

Supplementary Data

(+)-13a-(S)-Deoxytylophorinine, a New Phenanthroindolizidine Anticancer Alkaloid, Sequence-Specifically Interacts with DNA in an Intercalating Manner

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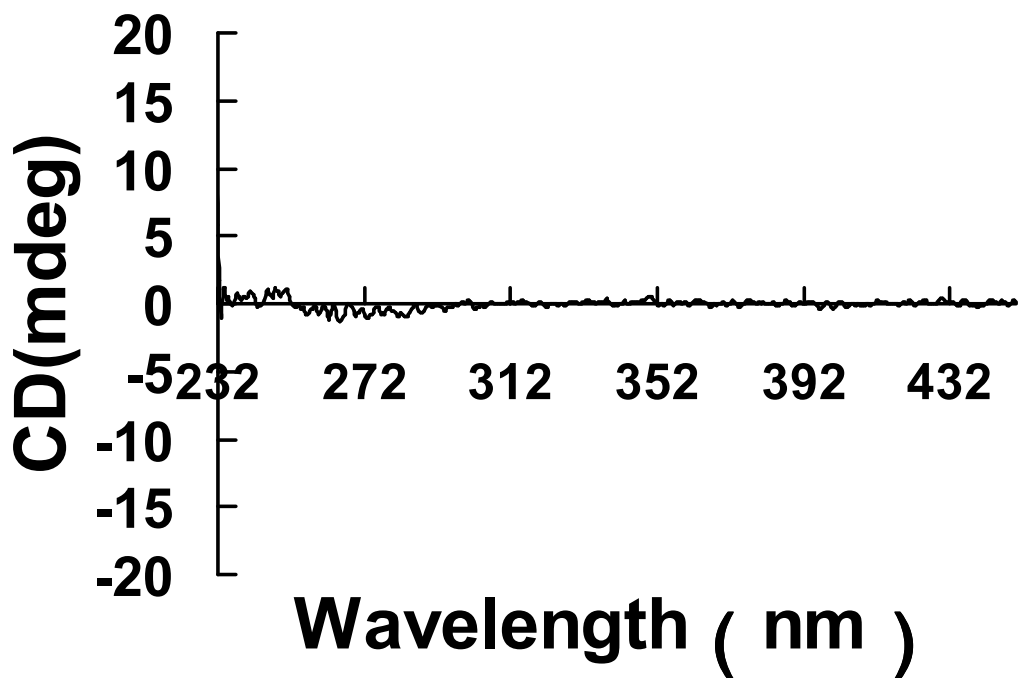


Figure S1. CD spectrum of dimethyl sulphoxide (DMSO, 5%) in BPES buffer.

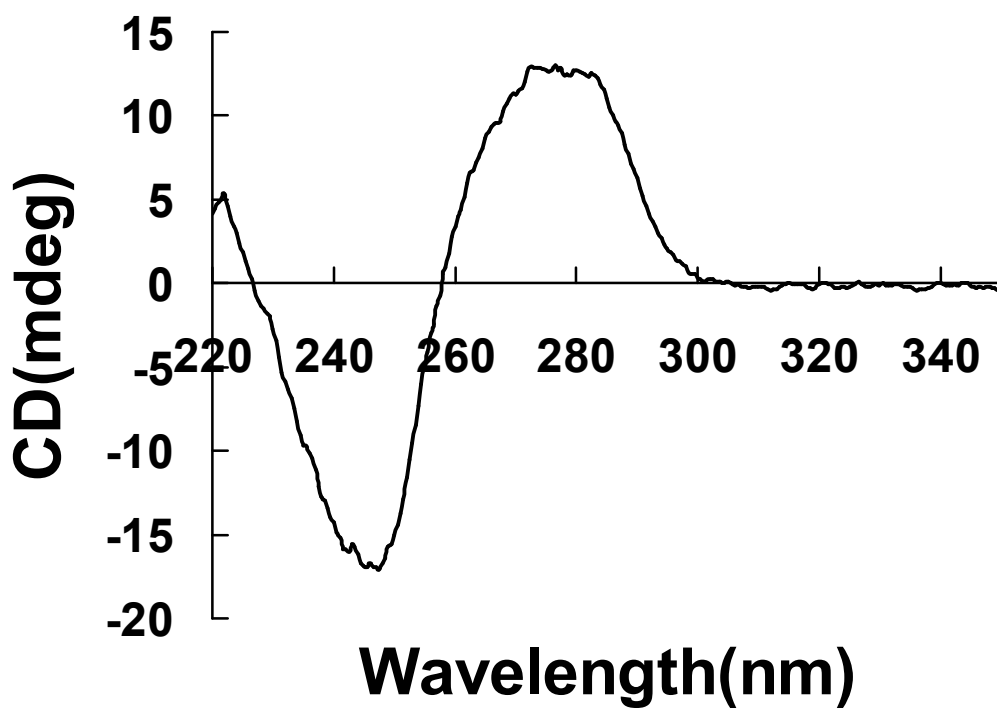


Figure S2. The CD spectrum of CD-DNA ($3 \times 10^{-5} \text{ M(bp)}$) as a standard CD spectrum of DNA.

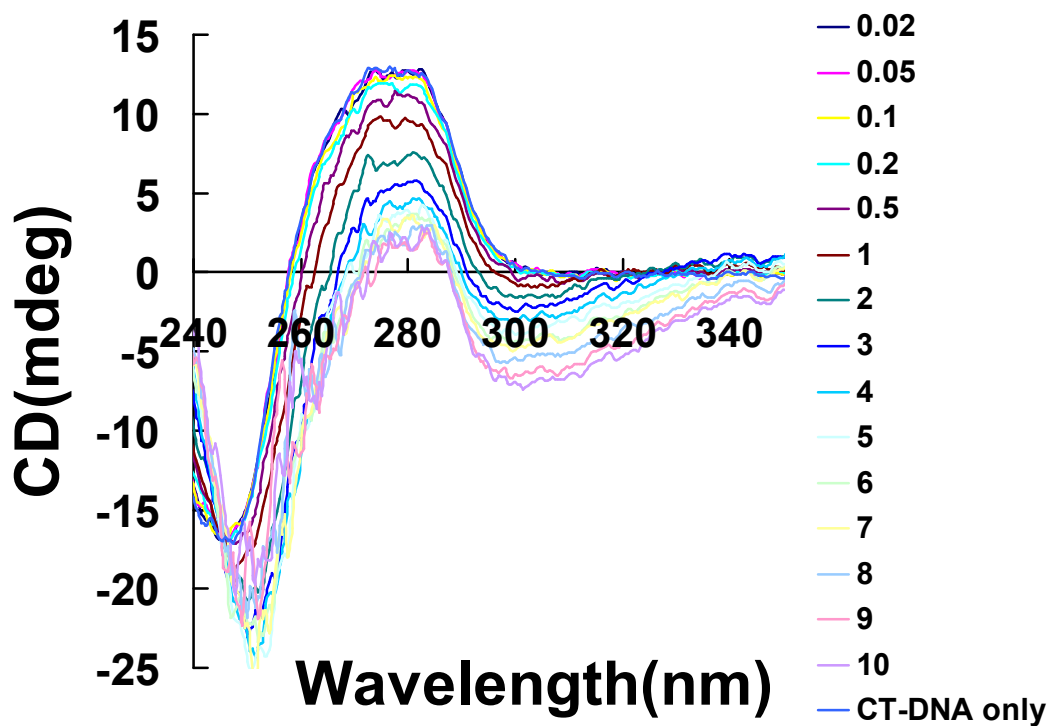


Figure S3. Spectra of the same concentration of DNA in the presence of increasing concentration of CAT with the CAT/DNA ratio (M/ M(bp)) ranging from 0.02 to 10.

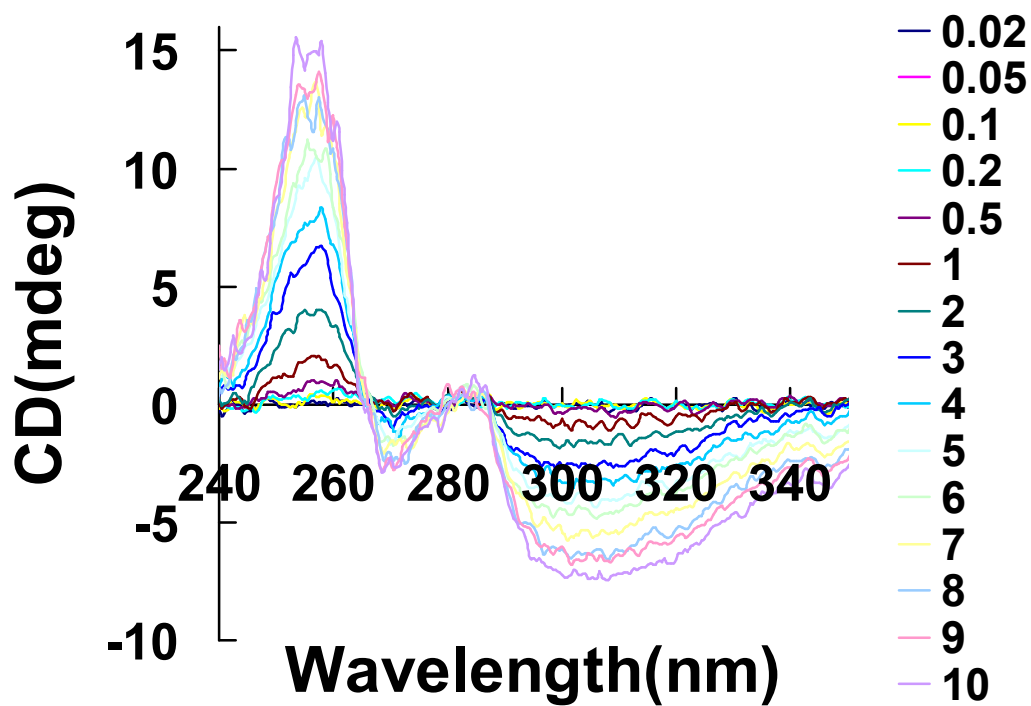


Figure S4. The CD spectra of CAT with the same series of concentrations as figure S3.

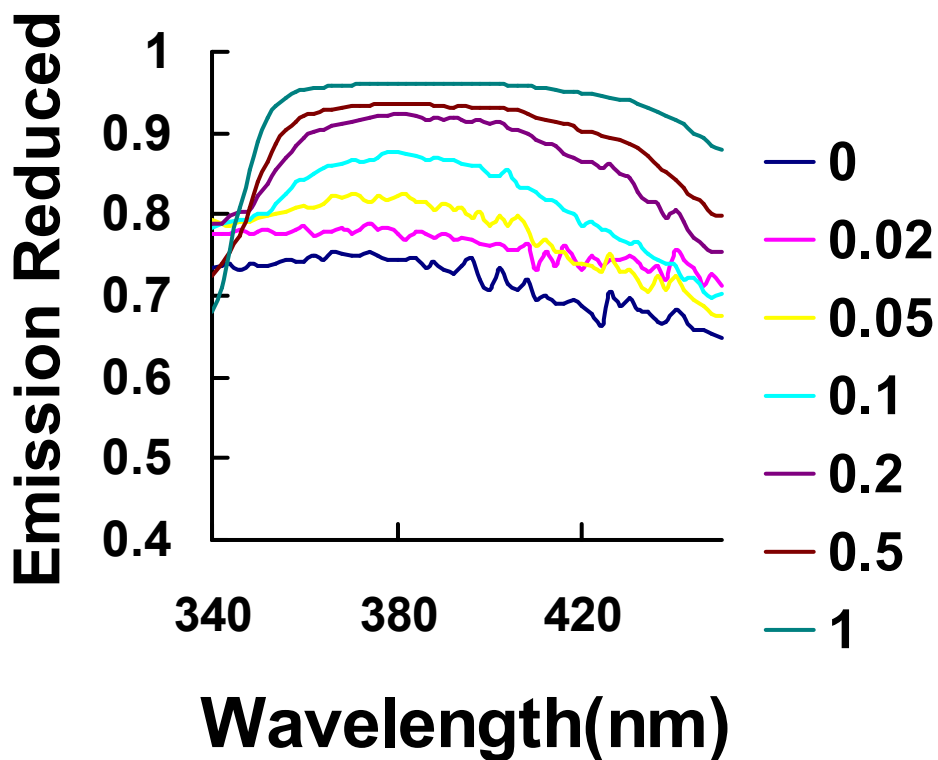


Figure S5. Reduced emissions of different CAT concentrations were plotted with wavelength with the increasing of CAT/DNA ratio (M/ M(bp)) from 0.02 to 1. The magnitudes of reduced emission increased in the wavelength range from all through 350nm to 450nm.

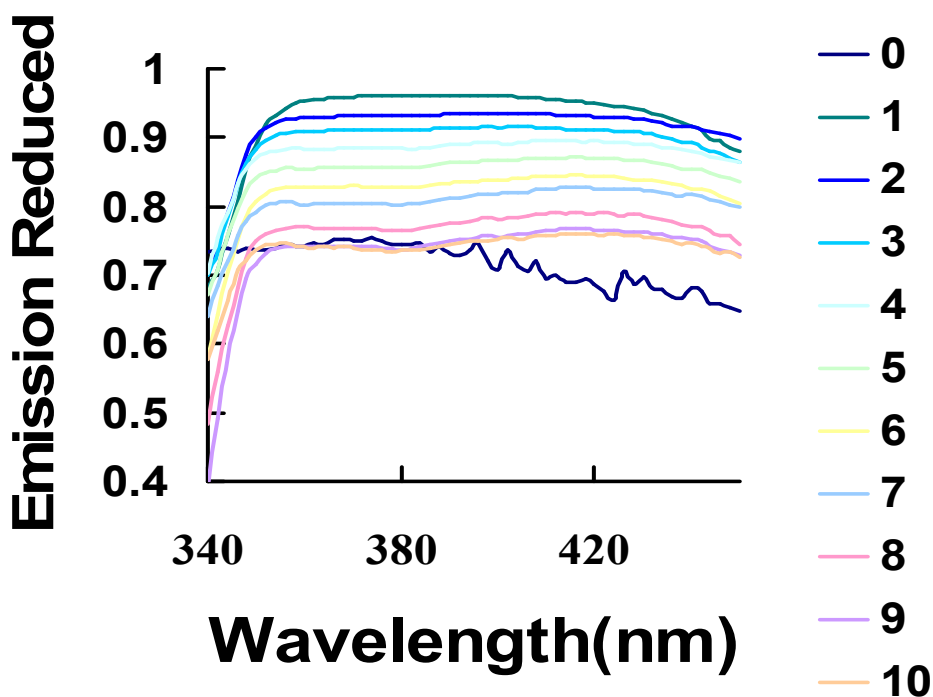


Figure S6. Reduced emissions of different CAT concentrations were plotted with wavelength with the increasing of CAT/DNA ratio (M/ M(bp)) from 1 to 10. The magnitudes of reduced

emission decreased in the wavelength range from all through 350nm to 450nm.

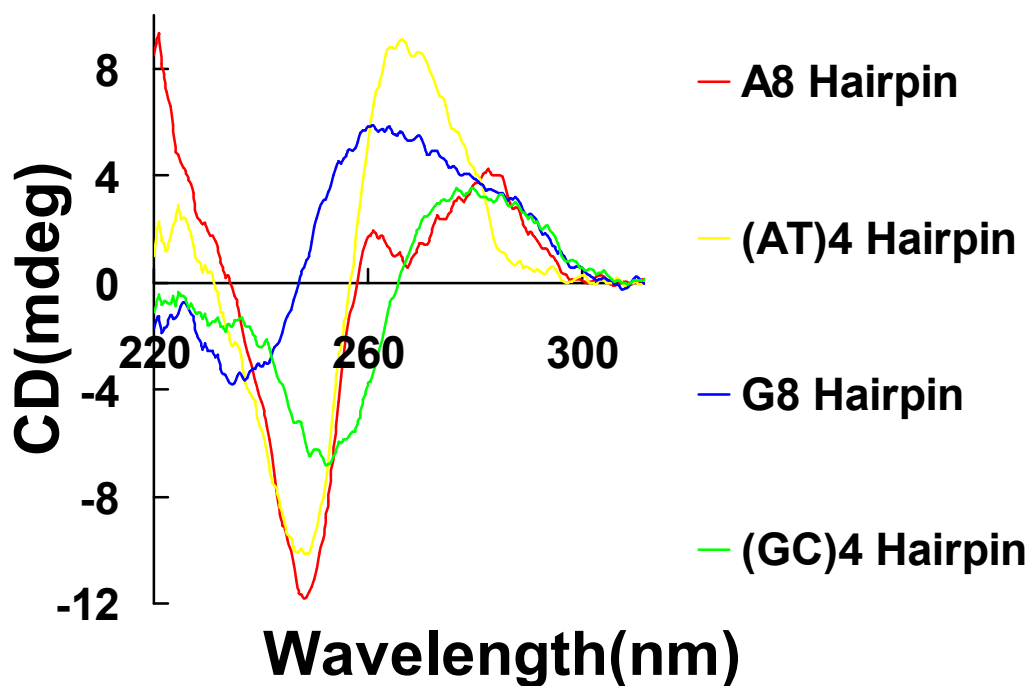


Figure S7. CD spectra of the four short 8bp DNA sequences in BPES buffer with the same concentration, $3 \times 10^{-5} \text{M}(\text{bp})$.

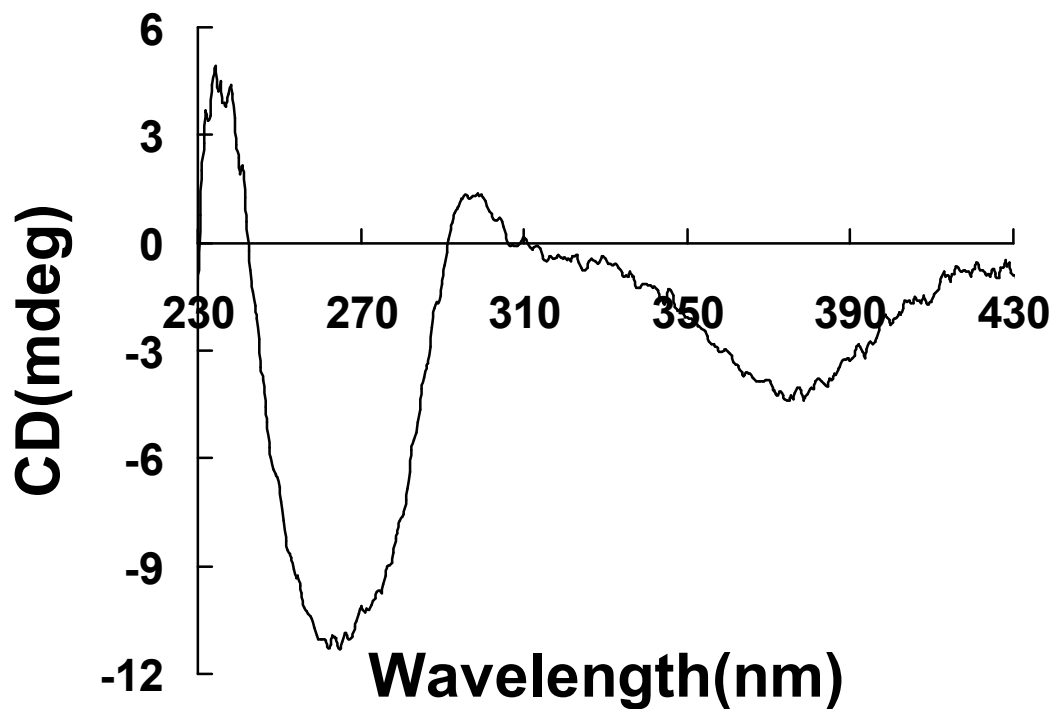


Figure S8. Intrinsic CD spectrum of actinomycin D ($6 \times 10^{-5} \text{M}$) in BPES buffer.