

Oxidatively Generated Damage to DNA at 5-Methylcytosine Mispairs

Joshy Joseph and Gary B. Schuster*

schuster@gatech.edu

*School of Chemistry and Biochemistry
Georgia Institute of Technology
Atlanta, Georgia*

Supporting Information

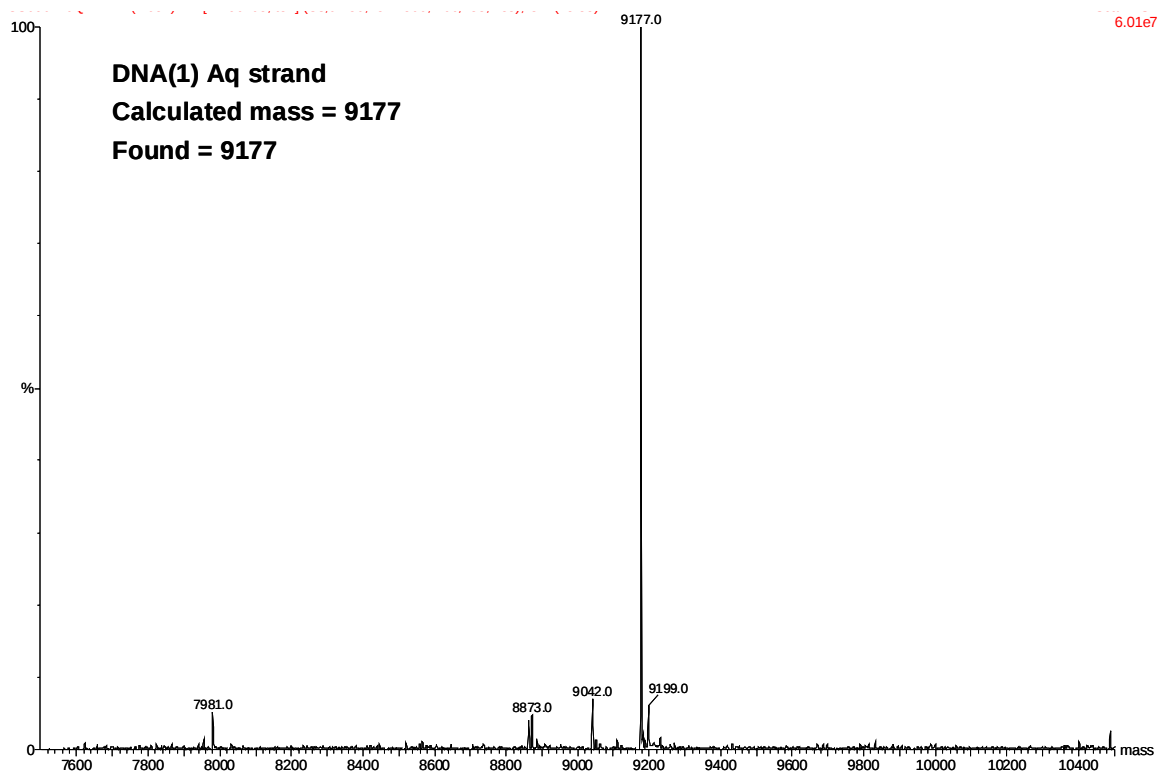


Fig. S1 Mass spectrum of Aq strand of DNA(1).

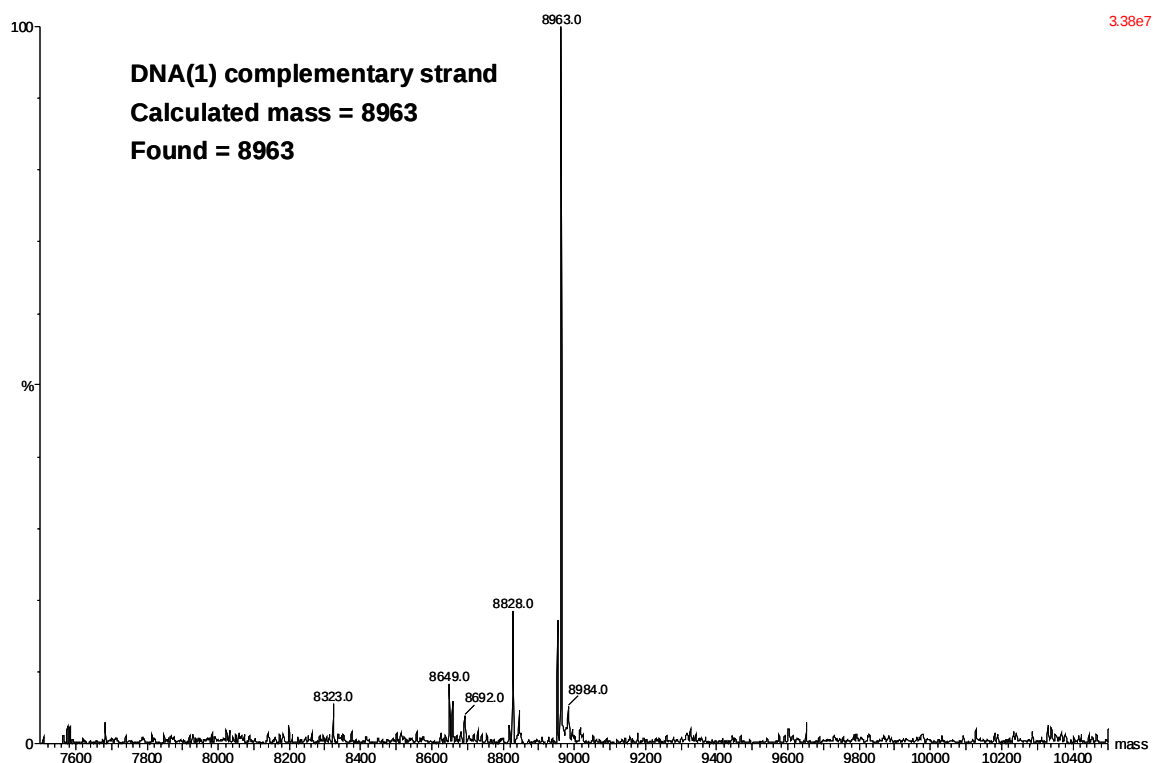


Fig. S2 Mass spectrum of complementary strand of DNA(1).

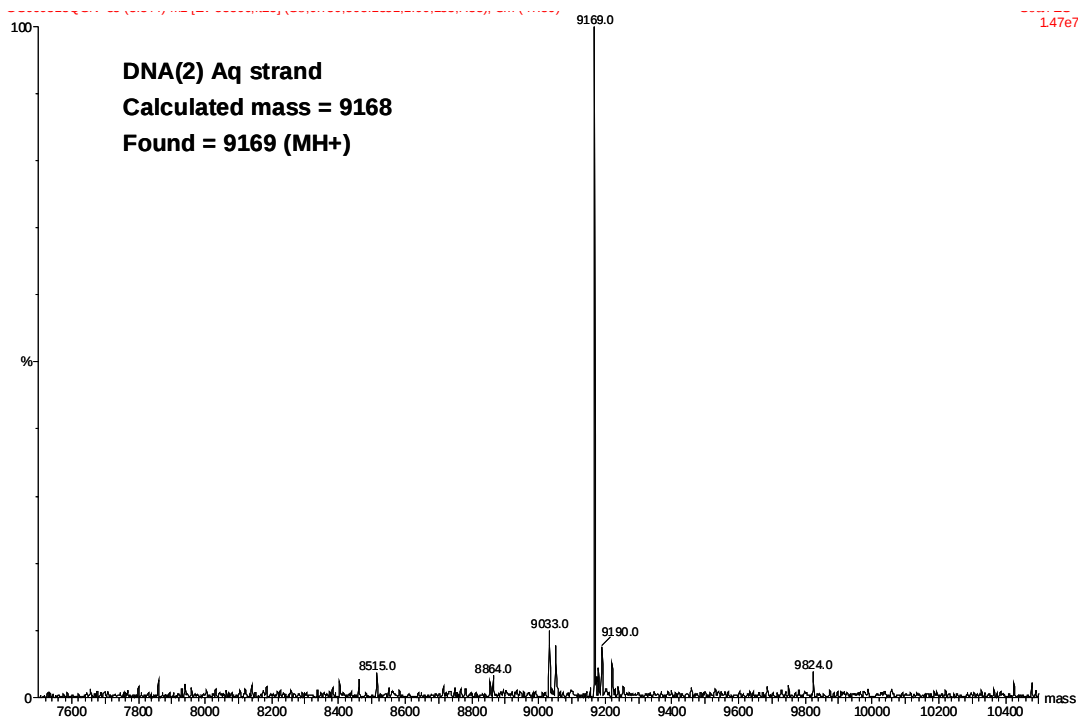


Fig. S3 Mass spectrum of Aq strand of DNA(2).

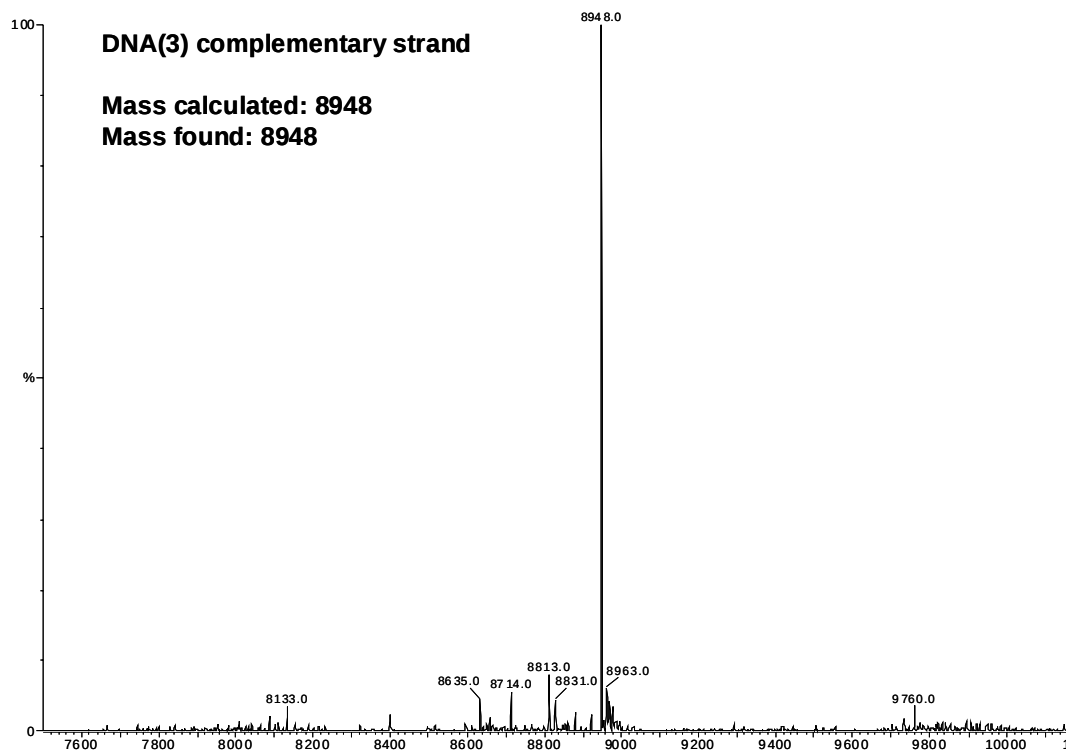


Fig. S4 Mass spectrum of complementary strand of DNA(3).

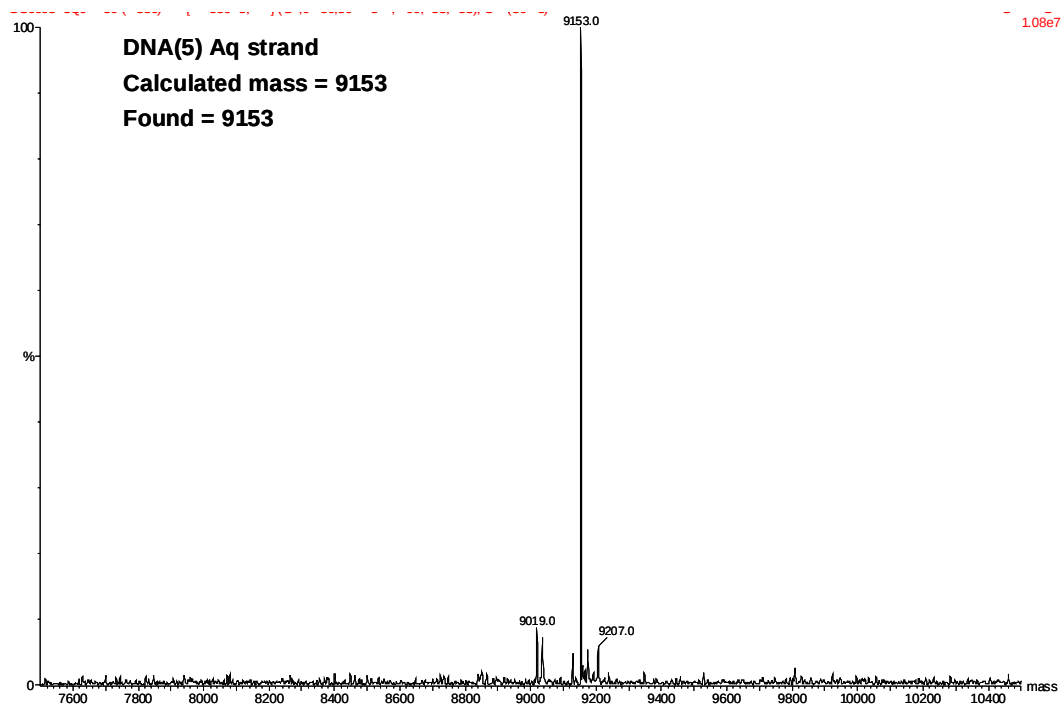


Fig. S5 Mass spectrum of Aq strand of DNA(5).

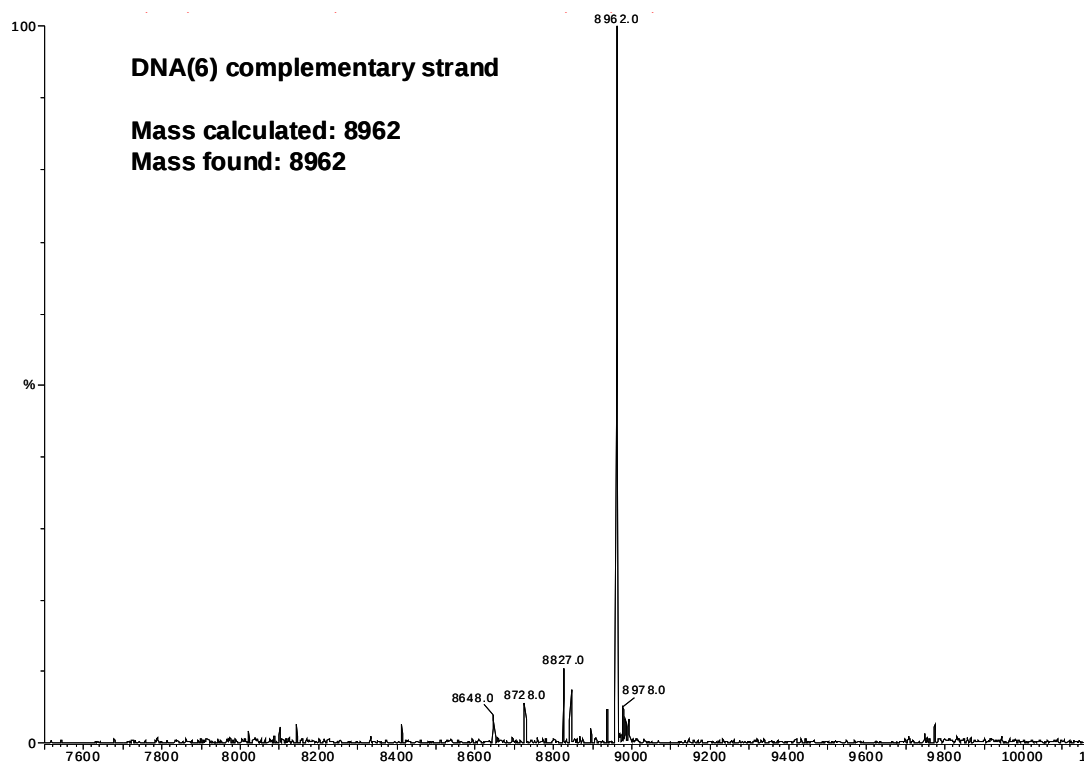


Fig. S6 Mass spectrum of Aq strand of DNA(6).

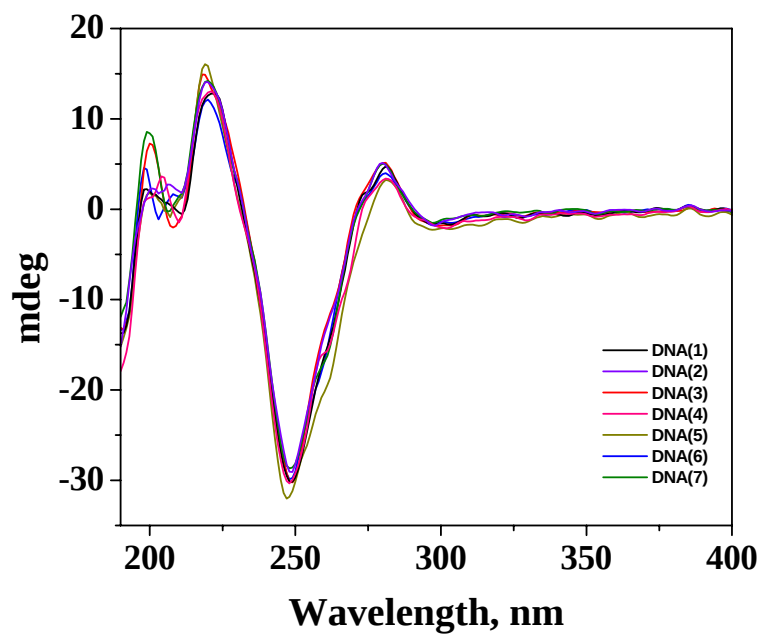


Fig. S7 CD spectra of DNA 1-7 (2 μ M) in 10 mM sodium phosphate buffer containing 2 mM MgCl_2 .

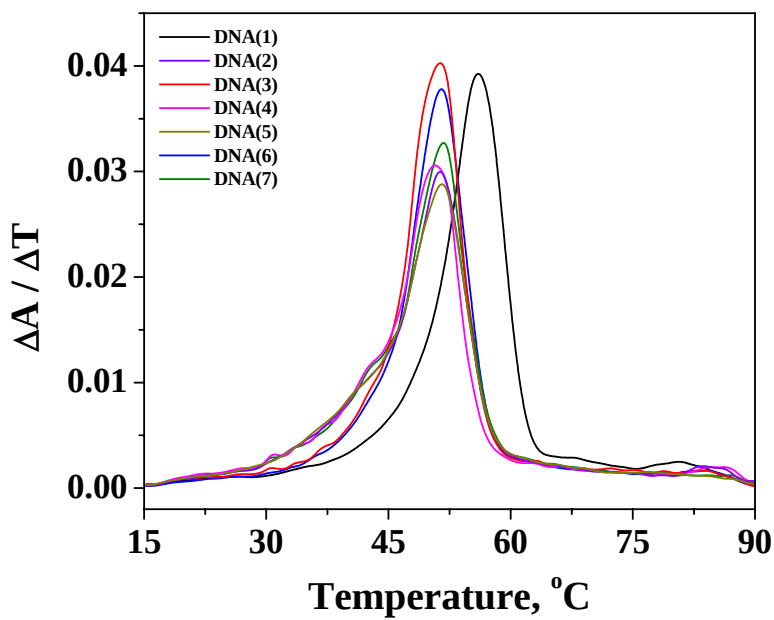


Fig. S8 First derivative plots of DNA melting curves for DNA 1-7 (2 μ M) in 10 mM sodium phosphate buffer containing 2 mM MgCl_2 .

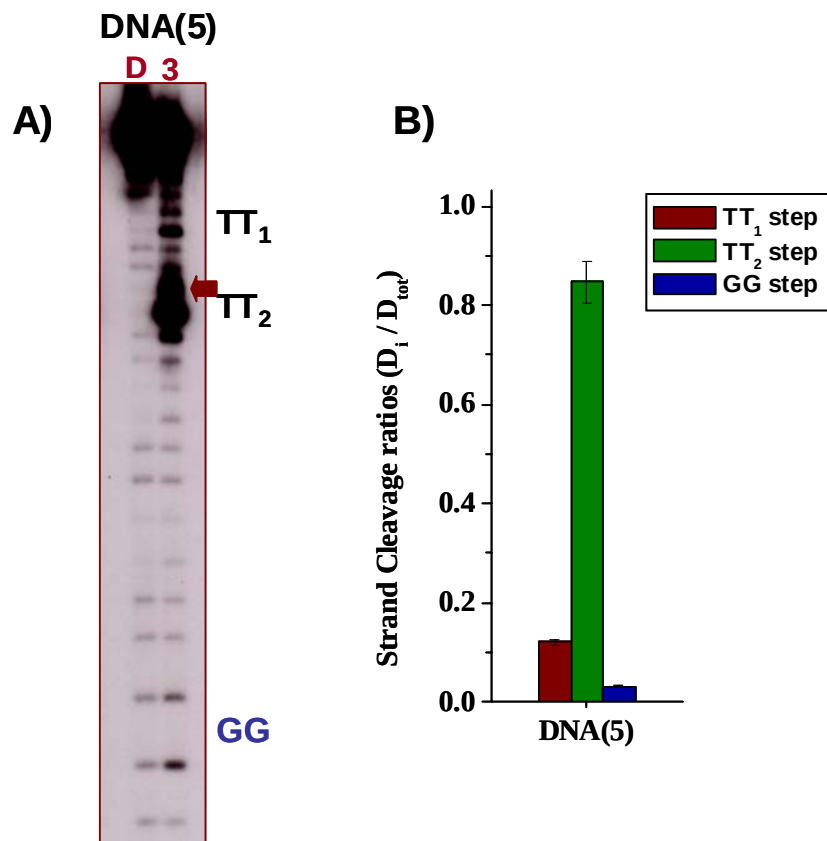


Fig. S9 A) PAGE gel showing the oxidative damage patterns in DNA(5). The position of C-T mismatch is indicated by the red arrow mark. D and 3 indicates dark control and 3 minutes irradiation with eight 350 nm lamps, respectively; **B)** Corresponding DNA damage ratio profiles for the first two TT steps and the GG step.