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Dihydronaphthalene based fluorescence probe for sensitive detection of Cysteine and its application in bioimaging

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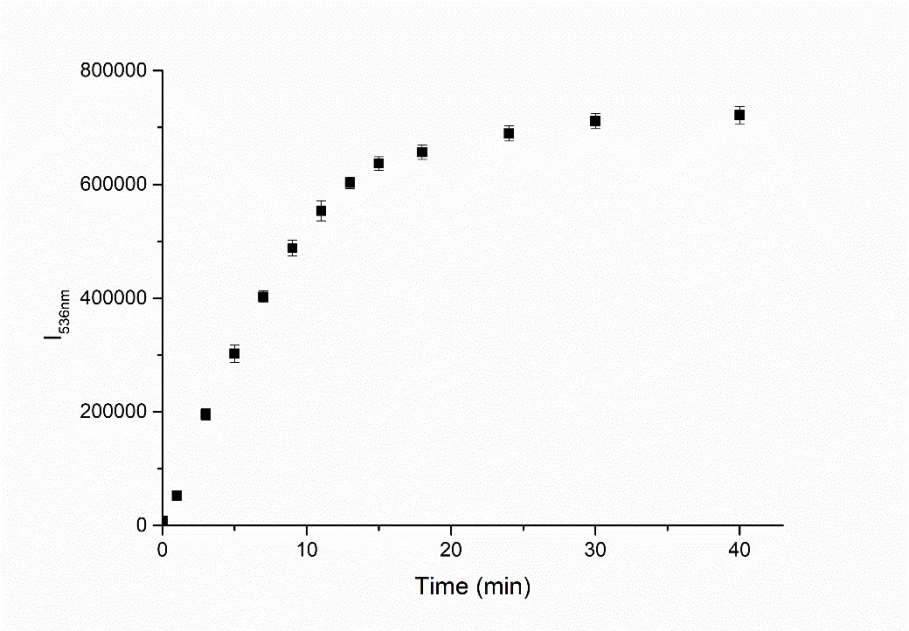

Fig. S1 Reaction time curve of probe **NC-Cys** (10 μM) in the presence of Cys (100 μM) in PBS buffer solution (10 mM, pH 7.4, containing 50% DMSO).

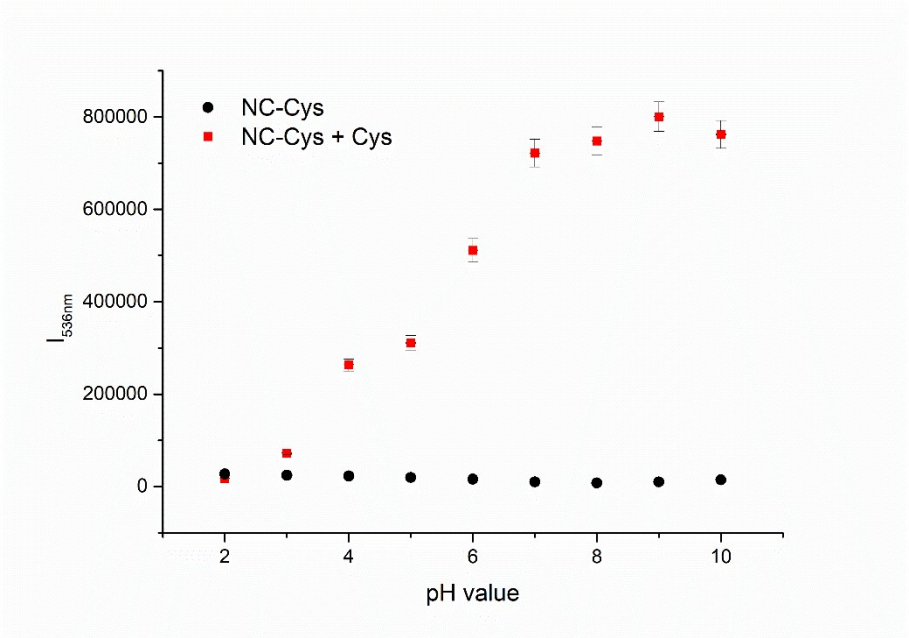

Fig. S2 pH dependence of probe **NC-Cys** (10 μM) in the absence or presence of Cys 100 μM) in citrate-phosphate buffer, PBS, and glycine-NaOH buffer solution for different pH. λ_{ex} = 447 nm.

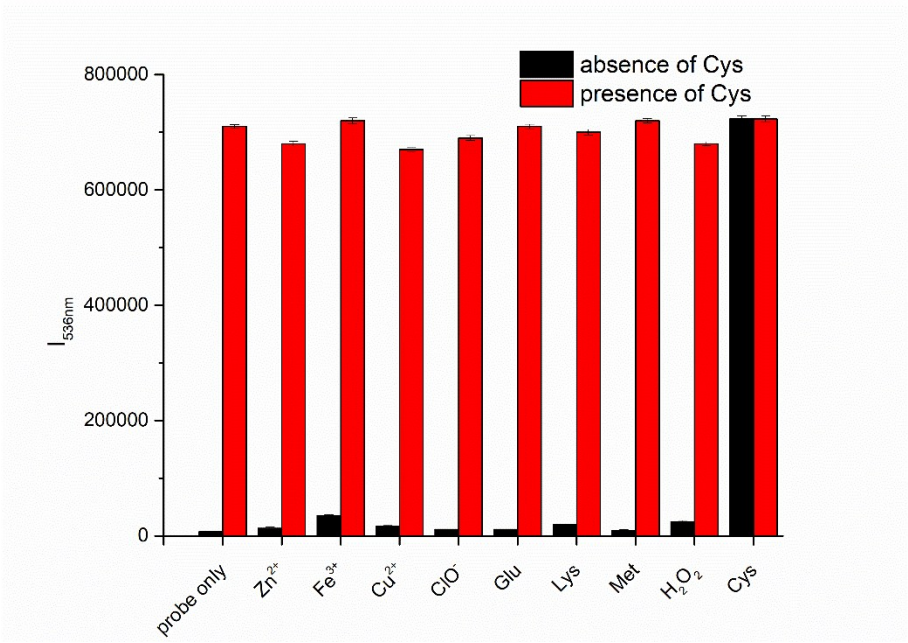

Fig. S3 Fluorescence response of probe **NC-Cys** (10 μM) toward various analytes in the absence or presence of Cys (1 mM Zn^{2+}; 1 mM Fe^{3+}; 1 mM Cu^{2+}; 500 μM ClO^{-}; 500 μM Glu; 500 μM Lys; 500 μM Met; 500 μM H_2O_2; 100 μM Cys).

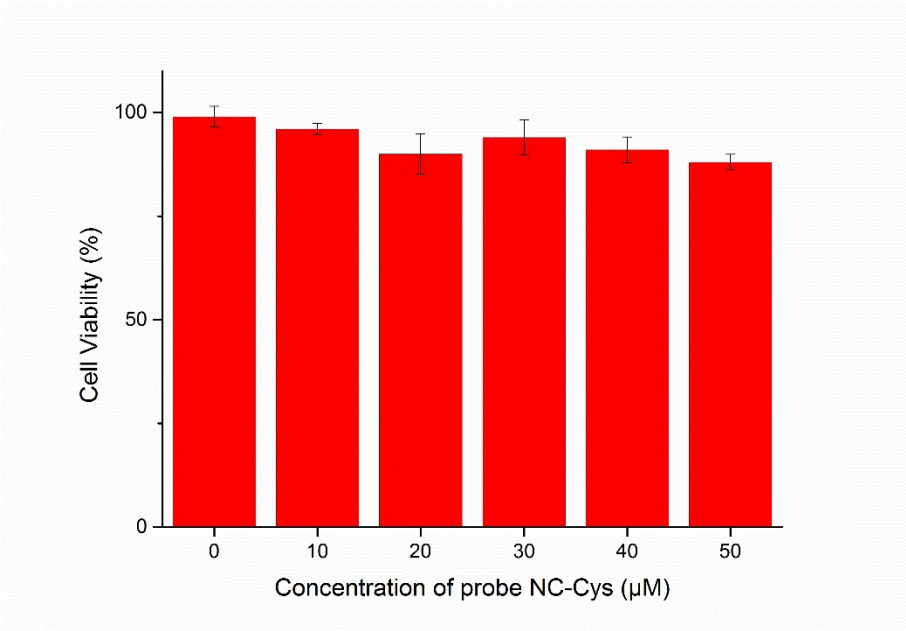

Fig. S4 MTT assay was performed in HepG2 cells treated with different concentrations of probe **NC-Cys**.

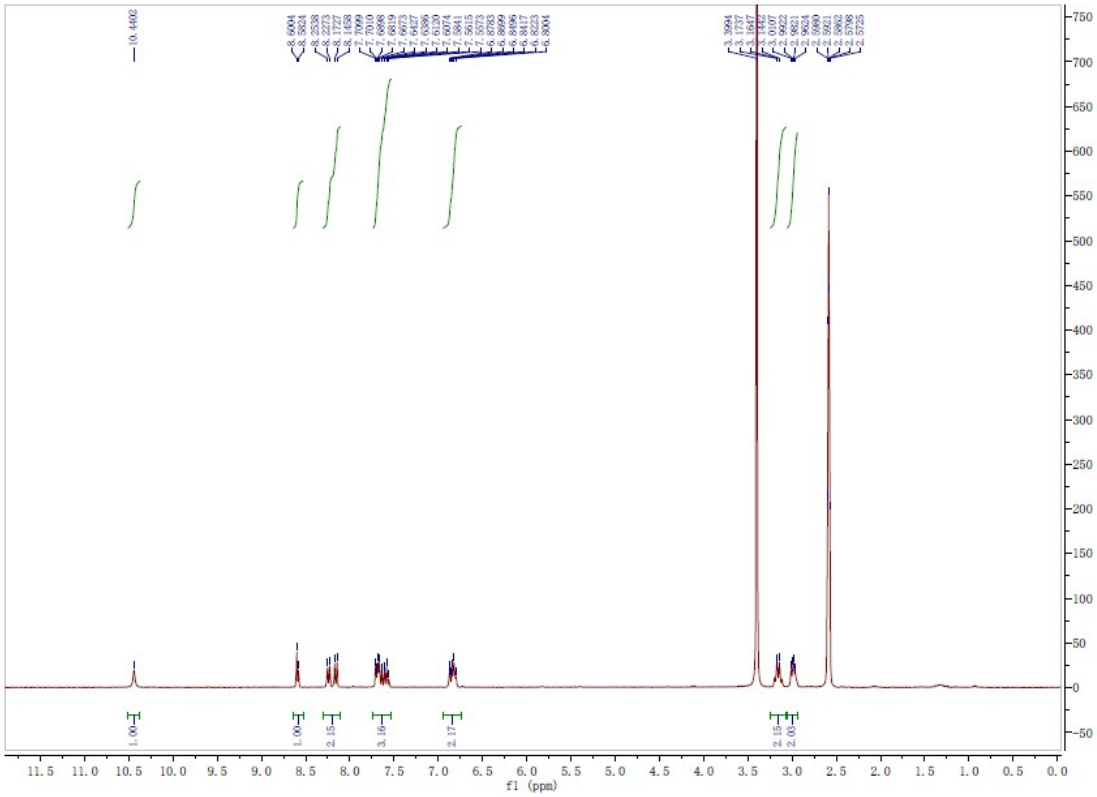

Fig. S5 ^{1}H NMR spectrum of probe **NC-Cys**

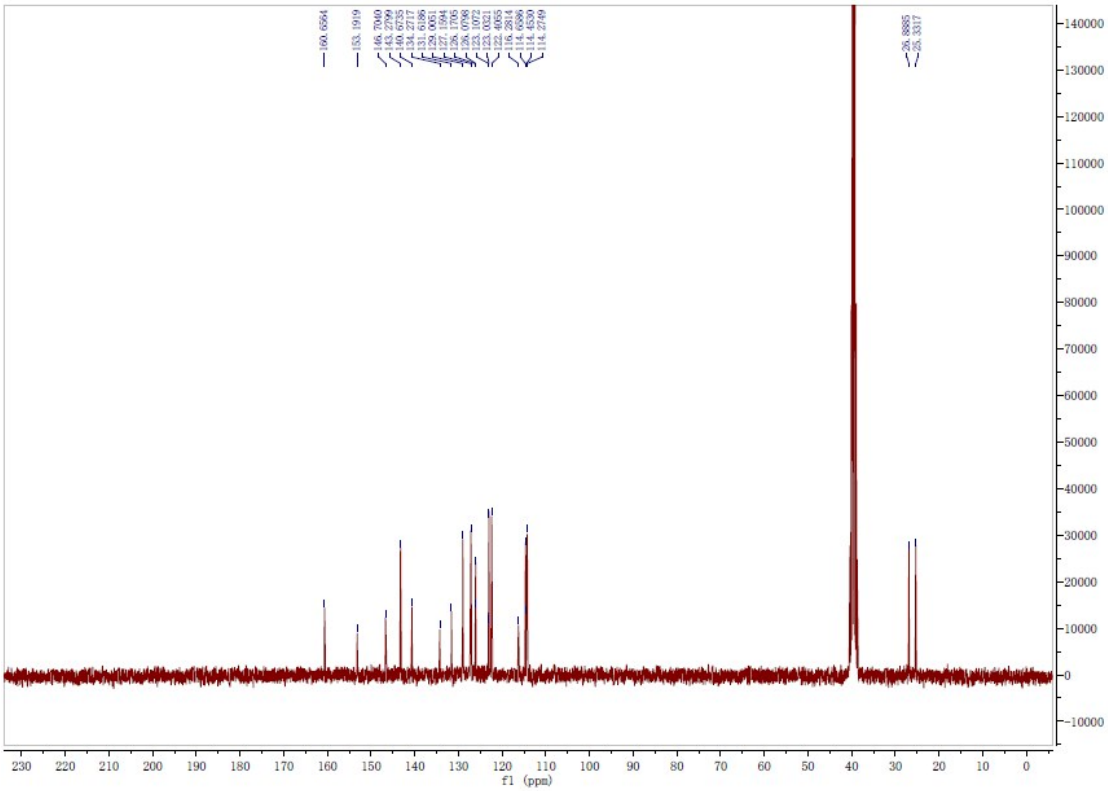

Fig. S6 ^{13}C NMR spectrum of probe **NC-Cys**

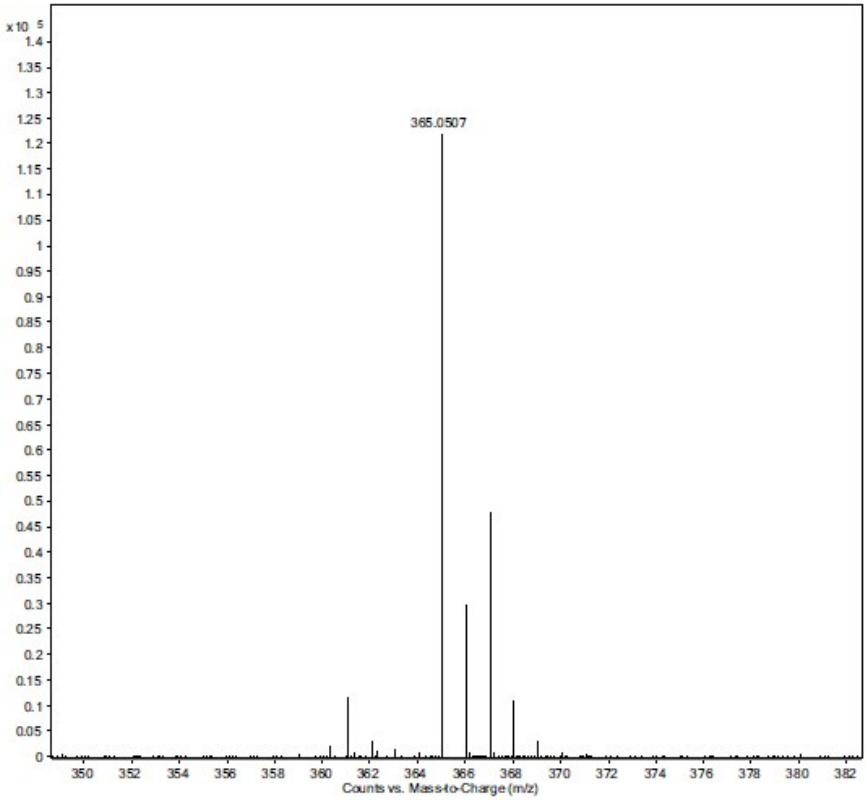

Fig. S7 HRMS of probe **NC-Cys**

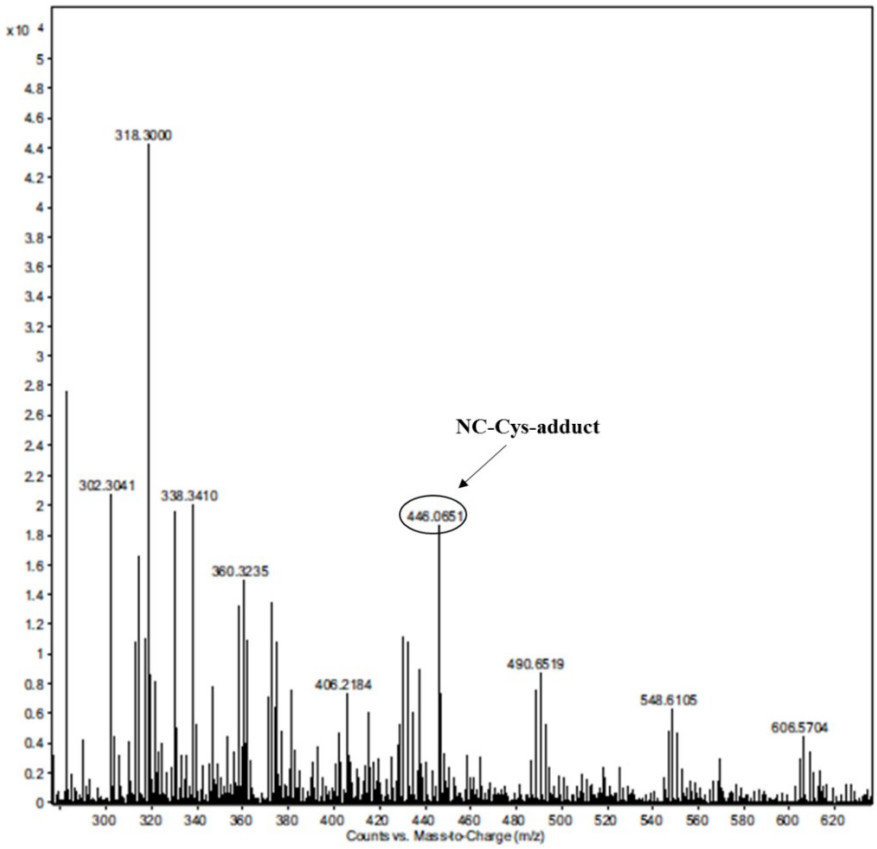

Fig. S8 HRMS of probe **NC-Cys** with Cys