QuantiNova® LNA® PCR Focus Panels (96-Well Format and 384-Well [4 x 96] Format)

Mouse Cancer Stem Cells

Cat. no. 249950 SBMM-176ZA

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 (96-well): QuantiNova LNA PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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	Abcb5	Abcg2	Alcam	Aldh1a1	Atm	Atxn1	Axl	Bmi1	Bmp7	Cd24a	Cd34	Cd38
B	Cd44	Chek1	Dach1	Ddr1	Dkk1	Dll1	Dll4	Dnmt1	Egf	Eng	Epcam	Erbb2
C	Etfa	Fgfr2	Flot2	Foxa2	Foxp1	Fzd7	Gata3	Gsk3b	Hdac1	Id1	Ikbkb	Itga2
D	Itga4	Itga6	Itgb1	Jag1	Jak2	Kit	Kitl	Klf17	Klf4	Lats1	Lin28a	Lin28b
E	Maml1	Mertk	Ms4a1	Muc1	Myc	Mycn	Nanog	Nfkb1	Nos2	Notch1	Notch2	Pecam1
F	Plat	Plaur	Pou5f1	Prom1	Ptch1	Ptprc	Sav1	Sirt1	Smo	Snai1	Snai2	Sox2
G	Stat3	Taz	Tgfbr1	Thy1	Twist1	Twist2	Wee1	Wnt1	Wwc1	Yap1	Zeb1	Zeb2
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	SBM1032154	ENSMUST00000035515.4	Abcb5	ENSMUSG00000072791	ATP-binding cassette, sub-family B (MDR/TAP), member 5 Source MGI Symbol Acc MGI 1924956
A02	SBM0956969	ENSMUST00000145161.7	Abcg2	ENSMUSG00000029802	ATP binding cassette subfamily G member 2 (Junior blood group) Source MGI Symbol Acc MGI 1347061
A03	SBM0797639	ENSMUST00000168071.1	Alcam	ENSMUSG00000022636	activated leukocyte cell adhesion molecule Source MGI Symbol Acc MGI 1313266
A04	SBM0801506	ENSMUST00000225337.2	Aldh1a1	ENSMUSG00000053279	aldehyde dehydrogenase family 1, subfamily A1 Source MGI Symbol Acc MGI 1353450
A05	SBM0745660	ENSMUST00000150244.1	Atm	ENSMUSG00000034218	ataxia telangiectasia mutated Source MGI Symbol Acc MGI 107202
A06	SBM0770495	ENSMUST00000222943.1	Atxn1	ENSMUSG00000046876	ataxin 1 Source MGI Symbol Acc MGI 104783
A07	SBM0743275	ENSMUST00000132989.7	Axl	ENSMUSG00000002602	AXL receptor tyrosine kinase Source MGI Symbol Acc MGI 1347244
A08	SBM0925658	ENSMUST00000150834.7	Bmi1	ENSMUSG00000026739	Bmi1 polycomb ring finger oncogene Source MGI Symbol Acc MGI 88174
A09	SBM1004016	ENSMUST00000137247.1	Bmp7	ENSMUSG00000008999	bone morphogenetic protein 7 Source MGI Symbol Acc MGI 103302
A10	SBM0882434	ENSMUST00000214476.1	Cd24a	ENSMUSG00000047139	CD24a antigen Source MGI Symbol Acc MGI 88323
A11	SBM1031595	ENSMUST00000110815.8	Cd34	ENSMUSG00000016494	CD34 antigen Source MGI Symbol Acc MGI 88329
A12	SBM1090383	ENSMUST00000030964.5	Cd38	ENSMUSG00000029084	CD38 antigen Source MGI Symbol Acc MGI 107474
B01	SBM0860996	ENSMUST00000111194.7	Cd44	ENSMUSG00000005087	CD44 antigen Source MGI Symbol Acc MGI 88338
B02	SBM0725925	ENSMUST00000173963.8	Chek1	ENSMUSG00000032113	checkpoint kinase 1 Source MGI Symbol Acc MGI 1202065
B03	SBM0764335	ENSMUST00000071533.12	Dach1	ENSMUSG00000055639	dachshund family transcription factor 1 Source MGI Symbol Acc MGI 1277991
B04	SBM0814333	ENSMUST00000003628.12	Ddr1	ENSMUSG00000003534	discoidin domain receptor family, member 1 Source MGI Symbol Acc MGI 99216
B05	SBM0673405	ENSMUST00000025803.8	Dkk1	ENSMUSG00000024868	dickkopf WNT signaling pathway inhibitor 1 Source MGI Symbol Acc MGI 1329040
B06	SBM0898031	ENSMUST00000124196.1	Dll1	ENSMUSG00000014773	delta like canonical Notch ligand 1 Source MGI Symbol Acc MGI 104659
B07	SBM0960057	ENSMUST00000102517.3	Dll4	ENSMUSG00000027314	delta like canonical Notch ligand 4 Source MGI Symbol Acc MGI 1859388
B08	SBM0945860	ENSMUST00000177754.8	Dnmt1	ENSMUSG00000004099	DNA methyltransferase (cytosine-5) 1 Source MGI Symbol Acc MGI 94912
B09	SBM1005237	ENSMUST00000197079.4	Egf	ENSMUSG00000028017	epidermal growth factor Source MGI Symbol Acc MGI 95290
B10	SBM0877670	ENSMUST00000156306.1	Eng	ENSMUSG00000026814	endoglin Source MGI Symbol Acc MGI 95392
B11	SBM0817447	ENSMUST00000053577.8	Epcam	ENSMUSG00000045394	epithelial cell adhesion molecule Source MGI Symbol Acc MGI 106653
B12	SBM0761323	ENSMUST00000136032.1	Erbb2	ENSMUSG00000062312	erb-b2 receptor tyrosine kinase 2 Source MGI Symbol Acc MGI 95410
C01	SBM1079346	ENSMUST00000034866.8	Etfa	ENSMUSG00000032314	electron transferring flavoprotein, alpha polypeptide Source MGI Symbol Acc MGI 106092
C02	SBM0813645	ENSMUST00000124096.7	Fgfr2	ENSMUSG00000030849	fibroblast growth factor receptor 2 Source MGI Symbol Acc MGI 95523
C03	SBM1073185	ENSMUST00000072289.11	Flot2	ENSMUSG00000061981	flotillin 2 Source MGI Symbol Acc MGI 103309
C04	SBM1016226	ENSMUST00000109964.7	Foxa2	ENSMUSG00000037025	forkhead box A2 Source MGI Symbol Acc MGI 1347476
C05	SBM0819007	ENSMUST00000177437.7	Foxp1	ENSMUSG00000030067	forkhead box P1 Source MGI Symbol Acc MGI 1914004
C06	SBM1055854	ENSMUST00000114246.3	Fzd7	ENSMUSG00000041075	frizzled class receptor 7 Source MGI Symbol Acc MGI 108570
C07	SBM0782281	ENSMUST00000147533.1	Gata3	ENSMUSG00000015619	GATA binding protein 3 Source MGI Symbol Acc MGI 95663
C08	SBM0862470	ENSMUST00000132057.1	Gsk3b	ENSMUSG00000022812	glycogen synthase kinase 3 beta Source MGI Symbol Acc MGI 1861437
C09	SBM0727728	ENSMUST00000132909.1	Hdac1	ENSMUSG00000028800	histone deacetylase 1 Source MGI Symbol Acc MGI 108086
C10	SBM0688367	ENSMUST00000109824.1	Id1	ENSMUSG00000042745	inhibitor of DNA binding 1 Source MGI Symbol Acc MGI 96396
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0683235	144583.7	Ikbkb	000031537	inhibitor of kappaB kinase beta Source MGI Symbol Acc MGI 1338071
C12	SBM1002416	ENSMUST00000 056117.9	Itga2	ENSMUSG00 000015533	integrin alpha 2 Source MGI Symbol Acc MGI 96600
D01	SBM0718988	ENSMUST00000 126312.1	Itga4	ENSMUSG00 000027009	integrin alpha 4 Source MGI Symbol Acc MGI 96603
D02	SBM0759318	ENSMUST00000 028522.9	Itga6	ENSMUSG00 000027111	integrin alpha 6 Source MGI Symbol Acc MGI 96605
D03	SBM0691612	ENSMUST00000 090006.11	Itgb1	ENSMUSG00 000025809	integrin beta 1 (fibronectin receptor beta) Source MGI Symbol Acc MGI 96610
D04	SBM0986327	ENSMUST00000 028735.7	Jag1	ENSMUSG00 000027276	jagged 1 Source MGI Symbol Acc MGI 1095416
D05	SBM0844988	ENSMUST00000 065796.9	Jak2	ENSMUSG00 000024789	Janus kinase 2 Source MGI Symbol Acc MGI 96629
D06	SBM0996057	ENSMUST00000 202167.1	Kit	ENSMUSG00 000005672	KIT proto-oncogene receptor tyrosine kinase Source MGI Symbol Acc MGI 96677
D07	SBM0685433	ENSMUST00000 105283.8	Kitl	ENSMUSG00 000019966	kit ligand Source MGI Symbol Acc MGI 96974
D08	SBM0846928	ENSMUST00000 062747.5	Klf17	ENSMUSG00 000048626	Kruppel-like factor 17 Source MGI Symbol Acc MGI 2181068
D09	SBM0801791	ENSMUST00000 132746.1	Klf4	ENSMUSG00 000003032	Kruppel-like factor 4 (gut) Source MGI Symbol Acc MGI 1342287
D10	SBM1025787	ENSMUST00000 217931.1	Lats1	ENSMUSG00 000040021	large tumor suppressor Source MGI Symbol Acc MGI 1333883
D11	SBM0992646	ENSMUST00000 176113.7	Lin28a	ENSMUSG00 000050966	lin-28 homolog A (C. elegans) Source MGI Symbol Acc MGI 1890546
D12	SBM1037630	ENSMUST00000 079390.6	Lin28b	ENSMUSG00 000063804	lin-28 homolog B (C. elegans) Source MGI Symbol Acc MGI 3584032
E01	SBM1005699	ENSMUST00000 135868.7	Maml1	ENSMUSG00 000050567	mastermind like transcriptional coactivator 1 Source MGI Symbol Acc MGI 1890504
E02	SBM0937977	ENSMUST00000 014505.4	Mertk	ENSMUSG00 000014361	MER proto-oncogene tyrosine kinase Source MGI Symbol Acc MGI 96965
E03	SBM1078430	ENSMUST00000 169159.2	Ms4a1	ENSMUSG00 000024673	membrane-spanning 4-domains, subfamily A, member 1 Source MGI Symbol Acc MGI 88321
E04	SBM1063614	ENSMUST00000 139206.1	Muc1	ENSMUSG00 000042784	mucin 1, transmembrane Source MGI Symbol Acc MGI 97231
E05	SBM0987162	ENSMUST00000 159338.1	Myc	ENSMUSG00 000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E06	SBM1082904	ENSMUST00000 043396.14	Mycn	ENSMUSG00 000037169	v-myc avian myelocytomatosis viral related oncogene, neuroblastoma derived Source MGI Symbol Acc MGI 97357
E07	SBM0911915	ENSMUST00000 012540.4	Nanog	ENSMUSG00 000012396	Nanog homeobox Source MGI Symbol Acc MGI 1919200
E08	SBM0841870	ENSMUST00000 164430.6	Nfkb1	ENSMUSG00 000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E09	SBM0835086	ENSMUST00000 208783.1	Nos2	ENSMUSG00 000020826	nitric oxide synthase 2, inducible Source MGI Symbol Acc MGI 97361
E10	SBM1060528	ENSMUST00000 132820.1	Notch1	ENSMUSG00 000026923	notch 1 Source MGI Symbol Acc MGI 97363
E11	SBM0724048	ENSMUST00000 079812.7	Notch2	ENSMUSG00 000027878	notch 2 Source MGI Symbol Acc MGI 97364
E12	SBM1044090	ENSMUST00000 068021.8	Pecam1	ENSMUSG00 000020717	platelet/endothelial cell adhesion molecule 1 Source MGI Symbol Acc MGI 97537
F01	SBM0722468	ENSMUST00000 033941.6	Plat	ENSMUSG00 000031538	plasminogen activator, tissue Source MGI Symbol Acc MGI 97610
F02	SBM0732269	ENSMUST00000 206514.1	Plaur	ENSMUSG00 000046223	plasminogen activator, urokinase receptor Source MGI Symbol Acc MGI 97612
F03	SBM0857412	ENSMUST00000 173805.7	Pou5f1	ENSMUSG00 000024406	POU domain, class 5, transcription factor 1 Source MGI Symbol Acc MGI 101893
F04	SBM0800939	ENSMUST00000 165909.7	Prom1	ENSMUSG00 000029086	prominin 1 Source MGI Symbol Acc MGI 1100886
F05	SBM0724304	ENSMUST00000 194663.5	Ptch1	ENSMUSG00 000021466	patched 1 Source MGI Symbol Acc MGI 105373
F06	SBM0851018	ENSMUST00000 183229.2	Ptprc	ENSMUSG00 000026395	protein tyrosine phosphatase, receptor type, C Source MGI Symbol Acc MGI 97810
F07	SBM1092115	ENSMUST00000 220735.1	Sav1	ENSMUSG00 000021067	salvador family WW domain containing 1 Source MGI Symbol Acc MGI 1927144
F08	SBM1040786	ENSMUST00000 020257.12	Sirt1	ENSMUSG00 000020063	sirtuin 1 Source MGI Symbol Acc MGI 2135607
F09	SBM0921550	ENSMUST00000 001812.4	Smo	ENSMUSG00 000001761	smoothened, frizzled class receptor Source MGI Symbol Acc MGI 108075
F10	SBM0756361	ENSMUST00000 052631.7	Snai1	ENSMUSG00 000042821	snail family zinc finger 1 Source MGI Symbol Acc MGI 98330

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0992194	ENSMUST00000023356.7	Snai2	ENSMUSG00000022676	snail family zinc finger 2 Source MGI Symbol Acc MGI 1096393
F12	SBM0819160	ENSMUST00000099151.5	Sox2	ENSMUSG00000074637	SRY (sex determining region Y)-box 2 Source MGI Symbol Acc MGI 98364
G01	SBM0821931	ENSMUST00000103114.7	Stat3	ENSMUSG00000004040	signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038
G02	SBM0907399	ENSMUST00000156212.7	Taz	ENSMUSG00000009995	tafazzin Source MGI Symbol Acc MGI 109626
G03	SBM0973351	ENSMUST00000044234.13	Tgfbr1	ENSMUSG00000007613	transforming growth factor, beta receptor I Source MGI Symbol Acc MGI 98728
G04	SBM0937058	ENSMUST00000215156.1	Thy1	ENSMUSG00000032011	thymus cell antigen 1, theta Source MGI Symbol Acc MGI 98747
G05	SBM0689554	ENSMUST00000049089.6	Twist1	ENSMUSG00000035799	twist basic helix-loop-helix transcription factor 1 Source MGI Symbol Acc MGI 98872
G06	SBM0817872	ENSMUST00000186075.1	Twist2	ENSMUSG00000007805	twist basic helix-loop-helix transcription factor 2 Source MGI Symbol Acc MGI 104685
G07	SBM0782254	ENSMUST00000033326.9	Wee1	ENSMUSG00000031016	WEE 1 homolog 1 (S. pombe) Source MGI Symbol Acc MGI 103075
G08	SBM0828761	ENSMUST00000023734.7	Wnt1	ENSMUSG00000022997	wingless-type MMTV integration site family, member 1 Source MGI Symbol Acc MGI 98953
G09	SBM1010264	ENSMUST00000127086.1	Wwc1	ENSMUSG00000018849	WW, C2 and coiled-coil domain containing 1 Source MGI Symbol Acc MGI 2388637
G10	SBM0698501	ENSMUST00000172870.1	Yap1	ENSMUSG00000053110	yes-associated protein 1 Source MGI Symbol Acc MGI 103262
G11	SBM0746940	ENSMUST00000159390.7	Zeb1	ENSMUSG00000024238	zinc finger E-box binding homeobox 1 Source MGI Symbol Acc MGI 1344313
G12	SBM1061696	ENSMUST00000076836.12	Zeb2	ENSMUSG00000026872	zinc finger E-box binding homeobox 2 Source MGI Symbol Acc MGI 1344407
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 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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