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

Mouse Cell Cycle

Cat. no. 249955 UPMM-020ZA

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light 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 Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

Panel layout (96-well): QuantiNova LNA Probe PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. Refer to the QuantiNova LNA Probe PCR Handbook at **www.qiagen.com** for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Abl1	Atm	Atr	Aurka	Aurkb	Bcl2	Birc5	Brca1	Brca2	Casp3	Ccna1	Ccna2
B	Ccnb1	Ccnb2	Ccnc	Ccnd1	Ccnd2	Ccnd3	Ccne1	Ccnf	Cdc20	Cdc25a	Cdc25c	Cdc6
C	Cdc7	Cdk1	Cdk2	Cdk4	Cdk5rap1	Cdk6	Cdkn1a	Cdkn1b	Cdkn2a	Cdkn2b	Cdkn3	Chek1
D	Chek2	Cks1b	Ddit3	Dst	E2f1	E2f2	E2f3	E2f4	Gadd45a	Gpr132	Hus1	Itgb1
E	Mad2l1	Mcm2	Mcm3	Mcm4	Mdm2	Mki67	Mre11a	Msh2	Myb	Nbn	Nek2	Notch2
F	Pkd1	Pmp22	Ppm1d	Rad17	Rad21	Rad51	Rad9a	Ran	Rb1	Rbl1	Rbl2	Sfn
G	Shc1	Skp2	Slfn1	Smc1a	Stag1	Stmn1	Terf1	Tfdp1	Trp53	Trp63	Tsg101	Wee1
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFM0893522	ENSMUST00000028190.12	Abl1	ENSMUSG00000026842	c-abl oncogene 1, non-receptor tyrosine kinase Source MGI Symbol Acc MGI 87859
A02	UPFM0708773	ENSMUST00000150244.1	Atm	ENSMUSG00000034218	ataxia telangiectasia mutated Source MGI Symbol Acc MGI 107202
A03	UPFM0920400	ENSMUST00000185473.6	Atr	ENSMUSG00000032409	ataxia telangiectasia and Rad3 related Source MGI Symbol Acc MGI 108028
A04	UPFM0699005	ENSMUST00000109140.9	Aurka	ENSMUSG00000027496	aurora kinase A Source MGI Symbol Acc MGI 894678
A05	UPFM0683724	ENSMUST00000149018.1	Aurkb	ENSMUSG00000020897	aurora kinase B Source MGI Symbol Acc MGI 107168
A06	UPFM0635853	ENSMUST00000112751.1	Bcl2	ENSMUSG00000057329	B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138
A07	UPFM0854913	ENSMUST00000081387.10	Birc5	ENSMUSG00000017716	baculoviral IAP repeat-containing 5 Source MGI Symbol Acc MGI 1203517
A08	UPFM0989907	ENSMUST00000156843.1	Brca1	ENSMUSG00000017146	breast cancer 1, early onset Source MGI Symbol Acc MGI 104537
A09	UPFM0774522	ENSMUST00000201226.1	Brca2	ENSMUSG00000041147	breast cancer 2, early onset Source MGI Symbol Acc MGI 109337
A10	UPFM0728951	ENSMUST00000210534.1	Casp3	ENSMUSG00000031628	caspase 3 Source MGI Symbol Acc MGI 107739
A11	UPFM0794983	ENSMUST00000029368.6	Ccna1	ENSMUSG00000027793	cyclin A1 Source MGI Symbol Acc MGI 108042
A12	UPFM0888575	ENSMUST00000029270.9	Ccna2	ENSMUSG00000027715	cyclin A2 Source MGI Symbol Acc MGI 108069
B01	UPFM0919252	ENSMUST00000147790.1	Ccnb1	ENSMUSG00000041431	cyclin B1 Source MGI Symbol Acc MGI 88302
B02	UPFM1007495	ENSMUST00000034742.7	Ccnb2	ENSMUSG00000032218	cyclin B2 Source MGI Symbol Acc MGI 88311
B03	UPFM0709814	ENSMUST00000123294.7	Ccnc	ENSMUSG00000028252	cyclin C Source MGI Symbol Acc MGI 1858199
B04	UPFM0933463	ENSMUST00000208193.1	Ccnd1	ENSMUSG00000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
B05	UPFM0861442	ENSMUST00000201066.1	Ccnd2	ENSMUSG00000000184	cyclin D2 Source MGI Symbol Acc MGI 88314
B06	UPFM0692031	ENSMUST00000182848.7	Ccnd3	ENSMUSG00000034165	cyclin D3 Source MGI Symbol Acc MGI 88315
B07	UPFM0977827	ENSMUST00000130329.1	Ccne1	ENSMUSG00000002068	cyclin E1 Source MGI Symbol Acc MGI 88316
B08	UPFM0757717	ENSMUST00000234708.1	Ccnf	ENSMUSG00000072082	cyclin F Source MGI Symbol Acc MGI 102551
B09	UPFM1004809	ENSMUST00000151302.1	Cdc20	ENSMUSG00000006398	cell division cycle 20 Source MGI Symbol Acc MGI 1859866
B10	UPFM0654747	ENSMUST00000094324.7	Cdc25a	ENSMUSG00000032477	cell division cycle 25A Source MGI Symbol Acc MGI 103198
B11	UPFM0964675	ENSMUST00000237620.1	Cdc25c	ENSMUSG00000044201	cell division cycle 25C Source MGI Symbol Acc MGI 88350
B12	UPFM1010375	ENSMUST00000135862.1	Cdc6	ENSMUSG00000017499	cell division cycle 6 Source MGI Symbol Acc MGI 1345150
C01	UPFM0776911	ENSMUST00000118261.7	Cdc7	ENSMUSG00000029283	cell division cycle 7 (S. cerevisiae) Source MGI Symbol Acc MGI 1309511
C02	UPFM0810944	ENSMUST00000152448.1	Cdk1	ENSMUSG00000019942	cyclin-dependent kinase 1 Source MGI Symbol Acc MGI 88351
C03	UPFM0898239	ENSMUST00000219601.1	Cdk2	ENSMUSG00000025358	cyclin-dependent kinase 2 Source MGI Symbol Acc MGI 104772
C04	UPFM0948169	ENSMUST00000140254.7	Cdk4	ENSMUSG00000006728	cyclin-dependent kinase 4 Source MGI Symbol Acc MGI 88357
C05	UPFM0944146	ENSMUST00000150308.1	Cdk5rap1	ENSMUSG00000027487	CDK5 regulatory subunit associated protein 1 Source MGI Symbol Acc MGI 1914221
C06	UPFM0626344	ENSMUST00000042410.4	Cdk6	ENSMUSG00000040274	cyclin-dependent kinase 6 Source MGI Symbol Acc MGI 1277162
C07	UPFM0867791	ENSMUST00000122348.2	Cdkn1a	ENSMUSG00000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
C08	UPFM0725283	ENSMUST00000204807.1	Cdkn1b	ENSMUSG00000003031	cyclin-dependent kinase inhibitor 1B Source MGI Symbol Acc MGI 104565
C09	UPFM0702776	ENSMUST00000107131.1	Cdkn2a	ENSMUSG00000044303	cyclin dependent kinase inhibitor 2A Source MGI Symbol Acc MGI 104738
C10	UPFM0928123	ENSMUST00000097981.5	Cdkn2b	ENSMUSG00000073802	cyclin dependent kinase inhibitor 2B Source MGI Symbol Acc MGI 104737
	UPFM086197	ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	8	226621.1	Cdkn3	000037628	cyclin-dependent kinase inhibitor 3 Source MGI Symbol Acc MGI 1919641
C12	UPFM0983684	ENSMUST00000174105.7	Chek1	ENSMUSG00000032113	checkpoint kinase 1 Source MGI Symbol Acc MGI 1202065
D01	UPFM0966904	ENSMUST00000066160.2	Chek2	ENSMUSG00000029521	checkpoint kinase 2 Source MGI Symbol Acc MGI 1355321
D02	UPFM0747588	ENSMUST00000107422.1	Cks1b	ENSMUSG00000028044	CDC28 protein kinase 1b Source MGI Symbol Acc MGI 1889208
D03	UPFM0766569	ENSMUST00000026475.14	Ddit3	ENSMUSG00000025408	DNA-damage inducible transcript 3 Source MGI Symbol Acc MGI 109247
D04	UPFM0800887	ENSMUST00000183034.4	Dst	ENSMUSG00000026131	dystonin Source MGI Symbol Acc MGI 104627
D05	UPFM0661280	ENSMUST00000000894.5	E2f1	ENSMUSG00000027490	E2F transcription factor 1 Source MGI Symbol Acc MGI 101941
D06	UPFM1126182	ENSMUST00000061721.5	E2f2	ENSMUSG00000018983	E2F transcription factor 2 Source MGI Symbol Acc MGI 1096341
D07	UPFM0622739	ENSMUST00000222730.1	E2f3	ENSMUSG00000016477	E2F transcription factor 3 Source MGI Symbol Acc MGI 1096340
D08	UPFM0649415	ENSMUST00000015003.9	E2f4	ENSMUSG00000014859	E2F transcription factor 4 Source MGI Symbol Acc MGI 103012
D09	UPFM0910954	ENSMUST00000204282.1	Gadd45a	ENSMUSG00000036390	growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc MGI 107799
D10	UPFM0942175	ENSMUST00000021729.8	Gpr132	ENSMUSG00000021298	G protein-coupled receptor 132 Source MGI Symbol Acc MGI 1890220
D11	UPFM0688040	ENSMUST00000127578.1	Hus1	ENSMUSG00000020413	HUS1 checkpoint clamp component Source MGI Symbol Acc MGI 1277962
D12	UPFM0934656	ENSMUST00000124826.1	Itgb1	ENSMUSG00000025809	integrin beta 1 (fibronectin receptor beta) Source MGI Symbol Acc MGI 96610
E01	UPFM0652459	ENSMUST00000125430.1	Mad2l1	ENSMUSG00000029910	MAD2 mitotic arrest deficient-like 1 Source MGI Symbol Acc MGI 1860374
E02	UPFM0834531	ENSMUST00000205165.1	Mcm2	ENSMUSG00000002870	minichromosome maintenance complex component 2 Source MGI Symbol Acc MGI 105380
E03	UPFM0903960	ENSMUST00000191061.1	Mcm3	ENSMUSG00000041859	minichromosome maintenance complex component 3 Source MGI Symbol Acc MGI 101845
E04	UPFM0722428	ENSMUST00000230437.1	Mcm4	ENSMUSG00000022673	minichromosome maintenance complex component 4 Source MGI Symbol Acc MGI 103199
E05	UPFM0752195	ENSMUST00000137102.7	Mdm2	ENSMUSG00000020184	transformed mouse 3T3 cell double minute 2 Source MGI Symbol Acc MGI 96952
E06	UPFM0681630	ENSMUST00000211238.1	Mki67	ENSMUSG00000031004	antigen identified by monoclonal antibody Ki 67 Source MGI Symbol Acc MGI 106035
E07	UPFM1126318	ENSMUST00000215820.1	Mre11a	ENSMUSG00000031928	MRE11A homolog A, double strand break repair nuclease Source MGI Symbol Acc MGI 1100512
E08	UPFM0982877	ENSMUST00000173097.7	Msh2	ENSMUSG00000024151	mutS homolog 2 Source MGI Symbol Acc MGI 101816
E09	UPFM0843995	ENSMUST00000188495.7	Myb	ENSMUSG00000019982	myeloblastosis oncogene Source MGI Symbol Acc MGI 97249
E10	UPFM0981284	ENSMUST00000149069.1	Nbn	ENSMUSG00000028224	nibrin Source MGI Symbol Acc MGI 1351625
E11	UPFM0687007	ENSMUST00000027931.7	Nek2	ENSMUSG00000026622	NIMA (never in mitosis gene a)-related expressed kinase 2 Source MGI Symbol Acc MGI 109359
E12	UPFM0935665	ENSMUST00000079812.7	Notch2	ENSMUSG00000027878	notch 2 Source MGI Symbol Acc MGI 97364
F01	UPFM0723246	ENSMUST00000228581.1	Pkd1	ENSMUSG00000032855	polycystin 1, transient receptor poteintial channel interacting Source MGI Symbol Acc MGI 97603
F02	UPFM0646309	ENSMUST00000018361.9	Pmp22	ENSMUSG00000018217	peripheral myelin protein 22 Source MGI Symbol Acc MGI 97631
F03	UPFM0937448	ENSMUST00000020835.15	Ppm1d	ENSMUSG00000020525	protein phosphatase 1D magnesium-dependent, delta isoform Source MGI Symbol Acc MGI 1858214
F04	UPFM0848275	ENSMUST00000226050.1	Rad17	ENSMUSG00000021635	RAD17 checkpoint clamp loader component Source MGI Symbol Acc MGI 1333807
F05	UPFM0893108	ENSMUST00000022927.10	Rad21	ENSMUSG00000022314	RAD21 cohesin complex component Source MGI Symbol Acc MGI 108016
F06	UPFM0932448	ENSMUST00000110828.1	Rad51	ENSMUSG00000027323	RAD51 recombinase Source MGI Symbol Acc MGI 97890
F07	UPFM0986276	ENSMUST00000237467.1	Rad9a	ENSMUSG00000024824	RAD9 checkpoint clamp component A Source MGI Symbol Acc MGI 1328356
F08	UPFM0657018	ENSMUST00000031383.13	Ran	ENSMUSG00000029430	RAN, member RAS oncogene family Source MGI Symbol Acc MGI 1333112
F09	UPFM0772788	ENSMUST00000022701.6	Rb1	ENSMUSG00000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F10	UPFM0891940	ENSMUST00000154721.7	Rbl1	ENSMUSG00000027641	RB transcriptional corepressor like 1 Source MGI Symbol Acc MGI 103300

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM0740599	ENSMUST00000147361.7	Rbl2	ENSMUSG00000031666	RB transcriptional corepressor like 2 Source MGI Symbol Acc MGI 105085
F12	UPFM0941114	ENSMUST00000057311.3	Sfn	ENSMUSG00000047281	stratifin Source MGI Symbol Acc MGI 1891831
G01	UPFM0961868	ENSMUST00000154791.7	Shc1	ENSMUSG00000042626	src homology 2 domain-containing transforming protein C1 Source MGI Symbol Acc MGI 98296
G02	UPFM0900976	ENSMUST00000190131.1	Skp2	ENSMUSG00000054115	S-phase kinase-associated protein 2 (p45) Source MGI Symbol Acc MGI 1351663
G03	UPFM0803482	ENSMUST00000037994.7	Slfn1	ENSMUSG00000078763	schlafen 1 Source MGI Symbol Acc MGI 1313259
G04	UPFM0740855	ENSMUST00000045312.5	Smc1a	ENSMUSG00000041133	structural maintenance of chromosomes 1A Source MGI Symbol Acc MGI 1344345
G05	UPFM0909197	ENSMUST00000144005.7	Stag1	ENSMUSG00000037286	stromal antigen 1 Source MGI Symbol Acc MGI 1098658
G06	UPFM0934506	ENSMUST00000105867.7	Stmn1	ENSMUSG00000028832	stathmin 1 Source MGI Symbol Acc MGI 96739
G07	UPFM0629489	ENSMUST00000188371.6	Terf1	ENSMUSG00000025925	telomeric repeat binding factor 1 Source MGI Symbol Acc MGI 109634
G08	UPFM0700597	ENSMUST00000209945.1	Tfdp1	ENSMUSG00000038482	transcription factor Dp 1 Source MGI Symbol Acc MGI 101934
G09	UPFM0669133	ENSMUST00000171247.7	Trp53	ENSMUSG00000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G10	UPFM0621217	ENSMUST00000115308.8	Trp63	ENSMUSG00000022510	transformation related protein 63 Source MGI Symbol Acc MGI 1330810
G11	UPFM0949399	ENSMUST00000209538.1	Tsg101	ENSMUSG00000014402	tumor susceptibility gene 101 Source MGI Symbol Acc MGI 106581
G12	UPFM0696243	ENSMUST00000033326.9	Wee1	ENSMUSG00000031016	WEE 1 homolog 1 (S. pombe) Source MGI Symbol Acc MGI 103075
H01	UPFM1132946	ENSMUST00000163829.1	Actb	ENSMUSG00000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	UPFM1132947	ENSMUST00000102476.4	B2m	ENSMUSG00000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	UPFM1132948	ENSMUST00000117757.8	Gapdh	ENSMUSG00000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	UPFM1132949	ENSMUST00000026613.13	Gusb	ENSMUSG00000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	UPFM1132950	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG00000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	UPFM1126609	UPL_MGDC	MGDC	UPL_MGDC	Mouse Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
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 Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl QN ROX Reference Dye, 1.9 ml Water	208252

*Larger kit sizes available.

The QuantiNova LNA Probe 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.