

Electronic Supplementary Information

Synthesis, characterisation, and *in vitro* anticancer activity of catalytically active indole-based half-sandwich complexes.

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Figure S1: ¹H NMR stability studies

Figures S2 – S9: ¹H and ¹³C NMR spectra of complexes **1 – 4**

Figures S10 – S13: High-resolution ESI mass spectrum of complexes **1 – 4**

Figure S14: IC₅₀ graphs for the ind-py ligand against PNT2, A2780, and A2780cisR.

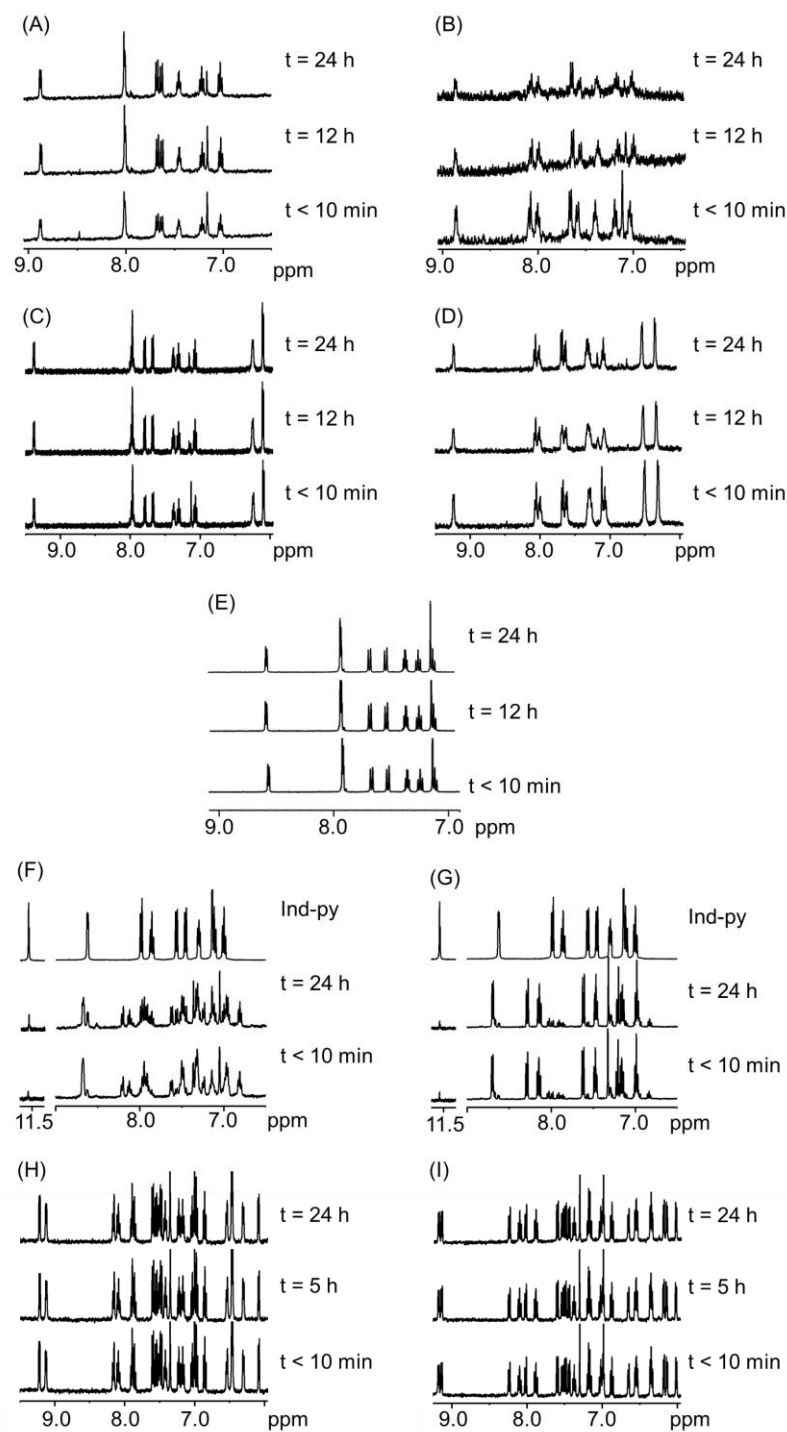


Figure 1. ^1H NMR (400 MHz) stability studies of complex **1** (A), **2** (B), **3** (C), **4** (D), and Ind-Py (E) in MeOD/D₂O (1:1 v/v, 1.1 mM, 298 K) and complexes **1** (E), **2** (F), **3** (G) and **4** (H) in *d*₆-DMSO (1.1 mM, 298 K). The low signal-to-noise ratio for (B) is due to the poor solubility of complex **2** in MeOD/D₂O.

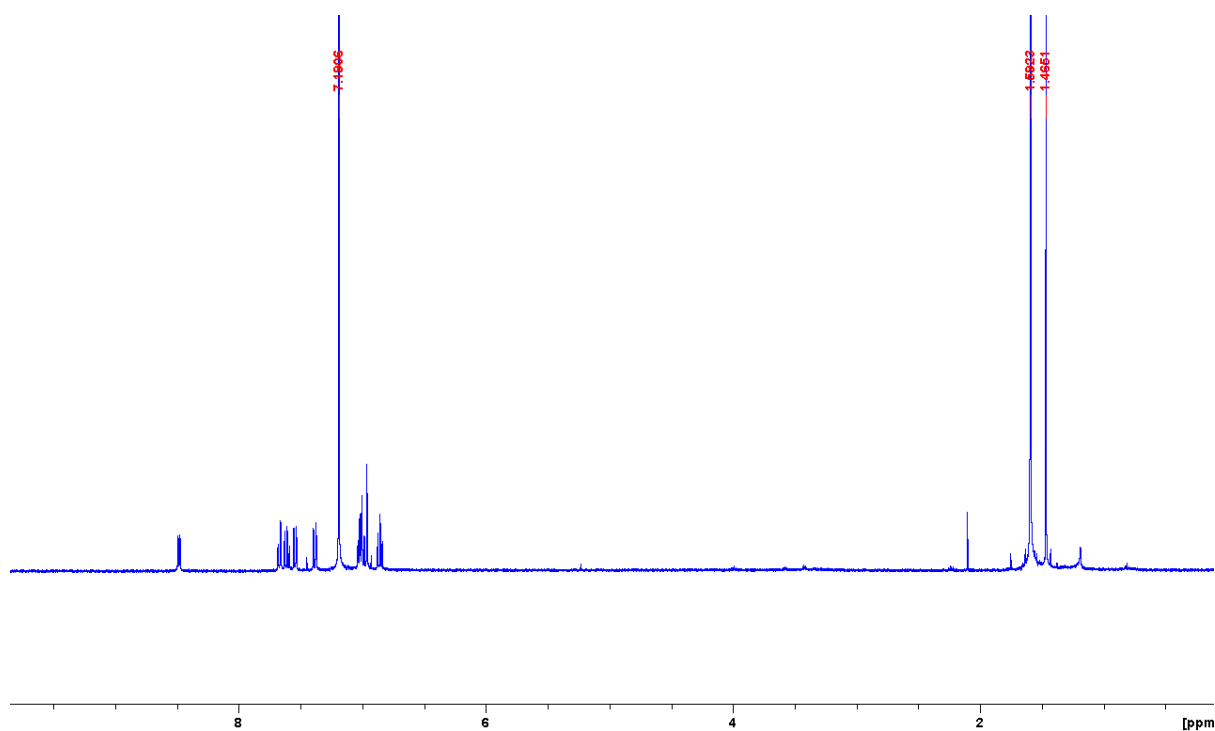


Figure S2. ^1H NMR spectrum of complex **1**

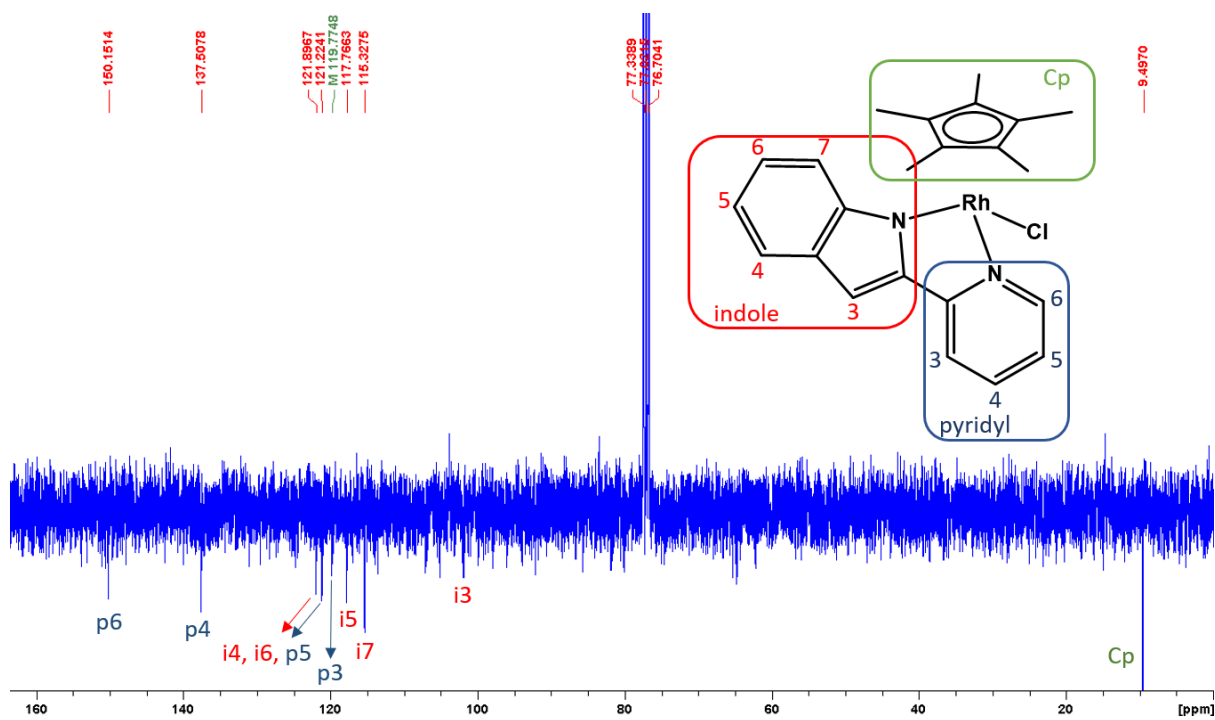


Figure S3. ^{13}C NMR spectrum of complex **1**

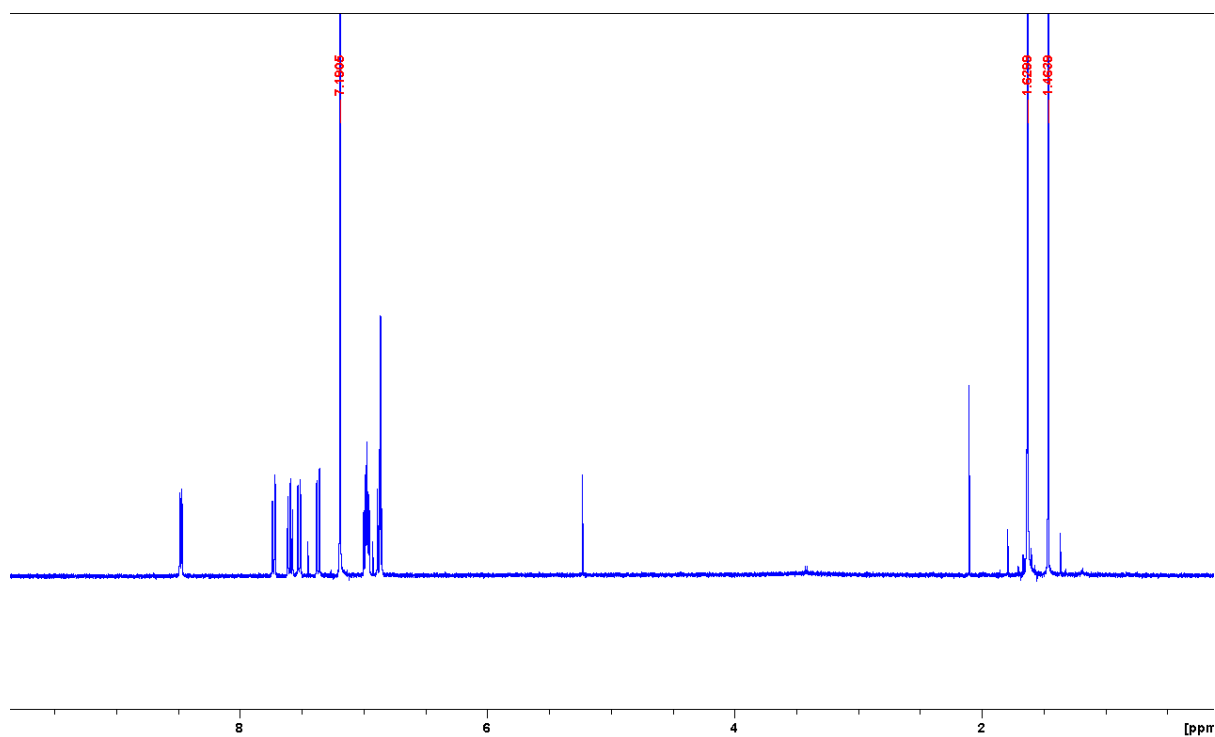


Figure S4. ^1H NMR spectrum of complex **2**

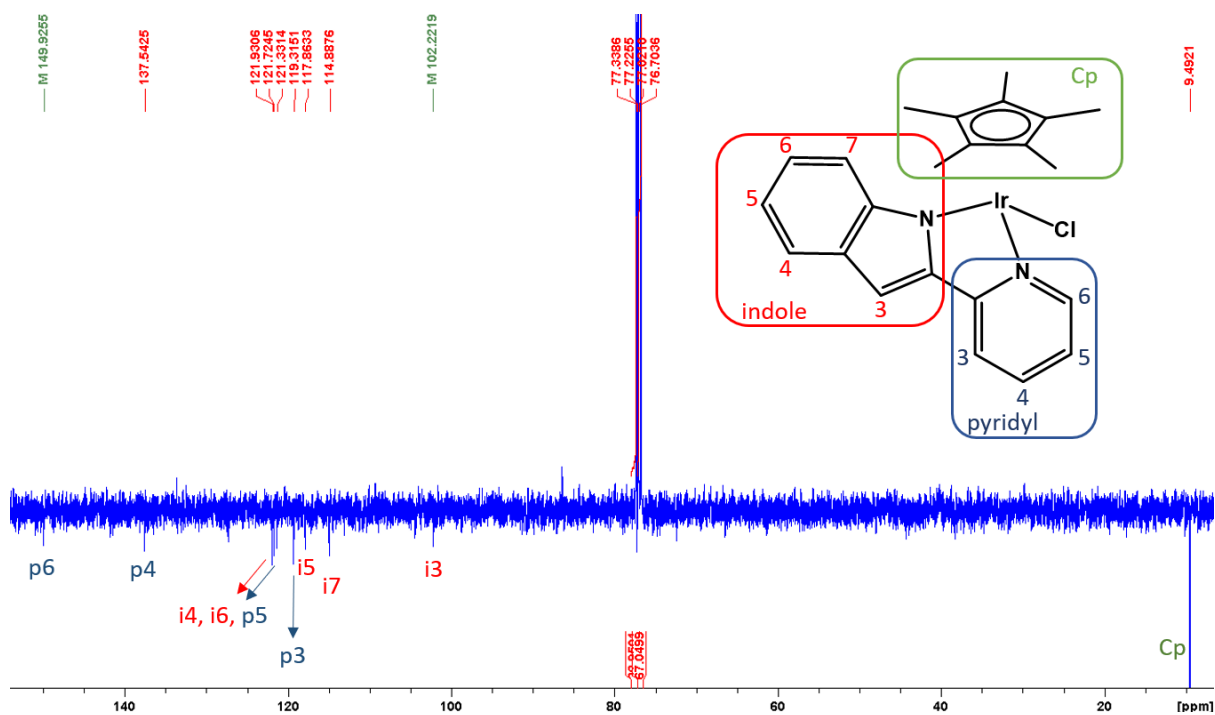


Figure S5. ^{13}C NMR spectrum of complex **2**

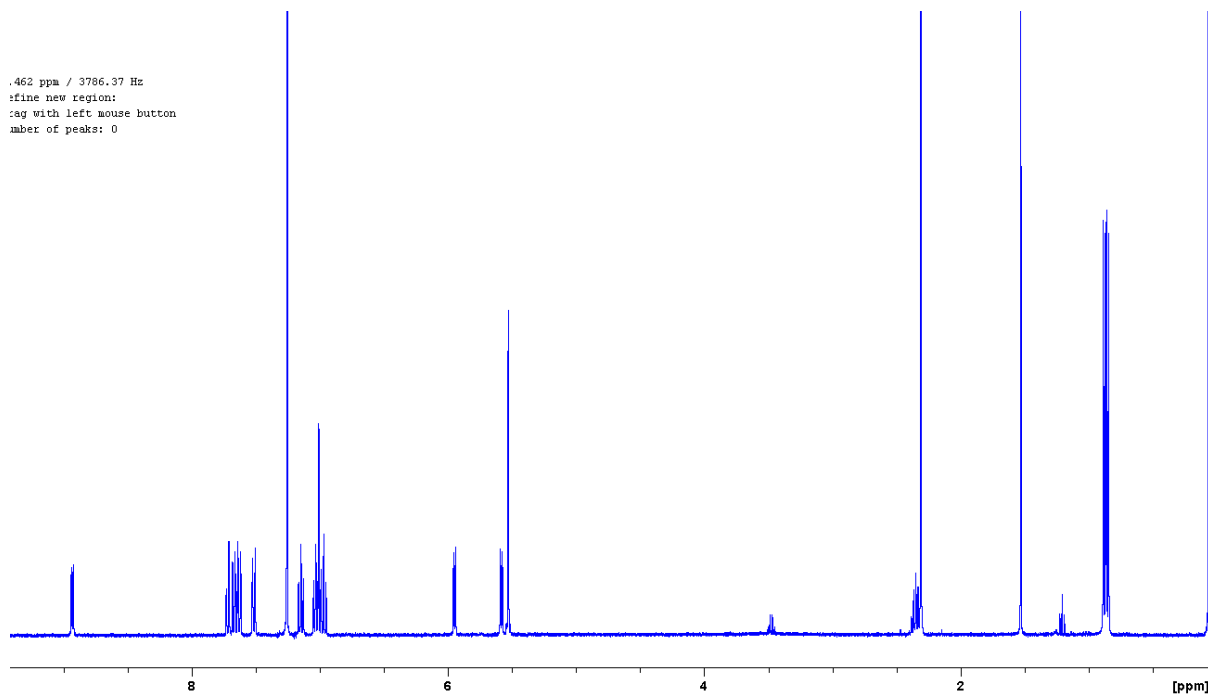


Figure S6. ^1H NMR spectrum of complex **3**

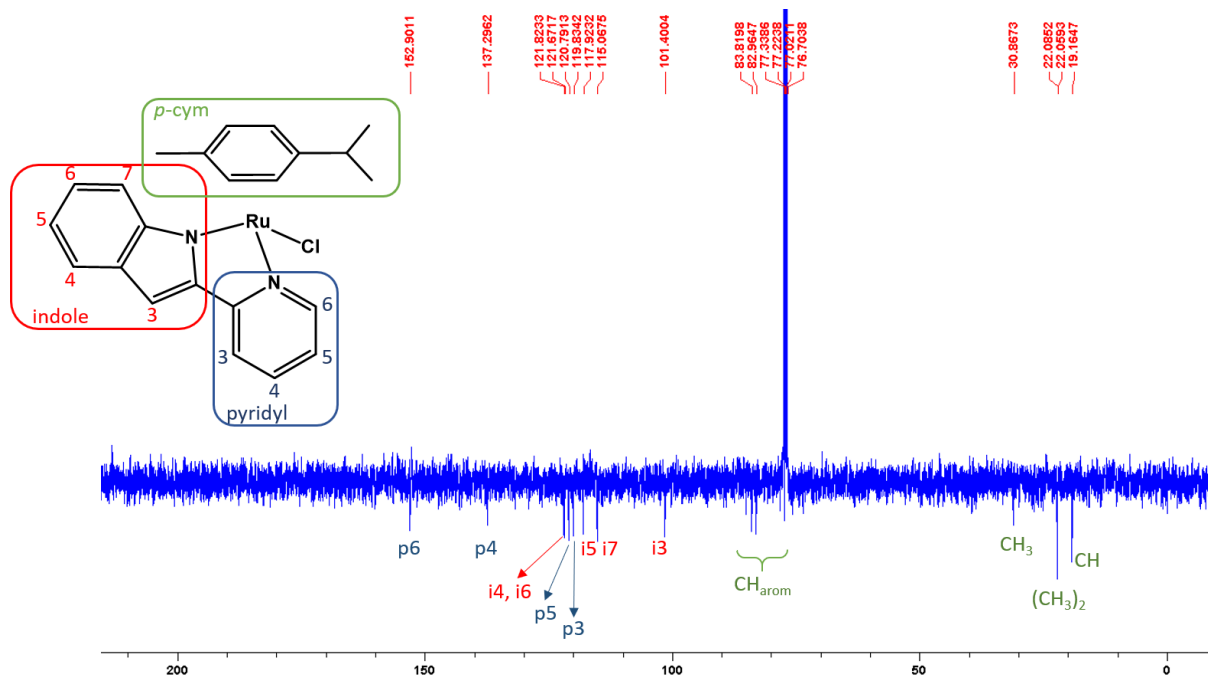


Figure S7. ^{13}C NMR spectrum of complex **3**

14/01/2019 14:46:16

140119_MA_IV_3_190114144616

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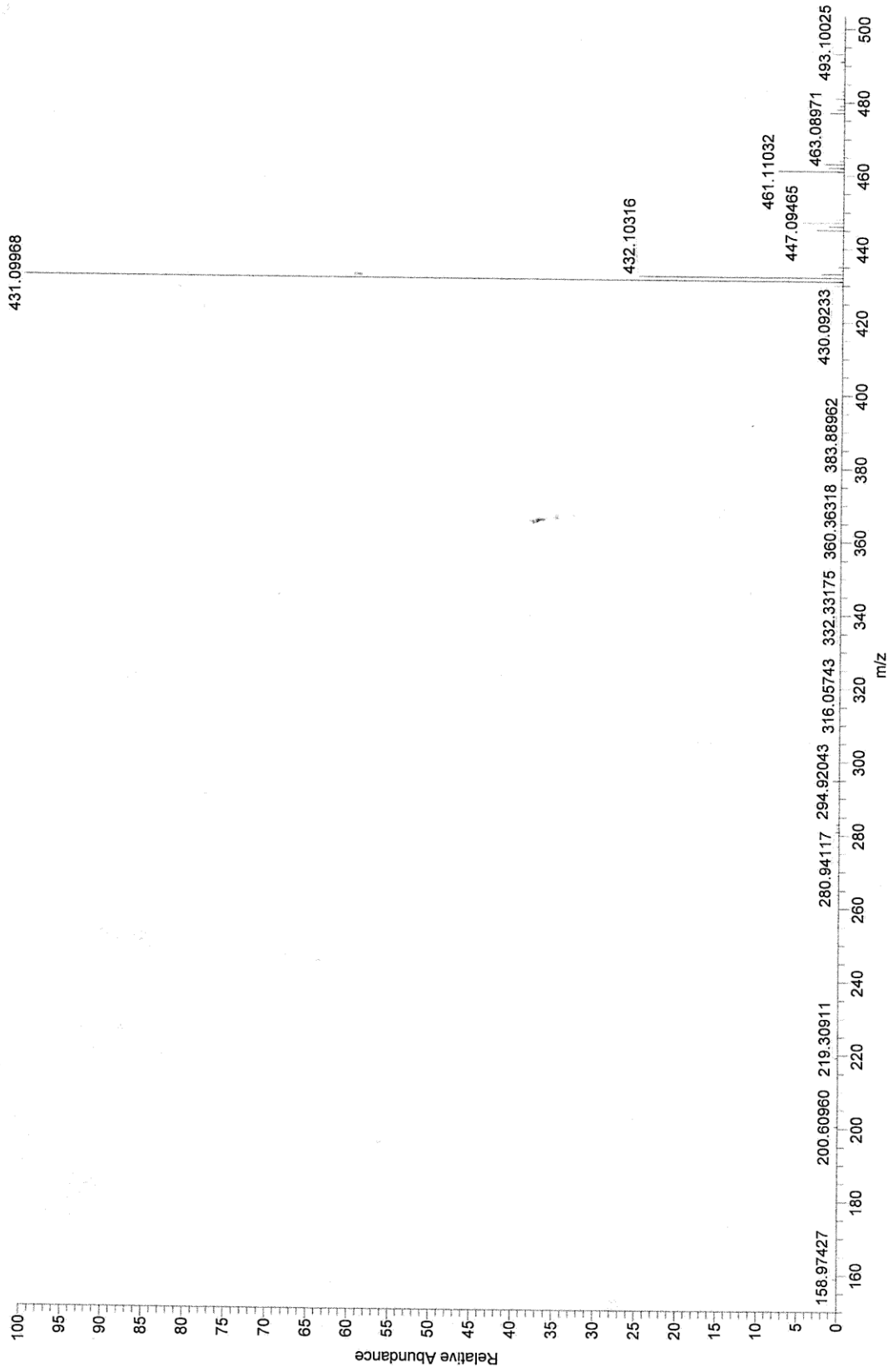


Figure S10. High-resolution ESI mass spectrum of complex 1

140119_MA_IV_4_190114141950 14/01/2019 14:19:51

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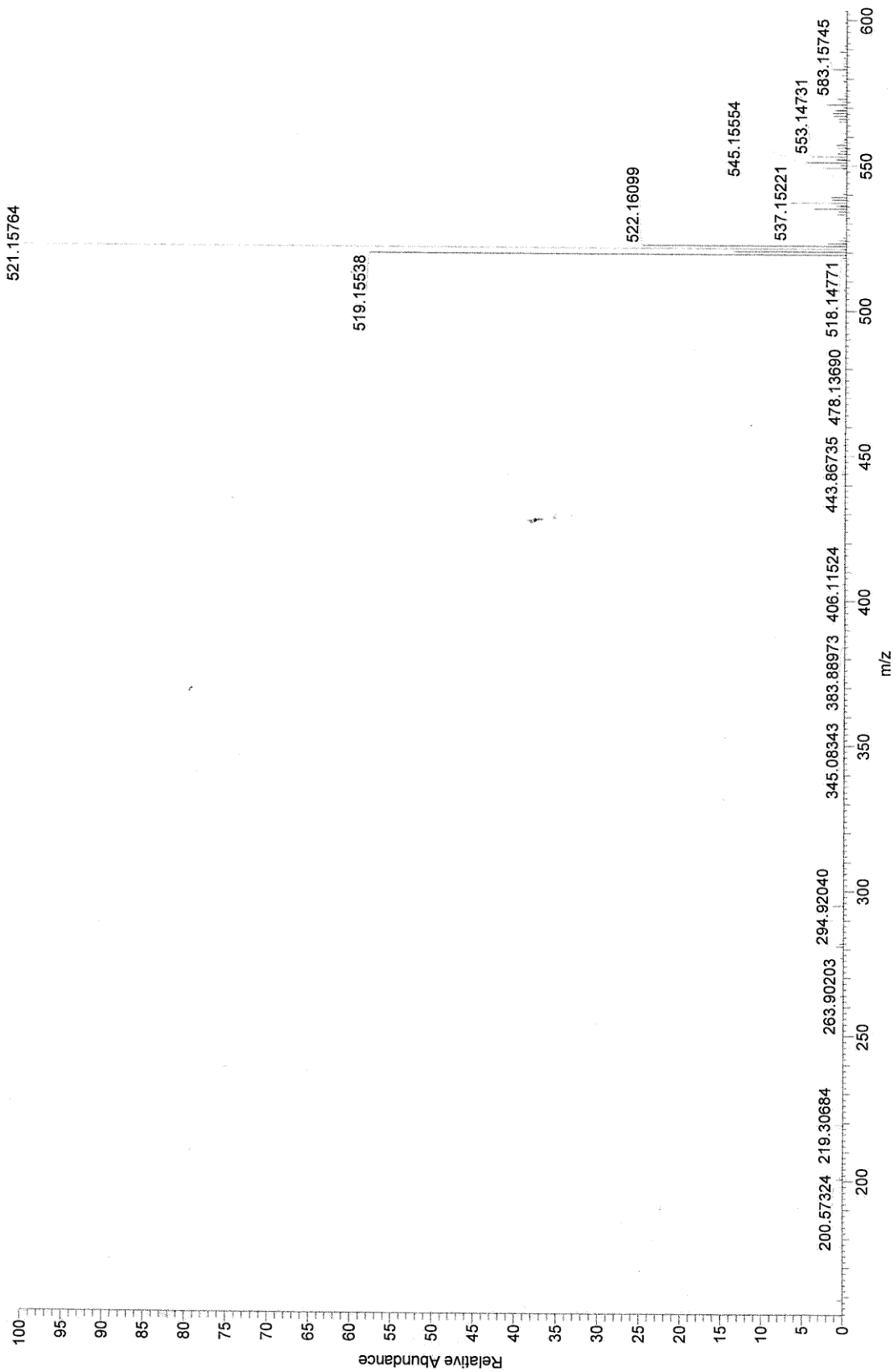


Figure S11. High-resolution ESI mass spectrum of complex 2

Ruthenium imido complex - Fraction 1

14/01/2019 11:14:55

140119_FKB3RULL_190114111454

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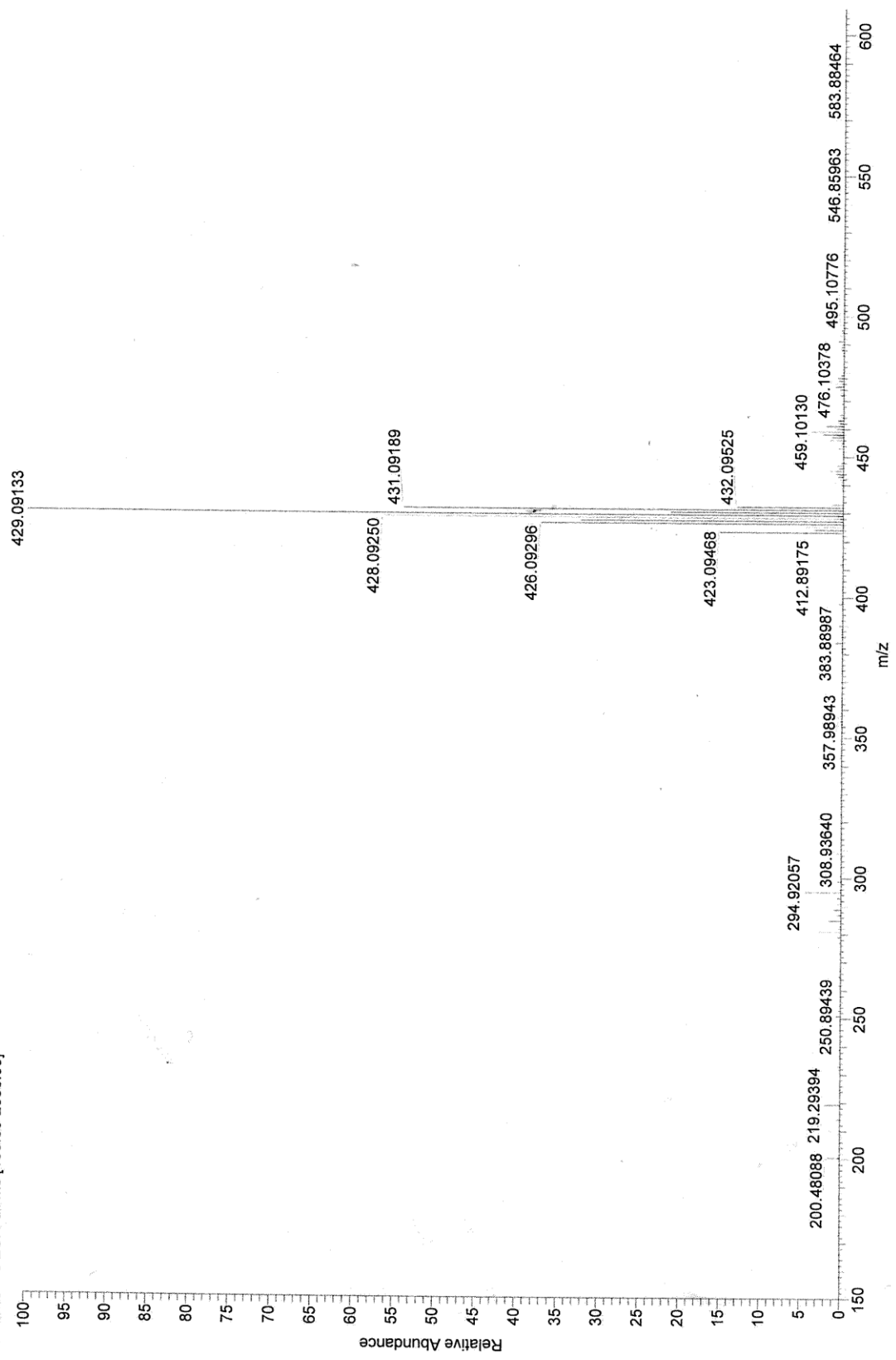


Figure S12. High-resolution ESI mass spectrum of complex 3

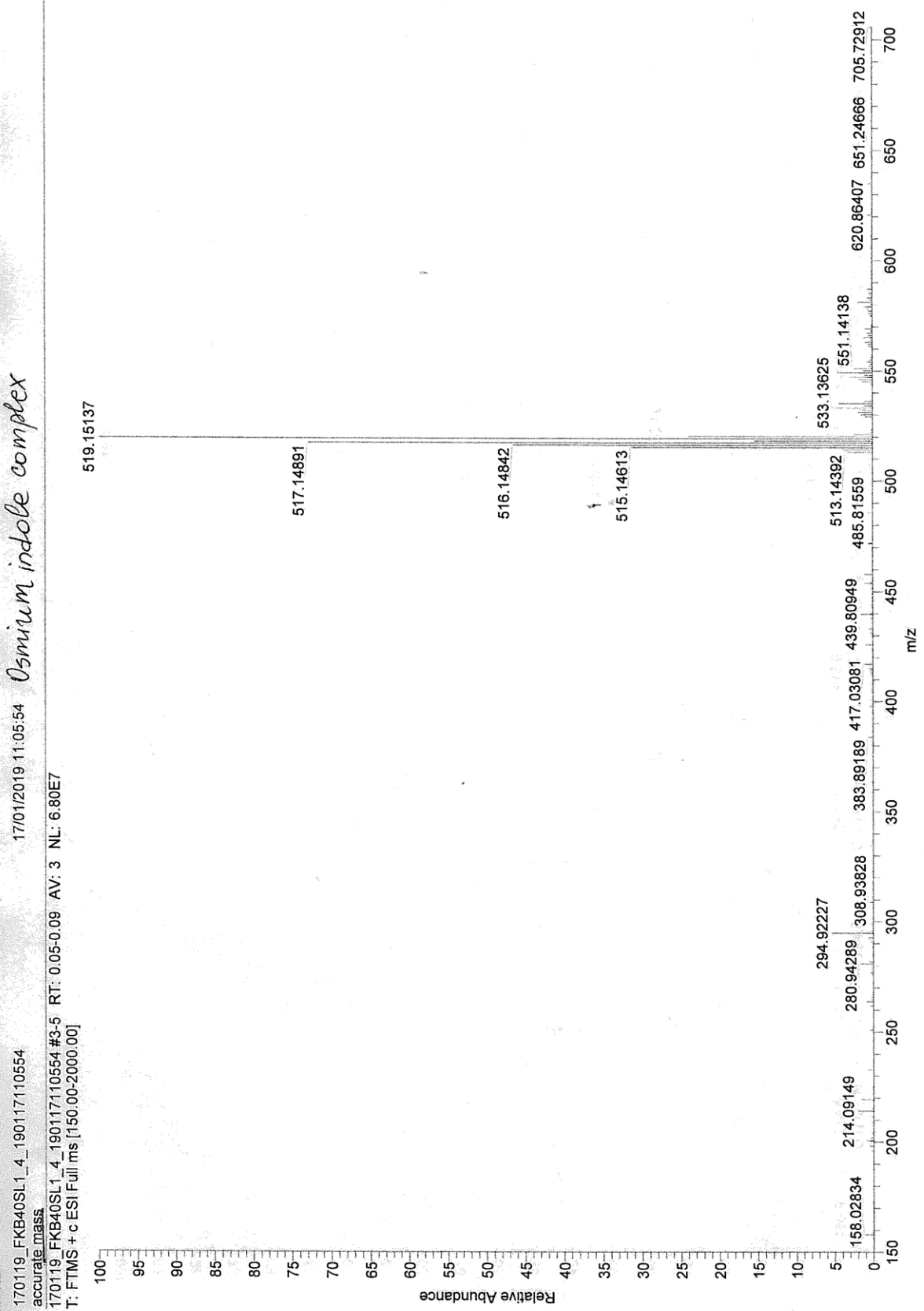


Figure S13. High-resolution ESI mass spectrum of complex 4

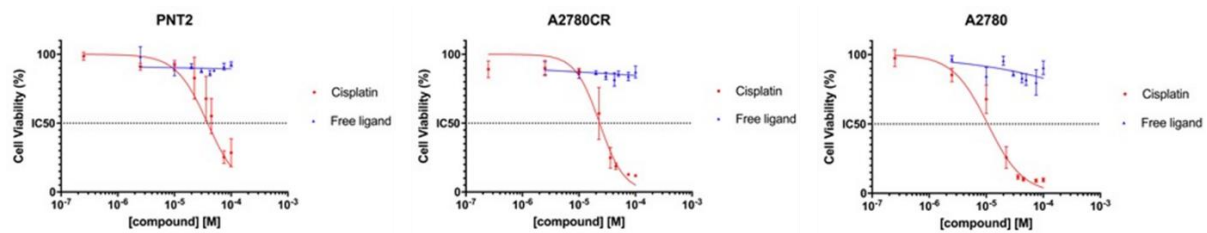


Figure S14. IC₅₀ graphs for the ind-py ligand against PNT2, A2780, and A2780cisR.