbol Acc MGI 98494
G03	SBM1066415	ENSMUST00000121021.7	Tbx3	ENSMUSG0000018604	T-box 3 Source MGI Symbol Acc MGI 98495
G04	SBM0816096	ENSMUST00000133925.7	Terf2	ENSMUSG00000031921	telomeric repeat binding factor 2 Source MGI Symbol Acc MGI 1195972
G05	SBM0871763	ENSMUST00000223303.1	Tert	ENSMUSG00000021611	telomerase reverse transcriptase Source MGI Symbol Acc MGI 1202709
G06	SBM0850388	ENSMUST00000002678.9	Tgfb1	ENSMUSG00000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G07	SBM0744840	ENSMUST00000168825.7	Tgfb1i1	ENSMUSG00000030782	transforming growth factor beta 1 induced transcript 1 Source MGI Symbol Acc MGI 102784
G08	SBM0895247	ENSMUST00000142588.1	Thbs1	ENSMUSG0000040152	thrombospondin 1 Source MGI Symbol Acc MGI 98737
G09	SBM0841427	ENSMUST00000108657.3	Trp53	ENSMUSG00000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G10	SBM0942656	ENSMUST00000110647.7	Trp53bp1	ENSMUSG00000043909	transformation related protein 53 binding protein 1 Source MGI Symbol Acc MGI 1351320
G11	SBM0689554	ENSMUST00000049089.6	Twist1	ENSMUSG00000035799	twist basic helix-loop-helix transcription factor 1 Source MGI Symbol Acc MGI 98872
G12	SBM0684573	ENSMUST00000028062.7	Vim	ENSMUSG00000026728	vimentin Source MGI Symbol Acc MGI 98932
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG00000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG00000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG00000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG00000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG00000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	SBM1218554	Sybr_MGDC	MGDC	Sybr_MGDC	Mouse Genomic DNA Contamination
H07	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H08	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H09	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H10	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H11	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H12	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249940
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 SYBR Green RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 µl QuantiNova SYBR Green RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl QN ROX Reference Dye, 1.9 ml Water	208052

*Larger kit sizes available.

The QuantiNova LNA 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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