Supplementary data

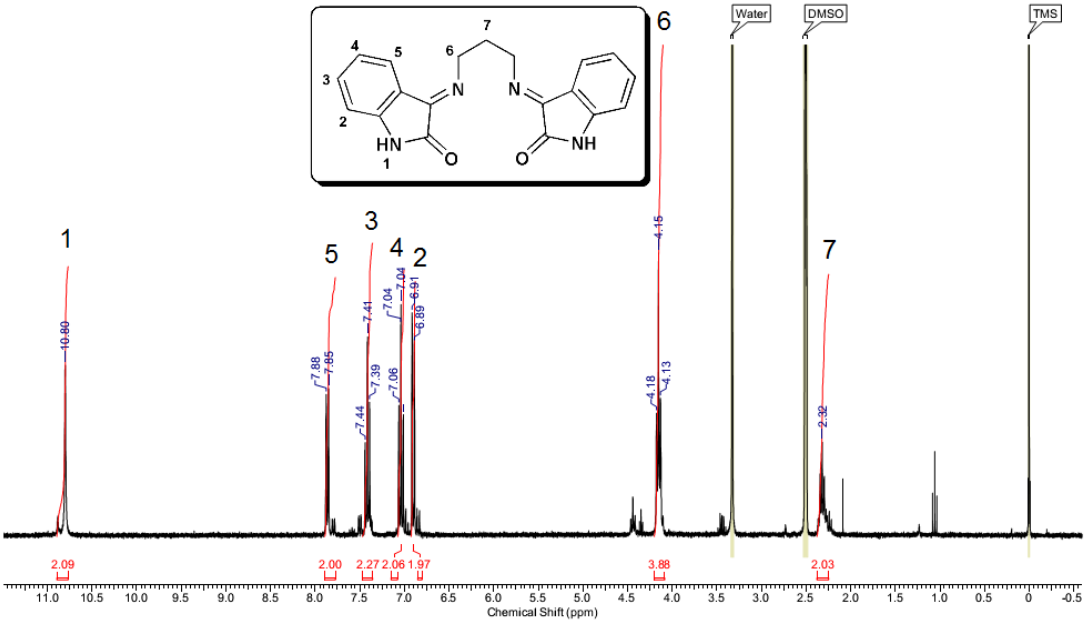


Figure S-1: ^{1}H NMR spectrum of the ligand *isapn*, in dmso-d6.

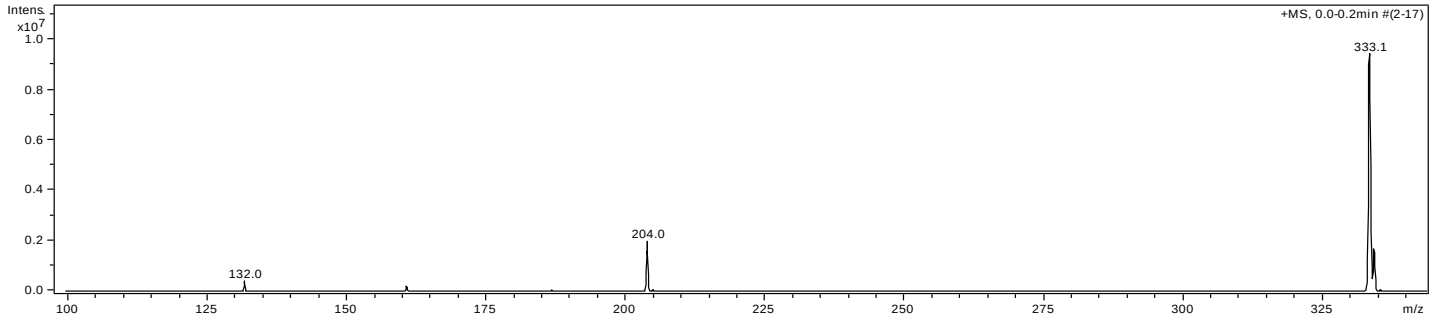


Figure S-2: Mass spectrum of the ligand *isapn*, in methanol.

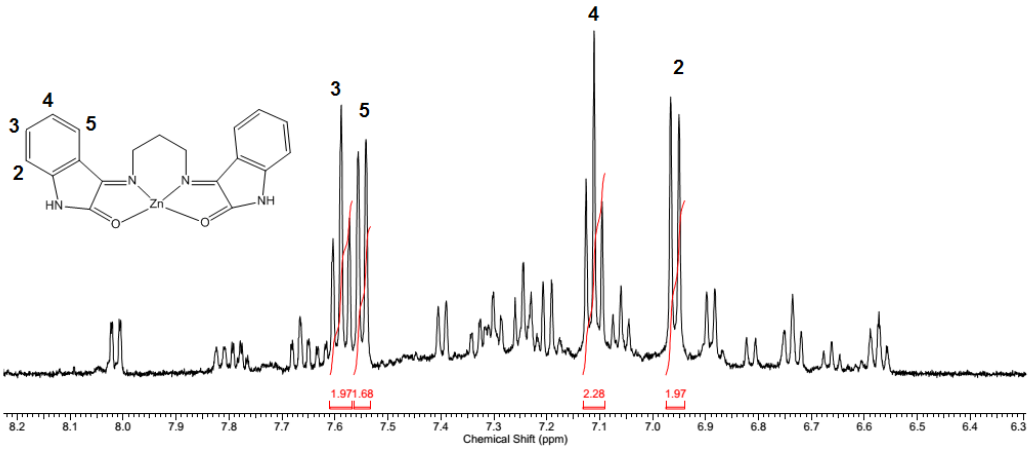


Figure S-3: ^{1}H NMR spectrum of the complex [Zn(isapn)]ClO_4, in MeOH-d4, at apparent pH 5.

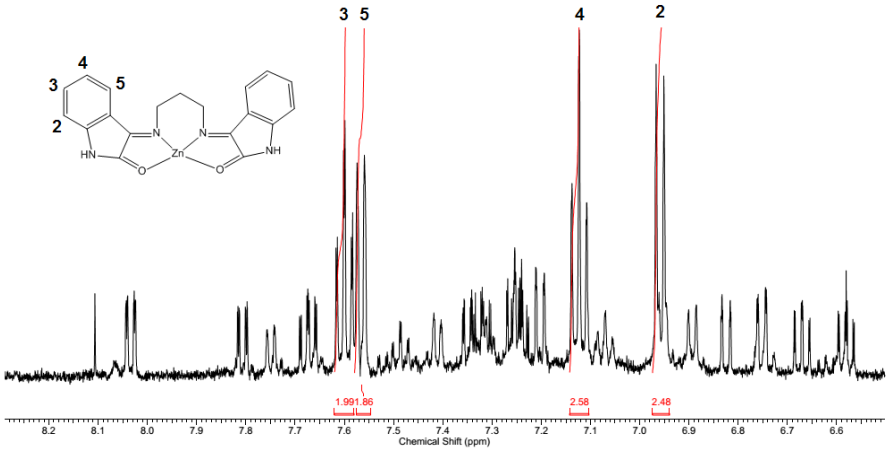
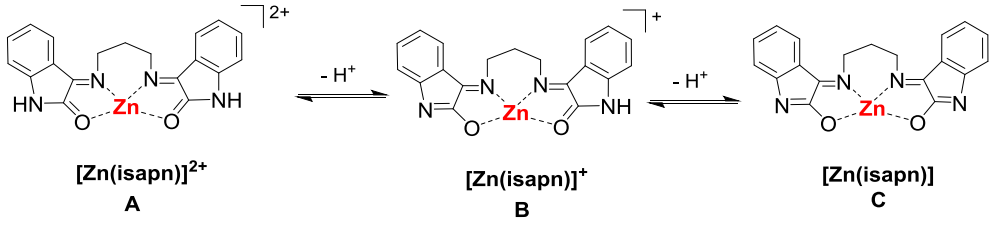


Figure S-4: ^{1}H NMR spectrum of the complex [Zn(isapn)]ClO_4, in MeOH-d4, at apparent pH 7.

In both spectra, the keto-keto species (**A**) is predominant. However, with increasing pH the intensity of these characteristic signals decrease, and there are other signals that can be attributed to the keto-enol species (**B**) or enol-enol species (**C**). The complex was isolated as species **B**, but all the species are probably present in solution at different ratio, according to the equilibria:



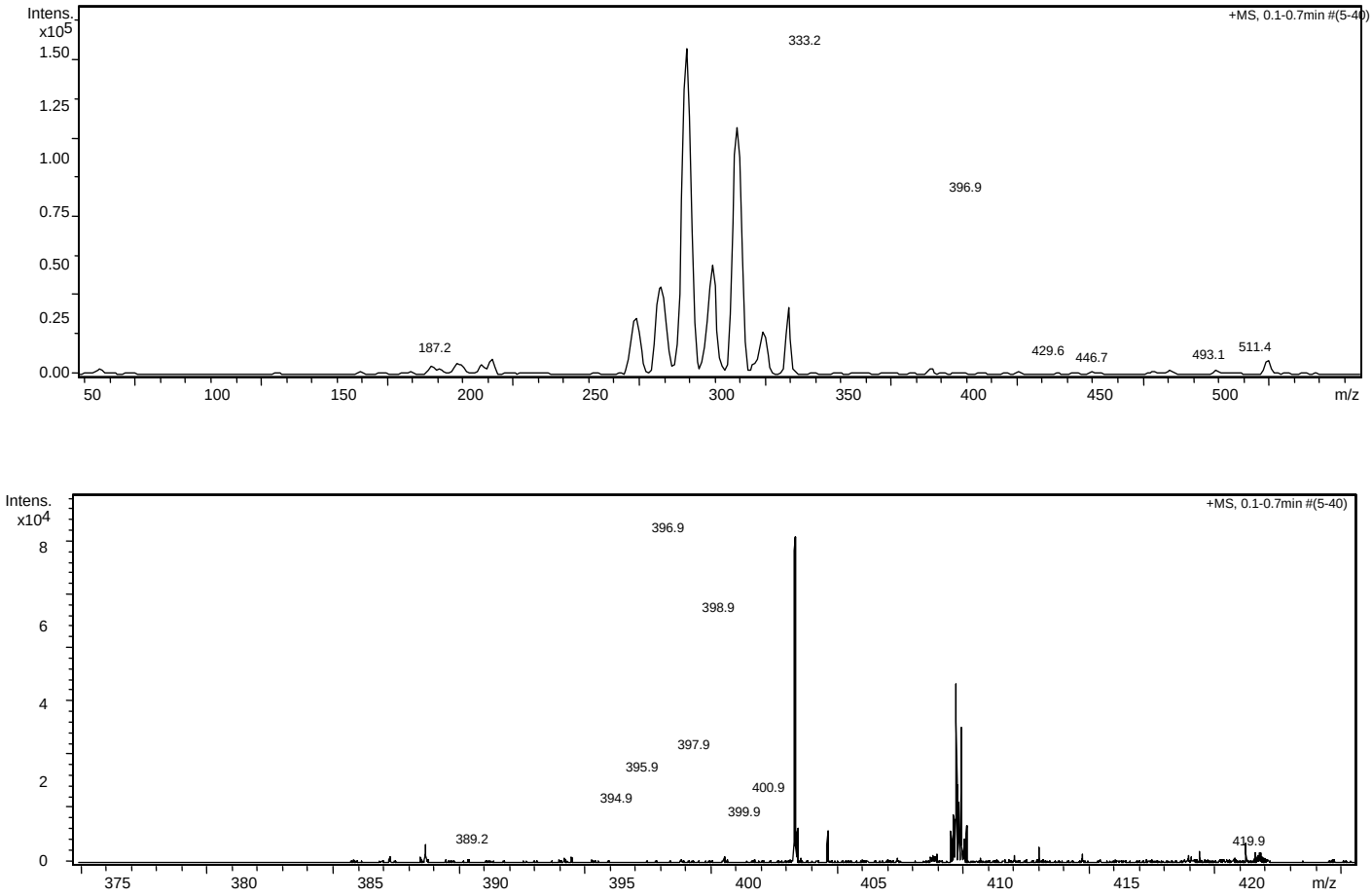


Figure S-5: Mass spectrum of the complex [Zn(isapn)]ClO_4 dissolved in methanol/water (9:1)

Figure S-5 shows the positive ion electrospray mass spectrum of the isatin-schiff base zinc(II) complex acquired from a 9:1 methanol/water solution, and reveals a metal/ligand ratio of 1:1. Zinc displays five isotopes and the two more abundant were observed in a 1:0.56 ratio for ^{64}Zn (48.6%) and ^{66}Zn (27.4%).

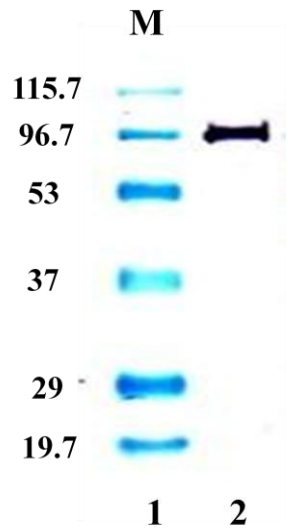


Figure S-6: Western blot analysis of the purified human topo IB fraction detected by reaction with monoclonal antibody. Lane 1, markers of different molecular weights in kDa: β-galactosidase (115.7), Bovine serum albumin (96.7), Ovalbumin (53), Soybean trypsin inhibitor (37), Carbonic anhydrase (29), Lysozyme (19.7). Lane 2, purified human topoisomerase I band.

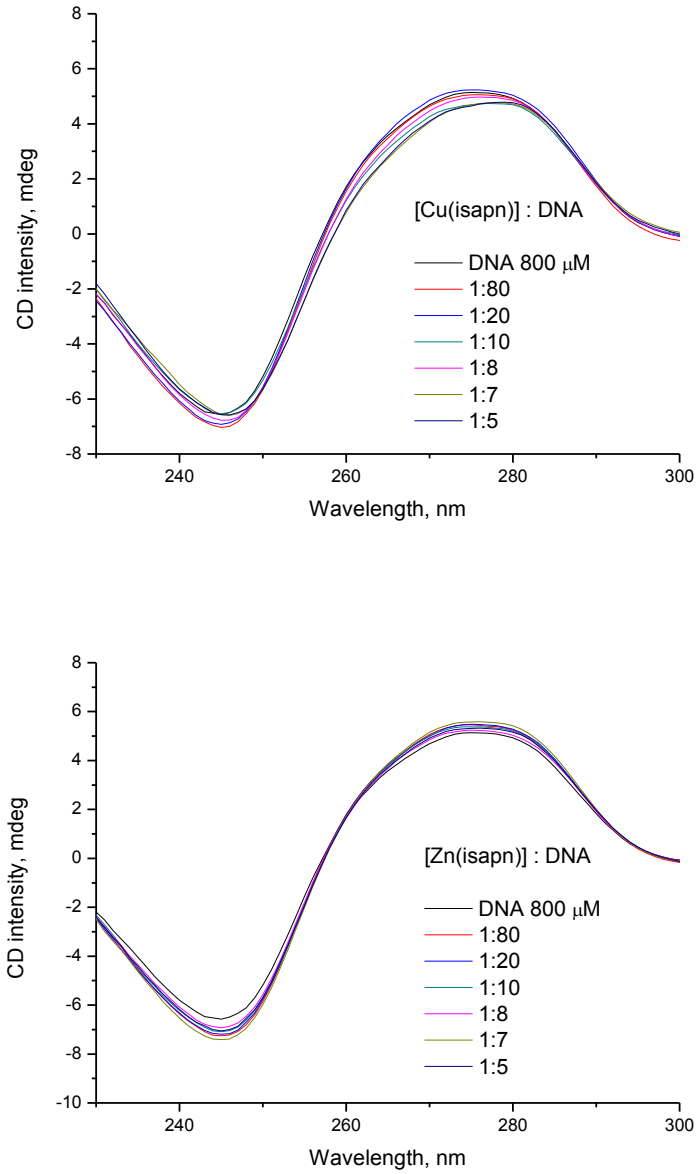


Figure S-7: CD spectra of CT-DNA (800 μM) in phosphate buffer 50 mM/NaCl 0.1 M, in the absence and presence of the complexes $[Cu(isapn)]^{2+}$ and $[Zn(isapn)]^{+}$ at different concentrations (up to 160 μM).