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

Mouse Neuronal Ion Channels

Cat. no. 249950 SBMM-036ZR

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	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	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	SBM0748546	ENSMUST00000 066197.6	Asic2	ENSMUSG00 000020704	acid-sensing (proton-gated) ion channel 2 Source MGI Symbol Acc MGI 1100867
A02	SBM1032439	ENSMUST00000 228185.1	Asic1	ENSMUSG00 000023017	acid-sensing (proton-gated) ion channel 1 Source MGI Symbol Acc MGI 1194915
A03	SBM1073464	ENSMUST00000 049346.9	Asic3	ENSMUSG00 000038276	acid-sensing (proton-gated) ion channel 3 Source MGI Symbol Acc MGI 2159339
A04	SBM0924350	ENSMUST00000 117346.1	Best1	ENSMUSG00 000037418	bestrophin 1 Source MGI Symbol Acc MGI 1346332
A05	SBM0750240	ENSMUST00000 153691.1	Cacna1a	ENSMUSG00 000034656	calcium channel, voltage-dependent, P/Q type, alpha 1A subunit Source MGI Symbol Acc MGI 109482
A06	SBM1049868	ENSMUST00000 100348.9	Cacna1b	ENSMUSG00 000004113	calcium channel, voltage-dependent, N type, alpha 1B subunit Source MGI Symbol Acc MGI 88296
A07	SBM0831888	ENSMUST00000 078320.13	Cacna1c	ENSMUSG00 000051331	calcium channel, voltage-dependent, L type, alpha 1C subunit Source MGI Symbol Acc MGI 103013
A08	SBM0777402	ENSMUST00000 112249.8	Cacna1d	ENSMUSG00 000015968	calcium channel, voltage-dependent, L type, alpha 1D subunit Source MGI Symbol Acc MGI 88293
A09	SBM0986001	ENSMUST00000 103166.8	Cacna1g	ENSMUSG00 000020866	calcium channel, voltage-dependent, T type, alpha 1G subunit Source MGI Symbol Acc MGI 1201678
A10	SBM1012574	ENSMUST00000 162913.7	Cacna1i	ENSMUSG00 000022416	calcium channel, voltage-dependent, alpha 1I subunit Source MGI Symbol Acc MGI 2178051
A11	SBM1061677	ENSMUST00000 092736.10	Cacnb1	ENSMUSG00 000020882	calcium channel, voltage-dependent, beta 1 subunit Source MGI Symbol Acc MGI 102522
A12	SBM0940475	ENSMUST00000 137746.7	Cacnb2	ENSMUSG00 000057914	calcium channel, voltage-dependent, beta 2 subunit Source MGI Symbol Acc MGI 894644
B01	SBM0785366	ENSMUST00000 003442.8	Cacnb3	ENSMUSG00 000003352	calcium channel, voltage-dependent, beta 3 subunit Source MGI Symbol Acc MGI 103307
B02	SBM0996634	ENSMUST00000 019290.2	Cacng2	ENSMUSG00 000019146	calcium channel, voltage-dependent, gamma subunit 2 Source MGI Symbol Acc MGI 1316660
B03	SBM0964620	ENSMUST00000 134076.1	Cacng4	ENSMUSG00 000020723	calcium channel, voltage-dependent, gamma subunit 4 Source MGI Symbol Acc MGI 1859167
B04	SBM0813877	ENSMUST00000 131833.1	Clcn2	ENSMUSG00 000022843	chloride channel, voltage-sensitive 2 Source MGI Symbol Acc MGI 105061
B05	SBM0791473	ENSMUST00000 110302.7	Clcn3	ENSMUSG00 000004319	chloride channel, voltage-sensitive 3 Source MGI Symbol Acc MGI 103555
B06	SBM0858344	ENSMUST00000 159773.1	Clcn7	ENSMUSG00 000036636	chloride channel, voltage-sensitive 7 Source MGI Symbol Acc MGI 1347048
B07	SBM0715354	ENSMUST00000 207599.1	Hcn1	ENSMUSG00 000021730	hyperpolarization-activated, cyclic nucleotide-gated K+ 1 Source MGI Symbol Acc MGI 1096392
B08	SBM0844855	ENSMUST00000 099513.7	Hcn2	ENSMUSG00 000020331	hyperpolarization-activated, cyclic nucleotide-gated K+ 2 Source MGI Symbol Acc MGI 1298210
B09	SBM0702142	ENSMUST00000 055168.4	Kcna1	ENSMUSG00 000047976	potassium voltage-gated channel, shaker-related subfamily, member 1 Source MGI Symbol Acc MGI 96654
B10	SBM0689979	ENSMUST00000 196403.1	Kcna2	ENSMUSG00 000040724	potassium voltage-gated channel, shaker-related subfamily, member 2 Source MGI Symbol Acc MGI 96659
B11	SBM0728811	ENSMUST00000 060972.4	Kcna5	ENSMUSG00 000045534	potassium voltage-gated channel, shaker-related subfamily, member 5 Source MGI Symbol Acc MGI 96662
B12	SBM0959651	ENSMUST00000 185333.1	Kcna6	ENSMUSG00 000038077	potassium voltage-gated channel, shaker-related, subfamily, member 6 Source MGI Symbol Acc MGI 96663
C01	SBM0783891	ENSMUST00000 049230.10	Kcnab1	ENSMUSG00 000027827	potassium voltage-gated channel, shaker-related subfamily, beta member 1 Source MGI Symbol Acc MGI 109155
C02	SBM0675755	ENSMUST00000 159844.7	Kcnab2	ENSMUSG00 000028931	potassium voltage-gated channel, shaker-related subfamily, beta member 2 Source MGI Symbol Acc MGI 109239
C03	SBM0764035	ENSMUST00000 142328.7	Kcnab3	ENSMUSG00 000018470	potassium voltage-gated channel, shaker-related subfamily, beta member 3 Source MGI Symbol Acc MGI 1336208
C04	SBM0916655	ENSMUST00000 207917.1	Kcnb1	ENSMUSG00 000050556	potassium voltage gated channel, Shab-related subfamily, member 1 Source MGI Symbol Acc MGI 96666
C05	SBM0951449	ENSMUST00000 175681.2	Kcnb2	ENSMUSG00 000092083	potassium voltage gated channel, Shab-related subfamily, member 2 Source MGI Symbol Acc MGI 99632
C06	SBM0950608	ENSMUST00000 160234.1	Kcnc1	ENSMUSG00 000058975	potassium voltage gated channel, Shaw-related subfamily, member 1 Source MGI Symbol Acc MGI 96667
C07	SBM0730756	ENSMUST00000 218445.1	Kcnc2	ENSMUSG00 000035681	potassium voltage gated channel, Shaw-related subfamily, member 2 Source MGI Symbol Acc MGI 96668
C08	SBM1029617	ENSMUST00000 081542.5	Kcnd2	ENSMUSG00 000060882	potassium voltage-gated channel, Shal-related family, member 2 Source MGI Symbol Acc MGI 102663
C09	SBM0944142	ENSMUST00000 098761.9	Kcnd3	ENSMUSG00 000040896	potassium voltage-gated channel, Shal-related family, member 3 Source MGI Symbol Acc MGI 1928743
C10	SBM0723464	ENSMUST00000 078470.11	Kcnh1	ENSMUSG00 000058248	potassium voltage-gated channel, subfamily H (eag-related), member 1 Source MGI Symbol Acc MGI 1341721
		ENSMUST00000		ENSMUSG00	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	ENSMUST00000 041415.4	Kcnh3	ENSMUSG00 000037579	potassium voltage-gated channel, subfamily H (eag-related), member 3 Source MGI Symbol Acc MGI 1341723
D01	SBM1026483	ENSMUST00000 106903.7	Kcnh6	ENSMUSG00 000001901	potassium voltage-gated channel, subfamily H (eag-related), member 6 Source MGI Symbol Acc MGI 2684139
D02	SBM0829494	ENSMUST00000 075052.9	Kcnh7	ENSMUSG00 000059742	potassium voltage-gated channel, subfamily H (eag-related), member 7 Source MGI Symbol Acc MGI 2159566
D03	SBM0761380	ENSMUST00000 172015.2	Kcnj1	ENSMUSG00 000041248	potassium inwardly-rectifying channel, subfamily J, member 1 Source MGI Symbol Acc MGI 1927248
D04	SBM0872823	ENSMUST00000 180081.2	Kcnj11	ENSMUSG00 000096146	potassium inwardly rectifying channel, subfamily J, member 11 Source MGI Symbol Acc MGI 107501
D05	SBM0755605	ENSMUST00000 108717.2	Kcnj12	ENSMUSG00 000042529	potassium inwardly-rectifying channel, subfamily J, member 12 Source MGI Symbol Acc MGI 108495
D06	SBM1021068	ENSMUST00000 174179.1	Kcnj13	ENSMUSG00 000079436	potassium inwardly-rectifying channel, subfamily J, member 13 Source MGI Symbol Acc MGI 3781032
D07	SBM0725731	ENSMUST00000 071937.6	Kcnj14	ENSMUSG00 000058743	potassium inwardly-rectifying channel, subfamily J, member 14 Source MGI Symbol Acc MGI 2384820
D08	SBM0990117	ENSMUST00000 113858.2	Kcnj15	ENSMUSG00 000062609	potassium inwardly-rectifying channel, subfamily J, member 15 Source MGI Symbol Acc MGI 1310000
D09	SBM0850705	ENSMUST00000 150902.7	Kcnj16	ENSMUSG00 000051497	potassium inwardly-rectifying channel, subfamily J, member 16 Source MGI Symbol Acc MGI 1314842
D10	SBM0890715	ENSMUST00000 042970.2	Kcnj2	ENSMUSG00 000041695	potassium inwardly-rectifying channel, subfamily J, member 2 Source MGI Symbol Acc MGI 104744
D11	SBM0814556	ENSMUST00000 112633.2	Kcnj3	ENSMUSG00 000026824	potassium inwardly-rectifying channel, subfamily J, member 3 Source MGI Symbol Acc MGI 104742
D12	SBM0833726	ENSMUST00000 057801.7	Kcnj4	ENSMUSG00 000044216	potassium inwardly-rectifying channel, subfamily J, member 4 Source MGI Symbol Acc MGI 104743
E01	SBM0937026	ENSMUST00000 034533.6	Kcnj5	ENSMUSG00 000032034	potassium inwardly-rectifying channel, subfamily J, member 5 Source MGI Symbol Acc MGI 104755
E02	SBM1008730	ENSMUST00000 232562.1	Kcnj6	ENSMUSG00 000043301	potassium inwardly-rectifying channel, subfamily J, member 6 Source MGI Symbol Acc MGI 104781
E03	SBM1014845	ENSMUST00000 194204.1	Kcnj9	ENSMUSG00 000038026	potassium inwardly-rectifying channel, subfamily J, member 9 Source MGI Symbol Acc MGI 108007
E04	SBM0803616	ENSMUST00000 212831.1	Kcnk1	ENSMUSG00 000033998	potassium channel, subfamily K, member 1 Source MGI Symbol Acc MGI 109322
E05	SBM0828328	ENSMUST00000 065788.14	Kcnma1	ENSMUSG00 000063142	potassium large conductance calcium-activated channel, subfamily M, alpha member 1 Source MGI Symbol Acc MGI 99923
E06	SBM0926609	ENSMUST00000 068233.10	Kcnmb4	ENSMUSG00 000054934	potassium large conductance calcium-activated channel, subfamily M, beta member 4 Source MGI Symbol Acc MGI 1913272
E07	SBM0854186	ENSMUST00000 212611.1	Kcnn1	ENSMUSG00 000002908	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 1 Source MGI Symbol Acc MGI 1933993
E08	SBM1035531	ENSMUST00000 169783.1	Kcnn2	ENSMUSG00 000054477	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 2 Source MGI Symbol Acc MGI 2153182
E09	SBM1093257	ENSMUST00000 000811.7	Kcnn3	ENSMUSG00 000000794	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 3 Source MGI Symbol Acc MGI 2153183
E10	SBM0755690	ENSMUST00000 009689.10	Kcnq1	ENSMUSG00 000009545	potassium voltage-gated channel, subfamily Q, member 1 Source MGI Symbol Acc MGI 108083
E11	SBM0874456	ENSMUST00000 129073.7	Kcnq2	ENSMUSG00 000016346	potassium voltage-gated channel, subfamily Q, member 2 Source MGI Symbol Acc MGI 1309503
E12	SBM0714491	ENSMUST00000 183354.1	Kcnq3	ENSMUSG00 000056258	potassium voltage-gated channel, subfamily Q, member 3 Source MGI Symbol Acc MGI 1336181
F01	SBM1049655	ENSMUST00000 045196.3	Kcns1	ENSMUSG00 000040164	K+ voltage-gated channel, subfamily S, 1 Source MGI Symbol Acc MGI 1197019
F02	SBM1023364	ENSMUST00000 208135.1	Ryr3	ENSMUSG00 000057378	ryanodine receptor 3 Source MGI Symbol Acc MGI 99684
F03	SBM0788387	ENSMUST00000 213392.1	Scn10a	ENSMUSG00 000034533	sodium channel, voltage-gated, type X, alpha Source MGI Symbol Acc MGI 108029
F04	SBM1048086	ENSMUST00000 215718.1	Scn11a	ENSMUSG00 000034115	sodium channel, voltage-gated, type XI, alpha Source MGI Symbol Acc MGI 1345149
F05	SBM0826538	ENSMUST00000 112366.7	Scn1a	ENSMUSG00 000064329	sodium channel, voltage-gated, type I, alpha Source MGI Symbol Acc MGI 98246
F06	SBM0719251	ENSMUST00000 211923.1	Scn1b	ENSMUSG00 000019194	sodium channel, voltage-gated, type I, beta Source MGI Symbol Acc MGI 98247
F07	SBM1063489	ENSMUST00000 028377.13	Scn2a	ENSMUSG00 000075318	sodium channel, voltage-gated, type II, alpha Source MGI Symbol Acc MGI 98248
F08	SBM1059979	ENSMUST00000 170998.8	Scn2b	ENSMUSG00 000070304	sodium channel, voltage-gated, type II, beta Source MGI Symbol Acc MGI 106921
F09	SBM0782116	ENSMUST00000 066432.11	Scn3a	ENSMUSG00 000057182	sodium channel, voltage-gated, type III, alpha Source MGI Symbol Acc MGI 98249
F10	SBM1036627	ENSMUST00000 201518.3	Scn8a	ENSMUSG00 000023033	sodium channel, voltage-gated, type VIII, alpha Source MGI Symbol Acc MGI 103169

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0932091	ENSMUST00000 164384.8	Scn9a	ENSMUSG00 000075316	sodium channel, voltage-gated, type IX, alpha Source MGI Symbol Acc MGI 107636
F12	SBM0825340	ENSMUST00000 202223.3	Slc12a5	ENSMUSG00 000017740	solute carrier family 12, member 5 Source MGI Symbol Acc MGI 1862037
G01	SBM0896820	ENSMUST00000 235071.1	Trpa1	ENSMUSG00 000032769	transient receptor potential cation channel, subfamily A, member 1 Source MGI Symbol Acc MGI 3522699
G02	SBM0680723	ENSMUST00000 189137.6	Trpc1	ENSMUSG00 000032839	transient receptor potential cation channel, subfamily C, member 1 Source MGI Symbol Acc MGI 109528
G03	SBM0686595	ENSMUST00000 029271.4	Trpc3	ENSMUSG00 000027716	transient receptor potential cation channel, subfamily C, member 3 Source MGI Symbol Acc MGI 109526
G04	SBM1024580	ENSMUST00000 214596.1	Trpc6	ENSMUSG00 000031997	transient receptor potential cation channel, subfamily C, member 6 Source MGI Symbol Acc MGI 109523
G05	SBM1085081	ENSMUST00000 206107.1	Trpm1	ENSMUSG00 000030523	transient receptor potential cation channel, subfamily M, member 1 Source MGI Symbol Acc MGI 1330305
G06	SBM0792410	ENSMUST00000 140471.7	Trpm2	ENSMUSG00 000009292	transient receptor potential cation channel, subfamily M, member 2 Source MGI Symbol Acc MGI 1351901
G07	SBM0690871	ENSMUST00000 237623.1	Trpm6	ENSMUSG00 000024727	transient receptor potential cation channel, subfamily M, member 6 Source MGI Symbol Acc MGI 2675603
G08	SBM0768989	ENSMUST00000 040210.13	Trpm8	ENSMUSG00 000036251	transient receptor potential cation channel, subfamily M, member 8 Source MGI Symbol Acc MGI 2181435
G09	SBM0823241	ENSMUST00000 102526.8	Trpv1	ENSMUSG00 000005952	transient receptor potential cation channel, subfamily V, member 1 Source MGI Symbol Acc MGI 1341787
G10	SBM0950414	ENSMUST00000 018651.13	Trpv2	ENSMUSG00 000018507	transient receptor potential cation channel, subfamily V, member 2 Source MGI Symbol Acc MGI 1341836
G11	SBM0854408	ENSMUST00000 049676.2	Trpv3	ENSMUSG00 000043029	transient receptor potential cation channel, subfamily V, member 3 Source MGI Symbol Acc MGI 2181407
G12	SBM0896660	ENSMUST00000 141828.1	Trpv4	ENSMUSG00 000014158	transient receptor potential cation channel, subfamily V, member 4 Source MGI Symbol Acc MGI 1926945
H01	SBM1220560	ENSMUST00000 100497.10	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	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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