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

Human Cancer PathwayFinder™

Cat. no. 249955 UPHS-033ZA

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	ACLY	ACSL4	ADM	ANGPT1	ANGPT2	APAF1	ARNT	ATP5F1A	AURKA	BCL2L11	BIRC3	BMI1
B	CA9	CASP2	CASP7	CASP9	CCL2	CCND2	CCND3	CDC20	CDH2	CFLAR	COX5A	CPT2
C	DDB2	DDIT3	DKC1	DSP	E2F4	EPO	ERCC3	ERCC5	ETS2	FASLG	FGF2	FLT1
D	FOXC2	G6PD	GADD45G	GPD2	GSC	HMOX1	IGFBP3	IGFBP5	IGFBP7	KDR	KRT14	LDHA
E	LIG4	LPL	MAP2K1	MAP2K3	MAPK14	MCM2	MKI67	NOL3	OCLN	PFKL	PGF	PINX1
F	POLB	PPP1R15A	SERPINB2	SERPINF1	SKP2	SLC2A1	SNAI1	SNAI2	SNAI3	SOD1	SOX10	STMN1
G	TBX2	TEK	TEP1	TERF1	TERF2IP	TINF2	TNKS	TNKS2	UQCRFS1	VEGFC	WEE1	XIAP
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	UPFH1132862	ENST00000537919.5	ACLY	ENSG00000131473	ATP citrate lyase Source HGNC Symbol Acc HGNC 115
A02	UPFH1132213	ENST00000348502.10	ACSL4	ENSG00000068366	acyl-CoA synthetase long chain family member 4 Source HGNC Symbol Acc HGNC 3571
A03	UPFH1172899	ENST00000528655.5	ADM	ENSG00000148926	adrenomedullin Source HGNC Symbol Acc HGNC 259
A04	UPFH1132231	ENST00000517746.6	ANGPT1	ENSG00000154188	angiopoietin 1 Source HGNC Symbol Acc HGNC 484
A05	UPFH0272158	ENST00000325203.9	ANGPT2	ENSG00000091879	angiopoietin 2 Source HGNC Symbol Acc HGNC 485
A06	UPFH1132235	ENST00000551964.5	APAF1	ENSG00000120868	apoptotic peptidase activating factor 1 Source HGNC Symbol Acc HGNC 576
A07	UPFH1132241	ENST00000354396.6	ARNT	ENSG00000143437	aryl hydrocarbon receptor nuclear translocator Source HGNC Symbol Acc HGNC 700
A08	UPFH1132254	ENST00000590406.5	ATP5F1A	ENSG00000152234	ATP synthase F1 subunit alpha Source HGNC Symbol Acc HGNC 823
A09	UPFH0528207	ENST00000347343.6	AURKA	ENSG00000087586	aurora kinase A Source HGNC Symbol Acc HGNC 11393
A10	UPFH1172900	ENST00000308659.12	BCL2L11	ENSG00000153094	BCL2 like 11 Source HGNC Symbol Acc HGNC 994
A11	UPFH0113281	ENST00000615299.4	BIRC3	ENSG00000023445	baculoviral IAP repeat containing 3 Source HGNC Symbol Acc HGNC 591
A12	UPFH0503163	ENST00000602358.5	BMI1	ENSG00000168283	BMI1 proto-oncogene, polycomb ring finger Source HGNC Symbol Acc HGNC 1066
B01	UPFH1132903	ENST00000617161.1	CA9	ENSG00000107159	carbonic anhydrase 9 Source HGNC Symbol Acc HGNC 1383
B02	UPFH0459272	ENST00000350623.7	CASP2	ENSG00000106144	caspase 2 Source HGNC Symbol Acc HGNC 1503
B03	UPFH0495219	ENST00000369318.7	CASP7	ENSG00000165806	caspase 7 Source HGNC Symbol Acc HGNC 1508
B04	UPFH0083593	ENST00000440484.1	CASP9	ENSG00000132906	caspase 9 Source HGNC Symbol Acc HGNC 1511
B05	UPFH1132783	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
B06	UPFH1132296	ENST00000261254.8	CCND2	ENSG00000118971	cyclin D2 Source HGNC Symbol Acc HGNC 1583
B07	UPFH0023687	ENST00000372991.8	CCND3	ENSG00000112576	cyclin D3 Source HGNC Symbol Acc HGNC 1585
B08	UPFH1132303	ENST00000372462.1	CDC20	ENSG00000117399	cell division cycle 20 Source HGNC Symbol Acc HGNC 1723
B09	UPFH1132792	ENST00000399380.7	CDH2	ENSG00000170558	cadherin 2 Source HGNC Symbol Acc HGNC 1759
B10	UPFH1132312	ENST00000479953.6	CFLAR	ENSG00000003402	CASP8 and FADD like apoptosis regulator Source HGNC Symbol Acc HGNC 1876
B11	UPFH1132328	ENST00000322347.11	COX5A	ENSG00000178741	cytochrome c oxidase subunit 5A Source HGNC Symbol Acc HGNC 2267
B12	UPFH1132334	ENST00000636891.1	CPT2	ENSG00000157184	carnitine palmitoyltransferase 2 Source HGNC Symbol Acc HGNC 2330
C01	UPFH0224958	ENST00000256996.8	DDB2	ENSG00000134574	damage specific DNA binding protein 2 Source HGNC Symbol Acc HGNC 2718
C02	UPFH0523891	ENST00000346473.7	DDIT3	ENSG00000175197	DNA damage inducible transcript 3 Source HGNC Symbol Acc HGNC 2726
C03	UPFH0521239	ENST00000481062.1	DKC1	ENSG00000130826	dyskerin pseudouridine synthase 1 Source HGNC Symbol Acc HGNC 2890
C04	UPFH1132371	ENST00000379802.8	DSP	ENSG00000096696	desmoplakin Source HGNC Symbol Acc HGNC 3052
C05	UPFH1132376	ENST00000379378.8	E2F4	ENSG00000205250	E2F transcription factor 4 Source HGNC Symbol Acc HGNC 3118
C06	UPFH0083071	ENST00000252723.3	EPO	ENSG00000130427	erythropoietin Source HGNC Symbol Acc HGNC 3415
C07	UPFH0176537	ENST00000285398.6	ERCC3	ENSG00000163161	ERCC excision repair 3, TFIIH core complex helicase subunit Source HGNC Symbol Acc HGNC 3435
C08	UPFH1132905	ENST00000652225.1	ERCC5	ENSG00000134899	ERCC excision repair 5, endonuclease Source HGNC Symbol Acc HGNC 3437
C09	UPFH1132389	ENST00000360214.7	ETS2	ENSG00000157557	ETS proto-oncogene 2, transcription factor Source HGNC Symbol Acc HGNC 3489
C10	UPFH1132396	ENST00000367721.3	FASLG	ENSG00000117560	Fas ligand Source HGNC Symbol Acc HGNC 11936
		ENST00000264		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0613093	498.7	FGF2	138685	fibroblast growth factor 2 Source HGNC Symbol Acc HGNC 3676
C12	UPFH1132400	ENST00000541932.5	FLT1	ENSG00000102755	fms related tyrosine kinase 1 Source HGNC Symbol Acc HGNC 3763
D01	UPFH0518784	ENST00000649859.1	FOXC2	ENSG00000176692	forkhead box C2 Source HGNC Symbol Acc HGNC 3801
D02	UPFH0397211	ENST00000621232.5	G6PD	ENSG00000160211	glucose-6-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4057
D03	UPFH1132415	ENST00000375769.1	GADD45G	ENSG00000130222	growth arrest and DNA damage inducible gamma Source HGNC Symbol Acc HGNC 4097
D04	UPFH1132422	ENST00000310454.10	GPD2	ENSG00000115159	glycerol-3-phosphate dehydrogenase 2 Source HGNC Symbol Acc HGNC 4456
D05	UPFH1132427	ENST00000238558.4	GSC	ENSG00000133937	goosecoid homeobox Source HGNC Symbol Acc HGNC 4612
D06	UPFH0433285	ENST00000216117.9	HMOX1	ENSG00000100292	heme oxygenase 1 Source HGNC Symbol Acc HGNC 5013
D07	UPFH1132893	ENST00000275521.10	IGFBP3	ENSG00000146674	insulin like growth factor binding protein 3 Source HGNC Symbol Acc HGNC 5472
D08	UPFH1132475	ENST00000449583.1	IGFBP5	ENSG00000115461	insulin like growth factor binding protein 5 Source HGNC Symbol Acc HGNC 5474
D09	UPFH0195059	ENST00000295666.6	IGFBP7	ENSG00000163453	insulin like growth factor binding protein 7 Source HGNC Symbol Acc HGNC 5476
D10	UPFH0596732	ENST00000263923.5	KDR	ENSG00000128052	kinase insert domain receptor Source HGNC Symbol Acc HGNC 6307
D11	UPFH1132514	ENST00000167586.7	KRT14	ENSG00000186847	keratin 14 Source HGNC Symbol Acc HGNC 6416
D12	UPFH1132517	ENST00000422447.8	LDHA	ENSG00000134333	lactate dehydrogenase A Source HGNC Symbol Acc HGNC 6535
E01	UPFH1132913	ENST00000356922.5	LIG4	ENSG00000174405	DNA ligase 4 Source HGNC Symbol Acc HGNC 6601
E02	UPFH1132523	ENST00000311322.10	LPL	ENSG00000175445	lipoprotein lipase Source HGNC Symbol Acc HGNC 6677
E03	UPFH1132932	ENST00000307102.9	MAP2K1	ENSG00000169032	mitogen-activated protein kinase kinase 1 Source HGNC Symbol Acc HGNC 6840
E04	UPFH0309340	ENST00000361818.9	MAP2K3	ENSG00000034152	mitogen-activated protein kinase kinase 3 Source HGNC Symbol Acc HGNC 6843
E05	UPFH0068247	ENST00000229795.7	MAPK14	ENSG00000112062	mitogen-activated protein kinase 14 Source HGNC Symbol Acc HGNC 6876
E06	UPFH1132539	ENST00000265056.12	MCM2	ENSG00000073111	minichromosome maintenance complex component 2 Source HGNC Symbol Acc HGNC 6944
E07	UPFH1132549	ENST00000368653.7	MKI67	ENSG00000148773	marker of proliferation Ki-67 Source HGNC Symbol Acc HGNC 7107
E08	UPFH0321828	ENST00000564053.5	NOL3	ENSG00000140939	nucleolar protein 3 Source NCBI gene Acc 8996
E09	UPFH1132600	ENST00000355237.6	OCLN	ENSG00000197822	occludin Source HGNC Symbol Acc HGNC 8104
E10	UPFH1132615	ENST00000349048.9	PFKL	ENSG00000141959	phosphofructokinase, liver type Source HGNC Symbol Acc HGNC 8876
E11	UPFH1132616	ENST00000555567.6	PGF	ENSG00000119630	placental growth factor Source HGNC Symbol Acc HGNC 8893
E12	UPFH1132625	ENST00000314787.8	PINX1	ENSG00000254093	PIN2 (TERF1) interacting telomerase inhibitor 1 Source HGNC Symbol Acc HGNC 30046
F01	UPFH1132832	ENST00000521290.5	POLB	ENSG00000070501	DNA polymerase beta Source HGNC Symbol Acc HGNC 9174
F02	UPFH1132630	ENST00000600406.1	PPP1R15A	ENSG00000087074	protein phosphatase 1 regulatory subunit 15A Source HGNC Symbol Acc HGNC 14375
F03	UPFH1132670	ENST00000299502.9	SERPINB2	ENSG00000197632	serpin family B member 2 Source HGNC Symbol Acc HGNC 8584
F04	UPFH1172913	ENST00000254722.9	SERPINF1	ENSG00000132386	serpin family F member 1 Source HGNC Symbol Acc HGNC 8824
F05	UPFH1132886	ENST00000274255.10	SKP2	ENSG00000145604	S-phase kinase associated protein 2 Source HGNC Symbol Acc HGNC 10901
F06	UPFH0225912	ENST00000426263.8	SLC2A1	ENSG00000117394	solute carrier family 2 member 1 Source HGNC Symbol Acc HGNC 11005
F07	UPFH1132841	ENST00000244050.3	SNAI1	ENSG00000124216	snail family transcriptional repressor 1 Source HGNC Symbol Acc HGNC 11128
F08	UPFH1132690	ENST00000020945.4	SNAI2	ENSG00000019549	snail family transcriptional repressor 2 Source HGNC Symbol Acc HGNC 11094
F09	UPFH1132691	ENST00000332281.6	SNAI3	ENSG00000185669	snail family transcriptional repressor 3 Source NCBI gene Acc 333929
F10	UPFH0220920	ENST00000270142.10	SOD1	ENSG00000142168	superoxide dismutase 1 Source HGNC Symbol Acc HGNC 11179

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH1132694	ENST00000360880.6	SOX10	ENSG00000100146	SRY-box 10 Source HGNC Symbol Acc HGNC 11190
F12	UPFH1132700	ENST00000426559.6	STMN1	ENSG00000117632	stathmin 1 Source HGNC Symbol Acc HGNC 6510
G01	UPFH1132707	ENST00000240328.4	TBX2	ENSG00000121068	T-box 2 Source HGNC Symbol Acc HGNC 11597
G02	UPFH1132711	ENST00000380036.9	TEK	ENSG00000120156	TEK receptor tyrosine kinase Source HGNC Symbol Acc HGNC 11724
G03	UPFH0572246	ENST00000553984.1	TEP1	ENSG00000129566	telomerase associated protein 1 Source HGNC Symbol Acc HGNC 11726
G04	UPFH1132712	ENST00000276603.10	TERF1	ENSG00000147601	telomeric repeat binding factor 1 Source HGNC Symbol Acc HGNC 11728
G05	UPFH1132713	ENST00000300086.5	TERF2IP	ENSG00000166848	TERF2 interacting protein Source HGNC Symbol Acc HGNC 19246
G06	UPFH0189537	ENST00000399423.8	TINF2	ENSG00000092330	TERF1 interacting nuclear factor 2 Source HGNC Symbol Acc HGNC 11824
G07	UPFH0321421	ENST00000517989.1	TNKS	ENSG00000173273	tankyrase Source HGNC Symbol Acc HGNC 11941
G08	UPFH1132734	ENST00000371627.5	TNKS2	ENSG00000107854	tankyrase 2 Source HGNC Symbol Acc HGNC 15677
G09	UPFH1132752	ENST00000304863.6	UQCRFS1	ENSG00000169021	ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1 Source HGNC Symbol Acc HGNC 12587
G10	UPFH1132755	ENST00000618562.2	VEGFC	ENSG00000150630	vascular endothelial growth factor C Source HGNC Symbol Acc HGNC 12682
G11	UPFH1132757	ENST00000450114.7	WEE1	ENSG00000166483	WEE1 G2 checkpoint kinase Source HGNC Symbol Acc HGNC 12761
G12	UPFH0572864	ENST00000371199.7	XIAP	ENSG00000101966	X-linked inhibitor of apoptosis Source HGNC Symbol Acc HGNC 592
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 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.