New Journal of Chemistry – Supporting Information

# Synthesis, G-quadruplex binding properties and cytotoxicity of naphthalimide-thiourea conjugates

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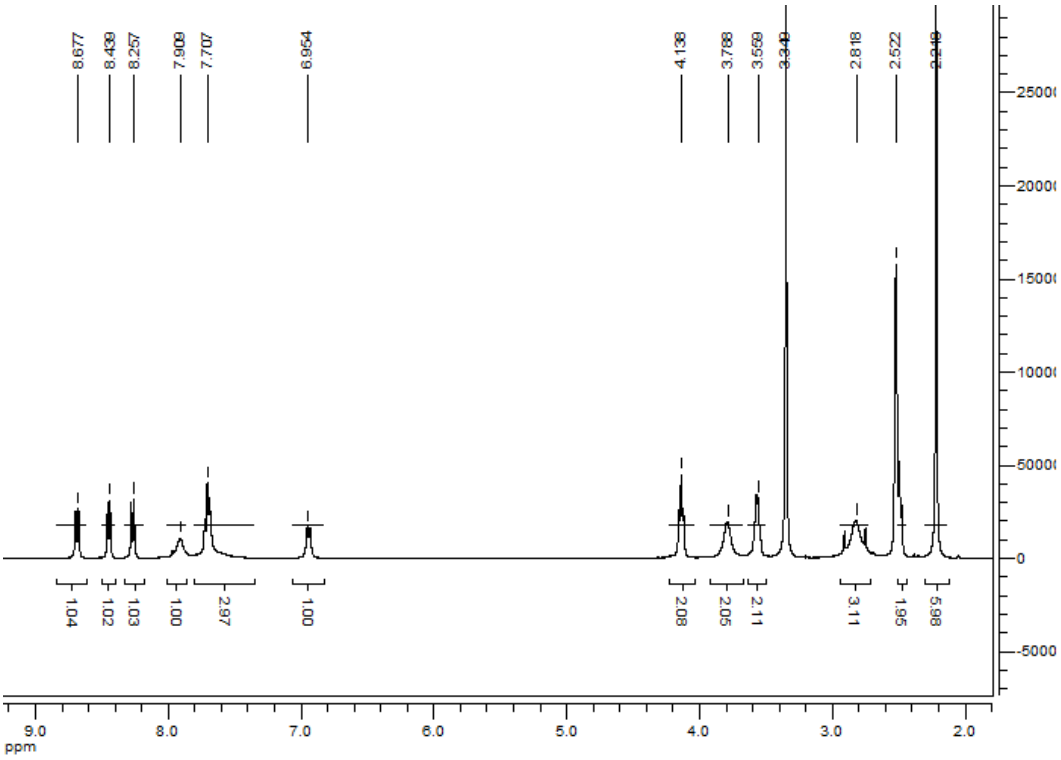


**Fig. S1** $^{1}$H NMR of **3a** in DMSO-$d_6$.

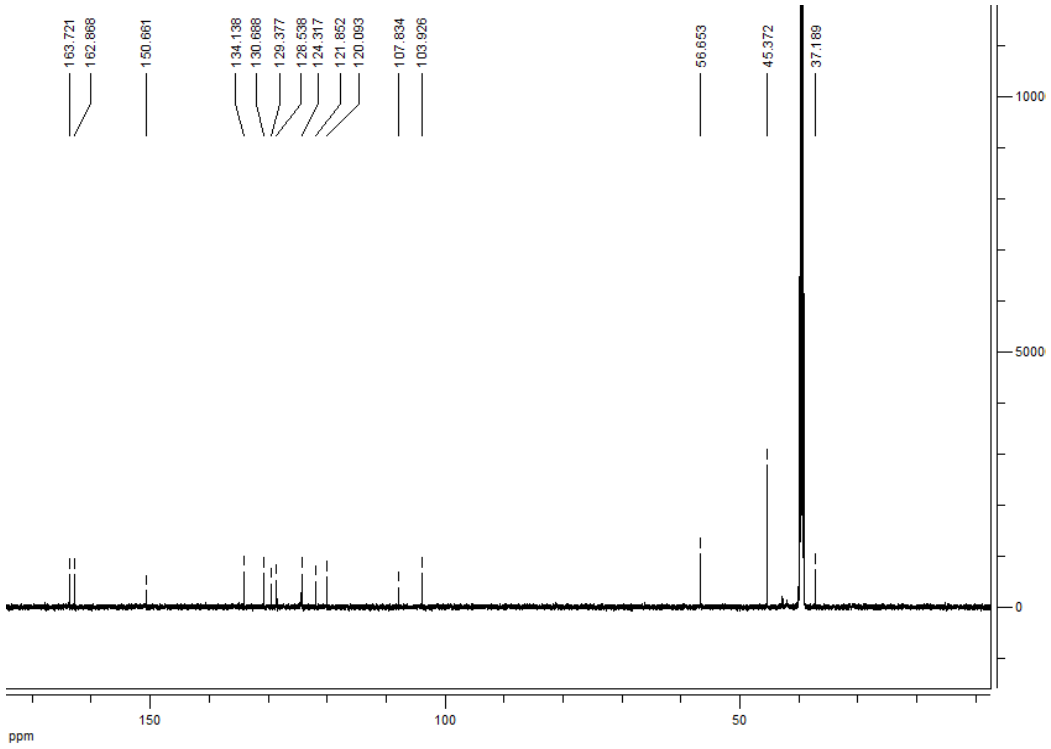


**Fig. S2** $^{13}$C NMR of **3a** in DMSO-$d_6$.

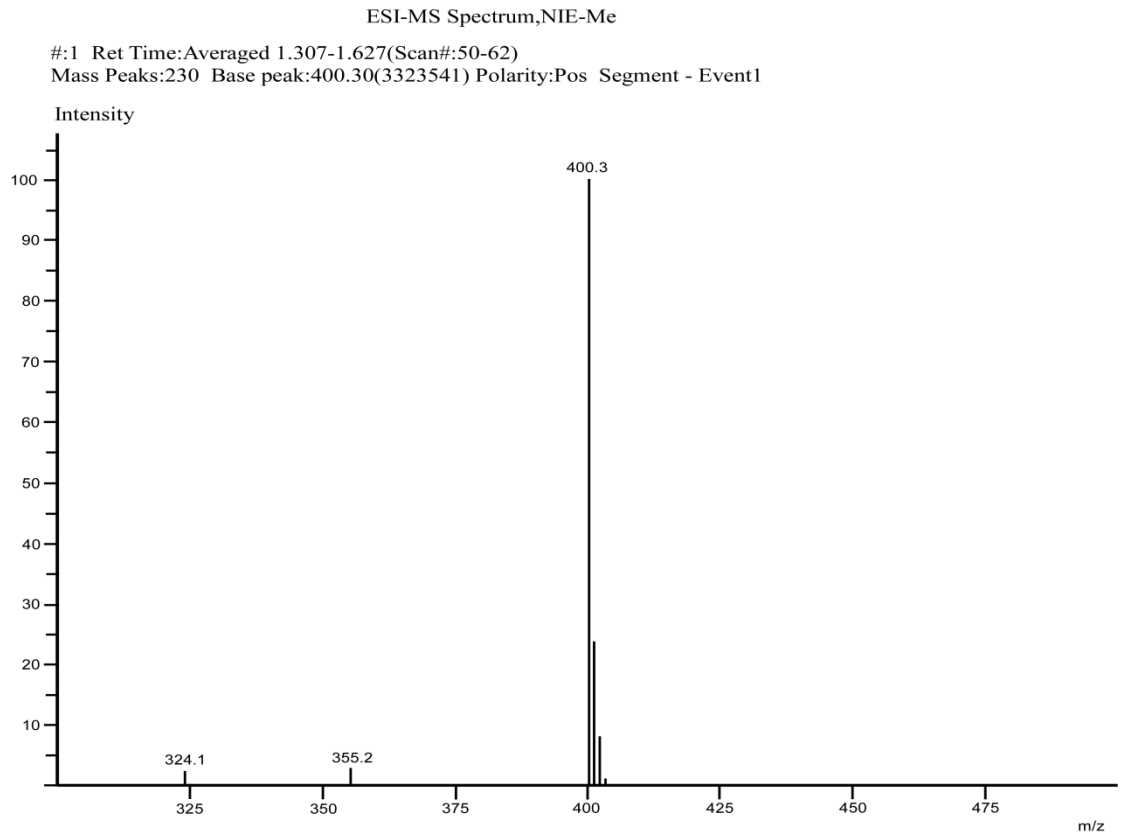


**Fig. S3** ESI-MS of **3a** in DMSO-$d_6$.

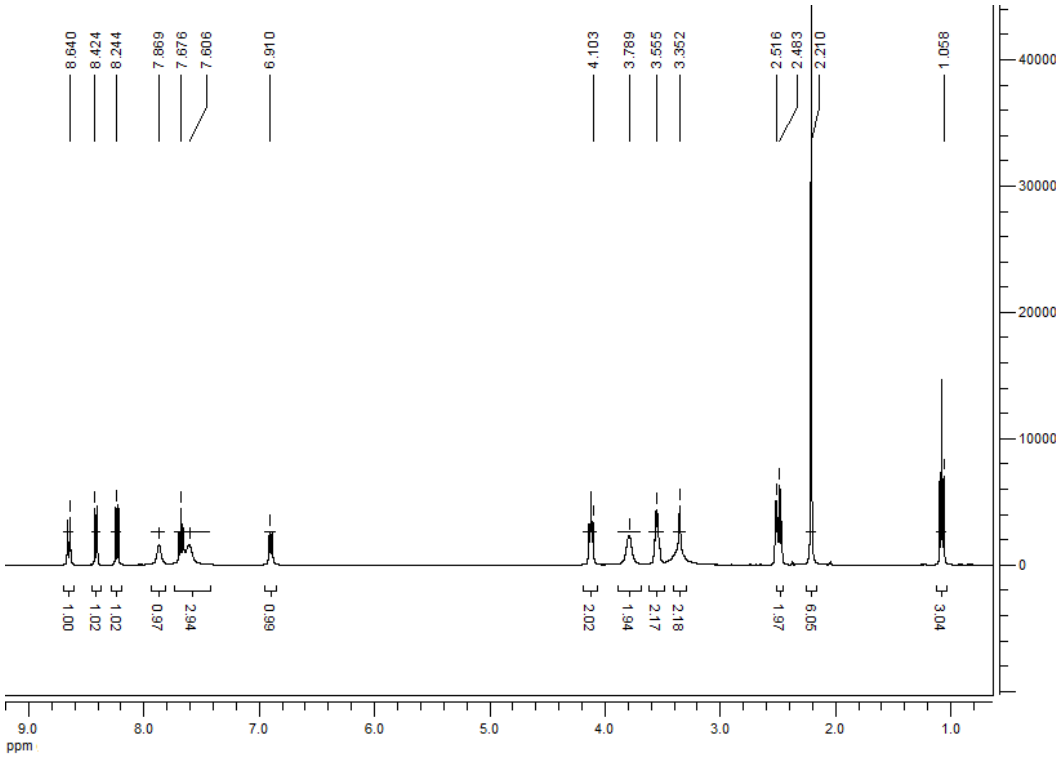


**Fig. S4** $^{1}$H NMR of **3b** in DMSO-$d_6$.

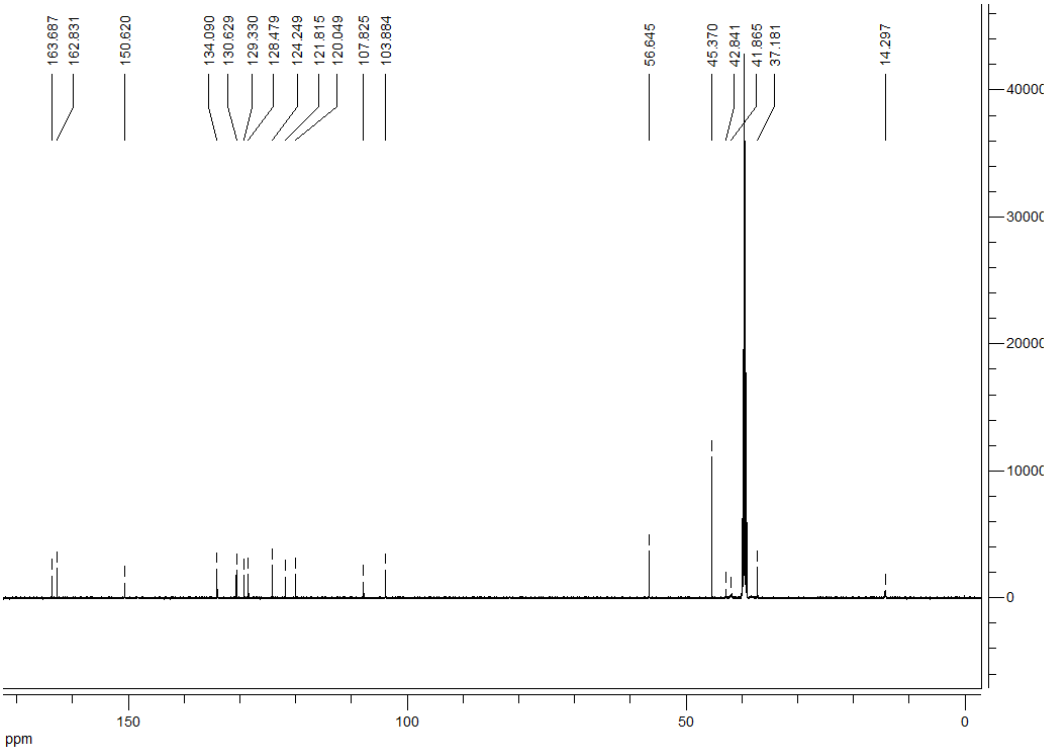


**Fig. S5** $^{13}$C NMR of in **3b** DMSO-$d_6$.

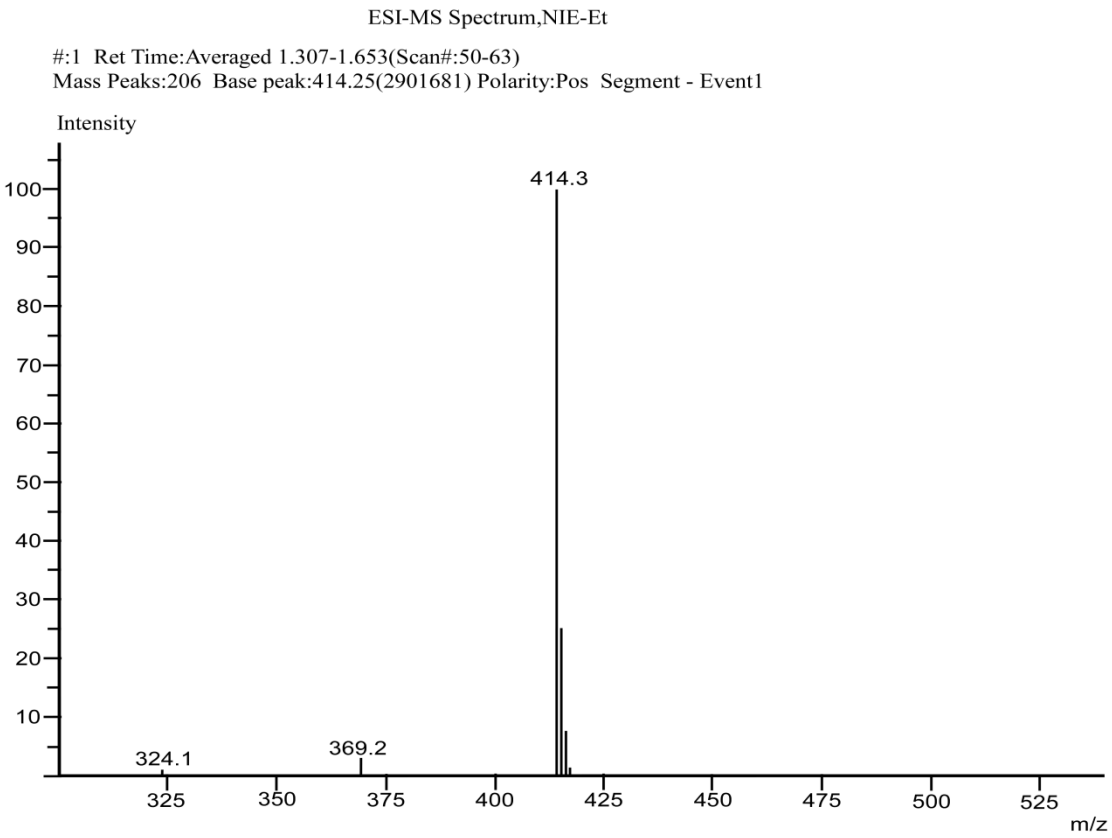


**Fig. S6** ESI-MS of **3b** in DMSO-$d_6$.

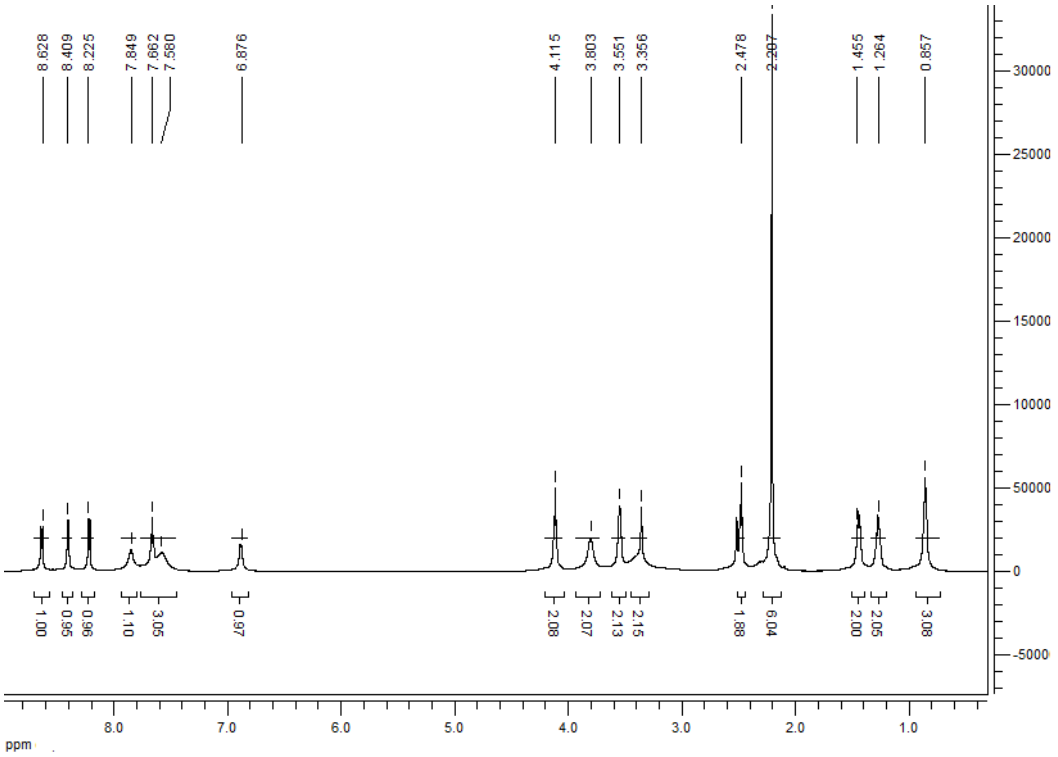


**Fig. S7** $^1$H NMR of **3c** in DMSO-$d_6$.

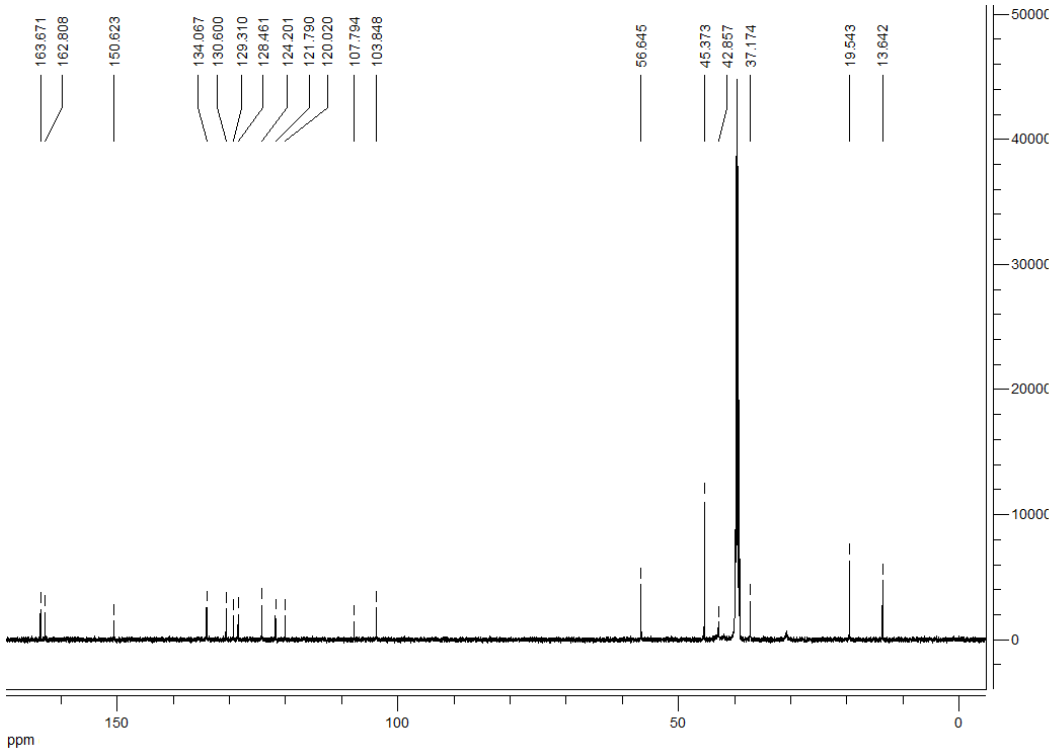


**Fig. S8** $^{13}$C NMR of **3c** in DMSO-$d_6$.

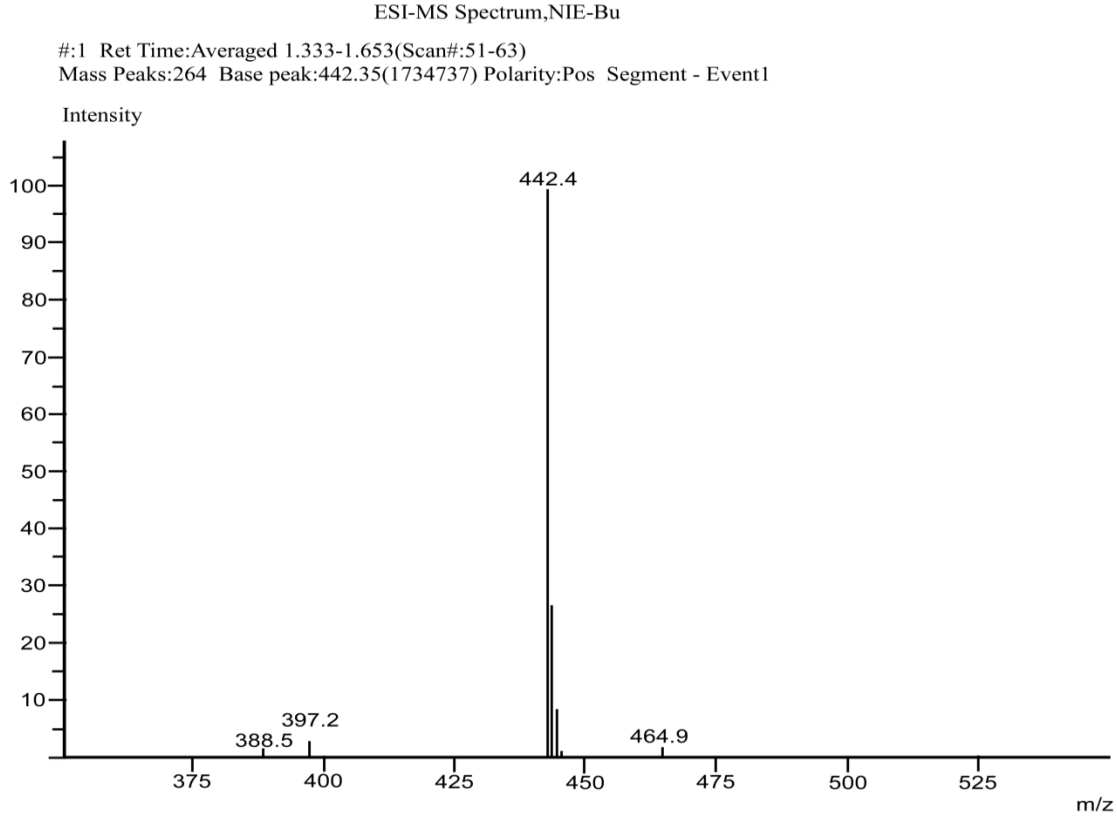


**Fig. S9** ESI-MS of **3c** in DMSO-$d_6$.

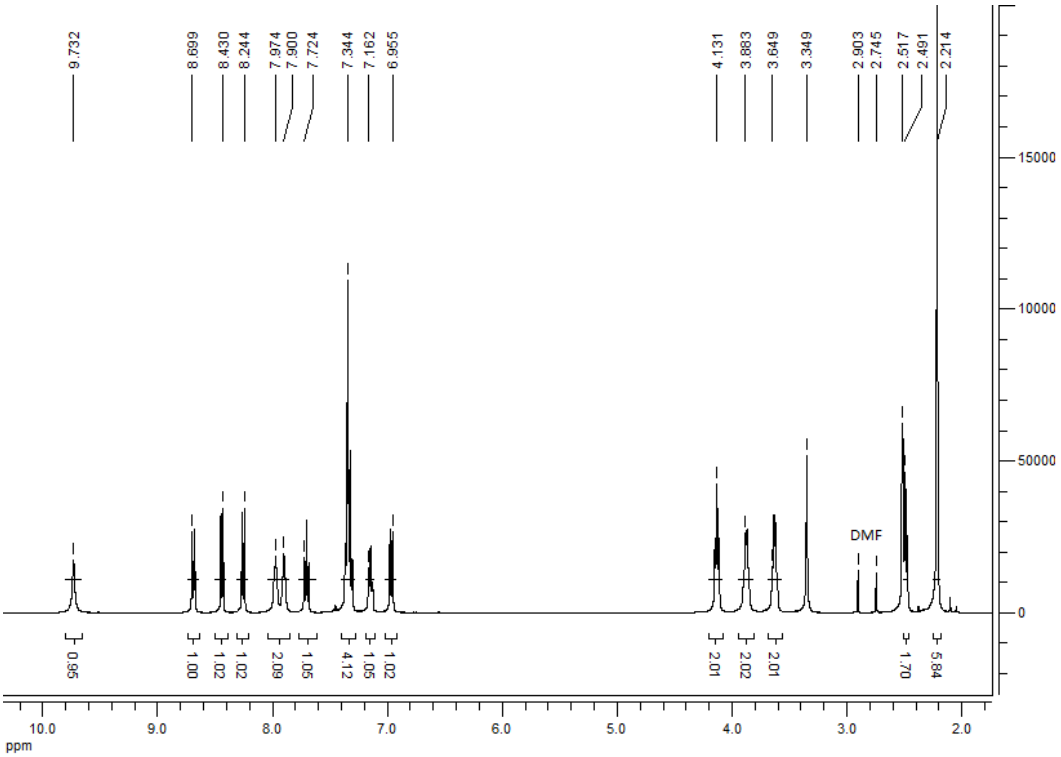


**Fig. S10** $^{1}$H NMR of **3d** in DMSO-$d_6$.

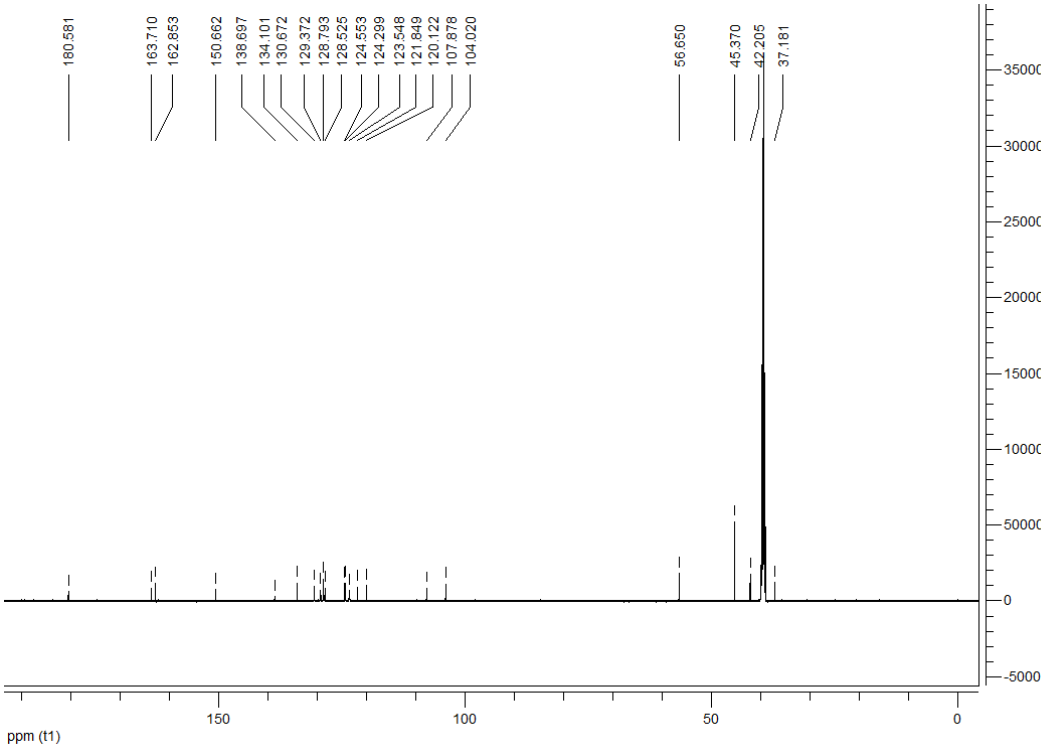


**Fig. S11** $^{13}$C NMR of **3d** in DMSO-$d_6$.

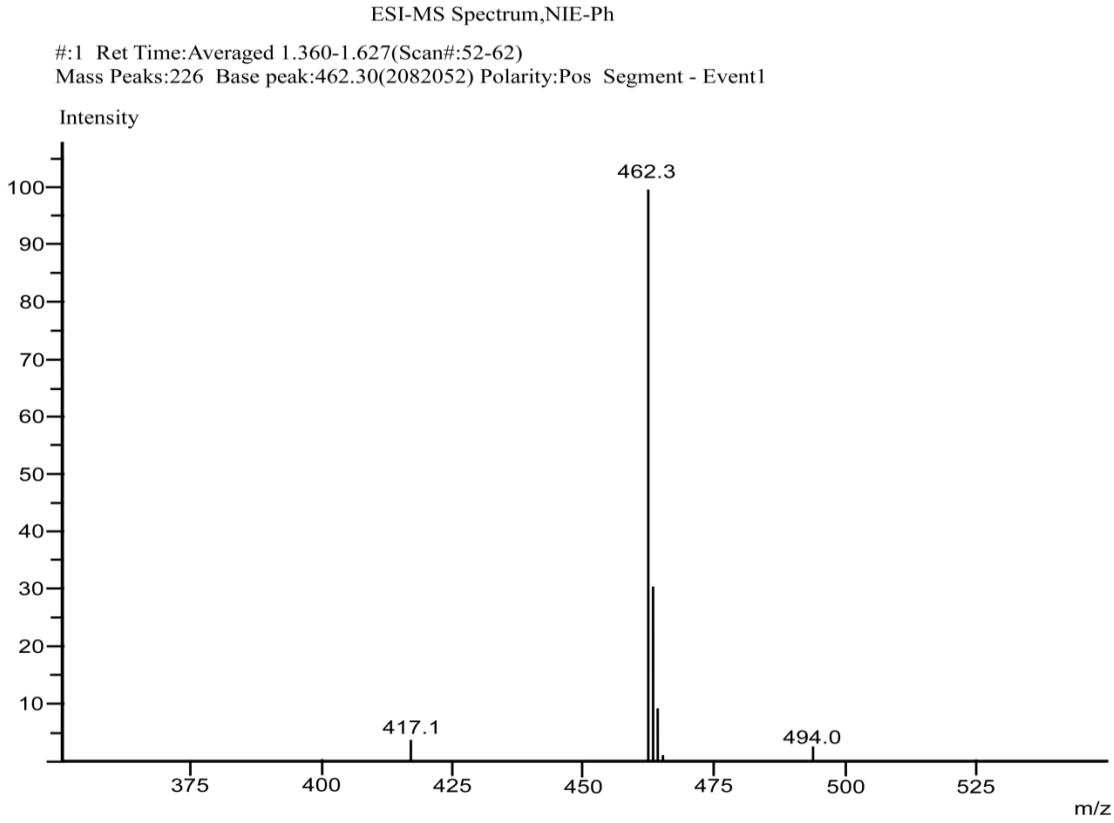


**Fig. S12** ESI-MS of **3d** in DMSO-$d_6$.

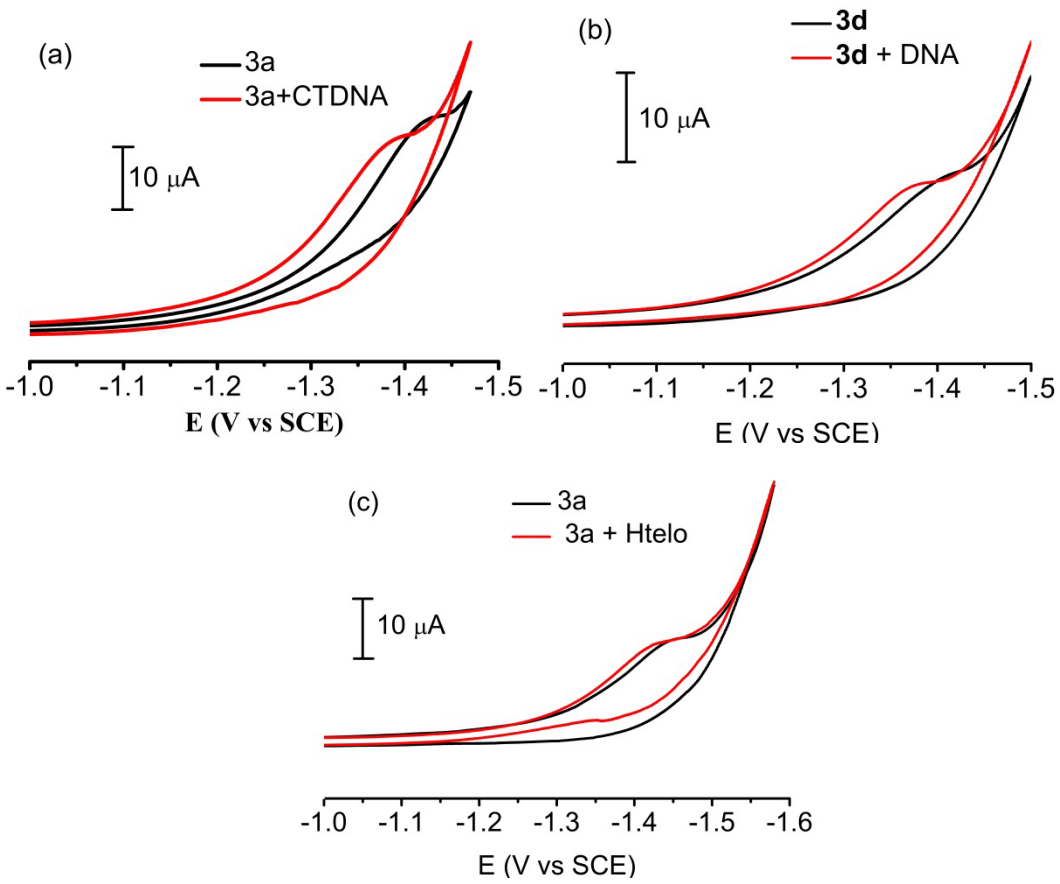


**Fig. S13** Cyclic voltammograms of (a) **3a** (50 μM) and (b) **3d** (50 μM) in the absence and presence of CT DNA (50 μM), and (c) **3a** (50 μM) in the absence and presence of Htelo G-quaruplex DNA (5 μM) in HEPES (10 mM, pH 7.4) buffer containing 0.1 M KCl. Scan rate 20 $mV.S^{-1}$.

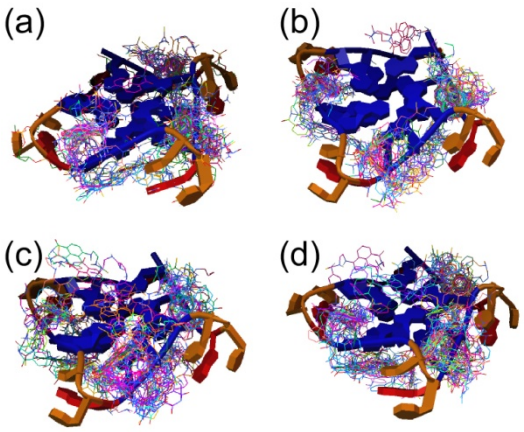


**Fig. S14** The docking results of platinum complexes (a) **1**, (b) **2** and (c) **3** in the different sites of telomeric G-quadruplex (PDB code: 1KF1).

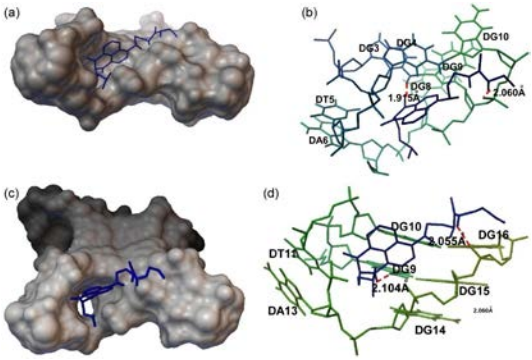


**Fig. S15** Molecular docking Different views of the docked model of **3b** (a, b), **3c** (c, d) with telomeric G-quadruplex (PDB code: 1KF1). The red dotted line represents the lengths of the hydrogen bond.

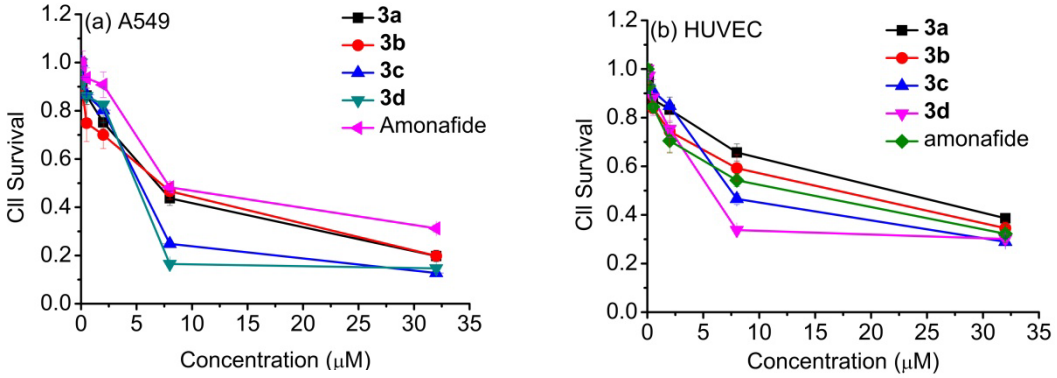


**Fig. S16** Cytotoxicity of **3a-3d** and amonafide against (a) A549 and (b) HUVEC cells