Electronic Supplementary Information (ESI)

A new fluorescent and colorimetric sensor for hydrazine and its

application in biological system

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1. Characterization of the compounds.



Fig. S1 ¹H NMR spectrum of compound 2 in CDCl₃.



Fig. S2 ¹³C NMR spectrum of compound 2 in CDCl₃.



Fig. S3 ¹H NMR spectrum of compound 1 in CDCl₃.



Fig. S4 ¹³C NMR spectrum of compound 1 in CDCl₃.







Fig. S6 13 C NMR spectrum of $1-N_2H_4$ in CDCl₃.

2. Supplemental spectra



Fig. S7 The fluorescence intensity ratio (I/I_0) at 490 nm of 1 (5 μ M) with various competing metal ions upon excitation of 350 nm. The competing ions are at concentration of 40.0 equiv. and hydrazine is 4.0 equiv.



Fig. S8 Optimized structures of (A) 1 and (B)1– N_2H_4 at the ground state (S₀) and the first excited state (S₁)