
New anti-*Cryptococcus* phenalenones and cyclic tetrapeptides from *Auxarthron pseudauxarthron*

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Contents	Page
1) Figure S1. <i>Auxarthron pseudauxarthron</i> strain TTI-0363	2
2) Figure S2. Phylogenetic tree of strain TTI-0363	3
3) Figure S3. ¹ H NMR spectrum of auxarthrone A (1 ; 500 MHz, CDCl ₃)	4
4) Figure S4. ¹³ C NMR (APT) spectrum of auxarthrone A (1 ; 125 MHz, CDCl ₃)	5
5) Figure S5. ¹ H NMR spectrum of auxarthrone B (2 ; 500 MHz, CDCl ₃)	6
6) Figure S6. ¹³ C NMR (APT) spectrum of auxarthrone B (2 ; 125 MHz, CDCl ₃)	7
7) Figure S7. ¹ H NMR spectrum of auxarthrone C (3 ; 500 MHz, DMSO- <i>d</i> ₆)	8
8) Figure S8. ¹³ C NMR (APT) spectrum of auxarthrone C (3 ; 125 MHz, DMSO- <i>d</i> ₆)	9
9) Figure S9. ¹ H NMR spectrum of auxarthrone D (4 ; 500 MHz, CDCl ₃)	10
10) Figure S10. ¹³ C NMR (APT) spectrum of auxarthrone D (4 ; 125 MHz, CDCl ₃)	11
11) Figure S11. LC-UV-MS analysis of auxarthrone E (5)	12-13
12) Figure S12. ¹ H NMR spectrum of auxarthride A (7 ; 500 MHz, DMSO- <i>d</i> ₆)	14
13) Figure S13. ¹³ C NMR (APT) spectrum of auxarthride A (7 ; 125 MHz, DMSO- <i>d</i> ₆)	15
14) Figure S14. ¹ H NMR spectrum of auxarthride B (8 ; 500 MHz, DMSO- <i>d</i> ₆)	16
15) Figure S15. ¹³ C NMR (APT) spectrum of auxarthride B (8 ; 125 MHz, DMSO- <i>d</i> ₆)	17
16) Figure S16. LC-MS analysis of the FDAA derivatives of hydrolysates of auxarthride A (7) and the standard amino acids	18
17) Figure S17. LC-MS analysis of the FDAA derivatives of hydrolysates of auxarthride B (8) and the standard amino acids	19

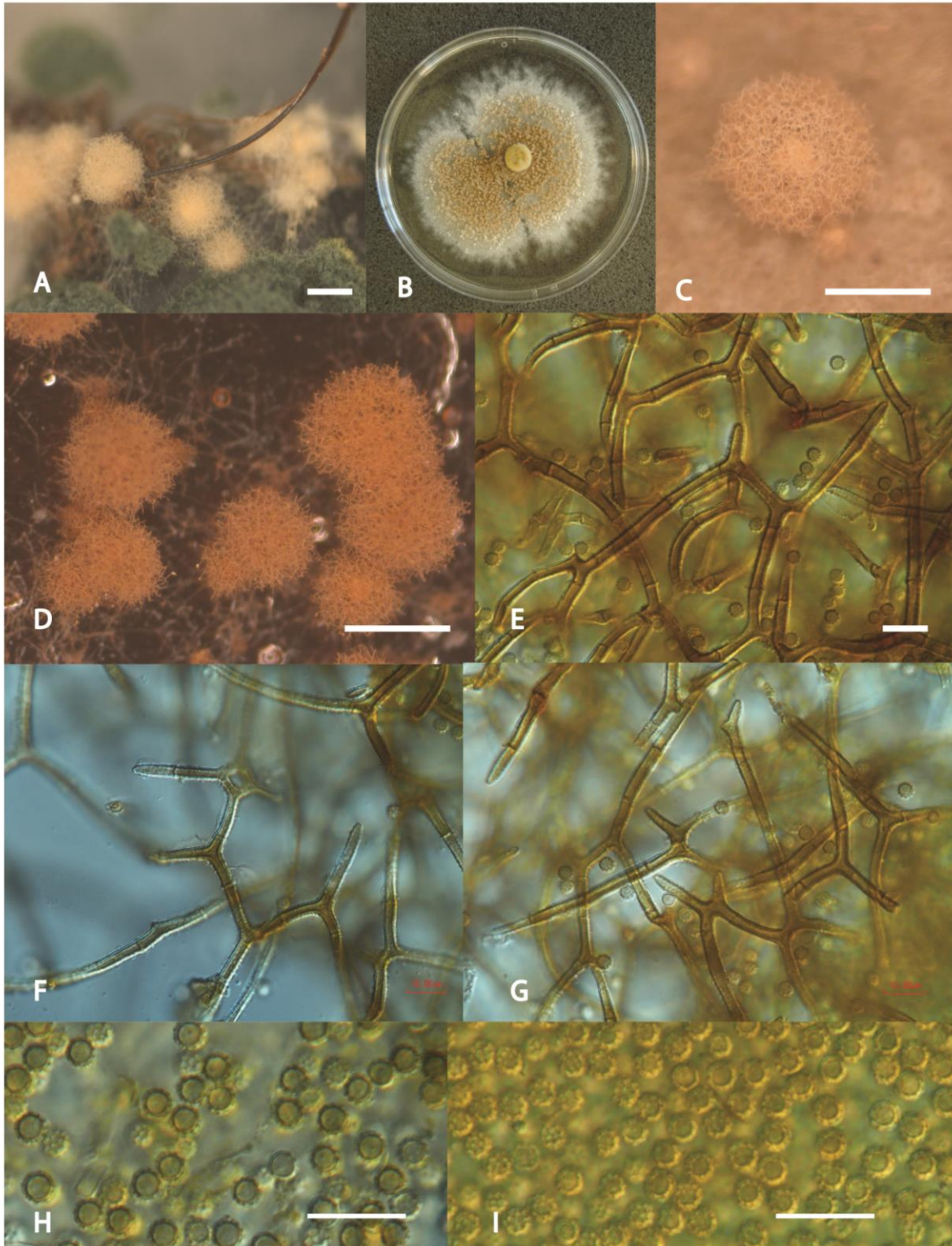


Figure S1. *Auxarthron pseudauxarthron* TTI-0363. A. Ascomata formed naturally on rabbit dung. B. Three-week-old colony grown on malt-yeast extract agar in 100-mm Petri dish. C. Close up of ascoma formed in culture. Bar = 500 μm . D. Ascomata formed in culture. Bar = 500 μm . D-F. Hyphal structure of reticuloperidium. Note spine-like terminal hyphae. Bar = 10 μm . G-H. Ascospores. Bar = 10 μm .

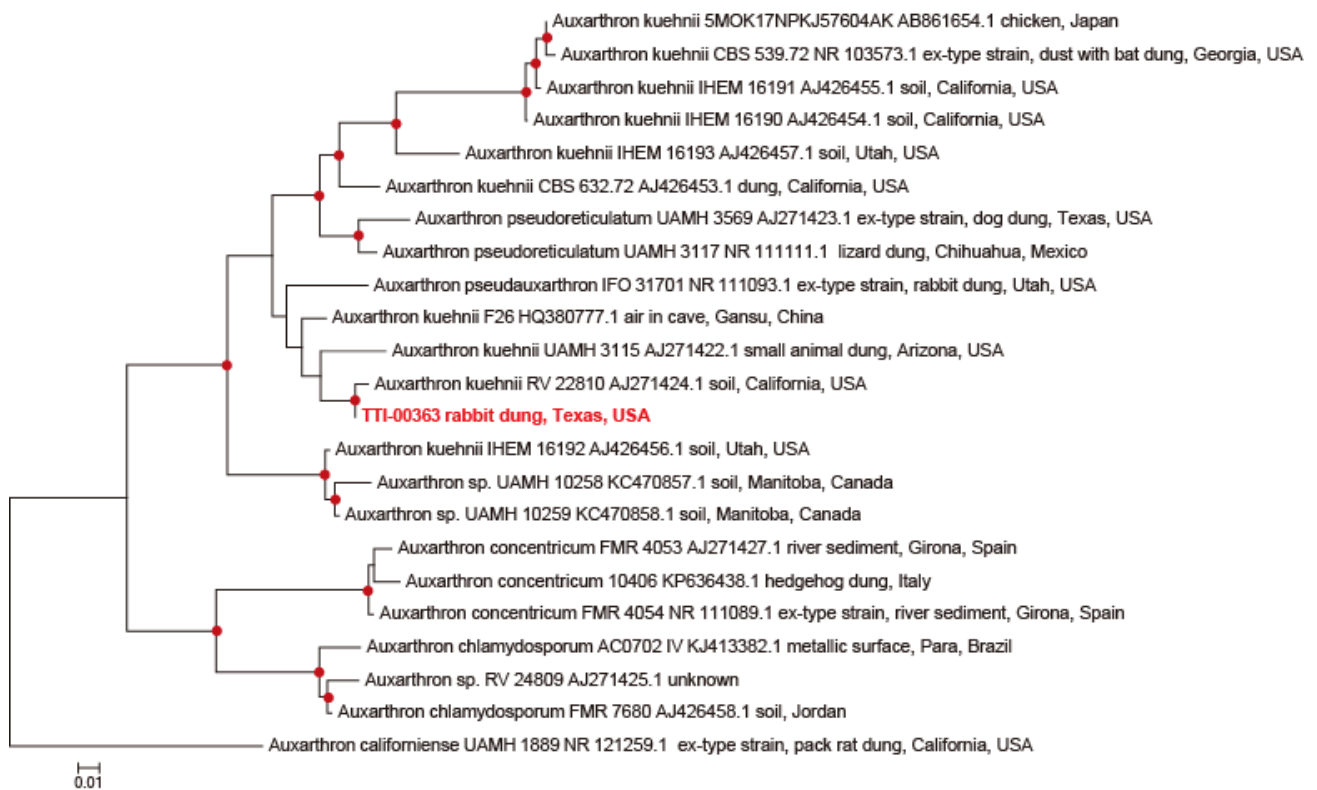


Figure S2. Maximum likelihood analysis of the ITS rDNA region of selected fungi of the genus *Auxarthron*. Branch nodes receiving more than 50% statistical support out of 1000 bootstrap replicates are indicated by a red circle on the branch node. Initial trees for the heuristic search were obtained by applying the neighbor-joining method to a matrix of pairwise distances estimated using the maximum composite likelihood approach under the GTR+G model. *Auxarthron californiense* was designated as the out group. New strain of *A. pseudauxarthron* TTI-0363 is indicated in red. The ITS rDNA region regions were resampled from strains compiled in the previous works of Sarrocco S, Diquattro S, Baroncelli R, Cimmino A, Evidente A, Vannacci G, Doveri F. 2015. A polyphasic contribution to the knowledge of *Auxarthron* (Onygenaceae). *Mycological Progress* 14:1-20 and Solé M, Cano J, Guarro J. 2002. Molecular phylogeny of *Amauroascus*, *Auxarthron*, and morphologically similar onygenalean fungi. *Mycological Research* 106:388-396.

Figure S3. ^1H NMR Spectrum of Auxarthrone A (**1**; 500 MHz, CDCl_3)

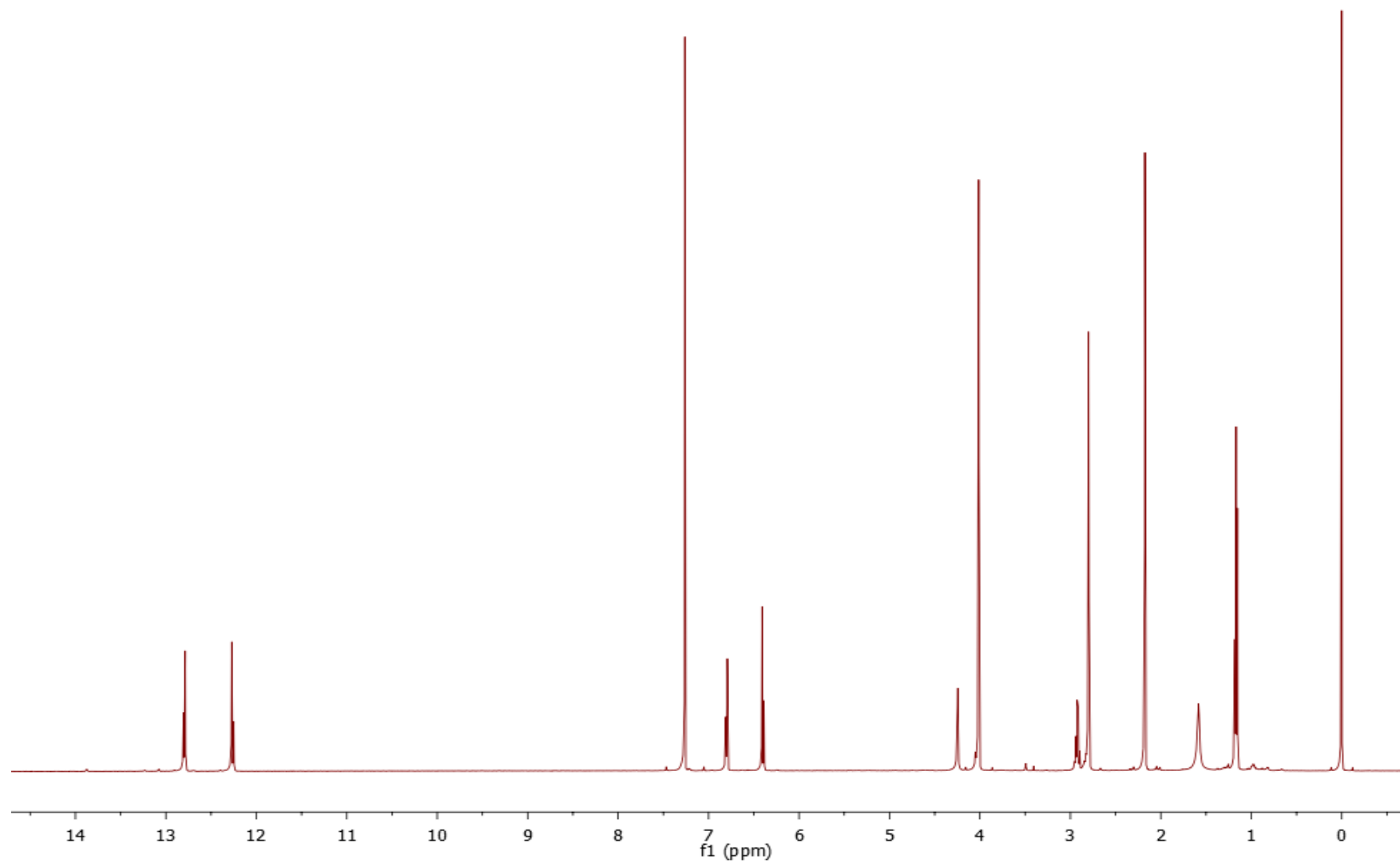


Figure S4. ^{13}C NMR (APT) Spectrum of Auxarthrone A (**1**; 125 MHz, CDCl_3)

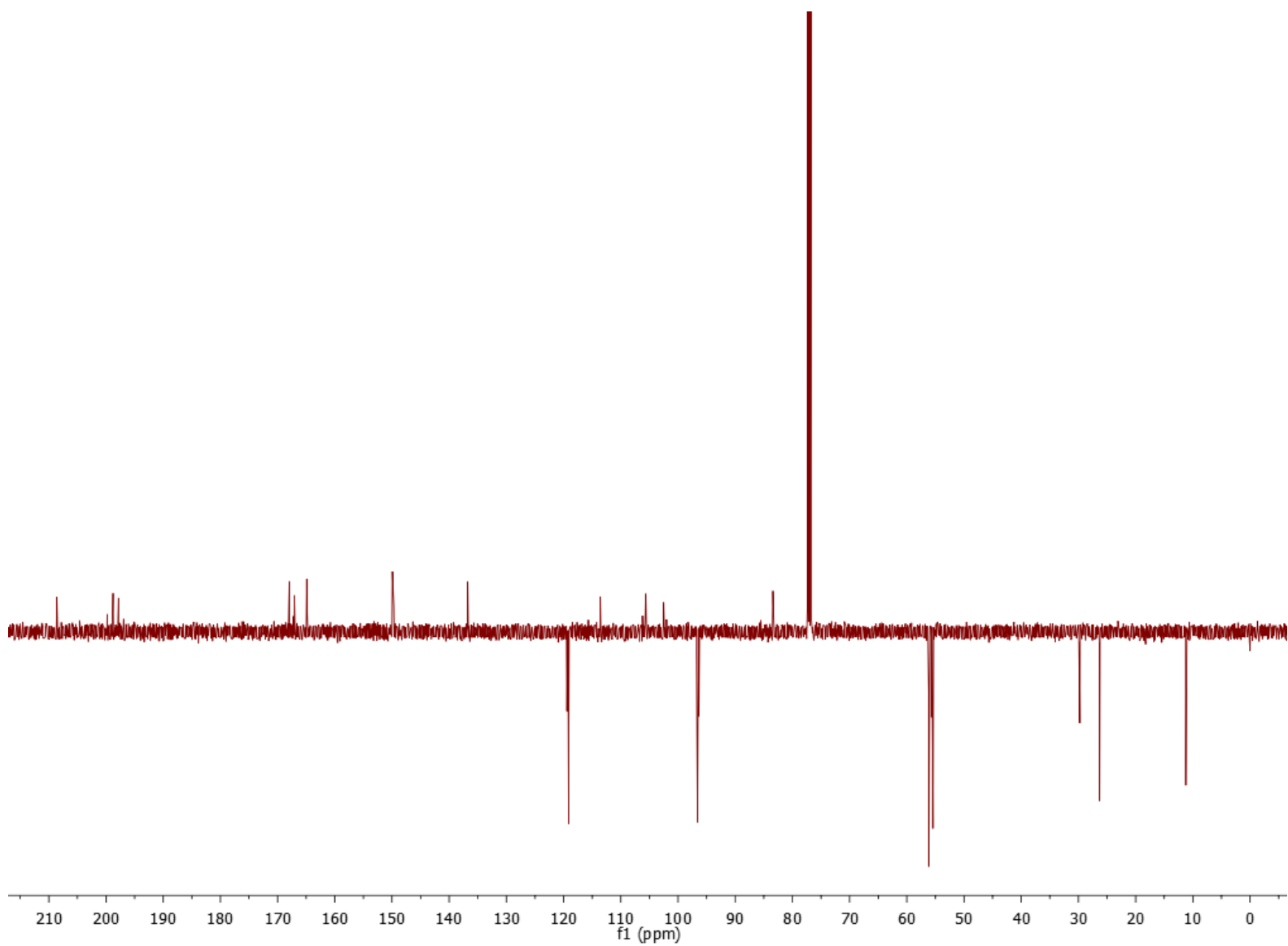


Figure S5. ^1H NMR Spectrum of Auxarthrone B (**2**; 500 MHz, CDCl_3)

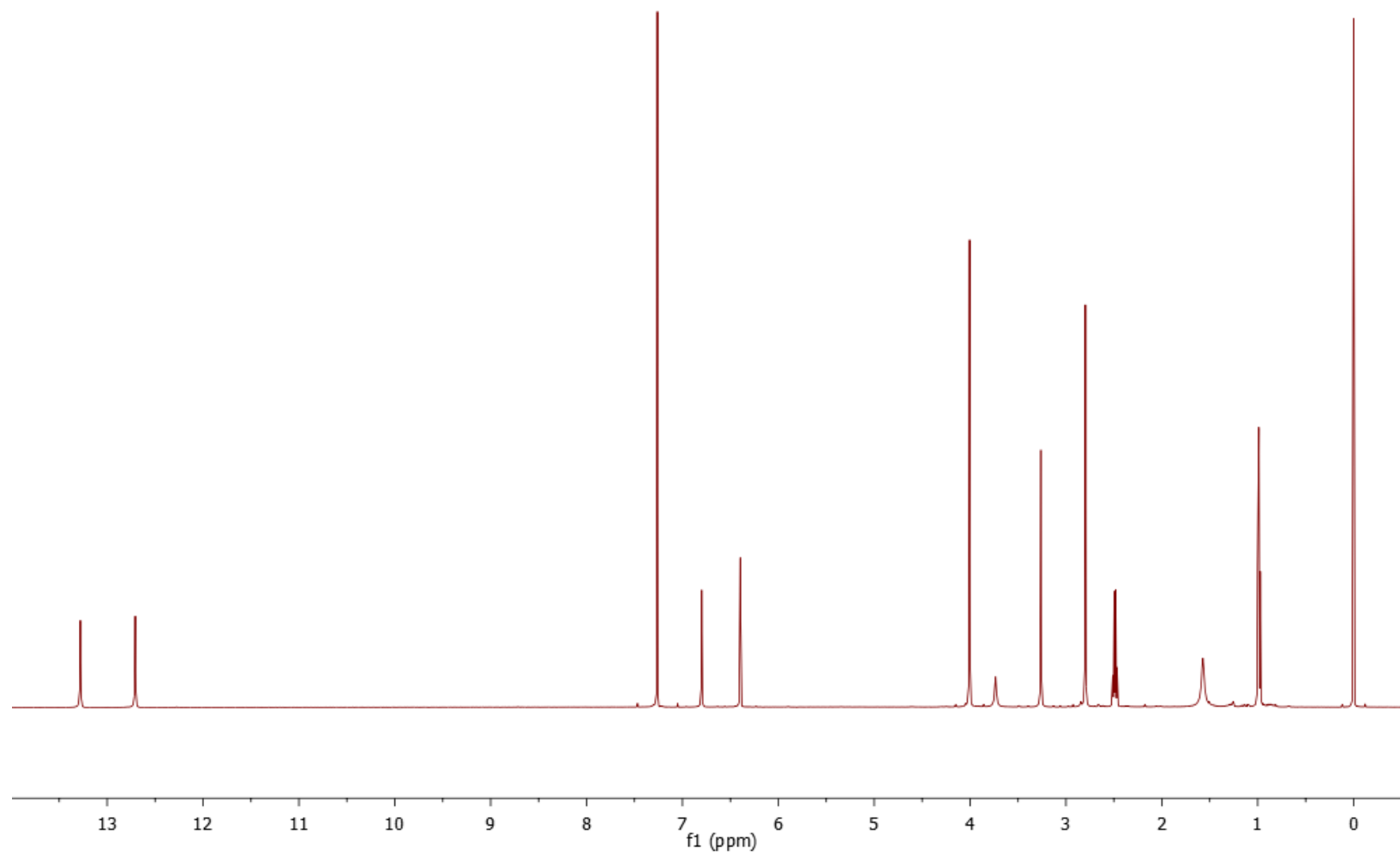


Figure S6. ^{13}C NMR (APT) Spectrum of Auxarthrone B (**2**; 125 MHz, CDCl_3)

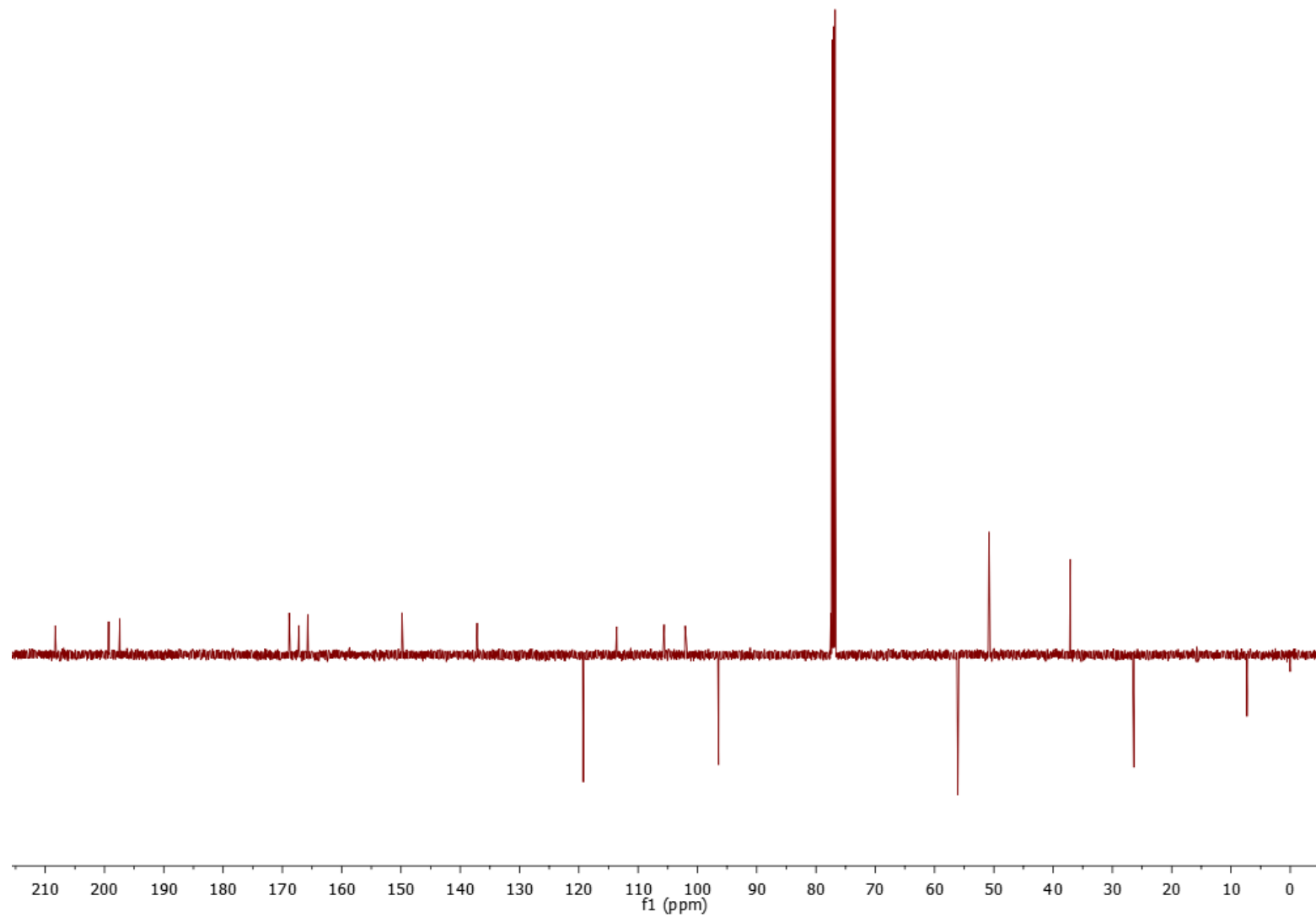


Figure S7. ^1H NMR Spectrum of Auxarthrone C (**3**; 500 MHz, $\text{DMSO-}d_6$)

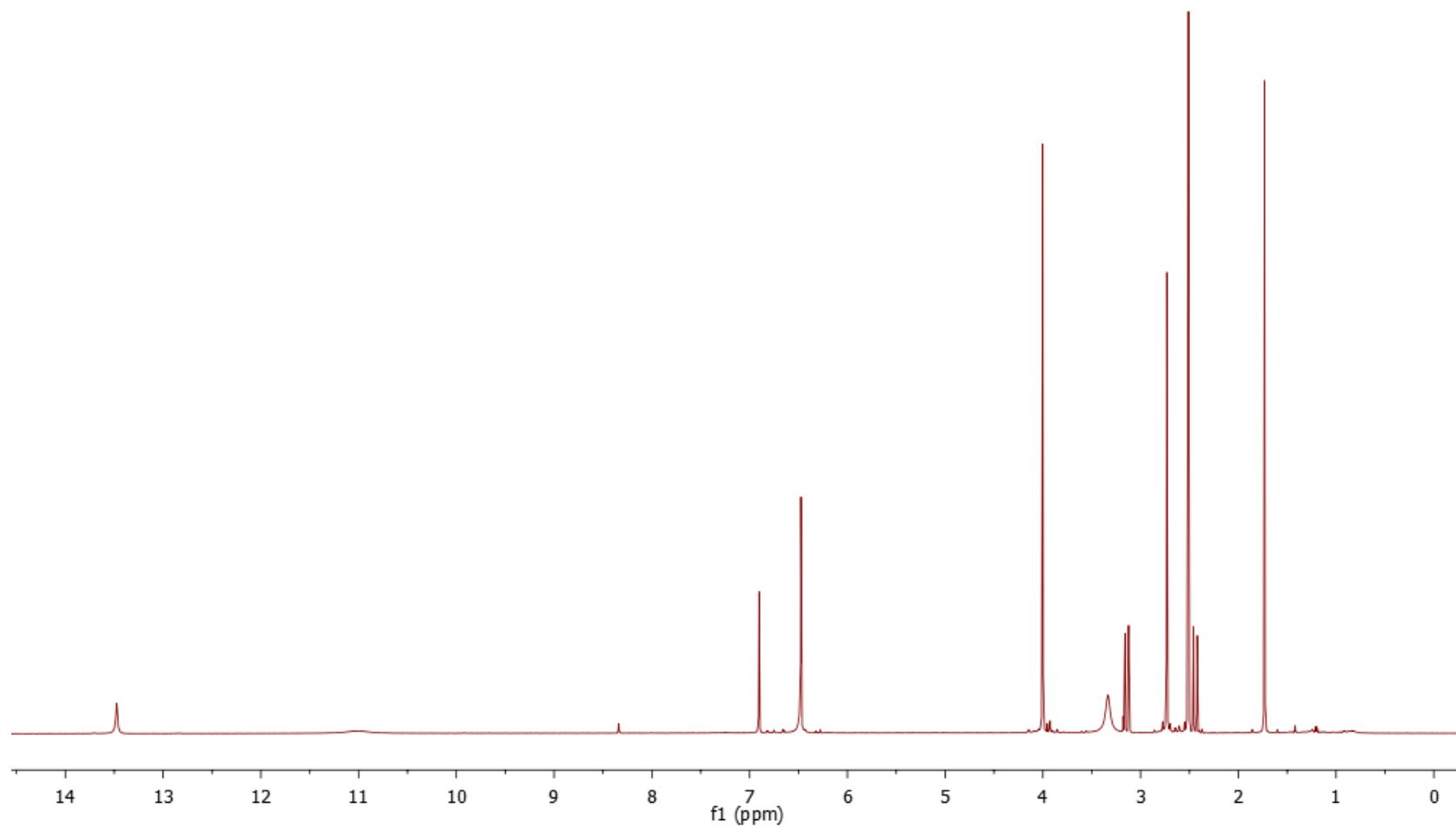


Figure S8. ^{13}C NMR (APT) Spectrum of Auxarthrone C (**3**; 125 MHz, $\text{DMSO-}d_6$)

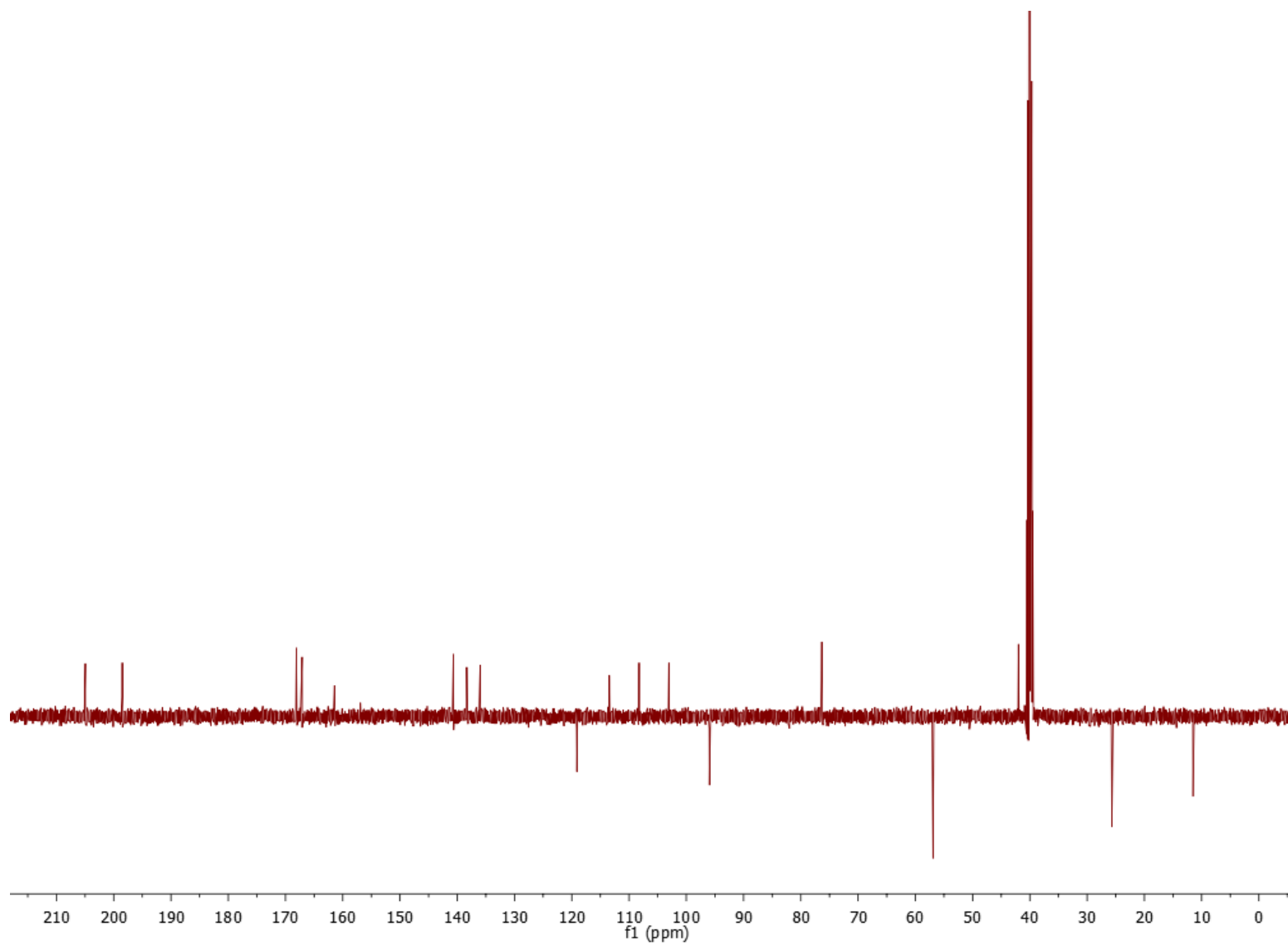


Figure S9. ^1H NMR Spectrum of Auxarthrone D (**4**; 500 MHz, CDCl_3)

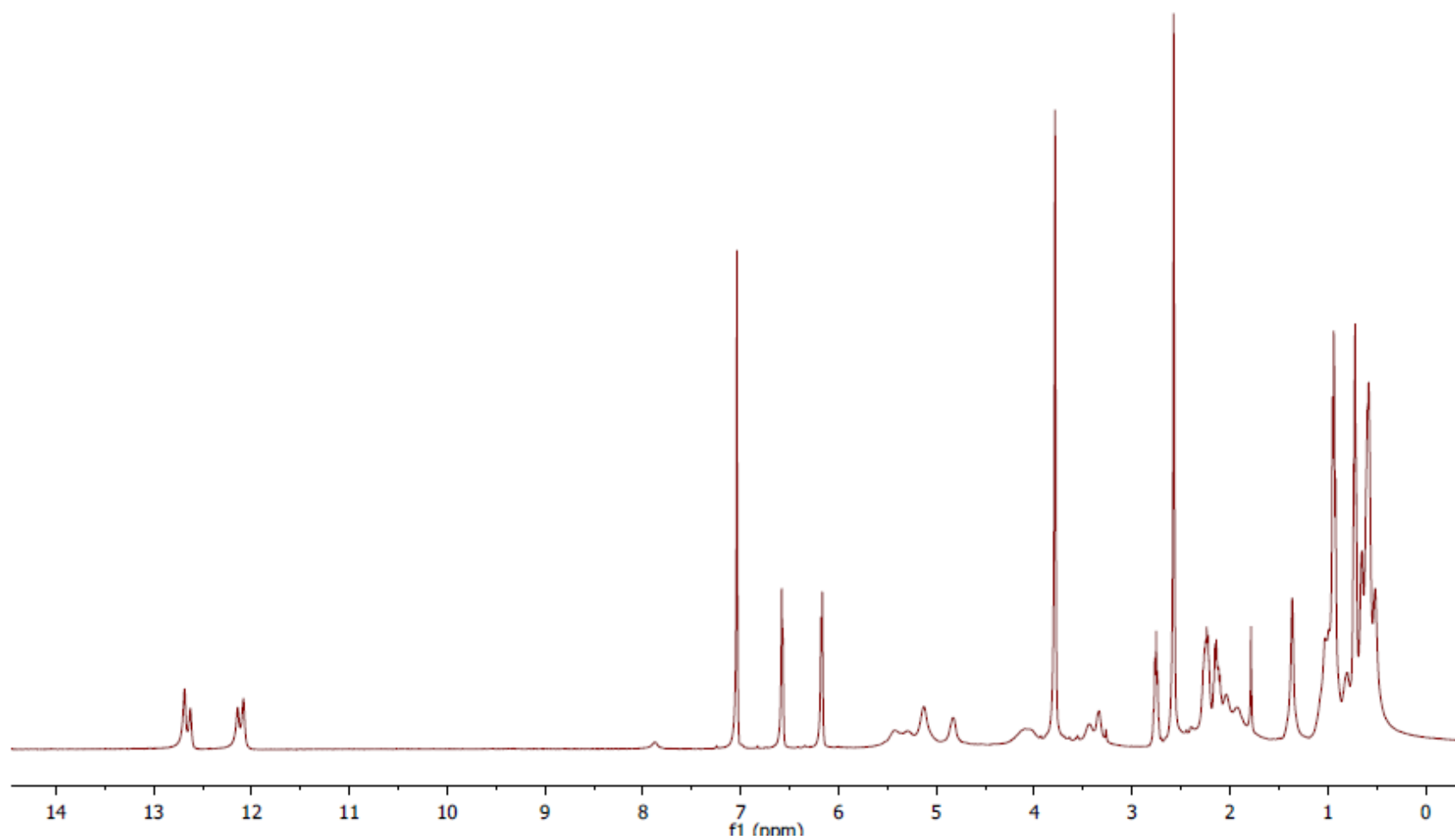


Figure S10. ^{13}C NMR (APT) Spectrum of Auxarthrone D (**4**; 125 MHz, CDCl_3)

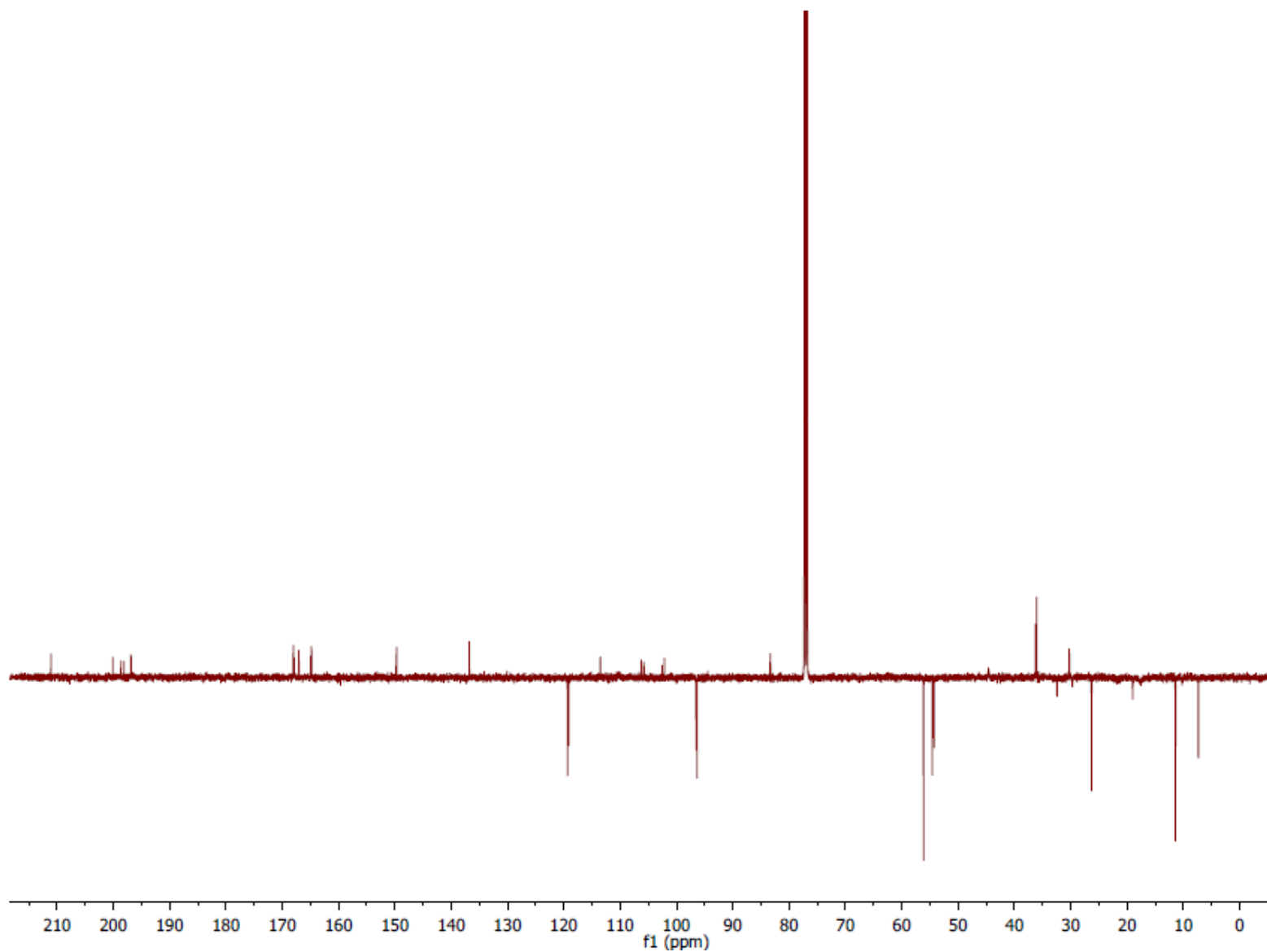
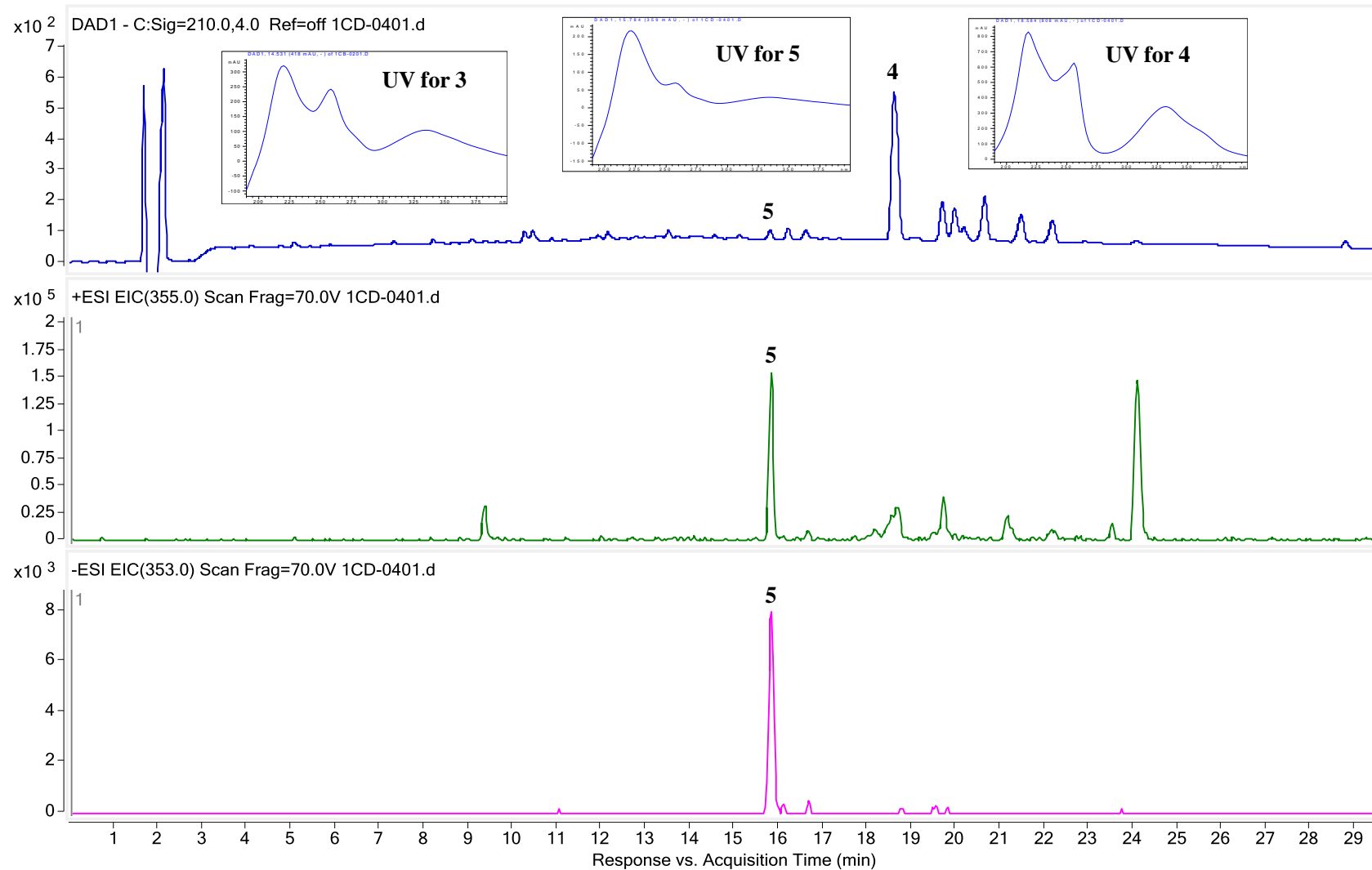


Figure S11. LC-UV-MS analysis of auxarthrone E (5)

A) LC-UV-MS chromatogram of 3-pentanone extracts and positive ion (355), negative ion (353) search for auxarthrone E (5)



B) ESI mass spectrum of auxarthrone E (5)

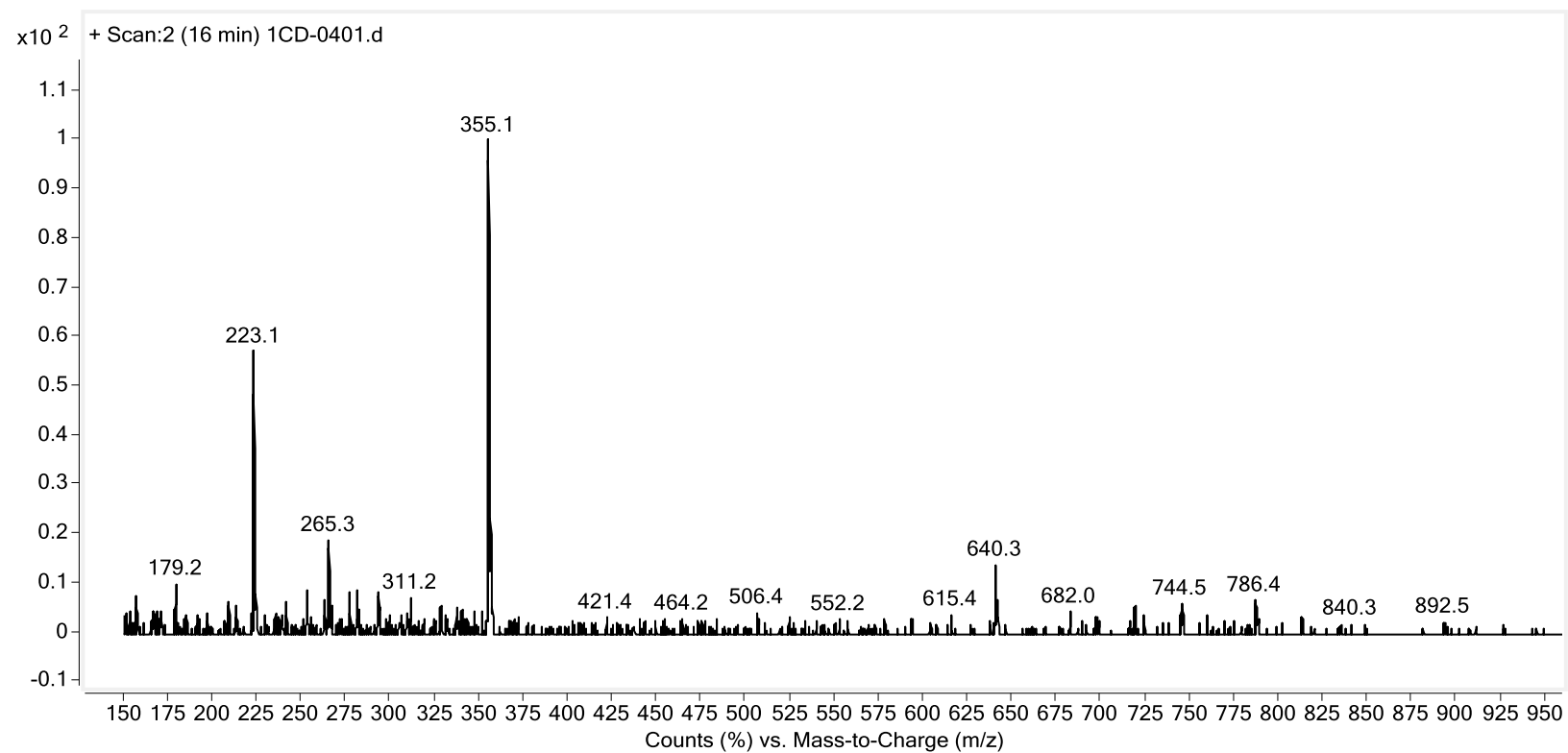


Figure S12. ^1H NMR Spectrum of Auxarthride A (**7**; 500 MHz, $\text{DMSO-}d_6$)

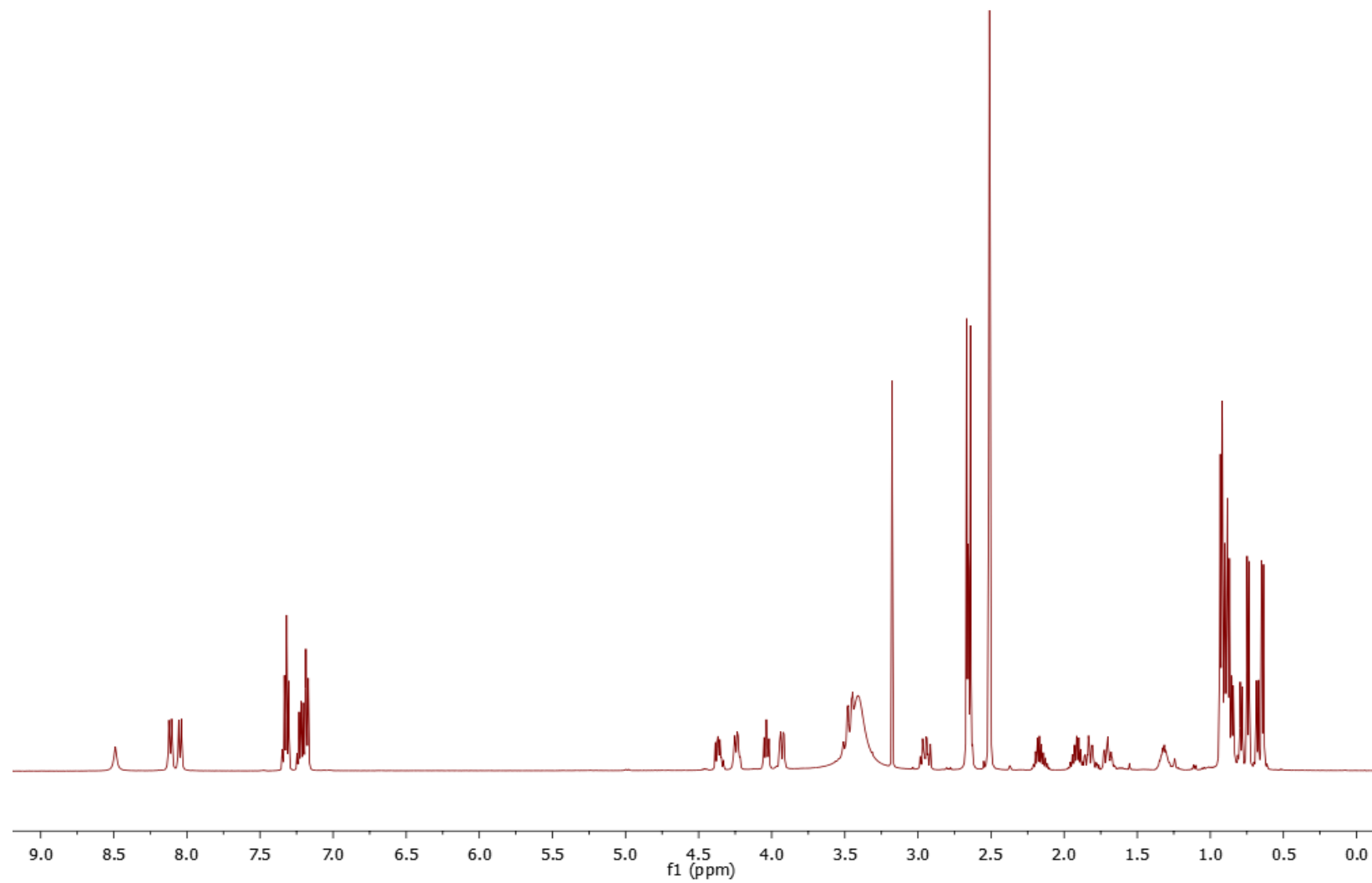


Figure S13. ^{13}C NMR (APT) Spectrum of Auxarthride A (**7**; 125 MHz, $\text{DMSO-}d_6$)

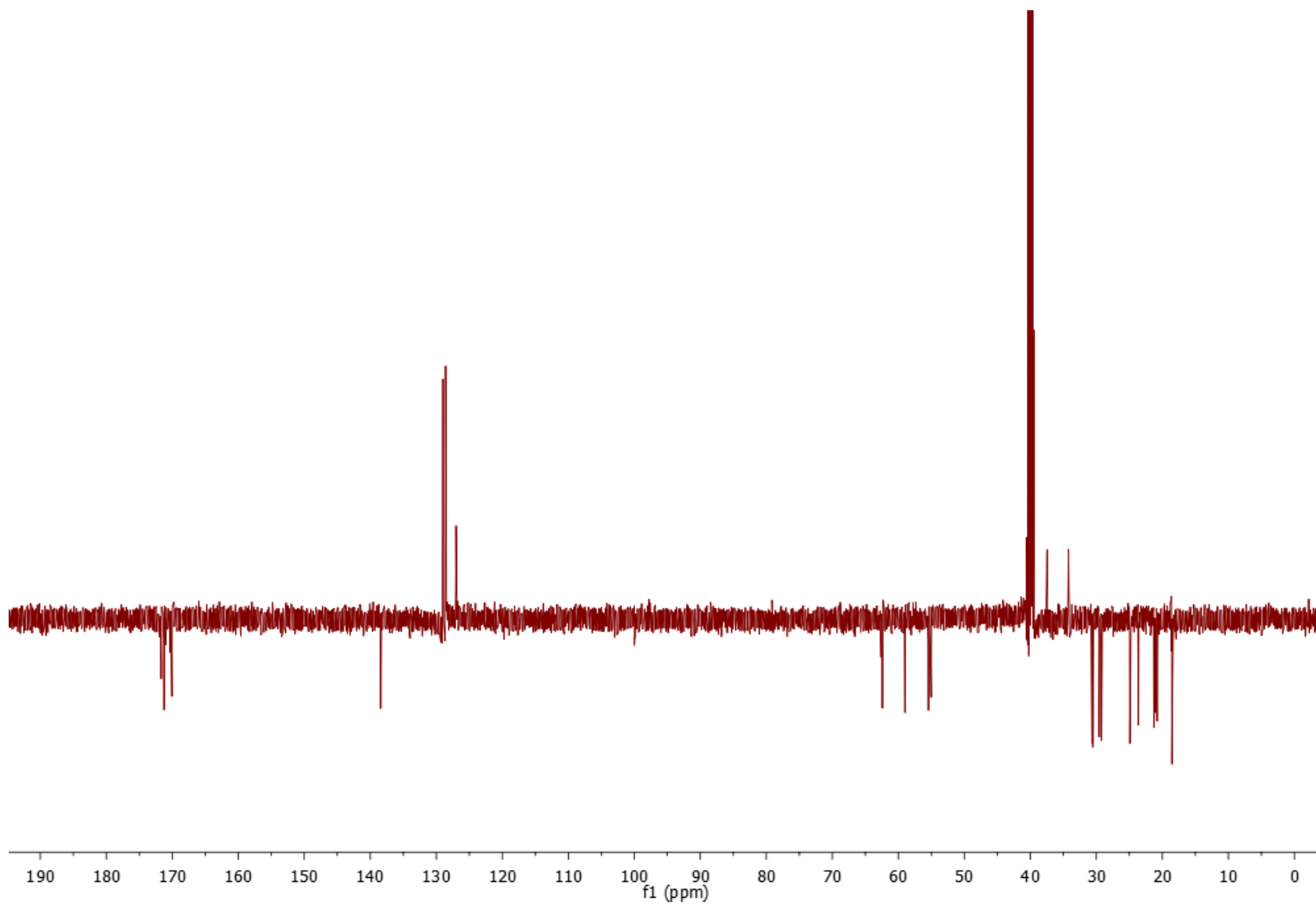


Figure S14. ^1H NMR Spectrum of Auxarthride B (**8**; 500 MHz, $\text{DMSO-}d_6$)

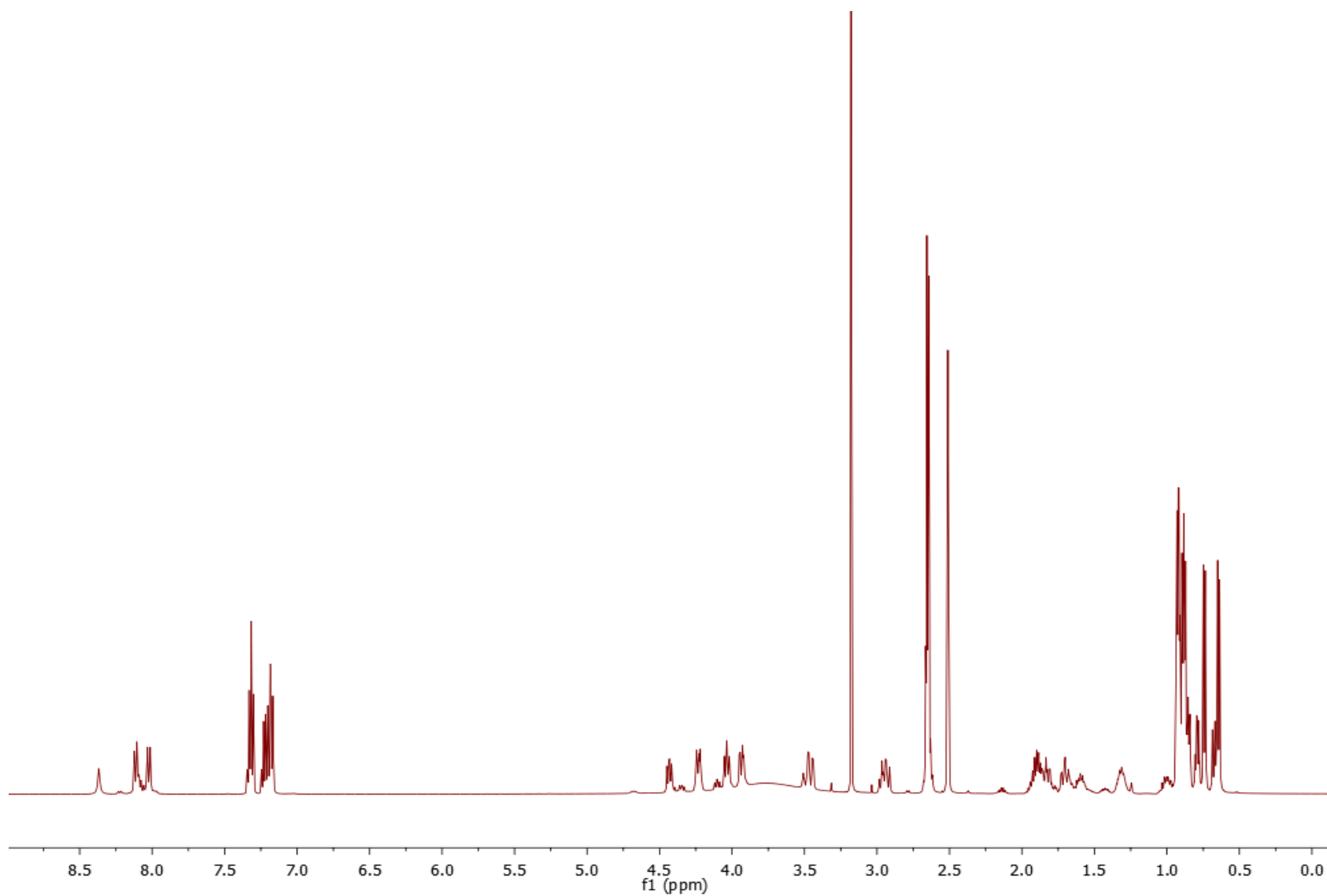


Figure S15. ^{13}C NMR (APT) Spectrum of Auxarthride B (**8**; 125 MHz, $\text{DMSO-}d_6$)

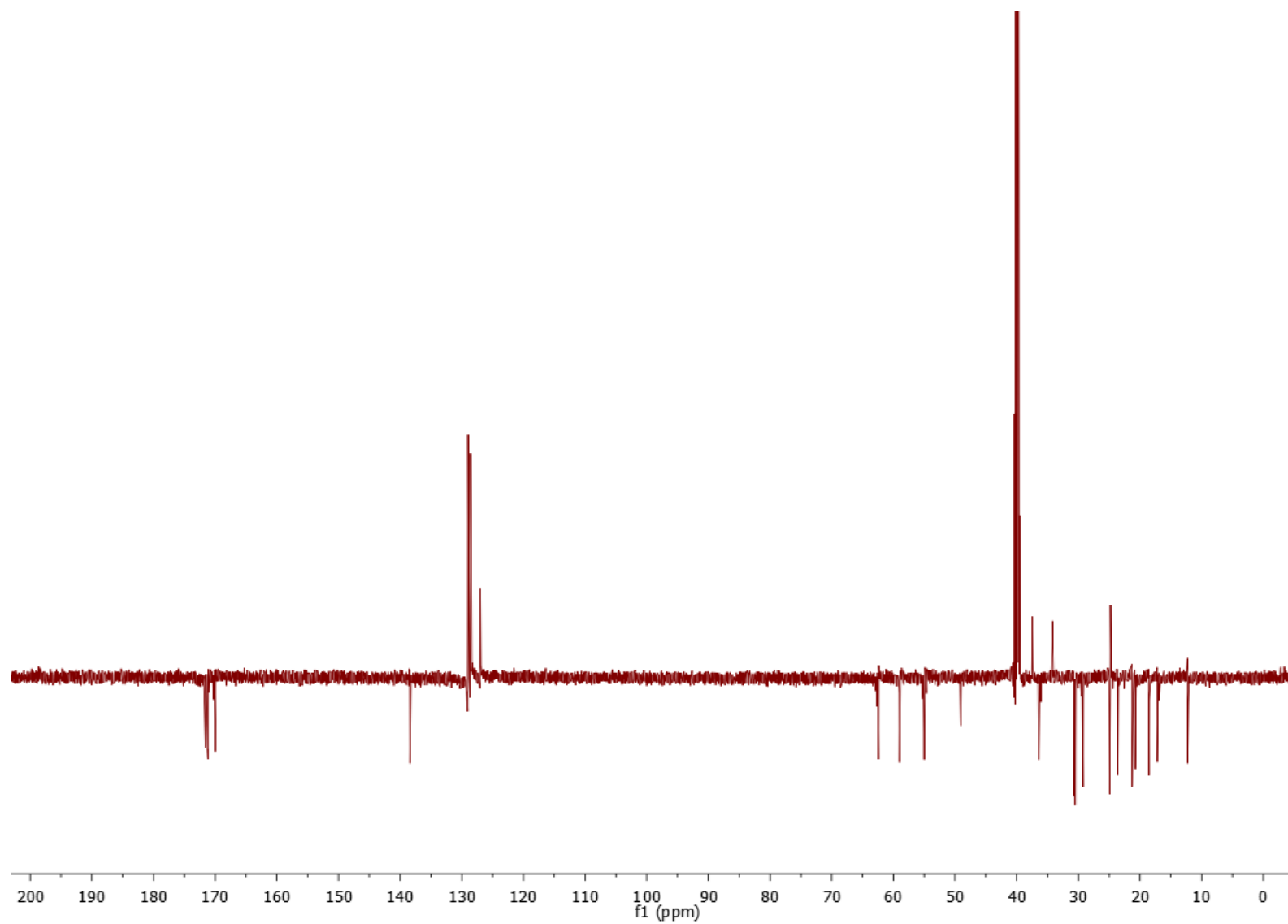


Figure S16. LC-MS Analysis of the FDAA Derivatives of Hydrolysates of Auxarthride A (7) and the Standard Amino Acids

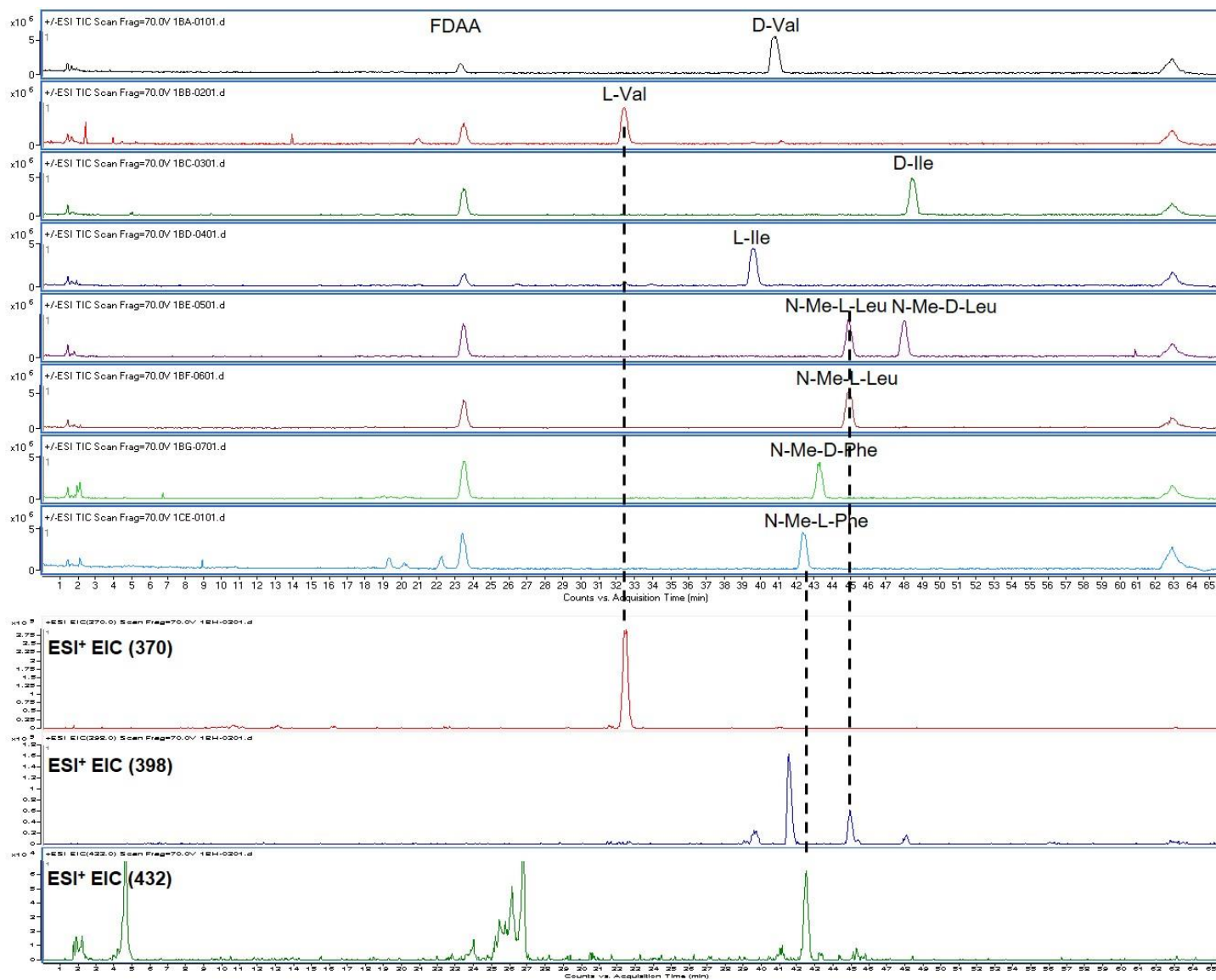


Figure S17. LC-MS Analysis of the FDAA Derivatives of Hydrolysates of Auxarthride B (**8**) and the Standard Amino Acids

