

Figure S1. ^1H NMR spectrum of receptor **1** (CDCl_3 , 400 MHz).

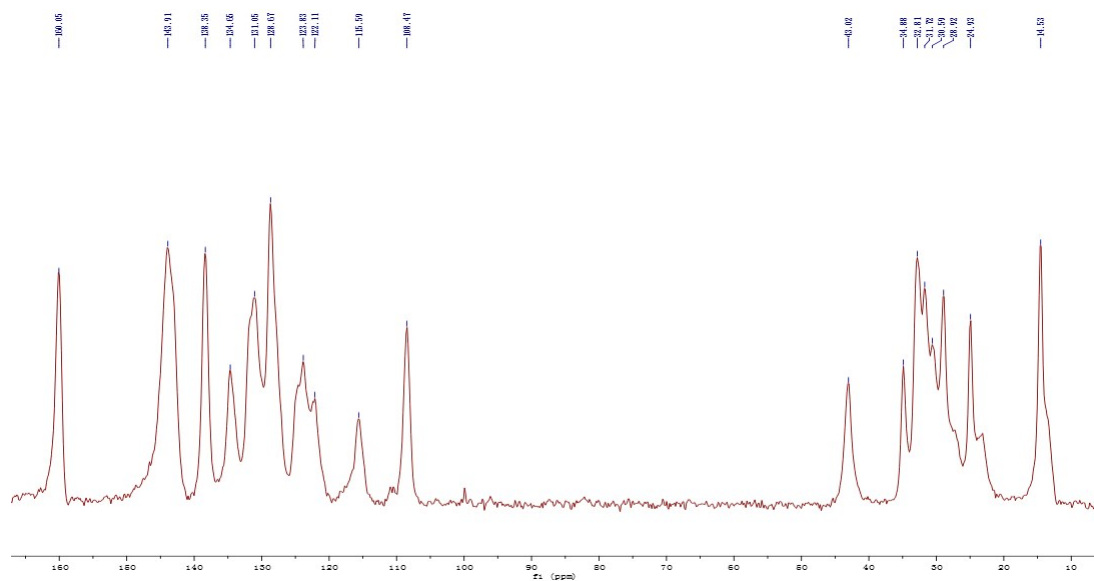


Figure S2. ^{13}C NMR spectrum of receptor **1** in solid state.

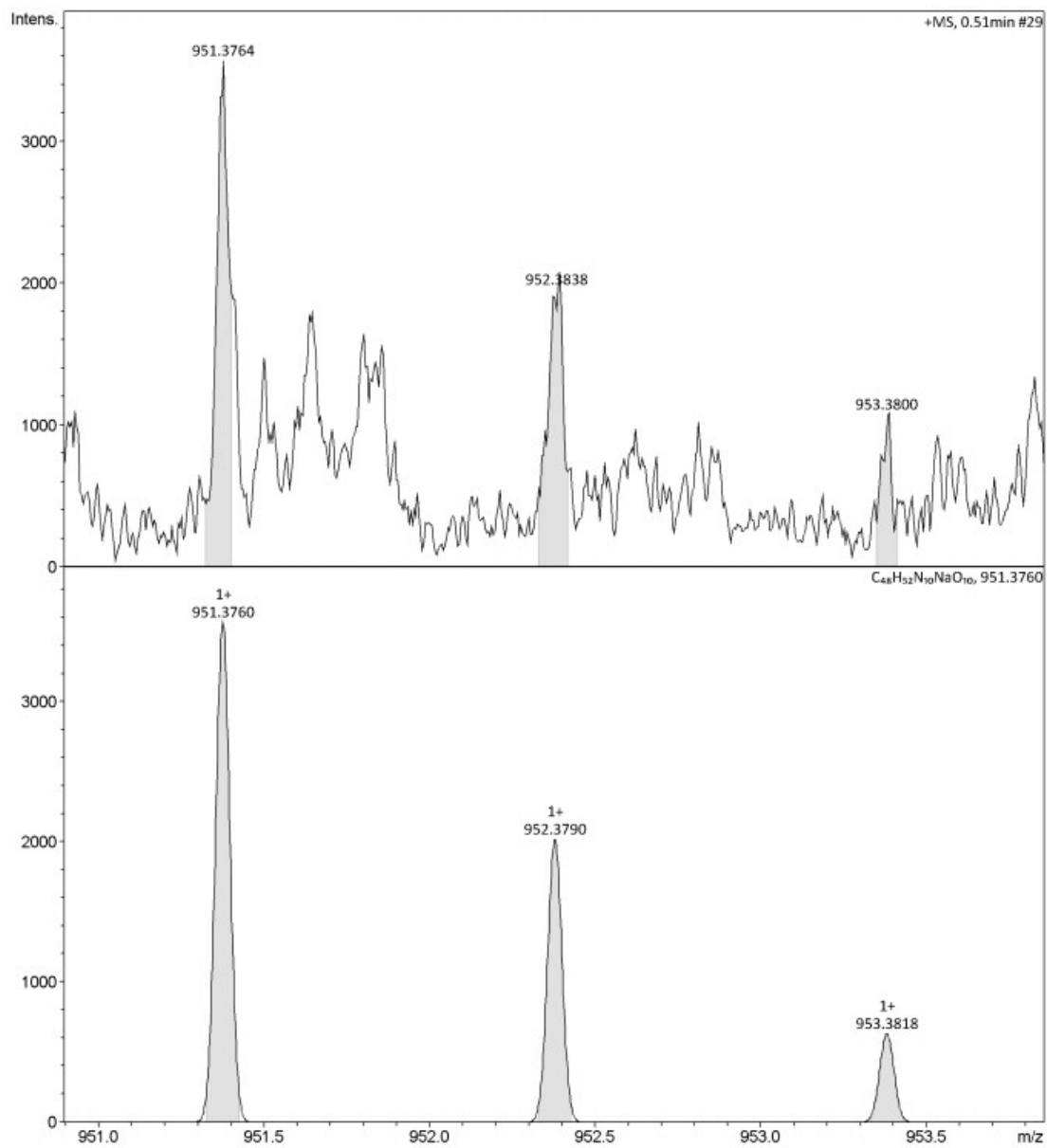


Figure S3. HRMS-ESI spectrum of receptor 1.

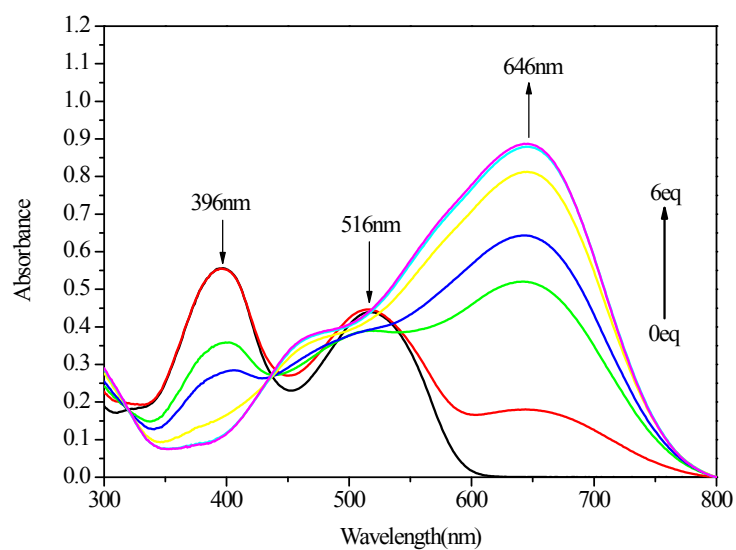


Figure S4. The absorption spectra of receptor **1** (10 μ M) in THF/H₂O (93/7, v/v) with the addition of different equivalents of hydroxyl ions.

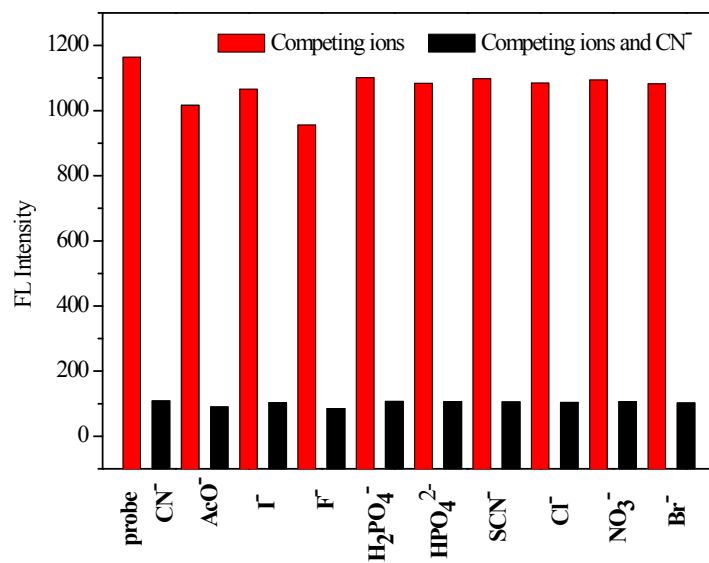


Figure S5. Competing responses of probe **1** (10 μ M) toward various anions in THF/H₂O (93/7, v/v). λ_{ex} = 516 nm, λ_{em} = 601 nm.

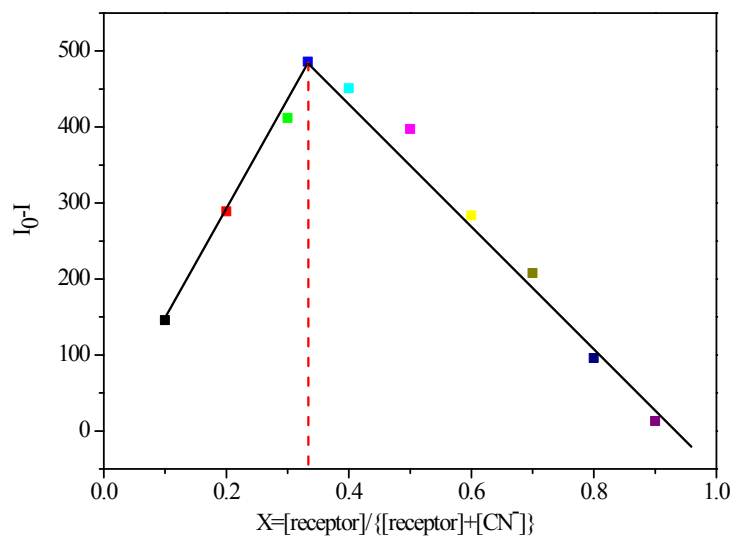


Figure S6. Job's plot for the evolution of binding stoichiometry between receptor **1** and cyanide ions in THF/H₂O (93/7, v/v) solution. The total concentration of cyanide ions and receptor **1** was 10 μM.

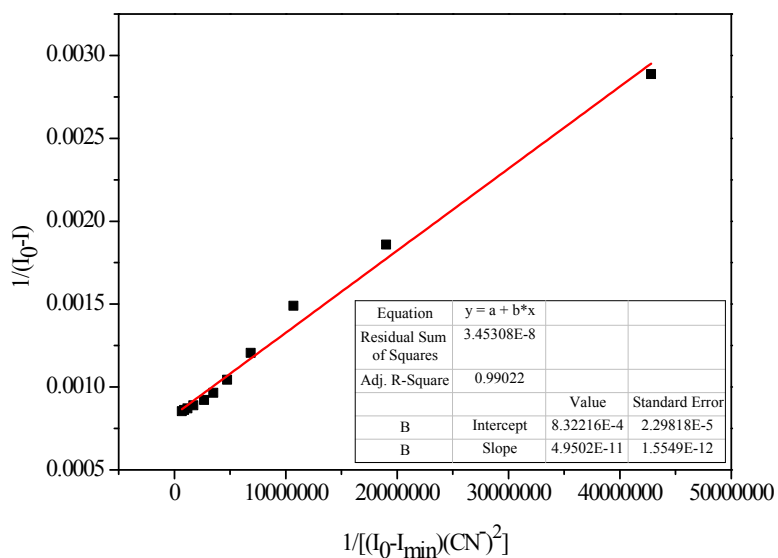


Figure S7. Benesi-Hildebrand plot of receptor **1** (10 μM) using 1:2 stoichiometry for association between receptor **1** and cyanide ions.

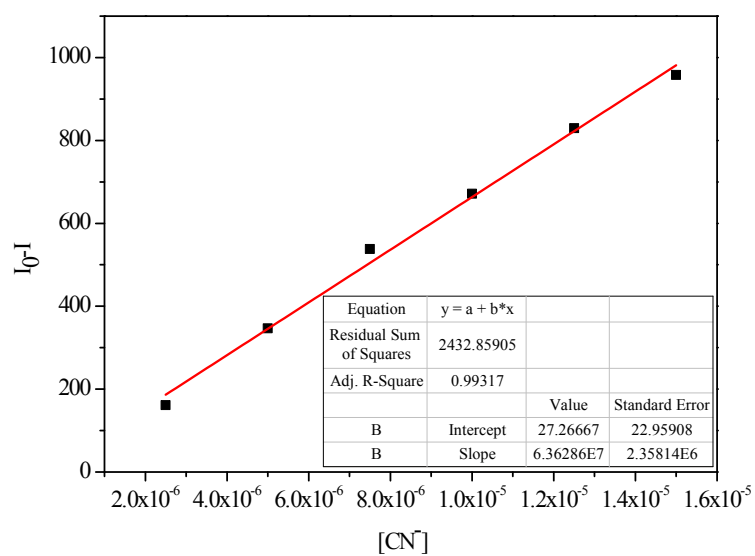


Figure S8. The linear dynamic fluorescence response for the titration of receptor **1** with cyanide ions to determine the limits of detection (LOD).



Fig. S9 Color change of **1**-based test strips before and after addition of CN^- .