

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

Mouse TGFb / BMP Signaling Pathway

Cat. no. 249950 SBMM-035ZR

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	Acvr1	Acvr2a	Acvr1	Amh	Amhr2	Atf4	Bambi	Bglap2	Bmp1	Bmp2	Bmp3	Bmp4
B	Bmp5	Bmp6	Bmp7	Bmper	Bmpr1a	Bmpr1b	Bmpr2	Cdkn1a	Cdkn1b	Cdkn2b	Chrd	Colla1
C	Colla2	Dcn	Dlk2	Emp1	Eng	Fos	Fst	Gadd45b	Gdf1	Gdf2	Gdf3	Gdf5
D	Gdf6	Gdf7	Gsc	Herpud1	Id1	Id2	Ifrd1	Igf1	Igf3	Il6	Inha	Inhba
E	Jun	Junb	Lefy1	Ltbp1	Ltbp2	Ltbp4	Mecom	Myc	Nodal	Nog	Pdgfrb	Plau
F	Runx1	Serpine1	Smad1	Smad2	Smad3	Smad4	Smad5	Smad7	Smurf1	Sox4	Stat1	Tdgf1
G	Tgfb1	Tgfb1i1	Tgfb2	Tgfb3	Tgfb3i	Tgfb3l	Tgfb3r2	Tgfb3r3	Tgfb3r4	Thbs1	Tnfrsf10	Tsc22d1
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	SBM0844679	ENSMUST00000145495.7	Acvr1	ENSMUSG0000026836	activin A receptor, type 1 Source MGI Symbol Acc MGI 87911
A02	SBM0741110	ENSMUST00000156681.1	Acvr2a	ENSMUSG0000052155	activin receptor IIA Source MGI Symbol Acc MGI 102806
A03	SBM0940120	ENSMUST00000120028.7	Acvr1l	ENSMUSG0000000530	activin A receptor, type II-like 1 Source MGI Symbol Acc MGI 1338946
A04	SBM0728372	ENSMUST00000036016.5	Amh	ENSMUSG0000035262	anti-Mullerian hormone Source MGI Symbol Acc MGI 88006
A05	SBM0676268	ENSMUST00000229278.1	Amhr2	ENSMUSG0000023047	anti-Mullerian hormone type 2 receptor Source MGI Symbol Acc MGI 105062
A06	SBM1055409	ENSMUST00000230434.1	Atf4	ENSMUSG0000042406	activating transcription factor 4 Source MGI Symbol Acc MGI 88096
A07	SBM0720982	ENSMUST00000025075.2	Bambi	ENSMUSG0000024232	BMP and activin membrane-bound inhibitor Source MGI Symbol Acc MGI 1915260
A08	SBM0993924	ENSMUST00000098956.2	Bglap2	ENSMUSG0000074486	bone gamma-carboxyglutamate protein 2 Source MGI Symbol Acc MGI 88157
A09	SBM1022339	ENSMUST00000022693.8	Bmp1	ENSMUSG0000022098	bone morphogenetic protein 1 Source MGI Symbol Acc MGI 88176
A10	SBM0831820	ENSMUST00000028836.6	Bmp2	ENSMUSG0000027358	bone morphogenetic protein 2 Source MGI Symbol Acc MGI 88177
A11	SBM0867543	ENSMUST00000200388.1	Bmp3	ENSMUSG0000029335	bone morphogenetic protein 3 Source MGI Symbol Acc MGI 88179
A12	SBM0845886	ENSMUST00000100676.2	Bmp4	ENSMUSG0000021835	bone morphogenetic protein 4 Source MGI Symbol Acc MGI 88180
B01	SBM0922578	ENSMUST00000137213.1	Bmp5	ENSMUSG0000032179	bone morphogenetic protein 5 Source MGI Symbol Acc MGI 88181
B02	SBM0892506	ENSMUST00000171970.2	Bmp6	ENSMUSG0000039004	bone morphogenetic protein 6 Source MGI Symbol Acc MGI 88182
B03	SBM1004016	ENSMUST00000137247.1	Bmp7	ENSMUSG0000008999	bone morphogenetic protein 7 Source MGI Symbol Acc MGI 103302
B04	SBM0913745	ENSMUST00000214050.1	Bmper	ENSMUSG0000031963	BMP-binding endothelial regulator Source MGI Symbol Acc MGI 1920480
B05	SBM0924768	ENSMUST00000165280.7	Bmpr1a	ENSMUSG0000021796	bone morphogenetic protein receptor, type 1A Source MGI Symbol Acc MGI 1338938
B06	SBM0770064	ENSMUST00000131273.7	Bmpr1b	ENSMUSG0000052430	bone morphogenetic protein receptor, type 1B Source MGI Symbol Acc MGI 107191
B07	SBM1052934	ENSMUST00000190659.1	Bmpr2	ENSMUSG0000067336	bone morphogenetic protein receptor, type II (serine/threonine kinase) Source MGI Symbol Acc MGI 1095407
B08	SBM1034022	ENSMUST00000023829.7	Cdkn1a	ENSMUSG0000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B09	SBM1006924	ENSMUST00000067327.10	Cdkn1b	ENSMUSG0000003031	cyclin-dependent kinase inhibitor 1B Source MGI Symbol Acc MGI 104565
B10	SBM1002560	ENSMUST00000097981.5	Cdkn2b	ENSMUSG0000073802	cyclin dependent kinase inhibitor 2B Source MGI Symbol Acc MGI 104737
B11	SBM1032359	ENSMUST00000153299.7	Chrd	ENSMUSG0000006958	chordin Source MGI Symbol Acc MGI 1313268
B12	SBM0911341	ENSMUST00000139974.1	Col1a1	ENSMUSG0000001506	collagen, type I, alpha 1 Source MGI Symbol Acc MGI 88467
C01	SBM0673080	ENSMUST00000132029.1	Col1a2	ENSMUSG0000029661	collagen, type I, alpha 2 Source MGI Symbol Acc MGI 88468
C02	SBM0910615	ENSMUST00000219539.1	Dcn	ENSMUSG0000019929	decorin Source MGI Symbol Acc MGI 94872
C03	SBM0733942	ENSMUST00000134249.1	Dlx2	ENSMUSG0000023391	distal-less homeobox 2 Source MGI Symbol Acc MGI 94902
C04	SBM0723043	ENSMUST00000204299.1	Emp1	ENSMUSG0000030208	epithelial membrane protein 1 Source MGI Symbol Acc MGI 107941
C05	SBM0877670	ENSMUST00000156306.1	Eng	ENSMUSG0000026814	endoglin Source MGI Symbol Acc MGI 95392
C06	SBM0977461	ENSMUST00000134311.1	Fos	ENSMUSG0000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
C07	SBM1028469	ENSMUST00000022287.7	Fst	ENSMUSG0000021765	follicle-stimulating hormone receptor Source MGI Symbol Acc MGI 95586
C08	SBM0915027	ENSMUST00000220246.1	Gadd45b	ENSMUSG0000015312	growth arrest and DNA-damage-inducible 45 beta Source MGI Symbol Acc MGI 107776
C09	SBM0835725	ENSMUST00000207684.1	Gdf1	ENSMUSG0000109523	growth differentiation factor 1 Source MGI Symbol Acc MGI 95683
C10	SBM1079890	ENSMUST00000100720.1	Gdf2	ENSMUSG0000072625	growth differentiation factor 2 Source MGI Symbol Acc MGI 1321394
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0688843	032211.4	Gdf3	000030117	growth differentiation factor 3 Source MGI Symbol Acc MGI 95686
C12	SBM0811347	ENSMUST00000040162.2	Gdf5	ENSMUSG0000038259	growth differentiation factor 5 Source MGI Symbol Acc MGI 95688
D01	SBM0980725	ENSMUST00000057613.2	Gdf6	ENSMUSG00000051279	growth differentiation factor 6 Source MGI Symbol Acc MGI 95689
D02	SBM0694335	ENSMUST00000220073.1	Gdf7	ENSMUSG00000037660	growth differentiation factor 7 Source MGI Symbol Acc MGI 95690
D03	SBM0992498	ENSMUST00000021513.5	Gsc	ENSMUSG00000021095	goosecoid homeobox Source MGI Symbol Acc MGI 95841
D04	SBM0746216	ENSMUST00000161085.7	Herpud1	ENSMUSG00000031770	homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1 Source MGI Symbol Acc MGI 1927406
D05	SBM0688367	ENSMUST00000109824.1	Id1	ENSMUSG00000042745	inhibitor of DNA binding 1 Source MGI Symbol Acc MGI 96396
D06	SBM1022270	ENSMUST00000020974.6	Id2	ENSMUSG00000020644	inhibitor of DNA binding 2 Source MGI Symbol Acc MGI 96397
D07	SBM0791718	ENSMUST00000165027.8	lfrd1	ENSMUSG0000001627	interferon-related developmental regulator 1 Source MGI Symbol Acc MGI 1316717
D08	SBM1026650	ENSMUST00000122386.7	Igf1	ENSMUSG00000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D09	SBM0693110	ENSMUST00000020702.10	Igfbp3	ENSMUSG00000020427	insulin-like growth factor binding protein 3 Source MGI Symbol Acc MGI 96438
D10	SBM0742623	ENSMUST00000026845.11	Il6	ENSMUSG00000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
D11	SBM0852039	ENSMUST00000037330.4	Inha	ENSMUSG00000032968	inhibin alpha Source MGI Symbol Acc MGI 96569
D12	SBM0694869	ENSMUST00000164993.1	Inhba	ENSMUSG00000041324	inhibin beta-A Source MGI Symbol Acc MGI 96570
E01	SBM1045409	ENSMUST00000107094.1	Jun	ENSMUSG00000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
E02	SBM0879318	ENSMUST00000064922.6	Junb	ENSMUSG00000052837	jun B proto-oncogene Source MGI Symbol Acc MGI 96647
E03	SBM0716026	ENSMUST00000037361.8	Lefty1	ENSMUSG00000038793	left right determination factor 1 Source MGI Symbol Acc MGI 107405
E04	SBM0712423	ENSMUST00000112514.1	Ltbp1	ENSMUSG0000001870	latent transforming growth factor beta binding protein 1 Source MGI Symbol Acc MGI 109151
E05	SBM1087192	ENSMUST00000002073.12	Ltbp2	ENSMUSG0000002020	latent transforming growth factor beta binding protein 2 Source MGI Symbol Acc MGI 99502
E06	SBM0961507	ENSMUST00000038618.12	Ltbp4	ENSMUSG00000040488	latent transforming growth factor beta binding protein 4 Source MGI Symbol Acc MGI 1321395
E07	SBM1010089	ENSMUST00000172694.7	Mecom	ENSMUSG00000027684	MDS1 and EVI1 complex locus Source MGI Symbol Acc MGI 95457
E08	SBM0987162	ENSMUST00000159338.1	Myc	ENSMUSG00000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E09	SBM1015337	ENSMUST00000049339.6	Nodal	ENSMUSG00000037171	nodal Source MGI Symbol Acc MGI 97359
E10	SBM1083967	ENSMUST00000061728.4	Nog	ENSMUSG00000048616	noggin Source MGI Symbol Acc MGI 104327
E11	SBM0947438	ENSMUST00000000500.7	Pdgfb	ENSMUSG00000000489	platelet derived growth factor, B polypeptide Source MGI Symbol Acc MGI 97528
E12	SBM0733272	ENSMUST00000224141.1	Plau	ENSMUSG00000021822	plasminogen activator, urokinase Source MGI Symbol Acc MGI 97611
F01	SBM0812229	ENSMUST00000168195.7	Runx1	ENSMUSG00000022952	runt related transcription factor 1 Source MGI Symbol Acc MGI 99852
F02	SBM0809699	ENSMUST00000041388.10	Serpine1	ENSMUSG00000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
F03	SBM0887383	ENSMUST00000109885.7	Smad1	ENSMUSG00000031681	SMAD family member 1 Source MGI Symbol Acc MGI 109452
F04	SBM1009250	ENSMUST00000165084.7	Smad2	ENSMUSG00000024563	SMAD family member 2 Source MGI Symbol Acc MGI 108051
F05	SBM1002783	ENSMUST00000034973.9	Smad3	ENSMUSG00000032402	SMAD family member 3 Source MGI Symbol Acc MGI 1201674
F06	SBM1071100	ENSMUST00000114939.1	Smad4	ENSMUSG00000024515	SMAD family member 4 Source MGI Symbol Acc MGI 894293
F07	SBM0732806	ENSMUST00000109876.7	Smad5	ENSMUSG00000021540	SMAD family member 5 Source MGI Symbol Acc MGI 1328787
F08	SBM0862681	ENSMUST00000168918.7	Smad7	ENSMUSG00000025880	SMAD family member 7 Source MGI Symbol Acc MGI 1100518
F09	SBM0958661	ENSMUST00000110677.7	Smurf1	ENSMUSG00000038780	SMAD specific E3 ubiquitin protein ligase 1 Source MGI Symbol Acc MGI 1923038
F10	SBM1075307	ENSMUST00000067230.5	Sox4	ENSMUSG00000076431	SRY (sex determining region Y)-box 4 Source MGI Symbol Acc MGI 98366

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0954168	ENSMUST00000070968.13	Stat1	ENSMUSG00000026104	signal transducer and activator of transcription 1 Source MGI Symbol Acc MGI 103063
F12	SBM1058699	ENSMUST00000035075.12	Tdgf1	ENSMUSG00000032494	teratocarcinoma-derived growth factor 1 Source MGI Symbol Acc MGI 98658
G01	SBM0850388	ENSMUST00000002678.9	Tgfb1	ENSMUSG0000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G02	SBM0744840	ENSMUST00000168825.7	Tgfb1i1	ENSMUSG00000030782	transforming growth factor beta 1 induced transcript 1 Source MGI Symbol Acc MGI 102784
G03	SBM0955433	ENSMUST00000194960.1	Tgfb2	ENSMUSG00000039239	transforming growth factor, beta 2 Source MGI Symbol Acc MGI 98726
G04	SBM1022458	ENSMUST00000003687.7	Tgfb3	ENSMUSG00000021253	transforming growth factor, beta 3 Source MGI Symbol Acc MGI 98727
G05	SBM1030857	ENSMUST00000225600.1	Tgfb1	ENSMUSG00000035493	transforming growth factor, beta induced Source MGI Symbol Acc MGI 99959
G06	SBM0973351	ENSMUST00000044234.13	Tgfb1r1	ENSMUSG00000007613	transforming growth factor, beta receptor I Source MGI Symbol Acc MGI 98728
G07	SBM0784825	ENSMUST00000035014.7	Tgfb1r2	ENSMUSG00000032440	transforming growth factor, beta receptor II Source MGI Symbol Acc MGI 98729
G08	SBM0782468	ENSMUST00000146591.1	Tgfb1r3	ENSMUSG00000029287	transforming growth factor, beta receptor III Source MGI Symbol Acc MGI 104637
G09	SBM1067200	ENSMUST00000095014.7	Tgfb1rap1	ENSMUSG00000070939	transforming growth factor, beta receptor associated protein 1 Source MGI Symbol Acc MGI 2447427
G10	SBM0895247	ENSMUST00000142588.1	Thbs1	ENSMUSG00000040152	thrombospondin 1 Source MGI Symbol Acc MGI 98737
G11	SBM0969669	ENSMUST00000046383.11	Tnfrsf10	ENSMUSG00000039304	tumor necrosis factor (ligand) superfamily, member 10 Source MGI Symbol Acc MGI 107414
G12	SBM0926698	ENSMUST00000110888.7	Tsc22d1	ENSMUSG00000022010	TSC22 domain family, member 1 Source MGI Symbol Acc MGI 109127
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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