

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

Mouse Stem Cell Transcription Factors

Cat. no. 249950 SBMM-501ZR

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	Cdx2	Dach1	Dlx1	Dlx2	Dnmt3b	Egr3	Esr1	Ezh2	Foxa1	Foxa2	Foxp1	Foxp2
B	Foxp3	Gata1	Gata6	Gli2	Hand1	Hoxa10	Hoxa11	Hoxa2	Hoxa3	Hoxa7	Hoxa9	Hoxb1
C	Hoxb13	Hoxb3	Hoxb5	Hoxb8	Hoxc10	Hoxc12	Hoxc4	Hoxc5	Hoxc6	Hoxc9	Hoxd1	Hoxd10
D	Hoxd4	Htr7	Irx4	Isl1	Jun	Klf2	Klf4	Lin28b	Lmx1b	Msx2	Myc	Nanog
E	Neurod1	Nfatc1	Nkx2-2	Notch2	Nr2f2	Olig2	Pax1	Pax5	Pax6	Pax9	Pcna	Pitx2
F	Pitx3	Pou4f1	Pou4f2	Pou5f1	Pparg	Rb1	Runtx1	Six2	Smad2	Sox2	Sox6	Sox9
G	Sp1	Stat1	Stat3	Tbx5	Tdgf1	Tert	Tlx3	Vdr	Wnt	Wt1	Zfp2	Zic1
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	SBM1045786	ENSMUST00000031650.3	Cdx2	ENSMUSG0000029646	caudal type homeobox 2 Source MGI Symbol Acc MGI 88361
A02	SBM0764335	ENSMUST00000071533.12	Dach1	ENSMUSG0000055639	dachshund family transcription factor 1 Source MGI Symbol Acc MGI 1277991
A03	SBM0989903	ENSMUST00000172629.1	Dlx1	ENSMUSG0000041911	distal-less homeobox 1 Source MGI Symbol Acc MGI 94901
A04	SBM0733942	ENSMUST00000134249.1	Dlx2	ENSMUSG0000023391	distal-less homeobox 2 Source MGI Symbol Acc MGI 94902
A05	SBM0792760	ENSMUST00000103151.7	Dnmt3b	ENSMUSG0000027478	DNA methyltransferase 3B Source MGI Symbol Acc MGI 1261819
A06	SBM0735904	ENSMUST00000035908.2	Egr3	ENSMUSG0000033730	early growth response 3 Source MGI Symbol Acc MGI 1306780
A07	SBM0745819	ENSMUST00000067086.13	Esr1	ENSMUSG0000019768	estrogen receptor 1 (alpha) Source MGI Symbol Acc MGI 1352467
A08	SBM0785041	ENSMUST00000169889.2	Ezh2	ENSMUSG0000029687	enhancer of zeste 2 polycomb repressive complex 2 subunit Source MGI Symbol Acc MGI 107940
A09	SBM0971553	ENSMUST00000044380.7	Foxa1	ENSMUSG0000035451	forkhead box A1 Source MGI Symbol Acc MGI 1347472
A10	SBM1016226	ENSMUST00000109964.7	Foxa2	ENSMUSG0000037025	forkhead box A2 Source MGI Symbol Acc MGI 1347476
A11	SBM0819007	ENSMUST00000177437.7	Foxp1	ENSMUSG0000030067	forkhead box P1 Source MGI Symbol Acc MGI 1914004
A12	SBM0990172	ENSMUST00000131414.7	Foxp2	ENSMUSG0000029563	forkhead box P2 Source MGI Symbol Acc MGI 2148705
B01	SBM0951877	ENSMUST00000234479.1	Foxp3	ENSMUSG0000039521	forkhead box P3 Source MGI Symbol Acc MGI 1891436
B02	SBM0835110	ENSMUST00000033502.13	Gata1	ENSMUSG0000031162	GATA binding protein 1 Source MGI Symbol Acc MGI 95661
B03	SBM0766909	ENSMUST00000047762.9	Gata6	ENSMUSG0000005836	GATA binding protein 6 Source MGI Symbol Acc MGI 107516
B04	SBM0716475	ENSMUST00000161301.7	Gli2	ENSMUSG0000048402	GLI-Kruppel family member GLI2 Source MGI Symbol Acc MGI 95728
B05	SBM0775153	ENSMUST00000036917.2	Hand1	ENSMUSG0000037335	heart and neural crest derivatives expressed 1 Source MGI Symbol Acc MGI 103577
B06	SBM0884140	ENSMUST00000125581.1	Hoxa10	ENSMUSG0000000938	homeobox A10 Source MGI Symbol Acc MGI 96171
B07	SBM1029418	ENSMUST00000048026.9	Hoxa11	ENSMUSG0000038210	homeobox A11 Source MGI Symbol Acc MGI 96172
B08	SBM0967534	ENSMUST00000014848.10	Hoxa2	ENSMUSG0000014704	homeobox A2 Source MGI Symbol Acc MGI 96174
B09	SBM0965239	ENSMUST00000134831.1	Hoxa3	ENSMUSG0000079560	homeobox A3 Source MGI Symbol Acc MGI 96175
B10	SBM0976754	ENSMUST00000153280.1	Hoxa7	ENSMUSG0000038236	homeobox A7 Source MGI Symbol Acc MGI 96179
B11	SBM0815496	ENSMUST00000114425.2	Hoxa9	ENSMUSG0000038227	homeobox A9 Source MGI Symbol Acc MGI 96180
B12	SBM0796047	ENSMUST00000123805.1	Hoxb1	ENSMUSG0000018973	homeobox B1 Source MGI Symbol Acc MGI 96182
C01	SBM0743197	ENSMUST00000062709.3	Hoxb13	ENSMUSG0000049604	homeobox B13 Source MGI Symbol Acc MGI 107730
C02	SBM0754757	ENSMUST00000123091.7	Hoxb3	ENSMUSG0000048763	homeobox B3 Source MGI Symbol Acc MGI 96184
C03	SBM1010003	ENSMUST00000190470.1	Hoxb5	ENSMUSG0000038700	homeobox B5 Source MGI Symbol Acc MGI 96186
C04	SBM0699022	ENSMUST00000125410.1	Hoxb8	ENSMUSG0000056648	homeobox B8 Source MGI Symbol Acc MGI 96189
C05	SBM0783077	ENSMUST00000001699.7	Hoxc10	ENSMUSG0000022484	homeobox C10 Source MGI Symbol Acc MGI 96192
C06	SBM1068451	ENSMUST00000055562.2	Hoxc12	ENSMUSG0000050328	homeobox C12 Source MGI Symbol Acc MGI 96194
C07	SBM0843749	ENSMUST00000100164.4	Hoxc4	ENSMUSG0000075394	homeobox C4 Source MGI Symbol Acc MGI 96195
C08	SBM0949181	ENSMUST00000174869.1	Hoxc5	ENSMUSG0000022485	homeobox C5 Source MGI Symbol Acc MGI 96196
C09	SBM0830976	ENSMUST00000001711.5	Hoxc6	ENSMUSG0000001661	homeobox C6 Source MGI Symbol Acc MGI 96197
C10	SBM0763828	ENSMUST00000001706.6	Hoxc9	ENSMUSG0000036139	homeobox C9 Source MGI Symbol Acc MGI 96199
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0829886	047793.5	Hoxd1	000042448	homeobox D1 Source MGI Symbol Acc MGI 96201
C12	SBM0874592	ENSMUST00000061745.4	Hoxd10	ENSMUSG0000050368	homeobox D10 Source MGI Symbol Acc MGI 96202
D01	SBM0852694	ENSMUST00000144040.8	Hoxd4	ENSMUSG0000101174	homeobox D4 Source MGI Symbol Acc MGI 96208
D02	SBM1063519	ENSMUST00000165215.7	Htr7	ENSMUSG00000024798	5-hydroxytryptamine (serotonin) receptor 7 Source MGI Symbol Acc MGI 99841
D03	SBM1044896	ENSMUST00000176684.7	Irx4	ENSMUSG00000021604	Iroquois homeobox 4 Source MGI Symbol Acc MGI 1355275
D04	SBM0835801	ENSMUST00000176444.1	Isl1	ENSMUSG00000042258	ISL1 transcription factor, LIM/homeodomain Source MGI Symbol Acc MGI 101791
D05	SBM1045409	ENSMUST00000107094.1	Jun	ENSMUSG00000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
D06	SBM1068978	ENSMUST00000067912.7	Klf2	ENSMUSG0000005148	Kruppel-like factor 2 (lung) Source MGI Symbol Acc MGI 1342772
D07	SBM0801791	ENSMUST00000132746.1	Klf4	ENSMUSG00000003032	Kruppel-like factor 4 (gut) Source MGI Symbol Acc MGI 1342287
D08	SBM1037630	ENSMUST00000079390.6	Lin28b	ENSMUSG00000063804	lin-28 homolog B (C. elegans) Source MGI Symbol Acc MGI 3584032
D09	SBM0706920	ENSMUST00000041730.10	Lmx1b	ENSMUSG00000038765	LIM homeobox transcription factor 1 beta Source MGI Symbol Acc MGI 1100513
D10	SBM1002801	ENSMUST00000188606.1	Msx2	ENSMUSG00000021469	msh homeobox 2 Source MGI Symbol Acc MGI 97169
D11	SBM0987162	ENSMUST00000159338.1	Myc	ENSMUSG00000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
D12	SBM0911915	ENSMUST00000012540.4	Nanog	ENSMUSG0000012396	Nanog homeobox Source MGI Symbol Acc MGI 1919200
E01	SBM0788481	ENSMUST00000041099.4	Neurod1	ENSMUSG00000034701	neurogenic differentiation 1 Source MGI Symbol Acc MGI 1339708
E02	SBM1038763	ENSMUST00000078049.11	Nfatc1	ENSMUSG00000033016	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 1 Source MGI Symbol Acc MGI 102469
E03	SBM0890176	ENSMUST00000067075.6	Nkx2-2	ENSMUSG00000027434	NK2 homeobox 2 Source MGI Symbol Acc MGI 97347
E04	SBM0724048	ENSMUST00000079812.7	Notch2	ENSMUSG00000027878	notch 2 Source MGI Symbol Acc MGI 97364
E05	SBM0946983	ENSMUST00000089565.5	Nr2f2	ENSMUSG00000030551	nuclear receptor subfamily 2, group F, member 2 Source MGI Symbol Acc MGI 1352452
E06	SBM1006161	ENSMUST00000035608.9	Olig2	ENSMUSG00000039830	oligodendrocyte transcription factor 2 Source MGI Symbol Acc MGI 1355331
E07	SBM1034046	ENSMUST00000109968.2	Pax1	ENSMUSG00000037034	paired box 1 Source MGI Symbol Acc MGI 97485
E08	SBM1071355	ENSMUST00000102932.9	Pax5	ENSMUSG00000014030	paired box 5 Source MGI Symbol Acc MGI 97489
E09	SBM0924606	ENSMUST00000090391.12	Pax6	ENSMUSG00000027168	paired box 6 Source MGI Symbol Acc MGI 97490
E10	SBM0817916	ENSMUST00000152848.1	Pax9	ENSMUSG0000001497	paired box 9 Source MGI Symbol Acc MGI 97493
E11	SBM0823260	ENSMUST00000140338.1	Pcna	ENSMUSG00000027342	proliferating cell nuclear antigen Source MGI Symbol Acc MGI 97503
E12	SBM1066657	ENSMUST00000042587.11	Pitx2	ENSMUSG00000028023	paired-like homeodomain transcription factor 2 Source MGI Symbol Acc MGI 109340
F01	SBM0940521	ENSMUST00000172980.1	Pitx3	ENSMUSG00000025229	paired-like homeodomain transcription factor 3 Source MGI Symbol Acc MGI 1100498
F02	SBM1020202	ENSMUST00000053016.9	Pou4f1	ENSMUSG00000048349	POU domain, class 4, transcription factor 1 Source MGI Symbol Acc MGI 102525
F03	SBM0731674	ENSMUST00000034115.4	Pou4f2	ENSMUSG00000031688	POU domain, class 4, transcription factor 2 Source MGI Symbol Acc MGI 102524
F04	SBM0857412	ENSMUST00000173805.7	Pou5f1	ENSMUSG00000024406	POU domain, class 5, transcription factor 1 Source MGI Symbol Acc MGI 101893
F05	SBM1015614	ENSMUST00000205213.2	Pparg	ENSMUSG00000000440	peroxisome proliferator activated receptor gamma Source MGI Symbol Acc MGI 97747
F06	SBM0795530	ENSMUST00000168495.1	Rb1	ENSMUSG00000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F07	SBM0812229	ENSMUST00000168195.7	Runx1	ENSMUSG00000022952	runt related transcription factor 1 Source MGI Symbol Acc MGI 99852
F08	SBM0782202	ENSMUST00000024947.7	Six2	ENSMUSG00000024134	sine oculis-related homeobox 2 Source MGI Symbol Acc MGI 102778
F09	SBM1009250	ENSMUST00000165084.7	Smad2	ENSMUSG00000024563	SMAD family member 2 Source MGI Symbol Acc MGI 108051
F10	SBM0819160	ENSMUST00000099151.5	Sox2	ENSMUSG00000074637	SRY (sex determining region Y)-box 2 Source MGI Symbol Acc MGI 98364

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM1079544	ENSMUST00000166207.2	Sox6	ENSMUSG00000051910	SRY (sex determining region Y)-box 6 Source MGI Symbol Acc MGI 98368
F12	SBM1029433	ENSMUST00000000579.2	Sox9	ENSMUSG00000000567	SRY (sex determining region Y)-box 9 Source MGI Symbol Acc MGI 98371
G01	SBM0682351	ENSMUST00000169619.1	Sp1	ENSMUSG0000001280	trans-acting transcription factor 1 Source MGI Symbol Acc MGI 98372
G02	SBM0954168	ENSMUST00000070968.13	Stat1	ENSMUSG00000026104	signal transducer and activator of transcription 1 Source MGI Symbol Acc MGI 103063
G03	SBM0821931	ENSMUST00000103114.7	Stat3	ENSMUSG00000004040	signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038
G04	SBM0806199	ENSMUST00000018407.9	Tbx5	ENSMUSG00000018263	T-box 5 Source MGI Symbol Acc MGI 102541
G05	SBM1058699	ENSMUST00000035075.12	Tdgf1	ENSMUSG00000032494	teratocarcinoma-derived growth factor 1 Source MGI Symbol Acc MGI 98658
G06	SBM0871763	ENSMUST00000223303.1	Terf	ENSMUSG00000021611	telomerase reverse transcriptase Source MGI Symbol Acc MGI 1202709
G07	SBM0858865	ENSMUST00000037746.7	Tlx3	ENSMUSG00000040610	T cell leukemia, homeobox 3 Source MGI Symbol Acc MGI 1351209
G08	SBM0761592	ENSMUST00000139656.1	Vdr	ENSMUSG00000022479	vitamin D (1,25-dihydroxyvitamin D3) receptor Source MGI Symbol Acc MGI 103076
G09	SBM0707429	ENSMUST00000033990.6	Wrrn	ENSMUSG00000031583	Werner syndrome RecQ like helicase Source MGI Symbol Acc MGI 109635
G10	SBM0752964	ENSMUST00000213301.1	Wt1	ENSMUSG00000016458	Wilms tumor 1 homolog Source MGI Symbol Acc MGI 98968
G11	SBM1043023	ENSMUST00000230319.1	Zfpn2	ENSMUSG00000022306	zinc finger protein, multitype 2 Source MGI Symbol Acc MGI 1334444
G12	SBM0852459	ENSMUST00000173121.1	Zic1	ENSMUSG00000032368	zinc finger protein of the cerebellum 1 Source MGI Symbol Acc MGI 106683
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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.