

Supporting Information

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Synthesis, antioxidant and carbonic anhydrase inhibitory properties of mono-peptide-anthraquinone conjugates

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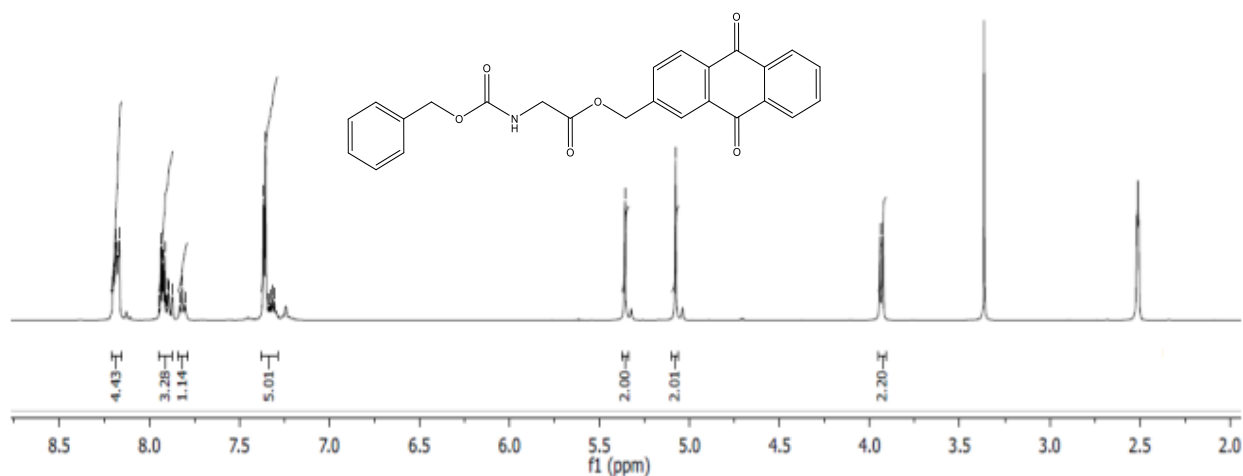


Figure S1: ^1H NMR (400 MHz, $\text{DMSO-}d_6$) spectrum of compound **1**

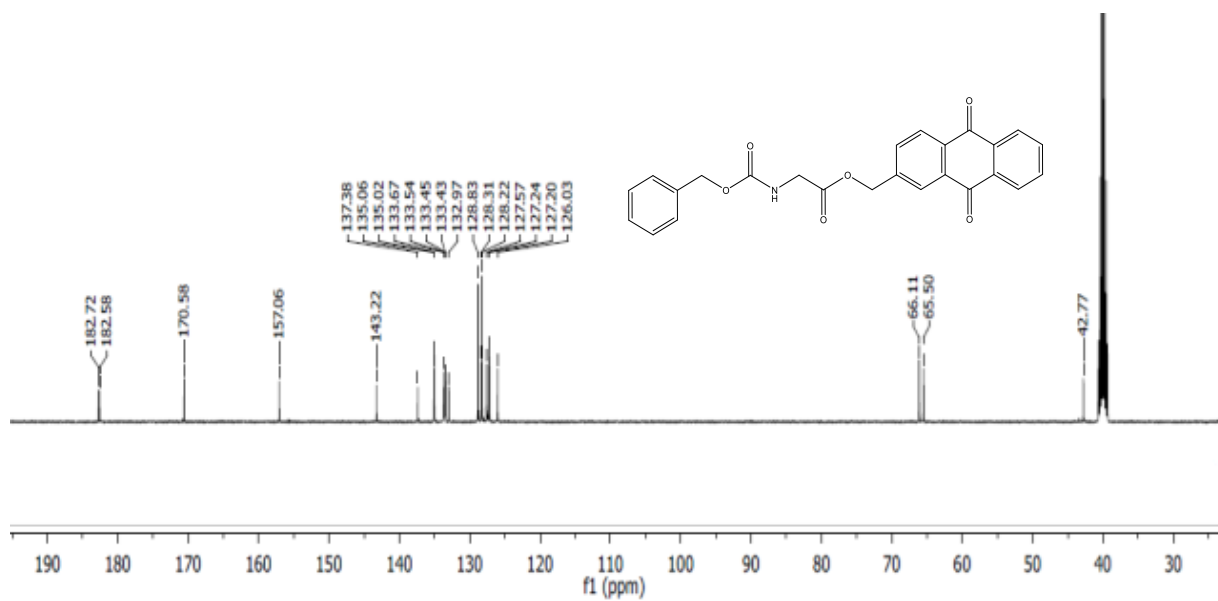


Figure S2: ¹³C NMR (100 MHz, DMSO-*d*₆) spectrum of compound **1**

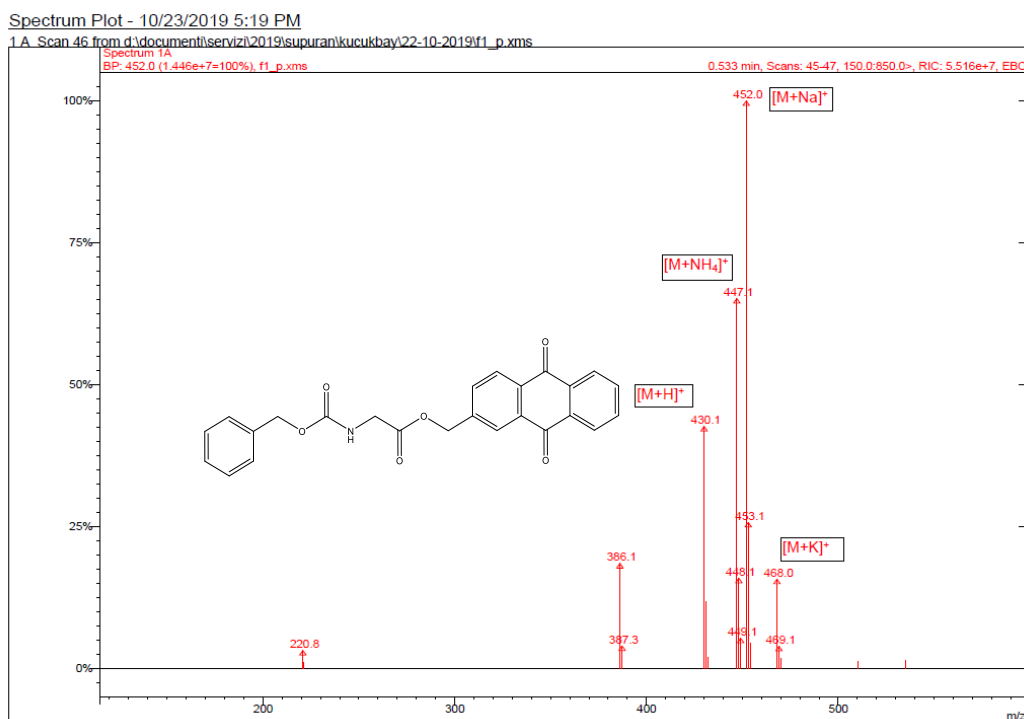


Figure S3 : Mass spectrum of compound **1**

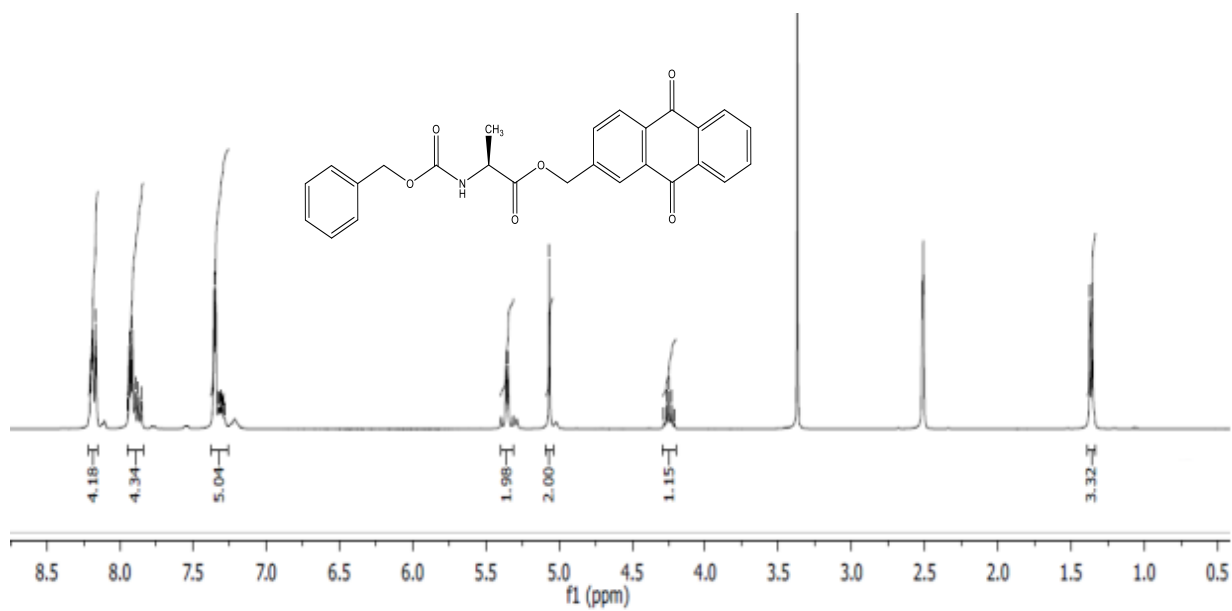


Figure S4: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 2

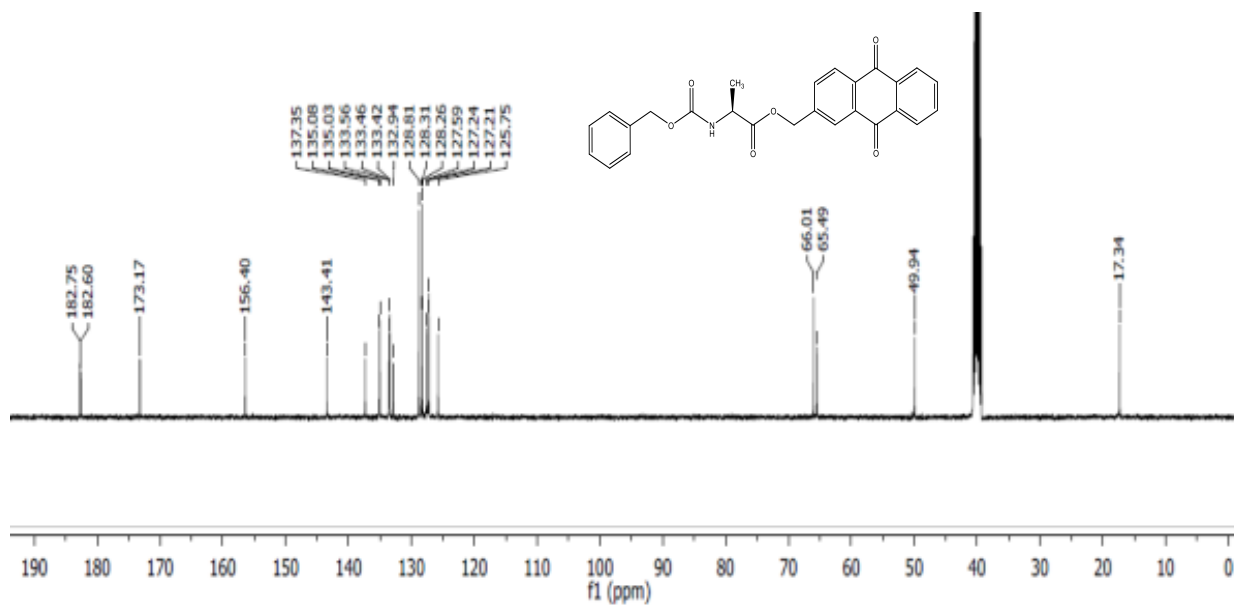


Figure S5: ¹³C NMR (100 MHz, DMSO-*d*₆) spectrum of compound 2

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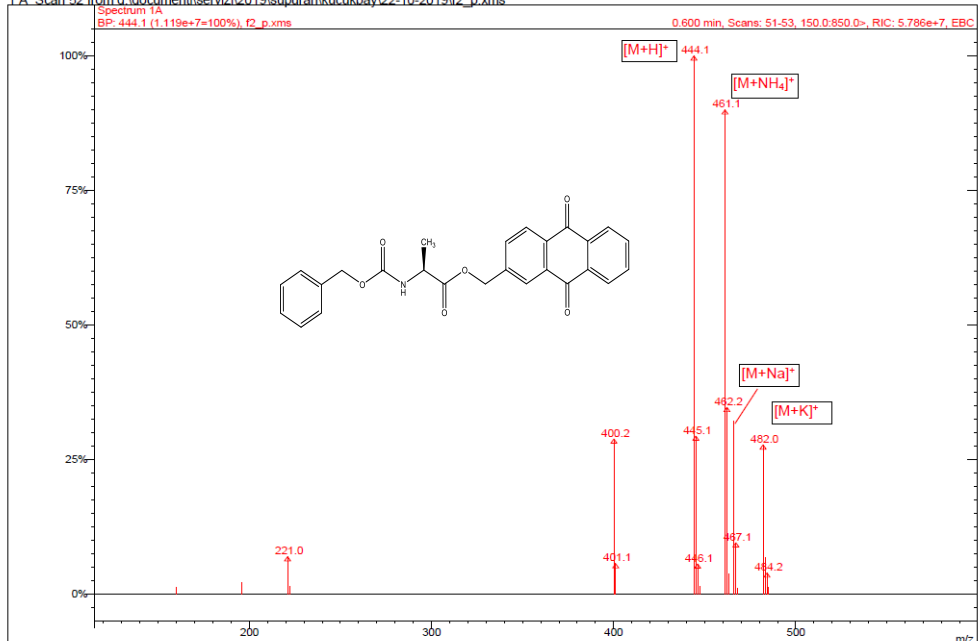


Figure S6: Mass spectrum of compound 2

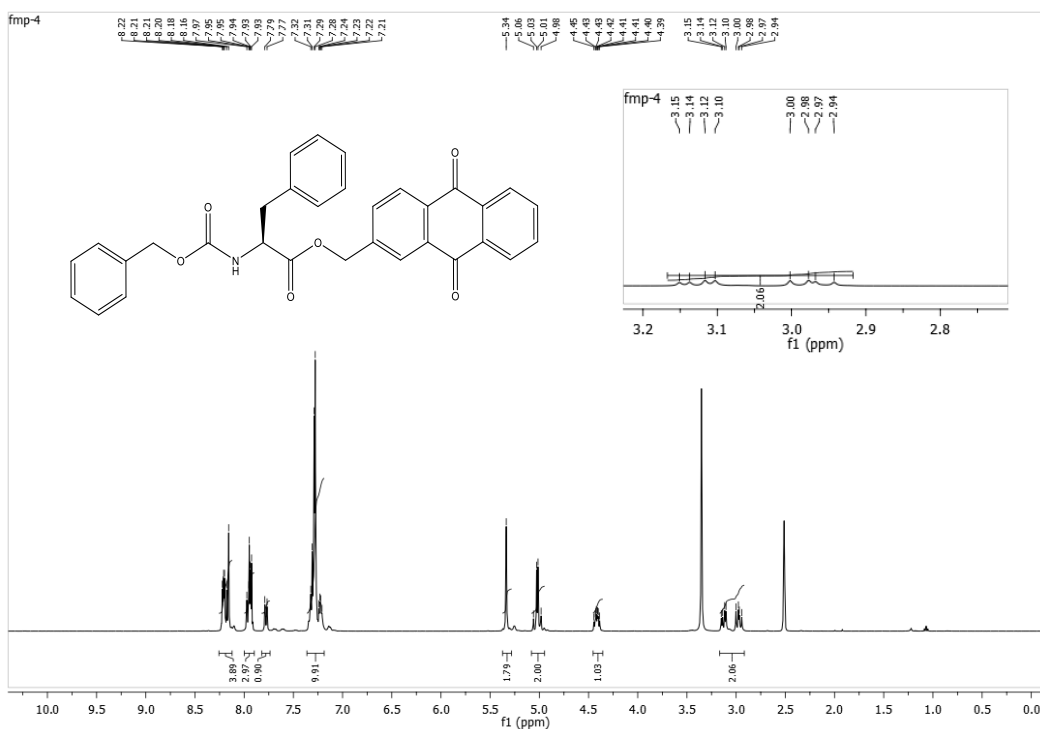


Figure S7: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 3

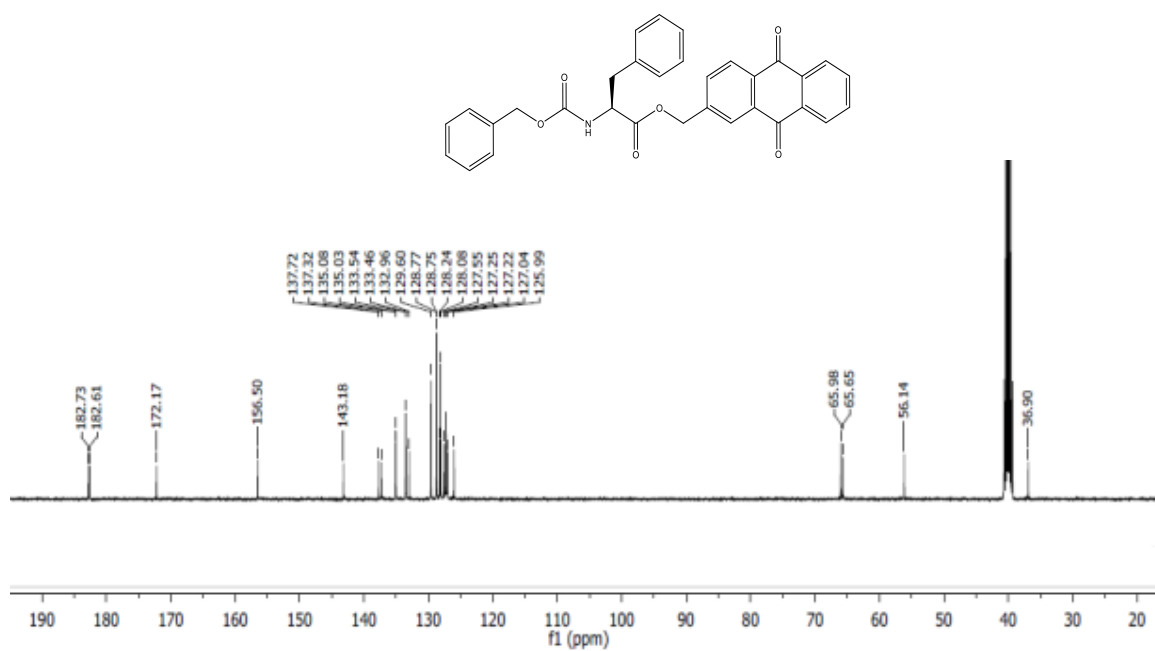


Figure S8: ^{13}C NMR (100 MHz, $\text{DMSO-}d_6$) spectrum of compound **3**

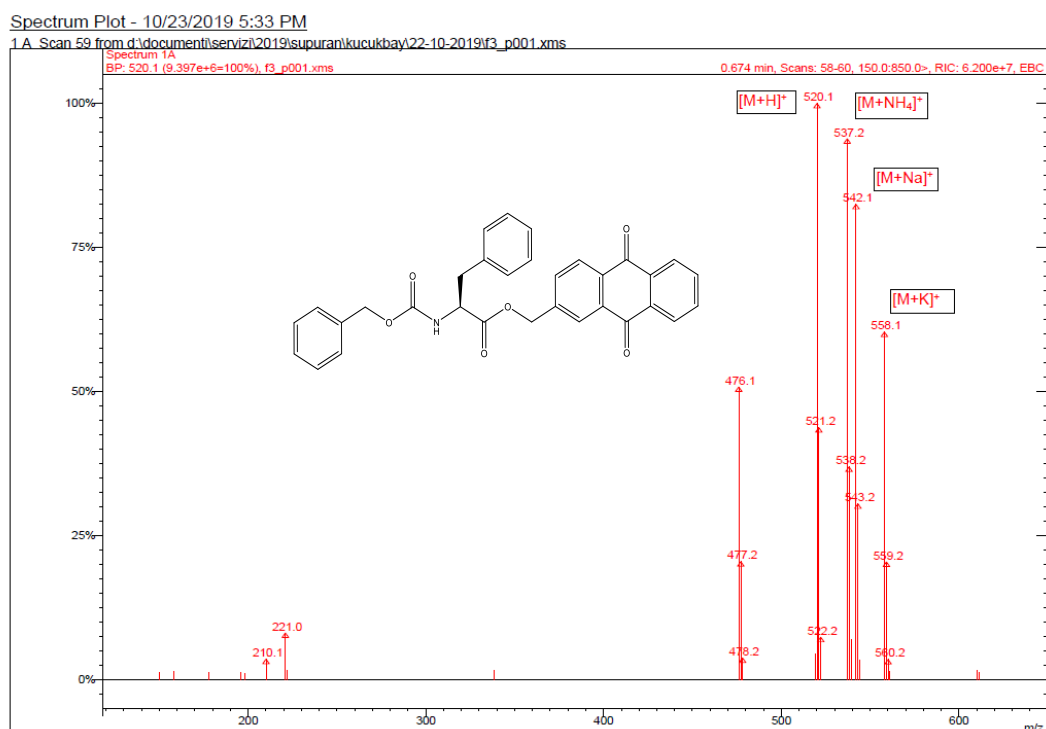


Figure S9: Mass spectrum of compound **3**

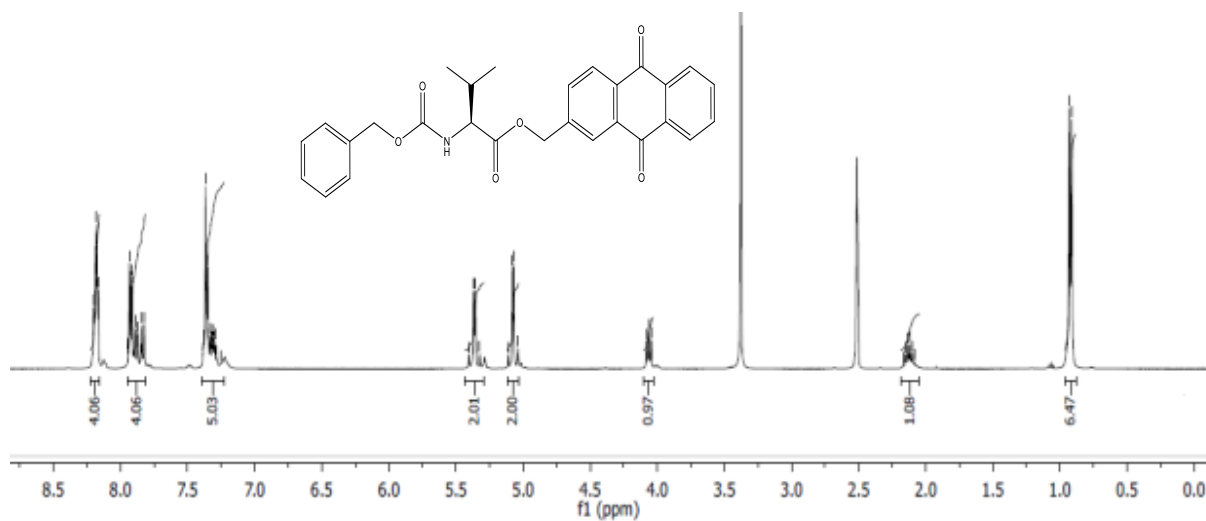


Figure S10: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 4

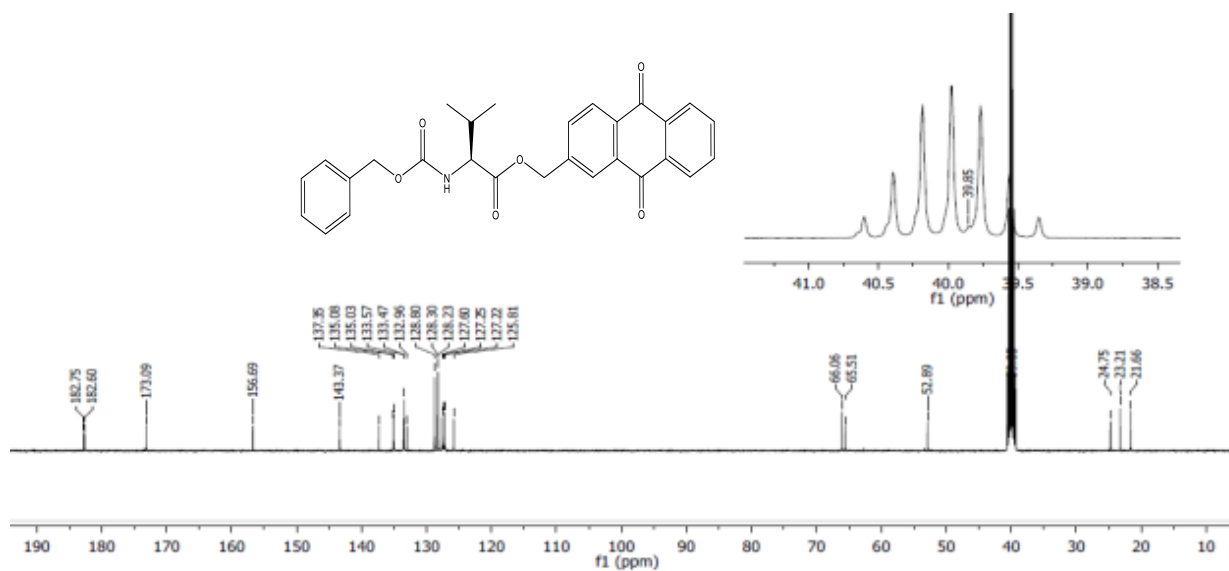
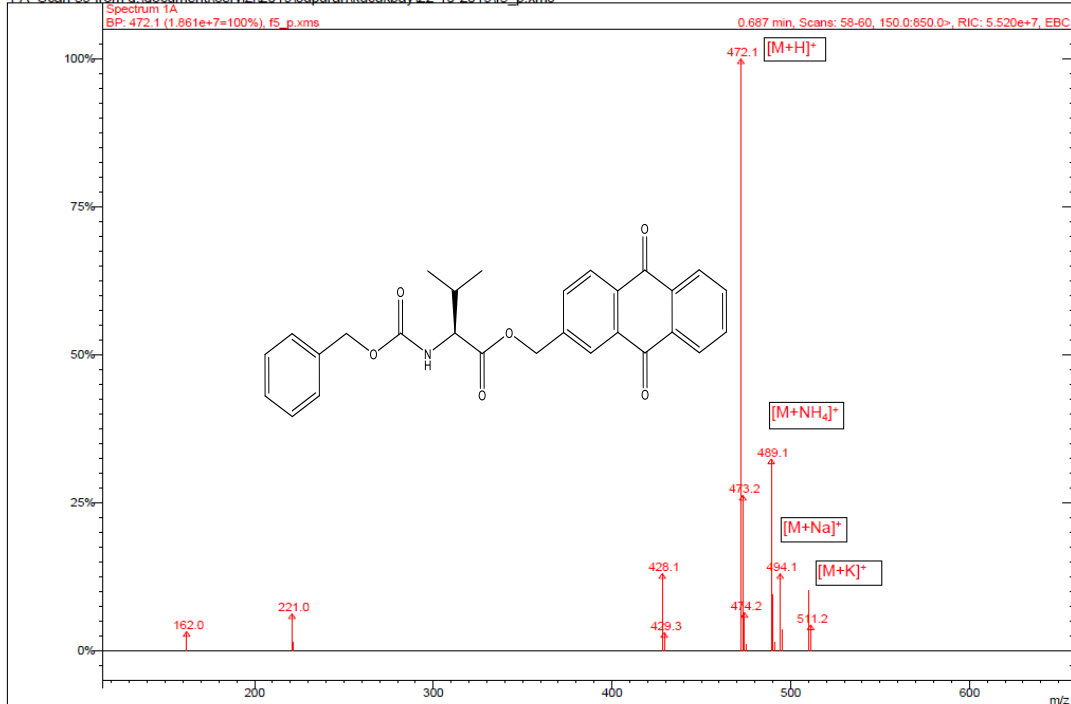
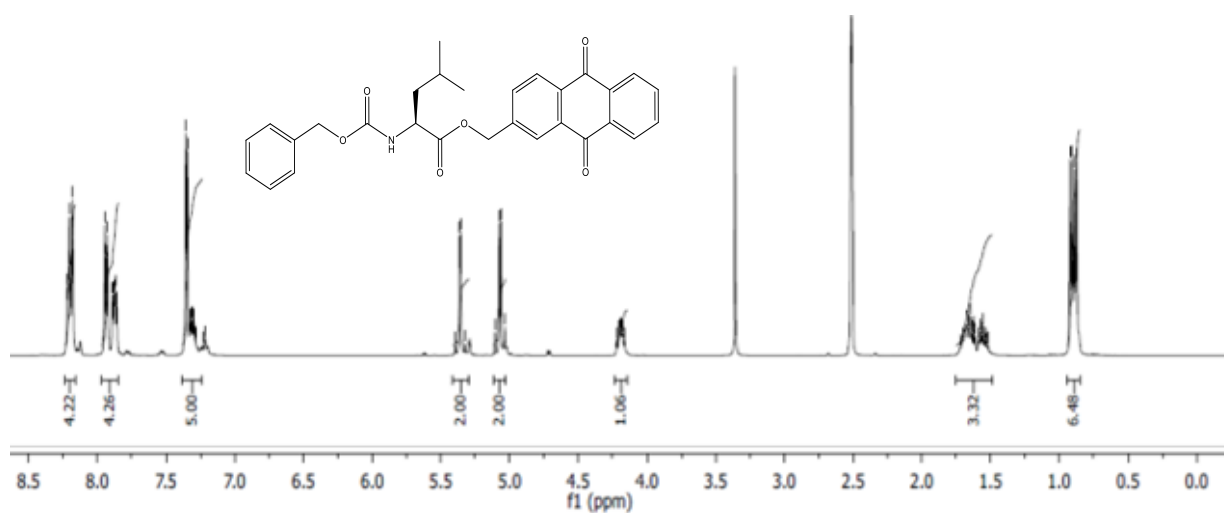


Figure S11: ¹³C NMR (100 MHz, DMSO-*d*₆) spectrum of compound 4

**Figure S12:** Mass spectrum of compound 4**Figure S13:** ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 5

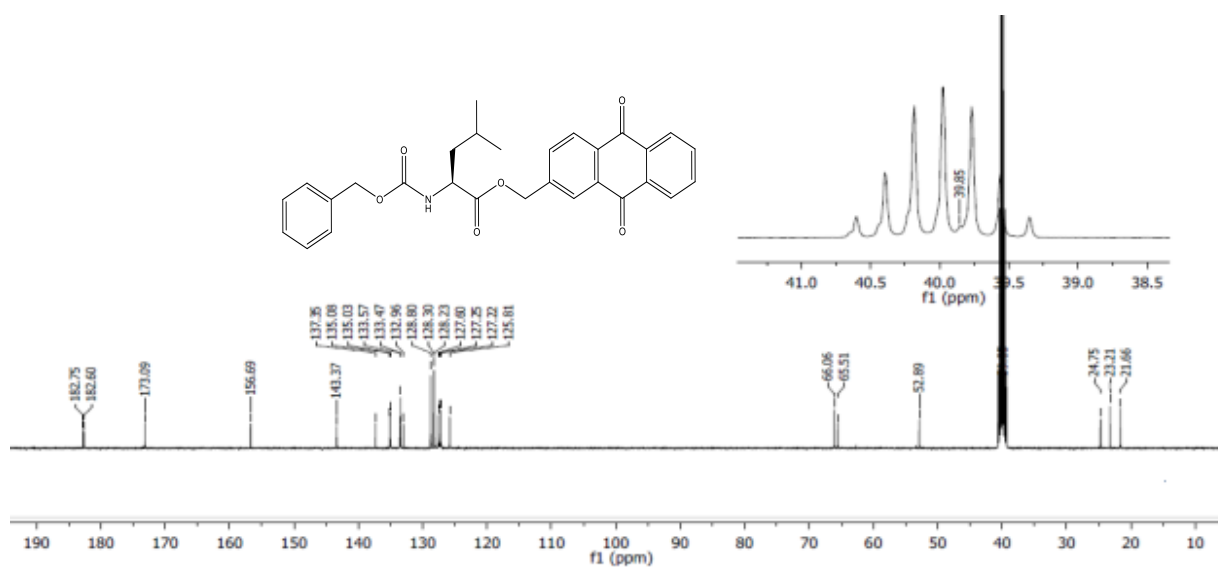


Figure S14: ¹³C NMR (100 MHz, DMSO-*d*₆) spectrum of compound 5

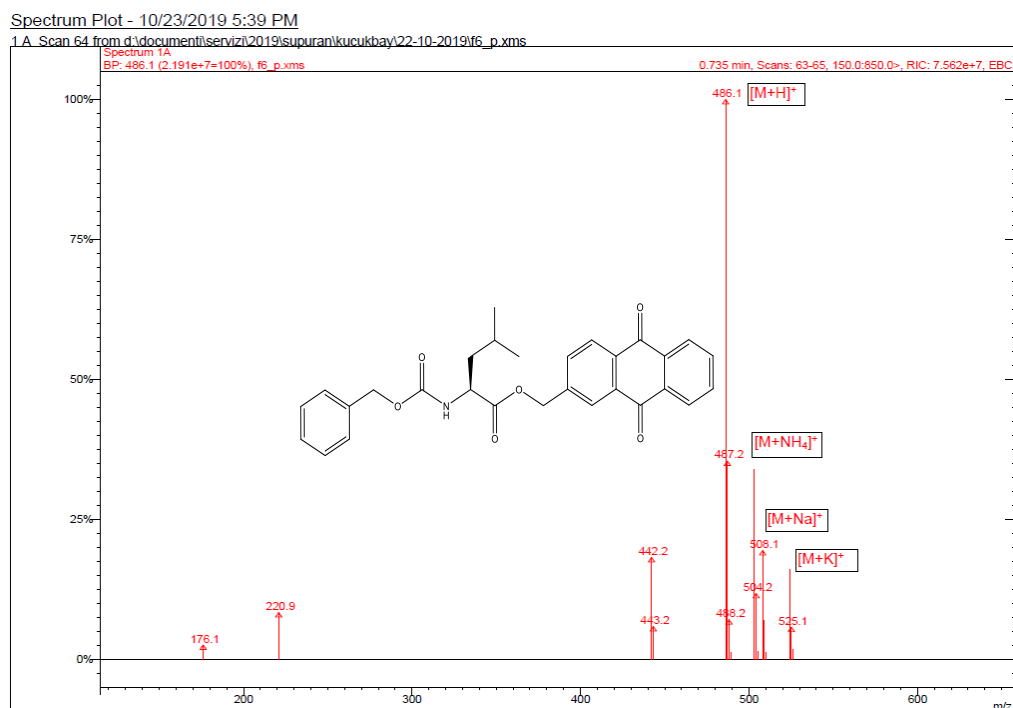


Figure S15: Mass spectrum of compound 5

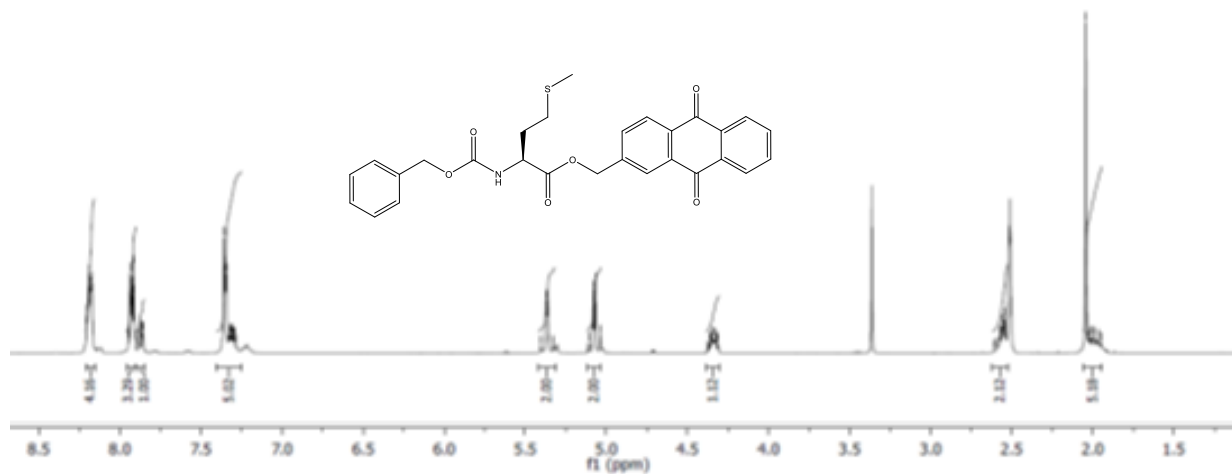


Figure S16: ^1H NMR (400 MHz, $\text{DMSO-}d_6$) spectrum of compound 6

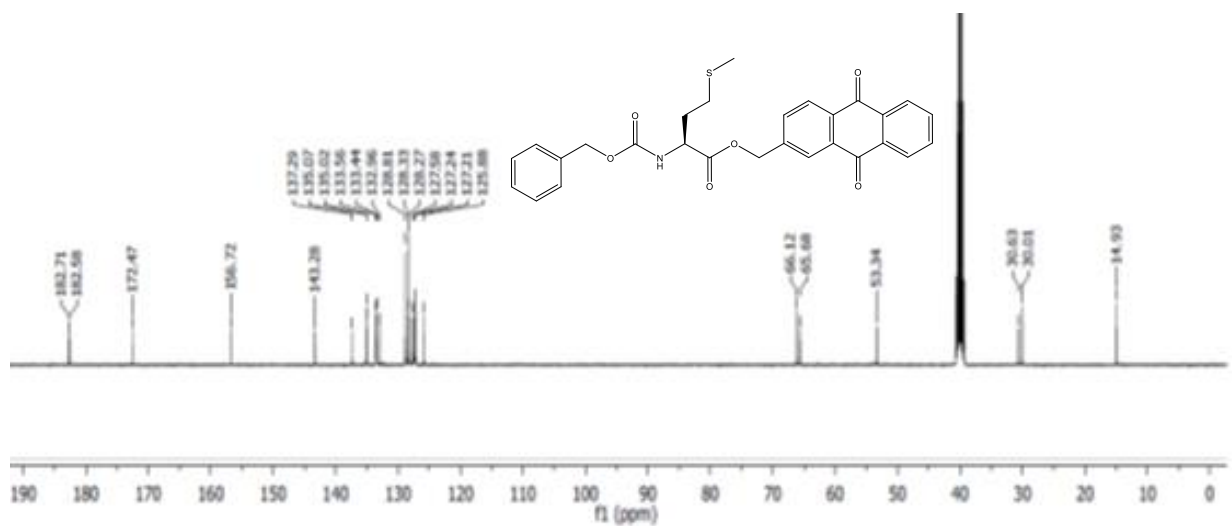


Figure S17: ^{13}C NMR (100 MHz, $\text{DMSO-}d_6$) spectrum of compound 6

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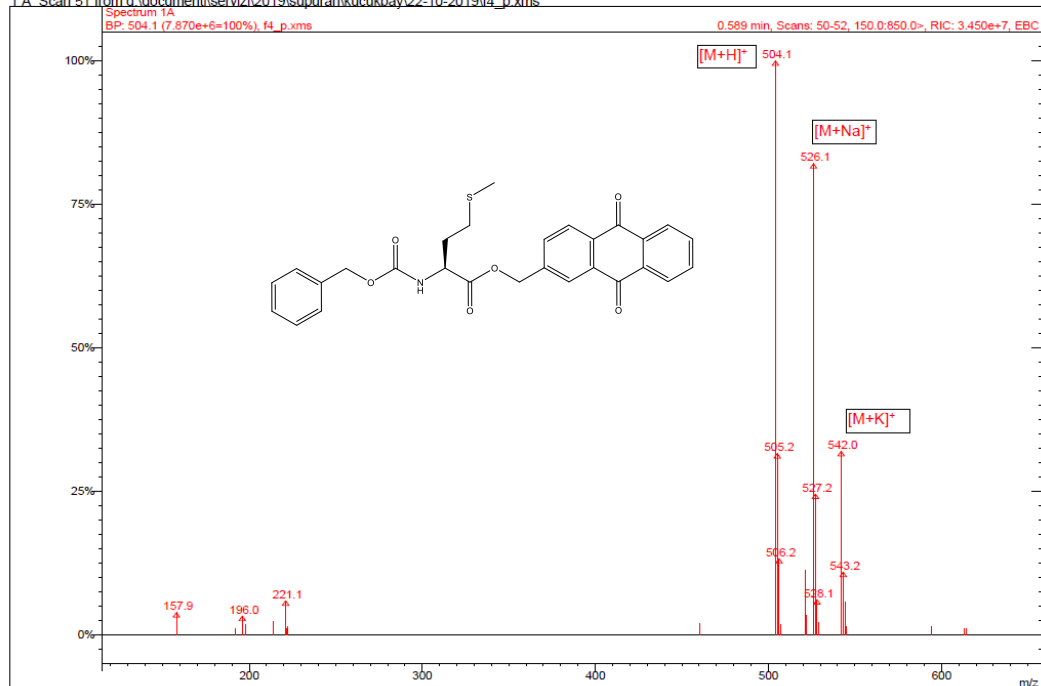


Figure S18: Mass spectrum of compound 6

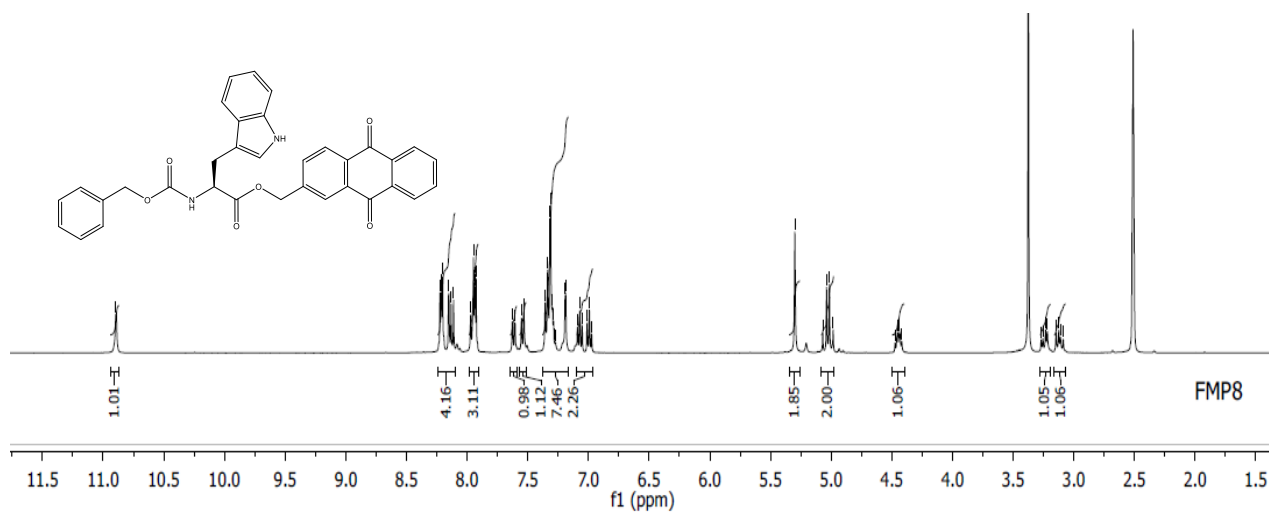


Figure S19: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 7

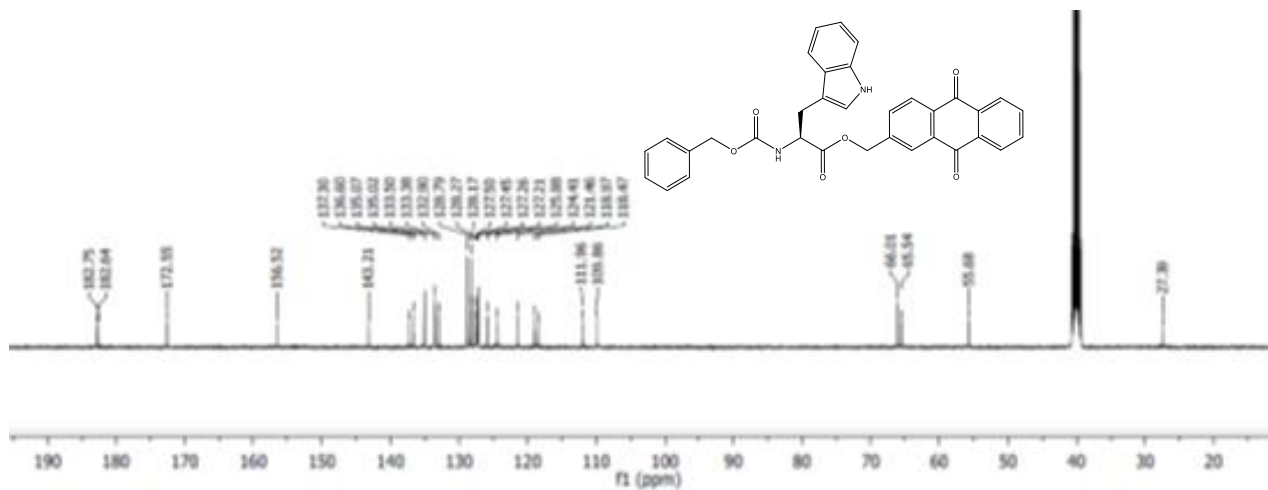


Figure S20: ^{13}C NMR (100 MHz, $\text{DMSO-}d_6$) spectrum of compound 7

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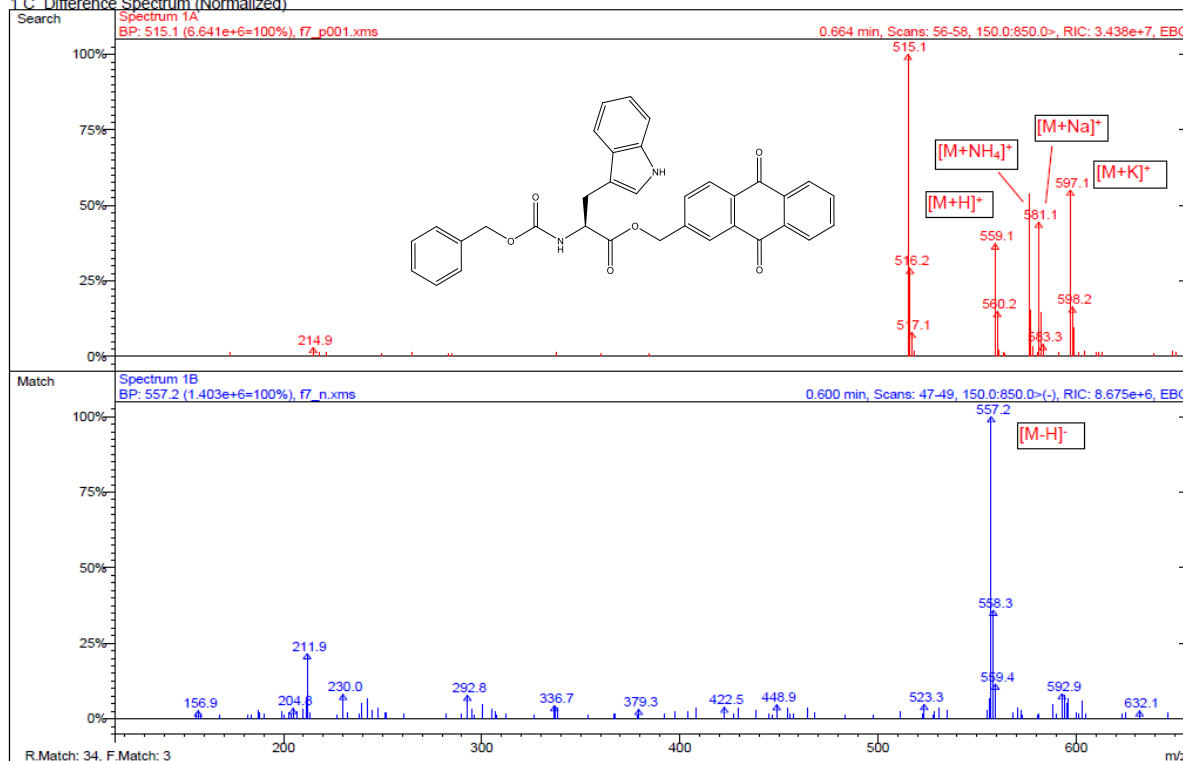


Figure S21: Mass spectrum of compound 7

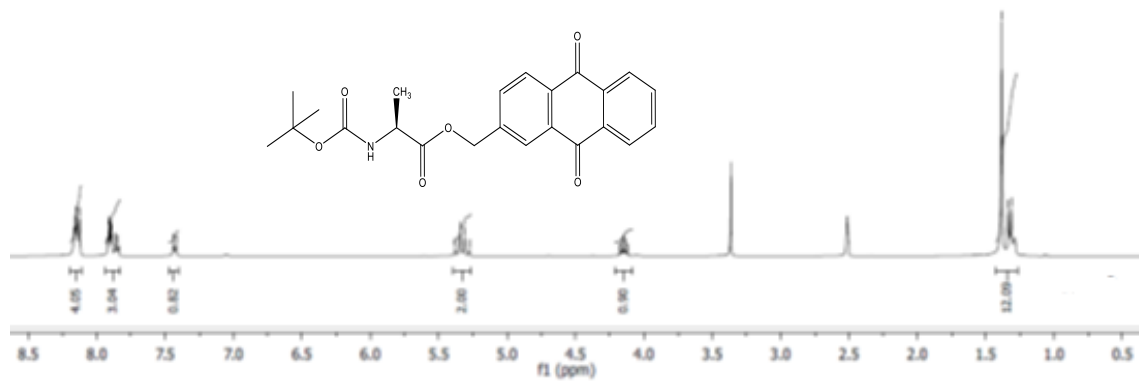


Figure S22: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 8

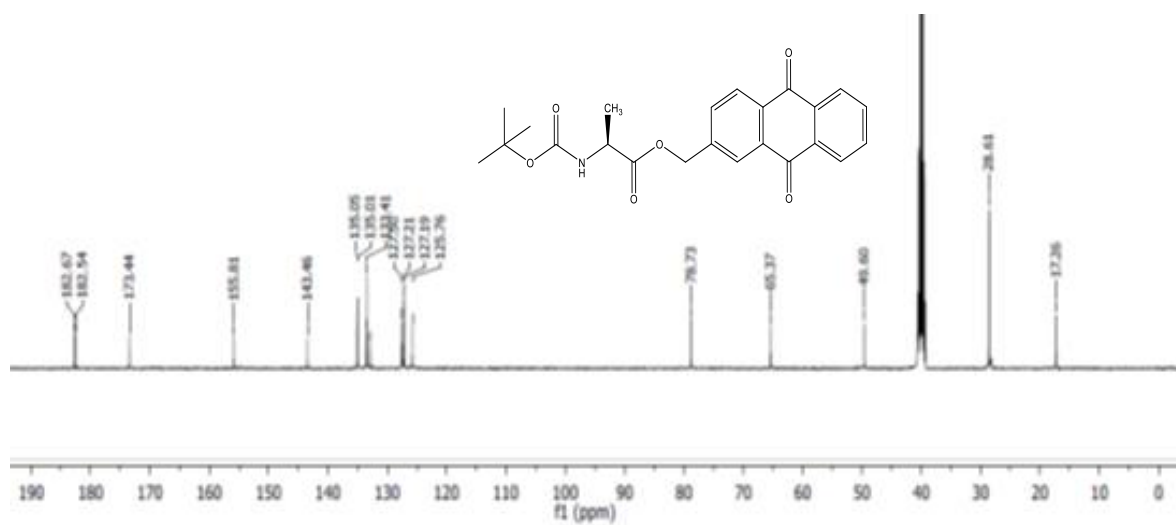


Figure S23: ¹³C NMR (100 MHz, DMSO-*d*₆) spectrum of compound 8

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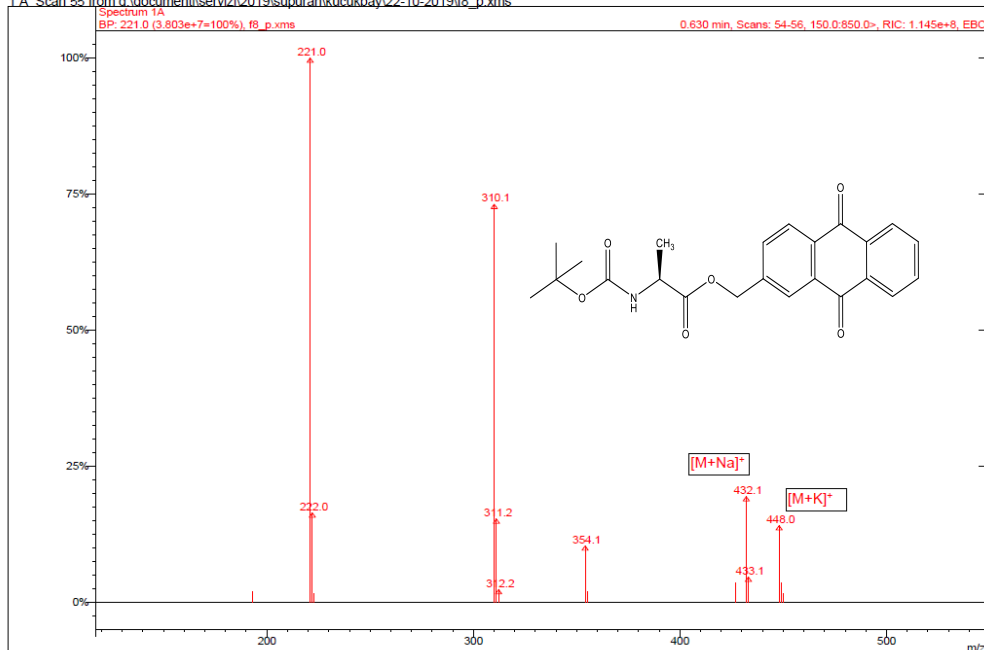


Figure S24: Mass spectrum of compound 8

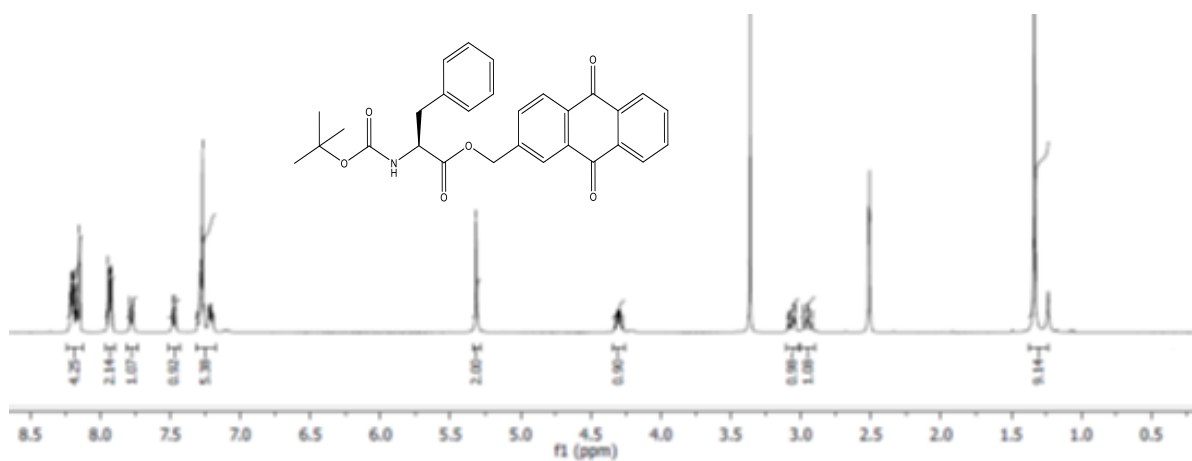


Figure S25: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 9

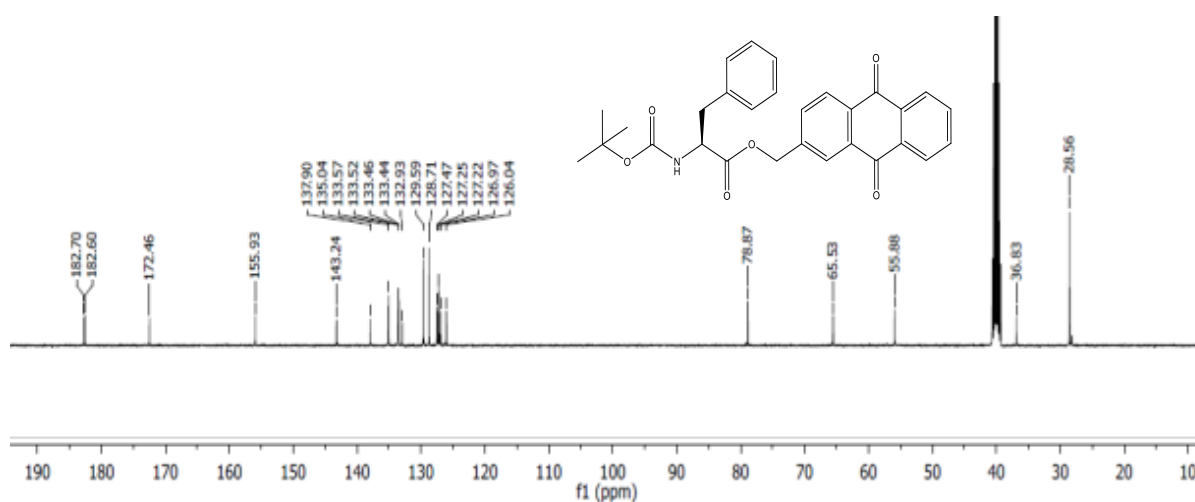


Figure S26: ^{13}C NMR (100 MHz, DMSO-*d*₆) spectrum of compound 9

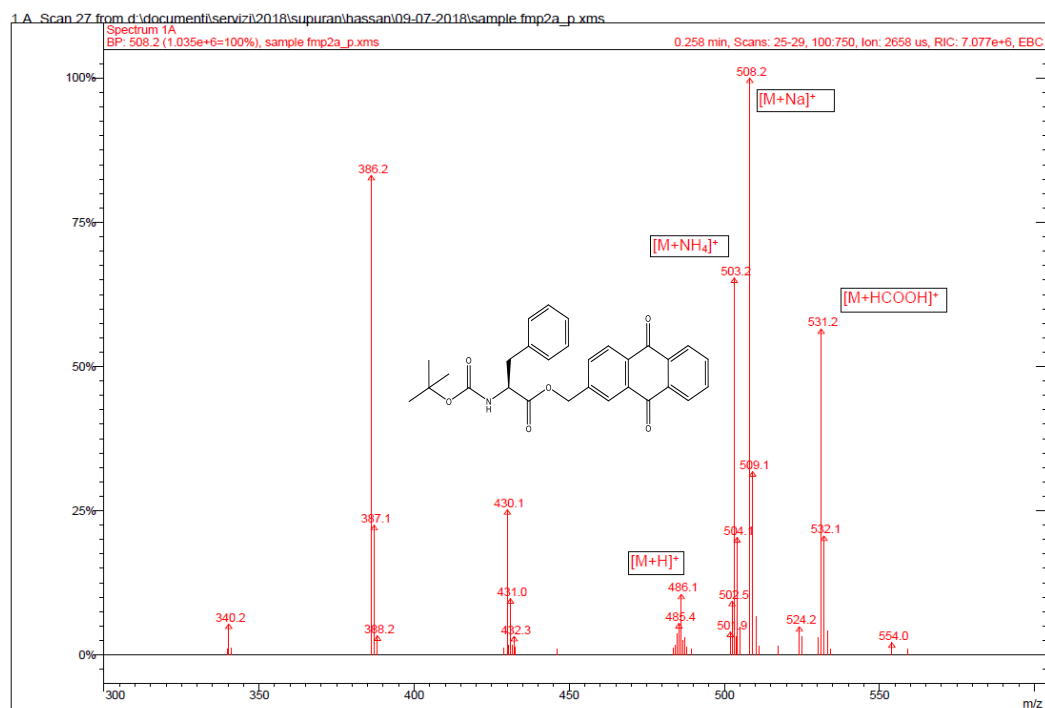


Figure S27: Mass spectrum of compound 9

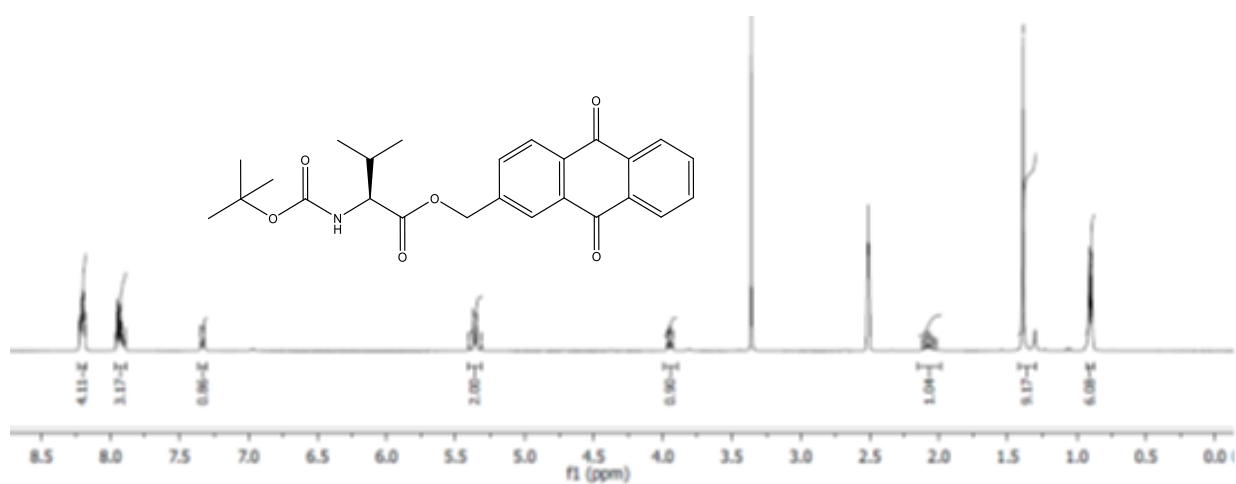


Figure S28: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 10

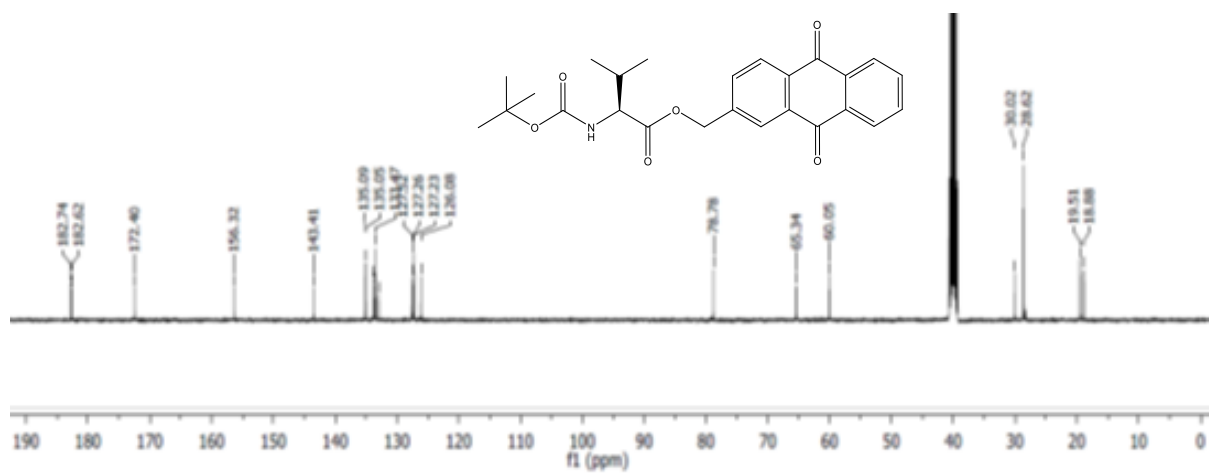


Figure S29: ¹³C NMR (100 MHz, DMSO-*d*₆) spectrum of compound 10

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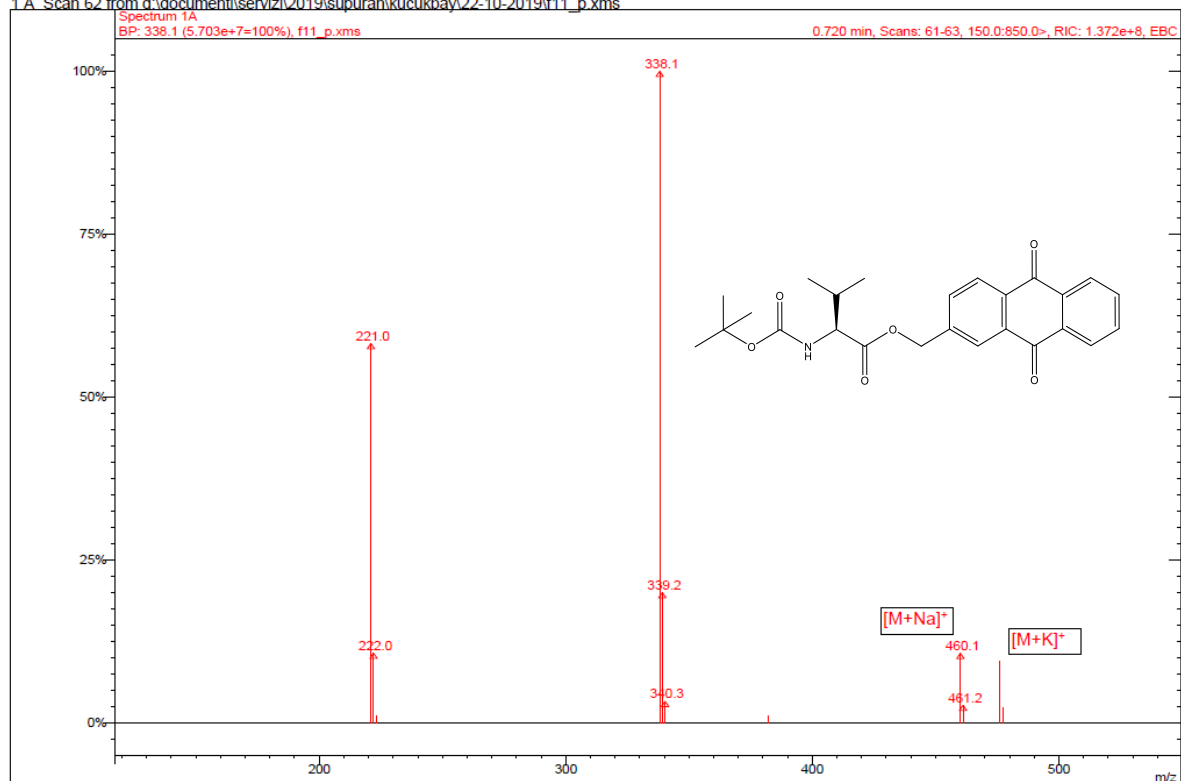


Figure S30: Mass spectrum of compound 10

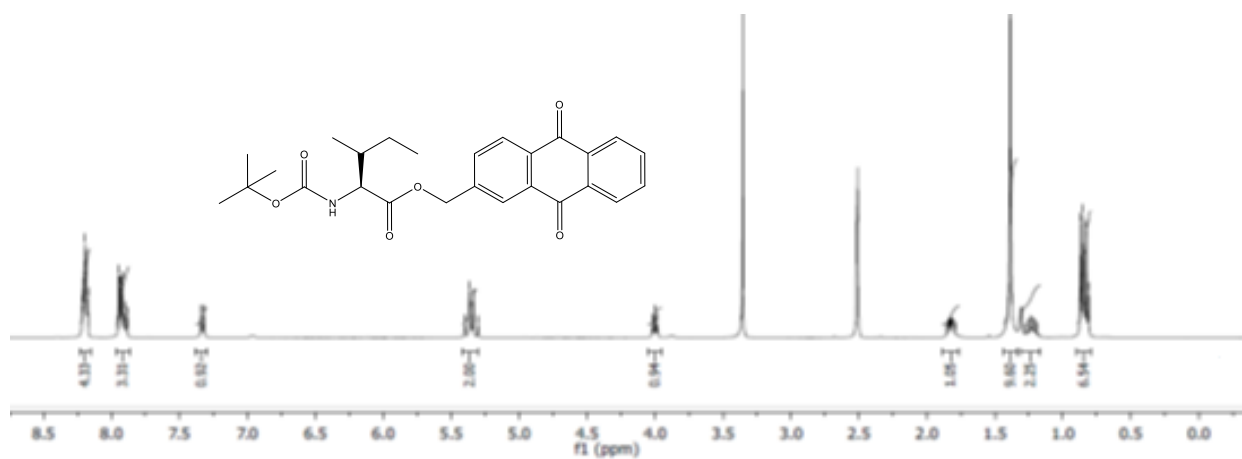


Figure S31: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 11

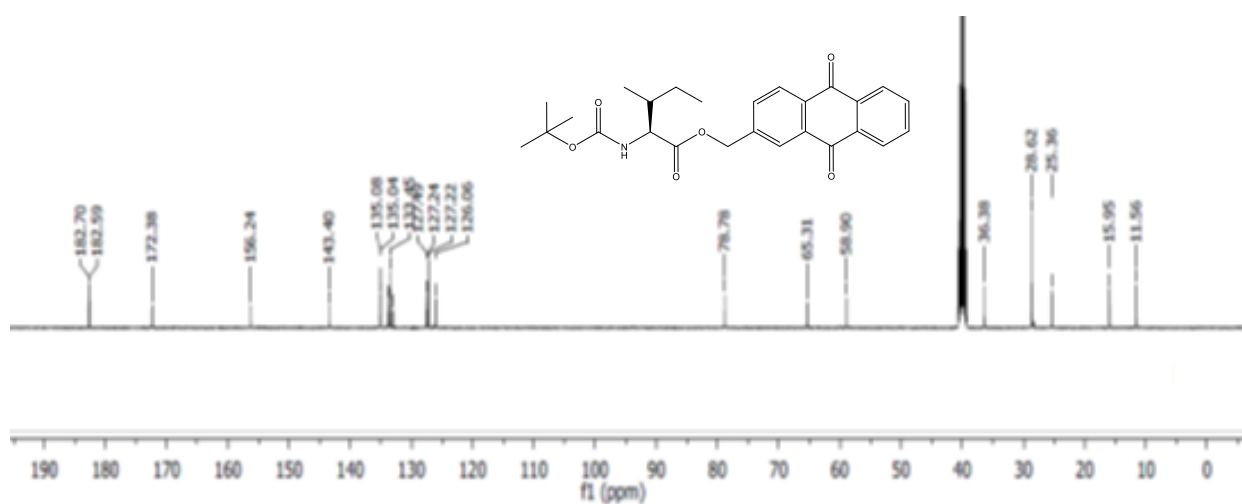


Figure S32: ^{13}C NMR (100 MHz, $\text{DMSO-}d_6$) spectrum of compound **11**

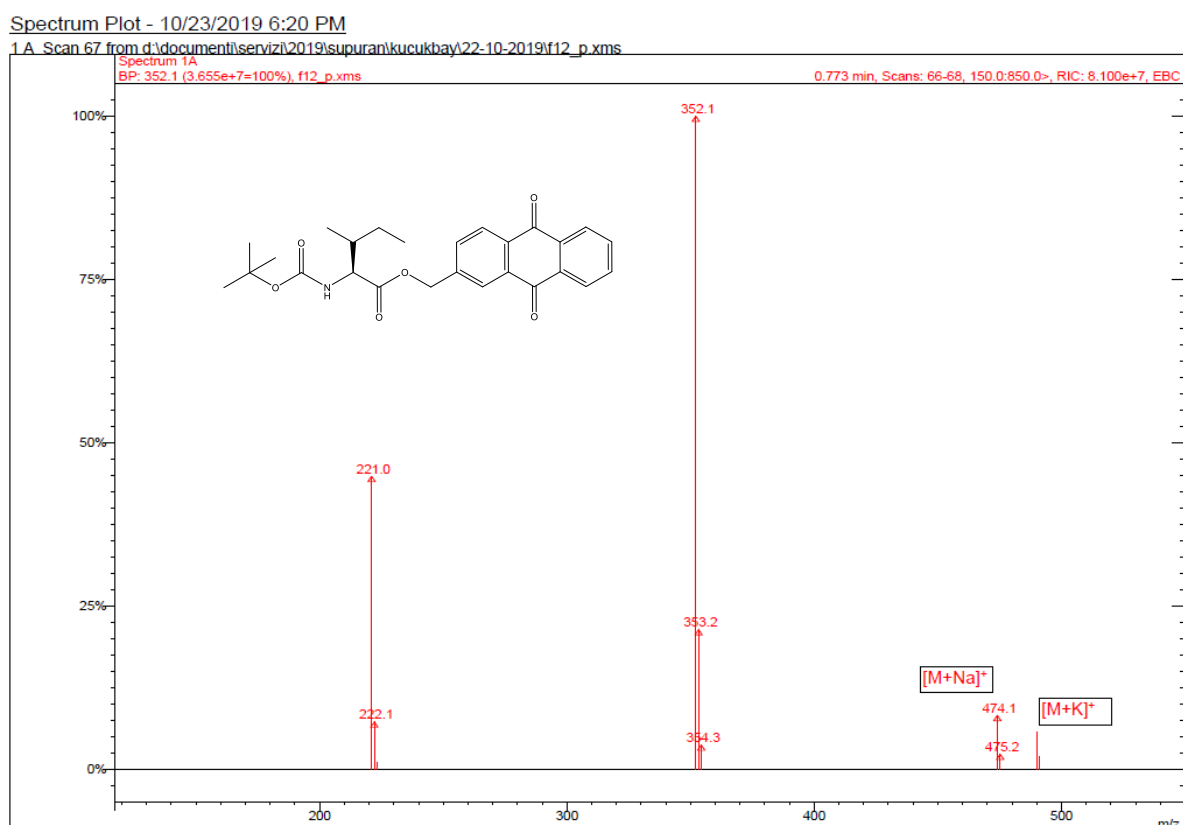


Figure S33: Mass spectrum of compound **11**

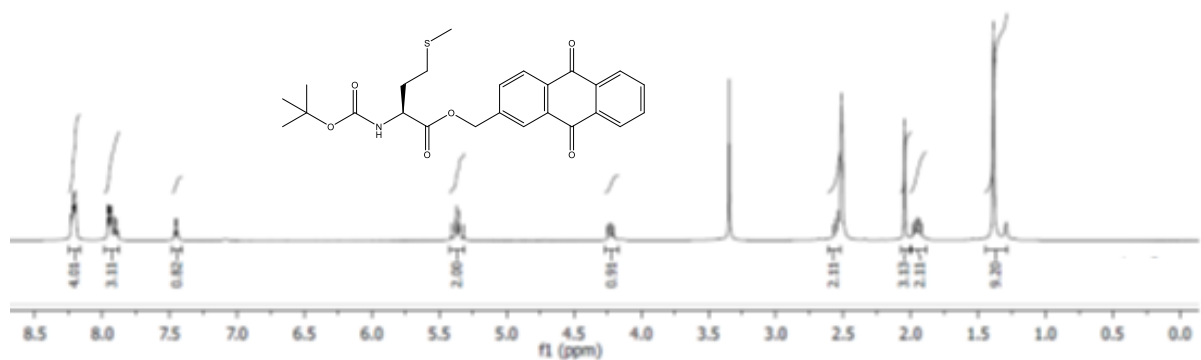


Figure S34: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 12



Figure S35: ¹³C NMR (100 MHz, DMSO-*d*₆) spectrum of compound 12

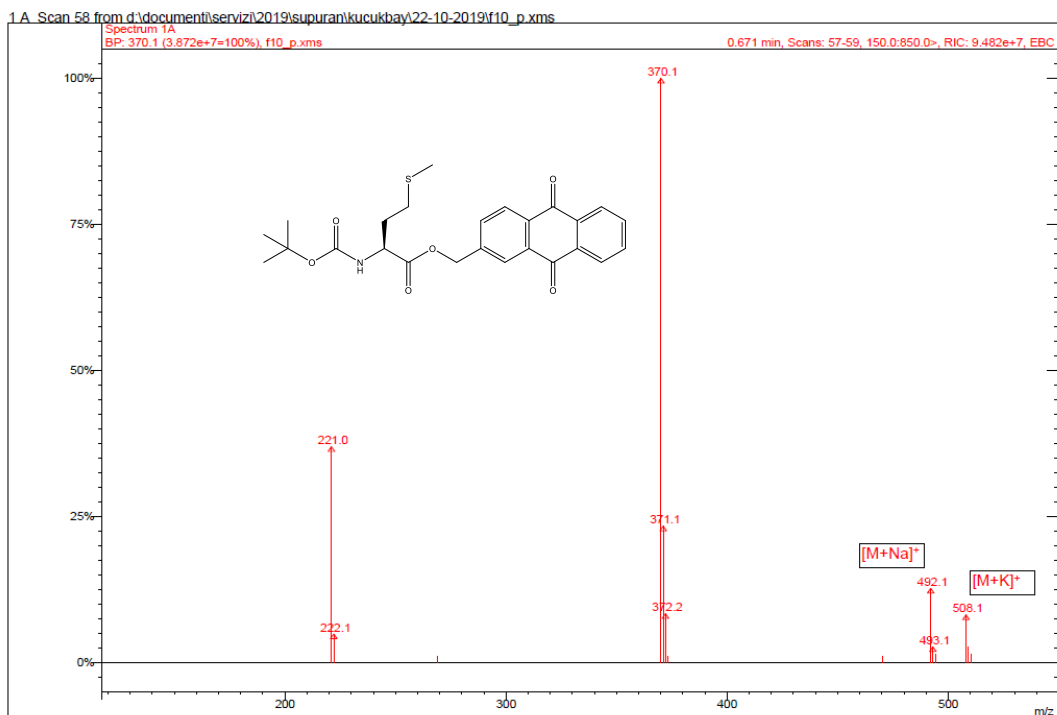


Figure S36: Mass spectrum of compound 12

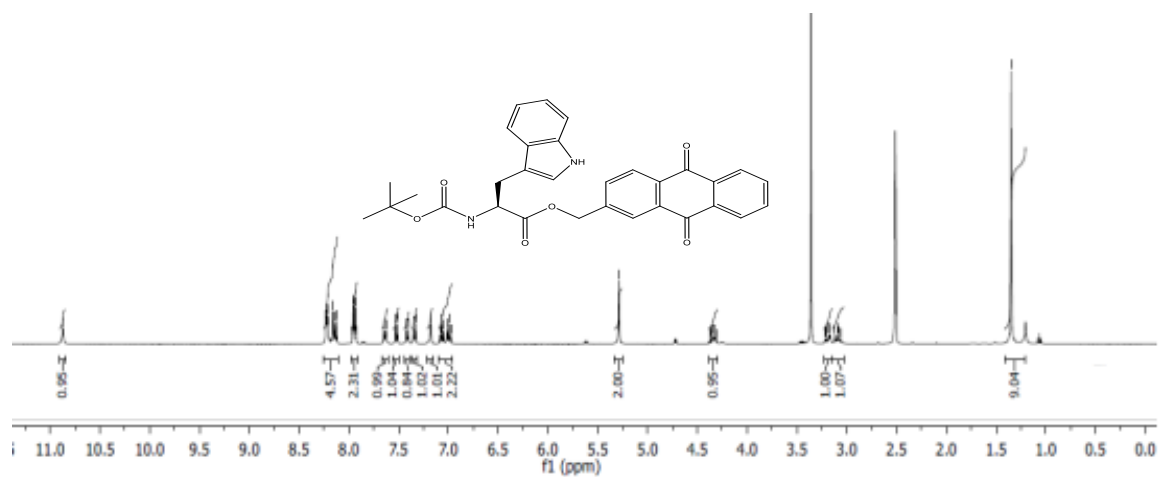


Figure S37: ^1H NMR (400 MHz, $\text{DMSO-}d_6$) spectrum of compound 13

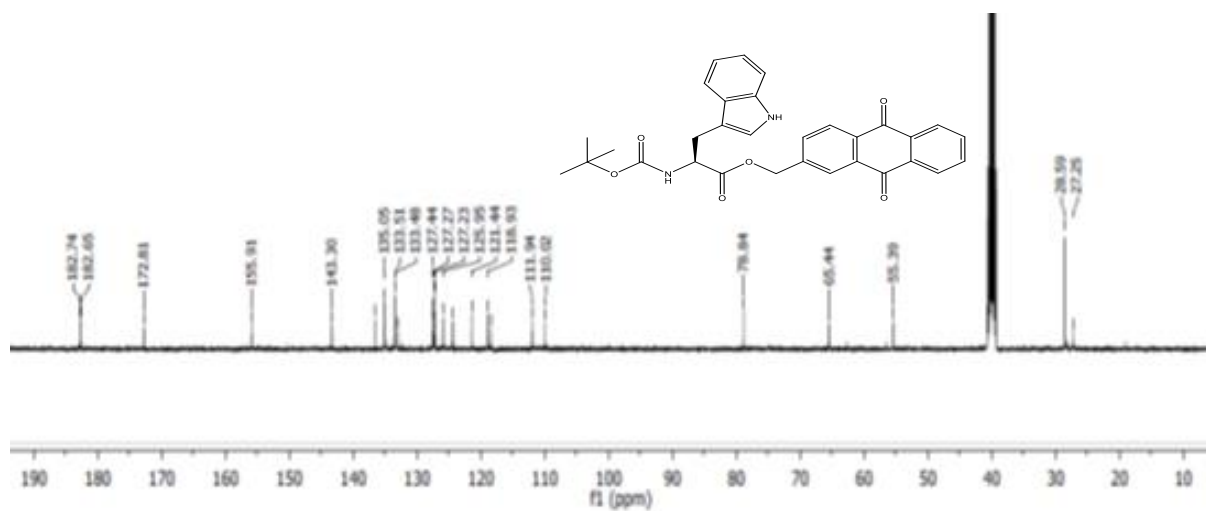


Figure S38: ^{13}C NMR (100 MHz, DMSO-*d*₆) spectrum of compound 13

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 1 C. Difference Spectrum (Normalized)

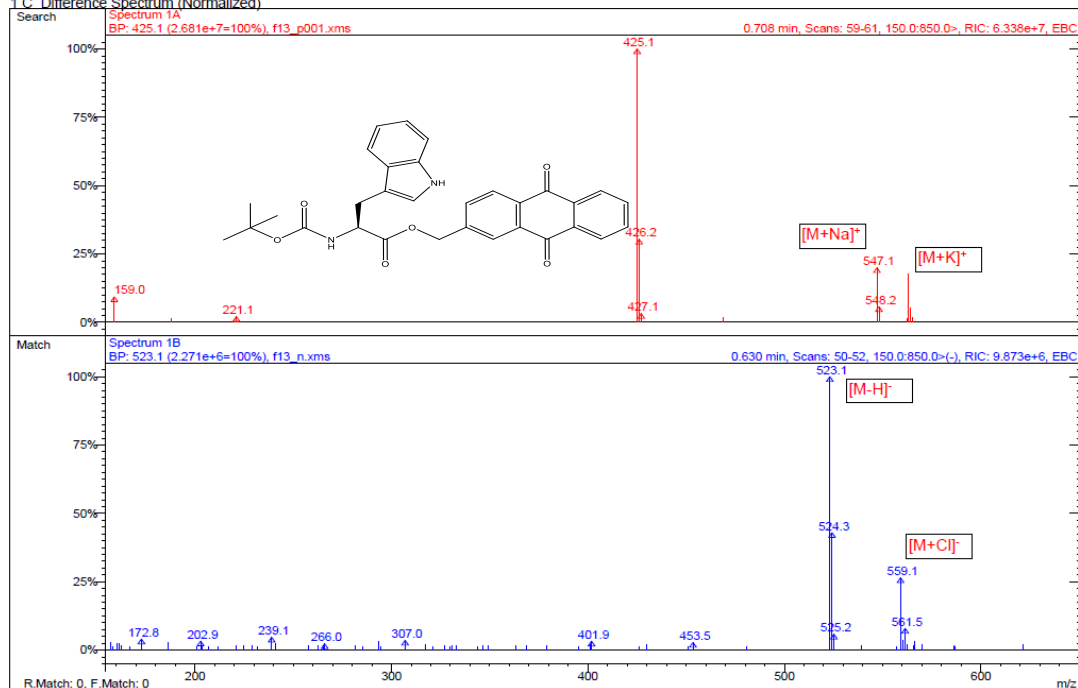


Figure S39: Mass spectrum of compound 13

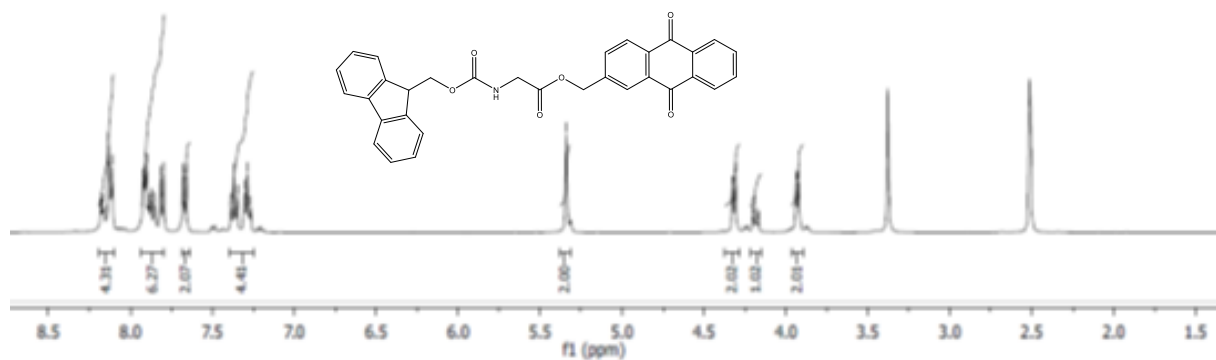


Figure S40: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound **14**

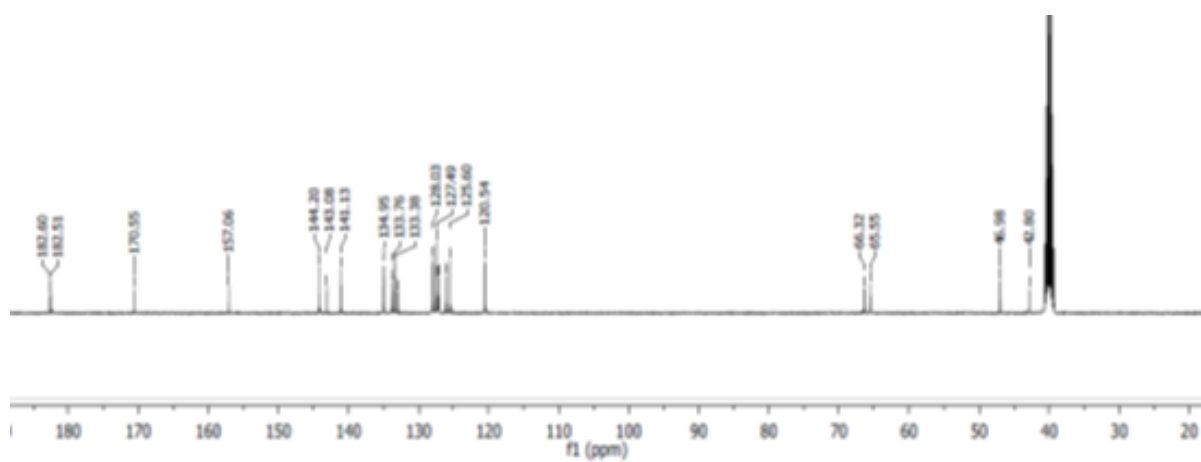


Figure S41: ¹³C NMR (100 MHz, DMSO-*d*₆) spectrum of compound **14**

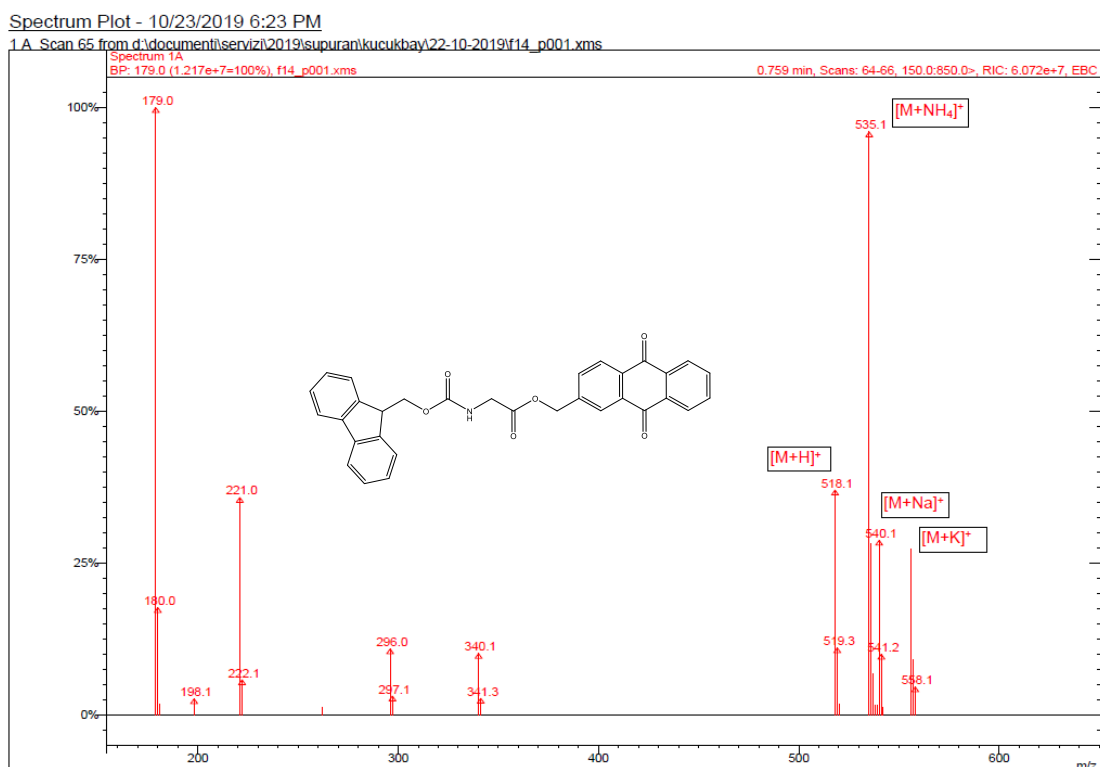


Figure S42: Mass spectrum of compound 14

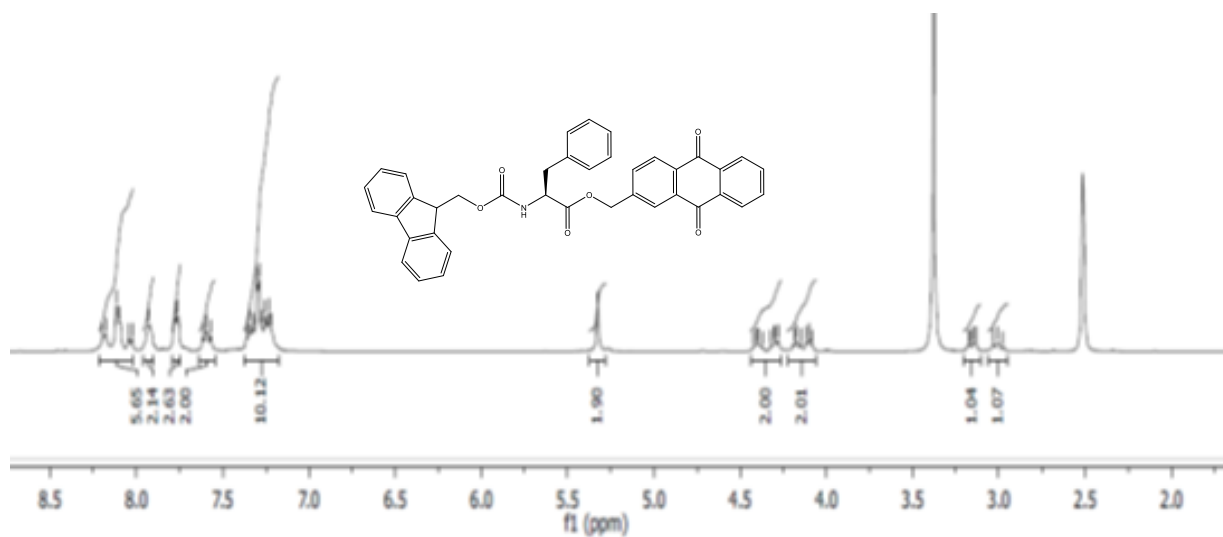


Figure S43: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 15

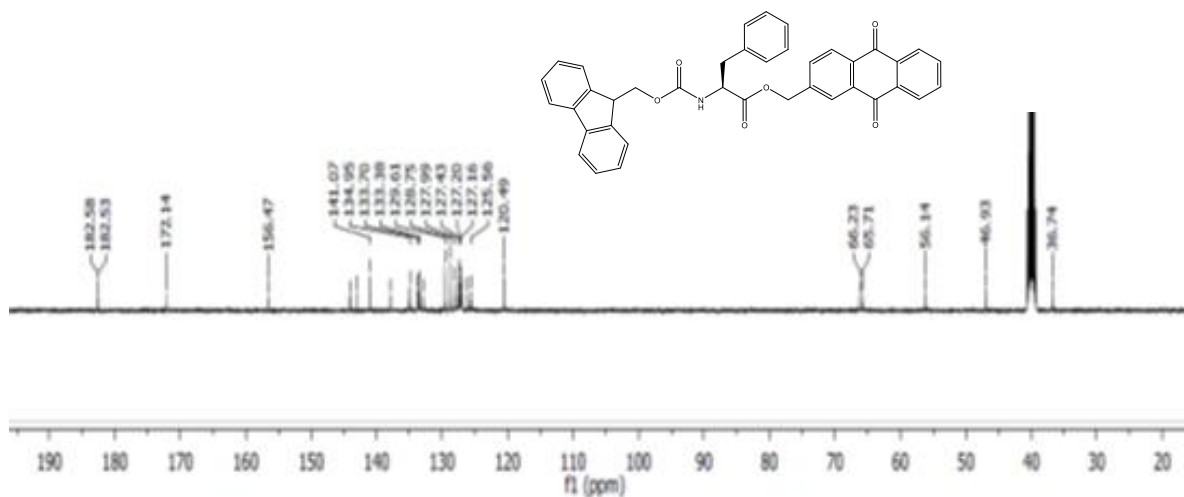


Figure S44: ^{13}C NMR (100 MHz, $\text{DMSO-}d_6$) spectrum of compound 15

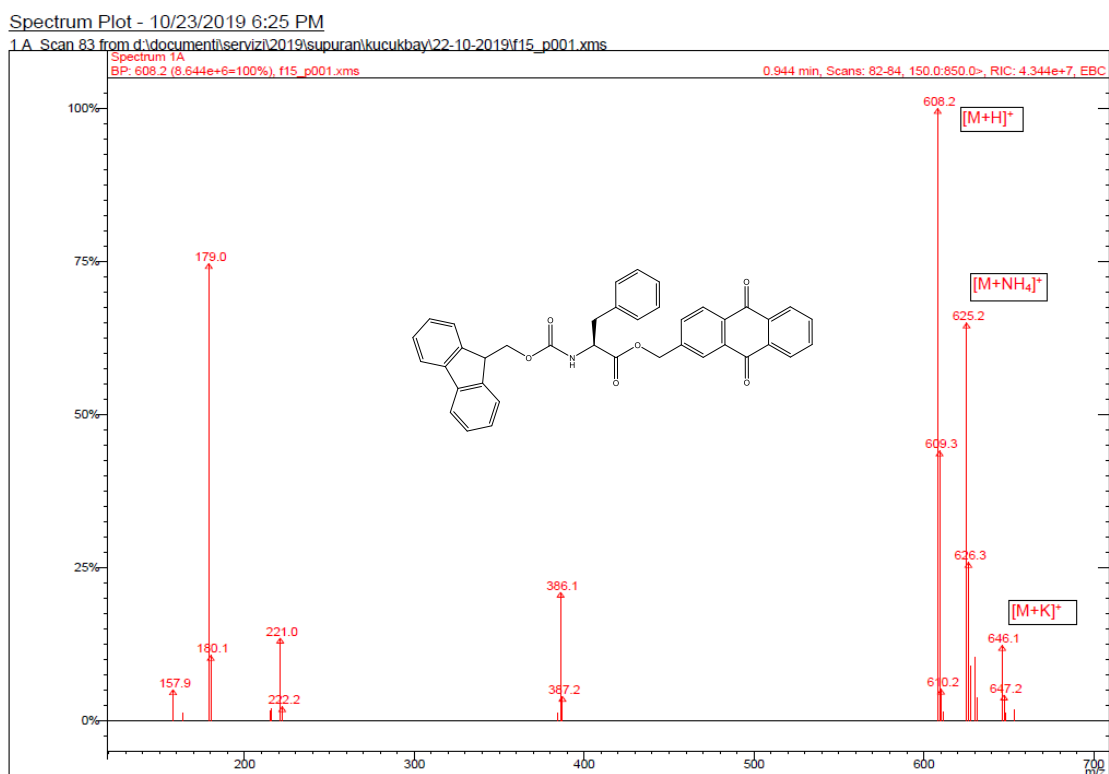


Figure S45: Mass spectrum of compound 15

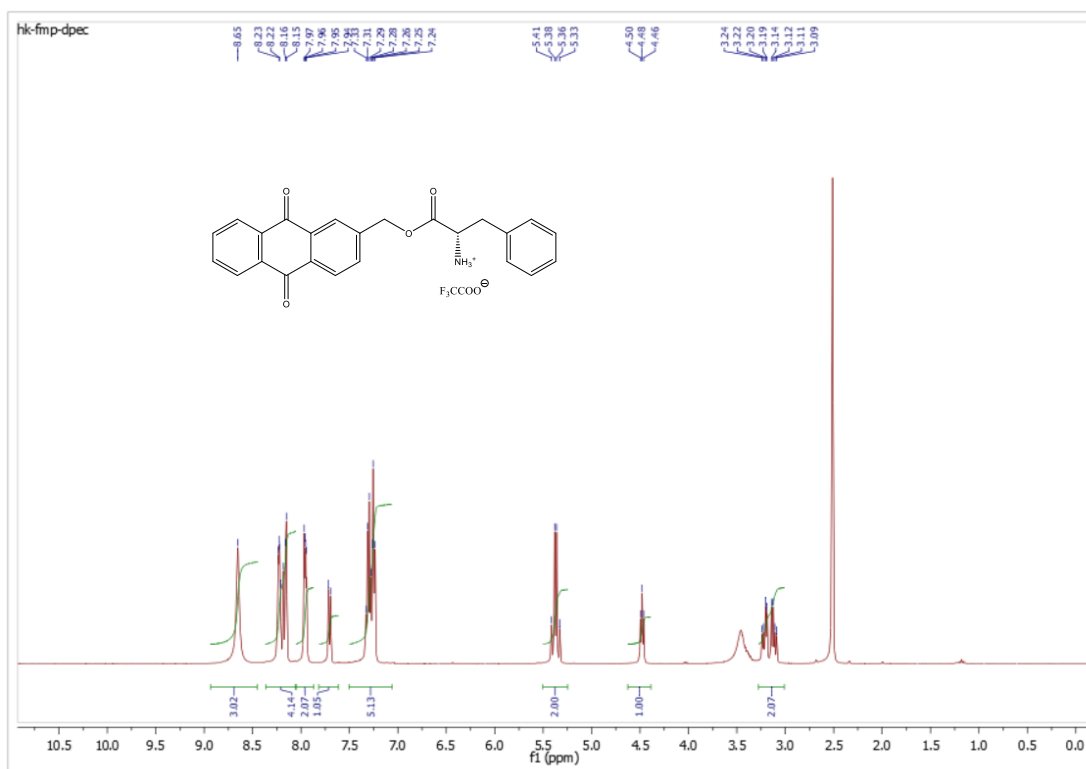


Figure S46: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 16

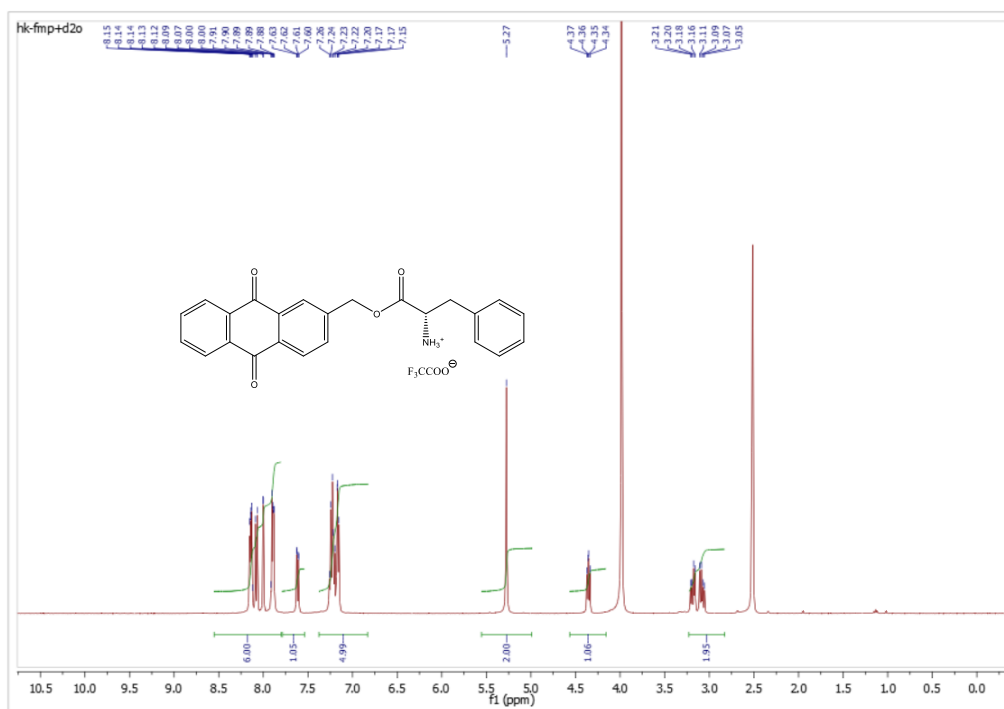


Figure S47: D₂O added ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of compound 16

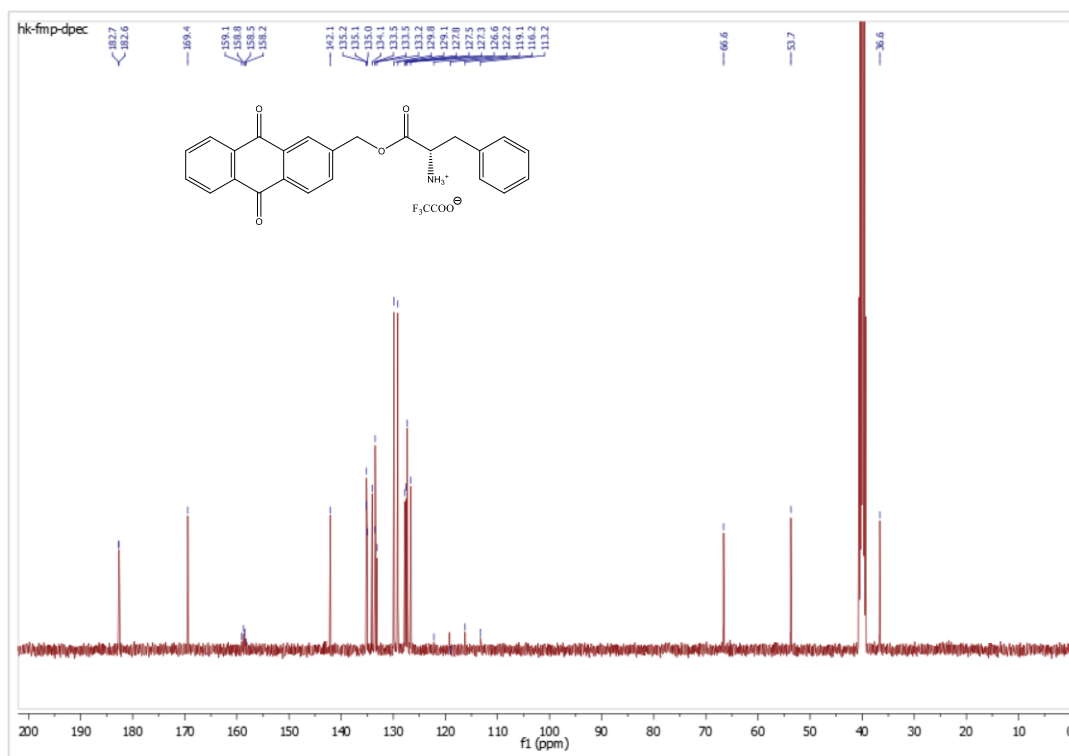


Figure S48: Mass spectrum of compound 16