

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

Mouse Oncogenes & Tumor Suppressor Genes

Cat. no. 249955 UPMM-502ZR

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 (Rotor-Gene): QuantiNova LNA Probe 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 Probe PCR Handbook at www.qiagen.com for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Abl1	Akt1	Apc	Atm	Bax	Bcl2	Bcl2l1	Bcr	Bra1	Bra2	Casp8	Ccnd1
B	Cdh1	Cdk4	Cdkn1a	Cdkn2a	Cdkn2b	Cdkn3	Cttnb1	E2f1	Egf	Elk1	Erb2	Esr1
C	Ets1	Fhit	Fos	Foxd3	Hgf	Hic1	Hras	Igf2r	Jak2	Jun	Junb	Jund
D	Kit	Kitl	Kras	Mcl1	Mdm2	Men1	Met	Mgmt	Mlh1	Mos	Myb	Myc
E	Mycn	Nf1	Nf2	Nfkb1	Nfkbia	Nras	Pik3c2a	Pik3ca	Pml	Prkca	Raf1	Rara
F	Rassf1	Rb1	Rel	Ret	Ros1	Runx1	Runx3	S100a4	Serpib5	Sh3pxd2a	Smad4	Src
G	Stat3	Skp1	Tgfb1	Tnf	Trp53	Trp73	Tsc1	Vhl	Wt1	Wwax	Xrcc1	Zhv2
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	UPFM089352 2	ENSMUST00000 028190.12	Abi1	ENSMUSG00 000026842	c-abl oncogene 1, non-receptor tyrosine kinase Source MGI Symbol Acc MGI 87859
A02	UPFM082786 0	ENSMUST00000 139388.2	Akt1	ENSMUSG00 000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A03	UPFM082281 4	ENSMUST00000 163295.1	Apc	ENSMUSG00 000005871	APC, WNT signaling pathway regulator Source MGI Symbol Acc MGI 88039
A04	UPFM070877 3	ENSMUST00000 150244.1	Atm	ENSMUSG00 000034218	ataxia telangiectasia mutated Source MGI Symbol Acc MGI 107202
A05	UPFM090386 1	ENSMUST00000 211195.1	Bax	ENSMUSG00 000003873	BCL2-associated X protein Source MGI Symbol Acc MGI 99702
A06	UPFM063585 3	ENSMUST00000 112751.1	Bcl2	ENSMUSG00 000057329	B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138
A07	UPFM066341 1	ENSMUST00000 156688.1	Bcl2l1	ENSMUSG00 000007659	BCL2-like 1 Source MGI Symbol Acc MGI 88139
A08	UPFM068300 6	ENSMUST00000 219807.1	Bcr	ENSMUSG00 000009681	breakpoint cluster region Source MGI Symbol Acc MGI 88141
A09	UPFM098990 7	ENSMUST00000 156843.1	Brc1	ENSMUSG00 000017146	breast cancer 1, early onset Source MGI Symbol Acc MGI 104537
A10	UPFM077452 2	ENSMUST00000 201226.1	Brc2	ENSMUSG00 000041147	breast cancer 2, early onset Source MGI Symbol Acc MGI 109337
A11	UPFM067082 6	ENSMUST00000 191201.6	Casp8	ENSMUSG00 000026029	caspase 8 Source MGI Symbol Acc MGI 1261423
A12	UPFM093346 3	ENSMUST00000 208193.1	Ccnd1	ENSMUSG00 000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
B01	UPFM088317 7	ENSMUST00000 136580.1	Cdh1	ENSMUSG00 000000303	cadherin 1 Source MGI Symbol Acc MGI 88354
B02	UPFM094816 9	ENSMUST00000 140254.7	Cdk4	ENSMUSG00 000006728	cyclin-dependent kinase 4 Source MGI Symbol Acc MGI 88357
B03	UPFM086779 1	ENSMUST00000 122348.2	Cdkn1a	ENSMUSG00 000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B04	UPFM070277 6	ENSMUST00000 107131.1	Cdkn2a	ENSMUSG00 000044303	cyclin dependent kinase inhibitor 2A Source MGI Symbol Acc MGI 104738
B05	UPFM092812 3	ENSMUST00000 097981.5	Cdkn2b	ENSMUSG00 000073802	cyclin dependent kinase inhibitor 2B Source MGI Symbol Acc MGI 104737
B06	UPFM086197 8	ENSMUST00000 226621.1	Cdkn3	ENSMUSG00 000037628	cyclin-dependent kinase inhibitor 3 Source MGI Symbol Acc MGI 1919641
B07	UPFM098586 3	ENSMUST00000 154356.7	Ctnnb1	ENSMUSG00 000006932	catenin (cadherin associated protein), beta 1 Source MGI Symbol Acc MGI 88276
B08	UPFM066128 0	ENSMUST00000 000894.5	E2f1	ENSMUSG00 000027490	E2F transcription factor 1 Source MGI Symbol Acc MGI 101941
B09	UPFM092572 5	ENSMUST00000 199615.4	Egf	ENSMUSG00 000028017	epidermal growth factor Source MGI Symbol Acc MGI 95290
B10	UPFM084473 1	ENSMUST00000 148133.1	Elk1	ENSMUSG00 000009406	ELK1, member of ETS oncogene family Source MGI Symbol Acc MGI 101833
B11	UPFM099508 8	ENSMUST00000 136032.1	Erb2	ENSMUSG00 000062312	erb-b2 receptor tyrosine kinase 2 Source MGI Symbol Acc MGI 95410
B12	UPFM083226 3	ENSMUST00000 105590.7	Esr1	ENSMUSG00 000019768	estrogen receptor 1 (alpha) Source MGI Symbol Acc MGI 1352467
C01	UPFM073575 5	ENSMUST00000 034534.12	Ets1	ENSMUSG00 000032035	E26 avian leukemia oncogene 1, 5 domain Source MGI Symbol Acc MGI 95455
C02	UPFM072661 7	ENSMUST00000 179394.7	Fhit	ENSMUSG00 000060579	fragile histidine triad gene Source MGI Symbol Acc MGI 1277947
C03	UPFM076456 3	ENSMUST00000 136122.7	Fos	ENSMUSG00 000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
C04	UPFM064101 0	ENSMUST00000 087285.4	Foxd3	ENSMUSG00 000067261	forkhead box D3 Source MGI Symbol Acc MGI 1347473
C05	UPFM081302 0	ENSMUST00000 199900.1	Hgf	ENSMUSG00 000028864	hepatocyte growth factor Source MGI Symbol Acc MGI 96079
C06	UPFM097894 5	ENSMUST00000 055619.4	Hic1	ENSMUSG00 000043099	hypermethylated in cancer 1 Source MGI Symbol Acc MGI 1338010
C07	UPFM099623 4	ENSMUST00000 124314.2	Hras	ENSMUSG00 000025499	Harvey rat sarcoma virus oncogene Source MGI Symbol Acc MGI 96224
C08	UPFM085552 1	ENSMUST00000 024599.13	Igf2r	ENSMUSG00 000023830	insulin-like growth factor 2 receptor Source MGI Symbol Acc MGI 96435
C09	UPFM074831 3	ENSMUST00000 065796.9	Jak2	ENSMUSG00 000024789	Janus kinase 2 Source MGI Symbol Acc MGI 96629
C10	UPFM097521 6	ENSMUST00000 107094.1	Jun	ENSMUSG00 000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
	UPFM090452	ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	1	064922.6	Junb	000052837	jun B proto-oncogene Source MGI Symbol Acc MGI 96647
C12	UPFM100589 8	ENSMUST00000 095267.5	Jund	ENSMUSG00 000071076	jun D proto-oncogene Source MGI Symbol Acc MGI 96648
D01	UPFM098121 2	ENSMUST00000 143221.1	Kit	ENSMUSG00 000005672	KIT proto-oncogene receptor tyrosine kinase Source MGI Symbol Acc MGI 96677
D02	UPFM094688 5	ENSMUST00000 105283.8	Kitl	ENSMUSG00 000019966	kit ligand Source MGI Symbol Acc MGI 96974
D03	UPFM100079 9	ENSMUST00000 032399.11	Kras	ENSMUSG00 000030265	Kirsten rat sarcoma viral oncogene homolog Source MGI Symbol Acc MGI 96680
D04	UPFM071261 7	ENSMUST00000 178686.1	Mcl1	ENSMUSG00 000038612	myeloid cell leukemia sequence 1 Source MGI Symbol Acc MGI 101769
D05	UPFM075219 5	ENSMUST00000 137102.7	Mdm2	ENSMUSG00 000020184	transformed mouse 3T3 cell double minute 2 Source MGI Symbol Acc MGI 96952
D06	UPFM076919 0	ENSMUST00000 113504.9	Men1	ENSMUSG00 000024947	multiple endocrine neoplasia 1 Source MGI Symbol Acc MGI 1316736
D07	UPFM081794 6	ENSMUST00000 115443.7	Met	ENSMUSG00 000009376	met proto-oncogene Source MGI Symbol Acc MGI 96969
D08	UPFM071101 1	ENSMUST00000 081510.3	Mgmt	ENSMUSG00 000054612	O-6-methylguanine-DNA methyltransferase Source MGI Symbol Acc MGI 96977
D09	UPFM084504 4	ENSMUST00000 135695.1	Mlh1	ENSMUSG00 000032498	mutL homolog 1 Source MGI Symbol Acc MGI 101938
D10	UPFM096890 7	ENSMUST00000 105158.1	Mos	ENSMUSG00 000078365	Moloney sarcoma oncogene Source MGI Symbol Acc MGI 97052
D11	UPFM084399 5	ENSMUST00000 188495.7	Myb	ENSMUSG00 000019982	myeloblastosis oncogene Source MGI Symbol Acc MGI 97249
D12	UPFM081421 4	ENSMUST00000 161976.7	Myc	ENSMUSG00 000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E01	UPFM088156 2	ENSMUST00000 043396.14	Mycn	ENSMUSG00 000037169	v-myc avian myelocytomatosis viral related oncogene, neuroblastoma derived Source MGI Symbol Acc MGI 97357
E02	UPFM099655 1	ENSMUST00000 122917.7	Nf1	ENSMUSG00 000020716	neurofibromin 1 Source MGI Symbol Acc MGI 97306
E03	UPFM100453 4	ENSMUST00000 109908.7	Nf2	ENSMUSG00 000009073	neurofibromin 2 Source MGI Symbol Acc MGI 97307
E04	UPFM098758 7	ENSMUST00000 029812.13	Nfkb1	ENSMUSG00 000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E05	UPFM072174 5	ENSMUST00000 021413.8	Nfkbia	ENSMUSG00 000021025	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, alpha Source MGI Symbol Acc MGI 104741
E06	UPFM074207 5	ENSMUST00000 197678.4	Nras	ENSMUSG00 000027852	neuroblastoma ras oncogene Source MGI Symbol Acc MGI 97376
E07	UPFM083514 9	ENSMUST00000 170430.2	Pik3c2a	ENSMUSG00 000030660	phosphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 alpha Source MGI Symbol Acc MGI 1203729
E08	UPFM070843 8	ENSMUST00000 108243.7	Pik3ca	ENSMUSG00 000027665	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source MGI Symbol Acc MGI 1206581
E09	UPFM065818 7	ENSMUST00000 085673.10	Pml	ENSMUSG00 000036986	promyelocytic leukemia Source MGI Symbol Acc MGI 104662
E10	UPFM091650 2	ENSMUST00000 100302.3	Prkca	ENSMUSG00 000050965	protein kinase C, alpha Source MGI Symbol Acc MGI 97595
E11	UPFM071074 7	ENSMUST00000 204512.1	Raf1	ENSMUSG00 000000441	v-raf-leukemia viral oncogene 1 Source MGI Symbol Acc MGI 97847
E12	UPFM063064 6	ENSMUST00000 068133.9	Rara	ENSMUSG00 000037992	retinoic acid receptor, alpha Source MGI Symbol Acc MGI 97856
F01	UPFM080094 7	ENSMUST00000 093786.8	Rassf1	ENSMUSG00 000010067	Ras association (RalGDS/AF-6) domain family member 1 Source MGI Symbol Acc MGI 1928386
F02	UPFM077278 8	ENSMUST00000 022701.6	Rb1	ENSMUSG00 000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F03	UPFM068973 8	ENSMUST00000 102864.4	Rel	ENSMUSG00 000020275	reticuloendotheliosis oncogene Source MGI Symbol Acc MGI 97897
F04	UPFM066937 7	ENSMUST00000 088790.8	Ret	ENSMUSG00 000030110	ret proto-oncogene Source MGI Symbol Acc MGI 97902
F05	UPFM076034 7	ENSMUST00000 020045.9	Ros1	ENSMUSG00 000019893	Ros1 proto-oncogene Source MGI Symbol Acc MGI 97999
F06	UPFM072805 9	ENSMUST00000 113956.9	Runx1	ENSMUSG00 000022952	runt related transcription factor 1 Source MGI Symbol Acc MGI 99852
F07	UPFM067733 3	ENSMUST00000 119564.1	Runx3	ENSMUSG00 000070691	runt related transcription factor 3 Source MGI Symbol Acc MGI 102672
F08	UPFM095944 0	ENSMUST00000 001046.6	S100a4	ENSMUSG00 000001020	S100 calcium binding protein A4 Source MGI Symbol Acc MGI 1330282
F09	UPFM094510 0	ENSMUST00000 112729.2	Serpib5	ENSMUSG00 000067006	serine (or cysteine) peptidase inhibitor, clade B, member 5 Source MGI Symbol Acc MGI 109579
F10	UPFM067591 8	ENSMUST00000 237796.1	Sh3pxd2a	ENSMUSG00 000053617	SH3 and PX domains 2A Source MGI Symbol Acc MGI 1298393

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM098632 8	ENSMUST00000 114939.1	Smad4	ENSMUSG00 000024515	SMAD family member 4 Source MGI Symbol Acc MGI 894293
F12	UPFM071690 7	ENSMUST00000 109531.7	Src	ENSMUSG00 000027646	Rous sarcoma oncogene Source MGI Symbol Acc MGI 98397
G01	UPFM098484 5	ENSMUST00000 092671.11	Stat3	ENSMUSG00 000004040	signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038
G02	UPFM079767 6	ENSMUST00000 213772.1	Stk11	ENSMUSG00 000003068	serine/threonine kinase 11 Source MGI Symbol Acc MGI 1341870
G03	UPFM066688 0	ENSMUST00000 171757.1	Tgfb1	ENSMUSG00 000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G04	UPFM063847 1	ENSMUST00000 025263.14	Tnf	ENSMUSG00 000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G05	UPFM066913 3	ENSMUST00000 171247.7	Trp53	ENSMUSG00 000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G06	UPFM092417 3	ENSMUST00000 105643.7	Trp73	ENSMUSG00 000029026	transformation related protein 73 Source MGI Symbol Acc MGI 1336991
G07	UPFM074659 5	ENSMUST00000 156857.7	Tsc1	ENSMUSG00 000026812	tuberous sclerosis 1 Source MGI Symbol Acc MGI 1929183
G08	UPFM077922 6	ENSMUST00000 128770.7	Vhl	ENSMUSG00 000033933	von Hippel-Lindau tumor suppressor Source MGI Symbol Acc MGI 103223
G09	UPFM100747 1	ENSMUST00000 111098.7	Wt1	ENSMUSG00 000016458	Wilms tumor 1 homolog Source MGI Symbol Acc MGI 98968
G10	UPFM071322 4	ENSMUST00000 160862.7	Wwox	ENSMUSG00 000004637	WW domain-containing oxidoreductase Source MGI Symbol Acc MGI 1931237
G11	UPFM098782 3	ENSMUST00000 205573.1	Xrcc1	ENSMUSG00 000051768	X-ray repair complementing defective repair in Chinese hamster cells 1 Source MGI Symbol Acc MGI 99137
G12	UPFM073743 6	ENSMUST00000 096430.10	Zhx2	ENSMUSG00 000071757	zinc fingers and homeoboxes 2 Source MGI Symbol Acc MGI 2683087
H01	UPFM113294 6	ENSMUST00000 163829.1	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	UPFM113294 7	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	UPFM113294 8	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	UPFM113294 9	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	UPFM113295 0	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	UPFM112660 9	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 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 Probe RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 μ l QuantiNova Probe 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	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l 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.

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