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

Human Diabetes

Cat. no. 249955 UPHS-023ZA

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	ABCC8	ACE	ACLY	ADRB3	AGT	AKT2	AQP2	CCL5	CCR2	CD28	CEACAM1	CEBPA
B	CTLA4	DUSP4	ENPP1	FBP1	FOXC2	FOXG1	FOXP3	G6PC	G6PD	GCG	GCGR	GCK
C	GLP1R	GPD1	GSK3B	HMOX1	HNF1B	HNF4A	ICAM1	IDE	IFNG	IGFBP5	IKBKB	IL10
D	IL12B	IL4R	IL6	INPPL1	INS	INSR	IRS1	IRS2	MAPK14	MAPK8	ME1	NEUROD1
E	NFKB1	NKX2-1	NOS3	NRF1	NSF	PARP1	PDX1	PIK3C2B	PIK3CD	PIK3R1	PPARA	PPARG
F	PPARGC1A	PPARGC1B	PRKAA1	PRKAG2	PRKCB	PTPN1	PYGL	RAB4A	RETN	SELL	SLC2A4	SNAP23
G	SNAP25	SREBF1	STX4	STXBP1	STXBP2	TGFB1	TNF	TNFRSF1A	TRIB3	VAMP3	VAPA	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	UPFH0308825	ENST00000532728.6	ABCC8	ENSG00000006071	ATP binding cassette subfamily C member 8 Source HGNC Symbol Acc HGNC 59
A02	UPFH1132210	ENST00000428043.5	ACE	ENSG00000159640	angiotensin I converting enzyme Source HGNC Symbol Acc HGNC 2707
A03	UPFH1132862	ENST00000537919.5	ACLY	ENSG00000131473	ATP citrate lyase Source HGNC Symbol Acc HGNC 115
A04	UPFH0554763	ENST00000520341.2	ADRB3	ENSG00000188778	adrenoceptor beta 3 Source HGNC Symbol Acc HGNC 288
A05	UPFH1132773	ENST00000366667.5	AGT	ENSG00000135744	angiotensinogen Source HGNC Symbol Acc HGNC 333
A06	UPFH0246744	ENST00000441941.6	AKT2	ENSG00000105221	AKT serine/threonine kinase 2 Source HGNC Symbol Acc HGNC 392
A07	UPFH0471106	ENST00000199280.3	AQP2	ENSG00000167580	aquaporin 2 Source HGNC Symbol Acc HGNC 634
A08	UPFH1132786	ENST00000603197.6	CCL5	ENSG00000271503	C-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10632
A09	UPFH0175349	ENST00000445132.2	CCR2	ENSG00000121807	C-C motif chemokine receptor 2 Source HGNC Symbol Acc HGNC 1603
A10	UPFH0310921	ENST00000458610.6	CD28	ENSG00000178562	CD28 molecule Source HGNC Symbol Acc HGNC 1653
A11	UPFH0400615	ENST00000403444.7	CEACAM1	ENSG00000079385	carcinoembryonic antigen related cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 1814
A12	UPFH0223943	ENST00000498907.3	CEBPA	ENSG00000245848	CCAAT enhancer binding protein alpha Source HGNC Symbol Acc HGNC 1833
B01	UPFH0603710	ENST00000427473.3	CTLA4	ENSG00000163599	cytotoxic T-lymphocyte associated protein 4 Source HGNC Symbol Acc HGNC 2505
B02	UPFH0575561	ENST00000240101.2	DUSP4	ENSG00000120875	dual specificity phosphatase 4 Source HGNC Symbol Acc HGNC 3070
B03	UPFH0098375	ENST00000650437.1	ENPP1	ENSG00000197594	ectonucleotide pyrophosphatase/phosphodiesterase 1 Source HGNC Symbol Acc HGNC 3356
B04	UPFH1132397	ENST00000415431.5	FBP1	ENSG00000165140	fructose-bisphosphatase 1 Source HGNC Symbol Acc HGNC 3606
B05	UPFH0518784	ENST00000649859.1	FOXC2	ENSG00000176692	forkhead box C2 Source HGNC Symbol Acc HGNC 3801
B06	UPFH0039193	ENST00000637220.1	FOXG1	ENSG00000176165	forkhead box G1 Source HGNC Symbol Acc HGNC 3811
B07	UPFH1132403	ENST00000557224.6	FOXP3	ENSG00000049768	forkhead box P3 Source HGNC Symbol Acc HGNC 6106
B08	UPFH0468561	ENST00000253801.6	G6PC	ENSG00000131482	glucose-6-phosphatase catalytic subunit Source HGNC Symbol Acc HGNC 4056
B09	UPFH0397211	ENST00000621232.5	G6PD	ENSG00000160211	glucose-6-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4057
B10	UPFH0034982	ENST00000418842.7	GCG	ENSG00000115263	glucagon Source HGNC Symbol Acc HGNC 4191
B11	UPFH0164429	ENST00000573428.1	GCGR	ENSG00000215644	glucagon receptor Source HGNC Symbol Acc HGNC 4192
B12	UPFH0335565	ENST00000395796.7	GCK	ENSG00000106633	glucokinase Source HGNC Symbol Acc HGNC 4195
C01	UPFH0517316	ENST00000373256.5	GLP1R	ENSG00000112164	glucagon like peptide 1 receptor Source HGNC Symbol Acc HGNC 4324
C02	UPFH0126857	ENST00000548152.1	GPD1	ENSG00000167588	glycerol-3-phosphate dehydrogenase 1 Source HGNC Symbol Acc HGNC 4455
C03	UPFH0470775	ENST00000316626.5	GSK3B	ENSG00000082701	glycogen synthase kinase 3 beta Source HGNC Symbol Acc HGNC 4617
C04	UPFH0433285	ENST00000216117.9	HMOX1	ENSG00000100292	heme oxygenase 1 Source HGNC Symbol Acc HGNC 5013
C05	UPFH0487664	ENST00000617811.5	HNF1B	ENSG00000275410	HNF1 homeobox B Source HGNC Symbol Acc HGNC 11630
C06	UPFH0223088	ENST00000372920.1	HNF4A	ENSG00000101076	hepatocyte nuclear factor 4 alpha Source HGNC Symbol Acc HGNC 5024
C07	UPFH1132462	ENST00000264832.8	ICAM1	ENSG00000090339	intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344
C08	UPFH0465385	ENST00000650060.1	IDE	ENSG00000119912	insulin degrading enzyme Source HGNC Symbol Acc HGNC 5381
C09	UPFH1132473	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
C10	UPFH1132475	ENST00000449583.1	IGFBP5	ENSG00000115461	insulin like growth factor binding protein 5 Source HGNC Symbol Acc HGNC 5474
		ENST00000649		ENSG00000	inhibitor of nuclear factor kappa B kinase subunit beta Source HGNC Symbol

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0596293	612.2	IKBKB	104365	Acc HGNC 5960
C12	UPFH0028177	ENST00000423557.1	IL10	ENSG00000136634	interleukin 10 Source HGNC Symbol Acc HGNC 5962
D01	UPFH0131869	ENST00000231228.2	IL12B	ENSG00000113302	interleukin 12B Source HGNC Symbol Acc HGNC 5970
D02	UPFH0363455	ENST00000563886.1	IL4R	ENSG00000077238	interleukin 4 receptor Source HGNC Symbol Acc HGNC 6015
D03	UPFH1172910	ENST00000258743.10	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D04	UPFH0143616	ENST00000535985.1	INPPL1	ENSG00000165458	inositol polyphosphate phosphatase like 1 Source HGNC Symbol Acc HGNC 6080
D05	UPFH1132488	ENST00000381330.4	INS	ENSG00000254647	insulin Source HGNC Symbol Acc HGNC 6081
D06	UPFH0483358	ENST00000598216.1	INSR	ENSG00000171105	insulin receptor Source HGNC Symbol Acc HGNC 6091
D07	UPFH0592509	ENST00000305123.5	IRS1	ENSG00000169047	insulin receptor substrate 1 Source HGNC Symbol Acc HGNC 6125
D08	UPFH0575069	ENST00000375856.5	IRS2	ENSG00000185950	insulin receptor substrate 2 Source HGNC Symbol Acc HGNC 6126
D09	UPFH0068247	ENST00000229795.7	MAPK14	ENSG00000112062	mitogen-activated protein kinase 14 Source HGNC Symbol Acc HGNC 6876
D10	UPFH1132535	ENST00000374179.8	MAPK8	ENSG00000107643	mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881
D11	UPFH0524328	ENST00000369705.4	ME1	ENSG00000065833	malic enzyme 1 Source HGNC Symbol Acc HGNC 6983
D12	UPFH0416171	ENST00000496876.1	NEUROD1	ENSG00000162992	neuronal differentiation 1 Source HGNC Symbol Acc HGNC 7762
E01	UPFH1132828	ENST00000226574.9	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E02	UPFH0080778	ENST00000522719.2	NKX2-1	ENSG00000136352	NK2 homeobox 1 Source HGNC Symbol Acc HGNC 11825
E03	UPFH1132897	ENST00000297494.8	NOS3	ENSG00000164867	nitric oxide synthase 3 Source HGNC Symbol Acc HGNC 7876
E04	UPFH0153972	ENST00000311967.6	NRF1	ENSG00000106459	nuclear respiratory factor 1 Source HGNC Symbol Acc HGNC 7996
E05	UPFH0168333	ENST00000571864.5	NSF	ENSG00000073969	N-ethylmaleimide sensitive factor, vesicle fusing ATPase Source HGNC Symbol Acc HGNC 8016
E06	UPFH0203594	ENST00000490921.5	PARP1	ENSG00000143799	poly(ADP-ribose) polymerase 1 Source HGNC Symbol Acc HGNC 270
E07	UPFH0537958	ENST00000381033.5	PDX1	ENSG00000139515	pancreatic and duodenal homeobox 1 Source HGNC Symbol Acc HGNC 6107
E08	UPFH0606629	ENST00000429009.1	PIK3C2B	ENSG00000133056	phosphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 beta Source HGNC Symbol Acc HGNC 8972
E09	UPFH0157436	ENST00000361110.6	PIK3CD	ENSG00000171608	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta Source HGNC Symbol Acc HGNC 8977
E10	UPFH0549122	ENST00000521381.6	PIK3R1	ENSG00000145675	phosphoinositide-3-kinase regulatory subunit 1 Source HGNC Symbol Acc HGNC 8979
E11	UPFH0327373	ENST00000262735.9	PPARA	ENSG00000186951	peroxisome proliferator activated receptor alpha Source HGNC Symbol Acc HGNC 9232
E12	UPFH0284890	ENST00000477039.5	PPARG	ENSG00000132170	peroxisome proliferator activated receptor gamma Source HGNC Symbol Acc HGNC 9236
F01	UPFH0403608	ENST00000264867.7	PPARGC1A	ENSG00000109819	PPARG coactivator 1 alpha Source HGNC Symbol Acc HGNC 9237
F02	UPFH0004689	ENST00000394320.7	PPARGC1B	ENSG00000155846	PPARG coactivator 1 beta Source HGNC Symbol Acc HGNC 30022
F03	UPFH0363221	ENST00000397128.6	PRKAA1	ENSG00000132356	protein kinase AMP-activated catalytic subunit alpha 1 Source HGNC Symbol Acc HGNC 9376
F04	UPFH0382293	ENST00000287878.9	PRKAG2	ENSG00000106617	protein kinase AMP-activated non-catalytic subunit gamma 2 Source HGNC Symbol Acc HGNC 9386
F05	UPFH0529104	ENST00000646168.1	PRKCB	ENSG00000166501	protein kinase C beta Source HGNC Symbol Acc HGNC 9395
F06	UPFH0306220	ENST00000371621.5	PTPN1	ENSG00000196396	protein tyrosine phosphatase, non-receptor type 1 Source HGNC Symbol Acc HGNC 9642
F07	UPFH1132646	ENST00000544180.6	PYGL	ENSG00000100504	glycogen phosphorylase L Source HGNC Symbol Acc HGNC 9725
F08	UPFH1122805	ENST00000473894.1	RAB4A	ENSG00000168118	RAB4A, member RAS oncogene family Source HGNC Symbol Acc HGNC 9781
F09	UPFH0306767	ENST00000629642.1	RETN	ENSG00000104918	resistin Source HGNC Symbol Acc HGNC 20389
F10	UPFH0444664	ENST00000236147.5	SELL	ENSG00000188404	selectin L Source HGNC Symbol Acc HGNC 10720

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0163622	ENST00000317370.12	SLC2A4	ENSG00000181856	solute carrier family 2 member 4 Source HGNC Symbol Acc HGNC 11009
F12	UPFH0454442	ENST00000249647.8	SNAP23	ENSG00000092531	synaptosome associated protein 23 Source HGNC Symbol Acc HGNC 11131
G01	UPFH0251002	ENST00000495883.1	SNAP25	ENSG00000132639	synaptosome associated protein 25 Source HGNC Symbol Acc HGNC 11132
G02	UPFH0380685	ENST00000490796.1	SREBF1	ENSG00000072310	sterol regulatory element binding transcription factor 1 Source HGNC Symbol Acc HGNC 11289
G03	UPFH0450662	ENST00000313843.8	STX4	ENSG00000103496	syntaxin 4 Source HGNC Symbol Acc HGNC 11439
G04	UPFH0142618	ENST00000637173.2	STXBP1	ENSG00000136854	syntaxin binding protein 1 Source HGNC Symbol Acc HGNC 11444
G05	UPFH0604116	ENST00000595950.5	STXBP2	ENSG00000076944	syntaxin binding protein 2 Source HGNC Symbol Acc HGNC 11445
G06	UPFH0193430	ENST00000221930.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G07	UPFH1132978	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G08	UPFH1132732	ENST00000162749.6	TNFRSF1A	ENSG00000067182	TNF receptor superfamily member 1A Source HGNC Symbol Acc HGNC 11916
G09	UPFH0237817	ENST00000217233.8	TRIB3	ENSG00000101255	tribbles pseudokinase 3 Source HGNC Symbol Acc HGNC 16228
G10	UPFH0214958	ENST00000470357.1	VAMP3	ENSG00000049245	vesicle associated membrane protein 3 Source HGNC Symbol Acc HGNC 12644
G11	UPFH0279607	ENST00000583879.5	VAPA	ENSG00000101558	VAMP associated protein A Source HGNC Symbol Acc HGNC 12648
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	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.