

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

Mouse Signal Transduction PathwayFinder™

Cat. no. 249950 SBMM-014ZA

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	Acsl3	Acsl4	Acsl5	Adm	Arnt	Atf4	Axin2	Bax	Bbc3	Bcl2	Bcl2a1a	Bcl2l1
B	Birc3	Bmp2	Bmp4	Bltp2	Car9	Ccl5	Ccnd1	Ccnd2	Cdkn1a	Cdkn1b	Cebpd	Cpt2
C	Csf1	Dab2	Egfr	Emp1	Epo	Fabp1	Fas	Fcer2a	Fosl1	Fth1	Gadd45a	Gadd45b
D	Gata3	Gclc	Gclm	Gsr	Herpud1	Hes1	Hes5	Hey1	Hey2	Heyl	Hmax1	Icam1
E	Id1	Ifng	Ifrd1	Irf1	Jag1	Ldha	Lfng	Lrg1	Mcl1	Mmp7	Myc	Notch1
F	Nqo1	Olr1	Pcna	Ppard	Ptch1	Rb1	Serpine1	Slc27a4	Slc2a1	Socs3	Sorbs1	Sqstm1
G	Stat1	Tnf	Tnfrsf10	Txn1	Txnrd1	Vegfa	Ccn4	Wnt1	Wnt2b	Wnt3a	Wnt5a	Wnt6
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	SBM0941480	ENSMUST00000142704.7	Acsl3	ENSMUSG0000032883	acyl-CoA synthetase long-chain family member 3 Source MGI Symbol Acc MGI 1921455
A02	SBM0931597	ENSMUST00000033634.4	Acsl4	ENSMUSG00000031278	acyl-CoA synthetase long-chain family member 4 Source MGI Symbol Acc MGI 1354713
A03	SBM0675306	ENSMUST00000043150.5	Acsl5	ENSMUSG0000024981	acyl-CoA synthetase long-chain family member 5 Source MGI Symbol Acc MGI 1919129
A04	SBM0999945	ENSMUST00000185766.1	Adm	ENSMUSG0000030790	adrenomedullin Source MGI Symbol Acc MGI 108058
A05	SBM0815999	ENSMUST00000140060.1	Arnt	ENSMUSG0000015522	aryl hydrocarbon receptor nuclear translocator Source MGI Symbol Acc MGI 88071
A06	SBM1055409	ENSMUST00000230434.1	Atf4	ENSMUSG0000042406	activating transcription factor 4 Source MGI Symbol Acc MGI 88096
A07	SBM0714773	ENSMUST00000106711.1	Axin2	ENSMUSG0000000142	axin 2 Source MGI Symbol Acc MGI 1270862
A08	SBM0740166	ENSMUST00000211615.1	Bax	ENSMUSG0000003873	BCL2-associated X protein Source MGI Symbol Acc MGI 99702
A09	SBM1088969	ENSMUST00000002152.12	Bbc3	ENSMUSG0000002083	BCL2 binding component 3 Source MGI Symbol Acc MGI 2181667
A10	SBM0876340	ENSMUST00000189999.1	Bcl2	ENSMUSG0000057329	B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138
A11	SBM1020275	ENSMUST00000098485.3	Bcl2a1a	ENSMUSG0000102037	B cell leukemia/lymphoma 2 related protein A1a Source MGI Symbol Acc MGI 102687
A12	SBM0751583	ENSMUST00000134357.1	Bcl2l1	ENSMUSG0000007659	BCL2-like 1 Source MGI Symbol Acc MGI 88139
B01	SBM0873926	ENSMUST00000115672.1	Birc3	ENSMUSG0000032000	baculoviral IAP repeat-containing 3 Source MGI Symbol Acc MGI 1197007
B02	SBM0831820	ENSMUST00000028836.6	Bmp2	ENSMUSG0000027358	bone morphogenetic protein 2 Source MGI Symbol Acc MGI 88177
B03	SBM0845886	ENSMUST00000100676.2	Bmp4	ENSMUSG0000021835	bone morphogenetic protein 4 Source MGI Symbol Acc MGI 88180
B04	SBM0925245	ENSMUST00000020692.6	Btg2	ENSMUSG0000020423	B cell translocation gene 2, anti-proliferative Source MGI Symbol Acc MGI 108384
B05	SBM0866761	ENSMUST00000124114.7	Car9	ENSMUSG0000028463	carbonic anhydrase 9 Source MGI Symbol Acc MGI 2447188
B06	SBM0703029	ENSMUST00000125015.1	Ccl5	ENSMUSG0000035042	chemokine (C-C motif) ligand 5 Source MGI Symbol Acc MGI 98262
B07	SBM0706150	ENSMUST00000093962.4	Ccnd1	ENSMUSG0000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
B08	SBM0977018	ENSMUST00000201066.1	Ccnd2	ENSMUSG0000000184	cyclin D2 Source MGI Symbol Acc MGI 88314
B09	SBM1034022	ENSMUST00000023829.7	Cdkn1a	ENSMUSG0000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B10	SBM1006924	ENSMUST00000067327.10	Cdkn1b	ENSMUSG0000003031	cyclin-dependent kinase inhibitor 1B Source MGI Symbol Acc MGI 104565
B11	SBM0962498	ENSMUST00000096232.5	Cebpd	ENSMUSG0000071637	CCAAT/enhancer binding protein (C/EBP), delta Source MGI Symbol Acc MGI 103573
B12	SBM0911444	ENSMUST00000030345.14	Cpt2	ENSMUSG0000028607	carnitine palmitoyltransferase 2 Source MGI Symbol Acc MGI 109176
C01	SBM0903322	ENSMUST00000155557.1	Csf1	ENSMUSG0000014599	colony stimulating factor 1 (macrophage) Source MGI Symbol Acc MGI 1339753
C02	SBM0997637	ENSMUST00000080880.11	Dab2	ENSMUSG0000022150	disabled 2, mitogen-responsive phosphoprotein Source MGI Symbol Acc MGI 109175
C03	SBM1033270	ENSMUST00000020329.12	Egfr	ENSMUSG0000020122	epidermal growth factor receptor Source MGI Symbol Acc MGI 95294
C04	SBM0723043	ENSMUST00000204299.1	Emp1	ENSMUSG0000030208	epithelial membrane protein 1 Source MGI Symbol Acc MGI 107941
C05	SBM0965635	ENSMUST00000111038.7	Epo	ENSMUSG0000029711	erythropoietin Source MGI Symbol Acc MGI 95407
C06	SBM0729972	ENSMUST00000067492.7	Fabp1	ENSMUSG0000054422	fatty acid binding protein 1, liver Source MGI Symbol Acc MGI 95479
C07	SBM0856649	ENSMUST00000112472.3	Fas	ENSMUSG0000024778	Fas (TNF receptor superfamily member 6) Source MGI Symbol Acc MGI 95484
C08	SBM0844408	ENSMUST00000005678.5	Fcer2a	ENSMUSG0000005540	Fc receptor, IgE, low affinity II, alpha polypeptide Source MGI Symbol Acc MGI 95497
C09	SBM0970102	ENSMUST00000235958.1	Fosl1	ENSMUSG0000024912	fos-like antigen 1 Source MGI Symbol Acc MGI 107179
C10	SBM0754118	ENSMUST00000235196.1	Fth1	ENSMUSG0000024661	ferritin heavy polypeptide 1 Source MGI Symbol Acc MGI 95588
		ENSMUST000000		ENSMUSG00	growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0962210	151958.1	Gadd45a	000036390	MGI 107799
C12	SBM0915027	ENSMUST00000220246.1	Gadd45b	ENSMUSG0000015312	growth arrest and DNA-damage-inducible 45 beta Source MGI Symbol Acc MGI 107776
D01	SBM0782281	ENSMUST00000147533.1	Gata3	ENSMUSG0000015619	GATA binding protein 3 Source MGI Symbol Acc MGI 95663
D02	SBM1048397	ENSMUST00000034905.8	Gclc	ENSMUSG0000002350	glutamate-cysteine ligase, catalytic subunit Source MGI Symbol Acc MGI 104990
D03	SBM0944392	ENSMUST00000029769.13	Gclm	ENSMUSG00000028124	glutamate-cysteine ligase, modifier subunit Source MGI Symbol Acc MGI 104995
D04	SBM0942303	ENSMUST00000033992.8	Gsr	ENSMUSG00000031584	glutathione reductase Source MGI Symbol Acc MGI 95804
D05	SBM0746216	ENSMUST00000161085.7	Herpud1	ENSMUSG00000031770	homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1 Source MGI Symbol Acc MGI 1927406
D06	SBM0965557	ENSMUST00000023171.7	Hes1	ENSMUSG00000022528	hes family bHLH transcription factor 1 Source MGI Symbol Acc MGI 104853
D07	SBM1008430	ENSMUST00000151480.1	Hes5	ENSMUSG00000048001	hes family bHLH transcription factor 5 Source MGI Symbol Acc MGI 104876
D08	SBM0693801	ENSMUST00000192102.1	Hey1	ENSMUSG00000040289	hairy/enhancer-of-split related with YRPW motif 1 Source MGI Symbol Acc MGI 1341800
D09	SBM0700946	ENSMUST00000019924.8	Hey2	ENSMUSG00000019789	hairy/enhancer-of-split related with YRPW motif 2 Source MGI Symbol Acc MGI 1341884
D10	SBM0821276	ENSMUST00000127172.1	Heyl	ENSMUSG00000032744	hairy/enhancer-of-split related with YRPW motif-like Source MGI Symbol Acc MGI 1860511
D11	SBM0936413	ENSMUST00000005548.7	Hmox1	ENSMUSG00000005413	heme oxygenase 1 Source MGI Symbol Acc MGI 96163
D12	SBM0806584	ENSMUST00000215003.1	Icam1	ENSMUSG00000037405	intercellular adhesion molecule 1 Source MGI Symbol Acc MGI 96392
E01	SBM0688367	ENSMUST00000109824.1	Id1	ENSMUSG00000042745	inhibitor of DNA binding 1 Source MGI Symbol Acc MGI 96396
E02	SBM0903694	ENSMUST00000068592.4	Ifng	ENSMUSG00000055170	interferon gamma Source MGI Symbol Acc MGI 107656
E03	SBM0791718	ENSMUST00000165027.8	Ifrd1	ENSMUSG00000001627	interferon-related developmental regulator 1 Source MGI Symbol Acc MGI 1316717
E04	SBM1091850	ENSMUST00000138913.7	Irf1	ENSMUSG00000018899	interferon regulatory factor 1 Source MGI Symbol Acc MGI 96590
E05	SBM0986327	ENSMUST00000028735.7	Jag1	ENSMUSG00000027276	jagged 1 Source MGI Symbol Acc MGI 1095416
E06	SBM1042883	ENSMUST00000209984.1	Ldha	ENSMUSG00000063229	lactate dehydrogenase A Source MGI Symbol Acc MGI 96759
E07	SBM1047216	ENSMUST00000200626.4	Lfng	ENSMUSG00000029570	LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase Source MGI Symbol Acc MGI 1095413
E08	SBM1035605	ENSMUST00000041357.8	Lrg1	ENSMUSG00000037095	leucine-rich alpha-2-glycoprotein 1 Source MGI Symbol Acc MGI 1924155
E09	SBM0701175	ENSMUST00000178686.1	Mcl1	ENSMUSG00000038612	myeloid cell leukemia sequence 1 Source MGI Symbol Acc MGI 101769
E10	SBM0709342	ENSMUST00000018767.7	Mmp7	ENSMUSG00000018623	matrix metalloproteinase 7 Source MGI Symbol Acc MGI 103189
E11	SBM0987162	ENSMUST00000159338.1	Myc	ENSMUSG00000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E12	SBM1060528	ENSMUST00000132820.1	Notch1	ENSMUSG00000026923	notch 1 Source MGI Symbol Acc MGI 97363
F01	SBM0878519	ENSMUST00000003947.8	Nqo1	ENSMUSG00000003849	NAD(P)H dehydrogenase, quinone 1 Source MGI Symbol Acc MGI 103187
F02	SBM1042162	ENSMUST00000183258.7	Olr1	ENSMUSG00000030162	oxidized low density lipoprotein (lectin-like) receptor 1 Source MGI Symbol Acc MGI 1261434
F03	SBM0823260	ENSMUST00000140338.1	Pcna	ENSMUSG00000027342	proliferating cell nuclear antigen Source MGI Symbol Acc MGI 97503
F04	SBM0865243	ENSMUST00000169040.2	Ppard	ENSMUSG00000002250	peroxisome proliferator activator receptor delta Source MGI Symbol Acc MGI 101884
F05	SBM0724304	ENSMUST00000194663.5	Ptch1	ENSMUSG00000021466	patched 1 Source MGI Symbol Acc MGI 105373
F06	SBM0795530	ENSMUST00000168495.1	Rb1	ENSMUSG00000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F07	SBM0809699	ENSMUST00000041388.10	Serpine1	ENSMUSG00000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
F08	SBM0823234	ENSMUST00000136444.1	Slc27a4	ENSMUSG00000059316	solute carrier family 27 (fatty acid transporter), member 4 Source MGI Symbol Acc MGI 1347347
F09	SBM1008931	ENSMUST00000144329.7	Slc2a1	ENSMUSG00000028645	solute carrier family 2 (facilitated glucose transporter), member 1 Source MGI Symbol Acc MGI 95755
F10	SBM0977814	ENSMUST00000054002.3	Socs3	ENSMUSG00000053113	suppressor of cytokine signaling 3 Source MGI Symbol Acc MGI 1201791

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM1083181	ENSMUST00000224667.1	Sorbs1	ENSMUSG0000025006	sorbin and SH3 domain containing 1 Source MGI Symbol Acc MGI 700014
F12	SBM1075778	ENSMUST00000131214.1	Sqstm1	ENSMUSG0000015837	sequestosome 1 Source MGI Symbol Acc MGI 107931
G01	SBM0954168	ENSMUST00000070968.13	Stat1	ENSMUSG0000026104	signal transducer and activator of transcription 1 Source MGI Symbol Acc MGI 103063
G02	SBM0788439	ENSMUST00000025263.14	Tnf	ENSMUSG0000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G03	SBM0969669	ENSMUST00000046383.11	Tnfsf10	ENSMUSG0000039304	tumor necrosis factor (ligand) superfamily, member 10 Source MGI Symbol Acc MGI 107414
G04	SBM0878537	ENSMUST00000030051.5	Txn1	ENSMUSG0000028367	thioredoxin 1 Source MGI Symbol Acc MGI 98874
G05	SBM1225401	ENSMUST000000218694.1	Txnrd1	ENSMUSG0000020250	thioredoxin reductase 1 Source MGI Symbol Acc MGI 1354175
G06	SBM1079198	ENSMUST000000217017.1	Vegfa	ENSMUSG0000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
G07	SBM1010994	ENSMUST000000230535.1	Ccn4	ENSMUSG0000005124	cellular communication network factor 4 Source MGI Symbol Acc MGI 1197008
G08	SBM0828761	ENSMUST00000023734.7	Wnt1	ENSMUSG0000022997	wingless-type MMTV integration site family, member 1 Source MGI Symbol Acc MGI 98953
G09	SBM1017184	ENSMUST00000029429.5	Wnt2b	ENSMUSG0000027840	wingless-type MMTV integration site family, member 2B Source MGI Symbol Acc MGI 1261834
G10	SBM0757599	ENSMUST00000010044.7	Wnt3a	ENSMUSG0000009900	wingless-type MMTV integration site family, member 3A Source MGI Symbol Acc MGI 98956
G11	SBM0893772	ENSMUST000000112272.1	Wnt5a	ENSMUSG0000021994	wingless-type MMTV integration site family, member 5A Source MGI Symbol Acc MGI 98958
G12	SBM0965462	ENSMUST000000189544.1	Wnt6	ENSMUSG0000033227	wingless-type MMTV integration site family, member 6 Source MGI Symbol Acc MGI 98960
H01	SBM1220560	ENSMUST000000100497.10	Actb	ENSMUSG0000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST000000102476.4	B2m	ENSMUSG0000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST000000117757.8	Gapdh	ENSMUSG0000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST000000026613.13	Gusb	ENSMUSG0000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST000000166469.7	Hsp90ab1	ENSMUSG0000023944	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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