

QuantiNova® LNA® PCR Focus Panels (96-Well Format and 384-Well [4 x 96] Format)

Mouse Neuronal Ion Channels

Cat. no. 249950 SBMM-036ZA

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 (96-well): QuantiNova LNA PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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	Asic2	Asic1	Asic3	Best1	Cacna1a	Cacna1b	Cacna1c	Cacna1d	Cacna1g	Cacna1i	Cacnb1	Cacnb2
B	Cacnb3	Cacng2	Cacng4	Clcn2	Clcn3	Clcn7	Hcn1	Hcn2	Kcna1	Kcna2	Kcna5	Kcna6
C	Kcnab1	Kcnab2	Kcnab3	Kcnb1	Kcnb2	Kcnc1	Kcnc2	Kcnd2	Kcnd3	Kcnh1	Kcnh2	Kcnh3
D	Kcnh6	Kcnh7	Kcnj1	Kcnj11	Kcnj12	Kcnj13	Kcnj14	Kcnj15	Kcnj16	Kcnj2	Kcnj3	Kcnj4
E	Kcnj5	Kcnj6	Kcnj9	Kcnk1	Kcnma1	Kcnmb4	Kcnn1	Kcnn2	Kcnn3	Kcnq1	Kcnq2	Kcnq3
F	Kcns1	Ryr3	Scn10a	Scn11a	Scn1a	Scn1b	Scn2a	Scn2b	Scn3a	Scn8a	Scn9a	Slc12a5
G	Trpa1	Trpc1	Trpc3	Trpc6	Trpm1	Trpm2	Trpm6	Trpm8	Trpv1	Trpv2	Trpv3	Trpv4
H	Acfb	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	SBM0748546	ENSMUST00000066197.6	Asic2	ENSMUSG0000020704	acid-sensing (proton-gated) ion channel 2 Source MGI Symbol Acc MGI 1100867
A02	SBM1032439	ENSMUST00000228185.1	Asic1	ENSMUSG0000023017	acid-sensing (proton-gated) ion channel 1 Source MGI Symbol Acc MGI 1194915
A03	SBM1073464	ENSMUST00000049346.9	Asic3	ENSMUSG0000038276	acid-sensing (proton-gated) ion channel 3 Source MGI Symbol Acc MGI 2159339
A04	SBM0924350	ENSMUST00000117346.1	Best1	ENSMUSG0000037418	bestrophin 1 Source MGI Symbol Acc MGI 1346332
A05	SBM0750240	ENSMUST00000153691.1	Cacna1a	ENSMUSG0000034656	calcium channel, voltage-dependent, P/Q type, alpha 1A subunit Source MGI Symbol Acc MGI 109482
A06	SBM1049868	ENSMUST00000100348.9	Cacna1b	ENSMUSG0000004113	calcium channel, voltage-dependent, N type, alpha 1B subunit Source MGI Symbol Acc MGI 88296
A07	SBM0831888	ENSMUST00000078320.13	Cacna1c	ENSMUSG0000051331	calcium channel, voltage-dependent, L type, alpha 1C subunit Source MGI Symbol Acc MGI 103013
A08	SBM0777402	ENSMUST00000112249.8	Cacna1d	ENSMUSG0000015968	calcium channel, voltage-dependent, L type, alpha 1D subunit Source MGI Symbol Acc MGI 88293
A09	SBM0986001	ENSMUST00000103166.8	Cacna1g	ENSMUSG0000020866	calcium channel, voltage-dependent, T type, alpha 1G subunit Source MGI Symbol Acc MGI 1201678
A10	SBM1012574	ENSMUST00000162913.7	Cacna1i	ENSMUSG0000022416	calcium channel, voltage-dependent, alpha 1I subunit Source MGI Symbol Acc MGI 2178051
A11	SBM1061677	ENSMUST00000092736.10	Cacnb1	ENSMUSG0000020882	calcium channel, voltage-dependent, beta 1 subunit Source MGI Symbol Acc MGI 102522
A12	SBM0940475	ENSMUST00000137746.7	Cacnb2	ENSMUSG0000057914	calcium channel, voltage-dependent, beta 2 subunit Source MGI Symbol Acc MGI 894644
B01	SBM0785366	ENSMUST00000003442.8	Cacnb3	ENSMUSG0000003352	calcium channel, voltage-dependent, beta 3 subunit Source MGI Symbol Acc MGI 103307
B02	SBM0996634	ENSMUST00000019290.2	Cacng2	ENSMUSG0000019146	calcium channel, voltage-dependent, gamma subunit 2 Source MGI Symbol Acc MGI 1316660
B03	SBM0964620	ENSMUST00000134076.1	Cacng4	ENSMUSG0000020723	calcium channel, voltage-dependent, gamma subunit 4 Source MGI Symbol Acc MGI 1859167
B04	SBM0813877	ENSMUST00000131833.1	Clcn2	ENSMUSG0000022843	chloride channel, voltage-sensitive 2 Source MGI Symbol Acc MGI 105061
B05	SBM0791473	ENSMUST00000110302.7	Clcn3	ENSMUSG0000004319	chloride channel, voltage-sensitive 3 Source MGI Symbol Acc MGI 103555
B06	SBM0858344	ENSMUST00000159773.1	Clcn7	ENSMUSG0000036636	chloride channel, voltage-sensitive 7 Source MGI Symbol Acc MGI 1347048
B07	SBM0715354	ENSMUST00000207599.1	Hcn1	ENSMUSG0000021730	hyperpolarization-activated, cyclic nucleotide-gated K+ 1 Source MGI Symbol Acc MGI 1096392
B08	SBM0844855	ENSMUST00000099513.7	Hcn2	ENSMUSG0000020331	hyperpolarization-activated, cyclic nucleotide-gated K+ 2 Source MGI Symbol Acc MGI 1298210
B09	SBM0702142	ENSMUST00000055168.4	Kcna1	ENSMUSG0000047976	potassium voltage-gated channel, shaker-related subfamily, member 1 Source MGI Symbol Acc MGI 96654
B10	SBM0689979	ENSMUST00000196403.1	Kcna2	ENSMUSG0000040724	potassium voltage-gated channel, shaker-related subfamily, member 2 Source MGI Symbol Acc MGI 96659
B11	SBM0728811	ENSMUST00000060972.4	Kcna5	ENSMUSG0000045534	potassium voltage-gated channel, shaker-related subfamily, member 5 Source MGI Symbol Acc MGI 96662
B12	SBM0959651	ENSMUST00000185333.1	Kcna6	ENSMUSG0000038077	potassium voltage-gated channel, shaker-related, subfamily, member 6 Source MGI Symbol Acc MGI 96663
C01	SBM0783891	ENSMUST00000049230.10	Kcnab1	ENSMUSG0000027827	potassium voltage-gated channel, shaker-related subfamily, beta member 1 Source MGI Symbol Acc MGI 109155
C02	SBM0675755	ENSMUST00000159844.7	Kcnab2	ENSMUSG0000028931	potassium voltage-gated channel, shaker-related subfamily, beta member 2 Source MGI Symbol Acc MGI 109239
C03	SBM0764035	ENSMUST00000142328.7	Kcnab3	ENSMUSG0000018470	potassium voltage-gated channel, shaker-related subfamily, beta member 3 Source MGI Symbol Acc MGI 1336208
C04	SBM0916655	ENSMUST00000207917.1	Kcnb1	ENSMUSG0000050556	potassium voltage gated channel, Shab-related subfamily, member 1 Source MGI Symbol Acc MGI 96666
C05	SBM0951449	ENSMUST00000175681.2	Kcnb2	ENSMUSG0000092083	potassium voltage gated channel, Shab-related subfamily, member 2 Source MGI Symbol Acc MGI 99632
C06	SBM0950608	ENSMUST00000160234.1	Kcnc1	ENSMUSG0000058975	potassium voltage gated channel, Shaw-related subfamily, member 1 Source MGI Symbol Acc MGI 96667
C07	SBM0730756	ENSMUST00000218445.1	Kcnc2	ENSMUSG0000035681	potassium voltage gated channel, Shaw-related subfamily, member 2 Source MGI Symbol Acc MGI 96668
C08	SBM1029617	ENSMUST00000081542.5	Kcnd2	ENSMUSG0000060882	potassium voltage-gated channel, Shal-related family, member 2 Source MGI Symbol Acc MGI 102663
C09	SBM0944142	ENSMUST00000098761.9	Kcnd3	ENSMUSG0000040896	potassium voltage-gated channel, Shal-related family, member 3 Source MGI Symbol Acc MGI 1928743
C10	SBM0723464	ENSMUST00000078470.11	Kcni1	ENSMUSG0000058248	potassium voltage-gated channel, subfamily H (eag-related), member 1 Source MGI Symbol Acc MGI 1341721
		ENSMUST00000000000.0		ENSMUSG00000000000.0	potassium voltage-gated channel, subfamily H (eag-related), member 2 Source

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0710297	115098.6	Kcnh2	000038319	MGI Symbol Acc MGI 1341722
C12	SBM0784704	ENSMUST0000041415.4	Kcnh3	ENSMUSG0000037579	potassium voltage-gated channel, subfamily H (eag-related), member 3 Source MGI Symbol Acc MGI 1341723
D01	SBM1026483	ENSMUST00000106903.7	Kcnh6	ENSMUSG0000001901	potassium voltage-gated channel, subfamily H (eag-related), member 6 Source MGI Symbol Acc MGI 2684139
D02	SBM0829494	ENSMUST00000075052.9	Kcnh7	ENSMUSG0000059742	potassium voltage-gated channel, subfamily H (eag-related), member 7 Source MGI Symbol Acc MGI 2159566
D03	SBM0761380	ENSMUST00000172015.2	Kcnj1	ENSMUSG00000041248	potassium inwardly-rectifying channel, subfamily J, member 1 Source MGI Symbol Acc MGI 1927248
D04	SBM0872823	ENSMUST00000180081.2	Kcnj11	ENSMUSG00000096146	potassium inwardly rectifying channel, subfamily J, member 11 Source MGI Symbol Acc MGI 107501
D05	SBM0755605	ENSMUST00000108717.2	Kcnj12	ENSMUSG0000042529	potassium inwardly-rectifying channel, subfamily J, member 12 Source MGI Symbol Acc MGI 108495
D06	SBM1021068	ENSMUST00000174179.1	Kcnj13	ENSMUSG00000079436	potassium inwardly-rectifying channel, subfamily J, member 13 Source MGI Symbol Acc MGI 3781032
D07	SBM0725731	ENSMUST00000071937.6	Kcnj14	ENSMUSG0000058743	potassium inwardly-rectifying channel, subfamily J, member 14 Source MGI Symbol Acc MGI 2384820
D08	SBM0990117	ENSMUST00000113858.2	Kcnj15	ENSMUSG00000062609	potassium inwardly-rectifying channel, subfamily J, member 15 Source MGI Symbol Acc MGI 1310000
D09	SBM0850705	ENSMUST00000150902.7	Kcnj16	ENSMUSG00000051497	potassium inwardly-rectifying channel, subfamily J, member 16 Source MGI Symbol Acc MGI 1314842
D10	SBM0890715	ENSMUST00000042970.2	Kcnj2	ENSMUSG00000041695	potassium inwardly-rectifying channel, subfamily J, member 2 Source MGI Symbol Acc MGI 104744
D11	SBM0814556	ENSMUST00000112633.2	Kcnj3	ENSMUSG00000026824	potassium inwardly-rectifying channel, subfamily J, member 3 Source MGI Symbol Acc MGI 104742
D12	SBM0833726	ENSMUST00000057801.7	Kcnj4	ENSMUSG0000044216	potassium inwardly-rectifying channel, subfamily J, member 4 Source MGI Symbol Acc MGI 104743
E01	SBM0937026	ENSMUST00000034533.6	Kcnj5	ENSMUSG00000032034	potassium inwardly-rectifying channel, subfamily J, member 5 Source MGI Symbol Acc MGI 104755
E02	SBM1008730	ENSMUST00000232562.1	Kcnj6	ENSMUSG00000043301	potassium inwardly-rectifying channel, subfamily J, member 6 Source MGI Symbol Acc MGI 104781
E03	SBM1014845	ENSMUST00000194204.1	Kcnj9	ENSMUSG00000038026	potassium inwardly-rectifying channel, subfamily J, member 9 Source MGI Symbol Acc MGI 108007
E04	SBM0803616	ENSMUST00000212831.1	Kcnk1	ENSMUSG00000033998	potassium channel, subfamily K, member 1 Source MGI Symbol Acc MGI 109322
E05	SBM0828328	ENSMUST00000065788.14	Kcnma1	ENSMUSG0000063142	potassium large conductance calcium-activated channel, subfamily M, alpha member 1 Source MGI Symbol Acc MGI 99923
E06	SBM0926609	ENSMUST00000068233.10	Kcnmb4	ENSMUSG00000054934	potassium large conductance calcium-activated channel, subfamily M, beta member 4 Source MGI Symbol Acc MGI 1913272
E07	SBM0854186	ENSMUST00000212611.1	Kcnn1	ENSMUSG00000002908	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 1 Source MGI Symbol Acc MGI 1933993
E08	SBM1035531	ENSMUST00000169783.1	Kcnn2	ENSMUSG00000054477	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 2 Source MGI Symbol Acc MGI 2153182
E09	SBM1093257	ENSMUST00000000811.7	Kcnn3	ENSMUSG00000000794	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 3 Source MGI Symbol Acc MGI 2153183
E10	SBM0755690	ENSMUST00000009689.10	Kcnq1	ENSMUSG00000009545	potassium voltage-gated channel, subfamily Q, member 1 Source MGI Symbol Acc MGI 108083
E11	SBM0874456	ENSMUST00000129073.7	Kcnq2	ENSMUSG0000016346	potassium voltage-gated channel, subfamily Q, member 2 Source MGI Symbol Acc MGI 1309503
E12	SBM0714491	ENSMUST00000183354.1	Kcnq3	ENSMUSG00000056258	potassium voltage-gated channel, subfamily Q, member 3 Source MGI Symbol Acc MGI 1336181
F01	SBM1049655	ENSMUST00000045196.3	Kcns1	ENSMUSG00000040164	K+ voltage-gated channel, subfamily S, 1 Source MGI Symbol Acc MGI 1197019
F02	SBM1023364	ENSMUST00000208135.1	Ryr3	ENSMUSG00000057378	ryanodine receptor 3 Source MGI Symbol Acc MGI 99684
F03	SBM0788387	ENSMUST00000213392.1	Scn10a	ENSMUSG00000034533	sodium channel, voltage-gated, type X, alpha Source MGI Symbol Acc MGI 108029
F04	SBM1048086	ENSMUST00000215718.1	Scn11a	ENSMUSG00000034115	sodium channel, voltage-gated, type XI, alpha Source MGI Symbol Acc MGI 1345149
F05	SBM0826538	ENSMUST00000112366.7	Scn1a	ENSMUSG00000064329	sodium channel, voltage-gated, type I, alpha Source MGI Symbol Acc MGI 98246
F06	SBM0719251	ENSMUST00000211923.1	Scn1b	ENSMUSG00000019194	sodium channel, voltage-gated, type I, beta Source MGI Symbol Acc MGI 98247
F07	SBM1063489	ENSMUST00000028377.13	Scn2a	ENSMUSG00000075318	sodium channel, voltage-gated, type II, alpha Source MGI Symbol Acc MGI 98248
F08	SBM1059979	ENSMUST00000170998.8	Scn2b	ENSMUSG00000070304	sodium channel, voltage-gated, type II, beta Source MGI Symbol Acc MGI 106921
F09	SBM0782116	ENSMUST00000066432.11	Scn3a	ENSMUSG00000057182	sodium channel, voltage-gated, type III, alpha Source MGI Symbol Acc MGI 98249
F10	SBM1036627	ENSMUST00000201518.3	Scn8a	ENSMUSG00000023033	sodium channel, voltage-gated, type VIII, alpha Source MGI Symbol Acc MGI 103169

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0932091	ENSMUST00000164384.8	Scn9a	ENSMUSG0000075316	sodium channel, voltage-gated, type IX, alpha Source MGI Symbol Acc MGI 107636
F12	SBM0825340	ENSMUST00000202223.3	Slc12a5	ENSMUSG0000017740	solute carrier family 12, member 5 Source MGI Symbol Acc MGI 1862037
G01	SBM0896820	ENSMUST00000235071.1	Trpa1	ENSMUSG0000032769	transient receptor potential cation channel, subfamily A, member 1 Source MGI Symbol Acc MGI 3522699
G02	SBM0680723	ENSMUST00000189137.6	Trpc1	ENSMUSG0000032839	transient receptor potential cation channel, subfamily C, member 1 Source MGI Symbol Acc MGI 109528
G03	SBM0686595	ENSMUST0000029271.4	Trpc3	ENSMUSG0000027716	transient receptor potential cation channel, subfamily C, member 3 Source MGI Symbol Acc MGI 109526
G04	SBM1024580	ENSMUST00000214596.1	Trpc6	ENSMUSG0000031997	transient receptor potential cation channel, subfamily C, member 6 Source MGI Symbol Acc MGI 109523
G05	SBM1085081	ENSMUST00000206107.1	Trpm1	ENSMUSG0000030523	transient receptor potential cation channel, subfamily M, member 1 Source MGI Symbol Acc MGI 1330305
G06	SBM0792410	ENSMUST00000140471.1	Trpm2	ENSMUSG0000009292	transient receptor potential cation channel, subfamily M, member 2 Source MGI Symbol Acc MGI 1351901
G07	SBM0690871	ENSMUST00000237623.1	Trpm6	ENSMUSG0000024727	transient receptor potential cation channel, subfamily M, member 6 Source MGI Symbol Acc MGI 2675603
G08	SBM0768989	ENSMUST0000040210.13	Trpm8	ENSMUSG0000036251	transient receptor potential cation channel, subfamily M, member 8 Source MGI Symbol Acc MGI 2181435
G09	SBM0823241	ENSMUST00000102526.8	Trpv1	ENSMUSG0000005952	transient receptor potential cation channel, subfamily V, member 1 Source MGI Symbol Acc MGI 1341787
G10	SBM0950414	ENSMUST0000018651.13	Trpv2	ENSMUSG0000018507	transient receptor potential cation channel, subfamily V, member 2 Source MGI Symbol Acc MGI 1341836
G11	SBM0854408	ENSMUST00000049676.2	Trpv3	ENSMUSG0000043029	transient receptor potential cation channel, subfamily V, member 3 Source MGI Symbol Acc MGI 2181407
G12	SBM0896660	ENSMUST00000141828.1	Trpv4	ENSMUSG0000014158	transient receptor potential cation channel, subfamily V, member 4 Source MGI Symbol Acc MGI 1926945
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG0000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG0000060802	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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.