

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

## Mouse Growth Factors

Cat. no. 249950 SBMM-041ZR

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](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Amh	Artn	Bdnf	Bmp1	Bmp10	Bmp2	Bmp3	Bmp4	Bmp5	Bmp6	Bmp7	Bmp8a
B	Bmp8b	Csf1	Csf2	Csf3	Cxcl1	Cxcl12	Egf	Ereg	Fgf1	Fgf10	Fgf11	Fgf13
C	Fgf14	Fgf15	Fgf17	Fgf18	Fgf2	Fgf22	Fgf3	Fgf4	Fgf5	Fgf6	Fgf7	Fgf8
D	Fgf9	Vegfd	Gdf10	Gdf11	Gdf5	Gdnf	Hgf	Igf1	Igf2	Il11	Il12a	Il18
E	Il1a	Il1b	Il2	Il3	Il4	Il6	Il7	Inha	Inhba	Inhbb	Kitl	Lefty1
F	Lefty2	Lep	Lif	Mdk	Mstn	Ngf	Nodal	Nf3	Nf5	Pdgfra	Pgf	Robep1
G	S100a6	Spp1	Tdgf1	Tff1	Tgfa	Tgfb1	Tgfb2	Tgfb3	Vegfa	Vegfb	Vegfc	Zfp91
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	SBM0728372	ENSMUST00000036016.5	Amh	ENSMUSG0000035262	anti-Mullerian hormone Source MGI Symbol Acc MGI 88006
A02	SBM0981474	ENSMUST00000070816.8	Artn	ENSMUSG0000028539	artemin Source MGI Symbol Acc MGI 1333791
A03	SBM0985592	ENSMUST00000111042.2	Bdnf	ENSMUSG0000048482	brain derived neurotrophic factor Source MGI Symbol Acc MGI 88145
A04	SBM1022339	ENSMUST00000022693.8	Bmp1	ENSMUSG0000022098	bone morphogenetic protein 1 Source MGI Symbol Acc MGI 88176
A05	SBM0702481	ENSMUST00000032125.6	Bmp10	ENSMUSG0000030046	bone morphogenetic protein 10 Source MGI Symbol Acc MGI 1338820
A06	SBM0831820	ENSMUST00000028836.6	Bmp2	ENSMUSG0000027358	bone morphogenetic protein 2 Source MGI Symbol Acc MGI 88177
A07	SBM0867543	ENSMUST000000200388.1	Bmp3	ENSMUSG0000029335	bone morphogenetic protein 3 Source MGI Symbol Acc MGI 88179
A08	SBM0845886	ENSMUST00000100676.2	Bmp4	ENSMUSG0000021835	bone morphogenetic protein 4 Source MGI Symbol Acc MGI 88180
A09	SBM0922578	ENSMUST00000137213.1	Bmp5	ENSMUSG0000032179	bone morphogenetic protein 5 Source MGI Symbol Acc MGI 88181
A10	SBM0892506	ENSMUST00000171970.2	Bmp6	ENSMUSG0000039004	bone morphogenetic protein 6 Source MGI Symbol Acc MGI 88182
A11	SBM1004016	ENSMUST00000137247.1	Bmp7	ENSMUSG0000008999	bone morphogenetic protein 7 Source MGI Symbol Acc MGI 103302
A12	SBM1032433	ENSMUST00000040496.5	Bmp8a	ENSMUSG0000032726	bone morphogenetic protein 8a Source MGI Symbol Acc MGI 104515
B01	SBM0765448	ENSMUST00000002457.1	Bmp8b	ENSMUSG0000002384	bone morphogenetic protein 8b Source MGI Symbol Acc MGI 107335
B02	SBM0903322	ENSMUST00000155557.1	Csf1	ENSMUSG0000014599	colony stimulating factor 1 (macrophage) Source MGI Symbol Acc MGI 1339753
B03	SBM1080991	ENSMUST00000019060.5	Csf2	ENSMUSG0000018916	colony stimulating factor 2 (granulocyte-macrophage) Source MGI Symbol Acc MGI 1339752
B04	SBM0837472	ENSMUST00000038886.2	Csf3	ENSMUSG0000038067	colony stimulating factor 3 (granulocyte) Source MGI Symbol Acc MGI 1339751
B05	SBM0998835	ENSMUST00000031327.8	Cxcl1	ENSMUSG0000029380	chemokine (C-X-C motif) ligand 1 Source MGI Symbol Acc MGI 108068
B06	SBM0703161	ENSMUST00000134244.1	Cxcl12	ENSMUSG0000061353	chemokine (C-X-C motif) ligand 12 Source MGI Symbol Acc MGI 103556
B07	SBM1005237	ENSMUST00000197079.4	Egf	ENSMUSG0000028017	epidermal growth factor Source MGI Symbol Acc MGI 95290
B08	SBM0874254	ENSMUST00000031324.5	Ereg	ENSMUSG0000029377	epiregulin Source MGI Symbol Acc MGI 107508
B09	SBM1074617	ENSMUST00000235922.1	Fgf1	ENSMUSG0000036585	fibroblast growth factor 1 Source MGI Symbol Acc MGI 95515
B10	SBM0904863	ENSMUST00000128103.8	Fgf10	ENSMUSG0000021732	fibroblast growth factor 10 Source MGI Symbol Acc MGI 1099809
B11	SBM0774212	ENSMUST00000102585.1	Fgf11	ENSMUSG0000042826	fibroblast growth factor 11 Source MGI Symbol Acc MGI 109167
B12	SBM0842006	ENSMUST00000033473.11	Fgf13	ENSMUSG0000031137	fibroblast growth factor 13 Source MGI Symbol Acc MGI 109178
C01	SBM0934831	ENSMUST00000095529.9	Fgf14	ENSMUSG0000025551	fibroblast growth factor 14 Source MGI Symbol Acc MGI 109189
C02	SBM0826287	ENSMUST00000207229.1	Fgf15	ENSMUSG0000031073	fibroblast growth factor 15 Source MGI Symbol Acc MGI 1096383
C03	SBM0733903	ENSMUST00000227123.1	Fgf17	ENSMUSG0000022101	fibroblast growth factor 17 Source MGI Symbol Acc MGI 1202401
C04	SBM0738741	ENSMUST00000109363.7	Fgf18	ENSMUSG0000057967	fibroblast growth factor 18 Source MGI Symbol Acc MGI 1277980
C05	SBM0959713	ENSMUST00000138563.8	Fgf2	ENSMUSG0000037225	fibroblast growth factor 2 Source MGI Symbol Acc MGI 95516
C06	SBM0678750	ENSMUST00000219981.1	Fgf22	ENSMUSG0000020327	fibroblast growth factor 22 Source MGI Symbol Acc MGI 1914362
C07	SBM0844076	ENSMUST00000155320.7	Fgf3	ENSMUSG0000031074	fibroblast growth factor 3 Source MGI Symbol Acc MGI 95517
C08	SBM0696463	ENSMUST00000060336.4	Fgf4	ENSMUSG0000050917	fibroblast growth factor 4 Source MGI Symbol Acc MGI 95518
C09	SBM0796867	ENSMUST00000200059.1	Fgf5	ENSMUSG0000029337	fibroblast growth factor 5 Source MGI Symbol Acc MGI 95519
C10	SBM1066026	ENSMUST00000000187.6	Fgf6	ENSMUSG0000000183	fibroblast growth factor 6 Source MGI Symbol Acc MGI 95520
		ENSMUST000000		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	SBM0919169	ENSMUST00000 026241.11	Fgf8	ENSMUSG00 000025219	fibroblast growth factor 8 Source MGI Symbol Acc MGI 99604
D01	SBM0984598	ENSMUST00000 022545.13	Fgf9	ENSMUSG00 000021974	fibroblast growth factor 9 Source MGI Symbol Acc MGI 104723
D02	SBM0809039	ENSMUST00000 124851.1	Vegfd	ENSMUSG00 000031380	vascular endothelial growth factor D Source MGI Symbol Acc MGI 108037
D03	SBM0689407	ENSMUST00000 168727.2	Gdf10	ENSMUSG00 000021943	growth differentiation factor 10 Source MGI Symbol Acc MGI 95684
D04	SBM0677701	ENSMUST00000 026408.6	Gdf11	ENSMUSG00 000025352	growth differentiation factor 11 Source MGI Symbol Acc MGI 1338027
D05	SBM0811347	ENSMUST00000 040162.2	Gdf5	ENSMUSG00 000038259	growth differentiation factor 5 Source MGI Symbol Acc MGI 95688
D06	SBM0745351	ENSMUST00000 022744.4	Gdnf	ENSMUSG00 000022144	glial cell line derived neurotrophic factor Source MGI Symbol Acc MGI 107430
D07	SBM0858725	ENSMUST00000 200189.4	Hgf	ENSMUSG00 000028864	hepatocyte growth factor Source MGI Symbol Acc MGI 96079
D08	SBM1026650	ENSMUST00000 122386.7	Igf1	ENSMUSG00 000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D09	SBM0905480	ENSMUST00000 121128.7	Igf2	ENSMUSG00 000048583	insulin-like growth factor 2 Source MGI Symbol Acc MGI 96434
D10	SBM0752881	ENSMUST00000 094892.11	Il11	ENSMUSG00 000004371	interleukin 11 Source MGI Symbol Acc MGI 107613
D11	SBM0806519	ENSMUST00000 107816.3	Il12a	ENSMUSG00 000027776	interleukin 12a Source MGI Symbol Acc MGI 96539
D12	SBM0953194	ENSMUST00000 180021.1	Il18	ENSMUSG00 000039217	interleukin 18 Source MGI Symbol Acc MGI 107936
E01	SBM1007460	ENSMUST00000 028882.1	Il1a	ENSMUSG00 000027399	interleukin 1 alpha Source MGI Symbol Acc MGI 96542
E02	SBM0738485	ENSMUST00000 028881.13	Il1b	ENSMUSG00 000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
E03	SBM0797059	ENSMUST00000 029275.5	Il2	ENSMUSG00 000027720	interleukin 2 Source MGI Symbol Acc MGI 96548
E04	SBM1089901	ENSMUST00000 019058.5	Il3	ENSMUSG00 000018914	interleukin 3 Source MGI Symbol Acc MGI 96552
E05	SBM0926369	ENSMUST00000 150568.7	Il4	ENSMUSG00 000000869	interleukin 4 Source MGI Symbol Acc MGI 96556
E06	SBM0742623	ENSMUST00000 026845.11	Il6	ENSMUSG00 000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
E07	SBM1037504	ENSMUST00000 168269.7	Il7	ENSMUSG00 000040329	interleukin 7 Source MGI Symbol Acc MGI 96561
E08	SBM0852039	ENSMUST00000 037330.4	Inha	ENSMUSG00 000032968	inhibin alpha Source MGI Symbol Acc MGI 96569
E09	SBM0694869	ENSMUST00000 164993.1	Inhba	ENSMUSG00 000041324	inhibin beta-A Source MGI Symbol Acc MGI 96570
E10	SBM1002906	ENSMUST00000 038765.5	Inhbb	ENSMUSG00 000037035	inhibin beta-B Source MGI Symbol Acc MGI 96571
E11	SBM0685433	ENSMUST00000 105283.8	Kitl	ENSMUSG00 000019966	kit ligand Source MGI Symbol Acc MGI 96974
E12	SBM0716026	ENSMUST00000 037361.8	Lefty1	ENSMUSG00 000038793	left right determination factor 1 Source MGI Symbol Acc MGI 107405
F01	SBM1038838	ENSMUST00000 085797.5	Lefty2	ENSMUSG00 000066652	left-right determination factor 2 Source MGI Symbol Acc MGI 2443573
F02	SBM0718370	ENSMUST00000 169505.1	Lep	ENSMUSG00 000059201	leptin Source MGI Symbol Acc MGI 104663
F03	SBM0873612	ENSMUST00000 066283.11	Lif	ENSMUSG00 000034394	leukemia inhibitory factor Source MGI Symbol Acc MGI 96787
F04	SBM0843207	ENSMUST00000 028672.12	Mdk	ENSMUSG00 000027239	midkine Source MGI Symbol Acc MGI 96949
F05	SBM0884770	ENSMUST00000 027269.6	Mstn	ENSMUSG00 000026100	myostatin Source MGI Symbol Acc MGI 95691
F06	SBM0986150	ENSMUST00000 106925.8	Ngf	ENSMUSG00 000027859	nerve growth factor Source MGI Symbol Acc MGI 97321
F07	SBM1015337	ENSMUST00000 049339.6	Nodal	ENSMUSG00 000037171	nodal Source MGI Symbol Acc MGI 97359
F08	SBM0855486	ENSMUST00000 204542.2	Nhf3	ENSMUSG00 000049107	neurotrophin 3 Source MGI Symbol Acc MGI 97380
F09	SBM1013714	ENSMUST00000 058879.7	Nhf5	ENSMUSG00 000074121	neurotrophin 5 Source MGI Symbol Acc MGI 97381
F10	SBM0932962	ENSMUST00000 124080.7	Pdgfa	ENSMUSG00 000025856	platelet derived growth factor, alpha Source MGI Symbol Acc MGI 97527

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0900847	ENSMUST00000220985.1	Pgf	ENSMUSG0000004791	placental growth factor Source MGI Symbol Acc MGI 105095
F12	SBM0674180	ENSMUST00000178245.1	Rabep1	ENSMUSG0000020817	rabaptin, RAB GTPase binding effector protein 1 Source MGI Symbol Acc MGI 1860236
G01	SBM0687148	ENSMUST00000197189.1	S100a6	ENSMUSG0000001025	S100 calcium binding protein A6 (calcyclin) Source MGI Symbol Acc MGI 1339467
G02	SBM0826950	ENSMUST00000086833.12	Spp1	ENSMUSG0000029304	secreted phosphoprotein 1 Source MGI Symbol Acc MGI 98389
G03	SBM1058699	ENSMUST00000035075.12	Tdgf1	ENSMUSG0000032494	teratocarcinoma-derived growth factor 1 Source MGI Symbol Acc MGI 98658
G04	SBM0790771	ENSMUST00000024831.7	Tff1	ENSMUSG0000024032	trefoil factor 1 Source MGI Symbol Acc MGI 88135
G05	SBM0940166	ENSMUST00000192058.3	Tgfa	ENSMUSG0000029999	transforming growth factor alpha Source MGI Symbol Acc MGI 98724
G06	SBM0850388	ENSMUST00000002678.7	Tgfb1	ENSMUSG0000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G07	SBM0955433	ENSMUST00000194960.1	Tgfb2	ENSMUSG0000039239	transforming growth factor, beta 2 Source MGI Symbol Acc MGI 98726
G08	SBM1022458	ENSMUST00000003687.7	Tgfb3	ENSMUSG0000021253	transforming growth factor, beta 3 Source MGI Symbol Acc MGI 98727
G09	SBM1079198	ENSMUST00000217017.1	Vegfa	ENSMUSG0000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
G10	SBM0920136	ENSMUST00000130048.7	Vegfb	ENSMUSG0000024962	vascular endothelial growth factor B Source MGI Symbol Acc MGI 106199
G11	SBM0863177	ENSMUST00000209703.1	Vegfc	ENSMUSG0000031520	vascular endothelial growth factor C Source MGI Symbol Acc MGI 109124
G12	SBM0886574	ENSMUST00000038627.8	Zfp91	ENSMUSG0000024695	zinc finger protein 91 Source MGI Symbol Acc MGI 104854
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG0000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG0000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG0000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG0000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG0000023944	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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