SUPPLEMENTAL DATA

Table S1. Effect of RNA extracts on rPrP23-231 and rPrPΔ51-90

	PrP23-231			PrPΔ51-90		
RNA	**LS/LS$_0$***	**FI/FI$_0$***	**Δ CM****	**LS/LS$_0$***	**FI/FI$_0$***	**Δ CM****
Total RNA						
-	1	1	0	1	1	0
N2aRNA	21.18	1.03	227	0.83	0.88	6
vRNA	6.08	0.81	270	3.18	0.75	80
c6RNA	13.41	0.77	320	2.59	0.73	84
*Sc*RNA	22.48	1.09	647	2.15	0.83	288
*Ec*RNA	5.31	0.35	583	0.83	0.82	120
Synthetic RNA sequences						
opRNA	9.84	0.80	269	1.59	1.04	116
SAF93	4.53	0.35	125	1.51	0.74	266

**Normalized values obtained by dividing each recorded value (in the presence of RNA) by the initial value (LS_0, initial light scattering, FI_0, initial fluorescence intensity) for free protein in solution; ***Changes in center of spectral mass (CM) values from the tryptophan emission spectra (cm^{-1}). The eukaryotic cell lineages used were: Neuroblastoma (N2a), N2aRNA; Vero, vRNA; C6/36, c6RNA; *Saccharomyces cerevisiae* (BSC783/4a), *Sc*RNA. Prokaryotic cells: *Escherichia coli* (BL21DE3), *Ec*RNA.

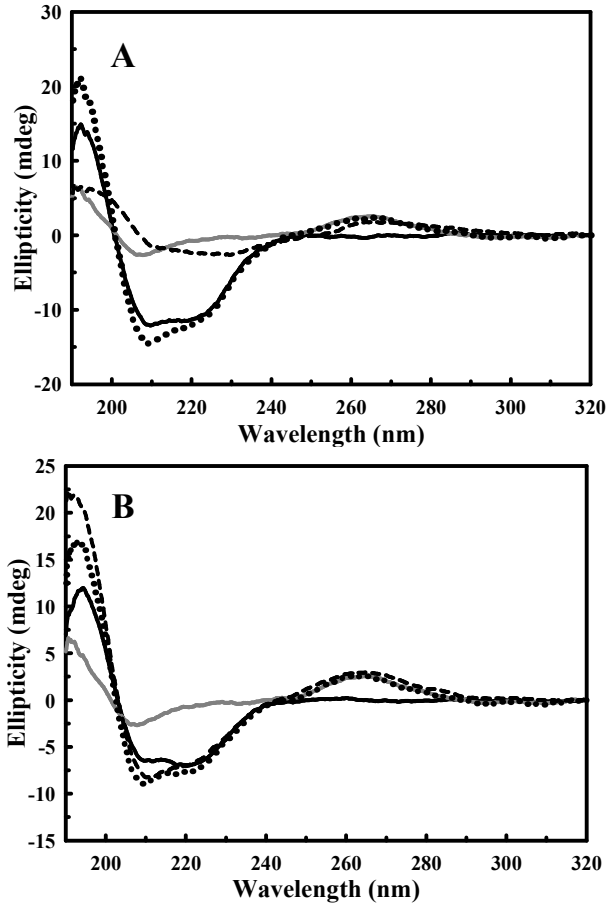

Figure S1. Secondary structure effects of N2aRNA on rPrP23-231 and rPrPΔ51-90. (A) CD spectrum of rPrP23-231 at 0.69 mg/mL (solid black line); N2aRNA at 0.69 mg/mL (solid gray line); rPrP23-231 at 0.69 mg/mL + N2aRNA at 0.69 mg/mL (dashed line); free PrP23-231 at 0.96 mg/mL + free N2aRNA 0.69 mg/mL (dotted line). **(B)** CD spectra for rPrPΔ51-90 at 0.57 mg/mL (solid black line); N2aRNA at 0.57 mg/mL (solid gray line); rPrPΔ51-90 at 0.57 mg/mL + N2aRNA at 0.57 mg/mL (dashed line); and the sum of free rPrPΔ51-90 at 0.57 mg/mL + spectrum of free N2aRNA at 0.57 mg/mL (dotted line).

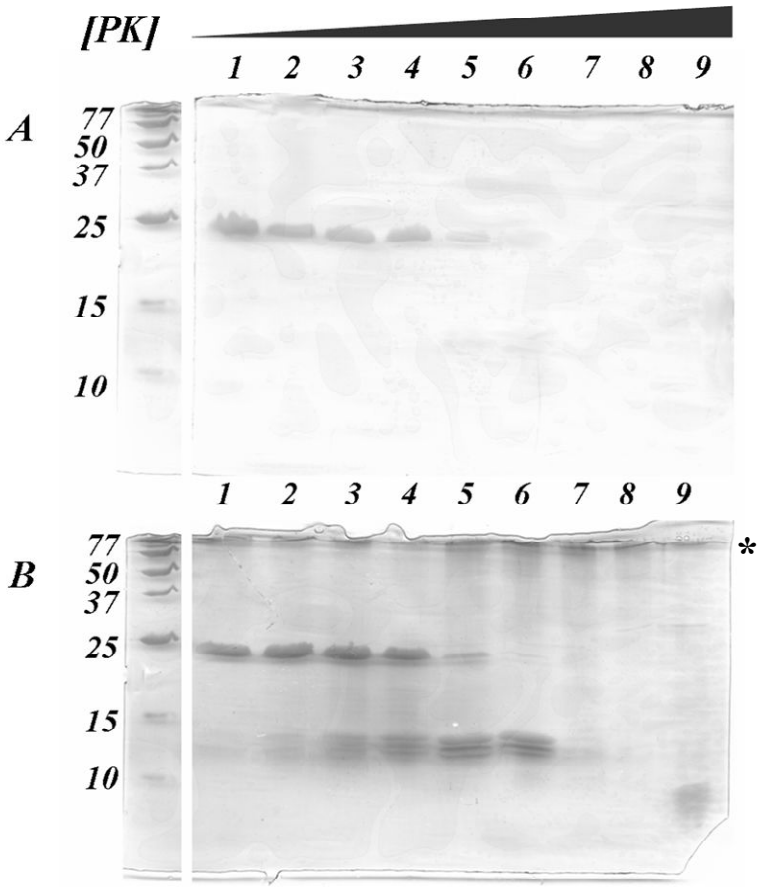

Figure S2. rPrP23-231:N2aRNA aggregate is partially resistant to proteinase K digestion. Silver-stained 15 % SDS-PAGE. Molecular markers are shown on the left for A and B. **(A)** rPrP23-231 at 0.69 mg/mL or **(B)** rPrP23-231:N2aRNA (0.69 mg/mL: 0.345mg/mL) treated with proteinase K for 1h at 37 ºC. Relation rPrP23-231:PK (mg/mL): 1) non treated; 2) 10,000:1; 3) 5,000:1; 4) 1,000:1; 5) 500:1; 6) 100:1; 7) 50:1; 8) 10:1; 9) 5:1. The asterisk shows larger aggregates that are protease-resistant on the top of the gel.

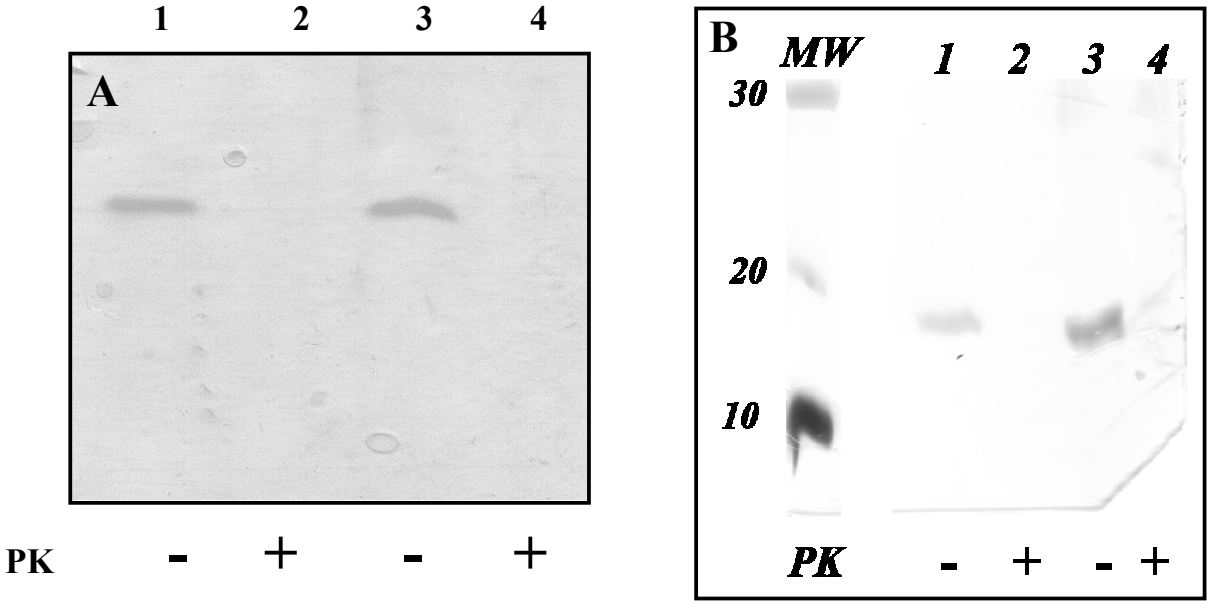

Figure S3. rPrPΔ51-90 does not acquire resistance to PK digestion in the presence of N2aRNA. Samples were treated with proteinase K (PK) at 37 ºC for 1 h (ratio PrP:PK = 100:1), except for where is indicated (-). (A) Western blotting for PrP C-terminal domain. Lanes 1 and 2, rPrPΔ51-90 at 5μM; Lanes 3 and 4, rPrPΔ51-90 at 5μM + N2aRNA at 0.0475 mg/mL. (B) Silver-stained 15 % SDS-PAGE. Lanes 1 and 2, rPrP_51-90 at 30μM; Lanes 3 and 4, rPrPΔ51-90 at 30μM + N2aRNA at 0.285 mg/mL. Molecular markers are shown in the left lane (MW).

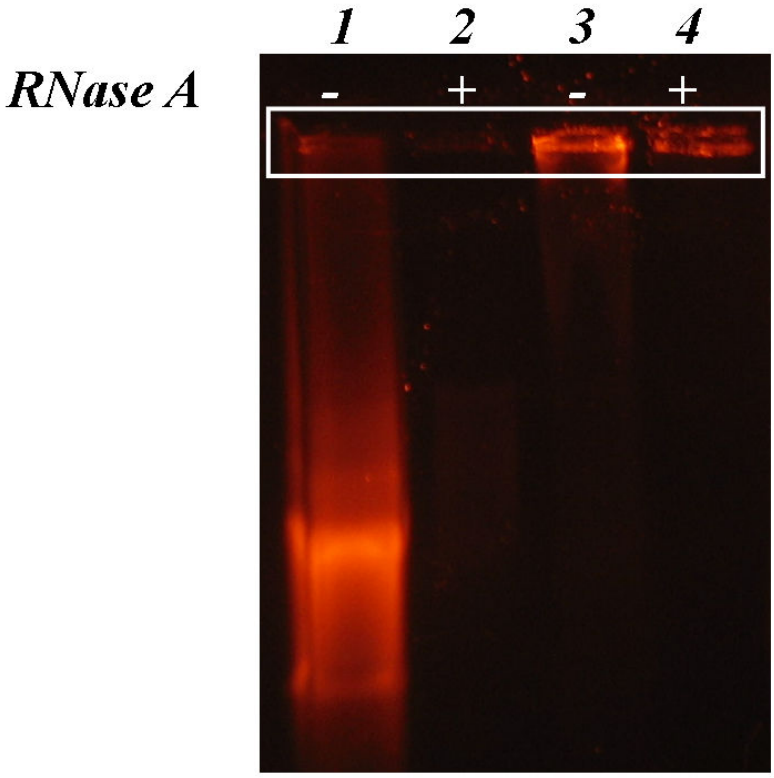

Figure S4. N2aRNA complexed with rPrP23-231 is protected from RNase A digestion. 0.8 % Agarose gel stained with ethidium bromide. Samples were treated with 0.004 mg/mL RNase A at room temperature for 1 h (ratio N2aRNA:RNase A = 100:1), except where indicated (-). Lanes 1 and 2, N2aRNA at 0.345 mg/mL; Lanes 3 and 4, rPrP23-231 at 0. 69 mg/mL (30μM) + N2aRNA at 0.345 mg/mL.