

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

## Human Cytoskeleton Regulators

Cat. no. 249955 UPHS-088ZA

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](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	ACTR2	ACTR3	ARAP1	ARFIP2	ARHGAP6	ARHGDI8	ARHGEF11	ARPC1B	ARPC2	ARPC3	ARPC4	ARPC5
B	AURKA	AURKB	AURKC	BAIAP2	CALD1	CALM1	CASK	CCNA1	CCNB2	CDC42	CDC42BPA	CDC42EP2
C	CDC42EP3	CDK5	CDK5R1	CFL1	CIT	CLASP1	CLASP2	CLIP1	CLIP2	CRK	CTTN	CYFIP1
D	CYFIP2	DIAPH1	DSTN	EZR	FNBP1L	FSCN2	GSN	IQGAP1	IQGAP2	LIMK1	LIMK2	LLGL1
E	MACF1	MAP3K11	MAP4	MAPK13	MAPRE1	MAPRE2	MAPT	MARK2	MID1	MSN	MYLK	MYLK2
F	NCK1	NCK2	PAK1	PAK4	PFN2	PHLDB2	PIKFYVE	PPP1R12A	PPP1R12B	PPP3CA	PPP3CB	RAC1
G	RACGAP1	RDX	RHOA	ROCK1	SSH1	SSH2	STMN1	TIAM1	VASP	WAS	WASF1	WASL
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	QIC	QIC	QIC	PPC	PPC	PPC

## Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFH0558245	ENST00000377982.8	ACTR2	ENSG00000138071	ARP2 actin related protein 2 homolog Source HGNC Symbol Acc HGNC 169
A02	UPFH0512486	ENST00000415792.5	ACTR3	ENSG00000115091	ARP3 actin related protein 3 homolog Source HGNC Symbol Acc HGNC 170
A03	UPFH0510955	ENST00000393605.7	ARAP1	ENSG00000186635	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 1 Source HGNC Symbol Acc HGNC 16925
A04	UPFH0026842	ENST00000445086.6	ARFIP2	ENSG00000132254	ADP ribosylation factor interacting protein 2 Source HGNC Symbol Acc HGNC 17160
A05	UPFH0374033	ENST00000495242.5	ARHGAP6	ENSG00000047648	Rho GTPase activating protein 6 Source HGNC Symbol Acc HGNC 676
A06	UPFH0031825	ENST00000541546.5	ARHGDI1B	ENSG00000111348	Rho GDP dissociation inhibitor beta Source HGNC Symbol Acc HGNC 679
A07	UPFH0067791	ENST00000486670.1	ARHGEF11	ENSG00000132694	Rho guanine nucleotide exchange factor 11 Source HGNC Symbol Acc HGNC 14580
A08	UPFH0282029	ENST00000252725.10	ARPC1B	ENSG00000130429	actin related protein 2/3 complex subunit 1B Source HGNC Symbol Acc HGNC 704
A09	UPFH0007446	ENST00000315717.10	ARPC2	ENSG00000163466	actin related protein 2/3 complex subunit 2 Source HGNC Symbol Acc HGNC 705
A10	UPFH0310339	ENST00000228825.12	ARPC3	ENSG00000111229	actin related protein 2/3 complex subunit 3 Source HGNC Symbol Acc HGNC 706
A11	UPFH0359764	ENST00000498623.6	ARPC4	ENSG00000241553	actin related protein 2/3 complex subunit 4 Source HGNC Symbol Acc HGNC 707
A12	UPFH0071244	ENST00000294742.6	ARPC5	ENSG00000162704	actin related protein 2/3 complex subunit 5 Source HGNC Symbol Acc HGNC 708
B01	UPFH0528207	ENST00000347343.6	AURKA	ENSG00000087586	aurora kinase A Source HGNC Symbol Acc HGNC 11393
B02	UPFH1132261	ENST00000316199.10	AURKB	ENSG00000178999	aurora kinase B Source HGNC Symbol Acc HGNC 11390
B03	UPFH0080001	ENST00000598785.5	AURKC	ENSG00000105146	aurora kinase C Source HGNC Symbol Acc HGNC 11391
B04	UPFH0407251	ENST00000573677.5	BAIAP2	ENSG00000175866	BAI1 associated protein 2 Source HGNC Symbol Acc HGNC 947
B05	UPFH0233428	ENST00000361675.7	CALD1	ENSG00000122786	caldesmon 1 Source HGNC Symbol Acc HGNC 1441
B06	UPFH0489153	ENST00000555267.1	CALM1	ENSG00000198668	calmodulin 1 Source HGNC Symbol Acc HGNC 1442
B07	UPFH0587212	ENST00000645986.1	CASK	ENSG00000147044	calcium/calmodulin dependent serine protein kinase Source HGNC Symbol Acc HGNC 1497
B08	UPFH0417476	ENST00000255465.7	CCNA1	ENSG00000133101	cyclin A1 Source HGNC Symbol Acc HGNC 1577
B09	UPFH1132294	ENST00000621385.1	CCNB2	ENSG00000157456	cyclin B2 Source HGNC Symbol Acc HGNC 1580
B10	UPFH0571108	ENST00000400259.5	CDC42	ENSG00000070831	cell division cycle 42 Source HGNC Symbol Acc HGNC 1736
B11	UPFH0103368	ENST00000366767.7	CDC42BPA	ENSG00000143776	CDC42 binding protein kinase alpha Source HGNC Symbol Acc HGNC 1737
B12	UPFH0040868	ENST00000533419.1	CDC42EP2	ENSG00000149798	CDC42 effector protein 2 Source HGNC Symbol Acc HGNC 16263
C01	UPFH0318406	ENST00000295324.3	CDC42EP3	ENSG00000163171	CDC42 effector protein 3 Source HGNC Symbol Acc HGNC 16943
C02	UPFH0609948	ENST00000485972.6	CDK5	ENSG00000164885	cyclin dependent kinase 5 Source HGNC Symbol Acc HGNC 1774
C03	UPFH1132308	ENST00000313401.4	CDK5R1	ENSG00000176749	cyclin dependent kinase 5 regulatory subunit 1 Source HGNC Symbol Acc HGNC 1775
C04	UPFH0122648	ENST00000525710.1	CFL1	ENSG00000172757	cofilin 1 Source HGNC Symbol Acc HGNC 1874
C05	UPFH0499386	ENST00000392520.2	CIT	ENSG00000122966	citron rho-interacting serine/threonine kinase Source HGNC Symbol Acc HGNC 1985
C06	UPFH0048970	ENST00000418989.5	CLASP1	ENSG00000074054	cytoplasmic linker associated protein 1 Source HGNC Symbol Acc HGNC 17088
C07	UPFH0516982	ENST00000485378.6	CLASP2	ENSG00000163539	cytoplasmic linker associated protein 2 Source HGNC Symbol Acc HGNC 17078
C08	UPFH0218481	ENST00000540539.5	CLIP1	ENSG00000130779	CAP-Gly domain containing linker protein 1 Source HGNC Symbol Acc HGNC 10461
C09	UPFH0124249	ENST00000493166.1	CLIP2	ENSG00000106665	CAP-Gly domain containing linker protein 2 Source HGNC Symbol Acc HGNC 2586
C10	UPFH0150681	ENST00000572145.1	CRK	ENSG00000167193	CRK proto-oncogene, adaptor protein Source HGNC Symbol Acc HGNC 2362
		ENST00000498		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0238959	223.3	CTTN	085733	cortactin Source HGNC Symbol Acc HGNC 3338
C12	UPFH0509685	ENST00000617928.5	CYFIP1	ENSG00000273749	cytoplasmic FMRI interacting protein 1 Source HGNC Symbol Acc HGNC 13759
D01	UPFH0274210	ENST00000611075.4	CYFIP2	ENSG00000055163	cytoplasmic FMRI interacting protein 2 Source HGNC Symbol Acc HGNC 13760
D02	UPFH0244789	ENST00000398557.8	DIAPH1	ENSG00000131504	diaphanous related formin 1 Source HGNC Symbol Acc HGNC 2876
D03	UPFH0249724	ENST00000474024.5	DSTN	ENSG00000125868	destrin, actin depolymerizing factor Source HGNC Symbol Acc HGNC 15750
D04	UPFH0388843	ENST00000392177.8	EZR	ENSG00000092820	ezrin Source HGNC Symbol Acc HGNC 12691
D05	UPFH0376359	ENST00000604705.5	FNBP1L	ENSG00000137942	formin binding protein 1 like Source HGNC Symbol Acc HGNC 20851
D06	UPFH0111174	ENST00000334850.7	FSCN2	ENSG00000186765	fascin actin-bundling protein 2, retinal Source HGNC Symbol Acc HGNC 3960
D07	UPFH0042101	ENST00000477863.5	GSN	ENSG00000148180	gelsolin Source HGNC Symbol Acc HGNC 4620
D08	UPFH0225529	ENST00000561461.5	IQGAP1	ENSG00000140575	IQ motif containing GTPase activating protein 1 Source HGNC Symbol Acc HGNC 6110
D09	UPFH0406467	ENST00000514001.5	IQGAP2	ENSG00000145703	IQ motif containing GTPase activating protein 2 Source HGNC Symbol Acc HGNC 6111
D10	UPFH0578089	ENST00000336180.7	LIMK1	ENSG00000106683	LIM domain kinase 1 Source HGNC Symbol Acc HGNC 6613
D11	UPFH0417565	ENST00000406516.5	LIMK2	ENSG00000182541	LIM domain kinase 2 Source HGNC Symbol Acc HGNC 6614
D12	UPFH0228579	ENST00000621229.1	LLGL1	ENSG00000131899	LLGL scribble cell polarity complex component 1 Source HGNC Symbol Acc HGNC 6628
E01	UPFH0442900	ENST00000524432.5	MACF1	ENSG00000127603	microtubule-actin crosslinking factor 1 Source HGNC Symbol Acc HGNC 13664
E02	UPFH0593835	ENST00000524848.5	MAP3K11	ENSG00000173327	mitogen-activated protein kinase kinase kinase 11 Source HGNC Symbol Acc HGNC 6850
E03	UPFH0020846	ENST00000482752.1	MAP4	ENSG00000047849	microtubule associated protein 4 Source HGNC Symbol Acc HGNC 6862
E04	UPFH0194573	ENST00000373759.1	MAPK13	ENSG00000156711	mitogen-activated protein kinase 13 Source HGNC Symbol Acc HGNC 6875
E05	UPFH0105247	ENST00000375571.6	MAPRE1	ENSG00000101367	microtubule associated protein RP/EB family member 1 Source HGNC Symbol Acc HGNC 6890
E06	UPFH0090294	ENST00000589180.5	MAPRE2	ENSG00000166974	microtubule associated protein RP/EB family member 2 Source HGNC Symbol Acc HGNC 6891
E07	UPFH0281608	ENST00000571987.5	MAPT	ENSG00000186868	microtubule associated protein tau Source HGNC Symbol Acc HGNC 6893
E08	UPFH0510122	ENST00000513765.6	MARK2	ENSG00000072518	microtubule affinity regulating kinase 2 Source HGNC Symbol Acc HGNC 3332
E09	UPFH0321350	ENST00000453318.6	MID1	ENSG00000101871	midline 1 Source HGNC Symbol Acc HGNC 7095
E10	UPFH1132558	ENST00000360270.7	MSN	ENSG00000147065	moesin Source HGNC Symbol Acc HGNC 7373
E11	UPFH0114137	ENST00000360772.7	MYLK	ENSG00000065534	myosin light chain kinase Source HGNC Symbol Acc HGNC 7590
E12	UPFH0595413	ENST00000375994.6	MYLK2	ENSG00000101306	myosin light chain kinase 2 Source HGNC Symbol Acc HGNC 16243
F01	UPFH0531352	ENST00000467911.1	NCK1	ENSG00000158092	NCK adaptor protein 1 Source HGNC Symbol Acc HGNC 7664
F02	UPFH0049450	ENST00000425756.1	NCK2	ENSG00000071051	NCK adaptor protein 2 Source HGNC Symbol Acc HGNC 7665
F03	UPFH0310946	ENST00000356341.7	PAK1	ENSG00000149269	p21 (RAC1) activated kinase 1 Source HGNC Symbol Acc HGNC 8590
F04	UPFH0491525	ENST00000321944.8	PAK4	ENSG00000130669	p21 (RAC1) activated kinase 4 Source HGNC Symbol Acc HGNC 16059
F05	UPFH0535373	ENST00000481767.5	PFN2	ENSG00000070087	profilin 2 Source HGNC Symbol Acc HGNC 8882
F06	UPFH0599736	ENST00000412622.5	PHLDB2	ENSG00000144824	pleckstrin homology like domain family B member 2 Source HGNC Symbol Acc HGNC 29573
F07	UPFH0458680	ENST00000443896.5	PIKFYVE	ENSG00000115020	phosphoinositide kinase, FYVE-type zinc finger containing Source HGNC Symbol Acc HGNC 23785
F08	UPFH0353711	ENST00000548318.1	PPP1R12A	ENSG00000058272	protein phosphatase 1 regulatory subunit 12A Source HGNC Symbol Acc HGNC 7618
F09	UPFH0245944	ENST00000634903.1	PPP1R12B	ENSG00000077157	protein phosphatase 1 regulatory subunit 12B Source HGNC Symbol Acc HGNC 7619
F10	UPFH0410648	ENST00000394854.8	PPP3CA	ENSG00000138814	protein phosphatase 3 catalytic subunit alpha Source HGNC Symbol Acc HGNC 9314

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0334097	ENST00000360663.9	PPP3CB	ENSG00000107758	protein phosphatase 3 catalytic subunit beta Source HGNC Symbol Acc HGNC 9315
F12	UPFH1132648	ENST00000348035.9	RAC1	ENSG00000136238	Rac family small GTPase 1 Source HGNC Symbol Acc HGNC 9801
G01	UPFH0263961	ENST00000547905.5	RACGAP1	ENSG00000161800	Rac GTPase activating protein 1 Source HGNC Symbol Acc HGNC 9804
G02	UPFH0413152	ENST00000646663.1	RDX	ENSG00000137710	radixin Source HGNC Symbol Acc HGNC 9944
G03	UPFH1132657	ENST00000445425.4	RHOA	ENSG00000067560	ras homolog family member A Source HGNC Symbol Acc HGNC 667
G04	UPFH0614334	ENST00000578051.1	ROCK1	ENSG00000067900	Rho associated coiled-coil containing protein kinase 1 Source HGNC Symbol Acc HGNC 10251
G05	UPFH0326499	ENST00000326470.9	SSH1	ENSG00000084112	slingshot protein phosphatase 1 Source HGNC Symbol Acc HGNC 30579
G06	UPFH0519800	ENST00000592397.1	SSH2	ENSG00000141298	slingshot protein phosphatase 2 Source HGNC Symbol Acc HGNC 30580
G07	UPFH1132700	ENST00000426559.6	STMN1	ENSG00000117632	stathmin 1 Source HGNC Symbol Acc HGNC 6510
G08	UPFH0108336	ENST00000423206.5	TIAM1	ENSG00000156299	T cell lymphoma invasion and metastasis 1 Source HGNC Symbol Acc HGNC 11805
G09	UPFH0013526	ENST00000592139.1	VASP	ENSG00000125753	vasodilator stimulated phosphoprotein Source HGNC Symbol Acc HGNC 12652
G10	UPFH0159424	ENST00000376701.4	WAS	ENSG00000015285	Wiskott-Aldrich syndrome Source HGNC Symbol Acc HGNC 12731
G11	UPFH0336515	ENST00000392589.6	WASF1	ENSG00000112290	WAS protein family member 1 Source HGNC Symbol Acc HGNC 12732
G12	UPFH0499368	ENST00000223023.5	WASL	ENSG00000106299	Wiskott-Aldrich syndrome like Source HGNC Symbol Acc HGNC 12735
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST00000544417.5	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	UPFH1132938	ENST00000229239.10	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	UPFH1132939	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	UPFH1132941	ENST00000392514.9	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	UPFH1126608	UPL_HGDC	HGDC	UPL_HGDC	Human 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 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 $\mu$ l QuantiNova Probe RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ 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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