

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

## Mouse Wound Healing

Cat. no. 249950 SBMM-121ZA

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	Acta2	Actc1	Angpt1	Ccl12	Ccl7	Cd40lg	Cdh1	Col14a1	Col1a1	Col1a2	Col3a1	Col4a1
B	Col4a3	Col5a1	Col5a2	Col5a3	Csf2	Csf3	Ccn2	Ctnnb1	Ctsb	Ctsk	Ctsl	Cxcl1
C	Cxcl11	Cxcl3	Cxcl5	Egf	Egfr	F13a1	F3	Fga	Fgf10	Fgf2	Fgf7	Hbegf
D	Hgf	Ifng	Igf1	Il10	Il1b	Il2	Il4	Il6	Il6st	Itga1	Itga2	Itga3
E	Itga4	Itga5	Itga6	Itgav	Itgb1	Itgb3	Itgb5	Itgb6	Mapk1	Mapk3	Mif	Mmp1a
F	Mmp2	Mmp7	Mmp9	Pdgfra	Plat	Plou	Plaur	Plg	Pten	Ptgs2	Rac1	Rhoa
G	Serpine1	Stat3	Tagln	Tgfa	Tgfb1	Tgfb3	Timp1	Tnf	Vegfa	Vin	Ccn4	Wnt5a
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	SBM0981403	ENSMUST00000090269.6	Actc1	ENSMUSG0000068614	actin, alpha, cardiac muscle 1 Source MGI Symbol Acc MGI 87905
A03	SBM0848818	ENSMUST0000022921.6	Angpt1	ENSMUSG0000022309	angiopoietin 1 Source MGI Symbol Acc MGI 108448
A04	SBM0687223	ENSMUST0000000194.3	Ccl12	ENSMUSG0000035352	chemokine (C-C motif) ligand 12 Source MGI Symbol Acc MGI 108224
A05	SBM0998844	ENSMUST0000021011.2	Ccl7	ENSMUSG0000035373	chemokine (C-C motif) ligand 7 Source MGI Symbol Acc MGI 99512
A06	SBM0708134	ENSMUST0000033466.1	Cd40lg	ENSMUSG0000031132	CD40 ligand Source MGI Symbol Acc MGI 88337
A07	SBM0815100	ENSMUST00000136580.1	Cdh1	ENSMUSG0000000303	cadherin 1 Source MGI Symbol Acc MGI 88354
A08	SBM0685043	ENSMUST00000125416.1	Col14a1	ENSMUSG0000022371	collagen, type XIV, alpha 1 Source MGI Symbol Acc MGI 1341272
A09	SBM0911341	ENSMUST00000139974.1	Col1a1	ENSMUSG0000001506	collagen, type I, alpha 1 Source MGI Symbol Acc MGI 88467
A10	SBM0673080	ENSMUST00000132029.1	Col1a2	ENSMUSG0000029661	collagen, type I, alpha 2 Source MGI Symbol Acc MGI 88468
A11	SBM0704935	ENSMUST00000129611.1	Col3a1	ENSMUSG0000026043	collagen, type III, alpha 1 Source MGI Symbol Acc MGI 88453
A12	SBM0696573	ENSMUST00000209598.1	Col4a1	ENSMUSG0000031502	collagen, type IV, alpha 1 Source MGI Symbol Acc MGI 88454
B01	SBM1225392	ENSMUST00000152664.1	Col4a3	ENSMUSG0000079465	collagen, type IV, alpha 3 Source MGI Symbol Acc MGI 104688
B02	SBM1062999	ENSMUST0000028280.13	Col5a1	ENSMUSG0000026837	collagen, type V, alpha 1 Source MGI Symbol Acc MGI 88457
B03	SBM1016493	ENSMUST00000131535.1	Col5a2	ENSMUSG0000026042	collagen, type V, alpha 2 Source MGI Symbol Acc MGI 88458
B04	SBM1089457	ENSMUST00000145974.1	Col5a3	ENSMUSG0000004098	collagen, type V, alpha 3 Source MGI Symbol Acc MGI 1858212
B05	SBM1080991	ENSMUST0000019060.5	Csf2	ENSMUSG0000018916	colony stimulating factor 2 (granulocyte-macrophage) Source MGI Symbol Acc MGI 1339752
B06	SBM0837472	ENSMUST0000038886.2	Csf3	ENSMUSG0000038067	colony stimulating factor 3 (granulocyte) Source MGI Symbol Acc MGI 1339751
B07	SBM0718058	ENSMUST00000176228.1	Ccn2	ENSMUSG0000019997	cellular communication network factor 1 Source MGI Symbol Acc MGI 95537
B08	SBM1021462	ENSMUST00000007130.14	Ctnnb1	ENSMUSG0000006932	catenin (cadherin associated protein), beta 1 Source MGI Symbol Acc MGI 88276
B09	SBM0791036	ENSMUST00000225312.1	Ctsg	ENSMUSG0000040314	cathepsin G Source MGI Symbol Acc MGI 88563
B10	SBM0898879	ENSMUST0000015664.4	Ctsk	ENSMUSG0000028111	cathepsin K Source MGI Symbol Acc MGI 107823
B11	SBM1071990	ENSMUST0000022462.1	Ctsl	ENSMUSG0000021477	cathepsin L Source MGI Symbol Acc MGI 88564
B12	SBM0998835	ENSMUST0000031327.8	Cxcl1	ENSMUSG0000029380	chemokine (C-X-C motif) ligand 1 Source MGI Symbol Acc MGI 108068
C01	SBM0710486	ENSMUST00000122808.1	Cxcl11	ENSMUSG0000060183	chemokine (C-X-C motif) ligand 11 Source MGI Symbol Acc MGI 1860203
C02	SBM0747228	ENSMUST00000201840.1	Cxcl3	ENSMUSG0000029379	chemokine (C-X-C motif) ligand 3 Source MGI Symbol Acc MGI 3037818
C03	SBM0760625	ENSMUST00000202380.1	Cxcl5	ENSMUSG0000029371	chemokine (C-X-C motif) ligand 5 Source MGI Symbol Acc MGI 1096868
C04	SBM1005237	ENSMUST00000197079.4	Egf	ENSMUSG0000028017	epidermal growth factor Source MGI Symbol Acc MGI 95290
C05	SBM1033270	ENSMUST0000020329.12	Egfr	ENSMUSG0000020122	epidermal growth factor receptor Source MGI Symbol Acc MGI 95294
C06	SBM0674680	ENSMUST0000037491.9	F13a1	ENSMUSG0000039109	coagulation factor XIII, A1 subunit Source MGI Symbol Acc MGI 1921395
C07	SBM0963811	ENSMUST0000029771.12	F3	ENSMUSG0000028128	coagulation factor III Source MGI Symbol Acc MGI 88381
C08	SBM0779575	ENSMUST00000166581.3	Fga	ENSMUSG0000028001	fibrinogen alpha chain Source MGI Symbol Acc MGI 1316726
C09	SBM0904863	ENSMUST00000128103.8	Fgf10	ENSMUSG0000021732	fibroblast growth factor 10 Source MGI Symbol Acc MGI 1099809
C10	SBM0959713	ENSMUST00000138563.8	Fgf2	ENSMUSG0000037225	fibroblast growth factor 2 Source MGI Symbol Acc MGI 95516
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0751389	064794.13	Fgf7	000027208	fibroblast growth factor 7 Source MGI Symbol Acc MGI 95521
C12	SBM0904142	ENSMUST00000 025363.6	Hbegf	ENSMUSG00 000024486	heparin-binding EGF-like growth factor Source MGI Symbol Acc MGI 96070
D01	SBM0858725	ENSMUST00000 200189.4	Hgf	ENSMUSG00 000028864	hepatocyte growth factor Source MGI Symbol Acc MGI 96079
D02	SBM0903694	ENSMUST00000 068592.4	lfng	ENSMUSG00 000055170	interferon gamma Source MGI Symbol Acc MGI 107656
D03	SBM1026650	ENSMUST00000 122386.7	Igf1	ENSMUSG00 000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D04	SBM1004151	ENSMUST00000 016673.5	Il10	ENSMUSG00 000016529	interleukin 10 Source MGI Symbol Acc MGI 96537
D05	SBM0738485	ENSMUST00000 028881.13	Il1b	ENSMUSG00 000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
D06	SBM0797059	ENSMUST00000 029275.5	Il2	ENSMUSG00 000027720	interleukin 2 Source MGI Symbol Acc MGI 96548
D07	SBM0926369	ENSMUST00000 150568.7	Il4	ENSMUSG00 000000869	interleukin 4 Source MGI Symbol Acc MGI 96556
D08	SBM0742623	ENSMUST00000 026845.11	Il6	ENSMUSG00 000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
D09	SBM0823451	ENSMUST00000 183829.7	Il6st	ENSMUSG00 000021756	interleukin 6 signal transducer Source MGI Symbol Acc MGI 96560
D10	SBM0802692	ENSMUST00000 061673.8	Itga1	ENSMUSG00 000042284	integrin alpha 1 Source MGI Symbol Acc MGI 96599
D11	SBM1002416	ENSMUST00000 056117.9	Itga2	ENSMUSG00 000015533	integrin alpha 2 Source MGI Symbol Acc MGI 96600
D12	SBM0845438	ENSMUST00000 140342.1	Itga3	ENSMUSG00 000001507	integrin alpha 3 Source MGI Symbol Acc MGI 96602
E01	SBM0718988	ENSMUST00000 126312.1	Itga4	ENSMUSG00 000027009	integrin alpha 4 Source MGI Symbol Acc MGI 96603
E02	SBM0776835	ENSMUST00000 023128.7	Itga5	ENSMUSG00 000000555	integrin alpha 5 (fibronectin receptor alpha) Source MGI Symbol Acc MGI 96604
E03	SBM0759318	ENSMUST00000 028522.9	Itga6	ENSMUSG00 000027111	integrin alpha 6 Source MGI Symbol Acc MGI 96605
E04	SBM0710817	ENSMUST00000 151463.1	Itgav	ENSMUSG00 000027087	integrin alpha V Source MGI Symbol Acc MGI 96608
E05	SBM0691612	ENSMUST00000 090006.11	Itgb1	ENSMUSG00 000025809	integrin beta 1 (fibronectin receptor beta) Source MGI Symbol Acc MGI 96610
E06	SBM0851696	ENSMUST00000 127140.2	Itgb3	ENSMUSG00 000020689	integrin beta 3 Source MGI Symbol Acc MGI 96612
E07	SBM0961760	ENSMUST00000 069345.5	Itgb5	ENSMUSG00 000022817	integrin beta 5 Source MGI Symbol Acc MGI 96614
E08	SBM0767121	ENSMUST00000 151035.7	Itgb6	ENSMUSG00 000026971	integrin beta 6 Source MGI Symbol Acc MGI 96615
E09	SBM0800614	ENSMUST00000 231821.1	Mapk1	ENSMUSG00 000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
E10	SBM0856900	ENSMUST00000 206272.1	Mapk3	ENSMUSG00 000063065	mitogen-activated protein kinase 3 Source MGI Symbol Acc MGI 1346859
E11	SBM0802241	ENSMUST00000 218267.1	Mif	ENSMUSG00 000033307	macrophage migration inhibitory factor (glycosylation-inhibiting factor) Source MGI Symbol Acc MGI 96982
E12	SBM0888476	ENSMUST00000 034492.5	Mmp1a	ENSMUSG00 000043089	matrix metalloproteinase 1a (interstitial collagenase) Source MGI Symbol Acc MGI 1933846
F01	SBM0690200	ENSMUST00000 034187.8	Mmp2	ENSMUSG00 000031740	matrix metalloproteinase 2 Source MGI Symbol Acc MGI 97009
F02	SBM0709342	ENSMUST00000 018767.7	Mmp7	ENSMUSG00 000018623	matrix metalloproteinase 7 Source MGI Symbol Acc MGI 103189
F03	SBM1089430	ENSMUST00000 017881.2	Mmp9	ENSMUSG00 000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
F04	SBM0932962	ENSMUST00000 124080.7	Pdgfa	ENSMUSG00 000025856	platelet derived growth factor, alpha Source MGI Symbol Acc MGI 97527
F05	SBM0722468	ENSMUST00000 033941.6	Plat	ENSMUSG00 000031538	plasminogen activator, tissue Source MGI Symbol Acc MGI 97610
F06	SBM0733272	ENSMUST00000 224141.1	Plau	ENSMUSG00 000021822	plasminogen activator, urokinase Source MGI Symbol Acc MGI 97611
F07	SBM0732269	ENSMUST00000 206514.1	Plaur	ENSMUSG00 000046223	plasminogen activator, urokinase receptor Source MGI Symbol Acc MGI 97612
F08	SBM0836626	ENSMUST00000 014578.6	Plg	ENSMUSG00 000059481	plasminogen Source MGI Symbol Acc MGI 97620
F09	SBM1220566	ENSMUST00000 013807.7	Pten	ENSMUSG00 000013663	phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583
F10	SBM0782881	ENSMUST00000 035065.8	Ptgs2	ENSMUSG00 000032487	prostaglandin-endoperoxide synthase 2 Source MGI Symbol Acc MGI 97798

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0680406	ENSMUST00000145709.7	Rac1	ENSMUSG0000001847	Rac family small GTPase 1 Source MGI Symbol Acc MGI 97845
F12	SBM0943773	ENSMUST00000194701.5	Rhoa	ENSMUSG0000007815	ras homolog family member A Source MGI Symbol Acc MGI 1096342
G01	SBM0809699	ENSMUST00000041388.10	Serpine1	ENSMUSG00000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
G02	SBM0821931	ENSMUST00000103114.7	Stat3	ENSMUSG0000004040	signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038
G03	SBM0866636	ENSMUST00000216035.1	Tagln	ENSMUSG00000032085	transgelin Source MGI Symbol Acc MGI 106012
G04	SBM0940166	ENSMUST00000192058.3	Tgfa	ENSMUSG00000029999	transforming growth factor alpha Source MGI Symbol Acc MGI 98724
G05	SBM0850388	ENSMUST00000002678.9	Tgfb1	ENSMUSG0000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G06	SBM0782468	ENSMUST00000146591.1	Tgfb3	ENSMUSG00000029287	transforming growth factor, beta receptor III Source MGI Symbol Acc MGI 104637
G07	SBM0839007	ENSMUST00000115342.9	Timp1	ENSMUSG0000001131	tissue inhibitor of metalloproteinase 1 Source MGI Symbol Acc MGI 98752
G08	SBM0788439	ENSMUST00000025263.14	Tnf	ENSMUSG00000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G09	SBM1079198	ENSMUST00000217017.1	Vegfa	ENSMUSG00000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
G10	SBM1079687	ENSMUST00000128479.1	Vtn	ENSMUSG00000017344	vitronectin Source MGI Symbol Acc MGI 98940
G11	SBM1010994	ENSMUST00000230535.1	Ccn4	ENSMUSG00000005124	cellular communication network factor 4 Source MGI Symbol Acc MGI 1197008
G12	SBM0893772	ENSMUST00000112272.1	Wnt5a	ENSMUSG00000021994	wingless-type MMTV integration site family, member 5A Source MGI Symbol Acc MGI 98958
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 $\mu$ 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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