

Interaction between the Peroxide Adduct of Binuclear Iron(III) Complex with (HPTP) Anion and the Sugar Moiety of Nucleosides

Satoshi Nishino^a, Mami Kunita^a, Teruyuki Kobayashi^a, Hideaki Matsushima^b, Tadashi Tokii^b, and Yuzo Nishida^{a,*}

^a Institute for Molecular Science, Okazaki 444-8585, Japan

^b Department of Chemistry, Faculty of Engineering, Saga University, Saga 841, Japan

* Reprint requests to Y. Nishida. Fax: (+81) 564 55 5245. E-mail: yuzo@ims.ac.jp

Z. Naturforsch. **54 b**, 1272–1276 (1999); received February 15, 1999

DNA Cleavage, Peroxide Adduct of Binuclear Iron(III), Interaction with Sugar moiety

We have in this study obtained the experimental evidence to suggest that the peroxide adduct of binuclear iron(III) complex with H(HPTP) directly reacts with the sugar moiety of the DNA chain, to cleave it; H(HPTP) denotes N,N,N',N'-tetrakis(2-pyridylmethyl)-1,3-diamino-2-propanol.