

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

Mouse Tumor Metastasis

Cat. no. 249950 SBMM-028ZR

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	Apc	Brms1	Ccl7	Cd44	Cd82	Cdh1	Cdh11	Cdh6	Cdh8	Cdkn2a	Chd4	Col4a2
B	Csf1	Ctbp1	Ctnn1	Ctsk	Ctsl	Cxcl12	Cxcr2	Cxcr4	Denr	Elane	Ephb2	Etv4
C	Ewrs1	Fat1	Fgfr4	Flt4	Fn1	Fxyd5	Gpnmb	Hgf	Hpse	Hras	Httatip2	Igf1
D	Il18	Il1b	Itga7	Itgb3	Kiss1	Kiss1r	Kras	Lpar6	Mcam	Mdm2	Met	Mmp10
E	Mmp11	Mmp13	Mmp2	Mmp3	Mmp7	Mmp9	Mta1	Mts1	Myc	Mycl	Nf2	Nme1
F	Nme2	Nme4	Nr4a3	Plaur	Pnn	Pten	Rb1	Rorb	Rpsa	Set	Smad2	Smad4
G	Src	Sstr2	Syk	Tcf20	Tgfb1	Timp2	Timp3	Timp4	Tnfrsf10	Trp53	Tshr	Vegfa
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	SBM0782035	ENSMUST00000079362.12	Apc	ENSMUSG0000005871	APC, WNT signaling pathway regulator Source MGI Symbol Acc MGI 88039
A02	SBM0809854	ENSMUST00000237117.1	Brms1	ENSMUSG0000080268	breast cancer metastasis-suppressor 1 Source MGI Symbol Acc MGI 2388804
A03	SBM0998844	ENSMUST0000021011.2	Ccl7	ENSMUSG0000035373	chemokine (C-C motif) ligand 7 Source MGI Symbol Acc MGI 99512
A04	SBM0860996	ENSMUST00000111194.7	Cd44	ENSMUSG0000005087	CD44 antigen Source MGI Symbol Acc MGI 88338
A05	SBM0792997	ENSMUST00000116457.8	Cd82	ENSMUSG0000027215	CD82 antigen Source MGI Symbol Acc MGI 104651
A06	SBM0815100	ENSMUST00000136580.1	Cdh1	ENSMUSG0000000303	cadherin 1 Source MGI Symbol Acc MGI 88354
A07	SBM0832324	ENSMUST00000210425.1	Cdh11	ENSMUSG0000031673	cadherin 11 Source MGI Symbol Acc MGI 99217
A08	SBM0916393	ENSMUST00000036439.5	Cdh6	ENSMUSG0000039385	cadherin 6 Source MGI Symbol Acc MGI 107435
A09	SBM1036019	ENSMUST00000093249.10	Cdh8	ENSMUSG0000036510	cadherin 8 Source MGI Symbol Acc MGI 107434
A10	SBM0998051	ENSMUST00000060501.4	Cdkn2a	ENSMUSG0000044303	cyclin dependent kinase inhibitor 2A Source MGI Symbol Acc MGI 104738
A11	SBM0848966	ENSMUST00000155261.1	Chd4	ENSMUSG0000063870	chromodomain helicase DNA binding protein 4 Source MGI Symbol Acc MGI 1344380
A12	SBM0756779	ENSMUST00000033899.13	Col4a2	ENSMUSG0000031503	collagen, type IV, alpha 2 Source MGI Symbol Acc MGI 88455
B01	SBM0903322	ENSMUST00000155557.1	Csf1	ENSMUSG0000014599	colony stimulating factor 1 (macrophage) Source MGI Symbol Acc MGI 1339753
B02	SBM1023677	ENSMUST00000201372.2	Ctbp1	ENSMUSG0000037373	C-terminal binding protein 1 Source MGI Symbol Acc MGI 1201685
B03	SBM0712952	ENSMUST00000236571.1	Ctnna1	ENSMUSG0000037815	catenin (cadherin associated protein), alpha 1 Source MGI Symbol Acc MGI 88274
B04	SBM0898879	ENSMUST00000015664.4	Ctsk	ENSMUSG0000028111	cathepsin K Source MGI Symbol Acc MGI 107823
B05	SBM1071990	ENSMUST00000222462.1	Ctsl	ENSMUSG0000021477	cathepsin L Source MGI Symbol Acc MGI 88564
B06	SBM0703161	ENSMUST00000134244.1	Cxcl12	ENSMUSG0000061353	chemokine (C-X-C motif) ligand 12 Source MGI Symbol Acc MGI 103556
B07	SBM0963144	ENSMUST00000106899.3	Cxcr2	ENSMUSG0000026180	chemokine (C-X-C motif) receptor 2 Source MGI Symbol Acc MGI 105303
B08	SBM0923037	ENSMUST00000052172.6	Cxcr4	ENSMUSG0000045382	chemokine (C-X-C motif) receptor 4 Source MGI Symbol Acc MGI 109563
B09	SBM0956446	ENSMUST00000023869.14	Denr	ENSMUSG0000023106	density-regulated protein Source MGI Symbol Acc MGI 1915434
B10	SBM0811159	ENSMUST00000046091.6	Elane	ENSMUSG0000020125	elastase, neutrophil expressed Source MGI Symbol Acc MGI 2679229
B11	SBM0735322	ENSMUST00000156558.1	Ephb2	ENSMUSG0000028664	Eph receptor B2 Source MGI Symbol Acc MGI 99611
B12	SBM0743574	ENSMUST00000129995.7	Etv4	ENSMUSG0000017724	ets variant 4 Source MGI Symbol Acc MGI 99423
C01	SBM0811931	ENSMUST00000151847.1	Ewsr1	ENSMUSG0000009079	Ewing sarcoma breakpoint region 1 Source MGI Symbol Acc MGI 99960
C02	SBM1009954	ENSMUST00000098796.9	Fat1	ENSMUSG0000070047	FAT atypical cadherin 1 Source MGI Symbol Acc MGI 109168
C03	SBM1072151	ENSMUST00000162967.1	Fgfr4	ENSMUSG0000005320	fibroblast growth factor receptor 4 Source MGI Symbol Acc MGI 95525
C04	SBM0847026	ENSMUST00000020617.2	Fli4	ENSMUSG0000020357	FMS-like tyrosine kinase 4 Source MGI Symbol Acc MGI 95561
C05	SBM0934692	ENSMUST00000185408.6	Fn1	ENSMUSG0000026193	fibronectin 1 Source MGI Symbol Acc MGI 95566
C06	SBM1082511	ENSMUST00000161684.7	Fxyd5	ENSMUSG0000009687	FXFD domain-containing ion transport regulator 5 Source MGI Symbol Acc MGI 1201785
C07	SBM1071689	ENSMUST00000204260.1	Gpnmb	ENSMUSG0000029816	glycoprotein (transmembrane) nmb Source MGI Symbol Acc MGI 1934765
C08	SBM0858725	ENSMUST00000200189.4	Hgf	ENSMUSG0000028864	hepatocyte growth factor Source MGI Symbol Acc MGI 96079
C09	SBM0962947	ENSMUST00000112908.1	Hpse	ENSMUSG0000035273	heparanase Source MGI Symbol Acc MGI 1343124
C10	SBM0815785	ENSMUST00000097957.10	Hras	ENSMUSG0000025499	Harvey rat sarcoma virus oncogene Source MGI Symbol Acc MGI 96224
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM1069391	085272.6	Htatip2	000039745	HIV-1 Tat interactive protein 2 Source MGI Symbol Acc MGI 1859271
C12	SBM1026650	ENSMUST00000122386.7	Igf1	ENSMUSG0000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D01	SBM0953194	ENSMUST00000180021.1	Il18	ENSMUSG0000039217	interleukin 18 Source MGI Symbol Acc MGI 107936
D02	SBM0738485	ENSMUST00000028881.13	Il1b	ENSMUSG0000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
D03	SBM0943260	ENSMUST00000218290.1	Itga7	ENSMUSG0000025348	integrin alpha 7 Source MGI Symbol Acc MGI 102700
D04	SBM0851696	ENSMUST00000127140.2	Itgb3	ENSMUSG0000020689	integrin beta 3 Source MGI Symbol Acc MGI 96612
D05	SBM0884233	ENSMUST00000178033.4	Kiss1	ENSMUSG0000116158	KISS-1 metastasis-suppressor Source MGI Symbol Acc MGI 2663985
D06	SBM0992776	ENSMUST00000045529.2	Kiss1r	ENSMUSG0000035773	KISS1 receptor Source MGI Symbol Acc MGI 2148793
D07	SBM1059793	ENSMUST00000203147.2	Kras	ENSMUSG0000030265	Kirsten rat sarcoma viral oncogene homolog Source MGI Symbol Acc MGI 96680
D08	SBM1081680	ENSMUST00000044405.7	Lpar6	ENSMUSG0000033446	lysophosphatidic acid receptor 6 Source MGI Symbol Acc MGI 1914418
D09	SBM0892832	ENSMUST00000034650.14	Mcam	ENSMUSG0000032135	melanoma cell adhesion molecule Source MGI Symbol Acc MGI 1933966
D10	SBM0989223	ENSMUST00000020408.15	Mdm2	ENSMUSG0000020184	transformed mouse 3T3 cell double minute 2 Source MGI Symbol Acc MGI 96952
D11	SBM1055926	ENSMUST00000115442.7	Met	ENSMUSG0000009376	met proto-oncogene Source MGI Symbol Acc MGI 96969
D12	SBM0917028	ENSMUST00000034488.3	Mmp10	ENSMUSG0000047562	matrix metalloproteinase 10 Source MGI Symbol Acc MGI 97007
E01	SBM0701635	ENSMUST00000000924.12	Mmp11	ENSMUSG0000000901	matrix metalloproteinase 11 Source MGI Symbol Acc MGI 97008
E02	SBM0784073	ENSMUST00000015394.9	Mmp13	ENSMUSG0000050578	matrix metalloproteinase 13 Source MGI Symbol Acc MGI 1340026
E03	SBM0690200	ENSMUST00000034187.8	Mmp2	ENSMUSG0000031740	matrix metalloproteinase 2 Source MGI Symbol Acc MGI 97009
E04	SBM1025609	ENSMUST00000034497.7	Mmp3	ENSMUSG0000043613	matrix metalloproteinase 3 Source MGI Symbol Acc MGI 97010
E05	SBM0709342	ENSMUST00000018767.7	Mmp7	ENSMUSG0000018623	matrix metalloproteinase 7 Source MGI Symbol Acc MGI 103189
E06	SBM1089430	ENSMUST00000017881.2	Mmp9	ENSMUSG0000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
E07	SBM0991754	ENSMUST00000009099.12	Mta1	ENSMUSG0000021144	metastasis associated 1 Source MGI Symbol Acc MGI 2150037
E08	SBM0876077	ENSMUST00000080371.7	Mtss1	ENSMUSG0000022353	metastasis suppressor 1 Source MGI Symbol Acc MGI 2384818
E09	SBM0987162	ENSMUST000000159338.1	Myc	ENSMUSG0000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E10	SBM0802635	ENSMUST000000147259.1	Mycl	ENSMUSG0000028654	v-myc avian myelocytomatosis viral oncogene lung carcinoma derived Source MGI Symbol Acc MGI 96799
E11	SBM0877965	ENSMUST000000124878.2	Nf2	ENSMUSG0000009073	neurofibromin 2 Source MGI Symbol Acc MGI 97307
E12	SBM1076959	ENSMUST00000021220.9	Nme1	ENSMUSG0000037601	NME/NM23 nucleoside diphosphate kinase 1 Source MGI Symbol Acc MGI 97355
F01	SBM1007830	ENSMUST00000021217.10	Nme2	ENSMUSG0000020857	NME/NM23 nucleoside diphosphate kinase 2 Source MGI Symbol Acc MGI 97356
F02	SBM0701614	ENSMUST000000236967.1	Nme4	ENSMUSG0000024177	NME/NM23 nucleoside diphosphate kinase 4 Source MGI Symbol Acc MGI 1931148
F03	SBM0766720	ENSMUST00000030025.9	Nr4a3	ENSMUSG0000028341	nuclear receptor subfamily 4, group A, member 3 Source MGI Symbol Acc MGI 1352457
F04	SBM0732269	ENSMUST000000206514.1	Plaur	ENSMUSG0000046223	plasminogen activator, urokinase receptor Source MGI Symbol Acc MGI 97612
F05	SBM0706790	ENSMUST000000219176.1	Pnn	ENSMUSG0000020994	pinin Source MGI Symbol Acc MGI 1100514
F06	SBM1220566	ENSMUST00000013807.7	Pten	ENSMUSG0000013663	phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583
F07	SBM0795530	ENSMUST000000168495.1	Rb1	ENSMUSG0000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F08	SBM0844721	ENSMUST000000147907.1	Rorb	ENSMUSG0000036192	RAR-related orphan receptor beta Source MGI Symbol Acc MGI 1343464
F09	SBM0733530	ENSMUST00000035105.6	Rpsa	ENSMUSG0000032518	ribosomal protein SA Source MGI Symbol Acc MGI 105381
F10	SBM1022400	ENSMUST000000125824.7	Set	ENSMUSG0000054766	SET nuclear oncogene Source MGI Symbol Acc MGI 1860267

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM1009250	ENSMUST00000165084.7	Smad2	ENSMUSG00000024563	SMAD family member 2 Source MGI Symbol Acc MGI 108051
F12	SBM1071100	ENSMUST00000114939.1	Smad4	ENSMUSG00000024515	SMAD family member 4 Source MGI Symbol Acc MGI 894293
G01	SBM1051097	ENSMUST00000029175.13	Src	ENSMUSG00000027646	Rous sarcoma oncogene Source MGI Symbol Acc MGI 98397
G02	SBM0791847	ENSMUST00000146390.2	Sstr2	ENSMUSG00000047904	somatostatin receptor 2 Source MGI Symbol Acc MGI 98328
G03	SBM0702487	ENSMUST00000120135.7	Syk	ENSMUSG00000021457	spleen tyrosine kinase Source MGI Symbol Acc MGI 99515
G04	SBM0710181	ENSMUST00000048966.6	Tcf20	ENSMUSG00000041852	transcription factor 20 Source MGI Symbol Acc MGI 108399
G05	SBM0850388	ENSMUST00000002678.9	Tgfb1	ENSMUSG00000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G06	SBM0732357	ENSMUST00000155707.2	Timp2	ENSMUSG00000017466	tissue inhibitor of metalloproteinase 2 Source MGI Symbol Acc MGI 98753
G07	SBM1025772	ENSMUST00000132307.1	Timp3	ENSMUSG00000020044	tissue inhibitor of metalloproteinase 3 Source MGI Symbol Acc MGI 98754
G08	SBM1077931	ENSMUST00000032462.8	Timp4	ENSMUSG00000030317	tissue inhibitor of metalloproteinase 4 Source MGI Symbol Acc MGI 109125
G09	SBM0969669	ENSMUST00000046383.11	Tnfsf10	ENSMUSG00000039304	tumor necrosis factor (ligand) superfamily, member 10 Source MGI Symbol Acc MGI 107414
G10	SBM0841427	ENSMUST00000108657.3	Trp53	ENSMUSG00000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G11	SBM0929034	ENSMUST00000221216.1	Tshr	ENSMUSG00000020963	thyroid stimulating hormone receptor Source MGI Symbol Acc MGI 98849
G12	SBM1079198	ENSMUST00000217017.1	Vegfa	ENSMUSG00000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
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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