

## **Supporting Information**

# **Design, Synthesis and Crystal Structure of a Novel Fluorescence Probe for Zn<sup>2+</sup> Based on Pyrano[3,2-c] Carbazole**

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## **1.NMR spectra for probe characterization**

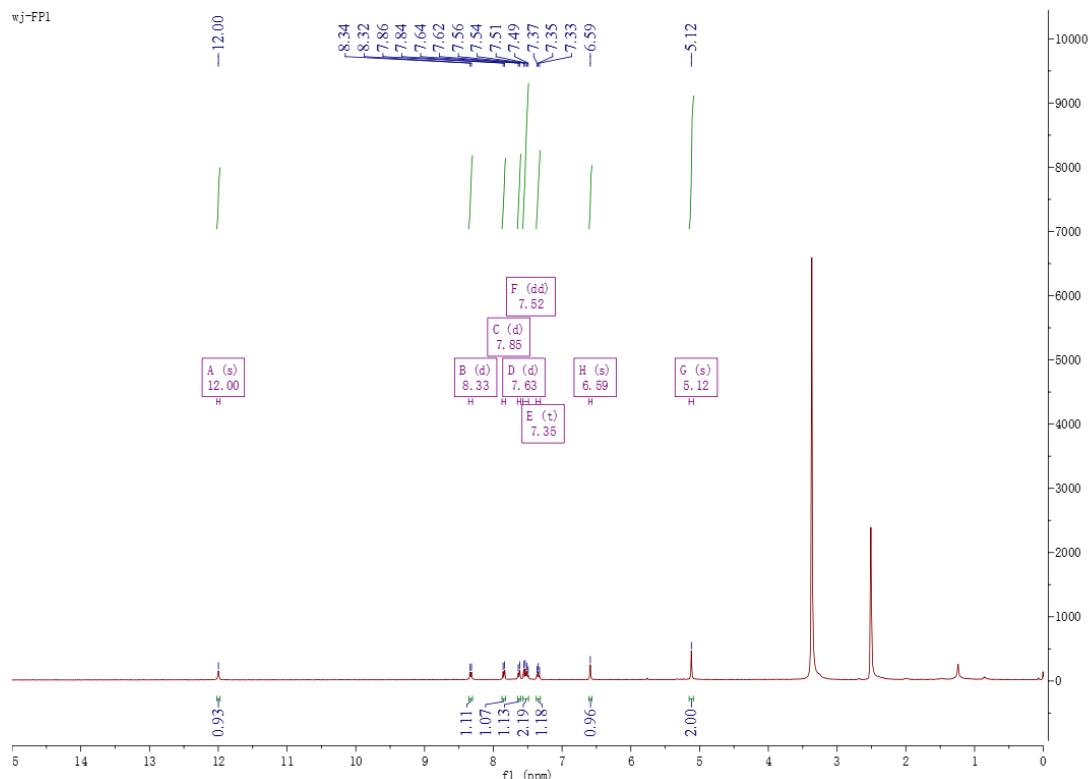


Figure S1. <sup>1</sup>H NMR for FP1 in DMSO-*d*<sub>6</sub>

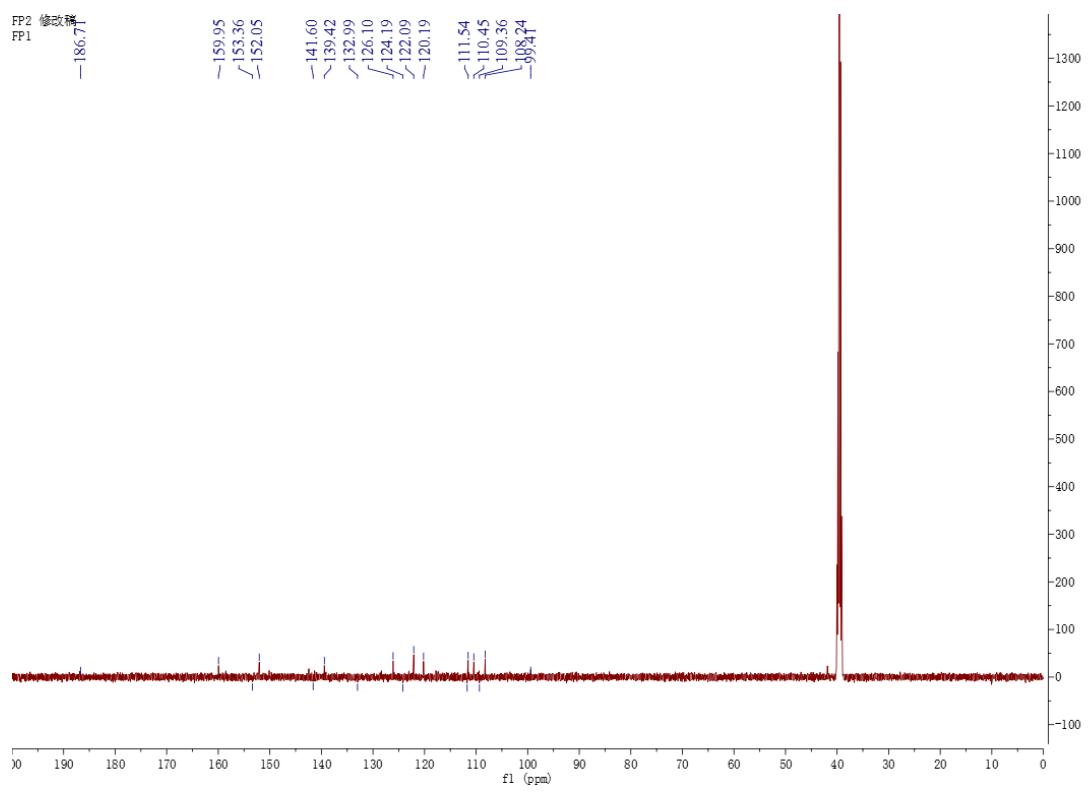


Figure S2  $^{13}\text{C}$ NMR for FP1 in  $\text{DMSO}-d_6$

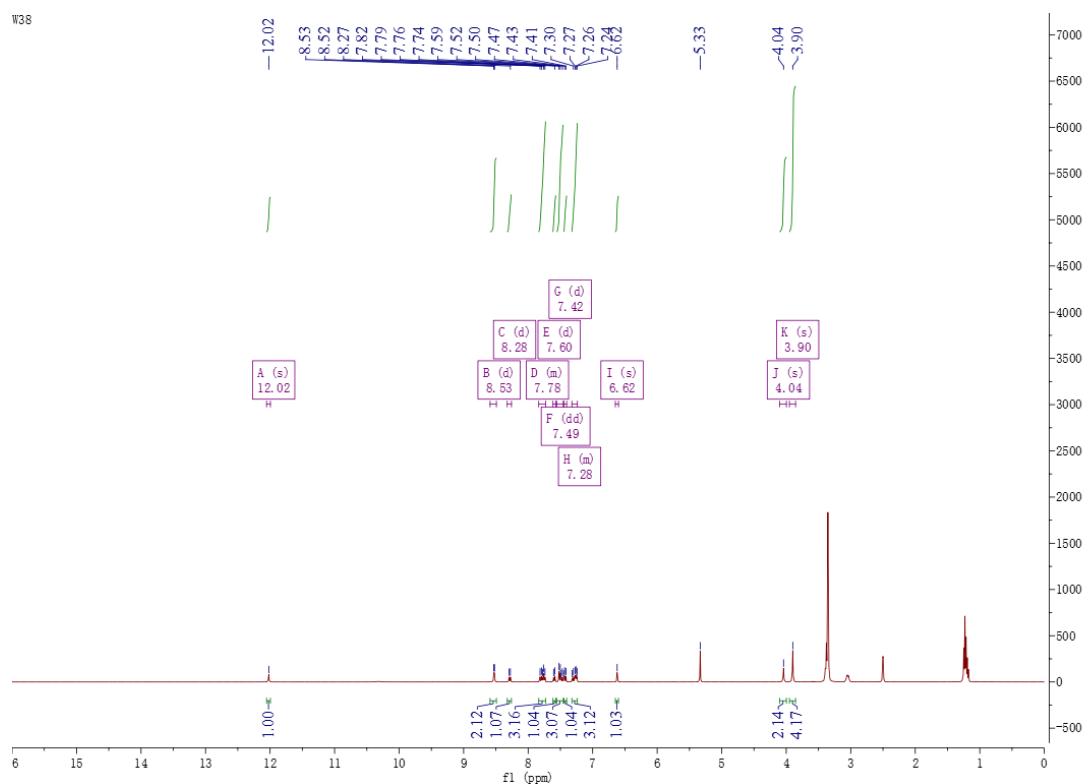


Figure S3  $^1\text{H}$ NMR for FP2 in  $\text{DMSO}-d_6$

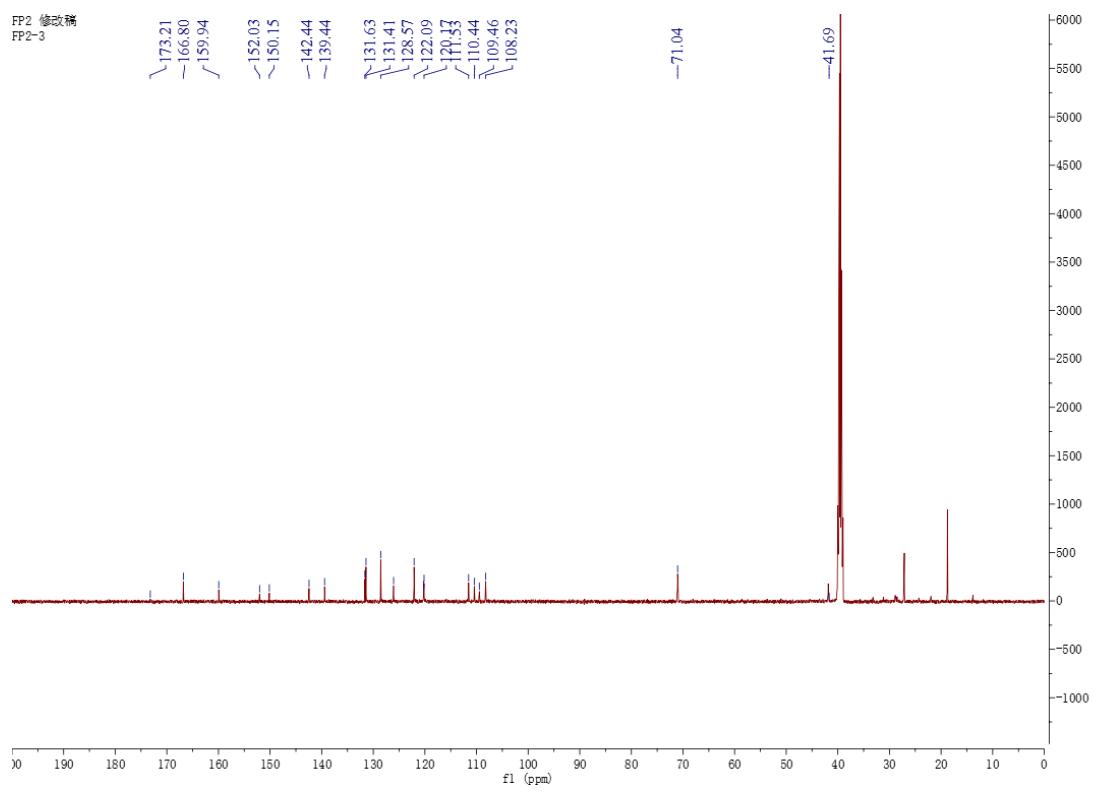


Figure S4  $^{13}\text{C}$ NMR for FP2 in  $\text{DMSO}-d_6$

## 2. FT-IR spectra for probe characterization

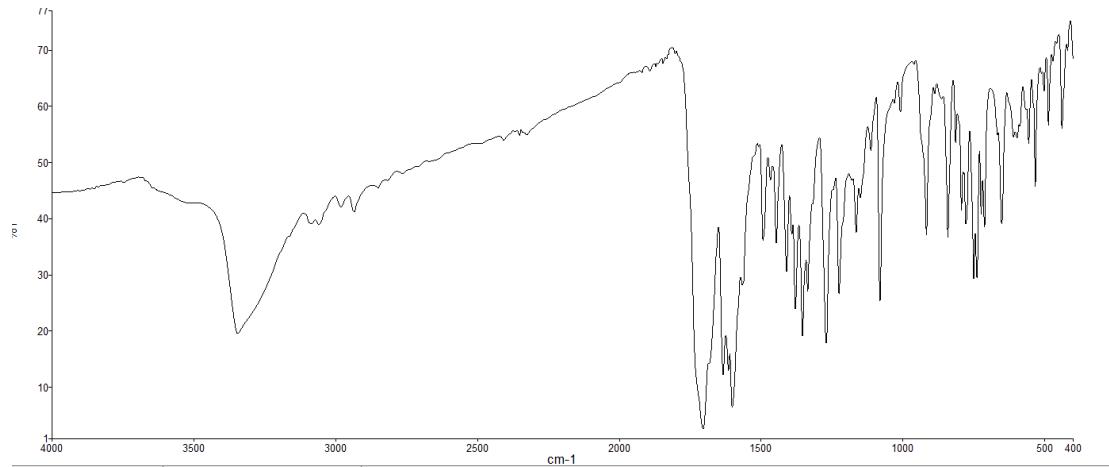


Figure S5 FT-IR for FP1

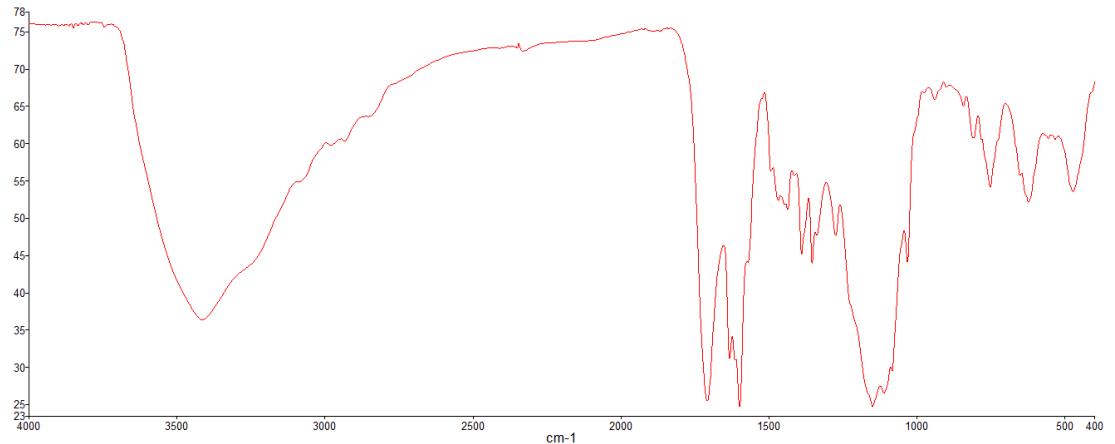


Figure S6 FT-IR for FP2

### 3. HRMS spectra for probe characterization

C16H10ClNO2 +H: C16 H9 Cl1 N1 O2 pa Chrg -1

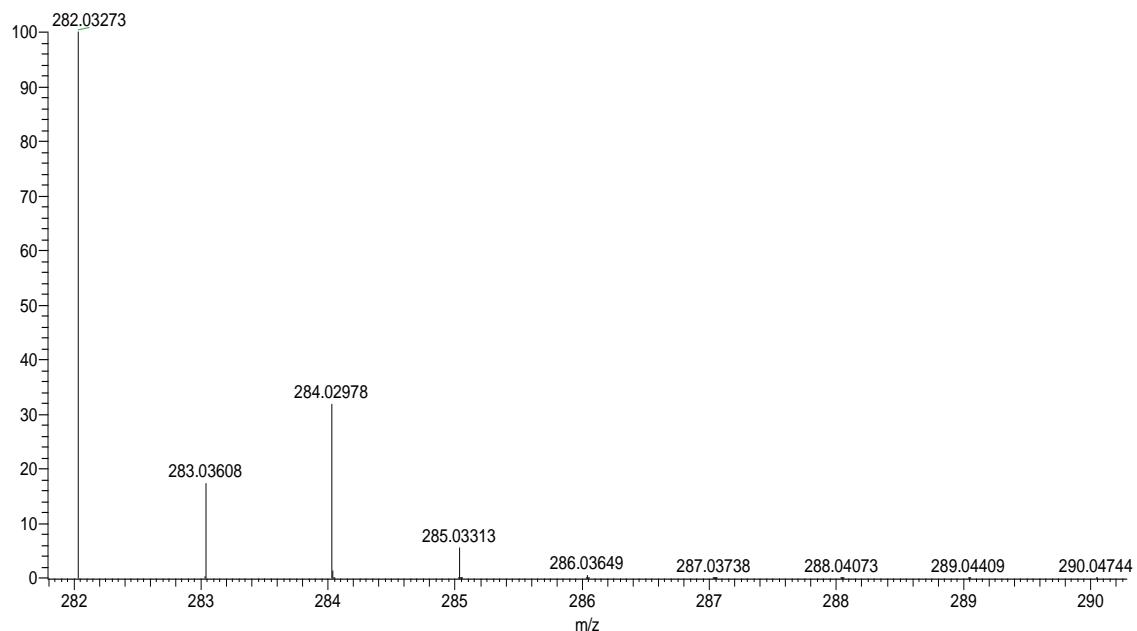


Figure S7 HRMS for FP1

C28H22N4O2 +H: C28 H23 N4 O2 pa Chrg 1

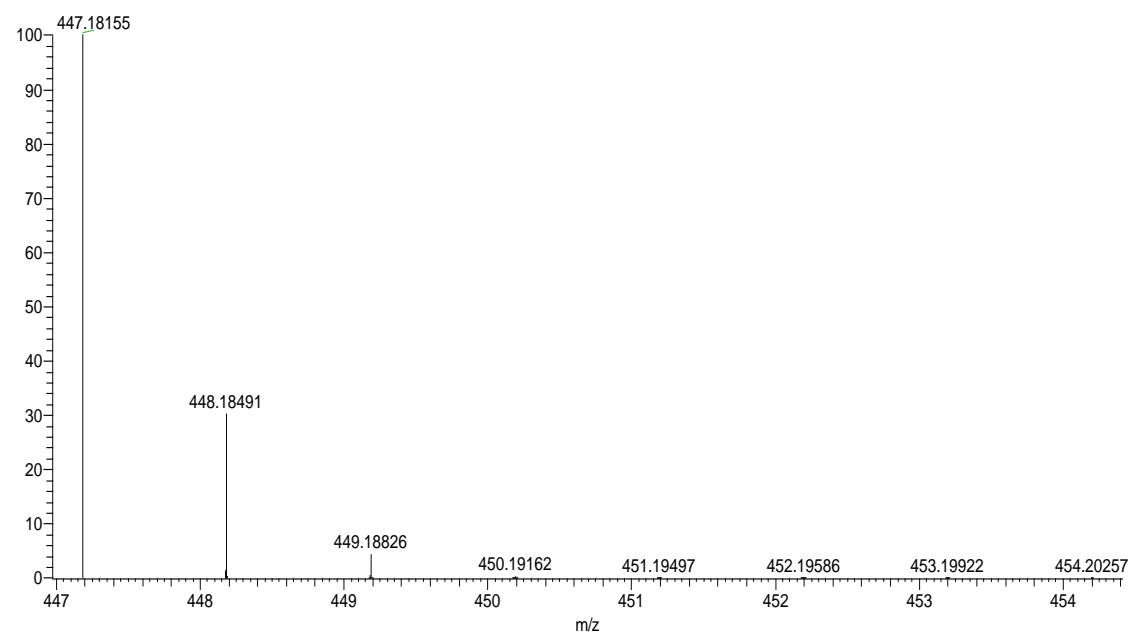


Figure S8 HRMS for FP2