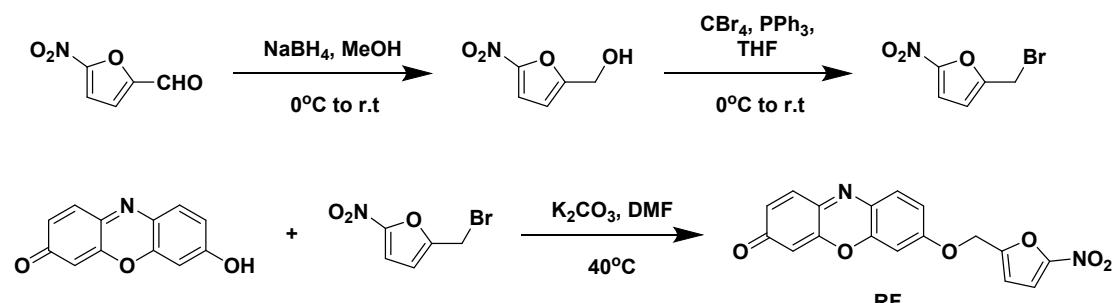


## Supplementary Information

### Syntheses route of RF



Scheme S1. synthetic procedure of RF.

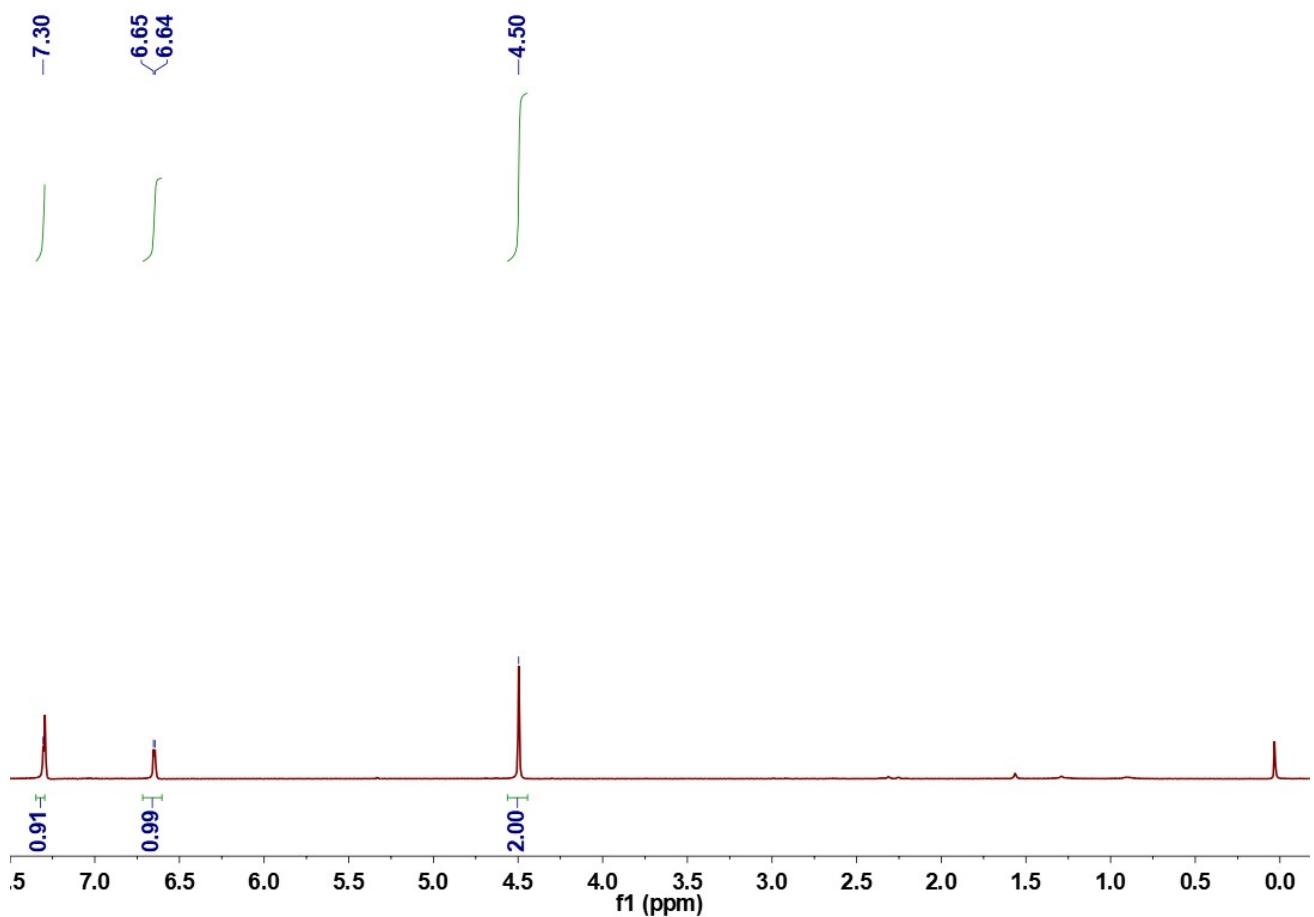


Figure S1. <sup>1</sup>H NMR spectrum of 5-nitrofurfuryl bromide in CDCl<sub>3</sub>.

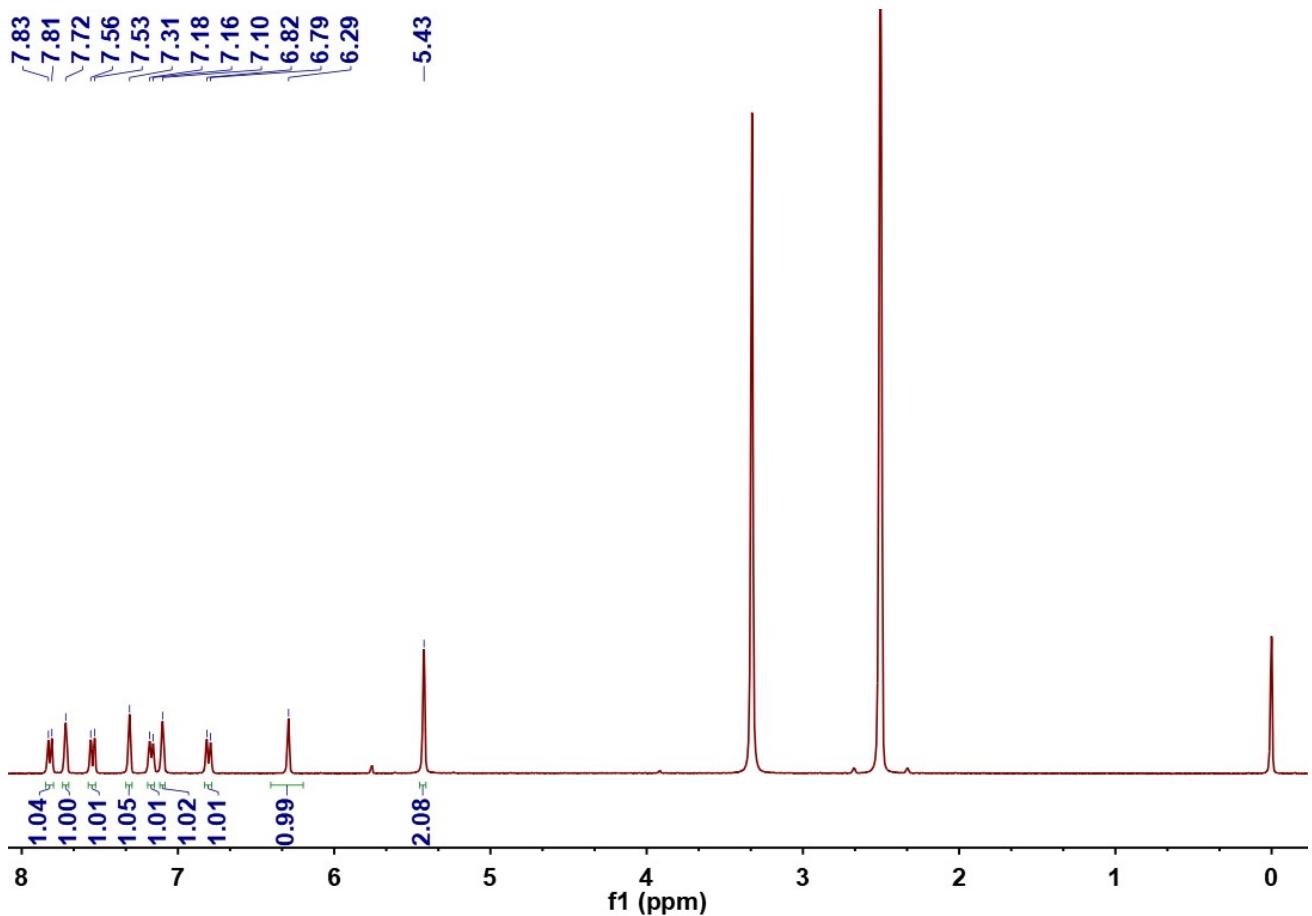


Figure S2. <sup>1</sup>H NMR spectrum of RF in *d*<sub>6</sub>-DMSO.

### Response of RF towards NADH

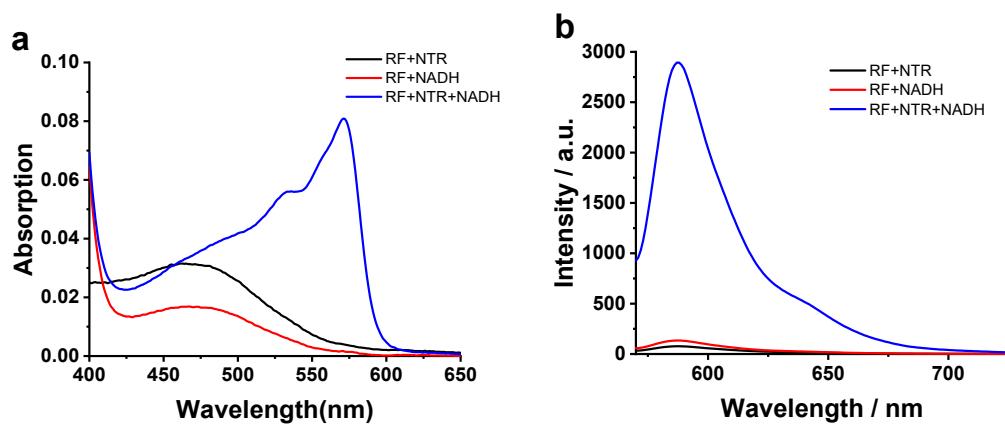


Figure S3. Absorption (a) and fluorescence spectra (b) of RF (5  $\mu$ M) reacts with nitroreductase (NTR) (0.20  $\mu$ g/mL) or NADH (500  $\mu$ M) alone, or both NTR (0.20  $\mu$ g/mL) and NADH (500  $\mu$ M) at 37 °C for 15 min.  $\lambda_{\text{ex}} = 540$  nm.

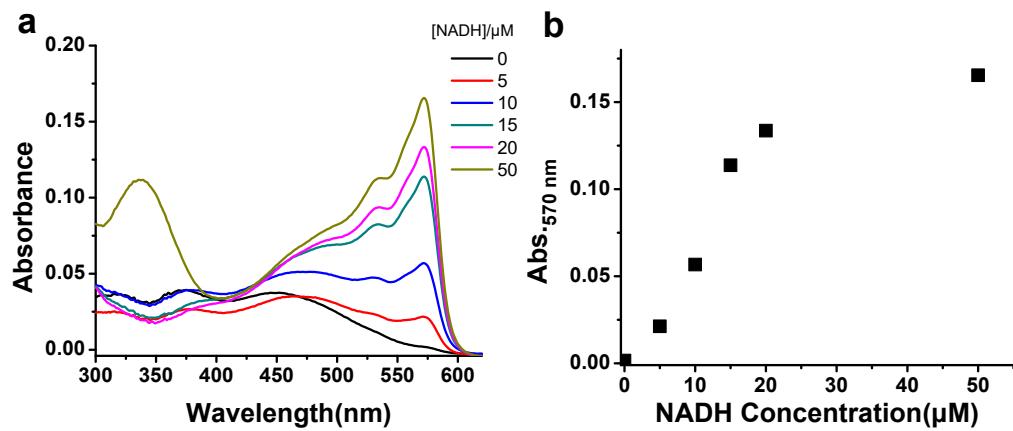


Figure S4. Absorption spectra (a) and corresponding absorbance at 570 nm (b) of probe RF (10  $\mu\text{M}$ ) in response to various concentrations of NADH (0 – 50  $\mu\text{M}$ ).