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**Hydrolytic cleavage of DNA-model substrates promoted by
polyoxovanadates**

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Supplementary material

Figure 1S. Influence of the $[V_{10}O_{28}]^{6-}$ concentration on k_{obs} for the cleavage of 4 mM NPP at pH 5.0 and 37 °C in the presence of 200 mM acetate buffer and 600 mM NaCl. Data were fitted to Equation 2.

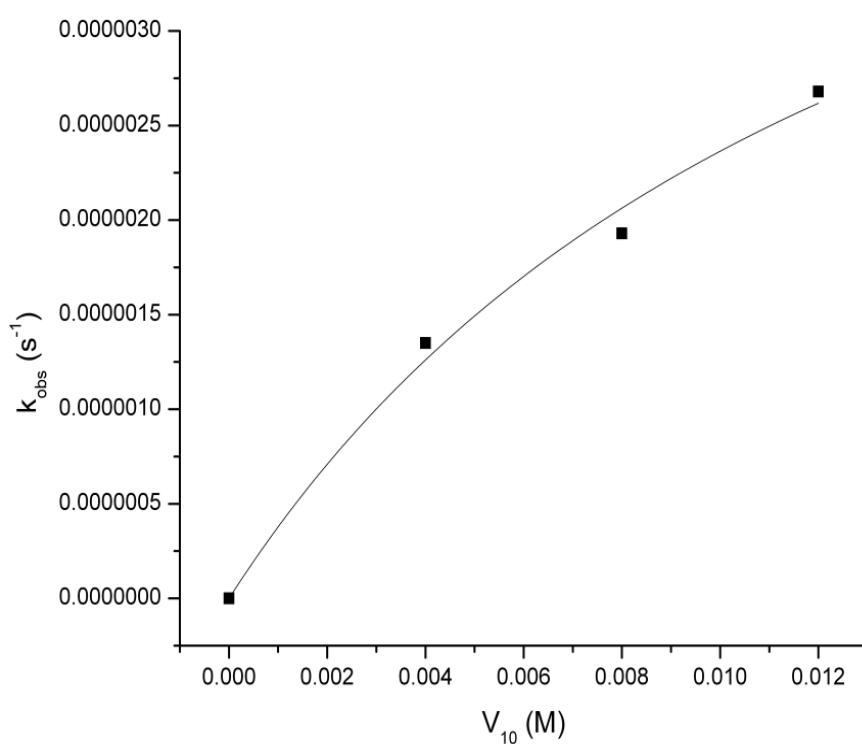


Figure 2S. Influence of the vanadate concentration on the ^{31}P NMR shift of the NPP resonance in an aqueous solution containing 4 mM NPP, 600 mM NaCl and 200 mM acetate buffer at room temperature and pH 5.0.

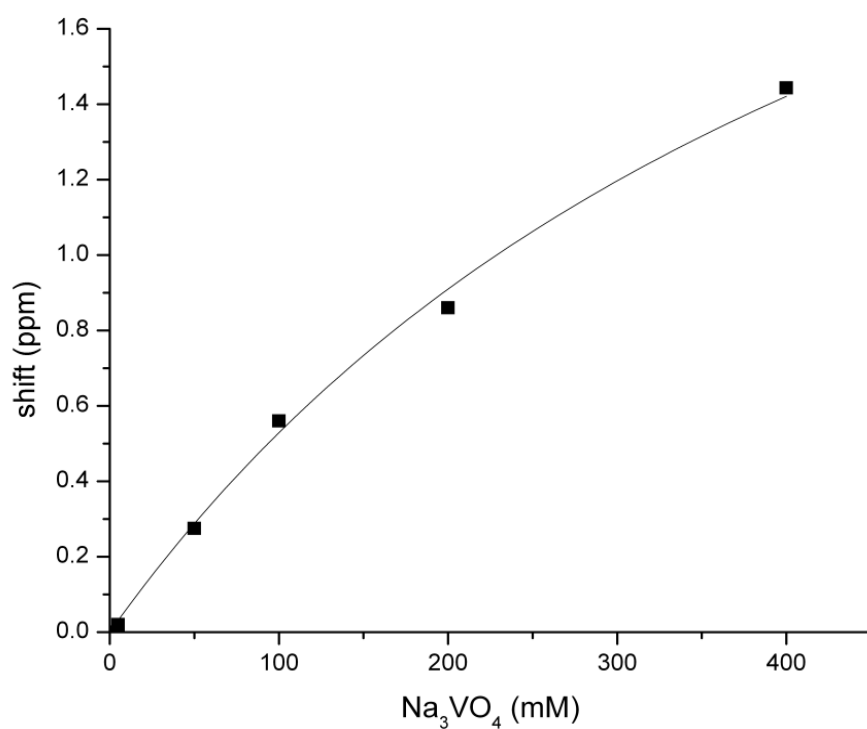


Figure 3S. Influence of the vanadate concentration on the ^{31}P NMR signal half width of the NPP resonance in an aqueous solution containing 4 mM NPP, 600 mM NaCl and 200 mM acetate buffer at room temperature and pH 5.0.

Figure 6

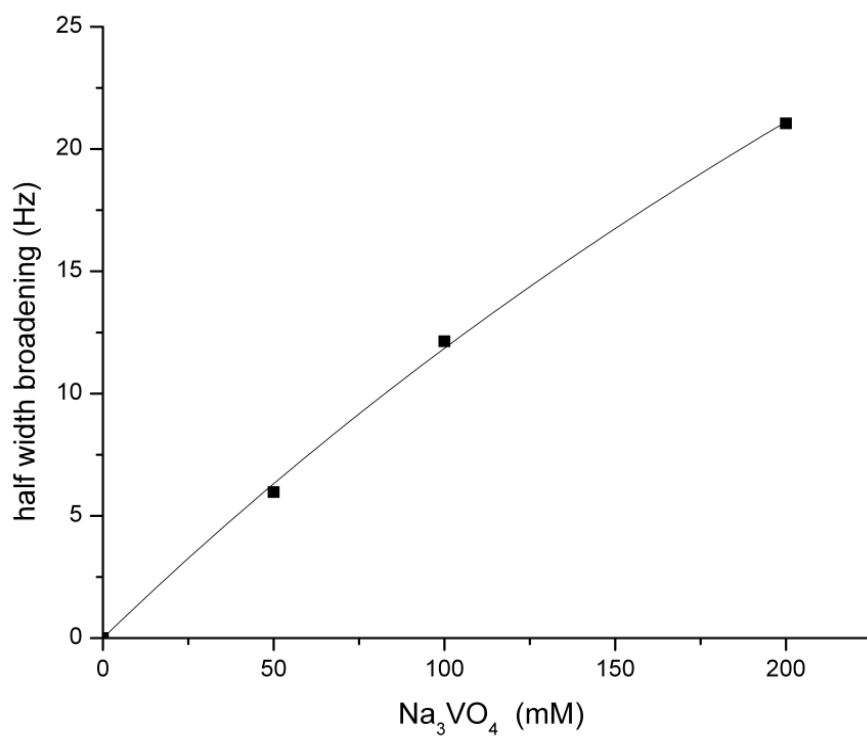


Figure 4S. Half width of the ^{31}P NMR NPP resonance as a function of temperature, measured in a solution containing 4 mM NPP, 40 mM initial concentration of Na_3VO_4 , 600 mM NaCl and 200 mM acetate buffer, at room temperature and pH 5.5.

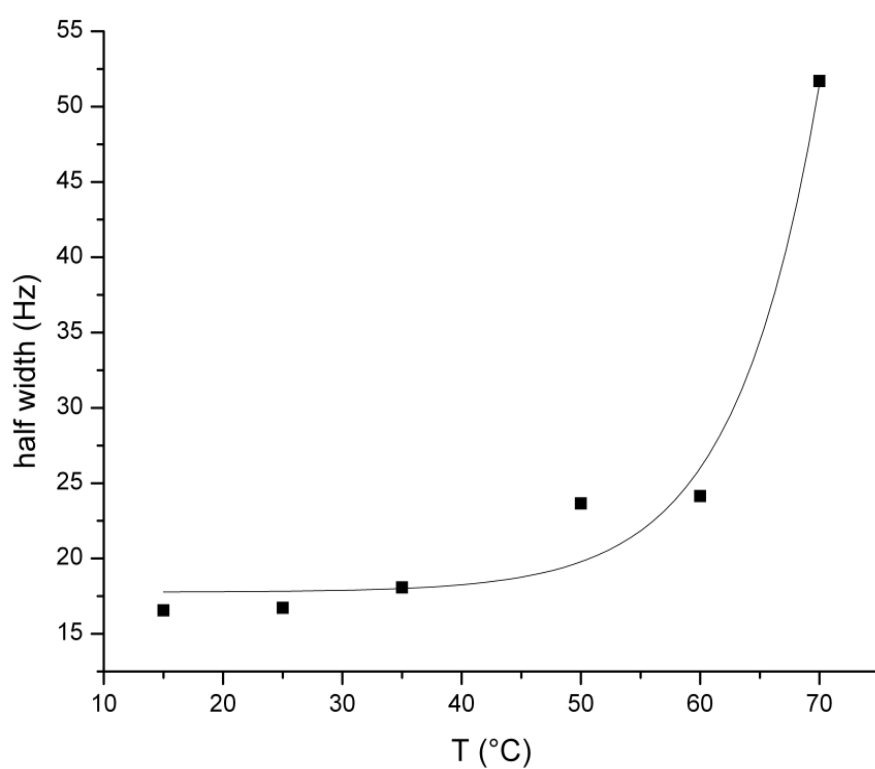


Table 1S: Influence of the 4 mM EDTA on the k_{obs} for the cleavage of 4 mM NPP at pH 5.0 and 37 °C in the presence of 200 mM acetate buffer and 600 mM NaCl. The k_{obs} was determined for solutions containing 4, 8 and 12 mM concentration of $[\text{V}_{10}\text{O}_{28}]^{6-}$.

Concentration of V_{10} (mM)	k_{obs} in the absence of EDTA	k_{obs} in the presence of EDTA
4	$2.74 \times 10^{-6} \text{ s}^{-1}$	$2.12 \times 10^{-6} \text{ s}^{-1}$
8	$2.96 \times 10^{-6} \text{ s}^{-1}$	$2.48 \times 10^{-6} \text{ s}^{-1}$
12	$4.06 \times 10^{-6} \text{ s}^{-1}$	$5.08 \times 10^{-6} \text{ s}^{-1}$