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

Rat TGFb / BMP Signaling Pathway

Cat. no. 249955 UPRN-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	Gdf3	Gdf5	Gdf6	Gdf7
D	Gsc	Herpud1	Hipk2	Id1	Id2	Ifrd1	Igf1	Igfbp3	Il6	Inha	Inhba	Inhbb
E	Jun	Junb	Ltbp1	Ltbp2	Mecom	Myc	Nodal	Nog	Pdgfb	Plat	Plau	Runx1
F	Serpine1	Smad1	Smad2	Smad3	Smad4	Smad5	Smad6	Smad7	AABR0702757 5.1	Stat1	Tdgf1	Tgfb1
G	Tgfb1i1	Tgfb2	Tgfb3	Tgfbi	Tgfbr1	Tgfbr2	Tgfbr3	Tgfbrap1	Tgif1	Thbs1	Tnfsf10	Tsc22d1
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFR1015339	ENSRNOT00000087071.1	Acvr1	ENSRNOG00000005033	activin A receptor type 1 Source RGD Symbol Acc 620200
A02	UPFR1059856	ENSRNOT00000007404.7	Acvr2a	ENSRNOG00000005334	activin A receptor type 2A Source RGD Symbol Acc 70911
A03	UPFR1098689	ENSRNOT00000008673.4	Acvrl1	ENSRNOG00000028713	activin A receptor like type 1 Source RGD Symbol Acc 2029
A04	UPFR1036093	ENSRNOT00000026220.2	Amh	ENSRNOG00000019377	anti-Mullerian hormone Source RGD Symbol Acc 2108
A05	UPFR1037149	ENSRNOT00000020103.5	Amhr2	ENSRNOG00000014850	anti-Mullerian hormone receptor type 2 Source RGD Symbol Acc 70964
A06	UPFR1067882	ENSRNOT00000065304.4	Atf4	ENSRNOG00000017801	activating transcription factor 4 Source RGD Symbol Acc 621863
A07	UPFR1041419	ENSRNOT00000021801.5	Bambi	ENSRNOG00000016066	BMP and activin membrane-bound inhibitor Source RGD Symbol Acc 621831
A08	UPFR1053867	ENSRNOT00000026530.3	Bglap	ENSRNOG00000019607	bone gamma-carboxyglutamate protein Source RGD Symbol Acc 2206
A09	UPFR1057170	ENSRNOT00000046054.4	Bmp1	ENSRNOG00000010890	bone morphogenetic protein 1 Source RGD Symbol Acc 620739
A10	UPFR1023820	ENSRNOT00000028904.4	Bmp2	ENSRNOG00000021276	bone morphogenetic protein 2 Source RGD Symbol Acc 2211
A11	UPFR1067060	ENSRNOT00000038872.3	Bmp3	ENSRNOG00000002381	bone morphogenetic protein 3 Source RGD Symbol Acc 2212
A12	UPFR1013450	ENSRNOT00000083268.1	Bmp4	ENSRNOG00000009694	bone morphogenetic protein 4 Source RGD Symbol Acc 2213
B01	UPFR1079381	ENSRNOT00000014846.5	Bmp5	ENSRNOG00000010917	bone morphogenetic protein 5 Source RGD Symbol Acc 1305979
B02	UPFR1048825	ENSRNOT00000018359.7	Bmp6	ENSRNOG00000013717	bone morphogenetic protein 6 Source RGD Symbol Acc 2214
B03	UPFR1105126	ENSRNOT00000084990.1	Bmp7	ENSRNOG00000053384	bone morphogenetic protein 7 Source RGD Symbol Acc 620743
B04	UPFR1056705	ENSRNOT00000033460.5	Bmper	ENSRNOG00000015357	BMP-binding endothelial regulator Source RGD Symbol Acc 1563373
B05	UPFR1025391	ENSRNOT00000079554.1	Bmpr1a	ENSRNOG00000052469	bone morphogenetic protein receptor type 1A Source RGD Symbol Acc 70989
B06	UPFR1039895	ENSRNOT00000021963.7	Bmpr1b	ENSRNOG00000016289	bone morphogenetic protein receptor type 1B Source RGD Symbol Acc 1595863
B07	UPFR1094942	ENSRNOT00000035238.4	Bmpr2	ENSRNOG00000022196	bone morphogenetic protein receptor type 2 Source RGD Symbol Acc 71082
B08	UPFR1028644	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG00000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
B09	UPFR1069360	ENSRNOT00000049848.1	Cdkn1b	ENSRNOG00000007249	cyclin-dependent kinase inhibitor 1B Source RGD Symbol Acc 69062
B10	UPFR1115067	ENSRNOT00000092196.1	Cdkn2b	ENSRNOG00000006735	cyclin-dependent kinase inhibitor 2B Source RGD Symbol Acc 2324
B11	UPFR1063759	ENSRNOT00000002394.7	Chrd	ENSRNOG00000001750	chordin Source RGD Symbol Acc 620181
B12	UPFR1053469	ENSRNOT00000005311.6	Col1a1	ENSRNOG00000003897	collagen type I alpha 1 chain Source RGD Symbol Acc 61817
C01	UPFR1109083	ENSRNOT00000089292.1	Col1a2	ENSRNOG00000011292	collagen type I alpha 2 chain Source RGD Symbol Acc 621351
C02	UPFR1014708	ENSRNOT00000006070.6	Dcn	ENSRNOG00000004554	decorin Source RGD Symbol Acc 61895
C03	UPFR1126530	ENSRNOT00000002076.5	Dlx2	ENSRNOG00000001519	distal-less homeobox 2 Source RGD Symbol Acc 1304853
C04	UPFR1029298	ENSRNOT00000079785.1	Emp1	ENSRNOG00000008676	epithelial membrane protein 1 Source RGD Symbol Acc 2552
C05	UPFR1081956	ENSRNOT00000071801.2	Eng	ENSRNOG00000050190	endoglin Source RGD Symbol Acc 1593188
C06	UPFR1045359	ENSRNOT00000010712.3	Fos	ENSRNOG00000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
C07	UPFR1120134	ENSRNOT00000015680.4	Fst	ENSRNOG00000011631	follistatin Source RGD Symbol Acc 2633
C08	UPFR1054309	ENSRNOT00000026871.4	Gadd45b	ENSRNOG00000019822	growth arrest and DNA-damage-inducible, beta Source RGD Symbol Acc 1309080
C09	UPFR1100558	ENSRNOT00000041552.3	Gdf3	ENSRNOG00000015331	growth differentiation factor 3 Source RGD Symbol Acc 1564178
C10	UPFR1064525	ENSRNOT00000073736.3	Gdf5	ENSRNOG00000050123	growth differentiation factor 5 Source RGD Symbol Acc 620102
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1076862	010266.5	Gdf6	000007810	growth differentiation factor 6 Source RGD Symbol Acc 620104
C12	UPFR1061846	ENSRNOT00000 007928.5	Gdf7	ENSRNOG00 000006046	growth differentiation factor 7 Source RGD Symbol Acc 620105
D01	UPFR1038732	ENSRNOT00000 014204.5	Gsc	ENSRNOG00 000010605	goosecoid homeobox Source RGD Symbol Acc 631425
D02	UPFR1015276	ENSRNOT00000 025559.5	Herpud1	ENSRNOG00 000018796	homocysteine inducible ER protein with ubiquitin like domain 1 Source RGD Symbol Acc 620818
D03	UPFR1040673	ENSRNOT00000 064891.2	Hipk2	ENSRNOG00 000007034	homeodomain interacting protein kinase 2 Source RGD Symbol Acc 1309349
D04	UPFR1039525	ENSRNOT00000 029660.5	Id1	ENSRNOG00 000021750	inhibitor of DNA binding 1, HLH protein Source RGD Symbol Acc 2858
D05	UPFR1117393	ENSRNOT00000 009491.6	Id2	ENSRNOG00 000007237	inhibitor of DNA binding 2 Source RGD Symbol Acc 2859
D06	UPFR1048152	ENSRNOT00000 073910.1	Ifrd1	ENSRNOG00 000050997	interferon-related developmental regulator 1 Source RGD Symbol Acc 2867
D07	UPFR1050099	ENSRNOT00000 038780.6	Igf1	ENSRNOG00 000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
D08	UPFR1013429	ENSRNOT00000 088355.1	Igfbp3	ENSRNOG00 000061910	insulin-like growth factor binding protein 3 Source RGD Symbol Acc 2874
D09	UPFR1098910	ENSRNOT00000 013732.6	Il6	ENSRNOG00 000010278	interleukin 6 Source RGD Symbol Acc 2901
D10	UPFR1056586	ENSRNOT00000 027227.4	Inha	ENSRNOG00 000020097	inhibin subunit alpha Source RGD Symbol Acc 2912
D11	UPFR1022215	ENSRNOT00000 019272.5	Inhba	ENSRNOG00 000014320	inhibin subunit beta A Source RGD Symbol Acc 62074
D12	UPFR1092263	ENSRNOT00000 086350.1	Inhbb	ENSRNOG00 000060237	inhibin subunit beta B Source RGD Symbol Acc 2913
E01	UPFR1037970	ENSRNOT00000 011731.3	Jun	ENSRNOG00 000026293	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2943
E02	UPFR1102181	ENSRNOT00000 067780.3	Junb	ENSRNOG00 000042838	JunB proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2944
E03	UPFR1061424	ENSRNOT00000 047674.4	Ltbp1	ENSRNOG00 000033090	latent transforming growth factor beta binding protein 1 Source RGD Symbol Acc 68379
E04	UPFR1052783	ENSRNOT00000 031331.4	Ltbp2	ENSRNOG00 000012094	latent transforming growth factor beta binding protein 2 Source RGD Symbol Acc 68380
E05	UPFR1015874	ENSRNOT00000 068381.3	Mecom	ENSRNOG00 000012645	MDS1 and EVI1 complex locus Source RGD Symbol Acc 1310997
E06	UPFR1101439	ENSRNOT00000 006188.5	Myc	ENSRNOG00 000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
E07	UPFR1057301	ENSRNOT00000 000672.4	Nodal	ENSRNOG00 000000556	nodal growth differentiation factor Source RGD Symbol Acc 1305994
E08	UPFR1059037	ENSRNOT00000 032388.4	Nog	ENSRNOG00 000023683	noggin Source RGD Symbol Acc 3183
E09	UPFR1088903	ENSRNOT00000 023196.5	Pdgfb	ENSRNOG00 000017197	platelet derived growth factor subunit B Source RGD Symbol Acc 3283
E10	UPFR1085291	ENSRNOT00000 025763.6	Plat	ENSRNOG00 000019018	plasminogen activator, tissue type Source RGD Symbol Acc 3342
E11	UPFR1088915	ENSRNOT00000 014273.5	Plau	ENSRNOG00 000010516	plasminogen activator, urokinase Source RGD Symbol Acc 3343
E12	UPFR1113082	ENSRNOT00000 002313.4	Runx1	ENSRNOG00 000001704	runt-related transcription factor 1 Source RGD Symbol Acc 2283
F01	UPFR1051798	ENSRNOT00000 001916.2	Serpine1	ENSRNOG00 000001414	serpin family E member 1 Source RGD Symbol Acc 3249
F02	UPFR1071849	ENSRNOT00000 025079.6	Smad1	ENSRNOG00 000018483	SMAD family member 1 Source RGD Symbol Acc 3030
F03	UPFR1057367	ENSRNOT00000 046847.4	Smad2	ENSRNOG00 000018140	SMAD family member 2 Source RGD Symbol Acc 3031
F04	UPFR1033812	ENSRNOT00000 039730.4	Smad3	ENSRNOG00 000008620	SMAD family member 3 Source RGD Symbol Acc 3032
F05	UPFR1022605	ENSRNOT00000 082484.1	Smad4	ENSRNOG00 000051965	SMAD family member 4 Source RGD Symbol Acc 3033
F06	UPFR1115197	ENSRNOT00000 016704.4	Smad5	ENSRNOG00 000022870	SMAD family member 5 Source RGD Symbol Acc 620158
F07	UPFR1024934	ENSRNOT00000 012155.7	Smad6	ENSRNOG00 000009173	SMAD family member 6 Source RGD Symbol Acc 1305069
F08	UPFR1092772	ENSRNOT00000 024831.4	Smad7	ENSRNOG00 000018359	SMAD family member 7 Source RGD Symbol Acc 69314
F09	UPFR1126582	ENSRNOT00000 080424.1	AABR0702 7575.1	ENSRNOG00 000058289	
F10	UPFR1068760	ENSRNOT00000 083514.1	Stat1	ENSRNOG00 000014079	signal transducer and activator of transcription 4 Source RGD Symbol Acc 1305747

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1115000	ENSRNOT00000040840.5	Tdgf1	ENSRNOG00000037171	teratocarcinoma-derived growth factor 1 Source RGD Symbol Acc 1594185
F12	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG00000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G01	UPFR1045420	ENSRNOT00000054980.3	Tgfb1i1	ENSRNOG00000019965	transforming growth factor beta 1 induced transcript 1 Source RGD Symbol Acc 620173
G02	UPFR1046456	ENSRNOT00000087023.1	Tgfb2	ENSRNOG00000002418	transforming growth factor, beta 2 Source RGD Symbol Acc 70491
G03	UPFR1030751	ENSRNOT00000013516.5	Tgfb3	ENSRNOG00000009867	transforming growth factor, beta 3 Source RGD Symbol Acc 3851
G04	UPFR1042228	ENSRNOT00000016390.7	Tgfbi	ENSRNOG00000012216	transforming growth factor, beta induced Source RGD Symbol Acc 620017
G05	UPFR1035135	ENSRNOT00000081090.1	Tgfbr1	ENSRNOG00000007036	transforming growth factor, beta receptor 1 Source RGD Symbol Acc 3852
G06	UPFR1107633	ENSRNOT00000037883.4	Tgfbr2	ENSRNOG00000013265	transforming growth factor, beta receptor 2 Source RGD Symbol Acc 69651
G07	UPFR1058624	ENSRNOT00000002867.4	Tgfbr3	ENSRNOG00000002093	transforming growth factor beta receptor 3 Source RGD Symbol Acc 61821
G08	UPFR1074466	ENSRNOT00000037094.6	Tgfbrap1	ENSRNOG00000024562	transforming growth factor, beta receptor associated protein 1 Source RGD Symbol Acc 1310772
G09	UPFR1059577	ENSRNOT00000021534.6	Tgif1	ENSRNOG00000015906	TGFB-induced factor homeobox 1 Source RGD Symbol Acc 1310517
G10	UPFR1104745	ENSRNOT00000083351.1	Thbs1	ENSRNOG00000045829	thrombospondin 1 Source RGD Symbol Acc 1588455
G11	UPFR1107113	ENSRNOT00000017758.5	Tnfsf10	ENSRNOG00000013269	TNF superfamily member 10 Source RGD Symbol Acc 628734
G12	UPFR1043932	ENSRNOT00000001360.3	Tsc22d1	ENSRNOG00000001030	TSC22 domain family, member 1 Source RGD Symbol Acc 3850
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	UPFR1126610	UPL_RGDC	RGDC	UPL_RGDC	Rat 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.