

ROS-responsive and pH-sensitive aminothiols dual-prodrug for radiation enteritis

Yuanfang Chen, Yuwei Yang, Haikang Tang, Ziqi Zhang, Xiaoliang Zhou*, Wenqing Xu*

1. Institute of Radiation Medicine, Chinese Academy of Medical Sciences and Peking Union Medical College, Tianjin 300192, China

* Correspondence: zhouxiaoliang@irm-cams.ac.cn (X.Z.); xuwenqing@irm-cams.ac.cn (W.X.).

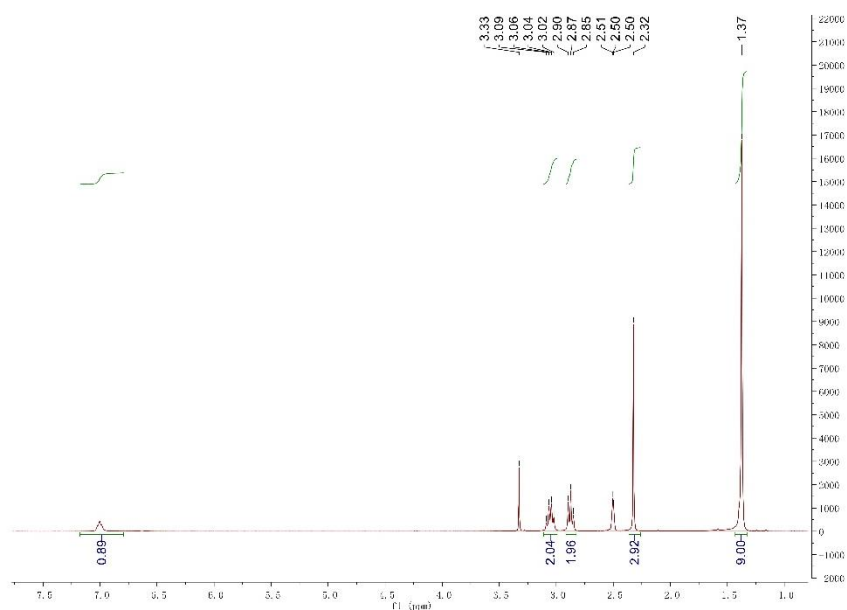


Figure S1. ¹H NMR spectrum of compound 3 in DMSO.

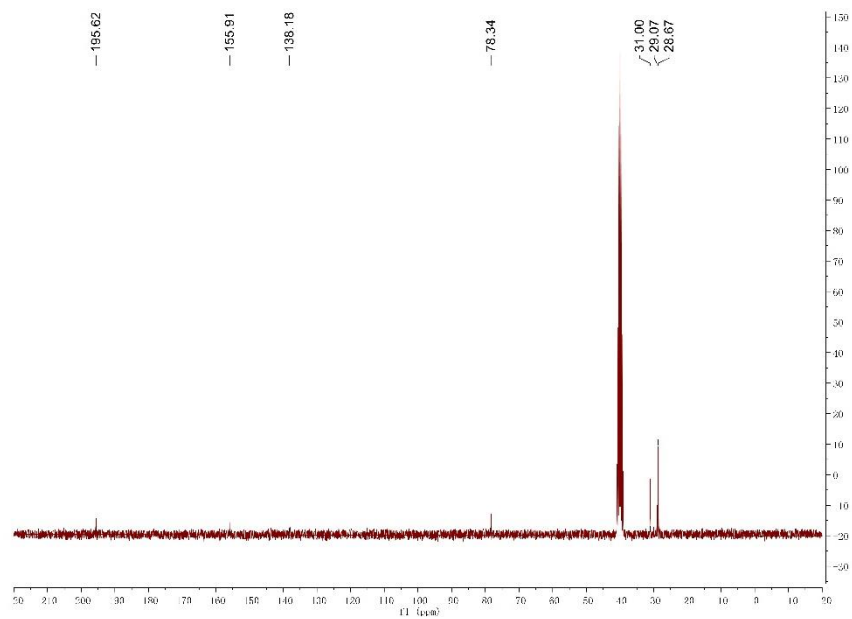


Figure S2. ^{13}C NMR spectrum of compound 3 in DMSO.

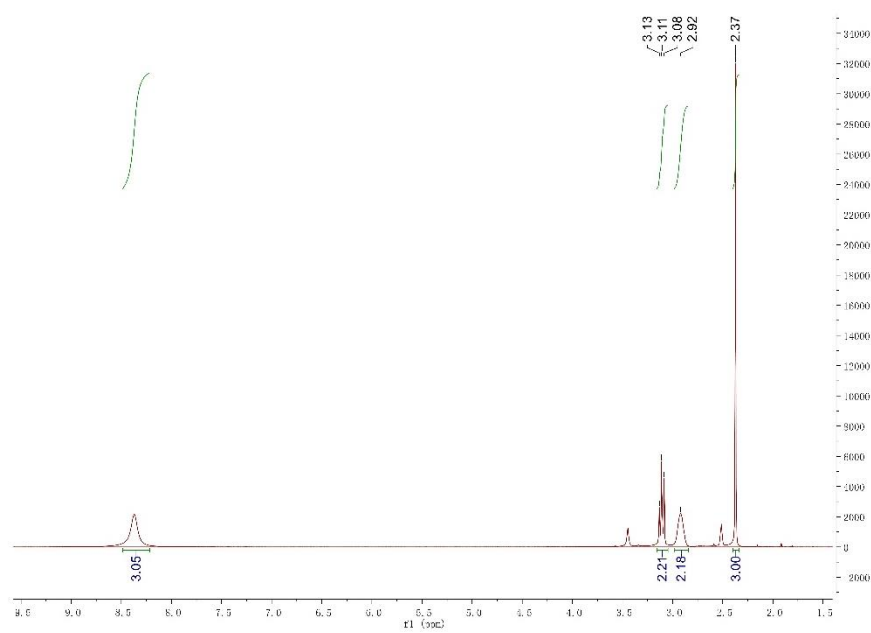


Figure S3. ^1H NMR spectrum of compound 2 in DMSO.

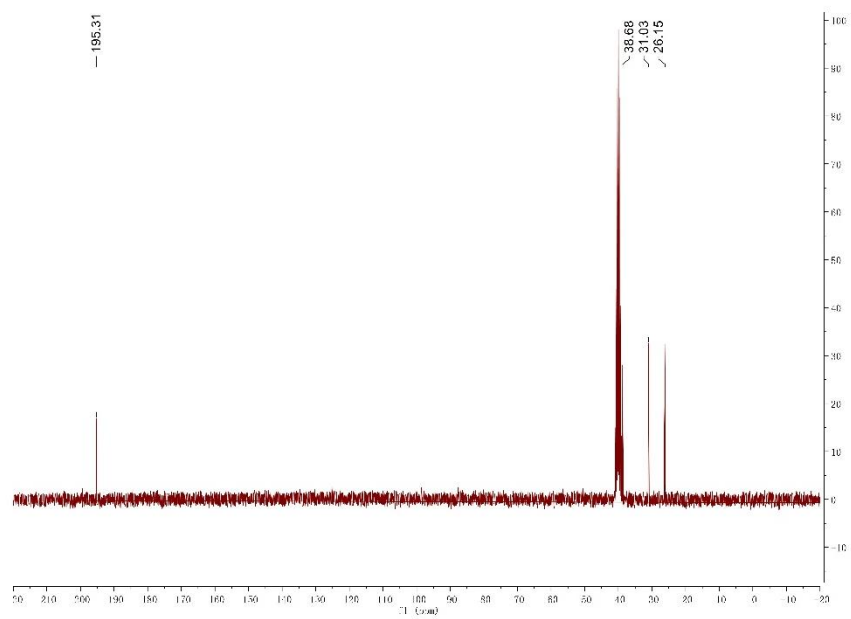


Figure S4. ^{13}C NMR spectrum of compound 2 in DMSO.

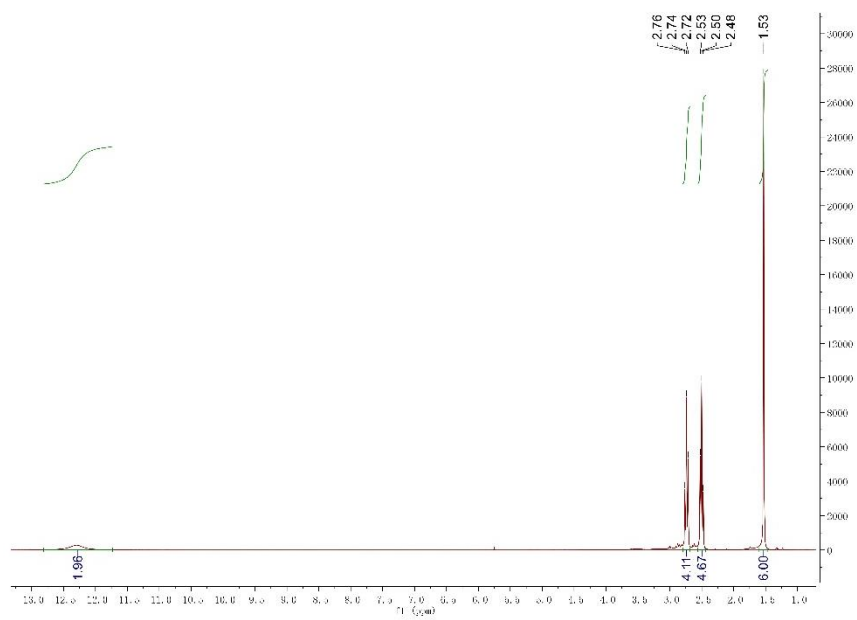


Figure S5. ^1H NMR spectrum of TK in DMSO.

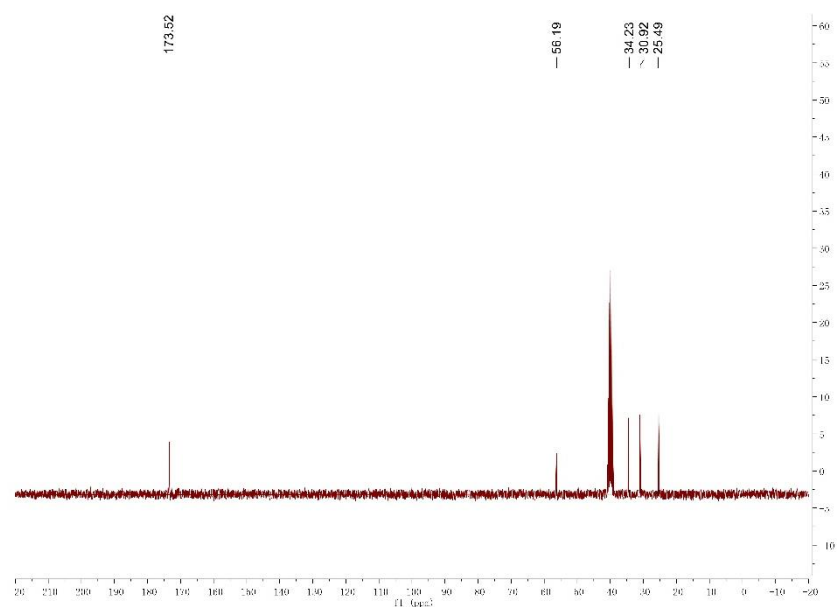


Figure S6. ¹³C NMR spectrum of TK in DMSO.

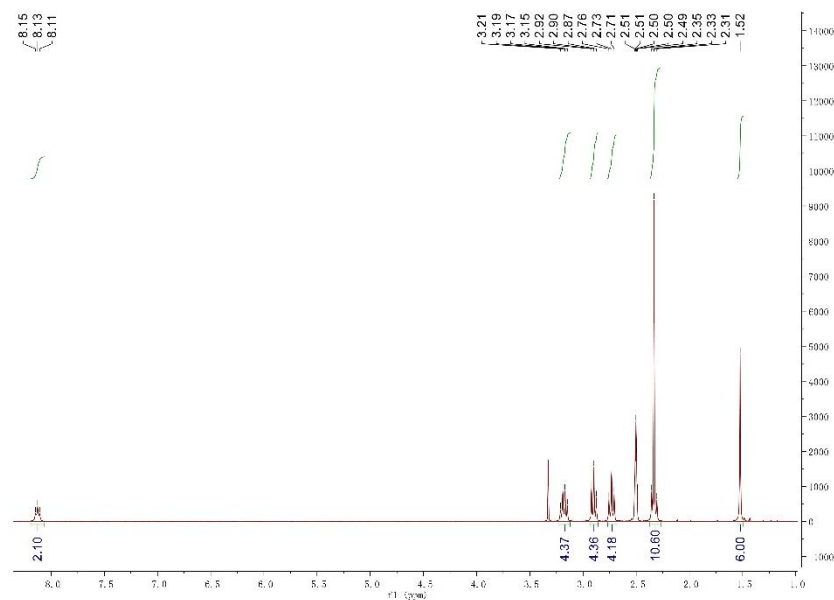


Figure S7. ¹H NMR spectrum of M1 in DMSO.

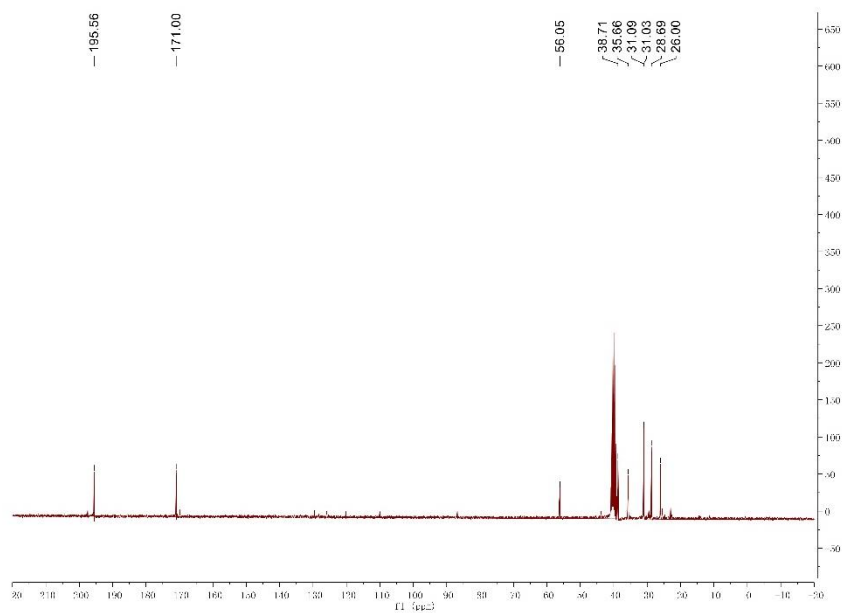


Figure S8. ¹³C NMR spectrum of M1 in DMSO.

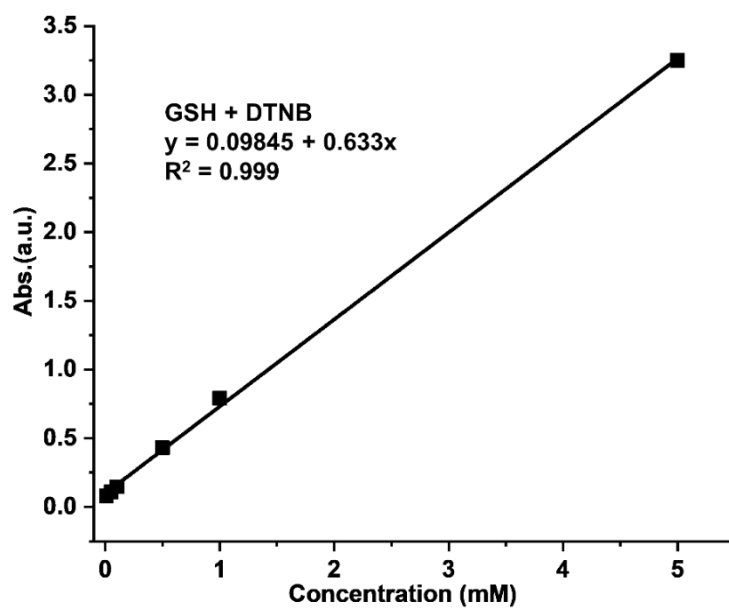


Figure S9. Standard curve between concentrations of glutathione and absorbance at 412 nm.

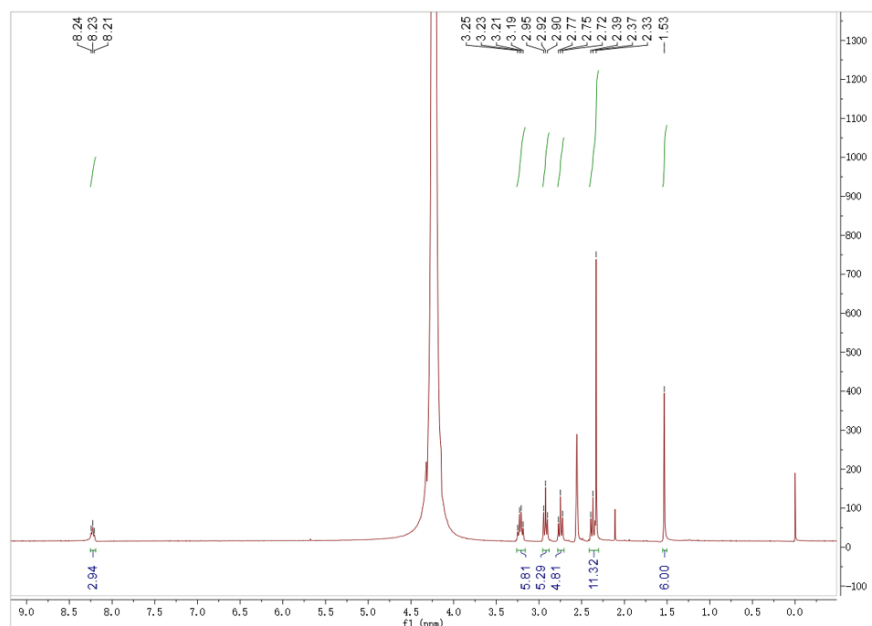


Figure S10. ^1H NMR spectrum of M1 with HCl in DMSO.

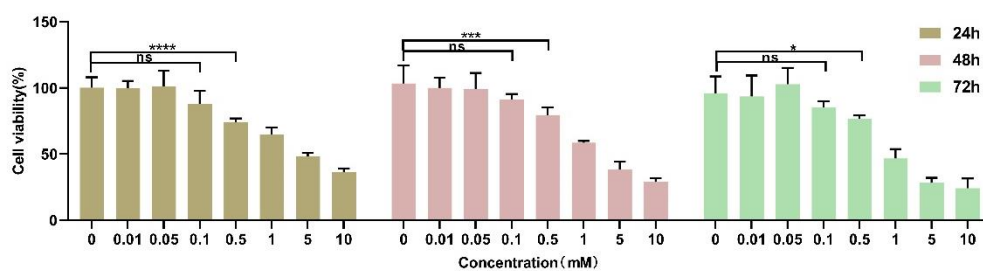


Figure S11. Cytotoxicity assays of M1 with HIEC-6 cells.

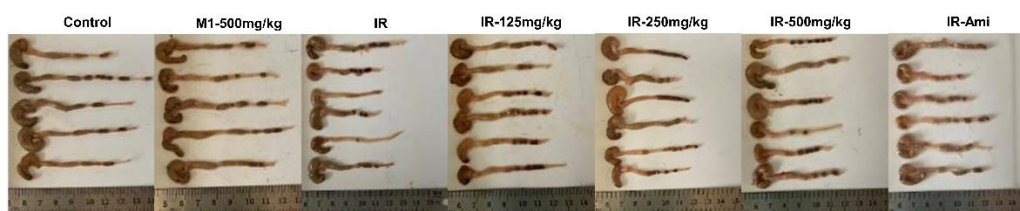


Figure S12. Colon tissues of mice in control, IR, M1-500 mg/kg, IR + 125 mg/kg, IR + 250 mg/kg, IR + 500 mg/kg and IR + Ami groups 3 days after 13 Gy ABI, $n = 6$ per group.