

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

## Rat Atherosclerosis

Cat. no. 249955 UPRN-038ZA

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>	Abca1	Ace	Plin2	Apoa1	Apob	Apoe	Bax	Bcl2	Bcl2a1	Bcl2l1	Bid	Birc3
<b>B</b>	Ccl2	Ccl5	Ccr1	Ccr7	Cd44	Cdh5	Cflar	Col3a1	Csf1	Csf2	Ccn2	Cxcl1
<b>C</b>	Egr1	Eln	Eng	Fabp3	Fos	Fga	Fgb	Fgf2	Fn1	Hbegf	Icam1	Ifng
<b>D</b>	Il1a	Il1b	Il1r1	Il1r2	Il2	Il3	Il4	Il5	Ilga2	Ilga5	Ilgax	Ilgb2
<b>E</b>	Kdr	Klf2	Lama1	Ldlr	Lif	Lpl	Lyp1a1	Mmp3	Nfk1	Nes3	LOC1009122 28	Nr1h3
<b>F</b>	Pdgfa	Pdgfb	Pdgfrb	Ppara	Ppard	Pparg	Ptgs1	Rxa	Sele	Sell	Selp	Selpg
<b>G</b>	Serpib2	Serpine1	Sod1	Spp1	Tgfb1	Tgfb2	Thbs4	Tnc	LOC1036943 80	Vcam1	Vegfa	Vwf
<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	UPFR1019469	ENSRNOT00000024564.7	Abca1	ENSRNOG0000018126	ATP binding cassette subfamily A member 1 Source RGD Symbol Acc 631344
A02	UPFR1115385	ENSRNOT00000010627.8	Ace	ENSRNOG0000062101	angiotensin I converting enzyme Source RGD Symbol Acc 2493
A03	UPFR1065250	ENSRNOT00000009749.5	Plin2	ENSRNOG0000007060	perilipin 2 Source RGD Symbol Acc 728889
A04	UPFR1066328	ENSRNOT000000074357.2	Apoa1	ENSRNOG0000045679	apolipoprotein A1 Source RGD Symbol Acc 2130
A05	UPFR1053925	ENSRNOT000000046811.4	Apob	ENSRNOG0000005542	apolipoprotein B Source RGD Symbol Acc 2129
A06	UPFR1073431	ENSRNOT000000091574.1	ApoE	ENSRNOG0000018454	apolipoprotein E Source RGD Symbol Acc 2138
A07	UPFR1074536	ENSRNOT000000028328.5	Bax	ENSRNOG0000020876	BCL2 associated X, apoptosis regulator Source RGD Symbol Acc 2192
A08	UPFR1082998	ENSRNOT000000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A09	UPFR1064713	ENSRNOT000000039850.3	Bcl2a1	ENSRNOG0000047606	BCL2-related protein A1 Source RGD Symbol Acc 620621
A10	UPFR1047186	ENSRNOT000000010762.7	Bcl2l1	ENSRNOG0000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
A11	UPFR1018136	ENSRNOT000000016776.2	Bid	ENSRNOG0000012439	BH3 interacting domain death agonist Source RGD Symbol Acc 620160
A12	UPFR1015683	ENSRNOT000000007702.7	Birc3	ENSRNOG0000005731	baculoviral IAP repeat-containing 3 Source RGD Symbol Acc 621282
B01	UPFR1014050	ENSRNOT000000009448.3	Ccl2	ENSRNOG0000007159	C-C motif chemokine ligand 2 Source RGD Symbol Acc 3645
B02	UPFR1019085	ENSRNOT000000014865.6	Ccl5	ENSRNOG0000010906	C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069
B03	UPFR1018077	ENSRNOT000000008772.4	Ccr1	ENSRNOG0000006715	C-C motif chemokine receptor 1 Source RGD Symbol Acc 708446
B04	UPFR1029602	ENSRNOT000000014163.7	Ccr7	ENSRNOG0000010665	C-C motif chemokine receptor 7 Source RGD Symbol Acc 735151
B05	UPFR1040363	ENSRNOT000000009073.7	Cd44	ENSRNOG0000006094	CD44 molecule (Indian blood group) Source RGD Symbol Acc 2307
B06	UPFR1038288	ENSRNOT000000017983.6	Cdh5	ENSRNOG0000013324	cadherin 5 Source RGD Symbol Acc 1307370
B07	UPFR1108095	ENSRNOT000000016730.5	Cflar	ENSRNOG0000012473	CASP8 and FADD-like apoptosis regulator Source RGD Symbol Acc 620847
B08	UPFR1066020	ENSRNOT000000004956.4	Col3a1	ENSRNOG0000003357	collagen type III alpha 1 chain Source RGD Symbol Acc 71029
B09	UPFR1022984	ENSRNOT000000081835.1	Csf1	ENSRNOG0000018659	colony stimulating factor 1 Source RGD Symbol Acc 621063
B10	UPFR1084630	ENSRNOT000000032333.3	Csf2	ENSRNOG0000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
B11	UPFR1047569	ENSRNOT000000089196.1	Ccn2	ENSRNOG0000015036	cellular communication network factor 2 Source RGD Symbol Acc 621392
B12	UPFR1056296	ENSRNOT000000003778.3	Cxcl1	ENSRNOG0000002802	C-X-C motif chemokine ligand 1 Source RGD Symbol Acc 619869
C01	UPFR1034050	ENSRNOT000000026303.4	Egr1	ENSRNOG0000019422	early growth response 1 Source RGD Symbol Acc 2544
C02	UPFR1061445	ENSRNOT000000032780.7	ElN	ENSRNOG0000001469	elastin Source RGD Symbol Acc 67394
C03	UPFR1081956	ENSRNOT000000071801.2	Eng	ENSRNOG0000050190	endoglin Source RGD Symbol Acc 1593188
C04	UPFR1083061	ENSRNOT000000017325.5	Fabp3	ENSRNOG0000012879	fatty acid binding protein 3 Source RGD Symbol Acc 69048
C05	UPFR1075141	ENSRNOT000000025928.5	Fas	ENSRNOG0000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
C06	UPFR1114837	ENSRNOT000000064091.3	Fga	ENSRNOG0000024848	fibrinogen alpha chain Source RGD Symbol Acc 2603
C07	UPFR1075212	ENSRNOT000000009813.3	Fgb	ENSRNOG0000007092	fibrinogen beta chain Source RGD Symbol Acc 2604
C08	UPFR1033121	ENSRNOT000000023388.5	Fgf2	ENSRNOG0000017392	fibroblast growth factor 2 Source RGD Symbol Acc 2609
C09	UPFR1089380	ENSRNOT000000057585.4	Fn1	ENSRNOG0000014288	fibronectin 1 Source RGD Symbol Acc 2624
C10	UPFR1043686	ENSRNOT000000025157.6	Hbegf	ENSRNOG0000018646	heparin-binding EGF-like growth factor Source RGD Symbol Acc 2526
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1031281	028066.5	Icam1	000020679	intercellular adhesion molecule 1 Source RGD Symbol Acc 2857
C12	UPFR1084134	ENSRNOT0000009919.2	Iifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
D01	UPFR1066959	ENSRNOT00000080818.1	Il1a	ENSRNOG0000004575	interleukin 1 alpha Source RGD Symbol Acc 2890
D02	UPFR1121351	ENSRNOT00000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D03	UPFR1025024	ENSRNOT00000082146.1	Il1r1	ENSRNOG0000014504	interleukin 1 receptor type 1 Source RGD Symbol Acc 2892
D04	UPFR1058134	ENSRNOT00000019415.5	Il1r2	ENSRNOG0000014378	interleukin 1 receptor type 2 Source RGD Symbol Acc 621147
D05	UPFR1070791	ENSRNOT00000023327.2	Il2	ENSRNOG0000017348	interleukin 2 Source RGD Symbol Acc 620047
D06	UPFR1073307	ENSRNOT00000031762.1	Il3	ENSRNOG0000026786	interleukin 3 Source RGD Symbol Acc 2897
D07	UPFR1099283	ENSRNOT00000010029.3	Il4	ENSRNOG0000007624	interleukin 4 Source RGD Symbol Acc 2898
D08	UPFR1086524	ENSRNOT00000010729.4	Il5	ENSRNOG0000008111	interleukin 5 Source RGD Symbol Acc 2900
D09	UPFR1068108	ENSRNOT00000077401.1	Itga2	ENSRNOG0000058111	integrin subunit alpha 2 Source RGD Symbol Acc 621632
D10	UPFR1023329	ENSRNOT00000087748.1	Itga5	ENSRNOG0000057451	integrin subunit alpha 5 Source RGD Symbol Acc 2925
D11	UPFR1013587	ENSRNOT00000054983.4	Itgax	ENSRNOG0000036703	integrin subunit alpha X Source RGD Symbol Acc 1561123
D12	UPFR1033837	ENSRNOT00000001639.6	Itgb2	ENSRNOG0000001224	integrin subunit beta 2 Source RGD Symbol Acc 1305581
E01	UPFR1041145	ENSRNOT00000085089.1	Kdr	ENSRNOG0000046829	kinase insert domain receptor Source RGD Symbol Acc 2965
E02	UPFR1119622	ENSRNOT00000019052.2	Klf2	ENSRNOG0000014205	Kruppel-like factor 2 Source RGD Symbol Acc 1359220
E03	UPFR1092904	ENSRNOT00000023226.6	Lama1	ENSRNOG0000017237	laminin subunit alpha 1 Source RGD Symbol Acc 1307207
E04	UPFR1015414	ENSRNOT00000013496.3	Ldlr	ENSRNOG0000009946	low density lipoprotein receptor Source RGD Symbol Acc 2998
E05	UPFR1017798	ENSRNOT00000009313.4	Lif	ENSRNOG0000007002	LIF, interleukin 6 family cytokine Source RGD Symbol Acc 620865
E06	UPFR1016556	ENSRNOT00000016543.3	Lpl	ENSRNOG0000012181	lipoprotein lipase Source RGD Symbol Acc 3017
E07	UPFR1088943	ENSRNOT00000011312.3	Lypla1	ENSRNOG0000008320	lysophospholipase 1 Source RGD Symbol Acc 3025
E08	UPFR1017988	ENSRNOT00000012310.6	Mmp3	ENSRNOG0000032626	matrix metalloproteinase 3 Source RGD Symbol Acc 621317
E09	UPFR1116688	ENSRNOT00000036838.4	Nfkb1	ENSRNOG0000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E10	UPFR1032783	ENSRNOT00000013058.4	Nos3	ENSRNOG0000009348	nitric oxide synthase 3 Source RGD Symbol Acc 3186
E11	UPFR1048595	ENSRNOT00000013145.6	LOC100912228	ENSRNOG0000009768	neuropeptide Y Source RGD Symbol Acc 3197
E12	UPFR1044343	ENSRNOT00000018154.5	Nr1h3	ENSRNOG0000013172	nuclear receptor subfamily 1, group H, member 3 Source RGD Symbol Acc 61909
F01	UPFR1035905	ENSRNOT00000042117.6	Pdgfa	ENSRNOG0000001312	platelet derived growth factor subunit A Source RGD Symbol Acc 3282
F02	UPFR1088903	ENSRNOT00000023196.5	Pdgfb	ENSRNOG0000017197	platelet derived growth factor subunit B Source RGD Symbol Acc 3283
F03	UPFR1052705	ENSRNOT00000086033.1	Pdgfrb	ENSRNOG0000018461	platelet derived growth factor receptor beta Source RGD Symbol Acc 3285
F04	UPFR1039308	ENSRNOT00000030082.2	Ppara	ENSRNOG0000021463	peroxisome proliferator activated receptor alpha Source RGD Symbol Acc 3369
F05	UPFR1082868	ENSRNOT00000042539.5	Ppard	ENSRNOG0000000503	peroxisome proliferator-activated receptor delta Source RGD Symbol Acc 3370
F06	UPFR1091351	ENSRNOT00000051858.5	Pparg	ENSRNOG0000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371
F07	UPFR1053064	ENSRNOT00000010218.5	Ptgs1	ENSRNOG0000007415	prostaglandin-endoperoxide synthase 1 Source RGD Symbol Acc 3439
F08	UPFR1042024	ENSRNOT00000012892.4	Rxra	ENSRNOG0000009446	retinoid X receptor alpha Source RGD Symbol Acc 3610
F09	UPFR1029154	ENSRNOT00000030677.3	Sele	ENSRNOG0000002723	selectin E Source RGD Symbol Acc 3654
F10	UPFR1104551	ENSRNOT00000003733.6	Sell	ENSRNOG0000002776	selectin L Source RGD Symbol Acc 3655

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1033299	ENSRNOT00000076879.2	Selp	ENSRNOG0000002794	selectin P Source RGD Symbol Acc 3656
F12	UPFR1126527	ENSRNOT00000000888.5	Selp1g	ENSRNOG0000000699	selectin P ligand Source RGD Symbol Acc 1307971
G01	UPFR1020681	ENSRNOT00000003409.5	Serp1b2	ENSRNOG0000002460	serpin family B member 2 Source RGD Symbol Acc 621823
G02	UPFR1051798	ENSRNOT00000001916.2	Serp1e1	ENSRNOG0000001414	serpin family E member 1 Source RGD Symbol Acc 3249
G03	UPFR1062096	ENSRNOT00000002885.6	Sod1	ENSRNOG0000002115	superoxide dismutase 1 Source RGD Symbol Acc 3731
G04	UPFR1100110	ENSRNOT000000067875.4	Spp1	ENSRNOG00000043451	secreted phosphoprotein 1 Source RGD Symbol Acc 3752
G05	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G06	UPFR1046456	ENSRNOT000000087023.1	Tgfb2	ENSRNOG0000002418	transforming growth factor, beta 2 Source RGD Symbol Acc 70491
G07	UPFR1103885	ENSRNOT000000065224.1	Thbs4	ENSRNOG0000012471	thrombospondin 4 Source RGD Symbol Acc 62046
G08	UPFR1025799	ENSRNOT000000084563.1	Tnc	ENSRNOG0000058645	tenascin C Source RGD Symbol Acc 621057
G09	UPFR1098022	ENSRNOT000000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G10	UPFR1101375	ENSRNOT000000019377.5	Vcam1	ENSRNOG0000014333	vascular cell adhesion molecule 1 Source RGD Symbol Acc 3952
G11	UPFR1117908	ENSRNOT000000026559.5	Vegfa	ENSRNOG0000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
G12	UPFR1092436	ENSRNOT000000026643.7	Vwf	ENSRNOG0000019689	von Willebrand factor Source RGD Symbol Acc 621759
H01	UPFR1132952	ENSRNOT000000080216.1	Actb	ENSRNOG0000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT000000023017.5	B2m	ENSRNOG0000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT000000065935.3	Hprt1	ENSRNOG0000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT000000017468.2	Ldha	ENSRNOG0000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT000000018820.5	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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