Supporting Information

For

A Thioether-Rich Crown-Based Highly Selective Fluorescent Sensor for Hg$^{2+}$ and Ag$^{+}$ in Aqueous Solution

Tao Chen, Weiping Zhu*, Yufang Xu, Shenyi Zhang, Xiaojun Zhang, Xuhong Qian

Shanghai Key Laboratory of Chemical Biology, School of Pharmacy, East China University of Science and Technology, Shanghai 200237, China

wpzhu@ecust.edu.cn
1. The characterization data of sensor 1

$^1$H-NMR spectrum of sensor 1

$^{13}$C NMR spectrum of sensor 1
HRMS spectrum of sensor 1
2. Absorption and Emission Spectra of 1 vs. Ag⁺

![Absorption and Emission Spectra](image)

**Fig. S1** (a) UV spectra of 1 upon addition of Ag⁺. (b) Fluorescence spectra of compound 1 upon addition of Ag⁺. Condition: 1 (10 μM) in 0.01 M Tris-HCl solution (ethanol:water = 20:80, v/v, pH 7.14)

3. ^1^H-NMR studies
Fig. S2  Partial $^1$H-NMR spectra of 1 (400 MHz, in DMSO-$d_6$) before (a) and after (b) the addition of 10 equiv of Hg(ClO$_4$)$_2$