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

Human Cardiovascular Disease

Cat. no. 249955 UPHS-174ZA

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	ACE	ACTC1	ADRA1A	ADRA1B	ADRA1D	ADRB1	ADRB2	ADRB3	AEBP1	AGTR1	ANXA4	AR
B	ATP2A2	ATP5F1A	C6	CCL11	CCL18	CCL2	CCND1	CDKN1B	COL11A1	COL1A1	COL3A1	CREB5
C	CREM	CRYAB	CRYM	CCN2	DCN	DMD	DUSP6	ENAH	EPOR	F2R	FN1	FRZB
D	G0S2	GJA1	HMGCL	HMGCR	HMGN2	KLHL3	MAOA	MAPK1	MAPK8	MMP13	MSI2	MT1X
E	MYH10	MYH6	NDUFB5	NEBL	NFIA	NKX2-5	NPPA	NPPB	NPR1	NPR2	NPR3	NR3C1
F	NR3C2	PDE3A	PDE3B	PDE5A	PDE7A	POSTN	PTN	RARRES1	RASSF1	REN	RTN4	S100A1
G	SERPINA3	SFRP4	SLC12A1	SNCA	SPOCK1	STAT1	TCF4	THBS2	TNNI3	TNNT2	UBB	ZYX
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	UPFH1132210	ENST00000428043.5	ACE	ENSG00000159640	angiotensin I converting enzyme Source HGNC Symbol Acc HGNC 2707
A02	UPFH0037178	ENST00000557860.1	ACTC1	ENSG00000159251	actin, alpha, cardiac muscle 1 Source HGNC Symbol Acc HGNC 143
A03	UPFH0101462	ENST00000380586.5	ADRA1A	ENSG00000120907	adrenoceptor alpha 1A Source HGNC Symbol Acc HGNC 277
A04	UPFH0458556	ENST00000306675.5	ADRA1B	ENSG00000170214	adrenoceptor alpha 1B Source HGNC Symbol Acc HGNC 278
A05	UPFH0065785	ENST00000379453.5	ADRA1D	ENSG00000171873	adrenoceptor alpha 1D Source HGNC Symbol Acc HGNC 280
A06	UPFH0612978	ENST00000369295.3	ADRB1	ENSG00000043591	adrenoceptor beta 1 Source HGNC Symbol Acc HGNC 285
A07	UPFH0552004	ENST00000305988.5	ADRB2	ENSG00000169252	adrenoceptor beta 2 Source HGNC Symbol Acc HGNC 286
A08	UPFH0554763	ENST00000520341.2	ADRB3	ENSG00000188778	adrenoceptor beta 3 Source HGNC Symbol Acc HGNC 288
A09	UPFH0211088	ENST00000223357.8	AEBP1	ENSG00000106624	AE binding protein 1 Source HGNC Symbol Acc HGNC 303
A10	UPFH1132221	ENST00000418473.6	AGTR1	ENSG00000144891	angiotensin II receptor type 1 Source HGNC Symbol Acc HGNC 336
A11	UPFH0572148	ENST00000484219.1	ANXA4	ENSG00000196975	annexin A4 Source HGNC Symbol Acc HGNC 542
A12	UPFH0268128	ENST00000374690.8	AR	ENSG00000169083	androgen receptor Source HGNC Symbol Acc HGNC 644
B01	UPFH0202763	ENST00000548169.2	ATP2A2	ENSG00000174437	ATPase sarcoplasmic/endoplasmic reticulum Ca2+ transporting 2 Source HGNC Symbol Acc HGNC 812
B02	UPFH1132254	ENST00000590406.5	ATP5F1A	ENSG00000152234	ATP synthase F1 subunit alpha Source HGNC Symbol Acc HGNC 823
B03	UPFH0444123	ENST00000475349.5	C6	ENSG00000039537	complement C6 Source HGNC Symbol Acc HGNC 1339
B04	UPFH0201571	ENST00000305869.3	CCL11	ENSG00000172156	C-C motif chemokine ligand 11 Source HGNC Symbol Acc HGNC 10610
B05	UPFH0121778	ENST00000616054.1	CCL18	ENSG00000275385	C-C motif chemokine ligand 18 Source HGNC Symbol Acc HGNC 10616
B06	UPFH1132783	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
B07	UPFH0430337	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B08	UPFH1132964	ENST00000228872.9	CDKN1B	ENSG00000111276	cyclin dependent kinase inhibitor 1B Source HGNC Symbol Acc HGNC 1785
B09	UPFH0124039	ENST00000427239.5	COL11A1	ENSG00000060718	collagen type XI alpha 1 chain Source HGNC Symbol Acc HGNC 2186
B10	UPFH0361104	ENST00000225964.9	COL1A1	ENSG00000108821	collagen type I alpha 1 chain Source HGNC Symbol Acc HGNC 2197
B11	UPFH0067087	ENST00000304636.7	COL3A1	ENSG00000168542	collagen type III alpha 1 chain Source HGNC Symbol Acc HGNC 2201
B12	UPFH0394072	ENST00000396300.6	CREB5	ENSG00000146592	cAMP responsive element binding protein 5 Source HGNC Symbol Acc HGNC 16844
C01	UPFH0269005	ENST00000439705.5	CREM	ENSG00000095794	cAMP responsive element modulator Source HGNC Symbol Acc HGNC 2352
C02	UPFH0205096	ENST00000527950.5	CRYAB	ENSG00000109846	crystallin alpha B Source HGNC Symbol Acc HGNC 2389
C03	UPFH0539348	ENST00000543948.5	CRYM	ENSG00000103316	crystallin mu Source HGNC Symbol Acc HGNC 2418
C04	UPFH1132340	ENST00000367976.4	CCN2	ENSG00000118523	cellular communication network factor 2 Source HGNC Symbol Acc HGNC 2500
C05	UPFH1132355	ENST00000052754.10	DCN	ENSG00000011465	decorin Source HGNC Symbol Acc HGNC 2705
C06	UPFH0041524	ENST00000378680.6	DMD	ENSG00000198947	dystrophin Source HGNC Symbol Acc HGNC 2928
C07	UPFH0610812	ENST00000547291.1	DUSP6	ENSG00000139318	dual specificity phosphatase 6 Source HGNC Symbol Acc HGNC 3072
C08	UPFH0424578	ENST00000391874.2	ENAH	ENSG00000154380	ENAH, actin regulator Source HGNC Symbol Acc HGNC 18271
C09	UPFH0349780	ENST00000588681.5	EPOR	ENSG00000187266	erythropoietin receptor Source HGNC Symbol Acc HGNC 3416
C10	UPFH1132392	ENST00000319211.5	F2R	ENSG00000181104	coagulation factor II thrombin receptor Source HGNC Symbol Acc HGNC 3537
		ENST00000336		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0605066	916.8	FN1	115414	fibronectin 1 Source HGNC Symbol Acc HGNC 3778
C12	UPFH1132870	ENST00000295113.5	FRZB	ENSG00000162998	frizzled related protein Source HGNC Symbol Acc HGNC 3959
D01	UPFH0189353	ENST00000367029.5	G0S2	ENSG00000123689	G0/G1 switch 2 Source HGNC Symbol Acc HGNC 30229
D02	UPFH0199748	ENST00000649003.1	GJA1	ENSG00000152661	gap junction protein alpha 1 Source HGNC Symbol Acc HGNC 4274
D03	UPFH0158241	ENST00000513148.1	HMGCL	ENSG00000117305	3-hydroxy-3-methylglutaryl-CoA lyase Source HGNC Symbol Acc HGNC 5005
D04	UPFH0368825	ENST00000343975.9	HMGCR	ENSG00000113161	3-hydroxy-3-methylglutaryl-CoA reductase Source HGNC Symbol Acc HGNC 5006
D05	UPFH0059314	ENST00000619352.4	HMGN2	ENSG00000198830	high mobility group nucleosomal binding domain 2 Source HGNC Symbol Acc HGNC 4986
D06	UPFH0551648	ENST00000504496.5	KLHL3	ENSG00000146021	kelch like family member 3 Source HGNC Symbol Acc HGNC 6354
D07	UPFH0432299	ENST00000338702.3	MAOA	ENSG00000189221	monoamine oxidase A Source HGNC Symbol Acc HGNC 6833
D08	UPFH0366815	ENST00000215832.10	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
D09	UPFH1132535	ENST00000374179.8	MAPK8	ENSG00000107643	mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881
D10	UPFH0371019	ENST00000615555.4	MMP13	ENSG00000137745	matrix metallopeptidase 13 Source HGNC Symbol Acc HGNC 7159
D11	UPFH0522648	ENST00000579505.5	MSI2	ENSG00000153944	musashi RNA binding protein 2 Source HGNC Symbol Acc HGNC 18585
D12	UPFH0373043	ENST00000568370.1	MT1X	ENSG00000187193	metallothionein 1X Source HGNC Symbol Acc HGNC 7405
E01	UPFH0379194	ENST00000360416.7	MYH10	ENSG00000133026	myosin heavy chain 10 Source HGNC Symbol Acc HGNC 7568
E02	UPFH0236795	ENST00000405093.8	MYH6	ENSG00000197616	myosin heavy chain 6 Source HGNC Symbol Acc HGNC 7576
E03	UPFH1132579	ENST00000259037.8	NDUFB5	ENSG00000136521	NADH ubiquinone oxidoreductase subunit B5 Source HGNC Symbol Acc HGNC 7700
E04	UPFH0055733	ENST00000377122.8	NEBL	ENSG00000078114	nebulette Source HGNC Symbol Acc HGNC 16932
E05	UPFH0588306	ENST00000479364.1	NFIA	ENSG00000162599	nuclear factor I A Source HGNC Symbol Acc HGNC 7784
E06	UPFH0227465	ENST00000521848.1	NKX2-5	ENSG00000183072	NK2 homeobox 5 Source HGNC Symbol Acc HGNC 2488
E07	UPFH0312155	ENST00000376480.7	NPPA	ENSG00000175206	natriuretic peptide A Source HGNC Symbol Acc HGNC 7939
E08	UPFH1132597	ENST00000376468.4	NPPB	ENSG00000120937	natriuretic peptide B Source HGNC Symbol Acc HGNC 7940
E09	UPFH1132933	ENST00000368680.4	NPR1	ENSG00000169418	natriuretic peptide receptor 1 Source HGNC Symbol Acc HGNC 7943
E10	UPFH0138419	ENST00000342694.6	NPR2	ENSG00000159899	natriuretic peptide receptor 2 Source HGNC Symbol Acc HGNC 7944
E11	UPFH0382697	ENST00000434067.6	NPR3	ENSG00000113389	natriuretic peptide receptor 3 Source HGNC Symbol Acc HGNC 7945
E12	UPFH1132917	ENST00000394464.7	NR3C1	ENSG00000113580	nuclear receptor subfamily 3 group C member 1 Source HGNC Symbol Acc HGNC 7978
F01	UPFH0487306	ENST00000512865.5	NR3C2	ENSG00000151623	nuclear receptor subfamily 3 group C member 2 Source HGNC Symbol Acc HGNC 7979
F02	UPFH0465126	ENST00000544307.1	PDE3A	ENSG00000172572	phosphodiesterase 3A Source HGNC Symbol Acc HGNC 8778
F03	UPFH0371179	ENST00000525439.1	PDE3B	ENSG00000152270	phosphodiesterase 3B Source HGNC Symbol Acc HGNC 8779
F04	UPFH0394532	ENST00000513594.5	PDE5A	ENSG00000138735	phosphodiesterase 5A Source HGNC Symbol Acc HGNC 8784
F05	UPFH0419530	ENST00000396642.7	PDE7A	ENSG00000205268	phosphodiesterase 7A Source HGNC Symbol Acc HGNC 8791
F06	UPFH0505568	ENST00000541179.5	POSTN	ENSG00000133110	periostin Source HGNC Symbol Acc HGNC 16953
F07	UPFH0287140	ENST00000348225.6	PTN	ENSG00000105894	pleiotrophin Source HGNC Symbol Acc HGNC 9630
F08	UPFH0064943	ENST00000462663.5	RARRES1	ENSG00000118849	retinoic acid receptor responder 1 Source HGNC Symbol Acc HGNC 9867
F09	UPFH0117232	ENST00000616212.4	RASSF1	ENSG00000068028	Ras association domain family member 1 Source HGNC Symbol Acc HGNC 9882
F10	UPFH0491031	ENST00000638118.1	REN	ENSG00000143839	renin Source HGNC Symbol Acc HGNC 9958

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0600182	ENST00000317610.11	RTN4	ENSG00000115310	reticulon 4 Source HGNC Symbol Acc HGNC 14085
F12	UPFH0391251	ENST00000368698.3	S100A1	ENSG00000160678	S100 calcium binding protein A1 Source HGNC Symbol Acc HGNC 10486
G01	UPFH0304898	ENST00000393078.4	SERPINA3	ENSG00000196136	serpin family A member 3 Source HGNC Symbol Acc HGNC 16
G02	UPFH1132677	ENST00000436072.7	SFRP4	ENSG00000106483	secreted frizzled related protein 4 Source HGNC Symbol Acc HGNC 10778
G03	UPFH0210557	ENST00000380993.7	SLC12A1	ENSG00000074803	solute carrier family 12 member 1 Source HGNC Symbol Acc HGNC 10910
G04	UPFH0584453	ENST00000394991.7	SNCA	ENSG00000145335	synuclein alpha Source HGNC Symbol Acc HGNC 11138
G05	UPFH0369579	ENST00000510405.5	SPOCK1	ENSG00000152377	SPARC (osteonectin), cwcv and kazal like domains proteoglycan 1 Source HGNC Symbol Acc HGNC 11251
G06	UPFH1132696	ENST00000392323.6	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
G07	UPFH0181405	ENST00000356073.8	TCF4	ENSG00000196628	transcription factor 4 Source HGNC Symbol Acc HGNC 11634
G08	UPFH1125960	ENST00000366787.7	THBS2	ENSG00000186340	thrombospondin 2 Source HGNC Symbol Acc HGNC 11786
G09	UPFH0402346	ENST00000344887.9	TNNI3	ENSG00000129991	troponin I3, cardiac type Source NCBI gene Acc 7137
G10	UPFH0150895	ENST00000367322.6	TNNT2	ENSG00000118194	troponin T2, cardiac type Source HGNC Symbol Acc HGNC 11949
G11	UPFH0050019	ENST00000577958.1	UBB	ENSG00000170315	ubiquitin B Source HGNC Symbol Acc HGNC 12463
G12	UPFH0292796	ENST00000477373.1	ZYX	ENSG00000159840	zyxin Source HGNC Symbol Acc HGNC 13200
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.

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