

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

## Mouse Cytokines & Chemokines

Cat. no. 249950 SBMM-150ZR

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	Adipoq	Bmp2	Bmp4	Bmp6	Bmp7	Ccl1	Ccl11	Ccl12	Ccl17	Ccl19	Ccl2	Ccl20
B	Ccl22	Ccl24	Ccl3	Ccl4	Ccl5	Ccl7	Cd40lg	Cd70	Cnff	Csf1	Csf2	Csf3
C	Cf1	Cx3cl1	Cxcl1	Cxcl10	Cxcl11	Cxcl12	Cxcl13	Cxcl16	Cxcl3	Cxcl5	Cxcl9	Fasl
D	Gpi1	Hc	Ifna2	Ifng	Il10	Il11	Il12a	Il12b	Il13	Il15	Il16	Il17a
E	Il17f	Il18	Il1a	Il1b	Il1rn	Il2	Il21	Il22	Il23a	Il24	Il27	Il3
F	Il4	Il5	Il6	Il7	Il9	Lif	Lta	Lib	Mif	Mtn	Nodal	Osm
G	Pf4	Ppbbp	Spp1	Tgfb2	Thpo	Tnf	Tnfrsf11b	Tnfsf10	Tnfsf11	Tnfsf13b	Vegfa	Xcl1
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	SBM0903115	ENSMUST0000023593.5	Adipoq	ENSMUSG0000022878	adiponectin, C1Q and collagen domain containing Source MGI Symbol Acc MGI 106675
A02	SBM0831820	ENSMUST0000028836.6	Bmp2	ENSMUSG0000027358	bone morphogenetic protein 2 Source MGI Symbol Acc MGI 88177
A03	SBM0845886	ENSMUST00000100676.2	Bmp4	ENSMUSG0000021835	bone morphogenetic protein 4 Source MGI Symbol Acc MGI 88180
A04	SBM0892506	ENSMUST00000171970.2	Bmp6	ENSMUSG0000039004	bone morphogenetic protein 6 Source MGI Symbol Acc MGI 88182
A05	SBM1004016	ENSMUST00000137247.1	Bmp7	ENSMUSG0000008999	bone morphogenetic protein 7 Source MGI Symbol Acc MGI 103302
A06	SBM0725984	ENSMUST00000108189.8	Ccl1	ENSMUSG0000020702	chemokine (C-C motif) ligand 1 Source MGI Symbol Acc MGI 98258
A07	SBM0757192	ENSMUST00000000342.2	Ccl11	ENSMUSG0000020676	chemokine (C-C motif) ligand 11 Source MGI Symbol Acc MGI 103576
A08	SBM0687223	ENSMUST00000000194.3	Ccl12	ENSMUSG0000035352	chemokine (C-C motif) ligand 12 Source MGI Symbol Acc MGI 108224
A09	SBM0699395	ENSMUST00000034232.2	Ccl17	ENSMUSG00000031780	chemokine (C-C motif) ligand 17 Source MGI Symbol Acc MGI 1329039
A10	SBM1085373	ENSMUST00000102957.5	Ccl19	ENSMUSG0000071005	chemokine (C-C motif) ligand 19 Source MGI Symbol Acc MGI 1346316
A11	SBM0836747	ENSMUST00000000193.5	Ccl2	ENSMUSG0000035385	chemokine (C-C motif) ligand 2 Source MGI Symbol Acc MGI 98259
A12	SBM1058215	ENSMUST00000113437.8	Ccl20	ENSMUSG0000026166	chemokine (C-C motif) ligand 20 Source MGI Symbol Acc MGI 1329031
B01	SBM0685855	ENSMUST00000034231.3	Ccl22	ENSMUSG0000031779	chemokine (C-C motif) ligand 22 Source MGI Symbol Acc MGI 1306779
B02	SBM0867136	ENSMUST00000004936.9	Ccl24	ENSMUSG0000004814	chemokine (C-C motif) ligand 24 Source MGI Symbol Acc MGI 1928953
B03	SBM0794563	ENSMUST00000001008.5	Ccl3	ENSMUSG0000000982	chemokine (C-C motif) ligand 3 Source MGI Symbol Acc MGI 98260
B04	SBM0939661	ENSMUST00000019074.3	Ccl4	ENSMUSG0000018930	chemokine (C-C motif) ligand 4 Source MGI Symbol Acc MGI 98261
B05	SBM0703029	ENSMUST00000125015.1	Ccl5	ENSMUSG0000035042	chemokine (C-C motif) ligand 5 Source MGI Symbol Acc MGI 98262
B06	SBM0998844	ENSMUST00000021011.2	Ccl7	ENSMUSG0000035373	chemokine (C-C motif) ligand 7 Source MGI Symbol Acc MGI 99512
B07	SBM0708134	ENSMUST00000033466.1	Cd40lg	ENSMUSG0000031132	CD40 ligand Source MGI Symbol Acc MGI 88337
B08	SBM0822094	ENSMUST00000019633.7	Cd70	ENSMUSG0000019489	CD70 antigen Source MGI Symbol Acc MGI 1195273
B09	SBM0749576	ENSMUST00000112933.1	Cnlf	ENSMUSG0000079415	ciliary neurotrophic factor Source MGI Symbol Acc MGI 88439
B10	SBM0903322	ENSMUST00000155557.1	Csf1	ENSMUSG0000014599	colony stimulating factor 1 (macrophage) Source MGI Symbol Acc MGI 1339753
B11	SBM1080991	ENSMUST00000019060.5	Csf2	ENSMUSG0000018916	colony stimulating factor 2 (granulocyte-macrophage) Source MGI Symbol Acc MGI 1339752
B12	SBM0837472	ENSMUST00000038886.2	Csf3	ENSMUSG0000038067	colony stimulating factor 3 (granulocyte) Source MGI Symbol Acc MGI 1339751
C01	SBM0812936	ENSMUST00000206997.1	Ctf1	ENSMUSG0000042340	cardiotrophin 1 Source MGI Symbol Acc MGI 105115
C02	SBM0783722	ENSMUST00000034230.6	Cx3cl1	ENSMUSG0000031778	chemokine (C-X3-C motif) ligand 1 Source MGI Symbol Acc MGI 1097153
C03	SBM0998835	ENSMUST00000031327.8	Cxcl1	ENSMUSG0000029380	chemokine (C-X-C motif) ligand 1 Source MGI Symbol Acc MGI 108068
C04	SBM0996179	ENSMUST00000118006.2	Cxcl10	ENSMUSG0000034855	chemokine (C-X-C motif) ligand 10 Source MGI Symbol Acc MGI 1352450
C05	SBM0710486	ENSMUST00000122808.1	Cxcl11	ENSMUSG0000060183	chemokine (C-X-C motif) ligand 11 Source MGI Symbol Acc MGI 1860203
C06	SBM0703161	ENSMUST00000134244.1	Cxcl12	ENSMUSG0000061353	chemokine (C-X-C motif) ligand 12 Source MGI Symbol Acc MGI 103556
C07	SBM1027153	ENSMUST00000023840.6	Cxcl13	ENSMUSG0000023078	chemokine (C-X-C motif) ligand 13 Source MGI Symbol Acc MGI 1888499
C08	SBM0926670	ENSMUST00000019064.8	Cxcl16	ENSMUSG0000018920	chemokine (C-X-C motif) ligand 16 Source MGI Symbol Acc MGI 1932682
C09	SBM0747228	ENSMUST00000201840.1	Cxcl3	ENSMUSG0000029379	chemokine (C-X-C motif) ligand 3 Source MGI Symbol Acc MGI 3037818
C10	SBM0760625	ENSMUST00000202380.1	Cxcl5	ENSMUSG0000029371	chemokine (C-X-C motif) ligand 5 Source MGI Symbol Acc MGI 1096868
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0993686	113093.4	Cxcl9	000029417	chemokine (C-X-C motif) ligand 9 Source MGI Symbol Acc MGI 1352449
C12	SBM0967876	ENSMUST0000000834.3	Fasl	ENSMUSG0000000817	Fas ligand (TNF superfamily, member 6) Source MGI Symbol Acc MGI 99255
D01	SBM1045586	ENSMUST00000038027.5	Gpi1	ENSMUSG00000036427	glucose phosphate isomerase 1 Source MGI Symbol Acc MGI 95797
D02	SBM0750153	ENSMUST00000028233.6	Hc	ENSMUSG00000026874	hemolytic complement Source MGI Symbol Acc MGI 96031
D03	SBM0773737	ENSMUST000000105147.1	Ifna2	ENSMUSG00000078354	interferon alpha 2 Source MGI Symbol Acc MGI 107666
D04	SBM0903694	ENSMUST00000068592.4	Ifng	ENSMUSG00000055170	interferon gamma Source MGI Symbol Acc MGI 107656
D05	SBM1004151	ENSMUST00000016673.5	Il10	ENSMUSG0000016529	interleukin 10 Source MGI Symbol Acc MGI 96537
D06	SBM0752881	ENSMUST00000094892.11	Il11	ENSMUSG0000004371	interleukin 11 Source MGI Symbol Acc MGI 107613
D07	SBM0806519	ENSMUST000000107816.3	Il12a	ENSMUSG00000027776	interleukin 12a Source MGI Symbol Acc MGI 96539
D08	SBM0957286	ENSMUST000000102796.9	Il12b	ENSMUSG00000004296	interleukin 12b Source MGI Symbol Acc MGI 96540
D09	SBM0860496	ENSMUST00000020650.1	Il13	ENSMUSG00000020383	interleukin 13 Source MGI Symbol Acc MGI 96541
D10	SBM0737685	ENSMUST00000034148.6	Il15	ENSMUSG00000031712	interleukin 15 Source MGI Symbol Acc MGI 103014
D11	SBM0679719	ENSMUST00000001792.11	Il16	ENSMUSG00000001741	interleukin 16 Source MGI Symbol Acc MGI 1270855
D12	SBM1055424	ENSMUST00000027061.4	Il17a	ENSMUSG00000025929	interleukin 17A Source MGI Symbol Acc MGI 107364
E01	SBM0790079	ENSMUST00000039046.9	Il17f	ENSMUSG00000041872	interleukin 17F Source MGI Symbol Acc MGI 2676631
E02	SBM0953194	ENSMUST000000180021.1	Il18	ENSMUSG00000039217	interleukin 18 Source MGI Symbol Acc MGI 107936
E03	SBM1007460	ENSMUST00000028882.1	Il1a	ENSMUSG00000027399	interleukin 1 alpha Source MGI Symbol Acc MGI 96542
E04	SBM0738485	ENSMUST00000028881.13	Il1b	ENSMUSG00000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
E05	SBM0732530	ENSMUST000000142093.6	Il1rn	ENSMUSG00000026981	interleukin 1 receptor antagonist Source MGI Symbol Acc MGI 96547
E06	SBM0797059	ENSMUST00000029275.5	Il2	ENSMUSG00000027720	interleukin 2 Source MGI Symbol Acc MGI 96548
E07	SBM0747287	ENSMUST000000161015.1	Il21	ENSMUSG00000027718	interleukin 21 Source MGI Symbol Acc MGI 1890474
E08	SBM0998851	ENSMUST000000096691.4	Il22	ENSMUSG00000074695	interleukin 22 Source MGI Symbol Acc MGI 1355307
E09	SBM0691721	ENSMUST000000218109.1	Il23a	ENSMUSG00000025383	interleukin 23, alpha subunit p19 Source MGI Symbol Acc MGI 1932410
E10	SBM0705042	ENSMUST000000191279.1	Il24	ENSMUSG00000026420	interleukin 24 Source MGI Symbol Acc MGI 2135548
E11	SBM0706373	ENSMUST000000058429.5	Il27	ENSMUSG00000044701	interleukin 27 Source MGI Symbol Acc MGI 2384409
E12	SBM1089901	ENSMUST00000019058.5	Il3	ENSMUSG0000018914	interleukin 3 Source MGI Symbol Acc MGI 96552
F01	SBM0926369	ENSMUST000000150568.7	Il4	ENSMUSG00000000869	interleukin 4 Source MGI Symbol Acc MGI 96556
F02	SBM1034588	ENSMUST000000048605.2	Il5	ENSMUSG00000036117	interleukin 5 Source MGI Symbol Acc MGI 96557
F03	SBM0742623	ENSMUST00000026845.11	Il6	ENSMUSG00000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
F04	SBM1037504	ENSMUST000000168269.7	Il7	ENSMUSG00000040329	interleukin 7 Source MGI Symbol Acc MGI 96561
F05	SBM0847018	ENSMUST00000022019.3	Il9	ENSMUSG00000021538	interleukin 9 Source MGI Symbol Acc MGI 96563
F06	SBM0873612	ENSMUST000000066283.11	Lif	ENSMUSG00000034394	leukemia inhibitory factor Source MGI Symbol Acc MGI 96787
F07	SBM0790437	ENSMUST00000025266.5	Lta	ENSMUSG00000024402	lymphotoxin A Source MGI Symbol Acc MGI 104797
F08	SBM0777783	ENSMUST000000173510.1	Ltb	ENSMUSG00000024399	lymphotoxin B Source MGI Symbol Acc MGI 104796
F09	SBM0802241	ENSMUST000000218267.1	Mif	ENSMUSG00000033307	macrophage migration inhibitory factor (glycosylation-inhibiting factor) Source MGI Symbol Acc MGI 96982
F10	SBM0884770	ENSMUST00000027269.6	Mstn	ENSMUSG00000026100	myostatin Source MGI Symbol Acc MGI 95691

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM1015337	ENSMUST00000049339.6	Nodal	ENSMUSG00000037171	nodal Source MGI Symbol Acc MGI 97359
F12	SBM0824436	ENSMUST00000131764.1	Osm	ENSMUSG0000058755	oncostatin M Source MGI Symbol Acc MGI 104749
G01	SBM0889385	ENSMUST00000031320.7	Pf4	ENSMUSG0000029373	platelet factor 4 Source MGI Symbol Acc MGI 1888711
G02	SBM1001435	ENSMUST00000031319.7	Ppbp	ENSMUSG0000029372	pro-platelet basic protein Source MGI Symbol Acc MGI 1888712
G03	SBM0826950	ENSMUST00000086833.12	Spp1	ENSMUSG0000029304	secreted phosphoprotein 1 Source MGI Symbol Acc MGI 98389
G04	SBM0955433	ENSMUST00000194960.1	Tgfb2	ENSMUSG0000039239	transforming growth factor, beta 2 Source MGI Symbol Acc MGI 98726
G05	SBM0851394	ENSMUST00000231826.1	Thpo	ENSMUSG0000022847	thrombopoietin Source MGI Symbol Acc MGI 101875
G06	SBM0788439	ENSMUST00000025263.14	Tnf	ENSMUSG0000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G07	SBM0675830	ENSMUST00000079772.3	Tnfrsf11b	ENSMUSG0000063727	tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin) Source MGI Symbol Acc MGI 109587
G08	SBM0969669	ENSMUST00000046383.11	Tnfsf10	ENSMUSG0000039304	tumor necrosis factor (ligand) superfamily, member 10 Source MGI Symbol Acc MGI 107414
G09	SBM1225403	ENSMUST00000022592.7	Tnfsf11	ENSMUSG0000022015	tumor necrosis factor (ligand) superfamily, member 11 Source MGI Symbol Acc MGI 1100089
G10	SBM0908217	ENSMUST00000208683.1	Tnfsf13b	ENSMUSG0000031497	tumor necrosis factor (ligand) superfamily, member 13b Source MGI Symbol Acc MGI 1344376
G11	SBM1079198	ENSMUST00000217017.1	Vegfa	ENSMUSG0000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
G12	SBM0898013	ENSMUST00000027860.7	Xcl1	ENSMUSG0000026573	chemokine (C motif) ligand 1 Source MGI Symbol Acc MGI 104593
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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