

# QuantiNova® LNA® Probe PCR Focus Panels (96-Well Format and 384-Well [4 x 96] Format)

## Rat Growth Factors

Cat. no. 249955 UPRN-041ZA

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 (96-well): QuantiNova LNA Probe PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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	Amh	Artn	Bdnf	Bmp1	Bmp10	Bmp2	Bmp3	Bmp4	Bmp5	Bmp6	Bmp7	Bmp8a
B	Ccl1	Csf1	Csf2	Csf3	Cxcl1	Cxcl12	Egf	Ereg	Fgf1	Fgf10	Fgf11	Fgf13
C	Fgf14	Fgf19	Fgf17	Fgf18	Fgf2	Fgf22	Fgf3	Fgf4	Fgf5	Fgf6	Fgf7	Fgf8
D	Fgf9	Vegfd	Gdf10	Gdf11	Gdf5	Gdnf	Hgf	Igf1	Igf2	Il11	Il12a	Il18
E	Il1a	Il1b	Il2	Il3	Il4	Il6	Il7	Inha	Inhba	Inhbb	Kitlg	Lefty1
F	Lep	Lif	Mdk	Mstn	Ngf	Nodal	Nrg1	Ntf3	Ntf4	Pdgfra	Pgf	Rabep1
G	S100a6	Spp1	Tdgf1	Thf1	Tgfa	Tgfb1	Tgfb2	Tgfb3	Vegfa	Vegfb	Vegfc	Zfp91
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	UPFR1036093	ENSRNOT00000026220.2	Amh	ENSRNOG0000019377	anti-Mullerian hormone Source RGD Symbol Acc 2108
A02	UPFR1059169	ENSRNOT00000026852.3	Artn	ENSRNOG0000019842	artemin Source RGD Symbol Acc 621427
A03	UPFR1014257	ENSRNOT00000078543.1	Bdnf	ENSRNOG0000047466	brain-derived neurotrophic factor Source RGD Symbol Acc 2202
A04	UPFR1057170	ENSRNOT00000046054.4	Bmp1	ENSRNOG0000010890	bone morphogenetic protein 1 Source RGD Symbol Acc 620739
A05	UPFR1068948	ENSRNOT00000012365.3	Bmp10	ENSRNOG0000009316	bone morphogenetic protein 10 Source RGD Symbol Acc 1562986
A06	UPFR1023820	ENSRNOT00000028904.4	Bmp2	ENSRNOG0000021276	bone morphogenetic protein 2 Source RGD Symbol Acc 2211
A07	UPFR1067060	ENSRNOT00000038872.3	Bmp3	ENSRNOG0000002381	bone morphogenetic protein 3 Source RGD Symbol Acc 2212
A08	UPFR1013450	ENSRNOT00000083268.1	Bmp4	ENSRNOG0000009694	bone morphogenetic protein 4 Source RGD Symbol Acc 2213
A09	UPFR1079381	ENSRNOT00000014846.5	Bmp5	ENSRNOG0000010917	bone morphogenetic protein 5 Source RGD Symbol Acc 1305979
A10	UPFR1048825	ENSRNOT00000018359.7	Bmp6	ENSRNOG0000013717	bone morphogenetic protein 6 Source RGD Symbol Acc 2214
A11	UPFR1105126	ENSRNOT00000084990.1	Bmp7	ENSRNOG0000053384	bone morphogenetic protein 7 Source RGD Symbol Acc 620743
A12	UPFR1055088	ENSRNOT00000045922.2	Bmp8a	ENSRNOG0000030155	bone morphogenetic protein 8a Source RGD Symbol Acc 1585858
B01	UPFR1028075	ENSRNOT00000025342.7	Clcf1	ENSRNOG0000018752	cardiotrophin-like cytokine factor 1 Source RGD Symbol Acc 1303171
B02	UPFR1022984	ENSRNOT00000081835.1	Csf1	ENSRNOG0000018659	colony stimulating factor 1 Source RGD Symbol Acc 621063
B03	UPFR1084630	ENSRNOT00000032333.3	Csf2	ENSRNOG0000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
B04	UPFR1037448	ENSRNOT00000011509.3	Csf3	ENSRNOG0000008525	colony stimulating factor 3 Source RGD Symbol Acc 2426
B05	UPFR1056296	ENSRNOT00000003778.3	Cxcl1	ENSRNOG0000002802	C-X-C motif chemokine ligand 1 Source RGD Symbol Acc 619869
B06	UPFR1044005	ENSRNOT00000066670.3	Cxcl12	ENSRNOG0000013589	C-X-C motif chemokine ligand 12 Source RGD Symbol Acc 3651
B07	UPFR1045222	ENSRNOT00000087007.1	Egf	ENSRNOG0000053979	epidermal growth factor Source RGD Symbol Acc 2542
B08	UPFR1109356	ENSRNOT00000003716.3	Ereg	ENSRNOG0000002771	epiregulin Source RGD Symbol Acc 620299
B09	UPFR1031298	ENSRNOT00000018577.3	Fgf1	ENSRNOG0000013867	fibroblast growth factor 1 Source RGD Symbol Acc 2605
B10	UPFR1048435	ENSRNOT00000016485.3	Fgf10	ENSRNOG0000012278	fibroblast growth factor 10 Source RGD Symbol Acc 2606
B11	UPFR1062688	ENSRNOT00000020152.3	Fgf11	ENSRNOG0000014882	fibroblast growth factor 11 Source RGD Symbol Acc 620162
B12	UPFR1116340	ENSRNOT00000091330.1	Fgf13	ENSRNOG0000042753	fibroblast growth factor 13 Source RGD Symbol Acc 620164
C01	UPFR1104305	ENSRNOT00000041551.5	Fgf14	ENSRNOG0000009288	fibroblast growth factor 14 Source RGD Symbol Acc 620165
C02	UPFR1030117	ENSRNOT00000028365.2	Fgf19	ENSRNOG0000020899	fibroblast growth factor 19 Source RGD Symbol Acc 620166
C03	UPFR1038954	ENSRNOT00000017723.2	Fgf17	ENSRNOG0000012912	fibroblast growth factor 17 Source RGD Symbol Acc 2607
C04	UPFR1089371	ENSRNOT00000072297.2	Fgf18	ENSRNOG0000048389	fibroblast growth factor 18 Source MGI Symbol Acc MGI 1277980
C05	UPFR1033121	ENSRNOT00000023388.5	Fgf2	ENSRNOG0000017392	fibroblast growth factor 2 Source RGD Symbol Acc 2609
C06	UPFR1097782	ENSRNOT00000011936.2	Fgf22	ENSRNOG0000008960	fibroblast growth factor 22 Source RGD Symbol Acc 620177
C07	UPFR1059877	ENSRNOT00000028343.4	Fgf3	ENSRNOG0000020888	fibroblast growth factor 3 Source RGD Symbol Acc 620126
C08	UPFR1084715	ENSRNOT00000028355.5	Fgf4	ENSRNOG0000020890	fibroblast growth factor 4 Source RGD Symbol Acc 620127
C09	UPFR1059215	ENSRNOT00000035446.2	Fgf5	ENSRNOG0000022631	fibroblast growth factor 5 Source RGD Symbol Acc 620129
C10	UPFR1036673	ENSRNOT00000081426.1	Fgf6	ENSRNOG0000053662	fibroblast growth factor 6 Source RGD Symbol Acc 620130
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1021146	012700.4	Fgf7	00009425	fibroblast growth factor 7 Source RGD Symbol Acc 61805
C12	UPFR1074028	ENSRNOT00000 023558.3	Fgf8	ENSRNOG00 000017524	fibroblast growth factor 8 Source RGD Symbol Acc 70891
D01	UPFR1020537	ENSRNOT00000 015367.5	Fgf9	ENSRNOG00 000011471	fibroblast growth factor 9 Source RGD Symbol Acc 2610
D02	UPFR1115126	ENSRNOT00000 068601.2	Vegfd	ENSRNOG00 000003587	vascular endothelial growth factor D Source RGD Symbol Acc 620695
D03	UPFR1064137	ENSRNOT00000 081183.1	Gdf10	ENSRNOG00 000051993	growth differentiation factor 10 Source RGD Symbol Acc 621512
D04	UPFR1034652	ENSRNOT00000 010035.3	Gdf11	ENSRNOG00 000007610	growth differentiation factor 11 Source RGD Symbol Acc 2673
D05	UPFR1064525	ENSRNOT00000 073736.3	Gdf5	ENSRNOG00 000050123	growth differentiation factor 5 Source RGD Symbol Acc 620102
D06	UPFR1111724	ENSRNOT00000 041288.2	Gdnf	ENSRNOG00 000012819	glial cell derived neurotrophic factor Source RGD Symbol Acc 2677
D07	UPFR1076642	ENSRNOT00000 009763.5	Hgf	ENSRNOG00 000007027	hepatocyte growth factor Source RGD Symbol Acc 2794
D08	UPFR1050099	ENSRNOT00000 038780.6	Igf1	ENSRNOG00 000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
D09	UPFR1085899	ENSRNOT00000 089171.1	Igf2	ENSRNOG00 000020369	insulin-like growth factor 2 Source RGD Symbol Acc 2870
D10	UPFR1065504	ENSRNOT00000 023489.5	Il11	ENSRNOG00 000017386	interleukin 11 Source RGD Symbol Acc 621475
D11	UPFR1065603	ENSRNOT00000 012831.3	Il12a	ENSRNOG00 000009468	interleukin 12A Source RGD Symbol Acc 620562
D12	UPFR1053861	ENSRNOT00000 013093.6	Il18	ENSRNOG00 000009848	interleukin 18 Source RGD Symbol Acc 2889
E01	UPFR1066959	ENSRNOT00000 080818.1	Il1a	ENSRNOG00 000004575	interleukin 1 alpha Source RGD Symbol Acc 2890
E02	UPFR1121351	ENSRNOT00000 006308.4	Il1b	ENSRNOG00 000004649	interleukin 1 beta Source RGD Symbol Acc 2891
E03	UPFR1070791	ENSRNOT00000 023327.2	Il2	ENSRNOG00 000017348	interleukin 2 Source RGD Symbol Acc 620047
E04	UPFR1073307	ENSRNOT00000 031762.1	Il3	ENSRNOG00 000026786	interleukin 3 Source RGD Symbol Acc 2897
E05	UPFR1099283	ENSRNOT00000 010029.3	Il4	ENSRNOG00 000007624	interleukin 4 Source RGD Symbol Acc 2898
E06	UPFR1098910	ENSRNOT00000 013732.6	Il6	ENSRNOG00 000010278	interleukin 6 Source RGD Symbol Acc 2901
E07	UPFR1101991	ENSRNOT00000 016091.7	Il7	ENSRNOG00 000011973	interleukin 7 Source RGD Symbol Acc 2904
E08	UPFR1056586	ENSRNOT00000 027227.4	Inha	ENSRNOG00 000020097	inhibin subunit alpha Source RGD Symbol Acc 2912
E09	UPFR1022215	ENSRNOT00000 019272.5	Inhba	ENSRNOG00 000014320	inhibin subunit beta A Source RGD Symbol Acc 62074
E10	UPFR1092263	ENSRNOT00000 086350.1	Inhbb	ENSRNOG00 000060237	inhibin subunit beta B Source RGD Symbol Acc 2913
E11	UPFR1087511	ENSRNOT00000 085097.1	Kitlg	ENSRNOG00 000005386	KIT ligand Source RGD Symbol Acc 3086
E12	UPFR1100077	ENSRNOT00000 004354.5	Lefty1	ENSRNOG00 000003263	left right determination factor 1 Source RGD Symbol Acc 1561867
F01	UPFR1089630	ENSRNOT00000 071926.1	Lep	ENSRNOG00 000045797	leptin Source RGD Symbol Acc 3000
F02	UPFR1017798	ENSRNOT00000 009313.4	Lif	ENSRNOG00 000007002	LIF, interleukin 6 family cytokine Source RGD Symbol Acc 620865
F03	UPFR1113183	ENSRNOT00000 033978.3	Mdk	ENSRNOG00 000017560	midkine Source RGD Symbol Acc 69073
F04	UPFR1114916	ENSRNOT00000 038093.3	Mstn	ENSRNOG00 000021294	myostatin Source RGD Symbol Acc 3115
F05	UPFR1044499	ENSRNOT00000 022200.6	Ngf	ENSRNOG00 000016571	nerve growth factor Source RGD Symbol Acc 1598328
F06	UPFR1057301	ENSRNOT00000 000672.4	Nodal	ENSRNOG00 000000556	nodal growth differentiation factor Source RGD Symbol Acc 1305994
F07	UPFR1017750	ENSRNOT00000 038549.7	Nrg1	ENSRNOG00 000010392	neuregulin 1 Source RGD Symbol Acc 621341
F08	UPFR1101598	ENSRNOT00000 087115.1	Nrf3	ENSRNOG00 000019716	neurotrophin 3 Source RGD Symbol Acc 619728
F09	UPFR1083073	ENSRNOT00000 028194.2	Nrf4	ENSRNOG00 000020783	neurotrophin 4 Source RGD Symbol Acc 3212
F10	UPFR1035905	ENSRNOT00000 042117.6	Pdgfra	ENSRNOG00 000001312	platelet derived growth factor subunit A Source RGD Symbol Acc 3282

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1118244	ENSRNOT0000007790.5	Pgf	ENSRNOG0000005650	placental growth factor Source RGD Symbol Acc 619850
F12	UPFR1109914	ENSRNOT00000041443.3	Rabep1	ENSRNOG0000005015	rabaptin, RAB GTPase binding effector protein 1 Source RGD Symbol Acc 708568
G01	UPFR1056437	ENSRNOT00000015612.5	S100a6	ENSRNOG0000011647	S100 calcium binding protein A6 Source RGD Symbol Acc 620264
G02	UPFR1100110	ENSRNOT00000067875.4	Spp1	ENSRNOG0000043451	secreted phosphoprotein 1 Source RGD Symbol Acc 3752
G03	UPFR1115000	ENSRNOT00000040840.5	Tdgf1	ENSRNOG0000037171	teratocarcinoma-derived growth factor 1 Source RGD Symbol Acc 1594185
G04	UPFR1094006	ENSRNOT00000001538.1	Tff1	ENSRNOG0000001164	trefoil factor 1 Source RGD Symbol Acc 620707
G05	UPFR1060818	ENSRNOT00000057441.4	Tgfa	ENSRNOG0000016182	transforming growth factor alpha Source RGD Symbol Acc 3849
G06	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G07	UPFR1046456	ENSRNOT00000087023.1	Tgfb2	ENSRNOG0000002418	transforming growth factor, beta 2 Source RGD Symbol Acc 70491
G08	UPFR1030751	ENSRNOT00000013516.5	Tgfb3	ENSRNOG0000009867	transforming growth factor, beta 3 Source RGD Symbol Acc 3851
G09	UPFR1117908	ENSRNOT00000026559.5	Vegfa	ENSRNOG0000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
G10	UPFR1063692	ENSRNOT00000050891.3	Vegfb	ENSRNOG0000021156	vascular endothelial growth factor B Source RGD Symbol Acc 619799
G11	UPFR1108264	ENSRNOT00000015529.4	Vegfc	ENSRNOG0000011416	vascular endothelial growth factor C Source RGD Symbol Acc 619800
G12	UPFR1103200	ENSRNOT00000016804.6	Zfp91	ENSRNOG0000012524	zinc finger protein 91 Source RGD Symbol Acc 628736
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG0000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG0000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG0000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG0000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG0000013874	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 $\mu$ 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.

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