

## Supplementary Material

# Fluorescent imaging of a new monofunctional platinum(II) complex containing a thioflavin-T (ThT)-based fluorophore

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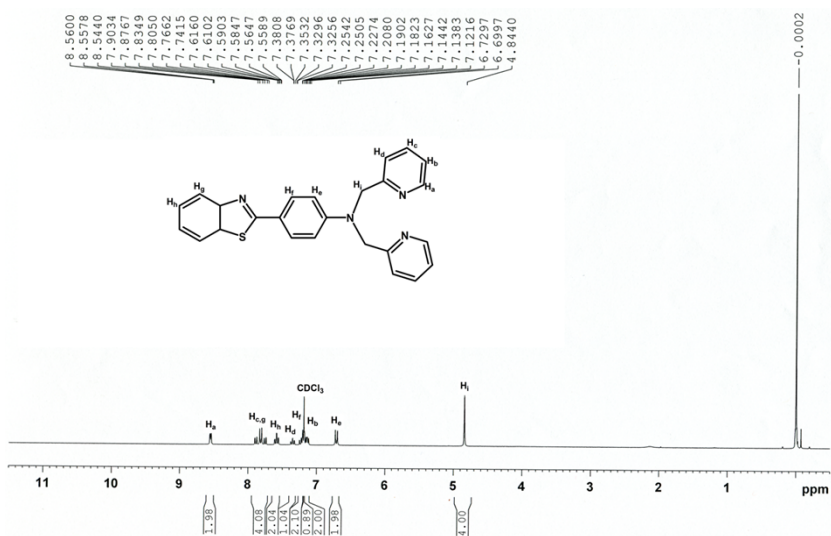
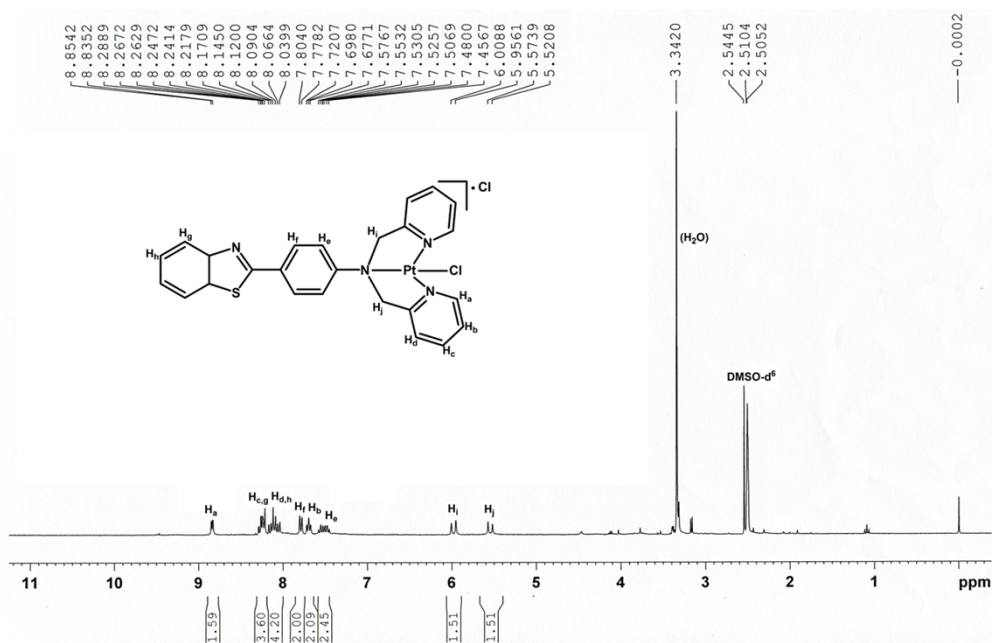
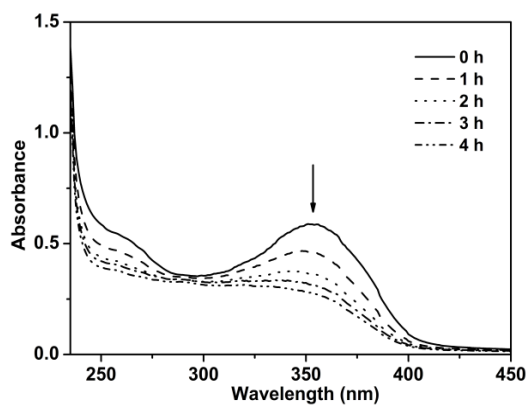


Fig. S1 <sup>1</sup>H NMR spectrum of Ligand L in CDCl<sub>3</sub>.

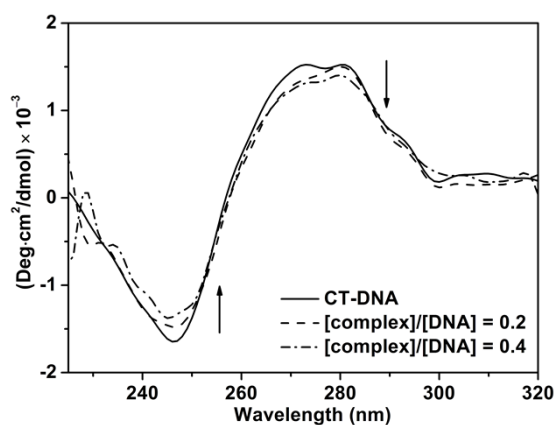


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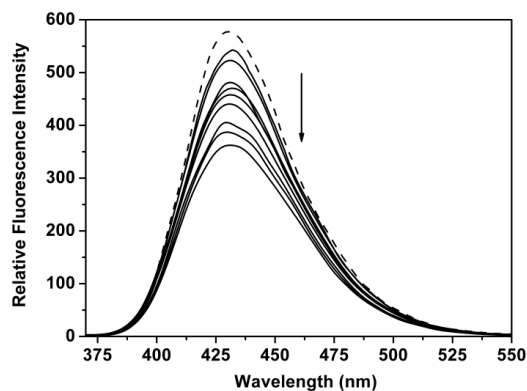
**Fig. S2**  $^1\text{H}$  NMR spectrum of  $[\text{PtLCl}]\text{Cl}$  in  $\text{DMSO-d}^6$ .



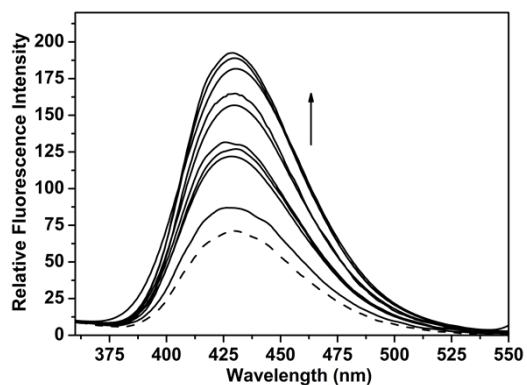
**Fig. S3** Time-dependent absorption spectra of  $[\text{PtLCl}]\text{Cl}$  ( $3 \times 10^{-5}$  M) in the presence of a fixed amount of CT-DNA ( $r = [\text{DNA}]/[\text{complex}] = 0.5$ ) at room temperature in pH 7.40.



**Fig. S4** Circular dichroism (CD) spectra of CT-DNA ( $1.7 \times 10^{-4}$  M) in the absence (solid line) and presence of  $[\text{PtLCl}]\text{Cl}$  at concentration ratios of  $[\text{PtLCl}]\text{Cl}$  to DNA of 0.2 and 0.4 (dashed line and dash-dotted line, respectively).



**Fig. S5** Fluorescence emission spectra ( $\lambda_{\text{ex}} = 360 \text{ nm}$ ) of  $[\text{PtLCl}]\text{Cl}$  ( $3 \times 10^{-5} \text{ M}$ ) in the absence (dashed line) and presence (solid line) of increasing amount of CT-DNA ( $r = [\text{DNA}]/[\text{complex}] = 0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9$ ) at room temperature in Tris-HCl/NaCl buffer (pH 7.40).



**Fig. S6** Fluorescence emission spectra ( $\lambda_{\text{ex}} = 360 \text{ nm}$ ) of **L** ( $3 \times 10^{-5} \text{ M}$ ) in the absence (dashed line) and presence (solid line) of increasing amount of CT-DNA ( $r = [\text{DNA}]/[\text{complex}] = 0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9$ ) at room temperature in Tris-HCl/NaCl buffer (pH 7.40).

**Table S1** Cytotoxicity of [PtLCl]Cl and **L** towards different tumour cell lines after incubation for 48 h, with cisplatin as the reference

Tested compound	IC <sub>50</sub> (μM) <sup>a</sup>		
	HeLa	A549	MCF-7
Cisplatin	17.68	8.62	21.18
[PtLCl]Cl	87.26	34.54	69.51
<b>L</b>	– <sup>b</sup>	–	–

<sup>a</sup> Compound concentration required to inhibit cell proliferation by 50%.

<sup>b</sup> Undetectable.