Overview

Purpose: Use chemical probes to study drug-binding sites and conformational changes in DNA

Methods: Analyze reactivity of chemical probes that react only with unique duplex DNA upon addition of ligand.

Results: DNA ligands were used in this study and their mode of binding was determined.

Conclusions: These chemical approaches reveal the reactivity of a variety of probes to help further study DNA distortions. Determination of Ligand-Induced Changes in DNA Conformations by Chemical Probes and Tandem Mass Spectrometry

Figure 1: Reaction of DEPC with an abasic site

Figure 2: DEPC reaction with a) 5'-GGGATGAGG/GGC-3' and b) 5'-GGGATGAGG/GGC-3' indicates a DEPC adduct.

Figure 3: DMDS reaction with a) Duplex 1b) Duplex 2: 1b)Ethidium bromide and b) Duplex 1aDR indicates a DMDS adduct.

Figure 4: ENU reaction with a) 5'-GGGATGAGG/GGC-3' and b) 5'-GGGATGAGG/GGC-3' indicates an ENU adduct.