

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

Mouse GABA & Glutamate

Cat. no. 249950 SBMM-152ZA

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	Abat	Adcy7	Adora1	Adora2a	Aldh5a1	App	Avp	Bdnf	Cacna1a	Cacna1b	Cdk5r1	Cln3
B	Dlg4	Gabbr1	Gabbr2	Gabra1	Gabra2	Gabra4	Gabra5	Gabra6	Gabbr1	Gabbr3	Gabbrd	Gabre
C	Gabrg1	Gabrg2	Gabrg3	Gabrq	Gabbr1	Gabbr2	Gad1	Gls	Glu1	Gnai1	Gnaq	Gphn
D	Gria1	Gria2	Gria3	Gria4	Grik1	Grik2	Grik4	Grik5	Grin1	Grin2a	Grin2b	Grin2c
E	Grm1	Grm2	Grm3	Grm4	Grm5	Grm6	Grm7	Grm8	Homer1	Homer2	Il1b	Ilpr1
F	Mapk1	Nsf	P2rx7	Phgdh	Pla2g6	Plcb1	Prodh	Shank2	Slc17a6	Slc17a7	Slc17a8	Slc1a1
G	Slc1a2	Slc1a3	Slc1a6	Slc32a1	Slc38a1	Slc6a1	Slc6a11	Slc6a12	Slc6a13	Slc7a11	Sncg	Srr
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	SBM0820574	ENSMUST00000138987.7	Abat	ENSMUSG0000057880	4-aminobutyrate aminotransferase Source MGI Symbol Acc MGI 2443582
A02	SBM0758574	ENSMUST00000098521.3	Adcy7	ENSMUSG00000031659	adenylate cyclase 7 Source MGI Symbol Acc MGI 102891
A03	SBM0781237	ENSMUST00000187631.1	Adora1	ENSMUSG0000042429	adenosine A1 receptor Source MGI Symbol Acc MGI 99401
A04	SBM1030748	ENSMUST00000219322.1	Adora2a	ENSMUSG0000020178	adenosine A2a receptor Source MGI Symbol Acc MGI 99402
A05	SBM0680255	ENSMUST00000037615.6	Aldh5a1	ENSMUSG0000035936	aldehyde dehydrogenase family 5, subfamily A1 Source MGI Symbol Acc MGI 2441982
A06	SBM0970132	ENSMUST00000226801.1	App	ENSMUSG0000022892	amyloid beta (A4) precursor protein Source MGI Symbol Acc MGI 88059
A07	SBM0938299	ENSMUST00000046001.6	Avp	ENSMUSG00000037727	arginine vasopressin Source MGI Symbol Acc MGI 88121
A08	SBM0985592	ENSMUST00000111042.2	Bdnf	ENSMUSG0000048482	brain derived neurotrophic factor Source MGI Symbol Acc MGI 88145
A09	SBM0750240	ENSMUST00000153691.1	Cacna1a	ENSMUSG0000034656	calcium channel, voltage-dependent, P/Q type, alpha 1A subunit Source MGI Symbol Acc MGI 109482
A10	SBM1049868	ENSMUST00000100348.9	Cacna1b	ENSMUSG0000004113	calcium channel, voltage-dependent, N type, alpha 1B subunit Source MGI Symbol Acc MGI 88296
A11	SBM0768274	ENSMUST00000147694.1	Cdk5r1	ENSMUSG0000048895	cyclin-dependent kinase 5, regulatory subunit 1 (p35) Source MGI Symbol Acc MGI 101764
A12	SBM0945049	ENSMUST00000150587.7	Cln3	ENSMUSG0000030720	ceroid lipofuscinosis, neuronal 3, juvenile (Batten, Spielmeier-Vogt disease) Source MGI Symbol Acc MGI 107537
B01	SBM0878952	ENSMUST00000108588.8	Dlg4	ENSMUSG0000020886	discs large MAGUK scaffold protein 4 Source MGI Symbol Acc MGI 1277959
B02	SBM1024680	ENSMUST00000173823.7	Gabbr1	ENSMUSG0000024462	gamma-aminobutyric acid (GABA) B receptor, 1 Source MGI Symbol Acc MGI 1860139
B03	SBM1093293	ENSMUST00000205643.1	Gabbr2	ENSMUSG0000039809	gamma-aminobutyric acid (GABA) B receptor, 2 Source MGI Symbol Acc MGI 2386030
B04	SBM0951405	ENSMUST00000207274.1	Gabra1	ENSMUSG0000010803	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 1 Source MGI Symbol Acc MGI 95613
B05	SBM0953209	ENSMUST00000199012.1	Gabra2	ENSMUSG0000000560	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 2 Source MGI Symbol Acc MGI 95614
B06	SBM1051147	ENSMUST00000199357.1	Gabra4	ENSMUSG0000029211	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 4 Source MGI Symbol Acc MGI 95616
B07	SBM0911233	ENSMUST00000068456.7	Gabra5	ENSMUSG0000055078	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 5 Source MGI Symbol Acc MGI 95617
B08	SBM0968345	ENSMUST00000155218.8	Gabra6	ENSMUSG0000020428	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 6 Source MGI Symbol Acc MGI 95618
B09	SBM1071736	ENSMUST00000199967.4	Gabbr1	ENSMUSG0000029212	gamma-aminobutyric acid (GABA) A receptor, subunit beta 1 Source MGI Symbol Acc MGI 95619
B10	SBM0923097	ENSMUST00000156375.2	Gabbr3	ENSMUSG0000033676	gamma-aminobutyric acid (GABA) A receptor, subunit beta 3 Source MGI Symbol Acc MGI 95621
B11	SBM1077947	ENSMUST00000030925.2	Gabrd	ENSMUSG0000029054	gamma-aminobutyric acid (GABA) A receptor, subunit delta Source MGI Symbol Acc MGI 95622
B12	SBM0787633	ENSMUST00000153740.1	Gabre	ENSMUSG0000031340	gamma-aminobutyric acid (GABA) A receptor, subunit epsilon Source MGI Symbol Acc MGI 1330235
C01	SBM0736728	ENSMUST00000199705.1	Gabrg1	ENSMUSG0000001260	gamma-aminobutyric acid (GABA) A receptor, subunit gamma 1 Source MGI Symbol Acc MGI 103156
C02	SBM0974275	ENSMUST00000109290.1	Gabrg2	ENSMUSG0000020436	gamma-aminobutyric acid (GABA) A receptor, subunit gamma 2 Source MGI Symbol Acc MGI 95623
C03	SBM0966172	ENSMUST00000171965.1	Gabrg3	ENSMUSG0000055026	gamma-aminobutyric acid (GABA) A receptor, subunit gamma 3 Source MGI Symbol Acc MGI 95624
C04	SBM0799982	ENSMUST00000033711.5	Gabrq	ENSMUSG0000031344	gamma-aminobutyric acid (GABA) A receptor, subunit theta Source MGI Symbol Acc MGI 1888498
C05	SBM0693729	ENSMUST00000029947.5	Gabrr1	ENSMUSG0000028280	gamma-aminobutyric acid (GABA) C receptor, subunit rho 1 Source MGI Symbol Acc MGI 95625
C06	SBM0910494	ENSMUST00000024035.8	Gabrr2	ENSMUSG0000023267	gamma-aminobutyric acid (GABA) C receptor, subunit rho 2 Source MGI Symbol Acc MGI 95626
C07	SBM0887552	ENSMUST00000094934.10	Gad1	ENSMUSG0000070880	glutamate decarboxylase 1 Source MGI Symbol Acc MGI 95632
C08	SBM1053129	ENSMUST00000114509.7	Gls	ENSMUSG0000026103	glutaminase Source MGI Symbol Acc MGI 95752
C09	SBM1001480	ENSMUST00000139476.7	Glul	ENSMUSG0000026473	glutamate-ammonia ligase (glutamine synthetase) Source MGI Symbol Acc MGI 95739
C10	SBM0770391	ENSMUST00000074694.6	Gnai1	ENSMUSG0000057614	guanine nucleotide binding protein (G protein), alpha inhibiting 1 Source MGI Symbol Acc MGI 95771
		ENSMUST000000		ENSMUSG00	guanine nucleotide binding protein, alpha q polypeptide Source MGI Symbol

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM1039267	167656.1	Gnaq	000024639	Acc MGI 95776
C12	SBM1084378	ENSMUST00000052472.5	Gphn	ENSMUSG0000047454	gephyrin Source MGI Symbol Acc MGI 109602
D01	SBM0678185	ENSMUST00000151045.2	Gria1	ENSMUSG0000020524	glutamate receptor, ionotropic, AMPA1 (alpha 1) Source MGI Symbol Acc MGI 95808
D02	SBM0731930	ENSMUST00000193645.5	Gria2	ENSMUSG0000033981	glutamate receptor, ionotropic, AMPA2 (alpha 2) Source MGI Symbol Acc MGI 95809
D03	SBM0768049	ENSMUST00000076349.11	Gria3	ENSMUSG0000001986	glutamate receptor, ionotropic, AMPA3 (alpha 3) Source MGI Symbol Acc MGI 95810
D04	SBM0947745	ENSMUST00000063508.14	Gria4	ENSMUSG0000025892	glutamate receptor, ionotropic, AMPA4 (alpha 4) Source MGI Symbol Acc MGI 95811
D05	SBM0857766	ENSMUST00000023652.15	Grik1	ENSMUSG0000022935	glutamate receptor, ionotropic, kainate 1 Source MGI Symbol Acc MGI 95814
D06	SBM0739378	ENSMUST00000105484.9	Grik2	ENSMUSG0000056073	glutamate receptor, ionotropic, kainate 2 (beta 2) Source MGI Symbol Acc MGI 95815
D07	SBM1003185	ENSMUST00000114865.7	Grik4	ENSMUSG0000032017	glutamate receptor, ionotropic, kainate 4 Source MGI Symbol Acc MGI 95817
D08	SBM0937604	ENSMUST00000206134.1	Grik5	ENSMUSG0000003378	glutamate receptor, ionotropic, kainate 5 (gamma 2) Source MGI Symbol Acc MGI 95818
D09	SBM1029073	ENSMUST00000028335.12	Grin1	ENSMUSG0000026959	glutamate receptor, ionotropic, NMDA1 (zeta 1) Source MGI Symbol Acc MGI 95819
D10	SBM0858237	ENSMUST00000032331.7	Grin2a	ENSMUSG0000059003	glutamate receptor, ionotropic, NMDA2A (epsilon 1) Source MGI Symbol Acc MGI 95820
D11	SBM0896174	ENSMUST00000143943.7	Grin2b	ENSMUSG0000030209	glutamate receptor, ionotropic, NMDA2B (epsilon 2) Source MGI Symbol Acc MGI 95821
D12	SBM0824768	ENSMUST00000003351.12	Grin2c	ENSMUSG0000020734	glutamate receptor, ionotropic, NMDA2C (epsilon 3) Source MGI Symbol Acc MGI 95822
E01	SBM1018691	ENSMUST00000044306.12	Grm1	ENSMUSG0000019828	glutamate receptor, metabotropic 1 Source MGI Symbol Acc MGI 1351338
E02	SBM0899846	ENSMUST00000023959.12	Grm2	ENSMUSG0000023192	glutamate receptor, metabotropic 2 Source MGI Symbol Acc MGI 1351339
E03	SBM0768909	ENSMUST00000004076.4	Grm3	ENSMUSG0000003974	glutamate receptor, metabotropic 3 Source MGI Symbol Acc MGI 1351340
E04	SBM1039363	ENSMUST00000146277.7	Grm4	ENSMUSG0000063239	glutamate receptor, metabotropic 4 Source MGI Symbol Acc MGI 1351341
E05	SBM0928000	ENSMUST00000138732.2	Grm5	ENSMUSG0000049583	glutamate receptor, metabotropic 5 Source MGI Symbol Acc MGI 1351342
E06	SBM0824144	ENSMUST00000126890.1	Grm6	ENSMUSG0000000617	glutamate receptor, metabotropic 6 Source MGI Symbol Acc MGI 1351343
E07	SBM0686734	ENSMUST00000174018.7	Grm7	ENSMUSG0000056755	glutamate receptor, metabotropic 7 Source MGI Symbol Acc MGI 1351344
E08	SBM0928896	ENSMUST00000115324.8	Grm8	ENSMUSG0000024211	glutamate receptor, metabotropic 8 Source MGI Symbol Acc MGI 1351345
E09	SBM1033070	ENSMUST00000109494.7	Homer1	ENSMUSG0000007617	homer scaffolding protein 1 Source MGI Symbol Acc MGI 1347345
E10	SBM0772218	ENSMUST00000207983.1	Homer2	ENSMUSG0000025813	homer scaffolding protein 2 Source MGI Symbol Acc MGI 1347354
E11	SBM0738485	ENSMUST00000028881.13	Il1b	ENSMUSG0000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
E12	SBM0795463	ENSMUST00000203638.2	Itpr1	ENSMUSG0000030102	inositol 1,4,5-trisphosphate receptor 1 Source MGI Symbol Acc MGI 96623
F01	SBM0800614	ENSMUST00000231821.1	Mapk1	ENSMUSG0000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
F02	SBM0692088	ENSMUST00000149642.2	Nsf	ENSMUSG0000034187	N-ethylmaleimide sensitive fusion protein Source MGI Symbol Acc MGI 104560
F03	SBM0965301	ENSMUST00000199371.1	P2rx7	ENSMUSG0000029468	purinergic receptor P2X, ligand-gated ion channel, 7 Source MGI Symbol Acc MGI 1339957
F04	SBM0830263	ENSMUST00000153694.7	Phgdh	ENSMUSG0000053398	3-phosphoglycerate dehydrogenase Source MGI Symbol Acc MGI 1355330
F05	SBM0797748	ENSMUST00000173163.7	Pla2g6	ENSMUSG0000042632	phospholipase A2, group VI Source MGI Symbol Acc MGI 1859152
F06	SBM0900896	ENSMUST00000129382.4	Plcb1	ENSMUSG0000051177	phospholipase C, beta 1 Source MGI Symbol Acc MGI 97613
F07	SBM0901635	ENSMUST00000126087.1	Prodh	ENSMUSG0000003526	proline dehydrogenase Source MGI Symbol Acc MGI 97770
F08	SBM0796964	ENSMUST00000097929.3	Shank2	ENSMUSG0000037541	SH3 and multiple ankyrin repeat domains 2 Source MGI Symbol Acc MGI 2671987
F09	SBM1015411	ENSMUST00000207375.1	Slc17a6	ENSMUSG0000030500	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 6 Source MGI Symbol Acc MGI 2156052
F10	SBM0813536	ENSMUST00000210540.1	Slc17a7	ENSMUSG0000070570	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 7 Source MGI Symbol Acc MGI 1920211

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0902532	ENSMUST00000105295.1	Slc17a8	ENSMUSG0000019935	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 8 Source MGI Symbol Acc MGI 3039629
F12	SBM1063326	ENSMUST00000025875.4	Slc1a1	ENSMUSG0000024935	solute carrier family 1 (neuronal/epithelial high affinity glutamate transporter, system Xag), member 1 Source MGI Symbol Acc MGI 105083
G01	SBM0896103	ENSMUST00000136488.1	Slc1a2	ENSMUSG0000005089	solute carrier family 1 (glial high affinity glutamate transporter), member 2 Source MGI Symbol Acc MGI 101931
G02	SBM0795588	ENSMUST00000133309.1	Slc1a3	ENSMUSG0000005360	solute carrier family 1 (glial high affinity glutamate transporter), member 3 Source MGI Symbol Acc MGI 99917
G03	SBM0938765	ENSMUST00000217717.1	Slc1a6	ENSMUSG0000005357	solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 Source MGI Symbol Acc MGI 1096331
G04	SBM0731107	ENSMUST00000045738.4	Slc32a1	ENSMUSG0000003771	solute carrier family 32 (GABA vesicular transporter), member 1 Source MGI Symbol Acc MGI 1194488
G05	SBM1028243	ENSMUST00000088454.12	Slc38a1	ENSMUSG0000023169	solute carrier family 38, member 1 Source MGI Symbol Acc MGI 2145895
G06	SBM0906082	ENSMUST00000204278.2	Slc6a1	ENSMUSG0000003010	solute carrier family 6 (neurotransmitter transporter, GABA), member 1 Source MGI Symbol Acc MGI 95627
G07	SBM1041344	ENSMUST00000032451.8	Slc6a11	ENSMUSG00000030307	solute carrier family 6 (neurotransmitter transporter, GABA), member 11 Source MGI Symbol Acc MGI 95630
G08	SBM0739139	ENSMUST00000163771.7	Slc6a12	ENSMUSG00000030109	solute carrier family 6 (neurotransmitter transporter, betaine/GABA), member 12 Source MGI Symbol Acc MGI 95628
G09	SBM1001746	ENSMUST00000064580.13	Slc6a13	ENSMUSG00000030108	solute carrier family 6 (neurotransmitter transporter, GABA), member 13 Source MGI Symbol Acc MGI 95629
G10	SBM0737852	ENSMUST00000142932.2	Slc7a11	ENSMUSG00000027737	solute carrier family 7 (cationic amino acid transporter, y+ system), member 11 Source MGI Symbol Acc MGI 1347355
G11	SBM1045894	ENSMUST00000163779.7	Snca	ENSMUSG00000025889	synuclein, alpha Source MGI Symbol Acc MGI 1277151
G12	SBM0913151	ENSMUST00000147817.7	Srr	ENSMUSG00000001323	serine racemase Source MGI Symbol Acc MGI 1351636
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 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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