

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

Mouse TGFb Signaling Targets

Cat. no. 249950 SBMM-235ZA

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	Acta2	Acrv1	Acrv1	Agf	Aip1	Ar	Atf3	Atf4	Bach1	Bcl2l1	Bdnf	Bhlhe40
B	Brd2	Cdc6	Cdkn1b	Cebpb	Creb1	Crebbp	Cryab	Cttnb1	Dnaja1	E2f4	Emp1	Eng
C	Ep300	Ephb2	Fn1	Fos	Furin	Gadd45b	Gli2	Gtf2i	Herpud1	Hes1	Hey1	Hmox1
D	Id1	Id2	Id3	Ifrd1	Il10	Klf10	Map3k7	Mapk14	Mapk8	Mbd1	Mmp2	Max2
E	Myc	Myd1	Nfib	Nfkbia	Notch1	Pdgfra	Plg	Ppara	Plgs2	Pthlh	Pik2	Pik2b
F	Rad21	Rara	Rbl1	Rhoa	Rhob	Rune1	S100a8	Serpine1	Shh	Smad1	Smad3	Smad5
G	Smad6	Snai1	Sox4	Sp1	Srebf2	Tgfb2	Tgfb2	Thbs1	Tnfrsf10	Txnip	Vegfa	Vwf1
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	SBM0729572	ENSMUST00000238147.1	Acta2	ENSMUSG0000035783	actin, alpha 2, smooth muscle, aorta Source MGI Symbol Acc MGI 87909
A02	SBM0844679	ENSMUST00000145495.7	Acvr1	ENSMUSG0000026836	activin A receptor, type 1 Source MGI Symbol Acc MGI 87911
A03	SBM0940120	ENSMUST00000120028.7	Acvr1l	ENSMUSG0000000530	activin A receptor, type II-like 1 Source MGI Symbol Acc MGI 1338946
A04	SBM0838798	ENSMUST00000063278.6	Agt	ENSMUSG0000031980	angiotensinogen (serpin peptidase inhibitor, clade A, member 8) Source MGI Symbol Acc MGI 87963
A05	SBM0757277	ENSMUST00000048207.9	Aipl1	ENSMUSG0000040554	aryl hydrocarbon receptor-interacting protein-like 1 Source MGI Symbol Acc MGI 2148800
A06	SBM0829583	ENSMUST00000052837.8	Ar	ENSMUSG0000046532	androgen receptor Source MGI Symbol Acc MGI 88064
A07	SBM0766362	ENSMUST00000131854.1	Atf3	ENSMUSG0000026628	activating transcription factor 3 Source MGI Symbol Acc MGI 109384
A08	SBM1055409	ENSMUST00000230434.1	Atf4	ENSMUSG0000042406	activating transcription factor 4 Source MGI Symbol Acc MGI 88096
A09	SBM0980775	ENSMUST00000026703.5	Bach1	ENSMUSG0000025612	BTB and CNC homology 1, basic leucine zipper transcription factor 1 Source MGI Symbol Acc MGI 894680
A10	SBM0751583	ENSMUST00000134357.1	Bcl2l1	ENSMUSG0000007659	BCL2-like 1 Source MGI Symbol Acc MGI 88139
A11	SBM0985592	ENSMUST00000111042.2	Bdnf	ENSMUSG0000048482	brain derived neurotrophic factor Source MGI Symbol Acc MGI 88145
A12	SBM1059378	ENSMUST00000163617.1	Bhlhe40	ENSMUSG0000030103	basic helix-loop-helix family, member e40 Source MGI Symbol Acc MGI 1097714
B01	SBM1012466	ENSMUST00000025193.13	Brd2	ENSMUSG0000024335	bromodomain containing 2 Source MGI Symbol Acc MGI 99495
B02	SBM0867085	ENSMUST00000133779.8	Cdc6	ENSMUSG00000017499	cell division cycle 6 Source MGI Symbol Acc MGI 1345150
B03	SBM1006924	ENSMUST00000067327.10	Cdkn1b	ENSMUSG0000003031	cyclin-dependent kinase inhibitor 1B Source MGI Symbol Acc MGI 104565
B04	SBM0682459	ENSMUST00000070642.3	Cebpb	ENSMUSG0000056501	CCAAT/enhancer binding protein (C/EBP), beta Source MGI Symbol Acc MGI 88373
B05	SBM0735214	ENSMUST00000188855.6	Creb1	ENSMUSG0000025958	cAMP responsive element binding protein 1 Source MGI Symbol Acc MGI 88494
B06	SBM0926551	ENSMUST00000205765.1	Crebbp	ENSMUSG0000022521	CREB binding protein Source MGI Symbol Acc MGI 1098280
B07	SBM1019697	ENSMUST00000034562.8	Cryab	ENSMUSG0000032060	crystallin, alpha B Source MGI Symbol Acc MGI 88516
B08	SBM1021462	ENSMUST00000007130.14	Ctnnb1	ENSMUSG0000006932	catenin (cadherin associated protein), beta 1 Source MGI Symbol Acc MGI 88276
B09	SBM0967006	ENSMUST00000125442.7	Dnaja1	ENSMUSG0000028410	DnaJ heat shock protein family (Hsp40) member A1 Source MGI Symbol Acc MGI 1270129
B10	SBM1013821	ENSMUST00000015003.9	E2f4	ENSMUSG0000014859	E2F transcription factor 4 Source MGI Symbol Acc MGI 103012
B11	SBM0723043	ENSMUST00000204299.1	Emp1	ENSMUSG0000030208	epithelial membrane protein 1 Source MGI Symbol Acc MGI 107941
B12	SBM0877670	ENSMUST00000156306.1	Eng	ENSMUSG0000026814	endoglin Source MGI Symbol Acc MGI 95392
C01	SBM1065431	ENSMUST00000190035.1	Ep300	ENSMUSG0000055024	E1A binding protein p300 Source MGI Symbol Acc MGI 1276116
C02	SBM0735322	ENSMUST00000156558.1	Ephb2	ENSMUSG0000028664	Eph receptor B2 Source MGI Symbol Acc MGI 99611
C03	SBM0934692	ENSMUST00000185408.6	Fn1	ENSMUSG0000026193	fibronectin 1 Source MGI Symbol Acc MGI 95566
C04	SBM0977461	ENSMUST00000134311.1	Fos	ENSMUSG0000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
C05	SBM0903700	ENSMUST00000120753.2	Furin	ENSMUSG0000030530	furin (paired basic amino acid cleaving enzyme) Source MGI Symbol Acc MGI 97513
C06	SBM0915027	ENSMUST00000220246.1	Gadd45b	ENSMUSG0000015312	growth arrest and DNA-damage-inducible 45 beta Source MGI Symbol Acc MGI 107776
C07	SBM0716475	ENSMUST00000161301.7	Gli2	ENSMUSG0000048402	GLI-Kruppel family member GLI2 Source MGI Symbol Acc MGI 95728
C08	SBM0956876	ENSMUST00000111261.10	Gtf2i	ENSMUSG0000060261	general transcription factor II I Source MGI Symbol Acc MGI 1202722
C09	SBM0746216	ENSMUST00000161085.7	Herpud1	ENSMUSG0000031770	homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1 Source MGI Symbol Acc MGI 1927406
C10	SBM0965557	ENSMUST00000023171.7	Hes1	ENSMUSG0000022528	hes family bHLH transcription factor 1 Source MGI Symbol Acc MGI 104853
		ENSMUST000000		ENSMUSG00	hairly/enhancer-of-split related with YRPW motif 1 Source MGI Symbol Acc MGI

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0693801	192102.1	Hey1	000040289	1341800
C12	SBM0936413	ENSMUST0000005548.7	Hmox1	ENSMUSG0000005413	heme oxygenase 1 Source MGI Symbol Acc MGI 96163
D01	SBM0688367	ENSMUST00000109824.1	Id1	ENSMUSG00000042745	inhibitor of DNA binding 1 Source MGI Symbol Acc MGI 96396
D02	SBM1022270	ENSMUST00000020974.6	Id2	ENSMUSG00000020644	inhibitor of DNA binding 2 Source MGI Symbol Acc MGI 96397
D03	SBM1070355	ENSMUST00000008016.2	Id3	ENSMUSG00000007872	inhibitor of DNA binding 3 Source MGI Symbol Acc MGI 96398
D04	SBM0791718	ENSMUST00000165027.8	lfrd1	ENSMUSG00000001627	interferon-related developmental regulator 1 Source MGI Symbol Acc MGI 1316717
D05	SBM1004151	ENSMUST00000016673.5	Il10	ENSMUSG00000016529	interleukin 10 Source MGI Symbol Acc MGI 96537
D06	SBM1054966	ENSMUST00000074043.6	Klf10	ENSMUSG00000037465	Kruppel-like factor 10 Source MGI Symbol Acc MGI 1101353
D07	SBM0833481	ENSMUST00000037607.10	Map3k7	ENSMUSG00000028284	mitogen-activated protein kinase kinase kinase 7 Source MGI Symbol Acc MGI 1346877
D08	SBM0683456	ENSMUST00000114754.7	Mapk14	ENSMUSG00000053436	mitogen-activated protein kinase 14 Source MGI Symbol Acc MGI 1346865
D09	SBM0984642	ENSMUST00000132379.1	Mapk8	ENSMUSG00000021936	mitogen-activated protein kinase 8 Source MGI Symbol Acc MGI 1346861
D10	SBM0969137	ENSMUST00000097530.4	Mbd1	ENSMUSG00000024561	methyl-CpG binding domain protein 1 Source MGI Symbol Acc MGI 1333811
D11	SBM0690200	ENSMUST00000034187.8	Mmp2	ENSMUSG00000031740	matrix metalloproteinase 2 Source MGI Symbol Acc MGI 97009
D12	SBM1002801	ENSMUST00000188606.1	Msx2	ENSMUSG00000021469	msh homeobox 2 Source MGI Symbol Acc MGI 97169
E01	SBM0987162	ENSMUST00000159338.1	Myc	ENSMUSG00000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E02	SBM0847322	ENSMUST00000072514.2	Myod1	ENSMUSG00000009471	myogenic differentiation 1 Source MGI Symbol Acc MGI 97275
E03	SBM0682124	ENSMUST00000107247.7	Nfib	ENSMUSG00000008575	nuclear factor I/B Source MGI Symbol Acc MGI 103188
E04	SBM0696431	ENSMUST00000021413.8	Nfkb1a	ENSMUSG00000021025	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, alpha Source MGI Symbol Acc MGI 104741
E05	SBM1060528	ENSMUST00000132820.1	Notch1	ENSMUSG00000026923	notch 1 Source MGI Symbol Acc MGI 97363
E06	SBM0932962	ENSMUST00000124080.7	Pdgfra	ENSMUSG00000025856	platelet derived growth factor, alpha Source MGI Symbol Acc MGI 97527
E07	SBM0836626	ENSMUST00000014578.6	Plg	ENSMUSG00000059481	plasminogen Source MGI Symbol Acc MGI 97620
E08	SBM0952484	ENSMUST00000138813.7	Ppara	ENSMUSG00000022383	peroxisome proliferator activated receptor alpha Source MGI Symbol Acc MGI 104740
E09	SBM0782881	ENSMUST00000035065.8	Ptgs2	ENSMUSG00000032487	prostaglandin-endoperoxide synthase 2 Source MGI Symbol Acc MGI 97798
E10	SBM0995190	ENSMUST00000204197.1	Pthlh	ENSMUSG00000048776	parathyroid hormone-like peptide Source MGI Symbol Acc MGI 97800
E11	SBM0988125	ENSMUST00000227569.1	Ptk2	ENSMUSG00000022607	PTK2 protein tyrosine kinase 2 Source MGI Symbol Acc MGI 95481
E12	SBM0817798	ENSMUST00000022622.13	Ptk2b	ENSMUSG00000059456	PTK2 protein tyrosine kinase 2 beta Source MGI Symbol Acc MGI 104908
F01	SBM0870390	ENSMUST00000226529.1	Rad21	ENSMUSG00000022314	RAD21 cohesin complex component Source MGI Symbol Acc MGI 108016
F02	SBM0703002	ENSMUST00000107475.8	Rara	ENSMUSG00000037992	retinoic acid receptor, alpha Source MGI Symbol Acc MGI 97856
F03	SBM1034359	ENSMUST00000141296.1	Rbl1	ENSMUSG00000027641	RB transcriptional corepressor like 1 Source MGI Symbol Acc MGI 103300
F04	SBM0943773	ENSMUST00000194701.5	Rhoa	ENSMUSG00000007815	ras homolog family member A Source MGI Symbol Acc MGI 1096342
F05	SBM0814150	ENSMUST00000067384.5	Rhob	ENSMUSG00000054364	ras homolog family member B Source MGI Symbol Acc MGI 107949
F06	SBM0812229	ENSMUST00000168195.7	Runx1	ENSMUSG00000022952	runt related transcription factor 1 Source MGI Symbol Acc MGI 99852
F07	SBM0822839	ENSMUST00000198156.1	S100a8	ENSMUSG00000056054	S100 calcium binding protein A8 (calgranulin A) Source MGI Symbol Acc MGI 88244
F08	SBM0809699	ENSMUST00000041388.10	Serpine1	ENSMUSG00000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
F09	SBM0959314	ENSMUST00000002708.4	Shh	ENSMUSG00000002633	sonic hedgehog Source MGI Symbol Acc MGI 98297
F10	SBM0887383	ENSMUST00000109885.7	Smad1	ENSMUSG00000031681	SMAD family member 1 Source MGI Symbol Acc MGI 109452

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM1002783	ENSMUST00000034973.9	Smad3	ENSMUSG00000032402	SMAD family member 3 Source MGI Symbol Acc MGI 1201674
F12	SBM0732806	ENSMUST00000109876.7	Smad5	ENSMUSG00000021540	SMAD family member 5 Source MGI Symbol Acc MGI 1328787
G01	SBM0734783	ENSMUST00000144323.2	Smad6	ENSMUSG00000036867	SMAD family member 6 Source MGI Symbol Acc MGI 1336883
G02	SBM0756361	ENSMUST00000052631.7	Snai1	ENSMUSG00000042821	snail family zinc finger 1 Source MGI Symbol Acc MGI 98330
G03	SBM1075307	ENSMUST00000067230.5	Sox4	ENSMUSG00000076431	SRY (sex determining region Y)-box 4 Source MGI Symbol Acc MGI 98366
G04	SBM0682351	ENSMUST00000169619.1	Sp1	ENSMUSG00000001280	trans-acting transcription factor 1 Source MGI Symbol Acc MGI 98372
G05	SBM0762835	ENSMUST00000229336.1	Srebf2	ENSMUSG00000022463	sterol regulatory element binding factor 2 Source MGI Symbol Acc MGI 107585
G06	SBM0955433	ENSMUST00000194960.1	Tgfb2	ENSMUSG00000039239	transforming growth factor, beta 2 Source MGI Symbol Acc MGI 98726
G07	SBM0784825	ENSMUST00000035014.7	Tgfb2	ENSMUSG00000032440	transforming growth factor, beta receptor II Source MGI Symbol Acc MGI 98729
G08	SBM0895247	ENSMUST00000142588.1	Thbs1	ENSMUSG00000040152	thrombospondin 1 Source MGI Symbol Acc MGI 98737
G09	SBM0969669	ENSMUST00000046383.11	Tnfsf10	ENSMUSG00000039304	tumor necrosis factor (ligand) superfamily, member 10 Source MGI Symbol Acc MGI 107414
G10	SBM1060480	ENSMUST00000049093.7	Txnip	ENSMUSG00000038393	thioredoxin interacting protein Source MGI Symbol Acc MGI 1889549
G11	SBM1079198	ENSMUST00000217017.1	Vegfa	ENSMUSG00000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
G12	SBM0853976	ENSMUST00000167937.1	Wfs1	ENSMUSG00000039474	wolframin ER transmembrane glycoprotein Source MGI Symbol Acc MGI 1328355
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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