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

Mouse Nitric Oxide Signaling Pathway

Cat. no. 249950 SBMM-062ZA

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	Aass	Als2	Apoe	Bax	Bcl2l1	Calm1	Capns1	Cat	Cav1	Ccnd1	Ccng1	Ccs
B	Cd151	Cdkn1a	Clcf1	Ctsb	Cyba	Ddah1	Ddah2	Dlg4	Dynll1	Egr1	Epx	Ercc2
C	Fas	Fos	Gab1	Gadd45a	Gpx1	Gpx2	Gpx3	Gpx4	Gpx5	Gpx6	Gpx7	Grin1
D	Hmgb1	Hpn	Idh1	Irgm1	Mdm2	Med4	Mpo	Myc	Ncf2	Nedd1	Nos1	Nos2
E	Nos3	Nox1	Nox4	Noxa1	Noxo1	Nudt15	Pea15a	Ppp1r15b	Ppp3ca	Prdx1	Prdx2	Prdx6
F	Prkaca	Prnp	Prpf4	Psmb5	Ptx3	Rb1	Recql4	Rprm	Rras	Rrp1	Scd1	Scd2
G	Scd3	Sfn	Sod1	Sod2	Sod3	Tpo	Trp53	Txnip	Txnrd2	Ubc	Ucp3	Xpa
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	SBM0902788	ENSMUST00000 138063.1	Aass	ENSMUSG00 000029695	aminoadipate-semialdehyde synthase Source MGI Symbol Acc MGI 1353573
A02	SBM1045207	ENSMUST00000 159166.7	Als2	ENSMUSG00 000026024	alsin Rho guanine nucleotide exchange factor Source MGI Symbol Acc MGI 1921268
A03	SBM0912771	ENSMUST00000 173739.7	Apoe	ENSMUSG00 000002985	apolipoprotein E Source MGI Symbol Acc MGI 88057
A04	SBM0740166	ENSMUST00000 211615.1	Bax	ENSMUSG00 000003873	BCL2-associated X protein Source MGI Symbol Acc MGI 99702
A05	SBM0751583	ENSMUST00000 134357.1	Bcl2l1	ENSMUSG00 000007659	BCL2-like 1 Source MGI Symbol Acc MGI 88139
A06	SBM0858583	ENSMUST00000 153524.1	Calm1	ENSMUSG00 000001175	calmodulin 1 Source MGI Symbol Acc MGI 88251
A07	SBM0986499	ENSMUST00000 001845.12	Capns1	ENSMUSG00 000001794	calpain, small subunit 1 Source MGI Symbol Acc MGI 88266
A08	SBM0711514	ENSMUST00000 111168.3	Cat	ENSMUSG00 000027187	catalase Source MGI Symbol Acc MGI 88271
A09	SBM0727943	ENSMUST00000 115454.1	Cav1	ENSMUSG00 000007655	caveolin 1, caveolae protein Source MGI Symbol Acc MGI 102709
A10	SBM0706150	ENSMUST00000 093962.4	Ccnd1	ENSMUSG00 000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
A11	SBM0884128	ENSMUST00000 020576.7	Ccng1	ENSMUSG00 000020326	cyclin G1 Source MGI Symbol Acc MGI 102890
A12	SBM0733239	ENSMUST00000 037246.6	Ccs	ENSMUSG00 000034108	copper chaperone for superoxide dismutase Source MGI Symbol Acc MGI 1333783
B01	SBM0937806	ENSMUST00000 058746.6	Cd151	ENSMUSG00 000025510	CD151 antigen Source MGI Symbol Acc MGI 1096360
B02	SBM1034022	ENSMUST00000 023829.7	Cdkn1a	ENSMUSG00 000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B03	SBM0873270	ENSMUST00000 046506.6	Clcf1	ENSMUSG00 000040663	cardiotrophin-like cytokine factor 1 Source MGI Symbol Acc MGI 1930088
B04	SBM0677916	ENSMUST00000 225540.1	Ctsb	ENSMUSG00 000021939	cathepsin B Source MGI Symbol Acc MGI 88561
B05	SBM0717267	ENSMUST00000 212600.1	Cyba	ENSMUSG00 000006519	cytochrome b-245, alpha polypeptide Source MGI Symbol Acc MGI 1316658
B06	SBM0982911	ENSMUST00000 127193.1	Ddah1	ENSMUSG00 000028194	dimethylarginine dimethylaminohydrolase 1 Source MGI Symbol Acc MGI 1916469
B07	SBM0969954	ENSMUST00000 007255.12	Ddah2	ENSMUSG00 000007039	dimethylarginine dimethylaminohydrolase 2 Source MGI Symbol Acc MGI 1859016
B08	SBM0878952	ENSMUST00000 108588.8	Dlg4	ENSMUSG00 000020886	discs large MAGUK scaffold protein 4 Source MGI Symbol Acc MGI 1277959
B09	SBM0988180	ENSMUST00000 009157.3	Dynll1	ENSMUSG00 000009013	dynein light chain LC8-type 1 Source MGI Symbol Acc MGI 1861457
B10	SBM0782056	ENSMUST00000 064795.5	Egr1	ENSMUSG00 000038418	early growth response 1 Source MGI Symbol Acc MGI 95295
B11	SBM1063593	ENSMUST00000 125590.1	Epx	ENSMUSG00 000052234	eosinophil peroxidase Source MGI Symbol Acc MGI 107569
B12	SBM0850014	ENSMUST00000 062831.15	Ercc2	ENSMUSG00 000030400	excision repair cross-complementing rodent repair deficiency, complementation group 2 Source MGI Symbol Acc MGI 95413
C01	SBM0856649	ENSMUST00000 112472.3	Fas	ENSMUSG00 000024778	Fas (TNF receptor superfamily member 6) Source MGI Symbol Acc MGI 95484
C02	SBM0977461	ENSMUST00000 134311.1	Fos	ENSMUSG00 000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
C03	SBM0848661	ENSMUST00000 210676.1	Gab1	ENSMUSG00 000031714	growth factor receptor bound protein 2-associated protein 1 Source MGI Symbol Acc MGI 108088
C04	SBM0962210	ENSMUST00000 151958.1	Gadd45a	ENSMUSG00 000036390	growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc MGI 107799
C05	SBM0858533	ENSMUST00000 082429.6	Gpx1	ENSMUSG00 000063856	glutathione peroxidase 1 Source MGI Symbol Acc MGI 104887
C06	SBM0899268	ENSMUST00000 082431.3	Gpx2	ENSMUSG00 000042808	glutathione peroxidase 2 Source MGI Symbol Acc MGI 106609
C07	SBM0906281	ENSMUST00000 149324.1	Gpx3	ENSMUSG00 000018339	glutathione peroxidase 3 Source MGI Symbol Acc MGI 105102
C08	SBM0842398	ENSMUST00000 136081.1	Gpx4	ENSMUSG00 000075706	glutathione peroxidase 4 Source MGI Symbol Acc MGI 104767
C09	SBM0989192	ENSMUST00000 110491.8	Gpx5	ENSMUSG00 000004344	glutathione peroxidase 5 Source MGI Symbol Acc MGI 104886
C10	SBM0884498	ENSMUST00000 004453.8	Gpx6	ENSMUSG00 000004341	glutathione peroxidase 6 Source MGI Symbol Acc MGI 1922762
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM1021994	030332.6	Gpx7	000028597	glutathione peroxidase 7 Source MGI Symbol Acc MGI 1914555
C12	SBM1029073	ENSMUST00000 028335.12	Grin1	ENSMUSG00 000026959	glutamate receptor, ionotropic, NMDA1 (zeta 1) Source MGI Symbol Acc MGI 95819
D01	SBM0955512	ENSMUST00000 202133.3	Hmgb1	ENSMUSG00 000066551	high mobility group box 1 Source MGI Symbol Acc MGI 96113
D02	SBM1074749	ENSMUST00000 165124.7	Hpn	ENSMUSG00 000001249	hepsin Source MGI Symbol Acc MGI 1196620
D03	SBM1066582	ENSMUST00000 169032.7	Idh1	ENSMUSG00 000025950	isocitrate dehydrogenase 1 (NADP+), soluble Source MGI Symbol Acc MGI 96413
D04	SBM0768586	ENSMUST00000 097271.3	Irgm1	ENSMUSG00 000046879	immunity-related GTPase family M member 1 Source MGI Symbol Acc MGI 107567
D05	SBM0989223	ENSMUST00000 020408.15	Mdm2	ENSMUSG00 000020184	transformed mouse 3T3 cell double minute 2 Source MGI Symbol Acc MGI 96952
D06	SBM0914344	ENSMUST00000 022705.6	Med4	ENSMUSG00 000022109	mediator complex subunit 4 Source MGI Symbol Acc MGI 1914631
D07	SBM1011865	ENSMUST00000 107930.2	Mpo	ENSMUSG00 000009350	myeloperoxidase Source MGI Symbol Acc MGI 97137
D08	SBM0987162	ENSMUST00000 159338.1	Myc	ENSMUSG00 000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
D09	SBM1009456	ENSMUST00000 190323.6	Ncf2	ENSMUSG00 000026480	neutrophil cytosolic factor 2 Source MGI Symbol Acc MGI 97284
D10	SBM1086858	ENSMUST00000 216086.1	Nedd1	ENSMUSG00 000019988	neural precursor cell expressed, developmentally down-regulated gene 1 Source MGI Symbol Acc MGI 97293
D11	SBM0823743	ENSMUST00000 086451.11	Nos1	ENSMUSG00 000029361	nitric oxide synthase 1, neuronal Source MGI Symbol Acc MGI 97360
D12	SBM0835086	ENSMUST00000 208783.1	Nos2	ENSMUSG00 000020826	nitric oxide synthase 2, inducible Source MGI Symbol Acc MGI 97361
E01	SBM0681619	ENSMUST00000 030834.6	Nos3	ENSMUSG00 000028978	nitric oxide synthase 3, endothelial cell Source MGI Symbol Acc MGI 97362
E02	SBM0993594	ENSMUST00000 159231.2	Nox1	ENSMUSG00 000031257	NADPH oxidase 1 Source MGI Symbol Acc MGI 2450016
E03	SBM0915544	ENSMUST00000 126887.7	Nox4	ENSMUSG00 000030562	NADPH oxidase 4 Source MGI Symbol Acc MGI 1354184
E04	SBM0980396	ENSMUST00000 044018.7	Noxa1	ENSMUSG00 000036805	NADPH oxidase activator 1 Source MGI Symbol Acc MGI 2449980
E05	SBM0975396	ENSMUST00000 123026.7	Noxo1	ENSMUSG00 000019320	NADPH oxidase organizer 1 Source MGI Symbol Acc MGI 1919143
E06	SBM1042109	ENSMUST00000 043813.2	Nudt15	ENSMUSG00 000033405	nudix (nucleoside diphosphate linked moiety X)-type motif 15 Source MGI Symbol Acc MGI 2443366
E07	SBM0739016	ENSMUST00000 111247.7	Pea15a	ENSMUSG00 000013698	phosphoprotein enriched in astrocytes 15A Source MGI Symbol Acc MGI 104799
E08	SBM0807762	ENSMUST00000 052529.3	Ppp1r15b	ENSMUSG00 000046062	protein phosphatase 1, regulatory subunit 15B Source MGI Symbol Acc MGI 2444211
E09	SBM1084664	ENSMUST00000 070198.13	Ppp3ca	ENSMUSG00 000028161	protein phosphatase 3, catalytic subunit, alpha isoform Source MGI Symbol Acc MGI 107164
E10	SBM0764176	ENSMUST00000 129315.7	Prdx1	ENSMUSG00 000028691	peroxiredoxin 1 Source MGI Symbol Acc MGI 99523
E11	SBM0684492	ENSMUST00000 164807.1	Prdx2	ENSMUSG00 000005161	peroxiredoxin 2 Source MGI Symbol Acc MGI 109486
E12	SBM0987299	ENSMUST00000 139387.7	Prdx6	ENSMUSG00 000026701	peroxiredoxin 6 Source MGI Symbol Acc MGI 894320
F01	SBM0941812	ENSMUST00000 211558.1	Prkaca	ENSMUSG00 000005469	protein kinase, cAMP dependent, catalytic, alpha Source MGI Symbol Acc MGI 97592
F02	SBM0821511	ENSMUST00000 091288.12	Prnp	ENSMUSG00 000079037	prion protein Source MGI Symbol Acc MGI 97769
F03	SBM0936321	ENSMUST00000 084524.3	Prpf4	ENSMUSG00 000066148	pre-mRNA processing factor 4 Source MGI Symbol Acc MGI 1917302
F04	SBM0750722	ENSMUST00000 022803.5	Psmb5	ENSMUSG00 000022193	proteasome (prosome, macropain) subunit, beta type 5 Source MGI Symbol Acc MGI 1194513
F05	SBM0880764	ENSMUST00000 029421.5	Ptx3	ENSMUSG00 000027832	pentraxin related gene Source MGI Symbol Acc MGI 104641
F06	SBM0795530	ENSMUST00000 168495.1	Rb1	ENSMUSG00 000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F07	SBM0840147	ENSMUST00000 230544.1	Recql4	ENSMUSG00 000033762	RecQ protein-like 4 Source MGI Symbol Acc MGI 1931028
F08	SBM0760742	ENSMUST00000 100089.2	Rprm	ENSMUSG00 000075334	reprimo, TP53 dependent G2 arrest mediator candidate Source MGI Symbol Acc MGI 1915124
F09	SBM0942809	ENSMUST00000 044111.9	Rras	ENSMUSG00 000038387	related RAS viral (r-ras) oncogene Source MGI Symbol Acc MGI 98179
F10	SBM0959689	ENSMUST00000 217835.1	Rrp1	ENSMUSG00 000061032	ribosomal RNA processing 1 homolog (S. cerevisiae) Source MGI Symbol Acc MGI 1203500

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0890897	ENSMUST00000236824.1	Scd1	ENSMUSG00000037071	stearoyl-Coenzyme A desaturase 1 Source MGI Symbol Acc MGI 98239
F12	SBM1036702	ENSMUST00000026221.6	Scd2	ENSMUSG00000025203	stearoyl-Coenzyme A desaturase 2 Source MGI Symbol Acc MGI 98240
G01	SBM0918267	ENSMUST00000026220.6	Scd3	ENSMUSG00000025202	stearoyl-coenzyme A desaturase 3 Source MGI Symbol Acc MGI 1353437
G02	SBM1012777	ENSMUST00000057311.3	Sfn	ENSMUSG00000047281	stratifin Source MGI Symbol Acc MGI 1891831
G03	SBM0946306	ENSMUST00000023707.10	Sod1	ENSMUSG00000022982	superoxide dismutase 1, soluble Source MGI Symbol Acc MGI 98351
G04	SBM1063571	ENSMUST00000233791.1	Sod2	ENSMUSG00000006818	superoxide dismutase 2, mitochondrial Source MGI Symbol Acc MGI 98352
G05	SBM1072491	ENSMUST00000101208.5	Sod3	ENSMUSG00000072941	superoxide dismutase 3, extracellular Source MGI Symbol Acc MGI 103181
G06	SBM0913427	ENSMUST00000021005.14	Tpo	ENSMUSG00000020673	thyroid peroxidase Source MGI Symbol Acc MGI 98813
G07	SBM0841427	ENSMUST00000108657.3	Trp53	ENSMUSG00000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G08	SBM1060480	ENSMUST00000049093.7	Txnip	ENSMUSG00000038393	thioredoxin interacting protein Source MGI Symbol Acc MGI 1889549
G09	SBM0869696	ENSMUST00000115604.7	Txnrd2	ENSMUSG00000075704	thioredoxin reductase 2 Source MGI Symbol Acc MGI 1347023
G10	SBM1046001	ENSMUST00000136312.1	Ubc	ENSMUSG00000008348	ubiquitin C Source MGI Symbol Acc MGI 98889
G11	SBM0890962	ENSMUST00000107059.1	Ucp3	ENSMUSG00000032942	uncoupling protein 3 (mitochondrial, proton carrier) Source MGI Symbol Acc MGI 1099787
G12	SBM0953059	ENSMUST00000058232.10	Xpa	ENSMUSG00000028329	xeroderma pigmentosum, complementation group A Source MGI Symbol Acc MGI 99135
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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