

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

## Mouse Inflammatory Cytokines & Receptors

Cat. no. 249950 SBMM-011ZR

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	Aimp1	Bmp2	Ccl1	Ccl11	Ccl12	Cd17	Ccl19	Ccd2	Ccd20	Ccd22	Ccd24	Ccl3
B	Ccd4	Ccd5	Ccl6	Ccd7	Ccd8	Ccd9	Ccr1	Ccr10	Ccr2	Ccr3	Ccr4	Ccr5
C	Ccr6	Ccr8	Cd40lg	Csf1	Csf2	Csf3	Cx3d1	Cxd1	Cxd10	Cxd11	Cxd12	Cxd13
D	Cxd15	Cxd15	Cxd19	Cxcr2	Cxcr3	Cxcr5	Fasl	Ifng	Il10ra	Il10rb	Il11	Il13
E	Il15	Il16	Il17a	Il17b	Il17f	Il1a	Il1b	Il1r1	Il1m	Il21	Il27	Il2rb
F	Il2rg	Il3	Il33	Il4	Il5	Il5ra	Il6ra	Il6st	Il7	Lta	Ltb	Mif
G	Nomp1	Osm	Pf4	Spp1	Tnf	Tnfsf11b	Tnfsf10	Tnfsf11	Tnfsf13	Tnfsf13b	Tnfsf4	Vegfa
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	PPC	PPC	PPC	PPC

## Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBM0758354	ENSMUST00000 196206.4	Aimp1	ENSMUSG00 000028029	aminoacyl tRNA synthetase complex-interacting multifunctional protein 1 Source MGI Symbol Acc MGI 102774
A02	SBM0831820	ENSMUST00000 028836.6	Bmp2	ENSMUSG00 000027358	bone morphogenetic protein 2 Source MGI Symbol Acc MGI 88177
A03	SBM0725984	ENSMUST00000 108189.8	Ccl1	ENSMUSG00 000020702	chemokine (C-C motif) ligand 1 Source MGI Symbol Acc MGI 98258
A04	SBM0757192	ENSMUST00000 000342.2	Ccl11	ENSMUSG00 000020676	chemokine (C-C motif) ligand 11 Source MGI Symbol Acc MGI 103576
A05	SBM0687223	ENSMUST00000 000194.3	Ccl12	ENSMUSG00 000035352	chemokine (C-C motif) ligand 12 Source MGI Symbol Acc MGI 108224
A06	SBM0699395	ENSMUST00000 034232.2	Ccl17	ENSMUSG00 000031780	chemokine (C-C motif) ligand 17 Source MGI Symbol Acc MGI 1329039
A07	SBM1085373	ENSMUST00000 102957.5	Ccl19	ENSMUSG00 000071005	chemokine (C-C motif) ligand 19 Source MGI Symbol Acc MGI 1346316
A08	SBM0836747	ENSMUST00000 000193.5	Ccl2	ENSMUSG00 000035385	chemokine (C-C motif) ligand 2 Source MGI Symbol Acc MGI 98259
A09	SBM1058215	ENSMUST00000 113437.8	Ccl20	ENSMUSG00 000026166	chemokine (C-C motif) ligand 20 Source MGI Symbol Acc MGI 1329031
A10	SBM0685855	ENSMUST00000 034231.3	Ccl22	ENSMUSG00 000031779	chemokine (C-C motif) ligand 22 Source MGI Symbol Acc MGI 1306779
A11	SBM0867136	ENSMUST00000 004936.9	Ccl24	ENSMUSG00 000004814	chemokine (C-C motif) ligand 24 Source MGI Symbol Acc MGI 1928953
A12	SBM0794563	ENSMUST00000 001008.5	Ccl3	ENSMUSG00 000000982	chemokine (C-C motif) ligand 3 Source MGI Symbol Acc MGI 98260
B01	SBM0939661	ENSMUST00000 019074.3	Ccl4	ENSMUSG00 000018930	chemokine (C-C motif) ligand 4 Source MGI Symbol Acc MGI 98261
B02	SBM0703029	ENSMUST00000 125015.1	Ccl5	ENSMUSG00 000035042	chemokine (C-C motif) ligand 5 Source MGI Symbol Acc MGI 98262
B03	SBM1076242	ENSMUST00000 019071.3	Ccl6	ENSMUSG00 000018927	chemokine (C-C motif) ligand 6 Source MGI Symbol Acc MGI 98263
B04	SBM0998844	ENSMUST00000 021011.2	Ccl7	ENSMUSG00 000035373	chemokine (C-C motif) ligand 7 Source MGI Symbol Acc MGI 99512
B05	SBM1067489	ENSMUST00000 009329.2	Ccl8	ENSMUSG00 000009185	chemokine (C-C motif) ligand 8 Source MGI Symbol Acc MGI 101878
B06	SBM0688036	ENSMUST00000 019266.5	Ccl9	ENSMUSG00 000019122	chemokine (C-C motif) ligand 9 Source MGI Symbol Acc MGI 104533
B07	SBM1015405	ENSMUST00000 026911.5	Ccr1	ENSMUSG00 000025804	chemokine (C-C motif) receptor 1 Source MGI Symbol Acc MGI 104618
B08	SBM0858133	ENSMUST00000 062759.3	Ccr10	ENSMUSG00 000044052	chemokine (C-C motif) receptor 10 Source MGI Symbol Acc MGI 1096320
B09	SBM0796638	ENSMUST00000 168841.2	Ccr2	ENSMUSG00 000049103	chemokine (C-C motif) receptor 2 Source MGI Symbol Acc MGI 106185
B10	SBM1022292	ENSMUST00000 039171.8	Ccr3	ENSMUSG00 000035448	chemokine (C-C motif) receptor 3 Source MGI Symbol Acc MGI 104616
B11	SBM0824531	ENSMUST00000 054414.4	Ccr4	ENSMUSG00 000047898	chemokine (C-C motif) receptor 4 Source MGI Symbol Acc MGI 107824
B12	SBM0964476	ENSMUST00000 111442.2	Ccr5	ENSMUSG00 000079227	chemokine (C-C motif) receptor 5 Source MGI Symbol Acc MGI 107182
C01	SBM0879668	ENSMUST00000 164411.9	Ccr6	ENSMUSG00 000040899	chemokine (C-C motif) receptor 6 Source MGI Symbol Acc MGI 1333797
C02	SBM0815029	ENSMUST00000 048777.3	Ccr8	ENSMUSG00 000042262	chemokine (C-C motif) receptor 8 Source MGI Symbol Acc MGI 1201402
C03	SBM0708134	ENSMUST00000 033466.1	Cd40lg	ENSMUSG00 000031132	CD40 ligand Source MGI Symbol Acc MGI 88337
C04	SBM0903322	ENSMUST00000 155557.1	Csf1	ENSMUSG00 000014599	colony stimulating factor 1 (macrophage) Source MGI Symbol Acc MGI 1339753
C05	SBM1080991	ENSMUST00000 019060.5	Csf2	ENSMUSG00 000018916	colony stimulating factor 2 (granulocyte-macrophage) Source MGI Symbol Acc MGI 1339752
C06	SBM0837472	ENSMUST00000 038886.2	Csf3	ENSMUSG00 000038067	colony stimulating factor 3 (granulocyte) Source MGI Symbol Acc MGI 1339751
C07	SBM0783722	ENSMUST00000 034230.6	Cx3cl1	ENSMUSG00 000031778	chemokine (C-X3-C motif) ligand 1 Source MGI Symbol Acc MGI 1097153
C08	SBM0998835	ENSMUST00000 031327.8	Cxcl1	ENSMUSG00 000029380	chemokine (C-X-C motif) ligand 1 Source MGI Symbol Acc MGI 108068
C09	SBM0996179	ENSMUST00000 118006.2	Cxcl10	ENSMUSG00 000034855	chemokine (C-X-C motif) ligand 10 Source MGI Symbol Acc MGI 1352450
C10	SBM0710486	ENSMUST00000 122808.1	Cxcl11	ENSMUSG00 000060183	chemokine (C-X-C motif) ligand 11 Source MGI Symbol Acc MGI 1860203
		ENSMUST00000		ENSMUSG00	

<b>Position</b>	<b>Assay</b>	<b>Name</b>	<b>Symbol</b>	<b>Ensembl ID</b>	<b>Description</b>
C11	SBM0703161	134244.1	Cxcl12	000061353	chemokine (C-X-C motif) ligand 12 Source MGI Symbol Acc MGI 103556
C12	SBM1027153	ENSMUST00000 023840.6	Cxcl13	ENSMUSG00 000023078	chemokine (C-X-C motif) ligand 13 Source MGI Symbol Acc MGI 1888499
D01	SBM0816626	ENSMUST00000 031322.6	Cxcl15	ENSMUSG00 000029375	chemokine (C-X-C motif) ligand 15 Source MGI Symbol Acc MGI 1339941
D02	SBM0760625	ENSMUST00000 202380.1	Cxcl5	ENSMUSG00 000029371	chemokine (C-X-C motif) ligand 5 Source MGI Symbol Acc MGI 1096868
D03	SBM0993686	ENSMUST00000 113093.4	Cxcl9	ENSMUSG00 000029417	chemokine (C-X-C motif) ligand 9 Source MGI Symbol Acc MGI 1352449
D04	SBM0963144	ENSMUST00000 106899.3	Cxcr2	ENSMUSG00 000026180	chemokine (C-X-C motif) receptor 2 Source MGI Symbol Acc MGI 105303
D05	SBM0682187	ENSMUST00000 056614.6	Cxcr3	ENSMUSG00 000050232	chemokine (C-X-C motif) receptor 3 Source MGI Symbol Acc MGI 1277207
D06	SBM0950831	ENSMUST00000 179828.7	Cxcr5	ENSMUSG00 000047880	chemokine (C-X-C motif) receptor 5 Source MGI Symbol Acc MGI 103567
D07	SBM0967876	ENSMUST00000 000834.3	Fasl	ENSMUSG00 000000817	Fas ligand (TNF superfamily, member 6) Source MGI Symbol Acc MGI 99255
D08	SBM0903694	ENSMUST00000 068592.4	Ifng	ENSMUSG00 000055170	interferon gamma Source MGI Symbol Acc MGI 107656
D09	SBM0888395	ENSMUST00000 176808.1	Il10ra	ENSMUSG00 000032089	interleukin 10 receptor, alpha Source MGI Symbol Acc MGI 96538
D10	SBM0883363	ENSMUST00000 156133.7	Il10rb	ENSMUSG00 000022969	interleukin 10 receptor, beta Source MGI Symbol Acc MGI 109380
D11	SBM0752881	ENSMUST00000 094892.11	Il11	ENSMUSG00 000004371	interleukin 11 Source MGI Symbol Acc MGI 107613
D12	SBM0860496	ENSMUST00000 020650.1	Il13	ENSMUSG00 000020383	interleukin 13 Source MGI Symbol Acc MGI 96541
E01	SBM0737685	ENSMUST00000 034148.6	Il15	ENSMUSG00 000031712	interleukin 15 Source MGI Symbol Acc MGI 103014
E02	SBM0679719	ENSMUST00000 001792.11	Il16	ENSMUSG00 000001741	interleukin 16 Source MGI Symbol Acc MGI 1270855
E03	SBM1055424	ENSMUST00000 027061.4	Il17a	ENSMUSG00 000025929	interleukin 17A Source MGI Symbol Acc MGI 107364
E04	SBM0707381	ENSMUST00000 235713.1	Il17b	ENSMUSG00 000024578	interleukin 17B Source MGI Symbol Acc MGI 1928397
E05	SBM0790079	ENSMUST00000 039046.9	Il17f	ENSMUSG00 000041872	interleukin 17F Source MGI Symbol Acc MGI 2676631
E06	SBM1007460	ENSMUST00000 028882.1	Il1a	ENSMUSG00 000027399	interleukin 1 alpha Source MGI Symbol Acc MGI 96542
E07	SBM0738485	ENSMUST00000 028881.13	Il1b	ENSMUSG00 000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
E08	SBM1086348	ENSMUST00000 027241.10	Il1r1	ENSMUSG00 000026072	interleukin 1 receptor, type I Source MGI Symbol Acc MGI 96545
E09	SBM0732530	ENSMUST00000 142093.6	Il1rn	ENSMUSG00 000026981	interleukin 1 receptor antagonist Source MGI Symbol Acc MGI 96547
E10	SBM0747287	ENSMUST00000 161015.1	Il21	ENSMUSG00 000027718	interleukin 21 Source MGI Symbol Acc MGI 1890474
E11	SBM0706373	ENSMUST00000 058429.5	Il27	ENSMUSG00 000044701	interleukin 27 Source MGI Symbol Acc MGI 2384409
E12	SBM1056230	ENSMUST00000 163494.2	Il2rb	ENSMUSG00 000068227	interleukin 2 receptor, beta chain Source MGI Symbol Acc MGI 96550
F01	SBM0793634	ENSMUST00000 127538.1	Il2rg	ENSMUSG00 000031304	interleukin 2 receptor, gamma chain Source MGI Symbol Acc MGI 96551
F02	SBM1089901	ENSMUST00000 019058.5	Il3	ENSMUSG00 000018914	interleukin 3 Source MGI Symbol Acc MGI 96552
F03	SBM0679001	ENSMUST00000 120388.8	Il33	ENSMUSG00 000024810	interleukin 33 Source MGI Symbol Acc MGI 1924375
F04	SBM0926369	ENSMUST00000 150568.7	Il4	ENSMUSG00 000000869	interleukin 4 Source MGI Symbol Acc MGI 96556
F05	SBM1034588	ENSMUST00000 048605.2	Il5	ENSMUSG00 000036117	interleukin 5 Source MGI Symbol Acc MGI 96557
F06	SBM0863497	ENSMUST00000 205004.1	Il5ra	ENSMUSG00 000005364	interleukin 5 receptor, alpha Source MGI Symbol Acc MGI 96558
F07	SBM0834938	ENSMUST00000 197679.4	Il6ra	ENSMUSG00 000027947	interleukin 6 receptor, alpha Source MGI Symbol Acc MGI 105304
F08	SBM0823451	ENSMUST00000 183829.7	Il6st	ENSMUSG00 000021756	interleukin 6 signal transducer Source MGI Symbol Acc MGI 96560
F09	SBM1037504	ENSMUST00000 168269.7	Il7	ENSMUSG00 000040329	interleukin 7 Source MGI Symbol Acc MGI 96561
F10	SBM0790437	ENSMUST00000 025266.5	Lta	ENSMUSG00 000024402	lymphotoxin A Source MGI Symbol Acc MGI 104797

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0777783	ENSMUST00000 173510.1	Ltb	ENSMUSG00 000024399	lymphotoxin B Source MGI Symbol Acc MGI 104796
F12	SBM0802241	ENSMUST00000 218267.1	Mif	ENSMUSG00 000033307	macrophage migration inhibitory factor (glycosylation-inhibiting factor) Source MGI Symbol Acc MGI 96982
G01	SBM0859199	ENSMUST00000 218491.1	Nampt	ENSMUSG00 000020572	nicotinamide phosphoribosyltransferase Source MGI Symbol Acc MGI 1929865
G02	SBM0824436	ENSMUST00000 131764.1	Osm	ENSMUSG00 000058755	oncostatin M Source MGI Symbol Acc MGI 104749
G03	SBM0889385	ENSMUST00000 031320.7	Pf4	ENSMUSG00 000029373	platelet factor 4 Source MGI Symbol Acc MGI 1888711
G04	SBM0826950	ENSMUST00000 086833.12	Spp1	ENSMUSG00 000029304	secreted phosphoprotein 1 Source MGI Symbol Acc MGI 98389
G05	SBM0788439	ENSMUST00000 025263.14	Tnf	ENSMUSG00 000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G06	SBM0675830	ENSMUST00000 079772.3	Tnfrsf11b	ENSMUSG00 000063727	tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin) Source MGI Symbol Acc MGI 109587
G07	SBM0969669	ENSMUST00000 046383.11	Tnfsf10	ENSMUSG00 000039304	tumor necrosis factor (ligand) superfAMILY, member 10 Source MGI Symbol Acc MGI 107414
G08	SBM1225403	ENSMUST00000 022592.7	Tnfsf11	ENSMUSG00 00002015	tumor necrosis factor (ligand) superfAMILY, member 11 Source MGI Symbol Acc MGI 1100089
G09	SBM1082975	ENSMUST00000 018896.13	Tnfsf13	ENSMUSG00 000089669	tumor necrosis factor (ligand) superfAMILY, member 13 Source MGI Symbol Acc MGI 1916833
G10	SBM0908217	ENSMUST00000 208683.1	Tnfsf13b	ENSMUSG00 000031497	tumor necrosis factor (ligand) superfAMILY, member 13b Source MGI Symbol Acc MGI 1344376
G11	SBM1089254	ENSMUST00000 028024.4	Tnfsf4	ENSMUSG00 000026700	tumor necrosis factor (ligand) superfAMILY, member 4 Source MGI Symbol Acc MGI 104511
G12	SBM1079198	ENSMUST00000 217017.1	Vegfa	ENSMUSG00 000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
H01	SBM1220560	ENSMUST00000 100497.10	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	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 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 µl QuantiNova SYBR Green RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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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