

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

Rat Autophagy

Cat. no. 249955 UPRN-084ZA

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 for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Akt1	Ambra1	App	Arsa	Atg12	Atg16l1	Atg16l2	Atg3	Atg4b	Atg4c	Atg5	Atg7
B	Atg9a	Bad	Bak1	Bax	Bcl2	Bcl2l1	Becn1	Bid	Bnip3	Casp3	Casp8	Npc1
C	Cdkn1b	Cdkn2a	Cln3	Ctsb	Ctsd	Ctss	Cxcr4	Dapk1	Dram2	Eif2ak3	Eif4g1	Esr1
D	Fadd	Fas	Gaa	Gabarap	Gabarapl2	Hdac1	Hdac6	Hgs	Hsp90aa1	Htt	Ifng	Igf1
E	Ins2	Irgm	Lamp1	Map1lc3a	Map1lc3b	Mapk14	Mapk8	Mapt	Mtor	Nkx1	AABR0700151 9.1	Parp7
F	Pik3c3	Pik3cg	Pik3r4	Pim2	Pink1	Prkaa1	Psen1	Plen	Mxd3	Rb1	Rblcc1	Atg101
G	Rgs19	Rps6kb1	Snca	Sqstm1	Tgfb1	Tgm2	Tm9sf1	LOC1036943 80	Tnfrsf10	Tp53	Ulk1	Wipi1
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	UPFR1083196	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A02	UPFR1027023	ENSRNOT00000085614.1	Ambra1	ENSRNOG0000017422	autophagy and beclin 1 regulator 1 Source RGD Symbol Acc 621330
A03	UPFR1021296	ENSRNOT00000044081.5	App	ENSRNOG0000006997	amyloid beta precursor protein Source RGD Symbol Acc 2139
A04	UPFR1079950	ENSRNOT00000017783.6	Arsa	ENSRNOG0000012953	arylsulfatase A Source RGD Symbol Acc 1310381
A05	UPFR1044325	ENSRNOT00000000170.5	Atg12	ENSRNOG0000000157	autophagy related 12 Source RGD Symbol Acc 1306306
A06	UPFR1043441	ENSRNOT00000080482.1	Atg16l1	ENSRNOG0000017913	autophagy related 16-like 1 Source RGD Symbol Acc 1310631
A07	UPFR1072041	ENSRNOT00000026286.5	Atg16l2	ENSRNOG0000019413	autophagy related 16-like 2 Source RGD Symbol Acc 1311400
A08	UPFR1110378	ENSRNOT00000002906.6	Atg3	ENSRNOG0000002094	autophagy related 3 Source RGD Symbol Acc 708464
A09	UPFR1119300	ENSRNOT00000025529.7	Atg4b	ENSRNOG0000018403	autophagy related 4B, cysteine peptidase Source RGD Symbol Acc 1309664
A10	UPFR1078503	ENSRNOT00000011631.6	Atg4c	ENSRNOG0000008767	autophagy related 4C, cysteine peptidase Source RGD Symbol Acc 1598323
A11	UPFR1058111	ENSRNOT00000080283.1	Atg5	ENSRNOG0000000322	autophagy related 5 Source RGD Symbol Acc 1359580
A12	UPFR1095782	ENSRNOT00000067532.2	Atg7	ENSRNOG0000007486	autophagy related 7 Source RGD Symbol Acc 1304817
B01	UPFR1105633	ENSRNOT00000025740.5	Atg9a	ENSRNOG0000018975	autophagy related 9A Source RGD Symbol Acc 1310450
B02	UPFR1109796	ENSRNOT00000028712.5	Bad	ENSRNOG0000021147	BCL2-associated agonist of cell death Source RGD Symbol Acc 620103
B03	UPFR1013012	ENSRNOT00000000576.5	Bak1	ENSRNOG0000000485	BCL2-antagonist/killer 1 Source RGD Symbol Acc 621635
B04	UPFR1074536	ENSRNOT00000028328.5	Bax	ENSRNOG0000020876	BCL2 associated X, apoptosis regulator Source RGD Symbol Acc 2192
B05	UPFR1082998	ENSRNOT00000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
B06	UPFR1047186	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG0000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
B07	UPFR1048185	ENSRNOT00000027868.7	Becn1	ENSRNOG0000020513	beclin 1 Source RGD Symbol Acc 620190
B08	UPFR1018136	ENSRNOT00000016776.2	Bid	ENSRNOG0000012439	BH3 interacting domain death agonist Source RGD Symbol Acc 620160
B09	UPFR1105806	ENSRNOT00000023477.6	Bnip3	ENSRNOG0000017243	BCL2 interacting protein 3 Source RGD Symbol Acc 620800
B10	UPFR1091664	ENSRNOT00000014095.5	Casp3	ENSRNOG0000010475	caspase 3 Source RGD Symbol Acc 2275
B11	UPFR1030636	ENSRNOT00000016613.4	Casp8	ENSRNOG0000012331	caspase 8 Source RGD Symbol Acc 620945
B12	UPFR1063124	ENSRNOT00000016167.7	Npc1	ENSRNOG0000012016	NPC intracellular cholesterol transporter 1 Source RGD Symbol Acc 628693
C01	UPFR1069360	ENSRNOT00000049848.1	Cdkn1b	ENSRNOG0000007249	cyclin-dependent kinase inhibitor 1B Source RGD Symbol Acc 69062
C02	UPFR1104432	ENSRNOT00000079251.1	Cdkn2a	ENSRNOG0000059837	cyclin-dependent kinase inhibitor 2A Source RGD Symbol Acc 2323
C03	UPFR1072893	ENSRNOT00000025898.4	Cln3	ENSRNOG0000019103	CLN3, battenin Source RGD Symbol Acc 1359537
C04	UPFR1121227	ENSRNOT00000014177.5	Ctsb	ENSRNOG0000010331	cathepsin B Source RGD Symbol Acc 621509
C05	UPFR1024358	ENSRNOT00000027407.4	Ctsd	ENSRNOG0000020206	cathepsin D Source RGD Symbol Acc 621511
C06	UPFR1035779	ENSRNOT00000028732.7	Ctss	ENSRNOG0000021157	cathepsin S Source RGD Symbol Acc 621513
C07	UPFR1030244	ENSRNOT00000005143.6	Cxcr4	ENSRNOG0000003866	C-X-C motif chemokine receptor 4 Source RGD Symbol Acc 620465
C08	UPFR1056311	ENSRNOT00000066950.2	Dapk1	ENSRNOG0000018198	death associated protein kinase 1 Source RGD Symbol Acc 1311629
C09	UPFR1091907	ENSRNOT00000023903.7	Dram2	ENSRNOG0000017744	DNA-damage regulated autophagy modulator 2 Source RGD Symbol Acc 1564099
C10	UPFR1090219	ENSRNOT00000008451.5	Eif2ak3	ENSRNOG0000006069	eukaryotic translation initiation factor 2 alpha kinase 3 Source RGD Symbol Acc 70884
		ENSRNOT000000		ENSRNOG00	eukaryotic translation initiation factor 4 gamma, 1 Source RGD Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1083505	041777.6	Eif4g1	000001738	1306144
C12	UPFR1099141	ENSRNOT00000 026350.7	Esr1	ENSRNOG00 000019358	estrogen receptor 1 Source RGD Symbol Acc 2581
D01	UPFR1101946	ENSRNOT00000 075089.3	Fadd	ENSRNOG00 000047035	Fas associated via death domain Source RGD Symbol Acc 628700
D02	UPFR1075141	ENSRNOT00000 025928.5	Fas	ENSRNOG00 000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
D03	UPFR1022261	ENSRNOT00000 075796.2	Gaa	ENSRNOG00 000047656	glucosidase, alpha, acid Source RGD Symbol Acc 735227
D04	UPFR1042418	ENSRNOT00000 023724.6	Gabarap	ENSRNOG00 000017417	GABA type A receptor-associated protein Source RGD Symbol Acc 61911
D05	UPFR1098888	ENSRNOT00000 048998.3	Gabarapl2	ENSRNOG00 000019425	GABA type A receptor associated protein like 2 Source RGD Symbol Acc 620510
D06	UPFR1113247	ENSRNOT00000 012854.6	Hdac1	ENSRNOG00 000009568	histone deacetylase 1 Source RGD Symbol Acc 1309799
D07	UPFR1060810	ENSRNOT00000 009295.6	Hdac6	ENSRNOG00 000048738	histone deacetylase 6 Source RGD Symbol Acc 619981
D08	UPFR1066634	ENSRNOT00000 054966.4	Hgs	ENSRNOG00 000036696	hepatocyte growth factor-regulated tyrosine kinase substrate Source RGD Symbol Acc 69225
D09	UPFR1014170	ENSRNOT00000 086310.1	Hsp90aa1	ENSRNOG00 000059714	heat shock protein 90 alpha family class A member 1 Source RGD Symbol Acc 631409
D10	UPFR1039252	ENSRNOT00000 058166.3	Htt	ENSRNOG00 000011073	huntingtin Source RGD Symbol Acc 68337
D11	UPFR1084134	ENSRNOT00000 009919.2	Iifng	ENSRNOG00 000007468	interferon gamma Source RGD Symbol Acc 2866
D12	UPFR1050099	ENSRNOT00000 038780.6	Igf1	ENSRNOG00 000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
E01	UPFR1114751	ENSRNOT00000 027656.3	Ins2	ENSRNOG00 000020405	insulin 2 Source RGD Symbol Acc 2916
E02	UPFR1059248	ENSRNOT00000 045545.3	Irgm	ENSRNOG00 000031138	immunity-related GTPase M Source RGD Symbol Acc 1305163
E03	UPFR1013901	ENSRNOT00000 026580.6	Lamp1	ENSRNOG00 000019629	lysosomal-associated membrane protein 1 Source RGD Symbol Acc 2989
E04	UPFR1091462	ENSRNOT00000 035060.4	Map1lc3a	ENSRNOG00 000025443	microtubule-associated protein 1 light chain 3 alpha Source RGD Symbol Acc 735183
E05	UPFR1036103	ENSRNOT00000 079382.1	Map1lc3b	ENSRNOG00 000017905	microtubule-associated protein 1 light chain 3 beta Source RGD Symbol Acc 621315
E06	UPFR1036984	ENSRNOT00000 000617.8	Mapk14	ENSRNOG00 000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
E07	UPFR1048766	ENSRNOT00000 065216.3	Mapk8	ENSRNOG00 000020155	mitogen-activated protein kinase 8 Source RGD Symbol Acc 621506
E08	UPFR1041157	ENSRNOT00000 045127.6	Mapt	ENSRNOG00 000005133	microtubule-associated protein tau Source RGD Symbol Acc 69329
E09	UPFR1112219	ENSRNOT00000 080751.1	Mtor	ENSRNOG00 000009615	mechanistic target of rapamycin kinase Source RGD Symbol Acc 68371
E10	UPFR1116688	ENSRNOT00000 036838.4	Nfkb1	ENSRNOG00 000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E11	UPFR1080845	ENSRNOT00000 086127.1	AABR0700 1519.1	ENSRNOG00 000055547	
E12	UPFR1045325	ENSRNOT00000 091206.1	Park7	ENSRNOG00 000018289	Parkinsonism associated deglycase Source RGD Symbol Acc 621808
F01	UPFR1079473	ENSRNOT00000 066816.2	Pik3c3	ENSRNOG00 000017840	phosphatidylinositol 3-kinase, catalytic subunit type 3 Source RGD Symbol Acc 620899
F02	UPFR1091290	ENSRNOT00000 012487.5	Pik3cg	ENSRNOG00 000009385	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit gamma Source RGD Symbol Acc 1306468
F03	UPFR1110662	ENSRNOT00000 090707.1	Pik3r4	ENSRNOG00 000013669	phosphoinositide-3-kinase, regulatory subunit 4 Source RGD Symbol Acc 1311809
F04	UPFR1100332	ENSRNOT00000 011207.7	Pim2	ENSRNOG00 000008177	Pim-2 proto-oncogene, serine/threonine kinase Source RGD Symbol Acc 1560759
F05	UPFR1021822	ENSRNOT00000 083474.1	Pink1	ENSRNOG00 000015385	PTEN induced putative kinase 1 Source RGD Symbol Acc 1305769
F06	UPFR1073875	ENSRNOT00000 017626.5	Prkaa1	ENSRNOG00 000012799	protein kinase AMP-activated catalytic subunit alpha 1 Source RGD Symbol Acc 3387
F07	UPFR1095499	ENSRNOT00000 012495.7	Psen1	ENSRNOG00 000009110	presenilin 1 Source RGD Symbol Acc 3425
F08	UPFR1043890	ENSRNOT00000 028143.3	Pten	ENSRNOG00 000020723	phosphatase and tensin homolog Source RGD Symbol Acc 61995
F09	UPFR1106206	ENSRNOT00000 076436.1	Mxd3	ENSRNOG00 000016539	Max dimerization protein 3 Source RGD Symbol Acc 628624
F10	UPFR1039430	ENSRNOT00000 021752.5	Rb1	ENSRNOG00 000016029	RB transcriptional corepressor 1 Source RGD Symbol Acc 3540

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1084799	ENSRNOT00000061884.2	Rb1cc1	ENSRNOG0000006833	RB1-inducible coiled-coil 1 Source RGD Symbol Acc 1309346
F12	UPFR1018869	ENSRNOT00000087415.1	Atg101	ENSRNOG0000007756	autophagy related 101 Source RGD Symbol Acc 1359310
G01	UPFR1039901	ENSRNOT00000022451.4	Rgs19	ENSRNOG0000016547	regulator of G-protein signaling 19 Source RGD Symbol Acc 629471
G02	UPFR1107808	ENSRNOT00000005226.4	Rps6kb1	ENSRNOG0000003919	ribosomal protein S6 kinase B1 Source RGD Symbol Acc 620683
G03	UPFR1068205	ENSRNOT00000039247.4	Snca	ENSRNOG0000008656	synuclein alpha Source RGD Symbol Acc 3729
G04	UPFR1112424	ENSRNOT00000059255.5	Sqstm1	ENSRNOG0000003147	sequestosome 1 Source RGD Symbol Acc 69287
G05	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G06	UPFR1068061	ENSRNOT00000018328.5	Tgm2	ENSRNOG0000012956	transglutaminase 2 Source RGD Symbol Acc 621081
G07	UPFR1097147	ENSRNOT00000026734.6	Tm9sf1	ENSRNOG0000019710	transmembrane 9 superfamily member 1 Source RGD Symbol Acc 1307085
G08	UPFR1098022	ENSRNOT00000079677.1	LOC103694380	ENSRNOG000005156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G09	UPFR1107113	ENSRNOT00000017758.5	Tnfsf10	ENSRNOG0000013269	TNF superfamily member 10 Source RGD Symbol Acc 628734
G10	UPFR1095007	ENSRNOT00000085115.1	Tp53	ENSRNOG0000010756	tumor protein p53 Source RGD Symbol Acc 3889
G11	UPFR1015373	ENSRNOT00000056790.3	Ulk1	ENSRNOG0000037505	unc-51 like autophagy activating kinase 1 Source RGD Symbol Acc 1589743
G12	UPFR1040874	ENSRNOT00000005172.7	Wipi1	ENSRNOG0000003827	WD repeat domain, phosphoinositide interacting 1 Source RGD Symbol Acc 1307754
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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