

Supplementary Information for

Dihydropyridine-Based Fluorescence Probe for Nitric Oxide

Su-Fang Ma,^{a,b} Qiu-Hua Wang^b, Fu-Tao Liu,^b Hui-Li Wang,^a De-Cai Fang,^b Bing Gong,^{b,c} Lan He,^{a,b,*}
Zhong-Lin Lu,^{b*}

^a National Institutes for Food and Drug Control, Beijing 100050, China

^b College of Chemistry, Beijing Normal University, Beijing 100875, China

^c Department of Chemistry, University at Buffalo, the State University of New York,
Buffalo, NY 14260, USA.

1. Materials and methods

The nitric oxide (NO) stock solution in de-ionized water was prepared by bubbling NO into deoxygenated de-ionized water for 15 min.¹ Singlet oxygen (¹O₂) was generated from ClO[•] and H₂O₂. Peroxynitrite was generated from amyl nitrite and H₂O₂ following literature procedures.² Superoxide radical anion (O₂^{•-}) was from KO₂.

1 J. Ouyang, H. Hong, C. Shen, Y. Zhao, C. G. Ouyang, L. Dong, J. H. Zhu, Z. J. Guo, K. Zeng, J. N. Chen, C. Y. Zhang and J. F. Zhang, *Free Radic. Biol. Med.* 2008, **45**, 1426-1436.

2 R. M. Uppu, and W. A. Pryor, *Anal. Biochem.* 1996, **236**, 242–249.

2. Appendix

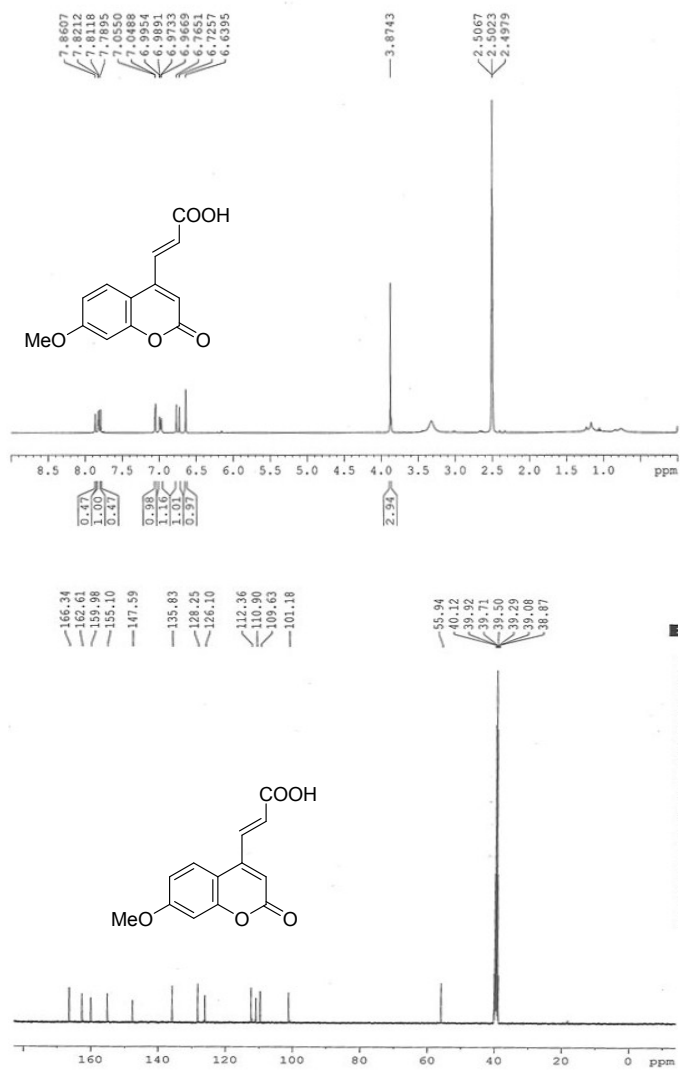


Fig. S1. ^1H NMR (DMSO- d_6) and ^{13}C NMR (DMSO- d_6) of compound 1a

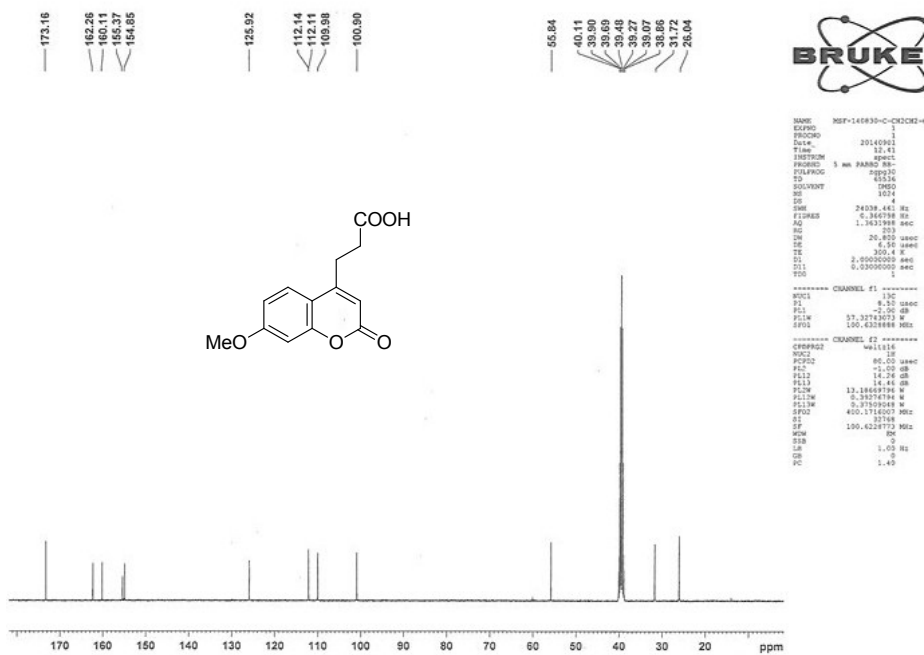
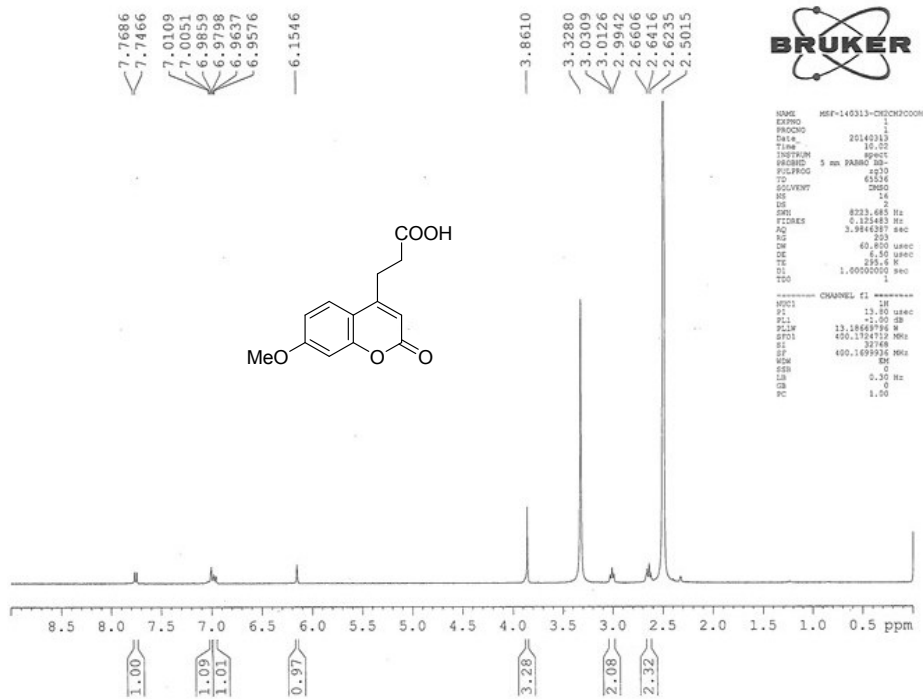


Fig. S2. ¹H NMR (DMSO-*d*₆) and ¹³C NMR (DMSO-*d*₆) of compound 1b

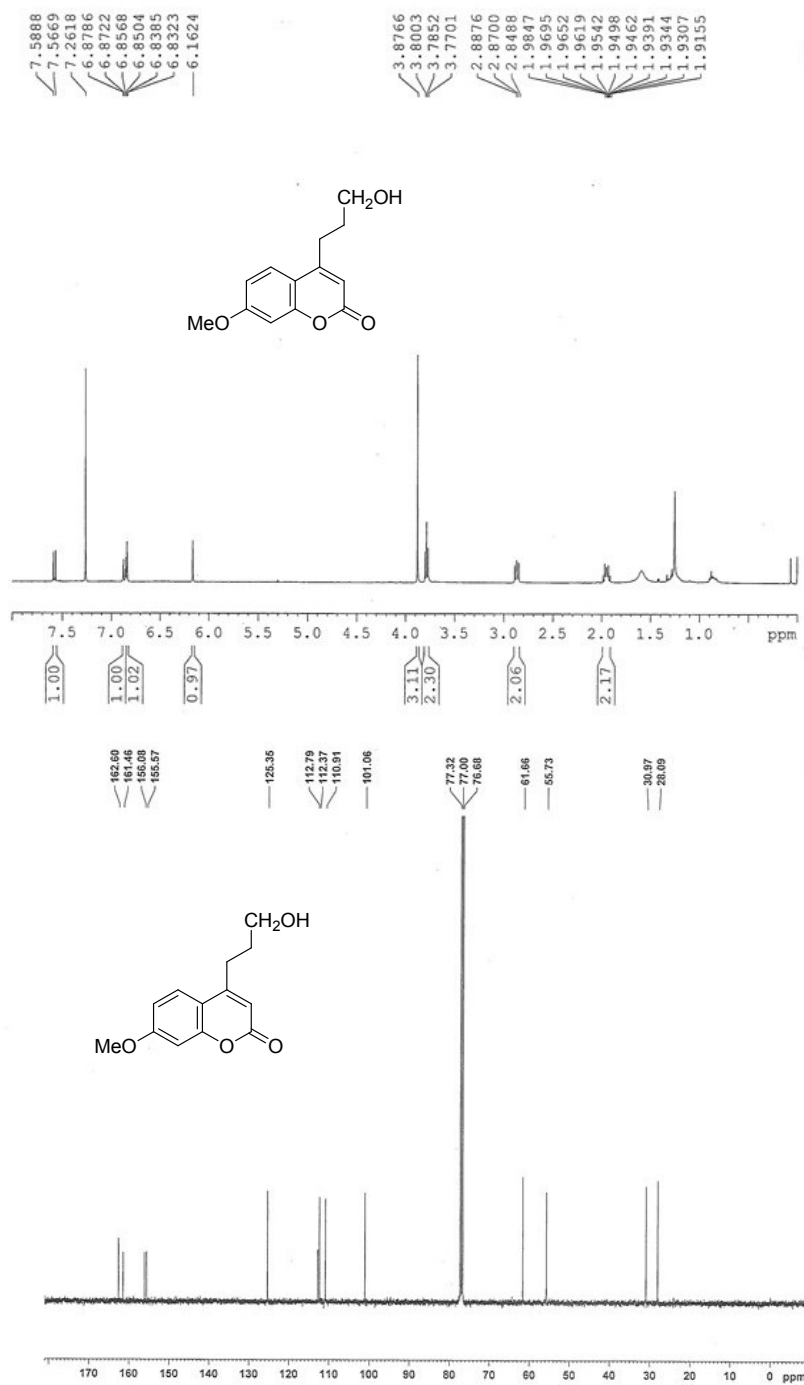


Fig. S3. ¹H NMR (CDCl₃) and ¹³C NMR (CDCl₃) of compound **1c**

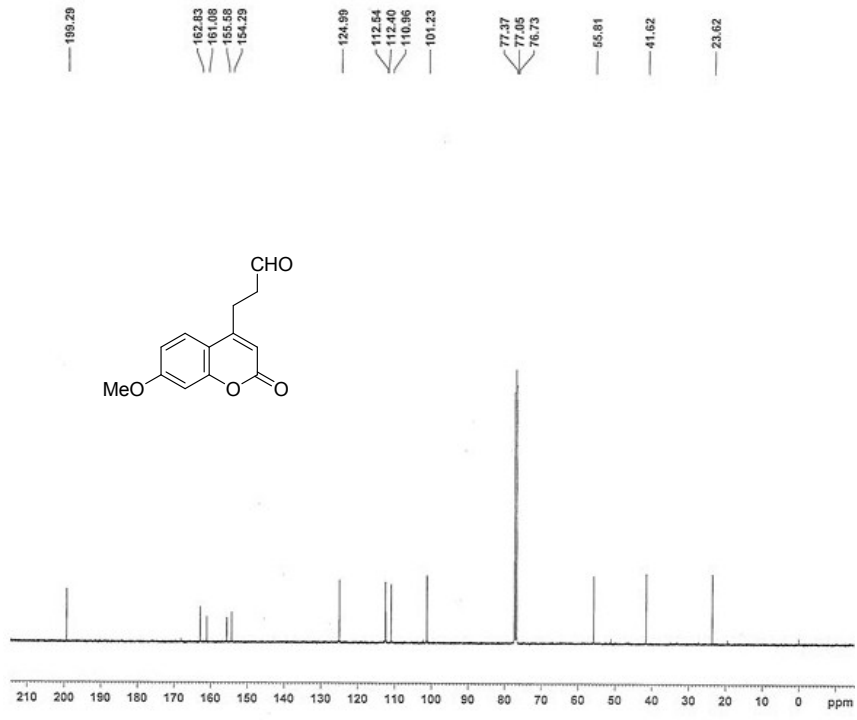
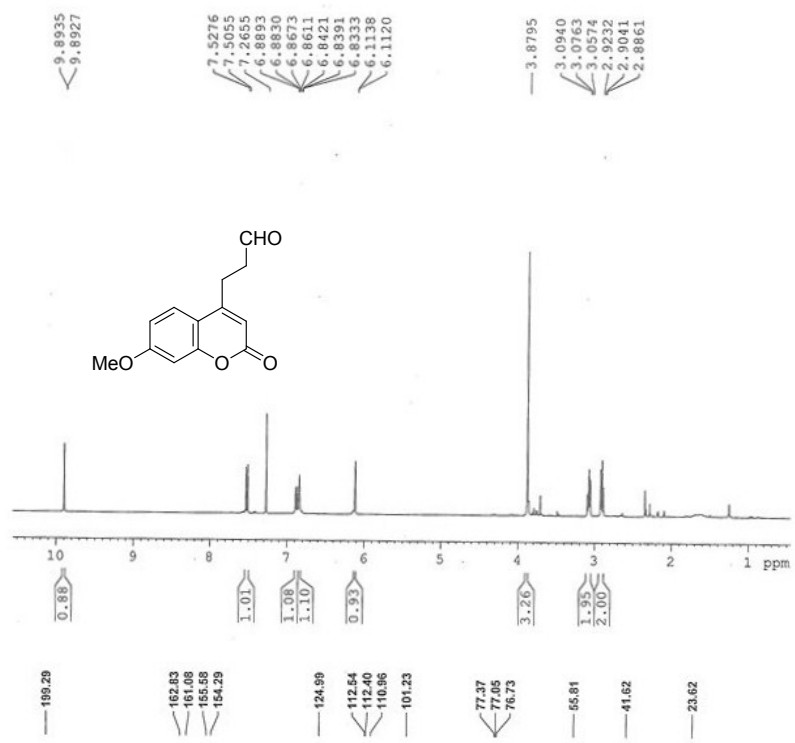


Fig. S4. ¹H NMR (CDCl₃) and ¹³C NMR (CDCl₃) of compound 1d

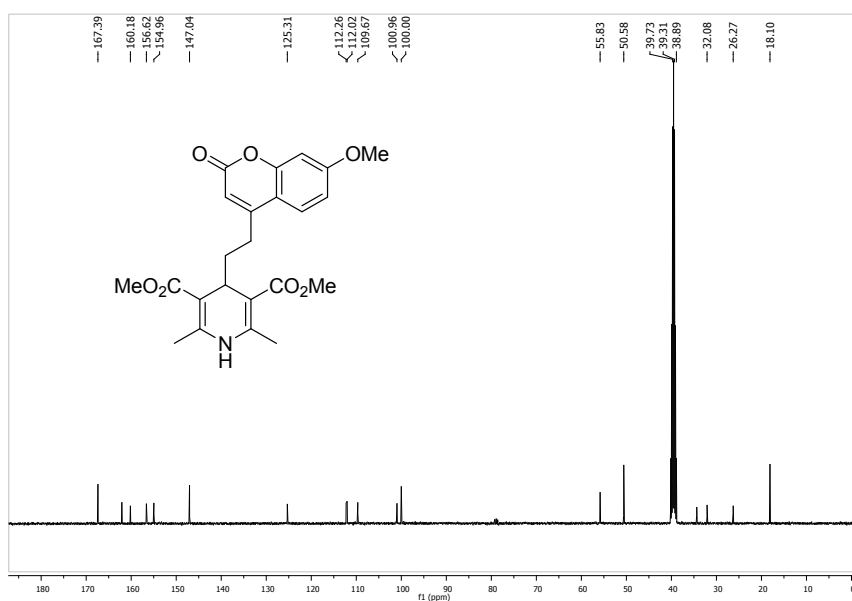
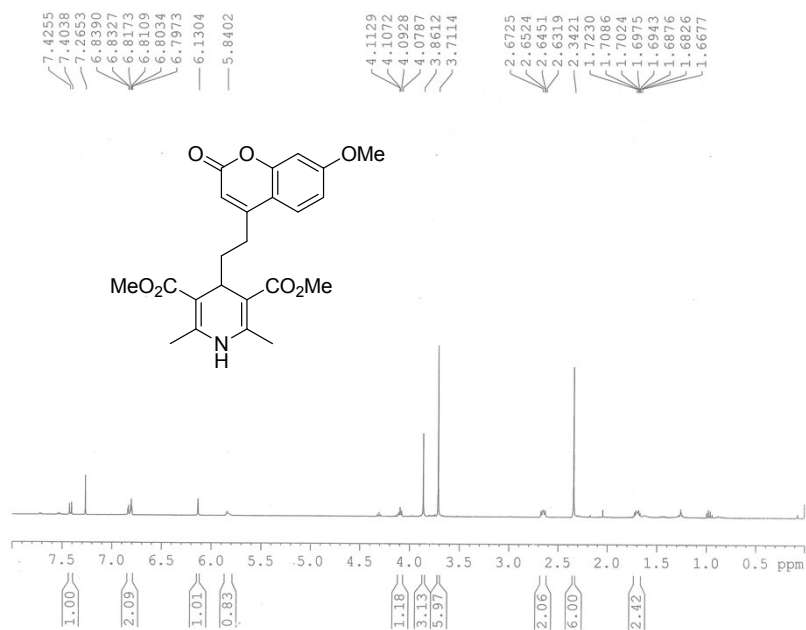


Fig. S5. ¹H NMR (CDCl₃) and ¹³C NMR (DMSO-*d*₆) of compound **DHP-1**

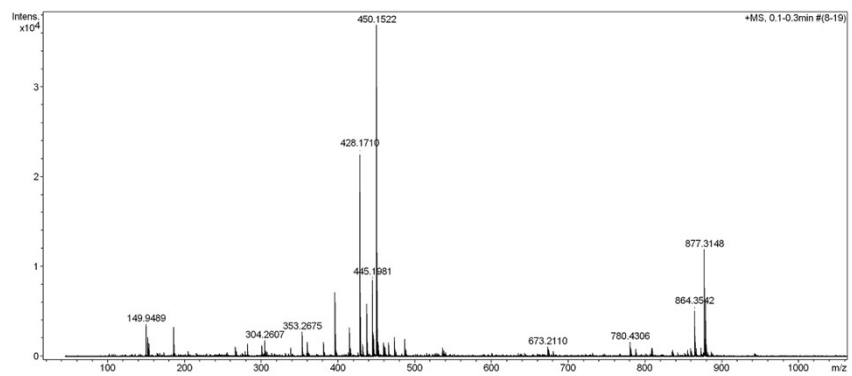


Fig. S6 The HR-MS spectrum for probe **DHP-1**

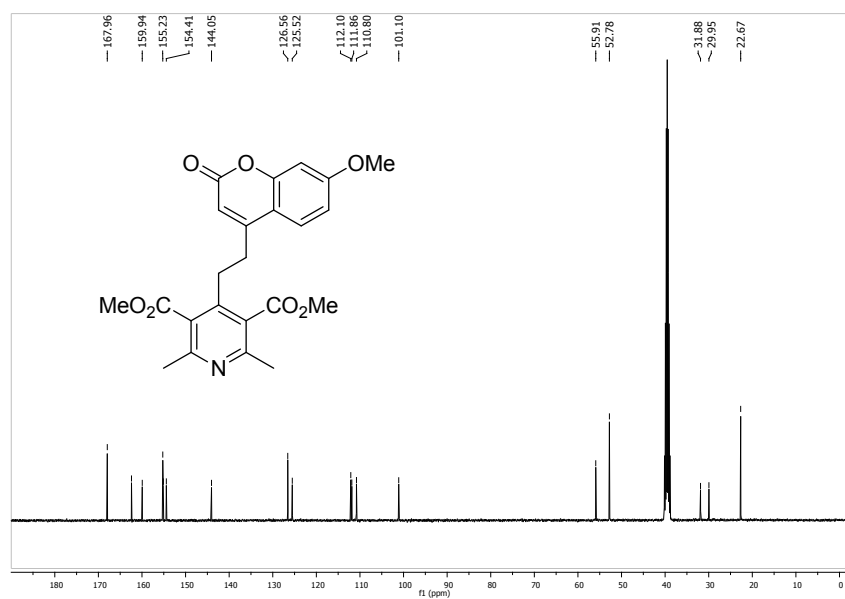
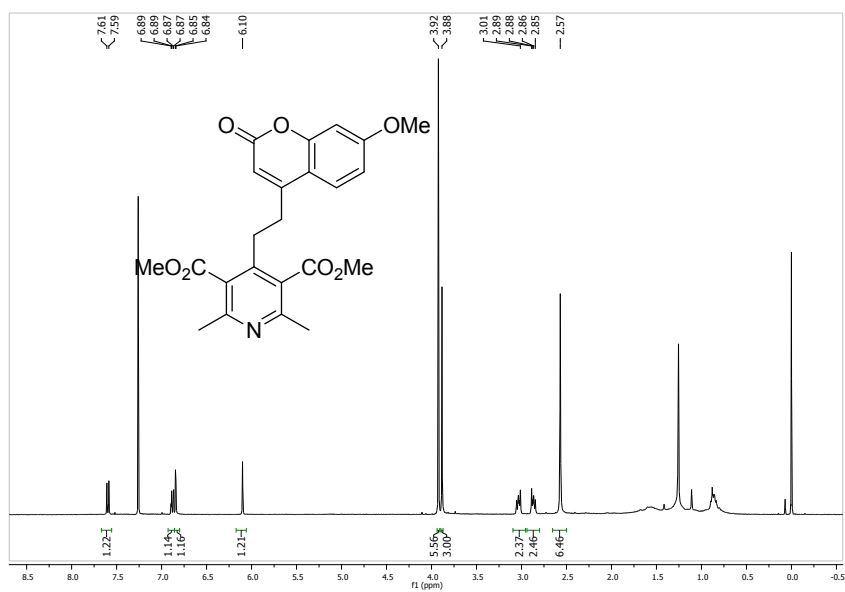


Fig. S7. ¹H NMR (CDCl₃) and ¹³C NMR (DMSO-*d*₆) of compound **PY-1**

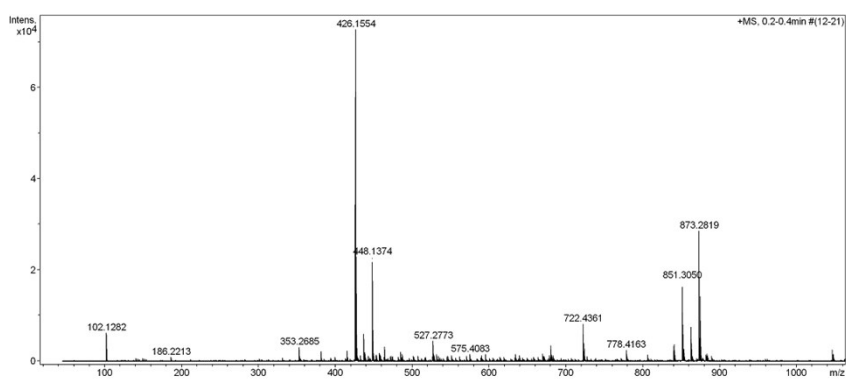


Fig. S8 The HR-MS spectrum for compound **PY-1**