

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

Mouse TGFb / BMP Signaling Pathway

Cat. no. 249955 UPMM-035ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light 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 Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

Panel layout (Rotor-Gene): QuantiNova LNA Probe 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 Probe PCR 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	Col1a1
C	Col1a2	Dcn	Dkk2	Emp1	Eng	Fos	Fst	Gadd45b	Gdf1	Gdf2	Gdf3	Gdf5
D	Gdf6	Gdf7	Gsc	Herpud1	Id1	Id2	lfrd1	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	Tgfb3	Tgfb3	Tgfb3	Tgfb3	Tgfb3	Tgfb3	Tgfb3
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	QIC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFM071633 1	ENSMUST00000 112599.7	Acvr1	ENSMUSG00 000026836	activin A receptor, type 1 Source MGI Symbol Acc MGI 87911
A02	UPFM093368 1	ENSMUST00000 156681.1	Acvr2a	ENSMUSG00 000052155	activin receptor IIA Source MGI Symbol Acc MGI 102806
A03	UPFM068818 0	ENSMUST00000 121718.7	Acvr1l	ENSMUSG00 000000530	activin A receptor, type II-like 1 Source MGI Symbol Acc MGI 1338946
A04	UPFM065734 5	ENSMUST00000 036016.5	Amh	ENSMUSG00 000035262	anti-Mullerian hormone Source MGI Symbol Acc MGI 88006
A05	UPFM082232 7	ENSMUST00000 023809.10	Amhr2	ENSMUSG00 000023047	anti-Mullerian hormone type 2 receptor Source MGI Symbol Acc MGI 105062
A06	UPFM075251 7	ENSMUST00000 229828.1	Atf4	ENSMUSG00 000042406	activating transcription factor 4 Source MGI Symbol Acc MGI 88096
A07	UPFM079500 1	ENSMUST00000 025075.2	Bambi	ENSMUSG00 000024232	BMP and activin membrane-bound inhibitor Source MGI Symbol Acc MGI 1915260
A08	UPFM112650 3	ENSMUST00000 098956.2	Bglap2	ENSMUSG00 000074486	bone gamma-carboxyglutamate protein 2 Source MGI Symbol Acc MGI 88157
A09	UPFM075622 5	ENSMUST00000 227944.1	Bmp1	ENSMUSG00 000022098	bone morphogenetic protein 1 Source MGI Symbol Acc MGI 88176
A10	UPFM117294 5	ENSMUST00000 028836.6	Bmp2	ENSMUSG00 000027358	bone morphogenetic protein 2 Source MGI Symbol Acc MGI 88177
A11	UPFM080866 5	ENSMUST00000 031278.5	Bmp3	ENSMUSG00 000029335	bone morphogenetic protein 3 Source MGI Symbol Acc MGI 88179
A12	UPFM097472 7	ENSMUST00000 100676.2	Bmp4	ENSMUSG00 000021835	bone morphogenetic protein 4 Source MGI Symbol Acc MGI 88180
B01	UPFM087909 3	ENSMUST00000 012281.7	Bmp5	ENSMUSG00 000032179	bone morphogenetic protein 5 Source MGI Symbol Acc MGI 88181
B02	UPFM088089 8	ENSMUST00000 171970.2	Bmp6	ENSMUSG00 000039004	bone morphogenetic protein 6 Source MGI Symbol Acc MGI 88182
B03	UPFM093035 6	ENSMUST00000 009143.7	Bmp7	ENSMUSG00 000008999	bone morphogenetic protein 7 Source MGI Symbol Acc MGI 103302
B04	UPFM079660 0	ENSMUST00000 214050.1	Bmper	ENSMUSG00 000031963	BMP-binding endothelial regulator Source MGI Symbol Acc MGI 1920480
B05	UPFM083222 2	ENSMUST00000 165280.7	Bmpr1a	ENSMUSG00 000021796	bone morphogenetic protein receptor, type 1A Source MGI Symbol Acc MGI 1338938
B06	UPFM087635 6	ENSMUST00000 106232.7	Bmpr1b	ENSMUSG00 000052430	bone morphogenetic protein receptor, type 1B Source MGI Symbol Acc MGI 107191
B07	UPFM080425 7	ENSMUST00000 190659.1	Bmpr2	ENSMUSG00 000067336	bone morphogenetic protein receptor, type II (serine/threonine kinase) Source MGI Symbol Acc MGI 1095407
B08	UPFM086779 1	ENSMUST00000 122348.2	Cdkn1a	ENSMUSG00 000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B09	UPFM072528 3	ENSMUST00000 204807.1	Cdkn1b	ENSMUSG00 000003031	cyclin-dependent kinase inhibitor 1B Source MGI Symbol Acc MGI 104565
B10	UPFM092812 3	ENSMUST00000 097981.5	Cdkn2b	ENSMUSG00 000073802	cyclin dependent kinase inhibitor 2B Source MGI Symbol Acc MGI 104737
B11	UPFM066747 9	ENSMUST00000 231636.1	Chrd	ENSMUSG00 000006958	chordin Source MGI Symbol Acc MGI 1313268
B12	UPFM117294 6	ENSMUST00000 001547.7	Col1a1	ENSMUSG00 000001506	collagen, type I, alpha 1 Source MGI Symbol Acc MGI 88467
C01	UPFM081902 3	ENSMUST00000 132029.1	Col1a2	ENSMUSG00 000029661	collagen, type I, alpha 2 Source MGI Symbol Acc MGI 88468
C02	UPFM067651 1	ENSMUST00000 219539.1	Dcn	ENSMUSG00 000019929	decorin Source MGI Symbol Acc MGI 94872
C03	UPFM100551 8	ENSMUST00000 134249.1	Dlx2	ENSMUSG00 000023391	distal-less homeobox 2 Source MGI Symbol Acc MGI 94902
C04	UPFM092819 4	ENSMUST00000 111907.1	Emp1	ENSMUSG00 000030208	epithelial membrane protein 1 Source MGI Symbol Acc MGI 107941
C05	UPFM062460 8	ENSMUST00000 009705.13	Eng	ENSMUSG00 000026814	endoglin Source MGI Symbol Acc MGI 95392
C06	UPFM076456 3	ENSMUST00000 136122.7	Fos	ENSMUSG00 000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
C07	UPFM064893 2	ENSMUST00000 022287.7	Fst	ENSMUSG00 000021765	follicle-stimulating hormone receptor Source MGI Symbol Acc MGI 95586
C08	UPFM085248 2	ENSMUST00000 220246.1	Gadd45b	ENSMUSG00 000015312	growth arrest and DNA-damage-inducible 45 beta Source MGI Symbol Acc MGI 107776
C09	UPFM112652 4	ENSMUST00000 207684.1	Gdf1	ENSMUSG00 000109523	growth differentiation factor 1 Source MGI Symbol Acc MGI 95683
C10	UPFM081201 1	ENSMUST00000 100720.1	Gdf2	ENSMUSG00 000072625	growth differentiation factor 2 Source MGI Symbol Acc MGI 1321394
	UPFM079120	ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	1	032211.4	Gdf3	000030117	growth differentiation factor 3 Source MGI Symbol Acc MGI 95686
C12	UPFM0984960	ENSMUST0000040162.2	Gdf5	ENSMUSG0000038259	growth differentiation factor 5 Source MGI Symbol Acc MGI 95688
D01	UPFM0640989	ENSMUST0000057613.2	Gdf6	ENSMUSG00000051279	growth differentiation factor 6 Source MGI Symbol Acc MGI 95689
D02	UPFM0839682	ENSMUST00000220073.1	Gdf7	ENSMUSG00000037660	growth differentiation factor 7 Source MGI Symbol Acc MGI 95690
D03	UPFM0934802	ENSMUST000002021513.5	Gsc	ENSMUSG00000021095	goosecoid homeobox Source MGI Symbol Acc MGI 95841
D04	UPFM0950651	ENSMUST00000161576.7	Herpud1	ENSMUSG00000031770	homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1 Source MGI Symbol Acc MGI 1927406
D05	UPFM0858342	ENSMUST00000109824.1	Id1	ENSMUSG00000042745	inhibitor of DNA binding 1 Source MGI Symbol Acc MGI 96396
D06	UPFM0623246	ENSMUST000002020974.6	Id2	ENSMUSG00000020644	inhibitor of DNA binding 2 Source MGI Symbol Acc MGI 96397
D07	UPFM0696192	ENSMUST00000001672.11	lfrd1	ENSMUSG0000001627	interferon-related developmental regulator 1 Source MGI Symbol Acc MGI 1316717
D08	UPFM0929418	ENSMUST00000121161.7	lgf1	ENSMUSG00000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D09	UPFM0968986	ENSMUST000002020702.10	Igfbp3	ENSMUSG00000020427	insulin-like growth factor binding protein 3 Source MGI Symbol Acc MGI 96438
D10	UPFM0729099	ENSMUST00000195978.4	Il6	ENSMUSG00000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
D11	UPFM0849201	ENSMUST00000037330.4	Inha	ENSMUSG00000032968	inhibin alpha Source MGI Symbol Acc MGI 96569
D12	UPFM0811177	ENSMUST00000164993.1	Inhba	ENSMUSG00000041324	inhibin beta-A Source MGI Symbol Acc MGI 96570
E01	UPFM0975216	ENSMUST00000107094.1	Jun	ENSMUSG00000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
E02	UPFM0904521	ENSMUST00000064922.6	Junb	ENSMUSG00000052837	jun B proto-oncogene Source MGI Symbol Acc MGI 96647
E03	UPFM0897457	ENSMUST00000132087.1	Lefty1	ENSMUSG00000038793	left right determination factor 1 Source MGI Symbol Acc MGI 107405
E04	UPFM0619560	ENSMUST00000135750.1	Ltbp1	ENSMUSG00000001870	latent transforming growth factor beta binding protein 1 Source MGI Symbol Acc MGI 109151
E05	UPFM0756787	ENSMUST00000002073.12	Ltbp2	ENSMUSG00000002020	latent transforming growth factor beta binding protein 2 Source MGI Symbol Acc MGI 99502
E06	UPFM0736145	ENSMUST00000118961.2	Ltbp4	ENSMUSG00000040488	latent transforming growth factor beta binding protein 4 Source MGI Symbol Acc MGI 1321395
E07	UPFM0863237	ENSMUST00000108270.9	Mecom	ENSMUSG00000027684	MDS1 and EVI1 complex locus Source MGI Symbol Acc MGI 95457
E08	UPFM0814214	ENSMUST00000161976.7	Myc	ENSMUSG00000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E09	UPFM0799842	ENSMUST00000049339.6	Nodal	ENSMUSG00000037171	nodal Source MGI Symbol Acc MGI 97359
E10	UPFM0827055	ENSMUST00000061728.4	Nog	ENSMUSG00000048616	noggin Source MGI Symbol Acc MGI 104327
E11	UPFM0815897	ENSMUST00000229795.1	Pdgfb	ENSMUSG00000000489	platelet derived growth factor, B polypeptide Source MGI Symbol Acc MGI 97528
E12	UPFM0836616	ENSMUST00000224141.1	Plau	ENSMUSG00000021822	plasminogen activator, urokinase Source MGI Symbol Acc MGI 97611
F01	UPFM0728059	ENSMUST00000113956.9	Runx1	ENSMUSG00000022952	runt related transcription factor 1 Source MGI Symbol Acc MGI 99852
F02	UPFM0707886	ENSMUST00000041388.10	Serpine1	ENSMUSG00000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
F03	UPFM0990349	ENSMUST00000210678.1	Smad1	ENSMUSG00000031681	SMAD family member 1 Source MGI Symbol Acc MGI 109452
F04	UPFM0774433	ENSMUST00000172198.7	Smad2	ENSMUSG00000024563	SMAD family member 2 Source MGI Symbol Acc MGI 108051
F05	UPFM0883922	ENSMUST00000034973.9	Smad3	ENSMUSG00000032402	SMAD family member 3 Source MGI Symbol Acc MGI 1201674
F06	UPFM0986328	ENSMUST00000114939.1	Smad4	ENSMUSG00000024515	SMAD family member 4 Source MGI Symbol Acc MGI 894293
F07	UPFM0675736	ENSMUST00000109876.7	Smad5	ENSMUSG00000021540	SMAD family member 5 Source MGI Symbol Acc MGI 1328787
F08	UPFM0732981	ENSMUST00000174843.7	Smad7	ENSMUSG00000025880	SMAD family member 7 Source MGI Symbol Acc MGI 1100518
F09	UPFM0923052	ENSMUST00000198621.1	Smurf1	ENSMUSG00000038780	SMAD specific E3 ubiquitin protein ligase 1 Source MGI Symbol Acc MGI 1923038
F10	UPFM0736142	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	UPFM071531 5	ENSMUST00000 186574.6	Stat1	ENSMUSG00 000026104	signal transducer and activator of transcription 1 Source MGI Symbol Acc MGI 103063
F12	UPFM099001 1	ENSMUST00000 035075.12	Tdgf1	ENSMUSG00 000032494	teratocarcinoma-derived growth factor 1 Source MGI Symbol Acc MGI 98658
G01	UPFM066688 0	ENSMUST00000 171757.1	Tgfb1	ENSMUSG00 000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G02	UPFM097202 8	ENSMUST00000 167965.7	Tgfb1i1	ENSMUSG00 000030782	transforming growth factor beta 1 induced transcript 1 Source MGI Symbol Acc MGI 102784
G03	UPFM073116 6	ENSMUST00000 045288.13	Tgfb2	ENSMUSG00 000039239	transforming growth factor, beta 2 Source MGI Symbol Acc MGI 98726
G04	UPFM086737 6	ENSMUST00000 003687.7	Tgfb3	ENSMUSG00 000021253	transforming growth factor, beta 3 Source MGI Symbol Acc MGI 98727
G05	UPFM065578 1	ENSMUST00000 225600.1	Tgfb1	ENSMUSG00 000035493	transforming growth factor, beta induced Source MGI Symbol Acc MGI 99959
G06	UPFM064002 0	ENSMUST00000 044234.13	Tgfb1r1	ENSMUSG00 000007613	transforming growth factor, beta receptor I Source MGI Symbol Acc MGI 98728
G07	UPFM117296 4	ENSMUST00000 061101.11	Tgfb1r2	ENSMUSG00 000032440	transforming growth factor, beta receptor II Source MGI Symbol Acc MGI 98729
G08	UPFM085655 8	ENSMUST00000 031224.14	Tgfb1r3	ENSMUSG00 000029287	transforming growth factor, beta receptor III Source MGI Symbol Acc MGI 104637
G09	UPFM090653 4	ENSMUST00000 188728.1	Tgfb1rap1	ENSMUSG00 000070939	transforming growth factor, beta receptor associated protein 1 Source MGI Symbol Acc MGI 2447427
G10	UPFM072927 9	ENSMUST00000 039559.8	Thbs1	ENSMUSG00 000040152	thrombospondin 1 Source MGI Symbol Acc MGI 98737
G11	UPFM068209 9	ENSMUST00000 174840.1	Tnfrsf10	ENSMUSG00 000039304	tumor necrosis factor (ligand) superfamily, member 10 Source MGI Symbol Acc MGI 107414
G12	UPFM088934 0	ENSMUST00000 110888.7	Tsc22d1	ENSMUSG00 000022010	TSC22 domain family, member 1 Source MGI Symbol Acc MGI 109127
H01	UPFM113294 6	ENSMUST00000 163829.1	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	UPFM113294 7	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	UPFM113294 8	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	UPFM113294 9	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	UPFM113295 0	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	UPFM112660 9	UPL_MGDC	MGDC	UPL_MGDC	Mouse Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control



Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
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 Probe RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 μ l QuantiNova Probe 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	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l QN ROX Reference Dye, 1.9 ml Water	208252

*Larger kit sizes available.

The QuantiNova LNA Probe 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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