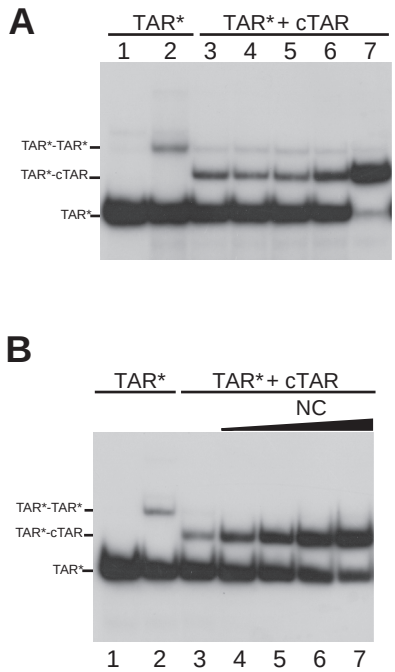

Supplementary Fig. S1

Supplementary Figure S1. Annealing of TAR RNA to cTAR DNA in the absence or in the presence of NC. The heat-denatured control of TAR (1 pmol of TAR ^{32}P-RNA at 2 × 10^4 cpm/pmol in 10 µl of double-distilled water) was performed by heating at 90 °C for 2 min and chilling for 2 min on ice, and mixing with 2.5 µl of loading buffer (50 % w/v glycerol, 0.05 % w/v bromophenol blue, 0.05 % w/v xylene cyanol). The annealing assays were carried out in a final volume of 10 µl. One pmol of TAR ^{32}P-RNA (2 × 10^4 cpm/pmol) in 3.6 µl of water was heated at 90 °C for 2 min and chilled for 2 min on ice. Then, 0.9 µl of strand transfer buffer was added (final concentrations: 75 mM KCl, 7 mM $MgCl_2$ and 50 mM Tris-HCl pH 7.8) and the sample was incubated at 37 °C for 30 min. Unlabeled DNA (1 pmol) underwent the same renaturation treatment and was then added to refolded TAR ^{32}P-RNA. The reaction mixture was then incubated at 37 °C for 10 min in the presence of NC at various concentrations or incubated at 37 °C for various times in the absence of protein. At the end of incubations, 3.5 µl of loading buffer was added to assays without protein, and the assays with NC were phenol-chloroform extracted and each aqueous phase was mixed with 3.5 µl of loading buffer. The samples were analyzed by electrophoresis on a 12 % polyacrylamide gel (37.5:1 (w/w), acrylamide/bisacrylamide) at 25 °C in 1 X TBE buffer (90 mM Tris-borate (pH 8.3), 2 mM EDTA). After electrophoresis, the gel was fixed, dried and autoradiographed. **(A)** Time course of TAR RNA annealing with cTAR DNA in the absence of NC. Lane 1, heat-denatured TAR ^{32}P-RNA. TAR ^{32}P-RNA alone (lane 2) or mixed with cTAR DNA (lanes 3-7) was incubated at 37 °C for 10 min (lanes 2 and 3), 1 h (lane 4), 3 h (lane 5), 6 h (lane 6) or 24 h (lane 7). **(B)** TAR RNA-DNA annealing in the presence of NC. Lane 1, heat-denatured TAR ^{32}P-RNA. Lane 2, TAR ^{32}P-RNA was incubated in the presence of NC at a protein to nucleotide molar ratio of 1:1. TAR ^{32}P-RNA mixed with cTAR DNA (lanes 3-7) was incubated in the absence (lane 3) or presence of NC (lanes 4-7). The protein to nucleotide molar ratios were 1:8 (lane 4), 1:4 (lane 5), 1:2 (lane 6) and 1:1 (lane 7). Monomeric form of TAR is indicated by TAR*. The TAR RNA-cTAR DNA duplex is indicated by TAR*-cTAR. Homodimeric form of TAR is indicated by TAR*-TAR*.