

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

Mouse Stem Cell Signaling

Cat. no. 249950 SBMM-047ZR

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	Acvr1b	Acvr1c	Acvr2a	Acvr2b	Acvr11	Amhr2	Bcl9	Bcl9l	Bmpr1a	Bmpr1b	Bmpr2
B	Cdx2	Crebbp	Cttnb1	E2f5	Eng	Ep300	Fgfr1	Fgfr2	Fgfr3	Fgfr4	Fzd1	Fzd2
C	Fzd3	Fzd4	Fzd5	Fzd6	Fzd7	Fzd8	Fzd9	Gli1	Gli2	Gli3	Il6st	Lef1
D	Lifr	Lrp5	Lrp6	Ltbp1	Ltbp2	Ltbp3	Ltbp4	Ncstn	Nfat5	Nfatc1	Nfatc2	Nfatc3
E	Nfatc4	Notch1	Notch2	Notch3	Notch4	Psen1	Psen2	Psenen	Ptch1	Disp3	Pygo2	Rb11
F	Rbl2	Rbpil	Rgma	Smad1	Smad2	Smad3	Smad4	Smad5	Smad6	Smad7	Smad9	Smo
G	Sp1	Stat3	Sufu	Tcf7	Tcf7l1	Tcf7l2	Tgfb1	Tgfb2	Tgfb3	Tgfb3p1	Vangl2	Zeb2
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	SBM0967181	ENSMUST0000000544.11	Acvr1b	ENSMUSG0000000532	activin A receptor, type 1B Source MGI Symbol Acc MGI 1338944
A03	SBM0961809	ENSMUST00000028178.13	Acvr1c	ENSMUSG0000026834	activin A receptor, type 1C Source MGI Symbol Acc MGI 2661081
A04	SBM0741110	ENSMUST00000156681.1	Acvr2a	ENSMUSG0000052155	activin receptor 2A Source MGI Symbol Acc MGI 102806
A05	SBM0816669	ENSMUST00000165044.2	Acvr2b	ENSMUSG0000061393	activin receptor 2B Source MGI Symbol Acc MGI 87912
A06	SBM0940120	ENSMUST00000120028.7	Acvr1l	ENSMUSG0000000530	activin A receptor, type II-like 1 Source MGI Symbol Acc MGI 1338946
A07	SBM0676268	ENSMUST00000229278.1	Amhr2	ENSMUSG0000023047	anti-Mullerian hormone type 2 receptor Source MGI Symbol Acc MGI 105062
A08	SBM1059154	ENSMUST00000134695.7	Bcl9	ENSMUSG0000038256	B cell CLL/lymphoma 9 Source MGI Symbol Acc MGI 1924828
A09	SBM1075960	ENSMUST00000220292.1	Bcl9l	ENSMUSG0000063382	B cell CLL/lymphoma 9-like Source MGI Symbol Acc MGI 1933114
A10	SBM0924768	ENSMUST00000165280.7	Bmpr1a	ENSMUSG0000021796	bone morphogenetic protein receptor, type 1A Source MGI Symbol Acc MGI 1338938
A11	SBM0770064	ENSMUST00000131273.7	Bmpr1b	ENSMUSG0000052430	bone morphogenetic protein receptor, type 1B Source MGI Symbol Acc MGI 107191
A12	SBM1052934	ENSMUST00000190659.1	Bmpr2	ENSMUSG0000067336	bone morphogenetic protein receptor, type II (serine/threonine kinase) Source MGI Symbol Acc MGI 1095407
B01	SBM1045786	ENSMUST00000031650.3	Cdx2	ENSMUSG0000029646	caudal type homeobox 2 Source MGI Symbol Acc MGI 88361
B02	SBM0926551	ENSMUST00000205765.1	Crebbp	ENSMUSG0000022521	CREB binding protein Source MGI Symbol Acc MGI 1098280
B03	SBM1021462	ENSMUST00000007130.14	Ctnnb1	ENSMUSG0000006932	catenin (cadherin associated protein), beta 1 Source MGI Symbol Acc MGI 88276
B04	SBM0884669	ENSMUST00000029069.12	E2f5	ENSMUSG0000027552	E2F transcription factor 5 Source MGI Symbol Acc MGI 105091
B05	SBM0877670	ENSMUST00000156306.1	Eng	ENSMUSG0000026814	endoglin Source MGI Symbol Acc MGI 95392
B06	SBM1065431	ENSMUST00000190035.1	Ep300	ENSMUSG0000055024	E1A binding protein p300 Source MGI Symbol Acc MGI 1276116
B07	SBM1002495	ENSMUST00000178276.7	Fgfr1	ENSMUSG0000031565	fibroblast growth factor receptor 1 Source MGI Symbol Acc MGI 95522
B08	SBM0813645	ENSMUST00000124096.7	Fgfr2	ENSMUSG0000030849	fibroblast growth factor receptor 2 Source MGI Symbol Acc MGI 95523
B09	SBM0713841	ENSMUST00000169212.8	Fgfr3	ENSMUSG0000054252	fibroblast growth factor receptor 3 Source MGI Symbol Acc MGI 95524
B10	SBM1072151	ENSMUST00000162967.1	Fgfr4	ENSMUSG0000005320	fibroblast growth factor receptor 4 Source MGI Symbol Acc MGI 95525
B11	SBM0714051	ENSMUST00000054294.6	Fzd1	ENSMUSG0000044674	frizzled class receptor 1 Source MGI Symbol Acc MGI 1196625
B12	SBM0938001	ENSMUST00000057893.6	Fzd2	ENSMUSG0000050288	frizzled class receptor 2 Source MGI Symbol Acc MGI 1888513
C01	SBM0964179	ENSMUST00000127272.1	Fzd3	ENSMUSG0000007989	frizzled class receptor 3 Source MGI Symbol Acc MGI 108476
C02	SBM0730931	ENSMUST00000058755.4	Fzd4	ENSMUSG0000049791	frizzled class receptor 4 Source MGI Symbol Acc MGI 108520
C03	SBM0841457	ENSMUST00000063982.6	Fzd5	ENSMUSG0000045005	frizzled class receptor 5 Source MGI Symbol Acc MGI 108571
C04	SBM1051469	ENSMUST00000179165.8	Fzd6	ENSMUSG0000022297	frizzled class receptor 6 Source MGI Symbol Acc MGI 108474
C05	SBM1055854	ENSMUST00000114246.3	Fzd7	ENSMUSG0000041075	frizzled class receptor 7 Source MGI Symbol Acc MGI 108570
C06	SBM1075164	ENSMUST00000041080.6	Fzd8	ENSMUSG0000036904	frizzled class receptor 8 Source MGI Symbol Acc MGI 108460
C07	SBM1068165	ENSMUST00000062572.2	Fzd9	ENSMUSG0000049551	frizzled class receptor 9 Source MGI Symbol Acc MGI 1313278
C08	SBM0738831	ENSMUST00000219671.1	Gli1	ENSMUSG0000025407	GLI-Kruppel family member GLI1 Source MGI Symbol Acc MGI 95727
C09	SBM0716475	ENSMUST00000161301.7	Gli2	ENSMUSG0000048402	GLI-Kruppel family member GLI2 Source MGI Symbol Acc MGI 95728
C10	SBM0853730	ENSMUST00000110510.3	Gli3	ENSMUSG0000021318	GLI-Kruppel family member GLI3 Source MGI Symbol Acc MGI 95729
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0823451	183829.7	Il6st	000021756	interleukin 6 signal transducer Source MGI Symbol Acc MGI 96560
C12	SBM1041904	ENSMUST00000198624.1	Lef1	ENSMUSG0000027985	lymphoid enhancer binding factor 1 Source MGI Symbol Acc MGI 96770
D01	SBM0699496	ENSMUST00000067190.11	Lifr	ENSMUSG0000054263	LIF receptor alpha Source MGI Symbol Acc MGI 96788
D02	SBM0676519	ENSMUST00000177294.1	Lrp5	ENSMUSG0000024913	low density lipoprotein receptor-related protein 5 Source MGI Symbol Acc MGI 1278315
D03	SBM0842955	ENSMUST00000203773.1	Lrp6	ENSMUSG0000030201	low density lipoprotein receptor-related protein 6 Source MGI Symbol Acc MGI 1298218
D04	SBM0712423	ENSMUST00000112514.1	Ltbp1	ENSMUSG0000001870	latent transforming growth factor beta binding protein 1 Source MGI Symbol Acc MGI 109151
D05	SBM1087192	ENSMUST00000002073.12	Ltbp2	ENSMUSG0000002020	latent transforming growth factor beta binding protein 2 Source MGI Symbol Acc MGI 99502
D06	SBM0721806	ENSMUST00000236258.1	Ltbp3	ENSMUSG0000024940	latent transforming growth factor beta binding protein 3 Source MGI Symbol Acc MGI 1101355
D07	SBM0961507	ENSMUST00000038618.12	Ltbp4	ENSMUSG0000040488	latent transforming growth factor beta binding protein 4 Source MGI Symbol Acc MGI 1321395
D08	SBM0957404	ENSMUST00000003550.10	Ncstn	ENSMUSG0000003458	nicastrin Source MGI Symbol Acc MGI 1891700
D09	SBM0948071	ENSMUST00000075922.10	Nfat5	ENSMUSG0000003847	nuclear factor of activated T cells 5 Source MGI Symbol Acc MGI 1859333
D10	SBM1038763	ENSMUST00000078049.11	Nfatc1	ENSMUSG0000033016	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 1 Source MGI Symbol Acc MGI 102469
D11	SBM0850906	ENSMUST00000099067.9	Nfatc2	ENSMUSG0000027544	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 2 Source MGI Symbol Acc MGI 102463
D12	SBM1071895	ENSMUST00000212936.1	Nfatc3	ENSMUSG0000031902	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 3 Source MGI Symbol Acc MGI 103296
E01	SBM0813365	ENSMUST00000226716.1	Nfatc4	ENSMUSG0000023411	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 4 Source MGI Symbol Acc MGI 1920431
E02	SBM1060528	ENSMUST00000132820.1	Notch1	ENSMUSG0000026923	notch 1 Source MGI Symbol Acc MGI 97363
E03	SBM0724048	ENSMUST00000079812.7	Notch2	ENSMUSG0000027878	notch 2 Source MGI Symbol Acc MGI 97364
E04	SBM0987360	ENSMUST00000087723.4	Notch3	ENSMUSG0000038146	notch 3 Source MGI Symbol Acc MGI 99460
E05	SBM0822219	ENSMUST00000174707.1	Notch4	ENSMUSG0000015468	notch 4 Source MGI Symbol Acc MGI 107471
E06	SBM0767761	ENSMUST00000101225.1	Psen1	ENSMUSG0000019969	presenilin 1 Source MGI Symbol Acc MGI 1202717
E07	SBM0822272	ENSMUST00000130711.7	Psen2	ENSMUSG0000010609	presenilin 2 Source MGI Symbol Acc MGI 109284
E08	SBM1041938	ENSMUST00000207031.1	Psenen	ENSMUSG0000036835	presenilin enhancer gamma secretase subunit Source MGI Symbol Acc MGI 1913590
E09	SBM0724304	ENSMUST00000194663.5	Ptch1	ENSMUSG0000021466	patched 1 Source MGI Symbol Acc MGI 105373
E10	SBM1068533	ENSMUST00000047720.8	Disp3	ENSMUSG0000041544	dispatched RND transporter family member 3 Source MGI Symbol Acc MGI 2444403
E11	SBM1001092	ENSMUST00000133680.1	Pygo2	ENSMUSG0000047824	pygopus 2 Source MGI Symbol Acc MGI 1916161
E12	SBM1034359	ENSMUST00000141296.1	Rbl1	ENSMUSG0000027641	RB transcriptional corepressor like 1 Source MGI Symbol Acc MGI 103300
F01	SBM1089037	ENSMUST00000144190.7	Rbl2	ENSMUSG0000031666	RB transcriptional corepressor like 2 Source MGI Symbol Acc MGI 105085
F02	SBM0676122	ENSMUST00000017151.1	Rbpjl	ENSMUSG0000017007	recombination signal binding protein for immunoglobulin kappa J region-like Source MGI Symbol Acc MGI 1196616
F03	SBM1046322	ENSMUST00000139780.2	Rgma	ENSMUSG0000070509	repulsive guidance molecule family member A Source MGI Symbol Acc MGI 2679262
F04	SBM0887383	ENSMUST00000109885.7	Smad1	ENSMUSG0000031681	SMAD family member 1 Source MGI Symbol Acc MGI 109452
F05	SBM1009250	ENSMUST00000165084.7	Smad2	ENSMUSG0000024563	SMAD family member 2 Source MGI Symbol Acc MGI 108051
F06	SBM1002783	ENSMUST00000034973.9	Smad3	ENSMUSG0000032402	SMAD family member 3 Source MGI Symbol Acc MGI 1201674
F07	SBM1071100	ENSMUST00000114939.1	Smad4	ENSMUSG0000024515	SMAD family member 4 Source MGI Symbol Acc MGI 894293
F08	SBM0732806	ENSMUST00000109876.7	Smad5	ENSMUSG0000021540	SMAD family member 5 Source MGI Symbol Acc MGI 1328787
F09	SBM0734783	ENSMUST00000144323.2	Smad6	ENSMUSG0000036867	SMAD family member 6 Source MGI Symbol Acc MGI 1336883
F10	SBM0862681	ENSMUST00000168918.7	Smad7	ENSMUSG0000025880	SMAD family member 7 Source MGI Symbol Acc MGI 1100518

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0885140	ENSMUST00000029371.2	Smad9	ENSMUSG00000027796	SMAD family member 9 Source MGI Symbol Acc MGI 1859993
F12	SBM0921550	ENSMUST00000001812.4	Smo	ENSMUSG0000001761	smoothened, frizzled class receptor Source MGI Symbol Acc MGI 108075
G01	SBM0682351	ENSMUST00000169619.1	Sp1	ENSMUSG0000001280	trans-acting transcription factor 1 Source MGI Symbol Acc MGI 98372
G02	SBM0821931	ENSMUST00000103114.7	Stat3	ENSMUSG0000004040	signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038
G03	SBM0679226	ENSMUST00000039922.12	Sufu	ENSMUSG00000025231	SUFU negative regulator of hedgehog signaling Source MGI Symbol Acc MGI 1345643
G04	SBM0759929	ENSMUST00000086844.9	Tcf7	ENSMUSG0000000782	transcription factor 7, T cell specific Source MGI Symbol Acc MGI 98507
G05	SBM0729086	ENSMUST00000141743.1	Tcf7l1	ENSMUSG00000055799	transcription factor 7 like 1 (T cell specific, HMG box) Source MGI Symbol Acc MGI 1202876
G06	SBM0875642	ENSMUST00000111657.10	Tcf7l2	ENSMUSG00000024985	transcription factor 7 like 2, T cell specific, HMG box Source MGI Symbol Acc MGI 1202879
G07	SBM0973351	ENSMUST00000044234.13	Tgfb1	ENSMUSG0000007613	transforming growth factor, beta receptor I Source MGI Symbol Acc MGI 98728
G08	SBM0784825	ENSMUST00000035014.7	Tgfb2	ENSMUSG00000032440	transforming growth factor, beta receptor II Source MGI Symbol Acc MGI 98729
G09	SBM0782468	ENSMUST00000146591.1	Tgfb3	ENSMUSG00000029287	transforming growth factor, beta receptor III Source MGI Symbol Acc MGI 104637
G10	SBM1067200	ENSMUST00000095014.7	Tgfbrap1	ENSMUSG00000070939	transforming growth factor, beta receptor associated protein 1 Source MGI Symbol Acc MGI 2447427
G11	SBM1043500	ENSMUST00000111263.8	Vangl2	ENSMUSG00000026556	VANGL planar cell polarity 2 Source MGI Symbol Acc MGI 2135272
G12	SBM1061696	ENSMUST00000076836.12	Zeb2	ENSMUSG00000026872	zinc finger E-box binding homeobox 2 Source MGI Symbol Acc MGI 1344407
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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