Electronic Supplementary Material (ESI) for Analytical Methods.

Supporting Information

A novel sensing membrane for the determination of ferric ion in aqueous solutions

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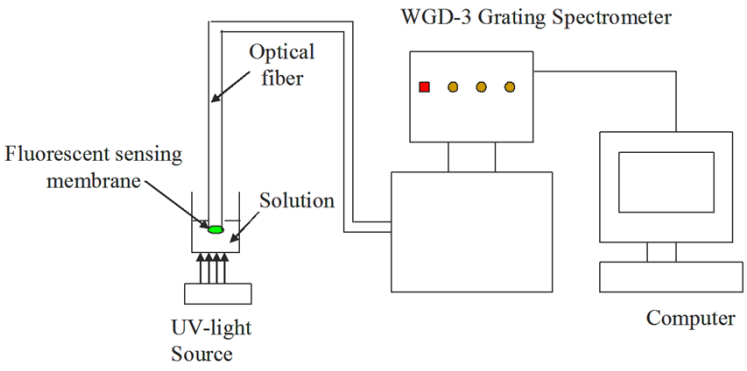

Figure S1 Construction of the fluorescence detection system.

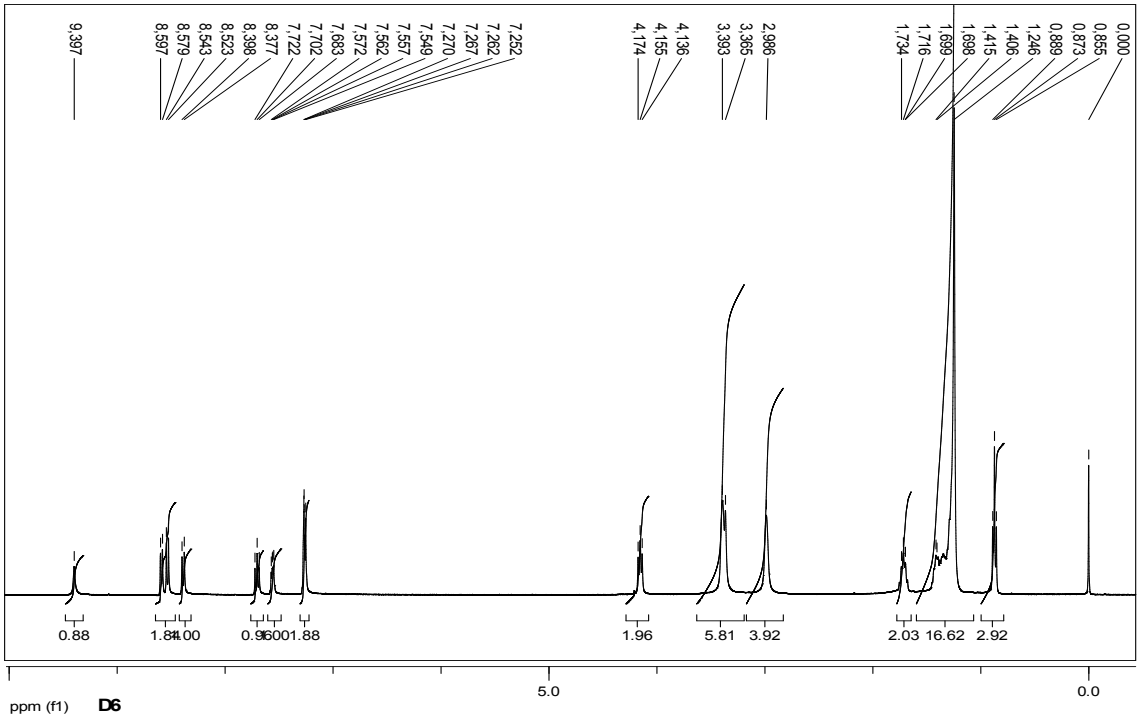

Figure S2 ^{1}H NMR of **D6**

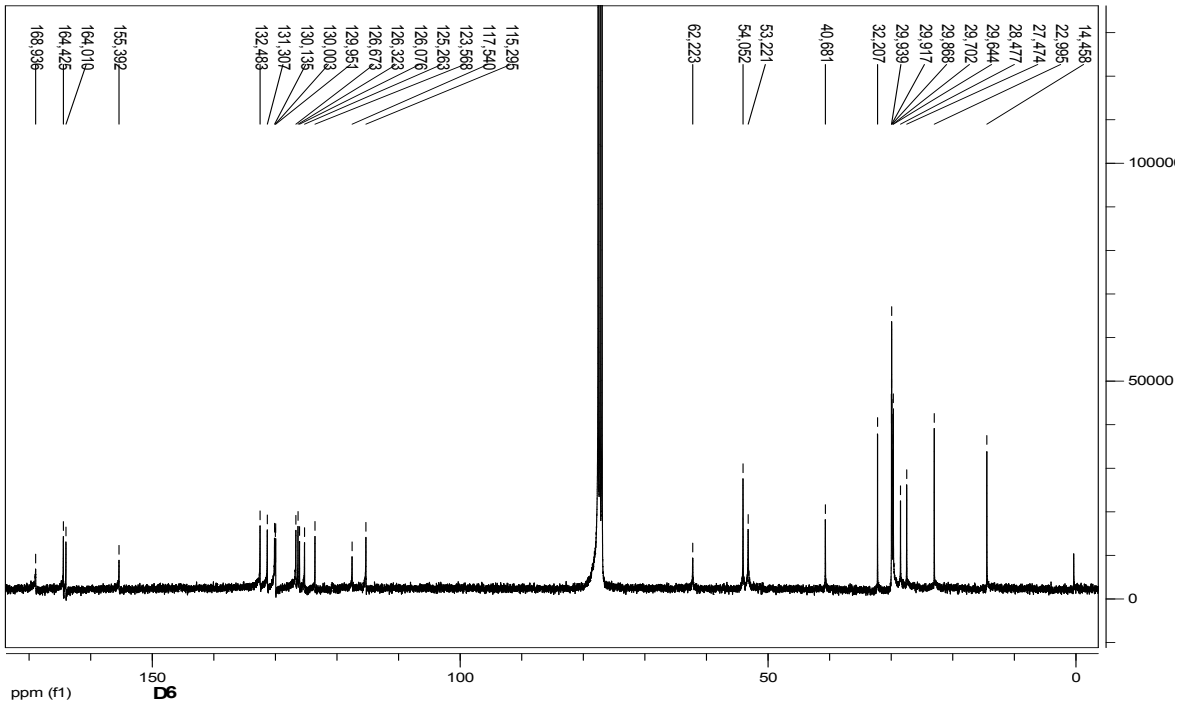

Figure S3 ^{13}C NMR of **D6**

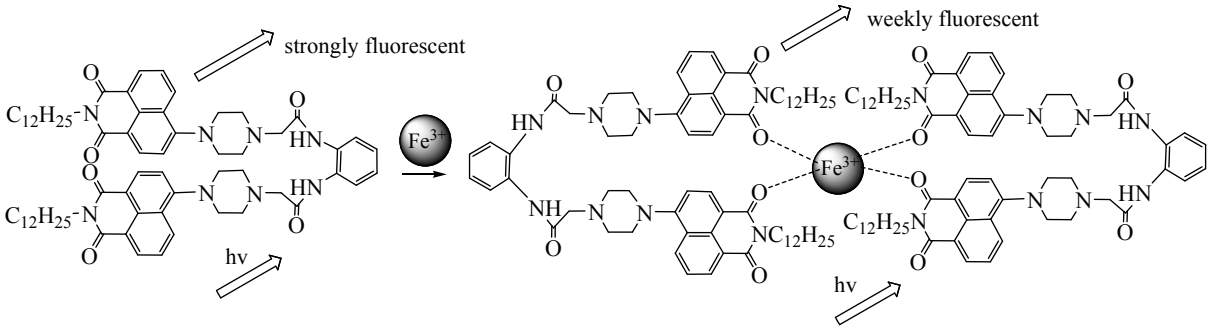

Figure S4 The impossible mode of Fe^{3+} binding with D6

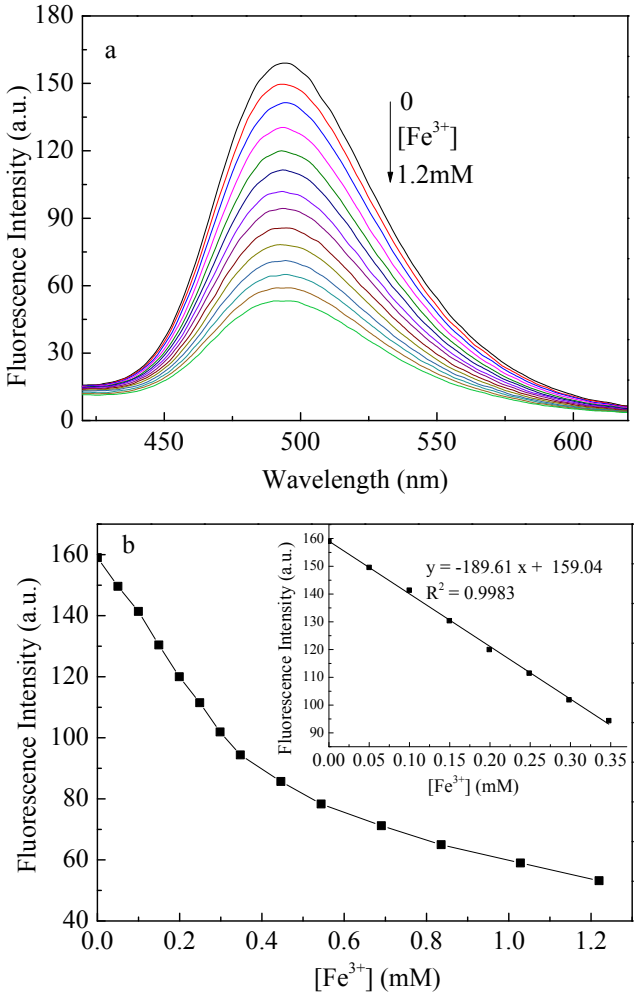

Figure S5 Fluorescence spectra (a) and fluorescence intensity (b) of SM-1 in aqueous solutions of HAc-NaAc (10 mM) with increasing concentrations of Fe^{3+} at pH 5.0. λ_{ex} = 365 nm.

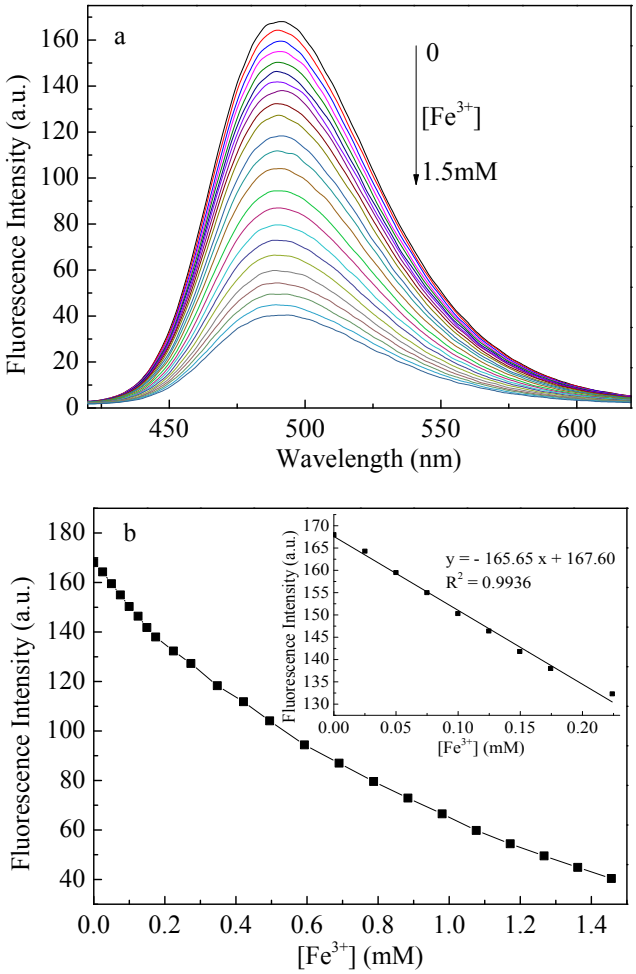

Figure S6 Fluorescence spectra (a) and fluorescence intensity (b) of SM-2 in aqueous solutions of HAc-NaAc (10 mM) with increasing concentrations of Fe^{3+} at pH 5.0. λ_{ex} = 365 nm.

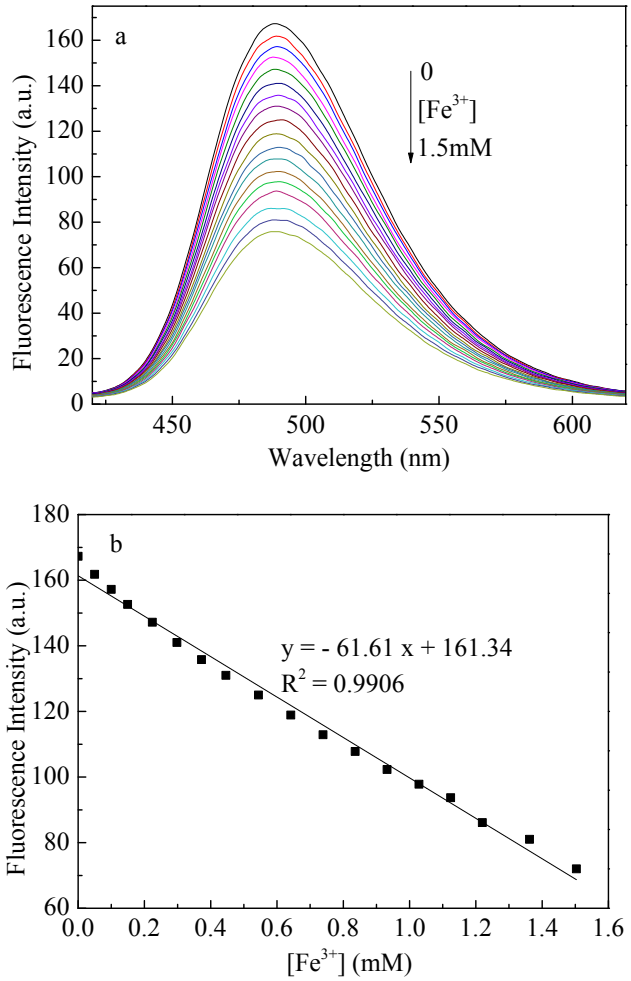

Figure S7 Fluorescence spectra (a) and fluorescence intensity (b) of SM-3 in aqueous solutions of HAc-NaAc (10 mM) with increasing concentrations of Fe^{3+} at pH 5.0. λ_{ex} = 365 nm.

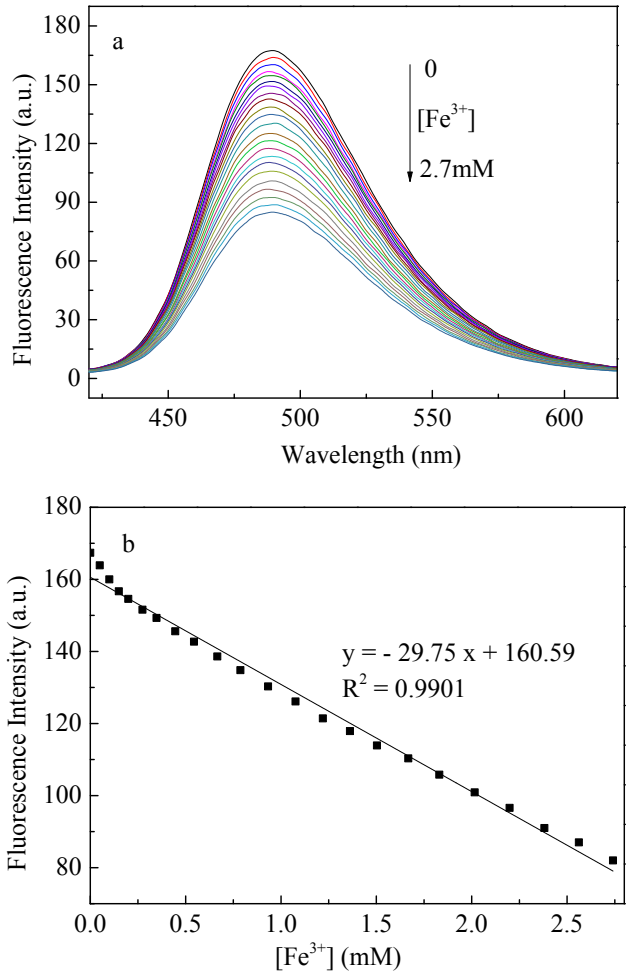

Figure S8 Fluorescence spectra (a) and fluorescence intensity (b) of SM-4 in aqueous solutions of HAc-NaAc (10 mM) with increasing concentrations of Fe^{3+} at pH 5.0. λ_{ex} = 365 nm.

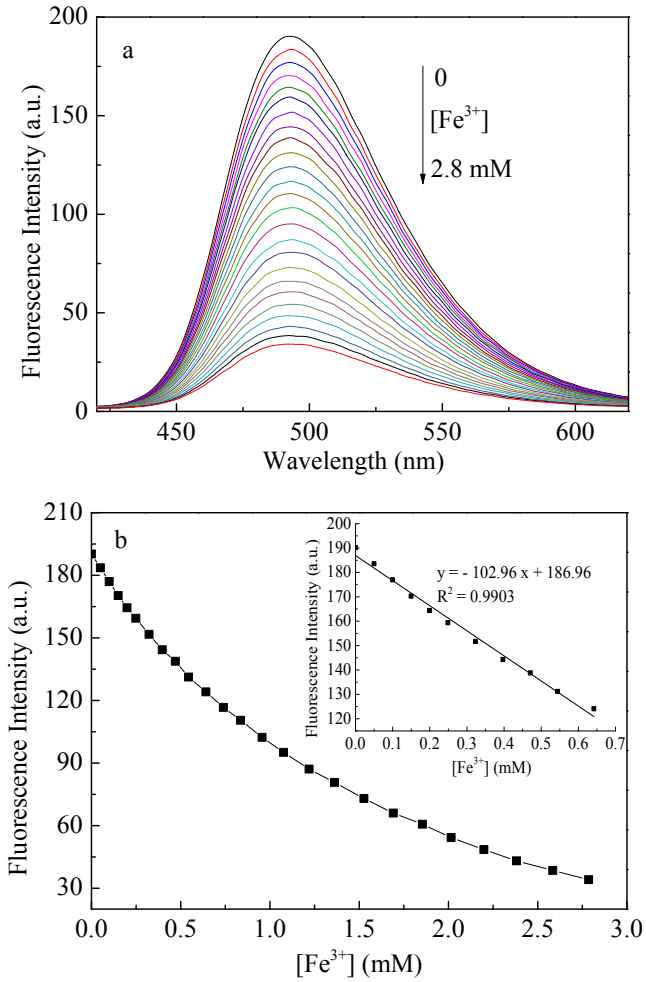

Figure S9 Fluorescence spectra (a) and fluorescence intensity (b) of SM-5 in aqueous solutions of HAc-NaAc (10 mM) with increasing concentrations of Fe^{3+} at pH 5.0. λ_{ex} = 365 nm.