Supporting Information

For

A turn-on fluorescent probe for hydrogen sulfide and its application in living cells

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Supplementary figures and text:

Supplementary Figure S1-S3. NMR spectra of synthesized compounds.
Supplementary Figure S4. IR spectra of probe **1**.
Supplementary Figure S5. Fluorescence spectra of **1** in the presence of H_2S and NBD-NH_2.
Supplementary Figure S6. Cell viability of probe **1** (5 μ M) at different times in HT-29 cells.
Supplementary Figure S7. Images of HT-29 cells incubated with DAPI.

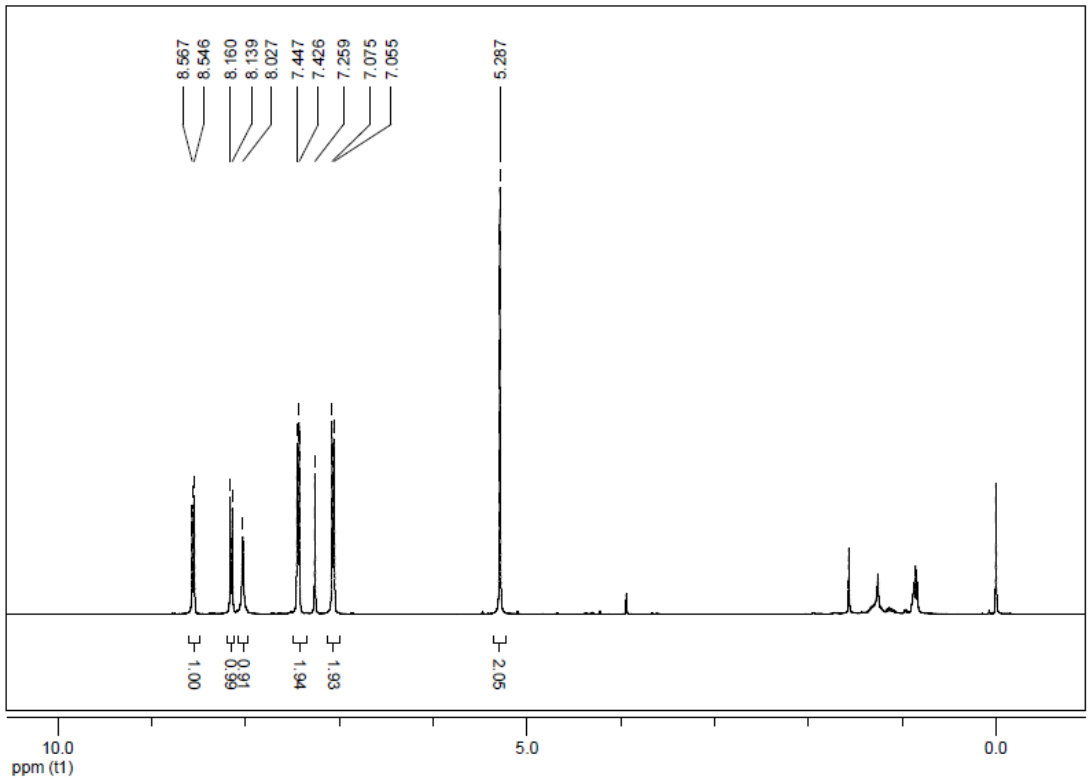

Figure S1. ^{1}H-NMR spectra of compound **1** in $CDCl_3$.

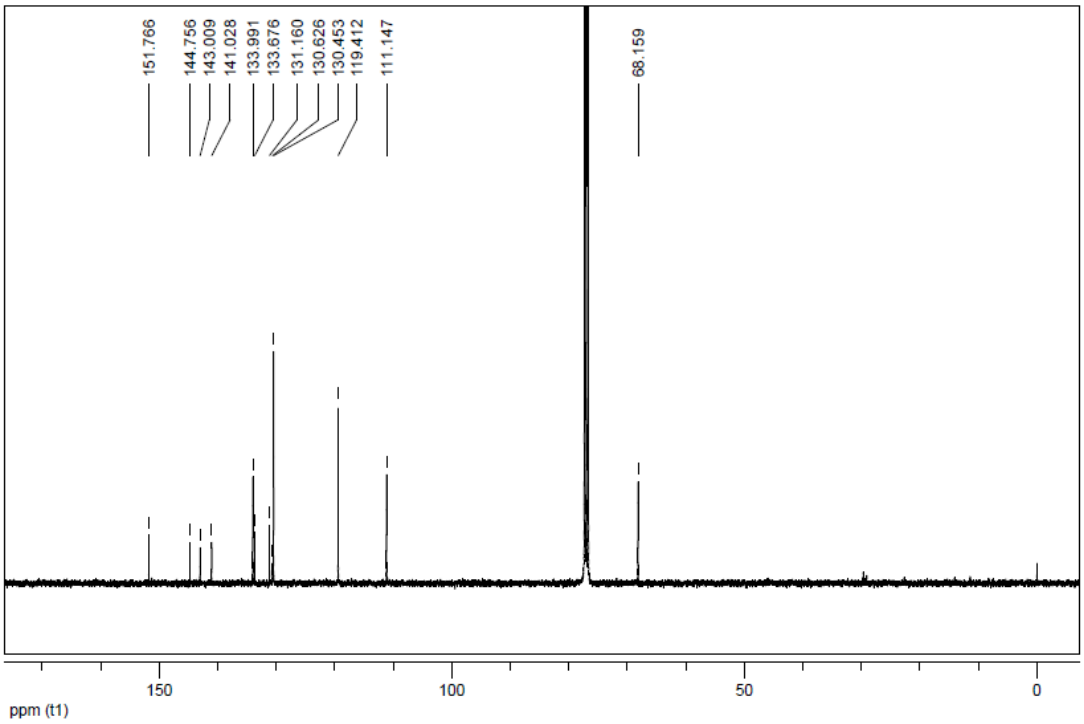

Figure S2. ^{13}C-NMR spectra of compound **1** in $CDCl_3$.

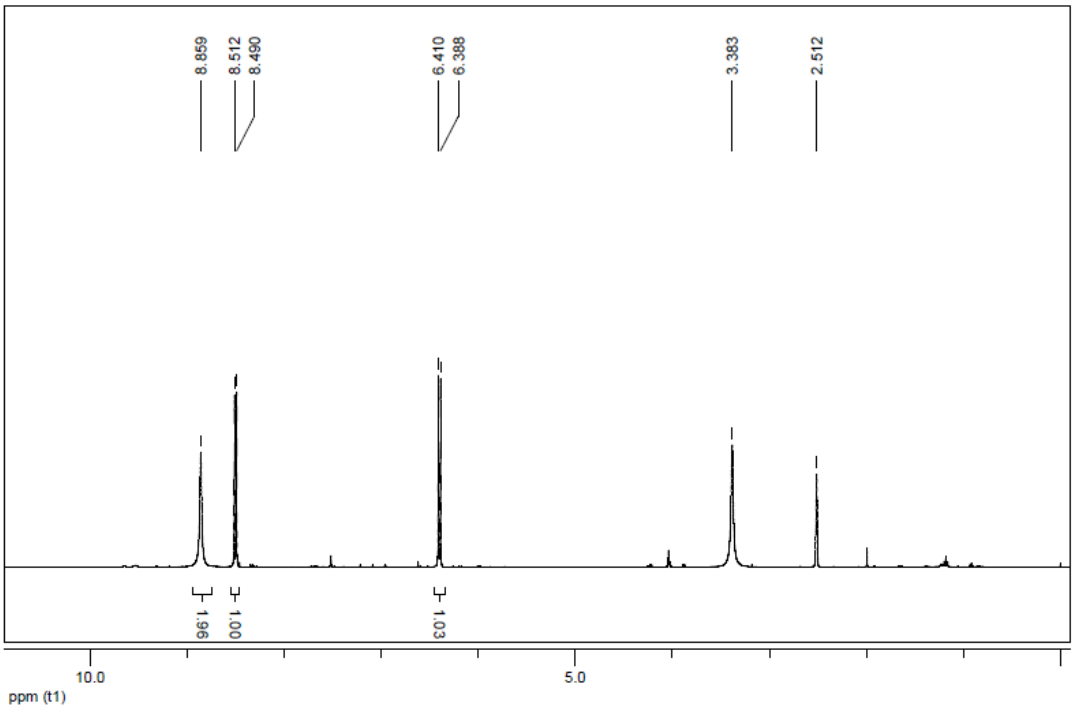

Figure S3.[1]H-NMR spectra of compound **3** in DMSO-d_6.

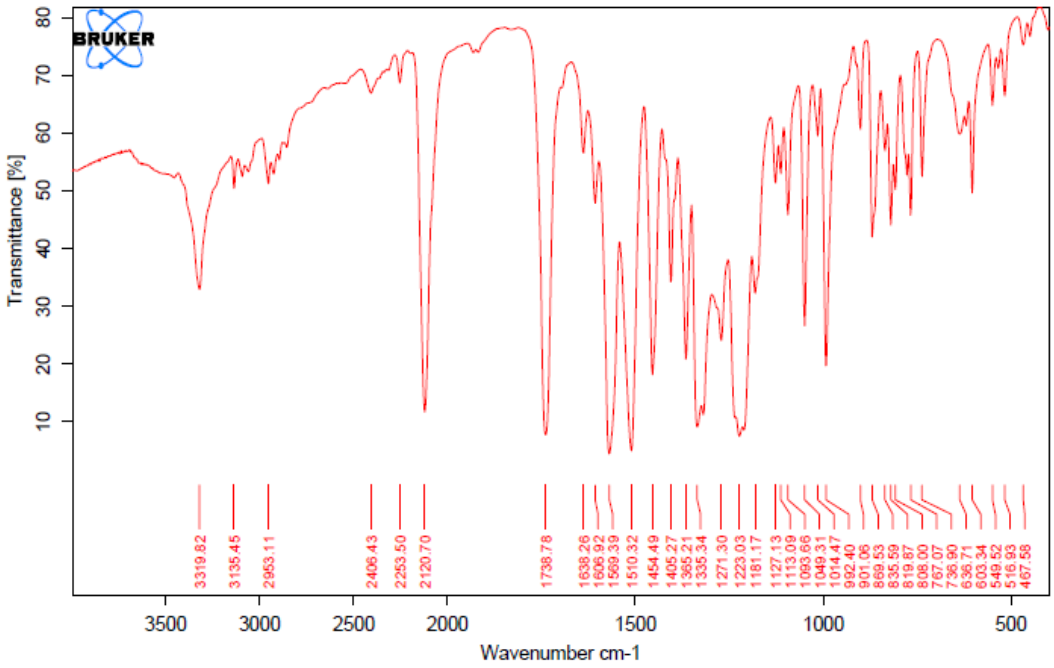

Figure S4.IR spectra of probe **1**

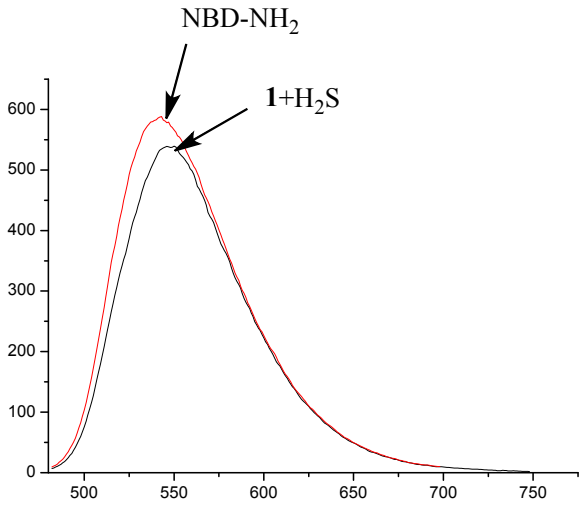

Figure S5. Fluorescent emission spectra of 10 μM compound **1** with 20 eq H_2S and 10 μM DCDHF-NH_2 in aqueous solution (CH_3CN: PBS = 9:1, pH = 7.4). Excitation at 470 nm.

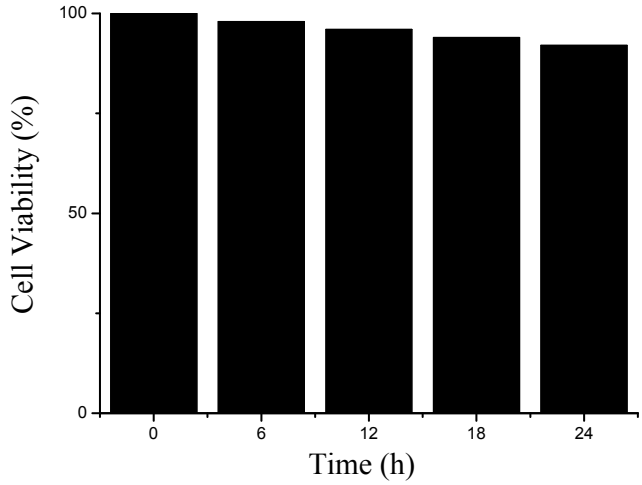

Figure S6. Cell viability of probe **1** (5 μ M) at different times in HT-29 cells.

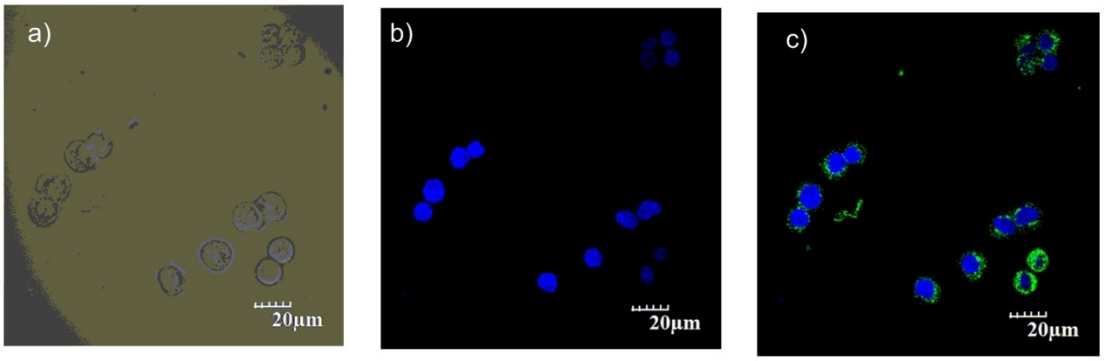

Fig. S7. Images of HT-29 cells incubated with DAPI (2 μM) at 37 °C. a) bright field. b) 2.0 μM DAPI. c) merged images of b) and probe **1** incubated with 20 μM H_2S.