Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.
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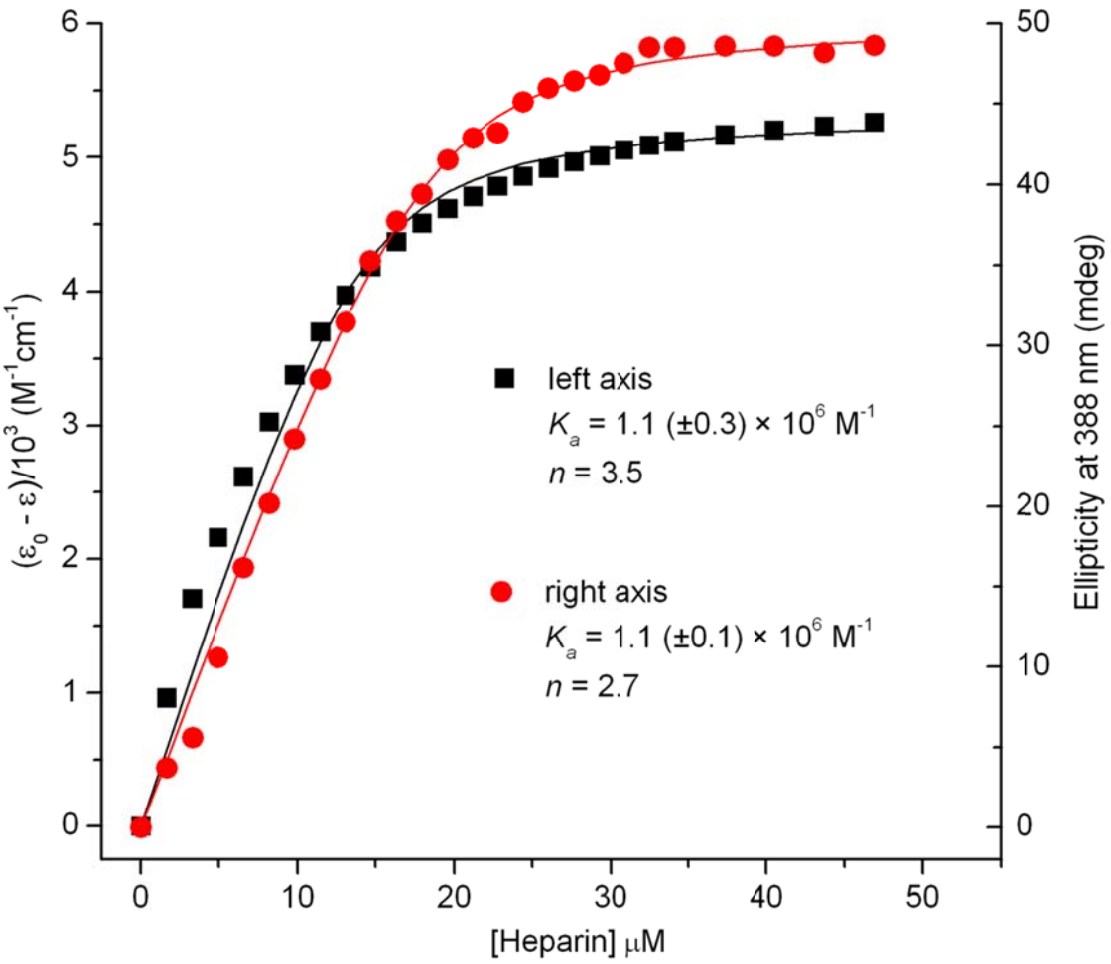
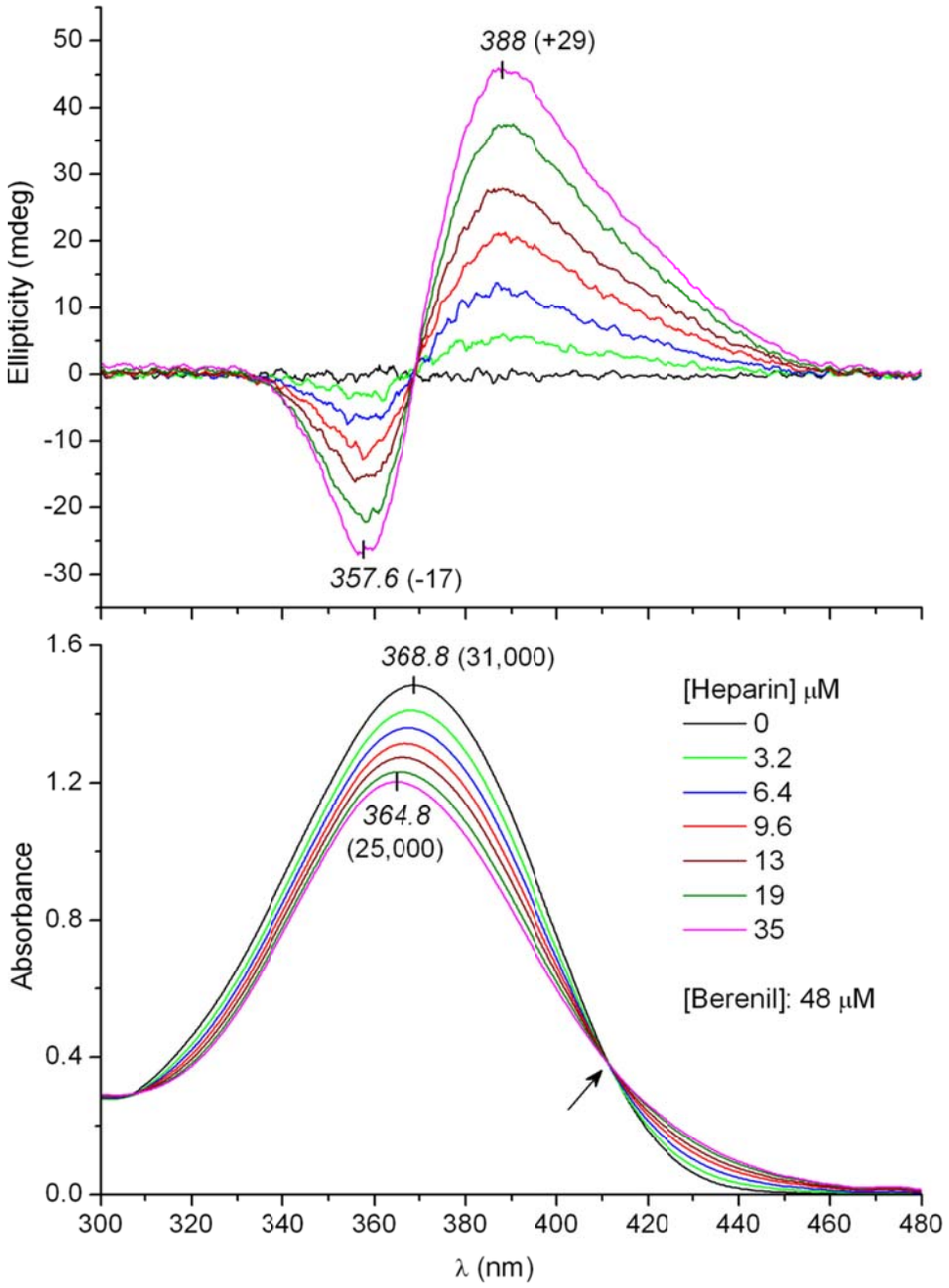
Supplementary Information



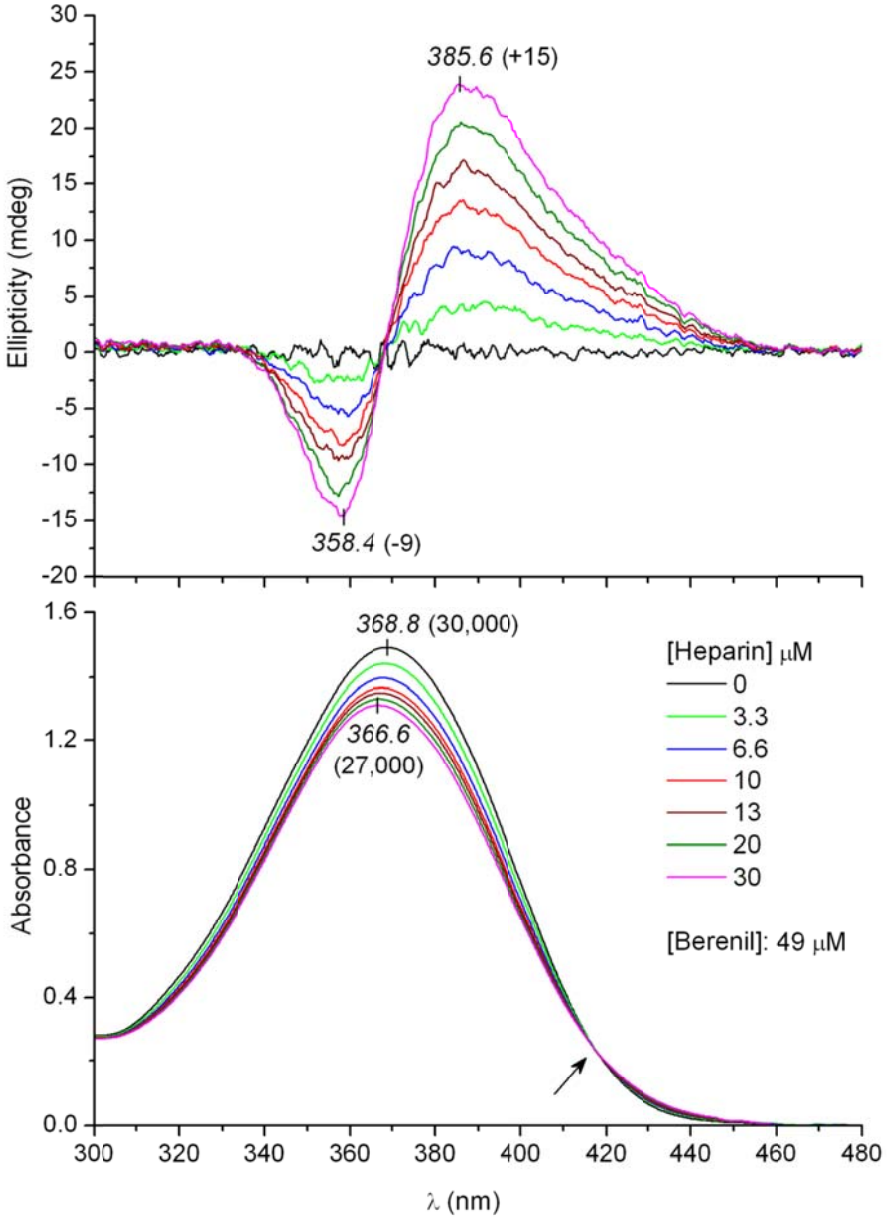
Supplementary Figure 1

UV absorption changes and induced CD values of berenil (49 μM) plotted against the heparin concentration of the sample solution (50 mM phosphate buffer at pH 7.0, 80 mM Na^+, 25 °C). ε_0: maximum molar absorption coefficient of the main UV peak of berenil measured in heparin-free buffer solution; ε: molar absorption coefficient measured at increasing concentrations of heparin. Solid lines are the results of non-linear curve fitting analysis. Estimated association constant (K_a) and the number of berenil binding sites (n) per a disaccharide unit are shown.



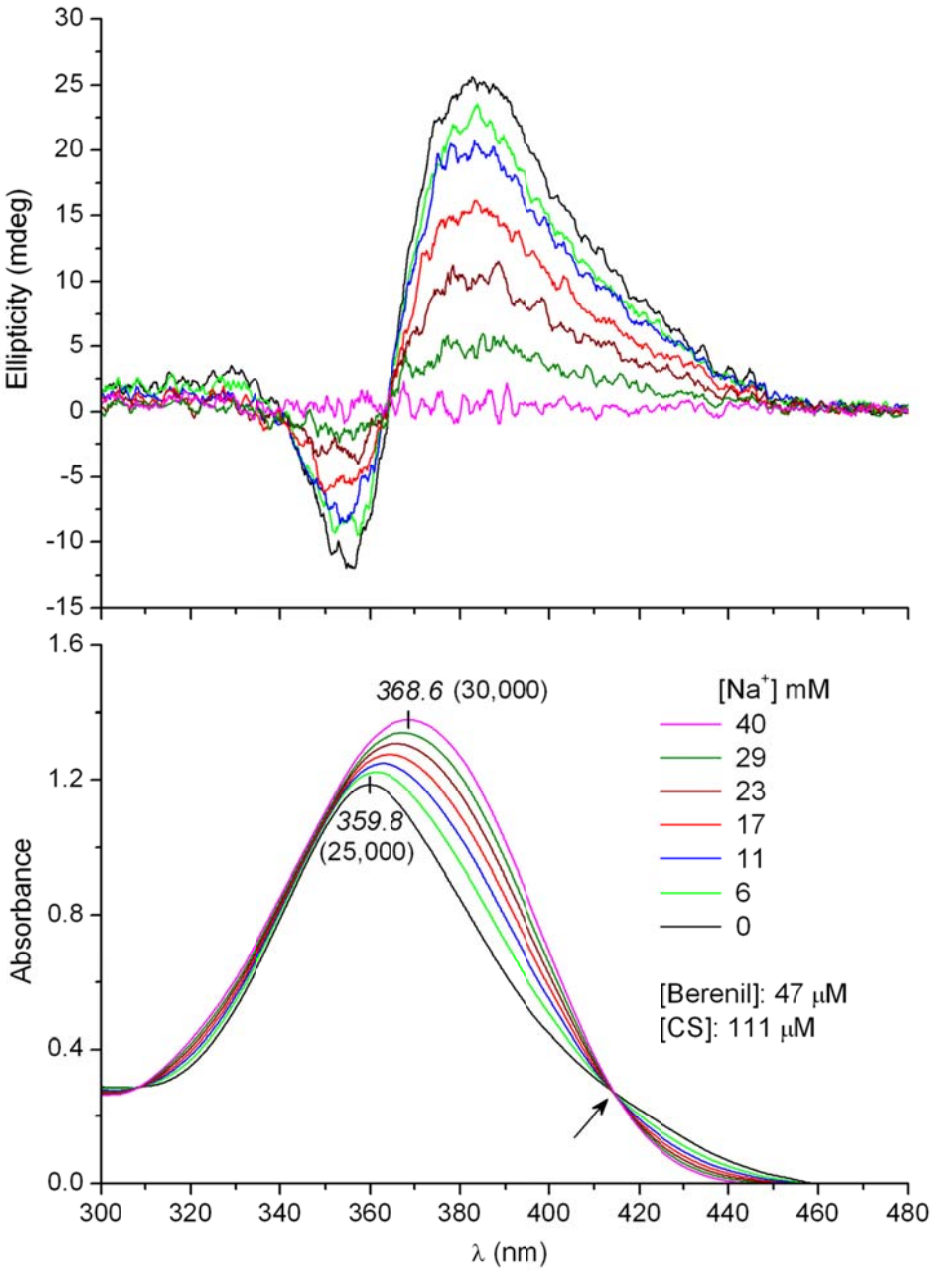
Supplementary Figure 2

Induced CD and absorption spectra of 48 μM berenil at increasing concentrations of heparin in deionized water (100 mM NaCl, 25 °C). Molar absorption (ε) and circular dichroic absorption cofficients (±Δε)calculated by using the concentration of berenil in the sample solution are shown in parentheses. Arrow denotes an isosbestic point at 411 nm.



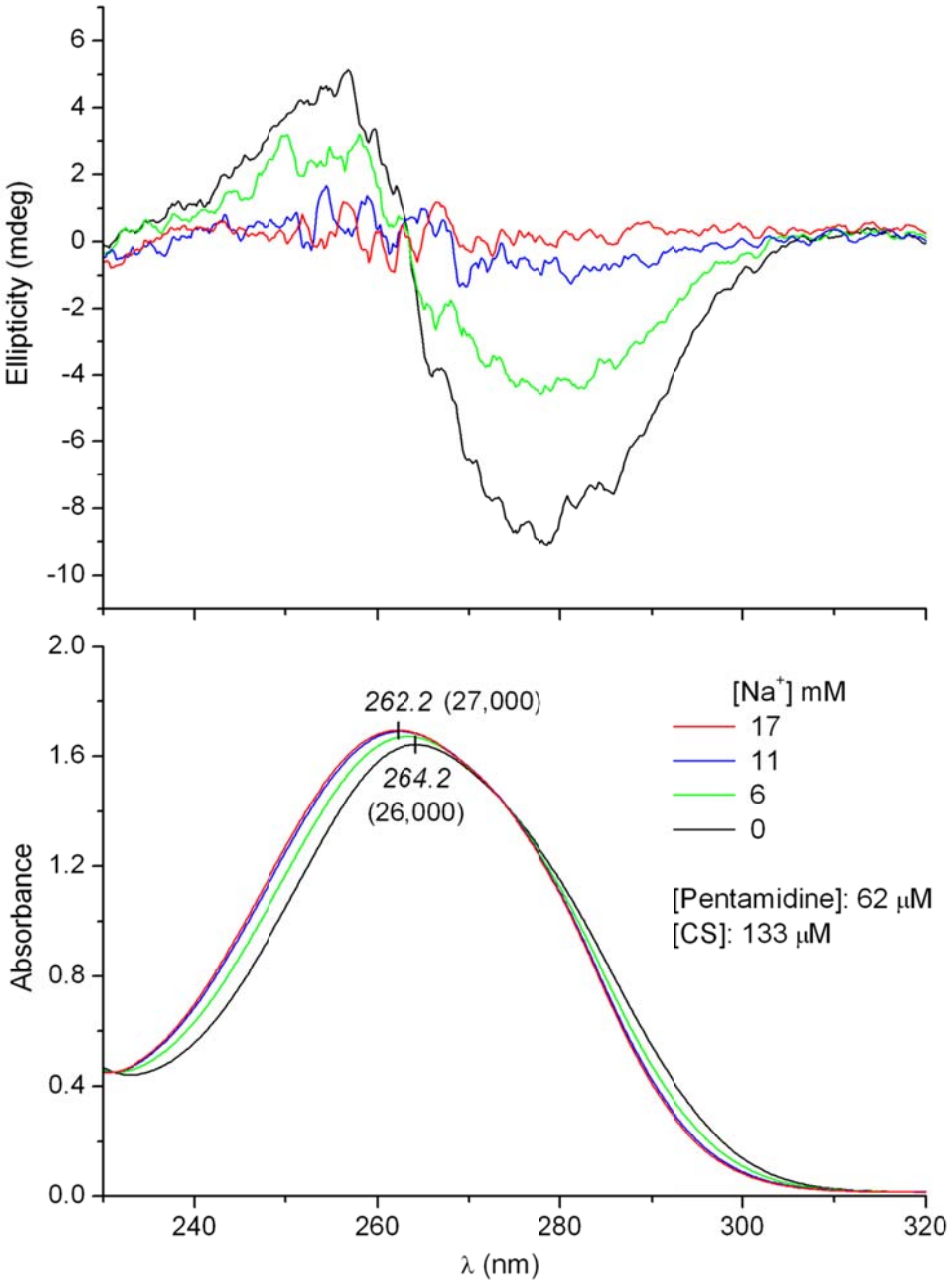
Supplementary Figure 3

Induced CD and absorption spectra of 49 μM berenil at increasing concentrations of heparin in pH 7.4 phosphate buffer with 140 mM Na^+ (25 °C). Molar absorption (ε) and circular dichroic absorption cofficients (±Δε) calculated by using the concentration of berenil in the sample solution are shown in parentheses. Due to the time-dependence of the CD curves, each scan was performed with 15 min. delay after the addition of heparin aliquots. Arrow denotes an isosbestic point at 417 nm.



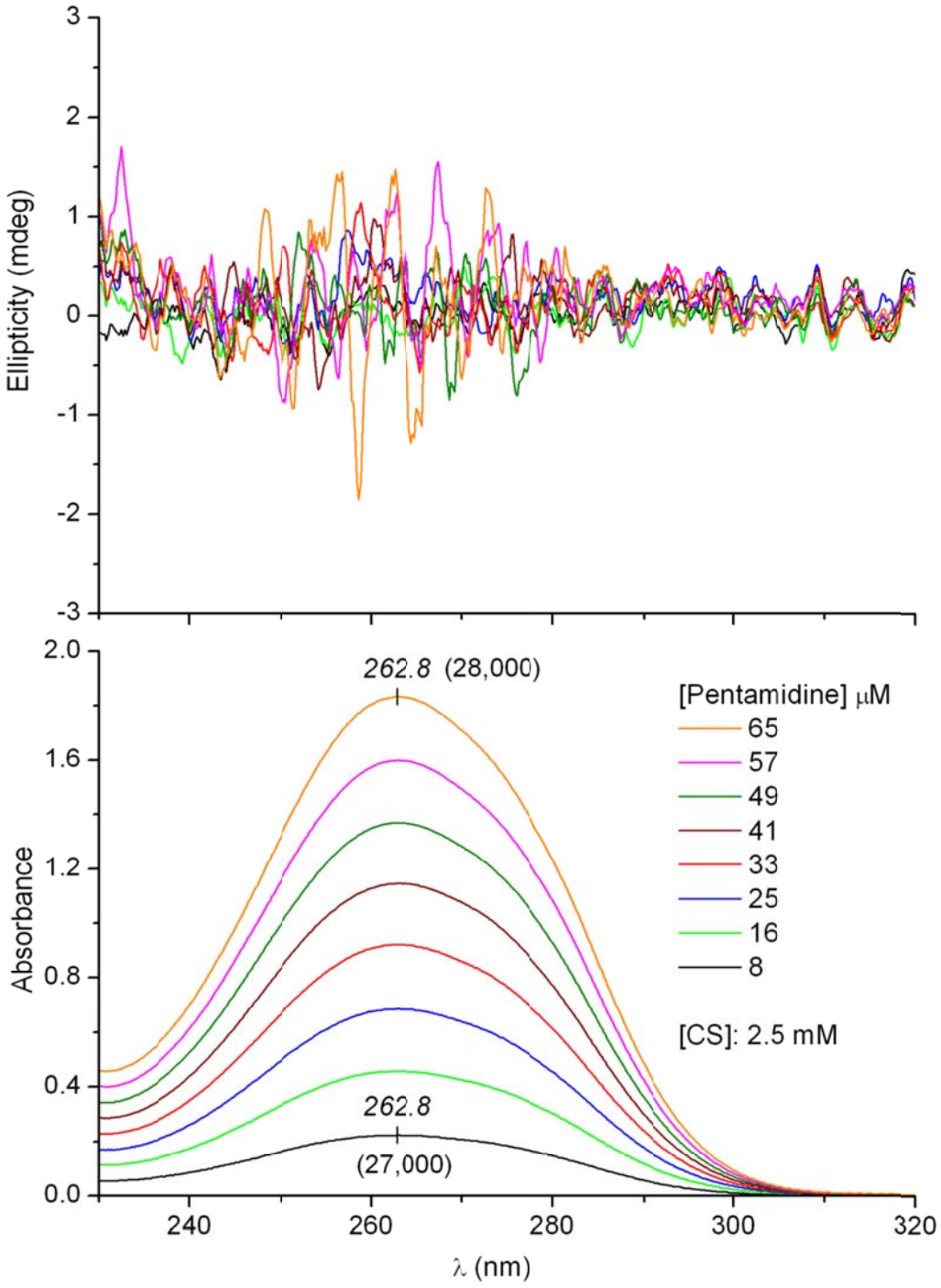
Supplementary Figure 4

Effect of increasing sodium ion concentration on the ICD and UV absorption spectrum of berenil in CS solution (deionized water, 25 °C). Molar absorption cofficients (ε) of berenil are shown in parentheses. Arrow denotes an isosbestic point at 414 nm.



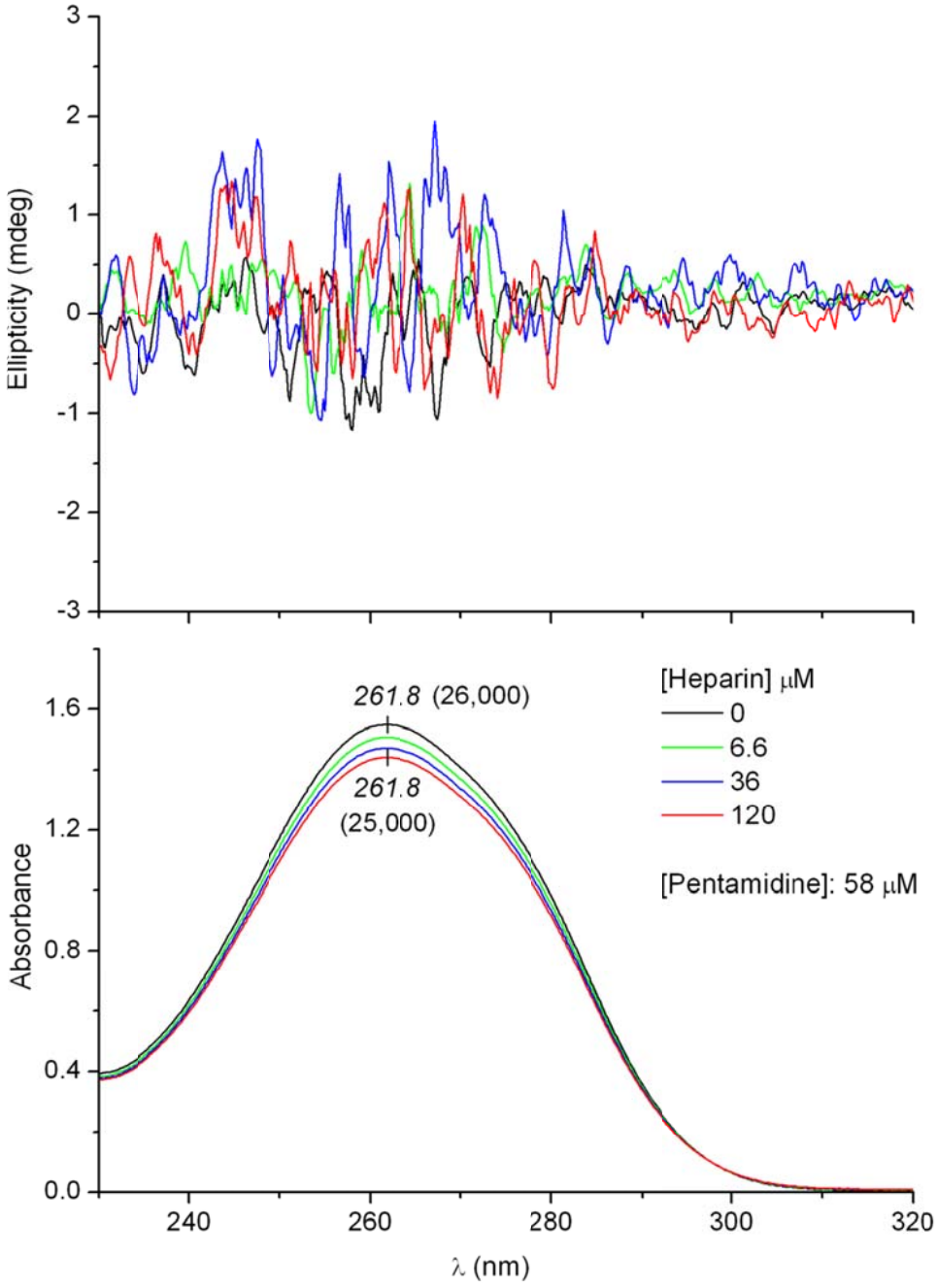
Supplementary Figure 5

Effect of increasing sodium ion concentration on the ICD and UV absorption spectrum of pentamidine in chondroitin 6-sulfate solution (deionized water, 25 °C). Molar absorption cofficients (ε) of the drug are shown in parentheses.



Supplementary Figure 6

CD and absorption spectra of pentamidine in aqueous solution of chondroitin 6-sulfate (25 °C). Molar absorption cofficients (ε) are shown in parentheses.



Supplementary Figure 7

CD and absorption spectra of 58 μM pentamidine at increasing concentrations of heparin in pH 7.4 phosphate buffer with 140 mM Na^+ (25 °C). Molar absorption cofficients (ε) are shown in parentheses.