

Electronic Supplementary Information for Dalton Transactions  
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## **SUPPORTING INFORMATION**

### **A Minimalist Approach to Understanding the Efficiency of Mononuclear Zn(II) Complexes as Catalysts of Cleavage of an RNA Analog.**

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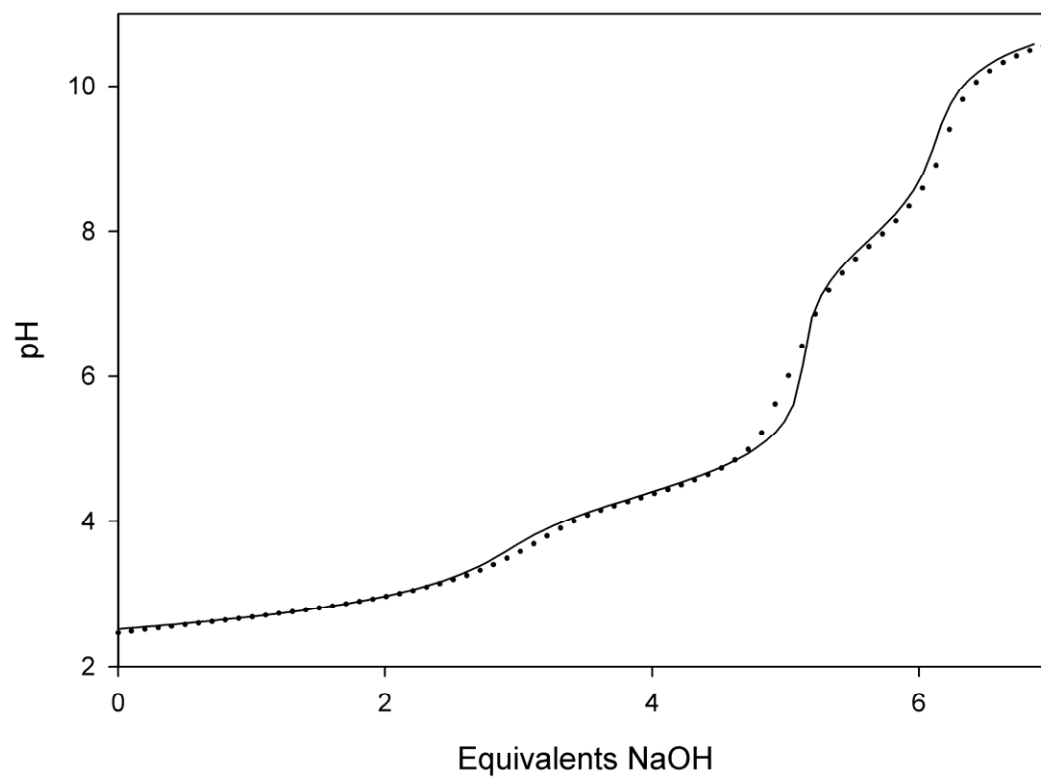
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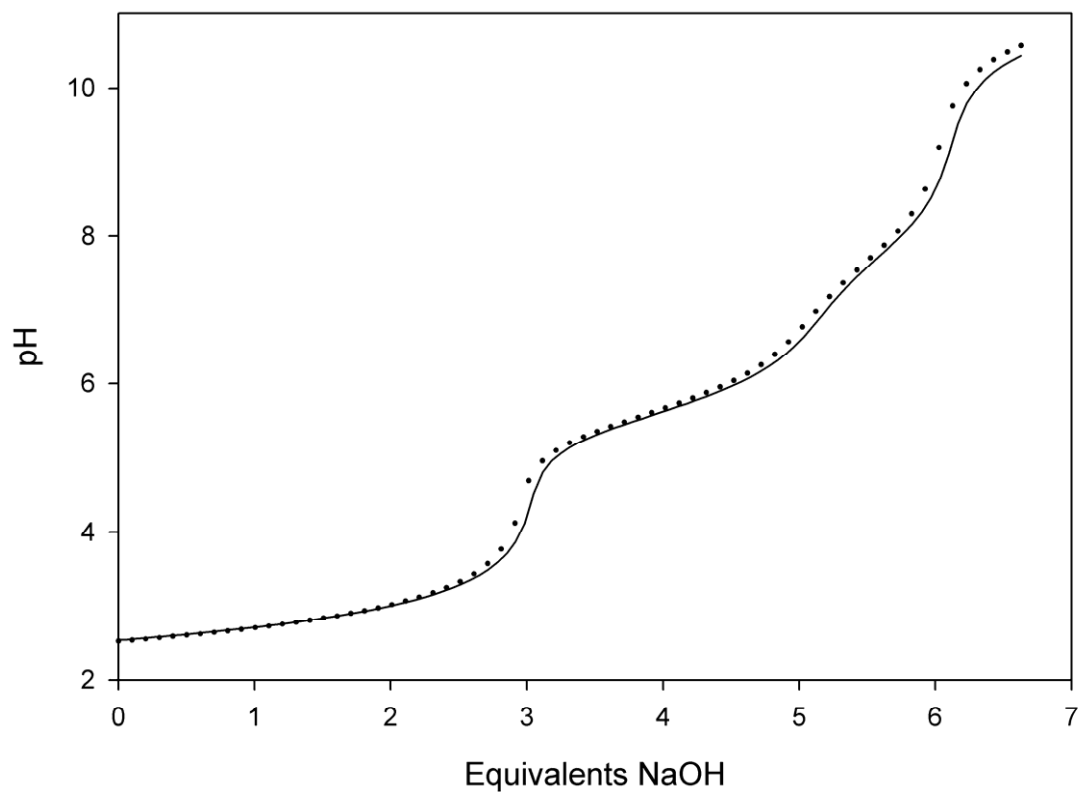
**Table S1.** Values of  $(K_i)_{\text{obsd}}$  Determined for Inhibition of **Zn(2)**-Catalyzed Cleavage of **HpPNP** by Methylphosphate Dianion at 25 °C and  $I = 0.10$  Maintained with  $\text{NaNO}_3$ .

pH	$K_i/10^{-3} \text{ M}^a$
7.6	1.0
8.0	1.25
8.5	2.2
9.0	7.2
9.5	17
10.0	50

<sup>a</sup> For reactions at constant ionic strength of  $I = 0.10$  ( $\text{NaNO}_3$ ) at  $\text{pH} = 7.6$  and  $25^\circ\text{C}$ . <sup>b</sup> Value of  $K_i$  determined from the non linear least squares fit of the plots of  $k_{\text{obsd}}/k_o$  against inhibitor concentration to eq 2.



**Figure S1.** pH-potentiometric titration diagram for **Zn(1)**, ( 25 °C,  $I = 0.10$  M (NaNO<sub>3</sub>)) showing fit (solid line) to the experimental data.



**Figure S2.** pH-potentiometric titration diagram for **Zn(2)**, ( 25 °C,  $I = 0.10$  M (NaNO<sub>3</sub>)) showing fit (solid line) to the experimental data (dashed line).

Macrocyclic ionization constants used in fits of the pH-potentiometric titrations were obtained from the following references: Thom, Vivienne J.; Shaikjee, M. Salim; Hancock, Robert D. *Inorg. Chem.* **1986**, *25*, 2992-3000 and Koike, Tohru; Kajitani, Satoko; Nakamura, Ikushi; Kimura, Eiichi; Shiro, Motoo. *J. Am. Chem. Soc.* **1995**, *117*, 1210-19.