

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

Human Liver Cancer

Cat. no. 249955 UPHS-133ZA

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	ADAM17	AKT1	ANGPT2	BAX	BCL2	BCL2L1	BID	BIRC2	BIRC5	CASP8	CCL5	CCND1
B	CCND2	CDH1	CDH13	CDKN1A	CDKN1B	CDKN2A	CFLAR	CTNNB1	CXCR4	DAB2IP	DLC1	E2F1
C	EGF	EGFR	EP300	FADD	FAS	FHIT	FLT1	FZD7	GADD45B	GSTP1	HGF	HHIP
D	HRAS	IGF2	IGFBP1	IGFBP3	IRS1	ITGB1	KDR	LEF1	MCL1	MET	MSH2	MSH3
E	MTDH	MYC	NFKB1	NRAS	OPCML	PDGFRA	PIN1	PTEN	PTGS2	PTK2	PYCARD	RAC1
F	RASSF1	RB1	RELN	RHOA	RUNX3	SFRP2	SMAD4	SMAD7	SOC1	SOC3	STAT3	TCF4
G	TEXT	TGFA	TGFB1	TGFB2	TLR4	TNFRSF10B	TNFRSF10	TP53	VEGFA	WT1	XIAP	YAP1
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	UPFH1132216	ENST00000497134.6	ADAM17	ENSG00000151694	ADAM metallopeptidase domain 17 Source HGNC Symbol Acc HGNC 195
A02	UPFH0453992	ENST0000055528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A03	UPFH0272158	ENST00000325203.9	ANGPT2	ENSG00000091879	angiopoietin 2 Source HGNC Symbol Acc HGNC 485
A04	UPFH0540159	ENST00000293288.12	BAX	ENSG00000087088	BCL2 associated X, apoptosis regulator Source HGNC Symbol Acc HGNC 959
A05	UPFH1132900	ENST00000333681.5	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
A06	UPFH1132271	ENST00000376062.6	BCL2L1	ENSG00000171552	BCL2 like 1 Source HGNC Symbol Acc HGNC 992
A07	UPFH0184066	ENST00000622694.4	BID	ENSG00000015475	BH3 interacting domain death agonist Source HGNC Symbol Acc HGNC 1050
A08	UPFH0351057	ENST00000227758.6	BIRC2	ENSG00000110330	baculoviral IAP repeat containing 2 Source HGNC Symbol Acc HGNC 590
A09	UPFH1132779	ENST00000301633.8	BIRC5	ENSG00000089685	baculoviral IAP repeat containing 5 Source HGNC Symbol Acc HGNC 593
A10	UPFH0522971	ENST00000264275.9	CASP8	ENSG00000064012	caspase 8 Source HGNC Symbol Acc HGNC 1509
A11	UPFH1132786	ENST00000603197.6	CCL5	ENSG00000271503	C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632
A12	UPFH0430337	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B01	UPFH1132296	ENST00000261254.8	CCND2	ENSG00000118971	cyclin D2 Source HGNC Symbol Acc HGNC 1583
B02	UPFH1132791	ENST00000261769.10	CDH1	ENSG00000039068	cadherin 1 Source HGNC Symbol Acc HGNC 1748
B03	UPFH0210939	ENST00000428848.7	CDH13	ENSG00000140945	cadherin 13 Source HGNC Symbol Acc HGNC 1753
B04	UPFH0312181	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
B05	UPFH1132964	ENST00000228872.9	CDKN1B	ENSG00000111276	cyclin dependent kinase inhibitor 1B Source HGNC Symbol Acc HGNC 1785
B06	UPFH0246593	ENST00000494262.5	CDKN2A	ENSG00000147889	cyclin dependent kinase inhibitor 2A Source HGNC Symbol Acc HGNC 1787
B07	UPFH1132312	ENST00000479953.6	CFLAR	ENSG00000003402	CASP8 and FADD like apoptosis regulator Source HGNC Symbol Acc HGNC 1876
B08	UPFH0097734	ENST00000396183.7	CTNNB1	ENSG00000168036	catenin beta 1 Source HGNC Symbol Acc HGNC 2514
B09	UPFH0570418	ENST00000241393.3	CXCR4	ENSG00000121966	C-X-C motif chemokine receptor 4 Source HGNC Symbol Acc HGNC 2561
B10	UPFH0600818	ENST00000459906.1	DAB2IP	ENSG00000136848	DAB2 interacting protein Source HGNC Symbol Acc HGNC 17294
B11	UPFH0418198	ENST00000521730.1	DLC1	ENSG00000164741	DLC1 Rho GTPase activating protein Source HGNC Symbol Acc HGNC 2897
B12	UPFH1132375	ENST00000343380.6	E2F1	ENSG00000101412	E2F transcription factor 1 Source HGNC Symbol Acc HGNC 3113
C01	UPFH1132380	ENST00000503392.1	EGF	ENSG00000138798	epidermal growth factor Source HGNC Symbol Acc HGNC 3229
C02	UPFH1132381	ENST00000420316.6	EGFR	ENSG00000146648	epidermal growth factor receptor Source HGNC Symbol Acc HGNC 3236
C03	UPFH0118049	ENST00000635691.1	EP300	ENSG00000100393	E1A binding protein p300 Source HGNC Symbol Acc HGNC 3373
C04	UPFH1132906	ENST00000301838.4	FADD	ENSG00000168040	Fas associated via death domain Source HGNC Symbol Acc HGNC 3573
C05	UPFH1132395	ENST00000357339.6	FAS	ENSG00000026103	Fas cell surface death receptor Source HGNC Symbol Acc HGNC 11920
C06	UPFH0443291	ENST00000468189.5	FHIT	ENSG00000189283	fragile histidine triad Source HGNC Symbol Acc HGNC 3701
C07	UPFH1132400	ENST00000541932.5	FLT1	ENSG00000102755	fms related tyrosine kinase 1 Source HGNC Symbol Acc HGNC 3763
C08	UPFH0485950	ENST00000286201.2	FZD7	ENSG00000155760	frizzled class receptor 7 Source HGNC Symbol Acc HGNC 4045
C09	UPFH1132414	ENST00000215631.9	GADD45B	ENSG00000099860	growth arrest and DNA damage inducible beta Source HGNC Symbol Acc HGNC 4096
C10	UPFH0262059	ENST00000398606.8	GSTP1	ENSG00000084207	glutathione S-transferase pi 1 Source HGNC Symbol Acc HGNC 4638
		ENST00000643		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132871	024.1	HGF	019991	hepatocyte growth factor Source HGNC Symbol Acc HGNC 4893
C12	UPFH0426966	ENST00000515080.1	HHIP	ENSG00000164161	hedgehog interacting protein Source HGNC Symbol Acc HGNC 14866
D01	UPFH1132981	ENST00000311189.8	HRAS	ENSG00000174775	HRas proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 5173
D02	UPFH0479939	ENST00000418738.2	IGF2	ENSG00000167244	insulin like growth factor 2 Source HGNC Symbol Acc HGNC 5466
D03	UPFH0226057	ENST00000468955.1	IGFBP1	ENSG00000146678	insulin like growth factor binding protein 1 Source HGNC Symbol Acc HGNC 5469
D04	UPFH1132893	ENST00000275521.10	IGFBP3	ENSG00000146674	insulin like growth factor binding protein 3 Source HGNC Symbol Acc HGNC 5472
D05	UPFH0592509	ENST00000305123.5	IRS1	ENSG00000169047	insulin receptor substrate 1 Source HGNC Symbol Acc HGNC 6125
D06	UPFH1132498	ENST00000423113.5	ITGB1	ENSG00000150093	integrin subunit beta 1 Source HGNC Symbol Acc HGNC 6153
D07	UPFH0596732	ENST00000263923.5	KDR	ENSG00000128052	kinase insert domain receptor Source HGNC Symbol Acc HGNC 6307
D08	UPFH1132518	ENST00000438313.6	LEF1	ENSG00000138795	lymphoid enhancer binding factor 1 Source HGNC Symbol Acc HGNC 6551
D09	UPFH1132538	ENST00000369026.3	MCL1	ENSG00000143384	MCL1, BCL2 family apoptosis regulator Source HGNC Symbol Acc HGNC 6943
D10	UPFH1132915	ENST00000436117.2	MET	ENSG00000105976	MET proto-oncogene, receptor tyrosine kinase Source HGNC Symbol Acc HGNC 7029
D11	UPFH0051784	ENST00000233146.6	MSH2	ENSG00000095002	mutS homolog 2 Source HGNC Symbol Acc HGNC 7325
D12	UPFH1132557	ENST00000265081.7	MSH3	ENSG00000113318	mutS homolog 3 Source HGNC Symbol Acc HGNC 7326
E01	UPFH0590119	ENST00000519293.1	MTDH	ENSG00000147649	metadherin Source HGNC Symbol Acc HGNC 29608
E02	UPFH1132563	ENST00000517291.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
E03	UPFH1132828	ENST00000226574.9	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E04	UPFH0189023	ENST00000369535.5	NRAS	ENSG00000213281	NRAS proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 7989
E05	UPFH0099438	ENST00000541867.5	OPCML	ENSG00000183715	opioid binding protein/cell adhesion molecule like Source HGNC Symbol Acc HGNC 8143
E06	UPFH1132609	ENST00000508170.5	PDGFRA	ENSG00000134853	platelet derived growth factor receptor alpha Source HGNC Symbol Acc HGNC 8803
E07	UPFH0325267	ENST00000247970.8	PIN1	ENSG00000127445	peptidylprolyl cis/trans isomerase, NIMA-interacting 1 Source HGNC Symbol Acc HGNC 8988
E08	UPFH1132982	ENST00000371953.8	PTEN	ENSG00000171862	phosphatase and tensin homolog Source HGNC Symbol Acc HGNC 9588
E09	UPFH1132642	ENST00000367468.10	PTGS2	ENSG00000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
E10	UPFH1132643	ENST00000522684.5	PTK2	ENSG00000169398	protein tyrosine kinase 2 Source HGNC Symbol Acc HGNC 9611
E11	UPFH1133183	ENST00000247470.10	PYCARD	ENSG00000103490	PYD and CARD domain containing Source HGNC Symbol Acc HGNC 16608
E12	UPFH1132648	ENST00000348035.9	RAC1	ENSG00000136238	Rac family small GTPase 1 Source HGNC Symbol Acc HGNC 9801
F01	UPFH0117232	ENST00000616212.4	RASSF1	ENSG00000068028	Ras association domain family member 1 Source HGNC Symbol Acc HGNC 9882
F02	UPFH0001483	ENST00000267163.5	RB1	ENSG00000139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
F03	UPFH0230624	ENST00000428762.6	RELN	ENSG00000189056	reelin Source HGNC Symbol Acc HGNC 9957
F04	UPFH1132657	ENST00000445425.4	RHOA	ENSG00000067560	ras homolog family member A Source HGNC Symbol Acc HGNC 667
F05	UPFH0389770	ENST00000496967.1	RUNX3	ENSG00000020633	runt related transcription factor 3 Source HGNC Symbol Acc HGNC 10473
F06	UPFH0335317	ENST00000274063.5	SFRP2	ENSG00000145423	secreted frizzled related protein 2 Source HGNC Symbol Acc HGNC 10777
F07	UPFH0151428	ENST00000342988.7	SMAD4	ENSG00000141646	SMAD family member 4 Source HGNC Symbol Acc HGNC 6770
F08	UPFH0372810	ENST00000262158.7	SMAD7	ENSG00000101665	SMAD family member 7 Source HGNC Symbol Acc HGNC 6773
F09	UPFH1132887	ENST00000644787.1	SOCS1	ENSG00000185338	suppressor of cytokine signaling 1 Source HGNC Symbol Acc HGNC 19383
F10	UPFH1132974	ENST00000330871.3	SOCS3	ENSG00000184557	suppressor of cytokine signaling 3 Source HGNC Symbol Acc HGNC 19391

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0531262	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
F12	UPFH0181405	ENST00000356073.8	TCF4	ENSG00000196628	transcription factor 4 Source HGNC Symbol Acc HGNC 11634
G01	UPFH0248987	ENST00000310581.9	TERT	ENSG00000164362	telomerase reverse transcriptase Source HGNC Symbol Acc HGNC 11730
G02	UPFH1132717	ENST00000295400.11	TGFA	ENSG00000163235	transforming growth factor alpha Source HGNC Symbol Acc HGNC 11765
G03	UPFH0193430	ENST00000221930.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G04	UPFH0249772	ENST00000295754.9	TGFB2	ENSG00000163513	transforming growth factor beta receptor 2 Source HGNC Symbol Acc HGNC 11773
G05	UPFH1132859	ENST00000645071.1	TLR4	ENSG00000136869	toll like receptor 4 Source HGNC Symbol Acc HGNC 11850
G06	UPFH1132850	ENST00000347739.3	TNFRSF10B	ENSG00000120889	TNF receptor superfamily member 10b Source HGNC Symbol Acc HGNC 11905
G07	UPFH1132733	ENST00000241261.7	TNFSF10	ENSG00000121858	TNF superfamily member 10 Source HGNC Symbol Acc HGNC 11925
G08	UPFH0565795	ENST00000269305.8	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G09	UPFH0281656	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G10	UPFH0122271	ENST00000527882.5	WT1	ENSG00000184937	Wilms tumor 1 Source HGNC Symbol Acc HGNC 12796
G11	UPFH0572864	ENST00000371199.7	XIAP	ENSG00000101966	X-linked inhibitor of apoptosis Source HGNC Symbol Acc HGNC 592
G12	UPFH0175061	ENST00000282441.10	YAP1	ENSG00000137693	Yes associated protein 1 Source HGNC Symbol Acc HGNC 16262
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 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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