

liquid chromatography (HPLC). The chromatogram (Figure 3) shows one major and two minor radioactive peaks, corresponding with different

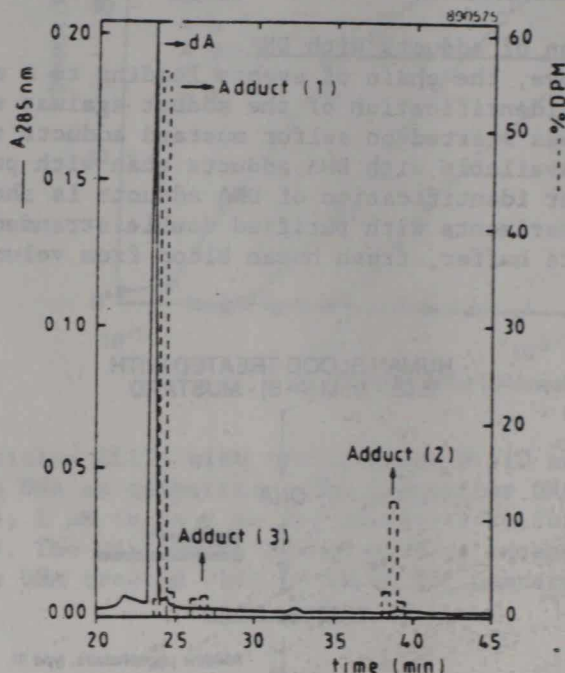


Figure 3 HPLC chromatogram of DNA from human blood, treated with 1 mM [³⁵S]-sulfur mustard (30 min, 37 °C). The UV absorbance profile (285 nm; left ordinate) is combined with the profile of radioactivity (right ordinate) of the collected fractions (dA = 2'-deoxyadenosine).

alkylated bases. The other part of the procedure to identify the DNA adducts was based on the synthesis of four adducts which are possibly formed with sulfur mustard (Figure 4).

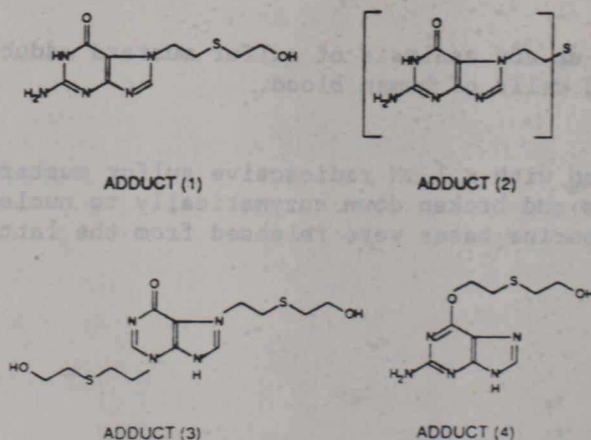


Figure 4 Chemical structures of synthesized sulfur mustard adducts with DNA bases.