

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

Mouse p53 Signaling Pathway

Cat. no. 249950 SBMM-027ZA

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	Apaf1	Apex1	Atm	Atr	Bag1	Bax	Bbc3	Bcl2	Bid	Birc5	Bnip3	Brc1
B	Brca2	Blg2	Casp2	Casp9	Ccnb1	Ccne1	Ccng1	Ccnh	Cdc25a	Cdc25c	Cdk1	Cdk4
C	Cdkn1a	Cdkn2a	Chek1	Chek2	Crodd	Cul9	Dapk1	Dnmt1	E2f1	E2f3	Egfr	Egr1
D	Ep300	Erc1	Esr1	Fadd	Fas	Fas1	Foxo3	Gadd45a	Hif1a	Il6	Jun	Kras
E	Lig4	Mcl1	Mdm2	Mdm4	Mlh1	Msh2	Myc	Myod1	Nf1	Nfkb1	Pcna	Pmaip1
F	Ppm1d	Prc1	Prkca	Pten	Ptfg1	Rb1	Rela	Rprm	Serpinb5	Sesn2	Sfn	Sirt1
G	Stat1	Tnf	Tnfrsf10b	Traf1	Trp53	Trp53bp2	Trp63	Trp73	Vh1	Xccc4	Xccc5	Zmat3
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	SBM0931259	ENSMUST00000160788.1	Apaf1	ENSMUSG0000019979	apoptotic peptidase activating factor 1 Source MGI Symbol Acc MGI 1306796
A02	SBM0874745	ENSMUST00000128395.1	Apex1	ENSMUSG0000035960	apurinic/apyrimidinic endonuclease 1 Source MGI Symbol Acc MGI 88042
A03	SBM0745660	ENSMUST00000150244.1	Atm	ENSMUSG0000034218	ataxia telangiectasia mutated Source MGI Symbol Acc MGI 107202
A04	SBM0707457	ENSMUST00000189602.6	Atr	ENSMUSG0000032409	ataxia telangiectasia and Rad3 related Source MGI Symbol Acc MGI 108028
A05	SBM0738052	ENSMUST00000030125.4	Bag1	ENSMUSG0000028416	BCL2-associated athanogene 1 Source MGI Symbol Acc MGI 108047
A06	SBM0740166	ENSMUST00000211615.1	Bax	ENSMUSG0000003873	BCL2-associated X protein Source MGI Symbol Acc MGI 99702
A07	SBM1088969	ENSMUST00000002152.12	Bbc3	ENSMUSG0000002083	BCL2 binding component 3 Source MGI Symbol Acc MGI 2181667
A08	SBM0876340	ENSMUST00000189999.1	Bcl2	ENSMUSG0000057329	B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138
A09	SBM0938087	ENSMUST00000160684.7	Bid	ENSMUSG0000004446	BH3 interacting domain death agonist Source MGI Symbol Acc MGI 108093
A10	SBM0773958	ENSMUST00000081387.10	Birc5	ENSMUSG0000017716	baculoviral IAP repeat-containing 5 Source MGI Symbol Acc MGI 1203517
A11	SBM0840313	ENSMUST00000130500.7	Bnip3	ENSMUSG0000078566	BCL2/adenovirus E1B interacting protein 3 Source MGI Symbol Acc MGI 109326
A12	SBM0935779	ENSMUST00000142086.2	Brca1	ENSMUSG0000017146	breast cancer 1, early onset Source MGI Symbol Acc MGI 104537
B01	SBM0807222	ENSMUST00000201226.1	Brca2	ENSMUSG0000041147	breast cancer 2, early onset Source MGI Symbol Acc MGI 109337
B02	SBM0925245	ENSMUST00000020692.6	Blg2	ENSMUSG00000020423	B cell translocation gene 2, anti-proliferative Source MGI Symbol Acc MGI 108384
B03	SBM1225390	ENSMUST00000031895.12	Casp2	ENSMUSG0000029863	caspase 2 Source MGI Symbol Acc MGI 97295
B04	SBM0686567	ENSMUST00000097805.10	Casp9	ENSMUSG0000028914	caspase 9 Source MGI Symbol Acc MGI 1277950
B05	SBM0677113	ENSMUST00000147790.1	Ccnb1	ENSMUSG0000041431	cyclin B1 Source MGI Symbol Acc MGI 88302
B06	SBM0866938	ENSMUST00000124979.2	Ccne1	ENSMUSG0000002068	cyclin E1 Source MGI Symbol Acc MGI 88316
B07	SBM0884128	ENSMUST00000020576.7	Ccng1	ENSMUSG0000020326	cyclin G1 Source MGI Symbol Acc MGI 102890
B08	SBM0837376	ENSMUST00000163600.7	Ccnh	ENSMUSG0000021548	cyclin H Source MGI Symbol Acc MGI 1913921
B09	SBM0768186	ENSMUST00000199787.2	Cdc25a	ENSMUSG0000032477	cell division cycle 25A Source MGI Symbol Acc MGI 103198
B10	SBM0971821	ENSMUST00000060710.8	Cdc25c	ENSMUSG0000044201	cell division cycle 25C Source MGI Symbol Acc MGI 88350
B11	SBM0979951	ENSMUST00000129444.7	Cdk1	ENSMUSG0000019942	cyclin-dependent kinase 1 Source MGI Symbol Acc MGI 88351
B12	SBM0702559	ENSMUST00000120226.7	Cdk4	ENSMUSG0000006728	cyclin-dependent kinase 4 Source MGI Symbol Acc MGI 88357
C01	SBM1034022	ENSMUST00000023829.7	Cdkn1a	ENSMUSG0000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
C02	SBM0998051	ENSMUST00000060501.4	Cdkn2a	ENSMUSG0000044303	cyclin dependent kinase inhibitor 2A Source MGI Symbol Acc MGI 104738
C03	SBM0725925	ENSMUST00000173963.8	Chek1	ENSMUSG0000032113	checkpoint kinase 1 Source MGI Symbol Acc MGI 1202065
C04	SBM0884188	ENSMUST00000066160.2	Chek2	ENSMUSG0000029521	checkpoint kinase 2 Source MGI Symbol Acc MGI 1355321
C05	SBM0880165	ENSMUST00000217809.1	Cradd	ENSMUSG0000045867	CASP2 and RIPK1 domain containing adaptor with death domain Source MGI Symbol Acc MGI 1336168
C06	SBM0870115	ENSMUST00000182451.1	Cul9	ENSMUSG0000040327	cullin 9 Source MGI Symbol Acc MGI 1925559
C07	SBM0822721	ENSMUST00000226059.1	Dapk1	ENSMUSG0000021559	death associated protein kinase 1 Source MGI Symbol Acc MGI 1916885
C08	SBM0945860	ENSMUST00000177754.8	Dnmt1	ENSMUSG0000004099	DNA methyltransferase (cytosine-5) 1 Source MGI Symbol Acc MGI 94912
C09	SBM0678575	ENSMUST00000000894.5	E2f1	ENSMUSG0000027490	E2F transcription factor 1 Source MGI Symbol Acc MGI 101941
C10	SBM0884968	ENSMUST00000102948.10	E2f3	ENSMUSG0000016477	E2F transcription factor 3 Source MGI Symbol Acc MGI 1096340
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM1033270	020329.12	Egfr	000020122	epidermal growth factor receptor Source MGI Symbol Acc MGI 95294
C12	SBM0782056	ENSMUST00000064795.5	Egr1	ENSMUSG0000038418	early growth response 1 Source MGI Symbol Acc MGI 95295
D01	SBM1065431	ENSMUST00000190035.1	Ep300	ENSMUSG0000055024	E1A binding protein p300 Source MGI Symbol Acc MGI 1276116
D02	SBM0942819	ENSMUST00000003645.8	Ercc1	ENSMUSG0000003549	excision repair cross-complementing rodent repair deficiency, complementation group 1 Source MGI Symbol Acc MGI 95412
D03	SBM0745819	ENSMUST00000067086.13	Esr1	ENSMUSG0000019768	estrogen receptor 1 (alpha) Source MGI Symbol Acc MGI 1352467
D04	SBM0895464	ENSMUST00000033394.7	Fadd	ENSMUSG0000031077	Fas (TNFRSF6)-associated via death domain Source MGI Symbol Acc MGI 109324
D05	SBM0856649	ENSMUST00000112472.3	Fas	ENSMUSG0000024778	Fas (TNF receptor superfamily member 6) Source MGI Symbol Acc MGI 95484
D06	SBM0967876	ENSMUST00000000834.3	FasL	ENSMUSG0000000817	Fas ligand (TNF superfamily, member 6) Source MGI Symbol Acc MGI 99255
D07	SBM1067125	ENSMUST00000105502.7	Foxo3	ENSMUSG0000048756	forkhead box O3 Source MGI Symbol Acc MGI 1890081
D08	SBM0962210	ENSMUST00000151958.1	Gadd45a	ENSMUSG0000036390	growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc MGI 107799
D09	SBM1003614	ENSMUST00000110464.7	Hif1a	ENSMUSG0000021109	hypoxia inducible factor 1, alpha subunit Source MGI Symbol Acc MGI 106918
D10	SBM0742623	ENSMUST00000026845.11	Il6	ENSMUSG0000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
D11	SBM1045409	ENSMUST00000107094.1	Jun	ENSMUSG0000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
D12	SBM1059793	ENSMUST00000203147.2	Kras	ENSMUSG0000030265	Kirsten rat sarcoma viral oncogene homolog Source MGI Symbol Acc MGI 96680
E01	SBM1059958	ENSMUST00000170033.1	Lig4	ENSMUSG0000049717	ligase IV, DNA, ATP-dependent Source MGI Symbol Acc MGI 1335098
E02	SBM0701175	ENSMUST00000178686.1	Mcl1	ENSMUSG0000038612	myeloid cell leukemia sequence 1 Source MGI Symbol Acc MGI 101769
E03	SBM0989223	ENSMUST00000020408.15	Mdm2	ENSMUSG0000020184	transformed mouse 3T3 cell double minute 2 Source MGI Symbol Acc MGI 96952
E04	SBM0965028	ENSMUST00000189596.1	Mdm4	ENSMUSG0000054387	transformed mouse 3T3 cell double minute 4 Source MGI Symbol Acc MGI 107934
E05	SBM0706264	ENSMUST00000134316.1	Mlh1	ENSMUSG0000032498	mutL homolog 1 Source MGI Symbol Acc MGI 101938
E06	SBM0831857	ENSMUST00000172855.1	Msh2	ENSMUSG0000024151	mutS homolog 2 Source MGI Symbol Acc MGI 101816
E07	SBM0987162	ENSMUST00000159338.1	Myc	ENSMUSG0000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E08	SBM0847322	ENSMUST00000072514.2	Myod1	ENSMUSG0000009471	myogenic differentiation 1 Source MGI Symbol Acc MGI 97275
E09	SBM1038616	ENSMUST00000122917.7	Nf1	ENSMUSG0000020716	neurofibromin 1 Source MGI Symbol Acc MGI 97306
E10	SBM0841870	ENSMUST00000164430.6	Nfkb1	ENSMUSG0000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E11	SBM0823260	ENSMUST00000140338.1	Pcna	ENSMUSG0000027342	proliferating cell nuclear antigen Source MGI Symbol Acc MGI 97503
E12	SBM0884842	ENSMUST00000237161.1	Pmaip1	ENSMUSG0000024521	phorbol-12-myristate-13-acetate-induced protein 1 Source MGI Symbol Acc MGI 1930146
F01	SBM0864740	ENSMUST00000020835.15	Ppm1d	ENSMUSG0000020525	protein phosphatase 1D magnesium-dependent, delta isoform Source MGI Symbol Acc MGI 1858214
F02	SBM0994811	ENSMUST00000173914.2	Prc1	ENSMUSG0000038943	protein regulator of cytokinesis 1 Source MGI Symbol Acc MGI 1858961
F03	SBM0890328	ENSMUST00000100302.3	Prkca	ENSMUSG0000050965	protein kinase C, alpha Source MGI Symbol Acc MGI 97595
F04	SBM1220566	ENSMUST00000013807.7	Pten	ENSMUSG0000013663	phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583
F05	SBM0709049	ENSMUST00000101340.10	Pttg1	ENSMUSG0000020415	pituitary tumor-transforming gene 1 Source MGI Symbol Acc MGI 1353578
F06	SBM0795530	ENSMUST00000168495.1	Rb1	ENSMUSG0000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F07	SBM0937498	ENSMUST00000237361.1	Rela	ENSMUSG0000024927	v-rel reticuloendotheliosis viral oncogene homolog A (avian) Source MGI Symbol Acc MGI 103290
F08	SBM0760742	ENSMUST00000100089.2	Rprm	ENSMUSG0000075334	reprimin, TP53 dependent G2 arrest mediator candidate Source MGI Symbol Acc MGI 1915124
F09	SBM0832102	ENSMUST00000086701.12	Serpib5	ENSMUSG0000067006	serine (or cysteine) peptidase inhibitor, clade B, member 5 Source MGI Symbol Acc MGI 109579
F10	SBM0907073	ENSMUST00000030724.8	Sesn2	ENSMUSG0000028893	sestrin 2 Source MGI Symbol Acc MGI 2651874

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM1012777	ENSMUST00000057311.3	Sfn	ENSMUSG00000047281	stratifin Source MGI Symbol Acc MGI 1891831
F12	SBM1040786	ENSMUST00000020257.12	Sirt1	ENSMUSG00000020063	sirtuin 1 Source MGI Symbol Acc MGI 2135607
G01	SBM0954168	ENSMUST00000070968.13	Stat1	ENSMUSG00000026104	signal transducer and activator of transcription 1 Source MGI Symbol Acc MGI 103063
G02	SBM0788439	ENSMUST00000025263.14	Tnf	ENSMUSG00000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G03	SBM0809431	ENSMUST000000224533.1	Tnfrsf10b	ENSMUSG00000022074	tumor necrosis factor receptor superfamily, member 10b Source MGI Symbol Acc MGI 1341090
G04	SBM0741116	ENSMUST00000028234.11	Traf1	ENSMUSG00000026875	TNF receptor-associated factor 1 Source MGI Symbol Acc MGI 101836
G05	SBM0841427	ENSMUST000000108657.3	Trp53	ENSMUSG00000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G06	SBM0771773	ENSMUST000000117245.1	Trp53bp2	ENSMUSG00000026510	transformation related protein 53 binding protein 2 Source MGI Symbol Acc MGI 2138319
G07	SBM1225399	ENSMUST000000115306.7	Trp63	ENSMUSG00000022510	transformation related protein 63 Source MGI Symbol Acc MGI 1330810
G08	SBM1225400	ENSMUST000000105643.7	Trp73	ENSMUSG00000029026	transformation related protein 73 Source MGI Symbol Acc MGI 1336991
G09	SBM0752964	ENSMUST000000213301.1	Wt1	ENSMUSG00000016458	Wilms tumor 1 homolog Source MGI Symbol Acc MGI 98968
G10	SBM1030169	ENSMUST000000161396.1	Xrcc4	ENSMUSG00000021615	X-ray repair complementing defective repair in Chinese hamster cells 4 Source MGI Symbol Acc MGI 1333799
G11	SBM0879017	ENSMUST000000027379.8	Xrcc5	ENSMUSG00000026187	X-ray repair complementing defective repair in Chinese hamster cells 5 Source MGI Symbol Acc MGI 104517
G12	SBM0729141	ENSMUST000000168566.2	Zmat3	ENSMUSG00000027663	zinc finger matrin type 3 Source MGI Symbol Acc MGI 1195270
H01	SBM1220560	ENSMUST000000100497.10	Actb	ENSMUSG00000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST000000102476.4	B2m	ENSMUSG00000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST000000117757.8	Gapdh	ENSMUSG00000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST000000026613.13	Gusb	ENSMUSG00000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST000000166469.7	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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