

(*Biochemistry*)

**Solution Structure of the Biologically Relevant G-Quadruplex Element in the  
Human c-MYC Promoter. Implications for G-Quadruplex Stabilization.**

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**Supporting Information**

(Running title: G-Quadruplex Structure in Human c-myc Promoter)

**Figure S1.** Imino proton assignments of MYC22-G14T/G23T. The top spectrum is the imino region of the regular 1D proton spectrum, the rest of the spectra are 1D HMQC experiments recorded on site-specific labeled oligonucleotides. Conditions: 25 mM potassium-phosphate, 70 mM KCl, pH 7.0, 25 °C, 0.4-1.5 mM DNA.

**Figure S2.** Imino region of the 1D proton NMR spectrum of MYC22-G14T/G23T in H<sub>2</sub>O (A) and D<sub>2</sub>O after 3 hours (B). Conditions: 25 mM potassium-phosphate, 70 mM KCl, pH 7.0, 20 °C, 0.2 mM DNA. The stable imino protons are from the middle layer of the G-tetrad (Figure 1A) and are labeled with the residue numbers.

**Figure S3.** Non-exchangeable proton 2D-NOESY (200ms) spectra of MYC22-G14T/G23T at **A.** 25 °C, and **B.** 10 °C, The crosspeaks of the minor conformations of the 5'- and 3'-flanking sequences are very weak at 25 °C, and become more apparent at 10 °C. In the 25 °C spectrum, the crosspeaks belonging to the minor conformation of the 3'-flanking sequence are labeled with arrows, whereas the T4H6-T4H1' crosspeak from the minor conformation is labeled with asterisk. In the 10 °C spectrum, solid lines represent the connectivities of the major conformation of 3'-flanking TAA observed at 25 °C, whereas dashed lines designate the connectivities of the minor conformation. The two T4H6-T4H1' crosspeaks of major and minor conformations are labeled with asterisks. Conditions: 25 mM K-phosphate, 70 mM KCl, pH 7.0, 2 mM DNA.

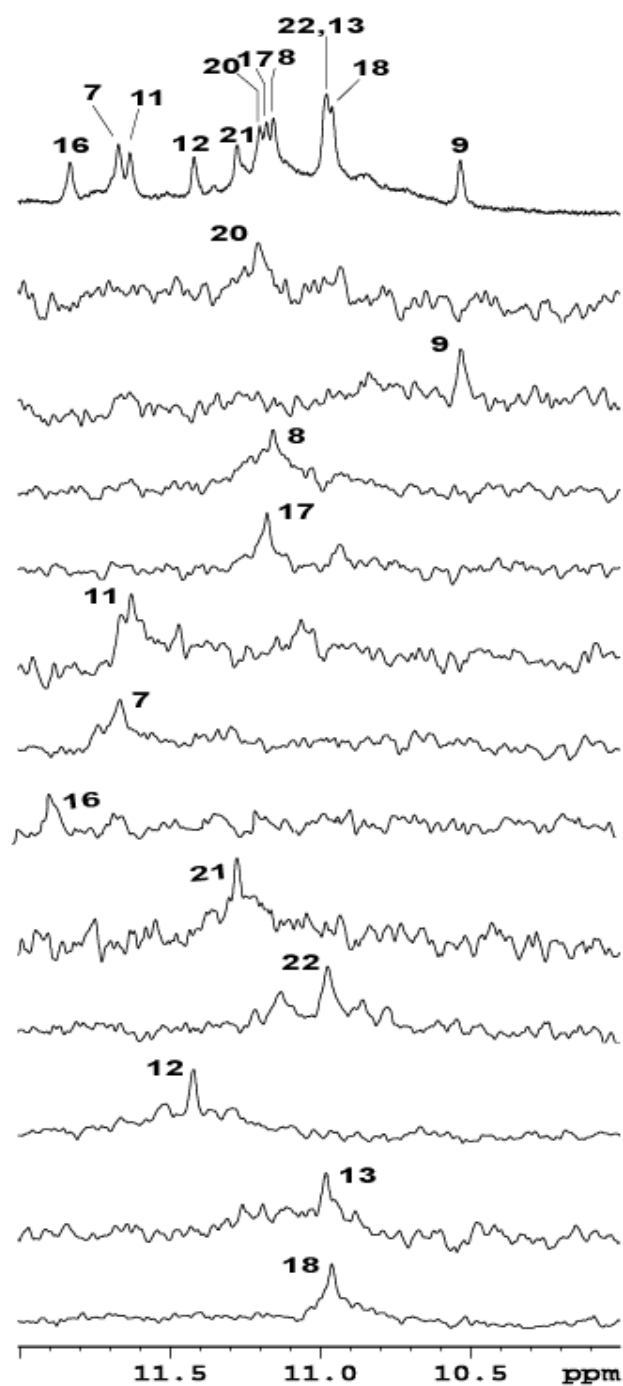


Figure S1.

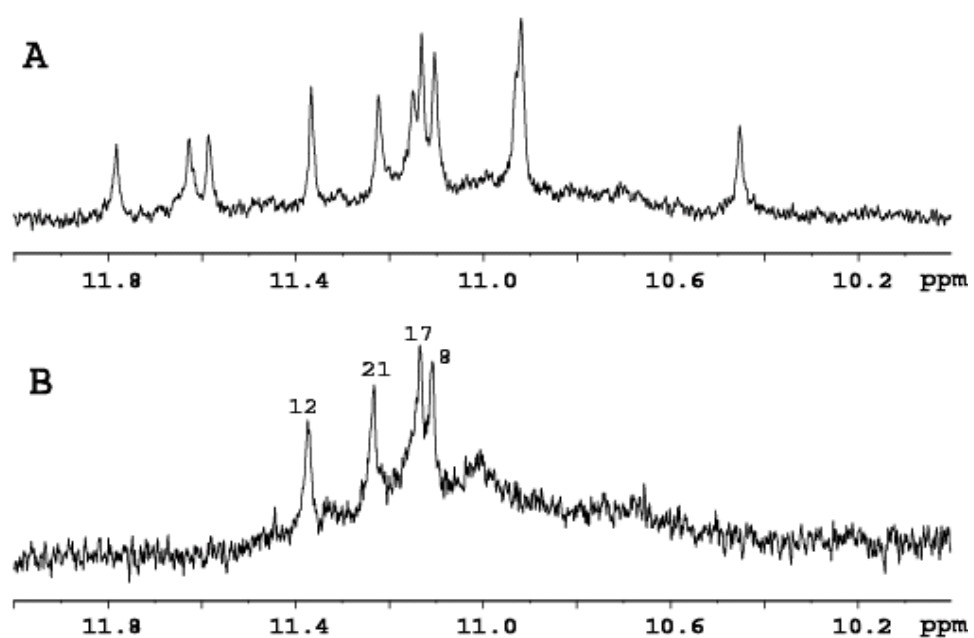


Figure S2.

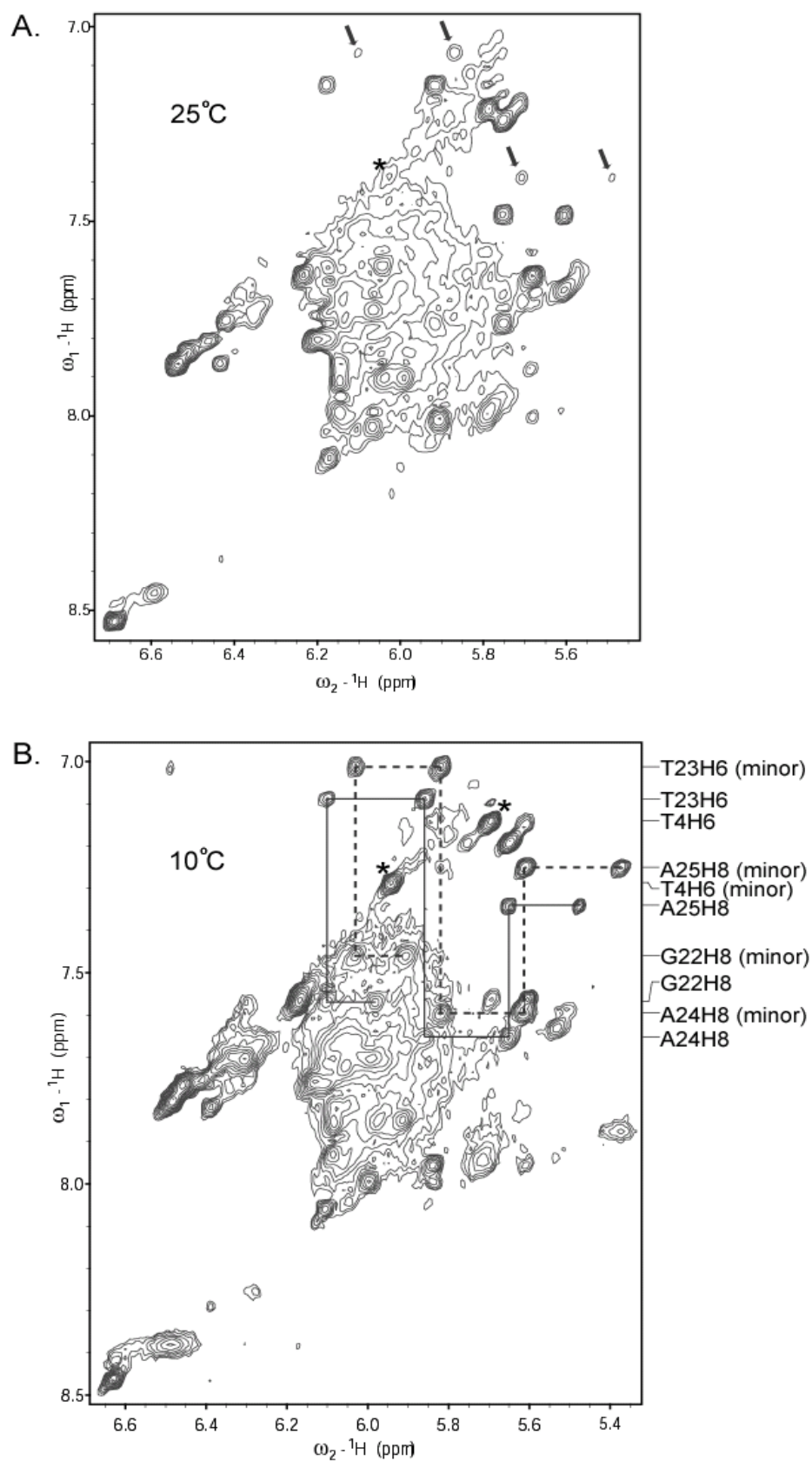


Figure S3.

