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

Mouse GABA & Glutamate

Cat. no. 249955 UPMM-152ZA

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light 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 Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

Panel layout (96-well): QuantiNova LNA Probe PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. Refer to the QuantiNova LNA Probe PCR 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	Gabrb1	Gabrb3	Gabrd	Gabre
C	Gabrg1	Gabrg2	Gabrg3	Gabrq	Gabrr1	Gabrr2	Gad1	Gls	Glul	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	Itpr1
F	Mapk1	Nsf	P2rx7	Phgdh	Pla2g6	Plcb1	Prodh	Shank2	Slc17a6	Slc17a7	Slc17a8	Slc1a1
G	Slc1a2	Slc1a3	Slc1a6	Slc32a1	Slc38a1	Slc6a1	Slc6a11	Slc6a12	Slc6a13	Slc7a11	Snca	Srr
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFM0915329	ENSMUST00000138987.7	Abat	ENSMUSG00000057880	4-aminobutyrate aminotransferase Source MGI Symbol Acc MGI 2443582
A02	UPFM0833041	ENSMUST00000168545.7	Adcy7	ENSMUSG00000031659	adenylate cyclase 7 Source MGI Symbol Acc MGI 102891
A03	UPFM0909850	ENSMUST00000187631.1	Adora1	ENSMUSG00000042429	adenosine A1 receptor Source MGI Symbol Acc MGI 99401
A04	UPFM0765243	ENSMUST00000219044.1	Adora2a	ENSMUSG00000020178	adenosine A2a receptor Source MGI Symbol Acc MGI 99402
A05	UPFM0890703	ENSMUST00000037615.6	Aldh5a1	ENSMUSG00000035936	aldhehyde dehydrogenase family 5, subfamily A1 Source MGI Symbol Acc MGI 2441982
A06	UPFM0815169	ENSMUST00000227723.1	App	ENSMUSG00000022892	amyloid beta (A4) precursor protein Source MGI Symbol Acc MGI 88059
A07	UPFM0749161	ENSMUST00000046001.6	Avp	ENSMUSG00000037727	arginine vasopressin Source MGI Symbol Acc MGI 88121
A08	UPFM0858155	ENSMUST00000111049.8	Bdnf	ENSMUSG00000048482	brain derived neurotrophic factor Source MGI Symbol Acc MGI 88145
A09	UPFM0658253	ENSMUST00000144879.7	Cacna1a	ENSMUSG00000034656	calcium channel, voltage-dependent, P/Q type, alpha 1A subunit Source MGI Symbol Acc MGI 109482
A10	UPFM0720974	ENSMUST00000041342.11	Cacna1b	ENSMUSG00000004113	calcium channel, voltage-dependent, N type, alpha 1B subunit Source MGI Symbol Acc MGI 88296
A11	UPFM0780289	ENSMUST00000053413.11	Cdk5r1	ENSMUSG00000048895	cyclin-dependent kinase 5, regulatory subunit 1 (p35) Source MGI Symbol Acc MGI 101764
A12	UPFM0749309	ENSMUST00000150587.7	Cln3	ENSMUSG00000030720	ceroid lipofuscinosis, neuronal 3, juvenile (Batten, Spielmeyer-Vogt disease) Source MGI Symbol Acc MGI 107537
B01	UPFM0792628	ENSMUST00000123687.2	Dlg4	ENSMUSG00000020886	discs large MAGUK scaffold protein 4 Source MGI Symbol Acc MGI 1277959
B02	UPFM0856480	ENSMUST00000174347.1	Gabbr1	ENSMUSG00000024462	gamma-aminobutyric acid (GABA) B receptor, 1 Source MGI Symbol Acc MGI 1860139
B03	UPFM0627825	ENSMUST00000205643.1	Gabbr2	ENSMUSG00000039809	gamma-aminobutyric acid (GABA) B receptor, 2 Source MGI Symbol Acc MGI 2386030
B04	UPFM0666738	ENSMUST00000153147.2	Gabra1	ENSMUSG00000010803	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 1 Source MGI Symbol Acc MGI 95613
B05	UPFM0804444	ENSMUST00000198625.4	Gabra2	ENSMUSG00000000560	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 2 Source MGI Symbol Acc MGI 95614
B06	UPFM0827304	ENSMUST00000199357.1	Gabra4	ENSMUSG00000029211	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 4 Source MGI Symbol Acc MGI 95616
B07	UPFM0900918	ENSMUST00000206382.1	Gabra5	ENSMUSG00000055078	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 5 Source MGI Symbol Acc MGI 95617
B08	UPFM0860595	ENSMUST00000155218.8	Gabra6	ENSMUSG00000020428	gamma-aminobutyric acid (GABA) A receptor, subunit alpha 6 Source MGI Symbol Acc MGI 95618
B09	UPFM0999031	ENSMUST00000199967.4	Gabrb1	ENSMUSG00000029212	gamma-aminobutyric acid (GABA) A receptor, subunit beta 1 Source MGI Symbol Acc MGI 95619
B10	UPFM0971142	ENSMUST00000138350.1	Gabrb3	ENSMUSG00000033676	gamma-aminobutyric acid (GABA) A receptor, subunit beta 3 Source MGI Symbol Acc MGI 95621
B11	UPFM0732423	ENSMUST00000150423.7	Gabrd	ENSMUSG00000029054	gamma-aminobutyric acid (GABA) A receptor, subunit delta Source MGI Symbol Acc MGI 95622
B12	UPFM0895325	ENSMUST00000153740.1	Gabre	ENSMUSG00000031340	gamma-aminobutyric acid (GABA) A receptor, subunit epsilon Source MGI Symbol Acc MGI 1330235
C01	UPFM0890448	ENSMUST00000199705.1	Gabrg1	ENSMUSG00000001260	gamma-aminobutyric acid (GABA) A receptor, subunit gamma 1 Source MGI Symbol Acc MGI 103156
C02	UPFM0697054	ENSMUST00000070735.9	Gabrg2	ENSMUSG00000020436	gamma-aminobutyric acid (GABA) A receptor, subunit gamma 2 Source MGI Symbol Acc MGI 95623
C03	UPFM0881818	ENSMUST00000068394.6	Gabrg3	ENSMUSG00000055026	gamma-aminobutyric acid (GABA) A receptor, subunit gamma 3 Source MGI Symbol Acc MGI 95624
C04	UPFM0923880	ENSMUST00000033711.5	Gabrq	ENSMUSG00000031344	gamma-aminobutyric acid (GABA) A receptor, subunit theta Source MGI Symbol Acc MGI 1888498
C05	UPFM0879127	ENSMUST00000029947.5	Gabrr1	ENSMUSG00000028280	gamma-aminobutyric acid (GABA) C receptor, subunit rho 1 Source MGI Symbol Acc MGI 95625
C06	UPFM0956049	ENSMUST00000108162.7	Gabrr2	ENSMUSG00000023267	gamma-aminobutyric acid (GABA) C receptor, subunit rho 2 Source MGI Symbol Acc MGI 95626
C07	UPFM0653989	ENSMUST00000130998.7	Gad1	ENSMUSG00000070880	glutamate decarboxylase 1 Source MGI Symbol Acc MGI 95632
C08	UPFM0696084	ENSMUST00000114509.7	Gls	ENSMUSG00000026103	glutaminase Source MGI Symbol Acc MGI 95752
C09	UPFM0724471	ENSMUST00000140685.2	Glul	ENSMUSG00000026473	glutamate-ammonia ligase (glutamine synthetase) Source MGI Symbol Acc MGI 95739
C10	UPFM0835191	ENSMUST00000074694.6	Gnai1	ENSMUSG00000057614	guanine nucleotide binding protein (G protein), alpha inhibiting 1 Source MGI Symbol Acc MGI 95771
	UPFM063076	ENSMUST00000		ENSMUSG00	guanine nucleotide binding protein, alpha q polypeptide Source MGI Symbol

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	9	170229.1	Gnaq	000024639	Acc MGI 95776
C12	UPFM061837 5	ENSMUST00000 219629.1	Gphn	ENSMUSG00 000047454	gephyrin Source MGI Symbol Acc MGI 109602
D01	UPFM066499 7	ENSMUST00000 094179.10	Gria1	ENSMUSG00 000020524	glutamate receptor, ionotropic, AMPA1 (alpha 1) Source MGI Symbol Acc MGI 95808
D02	UPFM073325 3	ENSMUST00000 193645.5	Gria2	ENSMUSG00 000033981	glutamate receptor, ionotropic, AMPA2 (alpha 2) Source MGI Symbol Acc MGI 95809
D03	UPFM076116 0	ENSMUST00000 148212.1	Gria3	ENSMUSG00 000001986	glutamate receptor, ionotropic, AMPA3 (alpha 3) Source MGI Symbol Acc MGI 95810
D04	UPFM085696 4	ENSMUST00000 063508.14	Gria4	ENSMUSG00 000025892	glutamate receptor, ionotropic, AMPA4 (alpha 4) Source MGI Symbol Acc MGI 95811
D05	UPFM100878 6	ENSMUST00000 072256.12	Grik1	ENSMUSG00 000022935	glutamate receptor, ionotropic, kainate 1 Source MGI Symbol Acc MGI 95814
D06	UPFM064751 5	ENSMUST00000 079751.8	Grik2	ENSMUSG00 000056073	glutamate receptor, ionotropic, kainate 2 (beta 2) Source MGI Symbol Acc MGI 95815
D07	UPFM069176 3	ENSMUST00000 034515.6	Grik4	ENSMUSG00 000032017	glutamate receptor, ionotropic, kainate 4 Source MGI Symbol Acc MGI 95817
D08	UPFM097428 9	ENSMUST00000 205661.1	Grik5	ENSMUSG00 000003378	glutamate receptor, ionotropic, kainate 5 (gamma 2) Source MGI Symbol Acc MGI 95818
D09	UPFM066058 1	ENSMUST00000 114312.1	Grin1	ENSMUSG00 000026959	glutamate receptor, ionotropic, NMDA1 (zeta 1) Source MGI Symbol Acc MGI 95819
D10	UPFM091721 9	ENSMUST00000 199708.4	Grin2a	ENSMUSG00 000059003	glutamate receptor, ionotropic, NMDA2A (epsilon 1) Source MGI Symbol Acc MGI 95820
D11	UPFM077461 0	ENSMUST00000 143943.7	Grin2b	ENSMUSG00 000030209	glutamate receptor, ionotropic, NMDA2B (epsilon 2) Source MGI Symbol Acc MGI 95821
D12	UPFM089258 5	ENSMUST00000 003351.12	Grin2c	ENSMUSG00 000020734	glutamate receptor, ionotropic, NMDA2C (epsilon 3) Source MGI Symbol Acc MGI 95822
E01	UPFM075534 6	ENSMUST00000 105561.8	Grm1	ENSMUSG00 000019828	glutamate receptor, metabotropic 1 Source MGI Symbol Acc MGI 1351338
E02	UPFM084574 1	ENSMUST00000 200826.3	Grm2	ENSMUSG00 000023192	glutamate receptor, metabotropic 2 Source MGI Symbol Acc MGI 1351339
E03	UPFM095413 8	ENSMUST00000 004076.4	Grm3	ENSMUSG00 000003974	glutamate receptor, metabotropic 3 Source MGI Symbol Acc MGI 1351340
E04	UPFM073855 9	ENSMUST00000 147865.1	Grm4	ENSMUSG00 000063239	glutamate receptor, metabotropic 4 Source MGI Symbol Acc MGI 1351341
E05	UPFM100372 0	ENSMUST00000 138732.2	Grm5	ENSMUSG00 000049583	glutamate receptor, metabotropic 5 Source MGI Symbol Acc MGI 1351342
E06	UPFM100753 4	ENSMUST00000 126890.1	Grm6	ENSMUSG00 000000617	glutamate receptor, metabotropic 6 Source MGI Symbol Acc MGI 1351343
E07	UPFM063816 6	ENSMUST00000 071076.12	Grm7	ENSMUSG00 000056755	glutamate receptor, metabotropic 7 Source MGI Symbol Acc MGI 1351344
E08	UPFM076666 2	ENSMUST00000 115324.8	Grm8	ENSMUSG00 000024211	glutamate receptor, metabotropic 8 Source MGI Symbol Acc MGI 1351345
E09	UPFM072130 8	ENSMUST00000 080127.11	Homer1	ENSMUSG00 000007617	homer scaffolding protein 1 Source MGI Symbol Acc MGI 1347345
E10	UPFM063599 9	ENSMUST00000 208937.1	Homer2	ENSMUSG00 000025813	homer scaffolding protein 2 Source MGI Symbol Acc MGI 1347354
E11	UPFM067128 1	ENSMUST00000 155994.1	Il1b	ENSMUSG00 000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
E12	UPFM098421 5	ENSMUST00000 203995.1	Itpr1	ENSMUSG00 000030102	inositol 1,4,5-trisphosphate receptor 1 Source MGI Symbol Acc MGI 96623
F01	UPFM066625 9	ENSMUST00000 232611.1	Mapk1	ENSMUSG00 000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
F02	UPFM097647 5	ENSMUST00000 133774.3	Nsf	ENSMUSG00 000034187	N-ethylmaleimide sensitive fusion protein Source MGI Symbol Acc MGI 104560
F03	UPFM066645 7	ENSMUST00000 086247.5	P2rx7	ENSMUSG00 000029468	purinergic receptor P2X, ligand-gated ion channel, 7 Source MGI Symbol Acc MGI 1339957
F04	UPFM092136 1	ENSMUST00000 065793.11	Phgdh	ENSMUSG00 000053398	3-phosphoglycerate dehydrogenase Source MGI Symbol Acc MGI 1355330
F05	UPFM097865 7	ENSMUST00000 172403.8	Pla2g6	ENSMUSG00 000042632	phospholipase A2, group VI Source MGI Symbol Acc MGI 1859152
F06	UPFM062368 3	ENSMUST00000 130524.4	Plcb1	ENSMUSG00 000051177	phospholipase C, beta 1 Source MGI Symbol Acc MGI 97613
F07	UPFM087449 7	ENSMUST00000 123969.2	Prodh	ENSMUSG00 000003526	proline dehydrogenase Source MGI Symbol Acc MGI 97770
F08	UPFM082395 7	ENSMUST00000 146006.2	Shank2	ENSMUSG00 000037541	SH3 and multiple ankyrin repeat domains 2 Source MGI Symbol Acc MGI 2671987
F09	UPFM094600 1	ENSMUST00000 207945.1	Slc17a6	ENSMUSG00 000030500	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 6 Source MGI Symbol Acc MGI 2156052
F10	UPFM090943 5	ENSMUST00000 209634.1	Slc17a7	ENSMUSG00 000070570	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	UPFM0945321	ENSMUST00000020102.13	Slc17a8	ENSMUSG00000019935	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 8 Source MGI Symbol Acc MGI 3039629
F12	UPFM0631849	ENSMUST00000161340.1	Slc1a1	ENSMUSG00000024935	solute carrier family 1 (neuronal/epithelial high affinity glutamate transporter, system Xag), member 1 Source MGI Symbol Acc MGI 105083
G01	UPFM0846904	ENSMUST00000111213.7	Slc1a2	ENSMUSG00000005089	solute carrier family 1 (glial high affinity glutamate transporter), member 2 Source MGI Symbol Acc MGI 101931
G02	UPFM0844468	ENSMUST00000153455.7	Slc1a3	ENSMUSG00000005360	solute carrier family 1 (glial high affinity glutamate transporter), member 3 Source MGI Symbol Acc MGI 99917
G03	UPFM0725213	ENSMUST00000005490.9	Slc1a6	ENSMUSG00000005357	solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 Source MGI Symbol Acc MGI 1096331
G04	UPFM0941358	ENSMUST00000045738.4	Slc32a1	ENSMUSG00000037771	solute carrier family 32 (GABA vesicular transporter), member 1 Source MGI Symbol Acc MGI 1194488
G05	UPFM1002639	ENSMUST00000088454.12	Slc38a1	ENSMUSG00000023169	solute carrier family 38, member 1 Source MGI Symbol Acc MGI 2145895
G06	UPFM0849066	ENSMUST00000204074.1	Slc6a1	ENSMUSG00000030310	solute carrier family 6 (neurotransmitter transporter, GABA), member 1 Source MGI Symbol Acc MGI 95627
G07	UPFM0928283	ENSMUST00000032451.8	Slc6a11	ENSMUSG00000030307	solute carrier family 6 (neurotransmitter transporter, GABA), member 11 Source MGI Symbol Acc MGI 95630
G08	UPFM0845711	ENSMUST00000170339.1	Slc6a12	ENSMUSG00000030109	solute carrier family 6 (neurotransmitter transporter, betaine/GABA), member 12 Source MGI Symbol Acc MGI 95628
G09	UPFM0952791	ENSMUST00000142021.1	Slc6a13	ENSMUSG00000030108	solute carrier family 6 (neurotransmitter transporter, GABA), member 13 Source MGI Symbol Acc MGI 95629
G10	UPFM0682338	ENSMUST00000142932.2	Slc7a11	ENSMUSG00000027737	solute carrier family 7 (cationic amino acid transporter, y+ system), member 11 Source MGI Symbol Acc MGI 1347355
G11	UPFM0643662	ENSMUST00000163779.7	Snca	ENSMUSG00000025889	synuclein, alpha Source MGI Symbol Acc MGI 1277151
G12	UPFM1007550	ENSMUST00000121738.7	Srr	ENSMUSG00000001323	serine racemase Source MGI Symbol Acc MGI 1351636
H01	UPFM1132946	ENSMUST00000163829.1	Actb	ENSMUSG00000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	UPFM1132947	ENSMUST00000102476.4	B2m	ENSMUSG00000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	UPFM1132948	ENSMUST00000117757.8	Gapdh	ENSMUSG00000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	UPFM1132949	ENSMUST00000026613.13	Gusb	ENSMUSG00000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	UPFM1132950	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG00000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	UPFM1126609	UPL_MGDC	MGDC	UPL_MGDC	Mouse Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
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 Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl QN ROX Reference Dye, 1.9 ml Water	208252

*Larger kit sizes available.

The QuantiNova LNA Probe 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.