

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

Human Osmotic Stress

Cat. no. 249955 UPHS-151ZA

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	ABCB1	ADM	AGT	AGTR1	AKR1B1	AKT1	AQP1	AQP2	AQP3	AQP4	AQP5	AQP9
B	ATF4	ATP1A1	ATP1B1	AVP	CALR	CD9	CFTR	CRYAB	CCN2	DDIT3	DUSP1	EDN1
C	EGFR	EGR1	EGR3	FOS	GADD45A	GADD45B	GADD45G	GUCA2A	HMOX1	HSP90AA1	HSPA1A	HSPA4
D	HSPA4L	HSPA5	HSPB1	IL1B	CXCL8	INS	ITGB1	JUN	KCNJ1	LCN2	LTB	MAP2K2
E	MAP3K1	MAPK1	MAPK8	MLC1	NFAT5	NFKBIA	NOS3	NPR1	ODC1	OXT	PAK2	PAX2
F	PCK2	PDIA4	PLAT	PTK2	SGK1	SLC14A2	SLC2A1	SLC38A2	SLC5A3	SLC6A12	SLC6A6	SLC9A2
G	SLC9A3	SNAI1	SRC	TAT	TGFA	TNF	TP53	TPM4	TRPV4	VEGFA	VIM	ZFP36L1
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	UPFH0266833	ENST00000483831.1	ABCB1	ENSG00000085563	ATP binding cassette subfamily B member 1 Source HGNC Symbol Acc HGNC 40
A02	UPFH1172899	ENST00000528655.5	ADM	ENSG00000148926	adrenomedullin Source HGNC Symbol Acc HGNC 259
A03	UPFH1132773	ENST00000366667.5	AGT	ENSG00000135744	angiotensinogen Source HGNC Symbol Acc HGNC 333
A04	UPFH1132221	ENST00000418473.6	AGTR1	ENSG00000144891	angiotensin II receptor type 1 Source HGNC Symbol Acc HGNC 336
A05	UPFH1132223	ENST00000285930.9	AKR1B1	ENSG00000085662	aldo-keto reductase family 1 member B Source HGNC Symbol Acc HGNC 381
A06	UPFH0453992	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A07	UPFH1132239	ENST00000311813.10	AQP1	ENSG00000240583	aquaporin 1 (Colton blood group) Source HGNC Symbol Acc HGNC 633
A08	UPFH0471106	ENST00000199280.3	AQP2	ENSG00000167580	aquaporin 2 Source HGNC Symbol Acc HGNC 634
A09	UPFH0168530	ENST00000493581.1	AQP3	ENSG00000165272	aquaporin 3 (Gill blood group) Source HGNC Symbol Acc HGNC 636
A10	UPFH1132240	ENST00000383168.9	AQP4	ENSG00000171885	aquaporin 4 Source HGNC Symbol Acc HGNC 637
A11	UPFH0348877	ENST00000293599.7	AQP5	ENSG00000161798	aquaporin 5 Source HGNC Symbol Acc HGNC 638
A12	UPFH0173872	ENST00000558772.5	AQP9	ENSG00000103569	aquaporin 9 Source HGNC Symbol Acc HGNC 643
B01	UPFH1132244	ENST00000404241.6	ATF4	ENSG00000128272	activating transcription factor 4 Source HGNC Symbol Acc HGNC 786
B02	UPFH0142532	ENST00000488733.1	ATP1A1	ENSG00000163399	ATPase Na ⁺ /K ⁺ transporting subunit alpha 1 Source HGNC Symbol Acc HGNC 799
B03	UPFH0565565	ENST00000367815.8	ATP1B1	ENSG00000143153	ATPase Na ⁺ /K ⁺ transporting subunit beta 1 Source HGNC Symbol Acc HGNC 804
B04	UPFH0615974	ENST00000380293.3	AVP	ENSG00000101200	arginine vasopressin Source HGNC Symbol Acc HGNC 894
B05	UPFH0025967	ENST00000316448.9	CALR	ENSG00000179218	calreticulin Source HGNC Symbol Acc HGNC 1455
B06	UPFH0252582	ENST00000646407.1	CD9	ENSG000001010278	CD9 molecule Source HGNC Symbol Acc HGNC 1709
B07	UPFH0186636	ENST000000003084.10	CFTR	ENSG00000001626	cystic fibrosis transmembrane conductance regulator Source HGNC Symbol Acc HGNC 1884
B08	UPFH0205096	ENST00000527950.5	CRYAB	ENSG00000109846	crystallin alpha B Source HGNC Symbol Acc HGNC 2389
B09	UPFH1132340	ENST00000367976.4	CCN2	ENSG00000118523	cellular communication network factor 2 Source HGNC Symbol Acc HGNC 2500
B10	UPFH0523891	ENST00000346473.7	DDIT3	ENSG00000175197	DNA damage inducible transcript 3 Source HGNC Symbol Acc HGNC 2726
B11	UPFH1132372	ENST00000239223.4	DUSP1	ENSG00000120129	dual specificity phosphatase 1 Source HGNC Symbol Acc HGNC 3064
B12	UPFH1132801	ENST00000379375.6	EDN1	ENSG00000078401	endothelin 1 Source HGNC Symbol Acc HGNC 3176
C01	UPFH1132381	ENST00000420316.6	EGFR	ENSG00000146648	epidermal growth factor receptor Source HGNC Symbol Acc HGNC 3236
C02	UPFH0558832	ENST00000239938.5	EGR1	ENSG00000120738	early growth response 1 Source HGNC Symbol Acc HGNC 3238
C03	UPFH0445244	ENST00000522910.1	EGR3	ENSG00000179388	early growth response 3 Source HGNC Symbol Acc HGNC 3240
C04	UPFH1132401	ENST00000555242.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
C05	UPFH1132413	ENST00000370985.4	GADD45A	ENSG00000116717	growth arrest and DNA damage inducible alpha Source HGNC Symbol Acc HGNC 4095
C06	UPFH1132414	ENST00000215631.9	GADD45B	ENSG00000099860	growth arrest and DNA damage inducible beta Source HGNC Symbol Acc HGNC 4096
C07	UPFH1132415	ENST00000375769.1	GADD45G	ENSG00000130222	growth arrest and DNA damage inducible gamma Source HGNC Symbol Acc HGNC 4097
C08	UPFH0295673	ENST00000357001.3	GUCA2A	ENSG00000197273	guanylate cyclase activator 2A Source HGNC Symbol Acc HGNC 4682
C09	UPFH0433285	ENST00000216117.9	HMOX1	ENSG00000100292	heme oxygenase 1 Source HGNC Symbol Acc HGNC 5013
C10	UPFH0292880	ENST00000334701.11	HSP90AA1	ENSG00000080824	heat shock protein 90 alpha family class A member 1 Source HGNC Symbol Acc HGNC 5253
		ENST00000375		ENSG000000	heat shock protein family A (Hsp70) member 1A Source HGNC Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1126009	651.6	HSPA1A	204389	HGNC 5232
C12	UPFH1132457	ENST00000304858.7	HSPA4	ENSG00000170606	heat shock protein family A (Hsp70) member 4 Source HGNC Symbol Acc HGNC 5237
D01	UPFH1132458	ENST00000505726.1	HSPA4L	ENSG00000164070	heat shock protein family A (Hsp70) member 4 like Source HGNC Symbol Acc HGNC 17041
D02	UPFH1132459	ENST00000324460.7	HSPA5	ENSG00000044574	heat shock protein family A (Hsp70) member 5 Source HGNC Symbol Acc HGNC 5238
D03	UPFH1139042	ENST00000248553.7	HSPB1	ENSG00000106211	heat shock protein family B (small) member 1 Source HGNC Symbol Acc HGNC 5246
D04	UPFH0163764	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
D05	UPFH0120553	ENST00000307407.8	CXCL8	ENSG00000169429	C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025
D06	UPFH1132488	ENST00000381330.4	INS	ENSG00000254647	insulin Source HGNC Symbol Acc HGNC 6081
D07	UPFH1132498	ENST00000423113.5	ITGB1	ENSG00000150093	integrin subunit beta 1 Source HGNC Symbol Acc HGNC 6153
D08	UPFH0569765	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D09	UPFH0028572	ENST00000392665.6	KCNJ1	ENSG00000151704	potassium voltage-gated channel subfamily J member 1 Source HGNC Symbol Acc HGNC 6255
D10	UPFH0258851	ENST00000277480.7	LCN2	ENSG00000148346	lipocalin 2 Source HGNC Symbol Acc HGNC 6526
D11	UPFH0509119	ENST00000429299.2	LTB	ENSG00000227507	lymphotoxin beta Source HGNC Symbol Acc HGNC 6711
D12	UPFH0606297	ENST00000599021.1	MAP2K2	ENSG00000126934	mitogen-activated protein kinase kinase 2 Source HGNC Symbol Acc HGNC 6842
E01	UPFH1132532	ENST00000399503.4	MAP3K1	ENSG00000095015	mitogen-activated protein kinase kinase kinase 1 Source HGNC Symbol Acc HGNC 6848
E02	UPFH0366815	ENST00000215832.10	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
E03	UPFH1132535	ENST00000374179.8	MAPK8	ENSG00000107643	mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881
E04	UPFH0052166	ENST00000442311.1	MLC1	ENSG00000100427	megalencephalic leukoencephalopathy with subcortical cysts 1 Source HGNC Symbol Acc HGNC 17082
E05	UPFH0317172	ENST00000354436.6	NFAT5	ENSG00000102908	nuclear factor of activated T cells 5 Source HGNC Symbol Acc HGNC 7774
E06	UPFH0444462	ENST00000216797.9	NFKBIA	ENSG00000100906	NFkB inhibitor alpha Source HGNC Symbol Acc HGNC 7797
E07	UPFH1132897	ENST00000297494.8	NOS3	ENSG00000164867	nitric oxide synthase 3 Source HGNC Symbol Acc HGNC 7876
E08	UPFH1132933	ENST00000368680.4	NPR1	ENSG00000169418	natriuretic peptide receptor 1 Source HGNC Symbol Acc HGNC 7943
E09	UPFH0581844	ENST00000405333.5	ODC1	ENSG00000115758	ornithine decarboxylase 1 Source HGNC Symbol Acc HGNC 8109
E10	UPFH0184831	ENST00000217386.2	OXT	ENSG00000101405	oxytocin/neurophysin I prepropeptide Source HGNC Symbol Acc HGNC 8528
E11	UPFH0578402	ENST00000426668.1	PAK2	ENSG00000180370	p21 (RAC1) activated kinase 2 Source HGNC Symbol Acc HGNC 8591
E12	UPFH0308376	ENST00000370296.6	PAX2	ENSG00000075891	paired box 2 Source HGNC Symbol Acc HGNC 8616
F01	UPFH0165951	ENST00000216780.8	PCK2	ENSG00000100889	phosphoenolpyruvate carboxykinase 2, mitochondrial Source HGNC Symbol Acc HGNC 8725
F02	UPFH0236048	ENST00000286091.9	PDIA4	ENSG00000155660	protein disulfide isomerase family A member 4 Source HGNC Symbol Acc HGNC 30167
F03	UPFH1132830	ENST00000352041.7	PLAT	ENSG00000104368	plasminogen activator, tissue type Source HGNC Symbol Acc HGNC 9051
F04	UPFH1132643	ENST00000522684.5	PTK2	ENSG00000169398	protein tyrosine kinase 2 Source HGNC Symbol Acc HGNC 9611
F05	UPFH0010225	ENST00000367855.7	SGK1	ENSG00000118515	serum/glucocorticoid regulated kinase 1 Source HGNC Symbol Acc HGNC 10810
F06	UPFH0463906	ENST00000586448.5	SLC14A2	ENSG00000132874	solute carrier family 14 member 2 Source HGNC Symbol Acc HGNC 10919
F07	UPFH0225912	ENST00000426263.8	SLC2A1	ENSG00000117394	solute carrier family 2 member 1 Source HGNC Symbol Acc HGNC 11005
F08	UPFH0460743	ENST00000612232.1	SLC38A2	ENSG00000134294	solute carrier family 38 member 2 Source HGNC Symbol Acc HGNC 13448
F09	UPFH1132684	ENST00000381151.5	SLC5A3	ENSG00000198743	solute carrier family 5 member 3 Source HGNC Symbol Acc HGNC 11038
F10	UPFH0441624	ENST00000397296.6	SLC6A12	ENSG00000111181	solute carrier family 6 member 12 Source HGNC Symbol Acc HGNC 11045

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0322386	ENST00000610642.4	SLC6A6	ENSG00000131389	solute carrier family 6 member 6 Source HGNC Symbol Acc HGNC 11052
F12	UPFH0307638	ENST00000469286.1	SLC9A2	ENSG00000115616	solute carrier family 9 member A2 Source HGNC Symbol Acc HGNC 11072
G01	UPFH0332414	ENST00000644203.1	SLC9A3	ENSG00000066230	solute carrier family 9 member A3 Source HGNC Symbol Acc HGNC 11073
G02	UPFH1132841	ENST00000244050.3	SNAI1	ENSG00000124216	snail family transcriptional repressor 1 Source HGNC Symbol Acc HGNC 11128
G03	UPFH0308412	ENST00000472968.1	SRC	ENSG00000197122	SRC proto-oncogene, non-receptor tyrosine kinase Source HGNC Symbol Acc HGNC 11283
G04	UPFH0600142	ENST00000355962.5	TAT	ENSG00000198650	tyrosine aminotransferase Source HGNC Symbol Acc HGNC 11573
G05	UPFH1132717	ENST00000295400.11	TGFA	ENSG00000163235	transforming growth factor alpha Source HGNC Symbol Acc HGNC 11765
G06	UPFH1132978	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G07	UPFH0565795	ENST00000269305.8	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G08	UPFH0029369	ENST00000642221.1	TPM4	ENSG00000167460	tropomyosin 4 Source HGNC Symbol Acc HGNC 12013
G09	UPFH0395222	ENST00000544971.5	TRPV4	ENSG00000111199	transient receptor potential cation channel subfamily V member 4 Source HGNC Symbol Acc HGNC 18083
G10	UPFH0281656	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G11	UPFH1132857	ENST00000544301.7	VIM	ENSG00000026025	vimentin Source HGNC Symbol Acc HGNC 12692
G12	UPFH0468316	ENST00000553375.1	ZFP36L1	ENSG00000185650	ZFP36 ring finger protein like 1 Source HGNC Symbol Acc HGNC 1107
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 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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