

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

Rat Stress & Toxicity PathwayFinder

Cat. no. 249955 UPRN-003ZA

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	Adm	Aqp1	Aqp2	Aqp4	Arnt	Atf4	Atf6	Atg12	Atg7	Atm	Herpud1	Becn1
B	Bid	Bnip3l	Calr	Car9	Casp1	Casp7	Ccl12	Cd40lg	Cdkn1a	Cflr	Sit3a	Chek2
C	Crp	Ddb2	Ddit3	Dnajc3	Edn1	Epo	Fas	Fth1	Gadd45a	Gadd45g	Gclc	Gclm
D	Grb2	Gsr	Gstp1	Hmax1	Hsp90aa1	Hsp90b1	Hspa1a	Hspa4	Hspa4l	Hspa5	Hus1	Ifng
E	Il1a	Il1b	Il6	Pgk1	Diablo	Mmp9	Mre11a	Nbn	Nfat5	Nqa1	Parp1	Parp2
F	Prdx1	PVR	Rad17	Rad51	Rad9a	Ripk1	Ripk3	Serpine1	Slc2a1	Slc6a6	Slc9a3	Sqstm1
G	Tlr4	LOC1036943 80	AABR0701832 3.1	Tnfrsf1a	Tp53	Txn1	Txn14b	Txnrd1	Ulk1	Vegfa	Xbp1	Xpc
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	UPFR1061154	ENSRNOT00000036718.1	Adm	ENSRNOG0000027030	adrenomedullin Source RGD Symbol Acc 2047
A02	UPFR1107660	ENSRNOT00000015692.2	Aqp1	ENSRNOG0000011648	aquaporin 1 Source RGD Symbol Acc 2141
A03	UPFR1069964	ENSRNOT00000091717.1	Aqp2	ENSRNOG0000054378	aquaporin 2 Source RGD Symbol Acc 2142
A04	UPFR1087107	ENSRNOT00000068150.3	Aqp4	ENSRNOG0000016043	aquaporin 4 Source RGD Symbol Acc 2143
A05	UPFR1041304	ENSRNOT00000044738.4	Arnt	ENSRNOG0000031174	aryl hydrocarbon receptor nuclear translocator Source RGD Symbol Acc 2153
A06	UPFR1067882	ENSRNOT00000065304.4	Atf4	ENSRNOG0000017801	activating transcription factor 4 Source RGD Symbol Acc 621863
A07	UPFR1113100	ENSRNOT00000029202.5	Atf6	ENSRNOG0000024632	activating transcription factor 6 Source RGD Symbol Acc 1305471
A08	UPFR1044325	ENSRNOT00000000170.5	Atg12	ENSRNOG0000000157	autophagy related 12 Source RGD Symbol Acc 1306306
A09	UPFR1095782	ENSRNOT00000067532.2	Atg7	ENSRNOG0000007486	autophagy related 7 Source RGD Symbol Acc 1304817
A10	UPFR1064948	ENSRNOT00000086812.1	Atm	ENSRNOG0000029773	ATM serine/threonine kinase Source RGD Symbol Acc 1593265
A11	UPFR1015276	ENSRNOT00000025559.5	Herpud1	ENSRNOG0000018796	homocysteine inducible ER protein with ubiquitin like domain 1 Source RGD Symbol Acc 620818
A12	UPFR1048185	ENSRNOT00000027868.7	Becn1	ENSRNOG0000020513	beclin 1 Source RGD Symbol Acc 620190
B01	UPFR1018136	ENSRNOT00000016776.2	Bid	ENSRNOG0000012439	BH3 interacting domain death agonist Source RGD Symbol Acc 620160
B02	UPFR1115436	ENSRNOT00000014798.5	Bnip3l	ENSRNOG0000009820	BCL2 interacting protein 3 like Source RGD Symbol Acc 621354
B03	UPFR1077775	ENSRNOT00000004091.6	Calr	ENSRNOG0000003029	calreticulin Source RGD Symbol Acc 620288
B04	UPFR1102120	ENSRNOT00000023060.5	Car9	ENSRNOG0000017073	carbonic anhydrase 9 Source RGD Symbol Acc 1306426
B05	UPFR1052168	ENSRNOT00000009993.6	Casp1	ENSRNOG0000007372	caspase 1 Source RGD Symbol Acc 2274
B06	UPFR1051332	ENSRNOT00000080511.1	Casp7	ENSRNOG0000056216	caspase 7 Source RGD Symbol Acc 620944
B07	UPFR1080637	ENSRNOT00000031626.5	Ccl12	ENSRNOG0000029768	chemokine (C-C motif) ligand 12 Source RGD Symbol Acc 1309255
B08	UPFR1038741	ENSRNOT00000001162.4	Cd40lg	ENSRNOG0000000871	CD40 ligand Source RGD Symbol Acc 708418
B09	UPFR1028644	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG0000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
B10	UPFR1078307	ENSRNOT00000085043.1	Cfr	ENSRNOG0000055103	cystic fibrosis transmembrane conductance regulator Source RGD Symbol Acc 2332
B11	UPFR1067768	ENSRNOT00000082086.1	Stt3a	ENSRNOG0000031896	STT3A, catalytic subunit of the oligosaccharyltransferase complex Source RGD Symbol Acc 1565793
B12	UPFR1077555	ENSRNOT00000085591.1	Chek2	ENSRNOG0000037509	checkpoint kinase 2 Source RGD Symbol Acc 621543
C01	UPFR1072132	ENSRNOT00000000058.6	Crp	ENSRNOG0000000053	C-reactive protein Source RGD Symbol Acc 2411
C02	UPFR1019734	ENSRNOT00000018998.8	Ddb2	ENSRNOG0000014071	damage specific DNA binding protein 2 Source RGD Symbol Acc 1310164
C03	UPFR1119718	ENSRNOT00000008941.5	Ddit3	ENSRNOG0000006789	DNA-damage inducible transcript 3 Source RGD Symbol Acc 62391
C04	UPFR1032628	ENSRNOT00000014182.5	Dnajc3	ENSRNOG0000010352	DnaJ heat shock protein family (Hsp40) member C3 Source RGD Symbol Acc 708518
C05	UPFR1035851	ENSRNOT00000019361.2	Edn1	ENSRNOG0000014361	endothelin 1 Source RGD Symbol Acc 2532
C06	UPFR1023629	ENSRNOT00000001914.4	Epo	ENSRNOG0000001412	erythropoietin Source RGD Symbol Acc 2559
C07	UPFR1075141	ENSRNOT00000025928.5	Fas	ENSRNOG0000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
C08	UPFR1072612	ENSRNOT00000030919.5	Fth1	ENSRNOG0000022619	ferritin heavy chain 1 Source RGD Symbol Acc 2635
C09	UPFR1092990	ENSRNOT00000007698.6	Gadd45a	ENSRNOG0000005615	growth arrest and DNA-damage-inducible, alpha Source RGD Symbol Acc 2654
C10	UPFR1119739	ENSRNOT00000018252.7	Gadd45g	ENSRNOG0000013090	growth arrest and DNA-damage-inducible, gamma Source RGD Symbol Acc 1311796
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1065988	033196.3	Gclc	000006302	glutamate-cysteine ligase, catalytic subunit Source RGD Symbol Acc 619868
C12	UPFR1071868	ENSRNOT00000018343.4	Gclm	ENSRNOG0000013409	glutamate cysteine ligase, modifier subunit Source RGD Symbol Acc 619871
D01	UPFR1087543	ENSRNOT00000005347.5	Grb2	ENSRNOG0000003990	growth factor receptor bound protein 2 Source RGD Symbol Acc 619758
D02	UPFR1080300	ENSRNOT00000090036.1	Gsr	ENSRNOG0000014915	glutathione-disulfide reductase Source RGD Symbol Acc 621747
D03	UPFR1075260	ENSRNOT00000024601.4	Gstp1	ENSRNOG0000018237	glutathione S-transferase pi 1 Source RGD Symbol Acc 2758
D04	UPFR1040868	ENSRNOT00000019192.6	Hmox1	ENSRNOG0000014117	heme oxygenase 1 Source RGD Symbol Acc 2806
D05	UPFR1014170	ENSRNOT00000086310.1	Hsp90aa1	ENSRNOG0000059714	heat shock protein 90 alpha family class A member 1 Source RGD Symbol Acc 631409
D06	UPFR1020204	ENSRNOT00000079731.1	Hsp90b1	ENSRNOG0000026963	heat shock protein 90 beta family member 1 Source RGD Symbol Acc 1310482
D07	UPFR1057108	ENSRNOT00000081924.1	Hspa1a	ENSRNOG0000050647	heat shock protein family A (Hsp70) member 1B Source RGD Symbol Acc 2840
D08	UPFR1042317	ENSRNOT00000023628.3	Hspa4	ENSRNOG0000016596	heat shock protein family A member 4 Source RGD Symbol Acc 628878
D09	UPFR1106328	ENSRNOT00000015474.6	Hspa4l	ENSRNOG0000010819	heat shock protein family A (Hsp70) member 4 like Source RGD Symbol Acc 1306528
D10	UPFR1074347	ENSRNOT00000025067.6	Hspa5	ENSRNOG0000018294	heat shock protein family A member 5 Source RGD Symbol Acc 2843
D11	UPFR1092540	ENSRNOT00000006852.7	Hus1	ENSRNOG0000005141	HUS1 checkpoint clamp component Source RGD Symbol Acc 1591976
D12	UPFR1084134	ENSRNOT00000009919.2	Ifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
E01	UPFR1066959	ENSRNOT00000080818.1	Il1a	ENSRNOG0000004575	interleukin 1 alpha Source RGD Symbol Acc 2890
E02	UPFR1121351	ENSRNOT00000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
E03	UPFR1098910	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
E04	UPFR1132956	ENSRNOT00000077604.1	Pgk1	ENSRNOG0000058249	phosphoglycerate kinase 1 Source RGD Symbol Acc 619878
E05	UPFR1016351	ENSRNOT00000047861.4	Diablo	ENSRNOG0000029197	diablo, IAP-binding mitochondrial protein Source RGD Symbol Acc 1310885
E06	UPFR1032957	ENSRNOT00000023965.3	Mmp9	ENSRNOG0000017539	matrix metalloproteinase 9 Source RGD Symbol Acc 621320
E07	UPFR1015459	ENSRNOT00000012940.4	Mre11a	ENSRNOG0000009506	MRE11 homolog A, double strand break repair nuclease Source RGD Symbol Acc 69263
E08	UPFR1078597	ENSRNOT00000012377.4	Nbn	ENSRNOG0000008580	nibrin Source RGD Symbol Acc 621420
E09	UPFR1019376	ENSRNOT00000017005.5	Nfat5	ENSRNOG0000011879	nuclear factor of activated T-cells 5 Source RGD Symbol Acc 1309142
E10	UPFR1111217	ENSRNOT00000017174.5	Nqo1	ENSRNOG0000012772	NAD(P)H quinone dehydrogenase 1 Source RGD Symbol Acc 2503
E11	UPFR1022638	ENSRNOT00000004232.5	Parp1	ENSRNOG0000003084	poly (ADP-ribose) polymerase 1 Source RGD Symbol Acc 2053
E12	UPFR1118434	ENSRNOT00000011840.6	Parp2	ENSRNOG0000008892	poly (ADP-ribose) polymerase 2 Source RGD Symbol Acc 1310568
F01	UPFR1112300	ENSRNOT00000023132.5	Prdx1	ENSRNOG0000017194	peroxiredoxin 1 Source RGD Symbol Acc 620039
F02	UPFR1103254	ENSRNOT00000064305.3	PVR	ENSRNOG0000019202	poliovirus receptor Source RGD Symbol Acc 3813
F03	UPFR1120798	ENSRNOT00000024801.4	Rad17	ENSRNOG0000018353	RAD17 checkpoint clamp loader component Source RGD Symbol Acc 1309515
F04	UPFR1036915	ENSRNOT00000056432.2	Rad51	ENSRNOG0000037302	RAD51 recombinase Source RGD Symbol Acc 1563603
F05	UPFR1020465	ENSRNOT00000025317.5	Rad9a	ENSRNOG0000018729	RAD9 checkpoint clamp component A Source RGD Symbol Acc 2319938
F06	UPFR1111177	ENSRNOT00000023962.5	Ripk1	ENSRNOG0000017787	receptor interacting serine/threonine kinase 1 Source RGD Symbol Acc 1310158
F07	UPFR1014608	ENSRNOT00000027759.4	Ripk3	ENSRNOG0000020465	receptor-interacting serine-threonine kinase 3 Source RGD Symbol Acc 628899
F08	UPFR1051798	ENSRNOT00000001916.2	Serpine1	ENSRNOG0000001414	serpin family E member 1 Source RGD Symbol Acc 3249
F09	UPFR1052096	ENSRNOT00000083700.1	Slc2a1	ENSRNOG0000007284	solute carrier family 2 member 1 Source RGD Symbol Acc 3704
F10	UPFR1013112	ENSRNOT00000086982.1	Slc6a6	ENSRNOG0000009019	solute carrier family 6 member 6 Source RGD Symbol Acc 61912

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1051137	ENSRNOT00000020711.3	Slc9a3	ENSRNOG00000015159	solute carrier family 9 member A3 Source RGD Symbol Acc 3720
F12	UPFR1112424	ENSRNOT00000059255.5	Sqstm1	ENSRNOG00000003147	sequestosome 1 Source RGD Symbol Acc 69287
G01	UPFR1020675	ENSRNOT00000014020.3	Tlr4	ENSRNOG00000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G02	UPFR1098022	ENSRNOT00000079677.1	LOC103694380	ENSRNOG00000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G03	UPFR1016844	ENSRNOT00000066128.4	AABR07018323.1	ENSRNOG00000038483	
G04	UPFR1079067	ENSRNOT00000048529.4	Tnfrsf1a	ENSRNOG00000031312	TNF receptor superfamily member 1A Source RGD Symbol Acc 621237
G05	UPFR1095007	ENSRNOT00000085115.1	Tp53	ENSRNOG00000010756	tumor protein p53 Source RGD Symbol Acc 3889
G06	UPFR1060469	ENSRNOT00000016447.6	Txn1	ENSRNOG00000012081	thioredoxin 1 Source RGD Symbol Acc 621157
G07	UPFR1107823	ENSRNOT00000034676.4	Txn14b	ENSRNOG00000021379	thioredoxin-like 4B Source RGD Symbol Acc 1305127
G08	UPFR1022916	ENSRNOT00000013613.7	Txnrd1	ENSRNOG0000009088	thioredoxin reductase 1 Source RGD Symbol Acc 61959
G09	UPFR1015373	ENSRNOT00000056790.3	Ulk1	ENSRNOG00000037505	unc-51 like autophagy activating kinase 1 Source RGD Symbol Acc 1589743
G10	UPFR1117908	ENSRNOT00000026559.5	Vegfa	ENSRNOG00000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
G11	UPFR1118728	ENSRNOT00000014044.6	Xbp1	ENSRNOG00000010298	X-box binding protein 1 Source RGD Symbol Acc 1303073
G12	UPFR1016280	ENSRNOT00000011490.3	Xpc	ENSRNOG00000008274	XPC complex subunit, DNA damage recognition and repair factor Source RGD Symbol Acc 1305760
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	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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