

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

Rat Drug Metabolism

Cat. no. 249955 UPRN-002ZR

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	Abcc3	Abcb1a	Abcc2	Abcc1	Aoc1	Adh1	Adh4	Ahr	Alad	Aldh1a1	Alox15	Alox5
B	Apoe	Amt	Asna1	Blvra	Blvrb	Ces1a	LOC1003651 12	Chst1	Comt	Cyb5r3	Cyp17a1	Cyp19a1
C	Cyp1a1	Cyp1a2	Cyp1b1	Cyp27b1	Cyp2b15	Cyp2b3	Cyp2c13	Cyp2c6v1	Cyp2c7	Cyp2e1	Cyp3a18	Cyp4b1
D	Ephx1	Faah	Fbp1	Gad1	Gad2	Gckr	Ggt1	Gpi	Gpx1	Gpx2	Gpx3	Gpx4
E	Gpx5	Gsr	Gsta1	Gsta4	Gstm1	Gstm2	Gstm3l	Gstm4	Gstm3	Gstp1	Gstt1	Hk2
F	Hsd17b1	Hsd17b2	Hsd17b3	Lpo	Marcks	Mgst1	Mgst2	Mgst3	Mpo	Mt3	Mthfr	Nat1
G	Nos2	Nos3	Nqo1	Pklr	Pkm	Pon1	Pon2	Pon3	Smarcal1	Snn	Srd5a1	Xdh
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	UPFR1023753	ENSRNOT0000003977.6	Abcc3	ENSRNOG0000002948	ATP binding cassette subfamily C member 3 Source RGD Symbol Acc 71101
A02	UPFR1045141	ENSRNOT00000037712.5	Abcb1a	ENSRNOG0000008012	ATP binding cassette subfamily B member 4 Source RGD Symbol Acc 620248
A03	UPFR1015892	ENSRNOT00000070861.2	Abcc2	ENSRNOG0000046727	ATP binding cassette subfamily C member 2 Source RGD Symbol Acc 2366
A04	UPFR1107711	ENSRNOT00000044108.5	Abcc1	ENSRNOG0000022305	ATP binding cassette subfamily C member 1 Source RGD Symbol Acc 3112
A05	UPFR1060127	ENSRNOT00000059136.2	Aoc1	ENSRNOG0000008575	amine oxidase, copper containing 1 Source RGD Symbol Acc 61296
A06	UPFR1120480	ENSRNOT00000036993.4	Adh1	ENSRNOG0000012436	alcohol dehydrogenase 6 (class V) Source RGD Symbol Acc 1306313
A07	UPFR1074490	ENSRNOT00000016891.6	Adh4	ENSRNOG0000046357	alcohol dehydrogenase 4 (class II), pi polypeptide Source RGD Symbol Acc 71028
A08	UPFR1105470	ENSRNOT00000006618.7	Ahr	ENSRNOG0000004342	aryl hydrocarbon receptor Source RGD Symbol Acc 2074
A09	UPFR1090984	ENSRNOT00000020625.6	Alad	ENSRNOG0000015206	aminolevulinatase Source RGD Symbol Acc 2083
A10	UPFR1084336	ENSRNOT00000024000.6	Aldh1a1	ENSRNOG0000017619	aldehyde dehydrogenase 1 family, member A1 Source RGD Symbol Acc 2087
A11	UPFR1060182	ENSRNOT00000026038.6	Alox15	ENSRNOG0000019183	arachidonate 15-lipoxygenase Source RGD Symbol Acc 70493
A12	UPFR1115697	ENSRNOT00000017633.5	Alox5	ENSRNOG0000012972	arachidonate 5-lipoxygenase Source RGD Symbol Acc 2096
B01	UPFR1073431	ENSRNOT00000091574.1	ApoE	ENSRNOG0000018454	apolipoprotein E Source RGD Symbol Acc 2138
B02	UPFR1041304	ENSRNOT00000044738.4	Arnt	ENSRNOG00000031174	aryl hydrocarbon receptor nuclear translocator Source RGD Symbol Acc 2153
B03	UPFR1095602	ENSRNOT00000067518.1	Asna1	ENSRNOG0000003747	arsA arsenite transporter, ATP-binding, homolog 1 (bacterial) Source RGD Symbol Acc 1307906
B04	UPFR1078223	ENSRNOT00000015843.6	Bvra	ENSRNOG0000011778	biliverdin reductase A Source RGD Symbol Acc 620721
B05	UPFR1028759	ENSRNOT00000031026.4	Bvrb	ENSRNOG0000024410	biliverdin reductase B Source RGD Symbol Acc 1306080
B06	UPFR1088352	ENSRNOT00000060929.2	Ces1a	ENSRNOG0000039725	carboxylesterase 1A Source RGD Symbol Acc 1583671
B07	UPFR1091614	ENSRNOT00000080995.1	LOC100365112	ENSRNOG0000036571	carboxylesterase-like Source RGD Symbol Acc 2319661
B08	UPFR1066189	ENSRNOT00000010510.5	Chst1	ENSRNOG0000007989	carbohydrate sulfotransferase 1 Source RGD Symbol Acc 1308142
B09	UPFR1106463	ENSRNOT00000050269.5	Comt	ENSRNOG0000001889	catechol-O-methyltransferase Source RGD Symbol Acc 2379
B10	UPFR1120656	ENSRNOT00000064700.3	Cyb5r3	ENSRNOG0000009592	cytochrome b5 reductase 3 Source RGD Symbol Acc 2502
B11	UPFR1119383	ENSRNOT00000027160.4	Cyp17a1	ENSRNOG0000020035	cytochrome P450, family 17, subfamily a, polypeptide 1 Source RGD Symbol Acc 2456
B12	UPFR1043142	ENSRNOT00000000212.7	Cyp19a1	ENSRNOG0000000196	cytochrome P450, family 19, subfamily a, polypeptide 1 Source RGD Symbol Acc 2457
C01	UPFR1063695	ENSRNOT00000026473.4	Cyp1a1	ENSRNOG0000019500	cytochrome P450, family 1, subfamily a, polypeptide 1 Source RGD Symbol Acc 2458
C02	UPFR1096006	ENSRNOT00000021653.7	Cyp1a2	ENSRNOG0000016173	cytochrome P450, family 1, subfamily a, polypeptide 2 Source RGD Symbol Acc 2459
C03	UPFR1085739	ENSRNOT00000082017.1	Cyp1b1	ENSRNOG0000040287	cytochrome P450, family 1, subfamily b, polypeptide 1 Source RGD Symbol Acc 2460
C04	UPFR1086692	ENSRNOT00000084933.1	Cyp27b1	ENSRNOG0000046214	cytochrome P450, family 27, subfamily b, polypeptide 1 Source RGD Symbol Acc 69192
C05	UPFR1013990	ENSRNOT00000002054.3	Cyp2b15	ENSRNOG0000020801	cytochrome P450, family 2, subfamily b, polypeptide 15 Source RGD Symbol Acc 1596474
C06	UPFR1076645	ENSRNOT00000034845.5	Cyp2b3	ENSRNOG0000033164	cytochrome P450, family 2, subfamily b, polypeptide 3 Source RGD Symbol Acc 628627
C07	UPFR1042427	ENSRNOT00000071633.3	Cyp2c13	ENSRNOG0000049464	cytochrome P450, family 2, subfamily c, polypeptide 13 Source RGD Symbol Acc 620363
C08	UPFR1089259	ENSRNOT00000054742.5	Cyp2c6v1	ENSRNOG0000024016	cytochrome P450, family 2, subfamily C, polypeptide 6, variant 1 Source RGD Symbol Acc 619934
C09	UPFR1084451	ENSRNOT00000040325.5	Cyp2c7	ENSRNOG0000021405	cytochrome P450, family 2, subfamily c, polypeptide 7 Source RGD Symbol Acc 620379
C10	UPFR1025167	ENSRNOT00000016883.6	Cyp2e1	ENSRNOG0000012458	cytochrome P450, family 2, subfamily e, polypeptide 1 Source RGD Symbol Acc 2475
		ENSRNOT000000		ENSRNOG00	cytochrome P450, family 3, subfamily a, polypeptide 18 Source RGD Symbol

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1118437	001285.5	Cyp3a18	000000969	Acc 628709
C12	UPFR1083696	ENSRNOT00000013321.6	Cyp4b1	ENSRNOG0000055078	cytochrome P450, family 4, subfamily b, polypeptide 1 Source RGD Symbol Acc 2480
D01	UPFR1054888	ENSRNOT00000085279.1	Ephx1	ENSRNOG0000003515	epoxide hydrolase 1 Source RGD Symbol Acc 2557
D02	UPFR1113285	ENSRNOT00000015961.6	Faah	ENSRNOG0000011019	fatty acid amide hydrolase Source RGD Symbol Acc 61808
D03	UPFR1059543	ENSRNOT00000023685.6	Fbp1	ENSRNOG0000017597	fructose-bisphosphatase 1 Source RGD Symbol Acc 2595
D04	UPFR1039287	ENSRNOT00000087712.1	Gad1	ENSRNOG0000000007	glutamate decarboxylase 1 Source RGD Symbol Acc 2652
D05	UPFR1055255	ENSRNOT00000024901.4	Gad2	ENSRNOG0000018200	glutamate decarboxylase 2 Source RGD Symbol Acc 2653
D06	UPFR1088198	ENSRNOT00000073228.2	Gckr	ENSRNOG0000048874	glucokinase regulator Source RGD Symbol Acc 2671
D07	UPFR1103448	ENSRNOT00000074533.2	Ggt1	ENSRNOG0000047697	gamma-glutamyltransferase 1 Source RGD Symbol Acc 2683
D08	UPFR1020266	ENSRNOT00000032613.4	Gpi	ENSRNOG0000023150	glucose-6-phosphate isomerase Source RGD Symbol Acc 2727
D09	UPFR1108384	ENSRNOT00000073247.2	Gpx1	ENSRNOG0000048812	glutathione peroxidase 1 Source RGD Symbol Acc 2729
D10	UPFR1055910	ENSRNOT00000080270.1	Gpx2	ENSRNOG0000055672	glutathione peroxidase 2 Source RGD Symbol Acc 727780
D11	UPFR1072810	ENSRNOT00000079830.1	Gpx3	ENSRNOG0000052564	glutathione peroxidase 3 Source RGD Symbol Acc 69224
D12	UPFR1055483	ENSRNOT00000093632.1	Gpx4	ENSRNOG0000013604	glutathione peroxidase 4 Source RGD Symbol Acc 69226
E01	UPFR1087326	ENSRNOT00000081408.1	Gpx5	ENSRNOG0000057180	glutathione peroxidase 5 Source RGD Symbol Acc 69227
E02	UPFR1080300	ENSRNOT00000090036.1	Gsr	ENSRNOG0000014915	glutathione-disulfide reductase Source RGD Symbol Acc 621747
E03	UPFR1111390	ENSRNOT00000085195.1	Gsta1	ENSRNOG0000013484	glutathione S-transferase alpha 1 Source RGD Symbol Acc 2753
E04	UPFR1117992	ENSRNOT00000012348.6	Gsta4	ENSRNOG0000030449	glutathione S-transferase alpha 4 Source RGD Symbol Acc 1309970
E05	UPFR1118427	ENSRNOT00000047139.3	Gstm1	ENSRNOG0000029726	glutathione S-transferase mu 1 Source RGD Symbol Acc 2755
E06	UPFR1083092	ENSRNOT00000025689.4	Gstm2	ENSRNOG0000018937	glutathione S-transferase mu 2 Source RGD Symbol Acc 2756
E07	UPFR1121340	ENSRNOT00000025800.2	Gstm3l	ENSRNOG0000019058	glutathione S-transferase mu 3-like Source RGD Symbol Acc 620381
E08	UPFR1086046	ENSRNOT00000025994.6	Gstm4	ENSRNOG0000019221	glutathione S-transferase mu 4 Source RGD Symbol Acc 1565825
E09	UPFR1066051	ENSRNOT00000072342.2	Gstm3	ENSRNOG0000049743	glutathione S-transferase mu 3 Source RGD Symbol Acc 11402080
E10	UPFR1075260	ENSRNOT00000024601.4	Gstp1	ENSRNOG0000018237	glutathione S-transferase pi 1 Source RGD Symbol Acc 2758
E11	UPFR1063663	ENSRNOT00000001669.4	Gstt1	ENSRNOG0000049771	glutathione S-transferase theta 1 Source RGD Symbol Acc 2765
E12	UPFR1093740	ENSRNOT00000008813.3	Hk2	ENSRNOG0000006116	hexokinase 2 Source RGD Symbol Acc 2797
F01	UPFR1033897	ENSRNOT00000026878.5	Hsd17b1	ENSRNOG0000019830	hydroxysteroid (17-beta) dehydrogenase 1 Source RGD Symbol Acc 2836
F02	UPFR1096410	ENSRNOT00000018795.3	Hsd17b2	ENSRNOG0000013982	hydroxysteroid (17-beta) dehydrogenase 2 Source RGD Symbol Acc 621803
F03	UPFR1035807	ENSRNOT00000025850.3	Hsd17b3	ENSRNOG0000019096	hydroxysteroid (17-beta) dehydrogenase 3 Source RGD Symbol Acc 621805
F04	UPFR1051162	ENSRNOT00000011402.4	Lpo	ENSRNOG0000008422	lactoperoxidase Source RGD Symbol Acc 1310051
F05	UPFR1026480	ENSRNOT00000000707.6	Marcks	ENSRNOG0000000579	myristoylated alanine rich protein kinase C substrate Source RGD Symbol Acc 3028
F06	UPFR1019671	ENSRNOT00000010579.7	Mgst1	ENSRNOG0000007743	microsomal glutathione S-transferase 1 Source RGD Symbol Acc 70927
F07	UPFR1064939	ENSRNOT00000088846.1	Mgst2	ENSRNOG0000061857	microsomal glutathione S-transferase 2 Source RGD Symbol Acc 1311218
F08	UPFR1065910	ENSRNOT00000005719.7	Mgst3	ENSRNOG0000004245	microsomal glutathione S-transferase 3 Source RGD Symbol Acc 1306373
F09	UPFR1055988	ENSRNOT00000065910.3	Mpo	ENSRNOG0000008310	myeloperoxidase Source RGD Symbol Acc 1592081
F10	UPFR1100252	ENSRNOT00000025669.5	Mt3	ENSRNOG0000018958	metallothionein 3 Source RGD Symbol Acc 621252

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1037198	ENSRNOT00000011384.7	Mthfr	ENSRNOG0000008553	methylenetetrahydrofolate reductase Source RGD Symbol Acc 1309952
F12	UPFR1076734	ENSRNOT00000018854.6	Nat1	ENSRNOG0000014055	N-acetyltransferase 1 Source RGD Symbol Acc 70490
G01	UPFR1092405	ENSRNOT00000016133.6	Nos2	ENSRNOG0000057443	similar to Nitric oxide synthase, inducible (NOS type II) (Inducible NO synthase) (Inducible NOS) (iNOS) Source RGD Symbol Acc 1598227
G02	UPFR1032783	ENSRNOT00000013058.4	Nos3	ENSRNOG0000009348	nitric oxide synthase 3 Source RGD Symbol Acc 3186
G03	UPFR1111217	ENSRNOT00000017174.5	Nqo1	ENSRNOG0000012772	NAD(P)H quinone dehydrogenase 1 Source RGD Symbol Acc 2503
G04	UPFR1065120	ENSRNOT00000065791.2	Pklr	ENSRNOG0000020420	pyruvate kinase L/R Source RGD Symbol Acc 3336
G05	UPFR1105089	ENSRNOT00000015332.7	Pkm	ENSRNOG0000011329	pyruvate kinase M1/2 Source RGD Symbol Acc 3337
G06	UPFR1114492	ENSRNOT00000011823.6	Pon1	ENSRNOG0000008902	paraoxonase 1 Source RGD Symbol Acc 620062
G07	UPFR1104396	ENSRNOT00000036460.3	Pon2	ENSRNOG0000009112	paraoxonase 2 Source RGD Symbol Acc 1309954
G08	UPFR1062090	ENSRNOT00000012050.4	Pon3	ENSRNOG0000009096	paraoxonase 3 Source RGD Symbol Acc 1302965
G09	UPFR1020907	ENSRNOT00000071856.3	Smarca1	ENSRNOG0000016503	Swi/SNF related matrix associated, actin dependent regulator of chromatin, subfamily a-like 1 Source RGD Symbol Acc 1306134
G10	UPFR1097101	ENSRNOT00000088279.1	Snn	ENSRNOG0000058739	stannin Source RGD Symbol Acc 3730
G11	UPFR1077464	ENSRNOT00000023659.6	Srd5a1	ENSRNOG0000017601	steroid 5 alpha-reductase 1 Source RGD Symbol Acc 3757
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 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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