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

Human Primary Cilia

Cat. no. 249955 UPHS-127ZA

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	ADCY3	ADCY7	AHI1	AKT1	ALMS1	ARL13B	ARL6	AVPR2	AXIN2	BBS1	BBS2	BBS4
B	BBS7	BTRC	CC2D2A	CCND1	CDC42	CDK5RAP2	CDKN1A	CEP290	DVL1	DYNC2LI1	FAT4	FJX1
C	FOS	FUZ	FZD1	GLI1	GLI2	GLI3	GLIS2	GSK3B	HNF1B	HTR6	IFT172	IFT20
D	IFT74	IFT80	IFT88	IGF1	IHH	INS	INTU	INVS	IQCB1	ITGB1	KIF3A	KIF3B
E	KRAS	LRP2	MAP2K1	MAPK1	MKKS	MKS1	MOS	MTOR	NEK8	NPHP1	NPHP3	OFD1
F	PDGFRA	PIK3CA	PKD1	PKD2	PKHD1	PRKCA	PTCH1	PTPN5	RAB23	RHOA	ROCK2	RPGRIP1L
G	SHH	SMO	SSTR3	SUFU	TMEM67	TP53	TSC1	TSC2	TTC8	VANGL2	WNT9B	WWTR1
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	UPFH0040651	ENST00000606682.5	ADCY3	ENSG00000138031	adenylate cyclase 3 Source HGNC Symbol Acc HGNC 234
A02	UPFH0387575	ENST00000564044.5	ADCY7	ENSG00000121281	adenylate cyclase 7 Source HGNC Symbol Acc HGNC 238
A03	UPFH0503987	ENST00000265602.11	AHI1	ENSG00000135541	Abelson helper integration site 1 Source HGNC Symbol Acc HGNC 21575
A04	UPFH0453992	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A05	UPFH0399374	ENST00000620466.4	ALMS1	ENSG00000116127	ALMS1, centrosome and basal body associated protein Source HGNC Symbol Acc HGNC 428
A06	UPFH0481039	ENST00000335438.7	ARL13B	ENSG00000169379	ADP ribosylation factor like GTPase 13B Source HGNC Symbol Acc HGNC 25419
A07	UPFH0123922	ENST00000463745.6	ARL6	ENSG00000113966	ADP ribosylation factor like GTPase 6 Source HGNC Symbol Acc HGNC 13210
A08	UPFH0037447	ENST00000430697.1	AVPR2	ENSG00000126895	arginine vasopressin receptor 2 Source HGNC Symbol Acc HGNC 897
A09	UPFH1132263	ENST00000375702.5	AXIN2	ENSG00000168646	axin 2 Source HGNC Symbol Acc HGNC 904
A10	UPFH0305362	ENST00000533557.5	BBS1	ENSG00000174483	Bardet-Biedl syndrome 1 Source HGNC Symbol Acc HGNC 966
A11	UPFH0420829	ENST00000561951.5	BBS2	ENSG00000125124	Bardet-Biedl syndrome 2 Source HGNC Symbol Acc HGNC 967
A12	UPFH0182639	ENST00000569338.5	BBS4	ENSG00000140463	Bardet-Biedl syndrome 4 Source HGNC Symbol Acc HGNC 969
B01	UPFH0173408	ENST00000502444.1	BBS7	ENSG00000138686	Bardet-Biedl syndrome 7 Source HGNC Symbol Acc HGNC 18758
B02	UPFH0358747	ENST00000370187.8	BTRC	ENSG00000166167	beta-transducin repeat containing E3 ubiquitin protein ligase Source HGNC Symbol Acc HGNC 1144
B03	UPFH0101188	ENST00000514450.2	CC2D2A	ENSG00000048342	coiled-coil and C2 domain containing 2A Source HGNC Symbol Acc HGNC 29253
B04	UPFH0430337	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B05	UPFH0571108	ENST00000400259.5	CDC42	ENSG00000070831	cell division cycle 42 Source HGNC Symbol Acc HGNC 1736
B06	UPFH0347793	ENST00000360822.7	CDK5RAP2	ENSG00000136861	CDK5 regulatory subunit associated protein 2 Source HGNC Symbol Acc HGNC 18672
B07	UPFH0312181	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
B08	UPFH0424430	ENST00000604024.5	CEP290	ENSG00000198707	centrosomal protein 290 Source HGNC Symbol Acc HGNC 29021
B09	UPFH0264310	ENST00000378891.9	DVL1	ENSG00000107404	dishevelled segment polarity protein 1 Source HGNC Symbol Acc HGNC 3084
B10	UPFH0166284	ENST00000378587.3	DYNC2LI1	ENSG00000138036	dynein cytoplasmic 2 light intermediate chain 1 Source HGNC Symbol Acc HGNC 24595
B11	UPFH0156082	ENST00000335110.5	FAT4	ENSG00000196159	FAT atypical cadherin 4 Source HGNC Symbol Acc HGNC 23109
B12	UPFH0242364	ENST00000317811.5	FJX1	ENSG00000179431	four-jointed box kinase 1 Source HGNC Symbol Acc HGNC 17166
C01	UPFH1132401	ENST00000555242.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
C02	UPFH0303246	ENST00000526575.1	FUZ	ENSG00000010361	fuzzy planar cell polarity protein Source HGNC Symbol Acc HGNC 26219
C03	UPFH0039775	ENST00000287934.3	FZD1	ENSG00000157240	frizzled class receptor 1 Source HGNC Symbol Acc HGNC 4038
C04	UPFH0266526	ENST00000546141.5	GLI1	ENSG00000111087	GLI family zinc finger 1 Source HGNC Symbol Acc HGNC 4317
C05	UPFH0462614	ENST00000435313.6	GLI2	ENSG00000074047	GLI family zinc finger 2 Source HGNC Symbol Acc HGNC 4318
C06	UPFH0025980	ENST00000479210.1	GLI3	ENSG00000106571	GLI family zinc finger 3 Source HGNC Symbol Acc HGNC 4319
C07	UPFH1125105	ENST00000433375.1	GLIS2	ENSG00000126603	GLIS family zinc finger 2 Source HGNC Symbol Acc HGNC 29450
C08	UPFH0470775	ENST00000316626.5	GSK3B	ENSG00000082701	glycogen synthase kinase 3 beta Source HGNC Symbol Acc HGNC 4617
C09	UPFH0487664	ENST00000617811.5	HNF1B	ENSG00000275410	HNF1 homeobox B Source HGNC Symbol Acc HGNC 11630
C10	UPFH0555332	ENST00000289753.2	HTR6	ENSG00000158748	5-hydroxytryptamine receptor 6 Source HGNC Symbol Acc HGNC 5301
		ENST00000359		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0425164	466.10	IFT172	138002	intraflagellar transport 172 Source HGNC Symbol Acc HGNC 30391
C12	UPFH0402777	ENST00000582797.5	IFT20	ENSG00000109083	intraflagellar transport 20 Source HGNC Symbol Acc HGNC 30989
D01	UPFH0110698	ENST00000433700.5	IFT74	ENSG00000096872	intraflagellar transport 74 Source HGNC Symbol Acc HGNC 21424
D02	UPFH0062989	ENST00000478370.5	IFT80	ENSG00000068885	intraflagellar transport 80 Source HGNC Symbol Acc HGNC 29262
D03	UPFH0281963	ENST00000319980.10	IFT88	ENSG00000032742	intraflagellar transport 88 Source HGNC Symbol Acc HGNC 20606
D04	UPFH0229443	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D05	UPFH0570027	ENST00000295731.7	IHH	ENSG00000163501	Indian hedgehog signaling molecule Source HGNC Symbol Acc HGNC 5956
D06	UPFH1132488	ENST00000381330.4	INS	ENSG00000254647	insulin Source HGNC Symbol Acc HGNC 6081
D07	UPFH0351134	ENST00000506283.1	INTU	ENSG00000164066	inturned planar cell polarity protein Source HGNC Symbol Acc HGNC 29239
D08	UPFH0615911	ENST00000262457.7	INVS	ENSG00000119509	inversin Source HGNC Symbol Acc HGNC 17870
D09	UPFH0143038	ENST00000460108.5	IQCB1	ENSG00000173226	IQ motif containing B1 Source HGNC Symbol Acc HGNC 28949
D10	UPFH1132498	ENST00000423113.5	ITGB1	ENSG00000150093	integrin subunit beta 1 Source HGNC Symbol Acc HGNC 6153
D11	UPFH0050465	ENST00000450441.5	KIF3A	ENSG00000131437	kinesin family member 3A Source HGNC Symbol Acc HGNC 6319
D12	UPFH0349193	ENST00000375712.4	KIF3B	ENSG00000101350	kinesin family member 3B Source HGNC Symbol Acc HGNC 6320
E01	UPFH0376060	ENST00000557334.5	KRAS	ENSG00000133703	KRAS proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 6407
E02	UPFH0410908	ENST00000443831.1	LRP2	ENSG00000081479	LDL receptor related protein 2 Source HGNC Symbol Acc HGNC 6694
E03	UPFH1132932	ENST00000307102.9	MAP2K1	ENSG00000169032	mitogen-activated protein kinase kinase 1 Source HGNC Symbol Acc HGNC 6840
E04	UPFH0366815	ENST00000215832.10	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
E05	UPFH0035073	ENST00000399054.6	MKKS	ENSG00000125863	McKusick-Kaufman syndrome Source HGNC Symbol Acc HGNC 7108
E06	UPFH0457151	ENST00000393119.6	MKS1	ENSG00000011143	Meckel syndrome, type 1 Source HGNC Symbol Acc HGNC 7121
E07	UPFH0497427	ENST00000311923.1	MOS	ENSG00000172680	MOS proto-oncogene, serine/threonine kinase Source HGNC Symbol Acc HGNC 7199
E08	UPFH1132560	ENST00000361445.8	MTOR	ENSG00000198793	mechanistic target of rapamycin kinase Source HGNC Symbol Acc HGNC 3942
E09	UPFH0528998	ENST00000581000.1	NEK8	ENSG00000160602	NIMA related kinase 8 Source NCBI gene Acc 284086
E10	UPFH0396545	ENST00000316534.8	NPHP1	ENSG00000144061	nephrocystin 1 Source HGNC Symbol Acc HGNC 7905
E11	UPFH0303324	ENST00000512094.5	NPHP3	ENSG00000113971	nephrocystin 3 Source HGNC Symbol Acc HGNC 7907
E12	UPFH0595347	ENST00000340096.11	OFD1	ENSG00000046651	OFD1, centriole and centriolar satellite protein Source HGNC Symbol Acc HGNC 2567
F01	UPFH1132609	ENST00000508170.5	PDGFRA	ENSG00000134853	platelet derived growth factor receptor alpha Source HGNC Symbol Acc HGNC 8803
F02	UPFH0109251	ENST00000462255.1	PIK3CA	ENSG00000121879	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source HGNC Symbol Acc HGNC 8975
F03	UPFH0279277	ENST00000483558.5	PKD1	ENSG00000008710	polycystin 1, transient receptor potential channel interacting Source HGNC Symbol Acc HGNC 9008
F04	UPFH0219499	ENST00000508588.5	PKD2	ENSG00000118762	polycystin 2, transient receptor potential cation channel Source HGNC Symbol Acc HGNC 9009
F05	UPFH0372407	ENST00000371117.7	PKHD1	ENSG00000170927	PKHD1, fibrocystin/polyductin Source HGNC Symbol Acc HGNC 9016
F06	UPFH0607768	ENST00000578063.5	PRKCA	ENSG00000154229	protein kinase C alpha Source HGNC Symbol Acc HGNC 9393
F07	UPFH0155270	ENST00000331920.10	PTCH1	ENSG00000185920	patched 1 Source HGNC Symbol Acc HGNC 9585
F08	UPFH0100140	ENST00000477854.5	PTPN5	ENSG00000110786	protein tyrosine phosphatase, non-receptor type 5 Source HGNC Symbol Acc HGNC 9657
F09	UPFH0466422	ENST00000317483.4	RAB23	ENSG00000112210	RAB23, member RAS oncogene family Source HGNC Symbol Acc HGNC 14263
F10	UPFH1132657	ENST00000445425.4	RHOA	ENSG00000067560	ras homolog family member A Source HGNC Symbol Acc HGNC 667

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0472235	ENST00000462366.1	ROCK2	ENSG00000134318	Rho associated coiled-coil containing protein kinase 2 Source HGNC Symbol Acc HGNC 10252
F12	UPFH0012988	ENST00000262135.9	RPGRIP1L	ENSG00000103494	RPGRIP1 like Source HGNC Symbol Acc HGNC 29168
G01	UPFH0252724	ENST00000430104.5	SHH	ENSG00000164690	sonic hedgehog signaling molecule Source HGNC Symbol Acc HGNC 10848
G02	UPFH0104215	ENST00000462420.2	SMO	ENSG00000128602	smoothened, frizzled class receptor Source HGNC Symbol Acc HGNC 11119
G03	UPFH0325538	ENST00000617123.1	SSTR3	ENSG00000278195	somatostatin receptor 3 Source HGNC Symbol Acc HGNC 11332
G04	UPFH0106393	ENST00000471000.1	SUFU	ENSG00000107882	SUFU negative regulator of hedgehog signaling Source HGNC Symbol Acc HGNC 16466
G05	UPFH0570761	ENST00000323130.7	TMEM67	ENSG00000164953	transmembrane protein 67 Source HGNC Symbol Acc HGNC 28396
G06	UPFH0565795	ENST00000269305.8	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G07	UPFH0485358	ENST00000642745.1	TSC1	ENSG00000165699	TSC complex subunit 1 Source HGNC Symbol Acc HGNC 12362
G08	UPFH0065391	ENST00000643088.1	TSC2	ENSG00000103197	TSC complex subunit 2 Source HGNC Symbol Acc HGNC 12363
G09	UPFH0501120	ENST00000358622.9	TTC8	ENSG00000165533	tetratricopeptide repeat domain 8 Source HGNC Symbol Acc HGNC 20087
G10	UPFH1132754	ENST00000368061.3	VANGL2	ENSG00000162738	VANGL planar cell polarity protein 2 Source HGNC Symbol Acc HGNC 15511
G11	UPFH0059858	ENST00000575372.5	WNT9B	ENSG00000158955	Wnt family member 9B Source HGNC Symbol Acc HGNC 12779
G12	UPFH0220678	ENST00000465804.5	WWTR1	ENSG00000018408	WW domain containing transcription regulator 1 Source HGNC Symbol Acc HGNC 24042
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.