

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

Mouse Synaptic Plasticity

Cat. no. 249950 SBMM-126ZA

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	Adam10	Adcy1	Adcy8	Akt1	Arc	Bdnf	Camk2a	Camk2g	Cdh2	Cebpb	Cebpd	Cnr1
B	Creb1	Crem	Dlg4	Egr1	Egr2	Egr3	Egr4	Ephb2	Fos	Gabra5	Gnai1	Gria1
C	Gria2	Gria3	Gria4	Grin1	Grin2a	Grin2b	Grin2c	Grin2d	Grip1	Grm1	Grm2	Grm3
D	Grm4	Grm5	Grm7	Grm8	Homer1	Igf1	Inhba	Jun	Junb	Kif17	Klf10	Mapk1
E	Mmp9	Ncam1	Nfkb1	Nfkbib	Ngf	Ngfr	Nos1	Nptx2	Nr4a1	Ntf3	Ntf5	Ntrk2
F	Pcdh8	Pick1	Pim1	Plat	Plcg1	Ppp1ca	Ppp1cc	Ppp1r14a	Ppp2ca	Ppp3ca	Prkca	Prkcg
G	Prkg1	Rab3a	Rela	Reln	Rgs2	Rheb	Sirt1	Srf	Synpo	Timp1	Tnf	Ywhaq
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	SBM0691624	ENSMUST00000067880.12	Adam10	ENSMUSG0000054693	a disintegrin and metallopeptidase domain 10 Source MGI Symbol Acc MGI 109548
A02	SBM1088693	ENSMUST00000135398.1	Adcy1	ENSMUSG0000020431	adenylate cyclase 1 Source MGI Symbol Acc MGI 99677
A03	SBM0800883	ENSMUST0000023007.6	Adcy8	ENSMUSG0000022376	adenylate cyclase 8 Source MGI Symbol Acc MGI 1341110
A04	SBM1020452	ENSMUST00000144550.8	Akt1	ENSMUSG0000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A05	SBM0976989	ENSMUST00000110009.3	Arc	ENSMUSG0000022602	activity regulated cytoskeletal-associated protein Source MGI Symbol Acc MGI 88067
A06	SBM0985592	ENSMUST00000111042.2	Bdnf	ENSMUSG0000048482	brain derived neurotrophic factor Source MGI Symbol Acc MGI 88145
A07	SBM0784888	ENSMUST0000025519.10	Camk2a	ENSMUSG0000024617	calcium/calmodulin-dependent protein kinase II alpha Source MGI Symbol Acc MGI 88256
A08	SBM0845808	ENSMUST00000080440.13	Camk2g	ENSMUSG0000021820	calcium/calmodulin-dependent protein kinase II gamma Source MGI Symbol Acc MGI 88259
A09	SBM0822940	ENSMUST0000025166.13	Cdh2	ENSMUSG0000024304	cadherin 2 Source MGI Symbol Acc MGI 88355
A10	SBM0682459	ENSMUST00000070642.3	Cebpb	ENSMUSG0000056501	CCAAT/enhancer binding protein (C/EBP), beta Source MGI Symbol Acc MGI 88373
A11	SBM0962498	ENSMUST00000096232.5	Cebpd	ENSMUSG0000071637	CCAAT/enhancer binding protein (C/EBP), delta Source MGI Symbol Acc MGI 103573
A12	SBM1037540	ENSMUST00000084736.2	Cnr1	ENSMUSG0000044288	cannabinoid receptor 1 (brain) Source MGI Symbol Acc MGI 104615
B01	SBM0735214	ENSMUST00000188855.6	Creb1	ENSMUSG0000025958	cAMP responsive element binding protein 1 Source MGI Symbol Acc MGI 88494
B02	SBM1037952	ENSMUST00000147138.7	Crem	ENSMUSG0000063889	cAMP responsive element modulator Source MGI Symbol Acc MGI 88495
B03	SBM0878952	ENSMUST00000108588.8	Dlg4	ENSMUSG0000020886	discs large MAGUK scaffold protein 4 Source MGI Symbol Acc MGI 1277959
B04	SBM0782056	ENSMUST00000064795.5	Egr1	ENSMUSG0000038418	early growth response 1 Source MGI Symbol Acc MGI 95295
B05	SBM0767336	ENSMUST00000145936.1	Egr2	ENSMUSG0000037868	early growth response 2 Source MGI Symbol Acc MGI 95296
B06	SBM0735904	ENSMUST00000035908.2	Egr3	ENSMUSG0000033730	early growth response 3 Source MGI Symbol Acc MGI 1306780
B07	SBM0969226	ENSMUST00000095759.4	Egr4	ENSMUSG0000071341	early growth response 4 Source MGI Symbol Acc MGI 99252
B08	SBM0735322	ENSMUST00000156558.1	Ephb2	ENSMUSG0000028664	Eph receptor B2 Source MGI Symbol Acc MGI 99611
B09	SBM0977461	ENSMUST00000134311.1	Fos	ENSMUSG0000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
B10	SBM0911233	ENSMUST00000068456.7	Gabra5	ENSMUSG0000055078	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 5 Source MGI Symbol Acc MGI 95617
B11	SBM0770391	ENSMUST00000074694.6	Gnai1	ENSMUSG0000057614	guanine nucleotide binding protein (G protein), alpha inhibiting 1 Source MGI Symbol Acc MGI 95771
B12	SBM0678185	ENSMUST00000151045.2	Gria1	ENSMUSG0000020524	glutamate receptor, ionotropic, AMPA1 (alpha 1) Source MGI Symbol Acc MGI 95808
C01	SBM0731930	ENSMUST00000193645.5	Gria2	ENSMUSG0000033981	glutamate receptor, ionotropic, AMPA2 (alpha 2) Source MGI Symbol Acc MGI 95809
C02	SBM0768049	ENSMUST00000076349.11	Gria3	ENSMUSG0000001986	glutamate receptor, ionotropic, AMPA3 (alpha 3) Source MGI Symbol Acc MGI 95810
C03	SBM0947745	ENSMUST00000063508.14	Gria4	ENSMUSG0000025892	glutamate receptor, ionotropic, AMPA4 (alpha 4) Source MGI Symbol Acc MGI 95811
C04	SBM1029073	ENSMUST00000028335.12	Grin1	ENSMUSG0000026959	glutamate receptor, ionotropic, NMDA1 (zeta 1) Source MGI Symbol Acc MGI 95819
C05	SBM0858237	ENSMUST00000032331.7	Grin2a	ENSMUSG0000059003	glutamate receptor, ionotropic, NMDA2A (epsilon 1) Source MGI Symbol Acc MGI 95820
C06	SBM0896174	ENSMUST00000143943.7	Grin2b	ENSMUSG0000030209	glutamate receptor, ionotropic, NMDA2B (epsilon 2) Source MGI Symbol Acc MGI 95821
C07	SBM0824768	ENSMUST00000003351.12	Grin2c	ENSMUSG0000020734	glutamate receptor, ionotropic, NMDA2C (epsilon 3) Source MGI Symbol Acc MGI 95822
C08	SBM0827369	ENSMUST00000002848.9	Grin2d	ENSMUSG0000002771	glutamate receptor, ionotropic, NMDA2D (epsilon 4) Source MGI Symbol Acc MGI 95823
C09	SBM0904938	ENSMUST00000147454.7	Grip1	ENSMUSG0000034813	glutamate receptor interacting protein 1 Source MGI Symbol Acc MGI 1921303
C10	SBM1018691	ENSMUST00000044306.12	Grm1	ENSMUSG0000019828	glutamate receptor, metabotropic 1 Source MGI Symbol Acc MGI 1351338
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0899846	023959.12	Grm2	000023192	glutamate receptor, metabotropic 2 Source MGI Symbol Acc MGI 1351339
C12	SBM0768909	ENSMUST0000004076.4	Grm3	ENSMUSG0000003974	glutamate receptor, metabotropic 3 Source MGI Symbol Acc MGI 1351340
D01	SBM1039363	ENSMUST00000146277.7	Grm4	ENSMUSG00000063239	glutamate receptor, metabotropic 4 Source MGI Symbol Acc MGI 1351341
D02	SBM0928000	ENSMUST00000138732.2	Grm5	ENSMUSG00000049583	glutamate receptor, metabotropic 5 Source MGI Symbol Acc MGI 1351342
D03	SBM0686734	ENSMUST00000174018.7	Grm7	ENSMUSG00000056755	glutamate receptor, metabotropic 7 Source MGI Symbol Acc MGI 1351344
D04	SBM0928896	ENSMUST00000115324.8	Grm8	ENSMUSG00000024211	glutamate receptor, metabotropic 8 Source MGI Symbol Acc MGI 1351345
D05	SBM1033070	ENSMUST00000109494.7	Homer1	ENSMUSG0000007617	homer scaffolding protein 1 Source MGI Symbol Acc MGI 1347345
D06	SBM1026650	ENSMUST00000122386.7	Igf1	ENSMUSG00000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D07	SBM0694869	ENSMUST00000164993.1	Inhba	ENSMUSG00000041324	inhibin beta-A Source MGI Symbol Acc MGI 96570
D08	SBM1045409	ENSMUST00000107094.1	Jun	ENSMUSG00000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
D09	SBM0879318	ENSMUST00000064922.6	Junb	ENSMUSG00000052837	jun B proto-oncogene Source MGI Symbol Acc MGI 96647
D10	SBM0769520	ENSMUST00000105821.2	Kif17	ENSMUSG00000028758	kinesin family member 17 Source MGI Symbol Acc MGI 1098229
D11	SBM1054966	ENSMUST00000074043.6	Klf10	ENSMUSG00000037465	Kruppel-like factor 10 Source MGI Symbol Acc MGI 1101353
D12	SBM0800614	ENSMUST00000231821.1	Mapk1	ENSMUSG00000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
E01	SBM1089430	ENSMUST00000017881.2	Mmp9	ENSMUSG00000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
E02	SBM1225395	ENSMUST00000114476.7	Ncam1	ENSMUSG00000039542	neural cell adhesion molecule 1 Source MGI Symbol Acc MGI 97281
E03	SBM0841870	ENSMUST00000164430.6	Nfkb1	ENSMUSG00000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E04	SBM0704537	ENSMUST00000085851.11	Nfkbib	ENSMUSG00000030595	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, beta Source MGI Symbol Acc MGI 104752
E05	SBM0986150	ENSMUST00000106925.8	Ngf	ENSMUSG00000027859	nerve growth factor Source MGI Symbol Acc MGI 97321
E06	SBM0740409	ENSMUST00000000122.6	Ngfr	ENSMUSG00000000120	nerve growth factor receptor (TNFR superfamily, member 16) Source MGI Symbol Acc MGI 97323
E07	SBM0823743	ENSMUST00000086451.11	Nos1	ENSMUSG00000029361	nitric oxide synthase 1, neuronal Source MGI Symbol Acc MGI 97360
E08	SBM0792486	ENSMUST00000071782.7	Nptx2	ENSMUSG00000059991	neuronal pentraxin 2 Source MGI Symbol Acc MGI 1858209
E09	SBM0685861	ENSMUST00000228985.1	Nr4a1	ENSMUSG00000023034	nuclear receptor subfamily 4, group A, member 1 Source MGI Symbol Acc MGI 1352454
E10	SBM0855486	ENSMUST00000204542.2	Ntf3	ENSMUSG00000049107	neurotrophin 3 Source MGI Symbol Acc MGI 97380
E11	SBM1013714	ENSMUST00000058879.7	Ntf5	ENSMUSG00000074121	neurotrophin 5 Source MGI Symbol Acc MGI 97381
E12	SBM1050719	ENSMUST00000224402.1	Ntrk2	ENSMUSG00000055254	neurotrophic tyrosine kinase, receptor, type 2 Source MGI Symbol Acc MGI 97384
F01	SBM0920520	ENSMUST00000195034.1	Pcdh8	ENSMUSG00000036422	protocadherin 8 Source MGI Symbol Acc MGI 1306800
F02	SBM0976336	ENSMUST00000172162.7	Pick1	ENSMUSG00000068206	protein interacting with C kinase 1 Source MGI Symbol Acc MGI 894645
F03	SBM0769349	ENSMUST00000234665.1	Pim1	ENSMUSG00000024014	proviral integration site 1 Source MGI Symbol Acc MGI 97584
F04	SBM0722468	ENSMUST00000033941.6	Plat	ENSMUSG00000031538	plasminogen activator, tissue Source MGI Symbol Acc MGI 97610
F05	SBM0816988	ENSMUST00000017077.13	Plcg1	ENSMUSG0000016933	phospholipase C, gamma 1 Source MGI Symbol Acc MGI 97615
F06	SBM0679454	ENSMUST00000046094.5	Ppp1ca	ENSMUSG00000040385	protein phosphatase 1 catalytic subunit alpha Source MGI Symbol Acc MGI 103016
F07	SBM1009171	ENSMUST00000132555.7	Ppp1cc	ENSMUSG00000004455	protein phosphatase 1 catalytic subunit gamma Source MGI Symbol Acc MGI 104872
F08	SBM0712575	ENSMUST00000048187.5	Ppp1r14a	ENSMUSG00000037166	protein phosphatase 1, regulatory inhibitor subunit 14A Source MGI Symbol Acc MGI 1931139
F09	SBM0974754	ENSMUST00000020608.2	Ppp2ca	ENSMUSG00000020349	protein phosphatase 2 (formerly 2A), catalytic subunit, alpha isoform Source MGI Symbol Acc MGI 1321159
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	SBM0890328	ENSMUST00000100302.3	Prkca	ENSMUSG0000050965	protein kinase C, alpha Source MGI Symbol Acc MGI 97595
F12	SBM1062071	ENSMUST00000100301.10	Prkcg	ENSMUSG0000078816	protein kinase C, gamma Source MGI Symbol Acc MGI 97597
G01	SBM0904083	ENSMUST00000073581.5	Prkg1	ENSMUSG0000052920	protein kinase, cGMP-dependent, type I Source MGI Symbol Acc MGI 108174
G02	SBM0960231	ENSMUST00000143118.2	Rab3a	ENSMUSG0000031840	RAB3A, member RAS oncogene family Source MGI Symbol Acc MGI 97843
G03	SBM0937498	ENSMUST00000237361.1	Rela	ENSMUSG0000024927	v-rel reticuloendotheliosis viral oncogene homolog A (avian) Source MGI Symbol Acc MGI 103290
G04	SBM0822512	ENSMUST00000162427.7	Reln	ENSMUSG0000042453	reelin Source MGI Symbol Acc MGI 103022
G05	SBM1066056	ENSMUST00000134817.1	Rgs2	ENSMUSG0000026360	regulator of G-protein signaling 2 Source MGI Symbol Acc MGI 1098271
G06	SBM1072282	ENSMUST00000030787.8	Rheb	ENSMUSG0000028945	Ras homolog enriched in brain Source MGI Symbol Acc MGI 97912
G07	SBM1040786	ENSMUST00000020257.12	Sirt1	ENSMUSG0000020063	sirtuin 1 Source MGI Symbol Acc MGI 2135607
G08	SBM0804646	ENSMUST00000015749.6	Srf	ENSMUSG0000015605	serum response factor Source MGI Symbol Acc MGI 106658
G09	SBM1092736	ENSMUST00000130360.1	Synpo	ENSMUSG0000043079	synaptopodin Source MGI Symbol Acc MGI 1099446
G10	SBM0839007	ENSMUST00000115342.9	Timp1	ENSMUSG0000001131	tissue inhibitor of metalloproteinase 1 Source MGI Symbol Acc MGI 98752
G11	SBM0788439	ENSMUST00000025263.14	Tnf	ENSMUSG0000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G12	SBM0737251	ENSMUST00000146206.1	Ywhaq	ENSMUSG0000076432	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein theta Source MGI Symbol Acc MGI 891963
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.

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