

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

## Mouse Cytoskeleton Regulators

Cat. no. 249950 SBMM-088ZR

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](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Actr2	Actr3	Arap1	Arfp2	Arhgap6	Arhgdib	Arhgef11	Arpc1b	Arpc2	Arpc3	Arpc4	Arpc5
B	Aurka	Aurkb	Aurkc	Baiap2	Cald1	Calm1	Cask	Ccna1	Ccnb2	Cdc42	Cdc42bpa	Cdc42ep2
C	Cdc42ep3	Cdk5	Cdk5r1	Cfl1	Cit	Closp1	Closp2	Clip1	Clip2	Crk	Cttn	Cyfp1
D	Cyfp2	Diaph1	Dsn	Ezr	Frbp11	Fscn2	Gsn	Iqgap1	Iqgap2	Limk1	Limk2	Ug1
E	Mad1	Map3k11	Mapk13	Mapre1	Mapre2	Mapt	Mark2	Mid1	Msn	Map4	Myk	Myk2
F	Nck1	Nck2	Pak1	Pak4	Pfn2	Phldb2	Pikfyve	Ppp1r12a	Ppp1r12b	Ppp3ca	Ppp3cb	Rac1
G	Racgap1	Rdx	Rhoa	Rock1	Ssh1	Ssh2	Stmn1	Tiam1	Vasp	Was	Wasf1	Wasl
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	SBM0738261	ENSMUST0000000137.7	Actr2	ENSMUSG0000020152	ARP2 actin-related protein 2 Source MGI Symbol Acc MGI 1913963
A02	SBM0673509	ENSMUST00000027579.16	Actr3	ENSMUSG0000026341	ARP3 actin-related protein 3 Source MGI Symbol Acc MGI 1921367
A03	SBM0706580	ENSMUST000000155754.1	Arap1	ENSMUSG0000032812	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 1 Source MGI Symbol Acc MGI 1916960
A04	SBM0900202	ENSMUST000000142173.7	Arfp2	ENSMUSG0000030881	ADP-ribosylation factor interacting protein 2 Source MGI Symbol Acc MGI 1924182
A05	SBM1014144	ENSMUST000000139146.7	Arhgap6	ENSMUSG0000031355	Rho GTPase activating protein 6 Source MGI Symbol Acc MGI 1196332
A06	SBM0987438	ENSMUST000000032344.11	Arhgdib	ENSMUSG0000030220	Rho, GDP dissociation inhibitor (GDI) beta Source MGI Symbol Acc MGI 101940
A07	SBM0825604	ENSMUST000000142799.1	Arhgef11	ENSMUSG0000041977	Rho guanine nucleotide exchange factor (GEF) 11 Source MGI Symbol Acc MGI 2441869
A08	SBM0740267	ENSMUST000000138922.1	Arpc1b	ENSMUSG0000029622	actin related protein 2/3 complex, subunit 1B Source MGI Symbol Acc MGI 1343142
A09	SBM0761299	ENSMUST000000113820.8	Arpc2	ENSMUSG0000006304	actin related protein 2/3 complex, subunit 2 Source MGI Symbol Acc MGI 1923959
A10	SBM0896448	ENSMUST000000102525.10	Arpc3	ENSMUSG0000029465	actin related protein 2/3 complex, subunit 3 Source MGI Symbol Acc MGI 1928375
A11	SBM0748032	ENSMUST000000171058.7	Arpc4	ENSMUSG0000079426	actin related protein 2/3 complex, subunit 4 Source MGI Symbol Acc MGI 1915339
A12	SBM0916924	ENSMUST000000077755.10	Arpc5	ENSMUSG0000008475	actin related protein 2/3 complex, subunit 5 Source MGI Symbol Acc MGI 1915021
B01	SBM0964097	ENSMUST000000028997.7	Aurka	ENSMUSG0000027496	aurora kinase A Source MGI Symbol Acc MGI 894678
B02	SBM0735299	ENSMUST000000126576.1	Aurkb	ENSMUSG0000020897	aurora kinase B Source MGI Symbol Acc MGI 107168
B03	SBM0824224	ENSMUST000000208518.1	Aurkc	ENSMUSG0000070837	aurora kinase C Source MGI Symbol Acc MGI 1321119
B04	SBM0869408	ENSMUST000000106231.7	Baiap2	ENSMUSG0000025372	brain-specific angiogenesis inhibitor 1-associated protein 2 Source MGI Symbol Acc MGI 2137336
B05	SBM0900619	ENSMUST000000115027.7	Cald1	ENSMUSG0000029761	caldesmon 1 Source MGI Symbol Acc MGI 88250
B06	SBM0858583	ENSMUST000000153524.1	Calm1	ENSMUSG0000001175	calmodulin 1 Source MGI Symbol Acc MGI 88251
B07	SBM1044698	ENSMUST000000132240.1	Cask	ENSMUSG0000031012	calcium/calmodulin-dependent serine protein kinase (MAGUK family) Source MGI Symbol Acc MGI 1309489
B08	SBM0877611	ENSMUST000000197238.4	Ccna1	ENSMUSG0000027793	cyclin A1 Source MGI Symbol Acc MGI 108042
B09	SBM0976587	ENSMUST000000034742.7	Ccnb2	ENSMUSG0000032218	cyclin B2 Source MGI Symbol Acc MGI 88311
B10	SBM1071094	ENSMUST000000030417.9	Cdc42	ENSMUSG0000006699	cell division cycle 42 Source MGI Symbol Acc MGI 106211
B11	SBM1051321	ENSMUST000000145181.1	Cdc42bpa	ENSMUSG0000026490	CDC42 binding protein kinase alpha Source MGI Symbol Acc MGI 2441841
B12	SBM0950492	ENSMUST000000055458.5	Cdc42ep2	ENSMUSG0000045664	CDC42 effector protein (Rho GTPase binding) 2 Source MGI Symbol Acc MGI 1929744
C01	SBM0874241	ENSMUST000000068958.8	Cdc42ep3	ENSMUSG0000036533	CDC42 effector protein (Rho GTPase binding) 3 Source MGI Symbol Acc MGI 2384718
C02	SBM0737657	ENSMUST000000198990.1	Cdk5	ENSMUSG0000028969	cyclin-dependent kinase 5 Source MGI Symbol Acc MGI 101765
C03	SBM0768274	ENSMUST000000147694.1	Cdk5r1	ENSMUSG0000048895	cyclin-dependent kinase 5, regulatory subunit 1 (p35) Source MGI Symbol Acc MGI 101764
C04	SBM1037893	ENSMUST000000236645.1	Cfl1	ENSMUSG0000056201	cofilin 1, non-muscle Source MGI Symbol Acc MGI 101757
C05	SBM0812285	ENSMUST000000102560.6	Cit	ENSMUSG0000029516	citron Source MGI Symbol Acc MGI 105313
C06	SBM1032735	ENSMUST000000188710.6	Clasp1	ENSMUSG0000064302	CLIP associating protein 1 Source MGI Symbol Acc MGI 1923957
C07	SBM1011115	ENSMUST000000166734.9	Clasp2	ENSMUSG0000033392	CLIP associating protein 2 Source MGI Symbol Acc MGI 1923749
C08	SBM1017917	ENSMUST000000137363.7	Clip1	ENSMUSG0000049550	CAP-GLY domain containing linker protein 1 Source MGI Symbol Acc MGI 1928401
C09	SBM0678127	ENSMUST000000202408.1	Clip2	ENSMUSG0000063146	CAP-GLY domain containing linker protein 2 Source MGI Symbol Acc MGI 1313136
C10	SBM0856740	ENSMUST000000108425.7	Crk	ENSMUSG0000017776	v-crk avian sarcoma virus CT10 oncogene homolog Source MGI Symbol Acc MGI 88508
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0987219	033407.12	Ctn	000031078	cortactin Source MGI Symbol Acc MGI 99695
C12	SBM0805533	ENSMUST00000173267.7	Cyfp1	ENSMUSG0000030447	cytoplasmic FMR1 interacting protein 1 Source MGI Symbol Acc MGI 1338801
D01	SBM1040184	ENSMUST00000093165.11	Cyfp2	ENSMUSG00000020340	cytoplasmic FMR1 interacting protein 2 Source MGI Symbol Acc MGI 1924134
D02	SBM0886537	ENSMUST00000129688.1	Diaph1	ENSMUSG00000024456	diaphanous related formin 1 Source MGI Symbol Acc MGI 1194490
D03	SBM0753656	ENSMUST00000103172.3	Dstn	ENSMUSG00000015932	destrin Source MGI Symbol Acc MGI 1929270
D04	SBM0980731	ENSMUST00000064234.6	Ezr	ENSMUSG00000052397	ezrin Source MGI Symbol Acc MGI 98931
D05	SBM0709542	ENSMUST00000162947.1	Fnbp1l	ENSMUSG00000039735	formin binding protein 1-like Source MGI Symbol Acc MGI 1925642
D06	SBM1016639	ENSMUST00000026445.2	Fscn2	ENSMUSG00000025380	fascin actin-bundling protein 2 Source MGI Symbol Acc MGI 2443337
D07	SBM0793570	ENSMUST00000142324.7	Gsn	ENSMUSG00000026879	gelsolin Source MGI Symbol Acc MGI 95851
D08	SBM0952609	ENSMUST00000205813.1	lqgap1	ENSMUSG00000030536	IQ motif containing GTPase activating protein 1 Source MGI Symbol Acc MGI 1352757
D09	SBM0900823	ENSMUST00000068603.6	lqgap2	ENSMUSG00000021676	IQ motif containing GTPase activating protein 2 Source MGI Symbol Acc MGI 2449975
D10	SBM0769302	ENSMUST00000134093.1	Limk1	ENSMUSG00000029674	LIM-domain containing, protein kinase Source MGI Symbol Acc MGI 104572
D11	SBM0781004	ENSMUST00000101638.3	Limk2	ENSMUSG00000020451	LIM motif-containing protein kinase 2 Source MGI Symbol Acc MGI 1197517
D12	SBM0791464	ENSMUST00000052346.9	Llg1	ENSMUSG00000020536	LLGL1 scribble cell polarity complex component Source MGI Symbol Acc MGI 102682
E01	SBM0982083	ENSMUST00000082108.11	Macf1	ENSMUSG00000028649	microtubule-actin crosslinking factor 1 Source MGI Symbol Acc MGI 108559
E02	SBM0821245	ENSMUST00000004156.9	Map3k11	ENSMUSG00000004054	mitogen-activated protein kinase kinase kinase 11 Source MGI Symbol Acc MGI 1346880
E03	SBM1018712	ENSMUST00000023305.1.1	Mapk13	ENSMUSG00000004864	mitogen-activated protein kinase 13 Source MGI Symbol Acc MGI 1346864
E04	SBM0783545	ENSMUST00000123570.1	Mapre1	ENSMUSG00000027479	microtubule-associated protein, RP/EB family, member 1 Source MGI Symbol Acc MGI 891995
E05	SBM0855753	ENSMUST00000155708.7	Mapre2	ENSMUSG00000024277	microtubule-associated protein, RP/EB family, member 2 Source MGI Symbol Acc MGI 106271
E06	SBM1092220	ENSMUST00000106992.9	Mapt	ENSMUSG00000018411	microtubule-associated protein tau Source MGI Symbol Acc MGI 97180
E07	SBM0852288	ENSMUST00000025921.14	Mark2	ENSMUSG00000024969	MAP/microtubule affinity regulating kinase 2 Source MGI Symbol Acc MGI 99638
E08	SBM0741474	ENSMUST00000036753.11	Mid1	ENSMUSG00000035299	midline 1 Source MGI Symbol Acc MGI 1100537
E09	SBM1071206	ENSMUST00000149985.7	Msn	ENSMUSG00000031207	moesin Source MGI Symbol Acc MGI 97167
E10	SBM0970000	ENSMUST00000199548.4	Map4	ENSMUSG00000027479	microtubule-associated protein 4 Source MGI Symbol Acc MGI 97178
E11	SBM0720049	ENSMUST000000231589.1	Mylk	ENSMUSG00000022836	myosin, light polypeptide kinase Source MGI Symbol Acc MGI 894806
E12	SBM0689951	ENSMUST00000028970.7	Mylk2	ENSMUSG00000027470	myosin, light polypeptide kinase 2, skeletal muscle Source MGI Symbol Acc MGI 2139434
F01	SBM0730618	ENSMUST00000188670.1	Nck1	ENSMUSG00000032475	non-catalytic region of tyrosine kinase adaptor protein 1 Source MGI Symbol Acc MGI 109601
F02	SBM1084012	ENSMUST00000114744.2	Nck2	ENSMUSG00000066877	non-catalytic region of tyrosine kinase adaptor protein 2 Source MGI Symbol Acc MGI 1306821
F03	SBM0746109	ENSMUST00000033040.11	Pak1	ENSMUSG00000030774	p21 (RAC1) activated kinase 1 Source MGI Symbol Acc MGI 1339975
F04	SBM0701424	ENSMUST00000108283.7	Pak4	ENSMUSG00000030602	p21 (RAC1) activated kinase 4 Source MGI Symbol Acc MGI 1917834
F05	SBM0900355	ENSMUST00000066882.9	Pfn2	ENSMUSG00000027805	profilin 2 Source MGI Symbol Acc MGI 97550
F06	SBM0966865	ENSMUST00000151300.1	Phldb2	ENSMUSG00000033149	pleckstrin homology like domain, family B, member 2 Source MGI Symbol Acc MGI 2444981
F07	SBM0997086	ENSMUST00000186404.6	Pikfyve	ENSMUSG00000025949	phosphoinositide kinase, FYVE type zinc finger containing Source MGI Symbol Acc MGI 1335106
F08	SBM0906016	ENSMUST00000218161.1	Ppp1r12a	ENSMUSG00000019907	protein phosphatase 1, regulatory subunit 12A Source MGI Symbol Acc MGI 1309528
F09	SBM1003940	ENSMUST00000168381.7	Ppp1r12b	ENSMUSG00000073557	protein phosphatase 1, regulatory subunit 12B Source MGI Symbol Acc MGI 1916417
F10	SBM1084664	ENSMUST00000070198.13	Ppp3ca	ENSMUSG00000028161	protein phosphatase 3, catalytic subunit, alpha isoform Source MGI Symbol Acc MGI 107164

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM1078561	ENSMUST00000159027.7	PPP3cb	ENSMUSG00000021816	protein phosphatase 3, catalytic subunit, beta isoform Source MGI Symbol Acc MGI 107163
F12	SBM0680406	ENSMUST00000145709.7	Rac1	ENSMUSG0000001847	Rac family small GTPase 1 Source MGI Symbol Acc MGI 97845
G01	SBM0710413	ENSMUST00000169810.7	Racgap1	ENSMUSG00000023015	Rac GTPase-activating protein 1 Source MGI Symbol Acc MGI 1349423
G02	SBM0856664	ENSMUST00000061352.10	Rdx	ENSMUSG00000032050	radixin Source MGI Symbol Acc MGI 97887
G03	SBM0943773	ENSMUST00000194701.5	Rhoa	ENSMUSG0000007815	ras homolog family member A Source MGI Symbol Acc MGI 1096342
G04	SBM0761820	ENSMUST00000067947.6	Rock1	ENSMUSG00000024290	Rho-associated coiled-coil containing protein kinase 1 Source MGI Symbol Acc MGI 107927
G05	SBM1000219	ENSMUST00000159510.1	Ssh1	ENSMUSG00000042121	slingshot protein phosphatase 1 Source MGI Symbol Acc MGI 2686240
G06	SBM0704267	ENSMUST00000180554.1	Ssh2	ENSMUSG00000037926	slingshot protein phosphatase 2 Source MGI Symbol Acc MGI 2679255
G07	SBM0820556	ENSMUST00000130253.1	Stmn1	ENSMUSG00000028832	stathmin 1 Source MGI Symbol Acc MGI 96739
G08	SBM0797666	ENSMUST00000144691.8	Tiam1	ENSMUSG0000002489	T cell lymphoma invasion and metastasis 1 Source MGI Symbol Acc MGI 103306
G09	SBM0686532	ENSMUST00000032561.8	Vasp	ENSMUSG00000030403	vasodilator-stimulated phosphoprotein Source MGI Symbol Acc MGI 109268
G10	SBM0977884	ENSMUST00000033505.6	Was	ENSMUSG00000031165	Wiskott-Aldrich syndrome Source MGI Symbol Acc MGI 105059
G11	SBM1018765	ENSMUST00000105509.1	Wasf1	ENSMUSG00000019831	WAS protein family, member 1 Source MGI Symbol Acc MGI 1890563
G12	SBM0962503	ENSMUST00000041737.7	Wasl	ENSMUSG00000029684	Wiskott-Aldrich syndrome-like (human) Source MGI Symbol Acc MGI 1920428
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 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 $\mu$ l QuantiNova SYBR Green RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ l 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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