

## 2-Thiohydantoin Containing OH and NH Recognition Subunits: A Fluoride Ion Selective Colorimetric Sensor

Xue Yong, Mingjian Su, Wen Wan, Wenwei You, Xinwei Lu, Jinqing Qu, Ruiyuan Liu

### Contents

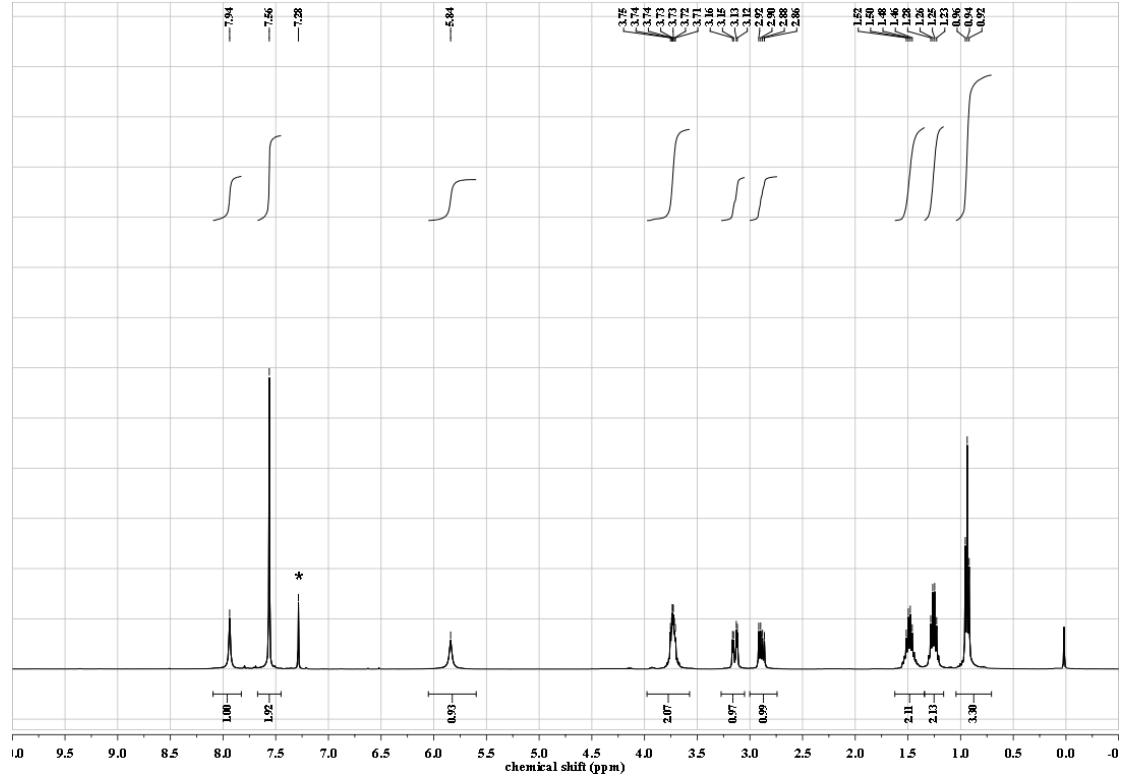
Fig S1  $^1\text{H}$  NMR spectrum of receptor **1** in  $\text{CDCl}_3$ . The solvent peaks are marked with asterisks.

Fig S2  $^{13}\text{C}$  NMR spectrum of receptor **1** in  $\text{CDCl}_3$ .

Fig S3 IR spectrum of receptor **1**

Fig S4 Visible color changes of receptor **1** in  $\text{CH}_3\text{CN}$  in presence of (a) 0 uM, (b) 0.1uM, (c) 1uM, (d) 10uM TBAF ( $[\mathbf{1}] = 1.0 \text{ mM}$ ).

Fig S5 Partly  $^1\text{H}$  NMR spectra of receptor **1** in the presence of (a) 0, (b) 1.0, (c) 2.0, and (d) 4.0 equiv of TBAF in  $\text{CDCl}_3$ .



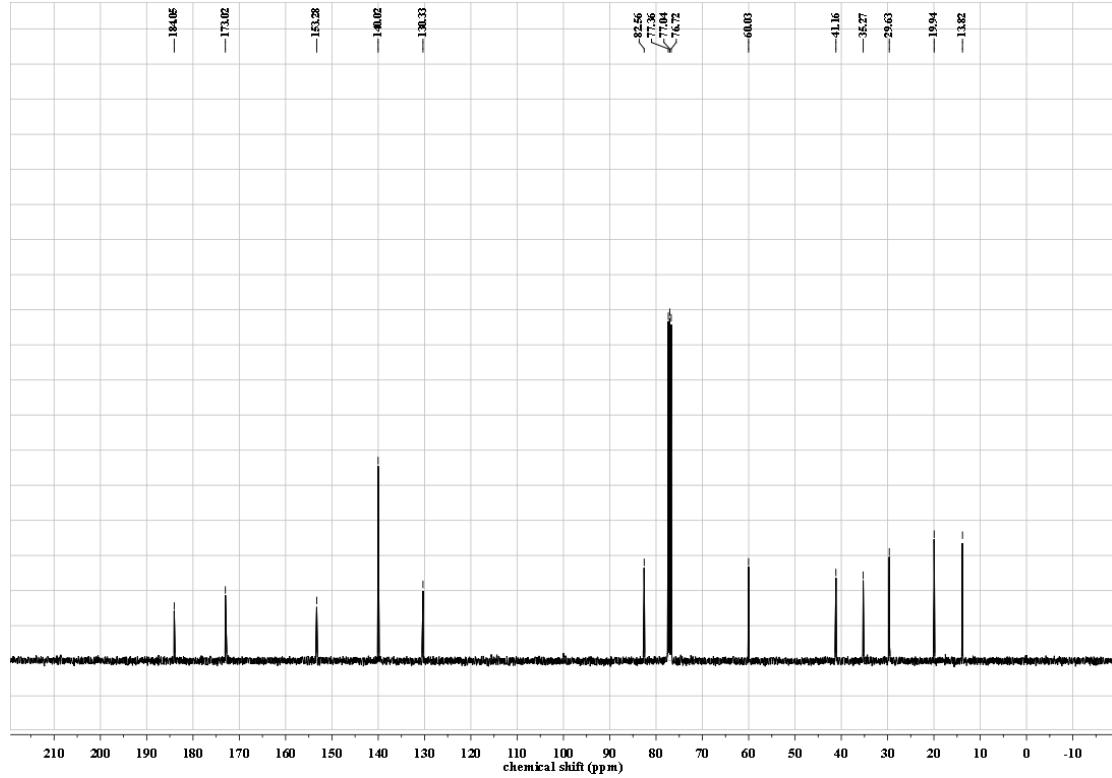


Fig S2 <sup>13</sup>C NMR spectrum of receptor 1 in  $\text{CDCl}_3$ . The solvent peaks are marked with asterisks.

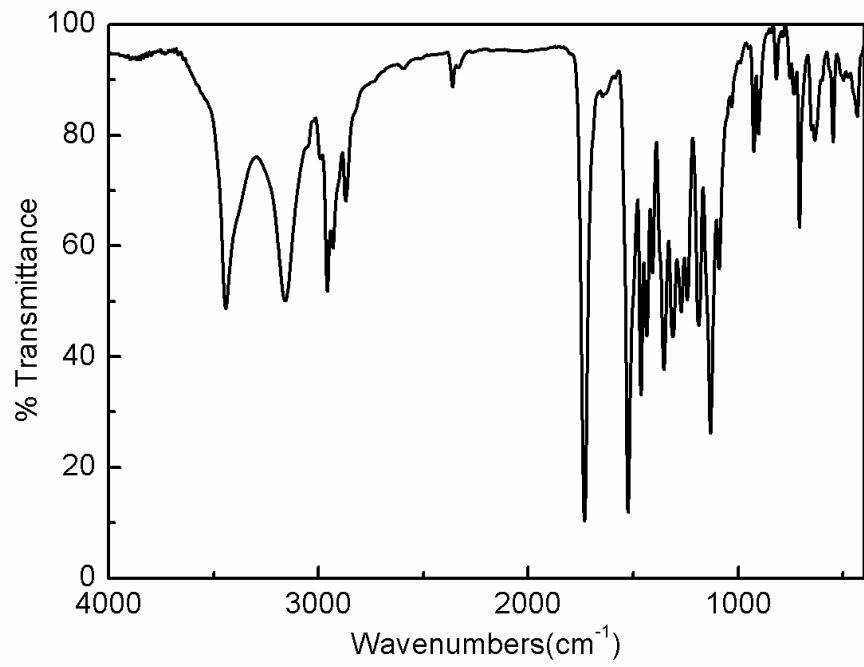


Fig S3 IR spectrum of receptor **1**

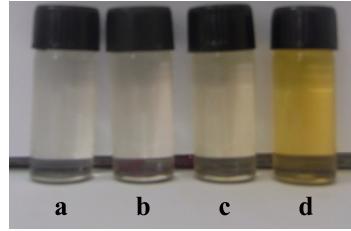


Fig S4 Visible color changes of receptor **1** in  $\text{CH}_3\text{CN}$  in presence of (a) 0  $\mu\text{M}$ , (b) 0.1 $\mu\text{M}$ , (c) 1 $\mu\text{M}$ , (d) 10 $\mu\text{M}$  TBAF ( $[\mathbf{1}] = 1.0 \text{ mM}$ ).

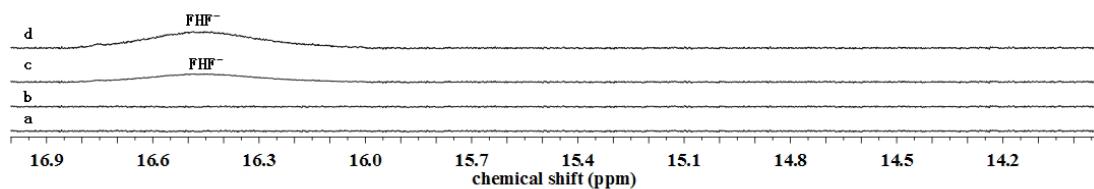


Fig S5 Partly <sup>1</sup>H NMR spectra of receptor **1** in the presence of (a) 0, (b) 1.0, (c) 2.0, and (d) 4.0 equiv of TBAF in CDCl<sub>3</sub>.