Supplementary Material (ESI) for Chemical Communications

A DNAzyme Cascade for the Amplified Detection of Pb^{2+} Ions or L-Histidine

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Supporting Information

The composition of the system for analyzing Pb^{2+} was optimized by different ratios of (**1**) and (**2**). We studied the following ratios: 1:1, 2:1, 4:1, 6:1, 8:1.This studies were aimed to detect the ratio of the components at which the horseradish peroxidase mimicking DNAzyme is fully blocked in the form of the (**1**):(**2**) complex , and the background color or chemiluminescence are essentially generated by free hemin. Figure 1S depicts the experimented results .

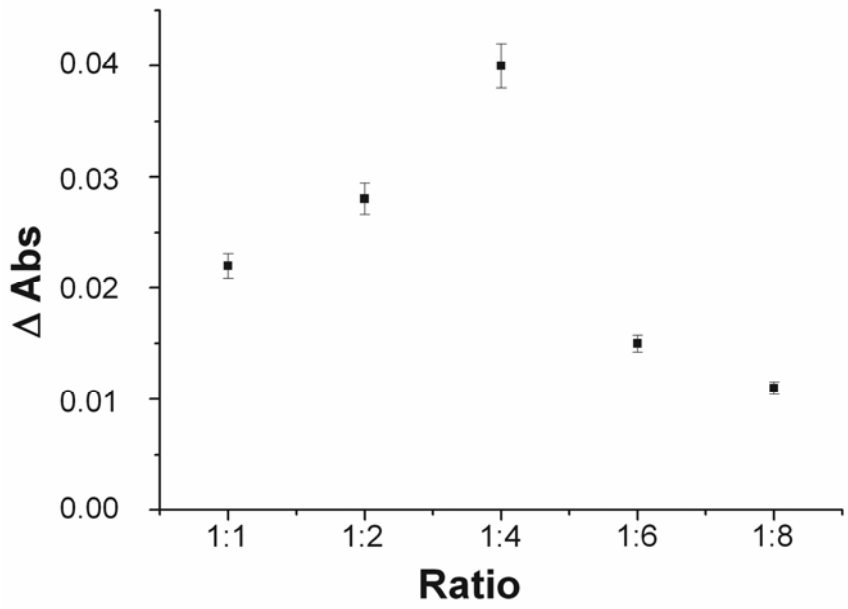

Figure 1S: Absorbance changes corresponding to the difference between the absorbance generated after 2.5 minutes by the system consisting of the respective ratio of (**1**) and (**2**) in the presence of Pb^{2+} , $1x10^{-5}$ M, and the absorbance generated after 2.5 minutes by the system consisting of (**1**) and (**2**) in the absence of Pb^{2+}.