

Supplementary Material

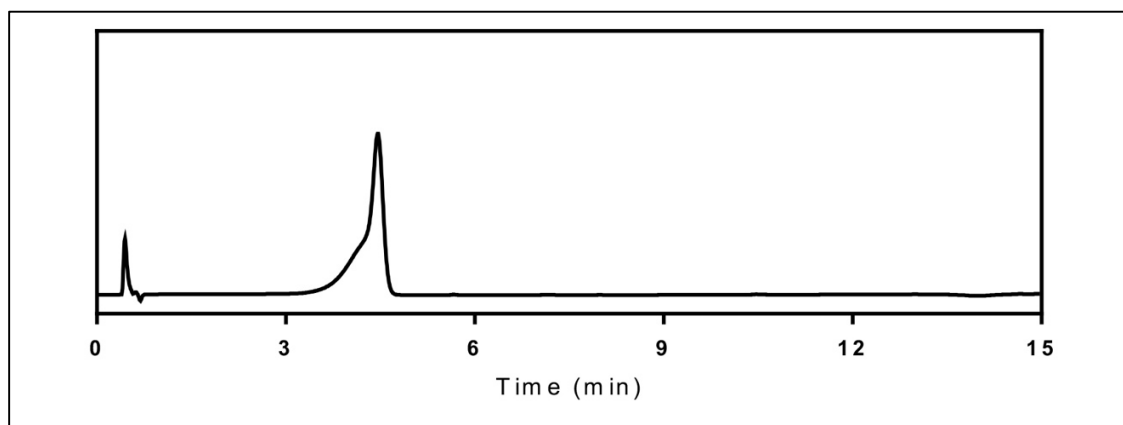


Figure S1. HPLC spectrum of compound AI-II

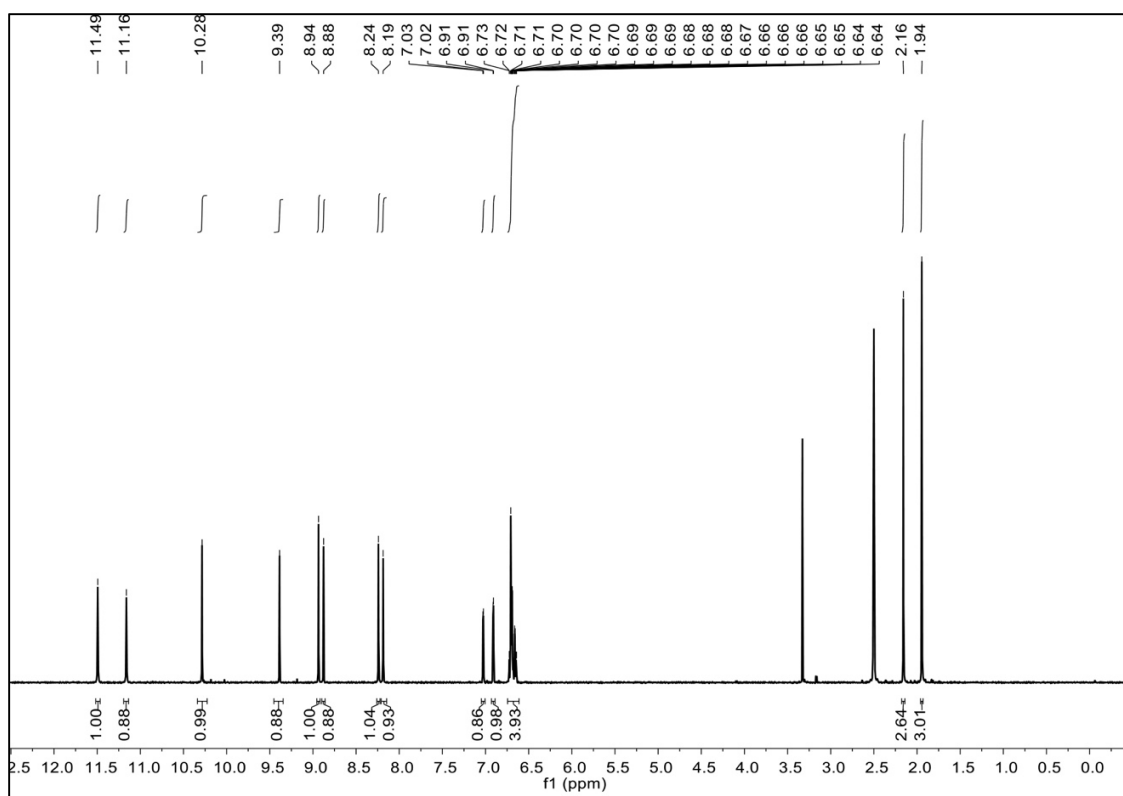


Figure S2. ¹H NMR spectrum of compound AI-II

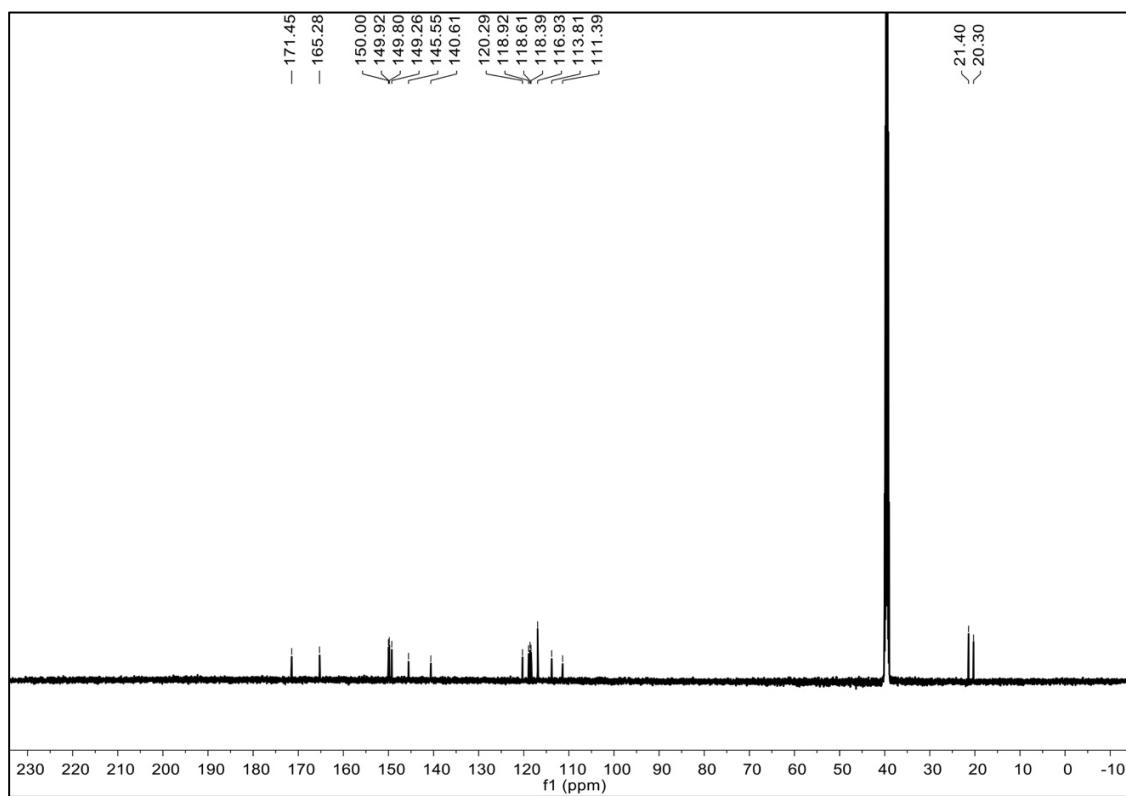


Figure S3. ¹³C NMR spectrum of compound Al-II.

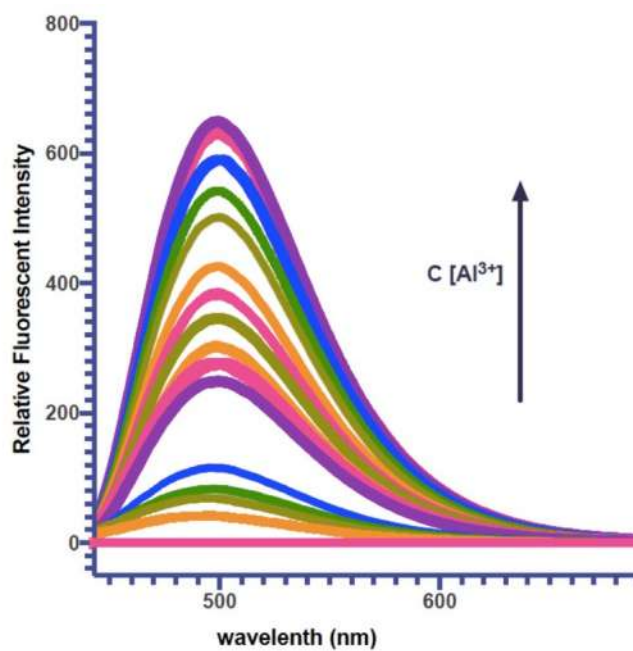


Figure S4. Fluorescent spectra of **Al-II** probe (10 μM) with titration of increased concentration of Al^{3+} (1 μM to 50 μM) after spectra subtraction of **Al-II** probe.

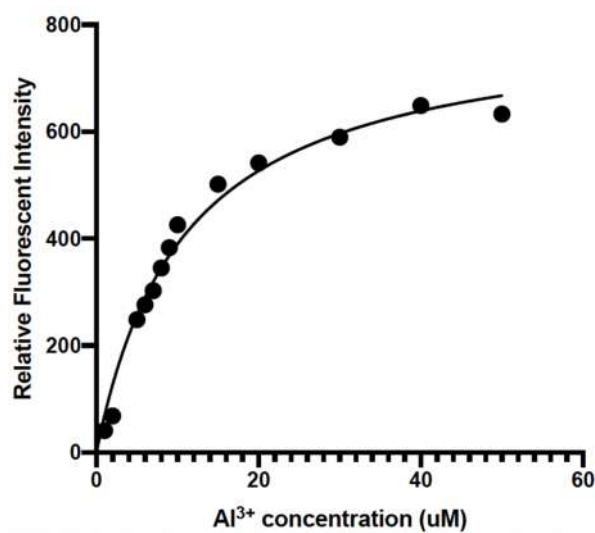


Figure S5. Nonlinear one-site specific binding curve with relative fluorescent intensity after Al^{3+} (1 μM to 50 μM) titration ($R^2 = 0.9816$, $K_d = 10.8$).

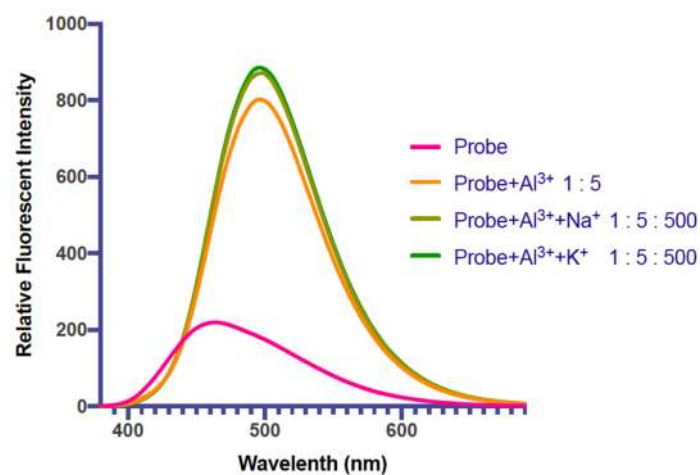


Figure S6. Fluorescence response of the probe to Al^{3+} in the presence of higher concentration of Na^+ and K^+ .

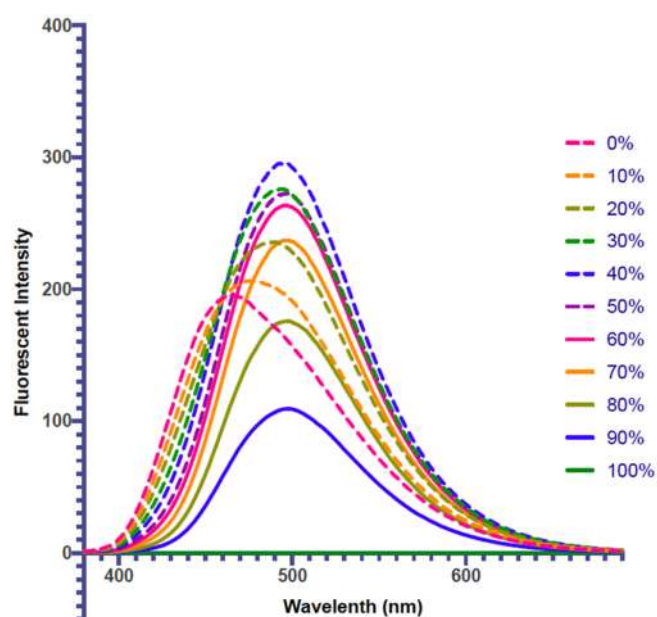


Figure S7. Original fluorescent spectra of different combination system of Al^{3+} and probe (with Al^{3+} from 0% to 100%, the total concentration is 10 μM).

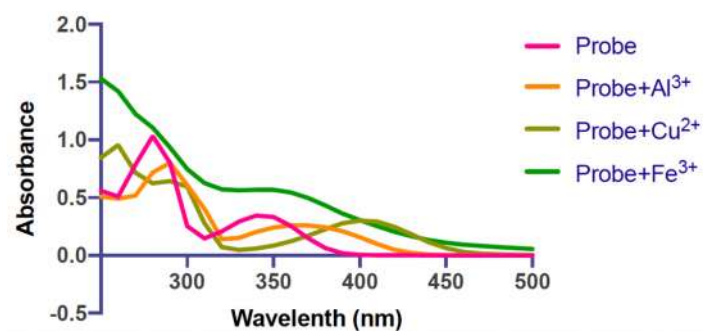


Figure S8. Absorbance spectra of Probe Al-II (25 μM) with Al³⁺, Cu²⁺ or Fe³⁺ (250 μM).