Supporting Information

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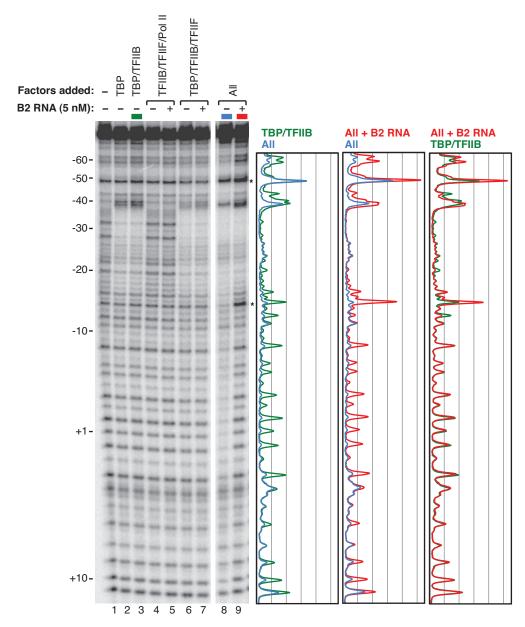


Fig. S1. Plots depicting the changes that occurred in DNase I protection as different combinations of factors were added to the AdMLP in the presence or absence of B2 RNA. The data are the same as shown in Fig. 4. The bands in the lanes with colored bars at the top were quantitated, and band intensity was plotted versus position along the DNA, as indicated above each plot. The color of each line in the plots corresponds to the color of the bar over the lane of the gel that was quantitated. The plots are placed next to the gel such that the peaks horizontally align with the bands from which they were derived. The left plot compares the TBP/TFIIB footprint (green line, lane 3) to that obtained in the presence of all four factors (blue line, lane 8). The middle plot compares closed complexes (blue line, lane 8) with complexes assembled in the presence of B2 RNA (red line, lane 9). The right plot compares the TBP/TFIIB footprint (green line, lane 3) to that obtained when complexes containing all factors were assembled in the presence of B2 RNA (red line, lane 9).

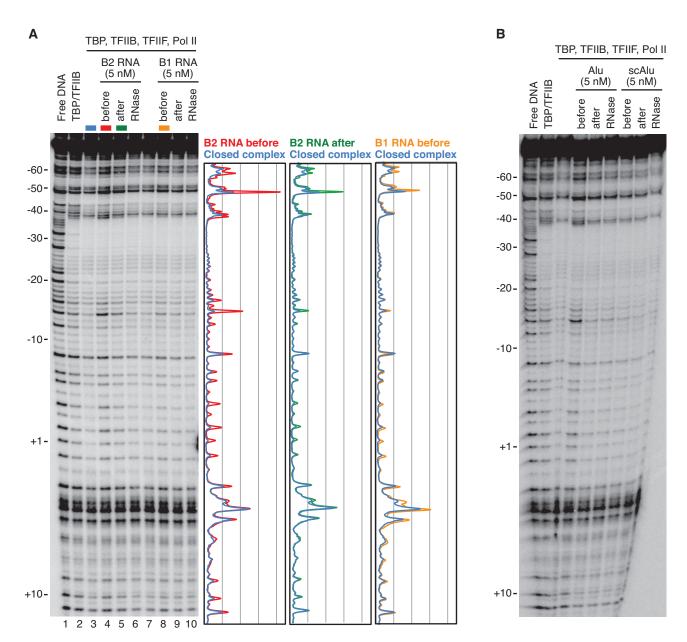


Fig. 52. B2 and Alu RNA alter the conformation of complexes assembled on DNA only under conditions in which they repress transcription. (A) Plots depicting the changes that occurred when B2 RNA and B1 RNA were added to reactions before or after closed complex formation, as indicated. The data are the same as shown in Fig. 5. The bands in the lanes with colored bars at the top were quantitated, and band intensity was plotted versus position along the DNA, as indicated above each plot. The color of each line in the plots corresponds to the color of the bar over the lane of the gel that was quantitated. The plots are placed next to the gel such that the peaks horizontally align with the bands from which they were derived. (B) Alu RNA alters the conformation of complexes assembled on DNA in the same manner as B2 RNA. Alu or scAlu RNA was added to reactions at the points indicated. When AluRNA was added to reactions before complexes were assembled, the -60 to -38 and -18 to +10 regions, which are normally protected in closed complexes, were susceptible to DNase I cleavage. The presence of Alu RNA also caused enhancement of bands at positions -48 and -14, similar to the effect of B2 RNA. When Alu RNA was added to reactions after closed complexes had formed, or when it was incorporated into complexes that were later treated with RNase I, the footprint looked similar to that of closed complexes assembled in the absence of ncRNA. scAlu RNA had no appreciable affect on the DNase I footprint under all conditions tested.