

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

## Human Adherens Junctions

Cat. no. 249955 UPHS-146ZA

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	ACTN1	ACTN2	ACTN3	ACTN4	AJAP1	ANAPC1	ARF6	ARVCF	BALAP2	CBLL1	CDC27	CDC42
B	CDH1	CDH2	CDH3	CDH4	CDH5	CDSN	CSNK2A1	CSNK2A2	CSNK2B	CTNNA1	CTNNA2	CTNNA3
C	CTNNA1	CTNNA2	DLG5	DLL1	DNM1	DNM2	DOCK4	DSC1	DSC2	DSC3	DSG1	DSG2
D	DSG3	DSG4	DSP	EXOC2	FARP2	FLNA	FLNB	HGS	IQGAP1	JUP	LMO7	MAPRE1
E	MAPRE2	AFDN	NME1	NOTCH1	NOTCH2	NOTCH3	NOTCH4	P2RX6	PARD3	PERP	PIK3CG	PKP1
F	PKP2	PKP3	PKP4	PNN	PLPP3	PPL	NECTIN1	NECTIN2	NECTIN3	NECTIN4	RAC1	RALA
G	RHOA	SORBS1	SSX2IP	TJP1	TLN1	TLN2	VCL	VEZT	WAS	WASF1	WASL	ZYX
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	UPFH0586030	ENST00000438 964.6	ACTN1	ENSG000000 072110	actinin alpha 1 Source HGNC Symbol Acc HGNC 163
A02	UPFH0081778	ENST00000651 275.1	ACTN2	ENSG000000 077522	actinin alpha 2 Source HGNC Symbol Acc HGNC 164
A03	UPFH0531688	ENST00000513 398.2	ACTN3	ENSG000000 248746	actinin alpha 3 (gene/pseudogene) Source HGNC Symbol Acc HGNC 165
A04	UPFH0354547	ENST00000390 009.7	ACTN4	ENSG000000 130402	actinin alpha 4 Source HGNC Symbol Acc HGNC 166
A05	UPFH0509832	ENST00000378 190.7	AJAP1	ENSG000000 196581	adherens junctions associated protein 1 Source HGNC Symbol Acc HGNC 30801
A06	UPFH0154076	ENST00000485 325.1	ANAPC1	ENSG000000 153107	anaphase promoting complex subunit 1 Source HGNC Symbol Acc HGNC 19988
A07	UPFH0302648	ENST00000298 316.7	ARF6	ENSG000000 165527	ADP ribosylation factor 6 Source HGNC Symbol Acc HGNC 659
A08	UPFH0482904	ENST00000401 994.5	ARVCF	ENSG000000 099889	ARVCF, delta catenin family member Source HGNC Symbol Acc HGNC 728
A09	UPFH0407251	ENST00000573 677.5	BAIAP2	ENSG000000 175866	BAI1 associated protein 2 Source HGNC Symbol Acc HGNC 947
A10	UPFH0383533	ENST00000487 517.1	CBLL1	ENSG000000 105879	Cbl proto-oncogene like 1 Source HGNC Symbol Acc HGNC 21225
A11	UPFH0259886	ENST00000573 550.5	CDC27	ENSG000000 004897	cell division cycle 27 Source HGNC Symbol Acc HGNC 1728
A12	UPFH0571108	ENST00000400 259.5	CDC42	ENSG000000 070831	cell division cycle 42 Source HGNC Symbol Acc HGNC 1736
B01	UPFH1132791	ENST00000261 769.10	CDH1	ENSG000000 039068	cadherin 1 Source HGNC Symbol Acc HGNC 1748
B02	UPFH1132792	ENST00000399 380.7	CDH2	ENSG000000 170558	cadherin 2 Source HGNC Symbol Acc HGNC 1759
B03	UPFH0325662	ENST00000569 036.2	CDH3	ENSG000000 062038	cadherin 3 Source HGNC Symbol Acc HGNC 1762
B04	UPFH0388940	ENST00000611 855.4	CDH4	ENSG000000 179242	cadherin 4 Source HGNC Symbol Acc HGNC 1763
B05	UPFH1132306	ENST00000563 425.2	CDH5	ENSG000000 179776	cadherin 5 Source HGNC Symbol Acc HGNC 1764
B06	UPFH0593682	ENST00000376 288.3	CDSN	ENSG000000 204539	corneodesmosin Source HGNC Symbol Acc HGNC 1802
B07	UPFH0055149	ENST00000645 249.1	CSNK2A1	ENSG000000 101266	casein kinase 2 alpha 1 Source HGNC Symbol Acc HGNC 2457
B08	UPFH0043887	ENST00000563 307.1	CSNK2A2	ENSG000000 070770	casein kinase 2 alpha 2 Source HGNC Symbol Acc HGNC 2459
B09	UPFH0261524	ENST00000375 882.6	CSNK2B	ENSG000000 204435	casein kinase 2 beta Source HGNC Symbol Acc HGNC 2460
B10	UPFH0447603	ENST00000627 109.2	CTNNA1	ENSG000000 044115	catenin alpha 1 Source HGNC Symbol Acc HGNC 2509
B11	UPFH0430223	ENST00000466 387.5	CTNNA2	ENSG000000 066032	catenin alpha 2 Source HGNC Symbol Acc HGNC 2510
B12	UPFH0332684	ENST00000373 735.1	CTNNA3	ENSG000000 183230	catenin alpha 3 Source HGNC Symbol Acc HGNC 2511
C01	UPFH0097734	ENST00000396 183.7	CTNNB1	ENSG000000 168036	catenin beta 1 Source HGNC Symbol Acc HGNC 2514
C02	UPFH1132342	ENST00000529 986.5	CTNND1	ENSG000000 198561	catenin delta 1 Source HGNC Symbol Acc HGNC 2515
C03	UPFH0332053	ENST00000463 362.5	DLG5	ENSG000000 151208	discs large MAGUK scaffold protein 5 Source HGNC Symbol Acc HGNC 2904
C04	UPFH0541475	ENST00000630 500.1	DLL1	ENSG000000 198719	delta like canonical Notch ligand 1 Source HGNC Symbol Acc HGNC 2908
C05	UPFH0472686	ENST00000475 805.5	DNM1	ENSG000000 106976	dynamamin 1 Source HGNC Symbol Acc HGNC 2972
C06	UPFH0253716	ENST00000355 667.10	DNM2	ENSG000000 079805	dynamamin 2 Source HGNC Symbol Acc HGNC 2974
C07	UPFH0016506	ENST00000437 633.6	DOCK4	ENSG000000 128512	dedicator of cytokinesis 4 Source HGNC Symbol Acc HGNC 19192
C08	UPFH0388933	ENST00000257 197.7	DSC1	ENSG000000 134765	desmocollin 1 Source HGNC Symbol Acc HGNC 3035
C09	UPFH1132370	ENST00000280 904.10	DSC2	ENSG000000 134755	desmocollin 2 Source HGNC Symbol Acc HGNC 3036
C10	UPFH0035792	ENST00000584 980.1	DSC3	ENSG000000 134762	desmocollin 3 Source HGNC Symbol Acc HGNC 3037
		ENST00000462		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0330133	981.2	DSG1	134760	desmoglein 1 Source HGNC Symbol Acc HGNC 3048
C12	UPFH0235367	ENST00000585206.1	DSG2	ENSG00000046604	desmoglein 2 Source HGNC Symbol Acc HGNC 3049
D01	UPFH0310199	ENST00000257189.5	DSG3	ENSG000000134757	desmoglein 3 Source HGNC Symbol Acc HGNC 3050
D02	UPFH0548558	ENST00000359747.4	DSG4	ENSG000000175065	desmoglein 4 Source HGNC Symbol Acc HGNC 21307
D03	UPFH1132371	ENST00000379802.8	DSP	ENSG000000096696	desmoplakin Source HGNC Symbol Acc HGNC 3052
D04	UPFH0389430	ENST00000230449.9	EXOC2	ENSG000000112685	exocyst complex component 2 Source HGNC Symbol Acc HGNC 24968
D05	UPFH0158293	ENST00000373287.8	FARP2	ENSG000000066607	FERM, ARH/RhoGEF and pleckstrin domain protein 2 Source HGNC Symbol Acc HGNC 16460
D06	UPFH0017156	ENST00000498491.5	FLNA	ENSG000000196924	filamin A Source HGNC Symbol Acc HGNC 3754
D07	UPFH0246085	ENST00000475487.1	FLNB	ENSG000000136068	filamin B Source HGNC Symbol Acc HGNC 3755
D08	UPFH1132446	ENST00000571518.5	HGS	ENSG000000185359	hepatocyte growth factor-regulated tyrosine kinase substrate Source HGNC Symbol Acc HGNC 4897
D09	UPFH0225529	ENST00000561461.5	IQGAP1	ENSG000000140575	IQ motif containing GTPase activating protein 1 Source HGNC Symbol Acc HGNC 6110
D10	UPFH0565151	ENST00000437369.5	JUP	ENSG000000173801	junction plakoglobin Source HGNC Symbol Acc HGNC 6207
D11	UPFH0408936	ENST00000532377.1	LMO7	ENSG000000136153	LIM domain 7 Source HGNC Symbol Acc HGNC 6646
D12	UPFH0105247	ENST00000375571.6	MAPRE1	ENSG000000101367	microtubule associated protein RP/EB family member 1 Source HGNC Symbol Acc HGNC 6890
E01	UPFH0090294	ENST00000589180.5	MAPRE2	ENSG000000166974	microtubule associated protein RP/EB family member 2 Source HGNC Symbol Acc HGNC 6891
E02	UPFH0347005	ENST00000366806.6	AFDN	ENSG000000130396	afadin, adherens junction formation factor Source HGNC Symbol Acc HGNC 7137
E03	UPFH0432508	ENST00000336097.7	NME1	ENSG000000239672	NME/NM23 nucleoside diphosphate kinase 1 Source HGNC Symbol Acc HGNC 7849
E04	UPFH0543837	ENST00000277541.7	NOTCH1	ENSG000000148400	notch 1 Source HGNC Symbol Acc HGNC 7881
E05	UPFH0591047	ENST00000640021.1	NOTCH2	ENSG000000134250	notch 2 Source HGNC Symbol Acc HGNC 7882
E06	UPFH0053070	ENST00000597756.1	NOTCH3	ENSG000000074181	notch 3 Source HGNC Symbol Acc HGNC 7883
E07	UPFH1132594	ENST00000375023.3	NOTCH4	ENSG000000204301	notch 4 Source HGNC Symbol Acc HGNC 7884
E08	UPFH0467822	ENST00000442475.5	P2RX6	ENSG000000099957	purinergic receptor P2X 6 Source HGNC Symbol Acc HGNC 8538
E09	UPFH0076865	ENST00000340077.9	PARD3	ENSG000000148498	par-3 family cell polarity regulator Source HGNC Symbol Acc HGNC 16051
E10	UPFH0012036	ENST00000421351.4	PERP	ENSG000000112378	PERP, TP53 apoptosis effector Source HGNC Symbol Acc HGNC 17637
E11	UPFH0562261	ENST00000473541.5	PIK3CG	ENSG000000105851	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma Source HGNC Symbol Acc HGNC 8978
E12	UPFH0445643	ENST00000475988.1	PKP1	ENSG000000081277	plakophilin 1 Source HGNC Symbol Acc HGNC 9023
F01	UPFH0394842	ENST00000546498.1	PKP2	ENSG000000057294	plakophilin 2 Source HGNC Symbol Acc HGNC 9024
F02	UPFH0087092	ENST00000527442.5	PKP3	ENSG000000184363	plakophilin 3 Source HGNC Symbol Acc HGNC 9025
F03	UPFH0520567	ENST00000426248.7	PKP4	ENSG000000144283	plakophilin 4 Source HGNC Symbol Acc HGNC 9026
F04	UPFH0480453	ENST00000553331.5	PNN	ENSG000000100941	pinin, desmosome associated protein Source HGNC Symbol Acc HGNC 9162
F05	UPFH0181651	ENST00000371250.4	PLPP3	ENSG000000162407	phospholipid phosphatase 3 Source HGNC Symbol Acc HGNC 9229
F06	UPFH0469252	ENST00000589090.1	PPL	ENSG000000118898	periplakin Source HGNC Symbol Acc HGNC 9273
F07	UPFH0405991	ENST00000341398.6	NECTIN1	ENSG000000110400	nectin cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 9706
F08	UPFH0301384	ENST00000591581.1	NECTIN2	ENSG000000130202	nectin cell adhesion molecule 2 Source HGNC Symbol Acc HGNC 9707
F09	UPFH0376239	ENST00000461477.5	NECTIN3	ENSG000000177707	nectin cell adhesion molecule 3 Source HGNC Symbol Acc HGNC 17664
F10	UPFH0452206	ENST00000368012.4	NECTIN4	ENSG000000143217	nectin cell adhesion molecule 4 Source HGNC Symbol Acc HGNC 19688

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH1132648	ENST00000348035.9	RAC1	ENSG00000136238	Rac family small GTPase 1 Source HGNC Symbol Acc HGNC 9801
F12	UPFH0227635	ENST00000436179.1	RALA	ENSG00000006451	RAS like proto-oncogene A Source HGNC Symbol Acc HGNC 9839
G01	UPFH1132657	ENST00000445425.4	RHOA	ENSG00000067560	ras homolog family member A Source HGNC Symbol Acc HGNC 667
G02	UPFH1132693	ENST00000371241.5	SORBS1	ENSG00000095637	sorbin and SH3 domain containing 1 Source HGNC Symbol Acc HGNC 14565
G03	UPFH0192520	ENST00000605755.5	SSX2IP	ENSG00000117155	SSX family member 2 interacting protein Source HGNC Symbol Acc HGNC 16509
G04	UPFH0310877	ENST00000558447.1	TJP1	ENSG00000104067	tight junction protein 1 Source HGNC Symbol Acc HGNC 11827
G05	UPFH0064240	ENST00000378192.2	TLN1	ENSG00000137076	talín 1 Source HGNC Symbol Acc HGNC 11845
G06	UPFH0082853	ENST00000472902.1	TLN2	ENSG00000171914	talín 2 Source HGNC Symbol Acc HGNC 15447
G07	UPFH0466583	ENST00000478896.2	VCL	ENSG00000035403	vinculin Source HGNC Symbol Acc HGNC 12665
G08	UPFH0498392	ENST00000550106.5	VEZT	ENSG00000028203	vezatin, adherens junctions transmembrane protein Source HGNC Symbol Acc HGNC 18258
G09	UPFH0159424	ENST00000376701.4	WAS	ENSG00000015285	Wiskott-Aldrich syndrome Source HGNC Symbol Acc HGNC 12731
G10	UPFH0336515	ENST00000392589.6	WASF1	ENSG00000112290	WAS protein family member 1 Source HGNC Symbol Acc HGNC 12732
G11	UPFH0499368	ENST00000223023.5	WASL	ENSG00000106299	Wiskott-Aldrich syndrome like Source HGNC Symbol Acc HGNC 12735
G12	UPFH0292796	ENST00000477373.1	ZYX	ENSG00000159840	zyxin Source HGNC Symbol Acc HGNC 13200
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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