

Supplementary Material

Investigation of Effects of Metal Ions in Sample Buffer on Capillary Electrophoresis Coupled with Laser-Induced Fluorescence Analysis of Thrombin Using Dye-Labeled 29-mer DNA Aptamer

Yunlong Bai ^{a, b}, Qiang Zhao ^{b, c} *

a. Institute of Environmental Science, Shanxi University, Taiyuan, 030006, PR China

b. State Key Laboratory of Environmental Chemistry and Eco-toxicology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, 100085, PR China.

c. University of Chinese Academy of Sciences, Beijing 100049, China.

*Corresponding author

E-mail: qiangzhao@rcees.ac.cn

Tel: +86-10-62849892. Fax: +86-10-62849892.

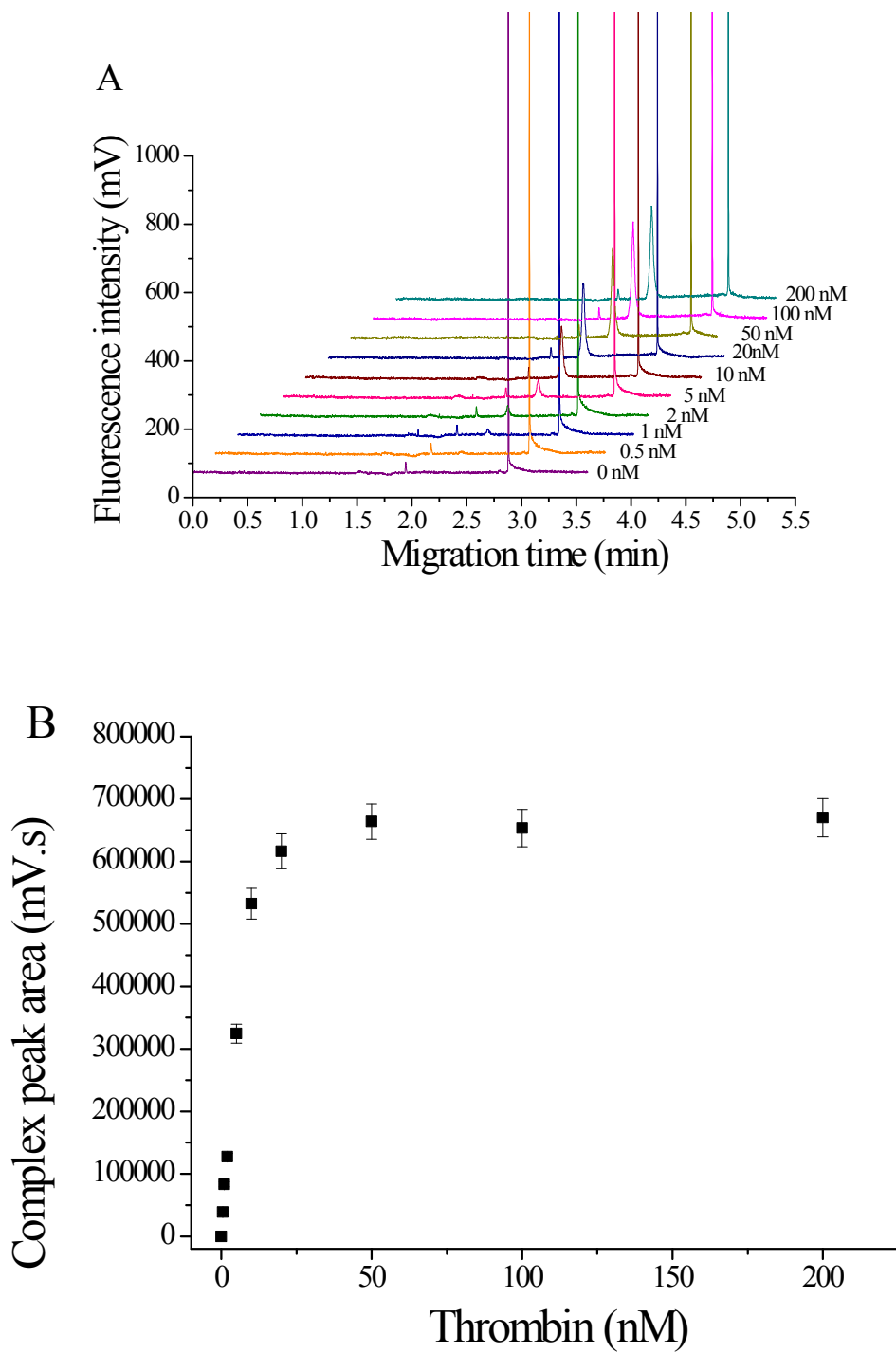


Fig. S1 CE-LIF detection of varying concentrations of thrombin by Apt29-5'TMR (10 nM) in the sample buffer (10 mM Tris-HCl, pH 7.5) containing 1 mM MgCl₂. (A) Electropherograms corresponding to varying concentrations of thrombin. The corresponding concentration of thrombin was indicated at traces. (B) Relationship between the peak area of the complex peak and the thrombin concentration.

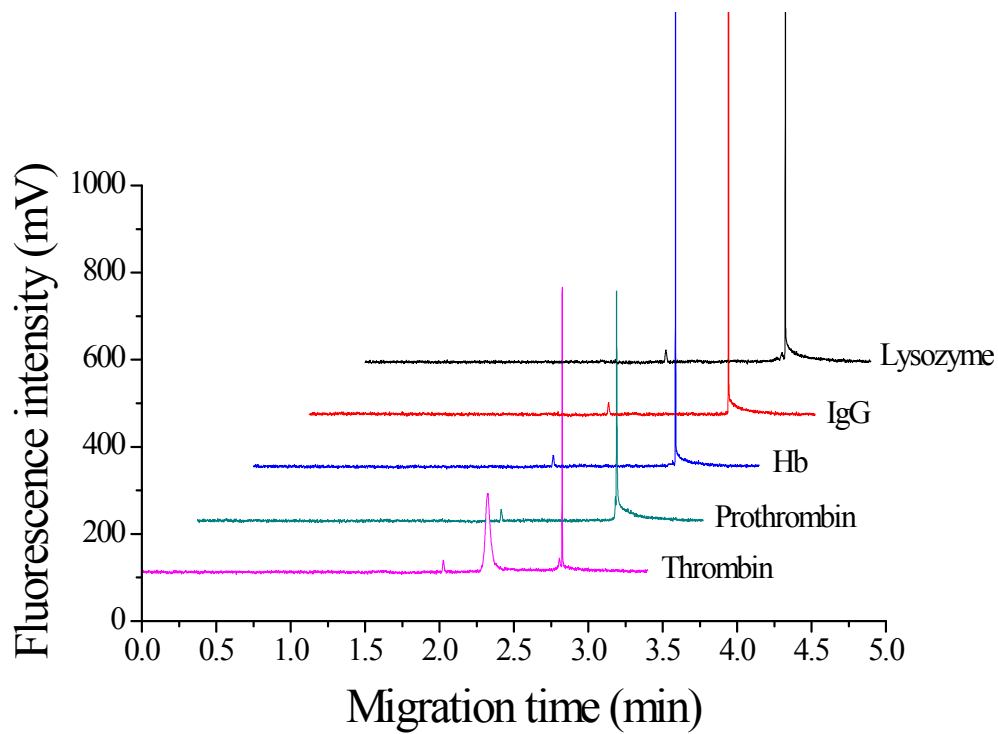


Fig. S2 Specificity test of CE-LIF detection of thrombin by Apt29-5'TMR. 10 nM Apt29-5'TMR was applied, and 10 nM other proteins were tested.

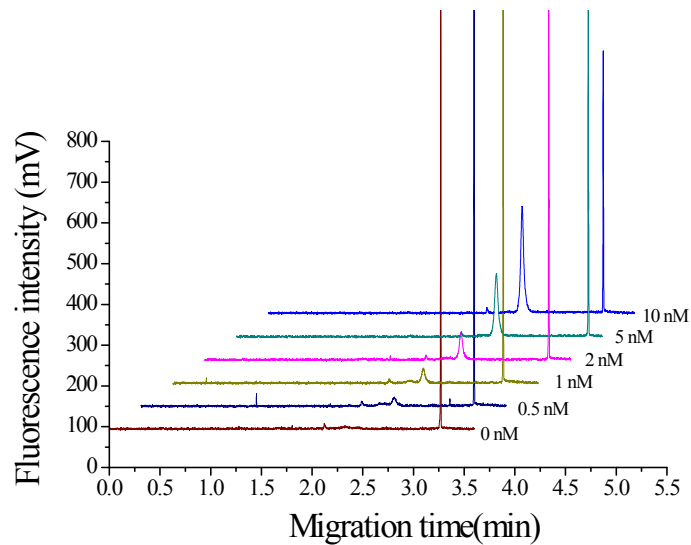


Fig. S3 CE-LIF detection of varying concentrations of thrombin spiked in 2% human serum in sample buffer (10 mM Tris-HCl, pH 7.5) containing 1 mM MgCl₂ and 10 mM NaCl by Apt29-5'TMR. The corresponding concentration of thrombin was indicated at traces in the electrophoregrams.