

Supporting Information

Two Novel Fan-Shaped Trinuclear Pt(II) Complexes act as G-quadruplex Binders and Telomerase Inhibitors

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Fig. S10 CD spectra of tib with a 3.0 μM solution of G-quadruplex in the absence of metal cations, pH 7.4, at room temperature ($r = C_{\text{tib}}/C_{\text{DNA}}$).

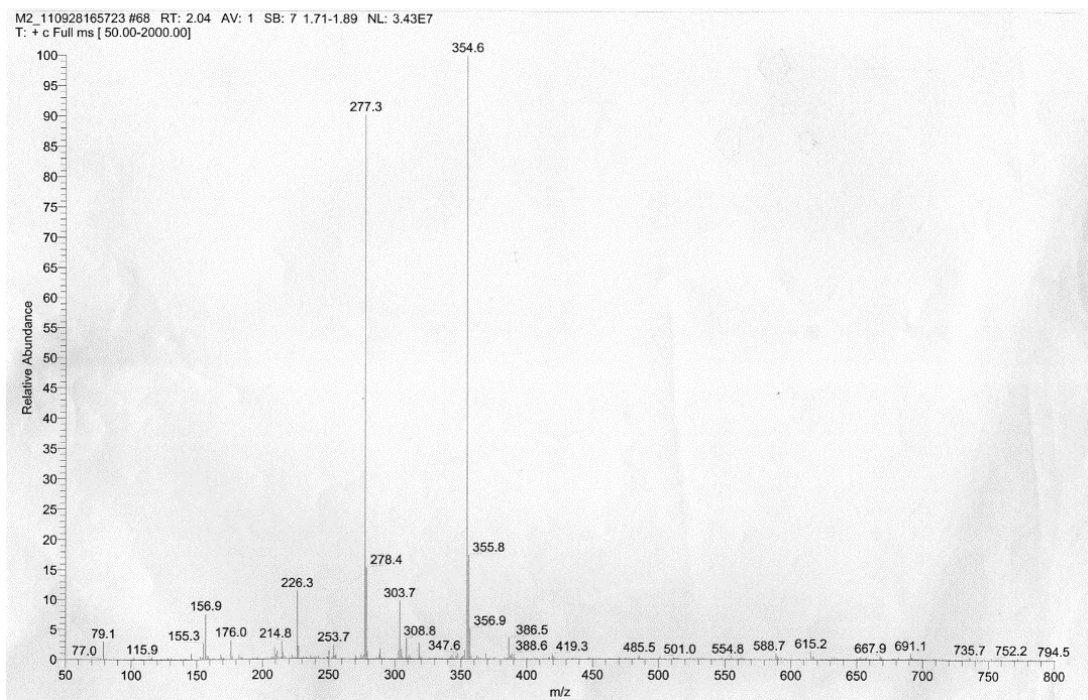


Fig. S1 The ESI-MS spectrum for tib.

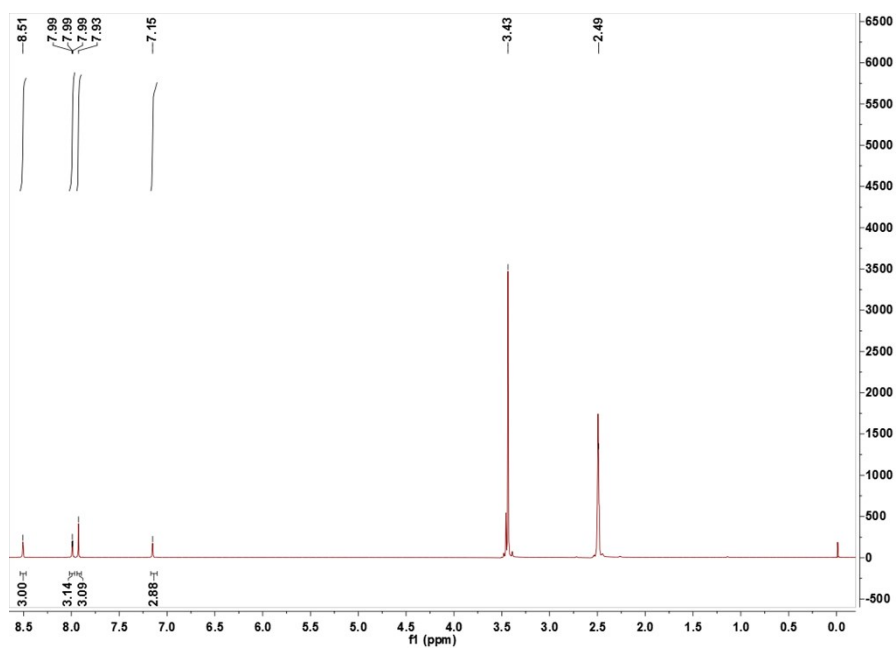


Fig. S2 The ¹H NMR [(CD₃)₂SO] spectrum for tib.

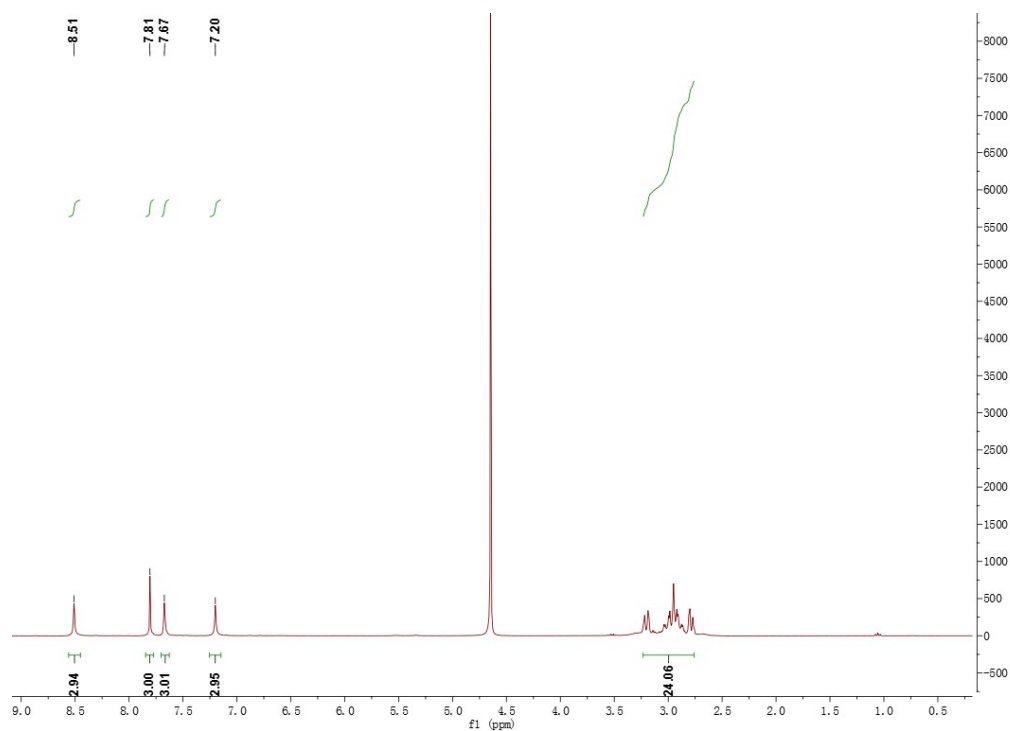


Fig. S3 ^1H NMR [D_2O] spectrum for **1**.

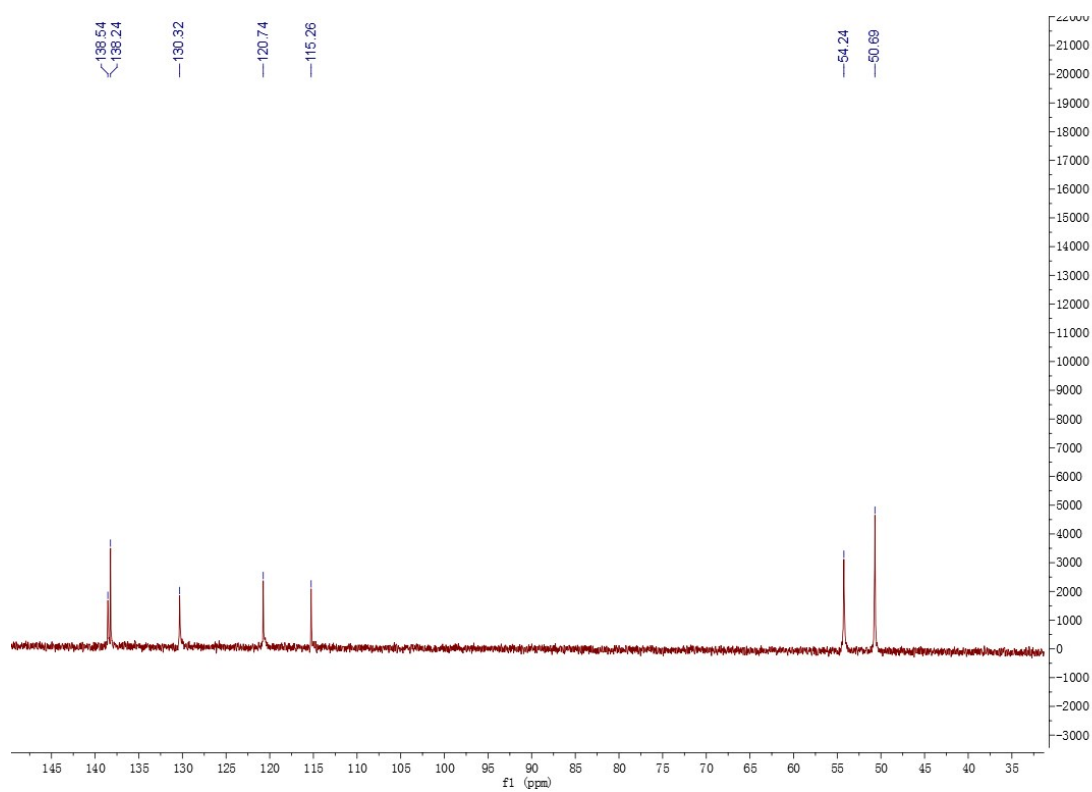


Fig. S4 ^{13}C NMR [D_2O] spectrum for **1**.

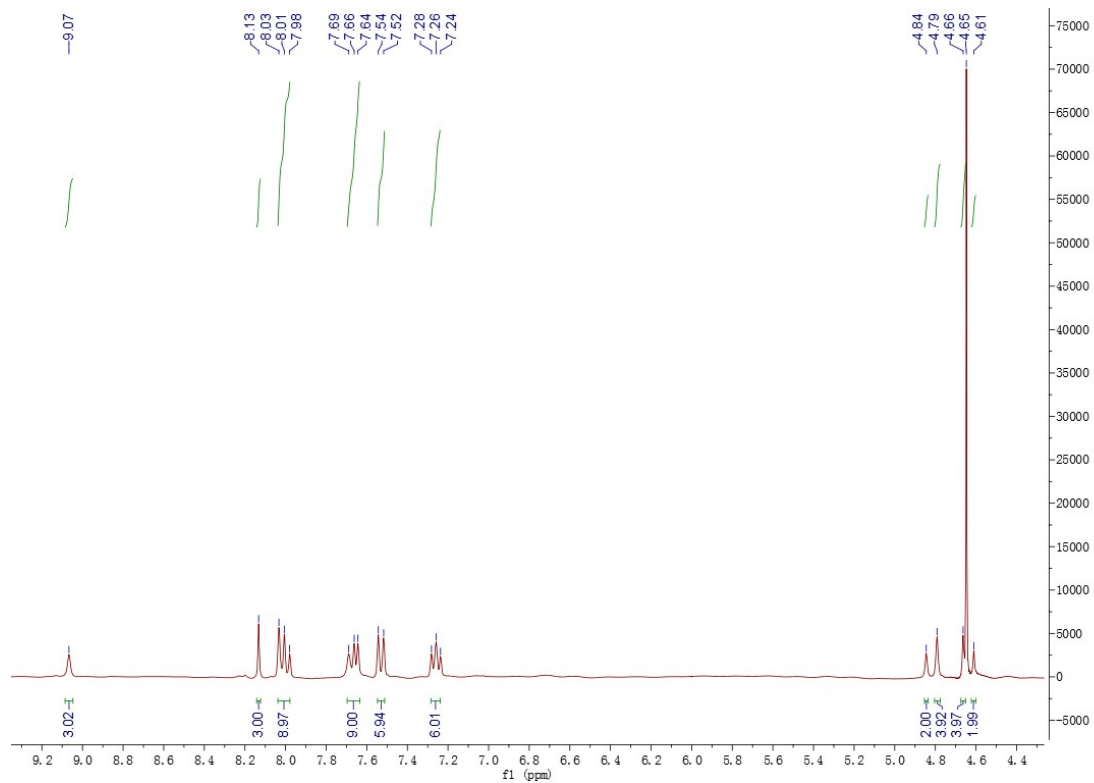


Fig. S5 ^1H NMR [D_2O] spectrum for **2**.

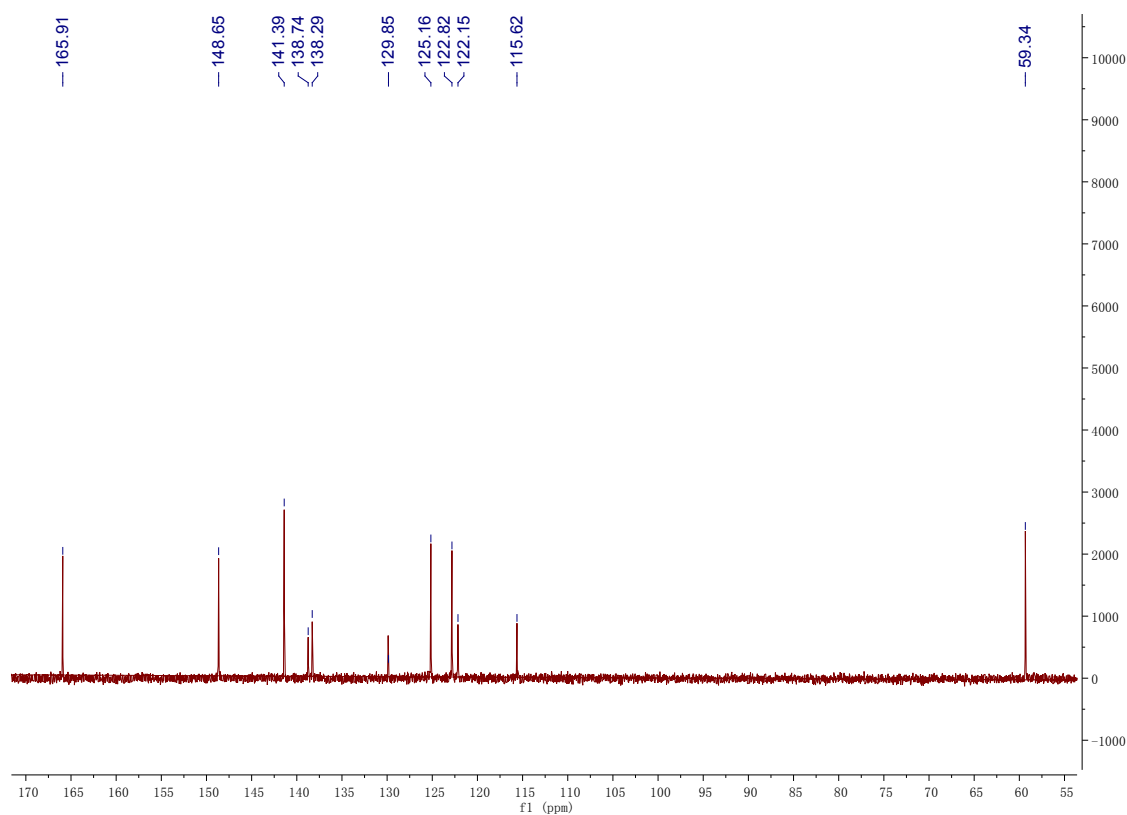


Fig. S6 ^{13}C NMR [D_2O] spectrum for **2**.

Table S1 Stabilization Temperatures ΔT_m ($^{\circ}\text{C}$) of hTel and duplex DNA at different ratios stabilized by Pt(II) complexes from competition FRET experiments.

Complex	ΔT_m ($^{\circ}\text{C}$)					$C_{\text{complex}}/C_{\text{DNA}}$
	1:0	1:1	1:10	1:50	1:100	
1	25.8 \pm 0.1	18.2 \pm 0.1	17.6 \pm 0.1	8.0 \pm 0.1	7.4 \pm 0.2	1.25
2	23.2 \pm 0.2	18.3 \pm 0.3	15.3 \pm 0.1	14 \pm 0.2	13.2 \pm 0.2	1.25

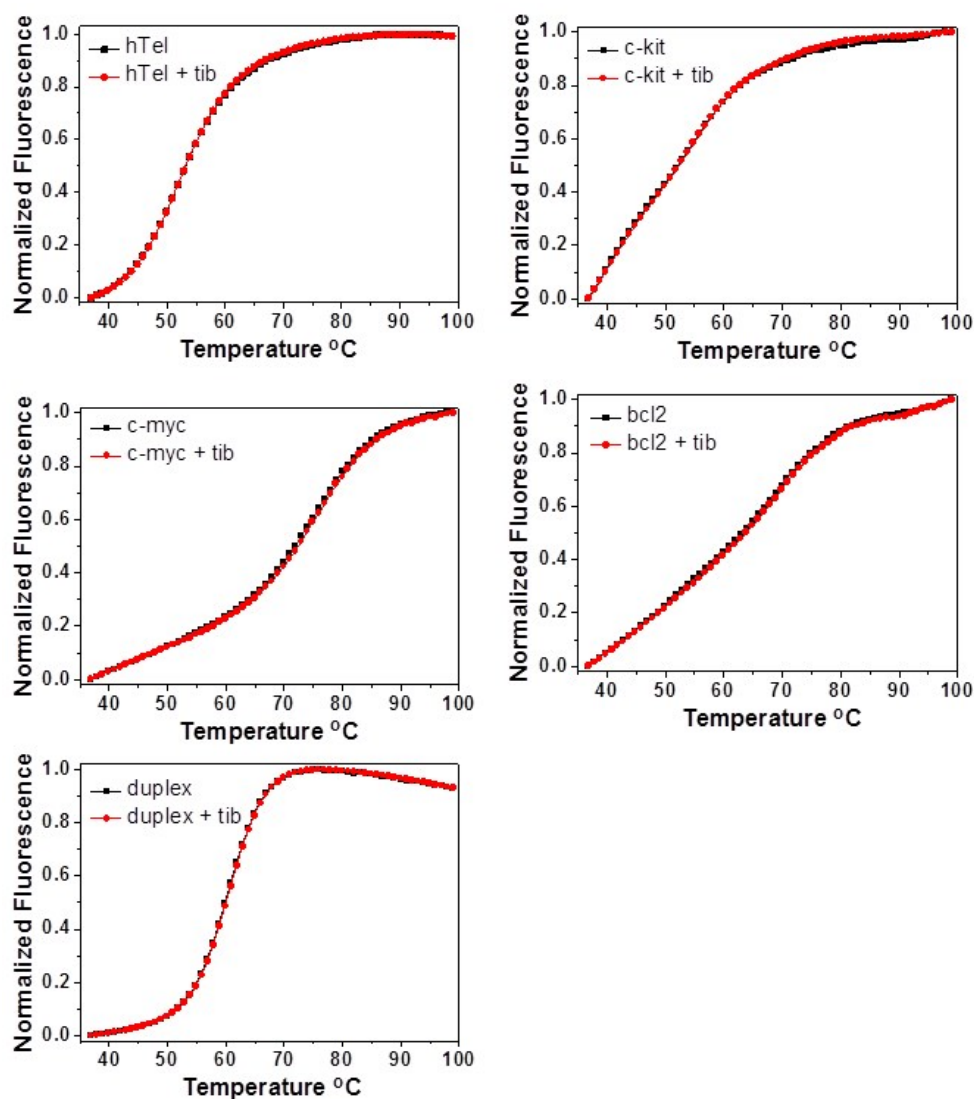


Fig. S7 FRET-melting curves^a obtained with hTel, c-kit, c-myc, bcl2 and duplex separately with ligand (tib). All experiments were carried out with the DNA concentration of 400 nM, and the tib of 500 nM.

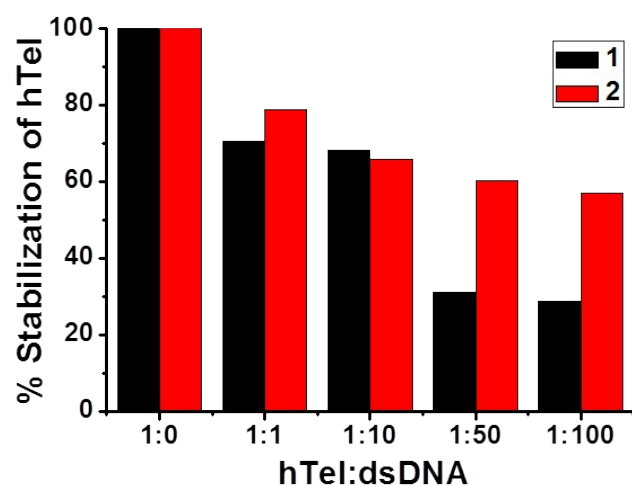


Fig. S8 Competition experiments show the effects of **1** and **2** on the thermal stabilization of hTel GQ, as measured by the FRET method, using increasing ratios of duplex DNA (as bases).

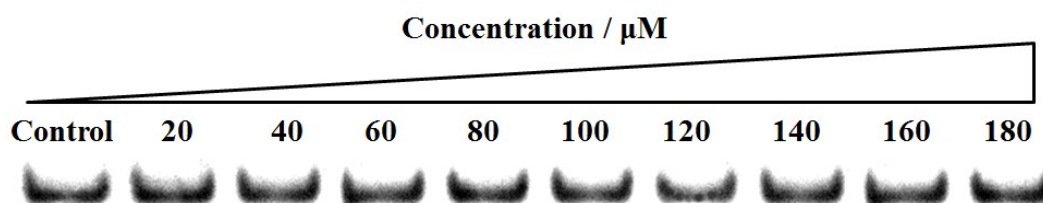


Fig. S9 Effects of the different concentrations of tib on the hybridization of HTG21 in the PCR-stop assays. The reactions were performed in the absence of salt ions with tib, and the PCR products were then analyzed on 15% nondenaturing polyacrylamide gels in 1×TBE and silver stained.

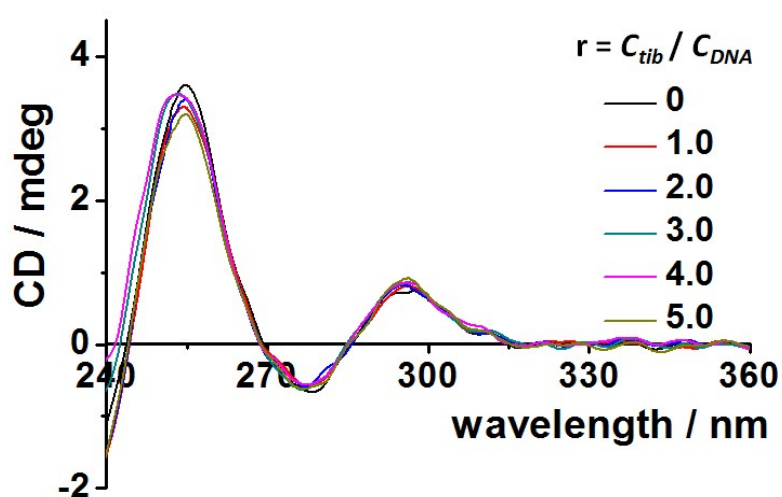


Fig. S10 CD spectra of tib with a 3.0 μM solution of GQ in the absence of metal cations, pH 7.4, at room temperature ($r = C_{\text{tib}}/C_{\text{DNA}}$).