

Electronic Supplementary Information

for

Strategy for Traceless Co-drug delivery with
Platinum(IV) Prodrug Complexes using Self-
Immolative Linkers

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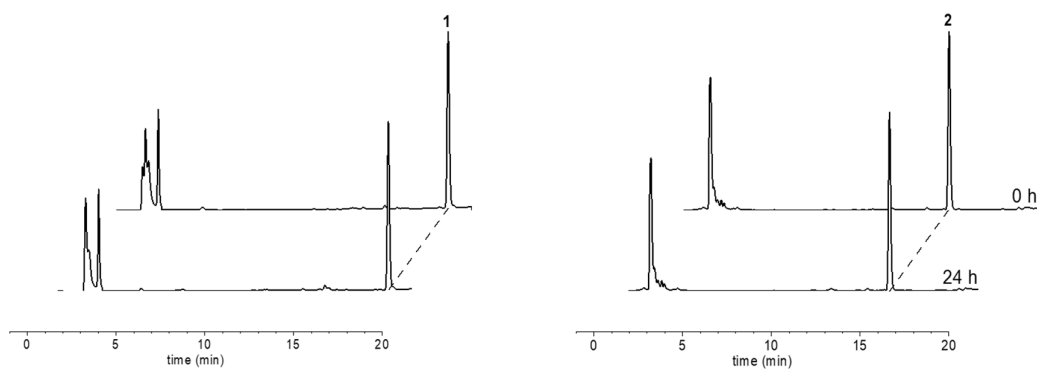


Figure S1. RP-HPLC chromatograms; stabilities of **1** and **2** in PBS over 24 h.

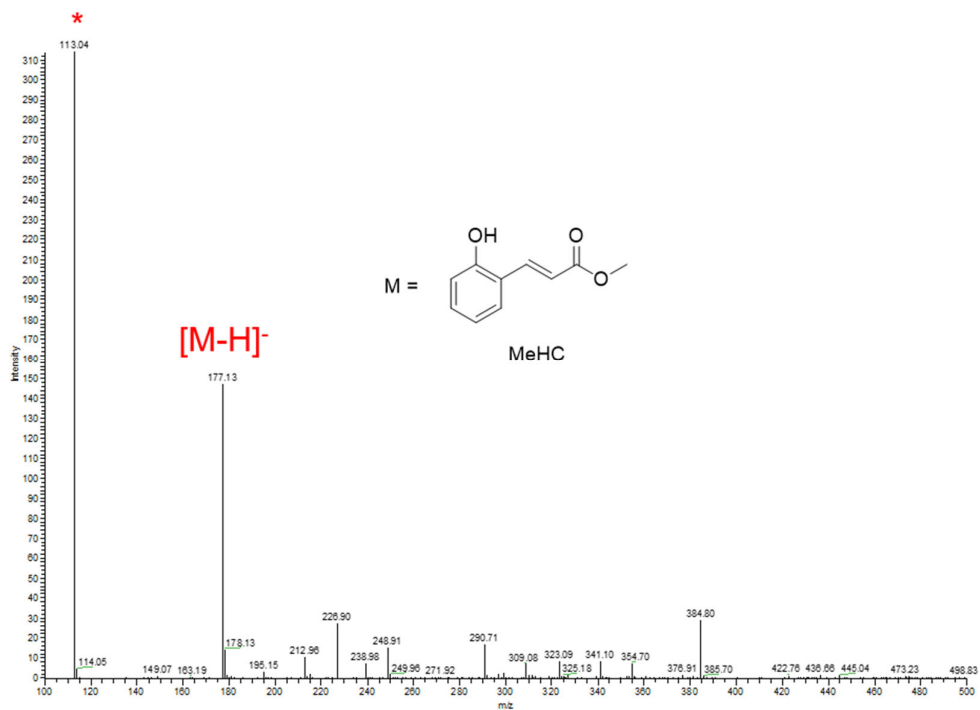


Figure S2. ESI-MS analysis (-ve mode) of reaction mixture after complete reduction of **1** at 6 h (background contaminants indicated by *).

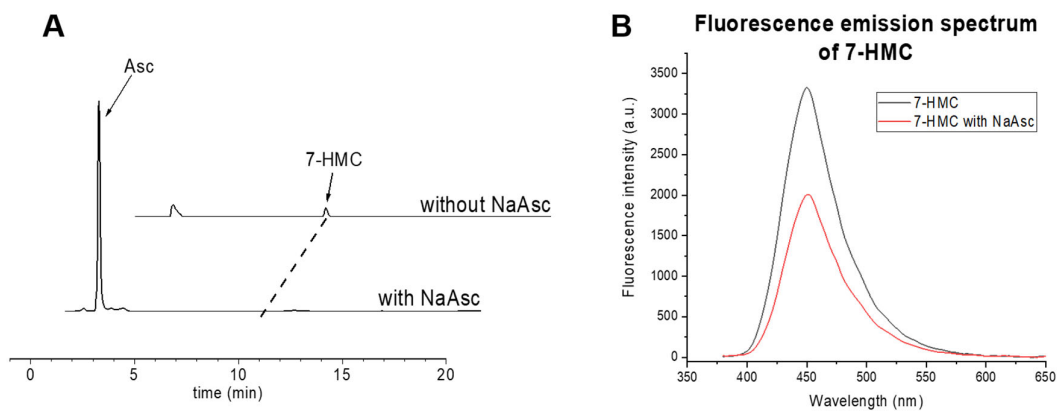


Figure S3. A) RP-HPLC studies of 7-HMC with and without NaAsc and B) fluorescence emission spectrum of 7-HMC with and without NaAsc.

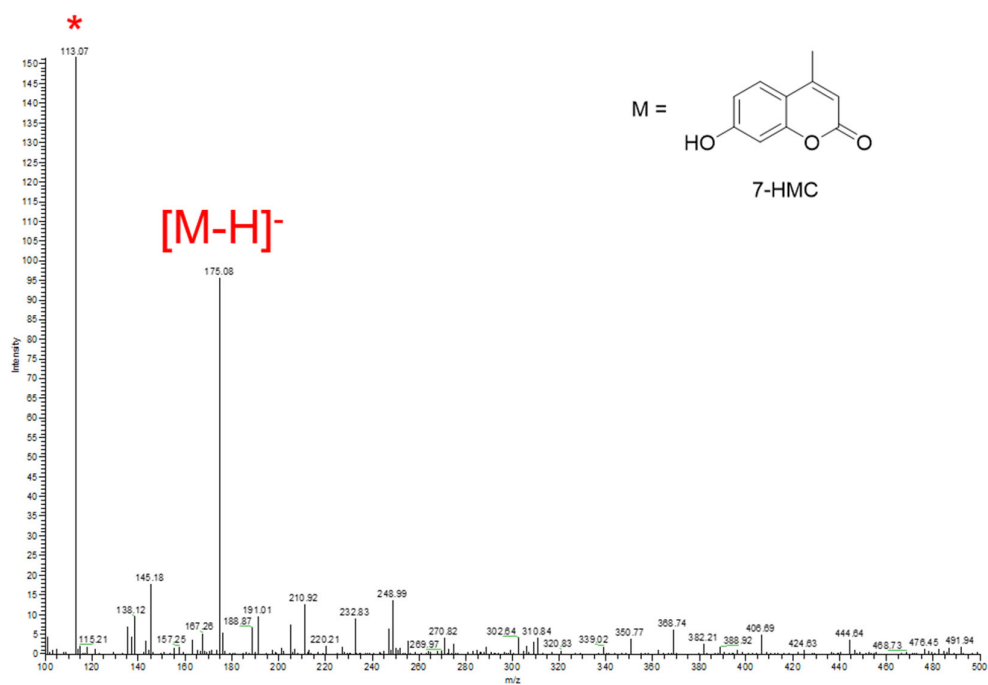


Figure S4. ESI-MS analysis (-ve mode) of reaction mixture after complete reduction of **2** at 6 h (background contaminants indicated by *).

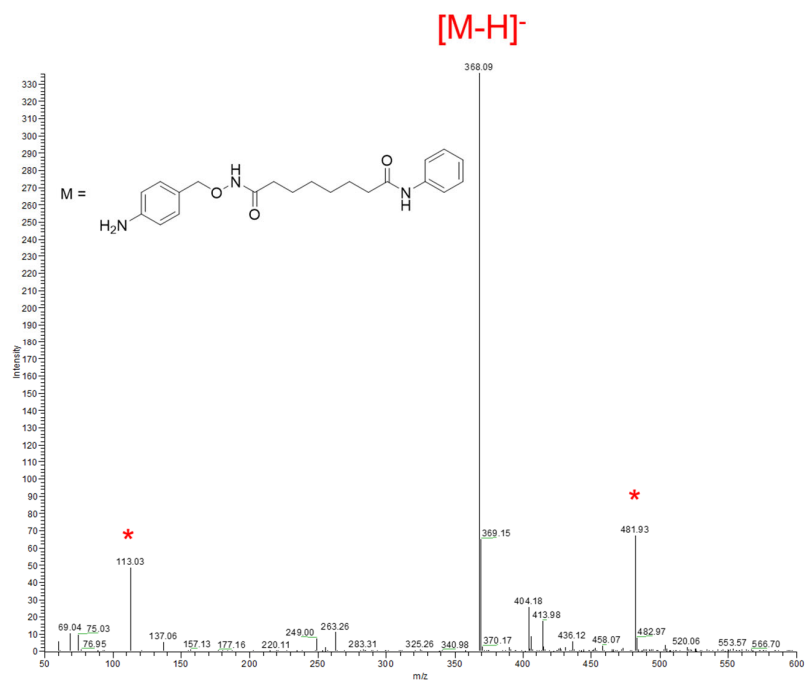


Figure S5. ESI-MS analysis (-ve mode) of linker-tethered SAHA formed after reduction of **3** (background contaminants indicated by *).

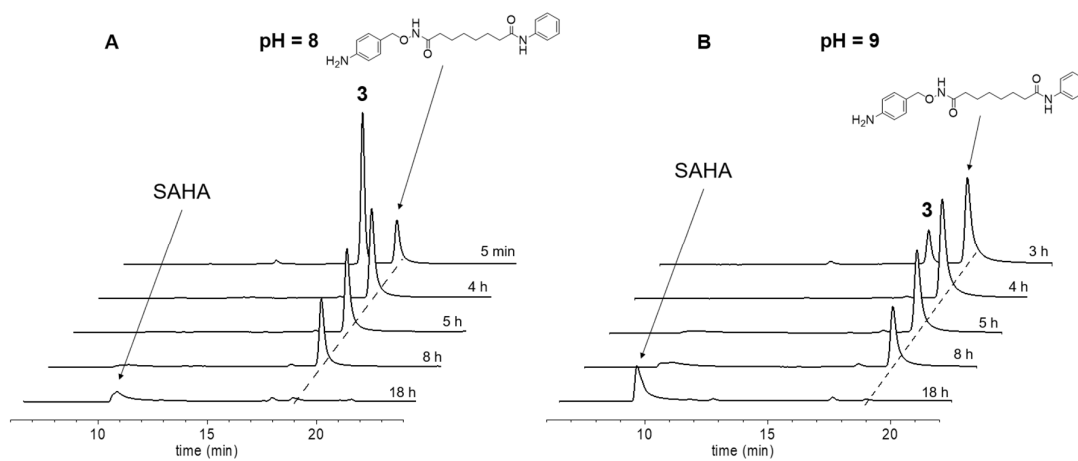


Figure S6. RP-HPLC studies of reduction of **3** at pH = 8 and 9, 37°C.

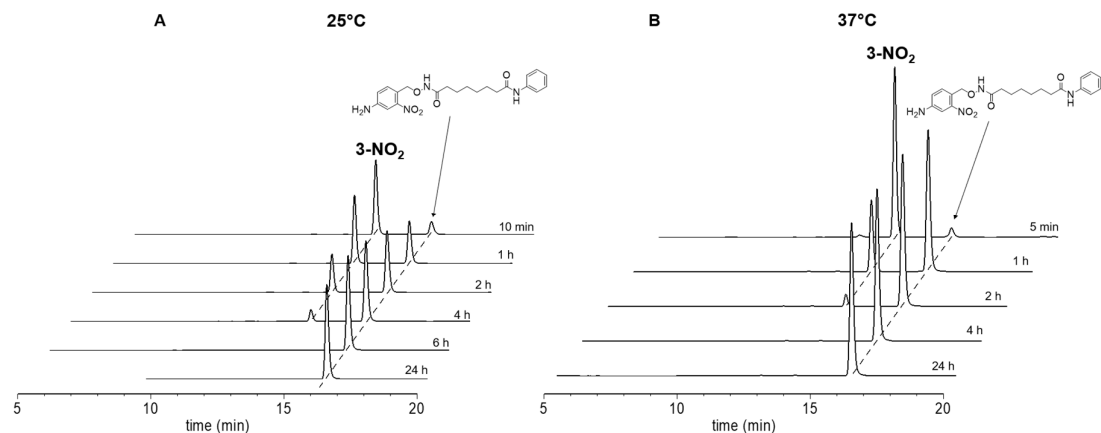


Figure S7. RP-HPLC studies of reduction of 3-NO₂ at 25°C and 37°C, pH = 7.4.

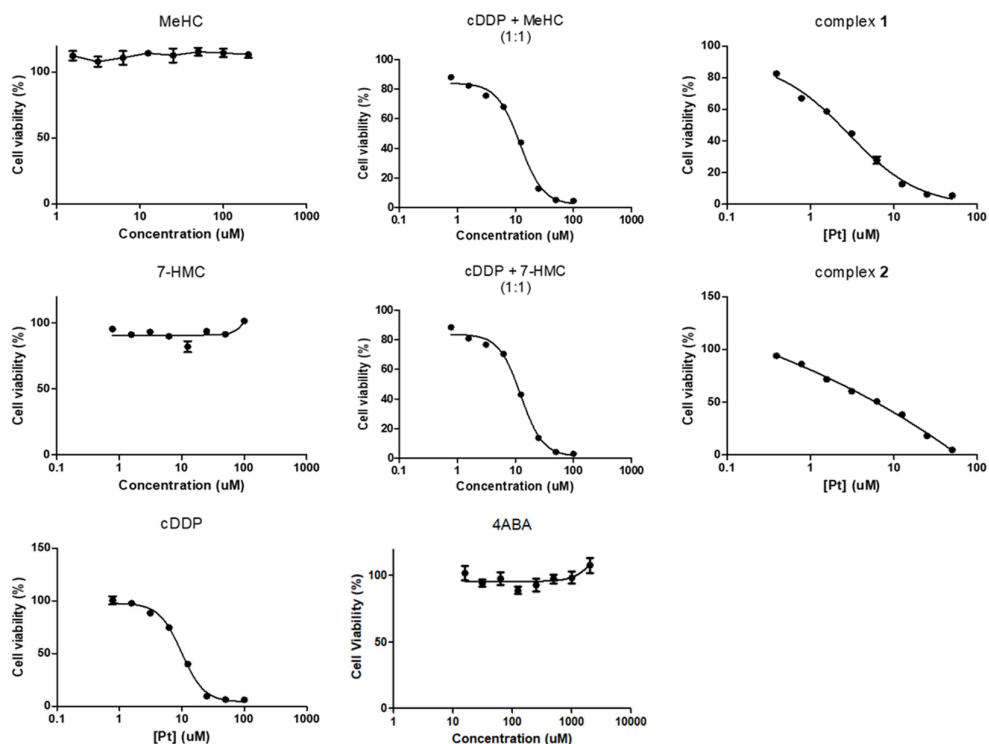


Figure S8. Dose-response antiproliferative efficacy curves for MeHC, 7-HMC, 4ABA, cDDP, cDDP+MeHC (1:1), cDDP+7-HMC (1:1), 1 and 2 in HeLa cell line.

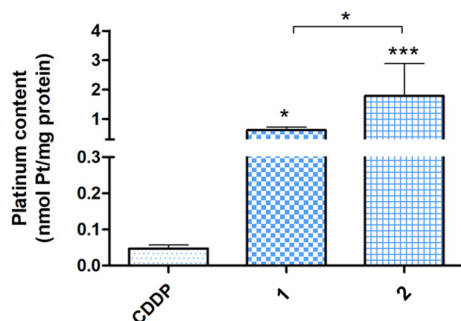


Figure S9. Cellular uptake of cDDP, **1** and **2** in HeLa cell line.

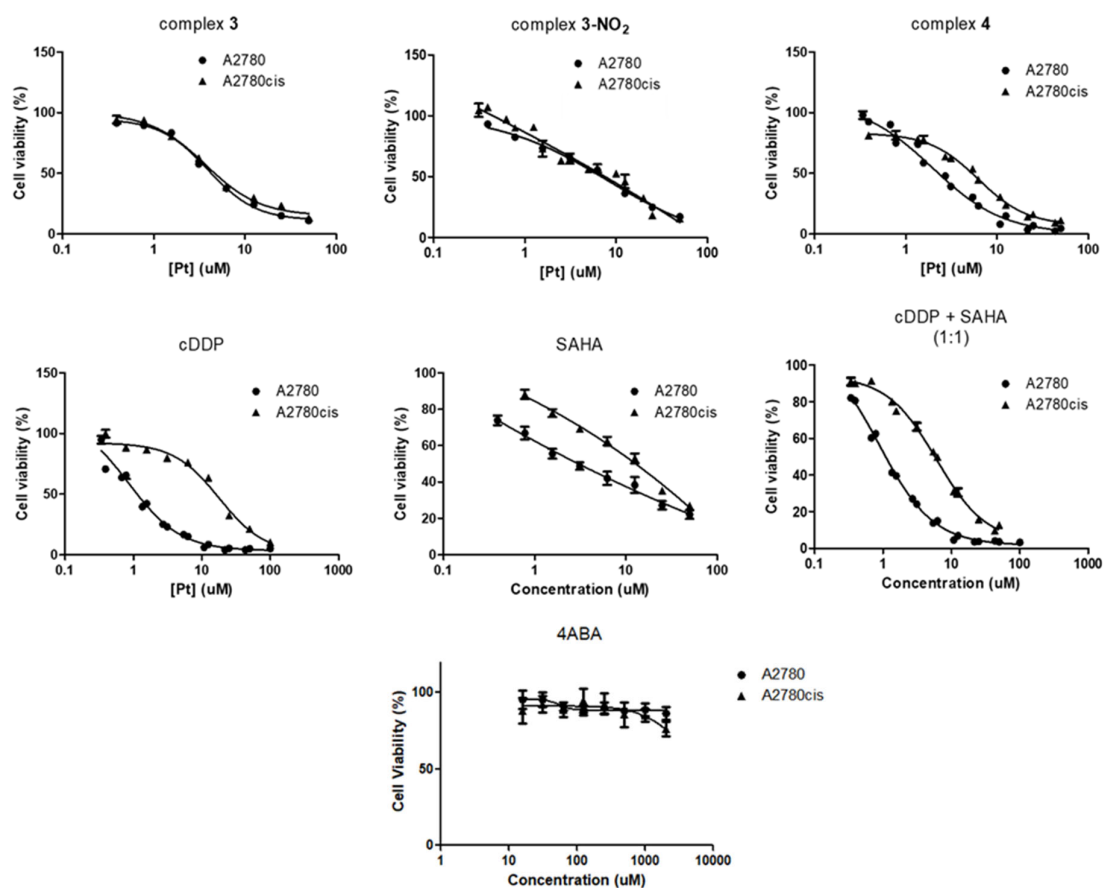


Figure S10. Dose-response drug efficacy curves for **3**, **3-NO₂** and **4**, cDDP, 4ABA, SAHA and cDDP and SAHA (1:1) in A2780 and A2780cis cell lines.

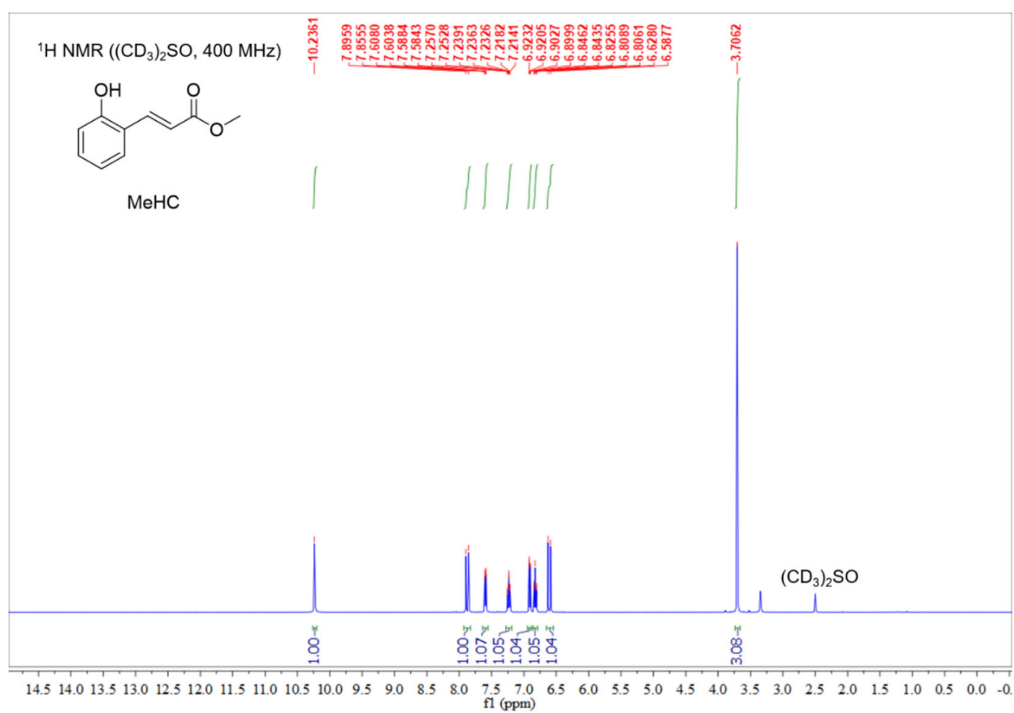


Figure S11A. ¹H-NMR of MeHC (DMSO-*d*⁶).

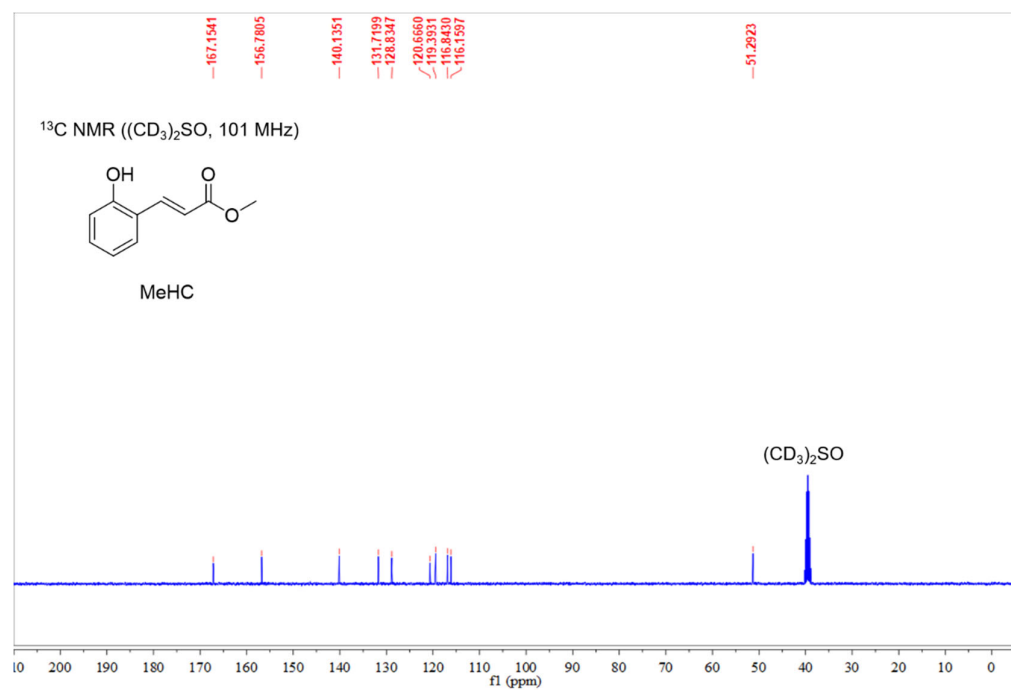


Figure S11B. ¹³C{¹H}-NMR of MeHC (DMSO-*d*⁶).

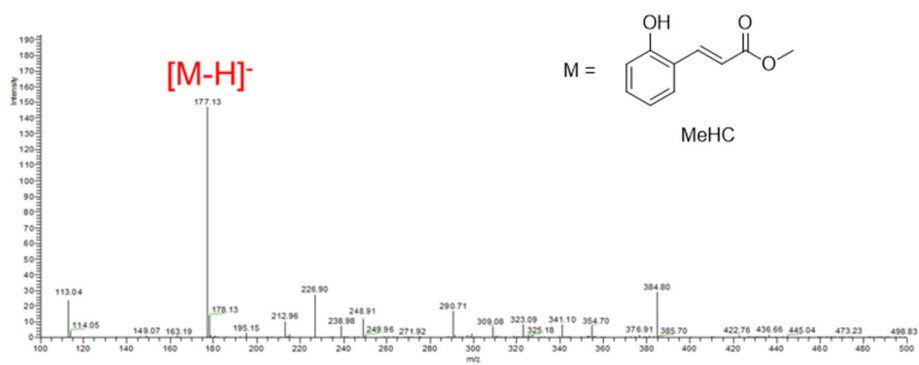


Figure S11C. ESI-MS analysis (-ve mode) of MeHC.

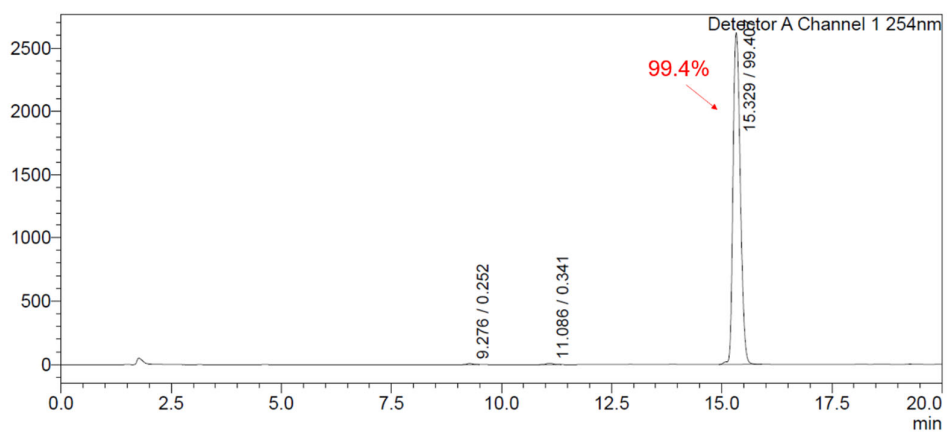


Figure S11D. RP-HPLC assessment of purity of MeHC at 254 nm.

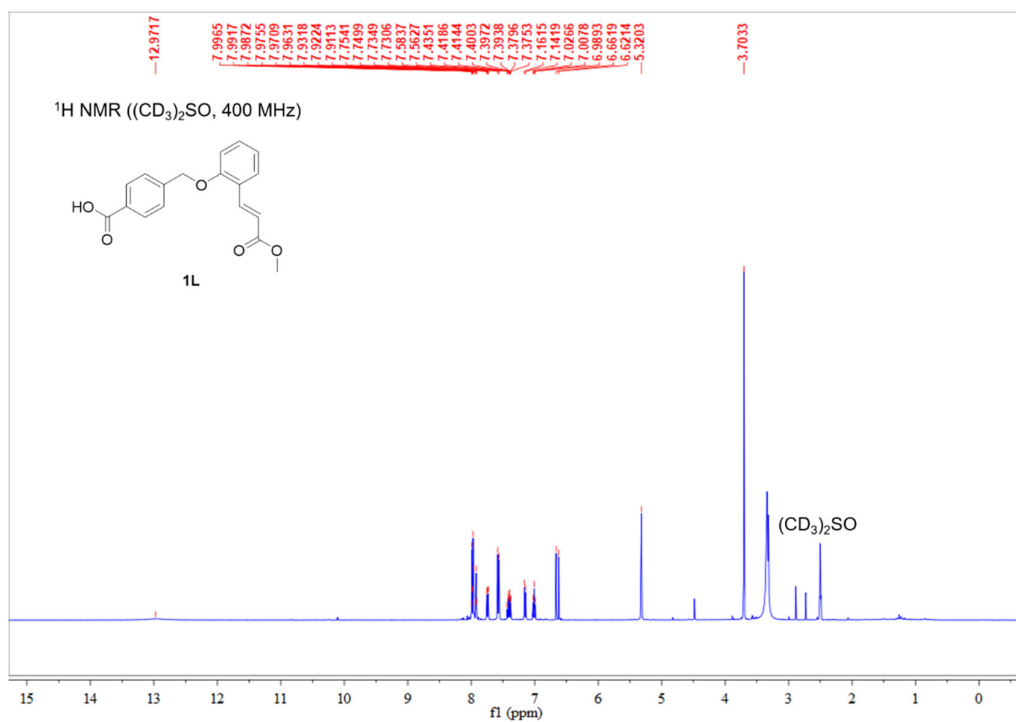


Figure S12A. ¹H-NMR of **L1** (DMSO-*d*⁶).

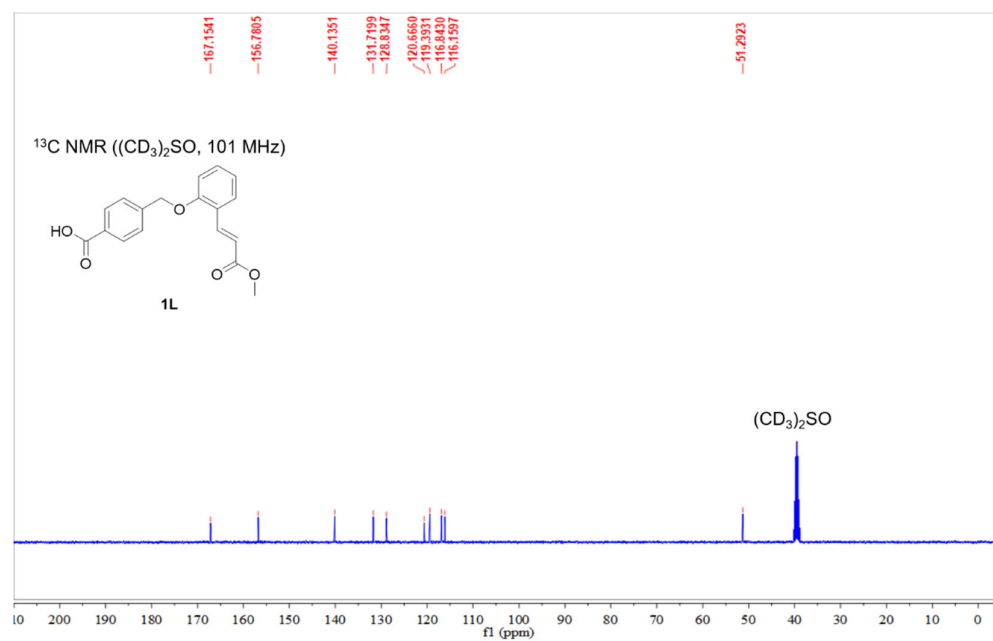


Figure S12B. ¹³C {¹H}-NMR of **L1** (DMSO-*d*⁶).

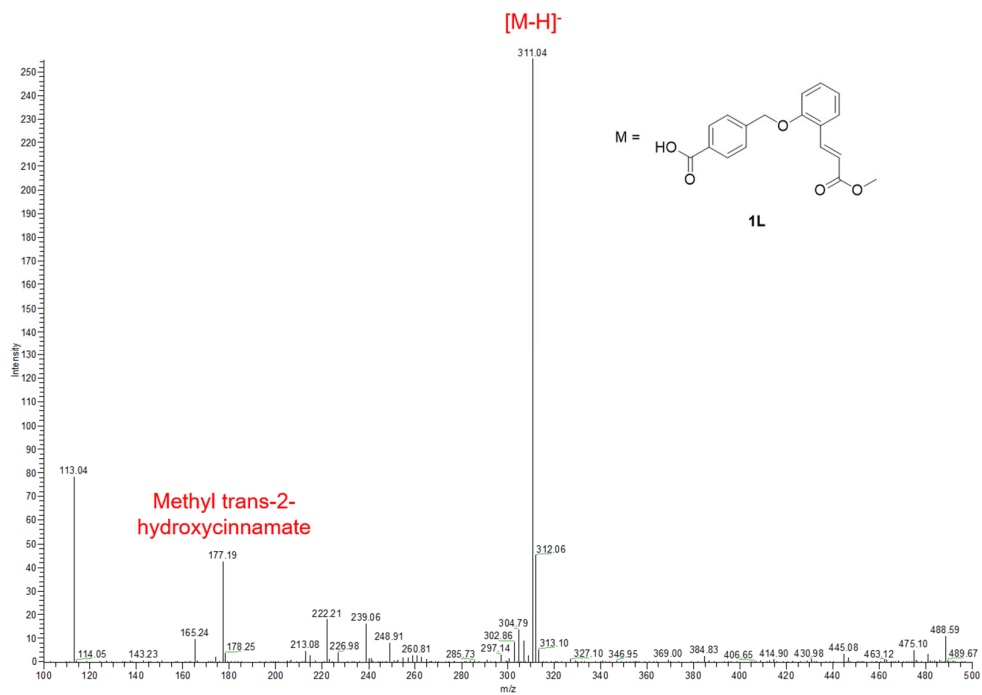


Figure S12C. ESI-MS analysis (-ve mode) of **1L**.

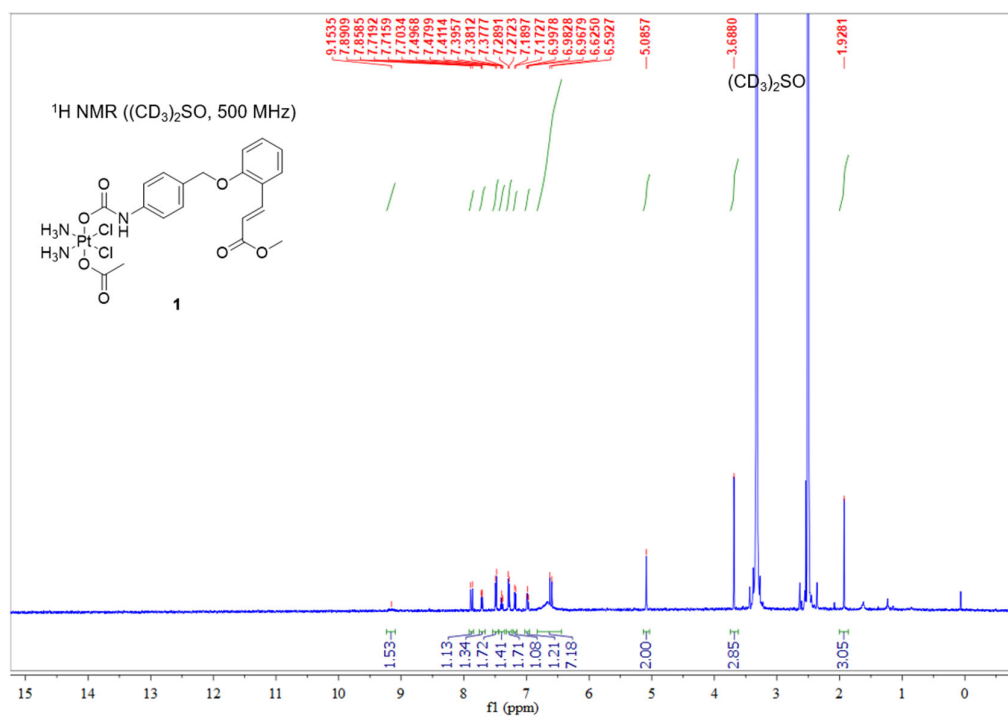


Figure S13A. ¹H-NMR of **1** (DMSO-*d*⁶).

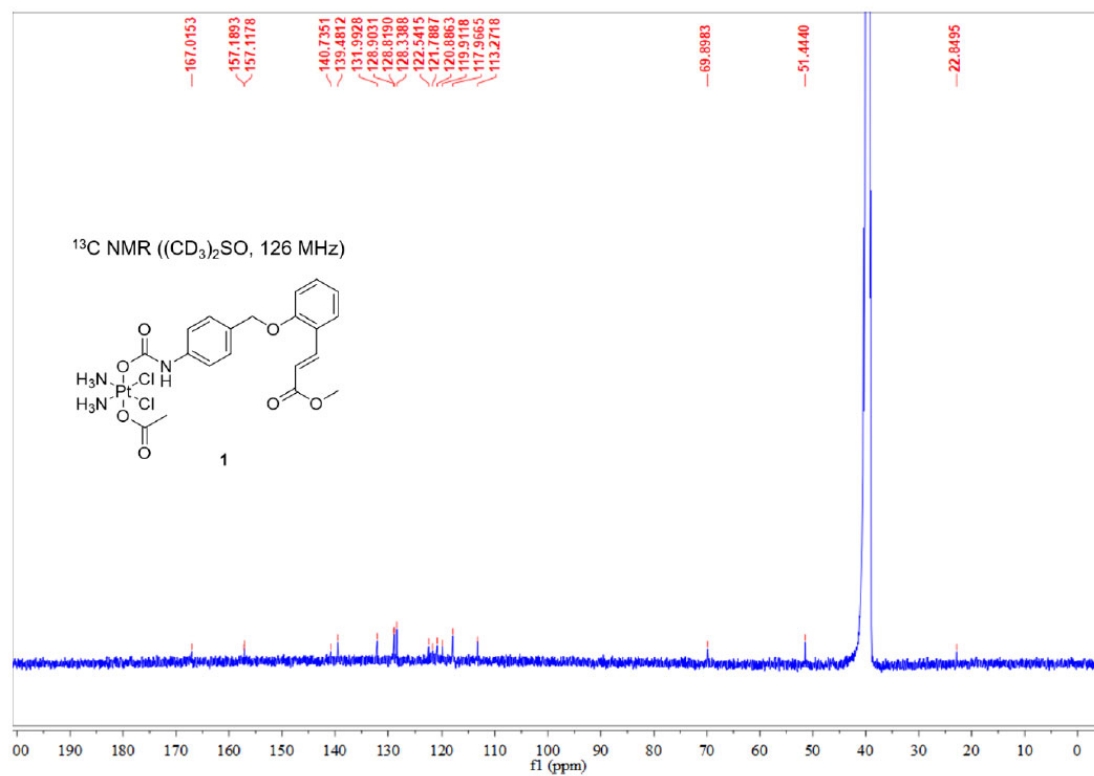


Figure S13B. ¹³C{¹H}-NMR of **1** (DMSO-*d*⁶).

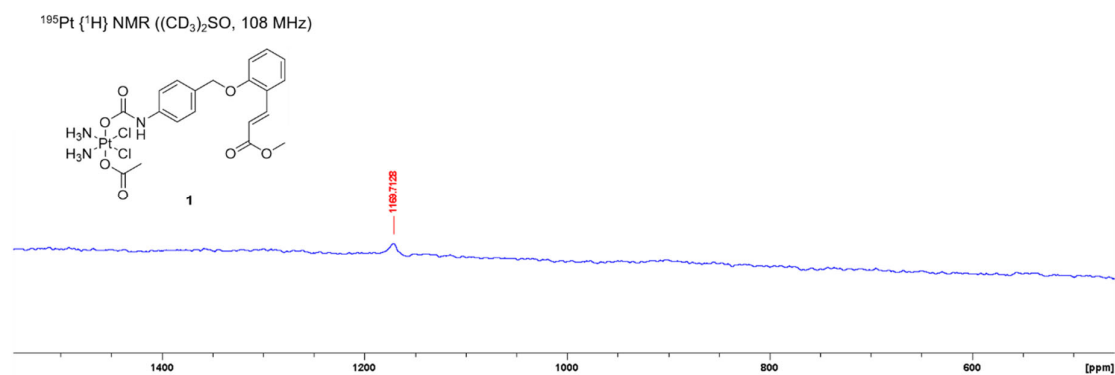


Figure S13C. $^{195}\text{Pt}\{^1\text{H}\}$ -NMR of **1** ($\text{DMSO}-d^6$).

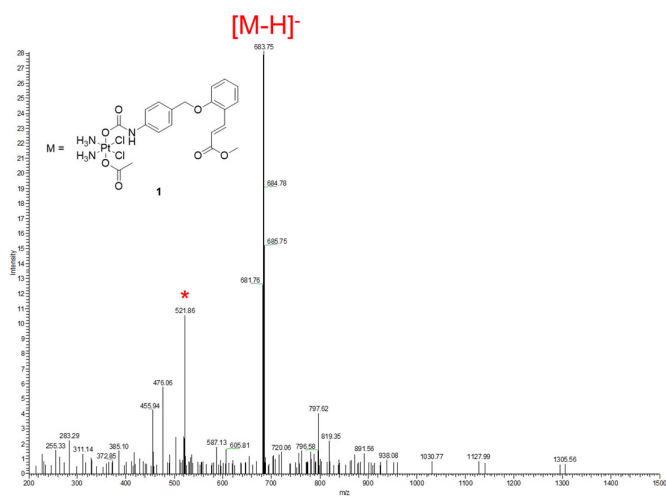


Figure S13D. ESI-MS analysis (-ve mode) of **1** (background contaminants indicated by *).

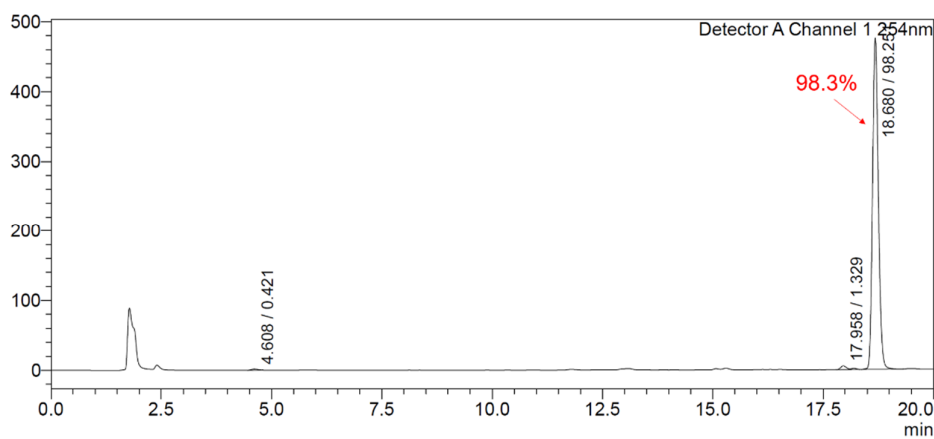


Figure S13E. RP-HPLC assessment of purity of **1** at 254 nm.

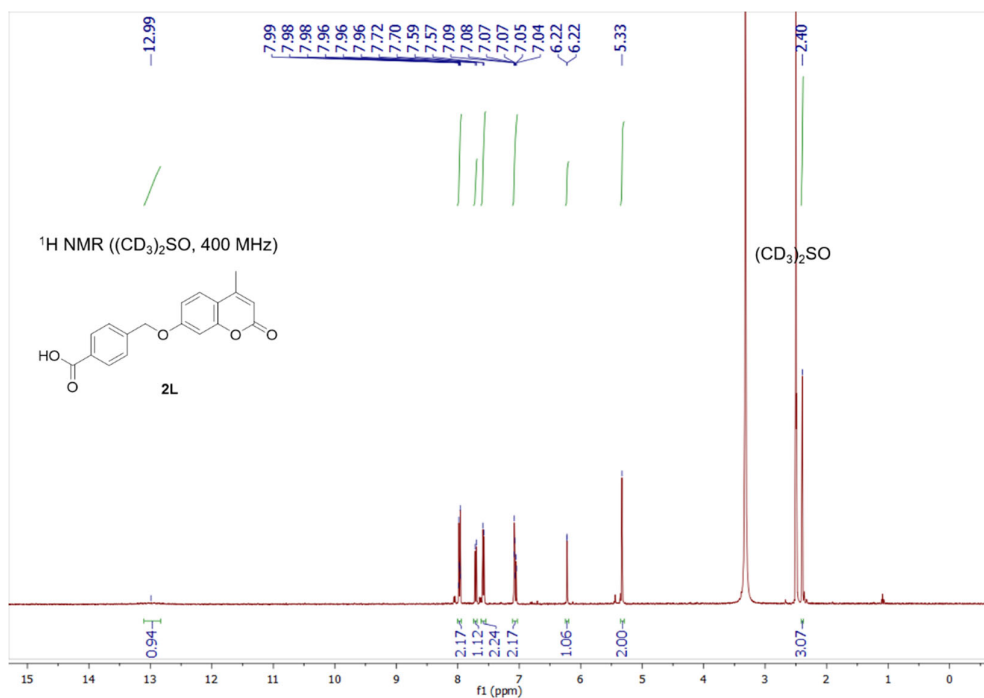


Figure S14A. ¹H-NMR of **L2** (DMSO-*d*⁶).

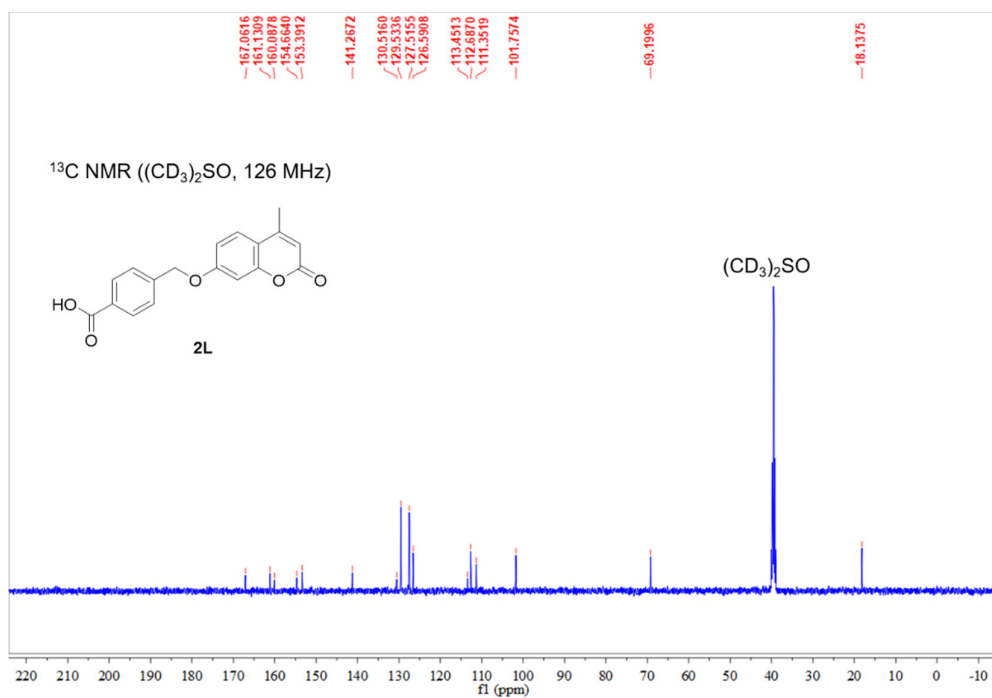


Figure S14B. ¹³C{¹H}-NMR of **L2** (DMSO-*d*⁶).

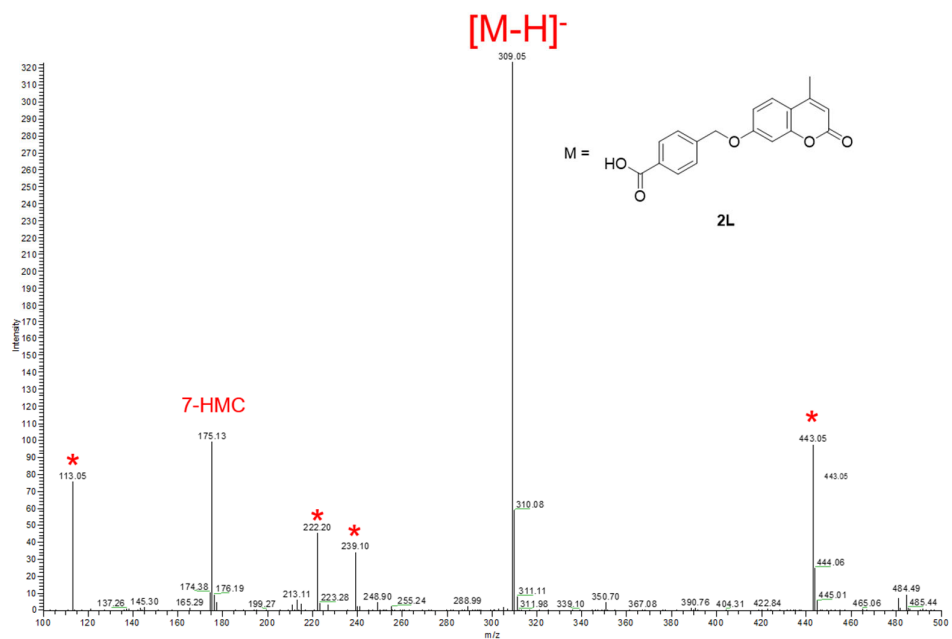


Figure S14C. ESI-MS analysis (-ve mode) of **L2** (background contaminants indicated by *).

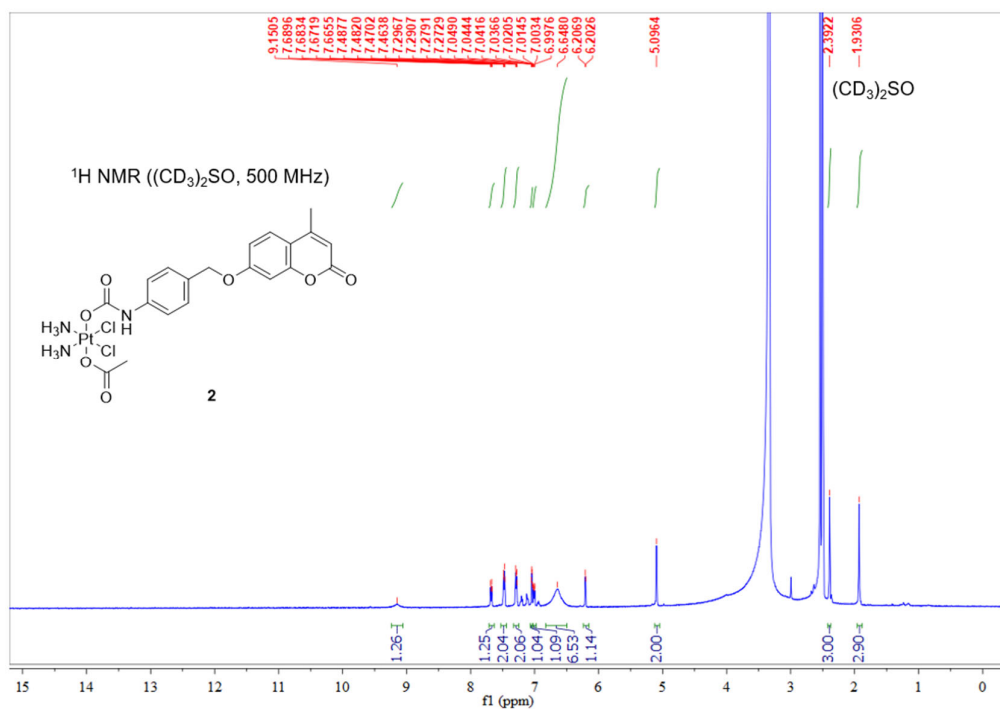


Figure S15A. ¹H-NMR of **2** (DMSO-*d*⁶).

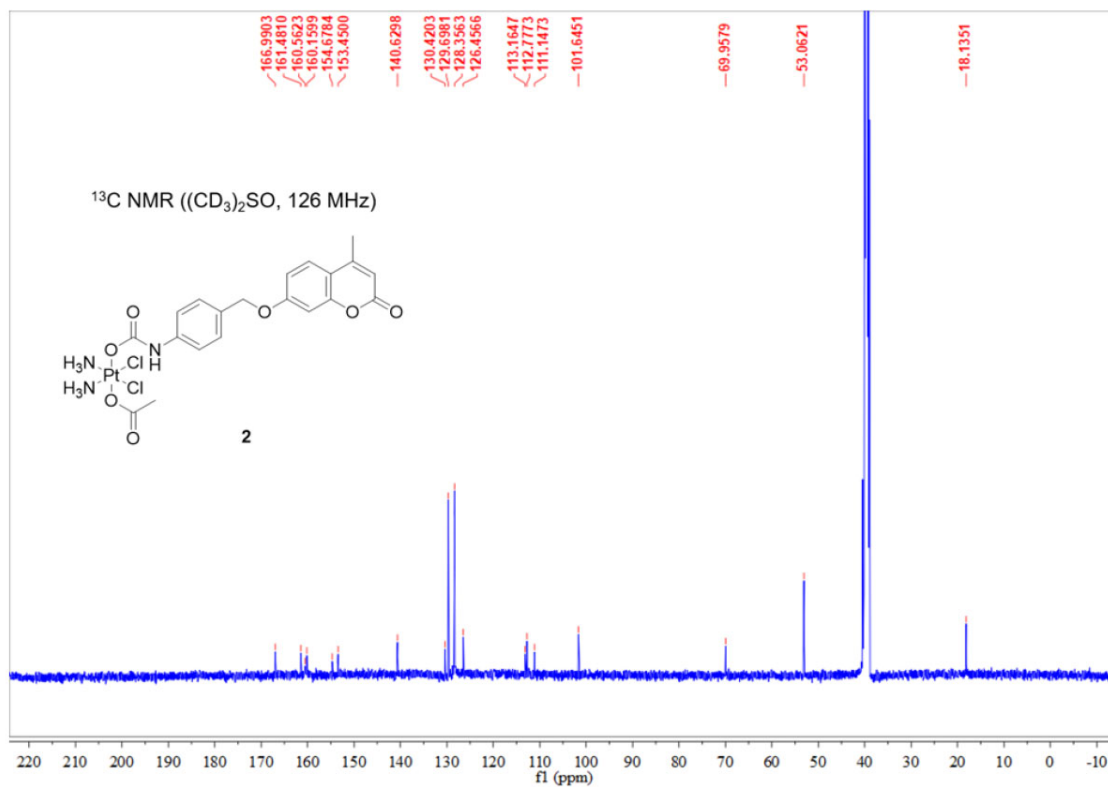


Figure S15B. ¹³C{¹H}-NMR of **2** (DMSO-*d*⁶).

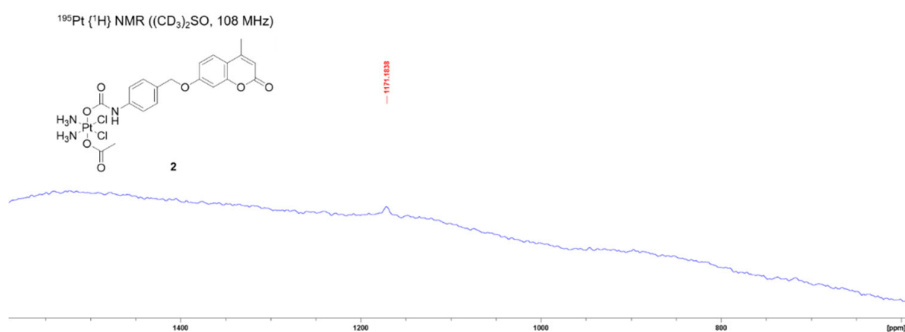


Figure S15C. $^{195}\text{Pt}\{^1\text{H}\}$ -NMR of **2** ($\text{DMSO}-d^6$).

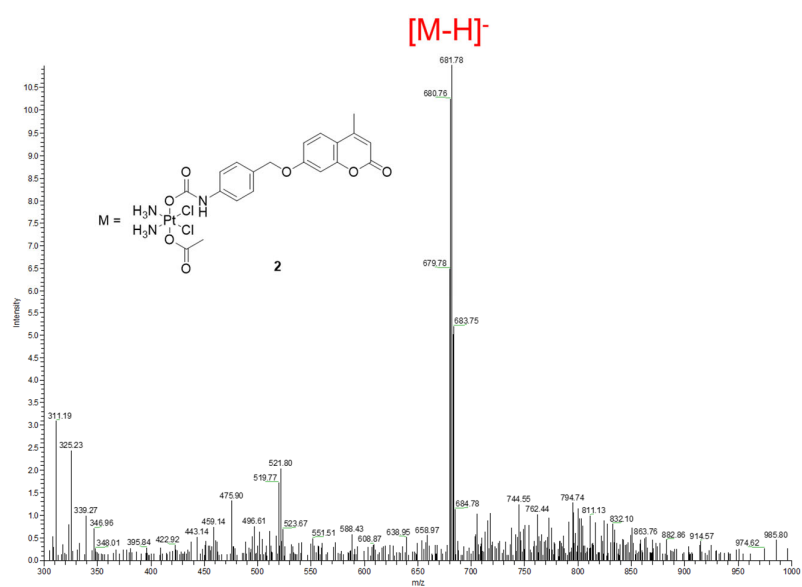


Figure S15D. ESI-MS analysis (-ve mode) of **2**.

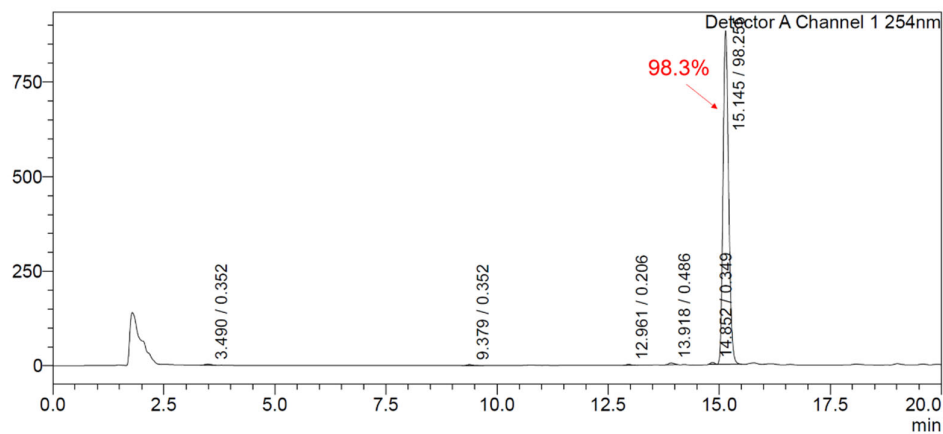


Figure S15E. RP-HPLC assessment of purity of **2** at 254 nm.

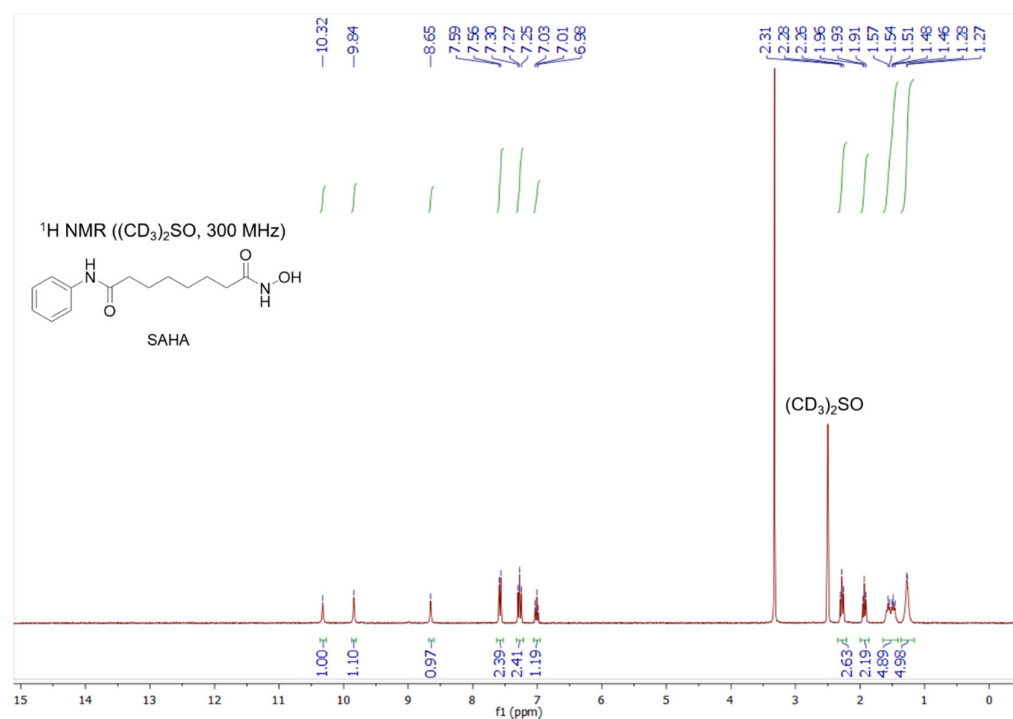


Figure S16A. ¹H-NMR of SAHA (DMSO-*d*⁶).

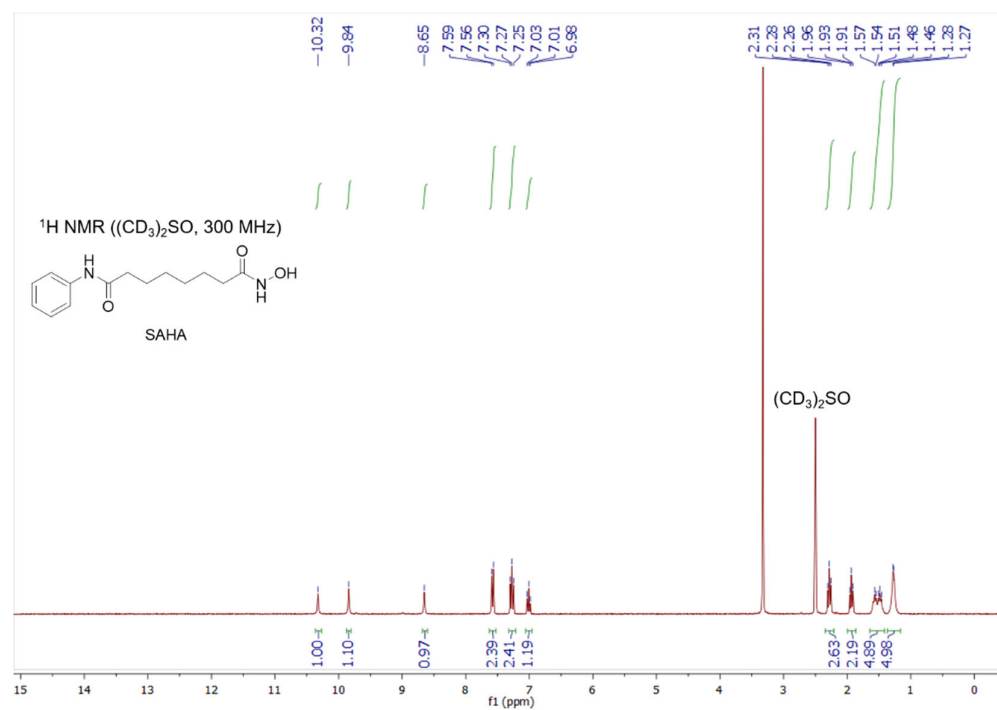


Figure S16B. ¹³C{¹H}-NMR of SAHA (DMSO-*d*⁶).

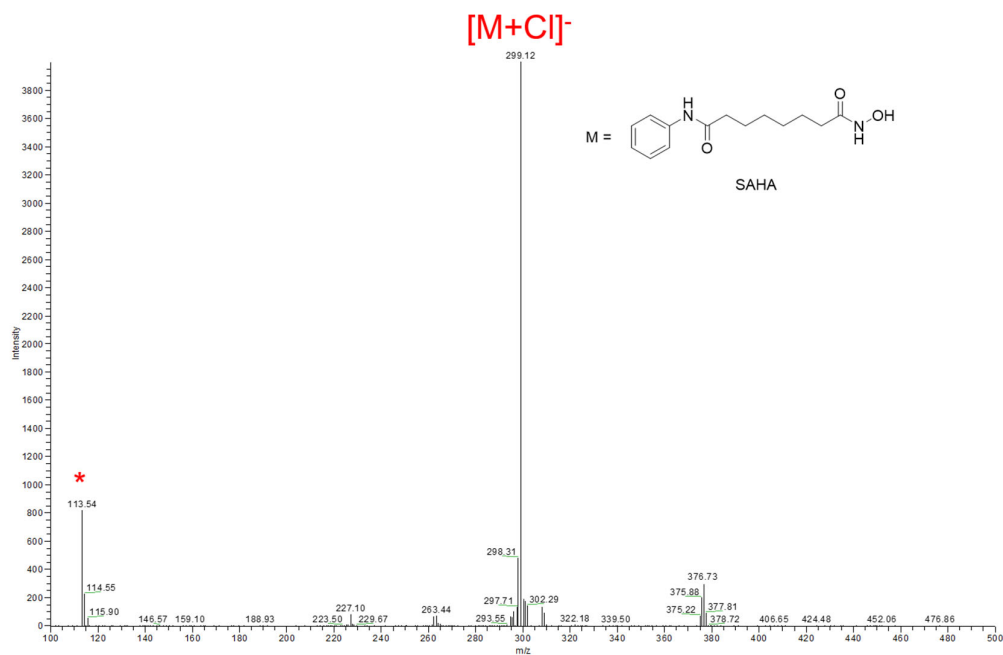


Figure S16C. ESI-MS analysis (-ve mode) of SAHA.

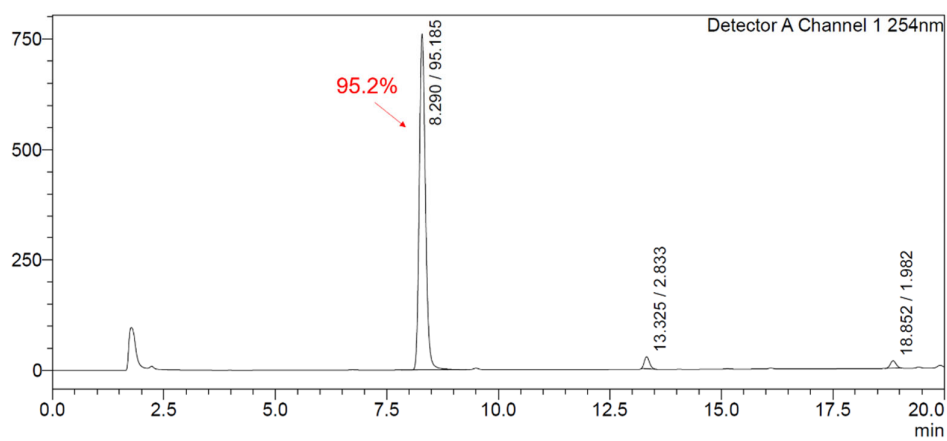


Figure S16D. RP-HPLC assessment of purity of SAHA at 254 nm.

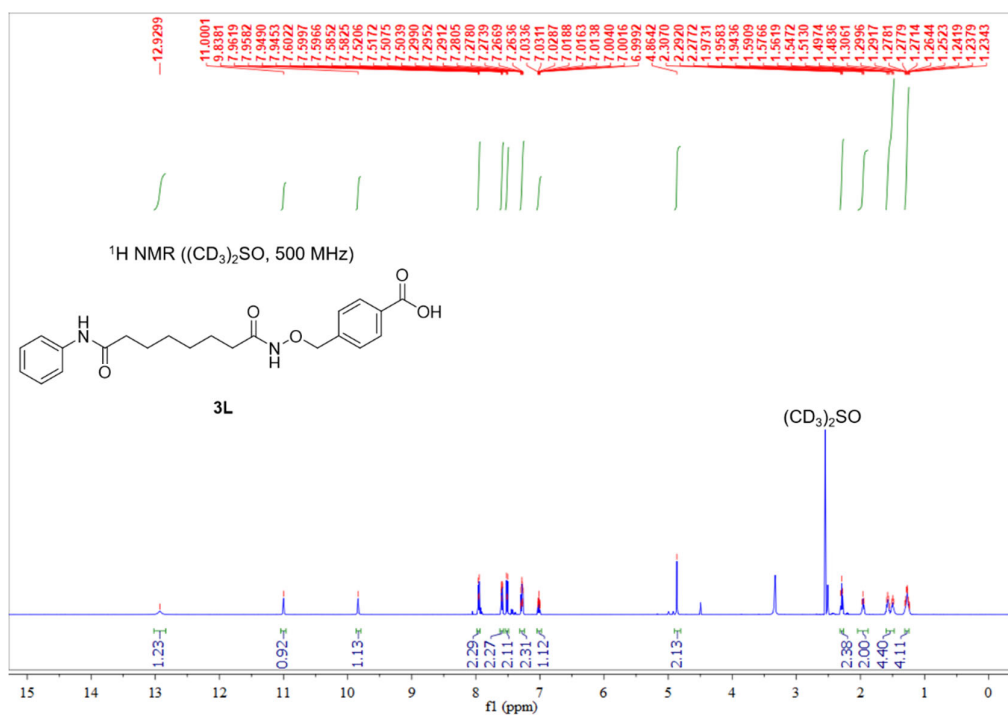


Figure S17A. ¹H-NMR of L3 (DMSO-*d*⁶).

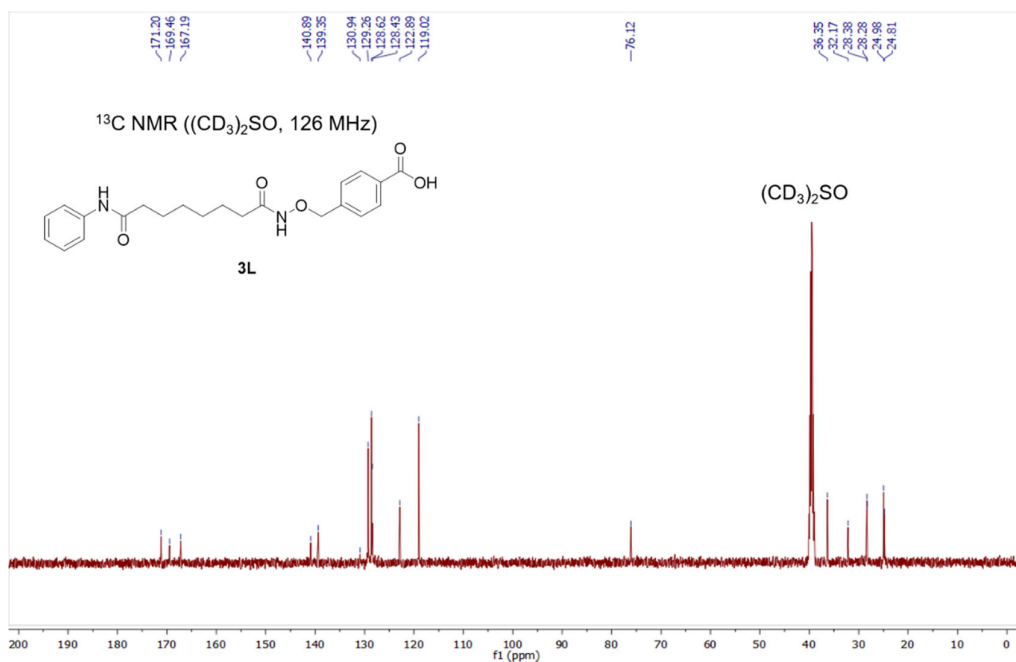


Figure S17B. ¹³C {¹H}-NMR of L3 (DMSO-*d*⁶).

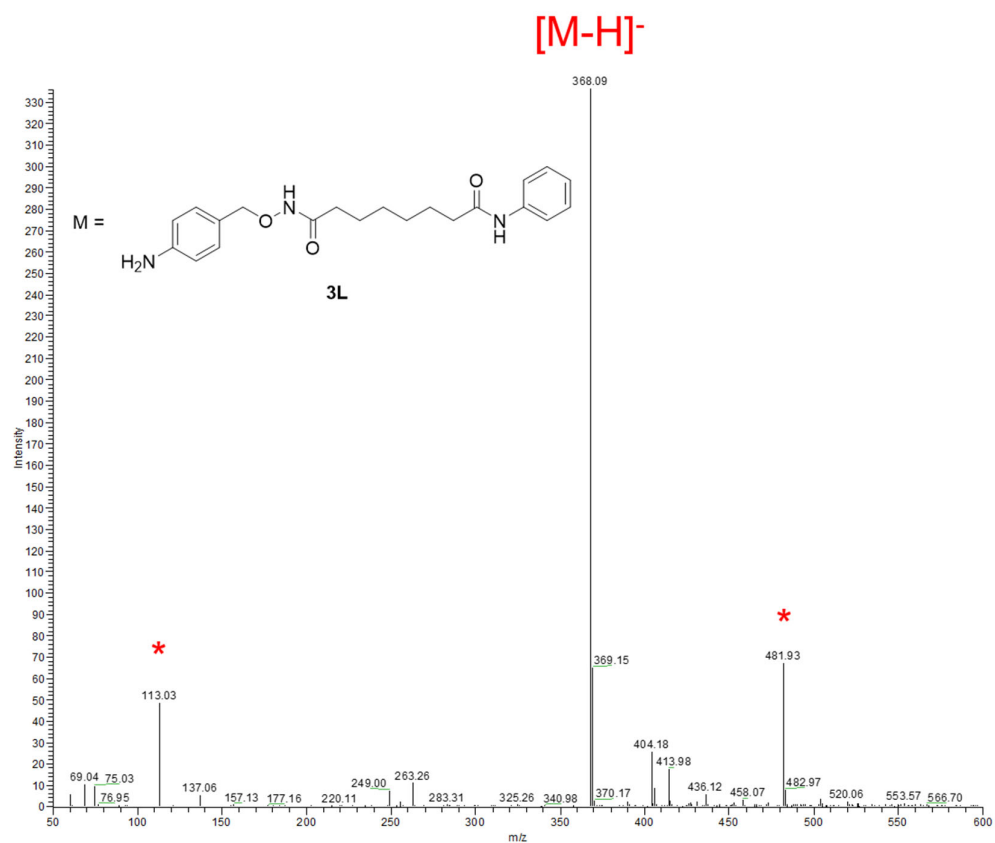


Figure S17C. ESI-MS analysis (-ve mode) of L3 (background contaminants indicated by *).

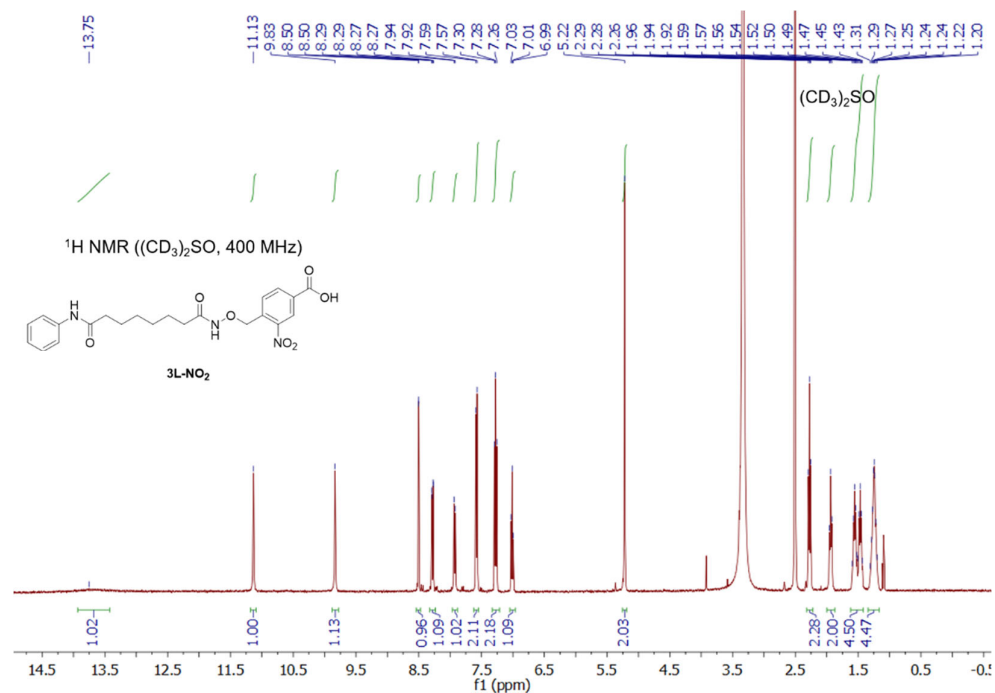


Figure S18A. ¹H-NMR of L3-NO₂ (DMSO-*d*⁶).

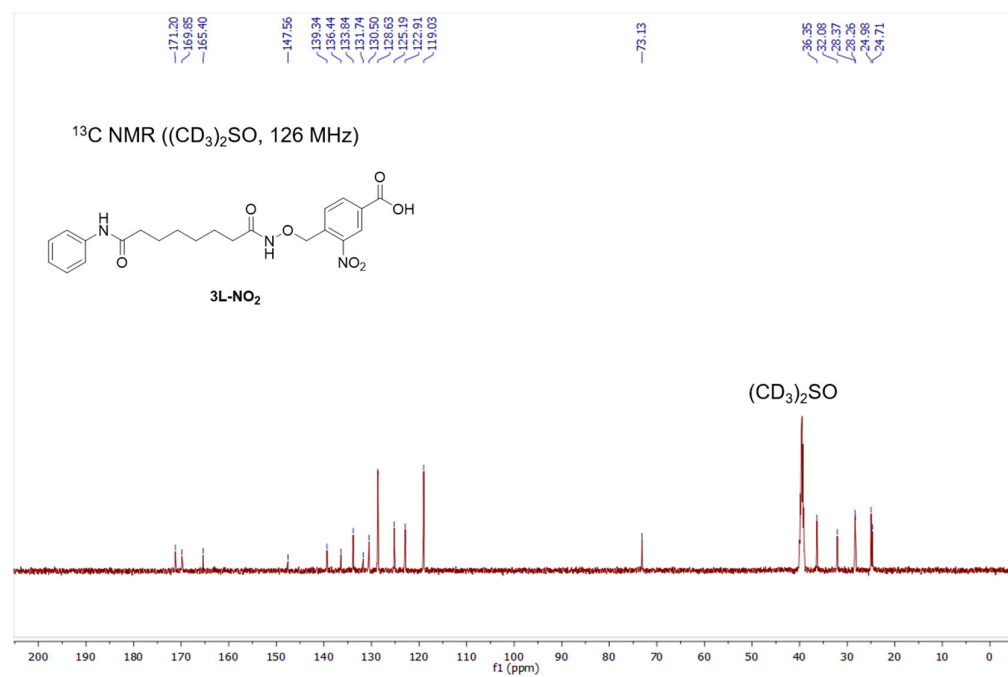


Figure S18B. ¹³C{¹H}-NMR of L3-NO₂ (DMSO-*d*⁶).

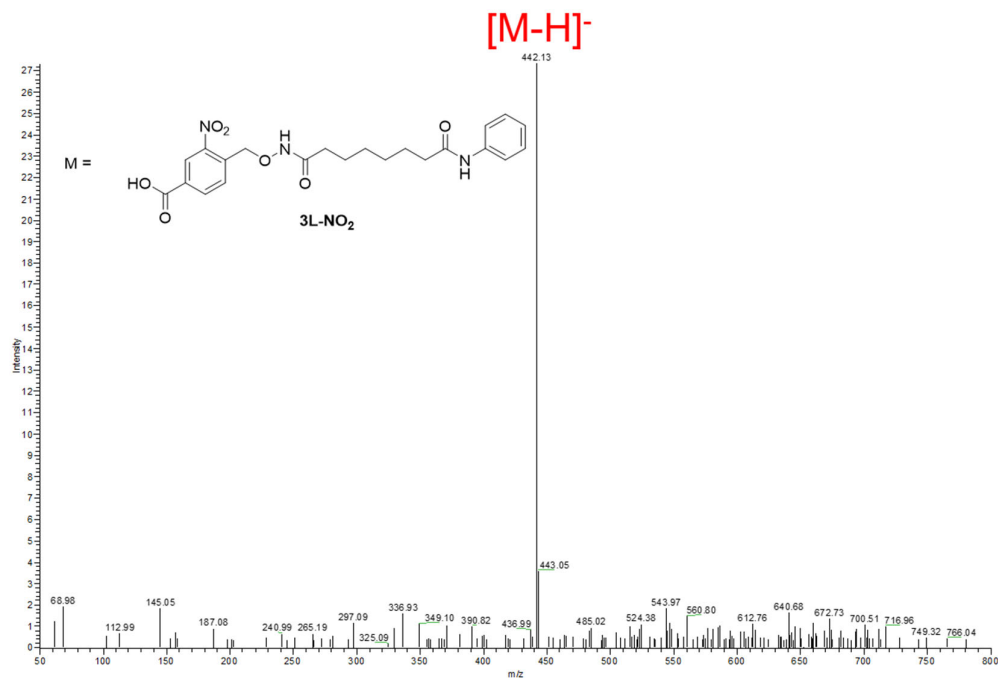


Figure S18C. ESI-MS analysis (-ve mode) of **L3-NO₂**.

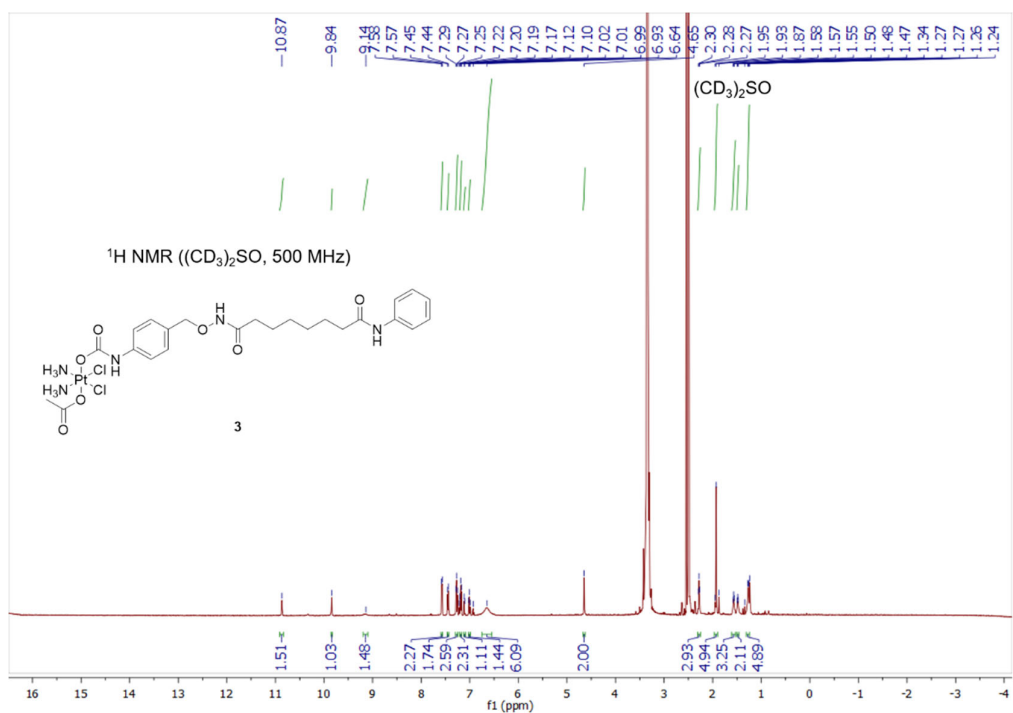


Figure S19A. ¹H-NMR of **3** (DMSO-*d*⁶).

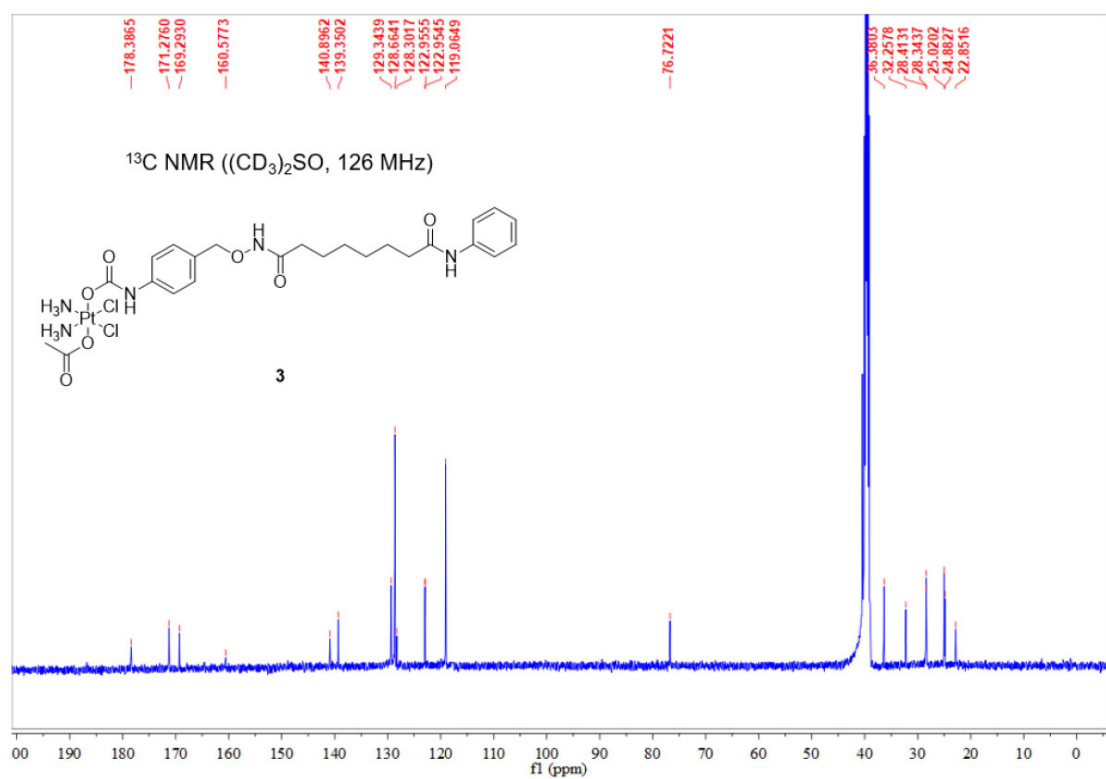


Figure S19B. ¹³C{¹H}-NMR of **3** (DMSO-*d*⁶).

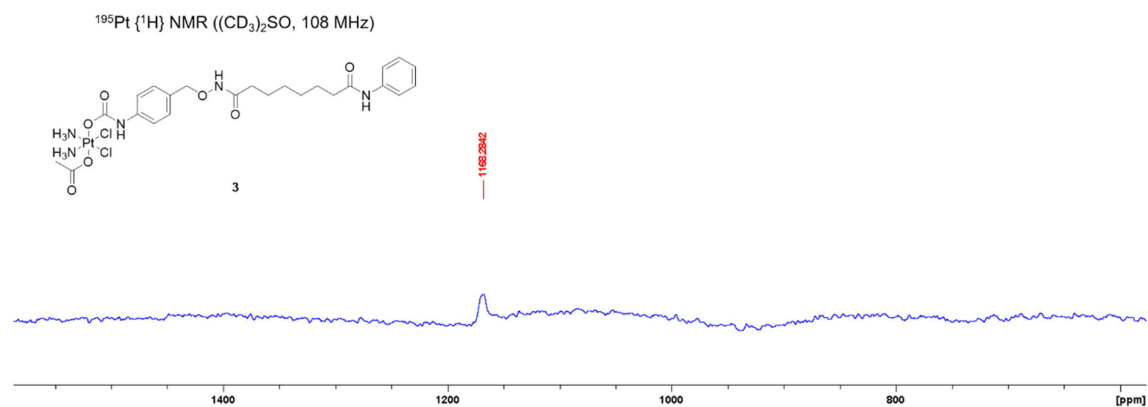


Figure S19C. $^{195}\text{Pt}\{^1\text{H}\}$ -NMR of **3** ($\text{DMSO}-d_6$).

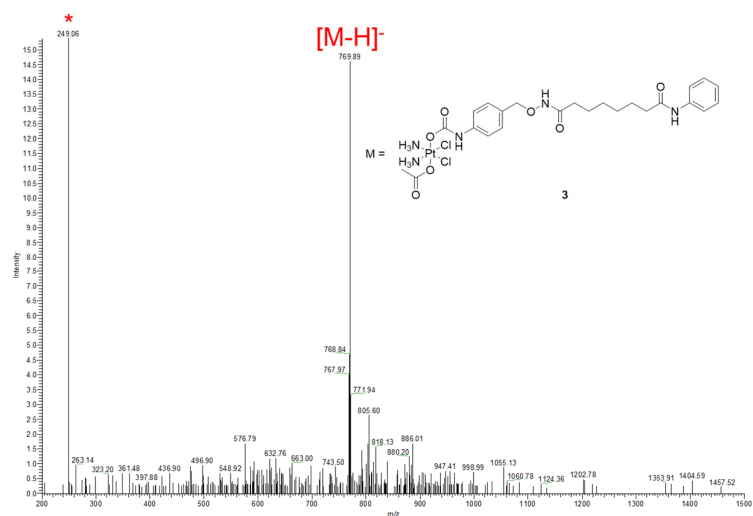


Figure S19D. ESI-MS analysis (-ve mode) of **3** (background contaminants indicated by *).

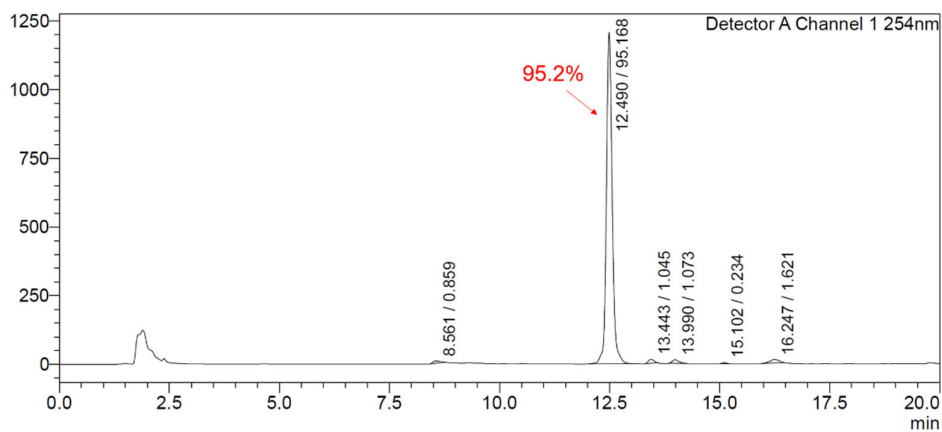


Figure S19E. RP-HPLC assessment of purity of **3** at 254 nm.

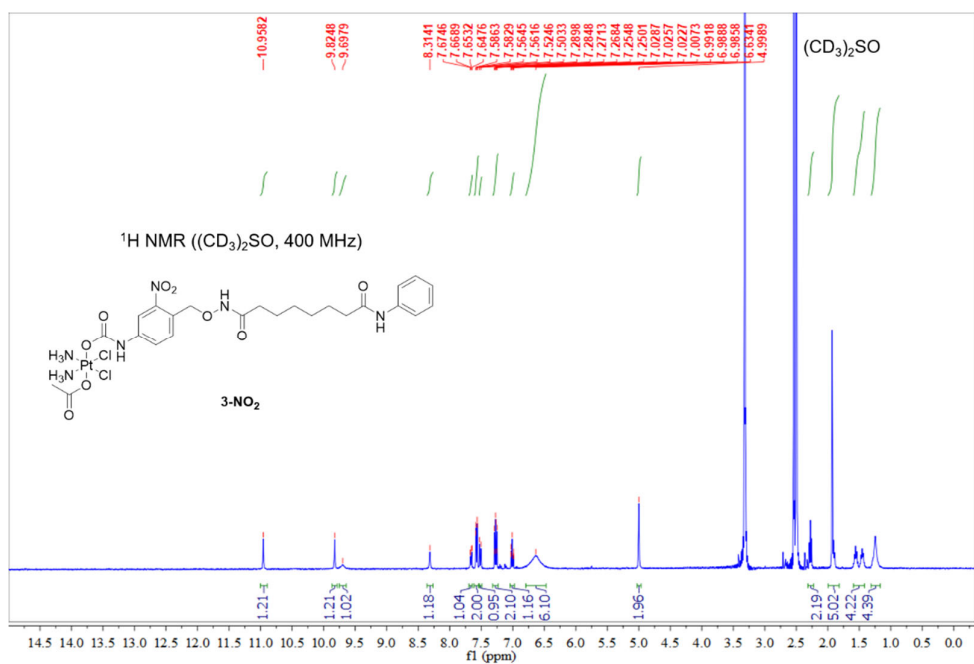


Figure S20A. ¹H-NMR of **3-NO₂** (DMSO-*d*⁶).

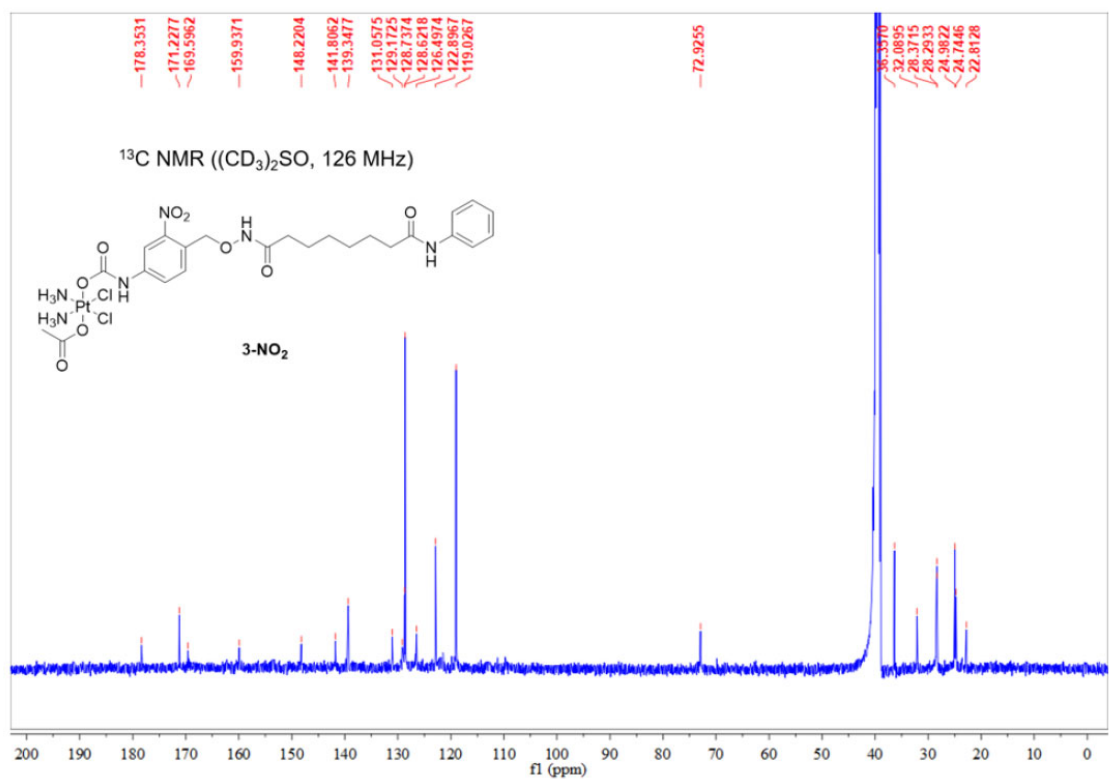


Figure S20B. ¹³C {¹H}-NMR of **3-NO₂** (DMSO-*d*⁶).

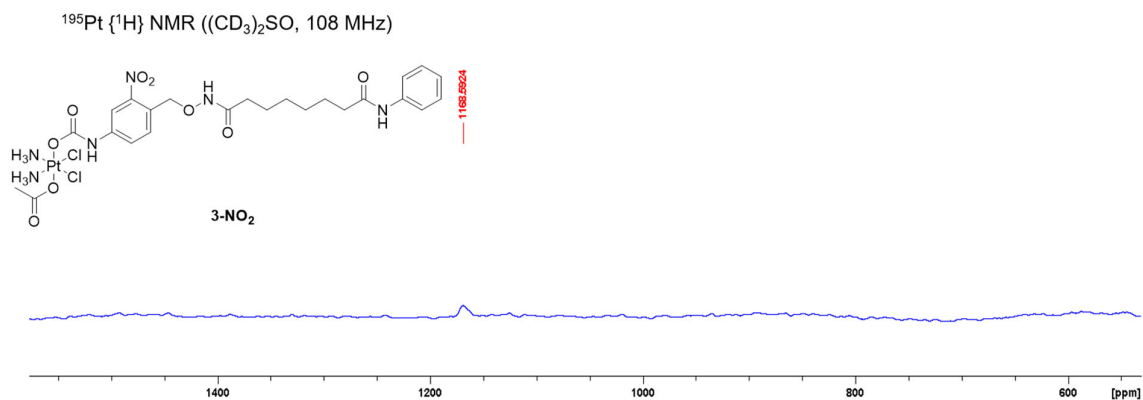


Figure S20C. $^{195}\text{Pt}\{^1\text{H}\}$ -NMR of 3-NO₂ (DMSO-*d*⁶).

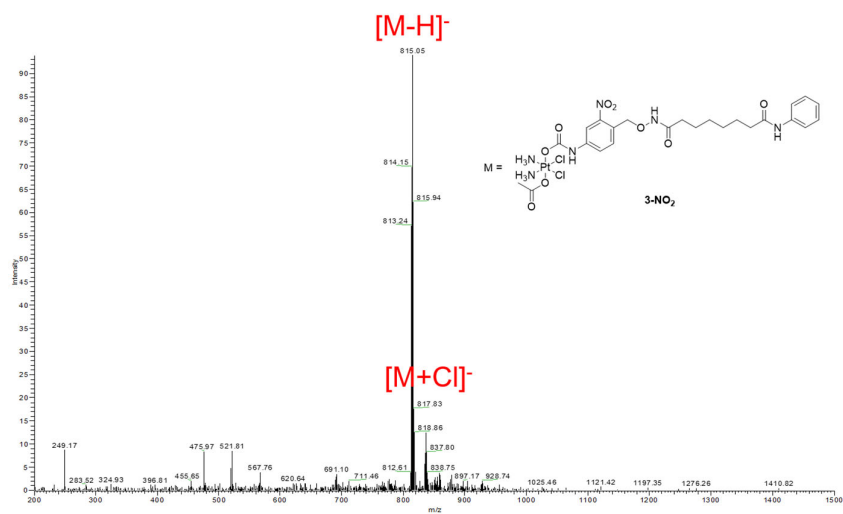


Figure S20D. ESI-MS analysis (-ve mode) of 3-NO₂.

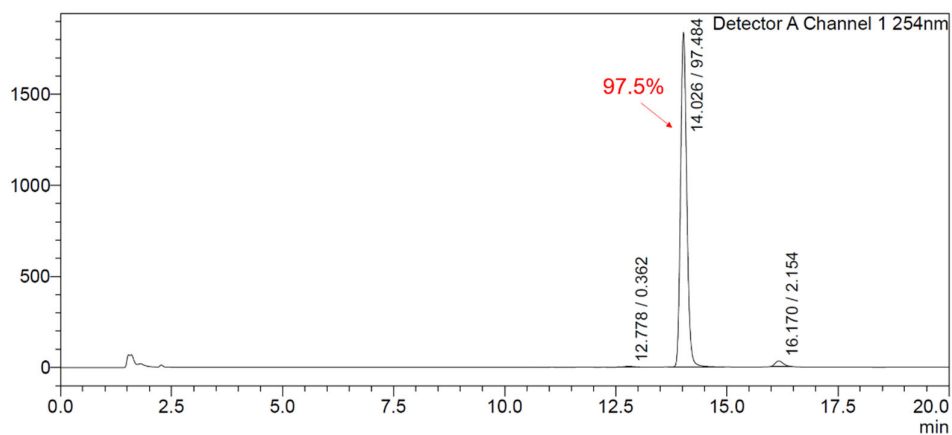


Figure S20E. RP-HPLC assessment of purity of 3-NO₂ at 254 nm.

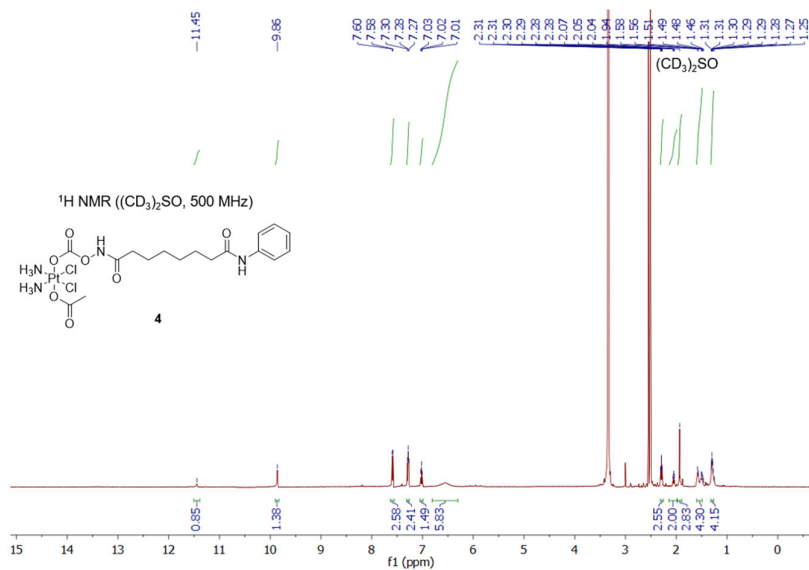


Figure S21A. ¹H-NMR of **4** (DMSO-*d*⁶).

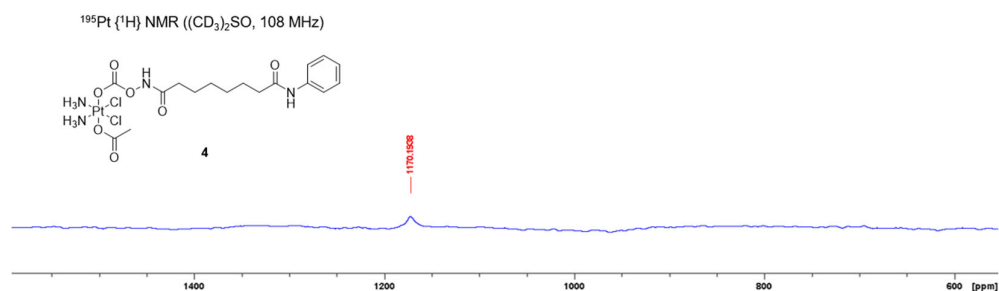


Figure S21B. ¹⁹⁵Pt{¹H}-NMR of **4** (DMSO-*d*⁶).

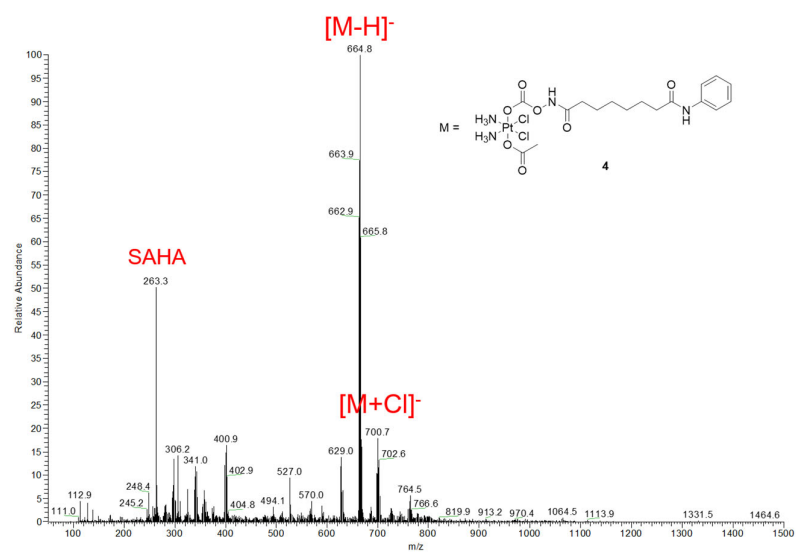


Figure S21C. ESI-MS analysis (-ve mode) of **4**.