

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

## Rat Endothelial Cell Biology

Cat. no. 249955 UPRN-015ZA

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
<b>A</b>	Ace	Adam17	Agf	Agtr1b	Angpt1	Anxa5	Apoe	Bax	Bcl2	Bcl2l1	Calca	Casp1
<b>B</b>	Casp3	Cav1	Ccl2	Ccl5	Cdh5	Cflar	Col18a1	Cx3cl1	Cxcl1	Cxcl2	Cxcr5	Edn1
<b>C</b>	Edn2	Ednra	Eng	F2r	F3	Fas	Faslg	Fgf1	Fgf2	Flt1	Fn1	Hif1a
<b>D</b>	Hmox1	Icam1	Il11	Il1b	Il3	Il6	Il7	Itga5	Itgav	Itgb1	Itgb3	Kdr
<b>E</b>	Kit	Mmp1	Mmp2	Mmp9	Nos3	Nppb	Npr1	Ocln	Pdgfra	Gp5	Pf4	Pgf
<b>F</b>	Plat	Plau	Plg	AABR0705461 4.1	Plgs2	Plk2	Sele	Sell	Selp	Serpine1	Sod1	Tek
<b>G</b>	Tfpi	Tgfb1	Thbd	Thbs1	Timp1	LOC1036943 80	Tnfrsf10	Tymp	Vcam1	Vegfa	Vwf	Xdh
<b>H</b>	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	QIC	PPC	PPC

## Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFR1115385	ENSRNOT00000010627.8	Ace	ENSRNOG0000062101	angiotensin I converting enzyme Source RGD Symbol Acc 2493
A02	UPFR1096573	ENSRNOT00000081110.1	Adam17	ENSRNOG0000060694	ADAM metallopeptidase domain 17 Source RGD Symbol Acc 620404
A03	UPFR1049261	ENSRNOT00000024917.4	Agf	ENSRNOG0000018445	angiotensinogen Source RGD Symbol Acc 2069
A04	UPFR1077618	ENSRNOT00000014178.4	Agtr1b	ENSRNOG0000010640	angiotensin II receptor, type 1b Source RGD Symbol Acc 2071
A05	UPFR1072829	ENSRNOT00000007979.6	Angpt1	ENSRNOG0000005854	angiopoietin 1 Source RGD Symbol Acc 628896
A06	UPFR1079810	ENSRNOT00000019554.6	Anxa5	ENSRNOG0000014453	annexin A5 Source RGD Symbol Acc 2120
A07	UPFR1073431	ENSRNOT00000091574.1	ApoE	ENSRNOG0000018454	apolipoprotein E Source RGD Symbol Acc 2138
A08	UPFR1074536	ENSRNOT00000028328.5	Bax	ENSRNOG0000020876	BCL2 associated X, apoptosis regulator Source RGD Symbol Acc 2192
A09	UPFR1082998	ENSRNOT00000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A10	UPFR1047186	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG0000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
A11	UPFR1035100	ENSRNOT00000005124.4	Calca	ENSRNOG0000011130	calcitonin-related polypeptide alpha Source RGD Symbol Acc 2254
A12	UPFR1052168	ENSRNOT00000009993.6	Casp1	ENSRNOG0000007372	caspase 1 Source RGD Symbol Acc 2274
B01	UPFR1091664	ENSRNOT00000014095.5	Casp3	ENSRNOG0000010475	caspase 3 Source RGD Symbol Acc 2275
B02	UPFR1012931	ENSRNOT000000078250.1	Cav1	ENSRNOG00000056836	caveolin 1 Source RGD Symbol Acc 2280
B03	UPFR1014050	ENSRNOT000000009448.3	Ccl2	ENSRNOG0000007159	C-C motif chemokine ligand 2 Source RGD Symbol Acc 3645
B04	UPFR1019085	ENSRNOT00000014865.6	Ccl5	ENSRNOG0000010906	C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069
B05	UPFR1038288	ENSRNOT00000017983.6	Cdh5	ENSRNOG0000013324	cadherin 5 Source RGD Symbol Acc 1307370
B06	UPFR1108095	ENSRNOT00000016730.5	Cflar	ENSRNOG0000012473	CASP8 and FADD-like apoptosis regulator Source RGD Symbol Acc 620847
B07	UPFR1110277	ENSRNOT000000045315.4	Col18a1	ENSRNOG0000001229	collagen type XVIII alpha 1 chain Source RGD Symbol Acc 70936
B08	UPFR1070853	ENSRNOT000000022128.5	Cx3cl1	ENSRNOG0000016326	C-X3-C motif chemokine ligand 1 Source RGD Symbol Acc 620458
B09	UPFR1056296	ENSRNOT000000003778.3	Cxcl1	ENSRNOG0000002802	C-X-C motif chemokine ligand 1 Source RGD Symbol Acc 619869
B10	UPFR1121790	ENSRNOT000000003745.6	Cxcl2	ENSRNOG0000002792	C-X-C motif chemokine ligand 2 Source RGD Symbol Acc 70069
B11	UPFR1083049	ENSRNOT00000016580.3	Cxcr5	ENSRNOG0000012430	C-X-C motif chemokine receptor 5 Source RGD Symbol Acc 62010
B12	UPFR1035851	ENSRNOT00000019361.2	Edn1	ENSRNOG0000014361	endothelin 1 Source RGD Symbol Acc 2532
C01	UPFR1121420	ENSRNOT00000012569.3	Edn2	ENSRNOG0000009390	endothelin 2 Source RGD Symbol Acc 2533
C02	UPFR1093550	ENSRNOT000000078701.1	Ednra	ENSRNOG0000012721	endothelin receptor type A Source RGD Symbol Acc 2535
C03	UPFR1081956	ENSRNOT000000071801.2	Eng	ENSRNOG00000050190	endoglin Source RGD Symbol Acc 1593188
C04	UPFR1094290	ENSRNOT000000074626.2	F2r	ENSRNOG0000048043	coagulation factor II (thrombin) receptor Source RGD Symbol Acc 2586
C05	UPFR1038904	ENSRNOT00000015836.5	F3	ENSRNOG0000011800	coagulation factor III, tissue factor Source RGD Symbol Acc 2587
C06	UPFR1075141	ENSRNOT000000025928.5	Fas	ENSRNOG0000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
C07	UPFR1108356	ENSRNOT000000003998.2	Faslg	ENSRNOG0000002978	Fas ligand Source RGD Symbol Acc 3880
C08	UPFR1031298	ENSRNOT00000018577.3	Fgf1	ENSRNOG0000013867	fibroblast growth factor 1 Source RGD Symbol Acc 2605
C09	UPFR1033121	ENSRNOT000000023388.5	Fgf2	ENSRNOG0000017392	fibroblast growth factor 2 Source RGD Symbol Acc 2609
C10	UPFR1070633	ENSRNOT000000001248.3	Fli1	ENSRNOG0000000940	FMS-related tyrosine kinase 1 Source RGD Symbol Acc 2621
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1089380	057585.4	Fn1	000014288	fibronectin 1 Source RGD Symbol Acc 2624
C12	UPFR1061095	ENSRNOT00000 049725.3	Hif1a	ENSRNOG00 000008292	hypoxia inducible factor 1 subunit alpha Source RGD Symbol Acc 61928
D01	UPFR1040868	ENSRNOT00000 019192.6	Hmox1	ENSRNOG00 000014117	heme oxygenase 1 Source RGD Symbol Acc 2806
D02	UPFR1031281	ENSRNOT00000 028066.5	Icam1	ENSRNOG00 000020679	intercellular adhesion molecule 1 Source RGD Symbol Acc 2857
D03	UPFR1065504	ENSRNOT00000 023489.5	Il11	ENSRNOG00 000017386	interleukin 11 Source RGD Symbol Acc 621475
D04	UPFR1121351	ENSRNOT00000 006308.4	Il1b	ENSRNOG00 000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D05	UPFR1073307	ENSRNOT00000 031762.1	Il3	ENSRNOG00 000026786	interleukin 3 Source RGD Symbol Acc 2897
D06	UPFR1098910	ENSRNOT00000 013732.6	Il6	ENSRNOG00 000010278	interleukin 6 Source RGD Symbol Acc 2901
D07	UPFR1101991	ENSRNOT00000 016091.7	Il7	ENSRNOG00 000011973	interleukin 7 Source RGD Symbol Acc 2904
D08	UPFR1023329	ENSRNOT00000 087748.1	Itga5	ENSRNOG00 000057451	integrin subunit alpha 5 Source RGD Symbol Acc 2925
D09	UPFR1097241	ENSRNOT00000 006961.7	Itgav	ENSRNOG00 000004912	integrin subunit alpha V Source RGD Symbol Acc 1310613
D10	UPFR1091655	ENSRNOT00000 014785.5	Itgb1	ENSRNOG00 000010966	integrin subunit beta 1 Source RGD Symbol Acc 2927
D11	UPFR1016531	ENSRNOT00000 073350.2	Itgb3	ENSRNOG00 000048449	integrin subunit beta 3 Source RGD Symbol Acc 628868
D12	UPFR1041145	ENSRNOT00000 085089.1	Kdr	ENSRNOG00 000046829	kinase insert domain receptor Source RGD Symbol Acc 2965
E01	UPFR1068157	ENSRNOT00000 003050.3	Kit	ENSRNOG00 000002227	KIT proto-oncogene receptor tyrosine kinase Source RGD Symbol Acc 620568
E02	UPFR1101595	ENSRNOT00000 012595.3	Mmp1	ENSRNOG00 000032353	matrix metalloproteinase 1 Source RGD Symbol Acc 1307917
E03	UPFR1080151	ENSRNOT00000 022679.6	Mmp2	ENSRNOG00 000016695	matrix metalloproteinase 2 Source RGD Symbol Acc 621316
E04	UPFR1032957	ENSRNOT00000 023965.3	Mmp9	ENSRNOG00 000017539	matrix metalloproteinase 9 Source RGD Symbol Acc 621320
E05	UPFR1032783	ENSRNOT00000 013058.4	Nos3	ENSRNOG00 000009348	nitric oxide synthase 3 Source RGD Symbol Acc 3186
E06	UPFR1100038	ENSRNOT00000 010779.5	Nppb	ENSRNOG00 000008141	natriuretic peptide B Source RGD Symbol Acc 3194
E07	UPFR1108667	ENSRNOT00000 020307.3	Npr1	ENSRNOG00 000014684	natriuretic peptide receptor 1 Source RGD Symbol Acc 3195
E08	UPFR1027887	ENSRNOT00000 084667.1	Ocln	ENSRNOG00 000018297	occludin Source RGD Symbol Acc 620089
E09	UPFR1089489	ENSRNOT00000 003077.5	Pdgfra	ENSRNOG00 000002244	platelet derived growth factor receptor alpha Source RGD Symbol Acc 3284
E10	UPFR1081107	ENSRNOT00000 090978.1	Gp5	ENSRNOG00 000061705	glycoprotein V (platelet) Source RGD Symbol Acc 2724
E11	UPFR1099077	ENSRNOT00000 033406.1	Pf4	ENSRNOG00 000028015	platelet factor 4 Source RGD Symbol Acc 3305
E12	UPFR1118244	ENSRNOT00000 007790.5	Pgf	ENSRNOG00 000005650	placental growth factor Source RGD Symbol Acc 619850
F01	UPFR1085291	ENSRNOT00000 025763.6	Plat	ENSRNOG00 000019018	plasminogen activator, tissue type Source RGD Symbol Acc 3342
F02	UPFR1088915	ENSRNOT00000 014273.5	Plau	ENSRNOG00 000010516	plasminogen activator, urokinase Source RGD Symbol Acc 3343
F03	UPFR1070729	ENSRNOT00000 023368.5	Plg	ENSRNOG00 000017223	plasminogen Source RGD Symbol Acc 619893
F04	UPFR1016828	ENSRNOT00000 010891.6	AABR0705 4614.1	ENSRNOG00 000008245	
F05	UPFR1035449	ENSRNOT00000 003567.4	Ptgs2	ENSRNOG00 000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
F06	UPFR1115915	ENSRNOT00000 011219.6	Ptk2	ENSRNOG00 000007916	protein tyrosine kinase 2 Source RGD Symbol Acc 3443
F07	UPFR1029154	ENSRNOT00000 030677.3	Sele	ENSRNOG00 000002723	selectin E Source RGD Symbol Acc 3654
F08	UPFR1104551	ENSRNOT00000 003733.6	Sell	ENSRNOG00 000002776	selectin L Source RGD Symbol Acc 3655
F09	UPFR1033299	ENSRNOT00000 076879.2	Selp	ENSRNOG00 000002794	selectin P Source RGD Symbol Acc 3656
F10	UPFR1051798	ENSRNOT00000 001916.2	Serpine1	ENSRNOG00 000001414	serpin family E member 1 Source RGD Symbol Acc 3249

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1062096	ENSRNOT0000002885.6	Sod1	ENSRNOG0000002115	superoxide dismutase 1 Source RGD Symbol Acc 3731
F12	UPFR1031924	ENSRNOT00000032248.3	Tek	ENSRNOG0000008587	TEK receptor tyrosine kinase Source RGD Symbol Acc 620980
G01	UPFR1049469	ENSRNOT0000006787.7	Tfpi	ENSRNOG0000005039	tissue factor pathway inhibitor Source RGD Symbol Acc 61914
G02	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G03	UPFR1103035	ENSRNOT0000006200.3	Thbd	ENSRNOG0000004687	thrombomodulin Source RGD Symbol Acc 621299
G04	UPFR1104745	ENSRNOT00000083351.1	Thbs1	ENSRNOG0000045829	thrombospondin 1 Source RGD Symbol Acc 1588455
G05	UPFR1060230	ENSRNOT00000013745.7	Timp1	ENSRNOG0000010208	TIMP metalloproteinase inhibitor 1 Source RGD Symbol Acc 621675
G06	UPFR1098022	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G07	UPFR1107113	ENSRNOT00000017758.5	Tnfsf10	ENSRNOG0000013269	TNF superfamily member 10 Source RGD Symbol Acc 628734
G08	UPFR1112605	ENSRNOT00000040541.4	Tymp	ENSRNOG0000032394	thymidine phosphorylase Source RGD Symbol Acc 1305756
G09	UPFR1101375	ENSRNOT00000019377.5	Vcam1	ENSRNOG0000014333	vascular cell adhesion molecule 1 Source RGD Symbol Acc 3952
G10	UPFR1117908	ENSRNOT00000026559.5	Vegfa	ENSRNOG0000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
G11	UPFR1092436	ENSRNOT00000026643.7	Vwf	ENSRNOG0000019689	von Willebrand factor Source RGD Symbol Acc 621759
G12	UPFR1070658	ENSRNOT00000009634.6	Xdh	ENSRNOG0000007081	xanthine dehydrogenase Source RGD Symbol Acc 62043
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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