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

Human p53 Signaling Pathway

Cat. no. 249955 UPHS-027ZA

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	APAF1	ATM	ATR	ADGRB1	BAX	BBC3	BCL2	BCL2A1	BID	BIRC5	BRCA1	BRCA2
B	BTG2	CASP2	CASP9	CCNB1	CCNE1	CCNG1	CCNH	CDC25A	CDC25C	CDK1	CDK4	CDKN1A
C	CDKN2A	CHEK1	CHEK2	CRADD	DNMT1	E2F1	E2F3	EGFR	EGR1	EI24	ESR1	FADD
D	FAS	FASLG	FOXO3	GADD45A	GML	HDAC1	HK2	IGF1R	IL6	JUN	KAT2B	KRAS
E	MCL1	MDM2	MDM4	MLH1	MSH2	MYC	MYOD1	NF1	NFKB1	PCNA	PIDD1	PPM1D
F	PRC1	PRKCA	PTEN	PTTG1	RB1	RELA	RPRM	SESN2	SIAH1	SIRT1	STAT1	TADA3
G	TNF	TNFRSF10B	TNFRSF10D	TP53	TP53AIP1	TP53BP2	TP63	TP73	TRAF2	TSC1	WT1	XRCC5
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	UPFH1132235	ENST00000551964.5	APAF1	ENSG00000120868	apoptotic peptidase activating factor 1 Source HGNC Symbol Acc HGNC 576
A02	UPFH1132252	ENST00000527805.5	ATM	ENSG00000149311	ATM serine/threonine kinase Source HGNC Symbol Acc HGNC 795
A03	UPFH1132260	ENST00000350721.9	ATR	ENSG00000175054	ATR serine/threonine kinase Source HGNC Symbol Acc HGNC 882
A04	UPFH0051538	ENST00000323289.6	ADGRB1	ENSG00000181790	adhesion G protein-coupled receptor B1 Source HGNC Symbol Acc HGNC 943
A05	UPFH0540159	ENST00000293288.12	BAX	ENSG00000087088	BCL2 associated X, apoptosis regulator Source HGNC Symbol Acc HGNC 959
A06	UPFH0224436	ENST00000439096.2	BBC3	ENSG00000105327	BCL2 binding component 3 Source HGNC Symbol Acc HGNC 17868
A07	UPFH1132900	ENST00000333681.5	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
A08	UPFH1132270	ENST00000335661.6	BCL2A1	ENSG00000140379	BCL2 related protein A1 Source HGNC Symbol Acc HGNC 991
A09	UPFH0184066	ENST00000622694.4	BID	ENSG00000015475	BH3 interacting domain death agonist Source HGNC Symbol Acc HGNC 1050
A10	UPFH1132779	ENST00000301633.8	BIRC5	ENSG00000089685	baculoviral IAP repeat containing 5 Source HGNC Symbol Acc HGNC 593
A11	UPFH1132279	ENST00000461574.1	BRCA1	ENSG00000012048	BRCA1, DNA repair associated Source HGNC Symbol Acc HGNC 1100
A12	UPFH0304950	ENST00000544455.5	BRCA2	ENSG00000139618	BRCA2, DNA repair associated Source HGNC Symbol Acc HGNC 1101
B01	UPFH1132281	ENST00000290551.5	BTG2	ENSG00000159388	BTG anti-proliferation factor 2 Source HGNC Symbol Acc HGNC 1131
B02	UPFH0459272	ENST00000350623.7	CASP2	ENSG00000106144	caspase 2 Source HGNC Symbol Acc HGNC 1503
B03	UPFH0083593	ENST00000440484.1	CASP9	ENSG00000132906	caspase 9 Source HGNC Symbol Acc HGNC 1511
B04	UPFH1132293	ENST00000505500.5	CCNB1	ENSG00000134057	cyclin B1 Source HGNC Symbol Acc HGNC 1579
B05	UPFH1132297	ENST00000444983.6	CCNE1	ENSG00000105173	cyclin E1 Source HGNC Symbol Acc HGNC 1589
B06	UPFH1132299	ENST00000510664.5	CCNG1	ENSG00000113328	cyclin G1 Source HGNC Symbol Acc HGNC 1592
B07	UPFH1132301	ENST00000504878.1	CCNH	ENSG00000134480	cyclin H Source HGNC Symbol Acc HGNC 1594
B08	UPFH0432792	ENST00000302506.7	CDC25A	ENSG00000164045	cell division cycle 25A Source HGNC Symbol Acc HGNC 1725
B09	UPFH1132304	ENST00000513970.5	CDC25C	ENSG00000158402	cell division cycle 25C Source HGNC Symbol Acc HGNC 1727
B10	UPFH1132307	ENST00000614696.4	CDK1	ENSG00000170312	cyclin dependent kinase 1 Source HGNC Symbol Acc HGNC 1722
B11	UPFH0291148	ENST00000549606.5	CDK4	ENSG00000135446	cyclin dependent kinase 4 Source HGNC Symbol Acc HGNC 1773
B12	UPFH0312181	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
C01	UPFH0246593	ENST00000494262.5	CDKN2A	ENSG00000147889	cyclin dependent kinase inhibitor 2A Source HGNC Symbol Acc HGNC 1787
C02	UPFH1132313	ENST00000427383.6	CHEK1	ENSG00000149554	checkpoint kinase 1 Source HGNC Symbol Acc HGNC 1925
C03	UPFH1132314	ENST00000439200.5	CHEK2	ENSG00000183765	checkpoint kinase 2 Source HGNC Symbol Acc HGNC 16627
C04	UPFH1132335	ENST00000332896.8	CRADD	ENSG00000169372	CASP2 and RIPK1 domain containing adaptor with death domain Source HGNC Symbol Acc HGNC 2340
C05	UPFH1132365	ENST00000359526.9	DNMT1	ENSG00000130816	DNA methyltransferase 1 Source HGNC Symbol Acc HGNC 2976
C06	UPFH1132375	ENST00000343380.6	E2F1	ENSG00000101412	E2F transcription factor 1 Source HGNC Symbol Acc HGNC 3113
C07	UPFH0317034	ENST00000613242.4	E2F3	ENSG00000112242	E2F transcription factor 3 Source HGNC Symbol Acc HGNC 3115
C08	UPFH1132381	ENST00000420316.6	EGFR	ENSG00000146648	epidermal growth factor receptor Source HGNC Symbol Acc HGNC 3236
C09	UPFH0558832	ENST00000239938.5	EGR1	ENSG00000120738	early growth response 1 Source HGNC Symbol Acc HGNC 3238
C10	UPFH0043400	ENST00000527520.6	EI24	ENSG00000149547	EI24, autophagy associated transmembrane protein Source HGNC Symbol Acc HGNC 13276
		ENST00000206		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0599047	249.7	ESR1	091831	estrogen receptor 1 Source HGNC Symbol Acc HGNC 3467
C12	UPFH1132906	ENST00000301 838.4	FADD	ENSG00000 168040	Fas associated via death domain Source HGNC Symbol Acc HGNC 3573
D01	UPFH1132395	ENST00000357 339.6	FAS	ENSG00000 026103	Fas cell surface death receptor Source HGNC Symbol Acc HGNC 11920
D02	UPFH1132396	ENST00000367 721.3	FASLG	ENSG00000 117560	Fas ligand Source HGNC Symbol Acc HGNC 11936
D03	UPFH0442611	ENST00000540 898.1	FOXO3	ENSG00000 118689	forkhead box O3 Source HGNC Symbol Acc HGNC 3821
D04	UPFH1132413	ENST00000370 985.4	GADD45A	ENSG00000 116717	growth arrest and DNA damage inducible alpha Source HGNC Symbol Acc HGNC 4095
D05	UPFH0362067	ENST00000522 728.5	GML	ENSG00000 104499	glycosylphosphatidylinositol anchored molecule like Source HGNC Symbol Acc HGNC 4375
D06	UPFH1132434	ENST00000373 548.8	HDAC1	ENSG00000 116478	histone deacetylase 1 Source HGNC Symbol Acc HGNC 4852
D07	UPFH1132910	ENST00000409 174.1	HK2	ENSG00000 159399	hexokinase 2 Source HGNC Symbol Acc HGNC 4923
D08	UPFH0237955	ENST00000650 285.1	IGF1R	ENSG00000 140443	insulin like growth factor 1 receptor Source HGNC Symbol Acc HGNC 5465
D09	UPFH1172910	ENST00000258 743.10	IL6	ENSG00000 136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D10	UPFH0569765	ENST00000371 222.3	JUN	ENSG00000 177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D11	UPFH0515603	ENST00000263 754.5	KAT2B	ENSG00000 114166	lysine acetyltransferase 2B Source HGNC Symbol Acc HGNC 8638
D12	UPFH0376060	ENST00000557 334.5	KRAS	ENSG00000 133703	KRAS proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 6407
E01	UPFH1132538	ENST00000369 026.3	MCL1	ENSG00000 143384	MCL1, BCL2 family apoptosis regulator Source HGNC Symbol Acc HGNC 6943
E02	UPFH1132546	ENST00000393 416.6	MDM2	ENSG00000 135679	MDM2 proto-oncogene Source HGNC Symbol Acc HGNC 6973
E03	UPFH0266550	ENST00000367 180.5	MDM4	ENSG00000 198625	MDM4, p53 regulator Source HGNC Symbol Acc HGNC 6974
E04	UPFH0346001	ENST00000231 790.6	MLH1	ENSG00000 076242	mutL homolog 1 Source HGNC Symbol Acc HGNC 7127
E05	UPFH0051784	ENST00000233 146.6	MSH2	ENSG00000 095002	mutS homolog 2 Source HGNC Symbol Acc HGNC 7325
E06	UPFH1132563	ENST00000517 291.1	MYC	ENSG00000 136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
E07	UPFH0179986	ENST00000250 003.4	MYOD1	ENSG00000 129152	myogenic differentiation 1 Source HGNC Symbol Acc HGNC 7611
E08	UPFH0158363	ENST00000431 387.8	NF1	ENSG00000 196712	neurofibromin 1 Source HGNC Symbol Acc HGNC 7765
E09	UPFH1132828	ENST00000226 574.9	NFKB1	ENSG00000 109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E10	UPFH1132607	ENST00000379 160.3	PCNA	ENSG00000 132646	proliferating cell nuclear antigen Source HGNC Symbol Acc HGNC 8729
E11	UPFH0080607	ENST00000347 755.10	PIDD1	ENSG00000 177595	p53-induced death domain protein 1 Source HGNC Symbol Acc HGNC 16491
E12	UPFH0483639	ENST00000305 921.7	PPM1D	ENSG00000 170836	protein phosphatase, Mg2+/Mn2+ dependent 1D Source HGNC Symbol Acc HGNC 9277
F01	UPFH0179791	ENST00000417 173.6	PRC1	ENSG00000 198901	protein regulator of cytokinesis 1 Source HGNC Symbol Acc HGNC 9341
F02	UPFH0607768	ENST00000578 063.5	PRKCA	ENSG00000 154229	protein kinase C alpha Source HGNC Symbol Acc HGNC 9393
F03	UPFH1132982	ENST00000371 953.8	PTEN	ENSG00000 171862	phosphatase and tensin homolog Source HGNC Symbol Acc HGNC 9588
F04	UPFH0208370	ENST00000520 452.5	PTTG1	ENSG00000 164611	pituitary tumor-transforming 1 Source HGNC Symbol Acc HGNC 9690
F05	UPFH0001483	ENST00000267 163.5	RB1	ENSG00000 139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
F06	UPFH1132884	ENST00000615 805.4	RELA	ENSG00000 173039	RELA proto-oncogene, NF-kB subunit Source HGNC Symbol Acc HGNC 9955
F07	UPFH0256899	ENST00000325 926.4	RPRM	ENSG00000 177519	reprimo, TP53 dependent G2 arrest mediator homolog Source HGNC Symbol Acc HGNC 24201
F08	UPFH0011537	ENST00000253 063.4	SESN2	ENSG00000 130766	sestrin 2 Source HGNC Symbol Acc HGNC 20746
F09	UPFH0471946	ENST00000563 745.1	SIAH1	ENSG00000 196470	siah E3 ubiquitin protein ligase 1 Source HGNC Symbol Acc HGNC 10857
F10	UPFH0388476	ENST00000212 015.11	SIRT1	ENSG00000 096717	sirtuin 1 Source HGNC Symbol Acc HGNC 14929

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH1132696	ENST00000392323.6	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
F12	UPFH1125824	ENST00000492103.1	TADA3	ENSG00000171148	transcriptional adaptor 3 Source HGNC Symbol Acc HGNC 19422
G01	UPFH1132978	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G02	UPFH1132850	ENST00000347739.3	TNFRSF10B	ENSG00000120889	TNF receptor superfamily member 10b Source HGNC Symbol Acc HGNC 11905
G03	UPFH0363243	ENST00000312584.4	TNFRSF10D	ENSG00000173530	TNF receptor superfamily member 10d Source HGNC Symbol Acc HGNC 11907
G04	UPFH0565795	ENST00000269305.8	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G05	UPFH0208710	ENST00000458238.6	TP53AIP1	ENSG00000120471	tumor protein p53 regulated apoptosis inducing protein 1 Source HGNC Symbol Acc HGNC 29984
G06	UPFH0097395	ENST00000391878.6	TP53BP2	ENSG00000143514	tumor protein p53 binding protein 2 Source HGNC Symbol Acc HGNC 12000
G07	UPFH0248912	ENST00000418709.6	TP63	ENSG00000073282	tumor protein p63 Source HGNC Symbol Acc HGNC 15979
G08	UPFH1132927	ENST00000354437.8	TP73	ENSG00000078900	tumor protein p73 Source HGNC Symbol Acc HGNC 12003
G09	UPFH1132855	ENST00000247668.7	TRAF2	ENSG00000127191	TNF receptor associated factor 2 Source HGNC Symbol Acc HGNC 12032
G10	UPFH0485358	ENST00000642745.1	TSC1	ENSG00000165699	TSC complex subunit 1 Source HGNC Symbol Acc HGNC 12362
G11	UPFH0122271	ENST00000527882.5	WT1	ENSG00000184937	Wilms tumor 1 Source HGNC Symbol Acc HGNC 12796
G12	UPFH0135513	ENST00000392132.7	XRCC5	ENSG00000079246	X-ray repair cross complementing 5 Source HGNC Symbol Acc HGNC 12833
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.