

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

## Rat PPAR Targets

Cat. no. 249955 UPRN-149ZA

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 x 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	Acaa2	Acadl	Acadm	Acox1	Acox3	Acs11	Acs13	Acs14	Acs15	Adipoq	Angptf4	Apoa1
B	Apoa5	Apoc3	Apoe	Aqp7	RGD1565355	Clu	Cpt1a	Cpt1b	Cpt2	Crebl	Crebbp	Cyp27a1
C	Cyp7a1	Dgat1	Ech1	Ehhadh	Eln	AABR0705853 9.1	Etdh	Fabp1	Fabp2	Fabp3	Fabp4	Fabp5
D	Fabp6	Fabp7	Fads2	Fgr	Gk	Hif1a	Hmgcs2	Hspd1	Ilk	Kif10	Lpin1	Lpl
E	Med1	Mlycd	Mmp9	Ncoa3	Ncoa6	Nr1h3	Olr1	Pck1	Pck2	Pdk1	Plip	Ppara
F	Ppard	Pparg	Ppargc1a	Ppargc1b	Pprc1	Pten	Pyy	Rxra	Rxrb	Rxrg	Scd	AABR0704492 5.1
G	Slc22a5	Slc27a1	Slc27a2	Slc27a4	Slc27a5	Slc27a6	Smarcd3	Sorbs1	Src	Tgs1	Txnip	Ucp1
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	Q1C	Q1C	Q1C	PPC	PPC	PPC

## Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFR1053491	ENSRNOT00000 085601.1	Acaa2	ENSRNOG00 000013766	acyl-CoA acyltransferase 2 Source RGD Symbol Acc 620482
A02	UPFR1080148	ENSRNOT00000 017686.7	Acadl	ENSRNOG00 000012966	acyl-CoA dehydrogenase, long chain Source RGD Symbol Acc 2011
A03	UPFR1090017	ENSRNOT00000 013238.3	Acadm	ENSRNOG00 000009845	acyl-CoA dehydrogenase medium chain Source RGD Symbol Acc 2012
A04	UPFR1092066	ENSRNOT00000 046754.5	Acox1	ENSRNOG00 000008755	acyl-CoA oxidase 1 Source RGD Symbol Acc 619757
A05	UPFR1066235	ENSRNOT00000 049798.3	Acox3	ENSRNOG00 000008474	acyl-CoA oxidase 3, pristanoyl Source RGD Symbol Acc 69245
A06	UPFR1104275	ENSRNOT00000 089501.1	Acsl1	ENSRNOG00 000010633	acyl-CoA synthetase long-chain family member 1 Source RGD Symbol Acc 2015
A07	UPFR1023034	ENSRNOT00000 020161.2	Acsl3	ENSRNOG00 000014718	acyl-CoA synthetase long-chain family member 3 Source RGD Symbol Acc 70552
A08	UPFR1082627	ENSRNOT00000 026057.6	Acsl4	ENSRNOG00 000019180	acyl-CoA synthetase long-chain family member 4 Source RGD Symbol Acc 69401
A09	UPFR1034409	ENSRNOT00000 022126.6	Acsl5	ENSRNOG00 000016265	acyl-CoA synthetase long-chain family member 5 Source RGD Symbol Acc 69402
A10	UPFR1094195	ENSRNOT00000 089988.1	Adipoq	ENSRNOG00 000001821	adiponectin, C1Q and collagen domain containing Source RGD Symbol Acc 628748
A11	UPFR1032714	ENSRNOT00000 010031.6	Angptl4	ENSRNOG00 000007545	angiopoietin-like 4 Source RGD Symbol Acc 735058
A12	UPFR1066328	ENSRNOT00000 074357.2	Apoa1	ENSRNOG00 000045679	apolipoprotein A1 Source RGD Symbol Acc 2130
B01	UPFR1044046	ENSRNOT00000 024918.5	Apoa5	ENSRNOG00 000018436	apolipoprotein A5 Source RGD Symbol Acc 70903
B02	UPFR1031429	ENSRNOT00000 074942.2	Apoc3	ENSRNOG00 000047503	apolipoprotein C3 Source RGD Symbol Acc 2136
B03	UPFR1073431	ENSRNOT00000 091574.1	Apoe	ENSRNOG00 000018454	apolipoprotein E Source RGD Symbol Acc 2138
B04	UPFR1014596	ENSRNOT00000 012975.2	Aqp7	ENSRNOG00 000009686	aquaporin 7 Source RGD Symbol Acc 2145
B05	UPFR1013797	ENSRNOT00000 008319.8	RGD15653 55	ENSRNOG00 000040108	similar to fatty acid translocase/CD36 Source RGD Symbol Acc 1565355
B06	UPFR1050205	ENSRNOT00000 091612.1	Clu	ENSRNOG00 000016460	clusterin Source RGD Symbol Acc 3907
B07	UPFR1101909	ENSRNOT00000 019652.3	Cpt1a	ENSRNOG00 000014254	carnitine palmitoyltransferase 1A Source RGD Symbol Acc 2396
B08	UPFR1021462	ENSRNOT00000 013985.3	Cpt1b	ENSRNOG00 000010438	carnitine palmitoyltransferase 1B Source RGD Symbol Acc 2397
B09	UPFR1106957	ENSRNOT00000 016954.3	Cpt2	ENSRNOG00 000012443	carnitine palmitoyltransferase 2 Source RGD Symbol Acc 2398
B10	UPFR1042088	ENSRNOT00000 018326.5	Creb1	ENSRNOG00 000013412	cAMP responsive element binding protein 1 Source RGD Symbol Acc 620218
B11	UPFR1058705	ENSRNOT00000 007079.5	Crebbp	ENSRNOG00 000005330	CREB binding protein Source RGD Symbol Acc 2401
B12	UPFR1033054	ENSRNOT00000 023152.5	Cyp27a1	ENSRNOG00 000017188	cytochrome P450, family 27, subfamily a, polypeptide 1 Source RGD Symbol Acc 727915
C01	UPFR1121855	ENSRNOT00000 012819.4	Cyp7a1	ENSRNOG00 000009488	cytochrome P450 family 7 subfamily A member 1 Source RGD Symbol Acc 2482
C02	UPFR1067168	ENSRNOT00000 039795.3	Dgat1	ENSRNOG00 000028711	diacylglycerol O-acyltransferase 1 Source RGD Symbol Acc 628673
C03	UPFR1053449	ENSRNOT00000 027537.6	Ech1	ENSRNOG00 000020308	enoyl-CoA hydratase 1 Source RGD Symbol Acc 69353
C04	UPFR1042056	ENSRNOT00000 002410.4	Ehhadh	ENSRNOG00 000001770	enoyl-CoA hydratase and 3-hydroxyacyl CoA dehydrogenase Source RGD Symbol Acc 621441
C05	UPFR1061445	ENSRNOT00000 032780.7	Eln	ENSRNOG00 000001469	elastin Source RGD Symbol Acc 67394
C06	UPFR1102114	ENSRNOT00000 000206.7	AABR0705 8539.1	ENSRNOG00 000000190	
C07	UPFR1060404	ENSRNOT00000 013262.6	Eifdh	ENSRNOG00 000009538	electron transfer flavoprotein dehydrogenase Source RGD Symbol Acc 735052
C08	UPFR1068726	ENSRNOT00000 008840.5	Fabp1	ENSRNOG00 000006675	fatty acid binding protein 1 Source RGD Symbol Acc 2590
C09	UPFR1059794	ENSRNOT00000 029871.3	Fabp2	ENSRNOG00 000024947	fatty acid binding protein 2 Source RGD Symbol Acc 2591
C10	UPFR1083061	ENSRNOT00000 017325.5	Fabp3	ENSRNOG00 000012879	fatty acid binding protein 3 Source RGD Symbol Acc 69048
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1043524	014701.7	Fabp4	ENSRNOG0000010805	fatty acid binding protein 4 Source RGD Symbol Acc 69309
C12	UPFR1101216	ENSRNOT00000 075493.2	Fabp5	ENSRNOG0000049075	fatty acid binding protein 5 Source RGD Symbol Acc 70997
D01	UPFR1083830	ENSRNOT00000 083910.1	Fabp6	ENSRNOG000003902	fatty acid binding protein 6 Source RGD Symbol Acc 2592
D02	UPFR1075327	ENSRNOT00000 001079.5	Fabp7	ENSRNOG000000814	fatty acid binding protein 7 Source RGD Symbol Acc 69312
D03	UPFR1050643	ENSRNOT00000 027756.6	Fads2	ENSRNOG0000020440	fatty acid desaturase 2 Source RGD Symbol Acc 68339
D04	UPFR1074982	ENSRNOT00000 085674.1	Fgr	ENSRNOG000009912	FGR proto-oncogene, Src family tyrosine kinase Source RGD Symbol Acc 621319
D05	UPFR1054947	ENSRNOT00000 064340.3	Gk	ENSRNOG0000034116	glycerol kinase Source RGD Symbol Acc 70893
D06	UPFR1061095	ENSRNOT00000 049725.3	Hif1a	ENSRNOG0000008292	hypoxia inducible factor 1 subunit alpha Source RGD Symbol Acc 61928
D07	UPFR1099961	ENSRNOT00000 026121.7	Hmgcs2	ENSRNOG0000019120	3-hydroxy-3-methylglutaryl-CoA synthase 2 Source RGD Symbol Acc 2804
D08	UPFR1095647	ENSRNOT00000 066589.2	Hspd1	ENSRNOG0000014525	heat shock protein family D member 1 Source RGD Symbol Acc 621314
D09	UPFR1118308	ENSRNOT00000 025906.4	Ilik	ENSRNOG0000018993	integrin-linked kinase Source RGD Symbol Acc 620063
D10	UPFR1058184	ENSRNOT00000 008350.3	Klf10	ENSRNOG0000061118	Kruppel-like factor 10 Source RGD Symbol Acc 621652
D11	UPFR1052616	ENSRNOT00000 084155.1	Lpin1	ENSRNOG0000004377	lipin 1 Source RGD Symbol Acc 1307646
D12	UPFR1016556	ENSRNOT00000 016543.3	Lpl	ENSRNOG0000012181	lipoprotein lipase Source RGD Symbol Acc 3017
E01	UPFR1049249	ENSRNOT00000 067901.1	Med1	ENSRNOG000005606	mediator complex subunit 1 Source RGD Symbol Acc 1559552
E02	UPFR1058121	ENSRNOT00000 019923.5	Mlycd	ENSRNOG0000014522	malonyl-CoA decarboxylase Source RGD Symbol Acc 620234
E03	UPFR1032957	ENSRNOT00000 023965.3	Mmp9	ENSRNOG0000017539	matrix metallopeptidase 9 Source RGD Symbol Acc 621320
E04	UPFR1072465	ENSRNOT00000 007768.7	Ncoa3	ENSRNOG0000005616	nuclear receptor coactivator 3 Source RGD Symbol Acc 620109
E05	UPFR1103463	ENSRNOT00000 024714.7	Ncoa6	ENSRNOG0000018288	nuclear receptor coactivator 6 Source RGD Symbol Acc 620111
E06	UPFR1044343	ENSRNOT00000 018154.5	Nr1h3	ENSRNOG0000013172	nuclear receptor subfamily 1, group H, member 3 Source RGD Symbol Acc 61909
E07	UPFR1028876	ENSRNOT00000 086390.1	Olr1	ENSRNOG0000056219	oxidized low density lipoprotein receptor 1 Source RGD Symbol Acc 620515
E08	UPFR1076964	ENSRNOT00000 031586.6	Pck1	ENSRNOG0000028616	phosphoenolpyruvate carboxykinase 1 Source RGD Symbol Acc 3267
E09	UPFR1076561	ENSRNOT00000 025260.7	Pck2	ENSRNOG0000018536	phosphoenolpyruvate carboxykinase 2 (mitochondrial) Source MGI Symbol Acc MGI 1860456
E10	UPFR1093188	ENSRNOT00000 067660.1	Pdk1	ENSRNOG0000006136	3-phosphoinositide dependent protein kinase-1 Source RGD Symbol Acc 620307
E11	UPFR1081098	ENSRNOT00000 022594.6	Plip	ENSRNOG0000016488	phospholipid transfer protein Source RGD Symbol Acc 1306695
E12	UPFR1039308	ENSRNOT00000 030082.2	Ppara	ENSRNOG0000021463	peroxisome proliferator activated receptor alpha Source RGD Symbol Acc 3369
F01	UPFR1082868	ENSRNOT00000 042539.5	Ppard	ENSRNOG000000503	peroxisome proliferator-activated receptor delta Source RGD Symbol Acc 3370
F02	UPFR1091351	ENSRNOT00000 051858.5	Pparg	ENSRNOG0000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371
F03	UPFR1107303	ENSRNOT00000 006071.5	Ppargc1a	ENSRNOG0000004473	PPARG coactivator 1 alpha Source RGD Symbol Acc 620925
F04	UPFR1114270	ENSRNOT00000 023661.5	Ppargc1b	ENSRNOG0000017503	PPARG coactivator 1 beta Source RGD Symbol Acc 727948
F05	UPFR1037570	ENSRNOT00000 025221.7	Pprc1	ENSRNOG0000018561	peroxisome proliferator-activated receptor gamma, coactivator-related 1 Source RGD Symbol Acc 1309688
F06	UPFR1043890	ENSRNOT00000 028143.3	Pten	ENSRNOG0000020723	phosphatase and tensin homolog Source RGD Symbol Acc 61995
F07	UPFR1016759	ENSRNOT00000 028323.6	Pyy	ENSRNOG0000020877	peptide YY (mapped) Source RGD Symbol Acc 1593289
F08	UPFR1042024	ENSRNOT00000 012892.4	Rxra	ENSRNOG0000009446	retinoid X receptor alpha Source RGD Symbol Acc 3610
F09	UPFR1021028	ENSRNOT00000 041613.5	Rxrb	ENSRNOG000000464	retinoid X receptor beta Source RGD Symbol Acc 3611
F10	UPFR1081605	ENSRNOT00000 077227.1	Rxrg	ENSRNOG000004537	retinoid X receptor gamma Source RGD Symbol Acc 620046

<b>Position</b>	<b>Assay</b>	<b>Name</b>	<b>Symbol</b>	<b>Ensembl ID</b>	<b>Description</b>
F11	UPFR1069413	ENSRNOT00000 018447.5	Scd	ENSRNOG00 000013552	stearoyl-CoA desaturase Source RGD Symbol Acc 621176
F12	UPFR1112360	ENSRNOT00000 078739.1	AABR0704 4925.1	ENSRNOG00 000051592	sirtuin 1 Source NCBI gene Acc 309757
G01	UPFR1087896	ENSRNOT00000 081898.1	Slc22a5	ENSRNOG00 000008432	solute carrier family 22 member 5 Source RGD Symbol Acc 3702
G02	UPFR1014919	ENSRNOT00000 024659.4	Slc27a1	ENSRNOG00 000018170	solute carrier family 27 member 1 Source RGD Symbol Acc 620927
G03	UPFR1017946	ENSRNOT00000 067700.3	Slc27a2	ENSRNOG00 000010128	solute carrier family 27 member 2 Source RGD Symbol Acc 71103
G04	UPFR1026149	ENSRNOT00000 019500.6	Slc27a4	ENSRNOG00 000014369	solute carrier family 27 member 4 Source RGD Symbol Acc 1307383
G05	UPFR1095460	ENSRNOT00000 026575.4	Slc27a5	ENSRNOG00 000019626	solute carrier family 27 member 5 Source RGD Symbol Acc 708535
G06	UPFR1020985	ENSRNOT00000 077443.1	Slc27a6	ENSRNOG00 000058193	solute carrier family 27 member 6 Source RGD Symbol Acc 1311977
G07	UPFR1100858	ENSRNOT00000 066598.2	Smarcd3	ENSRNOG00 000010077	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3 Source RGD Symbol Acc 1311869
G08	UPFR1049169	ENSRNOT00000 021114.8	Sorbs1	ENSRNOG00 000015658	sorbin and SH3 domain containing 1 Source RGD Symbol Acc 1586598
G09	UPFR1050158	ENSRNOT00000 012739.4	Src	ENSRNOG00 000009495	SRC proto-oncogene, non-receptor tyrosine kinase Source RGD Symbol Acc 620795
G10	UPFR1085267	ENSRNOT00000 010783.5	Tgs1	ENSRNOG00 000008156	trimethylguanosine synthase 1 Source RGD Symbol Acc 1309953
G11	UPFR1099909	ENSRNOT00000 028793.6	Txnip	ENSRNOG00 000021201	thioredoxin interacting protein Source RGD Symbol Acc 620886
G12	UPFR1121701	ENSRNOT00000 004900.4	Ucp1	ENSRNOG00 000003580	uncoupling protein 1 Source RGD Symbol Acc 3931
H01	UPFR1132952	ENSRNOT00000 080216.1	Actb	ENSRNOG00 000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000 023017.5	B2m	ENSRNOG00 000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000 065935.3	Hprt1	ENSRNOG00 000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000 017468.2	Ldha	ENSRNOG00 000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000 018820.5	Rplp1	ENSRNOG00 000013874	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.

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