

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

Mouse Breast Cancer

Cat. no. 249950 SBMM-131ZA

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	Abcb1a	Abcg2	Adam23	Akt1	Apc	Ar	Atm	Bad	Bcl2	Birc5	Brc1	Brc2
B	Ccna1	Ccnd1	Ccnd2	Cene1	Cdh1	Cdh13	Cdk2	Cdkn1a	Cdkn1c	Cdkn2a	Csf1	Cst6
C	Clnnb1	Ctsd	Egf	Egfr	Erb2	Esr1	Esr2	Foxa1	Gata3	Gli1	Grb7	Gstp1
D	Hic1	Id1	Igf1	Igf1r	Igf1bp3	Il6	Jun	Krt18	Krt19	Krt5	Krt8	Mapk1
E	Mapk3	Mapk8	Mgmt	Mki67	Mlh1	Mmp2	Mmp9	Muc1	Myc	Nme1	Notch1	Nr3c1
F	Pgr	Plau	Prdm2	Pten	Ptgs2	Pycard	Rarb	Rassf1	Rb1	Serpine1	Sfn	Sfrp1
G	Slc39a6	Slit2	Snai2	Src	Tf3	Tgfb1	Thbs1	Trp53	Trp73	Twist1	Vegfa	Xbp1
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	SBM1065613	ENSMUST00000126846.1	Abcb1a	ENSMUSG0000040584	ATP-binding cassette, sub-family B (MDR/TAP), member 1A Source MGI Symbol Acc MGI 97570
A02	SBM0956969	ENSMUST00000145161.7	Abcg2	ENSMUSG0000029802	ATP binding cassette subfamily G member 2 (Junior blood group) Source MGI Symbol Acc MGI 1347061
A03	SBM1033336	ENSMUST00000146403.7	Adam23	ENSMUSG0000025964	a disintegrin and metallopeptidase domain 23 Source MGI Symbol Acc MGI 1345162
A04	SBM1020452	ENSMUST00000144550.8	Akt1	ENSMUSG0000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A05	SBM0782035	ENSMUST00000079362.12	Apc	ENSMUSG0000005871	APC, WNT signaling pathway regulator Source MGI Symbol Acc MGI 88039
A06	SBM0829583	ENSMUST00000052837.8	Ar	ENSMUSG0000046532	androgen receptor Source MGI Symbol Acc MGI 88064
A07	SBM0745660	ENSMUST00000150244.1	Atm	ENSMUSG0000034218	ataxia telangiectasia mutated Source MGI Symbol Acc MGI 107202
A08	SBM0983531	ENSMUST00000238184.1	Bad	ENSMUSG0000024959	BCL2-associated agonist of cell death Source MGI Symbol Acc MGI 1096330
A09	SBM0876340	ENSMUST00000189999.1	Bcl2	ENSMUSG0000057329	B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138
A10	SBM0773958	ENSMUST00000081387.10	Birc5	ENSMUSG0000017716	baculoviral IAP repeat-containing 5 Source MGI Symbol Acc MGI 1203517
A11	SBM0935779	ENSMUST00000142086.2	Brc1	ENSMUSG0000017146	breast cancer 1, early onset Source MGI Symbol Acc MGI 104537
A12	SBM0807222	ENSMUST00000201226.1	Brc2	ENSMUSG0000041147	breast cancer 2, early onset Source MGI Symbol Acc MGI 109337
B01	SBM0877611	ENSMUST00000197238.4	Ccna1	ENSMUSG0000027793	cyclin A1 Source MGI Symbol Acc MGI 108042
B02	SBM0706150	ENSMUST00000093962.4	Ccnd1	ENSMUSG0000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
B03	SBM0977018	ENSMUST00000201066.1	Ccnd2	ENSMUSG0000000184	cyclin D2 Source MGI Symbol Acc MGI 88314
B04	SBM0866938	ENSMUST00000124979.2	Ccne1	ENSMUSG0000002068	cyclin E1 Source MGI Symbol Acc MGI 88316
B05	SBM0815100	ENSMUST00000136580.1	Cdh1	ENSMUSG0000000303	cadherin 1 Source MGI Symbol Acc MGI 88354
B06	SBM0740042	ENSMUST00000145849.7	Cdh13	ENSMUSG0000031841	cadherin 13 Source MGI Symbol Acc MGI 99551
B07	SBM1030284	ENSMUST00000219601.1	Cdk2	ENSMUSG0000025358	cyclin-dependent kinase 2 Source MGI Symbol Acc MGI 104772
B08	SBM1034022	ENSMUST00000023829.7	Cdkn1a	ENSMUSG0000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B09	SBM0762603	ENSMUST00000208137.1	Cdkn1c	ENSMUSG0000037664	cyclin-dependent kinase inhibitor 1C (P57) Source MGI Symbol Acc MGI 104564
B10	SBM0998051	ENSMUST00000060501.4	Cdkn2a	ENSMUSG0000044303	cyclin dependent kinase inhibitor 2A Source MGI Symbol Acc MGI 104738
B11	SBM0903322	ENSMUST00000155557.1	Csf1	ENSMUSG0000014599	colony stimulating factor 1 (macrophage) Source MGI Symbol Acc MGI 1339753
B12	SBM0958683	ENSMUST00000025764.5	Cst6	ENSMUSG0000024846	cystatin E/M Source MGI Symbol Acc MGI 1920970
C01	SBM1021462	ENSMUST00000007130.14	Ctnnb1	ENSMUSG0000006932	catenin (cadherin associated protein), beta 1 Source MGI Symbol Acc MGI 88276
C02	SBM0731741	ENSMUST00000151120.8	Ctsd	ENSMUSG0000007891	cathepsin D Source MGI Symbol Acc MGI 88562
C03	SBM1005237	ENSMUST00000197079.4	Egf	ENSMUSG0000028017	epidermal growth factor Source MGI Symbol Acc MGI 95290
C04	SBM1033270	ENSMUST00000020329.12	Egfr	ENSMUSG0000020122	epidermal growth factor receptor Source MGI Symbol Acc MGI 95294
C05	SBM0761323	ENSMUST00000136032.1	ErbB2	ENSMUSG0000062312	erb-b2 receptor tyrosine kinase 2 Source MGI Symbol Acc MGI 95410
C06	SBM0745819	ENSMUST00000067086.13	Esr1	ENSMUSG0000019768	estrogen receptor 1 (alpha) Source MGI Symbol Acc MGI 1352467
C07	SBM0969315	ENSMUST00000101291.10	Esr2	ENSMUSG0000021055	estrogen receptor 2 (beta) Source MGI Symbol Acc MGI 109392
C08	SBM0971553	ENSMUST00000044380.7	Foxa1	ENSMUSG0000035451	forkhead box A1 Source MGI Symbol Acc MGI 1347472
C09	SBM0782281	ENSMUST00000147533.1	Gata3	ENSMUSG0000015619	GATA binding protein 3 Source MGI Symbol Acc MGI 95663
C10	SBM0738831	ENSMUST00000219671.1	Gli1	ENSMUSG0000025407	GLI-Kruppel family member GLI1 Source MGI Symbol Acc MGI 95727
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM1022990	127914.7	Grb7	000019312	growth factor receptor bound protein 7 Source MGI Symbol Acc MGI 102683
C12	SBM1021264	ENSMUST00000237239.1	Gstp1	ENSMUSG0000060803	glutathione S-transferase, pi 1 Source MGI Symbol Acc MGI 95865
D01	SBM0795913	ENSMUST00000055619.4	Hic1	ENSMUSG0000043099	hypermethylated in cancer 1 Source MGI Symbol Acc MGI 1338010
D02	SBM0688367	ENSMUST00000109824.1	Id1	ENSMUSG0000042745	inhibitor of DNA binding 1 Source MGI Symbol Acc MGI 96396
D03	SBM1026650	ENSMUST00000122386.7	Igf1	ENSMUSG0000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D04	SBM0769269	ENSMUST00000207621.1	Igf1r	ENSMUSG0000005533	insulin-like growth factor I receptor Source MGI Symbol Acc MGI 96433
D05	SBM0693110	ENSMUST0000020702.10	Igfbp3	ENSMUSG0000020427	insulin-like growth factor binding protein 3 Source MGI Symbol Acc MGI 96438
D06	SBM0742623	ENSMUST0000026845.11	Il6	ENSMUSG0000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
D07	SBM1045409	ENSMUST00000107094.1	Jun	ENSMUSG0000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
D08	SBM0961106	ENSMUST0000023803.7	Krt18	ENSMUSG0000023043	keratin 18 Source MGI Symbol Acc MGI 96692
D09	SBM0705809	ENSMUST00000125888.1	Krt19	ENSMUSG0000020911	keratin 19 Source MGI Symbol Acc MGI 96693
D10	SBM0824321	ENSMUST0000023709.6	Krt5	ENSMUSG0000061527	keratin 5 Source MGI Symbol Acc MGI 96702
D11	SBM0683062	ENSMUST0000023952.9	Krt8	ENSMUSG0000049382	keratin 8 Source MGI Symbol Acc MGI 96705
D12	SBM0800614	ENSMUST00000231821.1	Mapk1	ENSMUSG0000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
E01	SBM0856900	ENSMUST00000206272.1	Mapk3	ENSMUSG0000063065	mitogen-activated protein kinase 3 Source MGI Symbol Acc MGI 1346859
E02	SBM0984642	ENSMUST00000132379.1	Mapk8	ENSMUSG0000021936	mitogen-activated protein kinase 8 Source MGI Symbol Acc MGI 1346861
E03	SBM0832259	ENSMUST00000081510.3	Mgmt	ENSMUSG0000054612	O-6-methylguanine-DNA methyltransferase Source MGI Symbol Acc MGI 96977
E04	SBM0976366	ENSMUST00000211238.1	Mki67	ENSMUSG0000031004	antigen identified by monoclonal antibody Ki 67 Source MGI Symbol Acc MGI 106035
E05	SBM0706264	ENSMUST00000134316.1	Mlh1	ENSMUSG0000032498	mutL homolog 1 Source MGI Symbol Acc MGI 101938
E06	SBM0690200	ENSMUST00000034187.8	Mmp2	ENSMUSG00000031740	matrix metalloproteinase 2 Source MGI Symbol Acc MGI 97009
E07	SBM1089430	ENSMUST00000017881.2	Mmp9	ENSMUSG0000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
E08	SBM1063614	ENSMUST00000139206.1	Muc1	ENSMUSG0000042784	mucin 1, transmembrane Source MGI Symbol Acc MGI 97231
E09	SBM0987162	ENSMUST00000159338.1	Myc	ENSMUSG0000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E10	SBM1076959	ENSMUST00000021220.9	Nme1	ENSMUSG0000037601	NME/NM23 nucleoside diphosphate kinase 1 Source MGI Symbol Acc MGI 97355
E11	SBM1060528	ENSMUST00000132820.1	Notch1	ENSMUSG0000026923	notch 1 Source MGI Symbol Acc MGI 97363
E12	SBM0963014	ENSMUST00000115571.7	Nr3c1	ENSMUSG0000024431	nuclear receptor subfamily 3, group C, member 1 Source MGI Symbol Acc MGI 95824
F01	SBM0738539	ENSMUST00000189181.6	Pgr	ENSMUSG00000031870	progesterone receptor Source MGI Symbol Acc MGI 97567
F02	SBM0733272	ENSMUST00000224141.1	Plau	ENSMUSG0000021822	plasminogen activator, urokinase Source MGI Symbol Acc MGI 97611
F03	SBM0841053	ENSMUST00000154280.7	Prdm2	ENSMUSG0000057637	PR domain containing 2, with ZNF domain Source MGI Symbol Acc MGI 107628
F04	SBM1220566	ENSMUST00000013807.7	Pten	ENSMUSG0000013663	phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583
F05	SBM0782881	ENSMUST00000035065.8	Ptgs2	ENSMUSG0000032487	prostaglandin-endoperoxide synthase 2 Source MGI Symbol Acc MGI 97798
F06	SBM0791013	ENSMUST00000205594.1	Pycard	ENSMUSG0000030793	PYD and CARD domain containing Source MGI Symbol Acc MGI 1931465
F07	SBM0779402	ENSMUST00000223576.1	Rarb	ENSMUSG0000017491	retinoic acid receptor, beta Source MGI Symbol Acc MGI 97857
F08	SBM0972716	ENSMUST00000121635.6	Rassf1	ENSMUSG0000010067	Ras association (RalGDS/AF-6) domain family member 1 Source MGI Symbol Acc MGI 1928386
F09	SBM0795530	ENSMUST00000168495.1	Rb1	ENSMUSG0000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F10	SBM0809699	ENSMUST00000041388.10	Serpine1	ENSMUSG0000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM1012777	ENSMUST00000057311.3	Sfn	ENSMUSG0000047281	stratifin Source MGI Symbol Acc MGI 1891831
F12	SBM0742478	ENSMUST00000033952.7	Sfrp1	ENSMUSG0000031548	secreted frizzled-related protein 1 Source MGI Symbol Acc MGI 892014
G01	SBM1087377	ENSMUST00000070726.9	Slc39a6	ENSMUSG0000024270	solute carrier family 39 (metal ion transporter), member 6 Source MGI Symbol Acc MGI 2147279
G02	SBM0795181	ENSMUST00000170109.8	Slit2	ENSMUSG0000031558	slit guidance ligand 2 Source MGI Symbol Acc MGI 1315205
G03	SBM0992194	ENSMUST00000023356.7	Snai2	ENSMUSG0000022676	snail family zinc finger 2 Source MGI Symbol Acc MGI 1096393
G04	SBM1051097	ENSMUST00000029175.13	Src	ENSMUSG0000027646	Rous sarcoma oncogene Source MGI Symbol Acc MGI 98397
G05	SBM1077411	ENSMUST00000024827.4	Tff3	ENSMUSG0000024029	trefoil factor 3, intestinal Source MGI Symbol Acc MGI 104638
G06	SBM0850388	ENSMUST00000002678.9	Tgfb1	ENSMUSG000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G07	SBM0895247	ENSMUST00000142588.1	Thbs1	ENSMUSG0000040152	thrombospondin 1 Source MGI Symbol Acc MGI 98737
G08	SBM0841427	ENSMUST00000108657.3	Trp53	ENSMUSG0000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G09	SBM1225400	ENSMUST00000105643.7	Trp73	ENSMUSG0000029026	transformation related protein 73 Source MGI Symbol Acc MGI 1336991
G10	SBM0689554	ENSMUST00000049089.6	Twist1	ENSMUSG0000035799	twist basic helix-loop-helix transcription factor 1 Source MGI Symbol Acc MGI 98872
G11	SBM1079198	ENSMUST000000217017.1	Vegfa	ENSMUSG0000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
G12	SBM0756103	ENSMUST00000145588.1	Xbp1	ENSMUSG0000020484	X-box binding protein 1 Source MGI Symbol Acc MGI 98970
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG0000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG0000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG0000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG0000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG0000023944	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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