

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

Mouse Skeletal Muscle: Myogenesis & Myopathy

Cat. no. 249950 SBMM-099ZR

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	Acta1	Actn3	Acr2b	Adipoq	Adrb2	Agrn	Akt1	Akt2	Atp2a1	Bcl2	Bmp4	Camk2g
B	Capn2	Capn3	Casp3	Cost	Cav1	Cav3	Cryab	Cs	Chnrb1	Dag1	Des	Dmd
C	Dmpk	Dysf	Fbxo32	Fgf2	Foxo1	Foxo3	Hdac5	Hk2	Igf1	Igf2	Igfbp3	Igfbp5
D	Ilkbkb	Il1b	Il6	Lep	Lmna	Mapk1	Mapk14	Mapk3	Mapk8	Mb	Mef2c	Mmp9
E	Mstn	Musk	Myf5	Myf6	Myh1	Myh2	Myod1	Myog	Myot	Neb	Nfkb1	Nos2
F	Pax3	Pax7	Pdk4	Pparg	Ppargc1a	Ppargc1b	Ppp3ca	Prkaa1	Prkab2	Prkag1	Prkag3	Rhoa
G	Rps6kb1	Sgca	Slc2a4	Tgfb1	Tnf	Tnnc1	Tnni2	Tnnt1	Tnnt3	Trim63	Tln	Utrn
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	SBM0719266	ENSMUST00000034453.5	Acta1	ENSMUSG0000031972	actin, alpha 1, skeletal muscle Source MGI Symbol Acc MGI 87902
A02	SBM0786527	ENSMUST00000006626.4	Actn3	ENSMUSG0000006457	actinin alpha 3 Source MGI Symbol Acc MGI 99678
A03	SBM0816669	ENSMUST00000165044.2	Acvr2b	ENSMUSG0000061393	activin receptor IIB Source MGI Symbol Acc MGI 87912
A04	SBM0903115	ENSMUST00000023593.5	Adipoq	ENSMUSG0000022878	adiponectin, C1Q and collagen domain containing Source MGI Symbol Acc MGI 106675
A05	SBM1025763	ENSMUST00000053640.4	Adrb2	ENSMUSG0000045730	adrenergic receptor, beta 2 Source MGI Symbol Acc MGI 87938
A06	SBM0827433	ENSMUST00000105574.8	Agri	ENSMUSG0000041936	agrin Source MGI Symbol Acc MGI 87961
A07	SBM1020452	ENSMUST00000144550.8	Akt1	ENSMUSG0000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A08	SBM0882867	ENSMUST00000051356.11	Akt2	ENSMUSG0000004056	thymoma viral proto-oncogene 2 Source MGI Symbol Acc MGI 104874
A09	SBM0873480	ENSMUST00000032974.12	Atp2a1	ENSMUSG0000030730	ATPase, Ca++ transporting, cardiac muscle, fast twitch 1 Source MGI Symbol Acc MGI 105058
A10	SBM0876340	ENSMUST00000189999.1	Bcl2	ENSMUSG0000057329	B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138
A11	SBM0845886	ENSMUST00000100676.2	Bmp4	ENSMUSG0000021835	bone morphogenetic protein 4 Source MGI Symbol Acc MGI 88180
A12	SBM0845808	ENSMUST00000080440.13	Camk2g	ENSMUSG0000021820	calcium/calmodulin-dependent protein kinase II gamma Source MGI Symbol Acc MGI 88259
B01	SBM0807527	ENSMUST00000194961.1	Capn2	ENSMUSG0000026509	calpain 2 Source MGI Symbol Acc MGI 88264
B02	SBM1022511	ENSMUST00000124129.7	Capn3	ENSMUSG0000079110	calpain 3 Source MGI Symbol Acc MGI 107437
B03	SBM0732165	ENSMUST00000093517.6	Casp3	ENSMUSG0000031628	caspase 3 Source MGI Symbol Acc MGI 107739
B04	SBM0773007	ENSMUST00000223309.1	Cast	ENSMUSG0000021585	calpastatin Source MGI Symbol Acc MGI 1098236
B05	SBM0727943	ENSMUST00000115454.1	Cav1	ENSMUSG0000007655	caveolin 1, caveolae protein Source MGI Symbol Acc MGI 102709
B06	SBM1035433	ENSMUST00000075477.7	Cav3	ENSMUSG0000062694	caveolin 3 Source MGI Symbol Acc MGI 107570
B07	SBM1019697	ENSMUST00000034562.8	Cryab	ENSMUSG0000032060	crystallin, alpha B Source MGI Symbol Acc MGI 88516
B08	SBM0906169	ENSMUST00000005826.8	Cs	ENSMUSG0000005683	citrate synthase Source MGI Symbol Acc MGI 88529
B09	SBM1021462	ENSMUST00000007130.14	Ctnnb1	ENSMUSG0000006932	catenin (cadherin associated protein), beta 1 Source MGI Symbol Acc MGI 88276
B10	SBM0981188	ENSMUST00000171412.6	Dag1	ENSMUSG0000039952	dystroglycan 1 Source MGI Symbol Acc MGI 101864
B11	SBM1025275	ENSMUST00000027409.9	Des	ENSMUSG0000026208	desmin Source MGI Symbol Acc MGI 94885
B12	SBM0815669	ENSMUST00000113991.7	Dmd	ENSMUSG0000045103	dystrophin, muscular dystrophy Source MGI Symbol Acc MGI 94909
C01	SBM0910099	ENSMUST00000142725.7	Dmpk	ENSMUSG0000030409	dystrophia myotonica-protein kinase Source MGI Symbol Acc MGI 94906
C02	SBM1028630	ENSMUST00000142711.5	Dysf	ENSMUSG0000033788	dysferlin Source MGI Symbol Acc MGI 1349385
C03	SBM1004772	ENSMUST00000022986.7	Fbxo32	ENSMUSG0000022358	F-box protein 32 Source MGI Symbol Acc MGI 1914981
C04	SBM0959713	ENSMUST00000138563.8	Fgf2	ENSMUSG0000037225	fibroblast growth factor 2 Source MGI Symbol Acc MGI 95516
C05	SBM0795258	ENSMUST00000053764.6	Foxo1	ENSMUSG0000044167	forkhead box O1 Source MGI Symbol Acc MGI 1890077
C06	SBM1067125	ENSMUST00000105502.7	Foxo3	ENSMUSG0000048756	forkhead box O3 Source MGI Symbol Acc MGI 1890081
C07	SBM0874640	ENSMUST00000124077.7	Hdac5	ENSMUSG0000008855	histone deacetylase 5 Source MGI Symbol Acc MGI 1333784
C08	SBM1068583	ENSMUST0000000642.10	Hk2	ENSMUSG0000000628	hexokinase 2 Source MGI Symbol Acc MGI 1315197
C09	SBM1026650	ENSMUST00000122386.7	Igf1	ENSMUSG0000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
C10	SBM0905480	ENSMUST00000121128.7	Igf2	ENSMUSG0000048583	insulin-like growth factor 2 Source MGI Symbol Acc MGI 96434
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0693110	020702.10	Igfbp3	000020427	insulin-like growth factor binding protein 3 Source MGI Symbol Acc MGI 96438
C12	SBM1004323	ENSMUST00000137339.1	Igfbp5	ENSMUSG0000026185	insulin-like growth factor binding protein 5 Source MGI Symbol Acc MGI 96440
D01	SBM0683235	ENSMUST00000144583.7	Ikbbk	ENSMUSG00000031537	inhibitor of kappaB kinase beta Source MGI Symbol Acc MGI 1338071
D02	SBM0738485	ENSMUST00000028881.13	Il1b	ENSMUSG00000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
D03	SBM0742623	ENSMUST00000026845.11	Il6	ENSMUSG00000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
D04	SBM0718370	ENSMUST00000169505.1	Lep	ENSMUSG00000059201	leptin Source MGI Symbol Acc MGI 104663
D05	SBM0903585	ENSMUST00000120377.7	Lmna	ENSMUSG0000028063	lamin A Source MGI Symbol Acc MGI 96794
D06	SBM0800614	ENSMUST00000231821.1	Mapk1	ENSMUSG00000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
D07	SBM0683456	ENSMUST00000114754.7	Mapk14	ENSMUSG00000053436	mitogen-activated protein kinase 14 Source MGI Symbol Acc MGI 1346865
D08	SBM0856900	ENSMUST00000206272.1	Mapk3	ENSMUSG00000063065	mitogen-activated protein kinase 3 Source MGI Symbol Acc MGI 1346859
D09	SBM0984642	ENSMUST00000132379.1	Mapk8	ENSMUSG00000021936	mitogen-activated protein kinase 8 Source MGI Symbol Acc MGI 1346861
D10	SBM1024274	ENSMUST00000169226.8	Mb	ENSMUSG0000018893	myoglobin Source MGI Symbol Acc MGI 96922
D11	SBM0750479	ENSMUST00000199210.4	Mef2c	ENSMUSG00000005583	myocyte enhancer factor 2C Source MGI Symbol Acc MGI 99458
D12	SBM1089430	ENSMUST00000017881.2	Mmp9	ENSMUSG00000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
E01	SBM0884770	ENSMUST00000027269.6	Mstn	ENSMUSG00000026100	myostatin Source MGI Symbol Acc MGI 95691
E02	SBM0888044	ENSMUST00000098057.9	Musk	ENSMUSG00000057280	muscle, skeletal, receptor tyrosine kinase Source MGI Symbol Acc MGI 103581
E03	SBM1013382	ENSMUST00000000445.1	Myf5	ENSMUSG00000000435	myogenic factor 5 Source MGI Symbol Acc MGI 97252
E04	SBM0747537	ENSMUST00000044210.4	Myf6	ENSMUSG00000035923	myogenic factor 6 Source MGI Symbol Acc MGI 97253
E05	SBM1088338	ENSMUST00000018637.14	Myh1	ENSMUSG00000056328	myosin, heavy polypeptide 1, skeletal muscle, adult Source MGI Symbol Acc MGI 1339711
E06	SBM0754166	ENSMUST000000170159.7	Myh2	ENSMUSG00000033196	myosin, heavy polypeptide 2, skeletal muscle, adult Source MGI Symbol Acc MGI 1339710
E07	SBM0847322	ENSMUST00000072514.2	Myod1	ENSMUSG00000009471	myogenic differentiation 1 Source MGI Symbol Acc MGI 97275
E08	SBM0913842	ENSMUST00000027730.5	Myog	ENSMUSG00000026459	myogenin Source MGI Symbol Acc MGI 97276
E09	SBM0938502	ENSMUST00000025349.11	Myot	ENSMUSG00000024471	myotilin Source MGI Symbol Acc MGI 1889800
E10	SBM1053665	ENSMUST00000028320.13	Neb	ENSMUSG00000026950	nebulin Source MGI Symbol Acc MGI 97292
E11	SBM0841870	ENSMUST000000164430.6	Nfkb1	ENSMUSG00000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E12	SBM0835086	ENSMUST000000208783.1	Nos2	ENSMUSG00000020826	nitric oxide synthase 2, inducible Source MGI Symbol Acc MGI 97361
F01	SBM0851058	ENSMUST000000172555.1	Pax3	ENSMUSG00000004872	paired box 3 Source MGI Symbol Acc MGI 97487
F02	SBM1083477	ENSMUST000000174681.1	Pax7	ENSMUSG00000028736	paired box 7 Source MGI Symbol Acc MGI 97491
F03	SBM0854468	ENSMUST00000019721.6	Pdk4	ENSMUSG00000019577	pyruvate dehydrogenase kinase, isoenzyme 4 Source MGI Symbol Acc MGI 1351481
F04	SBM1015614	ENSMUST000000205213.2	Pparg	ENSMUSG00000000440	peroxisome proliferator activated receptor gamma Source MGI Symbol Acc MGI 97747
F05	SBM0984439	ENSMUST000000132734.7	Ppargc1a	ENSMUSG00000029167	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha Source MGI Symbol Acc MGI 1342774
F06	SBM0842607	ENSMUST00000075299.12	Ppargc1b	ENSMUSG00000033871	peroxisome proliferative activated receptor, gamma, coactivator 1 beta Source MGI Symbol Acc MGI 2444934
F07	SBM1084664	ENSMUST00000070198.13	Ppp3ca	ENSMUSG00000028161	protein phosphatase 3, catalytic subunit, alpha isoform Source MGI Symbol Acc MGI 107164
F08	SBM0905959	ENSMUST000000228218.1	Prkaa1	ENSMUSG00000050697	protein kinase, AMP-activated, alpha 1 catalytic subunit Source MGI Symbol Acc MGI 2145955
F09	SBM0898406	ENSMUST000000132719.1	Prkab2	ENSMUSG00000038205	protein kinase, AMP-activated, beta 2 non-catalytic subunit Source MGI Symbol Acc MGI 1336185
F10	SBM0922630	ENSMUST000000229346.1	Prkag1	ENSMUSG00000067713	protein kinase, AMP-activated, gamma 1 non-catalytic subunit Source MGI Symbol Acc MGI 108411

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM1026091	ENSMUST00000160732.7	Prkag3	ENSMUSG0000006542	protein kinase, AMP-activated, gamma 3 non-catalytic subunit Source MGI Symbol Acc MGI 1891343
F12	SBM0943773	ENSMUST00000194701.5	Rhoa	ENSMUSG0000007815	ras homolog family member A Source MGI Symbol Acc MGI 1096342
G01	SBM0853475	ENSMUST00000058286.8	Rps6kb1	ENSMUSG0000020516	ribosomal protein S6 kinase, polypeptide 1 Source MGI Symbol Acc MGI 1270849
G02	SBM1055138	ENSMUST00000103162.7	Sgca	ENSMUSG0000001508	sarcoglycan, alpha (dystrophin-associated glycoprotein) Source MGI Symbol Acc MGI 894698
G03	SBM0717464	ENSMUST00000178809.7	Slc2a4	ENSMUSG0000018566	solute carrier family 2 (facilitated glucose transporter), member 4 Source MGI Symbol Acc MGI 95758
G04	SBM0850388	ENSMUST00000002678.9	Tgfb1	ENSMUSG0000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G05	SBM0788439	ENSMUST00000025263.14	Tnf	ENSMUSG0000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G06	SBM1093536	ENSMUST00000161399.1	Tnnc1	ENSMUSG00000091898	troponin C, cardiac/slow skeletal Source MGI Symbol Acc MGI 98779
G07	SBM0797070	ENSMUST00000129618.1	Tnni2	ENSMUSG00000031097	troponin I, skeletal, fast 2 Source MGI Symbol Acc MGI 105070
G08	SBM1077625	ENSMUST00000178163.7	Tnnt1	ENSMUSG00000064179	troponin T1, skeletal, slow Source MGI Symbol Acc MGI 1333868
G09	SBM0766591	ENSMUST00000105949.7	Tnnt3	ENSMUSG00000061723	troponin T3, skeletal, fast Source MGI Symbol Acc MGI 109550
G10	SBM0702962	ENSMUST00000105875.7	Trim63	ENSMUSG0000028834	tripartite motif-containing 63 Source MGI Symbol Acc MGI 2447992
G11	SBM0927302	ENSMUST00000123804.7	Ttn	ENSMUSG00000051747	titin Source MGI Symbol Acc MGI 98864
G12	SBM0780159	ENSMUST00000076817.4	Utrn	ENSMUSG0000019820	utrophin Source MGI Symbol Acc MGI 104631
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	ENSMUSG0000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG0000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG0000023944	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 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 SYBR Green RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 μ l QuantiNova SYBR Green 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	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ 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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