

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

Human Tumor Metastasis

Cat. no. 249955 UPHS-028ZA

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	APC	BRMS1	CCL7	CD44	CD82	CDH1	CDH11	CDH6	CDKN2A	CHD4	COL4A2	CST7
B	CTBP1	CTNNA1	CTSK	CTSL	CXCL12	CXCR2	CXCR4	DENR	EPHB2	ETV4	EWSR1	FAT1
C	FGFR4	FLT4	FN1	FXD5	GNRH1	HGF	HPSE	HRAS	HTATIP2	IGF1	IL18	IL1B
D	ITGA7	ITGB3	KISS1	KISS1R	KRAS		MDM2	MET	METAP2	MGAT5	MMP10	MMP11
E	MMP13	MMP2	MMP3	MMP7	MMP9	MTA1	MTSS1	MYC	MYCL	NF2	NME1	NME4
F	NR4A3	PLAUR	PNN	PTEN	RB1	RORB	RPSA	SERPINE1	SET	SMAD2	SMAD4	SRC
G	SSTR2	SYK	TCF20	TGFB1	TIMP2	TIMP3	TIMP4	TNFSF10	TP53	TRPM1	TSHR	VEGFA
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	UPFH1132236	ENST00000257430.9	APC	ENSG00000134982	APC, WNT signaling pathway regulator Source HGNC Symbol Acc HGNC 583
A02	UPFH0174559	ENST00000529544.1	BRMS1	ENSG00000174744	BRMS1, transcriptional repressor and anoikis regulator Source HGNC Symbol Acc HGNC 17262
A03	UPFH0186519	ENST00000378569.2	CCL7	ENSG00000108688	C-C motif chemokine ligand 7 Source HGNC Symbol Acc HGNC 10634
A04	UPFH0253499	ENST00000428726.7	CD44	ENSG00000026508	CD44 molecule (Indian blood group) Source HGNC Symbol Acc HGNC 1681
A05	UPFH0036387	ENST00000530601.1	CD82	ENSG00000085117	CD82 molecule Source HGNC Symbol Acc HGNC 6210
A06	UPFH1132791	ENST00000261769.10	CDH1	ENSG00000039068	cadherin 1 Source HGNC Symbol Acc HGNC 1748
A07	UPFH0449653	ENST00000562325.5	CDH11	ENSG000000140937	cadherin 11 Source HGNC Symbol Acc HGNC 1750
A08	UPFH0531791	ENST00000265071.3	CDH6	ENSG000000113361	cadherin 6 Source HGNC Symbol Acc HGNC 1765
A09	UPFH0246593	ENST00000494262.5	CDKN2A	ENSG000000147889	cyclin dependent kinase inhibitor 2A Source HGNC Symbol Acc HGNC 1787
A10	UPFH0374179	ENST00000545942.6	CHD4	ENSG000000111642	chromodomain helicase DNA binding protein 4 Source HGNC Symbol Acc HGNC 1919
A11	UPFH0055505	ENST00000360467.6	COL4A2	ENSG000000134871	collagen type IV alpha 2 chain Source HGNC Symbol Acc HGNC 2203
A12	UPFH0334254	ENST00000480798.2	CST7	ENSG000000077984	cystatin F Source HGNC Symbol Acc HGNC 2479
B01	UPFH1132339	ENST00000382952.7	CTBP1	ENSG000000159692	C-terminal binding protein 1 Source HGNC Symbol Acc HGNC 2494
B02	UPFH0447603	ENST00000627109.2	CTNNA1	ENSG000000044115	catenin alpha 1 Source HGNC Symbol Acc HGNC 2509
B03	UPFH0573582	ENST00000443913.1	CTSK	ENSG000000143387	cathepsin K Source HGNC Symbol Acc HGNC 2536
B04	UPFH1132904	ENST00000342020.5	CTSL	ENSG000000135047	cathepsin L Source HGNC Symbol Acc HGNC 2537
B05	UPFH0092551	ENST00000374429.6	CXCL12	ENSG000000107562	C-X-C motif chemokine ligand 12 Source HGNC Symbol Acc HGNC 10672
B06	UPFH0032462	ENST00000454148.1	CXCR2	ENSG000000180871	C-X-C motif chemokine receptor 2 Source HGNC Symbol Acc HGNC 6027
B07	UPFH0570418	ENST00000241393.3	CXCR4	ENSG000000121966	C-X-C motif chemokine receptor 4 Source HGNC Symbol Acc HGNC 2561
B08	UPFH0595701	ENST00000280557.11	DENR	ENSG000000139726	density regulated re-initiation and release factor Source HGNC Symbol Acc HGNC 2769
B09	UPFH0385602	ENST00000465676.1	EPHB2	ENSG000000133216	EPH receptor B2 Source HGNC Symbol Acc HGNC 3393
B10	UPFH0377063	ENST00000538265.5	ETV4	ENSG000000175832	ETS variant 4 Source HGNC Symbol Acc HGNC 3493
B11	UPFH0128858	ENST00000469669.5	EWSR1	ENSG000000182944	EWS RNA binding protein 1 Source HGNC Symbol Acc HGNC 3508
B12	UPFH0089931	ENST00000441802.7	FAT1	ENSG000000083857	FAT atypical cadherin 1 Source HGNC Symbol Acc HGNC 3595
C01	UPFH0491736	ENST00000393648.6	FGFR4	ENSG000000160867	fibroblast growth factor receptor 4 Source HGNC Symbol Acc HGNC 3691
C02	UPFH0098802	ENST00000514810.1	FLT4	ENSG000000037280	fms related tyrosine kinase 4 Source HGNC Symbol Acc HGNC 3767
C03	UPFH0605066	ENST00000336916.8	FN1	ENSG000000115414	fibronectin 1 Source HGNC Symbol Acc HGNC 3778
C04	UPFH0356752	ENST00000496493.5	FXYD5	ENSG000000089327	FXYD domain containing ion transport regulator 5 Source HGNC Symbol Acc HGNC 4029
C05	UPFH0288274	ENST00000421054.7	GNRH1	ENSG000000147437	gonadotropin releasing hormone 1 Source HGNC Symbol Acc HGNC 4419
C06	UPFH1132871	ENST00000643024.1	HGF	ENSG000000019991	hepatocyte growth factor Source HGNC Symbol Acc HGNC 4893
C07	UPFH1132454	ENST00000512196.5	HPSE	ENSG000000173083	heparanase Source HGNC Symbol Acc HGNC 5164
C08	UPFH1132981	ENST00000311189.8	HRAS	ENSG000000174775	HRas proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 5173
C09	UPFH0197382	ENST00000443524.6	HTATIP2	ENSG000000109854	HIV-1 Tat interactive protein 2 Source HGNC Symbol Acc HGNC 16637
C10	UPFH0229443	ENST00000337514.10	IGF1	ENSG000000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
		ENST00000528		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132481	832.1	IL18	150782	interleukin 18 Source HGNC Symbol Acc HGNC 5986
C12	UPFH0163764	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
D01	UPFH0265512	ENST00000555728.5	ITGA7	ENSG00000135424	integrin subunit alpha 7 Source HGNC Symbol Acc HGNC 6143
D02	UPFH1132500	ENST00000559488.5	ITGB3	ENSG00000259207	integrin subunit beta 3 Source HGNC Symbol Acc HGNC 6156
D03	UPFH0509113	ENST00000625357.1	KISS1	ENSG00000170498	KISS-1 metastasis suppressor Source HGNC Symbol Acc HGNC 6341
D04	UPFH0005575	ENST00000234371.10	KISS1R	ENSG00000116014	KISS1 receptor Source HGNC Symbol Acc HGNC 4510
D05	UPFH0376060	ENST00000557334.5	KRAS	ENSG00000133703	KRAS proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 6407
D06	UPFH1124023	ENST00000534522.5		ENSG00000076706	melanoma cell adhesion molecule Source NCBI gene Acc 4162
D07	UPFH1132546	ENST00000393416.6	MDM2	ENSG00000135679	MDM2 proto-oncogene Source HGNC Symbol Acc HGNC 6973
D08	UPFH1132915	ENST00000436117.2	MET	ENSG00000105976	MET proto-oncogene, receptor tyrosine kinase Source HGNC Symbol Acc HGNC 7029
D09	UPFH0056027	ENST00000550777.5	METAP2	ENSG00000111142	methionyl aminopeptidase 2 Source HGNC Symbol Acc HGNC 16672
D10	UPFH0367863	ENST00000281923.4	MGAT5	ENSG00000152127	alpha-1,6-mannosylglycoprotein 6-beta-N-acetylglucosaminyltransferase Source HGNC Symbol Acc HGNC 7049
D11	UPFH1132891	ENST00000279441.9	MMP10	ENSG00000166670	matrix metalloproteinase 10 Source HGNC Symbol Acc HGNC 7156
D12	UPFH1132550	ENST00000215743.8	MMP11	ENSG00000099953	matrix metalloproteinase 11 Source HGNC Symbol Acc HGNC 7157
E01	UPFH0371019	ENST0000061555.4	MMP13	ENSG00000137745	matrix metalloproteinase 13 Source HGNC Symbol Acc HGNC 7159
E02	UPFH1132551	ENST00000437642.6	MMP2	ENSG00000087245	matrix metalloproteinase 2 Source HGNC Symbol Acc HGNC 7166
E03	UPFH1132827	ENST00000299855.10	MMP3	ENSG00000149968	matrix metalloproteinase 3 Source HGNC Symbol Acc HGNC 7173
E04	UPFH0230006	ENST00000260227.5	MMP7	ENSG00000137673	matrix metalloproteinase 7 Source HGNC Symbol Acc HGNC 7174
E05	UPFH0367626	ENST00000372330.3	MMP9	ENSG00000100985	matrix metalloproteinase 9 Source HGNC Symbol Acc HGNC 7176
E06	UPFH0234938	ENST00000331320.12	MTA1	ENSG00000182979	metastasis associated 1 Source HGNC Symbol Acc HGNC 7410
E07	UPFH0112010	ENST00000431961.6	MTSS1	ENSG00000170873	MTSS1, I-BAR domain containing Source HGNC Symbol Acc HGNC 20443
E08	UPFH1132563	ENST00000517291.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
E09	UPFH0370678	ENST00000397332.2	MYCL	ENSG00000116990	MYCL proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7555
E10	UPFH0114449	ENST00000361166.8	NF2	ENSG00000186575	neurofibromin 2 Source HGNC Symbol Acc HGNC 7773
E11	UPFH0432508	ENST00000336097.7	NME1	ENSG00000239672	NME/NM23 nucleoside diphosphate kinase 1 Source HGNC Symbol Acc HGNC 7849
E12	UPFH0488120	ENST00000397722.5	NME4	ENSG00000103202	NME/NM23 nucleoside diphosphate kinase 4 Source HGNC Symbol Acc HGNC 7852
F01	UPFH0009540	ENST00000618101.4	NR4A3	ENSG00000119508	nuclear receptor subfamily 4 group A member 3 Source HGNC Symbol Acc HGNC 7982
F02	UPFH0152071	ENST00000601723.5	PLAUR	ENSG00000011422	plasminogen activator, urokinase receptor Source HGNC Symbol Acc HGNC 9053
F03	UPFH0480453	ENST00000553331.5	PNN	ENSG00000100941	pinin, desmosome associated protein Source HGNC Symbol Acc HGNC 9162
F04	UPFH1132982	ENST00000371953.8	PTEN	ENSG00000171862	phosphatase and tensin homolog Source HGNC Symbol Acc HGNC 9588
F05	UPFH0001483	ENST00000267163.5	RB1	ENSG00000139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
F06	UPFH0495525	ENST00000396204.2	RORB	ENSG00000198963	RAR related orphan receptor B Source HGNC Symbol Acc HGNC 10259
F07	UPFH0385761	ENST00000444512.2	RPSA	ENSG00000168028	ribosomal protein SA Source HGNC Symbol Acc HGNC 6502
F08	UPFH0384736	ENST00000223095.4	SERPINE1	ENSG00000106366	serpin family E member 1 Source HGNC Symbol Acc HGNC 8583
F09	UPFH0006272	ENST00000477806.5	SET	ENSG00000119335	SET nuclear proto-oncogene Source HGNC Symbol Acc HGNC 10760
F10	UPFH1132686	ENST00000585978.1	SMAD2	ENSG00000175387	SMAD family member 2 Source HGNC Symbol Acc HGNC 6768

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0151428	ENST00000342988.7	SMAD4	ENSG00000141646	SMAD family member 4 Source HGNC Symbol Acc HGNC 6770
F12	UPFH0308412	ENST00000472968.1	SRC	ENSG00000197122	SRC proto-oncogene, non-receptor tyrosine kinase Source HGNC Symbol Acc HGNC 11283
G01	UPFH0146676	ENST00000579323.5	SSTR2	ENSG00000180616	somatostatin receptor 2 Source HGNC Symbol Acc HGNC 11331
G02	UPFH0221786	ENST00000375751.8	SYK	ENSG00000165025	spleen associated tyrosine kinase Source HGNC Symbol Acc HGNC 11491
G03	UPFH0075441	ENST00000359486.7	TCF20	ENSG00000100207	transcription factor 20 Source HGNC Symbol Acc HGNC 11631
G04	UPFH0193430	ENST00000221930.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G05	UPFH0276014	ENST00000262768.11	TIMP2	ENSG00000035862	TIMP metalloproteinase inhibitor 2 Source HGNC Symbol Acc HGNC 11821
G06	UPFH0118826	ENST00000266085.6	TIMP3	ENSG00000100234	TIMP metalloproteinase inhibitor 3 Source HGNC Symbol Acc HGNC 11822
G07	UPFH0142938	ENST00000287814.5	TIMP4	ENSG00000157150	TIMP metalloproteinase inhibitor 4 Source HGNC Symbol Acc HGNC 11823
G08	UPFH1132733	ENST00000241261.7	TNFSF10	ENSG00000121858	TNF superfamily member 10 Source HGNC Symbol Acc HGNC 11925
G09	UPFH0565795	ENST00000269305.8	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G10	UPFH0456238	ENST00000558768.5	TRPM1	ENSG00000134160	transient receptor potential cation channel subfamily M member 1 Source HGNC Symbol Acc HGNC 7146
G11	UPFH0026674	ENST00000554263.5	TSHR	ENSG00000165409	thyroid stimulating hormone receptor Source HGNC Symbol Acc HGNC 12373
G12	UPFH0281656	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST0000054417.5	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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