

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

Mouse Neurogenesis

Cat. no. 249950 SBMM-404ZR

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	Ache	Adora1	Adora2a	Alk	Apbb1	ApoE	App	Artn	Ascl1	Bcl2	Bdnf	Bmp2
B	Bmp4	Bmp8b	Cdk5r1	Cdk5rap2	Chrm2	Creb1	Cxcl1	Dcx	Dlg4	Dll1	Drd2	Dvl3
C	Efnb1	Egf	Ep300	ErbB2	Fgf2	Flna	Gdnf	Gpi1	Grin1	Hdac4	Hes1	Hey1
D	Hey2	Heyl	Il3	Mdk	Mef2c	Kmt2a	Map2	Ndn	Ndp	Neurod1	Neurog1	Neurog2
E	Nf1	Nog	Notch1	Notch2	Nr2e3	Nrcam	Nrg1	Nrp1	Nrp2	Nf3	Ntn1	Tenm1
F	Olig2	Pafah1b1	Pard3	Pax3	Pax5	Pax6	Pou3f3	Pou4f1	Pln	Rac1	Robo1	Rtn4
G	S100a6	S100b	Shh	Slit2	Sod1	Sox2	Sox3	Stat3	Tgfb1	Th	Tnr	Vegfa
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	SBM0993196	ENSMUST00000196208.4	Ache	ENSMUSG0000023328	acetylcholinesterase Source MGI Symbol Acc MGI 87876
A02	SBM0781237	ENSMUST00000187631.1	Adora1	ENSMUSG0000042429	adenosine A1 receptor Source MGI Symbol Acc MGI 99401
A03	SBM1030748	ENSMUST00000219322.1	Adora2a	ENSMUSG0000020178	adenosine A2a receptor Source MGI Symbol Acc MGI 99402
A04	SBM0858301	ENSMUST00000086639.5	Alk	ENSMUSG0000055471	anaplastic lymphoma kinase Source MGI Symbol Acc MGI 103305
A05	SBM0843526	ENSMUST00000189378.6	Apbb1	ENSMUSG0000037032	amyloid beta (A4) precursor protein-binding, family B, member 1 Source MGI Symbol Acc MGI 107765
A06	SBM0912771	ENSMUST00000173739.7	Apoe	ENSMUSG0000002985	apolipoprotein E Source MGI Symbol Acc MGI 88057
A07	SBM0970132	ENSMUST00000226801.1	App	ENSMUSG0000022892	amyloid beta (A4) precursor protein Source MGI Symbol Acc MGI 88059
A08	SBM0981474	ENSMUST00000070816.8	Artn	ENSMUSG0000028539	artemin Source MGI Symbol Acc MGI 1333791
A09	SBM0974149	ENSMUST00000020243.9	Ascl1	ENSMUSG0000020052	achaete-scute family bHLH transcription factor 1 Source MGI Symbol Acc MGI 96919
A10	SBM0876340	ENSMUST00000189999.1	Bcl2	ENSMUSG0000057329	B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138
A11	SBM0985592	ENSMUST00000111042.2	Bdnf	ENSMUSG0000048482	brain derived neurotrophic factor Source MGI Symbol Acc MGI 88145
A12	SBM0831820	ENSMUST00000028836.6	Bmp2	ENSMUSG0000027358	bone morphogenetic protein 2 Source MGI Symbol Acc MGI 88177
B01	SBM0845886	ENSMUST00000100676.2	Bmp4	ENSMUSG0000021835	bone morphogenetic protein 4 Source MGI Symbol Acc MGI 88180
B02	SBM0765448	ENSMUST00000002457.1	Bmp8b	ENSMUSG0000002384	bone morphogenetic protein 8b Source MGI Symbol Acc MGI 107335
B03	SBM0768274	ENSMUST00000147694.1	Cdk5r1	ENSMUSG0000048895	cyclin-dependent kinase 5, regulatory subunit 1 (p35) Source MGI Symbol Acc MGI 101764
B04	SBM0969170	ENSMUST00000140108.1	Cdk5rap2	ENSMUSG0000039298	CDK5 regulatory subunit associated protein 2 Source MGI Symbol Acc MGI 2384875
B05	SBM0958301	ENSMUST00000172278.7	Chrm2	ENSMUSG0000045613	cholinergic receptor, muscarinic 2, cardiac Source MGI Symbol Acc MGI 88397
B06	SBM0735214	ENSMUST00000188855.6	Creb1	ENSMUSG0000025958	cAMP responsive element binding protein 1 Source MGI Symbol Acc MGI 88494
B07	SBM0998835	ENSMUST00000031327.8	Cxcl1	ENSMUSG0000029380	chemokine (C-X-C motif) ligand 1 Source MGI Symbol Acc MGI 108068
B08	SBM1025904	ENSMUST00000087313.9	Dcx	ENSMUSG0000031285	doublecortin Source MGI Symbol Acc MGI 1277171
B09	SBM0878952	ENSMUST00000108588.8	Dlg4	ENSMUSG0000020886	discs large MAGUK scaffold protein 4 Source MGI Symbol Acc MGI 1277959
B10	SBM0898031	ENSMUST00000124196.1	Dll1	ENSMUSG0000014773	delta like canonical Notch ligand 1 Source MGI Symbol Acc MGI 104659
B11	SBM0811566	ENSMUST00000075764.7	Drd2	ENSMUSG0000032259	dopamine receptor D2 Source MGI Symbol Acc MGI 94924
B12	SBM0911704	ENSMUST00000171774.1	Dvl3	ENSMUSG0000003233	dishevelled segment polarity protein 3 Source MGI Symbol Acc MGI 108100
C01	SBM1011520	ENSMUST00000151750.1	Efnb1	ENSMUSG0000031217	ephrin B1 Source MGI Symbol Acc MGI 102708
C02	SBM1005237	ENSMUST00000197079.4	Egf	ENSMUSG0000028017	epidermal growth factor Source MGI Symbol Acc MGI 95290
C03	SBM1065431	ENSMUST00000190035.1	Ep300	ENSMUSG0000055024	E1A binding protein p300 Source MGI Symbol Acc MGI 1276116
C04	SBM0761323	ENSMUST00000136032.1	ErbB2	ENSMUSG0000062312	erb-b2 receptor tyrosine kinase 2 Source MGI Symbol Acc MGI 95410
C05	SBM0959713	ENSMUST00000138563.8	Fgf2	ENSMUSG0000037225	fibroblast growth factor 2 Source MGI Symbol Acc MGI 95516
C06	SBM0838502	ENSMUST00000114299.7	Flna	ENSMUSG0000031328	filamin, alpha Source MGI Symbol Acc MGI 95556
C07	SBM0745351	ENSMUST00000022744.4	Gdnf	ENSMUSG0000022144	glial cell line derived neurotrophic factor Source MGI Symbol Acc MGI 107430
C08	SBM1045586	ENSMUST00000038027.5	Gpi1	ENSMUSG0000036427	glucose phosphate isomerase 1 Source MGI Symbol Acc MGI 95797
C09	SBM1029073	ENSMUST00000028335.12	Grin1	ENSMUSG0000026959	glutamate receptor, ionotropic, NMDA1 (zeta 1) Source MGI Symbol Acc MGI 95819
C10	SBM0836538	ENSMUST00000097644.8	Hdac4	ENSMUSG0000026313	histone deacetylase 4 Source MGI Symbol Acc MGI 3036234
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0965557	023171.7	Hes1	000022528	hes family bHLH transcription factor 1 Source MGI Symbol Acc MGI 104853
C12	SBM0693801	ENSMUST00000192102.1	Hey1	ENSMUSG0000040289	hairy/enhancer-of-split related with YRPW motif 1 Source MGI Symbol Acc MGI 1341800
D01	SBM0700946	ENSMUST00000019924.8	Hey2	ENSMUSG00000019789	hairy/enhancer-of-split related with YRPW motif 2 Source MGI Symbol Acc MGI 1341884
D02	SBM0821276	ENSMUST00000127172.1	Heyl	ENSMUSG00000032744	hairy/enhancer-of-split related with YRPW motif-like Source MGI Symbol Acc MGI 1860511
D03	SBM1089901	ENSMUST00000019058.5	Il3	ENSMUSG00000018914	interleukin 3 Source MGI Symbol Acc MGI 96552
D04	SBM0843207	ENSMUST00000028672.12	Mdk	ENSMUSG00000027239	midkine Source MGI Symbol Acc MGI 96949
D05	SBM0750479	ENSMUST00000199210.4	Mef2c	ENSMUSG0000005583	myocyte enhancer factor 2C Source MGI Symbol Acc MGI 99458
D06	SBM0791049	ENSMUST000000215489.1	Kmt2a	ENSMUSG0000002028	lysine (K)-specific methyltransferase 2A Source MGI Symbol Acc MGI 96995
D07	SBM0967978	ENSMUST00000123647.7	Map2	ENSMUSG00000015222	microtubule-associated protein 2 Source MGI Symbol Acc MGI 97175
D08	SBM1035270	ENSMUST00000038775.5	Ndn	ENSMUSG00000033585	necdin Source MGI Symbol Acc MGI 97290
D09	SBM1051002	ENSMUST00000040134.7	Ndp	ENSMUSG00000040138	Norrie disease (pseudoglioma) (human) Source MGI Symbol Acc MGI 102570
D10	SBM0788481	ENSMUST00000041099.4	Neurod1	ENSMUSG00000034701	neurogenic differentiation 1 Source MGI Symbol Acc MGI 1339708
D11	SBM0818470	ENSMUST00000058475.5	Neurog1	ENSMUSG00000048904	neurogenin 1 Source MGI Symbol Acc MGI 107754
D12	SBM0947488	ENSMUST00000029587.8	Neurog2	ENSMUSG00000027967	neurogenin 2 Source MGI Symbol Acc MGI 109619
E01	SBM1038616	ENSMUST00000122917.7	Nf1	ENSMUSG00000020716	neurofibromin 1 Source MGI Symbol Acc MGI 97306
E02	SBM1083967	ENSMUST00000061728.4	Nog	ENSMUSG00000048616	noggin Source MGI Symbol Acc MGI 104327
E03	SBM1060528	ENSMUST00000132820.1	Notch1	ENSMUSG00000026923	notch 1 Source MGI Symbol Acc MGI 97363
E04	SBM0724048	ENSMUST00000079812.7	Notch2	ENSMUSG00000027878	notch 2 Source MGI Symbol Acc MGI 97364
E05	SBM0851843	ENSMUST00000147892.7	Nr2e3	ENSMUSG00000032292	nuclear receptor subfamily 2, group E, member 3 Source MGI Symbol Acc MGI 1346317
E06	SBM0848097	ENSMUST000000219592.1	Nrcam	ENSMUSG00000020598	neuronal cell adhesion molecule Source MGI Symbol Acc MGI 104750
E07	SBM0794214	ENSMUST000000207417.1	Nrg1	ENSMUSG00000062991	neuregulin 1 Source MGI Symbol Acc MGI 96083
E08	SBM0705168	ENSMUST000000212746.1	Nrp1	ENSMUSG00000025810	neuropilin 1 Source MGI Symbol Acc MGI 106206
E09	SBM0915998	ENSMUST000000271112.12	Nrp2	ENSMUSG00000025969	neuropilin 2 Source MGI Symbol Acc MGI 1100492
E10	SBM0855486	ENSMUST000000204542.2	Ntrf3	ENSMUSG00000049107	neurotrophin 3 Source MGI Symbol Acc MGI 97380
E11	SBM0881454	ENSMUST00000108674.8	Ntn1	ENSMUSG00000020902	netrin 1 Source MGI Symbol Acc MGI 105088
E12	SBM0952158	ENSMUST00000115058.7	Tenm1	ENSMUSG00000016150	teneurin transmembrane protein 1 Source MGI Symbol Acc MGI 1345185
F01	SBM1006161	ENSMUST00000035608.9	Olig2	ENSMUSG00000039830	oligodendrocyte transcription factor 2 Source MGI Symbol Acc MGI 1355331
F02	SBM1033315	ENSMUST00000156794.1	Pafah1b1	ENSMUSG00000020745	platelet-activating factor acetylhydrolase, isoform 1b, subunit 1 Source MGI Symbol Acc MGI 109520
F03	SBM0952015	ENSMUST00000162309.7	Pard3	ENSMUSG00000025812	par-3 family cell polarity regulator Source MGI Symbol Acc MGI 2135608
F04	SBM0851058	ENSMUST00000172555.1	Pax3	ENSMUSG00000004872	paired box 3 Source MGI Symbol Acc MGI 97487
F05	SBM1071355	ENSMUST00000102932.9	Pax5	ENSMUSG00000014030	paired box 5 Source MGI Symbol Acc MGI 97489
F06	SBM0924606	ENSMUST00000090391.12	Pax6	ENSMUSG00000027168	paired box 6 Source MGI Symbol Acc MGI 97490
F07	SBM1083068	ENSMUST00000054883.3	Pou3f3	ENSMUSG00000045515	POU domain, class 3, transcription factor 3 Source MGI Symbol Acc MGI 102564
F08	SBM1020202	ENSMUST00000053016.9	Pou4f1	ENSMUSG00000048349	POU domain, class 4, transcription factor 1 Source MGI Symbol Acc MGI 102525
F09	SBM0912051	ENSMUST000000201321.1	Ptn	ENSMUSG00000029838	pleiotrophin Source MGI Symbol Acc MGI 97804
F10	SBM0680406	ENSMUST00000145709.7	Rac1	ENSMUSG0000001847	Rac family small GTPase 1 Source MGI Symbol Acc MGI 97845

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0908484	ENSMUST00000023600.7	Robo1	ENSMUSG00000022883	roundabout guidance receptor 1 Source MGI Symbol Acc MGI 1274781
F12	SBM0934050	ENSMUST00000156217.7	Rtn4	ENSMUSG00000020458	reticulon 4 Source MGI Symbol Acc MGI 1915835
G01	SBM0687148	ENSMUST00000197189.1	S100a6	ENSMUSG00000001025	S100 calcium binding protein A6 (calcyclin) Source MGI Symbol Acc MGI 1339467
G02	SBM1054599	ENSMUST00000036387.7	S100b	ENSMUSG00000033208	S100 protein, beta polypeptide, neural Source MGI Symbol Acc MGI 98217
G03	SBM0959314	ENSMUST00000002708.4	Shh	ENSMUSG00000002633	sonic hedgehog Source MGI Symbol Acc MGI 98297
G04	SBM0795181	ENSMUST00000170109.8	Slit2	ENSMUSG00000031558	slit guidance ligand 2 Source MGI Symbol Acc MGI 1315205
G05	SBM0946306	ENSMUST00000023707.10	Sod1	ENSMUSG00000022982	superoxide dismutase 1, soluble Source MGI Symbol Acc MGI 98351
G06	SBM0819160	ENSMUST00000099151.5	Sox2	ENSMUSG00000074637	SRY (sex determining region Y)-box 2 Source MGI Symbol Acc MGI 98364
G07	SBM0702713	ENSMUST00000135107.3	Sox3	ENSMUSG00000045179	SRY (sex determining region Y)-box 3 Source MGI Symbol Acc MGI 98365
G08	SBM0821931	ENSMUST00000103114.7	Stat3	ENSMUSG00000004040	signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038
G09	SBM0850388	ENSMUST00000002678.9	Tgfb1	ENSMUSG00000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G10	SBM0766276	ENSMUST00000000219.9	Th	ENSMUSG00000000214	tyrosine hydroxylase Source MGI Symbol Acc MGI 98735
G11	SBM0684114	ENSMUST00000111669.8	Tnr	ENSMUSG00000015829	tenascin R Source MGI Symbol Acc MGI 99516
G12	SBM1079198	ENSMUST00000217017.1	Vegfa	ENSMUSG00000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
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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