Electronic Supplementary Material (ESI) for Analyst

Supporting Information

Hairpin Oligonucleotides Anchored Terbium ion: A Fluorescent Probe to Specially Detect Lead (II) in Sub-nM Level

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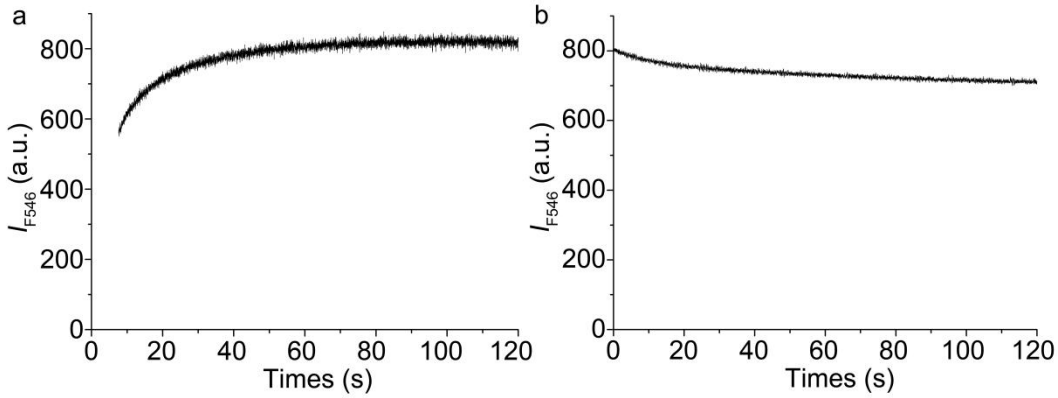

Figure S1. (a) Kinetics of fluorescence intensity of Tb-GH5 (emission at 546 nm), counted from the terbium ions begin to coordinate with GH5. (b) Photo-bleaching of Tb-GH5 probe under the excitation at 260 nm.

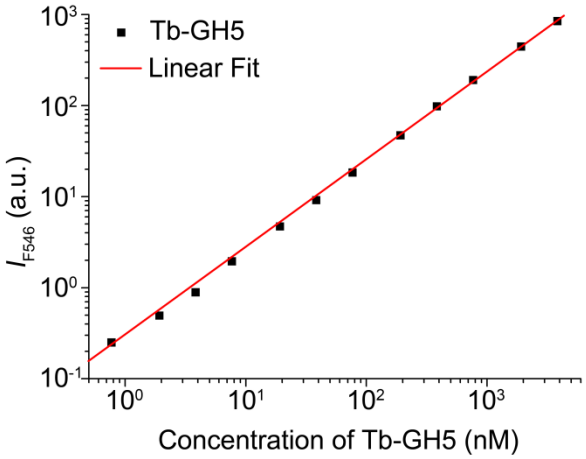

Figure S2. Fluorescence of Tb-GH5 probe plotted with respect to its series concentration (from 0.77 nM to 3.85 μM). The fluorescence shows a linear relation, which is a good optical feature for a probe.

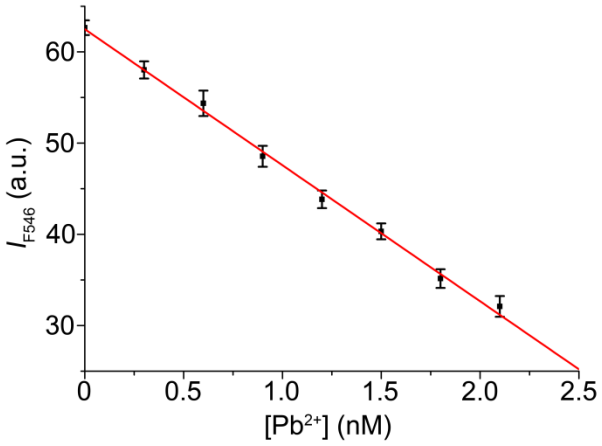

Figure S3. Fluorescence intensity of Tb-GH5 (3.85 nM, with other metal ions of 1 nM each) plotted with respect to the concentration of Pb^{2+}. The fluorescence shows a linear relation. LOD is 0.1 nM.