

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

Human Osteoporosis

Cat. no. 249955 UPHS-170ZR

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 for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	ACP5	ADCY10	ALOX12	ALOX15	ALOX5	ALPL	AR	BGLAP	BMP2	BMP7	CA2	CALCA
B	CALCR	CASR	CD40	CLCN7	CNR2	COL1A1	COL1A2	COMT	CRTAP	CTSK	CYP17A1	CYP19A1
C	DBP	DKK1	ENPP1	ESR1	ESR2	ESRRA	FGFR1	FGFR2	GHRH	HSD11B1	IGF1	IGFBP2
D	IL15	IL6	IL6R	ITGA1	ITGB3	LEP	P3H1	LRP1	LRP5	LRP6	LTA	LTBP2
E	MAB21L2	MMP2	MSTN	MTHFR	NFATC1	NOG	NOS3	NPY	NR3C1	P2RX7	PLOD2	PRL
F	PTH	PTH1R	PTH1H	RUNX2	SFRP1	SFRP4	SHBG	SOST	SPARC	SPP1	STAT1	TGFB1
G	TIMP2	TNFAIP3	TNFRSF11A	TNFRSF11B	TNFRSF1B	TNFSF11	TSHR	TWIST1	VDR	VEGFA	WNT10B	WNT3A
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	UPFH0563797	ENST00000412435.6	ACP5	ENSG00000102575	acid phosphatase 5, tartrate resistant Source HGNC Symbol Acc HGNC 124
A02	UPFH0019994	ENST00000367851.8	ADCY10	ENSG00000143199	adenylate cyclase 10 Source HGNC Symbol Acc HGNC 21285
A03	UPFH1132226	ENST00000251535.11	ALOX12	ENSG00000108839	arachidonate 12-lipoxygenase, 12S type Source HGNC Symbol Acc HGNC 429
A04	UPFH0425784	ENST00000570836.5	ALOX15	ENSG00000161905	arachidonate 15-lipoxygenase Source HGNC Symbol Acc HGNC 433
A05	UPFH1132227	ENST00000612635.4	ALOX5	ENSG00000012779	arachidonate 5-lipoxygenase Source HGNC Symbol Acc HGNC 435
A06	UPFH0616425	ENST00000374832.5	ALPL	ENSG00000162551	alkaline phosphatase, biomineralization associated Source HGNC Symbol Acc HGNC 438
A07	UPFH0268128	ENST00000374690.8	AR	ENSG00000169083	androgen receptor Source HGNC Symbol Acc HGNC 644
A08	UPFH1132966	ENST00000368272.5	BGLAP	ENSG00000242252	bone gamma-carboxyglutamate protein Source HGNC Symbol Acc HGNC 1043
A09	UPFH1132780	ENST00000378827.5	BMP2	ENSG00000125845	bone morphogenetic protein 2 Source HGNC Symbol Acc HGNC 1069
A10	UPFH1132781	ENST00000433911.1	BMP7	ENSG00000101144	bone morphogenetic protein 7 Source HGNC Symbol Acc HGNC 1074
A11	UPFH0484435	ENST00000520996.5	CA2	ENSG00000104267	carbonic anhydrase 2 Source HGNC Symbol Acc HGNC 1373
A12	UPFH0317713	ENST00000331587.8	CALCA	ENSG00000110680	calcitonin related polypeptide alpha Source HGNC Symbol Acc HGNC 1437
B01	UPFH0236099	ENST00000415529.2	CALCR	ENSG00000004948	calcitonin receptor Source HGNC Symbol Acc HGNC 1440
B02	UPFH0186858	ENST00000638421.1	CASR	ENSG00000036828	calcium sensing receptor Source HGNC Symbol Acc HGNC 1514
B03	UPFH0317626	ENST0000037285.7	CD40	ENSG00000101017	CD40 molecule Source HGNC Symbol Acc HGNC 11919
B04	UPFH0582340	ENST00000382745.9	CLCN7	ENSG00000103249	chloride voltage-gated channel 7 Source HGNC Symbol Acc HGNC 2025
B05	UPFH0468236	ENST00000374472.5	CNR2	ENSG00000188822	cannabinoid receptor 2 Source HGNC Symbol Acc HGNC 2160
B06	UPFH0361104	ENST00000225964.9	COL1A1	ENSG00000108821	collagen type I alpha 1 chain Source HGNC Symbol Acc HGNC 2197
B07	UPFH1132970	ENST00000620463.1	COL1A2	ENSG00000164692	collagen type I alpha 2 chain Source HGNC Symbol Acc HGNC 2198
B08	UPFH0043531	ENST00000361682.10	COMT	ENSG00000093010	catechol-O-methyltransferase Source HGNC Symbol Acc HGNC 2228
B09	UPFH0412388	ENST00000485310.1	CRTAP	ENSG00000170275	cartilage associated protein Source HGNC Symbol Acc HGNC 2379
B10	UPFH0573582	ENST00000443913.1	CTSK	ENSG00000143387	cathepsin K Source HGNC Symbol Acc HGNC 2536
B11	UPFH0464356	ENST00000638971.1	CYP17A1	ENSG00000148795	cytochrome P450 family 17 subfamily A member 1 Source HGNC Symbol Acc HGNC 2593
B12	UPFH0371849	ENST00000439712.6	CYP19A1	ENSG00000137869	cytochrome P450 family 19 subfamily A member 1 Source HGNC Symbol Acc HGNC 2594
C01	UPFH0127536	ENST00000599385.5	DBP	ENSG00000105516	D-box binding PAR bZIP transcription factor Source HGNC Symbol Acc HGNC 2697
C02	UPFH1132868	ENST00000373970.4	DKK1	ENSG00000107984	dickkopf WNT signaling pathway inhibitor 1 Source HGNC Symbol Acc HGNC 2891
C03	UPFH0098375	ENST00000650437.1	ENPP1	ENSG00000197594	ectonucleotide pyrophosphatase/phosphodiesterase 1 Source HGNC Symbol Acc HGNC 3356
C04	UPFH0599047	ENST00000206249.7	ESR1	ENSG00000091831	estrogen receptor 1 Source HGNC Symbol Acc HGNC 3467
C05	UPFH0094598	ENST00000358599.9	ESR2	ENSG00000140009	estrogen receptor 2 Source HGNC Symbol Acc HGNC 3468
C06	UPFH0612502	ENST00000539594.5	ESRRA	ENSG00000173153	estrogen related receptor alpha Source HGNC Symbol Acc HGNC 3471
C07	UPFH0483731	ENST00000447712.6	FGFR1	ENSG00000077782	fibroblast growth factor receptor 1 Source HGNC Symbol Acc HGNC 3688
C08	UPFH0529346	ENST00000604236.5	FGFR2	ENSG00000066468	fibroblast growth factor receptor 2 Source HGNC Symbol Acc HGNC 3689
C09	UPFH0508799	ENST00000373614.6	GHRH	ENSG00000118702	growth hormone releasing hormone Source HGNC Symbol Acc HGNC 4265
C10	UPFH0245413	ENST00000367028.6	HSD11B1	ENSG00000117594	hydroxysteroid 11-beta dehydrogenase 1 Source HGNC Symbol Acc HGNC 5208
		ENST00000337		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0229443	514.10	IGF1	017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
C12	UPFH0558593	ENST00000436812.1	IGFBP2	ENSG00000115457	insulin like growth factor binding protein 2 Source HGNC Symbol Acc HGNC 5471
D01	UPFH1132873	ENST00000296545.11	IL15	ENSG00000164136	interleukin 15 Source HGNC Symbol Acc HGNC 5977
D02	UPFH1172910	ENST00000258743.10	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D03	UPFH1132484	ENST00000622330.4	IL6R	ENSG00000160712	interleukin 6 receptor Source HGNC Symbol Acc HGNC 6019
D04	UPFH0229386	ENST00000282588.6	ITGA1	ENSG00000213949	integrin subunit alpha 1 Source HGNC Symbol Acc HGNC 6134
D05	UPFH1132500	ENST00000559488.5	ITGB3	ENSG00000259207	integrin subunit beta 3 Source HGNC Symbol Acc HGNC 6156
D06	UPFH1132519	ENST00000308868.5	LEP	ENSG00000174697	leptin Source HGNC Symbol Acc HGNC 6553
D07	UPFH0005062	ENST00000296388.9	P3H1	ENSG00000117385	prolyl 3-hydroxylase 1 Source HGNC Symbol Acc HGNC 19316
D08	UPFH1125057	ENST00000338962.8	LRP1	ENSG00000123384	LDL receptor related protein 1 Source HGNC Symbol Acc HGNC 6692
D09	UPFH1132877	ENST00000294304.12	LRP5	ENSG00000162337	LDL receptor related protein 5 Source HGNC Symbol Acc HGNC 6697
D10	UPFH1132525	ENST00000543091.1	LRP6	ENSG00000070018	LDL receptor related protein 6 Source HGNC Symbol Acc HGNC 6698
D11	UPFH1132824	ENST00000454783.5	LTA	ENSG00000226979	lymphotoxin alpha Source HGNC Symbol Acc HGNC 6709
D12	UPFH1132526	ENST00000556690.5	LTBP2	ENSG00000119681	latent transforming growth factor beta binding protein 2 Source HGNC Symbol Acc HGNC 6715
E01	UPFH0200895	ENST00000317605.5	MAB21L2	ENSG00000181541	mab-21 like 2 Source HGNC Symbol Acc HGNC 6758
E02	UPFH1132551	ENST00000437642.6	MMP2	ENSG00000087245	matrix metalloproteinase 2 Source HGNC Symbol Acc HGNC 7166
E03	UPFH0218466	ENST00000260950.4	MSTN	ENSG00000138379	myostatin Source HGNC Symbol Acc HGNC 4223
E04	UPFH0541642	ENST00000641407.1	MTHFR	ENSG00000177000	methylenetetrahydrofolate reductase Source HGNC Symbol Acc HGNC 7436
E05	UPFH0595445	ENST00000591814.5	NFATC1	ENSG00000131196	nuclear factor of activated T cells 1 Source HGNC Symbol Acc HGNC 7775
E06	UPFH0273734	ENST00000332822.4	NOG	ENSG00000183691	noggin Source HGNC Symbol Acc HGNC 7866
E07	UPFH1132897	ENST00000297494.8	NOS3	ENSG00000164867	nitric oxide synthase 3 Source HGNC Symbol Acc HGNC 7876
E08	UPFH0380153	ENST00000407573.5	NPY	ENSG00000122585	neuropeptide Y Source HGNC Symbol Acc HGNC 7955
E09	UPFH1132917	ENST00000394464.7	NR3C1	ENSG00000113580	nuclear receptor subfamily 3 group C member 1 Source HGNC Symbol Acc HGNC 7978
E10	UPFH0094042	ENST00000539606.5	P2RX7	ENSG00000089041	purinergic receptor P2X 7 Source HGNC Symbol Acc HGNC 8537
E11	UPFH0476397	ENST00000469350.5	PLOD2	ENSG00000152952	procollagen-lysine,2-oxoglutarate 5-dioxygenase 2 Source HGNC Symbol Acc HGNC 9082
E12	UPFH0580799	ENST00000615510.4	PRL	ENSG00000172179	prolactin Source HGNC Symbol Acc HGNC 9445
F01	UPFH0492478	ENST00000529816.1	PTH	ENSG00000152266	parathyroid hormone Source HGNC Symbol Acc HGNC 9606
F02	UPFH0420737	ENST00000313049.9	PTH1R	ENSG00000160801	parathyroid hormone 1 receptor Source HGNC Symbol Acc HGNC 9608
F03	UPFH0588389	ENST00000538310.1	PTH1H	ENSG00000087494	parathyroid hormone like hormone Source HGNC Symbol Acc HGNC 9607
F04	UPFH0537167	ENST00000371436.10	RUNX2	ENSG00000124813	runt related transcription factor 2 Source HGNC Symbol Acc HGNC 10472
F05	UPFH1132676	ENST00000220772.8	SFRP1	ENSG00000104332	secreted frizzled related protein 1 Source HGNC Symbol Acc HGNC 10776
F06	UPFH1132677	ENST00000436072.7	SFRP4	ENSG00000106483	secreted frizzled related protein 4 Source HGNC Symbol Acc HGNC 10778
F07	UPFH0555095	ENST00000575618.5	SHBG	ENSG00000129214	sex hormone binding globulin Source HGNC Symbol Acc HGNC 10839
F08	UPFH0312346	ENST00000301691.3	SOST	ENSG00000167941	sclerostin Source HGNC Symbol Acc HGNC 13771
F09	UPFH0385149	ENST00000231061.9	SPARC	ENSG00000113140	secreted protein acidic and cysteine rich Source HGNC Symbol Acc HGNC 11219
F10	UPFH0044238	ENST00000237623.11	SPP1	ENSG00000118785	secreted phosphoprotein 1 Source HGNC Symbol Acc HGNC 11255

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH1132696	ENST00000392323.6	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
F12	UPFH0193430	ENST00000221930.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G01	UPFH0276014	ENST00000262768.11	TIMP2	ENSG00000035862	TIMP metalloproteinase inhibitor 2 Source HGNC Symbol Acc HGNC 11821
G02	UPFH0576817	ENST00000485192.1	TNFAIP3	ENSG00000118503	TNF alpha induced protein 3 Source HGNC Symbol Acc HGNC 11896
G03	UPFH0510648	ENST00000639222.1	TNFRSF11A	ENSG00000141655	TNF receptor superfamily member 11a Source HGNC Symbol Acc HGNC 11908
G04	UPFH1132851	ENST00000297350.9	TNFRSF11B	ENSG00000164761	TNF receptor superfamily member 11b Source HGNC Symbol Acc HGNC 11909
G05	UPFH1132926	ENST00000536782.2	TNFRSF1B	ENSG00000028137	TNF receptor superfamily member 1B Source HGNC Symbol Acc HGNC 11917
G06	UPFH1132852	ENST00000544862.5	TNFSF11	ENSG00000120659	TNF superfamily member 11 Source HGNC Symbol Acc HGNC 11926
G07	UPFH0026674	ENST00000554263.5	TSHR	ENSG00000165409	thyroid stimulating hormone receptor Source HGNC Symbol Acc HGNC 12373
G08	UPFH1132743	ENST00000242261.6	TWIST1	ENSG00000122691	twist family bHLH transcription factor 1 Source HGNC Symbol Acc HGNC 12428
G09	UPFH0608623	ENST00000550325.5	VDR	ENSG00000111424	vitamin D receptor Source HGNC Symbol Acc HGNC 12679
G10	UPFH0281656	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G11	UPFH0490750	ENST00000301061.9	WNT10B	ENSG00000169884	Wnt family member 10B Source HGNC Symbol Acc HGNC 12775
G12	UPFH0486867	ENST00000284523.2	WNT3A	ENSG00000154342	Wnt family member 3A Source HGNC Symbol Acc HGNC 15983
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST0000054417.5	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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