

Supplementary Data

for

**A novel GSH-triggered theranostic prodrug for
anticancer and imaging in living cells**

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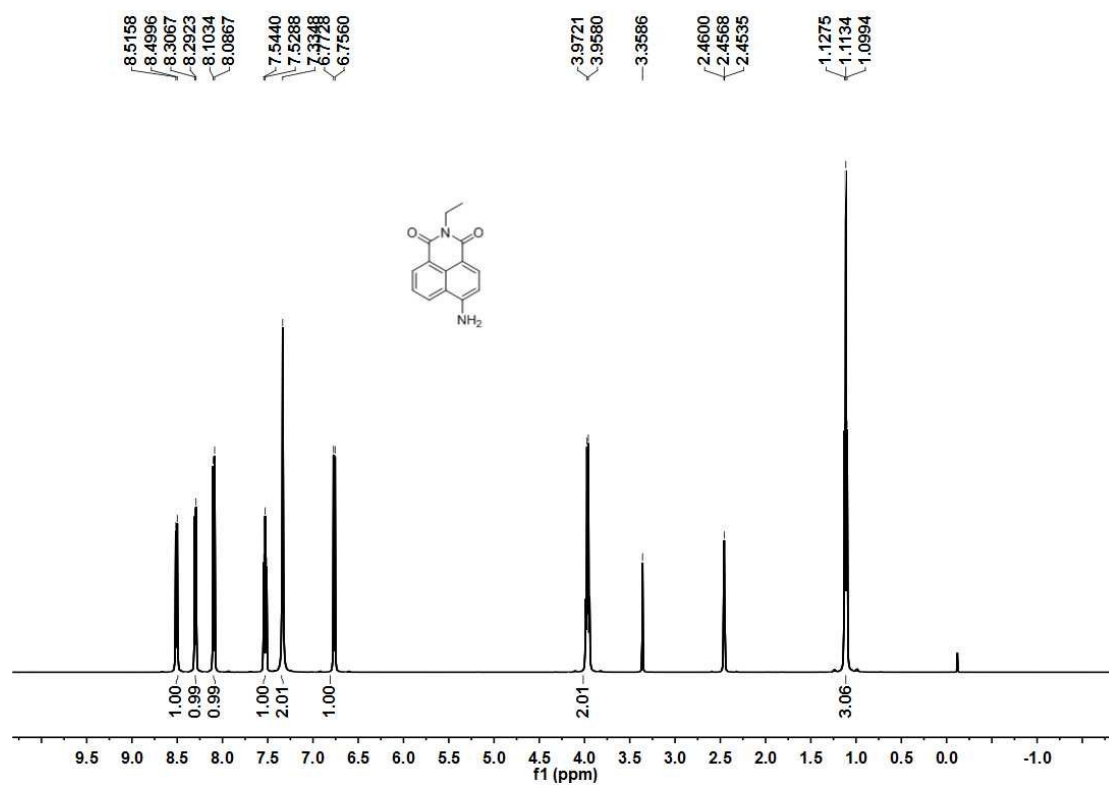
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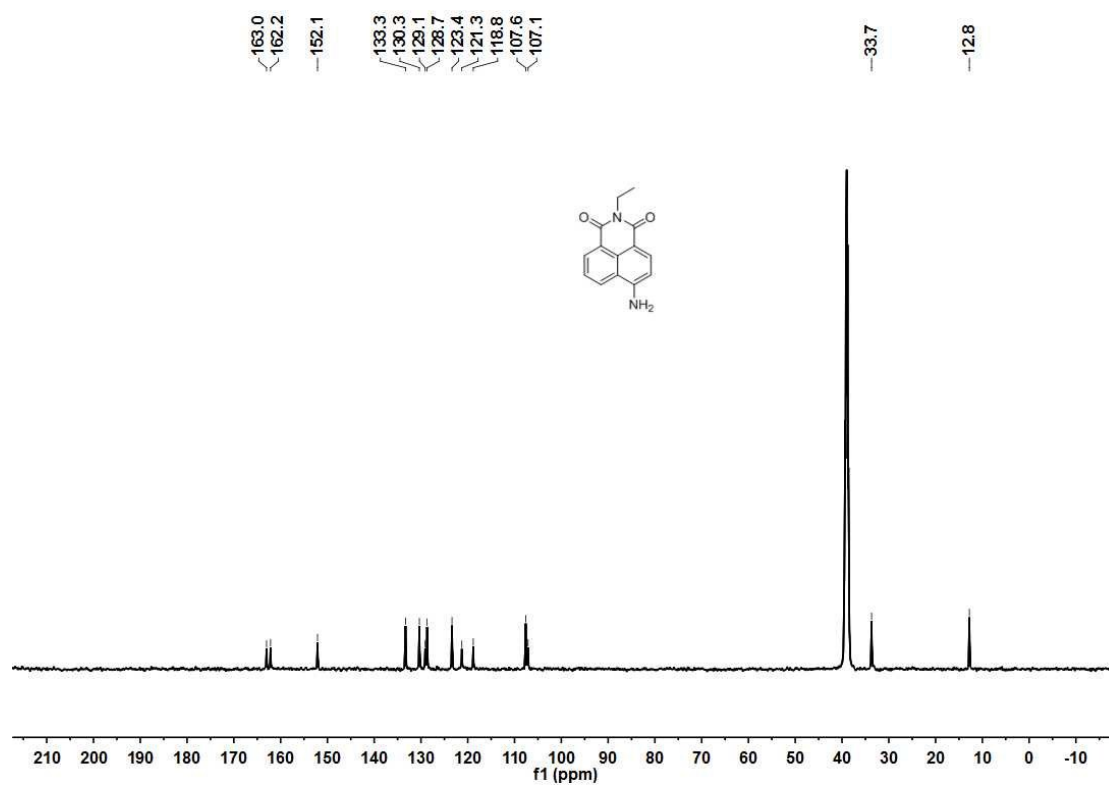
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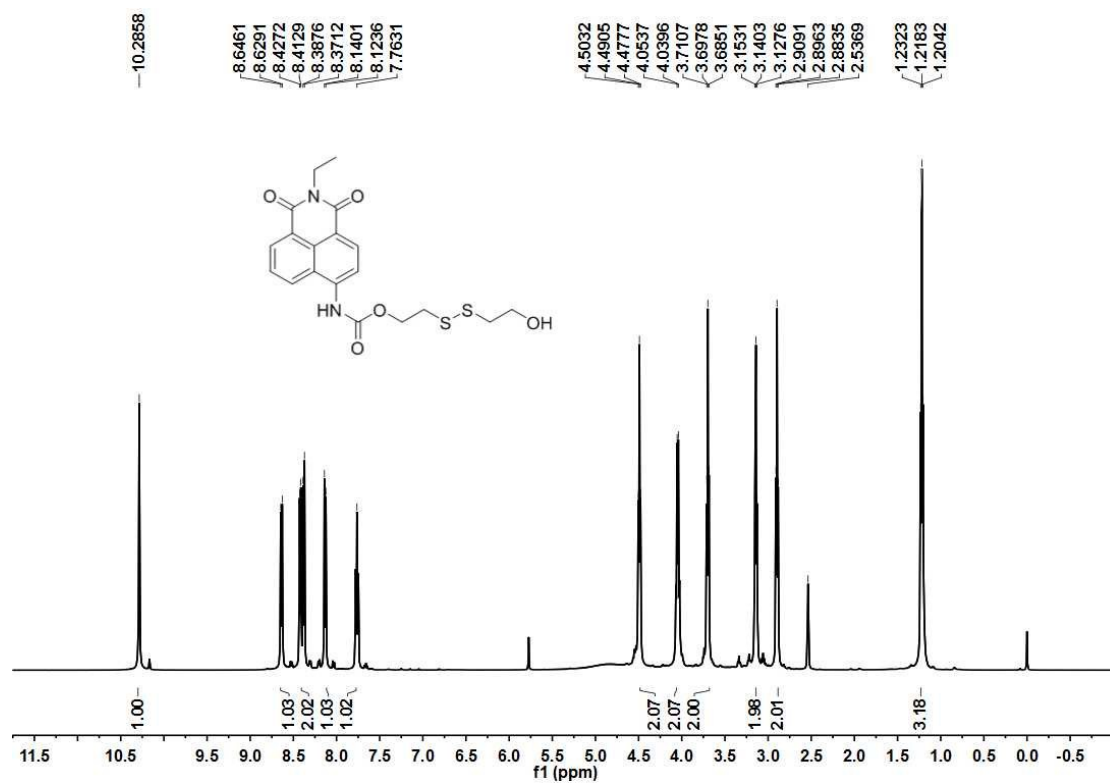
1. Structure characterizations of compound 4, 5 and prodrug



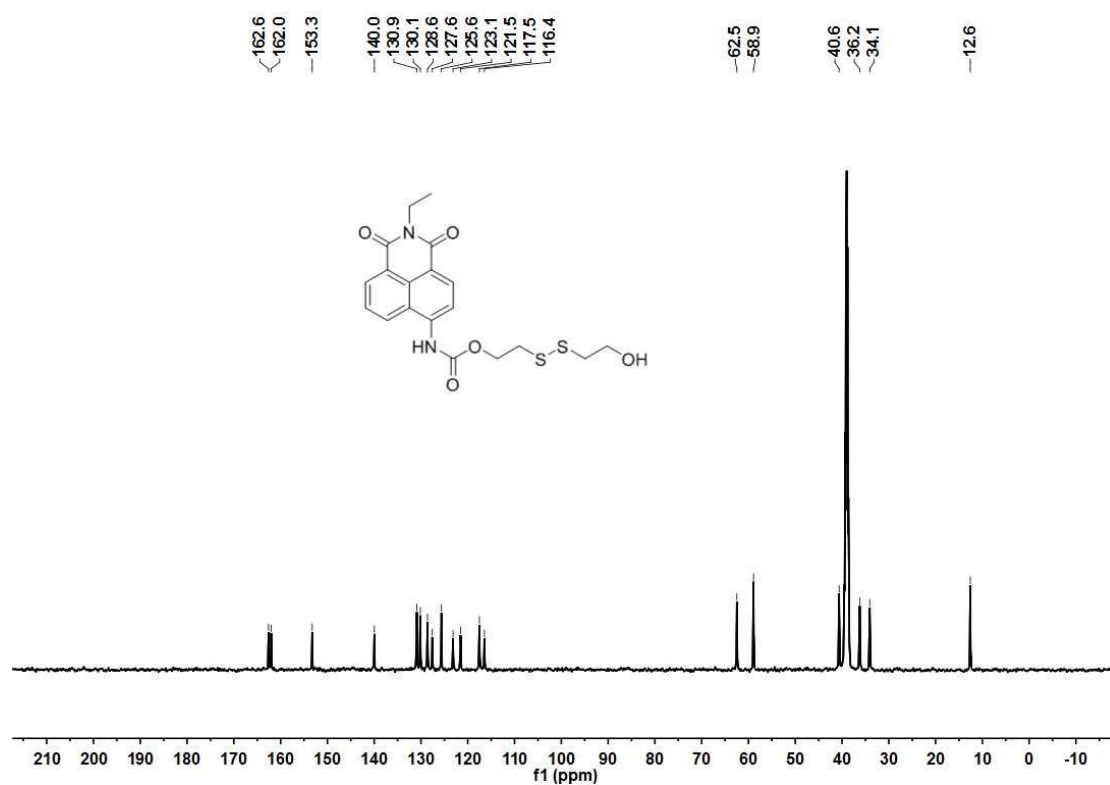
¹H-NMR spectrum of compound 4



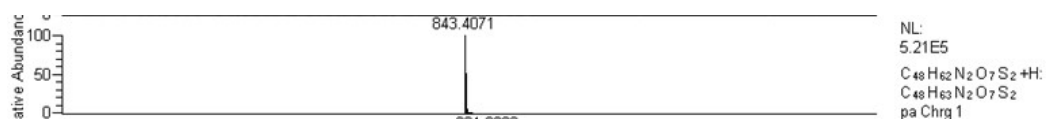
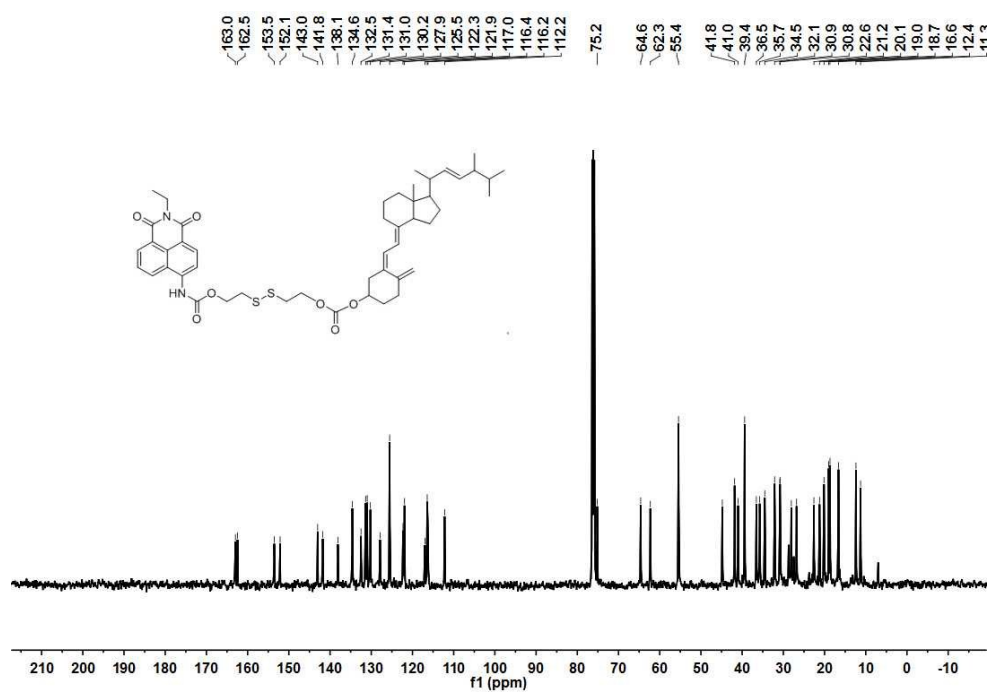
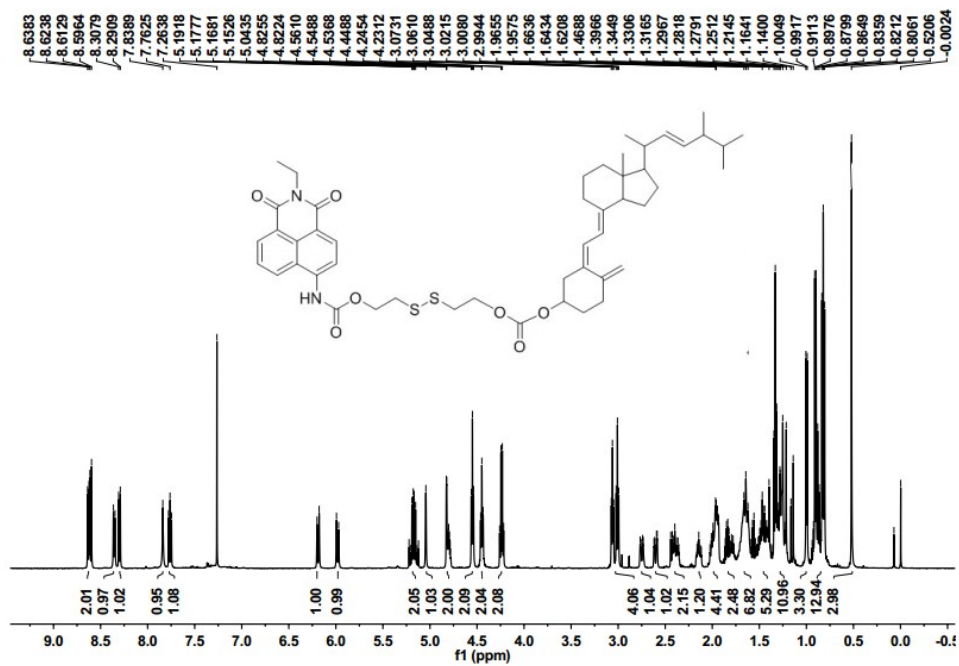
¹³C-NMR spectrum of compound 4



¹H-NMR spectrum of compound 5



¹³C-NMR spectrum of compound 5



2. Additional data

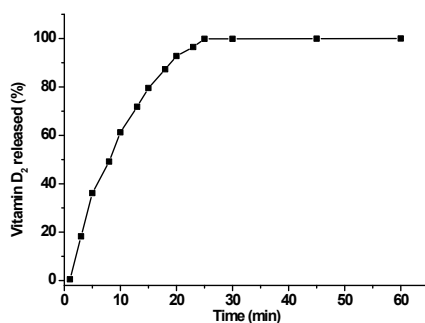


Figure. S1. The time-dependent release efficiency of prodrug in the presence of GSH.

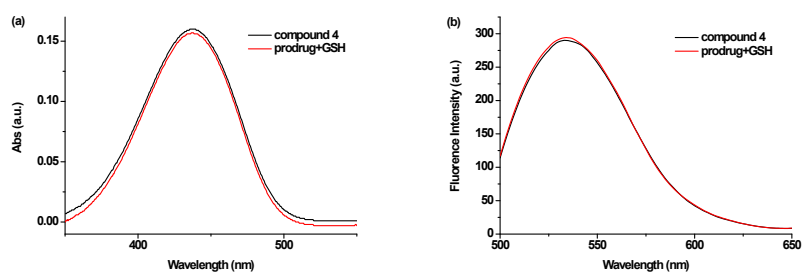


Figure. S2. Absorption (A) and fluorescence (B) spectra of compound **4** (10 μ M) and prodrug (10 μ M with 200 μ M of GSH) in PBS/DMSO solution (40:60, v/v, pH = 7.4, 10 mM). Spectras of prodrug with GSH were recorded 30 min after exposure at 37°C.

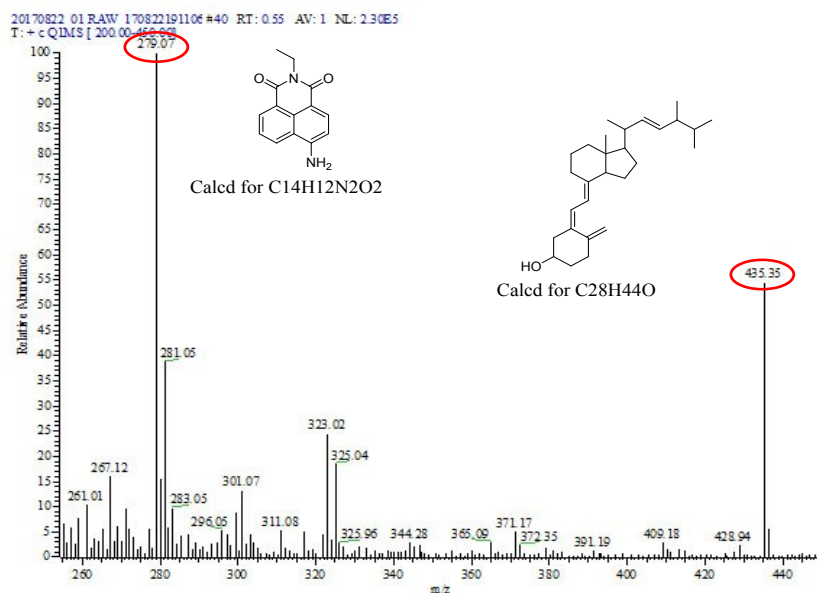


Figure. S3. MS spectrum of the products from the reaction of prodrug (10 μ M, PBS/DMSO, 40:60, v/v, pH 7.4, 10 mM) with 200 μ M of GSH. Spectrum was obtained 30 min after exposure at 37°C.

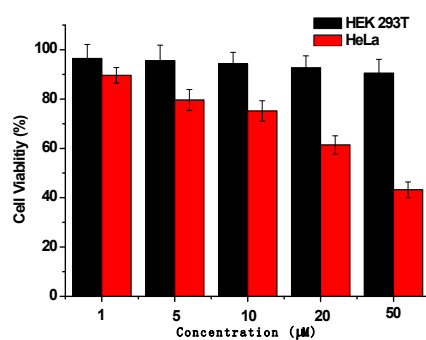


Fig. S4. Viable HEK 293T/HeLa cells after treatment with different concentrations of prodrug. The cell viability was observed via MTT assay. Cells were cultured for 4h in the presence of prodrug.