

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

Mouse Toll-Like Receptor Signaling Pathway

Cat. no. 249950 SBMM-018ZR

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 for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Agf1	Blk	Casp8	Cd2	Cd14	Cd80	Cd86	Cebpb	Chuk	Clec4e	Csf2	Csf3
B	Cxcl10	Elf2ak2	Elk1	Fadd	Fos	Hmgbl	Hras	Hspa1a	Hspd1	Ifnb1	Ifng	Ikbkb
C	Il10	Il12a	Il1a	Il1b	Il1r1	Il2	Il6	Il6ra	Ilr1	Ilr2	Ilr3	Ilr4
D	Jun	Lta	Ly86	Ly96	Map2k3	Map2k4	Map3k1	Map3k7	Mapk8	Mapk8ip3	Mapk9	Muc13
E	Myd88	Nfkb1	Nfkb2	Nfkbia	Nfkbib	Nfkbil1	Nfrib	Nr2c2	Peli1	Pglyrp1	Ppara	Ptgs2
F	Rel	Rela	Ripk2	Tbk1	Ticam1	Ticam2	Tirap	Tlr1	Tlr2	Tlr3	Tlr4	Tlr5
G	Tlr6	Tlr7	Tlr8	Tlr9	Tnf	Tnfai3	Tnfrsf1a	Tollip	Tradd	Traf6	Ube2n	Ube2v1
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	SBM1025386	ENSMUST00000189220.6	Agfg1	ENSMUSG0000026159	ArfGAP with FG repeats 1 Source MGI Symbol Acc MGI 1333754
A02	SBM1000019	ENSMUST00000033617.12	Btk	ENSMUSG00000031264	Bruton agammaglobulinemia tyrosine kinase Source MGI Symbol Acc MGI 88216
A03	SBM0772558	ENSMUST00000027189.14	Casp8	ENSMUSG0000026029	caspase 8 Source MGI Symbol Acc MGI 1261423
A04	SBM0836747	ENSMUST00000000193.5	Ccl2	ENSMUSG0000035385	chemokine (C-C motif) ligand 2 Source MGI Symbol Acc MGI 98259
A05	SBM0904854	ENSMUST00000061829.7	Cd14	ENSMUSG0000051439	CD14 antigen Source MGI Symbol Acc MGI 88318
A06	SBM1043965	ENSMUST000000232409.1	Cd80	ENSMUSG0000075122	CD80 antigen Source MGI Symbol Acc MGI 101775
A07	SBM0889253	ENSMUST00000089620.10	Cd86	ENSMUSG0000022901	CD86 antigen Source MGI Symbol Acc MGI 101773
A08	SBM0682459	ENSMUST00000070642.3	Cebpb	ENSMUSG0000056501	CCAAT/enhancer binding protein (C/EBP), beta Source MGI Symbol Acc MGI 88373
A09	SBM1034080	ENSMUST00000026217.10	Chuk	ENSMUSG0000025199	conserved helix-loop-helix ubiquitous kinase Source MGI Symbol Acc MGI 99484
A10	SBM0958639	ENSMUST000000176096.1	Clec4e	ENSMUSG0000030142	C-type lectin domain family 4, member e Source MGI Symbol Acc MGI 1861232
A11	SBM1080991	ENSMUST00000019060.5	Csf2	ENSMUSG0000018916	colony stimulating factor 2 (granulocyte-macrophage) Source MGI Symbol Acc MGI 1339752
A12	SBM0837472	ENSMUST00000038886.2	Csf3	ENSMUSG0000038067	colony stimulating factor 3 (granulocyte) Source MGI Symbol Acc MGI 1339751
B01	SBM0996179	ENSMUST000000118006.2	Cxcl10	ENSMUSG0000034855	chemokine (C-X-C motif) ligand 10 Source MGI Symbol Acc MGI 1352450
B02	SBM1072371	ENSMUST00000024884.4	Eif2ak2	ENSMUSG0000024079	eukaryotic translation initiation factor 2-alpha kinase 2 Source MGI Symbol Acc MGI 1353449
B03	SBM0783393	ENSMUST000000009550.13	Elk1	ENSMUSG0000009406	ELK1, member of ETS oncogene family Source MGI Symbol Acc MGI 101833
B04	SBM0895464	ENSMUST00000033394.7	Fadd	ENSMUSG0000031077	Fas (TNFRSF6)-associated via death domain Source MGI Symbol Acc MGI 109324
B05	SBM0977461	ENSMUST000000134311.1	Fos	ENSMUSG0000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
B06	SBM0955512	ENSMUST000000202133.3	Hmgb1	ENSMUSG0000066551	high mobility group box 1 Source MGI Symbol Acc MGI 96113
B07	SBM0815785	ENSMUST00000097957.10	Hras	ENSMUSG0000025499	Harvey rat sarcoma virus oncogene Source MGI Symbol Acc MGI 96224
B08	SBM0945329	ENSMUST00000087328.3	Hspa1a	ENSMUSG0000091971	heat shock protein 1A Source MGI Symbol Acc MGI 96244
B09	SBM0789113	ENSMUST00000027123.14	Hspd1	ENSMUSG0000025980	heat shock protein 1 (chaperonin) Source MGI Symbol Acc MGI 96242
B10	SBM0872658	ENSMUST00000055671.4	Ifnb1	ENSMUSG0000048806	interferon beta 1, fibroblast Source MGI Symbol Acc MGI 107657
B11	SBM0903694	ENSMUST00000068592.4	Ifng	ENSMUSG0000055170	interferon gamma Source MGI Symbol Acc MGI 107656
B12	SBM0683235	ENSMUST000000144583.7	Ikbbk	ENSMUSG0000031537	inhibitor of kappaB kinase beta Source MGI Symbol Acc MGI 1338071
C01	SBM1004151	ENSMUST00000016673.5	Il10	ENSMUSG0000016529	interleukin 10 Source MGI Symbol Acc MGI 96537
C02	SBM0806519	ENSMUST000000107816.3	Il12a	ENSMUSG0000027776	interleukin 12a Source MGI Symbol Acc MGI 96539
C03	SBM1007460	ENSMUST00000028882.1	Il1a	ENSMUSG0000027399	interleukin 1 alpha Source MGI Symbol Acc MGI 96542
C04	SBM0738485	ENSMUST00000028881.13	Il1b	ENSMUSG0000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
C05	SBM1086348	ENSMUST00000027241.10	Il1r1	ENSMUSG0000026072	interleukin 1 receptor, type I Source MGI Symbol Acc MGI 96545
C06	SBM0797059	ENSMUST00000029275.5	Il2	ENSMUSG0000027720	interleukin 2 Source MGI Symbol Acc MGI 96548
C07	SBM0742623	ENSMUST00000026845.11	Il6	ENSMUSG0000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
C08	SBM0834938	ENSMUST000000197679.4	Il6ra	ENSMUSG0000027947	interleukin 6 receptor, alpha Source MGI Symbol Acc MGI 105304
C09	SBM0933124	ENSMUST000000148706.7	Ilr1	ENSMUSG0000031392	interleukin-1 receptor-associated kinase 1 Source MGI Symbol Acc MGI 107420
C10	SBM0679387	ENSMUST00000089022.8	Ilr2	ENSMUSG0000060477	interleukin-1 receptor-associated kinase 2 Source MGI Symbol Acc MGI 2429603
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM1091850	138913.7	Irf1	000018899	interferon regulatory factor 1 Source MGI Symbol Acc MGI 96590
C12	SBM0803819	ENSMUST00000207129.1	Irf3	ENSMUSG0000003184	interferon regulatory factor 3 Source MGI Symbol Acc MGI 1859179
D01	SBM1045409	ENSMUST00000107094.1	Jun	ENSMUSG00000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
D02	SBM0790437	ENSMUST00000025266.5	Lta	ENSMUSG00000024402	lymphotoxin A Source MGI Symbol Acc MGI 104797
D03	SBM0950301	ENSMUST00000021860.6	Ly86	ENSMUSG00000021423	lymphocyte antigen 86 Source MGI Symbol Acc MGI 1321404
D04	SBM0966348	ENSMUST000000191260.1	Ly96	ENSMUSG00000025779	lymphocyte antigen 96 Source MGI Symbol Acc MGI 1341909
D05	SBM0905391	ENSMUST000000130269.1	Map2k3	ENSMUSG0000018932	mitogen-activated protein kinase kinase 3 Source MGI Symbol Acc MGI 1346868
D06	SBM1084723	ENSMUST000000046963.9	Map2k4	ENSMUSG0000003352	mitogen-activated protein kinase kinase 4 Source MGI Symbol Acc MGI 1346869
D07	SBM0811680	ENSMUST000000145055.1	Map3k1	ENSMUSG00000021754	mitogen-activated protein kinase kinase kinase 1 Source MGI Symbol Acc MGI 1346872
D08	SBM0833481	ENSMUST000000037607.10	Map3k7	ENSMUSG00000028284	mitogen-activated protein kinase kinase kinase 7 Source MGI Symbol Acc MGI 1346877
D09	SBM0984642	ENSMUST000000132379.1	Mapk8	ENSMUSG00000021936	mitogen-activated protein kinase 8 Source MGI Symbol Acc MGI 1346861
D10	SBM0709873	ENSMUST000000146923.7	Mapk8ip3	ENSMUSG00000024163	mitogen-activated protein kinase 8 interacting protein 3 Source MGI Symbol Acc MGI 1353598
D11	SBM1025510	ENSMUST000000144857.7	Mapk9	ENSMUSG00000020366	mitogen-activated protein kinase 9 Source MGI Symbol Acc MGI 1346862
D12	SBM0766396	ENSMUST000000115044.7	Muc13	ENSMUSG00000022824	mucin 13, epithelial transmembrane Source MGI Symbol Acc MGI 103190
E01	SBM0986804	ENSMUST000000035092.6	Myd88	ENSMUSG00000032508	myeloid differentiation primary response gene 88 Source MGI Symbol Acc MGI 108005
E02	SBM0841870	ENSMUST000000164430.6	Nfkb1	ENSMUSG00000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E03	SBM0970553	ENSMUST000000237761.1	Nfkb2	ENSMUSG00000025225	nuclear factor of kappa light polypeptide gene enhancer in B cells 2, p49/p100 Source MGI Symbol Acc MGI 1099800
E04	SBM0696431	ENSMUST000000021413.8	Nfkbia	ENSMUSG00000021025	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, alpha Source MGI Symbol Acc MGI 104741
E05	SBM0704537	ENSMUST000000085851.11	Nfkbib	ENSMUSG00000030595	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, beta Source MGI Symbol Acc MGI 104752
E06	SBM0980587	ENSMUST000000048994.6	Nfkbil1	ENSMUSG00000042419	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor like 1 Source MGI Symbol Acc MGI 1340031
E07	SBM0830847	ENSMUST000000150179.1	Nfrkb	ENSMUSG00000042185	nuclear factor related to kappa B binding protein Source MGI Symbol Acc MGI 2442410
E08	SBM0880427	ENSMUST000000113460.7	Nr2c2	ENSMUSG00000005893	nuclear receptor subfamily 2, group C, member 2 Source MGI Symbol Acc MGI 1352466
E09	SBM0831982	ENSMUST000000093290.11	Peli1	ENSMUSG00000020134	pellino 1 Source MGI Symbol Acc MGI 1914495
E10	SBM0969852	ENSMUST000000032573.7	Pglyrp1	ENSMUSG00000030413	peptidoglycan recognition protein 1 Source MGI Symbol Acc MGI 1345092
E11	SBM0952484	ENSMUST000000138813.7	Ppara	ENSMUSG00000022383	peroxisome proliferator activated receptor alpha Source MGI Symbol Acc MGI 104740
E12	SBM0782881	ENSMUST000000035065.8	Ptgs2	ENSMUSG00000032487	prostaglandin-endoperoxide synthase 2 Source MGI Symbol Acc MGI 97798
F01	SBM0781183	ENSMUST000000102864.4	Rel	ENSMUSG00000020275	reticuloendotheliosis oncogene Source MGI Symbol Acc MGI 97897
F02	SBM0937498	ENSMUST000000237361.1	Rela	ENSMUSG00000024927	v-rel reticuloendotheliosis viral oncogene homolog A (avian) Source MGI Symbol Acc MGI 103290
F03	SBM0781529	ENSMUST000000037035.11	Ripk2	ENSMUSG00000041135	receptor (TNFRSF)-interacting serine-threonine kinase 2 Source MGI Symbol Acc MGI 1891456
F04	SBM0858013	ENSMUST000000219400.1	Tbk1	ENSMUSG00000020115	TANK-binding kinase 1 Source MGI Symbol Acc MGI 1929658
F05	SBM0979664	ENSMUST000000058136.8	Ticam1	ENSMUSG00000047123	toll-like receptor adaptor molecule 1 Source MGI Symbol Acc MGI 2147032
F06	SBM0972875	ENSMUST000000149929.1	Ticam2	ENSMUSG00000056130	toll-like receptor adaptor molecule 2 Source MGI Symbol Acc MGI 3040056
F07	SBM1225397	ENSMUST000000177129.7	Tirap	ENSMUSG00000032041	toll-interleukin 1 receptor (TIR) domain-containing adaptor protein Source MGI Symbol Acc MGI 2152213
F08	SBM0864936	ENSMUST000000059349.5	Tlr1	ENSMUSG00000044827	toll-like receptor 1 Source MGI Symbol Acc MGI 1341295
F09	SBM0974490	ENSMUST000000029623.10	Tlr2	ENSMUSG00000027995	toll-like receptor 2 Source MGI Symbol Acc MGI 1346060
F10	SBM0964228	ENSMUST000000209772.1	Tlr3	ENSMUSG00000031639	toll-like receptor 3 Source MGI Symbol Acc MGI 2156367

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0745293	ENSMUST00000107365.2	Tlr4	ENSMUSG00000039005	toll-like receptor 4 Source MGI Symbol Acc MGI 96824
F12	SBM0677822	ENSMUST00000191820.1	Tlr5	ENSMUSG00000079164	toll-like receptor 5 Source MGI Symbol Acc MGI 1858171
G01	SBM0968629	ENSMUST00000201307.1	Tlr6	ENSMUSG00000051498	toll-like receptor 6 Source MGI Symbol Acc MGI 1341296
G02	SBM0901291	ENSMUST00000112164.1	Tlr7	ENSMUSG00000044583	toll-like receptor 7 Source MGI Symbol Acc MGI 2176882
G03	SBM1009367	ENSMUST00000112170.1	Tlr8	ENSMUSG00000040522	toll-like receptor 8 Source MGI Symbol Acc MGI 2176887
G04	SBM0973468	ENSMUST00000062241.10	Tlr9	ENSMUSG00000045322	toll-like receptor 9 Source MGI Symbol Acc MGI 1932389
G05	SBM0788439	ENSMUST00000025263.14	Tnf	ENSMUSG00000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G06	SBM0936524	ENSMUST00000105527.1	Tnfaip3	ENSMUSG00000019850	tumor necrosis factor, alpha-induced protein 3 Source MGI Symbol Acc MGI 1196377
G07	SBM0837100	ENSMUST00000134803.1	Tnfrsf1a	ENSMUSG00000030341	tumor necrosis factor receptor superfamily, member 1a Source MGI Symbol Acc MGI 1314884
G08	SBM0724694	ENSMUST00000151890.2	Tollip	ENSMUSG00000025139	toll interacting protein Source MGI Symbol Acc MGI 1891808
G09	SBM0977630	ENSMUST00000144762.7	Tradd	ENSMUSG00000031887	TNFRSF1A-associated via death domain Source MGI Symbol Acc MGI 109200
G10	SBM1225398	ENSMUST00000004949.7	Traf6	ENSMUSG00000027164	TNF receptor-associated factor 6 Source MGI Symbol Acc MGI 108072
G11	SBM0692885	ENSMUST00000219741.1	Ube2n	ENSMUSG00000074781	ubiquitin-conjugating enzyme E2N Source MGI Symbol Acc MGI 1934835
G12	SBM0699932	ENSMUST00000144830.1	Ube2v1	ENSMUSG00000078923	ubiquitin-conjugating enzyme E2 variant 1 Source MGI Symbol Acc MGI 1913839
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 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 SYBR Green RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 μ l QuantiNova SYBR Green 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	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ 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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