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

Human Osteogenesis

Cat. no. 249955 UPHS-026ZR

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	ACVR1	AHSG	ALPL	ANXA5	BGLAP	BGN	BMP1	BMP2	BMP3	BMP4	BMP5	BMP6
B	BMP7	BMPR1A	BMPR1B	BMPR2	CALCR	CD36	CDH11	CHRD	COL10A1	COL14A1	COL15A1	COL1A1
C	COL1A2	COL2A1	COL3A1	COL5A1	COMP	CSF1	CSF2	CSF3	CTSK	DLX5	EGF	EGFR
D	FGF1	FGF2	FGFR1	FGFR2	FLT1	FN1	GDF10	GLI1	ICAM1	IGF1	IGF1R	IGF2
E	IHH	ITGA1	ITGA2	ITGA3	ITGAM	ITGB1	MMP10	MMP2	MMP8	MMP9	NFKB1	NOG
F	PDGFA	PHEX	RUNX2	SERPINH1	SMAD1	SMAD2	SMAD3	SMAD4	SMAD5	SOX9	SP7	SPP1
G	TGFB1	TGFB2	TGFB3	TGFBR1	TGFBR2	TNF	TNFSF11	TWIST1	VCAM1	VDR	VEGFA	VEGFB
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	UPFH0312963	ENST00000539637.5	ACVR1	ENSG00000115170	activin A receptor type 1 Source HGNC Symbol Acc HGNC 171
A02	UPFH0148301	ENST00000273784.5	AHSG	ENSG00000145192	alpha 2-HS glycoprotein Source HGNC Symbol Acc HGNC 349
A03	UPFH0616425	ENST00000374832.5	ALPL	ENSG00000162551	alkaline phosphatase, biomineralization associated Source HGNC Symbol Acc HGNC 438
A04	UPFH1132775	ENST00000515017.5	ANXA5	ENSG00000164111	annexin A5 Source HGNC Symbol Acc HGNC 543
A05	UPFH1132966	ENST00000368272.5	BGLAP	ENSG00000242252	bone gamma-carboxyglutamate protein Source HGNC Symbol Acc HGNC 1043
A06	UPFH0475814	ENST00000480756.1	BGN	ENSG00000182492	biglycan Source HGNC Symbol Acc HGNC 1044
A07	UPFH1132274	ENST00000306385.10	BMP1	ENSG00000168487	bone morphogenetic protein 1 Source HGNC Symbol Acc HGNC 1067
A08	UPFH1132780	ENST00000378827.5	BMP2	ENSG00000125845	bone morphogenetic protein 2 Source HGNC Symbol Acc HGNC 1069
A09	UPFH1132275	ENST00000282701.3	BMP3	ENSG00000152785	bone morphogenetic protein 3 Source HGNC Symbol Acc HGNC 1070
A10	UPFH0443169	ENST00000558984.1	BMP4	ENSG00000125378	bone morphogenetic protein 4 Source HGNC Symbol Acc HGNC 1071
A11	UPFH1132864	ENST00000370830.4	BMP5	ENSG00000112175	bone morphogenetic protein 5 Source HGNC Symbol Acc HGNC 1072
A12	UPFH1172901	ENST00000283147.7	BMP6	ENSG00000153162	bone morphogenetic protein 6 Source HGNC Symbol Acc HGNC 1073
B01	UPFH1132781	ENST00000433911.1	BMP7	ENSG00000101144	bone morphogenetic protein 7 Source HGNC Symbol Acc HGNC 1074
B02	UPFH1132901	ENST00000372037.7	BMPR1A	ENSG00000107779	bone morphogenetic protein receptor type 1A Source HGNC Symbol Acc HGNC 1076
B03	UPFH0181358	ENST00000515059.5	BMPR1B	ENSG00000138696	bone morphogenetic protein receptor type 1B Source HGNC Symbol Acc HGNC 1077
B04	UPFH0383804	ENST00000374580.8	BMPR2	ENSG00000204217	bone morphogenetic protein receptor type 2 Source HGNC Symbol Acc HGNC 1078
B05	UPFH0236099	ENST00000415529.2	CALCR	ENSG00000004948	calcitonin receptor Source HGNC Symbol Acc HGNC 1440
B06	UPFH1125151	ENST00000433696.6	CD36	ENSG00000135218	CD36 molecule Source HGNC Symbol Acc HGNC 1663
B07	UPFH0449653	ENST00000562325.5	CDH11	ENSG00000140937	cadherin 11 Source HGNC Symbol Acc HGNC 1750
B08	UPFH0235750	ENST00000204604.5	CHRD	ENSG00000090539	chordin Source HGNC Symbol Acc HGNC 1949
B09	UPFH0319580	ENST00000327673.4	COL10A1	ENSG00000123500	collagen type X alpha 1 chain Source HGNC Symbol Acc HGNC 2185
B10	UPFH1132322	ENST00000309791.8	COL14A1	ENSG00000187955	collagen type XIV alpha 1 chain Source HGNC Symbol Acc HGNC 2191
B11	UPFH1132323	ENST00000610452.1	COL15A1	ENSG00000204291	collagen type XV alpha 1 chain Source HGNC Symbol Acc HGNC 2192
B12	UPFH0361104	ENST00000225964.9	COL1A1	ENSG00000108821	collagen type I alpha 1 chain Source HGNC Symbol Acc HGNC 2197
C01	UPFH1132970	ENST00000620463.1	COL1A2	ENSG00000164692	collagen type I alpha 2 chain Source HGNC Symbol Acc HGNC 2198
C02	UPFH0228314	ENST00000380518.8	COL2A1	ENSG00000139219	collagen type II alpha 1 chain Source HGNC Symbol Acc HGNC 2200
C03	UPFH0067087	ENST00000304636.7	COL3A1	ENSG00000168542	collagen type III alpha 1 chain Source HGNC Symbol Acc HGNC 2201
C04	UPFH0548854	ENST00000371820.3	COL5A1	ENSG00000130635	collagen type V alpha 1 chain Source HGNC Symbol Acc HGNC 2209
C05	UPFH0168413	ENST00000542601.6	COMP	ENSG00000105664	cartilage oligomeric matrix protein Source HGNC Symbol Acc HGNC 2227
C06	UPFH1132338	ENST00000329608.11	CSF1	ENSG00000184371	colony stimulating factor 1 Source HGNC Symbol Acc HGNC 2432
C07	UPFH1132793	ENST00000296871.4	CSF2	ENSG00000164400	colony stimulating factor 2 Source HGNC Symbol Acc HGNC 2434
C08	UPFH1132794	ENST00000225474.6	CSF3	ENSG00000108342	colony stimulating factor 3 Source HGNC Symbol Acc HGNC 2438
C09	UPFH0573582	ENST00000443913.1	CTSK	ENSG00000143387	cathepsin K Source HGNC Symbol Acc HGNC 2536
C10	UPFH0507540	ENST00000648378.1	DLX5	ENSG00000105880	distal-less homeobox 5 Source HGNC Symbol Acc HGNC 2918
		ENST00000503		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132380	392.1	EGF	138798	epidermal growth factor Source HGNC Symbol Acc HGNC 3229
C12	UPFH1132381	ENST00000420316.6	EGFR	ENSG00000146648	epidermal growth factor receptor Source HGNC Symbol Acc HGNC 3236
D01	UPFH0087975	ENST00000612258.4	FGF1	ENSG00000113578	fibroblast growth factor 1 Source HGNC Symbol Acc HGNC 3665
D02	UPFH0613093	ENST00000264498.7	FGF2	ENSG00000138685	fibroblast growth factor 2 Source HGNC Symbol Acc HGNC 3676
D03	UPFH0483731	ENST00000447712.6	FGFR1	ENSG00000077782	fibroblast growth factor receptor 1 Source HGNC Symbol Acc HGNC 3688
D04	UPFH0529346	ENST00000604236.5	FGFR2	ENSG00000066468	fibroblast growth factor receptor 2 Source HGNC Symbol Acc HGNC 3689
D05	UPFH1132400	ENST00000541932.5	FLT1	ENSG00000102755	fms related tyrosine kinase 1 Source HGNC Symbol Acc HGNC 3763
D06	UPFH0605066	ENST00000336916.8	FN1	ENSG00000115414	fibronectin 1 Source HGNC Symbol Acc HGNC 3778
D07	UPFH0565577	ENST00000580279.2	GDF10	ENSG00000266524	growth differentiation factor 10 Source HGNC Symbol Acc HGNC 4215
D08	UPFH0266526	ENST00000546141.5	GLI1	ENSG00000111087	GLI family zinc finger 1 Source HGNC Symbol Acc HGNC 4317
D09	UPFH1132462	ENST00000264832.8	ICAM1	ENSG00000090339	intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344
D10	UPFH0229443	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D11	UPFH0237955	ENST00000650285.1	IGF1R	ENSG00000140443	insulin like growth factor 1 receptor Source HGNC Symbol Acc HGNC 5465
D12	UPFH0479939	ENST00000418738.2	IGF2	ENSG00000167244	insulin like growth factor 2 Source HGNC Symbol Acc HGNC 5466
E01	UPFH0570027	ENST00000295731.7	IHH	ENSG00000163501	Indian hedgehog signaling molecule Source HGNC Symbol Acc HGNC 5956
E02	UPFH0229386	ENST00000282588.6	ITGA1	ENSG00000213949	integrin subunit alpha 1 Source HGNC Symbol Acc HGNC 6134
E03	UPFH1132496	ENST00000296585.10	ITGA2	ENSG00000164171	integrin subunit alpha 2 Source HGNC Symbol Acc HGNC 6137
E04	UPFH1132814	ENST00000320031.13	ITGA3	ENSG00000005884	integrin subunit alpha 3 Source HGNC Symbol Acc HGNC 6139
E05	UPFH0542903	ENST00000287497.13	ITGAM	ENSG00000169896	integrin subunit alpha M Source HGNC Symbol Acc HGNC 6149
E06	UPFH1132498	ENST00000423113.5	ITGB1	ENSG00000150093	integrin subunit beta 1 Source HGNC Symbol Acc HGNC 6153
E07	UPFH1132891	ENST00000279441.9	MMP10	ENSG00000166670	matrix metallopeptidase 10 Source HGNC Symbol Acc HGNC 7156
E08	UPFH1132551	ENST00000437642.6	MMP2	ENSG00000087245	matrix metallopeptidase 2 Source HGNC Symbol Acc HGNC 7166
E09	UPFH0387972	ENST00000236826.8	MMP8	ENSG00000118113	matrix metallopeptidase 8 Source HGNC Symbol Acc HGNC 7175
E10	UPFH0367626	ENST00000372330.3	MMP9	ENSG00000100985	matrix metallopeptidase 9 Source HGNC Symbol Acc HGNC 7176
E11	UPFH1132828	ENST00000226574.9	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E12	UPFH0273734	ENST00000332822.4	NOG	ENSG00000183691	noggin Source HGNC Symbol Acc HGNC 7866
F01	UPFH1132608	ENST00000354513.9	PDGFA	ENSG00000197461	platelet derived growth factor subunit A Source HGNC Symbol Acc HGNC 8799
F02	UPFH0036175	ENST00000475778.1	PHEX	ENSG00000102174	phosphate regulating endopeptidase homolog X-linked Source HGNC Symbol Acc HGNC 8918
F03	UPFH0537167	ENST00000371436.10	RUNX2	ENSG00000124813	runt related transcription factor 2 Source HGNC Symbol Acc HGNC 10472
F04	UPFH0251127	ENST00000358171.7	SERPINH1	ENSG00000149257	serpin family H member 1 Source HGNC Symbol Acc HGNC 1546
F05	UPFH1132685	ENST00000515385.1	SMAD1	ENSG00000170365	SMAD family member 1 Source HGNC Symbol Acc HGNC 6767
F06	UPFH1132686	ENST00000585978.1	SMAD2	ENSG00000175387	SMAD family member 2 Source HGNC Symbol Acc HGNC 6768
F07	UPFH1132840	ENST00000439724.7	SMAD3	ENSG00000166949	SMAD family member 3 Source HGNC Symbol Acc HGNC 6769
F08	UPFH0151428	ENST00000342988.7	SMAD4	ENSG00000141646	SMAD family member 4 Source HGNC Symbol Acc HGNC 6770
F09	UPFH1132687	ENST00000509297.6	SMAD5	ENSG00000113658	SMAD family member 5 Source HGNC Symbol Acc HGNC 6771
F10	UPFH0392206	ENST00000245479.3	SOX9	ENSG00000125398	SRY-box 9 Source HGNC Symbol Acc HGNC 11204

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0095636	ENST00000537210.2	SP7	ENSG00000170374	Sp7 transcription factor Source NCBI gene Acc 121340
F12	UPFH0044238	ENST00000237623.11	SPP1	ENSG00000118785	secreted phosphoprotein 1 Source HGNC Symbol Acc HGNC 11255
G01	UPFH0193430	ENST00000221930.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G02	UPFH1132846	ENST00000366929.4	TGFB2	ENSG00000092969	transforming growth factor beta 2 Source HGNC Symbol Acc HGNC 11768
G03	UPFH0000256	ENST00000238682.7	TGFB3	ENSG00000119699	transforming growth factor beta 3 Source HGNC Symbol Acc HGNC 11769
G04	UPFH1132719	ENST00000374990.6	TGFBR1	ENSG00000106799	transforming growth factor beta receptor 1 Source HGNC Symbol Acc HGNC 11772
G05	UPFH0249772	ENST00000295754.9	TGFBR2	ENSG00000163513	transforming growth factor beta receptor 2 Source HGNC Symbol Acc HGNC 11773
G06	UPFH1132978	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G07	UPFH1132852	ENST00000544862.5	TNFSF11	ENSG00000120659	TNF superfamily member 11 Source HGNC Symbol Acc HGNC 11926
G08	UPFH1132743	ENST00000242261.6	TWIST1	ENSG00000122691	twist family bHLH transcription factor 1 Source HGNC Symbol Acc HGNC 12428
G09	UPFH1132856	ENST00000294728.7	VCAM1	ENSG00000162692	vascular cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 12663
G10	UPFH0608623	ENST00000550325.5	VDR	ENSG00000111424	vitamin D receptor Source HGNC Symbol Acc HGNC 12679
G11	UPFH0281656	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G12	UPFH0523097	ENST00000309422.6	VEGFB	ENSG00000173511	vascular endothelial growth factor B Source HGNC Symbol Acc HGNC 12681
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.