

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

## Mouse NFkB Signaling Targets

Cat. no. 249950 SBMM-225ZA

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](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Adm	Agt	Akt1	Aldh3a2	Bcl2a1a	Bcl2l1	Birc2	Birc3	C3	C4a	Ccl12	Ccl22
B	Ccl5	Ccnd1	Ccr5	Cd40	Cd74	Cd80	Cd83	Cdkn1a	Cfb	Csf1	Csf2	Csf2rb
C	Csf3	Cxcl1	Cxcl10	Cxcl3	Cxcl9	Egfr	Egr2	F3	F8	Fas	Fasl	Gadd45b
D	Icam1	Ifnb1	Ifng	Il12b	Il15	Il1a	Il1b	Il1r2	Il1rn	Il2	Il2ra	Il4
E	Il6	Ins2	Irf1	Lta	Ltb	Map2k6	Mif	Mmp9	Myc	Myd88	Ncoa3	Nfkb1
F	Nfkb2	Nfkbio	Nqo1	Nr4a2	Pdgfrb	Plou	Ptgs2	Rel	Rela	Relb	Sele	Selp
G	Snap25	Sod2	Stat1	Stat3	Stat5b	Tnf	Tnfrsf1b	Tnfrsf10	Traf2	Trp53	Vcam1	Xiap
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	SBM0999945	ENSMUST00000185766.1	Adm	ENSMUSG0000030790	adrenomedullin Source MGI Symbol Acc MGI 108058
A02	SBM0838798	ENSMUST00000063278.6	Agt	ENSMUSG00000031980	angiotensinogen (serpin peptidase inhibitor, clade A, member 8) Source MGI Symbol Acc MGI 87963
A03	SBM1020452	ENSMUST00000144550.8	Akt1	ENSMUSG0000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A04	SBM0895686	ENSMUST00000147291.7	Aldh3a2	ENSMUSG0000010025	aldehyde dehydrogenase family 3, subfamily A2 Source MGI Symbol Acc MGI 1353452
A05	SBM1020275	ENSMUST00000098485.3	Bcl2a1a	ENSMUSG0000102037	B cell leukemia/lymphoma 2 related protein A1a Source MGI Symbol Acc MGI 102687
A06	SBM0751583	ENSMUST00000134357.1	Bcl2l1	ENSMUSG0000007659	BCL2-like 1 Source MGI Symbol Acc MGI 88139
A07	SBM0791338	ENSMUST00000190341.6	Birc2	ENSMUSG00000057367	baculoviral IAP repeat-containing 2 Source MGI Symbol Acc MGI 1197009
A08	SBM0873926	ENSMUST00000115672.1	Birc3	ENSMUSG00000032000	baculoviral IAP repeat-containing 3 Source MGI Symbol Acc MGI 1197007
A09	SBM0754550	ENSMUST00000024988.14	C3	ENSMUSG00000024164	complement component 3 Source MGI Symbol Acc MGI 88227
A10	SBM0834073	ENSMUST00000161121.7	C4a	ENSMUSG0000015451	complement component 4A (Rodgers blood group) Source MGI Symbol Acc MGI 98320
A11	SBM0687223	ENSMUST0000000194.3	Ccl12	ENSMUSG0000035352	chemokine (C-C motif) ligand 12 Source MGI Symbol Acc MGI 108224
A12	SBM0685855	ENSMUST00000034231.3	Ccl22	ENSMUSG00000031779	chemokine (C-C motif) ligand 22 Source MGI Symbol Acc MGI 1306779
B01	SBM0703029	ENSMUST00000125015.1	Ccl5	ENSMUSG0000035042	chemokine (C-C motif) ligand 5 Source MGI Symbol Acc MGI 98262
B02	SBM0706150	ENSMUST00000093962.4	Ccnd1	ENSMUSG00000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
B03	SBM0964476	ENSMUST00000111442.2	Ccr5	ENSMUSG0000079227	chemokine (C-C motif) receptor 5 Source MGI Symbol Acc MGI 107182
B04	SBM0757957	ENSMUST00000073707.8	Cd40	ENSMUSG0000017652	CD40 antigen Source MGI Symbol Acc MGI 88336
B05	SBM0877871	ENSMUST00000097563.8	Cd74	ENSMUSG0000024610	CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated) Source MGI Symbol Acc MGI 96534
B06	SBM1043965	ENSMUST00000232409.1	Cd80	ENSMUSG0000075122	CD80 antigen Source MGI Symbol Acc MGI 101775
B07	SBM0904565	ENSMUST00000015540.3	Cd83	ENSMUSG0000015396	CD83 antigen Source MGI Symbol Acc MGI 1328316
B08	SBM1034022	ENSMUST00000023829.7	Cdkn1a	ENSMUSG0000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B09	SBM0811827	ENSMUST00000128767.7	Cfb	ENSMUSG0000090231	complement factor B Source MGI Symbol Acc MGI 105975
B10	SBM0903322	ENSMUST00000155557.1	Csf1	ENSMUSG0000014599	colony stimulating factor 1 (macrophage) Source MGI Symbol Acc MGI 1339753
B11	SBM1080991	ENSMUST00000019060.5	Csf2	ENSMUSG0000018916	colony stimulating factor 2 (granulocyte-macrophage) Source MGI Symbol Acc MGI 1339752
B12	SBM0742677	ENSMUST00000096355.3	Csf2rb	ENSMUSG0000071713	colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) Source MGI Symbol Acc MGI 1339759
C01	SBM0837472	ENSMUST00000038886.2	Csf3	ENSMUSG0000038067	colony stimulating factor 3 (granulocyte) Source MGI Symbol Acc MGI 1339751
C02	SBM0998835	ENSMUST00000031327.8	Cxcl1	ENSMUSG0000029380	chemokine (C-X-C motif) ligand 1 Source MGI Symbol Acc MGI 108068
C03	SBM0996179	ENSMUST00000118006.2	Cxcl10	ENSMUSG0000034855	chemokine (C-X-C motif) ligand 10 Source MGI Symbol Acc MGI 1352450
C04	SBM0747228	ENSMUST00000201840.1	Cxcl3	ENSMUSG0000029379	chemokine (C-X-C motif) ligand 3 Source MGI Symbol Acc MGI 3037818
C05	SBM0993686	ENSMUST00000113093.4	Cxcl9	ENSMUSG0000029417	chemokine (C-X-C motif) ligand 9 Source MGI Symbol Acc MGI 1352449
C06	SBM1033270	ENSMUST00000020329.12	Egfr	ENSMUSG0000020122	epidermal growth factor receptor Source MGI Symbol Acc MGI 95294
C07	SBM0767336	ENSMUST00000145936.1	Egr2	ENSMUSG0000037868	early growth response 2 Source MGI Symbol Acc MGI 95296
C08	SBM0963811	ENSMUST00000029771.12	F3	ENSMUSG0000028128	coagulation factor III Source MGI Symbol Acc MGI 88381
C09	SBM0809754	ENSMUST00000147349.7	F8	ENSMUSG0000031196	coagulation factor VIII Source MGI Symbol Acc MGI 88383
C10	SBM0856649	ENSMUST00000112472.3	Fas	ENSMUSG0000024778	Fas (TNF receptor superfamily member 6) Source MGI Symbol Acc MGI 95484
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0967876	000834.3	FasL	000000817	Fas ligand (TNF superfamily, member 6) Source MGI Symbol Acc MGI 99255
C12	SBM0915027	ENSMUST00000220246.1	Gadd45b	ENSMUSG0000015312	growth arrest and DNA-damage-inducible 45 beta Source MGI Symbol Acc MGI 107776
D01	SBM0806584	ENSMUST00000215003.1	Icam1	ENSMUSG0000037405	intercellular adhesion molecule 1 Source MGI Symbol Acc MGI 96392
D02	SBM0872658	ENSMUST00000055671.4	Ifnb1	ENSMUSG0000048806	interferon beta 1, fibroblast Source MGI Symbol Acc MGI 107657
D03	SBM0903694	ENSMUST00000068592.4	Ifnb2	ENSMUSG0000055170	interferon gamma Source MGI Symbol Acc MGI 107656
D04	SBM0957286	ENSMUST00000102796.9	Il12b	ENSMUSG0000004296	interleukin 12b Source MGI Symbol Acc MGI 96540
D05	SBM0737685	ENSMUST00000034148.6	Il15	ENSMUSG0000031712	interleukin 15 Source MGI Symbol Acc MGI 103014
D06	SBM1007460	ENSMUST00000028882.1	Il1a	ENSMUSG0000027399	interleukin 1 alpha Source MGI Symbol Acc MGI 96542
D07	SBM0738485	ENSMUST00000028881.13	Il1b	ENSMUSG0000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
D08	SBM0820917	ENSMUST00000195770.1	Il1r2	ENSMUSG0000026073	interleukin 1 receptor, type II Source MGI Symbol Acc MGI 96546
D09	SBM0732530	ENSMUST00000142093.6	Il1rn	ENSMUSG0000026981	interleukin 1 receptor antagonist Source MGI Symbol Acc MGI 96547
D10	SBM0797059	ENSMUST00000029275.5	Il2	ENSMUSG0000027720	interleukin 2 Source MGI Symbol Acc MGI 96548
D11	SBM1067326	ENSMUST00000028111.5	Il2ra	ENSMUSG0000026770	interleukin 2 receptor, alpha chain Source MGI Symbol Acc MGI 96549
D12	SBM0926369	ENSMUST00000150568.7	Il4	ENSMUSG0000000869	interleukin 4 Source MGI Symbol Acc MGI 96556
E01	SBM0742623	ENSMUST00000026845.11	Il6	ENSMUSG0000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
E02	SBM0867142	ENSMUST00000125933.1	Ins2	ENSMUSG0000000215	insulin II Source MGI Symbol Acc MGI 96573
E03	SBM1091850	ENSMUST00000138913.7	Irf1	ENSMUSG0000018899	interferon regulatory factor 1 Source MGI Symbol Acc MGI 96590
E04	SBM0790437	ENSMUST00000025266.5	Lta	ENSMUSG0000024402	lymphotoxin A Source MGI Symbol Acc MGI 104797
E05	SBM0777783	ENSMUST00000173510.1	Ltb	ENSMUSG0000024399	lymphotoxin B Source MGI Symbol Acc MGI 104796
E06	SBM0854481	ENSMUST00000133920.1	Map2k6	ENSMUSG0000020623	mitogen-activated protein kinase kinase 6 Source MGI Symbol Acc MGI 1346870
E07	SBM1054907	ENSMUST00000139462.1	Mitf	ENSMUSG0000035158	melanogenesis associated transcription factor Source MGI Symbol Acc MGI 104554
E08	SBM1089430	ENSMUST00000017881.2	Mmp9	ENSMUSG0000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
E09	SBM0987162	ENSMUST00000159338.1	Myc	ENSMUSG0000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E10	SBM0986804	ENSMUST00000035092.6	Myd88	ENSMUSG0000032508	myeloid differentiation primary response gene 88 Source MGI Symbol Acc MGI 108005
E11	SBM0723993	ENSMUST00000153507.1	Ncoa3	ENSMUSG0000027678	nuclear receptor coactivator 3 Source MGI Symbol Acc MGI 1276535
E12	SBM0841870	ENSMUST00000164430.6	Nfkb1	ENSMUSG0000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
F01	SBM0970553	ENSMUST00000237761.1	Nfkb2	ENSMUSG0000025225	nuclear factor of kappa light polypeptide gene enhancer in B cells 2, p49/p100 Source MGI Symbol Acc MGI 1099800
F02	SBM0696431	ENSMUST00000021413.8	Nfkbia	ENSMUSG0000021025	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, alpha Source MGI Symbol Acc MGI 104741
F03	SBM0878519	ENSMUST00000003947.8	Nqo1	ENSMUSG0000003849	NAD(P)H dehydrogenase, quinone 1 Source MGI Symbol Acc MGI 103187
F04	SBM1012315	ENSMUST00000183542.7	Nr4a2	ENSMUSG0000026826	nuclear receptor subfamily 4, group A, member 2 Source MGI Symbol Acc MGI 1352456
F05	SBM0947438	ENSMUST00000005000.7	Pdgfb	ENSMUSG0000000489	platelet derived growth factor, B polypeptide Source MGI Symbol Acc MGI 97528
F06	SBM0733272	ENSMUST00000224141.1	Plau	ENSMUSG0000021822	plasminogen activator, urokinase Source MGI Symbol Acc MGI 97611
F07	SBM0782881	ENSMUST00000035065.8	Ptgs2	ENSMUSG0000032487	prostaglandin-endoperoxide synthase 2 Source MGI Symbol Acc MGI 97798
F08	SBM0781183	ENSMUST00000102864.4	Rel	ENSMUSG0000020275	reticuloendotheliosis oncogene Source MGI Symbol Acc MGI 97897
F09	SBM0937498	ENSMUST00000237361.1	Rela	ENSMUSG0000024927	v-rel reticuloendotheliosis viral oncogene homolog A (avian) Source MGI Symbol Acc MGI 103290
F10	SBM1089153	ENSMUST00000094762.9	Relb	ENSMUSG0000002983	avian reticuloendotheliosis viral (v-rel) oncogene related B Source MGI Symbol Acc MGI 103289

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0765795	ENSMUST00000027874.5	Sele	ENSMUSG0000026582	selectin, endothelial cell Source MGI Symbol Acc MGI 98278
F12	SBM1080696	ENSMUST00000161020.7	Selp	ENSMUSG0000026580	selectin, platelet Source MGI Symbol Acc MGI 98280
G01	SBM0825941	ENSMUST00000125486.1	Snap25	ENSMUSG0000027273	synaptosomal-associated protein 25 Source MGI Symbol Acc MGI 98331
G02	SBM1063571	ENSMUST00000233791.1	Sod2	ENSMUSG0000006818	superoxide dismutase 2, mitochondrial Source MGI Symbol Acc MGI 98352
G03	SBM0954168	ENSMUST00000070968.13	Stat1	ENSMUSG0000026104	signal transducer and activator of transcription 1 Source MGI Symbol Acc MGI 103063
G04	SBM0821931	ENSMUST00000103114.7	Stat3	ENSMUSG0000004040	signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038
G05	SBM0792638	ENSMUST00000126266.1	Stat5b	ENSMUSG0000020919	signal transducer and activator of transcription 5B Source MGI Symbol Acc MGI 103035
G06	SBM0788439	ENSMUST00000025263.14	Tnf	ENSMUSG0000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G07	SBM0979488	ENSMUST00000143055.1	Tnfrsf1b	ENSMUSG0000028599	tumor necrosis factor receptor superfamily, member 1b Source MGI Symbol Acc MGI 1314883
G08	SBM0969669	ENSMUST00000046383.11	Tnfsf10	ENSMUSG0000039304	tumor necrosis factor (ligand) superfamily, member 10 Source MGI Symbol Acc MGI 107414
G09	SBM0686660	ENSMUST00000151742.1	Traf2	ENSMUSG0000026942	TNF receptor-associated factor 2 Source MGI Symbol Acc MGI 101835
G10	SBM0841427	ENSMUST00000108657.3	Trp53	ENSMUSG0000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G11	SBM1225402	ENSMUST00000029574.12	Vcam1	ENSMUSG0000027962	vascular cell adhesion molecule 1 Source MGI Symbol Acc MGI 98926
G12	SBM0766940	ENSMUST00000115095.8	Xiap	ENSMUSG0000025860	X-linked inhibitor of apoptosis Source MGI Symbol Acc MGI 107572
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG0000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG0000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG0000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG0000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	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 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 $\mu$ l QuantiNova SYBR Green RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ 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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