

SUPPLEMENTARY MATERIAL

Copper inverse-9-Metallacrown-3 compounds interacting with DNA

Tereza Afrati,¹ Anastasia A. Pantazaki³, Catherine Dendrinou-Samara,¹ Catherine Raptopoulou,² Aris Terzis,² Dimitris P. Kessissoglou^{1*}

¹*Department of General and Inorganic Chemistry, Aristotle University of Thessaloniki, Thessaloniki, 54124, GREECE;* ²*NCSR "Demokritos", Institute of Materials Science, 15310 Aghia Paraskevi Attikis, GREECE;* ³*Laboratory of Biochemistry, Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, 54124, GREECE*

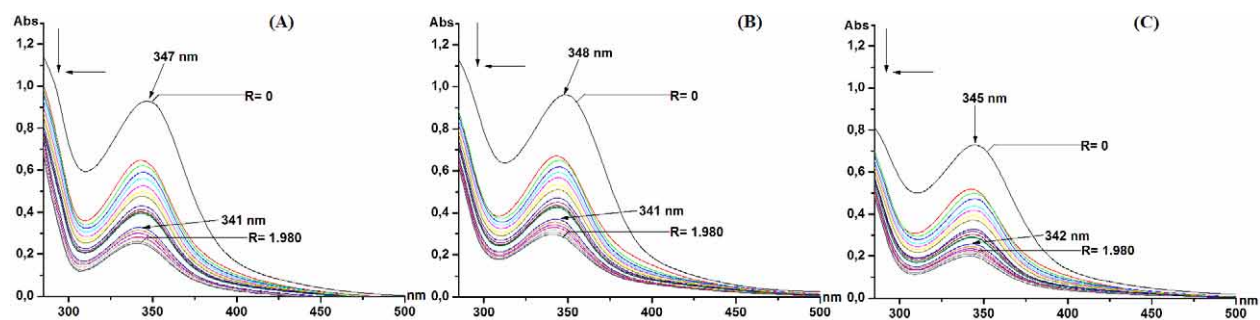


Figure S1. Absorption spectra in the UV region of $[\text{Cu}_3(\text{PhPyCNO})_3(\text{OH})(2,4,5\text{-T})_2]$ (**2**) (A), $[\text{Cu}_3(\text{PhPyCNO})_3(\text{OCH}_3)(\text{Cl})(\text{ClO}_4)]$ (**3**) (B) and $[\text{Cu}_3(\text{PhPyCNO})_3(\text{OH})(\text{CH}_3\text{OH})_2(\text{ClO}_4)_2]$ (**4**) (C) in the absence and presence of increasing amounts of CT-DNA. $[\text{complex}] = 2.5 \times 10^{-5}$ M, $R = [\text{DNA}]/[\text{complex}]$. Arrows show the absorbance changes upon increasing CT-DNA concentration.

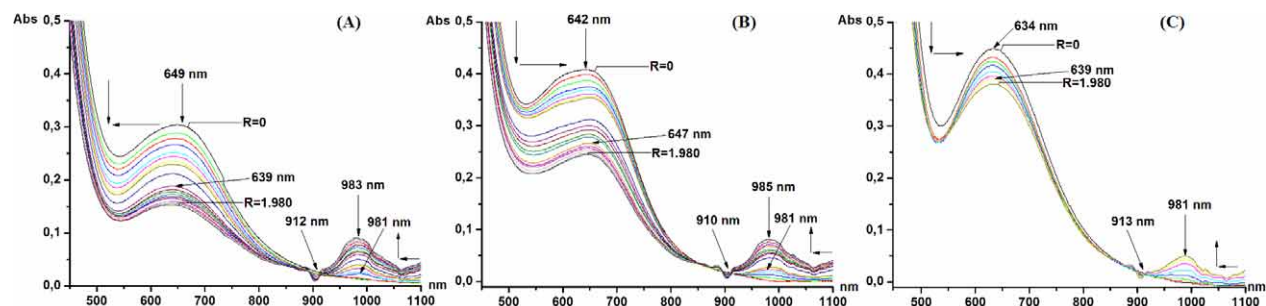


Figure S2. Absorption spectra in the Vis region of $[\text{Cu}_3(\text{PhPyCNO})_3(\text{OH})(2,4,5\text{-T})_2]$ (**2**) (A), $[\text{Cu}_3(\text{PhPyCNO})_3(\text{OCH}_3)(\text{Cl})(\text{ClO}_4)]$ (**3**) (B) and $[\text{Cu}_3(\text{PhPyCNO})_3(\text{OH})(\text{CH}_3\text{OH})_2(\text{ClO}_4)_2]$ (**4**) (C) in the absence and presence of increasing amounts of CT-DNA. $[\text{complex}] = 5 \times 10^{-4} \text{ M}$, $R = [\text{DNA}]/[\text{complex}]$. Arrows show the absorbance changes upon increasing CT-DNA concentration.

Table S1. Absorption spectroscopic properties of DNA binding to the copper(II) complexes **1**, **2**, **3** and **4**.

complex	λ_{max} (nm)	blue shift (nm)	change in absorbance	H (%)
1	260	4	Hyperchromism	41.32
2	260	1	Hyperchromism	45
3	260	3	Hyperchromism	41.18
4	260	2	Hyperchromism	43.47