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

Human TGFb / BMP Signaling Pathway

Cat. no. 249955 UPHS-035ZR

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	ACVR2A	ACVRL1	AMH	AMHR2	ATF4	BAMBI	BGLAP	BMP1	BMP2	BMP3	BMP4
B	BMP5	BMP6	BMP7	BMPER	BMPR1A	BMPR1B	BMPR2	CDKN1A	CDKN1B	CDKN2B	CHRD	COL1A1
C	COL1A2	DCN	DLX2	EMP1	ENG	FOS	FST	GADD45B	GDF2	GDF3	GDF5	GDF6
D	GDF7	GSC	HERPUD1	HIPK2	ID1	ID2	IFRD1	IGF1	IGFBP3	IL6	INHA	INHBA
E	INHBB	JUN	JUNB	LEFTY1	LTBP1	LTBP2	MECOM	MYC	NODAL	NOG	PDGFB	PLAU
F	RUNX1	SERPINE1	SMAD1	SMAD2	SMAD3	SMAD4	SMAD5	SMAD7	SMURF1	SOX4	STAT1	TGFB1
G	TGFB1I1	TGFB2	TGFB3	TGFBI	TGFBR1	TGFBR2	TGFBR3	TGFBRAP1	TGIF1	THBS1	TNFSF10	TSC22D1
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	UPFH1132215	ENST00000535787.5	ACVR2A	ENSG00000121989	activin A receptor type 2A Source HGNC Symbol Acc HGNC 173
A03	UPFH0438756	ENST00000419526.6	ACVRL1	ENSG00000139567	activin A receptor like type 1 Source HGNC Symbol Acc HGNC 175
A04	UPFH1132228	ENST00000221496.4	AMH	ENSG00000104899	anti-Mullerian hormone Source HGNC Symbol Acc HGNC 464
A05	UPFH1132229	ENST00000379791.7	AMHR2	ENSG00000135409	anti-Mullerian hormone receptor type 2 Source HGNC Symbol Acc HGNC 465
A06	UPFH1132244	ENST00000404241.6	ATF4	ENSG00000128272	activating transcription factor 4 Source HGNC Symbol Acc HGNC 786
A07	UPFH1132267	ENST00000375533.6	BAMBI	ENSG00000095739	BMP and activin membrane bound inhibitor Source HGNC Symbol Acc HGNC 30251
A08	UPFH1132966	ENST00000368272.5	BGLAP	ENSG00000242252	bone gamma-carboxyglutamate protein Source HGNC Symbol Acc HGNC 1043
A09	UPFH1132274	ENST00000306385.10	BMP1	ENSG00000168487	bone morphogenetic protein 1 Source HGNC Symbol Acc HGNC 1067
A10	UPFH1132780	ENST00000378827.5	BMP2	ENSG00000125845	bone morphogenetic protein 2 Source HGNC Symbol Acc HGNC 1069
A11	UPFH1132275	ENST00000282701.3	BMP3	ENSG00000152785	bone morphogenetic protein 3 Source HGNC Symbol Acc HGNC 1070
A12	UPFH0443169	ENST00000558984.1	BMP4	ENSG00000125378	bone morphogenetic protein 4 Source HGNC Symbol Acc HGNC 1071
B01	UPFH1132864	ENST00000370830.4	BMP5	ENSG00000112175	bone morphogenetic protein 5 Source HGNC Symbol Acc HGNC 1072
B02	UPFH1172901	ENST00000283147.7	BMP6	ENSG00000153162	bone morphogenetic protein 6 Source HGNC Symbol Acc HGNC 1073
B03	UPFH1132781	ENST00000433911.1	BMP7	ENSG00000101144	bone morphogenetic protein 7 Source HGNC Symbol Acc HGNC 1074
B04	UPFH1132276	ENST00000648392.1	BMPER	ENSG00000164619	BMP binding endothelial regulator Source HGNC Symbol Acc HGNC 24154
B05	UPFH1132901	ENST00000372037.7	BMPR1A	ENSG00000107779	bone morphogenetic protein receptor type 1A Source HGNC Symbol Acc HGNC 1076
B06	UPFH0181358	ENST00000515059.5	BMPR1B	ENSG00000138696	bone morphogenetic protein receptor type 1B Source HGNC Symbol Acc HGNC 1077
B07	UPFH0383804	ENST00000374580.8	BMPR2	ENSG00000204217	bone morphogenetic protein receptor type 2 Source HGNC Symbol Acc HGNC 1078
B08	UPFH0312181	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
B09	UPFH1132964	ENST00000228872.9	CDKN1B	ENSG00000111276	cyclin dependent kinase inhibitor 1B Source HGNC Symbol Acc HGNC 1785
B10	UPFH0150846	ENST00000579591.1	CDKN2B	ENSG00000147883	cyclin dependent kinase inhibitor 2B Source HGNC Symbol Acc HGNC 1788
B11	UPFH0235750	ENST00000204604.5	CHRD	ENSG00000090539	chordin Source HGNC Symbol Acc HGNC 1949
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	UPFH1132355	ENST00000052754.10	DCN	ENSG00000011465	decorin Source HGNC Symbol Acc HGNC 2705
C03	UPFH1132967	ENST00000234198.9	DLX2	ENSG00000115844	distal-less homeobox 2 Source HGNC Symbol Acc HGNC 2915
C04	UPFH1132383	ENST00000256951.10	EMP1	ENSG00000134531	epithelial membrane protein 1 Source HGNC Symbol Acc HGNC 3333
C05	UPFH0535657	ENST00000344849.4	ENG	ENSG00000106991	endoglin Source HGNC Symbol Acc HGNC 3349
C06	UPFH1132401	ENST00000555242.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
C07	UPFH0474678	ENST00000396947.7	FST	ENSG00000134363	follistatin Source HGNC Symbol Acc HGNC 3971
C08	UPFH1132414	ENST00000215631.9	GADD45B	ENSG00000099860	growth arrest and DNA damage inducible beta Source HGNC Symbol Acc HGNC 4096
C09	UPFH0412733	ENST00000581492.2	GDF2	ENSG00000263761	growth differentiation factor 2 Source HGNC Symbol Acc HGNC 4217
C10	UPFH1132908	ENST00000329913.4	GDF3	ENSG00000184344	growth differentiation factor 3 Source HGNC Symbol Acc HGNC 4218
		ENST00000374		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132419	372.1	GDF5	125965	growth differentiation factor 5 Source HGNC Symbol Acc HGNC 4220
C12	UPFH1132420	ENST00000287020.7	GDF6	ENSG00000156466	growth differentiation factor 6 Source HGNC Symbol Acc HGNC 4221
D01	UPFH1132421	ENST00000272224.5	GDF7	ENSG00000143869	growth differentiation factor 7 Source HGNC Symbol Acc HGNC 4222
D02	UPFH1132427	ENST00000238558.4	GSC	ENSG00000133937	goosecoid homeobox Source HGNC Symbol Acc HGNC 4612
D03	UPFH1132441	ENST00000379792.6	HERPUD1	ENSG00000051108	homocysteine inducible ER protein with ubiquitin like domain 1 Source HGNC Symbol Acc HGNC 13744
D04	UPFH1132448	ENST00000406875.8	HIPK2	ENSG00000064393	homeodomain interacting protein kinase 2 Source HGNC Symbol Acc HGNC 14402
D05	UPFH1132463	ENST00000376112.4	ID1	ENSG00000125968	inhibitor of DNA binding 1, HLH protein Source HGNC Symbol Acc HGNC 5360
D06	UPFH1132464	ENST00000331129.3	ID2	ENSG00000115738	inhibitor of DNA binding 2 Source HGNC Symbol Acc HGNC 5361
D07	UPFH1132962	ENST00000621379.4	IFRD1	ENSG00000006652	interferon related developmental regulator 1 Source HGNC Symbol Acc HGNC 5456
D08	UPFH0229443	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D09	UPFH1132893	ENST00000275521.10	IGFBP3	ENSG00000146674	insulin like growth factor binding protein 3 Source HGNC Symbol Acc HGNC 5472
D10	UPFH1172910	ENST00000258743.10	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D11	UPFH1132485	ENST00000243786.3	INHA	ENSG00000123999	inhibin subunit alpha Source HGNC Symbol Acc HGNC 6065
D12	UPFH1132486	ENST00000242208.5	INHBA	ENSG00000122641	inhibin subunit beta A Source HGNC Symbol Acc HGNC 6066
E01	UPFH1132487	ENST00000295228.4	INHBB	ENSG00000163083	inhibin subunit beta B Source HGNC Symbol Acc HGNC 6067
E02	UPFH0569765	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
E03	UPFH1132504	ENST00000302754.6	JUNB	ENSG00000171223	JunB proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6205
E04	UPFH1132876	ENST00000272134.5	LEFTY1	ENSG00000243709	left-right determination factor 1 Source HGNC Symbol Acc HGNC 6552
E05	UPFH0150319	ENST00000407925.5	LTBP1	ENSG00000049323	latent transforming growth factor beta binding protein 1 Source HGNC Symbol Acc HGNC 6714
E06	UPFH1132526	ENST00000556690.5	LTBP2	ENSG00000119681	latent transforming growth factor beta binding protein 2 Source HGNC Symbol Acc HGNC 6715
E07	UPFH0130668	ENST00000628990.2	MECOM	ENSG00000085276	MDS1 and EVI1 complex locus Source HGNC Symbol Acc HGNC 3498
E08	UPFH1132563	ENST00000517291.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
E09	UPFH0200048	ENST00000287139.7	NODAL	ENSG00000156574	nodal growth differentiation factor Source HGNC Symbol Acc HGNC 7865
E10	UPFH0273734	ENST00000332822.4	NOG	ENSG00000183691	noggin Source HGNC Symbol Acc HGNC 7866
E11	UPFH0524988	ENST00000381551.8	PDGFB	ENSG00000100311	platelet derived growth factor subunit B Source HGNC Symbol Acc HGNC 8800
E12	UPFH1132831	ENST00000446342.5	PLAU	ENSG00000122861	plasminogen activator, urokinase Source HGNC Symbol Acc HGNC 9052
F01	UPFH0023287	ENST00000437180.5	RUNX1	ENSG00000159216	runt related transcription factor 1 Source HGNC Symbol Acc HGNC 10471
F02	UPFH0384736	ENST00000223095.4	SERPINE1	ENSG00000106366	serpin family E member 1 Source HGNC Symbol Acc HGNC 8583
F03	UPFH1132685	ENST00000515385.1	SMAD1	ENSG00000170365	SMAD family member 1 Source HGNC Symbol Acc HGNC 6767
F04	UPFH1132686	ENST00000585978.1	SMAD2	ENSG00000175387	SMAD family member 2 Source HGNC Symbol Acc HGNC 6768
F05	UPFH1132840	ENST00000439724.7	SMAD3	ENSG00000166949	SMAD family member 3 Source HGNC Symbol Acc HGNC 6769
F06	UPFH0151428	ENST00000342988.7	SMAD4	ENSG00000141646	SMAD family member 4 Source HGNC Symbol Acc HGNC 6770
F07	UPFH1132687	ENST00000509297.6	SMAD5	ENSG00000113658	SMAD family member 5 Source HGNC Symbol Acc HGNC 6771
F08	UPFH0372810	ENST00000262158.7	SMAD7	ENSG00000101665	SMAD family member 7 Source HGNC Symbol Acc HGNC 6773
F09	UPFH0346334	ENST00000361125.1	SMURF1	ENSG00000198742	SMAD specific E3 ubiquitin protein ligase 1 Source HGNC Symbol Acc HGNC 16807
F10	UPFH0188647	ENST00000244745.3	SOX4	ENSG00000124766	SRY-box 4 Source HGNC Symbol Acc HGNC 11200

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	UPFH0013326	ENST00000394858.6	TGFB1I1	ENSG00000140682	transforming growth factor beta 1 induced transcript 1 Source HGNC Symbol Acc HGNC 11767
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	UPFH1132718	ENST00000514554.5	TGFBI	ENSG00000120708	transforming growth factor beta induced Source HGNC Symbol Acc HGNC 11771
G05	UPFH1132719	ENST00000374990.6	TGFBR1	ENSG00000106799	transforming growth factor beta receptor 1 Source HGNC Symbol Acc HGNC 11772
G06	UPFH0249772	ENST00000295754.9	TGFBR2	ENSG00000163513	transforming growth factor beta receptor 2 Source HGNC Symbol Acc HGNC 11773
G07	UPFH1132720	ENST00000525962.5	TGFBR3	ENSG00000069702	transforming growth factor beta receptor 3 Source HGNC Symbol Acc HGNC 11774
G08	UPFH1132721	ENST00000393359.7	TGFBRAP1	ENSG00000135966	transforming growth factor beta receptor associated protein 1 Source HGNC Symbol Acc HGNC 16836
G09	UPFH1132722	ENST00000407501.6	TGIF1	ENSG00000177426	TGFB induced factor homeobox 1 Source HGNC Symbol Acc HGNC 11776
G10	UPFH1132847	ENST00000260356.5	THBS1	ENSG00000137801	thrombospondin 1 Source HGNC Symbol Acc HGNC 11785
G11	UPFH1132733	ENST00000241261.7	TNFSF10	ENSG00000121858	TNF superfamily member 10 Source HGNC Symbol Acc HGNC 11925
G12	UPFH0220581	ENST00000261489.6	TSC22D1	ENSG00000102804	TSC22 domain family member 1 Source HGNC Symbol Acc HGNC 16826
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.