

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

Mouse Neurotoxicity

Cat. no. 249950 SBMM-096ZR

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	Abl1	Angptl4	Arg1	Arg2	Arrb1	Atf4	Bag4	Bdnf	Bik	Birc2	Camk2a	Camk2d
B	Casp7	Ccnd1	Cd8b1	Cdkn1a	Cdo1	Cidea	Cideb	Cicn5	Cicnkb	Col12a1	Crodd	Dapk1
C	Ddit3	Drd2	Drp2	Dynl1	Egln3	Elf2ak3	Ereg	Fas	Fasl	Gal	Galc	Gch1
D	Gpr37	Grin1	Gsn	Gsr	Gucy1a1	Heph	Hsp90aa1	Hspa5	Htr1a	Htr3a	Il10	Kit
E	Ldha	Lefty2	Lta	Mmp9	Nfkb1	Nal3	Nos1ap	Nosip	Nostrin	Notch4	Nup50	Pappa
F	Pdia4	Plp1	Pou1f1	Prim2	Rasd1	Sema3b	Sfn5	Slc16a3	Sod2	Tacr1	Tnfrsf10b	Tnfrsf11b
G	Tnfrsf25	Tph1	Traf2	Traf4	Trp53	Trpm1	Trpm4	Txnip	Tyrl	Usp7	Xiap	Ywhae
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	SBM1025688	ENSMUST00000127714.1	Abl1	ENSMUSG0000026842	c-abl oncogene 1, non-receptor tyrosine kinase Source MGI Symbol Acc MGI 87859
A02	SBM0692606	ENSMUST00000174872.1	Angptl4	ENSMUSG0000002289	angiopoietin-like 4 Source MGI Symbol Acc MGI 1888999
A03	SBM0929575	ENSMUST00000218260.1	Arg1	ENSMUSG0000019987	arginase, liver Source MGI Symbol Acc MGI 88070
A04	SBM1022583	ENSMUST00000021550.6	Arg2	ENSMUSG0000021125	arginase type II Source MGI Symbol Acc MGI 1330806
A05	SBM0975500	ENSMUST00000162043.7	Arrb1	ENSMUSG0000018909	arrestin, beta 1 Source MGI Symbol Acc MGI 99473
A06	SBM1055409	ENSMUST00000230434.1	Atf4	ENSMUSG0000042406	activating transcription factor 4 Source MGI Symbol Acc MGI 88096
A07	SBM1036283	ENSMUST00000210103.1	Bag4	ENSMUSG0000037316	BCL2-associated athanogene 4 Source MGI Symbol Acc MGI 1914634
A08	SBM0985592	ENSMUST00000111042.2	Bdnf	ENSMUSG0000048482	brain derived neurotrophic factor Source MGI Symbol Acc MGI 88145
A09	SBM1042210	ENSMUST00000016902.4	Bik	ENSMUSG0000016758	BCL2-interacting killer Source MGI Symbol Acc MGI 1206591
A10	SBM0791338	ENSMUST00000190341.6	Birc2	ENSMUSG0000057367	baculoviral IAP repeat-containing 2 Source MGI Symbol Acc MGI 1197009
A11	SBM0784888	ENSMUST00000025519.10	Camk2a	ENSMUSG0000024617	calcium/calmodulin-dependent protein kinase II alpha Source MGI Symbol Acc MGI 88256
A12	SBM1060282	ENSMUST00000145454.7	Camk2d	ENSMUSG0000053819	calcium/calmodulin-dependent protein kinase II, delta Source MGI Symbol Acc MGI 1341265
B01	SBM1225391	ENSMUST00000026062.9	Casp7	ENSMUSG0000025076	caspase 7 Source MGI Symbol Acc MGI 109383
B02	SBM0706150	ENSMUST00000093962.4	Ccnd1	ENSMUSG00000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
B03	SBM1023066	ENSMUST00000065248.8	Cd8b1	ENSMUSG0000053044	CD8 antigen, beta chain 1 Source MGI Symbol Acc MGI 88347
B04	SBM1034022	ENSMUST00000023829.7	Cdkn1a	ENSMUSG0000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B05	SBM0858164	ENSMUST00000234819.1	Cdo1	ENSMUSG0000033022	cysteine dioxygenase 1, cytosolic Source MGI Symbol Acc MGI 105925
B06	SBM1046343	ENSMUST00000025404.9	Cidea	ENSMUSG0000024526	cell death-inducing DNA fragmentation factor, alpha subunit-like effector A Source MGI Symbol Acc MGI 1270845
B07	SBM0952526	ENSMUST00000136270.1	Cideb	ENSMUSG0000022219	cell death-inducing DNA fragmentation factor, alpha subunit-like effector B Source MGI Symbol Acc MGI 1270844
B08	SBM0703630	ENSMUST00000115746.7	Clcn5	ENSMUSG0000004317	chloride channel, voltage-sensitive 5 Source MGI Symbol Acc MGI 99486
B09	SBM1036895	ENSMUST00000006378.8	Clcnkb	ENSMUSG0000006216	chloride channel, voltage-sensitive Kb Source MGI Symbol Acc MGI 1930643
B10	SBM1017437	ENSMUST00000150289.7	Col12a1	ENSMUSG0000032332	collagen, type XII, alpha 1 Source MGI Symbol Acc MGI 88448
B11	SBM0880165	ENSMUST00000217809.1	Cradd	ENSMUSG0000045867	CASP2 and RIPK1 domain containing adaptor with death domain Source MGI Symbol Acc MGI 1336168
B12	SBM0822721	ENSMUST00000226059.1	Dapk1	ENSMUSG0000021559	death associated protein kinase 1 Source MGI Symbol Acc MGI 1916885
C01	SBM0724182	ENSMUST00000139091.1	Ddit3	ENSMUSG0000025408	DNA-damage inducible transcript 3 Source MGI Symbol Acc MGI 109247
C02	SBM0811566	ENSMUST00000075764.7	Drd2	ENSMUSG0000032259	dopamine receptor D2 Source MGI Symbol Acc MGI 94924
C03	SBM0849415	ENSMUST00000113224.8	Drp2	ENSMUSG0000000223	dystrophin related protein 2 Source MGI Symbol Acc MGI 107432
C04	SBM0988180	ENSMUST00000009157.3	Dynll1	ENSMUSG0000009013	dynein light chain LC8-type 1 Source MGI Symbol Acc MGI 1861457
C05	SBM0765277	ENSMUST00000039516.3	EglN3	ENSMUSG0000035105	egl-9 family hypoxia-inducible factor 3 Source MGI Symbol Acc MGI 1932288
C06	SBM0754072	ENSMUST00000034093.14	Eif2ak3	ENSMUSG0000031668	eukaryotic translation initiation factor 2 alpha kinase 3 Source MGI Symbol Acc MGI 1341830
C07	SBM0874254	ENSMUST00000031324.5	Ereg	ENSMUSG0000029377	epiregulin Source MGI Symbol Acc MGI 107508
C08	SBM0856649	ENSMUST00000112472.3	Fas	ENSMUSG0000024778	Fas (TNF receptor superfamily member 6) Source MGI Symbol Acc MGI 95484
C09	SBM0967876	ENSMUST00000000834.3	FasL	ENSMUSG0000000817	Fas ligand (TNF superfamily, member 6) Source MGI Symbol Acc MGI 99255
C10	SBM0700517	ENSMUST00000025842.7	Gal	ENSMUSG0000024907	galanin Source MGI Symbol Acc MGI 95637
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0978870	222042.1	Galc	000021003	galactosylceramidase Source MGI Symbol Acc MGI 95636
C12	SBM0916524	ENSMUST00000089959.6	Gch1	ENSMUSG0000037580	GTP cyclohydrolase 1 Source MGI Symbol Acc MGI 95675
D01	SBM0734658	ENSMUST00000200812.1	Gpr37	ENSMUSG0000039904	G protein-coupled receptor 37 Source MGI Symbol Acc MGI 1313297
D02	SBM1029073	ENSMUST00000028335.12	Grin1	ENSMUSG0000026959	glutamate receptor, ionotropic, NMDA1 (zeta 1) Source MGI Symbol Acc MGI 95819
D03	SBM0793570	ENSMUST00000142324.7	Gsn	ENSMUSG0000026879	gelsolin Source MGI Symbol Acc MGI 95851
D04	SBM0942303	ENSMUST00000033992.8	Gsr	ENSMUSG0000031584	glutathione reductase Source MGI Symbol Acc MGI 95804
D05	SBM0892488	ENSMUST00000191942.1	Gucy1a1	ENSMUSG0000033910	guanylate cyclase 1, soluble, alpha 1 Source MGI Symbol Acc MGI 1926562
D06	SBM0787872	ENSMUST00000079322.11	Heph	ENSMUSG0000031209	hephaestin Source MGI Symbol Acc MGI 1332240
D07	SBM0939146	ENSMUST00000155242.7	Hsp90aa1	ENSMUSG0000021270	heat shock protein 90, alpha (cytosolic), class A member 1 Source MGI Symbol Acc MGI 96250
D08	SBM1001113	ENSMUST00000145466.1	Hspa5	ENSMUSG0000026864	heat shock protein 5 Source MGI Symbol Acc MGI 95835
D09	SBM0817571	ENSMUST00000022235.5	Htr1a	ENSMUSG0000021721	5-hydroxytryptamine (serotonin) receptor 1A Source MGI Symbol Acc MGI 96273
D10	SBM0963266	ENSMUST00000003826.7	Htr3a	ENSMUSG0000032269	5-hydroxytryptamine (serotonin) receptor 3A Source MGI Symbol Acc MGI 96282
D11	SBM1004151	ENSMUST00000016673.5	Il10	ENSMUSG0000016529	interleukin 10 Source MGI Symbol Acc MGI 96537
D12	SBM0996057	ENSMUST00000202167.1	Kit	ENSMUSG0000005672	KIT proto-oncogene receptor tyrosine kinase Source MGI Symbol Acc MGI 96677
E01	SBM1042883	ENSMUST00000209984.1	Ldha	ENSMUSG0000063229	lactate dehydrogenase A Source MGI Symbol Acc MGI 96759
E02	SBM1038838	ENSMUST00000085797.5	Lefty2	ENSMUSG0000066652	left-right determination factor 2 Source MGI Symbol Acc MGI 2443573
E03	SBM0790437	ENSMUST00000025266.5	Lta	ENSMUSG0000024402	lymphotoxin A Source MGI Symbol Acc MGI 104797
E04	SBM1089430	ENSMUST00000017881.2	Mmp9	ENSMUSG0000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
E05	SBM0841870	ENSMUST00000164430.6	Nfkb1	ENSMUSG0000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E06	SBM0777438	ENSMUST00000014920.7	Nol3	ENSMUSG0000014776	nucleolar protein 3 (apoptosis repressor with CARD domain) Source MGI Symbol Acc MGI 1925938
E07	SBM0781645	ENSMUST00000160816.7	Nos1ap	ENSMUSG0000038473	nitric oxide synthase 1 (neuronal) adaptor protein Source MGI Symbol Acc MGI 1917979
E08	SBM0847406	ENSMUST00000107829.8	Nosip	ENSMUSG0000003421	nitric oxide synthase interacting protein Source MGI Symbol Acc MGI 1913644
E09	SBM1039201	ENSMUST00000141276.1	Nostrin	ENSMUSG0000034738	nitric oxide synthase trafficker Source MGI Symbol Acc MGI 3606242
E10	SBM0822219	ENSMUST00000174707.1	Notch4	ENSMUSG0000015468	notch 4 Source MGI Symbol Acc MGI 107471
E11	SBM0732547	ENSMUST00000230411.1	Nup50	ENSMUSG0000016619	nucleoporin 50 Source MGI Symbol Acc MGI 1351502
E12	SBM0850964	ENSMUST00000084501.3	Pappa	ENSMUSG0000028370	pregnancy-associated plasma protein A Source MGI Symbol Acc MGI 97479
F01	SBM0882645	ENSMUST00000077290.8	Pdia4	ENSMUSG0000025823	protein disulfide isomerase associated 4 Source MGI Symbol Acc MGI 104864
F02	SBM0865182	ENSMUST00000144880.1	Plp1	ENSMUSG0000031425	proteolipid protein (myelin) 1 Source MGI Symbol Acc MGI 97623
F03	SBM0674401	ENSMUST00000176038.7	Pou1f1	ENSMUSG0000004842	POU domain, class 1, transcription factor 1 Source MGI Symbol Acc MGI 97588
F04	SBM0799491	ENSMUST00000027312.10	Prim2	ENSMUSG0000026134	DNA primase, p58 subunit Source MGI Symbol Acc MGI 97758
F05	SBM1218498	ENSMUST00000062405.7	Rasd1	ENSMUSG0000049892	RAS, dexamethasone-induced 1 Source MGI Symbol Acc MGI 1270848
F06	SBM0882447	ENSMUST00000102529.9	Sema3b	ENSMUSG0000057969	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3B Source MGI Symbol Acc MGI 107561
F07	SBM0706516	ENSMUST00000113788.1	Sfxn5	ENSMUSG0000033720	sideroflexin 5 Source MGI Symbol Acc MGI 2137681
F08	SBM0881693	ENSMUST00000154187.7	Slc16a3	ENSMUSG0000025161	solute carrier family 16 (monocarboxylic acid transporters), member 3 Source MGI Symbol Acc MGI 1933438
F09	SBM1063571	ENSMUST00000233791.1	Sod2	ENSMUSG0000006818	superoxide dismutase 2, mitochondrial Source MGI Symbol Acc MGI 98352
F10	SBM0836174	ENSMUST00000203775.1	Tacr1	ENSMUSG0000030043	tachykinin receptor 1 Source MGI Symbol Acc MGI 98475

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0809431	ENSMUST00000224533.1	Tnfrsf10b	ENSMUSG00000022074	tumor necrosis factor receptor superfamily, member 10b Source MGI Symbol Acc MGI 1341090
F12	SBM0675830	ENSMUST00000079772.3	Tnfrsf11b	ENSMUSG00000063727	tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin) Source MGI Symbol Acc MGI 109587
G01	SBM1006376	ENSMUST00000025706.9	Tnfrsf25	ENSMUSG00000024793	tumor necrosis factor receptor superfamily, member 25 Source MGI Symbol Acc MGI 1934667
G02	SBM0807361	ENSMUST00000168335.2	Tph1	ENSMUSG00000040046	tryptophan hydroxylase 1 Source MGI Symbol Acc MGI 98796
G03	SBM0686660	ENSMUST00000151742.1	Traf2	ENSMUSG00000026942	TNF receptor-associated factor 2 Source MGI Symbol Acc MGI 101835
G04	SBM0937665	ENSMUST00000149437.7	Traf4	ENSMUSG00000017386	TNF receptor associated factor 4 Source MGI Symbol Acc MGI 1202880
G05	SBM0841427	ENSMUST00000108657.3	Trp53	ENSMUSG00000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G06	SBM1085081	ENSMUST00000206107.1	Trpm1	ENSMUSG00000030523	transient receptor potential cation channel, subfamily M, member 1 Source MGI Symbol Acc MGI 1330305
G07	SBM0705225	ENSMUST00000042194.9	Trpm4	ENSMUSG00000038260	transient receptor potential cation channel, subfamily M, member 4 Source MGI Symbol Acc MGI 1915917
G08	SBM1060480	ENSMUST00000049093.7	Txnip	ENSMUSG00000038393	thioredoxin interacting protein Source MGI Symbol Acc MGI 1889549
G09	SBM0880574	ENSMUST00000133655.7	Tyrp1	ENSMUSG00000005994	tyrosinase-related protein 1 Source MGI Symbol Acc MGI 98881
G10	SBM0900775	ENSMUST00000159287.7	Usp7	ENSMUSG00000022710	ubiquitin specific peptidase 7 Source MGI Symbol Acc MGI 2182061
G11	SBM0766940	ENSMUST00000115095.8	Xiap	ENSMUSG00000025860	X-linked inhibitor of apoptosis Source MGI Symbol Acc MGI 107572
G12	SBM0711492	ENSMUST00000155057.1	Ywhae	ENSMUSG00000020849	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon polypeptide Source MGI Symbol Acc MGI 894689
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 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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