

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

Mouse T Helper Cell Differentiation

Cat. no. 249950 SBMM-503ZR

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	Asb2	Cacna1f	Ccl11	Ccl5	Ccl7	Ccr3	Ccr4	Ccr6	Cebpb	Chd7	Csf2	Fasl
B	Fosl1	Foxp3	Gata3	Gata4	Gfi1	Ptgdr2	Havr2	Hoxp	Hoxa10	Hoxa3	Icos	Id2
C	Iifng	Igfbp6	Irf2	Il12b	Il12rb2	Il13	Il13ra1	Il17a	Il17re	Il18	Il18r1	Il18rap
D	Il1r1	Il1r2	Il1r1	Il2	Il21	Il2ra	Il4	Il4ra	Il5	Il9	Irf1	Irf4
E	Irf8	Jak1	Lrrc32	Maf	Myb	Nfatc1	Nfatc2	Nfatc2ip	Nr4a1	Nr4a3	Perp	Plk2
F	Pou2f2	Pparg	Rel	Rora	Rorc	Runx1	Runx3	Socs1	Socs5	Stat1	Stat4	Stat6
G	Tbx21	Tgfb1	Tlr4	Tlr6	Tmed1	Tnf	Tnfrsf9	Tnfrsf11	Trp53inp1	Uts2	Zbtb7b	Zeb1
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	SBM1034822	ENSMUST00000127447.1	Asb2	ENSMUSG0000021200	ankyrin repeat and SOCS box-containing 2 Source MGI Symbol Acc MGI 1929743
A02	SBM0983401	ENSMUST00000115726.8	Cacna1f	ENSMUSG00000031142	calcium channel, voltage-dependent, alpha 1F subunit Source MGI Symbol Acc MGI 1859639
A03	SBM0757192	ENSMUST00000000342.2	Ccl11	ENSMUSG0000020676	chemokine (C-C motif) ligand 11 Source MGI Symbol Acc MGI 103576
A04	SBM0703029	ENSMUST00000125015.1	Ccl5	ENSMUSG0000035042	chemokine (C-C motif) ligand 5 Source MGI Symbol Acc MGI 98262
A05	SBM0998844	ENSMUST0000021011.2	Ccl7	ENSMUSG0000035373	chemokine (C-C motif) ligand 7 Source MGI Symbol Acc MGI 99512
A06	SBM1022292	ENSMUST0000039171.8	Ccr3	ENSMUSG0000035448	chemokine (C-C motif) receptor 3 Source MGI Symbol Acc MGI 104616
A07	SBM0824531	ENSMUST0000054414.4	Ccr4	ENSMUSG0000047898	chemokine (C-C motif) receptor 4 Source MGI Symbol Acc MGI 107824
A08	SBM0879668	ENSMUST00000164411.9	Ccr6	ENSMUSG0000040899	chemokine (C-C motif) receptor 6 Source MGI Symbol Acc MGI 1333797
A09	SBM0682459	ENSMUST0000070642.3	Cebpb	ENSMUSG0000056501	CCAAT/enhancer binding protein (C/EBP), beta Source MGI Symbol Acc MGI 88373
A10	SBM0929908	ENSMUST0000051558.9	Chd7	ENSMUSG0000041235	chromodomain helicase DNA binding protein 7 Source MGI Symbol Acc MGI 2444748
A11	SBM1080991	ENSMUST0000019060.5	Csf2	ENSMUSG0000018916	colony stimulating factor 2 (granulocyte-macrophage) Source MGI Symbol Acc MGI 1339752
A12	SBM0967876	ENSMUST0000000834.3	Fasl	ENSMUSG0000000817	Fas ligand (TNF superfamily, member 6) Source MGI Symbol Acc MGI 99255
B01	SBM0970102	ENSMUST00000235958.1	Fosl1	ENSMUSG0000024912	fos-like antigen 1 Source MGI Symbol Acc MGI 107179
B02	SBM0951877	ENSMUST00000234479.1	Foxp3	ENSMUSG0000039521	forkhead box P3 Source MGI Symbol Acc MGI 1891436
B03	SBM0782281	ENSMUST00000147533.1	Gata3	ENSMUSG0000015619	GATA binding protein 3 Source MGI Symbol Acc MGI 95663
B04	SBM0853627	ENSMUST0000067417.9	Gata4	ENSMUSG0000021944	GATA binding protein 4 Source MGI Symbol Acc MGI 95664
B05	SBM0999424	ENSMUST0000065478.11	Gfi1	ENSMUSG0000029275	growth factor independent 1 transcription repressor Source MGI Symbol Acc MGI 103170
B06	SBM0804277	ENSMUST0000037261.3	Ptgdr2	ENSMUSG0000034117	prostaglandin D2 receptor 2 Source MGI Symbol Acc MGI 1330275
B07	SBM0748726	ENSMUST00000202668.14	Havcr2	ENSMUSG0000020399	hepatitis A virus cellular receptor 2 Source MGI Symbol Acc MGI 2159682
B08	SBM0833276	ENSMUST00000120827.8	Hoxp	ENSMUSG0000059325	HOP homeobox Source MGI Symbol Acc MGI 1916782
B09	SBM0884140	ENSMUST00000125581.1	Hoxa10	ENSMUSG0000000938	homeobox A10 Source MGI Symbol Acc MGI 96171
B10	SBM0965239	ENSMUST00000134831.1	Hoxa3	ENSMUSG0000079560	homeobox A3 Source MGI Symbol Acc MGI 96175
B11	SBM0702277	ENSMUST0000027162.11	Icos	ENSMUSG0000026009	inducible T cell co-stimulator Source MGI Symbol Acc MGI 1858745
B12	SBM1022270	ENSMUST0000020974.6	Id2	ENSMUSG0000020644	inhibitor of DNA binding 2 Source MGI Symbol Acc MGI 96397
C01	SBM0903694	ENSMUST0000068592.4	Ifng	ENSMUSG0000055170	interferon gamma Source MGI Symbol Acc MGI 107656
C02	SBM0831254	ENSMUST0000047194.3	Igsf6	ENSMUSG0000035004	immunoglobulin superfamily, member 6 Source MGI Symbol Acc MGI 1891393
C03	SBM0729524	ENSMUST00000187184.6	Ikzf2	ENSMUSG0000025997	IKAROS family zinc finger 2 Source MGI Symbol Acc MGI 1342541
C04	SBM0957286	ENSMUST00000102796.9	Il12b	ENSMUSG0000004296	interleukin 12b Source MGI Symbol Acc MGI 96540
C05	SBM0758729	ENSMUST00000117441.7	Il12rb2	ENSMUSG0000018341	interleukin 12 receptor, beta 2 Source MGI Symbol Acc MGI 1270861
C06	SBM0860496	ENSMUST0000020650.1	Il13	ENSMUSG0000020383	interleukin 13 Source MGI Symbol Acc MGI 96541
C07	SBM0817568	ENSMUST0000033418.7	Il13ra1	ENSMUSG0000017057	interleukin 13 receptor, alpha 1 Source MGI Symbol Acc MGI 105052
C08	SBM1055424	ENSMUST0000027061.4	Il17a	ENSMUSG0000025929	interleukin 17A Source MGI Symbol Acc MGI 107364
C09	SBM0866544	ENSMUST00000204774.2	Il17re	ENSMUSG0000043088	interleukin 17 receptor E Source MGI Symbol Acc MGI 1889371
C10	SBM0953194	ENSMUST00000180021.1	Il18	ENSMUSG0000039217	interleukin 18 Source MGI Symbol Acc MGI 107936
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0709309	167723.7	Il18r1	000026070	interleukin 18 receptor 1 Source MGI Symbol Acc MGI 105383
C12	SBM0705557	ENSMUST00000163057.7	Il18rap	ENSMUSG0000026068	interleukin 18 receptor accessory protein Source MGI Symbol Acc MGI 1338888
D01	SBM1086348	ENSMUST00000027241.10	Il1r1	ENSMUSG00000026072	interleukin 1 receptor, type I Source MGI Symbol Acc MGI 96545
D02	SBM0820917	ENSMUST00000195770.1	Il1r2	ENSMUSG00000026073	interleukin 1 receptor, type II Source MGI Symbol Acc MGI 96546
D03	SBM0977445	ENSMUST00000174335.7	Il1rl1	ENSMUSG00000026069	interleukin 1 receptor-like 1 Source MGI Symbol Acc MGI 98427
D04	SBM0797059	ENSMUST00000029275.5	Il2	ENSMUSG00000027720	interleukin 2 Source MGI Symbol Acc MGI 96548
D05	SBM0747287	ENSMUST00000161015.1	Il21	ENSMUSG00000027718	interleukin 21 Source MGI Symbol Acc MGI 1890474
D06	SBM1067326	ENSMUST00000028111.5	Il2ra	ENSMUSG00000026770	interleukin 2 receptor, alpha chain Source MGI Symbol Acc MGI 96549
D07	SBM0926369	ENSMUST00000150568.7	Il4	ENSMUSG0000000869	interleukin 4 Source MGI Symbol Acc MGI 96556
D08	SBM0691649	ENSMUST00000206681.1	Il4ra	ENSMUSG00000030748	interleukin 4 receptor, alpha Source MGI Symbol Acc MGI 105367
D09	SBM1034588	ENSMUST00000048605.2	Il5	ENSMUSG00000036117	interleukin 5 Source MGI Symbol Acc MGI 96557
D10	SBM0847018	ENSMUST00000022019.3	Il9	ENSMUSG00000021538	interleukin 9 Source MGI Symbol Acc MGI 96563
D11	SBM1091850	ENSMUST00000138913.7	Irf1	ENSMUSG0000018899	interferon regulatory factor 1 Source MGI Symbol Acc MGI 96590
D12	SBM0761311	ENSMUST00000021784.9	Irf4	ENSMUSG00000021356	interferon regulatory factor 4 Source MGI Symbol Acc MGI 1096873
E01	SBM0695701	ENSMUST00000162658.7	Irf8	ENSMUSG00000041515	interferon regulatory factor 8 Source MGI Symbol Acc MGI 96395
E02	SBM0792684	ENSMUST00000155328.7	Jak1	ENSMUSG00000028530	Janus kinase 1 Source MGI Symbol Acc MGI 96628
E03	SBM0681410	ENSMUST00000205937.1	Lrrc32	ENSMUSG00000090958	leucine rich repeat containing 32 Source MGI Symbol Acc MGI 93882
E04	SBM0794374	ENSMUST00000069009.6	Maf	ENSMUSG00000055435	avian musculoaponeurotic fibrosarcoma oncogene homolog Source MGI Symbol Acc MGI 96909
E05	SBM0801960	ENSMUST00000020158.8	Myb	ENSMUSG00000019982	myeloblastosis oncogene Source MGI Symbol Acc MGI 97249
E06	SBM1038763	ENSMUST00000078049.11	Nfatc1	ENSMUSG00000033016	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 1 Source MGI Symbol Acc MGI 102469
E07	SBM0850906	ENSMUST00000099067.9	Nfatc2	ENSMUSG00000027544	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 2 Source MGI Symbol Acc MGI 102463
E08	SBM0917810	ENSMUST00000142947.1	Nfatc2ip	ENSMUSG00000030722	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 2 interacting protein Source MGI Symbol Acc MGI 1329015
E09	SBM0685861	ENSMUST00000228985.1	Nr4a1	ENSMUSG00000023034	nuclear receptor subfamily 4, group A, member 1 Source MGI Symbol Acc MGI 1352454
E10	SBM0766720	ENSMUST00000030025.9	Nr4a3	ENSMUSG00000028341	nuclear receptor subfamily 4, group A, member 3 Source MGI Symbol Acc MGI 1352457
E11	SBM0845871	ENSMUST00000019998.8	Perp	ENSMUSG00000019851	PERP, TP53 apoptosis effector Source MGI Symbol Acc MGI 1929938
E12	SBM0710172	ENSMUST00000130931.1	Pkd2	ENSMUSG00000034462	polycystic kidney disease 2 Source MGI Symbol Acc MGI 1099818
F01	SBM0963272	ENSMUST00000175774.8	Pou2f2	ENSMUSG00000008496	POU domain, class 2, transcription factor 2 Source MGI Symbol Acc MGI 101897
F02	SBM1015614	ENSMUST00000205213.2	Pparg	ENSMUSG00000000440	peroxisome proliferator activated receptor gamma Source MGI Symbol Acc MGI 97747
F03	SBM0781183	ENSMUST00000102864.4	Rel	ENSMUSG00000020275	reticuloendotheliosis oncogene Source MGI Symbol Acc MGI 97897
F04	SBM0775611	ENSMUST00000034766.13	Rora	ENSMUSG00000032238	RAR-related orphan receptor alpha Source MGI Symbol Acc MGI 104661
F05	SBM0832210	ENSMUST00000197040.4	Rorc	ENSMUSG00000028150	RAR-related orphan receptor gamma Source MGI Symbol Acc MGI 104856
F06	SBM0812229	ENSMUST00000168195.7	Runx1	ENSMUSG00000022952	runt related transcription factor 1 Source MGI Symbol Acc MGI 99852
F07	SBM0735435	ENSMUST00000119564.1	Runx3	ENSMUSG00000070691	runt related transcription factor 3 Source MGI Symbol Acc MGI 102672
F08	SBM0830785	ENSMUST00000229866.1	Socs1	ENSMUSG00000038037	suppressor of cytokine signaling 1 Source MGI Symbol Acc MGI 1354910
F09	SBM0834297	ENSMUST00000041369.7	Socs5	ENSMUSG00000037104	suppressor of cytokine signaling 5 Source MGI Symbol Acc MGI 2385459
F10	SBM0954168	ENSMUST00000070968.13	Stat1	ENSMUSG00000026104	signal transducer and activator of transcription 1 Source MGI Symbol Acc MGI 103063

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0758089	ENSMUST00000187554.1	Stat4	ENSMUSG00000062939	signal transducer and activator of transcription 4 Source MGI Symbol Acc MGI 103062
F12	SBM0912507	ENSMUST00000156231.1	Stat6	ENSMUSG00000002147	signal transducer and activator of transcription 6 Source MGI Symbol Acc MGI 103034
G01	SBM1024821	ENSMUST00000001484.2	Tbx21	ENSMUSG0000001444	T-box 21 Source MGI Symbol Acc MGI 1888984
G02	SBM0754223	ENSMUST00000186358.5	Tgif1	ENSMUSG00000047407	TGFB-induced factor homeobox 1 Source MGI Symbol Acc MGI 1194497
G03	SBM0745293	ENSMUST00000107365.2	Tlr4	ENSMUSG00000039005	toll-like receptor 4 Source MGI Symbol Acc MGI 96824
G04	SBM0968629	ENSMUST00000201307.1	Tlr6	ENSMUSG00000051498	toll-like receptor 6 Source MGI Symbol Acc MGI 1341296
G05	SBM0775563	ENSMUST00000213167.1	Tmed1	ENSMUSG00000032180	transmembrane p24 trafficking protein 1 Source MGI Symbol Acc MGI 106201
G06	SBM0788439	ENSMUST00000025263.14	Tnf	ENSMUSG00000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G07	SBM0840758	ENSMUST00000060901.10	Tnfrsf9	ENSMUSG00000028965	tumor necrosis factor receptor superfamily, member 9 Source MGI Symbol Acc MGI 1101059
G08	SBM1225403	ENSMUST00000022592.7	Tnfsf11	ENSMUSG00000022015	tumor necrosis factor (ligand) superfamily, member 11 Source MGI Symbol Acc MGI 1100089
G09	SBM0776404	ENSMUST00000132693.1	Trp53inp1	ENSMUSG00000028211	transformation related protein 53 inducible nuclear protein 1 Source MGI Symbol Acc MGI 1926609
G10	SBM0825630	ENSMUST00000030803.1	Uts2	ENSMUSG00000028963	urotensin 2 Source MGI Symbol Acc MGI 1346329
G11	SBM0901579	ENSMUST00000029677.8	Zbtb7b	ENSMUSG00000028042	zinc finger and BTB domain containing 7B Source MGI Symbol Acc MGI 102755
G12	SBM0746940	ENSMUST00000159390.7	Zeb1	ENSMUSG00000024238	zinc finger E-box binding homeobox 1 Source MGI Symbol Acc MGI 1344313
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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