

# QuantiNova® LNA® Probe PCR Focus Panels (Rotor-Gene® Format)

## Human Aging

Cat. no. 249955 UPHS-178ZR

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 (Rotor-Gene): QuantiNova LNA Probe PCR Focus Panel

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc® (plate A1–A12=Rotor-Disc 1–12, plate B1–B12=Rotor-Disc 13–24, etc.). To maintain data analysis compatibility, wells 97–100 do not contain real-time assays but will contain master mix to account for weight balance. Refer to the QuantiNova LNA Probe PCR Handbook at [www.qiagen.com](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	ANGEL2	ANXA3	ANXA5	ARID1A	ARL6IP6	BUB1B	C1QA	C1QB	C1QC	C1S	C3	C3AR1
B	C5AR1	CALB1	CASP1	CCR1	CD14	CD163	CDKN1C	CFH	CLU	COL1A1	COL3A1	CX3CL1
C	CXCL16	ELAVL1	ELP3	EML1	EP300	FBXL16	FCER1G	FCGBP	FCGR1A	FCGR2A	FCGR3B	FOXO1
D	GFAP	GSTA1	HSF1	JAKMIP3	LMNA	LMNB1	LMNB2	LSMS	LTF	LYZ	MBP	MRPL43
E	NDUFB11	PANX1	PDCD6	PHF3	POLRMT	POT1	RAP1A	RNF144B	S100A8	S100A9	SCN2B	SIRT1
F	SIRT3	SIRT6	SMAD2	SNAP23	TERF1	TERF2	TFAM	TFB1M	TFB2M	TINF2	TLR2	TLR4
G	TMEM135	TMEM33	TOLLIP	TPP1	TXNIP	VPS13C	VWASA	WRN	ZBTB10	ZFR	ZMPSTE24	ZNF25
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	UPFH1125931	ENST00000498650.1	ANGEL2	ENSG00000174606	angel homolog 2 Source HGNC Symbol Acc HGNC 30534
A02	UPFH0421772	ENST00000512373.5	ANXA3	ENSG00000138772	annexin A3 Source HGNC Symbol Acc HGNC 541
A03	UPFH1132775	ENST00000515017.5	ANXA5	ENSG00000164111	annexin A5 Source HGNC Symbol Acc HGNC 543
A04	UPFH0159057	ENST00000457599.6	ARID1A	ENSG00000117713	AT-rich interaction domain 1A Source HGNC Symbol Acc HGNC 11110
A05	UPFH0041490	ENST00000463690.1	ARL6IP6	ENSG00000177917	ADP ribosylation factor like GTPase 6 interacting protein 6 Source HGNC Symbol Acc HGNC 24048
A06	UPFH0346494	ENST00000558972.1	BUB1B	ENSG00000156970	BUB1 mitotic checkpoint serine/threonine kinase B Source HGNC Symbol Acc HGNC 1149
A07	UPFH0069887	ENST00000438241.1	C1QA	ENSG00000173372	complement C1q A chain Source HGNC Symbol Acc HGNC 1241
A08	UPFH0263853	ENST00000510260.5	C1QB	ENSG00000173369	complement C1q B chain Source HGNC Symbol Acc HGNC 1242
A09	UPFH0367991	ENST00000374639.7	C1QC	ENSG00000159189	complement C1q C chain Source HGNC Symbol Acc HGNC 1245
A10	UPFH0298558	ENST00000617865.4	C1S	ENSG00000182326	complement C1s Source HGNC Symbol Acc HGNC 1247
A11	UPFH1132902	ENST00000596548.1	C3	ENSG00000125730	complement C3 Source HGNC Symbol Acc HGNC 1318
A12	UPFH1172902	ENST00000546241.1	C3AR1	ENSG00000171860	complement C3a receptor 1 Source HGNC Symbol Acc HGNC 1319
B01	UPFH0279350	ENST00000355085.4	C5AR1	ENSG00000197405	complement C5a receptor 1 Source HGNC Symbol Acc HGNC 1338
B02	UPFH0585207	ENST00000265431.7	CALB1	ENSG00000104327	calbindin 1 Source HGNC Symbol Acc HGNC 1434
B03	UPFH0285144	ENST00000436863.7	CASP1	ENSG00000137752	caspase 1 Source HGNC Symbol Acc HGNC 1499
B04	UPFH0327828	ENST00000296140.4	CCR1	ENSG00000163823	C-C motif chemokine receptor 1 Source HGNC Symbol Acc HGNC 1602
B05	UPFH0199310	ENST00000302014.11	CD14	ENSG00000170458	CD14 molecule Source HGNC Symbol Acc HGNC 1628
B06	UPFH0603631	ENST00000541972.5	CD163	ENSG00000177575	CD163 molecule Source HGNC Symbol Acc HGNC 1631
B07	UPFH0327918	ENST00000440480.7	CDKN1C	ENSG00000129757	cyclin dependent kinase inhibitor 1C Source HGNC Symbol Acc HGNC 1786
B08	UPFH0217518	ENST00000496761.1	CFH	ENSG00000000971	complement factor H Source HGNC Symbol Acc HGNC 4883
B09	UPFH0432344	ENST00000519472.5	CLU	ENSG00000120885	clusterin Source HGNC Symbol Acc HGNC 2095
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	UPFH1132348	ENST00000006053.7	CX3CL1	ENSG00000006210	C-X3-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 10647
C01	UPFH1132797	ENST00000574412.5	CXCL16	ENSG00000161921	C-X-C motif chemokine ligand 16 Source HGNC Symbol Acc HGNC 16642
C02	UPFH0063561	ENST00000407627.7	ELAVL1	ENSG00000066044	ELAV like RNA binding protein 1 Source HGNC Symbol Acc HGNC 3312
C03	UPFH0203430	ENST00000524103.5	ELP3	ENSG00000134014	elongator acetyltransferase complex subunit 3 Source HGNC Symbol Acc HGNC 20696
C04	UPFH0058139	ENST00000262233.10	EML1	ENSG00000066629	EMAP like 1 Source HGNC Symbol Acc HGNC 3330
C05	UPFH0118049	ENST00000635691.1	EP300	ENSG00000100393	E1A binding protein p300 Source HGNC Symbol Acc HGNC 3373
C06	UPFH0438929	ENST00000562648.2	FBXL16	ENSG00000127585	F-box and leucine rich repeat protein 16 Source HGNC Symbol Acc HGNC 14150
C07	UPFH0027992	ENST00000367992.7	FCER1G	ENSG00000158869	Fc fragment of IgE receptor Ig Source HGNC Symbol Acc HGNC 3611
C08	UPFH0053780	ENST00000616721.5	FCGBP	ENSG00000275395	Fc fragment of IgG binding protein Source HGNC Symbol Acc HGNC 13572
C09	UPFH0313882	ENST00000444948.5	FCGR1A	ENSG00000150337	Fc fragment of IgG receptor Ia Source HGNC Symbol Acc HGNC 3613
C10	UPFH0461243	ENST00000536731.5	FCGR2A	ENSG00000143226	Fc fragment of IgG receptor IIa Source HGNC Symbol Acc HGNC 3616
		ENST00000531		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0439380	221.7	FCGR3B	162747	Fc fragment of IgG receptor IIIb Source HGNC Symbol Acc HGNC 3620
C12	UPFH0401417	ENST00000379561.6	FOXO1	ENSG00000150907	forkhead box O1 Source HGNC Symbol Acc HGNC 3819
D01	UPFH0473904	ENST00000592320.6	GFAP	ENSG00000131095	glial fibrillary acidic protein Source HGNC Symbol Acc HGNC 4235
D02	UPFH0492642	ENST00000493331.5	GSTA1	ENSG00000243955	glutathione S-transferase alpha 1 Source HGNC Symbol Acc HGNC 4626
D03	UPFH0041314	ENST00000528838.6	HSF1	ENSG00000185122	heat shock transcription factor 1 Source HGNC Symbol Acc HGNC 5224
D04	UPFH0403764	ENST00000298622.8	JAKMIP3	ENSG00000188385	Janus kinase and microtubule interacting protein 3 Source HGNC Symbol Acc HGNC 23523
D05	UPFH0218092	ENST00000368299.7	LMNA	ENSG00000160789	lamin A/C Source HGNC Symbol Acc HGNC 6636
D06	UPFH0052035	ENST00000472034.5	LMNB1	ENSG00000113368	lamin B1 Source HGNC Symbol Acc HGNC 6637
D07	UPFH0098623	ENST00000532465.1	LMNB2	ENSG00000176619	lamin B2 Source HGNC Symbol Acc HGNC 6638
D08	UPFH0409186	ENST00000409909.7	LSM5	ENSG00000106355	LSM5 homolog, U6 small nuclear RNA and mRNA degradation associated Source HGNC Symbol Acc HGNC 17162
D09	UPFH0167211	ENST00000231751.8	LTF	ENSG00000012223	lactotransferrin Source HGNC Symbol Acc HGNC 6720
D10	UPFH0398421	ENST00000261267.6	LYZ	ENSG00000090382	lysozyme Source HGNC Symbol Acc HGNC 6740
D11	UPFH0192973	ENST00000359645.7	MBP	ENSG00000197971	myelin basic protein Source HGNC Symbol Acc HGNC 6925
D12	UPFH0164942	ENST00000299179.9	MRPL43	ENSG00000055950	mitochondrial ribosomal protein L43 Source HGNC Symbol Acc HGNC 14517
E01	UPFH0592707	ENST00000377811.3	NDUFB11	ENSG00000147123	NADH ubiquinone oxidoreductase subunit B11 Source HGNC Symbol Acc HGNC 20372
E02	UPFH0419147	ENST00000436171.2	PANX1	ENSG00000110218	pannexin 1 Source HGNC Symbol Acc HGNC 8599
E03	UPFH0506206	ENST00000511482.1	PDCD6	ENSG00000249915	programmed cell death 6 Source HGNC Symbol Acc HGNC 8765
E04	UPFH0536930	ENST00000506783.5	PHF3	ENSG00000118482	PHD finger protein 3 Source HGNC Symbol Acc HGNC 8921
E05	UPFH0355831	ENST00000589961.2	POLRMT	ENSG00000099821	RNA polymerase mitochondrial Source HGNC Symbol Acc HGNC 9200
E06	UPFH0000556	ENST00000357628.8	POT1	ENSG00000128513	protection of telomeres 1 Source HGNC Symbol Acc HGNC 17284
E07	UPFH0233643	ENST00000369709.3	RAP1A	ENSG00000116473	RAP1A, member of RAS oncogene family Source HGNC Symbol Acc HGNC 9855
E08	UPFH0000635	ENST00000486622.1	RNF144B	ENSG00000137393	ring finger protein 144B Source HGNC Symbol Acc HGNC 21578
E09	UPFH0240332	ENST00000368732.5	S100A8	ENSG00000143546	S100 calcium binding protein A8 Source HGNC Symbol Acc HGNC 10498
E10	UPFH0106381	ENST00000368738.4	S100A9	ENSG00000163220	S100 calcium binding protein A9 Source HGNC Symbol Acc HGNC 10499
E11	UPFH0047177	ENST00000278947.5	SCN2B	ENSG00000149575	sodium voltage-gated channel beta subunit 2 Source HGNC Symbol Acc HGNC 10589
E12	UPFH0388476	ENST00000212015.11	SIRT1	ENSG00000096717	sirtuin 1 Source HGNC Symbol Acc HGNC 14929
F01	UPFH0466428	ENST00000532956.5	SIRT3	ENSG00000142082	sirtuin 3 Source HGNC Symbol Acc HGNC 14931
F02	UPFH0025867	ENST00000601488.5	SIRT6	ENSG00000077463	sirtuin 6 Source HGNC Symbol Acc HGNC 14934
F03	UPFH1132686	ENST00000585978.1	SMAD2	ENSG00000175387	SMAD family member 2 Source HGNC Symbol Acc HGNC 6768
F04	UPFH0454442	ENST00000249647.8	SNAP23	ENSG00000092531	synaptosome associated protein 23 Source HGNC Symbol Acc HGNC 11131
F05	UPFH1132712	ENST00000276603.10	TERF1	ENSG00000147601	telomeric repeat binding factor 1 Source HGNC Symbol Acc HGNC 11728
F06	UPFH0210309	ENST00000567296.6	TERF2	ENSG00000132604	telomeric repeat binding factor 2 Source HGNC Symbol Acc HGNC 11729
F07	UPFH0247714	ENST00000373899.3	TFAM	ENSG00000108064	transcription factor A, mitochondrial Source HGNC Symbol Acc HGNC 11741
F08	UPFH0173709	ENST00000480390.1	TFB1M	ENSG00000029639	transcription factor B1, mitochondrial Source HGNC Symbol Acc HGNC 17037
F09	UPFH0491922	ENST00000366514.5	TFB2M	ENSG00000162851	transcription factor B2, mitochondrial Source HGNC Symbol Acc HGNC 18559
F10	UPFH0189537	ENST00000399423.8	TINF2	ENSG00000092330	TERF1 interacting nuclear factor 2 Source HGNC Symbol Acc HGNC 11824

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0035742	ENST00000642700.1	TLR2	ENSG00000137462	toll like receptor 2 Source HGNC Symbol Acc HGNC 11848
F12	UPFH1132859	ENST00000645071.1	TLR4	ENSG00000136869	toll like receptor 4 Source HGNC Symbol Acc HGNC 11850
G01	UPFH0479346	ENST00000526733.5	TMEM135	ENSG00000166575	transmembrane protein 135 Source HGNC Symbol Acc HGNC 26167
G02	UPFH0427768	ENST00000510383.1	TMEM33	ENSG00000109133	transmembrane protein 33 Source HGNC Symbol Acc HGNC 25541
G03	UPFH0007721	ENST00000528719.1	TOLLIP	ENSG00000078902	toll interacting protein Source HGNC Symbol Acc HGNC 16476
G04	UPFH0039804	ENST00000534644.6	TPP1	ENSG00000166340	tripeptidyl peptidase 1 Source HGNC Symbol Acc HGNC 2073
G05	UPFH0343233	ENST00000582401.5	TXNIP	ENSG00000265972	thioredoxin interacting protein Source HGNC Symbol Acc HGNC 16952
G06	UPFH0180099	ENST00000395896.8	VPS13C	ENSG00000129003	vacuolar protein sorting 13 homolog C Source HGNC Symbol Acc HGNC 23594
G07	UPFH0598419	ENST00000392744.4	VWA5A	ENSG00000110002	von Willebrand factor A domain containing 5A Source HGNC Symbol Acc HGNC 6658
G08	UPFH0298882	ENST00000298139.6	WRN	ENSG00000165392	Werner syndrome RecQ like helicase Source HGNC Symbol Acc HGNC 12791
G09	UPFH0428459	ENST00000455036.8	ZBTB10	ENSG00000205189	zinc finger and BTB domain containing 10 Source HGNC Symbol Acc HGNC 30953
G10	UPFH0568552	ENST00000514356.5	ZFR	ENSG00000056097	zinc finger RNA binding protein Source HGNC Symbol Acc HGNC 17277
G11	UPFH0159810	ENST00000472583.1	ZMPSTE24	ENSG00000084073	zinc metalloproteinase STE24 Source HGNC Symbol Acc HGNC 12877
G12	UPFH0283391	ENST00000467975.2	ZNF25	ENSG00000175395	zinc finger protein 25 Source HGNC Symbol Acc HGNC 13043
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 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 $\mu$ l QuantiNova Probe RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ 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.

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](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

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