

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

Rat Lipoprotein Signaling & Cholesterol Metabolism

Cat. no. 249955 UPRN-080ZR

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	Abca1	Abca2	Abcg1	Acaa2	Akr1d1	Angptl3	LOC1009104 38	Apoa1	Apoa2	Apoa4	Apob	NEWGENE_21 34
B	Apoc3	Apod	Apoe	Apof	LOC1009118 04	Cdh13	Cel	Cela3b	Cnbp	Colec12	Cxcl16	Cyb5r3
C	Cyp11a1	Cyp39a1	Cyp46a1	Cyp51	Cyp7a1	Cyp7b1	Dhcr24	Dhcr7	Ebp	Fdft1	Fdps	Hdlbp
D	Hmgcr	Hmgcs1	Hmgcs2	Idi1	Il4	Insig1	Insig2	Lcat	Ldlr	Ldlrap1	Lep	Lipe
E	Lrp10	Lrp12	AABR0705189 2.1	Lrp6	Lrpap1	Mbltps1	Mvd	Mvk	Nr0b2	Nr1h2	Nr1h3	Nr1h4
F	Nsdhl	Olr1	Osbpl1a	Osbpl5	Pcsk9	Pmvk	Ppard	Prkaa1	Prkaa2	Prkag2	LOC291276	Scap
G	Scarf1	Snx17	Saat1	Saat2	Lrp5	Srebf1	Srebf2	Stab2	Stard3	Tm7sf2	Trexf1	Vldlr

	1	2	3	4	5	6	7	8	9	10	11	12
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	UPFR1019469	ENSRNOT00000024564.7	Abca1	ENSRNOG0000018126	ATP binding cassette subfamily A member 1 Source RGD Symbol Acc 631344
A02	UPFR1062601	ENSRNOT00000020339.7	Abca2	ENSRNOG0000014268	ATP binding cassette subfamily A member 2 Source RGD Symbol Acc 620238
A03	UPFR1084113	ENSRNOT00000001533.4	Abcg1	ENSRNOG0000001158	ATP binding cassette subfamily G member 1 Source RGD Symbol Acc 620294
A04	UPFR1053491	ENSRNOT000000085601.1	Acaa2	ENSRNOG0000013766	acetyl-CoA acyltransferase 2 Source RGD Symbol Acc 620482
A05	UPFR1034040	ENSRNOT000000083672.1	Akr1d1	ENSRNOG0000013004	aldo-keto reductase family 1, member D1 Source RGD Symbol Acc 620752
A06	UPFR1043616	ENSRNOT00000011486.6	Angptl3	ENSRNOG0000008638	angiotensin-like 3 Source RGD Symbol Acc 1564505
A07	UPFR1055046	ENSRNOT00000022525.6	LOC100910438	ENSRNOG0000016622	ankyrin repeat family A member 2 Source RGD Symbol Acc 1303108
A08	UPFR1066328	ENSRNOT000000074357.2	Apoa1	ENSRNOG0000045679	apolipoprotein A1 Source RGD Symbol Acc 2130
A09	UPFR1069722	ENSRNOT000000004662.4	Apoa2	ENSRNOG0000003500	apolipoprotein A2 Source RGD Symbol Acc 2131
A10	UPFR1032874	ENSRNOT000000080658.1	Apoa4	ENSRNOG0000055909	apolipoprotein A4 Source RGD Symbol Acc 2132
A11	UPFR1053925	ENSRNOT000000046811.4	Apob	ENSRNOG0000005542	apolipoprotein B Source RGD Symbol Acc 2129
A12	UPFR1017600	ENSRNOT000000046169.3	NEWGENE_2134	ENSRNOG0000018426	apolipoprotein C1 Source RGD Symbol Acc 2134
B01	UPFR1031429	ENSRNOT000000074942.2	Apoc3	ENSRNOG0000047503	apolipoprotein C3 Source RGD Symbol Acc 2136
B02	UPFR1023662	ENSRNOT000000073330.2	Apod	ENSRNOG0000048273	apolipoprotein D Source RGD Symbol Acc 2137
B03	UPFR1073431	ENSRNOT000000091574.1	Apoe	ENSRNOG0000018454	apolipoprotein E Source RGD Symbol Acc 2138
B04	UPFR1056711	ENSRNOT000000041341.3	Apof	ENSRNOG0000033619	apolipoprotein F Source RGD Symbol Acc 1560713
B05	UPFR1032233	ENSRNOT000000074293.2	LOC100911804	ENSRNOG0000048451	apolipoprotein L3-like Source RGD Symbol Acc 6490440
B06	UPFR1116742	ENSRNOT000000019298.7	Cdh13	ENSRNOG0000014371	cadherin 13 Source RGD Symbol Acc 619745
B07	UPFR1115409	ENSRNOT000000014572.4	Cel	ENSRNOG0000010406	carboxyl ester lipase Source RGD Symbol Acc 2331
B08	UPFR1047619	ENSRNOT000000036788.4	Cela3b	ENSRNOG0000021619	chymotrypsin-like elastase family, member 3B Source RGD Symbol Acc 1307819
B09	UPFR1071596	ENSRNOT000000013884.6	Cnbp	ENSRNOG0000010239	CCHC-type zinc finger, nucleic acid binding protein Source RGD Symbol Acc 621807
B10	UPFR1050188	ENSRNOT000000065494.1	Colec12	ENSRNOG0000016366	collectin sub-family member 12 Source RGD Symbol Acc 735039
B11	UPFR1076114	ENSRNOT000000032926.4	Cxcl16	ENSRNOG0000026647	C-X-C motif chemokine ligand 16 Source RGD Symbol Acc 1562928
B12	UPFR1120656	ENSRNOT000000064700.3	Cyb5r3	ENSRNOG0000009592	cytochrome b5 reductase 3 Source RGD Symbol Acc 2502
C01	UPFR1086821	ENSRNOT000000010831.6	Cyp11a1	ENSRNOG0000008074	cytochrome P450, family 11, subfamily a, polypeptide 1 Source RGD Symbol Acc 69325
C02	UPFR1075232	ENSRNOT000000014051.3	Cyp39a1	ENSRNOG0000010519	cytochrome P450, family 39, subfamily a, polypeptide 1 Source RGD Symbol Acc 1307471
C03	UPFR1120115	ENSRNOT000000009896.6	Cyp46a1	ENSRNOG0000007147	cytochrome P450, family 46, subfamily a, polypeptide 1 Source RGD Symbol Acc 1306605
C04	UPFR1079440	ENSRNOT000000009985.5	Cyp51	ENSRNOG0000007234	cytochrome P450, family 51 Source RGD Symbol Acc 2481
C05	UPFR1121855	ENSRNOT000000012819.4	Cyp7a1	ENSRNOG0000009488	cytochrome P450 family 7 subfamily A member 1 Source RGD Symbol Acc 2482
C06	UPFR1113756	ENSRNOT000000013116.6	Cyp7b1	ENSRNOG0000009730	cytochrome P450 family 7 subfamily B member 1 Source RGD Symbol Acc 2483
C07	UPFR1087559	ENSRNOT000000009402.6	Dhcr24	ENSRNOG0000006787	24-dehydrocholesterol reductase Source RGD Symbol Acc 1306529
C08	UPFR1057698	ENSRNOT000000028195.5	Dhcr7	ENSRNOG0000020776	7-dehydrocholesterol reductase Source RGD Symbol Acc 621769
C09	UPFR1077719	ENSRNOT000000007015.6	Ebp	ENSRNOG0000004903	EBP, cholesterol delta-isomerase Source RGD Symbol Acc 620957
C10	UPFR1102519	ENSRNOT000000032089.4	Fdft1	ENSRNOG0000021314	farnesyl diphosphate farnesyl transferase 1 Source RGD Symbol Acc 61834
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1079864	065065.2	Fdps	000043377	farnesyl diphosphate synthase Source RGD Symbol Acc 68953
C12	UPFR1104931	ENSRNOT0000085448.1	Hdlbp	ENSRNOG0000031479	high density lipoprotein binding protein Source RGD Symbol Acc 620962
D01	UPFR1042968	ENSRNOT0000022055.4	Hmgcr	ENSRNOG0000016122	3-hydroxy-3-methylglutaryl-CoA reductase Source RGD Symbol Acc 2803
D02	UPFR1013564	ENSRNOT0000023554.6	Hmgcs1	ENSRNOG0000016552	3-hydroxy-3-methylglutaryl-CoA synthase 1 Source RGD Symbol Acc 70970
D03	UPFR1099961	ENSRNOT0000026121.7	Hmgcs2	ENSRNOG0000019120	3-hydroxy-3-methylglutaryl-CoA synthase 2 Source RGD Symbol Acc 2804
D04	UPFR1048554	ENSRNOT0000022389.6	Idi1	ENSRNOG0000016690	isopentenyl-diphosphate delta isomerase 1 Source RGD Symbol Acc 621835
D05	UPFR1099283	ENSRNOT0000010029.3	Il4	ENSRNOG0000007624	interleukin 4 Source RGD Symbol Acc 2898
D06	UPFR1098045	ENSRNOT0000009233.6	Insig1	ENSRNOG0000006859	insulin induced gene 1 Source RGD Symbol Acc 708457
D07	UPFR1037341	ENSRNOT0000003391.5	Insig2	ENSRNOG0000002478	insulin induced gene 2 Source RGD Symbol Acc 631417
D08	UPFR1023778	ENSRNOT0000026585.5	Lcat	ENSRNOG0000019573	lecithin cholesterol acyltransferase Source RGD Symbol Acc 2993
D09	UPFR1015414	ENSRNOT0000013496.3	Ldlr	ENSRNOG0000009946	low density lipoprotein receptor Source RGD Symbol Acc 2998
D10	UPFR1021851	ENSRNOT0000000163.7	Ldlrap1	ENSRNOG0000000151	low density lipoprotein receptor adaptor protein 1 Source RGD Symbol Acc 1563417
D11	UPFR1089630	ENSRNOT0000071926.1	Lep	ENSRNOG0000045797	leptin Source RGD Symbol Acc 3000
D12	UPFR1057468	ENSRNOT0000027910.2	Lipe	ENSRNOG0000020546	lipase E, hormone sensitive type Source RGD Symbol Acc 3010
E01	UPFR1081043	ENSRNOT0000015468.5	Lrp10	ENSRNOG0000011592	LDL receptor related protein 10 Source RGD Symbol Acc 1310471
E02	UPFR1094594	ENSRNOT0000005668.5	Lrp12	ENSRNOG0000004152	LDL receptor related protein 12 Source RGD Symbol Acc 1304943
E03	UPFR1053229	ENSRNOT0000044209.4	AABR07051892.1	ENSRNOG0000030243	
E04	UPFR1077588	ENSRNOT0000082102.1	Lrp6	ENSRNOG0000006338	LDL receptor related protein 6 Source RGD Symbol Acc 1304749
E05	UPFR1025998	ENSRNOT0000012665.5	Lrpap1	ENSRNOG0000009313	LDL receptor related protein associated protein 1 Source RGD Symbol Acc 620700
E06	UPFR1112783	ENSRNOT0000020838.7	Mbtps1	ENSRNOG0000015173	membrane-bound transcription factor peptidase, site 1 Source RGD Symbol Acc 70935
E07	UPFR1070367	ENSRNOT0000018145.6	Mvd	ENSRNOG0000013376	mevalonate diphosphate decarboxylase Source RGD Symbol Acc 621292
E08	UPFR1049188	ENSRNOT0000073774.2	Mvk	ENSRNOG0000049604	mevalonate kinase Source RGD Symbol Acc 621295
E09	UPFR1041042	ENSRNOT0000009683.2	Nr0b2	ENSRNOG0000007229	nuclear receptor subfamily 0, group B, member 2 Source RGD Symbol Acc 621032
E10	UPFR1056236	ENSRNOT0000026862.5	Nr1h2	ENSRNOG0000019812	nuclear receptor subfamily 1, group H, member 2 Source RGD Symbol Acc 61906
E11	UPFR1044343	ENSRNOT0000018154.5	Nr1h3	ENSRNOG0000013172	nuclear receptor subfamily 1, group H, member 3 Source RGD Symbol Acc 61909
E12	UPFR1073410	ENSRNOT0000009910.4	Nr1h4	ENSRNOG0000007197	nuclear receptor subfamily 1, group H, member 4 Source RGD Symbol Acc 628831
F01	UPFR1022602	ENSRNOT00000091154.1	Nsdhl	ENSRNOG0000057814	NAD(P) dependent steroid dehydrogenase-like Source RGD Symbol Acc 1359337
F02	UPFR1028876	ENSRNOT00000086390.1	Olr1	ENSRNOG0000056219	oxidized low density lipoprotein receptor 1 Source RGD Symbol Acc 620515
F03	UPFR1115236	ENSRNOT00000091909.1	Osbpl1a	ENSRNOG0000054058	oxysterol binding protein-like 1A Source RGD Symbol Acc 628888
F04	UPFR1075622	ENSRNOT0000028119.5	Osbpl5	ENSRNOG0000020713	oxysterol binding protein-like 5 Source RGD Symbol Acc 1308402
F05	UPFR1052491	ENSRNOT0000008535.5	Pcsk9	ENSRNOG0000006280	proprotein convertase subtilisin/kexin type 9 Source RGD Symbol Acc 728909
F06	UPFR1040721	ENSRNOT0000028095.5	Pmvk	ENSRNOG0000020696	phosphomevalonate kinase Source RGD Symbol Acc 1310812
F07	UPFR1082868	ENSRNOT0000042539.5	Ppard	ENSRNOG0000000503	peroxisome proliferator-activated receptor delta Source RGD Symbol Acc 3370
F08	UPFR1073875	ENSRNOT0000017626.5	Prkaa1	ENSRNOG0000012799	protein kinase AMP-activated catalytic subunit alpha 1 Source RGD Symbol Acc 3387
F09	UPFR1026650	ENSRNOT0000010680.3	Prkaa2	ENSRNOG0000007706	protein kinase AMP-activated catalytic subunit alpha 2 Source RGD Symbol Acc 620893
F10	UPFR1041033	ENSRNOT0000067183.3	Prkag2	ENSRNOG0000009085	protein kinase AMP-activated non-catalytic subunit gamma 2 Source RGD Symbol Acc 727782

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1081342	ENSRNOT00000045035.4	LOC291276	ENSRNOG0000046404	similar to isopentenyl diphosphate delta-isomerase type 2 Source RGD Symbol Acc 1598362
F12	UPFR1044319	ENSRNOT00000028295.7	Scap	ENSRNOG0000020853	SREBF chaperone Source RGD Symbol Acc 1309378
G01	UPFR1020580	ENSRNOT00000088722.1	Scarf1	ENSRNOG0000059618	scavenger receptor class F, member 1 Source RGD Symbol Acc 1309330
G02	UPFR1065590	ENSRNOT00000091264.1	Snx17	ENSRNOG0000026884	sorting nexin 17 Source RGD Symbol Acc 1306424
G03	UPFR1104042	ENSRNOT00000005677.3	Soat1	ENSRNOG0000004111	sterol O-acyltransferase 1 Source RGD Symbol Acc 621641
G04	UPFR1118605	ENSRNOT00000085896.1	Soat2	ENSRNOG0000053769	sterol O-acyltransferase 2 Source RGD Symbol Acc 628865
G05	UPFR1116126	ENSRNOT00000022213.7	Lrp5	ENSRNOG0000015911	LDL receptor related protein 5 Source RGD Symbol Acc 1309329
G06	UPFR1104408	ENSRNOT00000004753.5	Srebf1	ENSRNOG0000003463	sterol regulatory element binding transcription factor 1 Source RGD Symbol Acc 69423
G07	UPFR1026089	ENSRNOT00000082603.1	Srebf2	ENSRNOG0000007400	sterol regulatory element binding transcription factor 2 Source RGD Symbol Acc 1307751
G08	UPFR1058489	ENSRNOT00000059538.3	Stab2	ENSRNOG0000038948	stabilin 2 Source RGD Symbol Acc 628822
G09	UPFR1108618	ENSRNOT00000064190.3	Stard3	ENSRNOG0000042044	StAR-related lipid transfer domain containing 3 Source RGD Symbol Acc 1549768
G10	UPFR1073119	ENSRNOT00000028485.6	Tm7sf2	ENSRNOG0000020989	transmembrane 7 superfamily member 2 Source RGD Symbol Acc 1311205
G11	UPFR1112265	ENSRNOT00000035907.3	Trerf1	ENSRNOG0000022598	transcriptional regulating factor 1 Source RGD Symbol Acc 1307167
G12	UPFR1017568	ENSRNOT00000035814.3	Vldlr	ENSRNOG0000027491	very low density lipoprotein receptor Source RGD Symbol Acc 3963
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 μ l reactions: 20 μ l 8x gDNA Removal Mix, 10 μ l Reverse Transcription Enzyme, 40 μ l Reverse Transcription Mix (containing RT primers), 20 μ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 μ l QuantiNova Probe RT Mix, 20 μ l Internal Control RNA, 500 μ l Yellow Template Dilution Buffer, 250 μ l ROX Reference Dye, 1.9 μ l RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ 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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