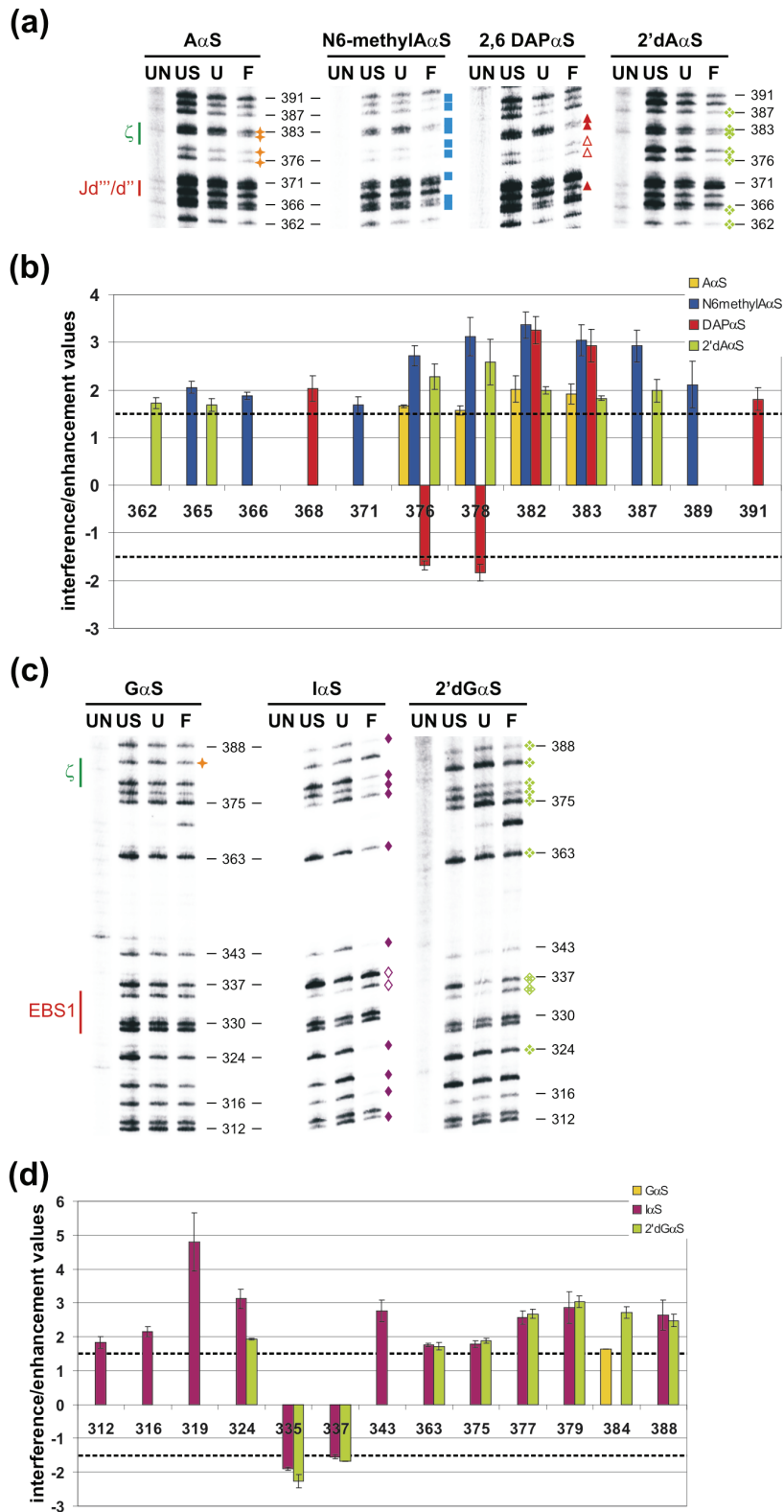
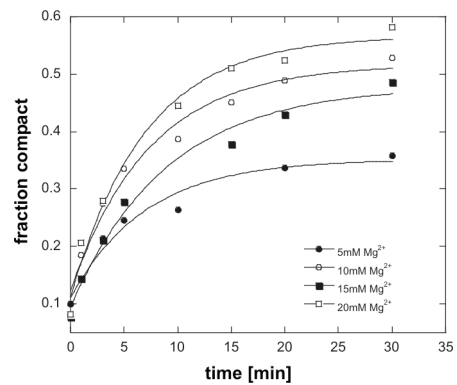


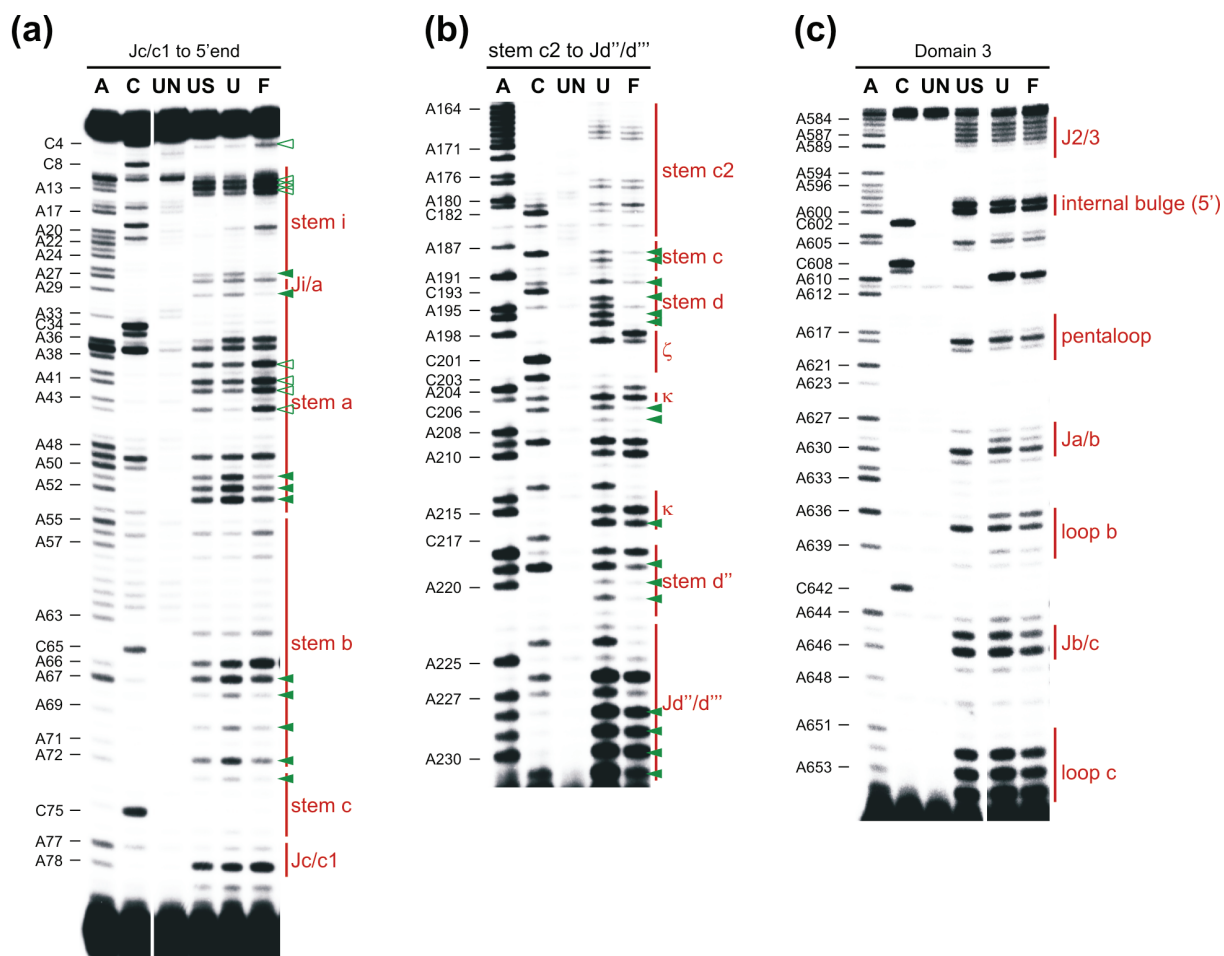
SUPPLEMENTARY FIGURES



Supplementary Figure 1: Interferences in the κ - ζ element and the coordination loop. (a) Representative gels for A analog interferences. (b) Bar diagram showing the average value and standard deviation for each interference and enhancement observed for adenosines within the 3' region of the κ - ζ element. The dotted line indicates the cutoff below which interferences and enhancements were considered insignificant. (c) Representative gels for G analog interferences in the region spanning κ - ζ , α' and EBS1. The abbreviation scheme (UN, US, U, F) is explained in the legend to Figure 3. (d) Bar diagram shows the average value and standard deviation for each guanosine interference. Color code and symbols used in this figure are explained in the legend to Figures 1 and 2.



Supplementary Figure 2: Kinetic progress curves for compaction at different Mg²⁺ concentrations: 5 mM (filled circle), 10 mM (open circle), 15 mM (filled square) and 20 mM (open square) MgCl₂. Individual rate constants and amplitudes are summarized in Table 1.



Supplementary Figure 3: Divalent ion dependence for the formation of secondary and tertiary structure in D135. (a) Representative gel displays the DMS interferences and enhancements identified within the c-c1-c2 three-way junction and within stems a, b and i. (b) Representative gel depicts the DMS interferences and enhancements identified within the 5' region of the κ - ζ element, the coordination loop (Jd''/d'''), their flanking helices as well as stems c and c2. (c) Representative gel shows that DMS interferences or enhancements were not detected within domain 3. The abbreviation scheme (UN, US, U, F) was explained in the legend to Figure 3; A and C are sequencing lanes.