

Supporting Information

Hypalocrinins, Taurine Conjugated Anthraquinone and Biaryl Pigments from the Deep Sea Crinoid *Hypalocrinus naresianus*

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Figure S1. *Hypalocrinus naresianus* (Carpenter, 1884), specimen ZMB Ech 7415, Shima Spur, Kumano-nada Sea, Japan.

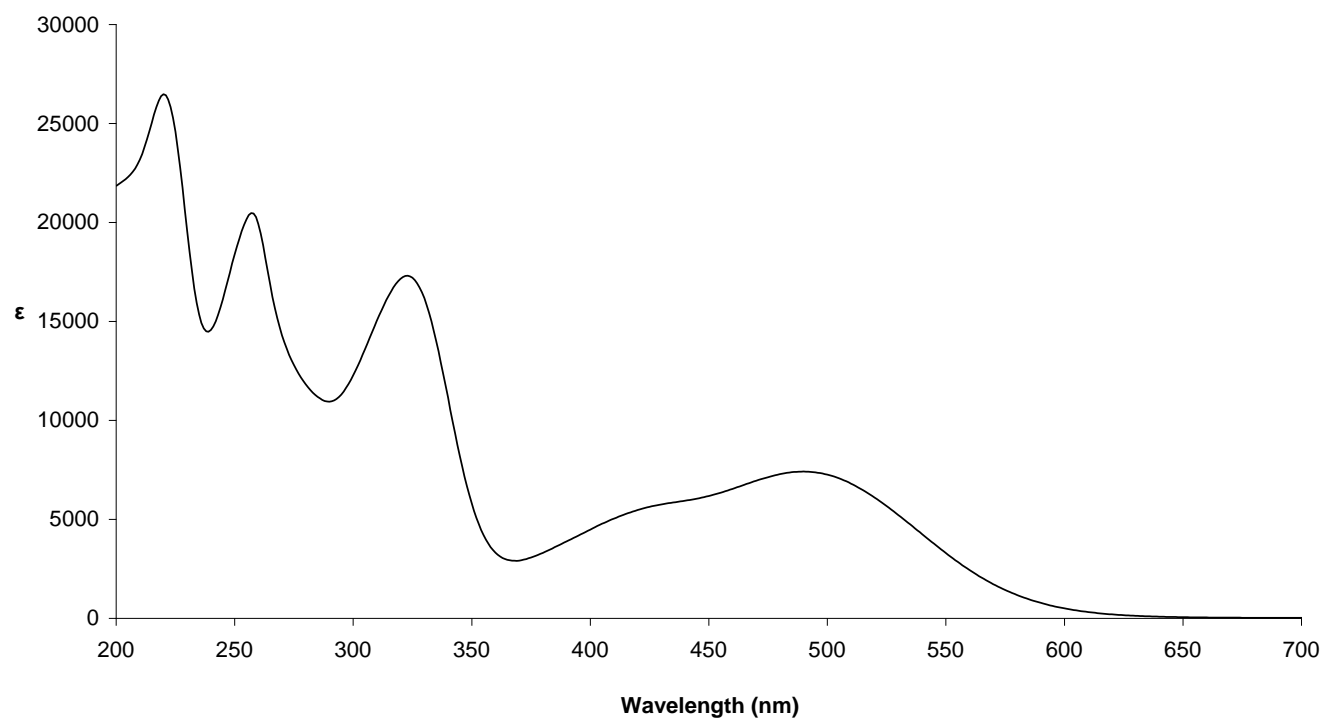


Figure S2. UV/vis spectrum (H₂O) of hypalocrinin A (1).

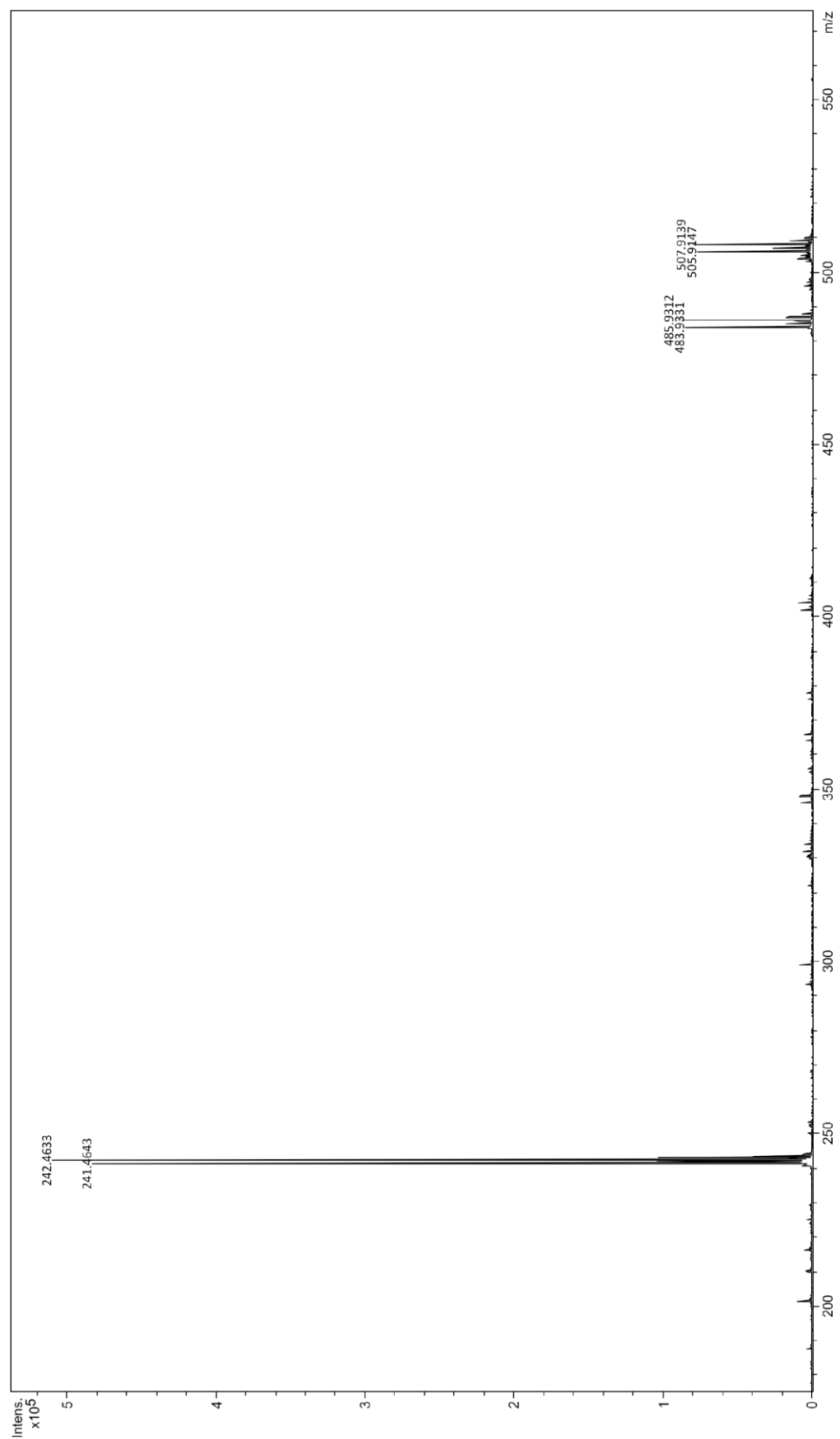


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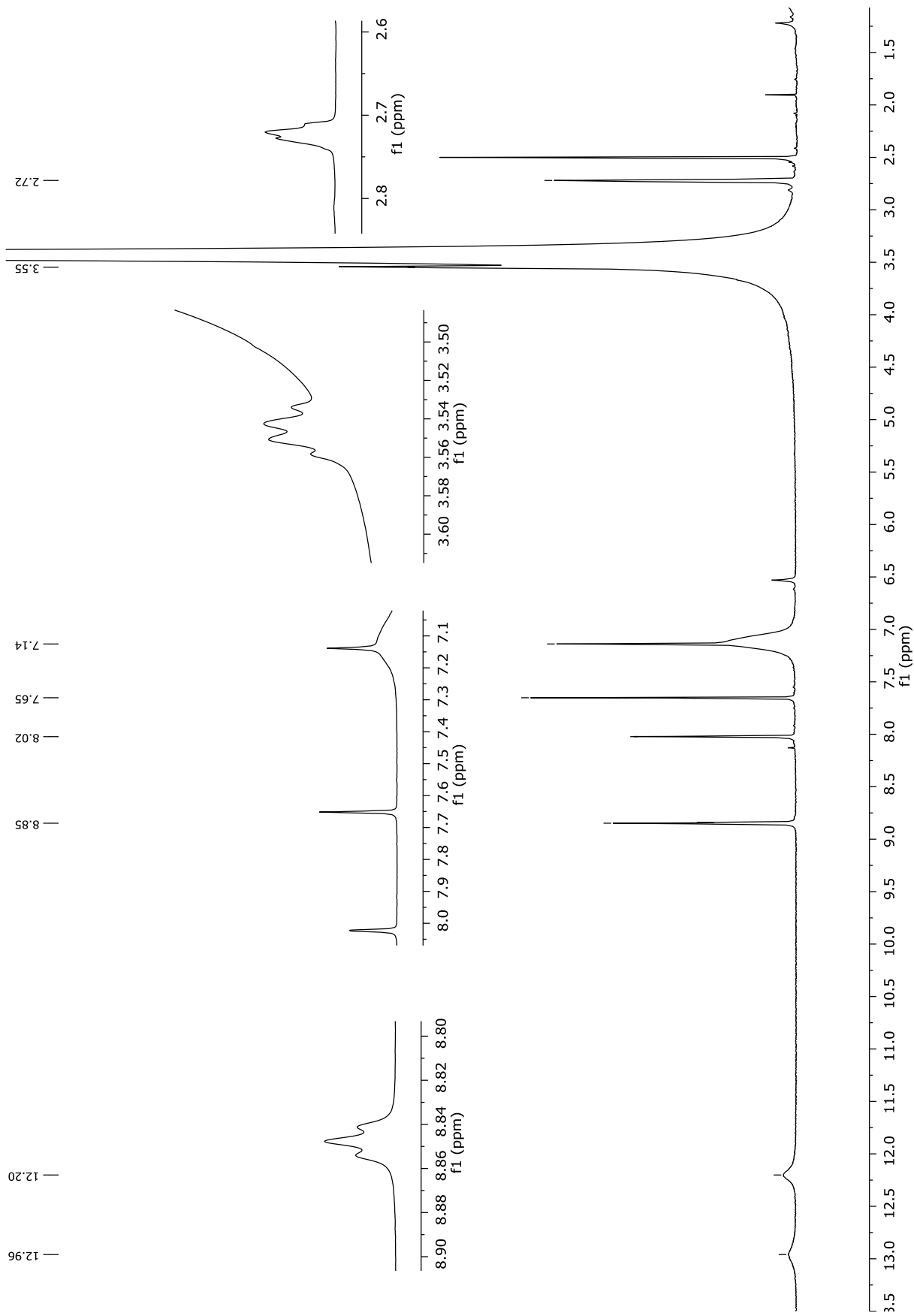


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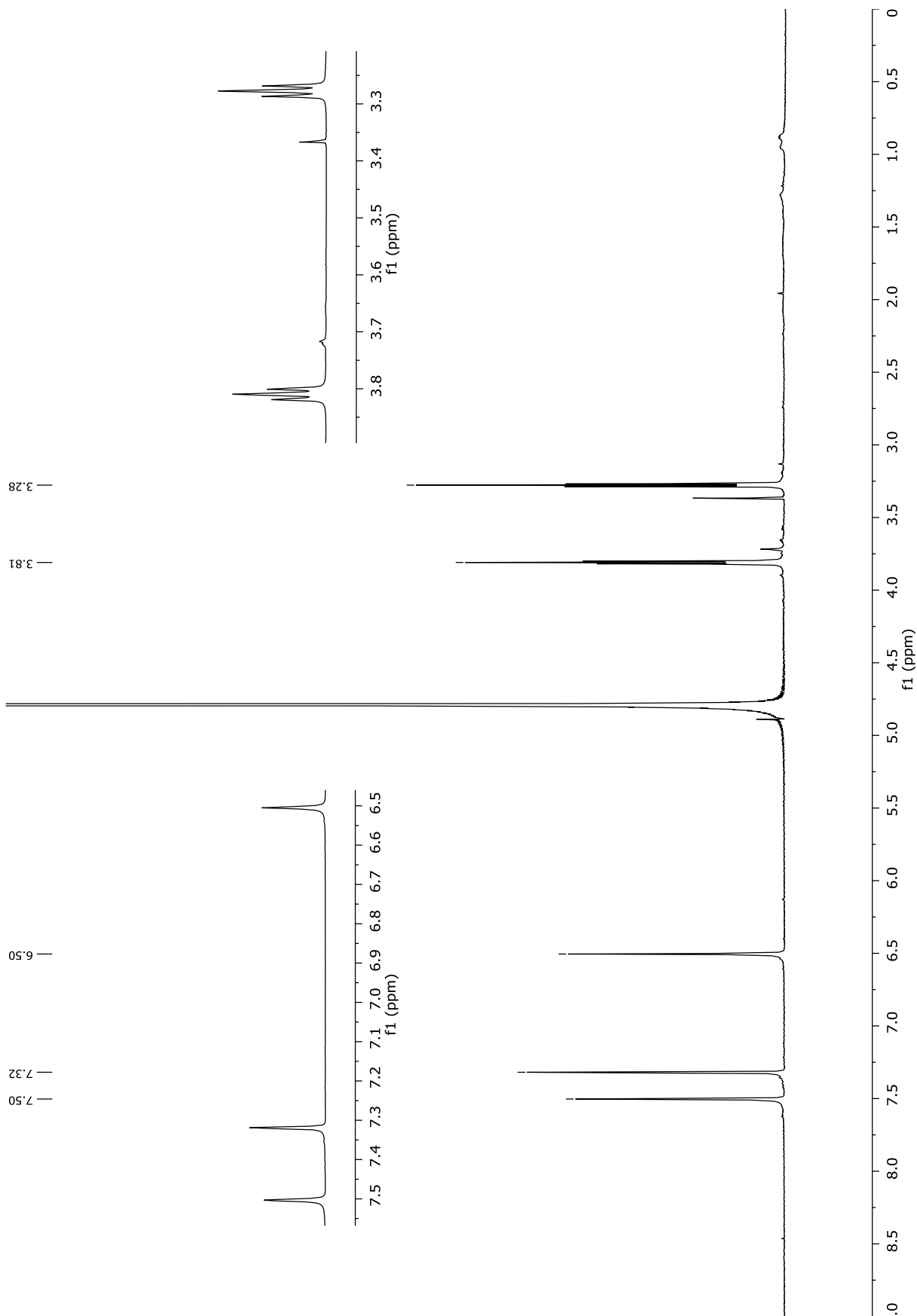


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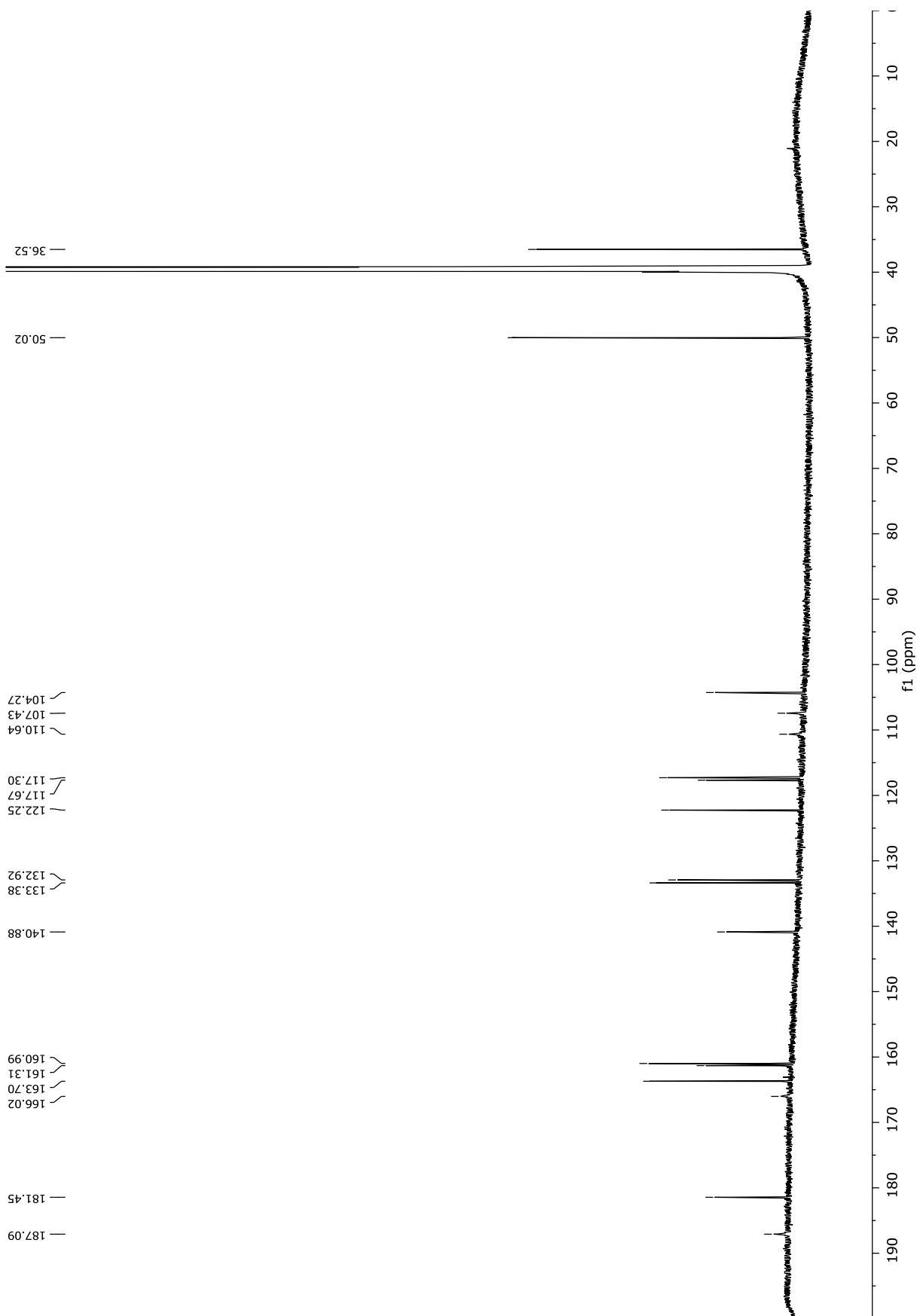


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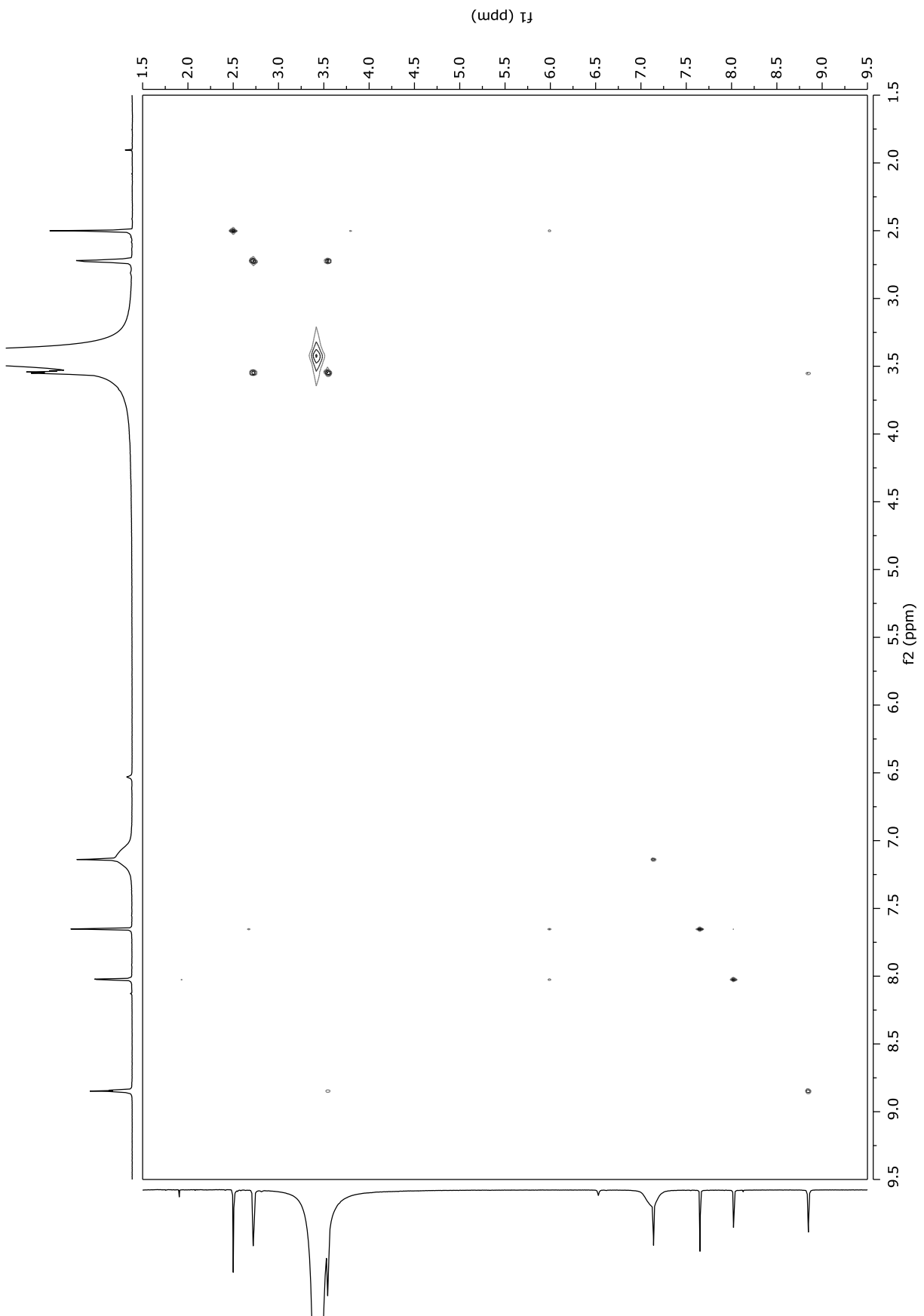


Figure S7. COSY spectrum (800 MHz, DMSO-*d*₆) of hypalocrinin A (1).

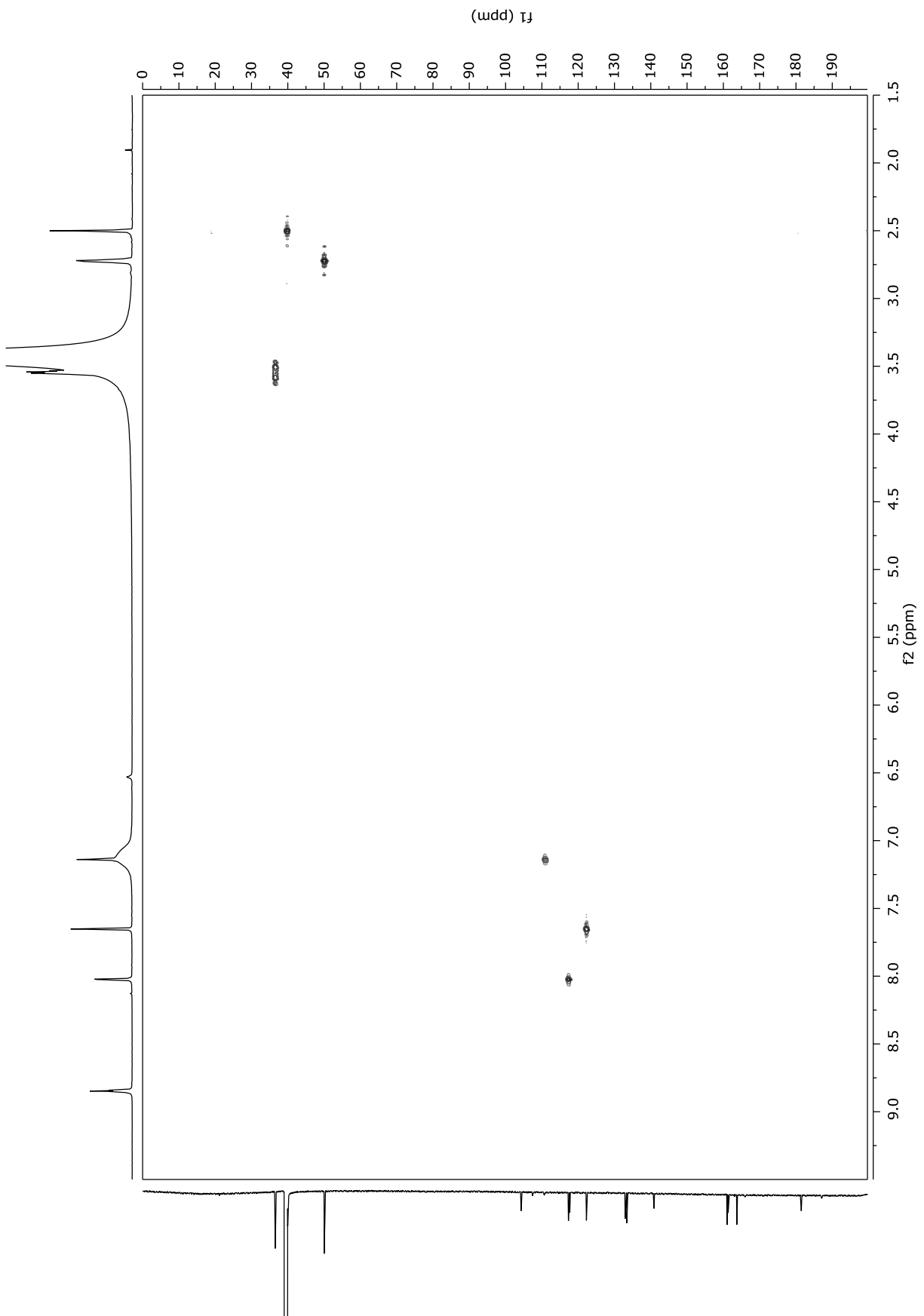


Figure S8. HSQC spectrum (800 MHz, DMSO-*d*₆) of hypalocrinin A (1).

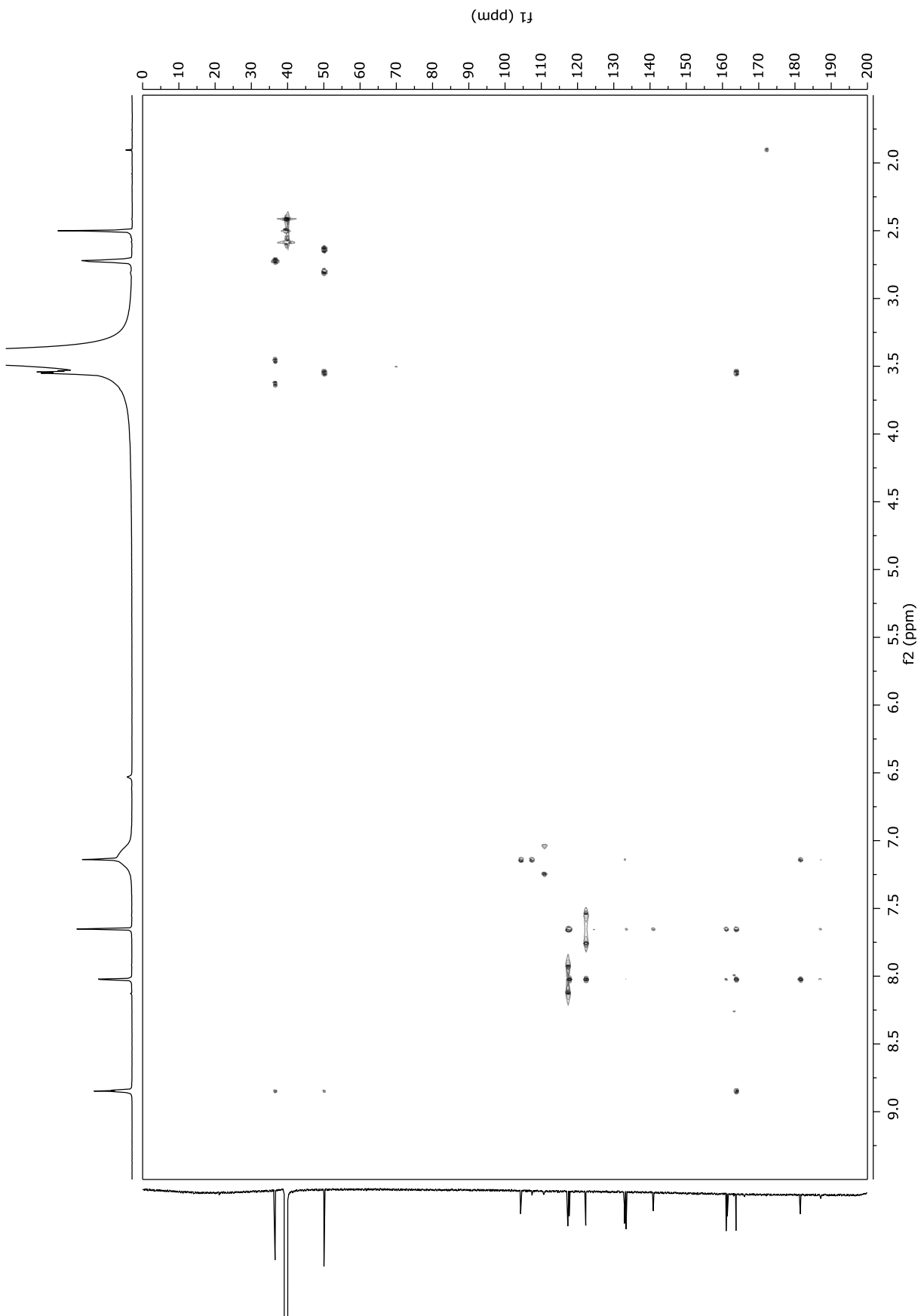


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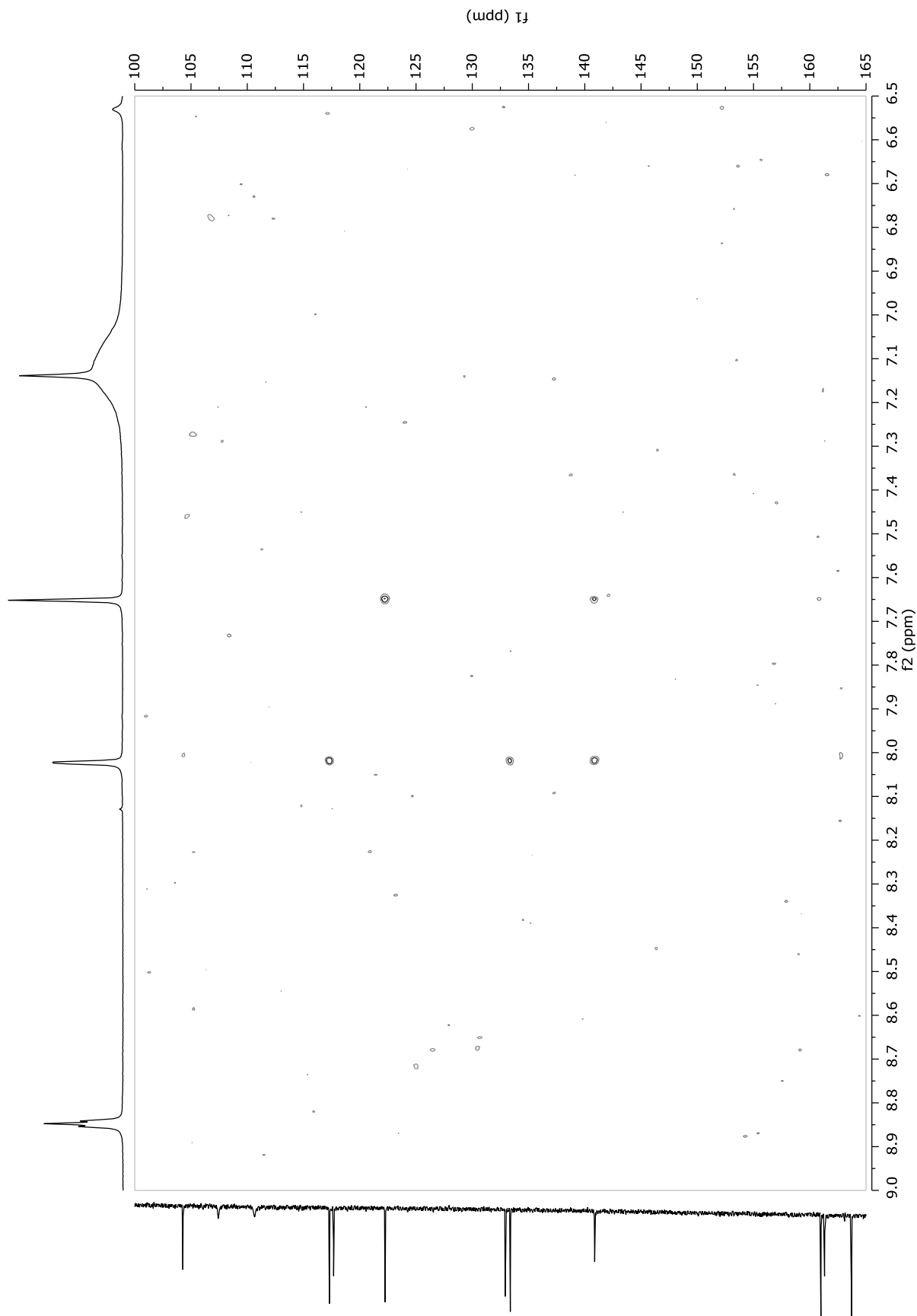


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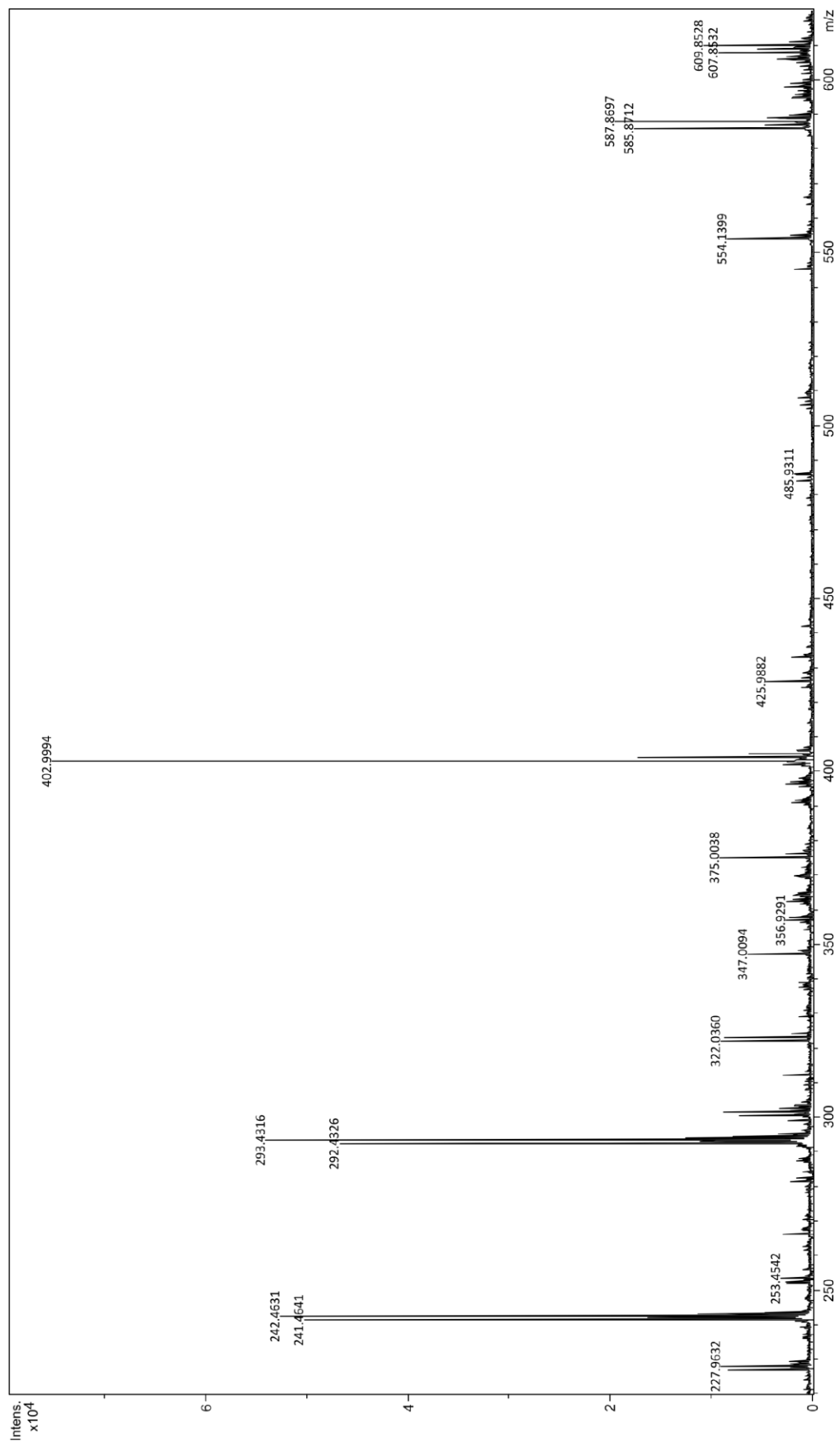


Figure S11. HRESIMS spectrum (negative-ion mode) of hypalocrinin B (**2**).

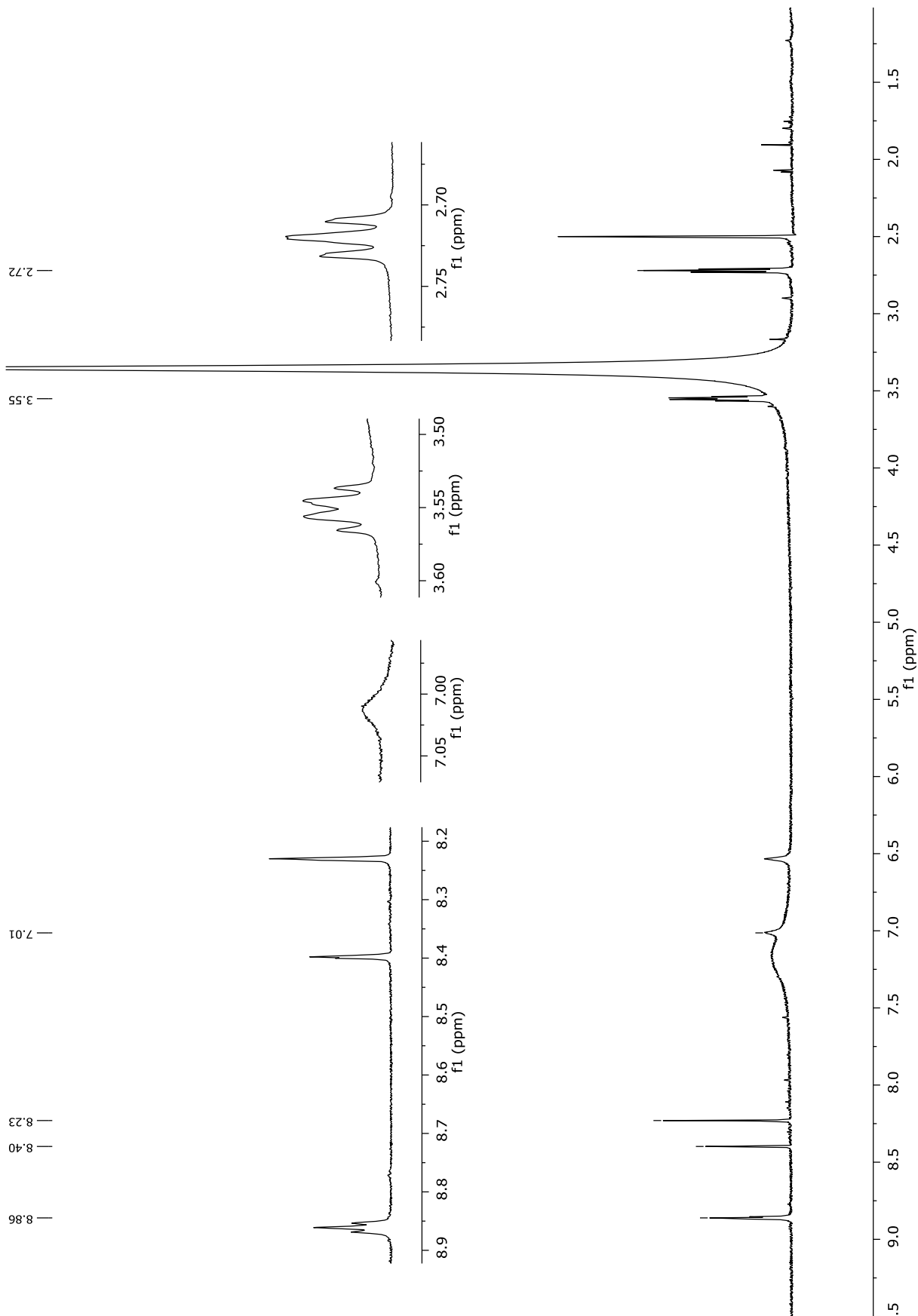


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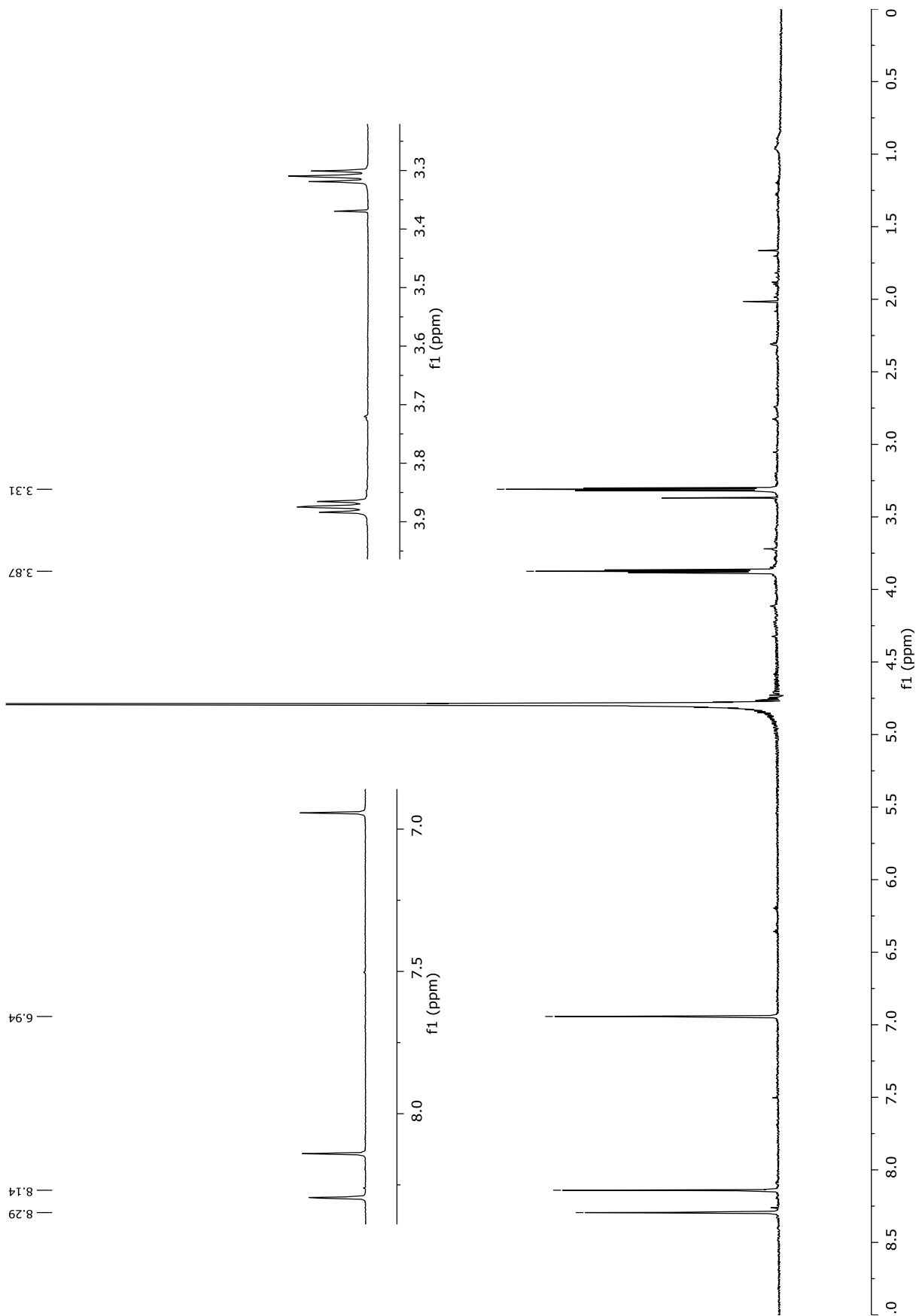


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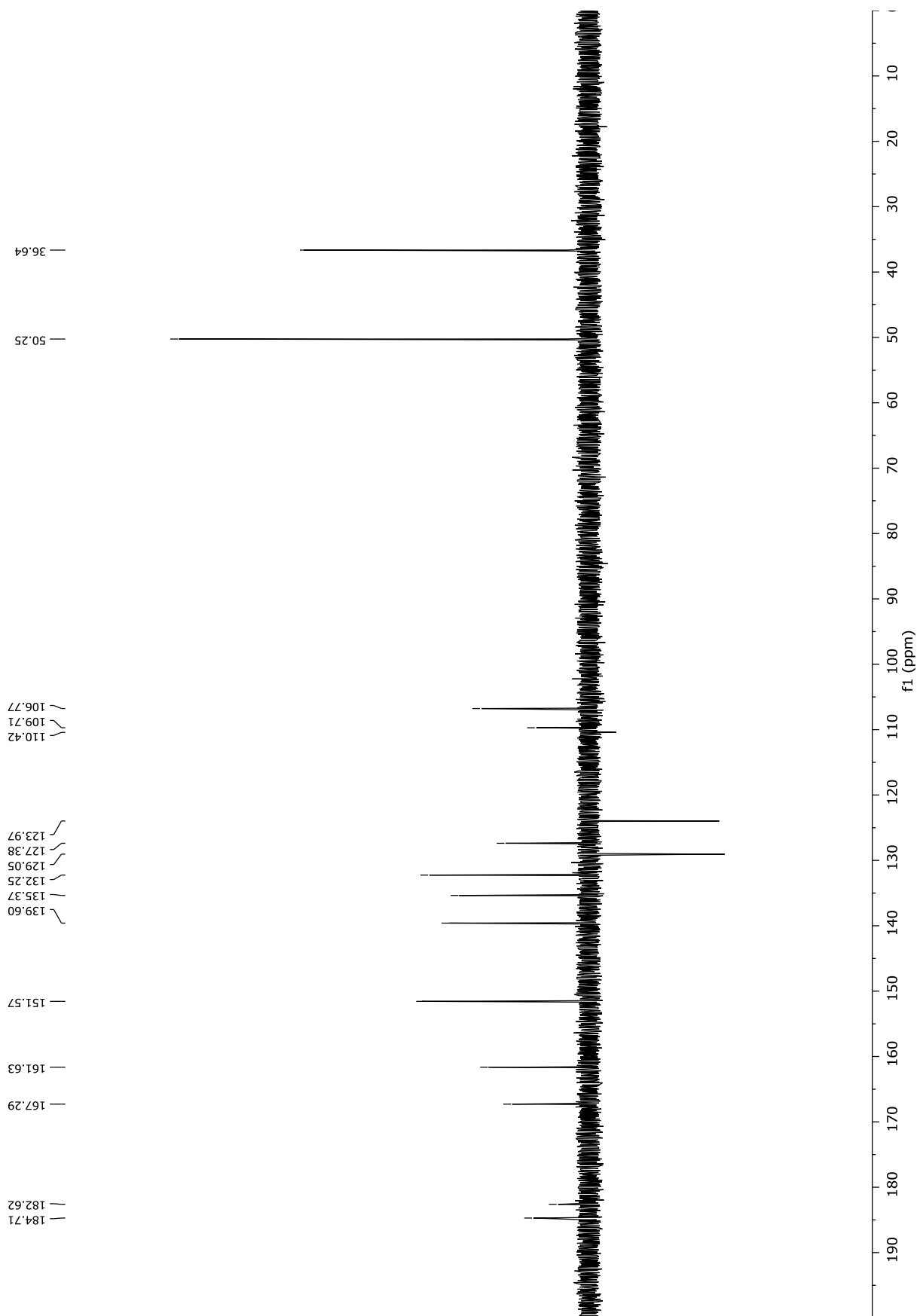


Figure S14. ^{13}C APT NMR spectrum (200 MHz, D_2O) of hypalocrinin B (**2**).

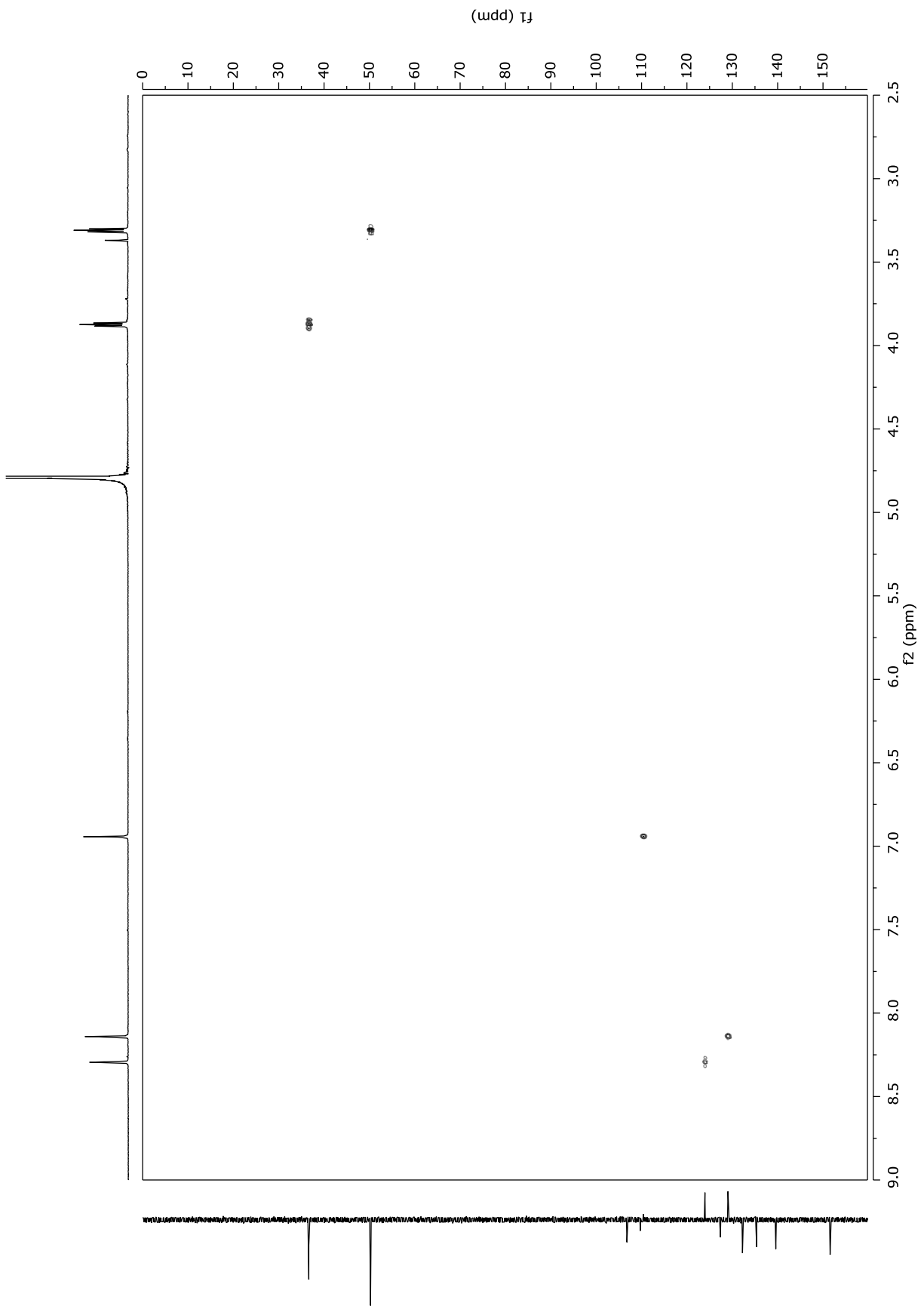


Figure S15. HSQC spectrum (800 MHz, D₂O) of hypalocrinin B (**2**).

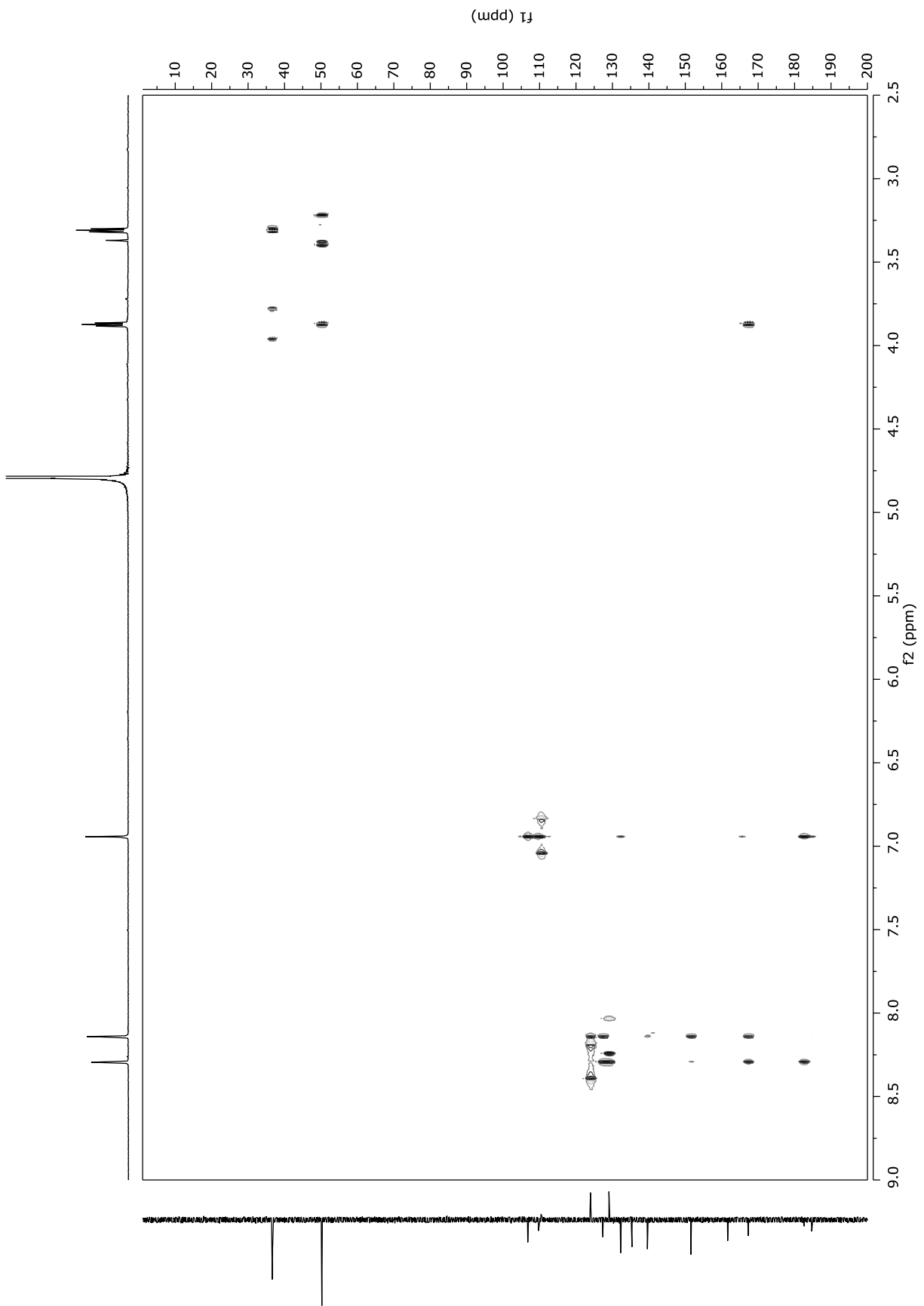


Figure S16. HMBC spectrum (800 MHz, D₂O) of hypalocrinin B (2).

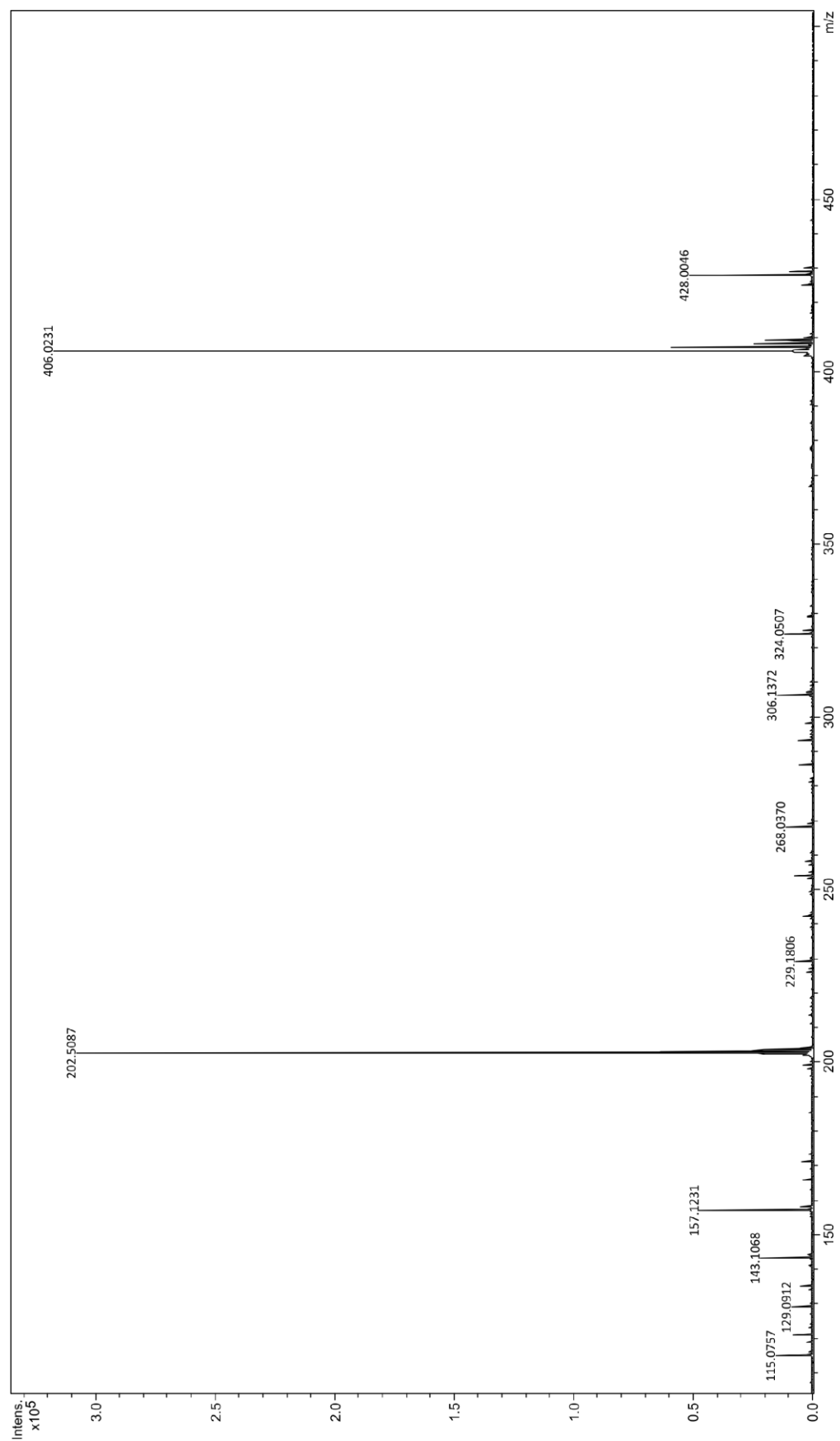


Figure S17. HRESIMS spectrum (negative-ion mode) of hypalocrinin C (**3**).

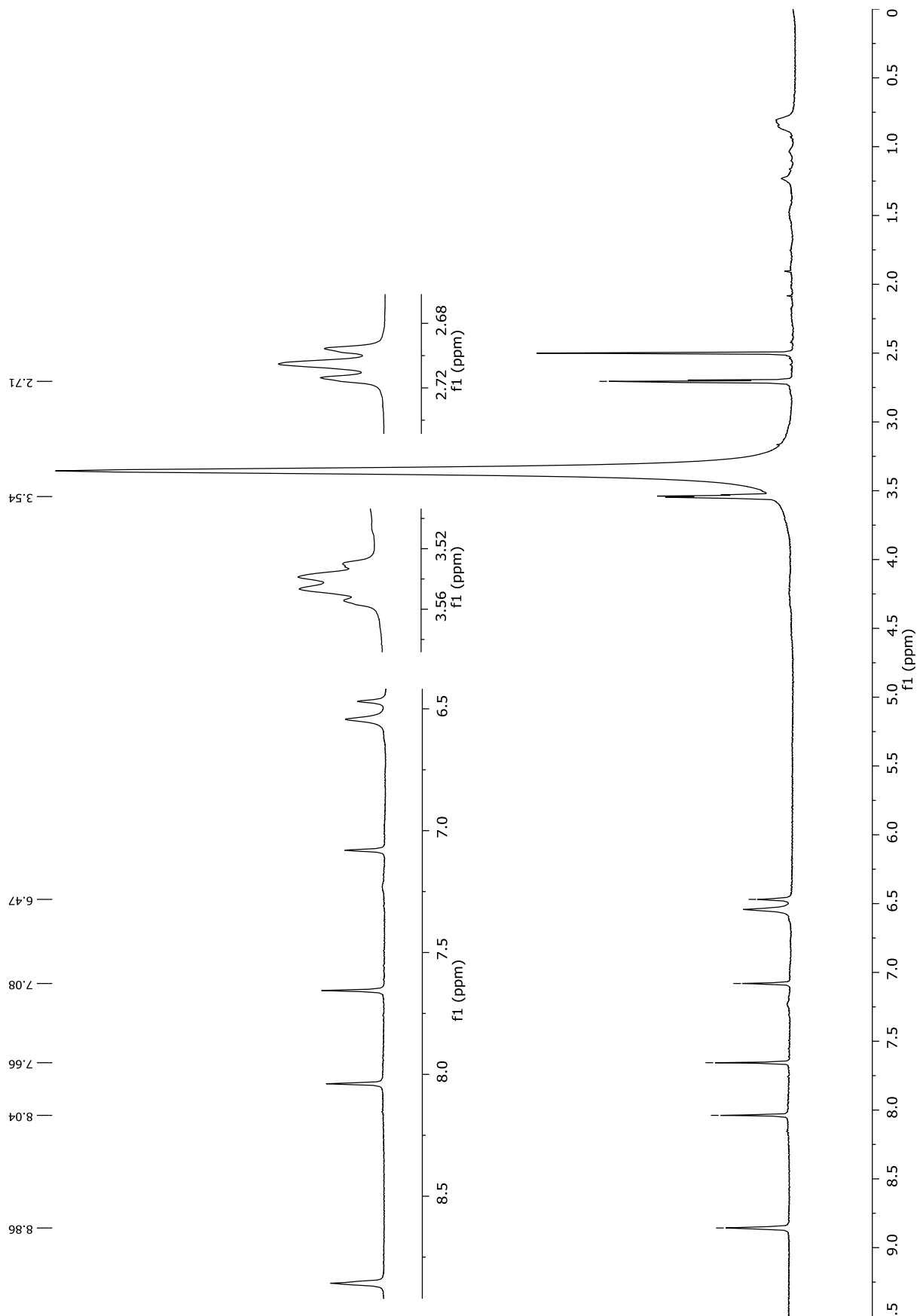


Figure S18. ^1H NMR spectrum (800 MHz, $\text{DMSO-}d_6$) of hyalocrinin C (**3**).

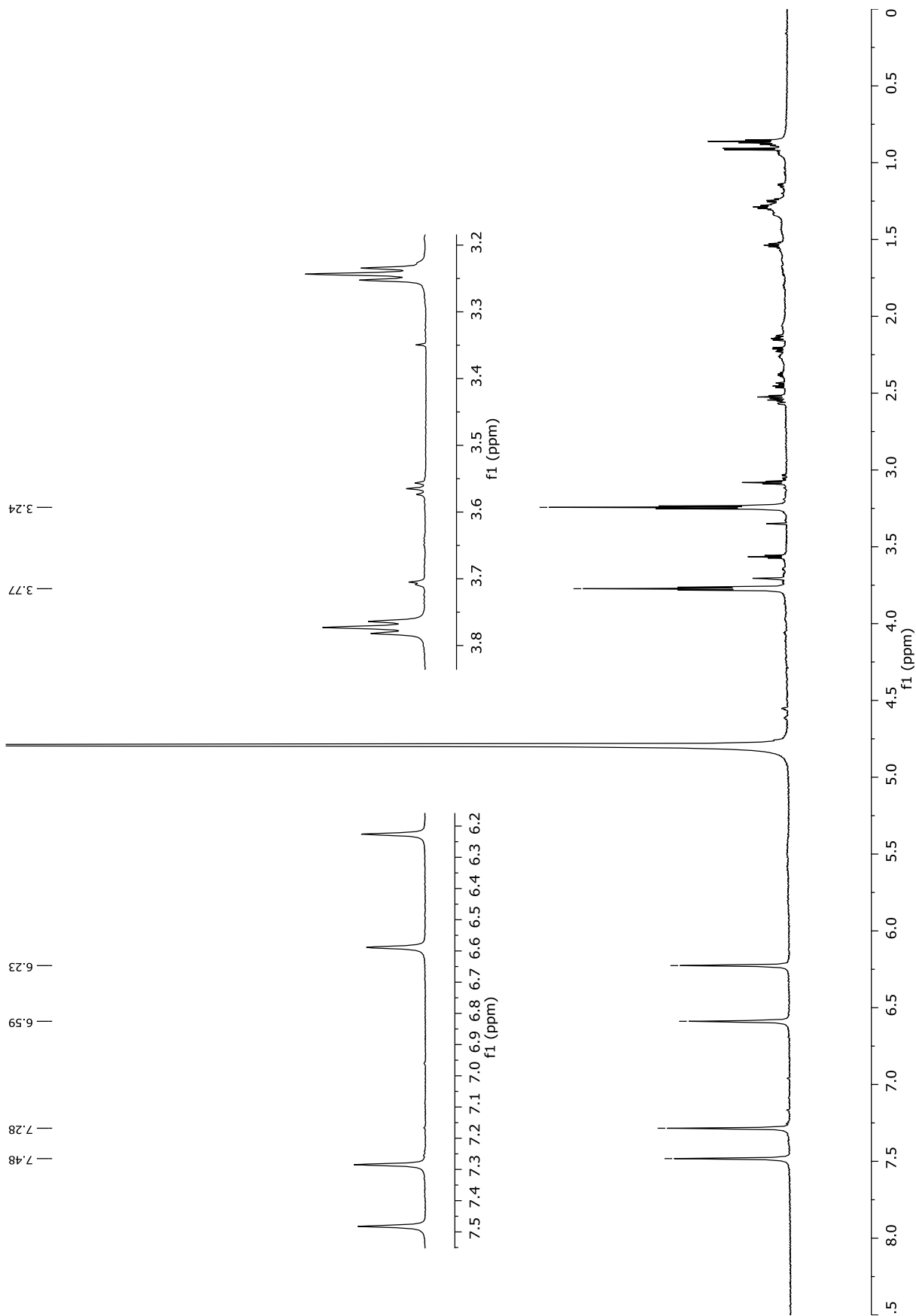


Figure S19. ^1H NMR spectrum (800 MHz, D_2O) of hypalocrinin C (3).

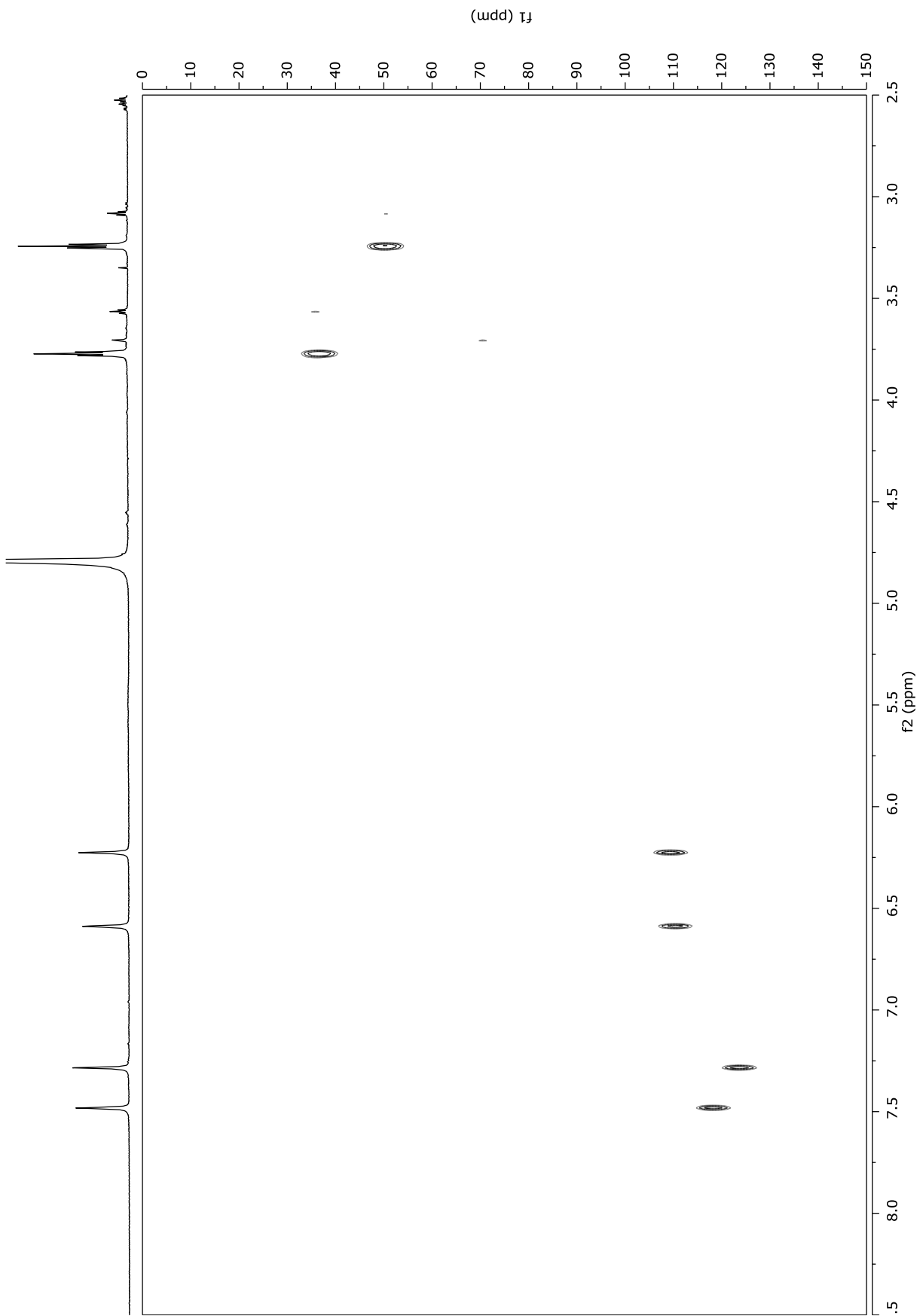


Figure S20. HSQC spectrum (800 MHz, D₂O) of hypalocrinin C (**3**).

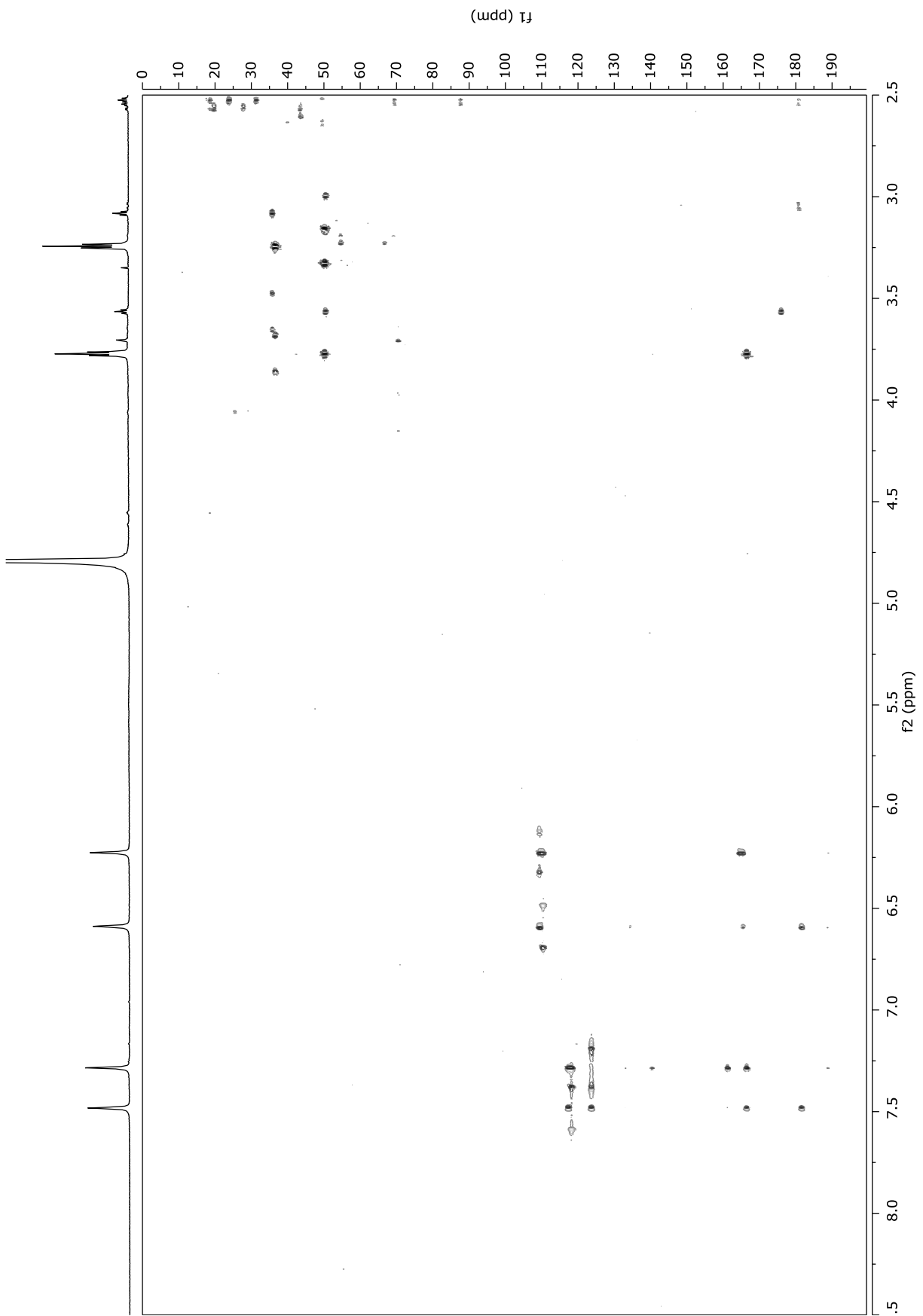


Figure S21. HMBC spectrum (800 MHz, D₂O) of hypalocrinin C (3).

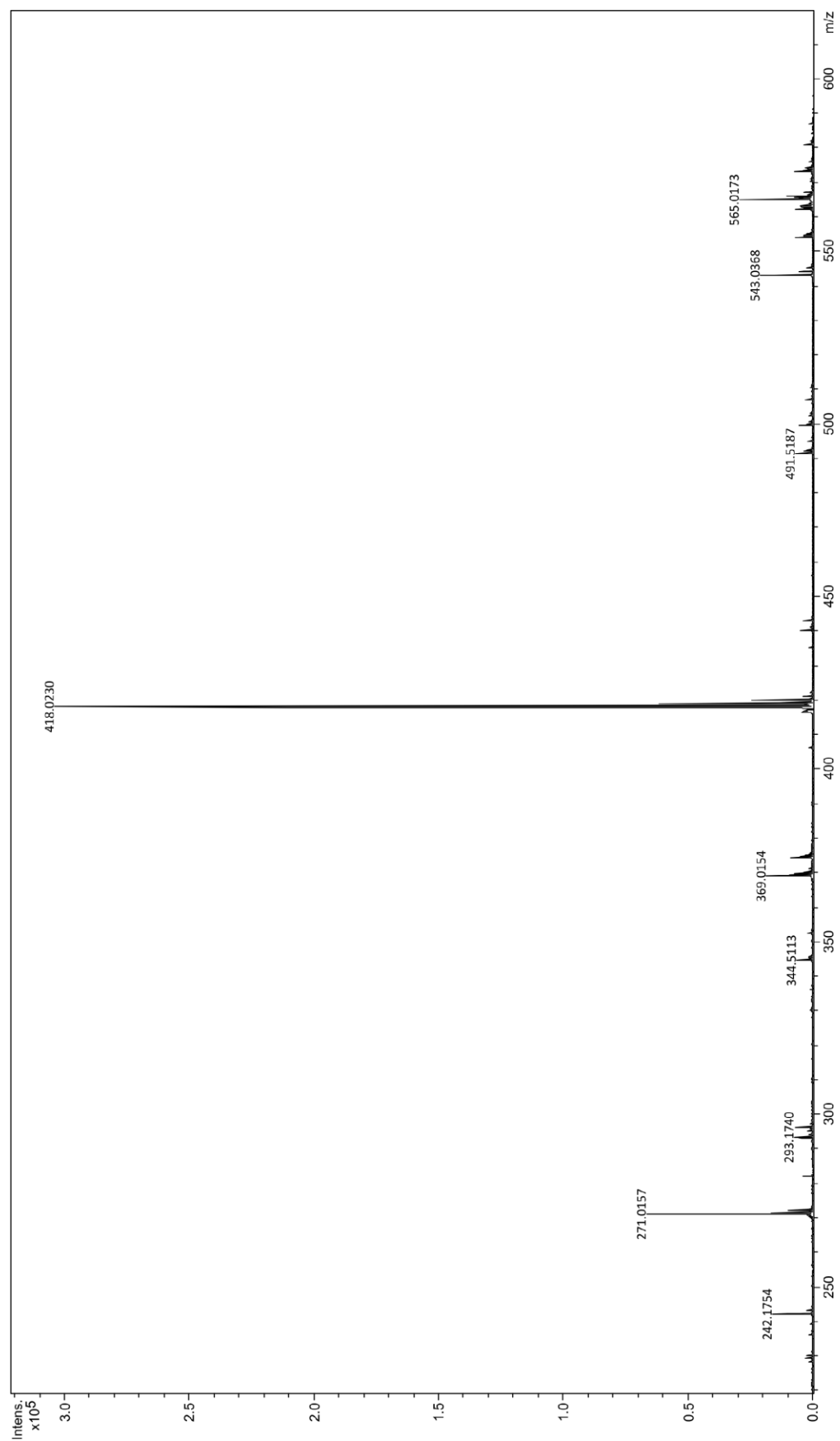


Figure S22. HRESIMS spectrum (negative-ion mode) of hypalocrinin D (**4**).

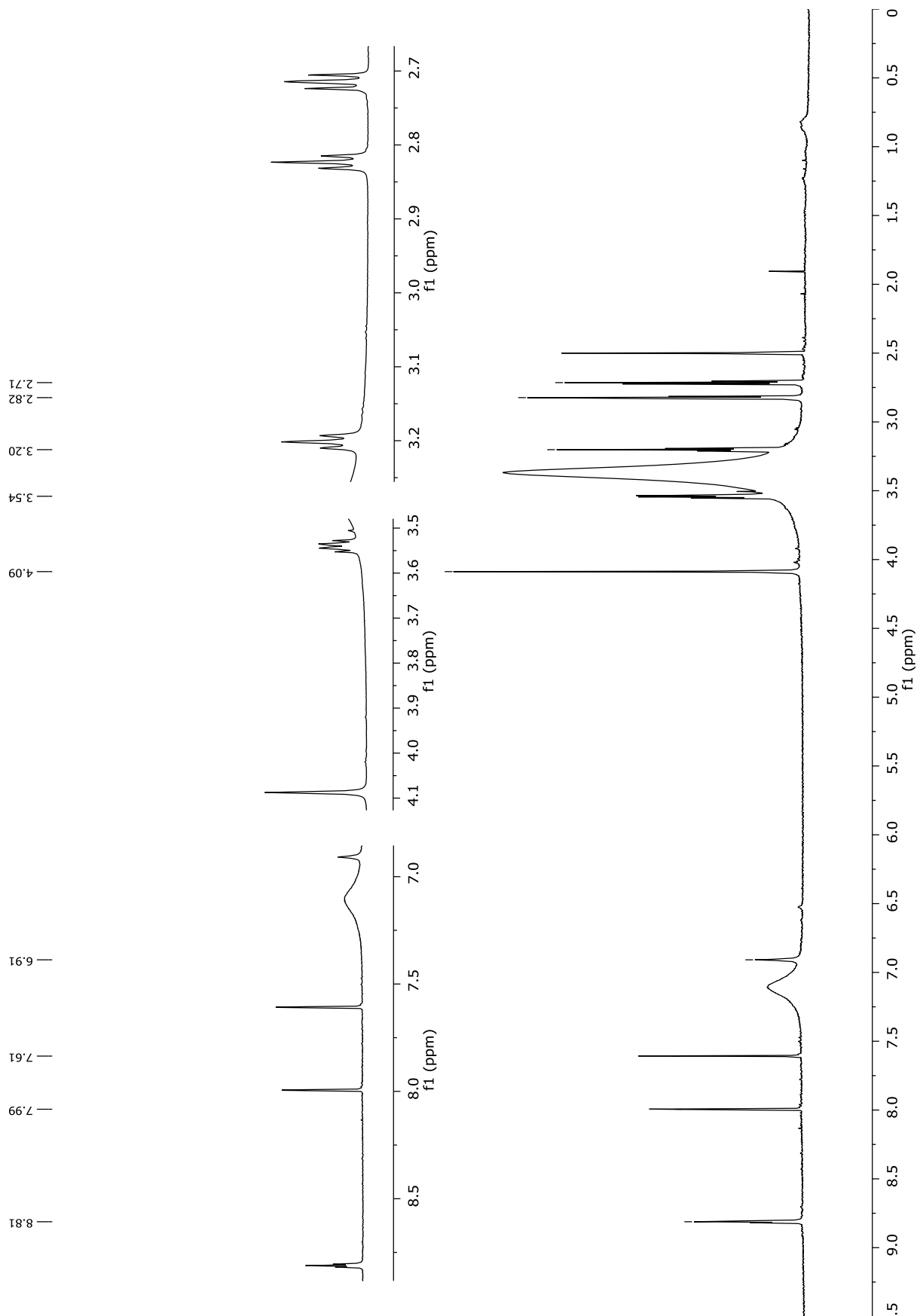


Figure S23. ^1H NMR spectrum (800 MHz, $\text{DMSO-}d_6$) of hypalocrinin D (4).

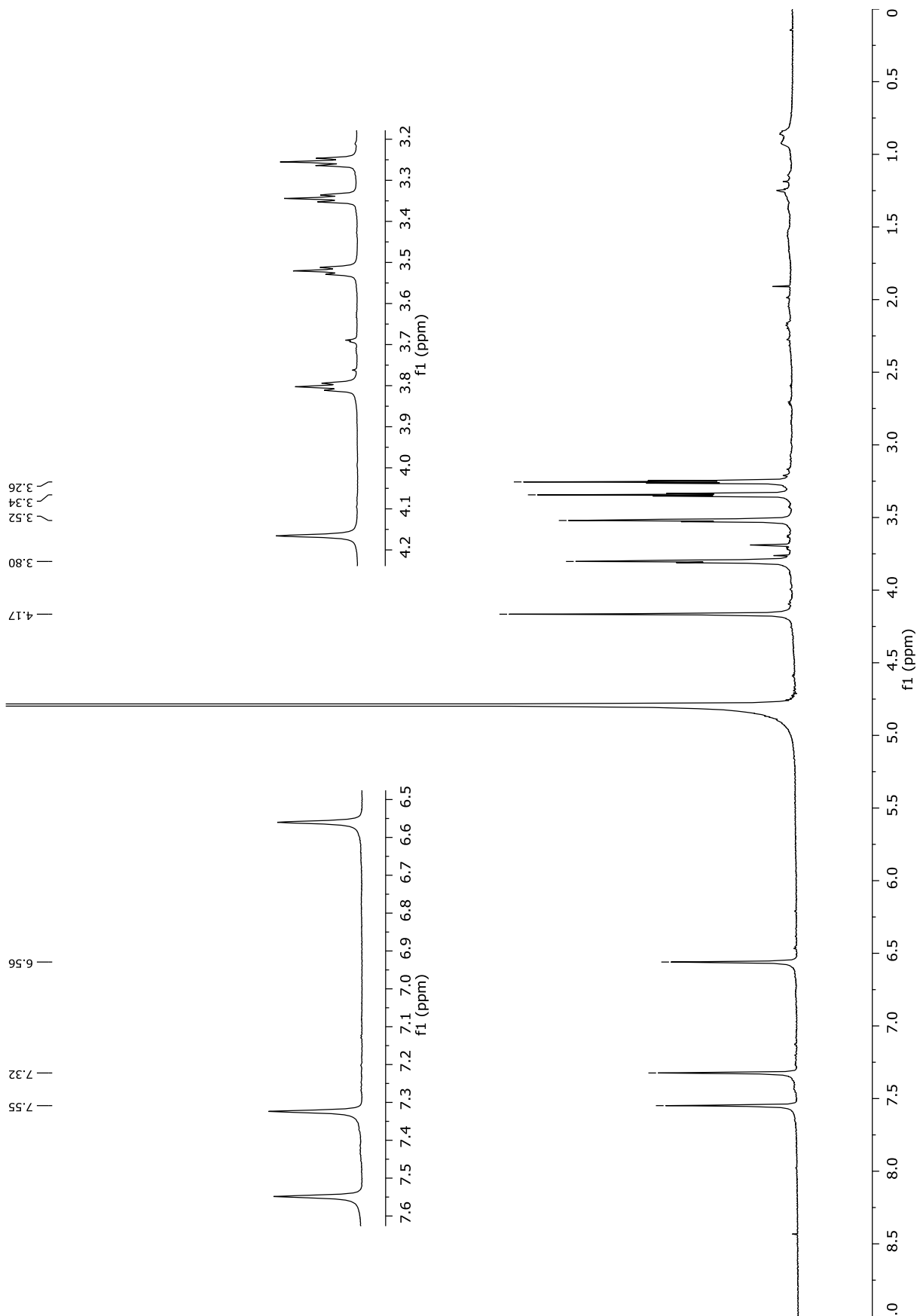


Figure S24. ^1H NMR spectrum (800 MHz, D_2O) of hypalocrinin D (4).

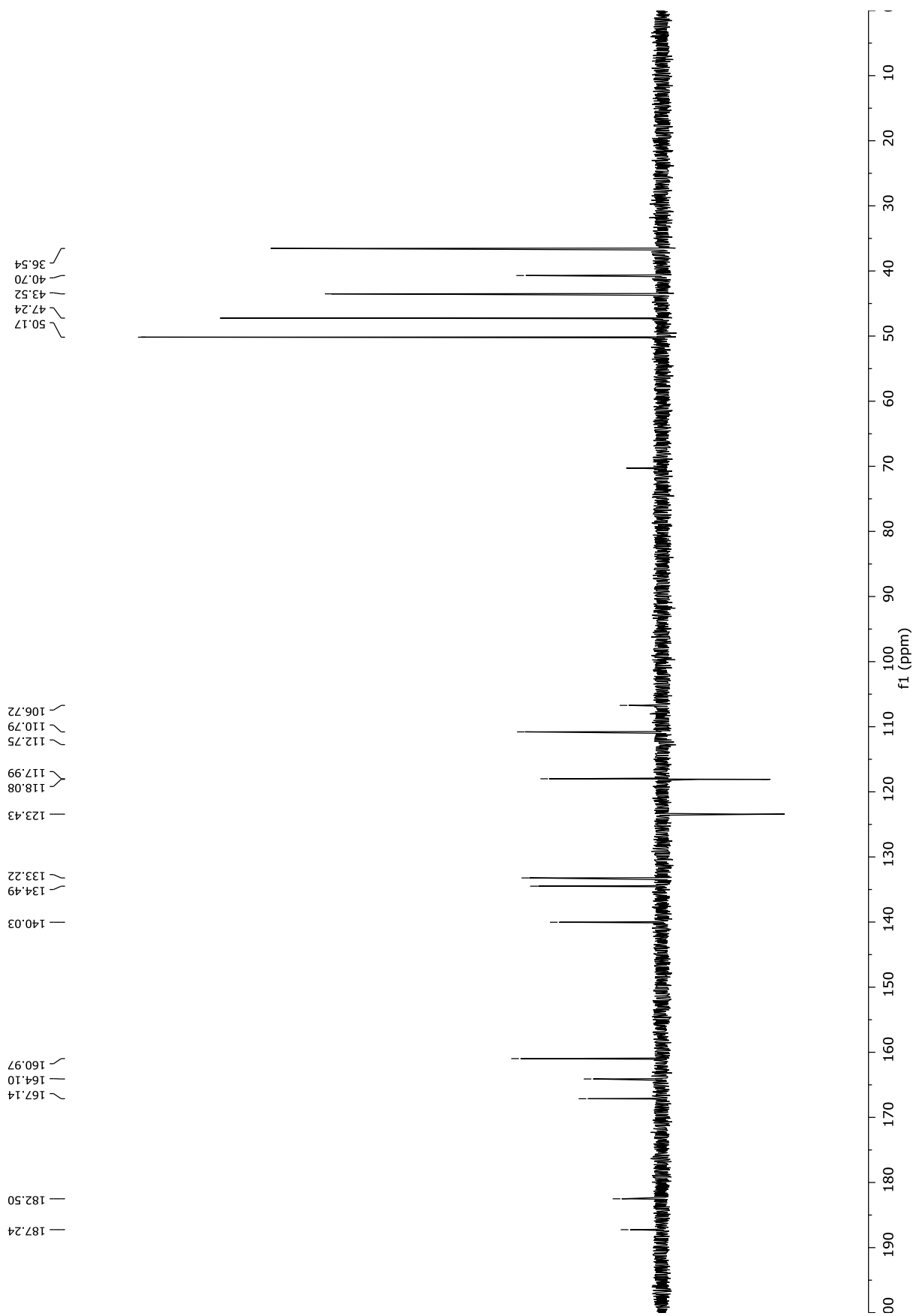


Figure S25. ^{13}C APT NMR spectrum (200 MHz, D_2O) of hypalocrinin D (4).

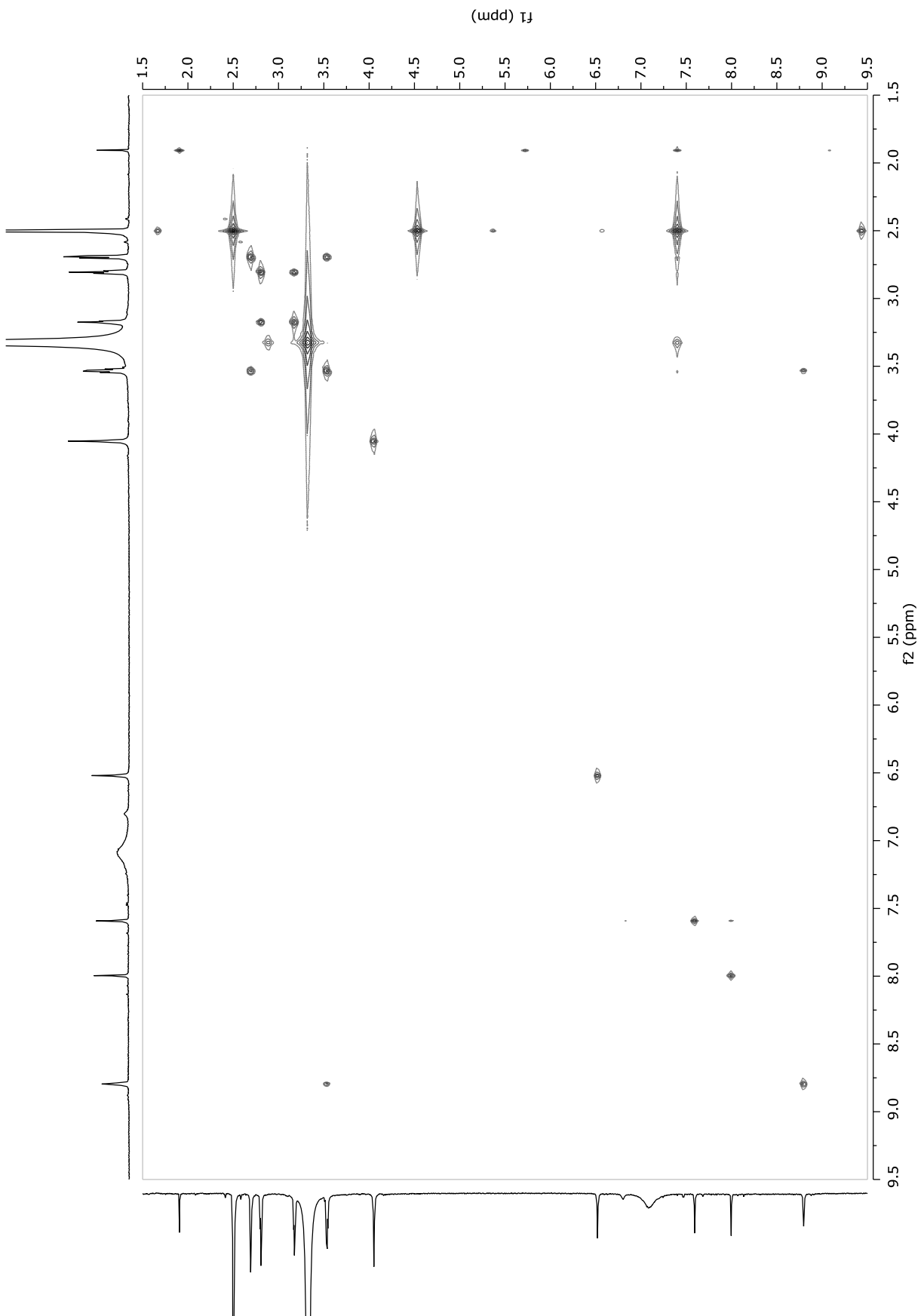


Figure S26. COSY spectrum (800 MHz, DMSO-*d*₆) of hypalocrinin D (**4**).

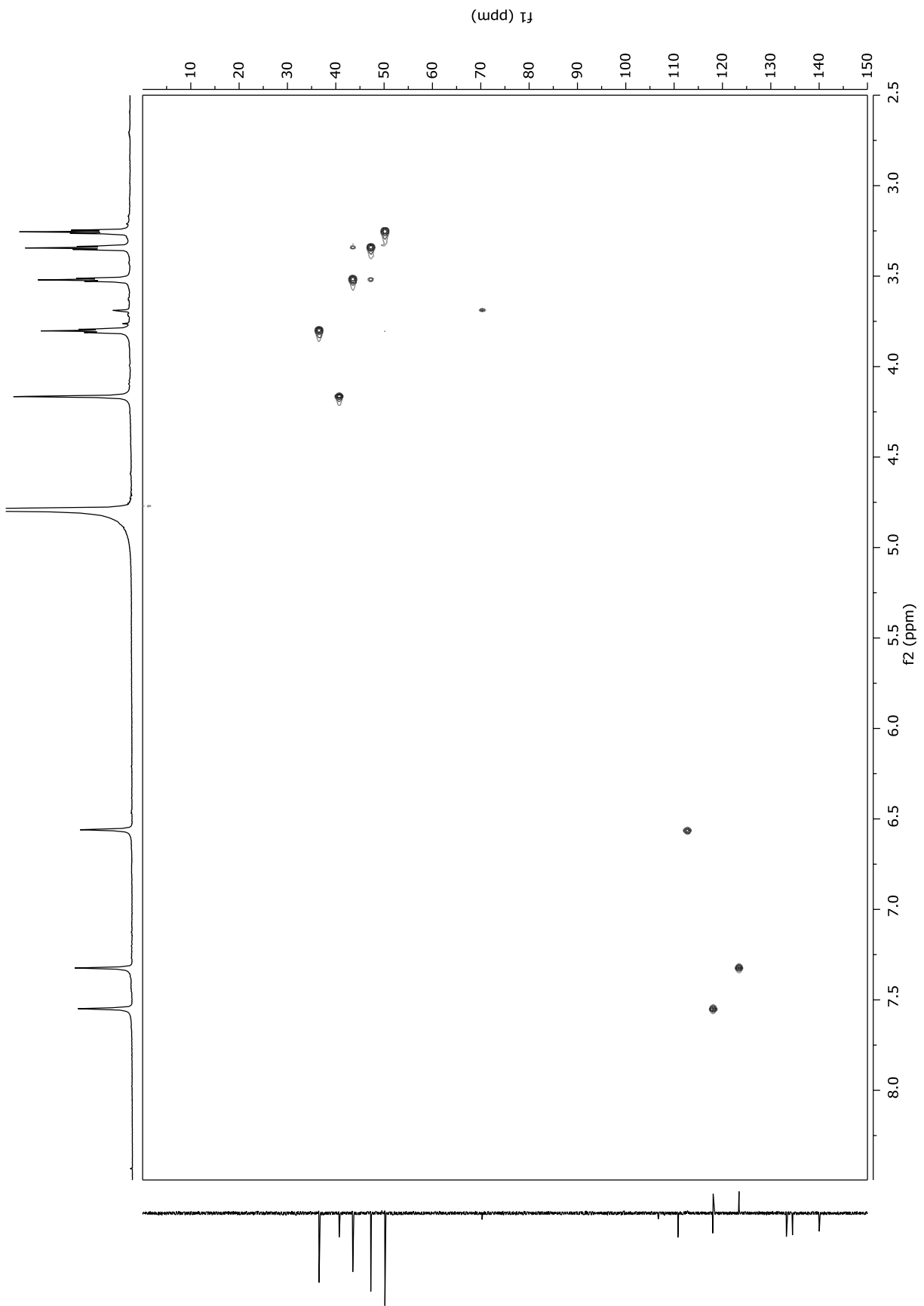


Figure S27. HSQC spectrum (800 MHz, D₂O) of hypalocrinin D (4).

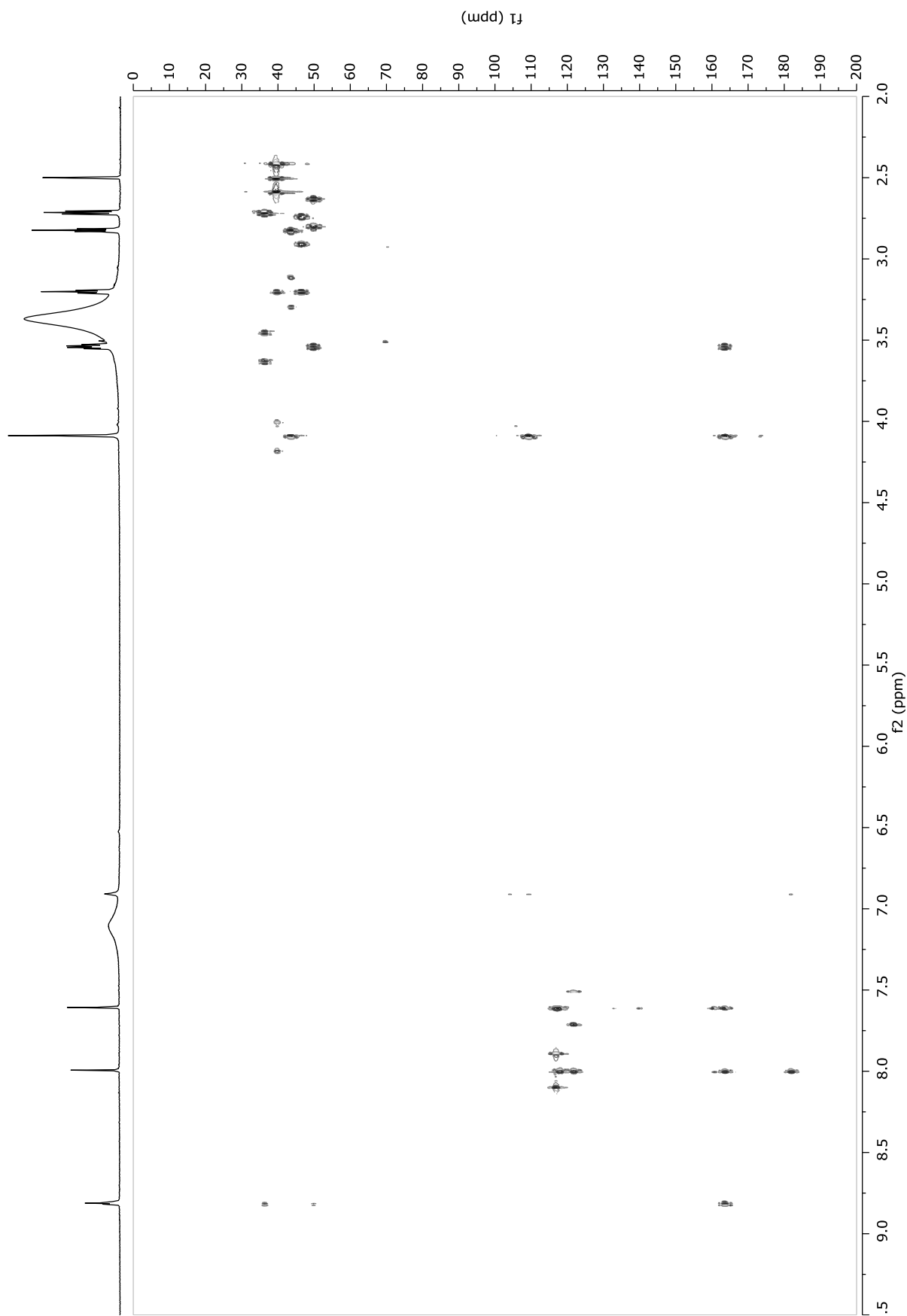


Figure S28. HMBC spectrum (800 MHz, DMSO- d_6) of hyalocrinin D (**4**).

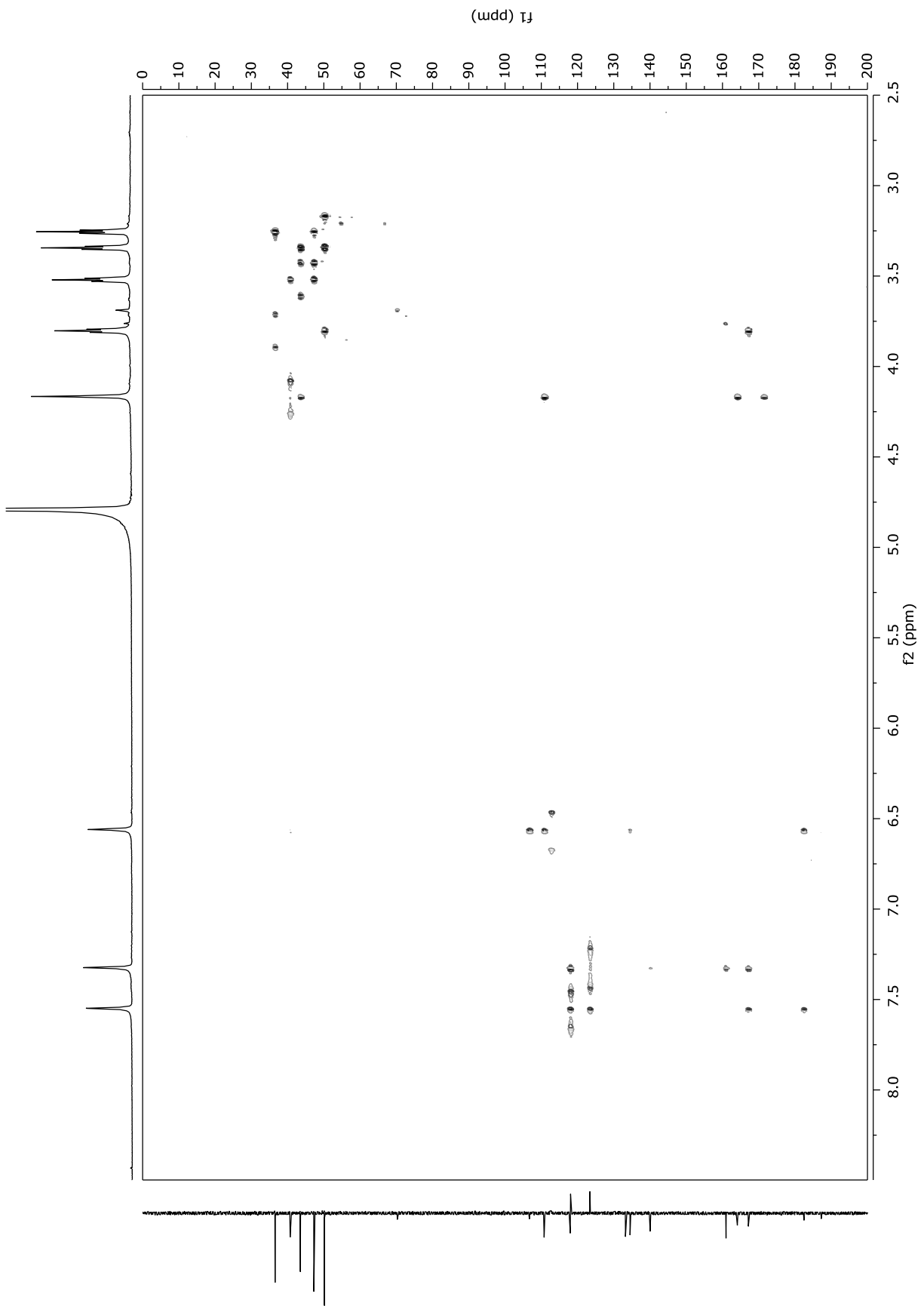


Figure S29. HMBC spectrum (800 MHz, D₂O) of hypalocrinin D (4).

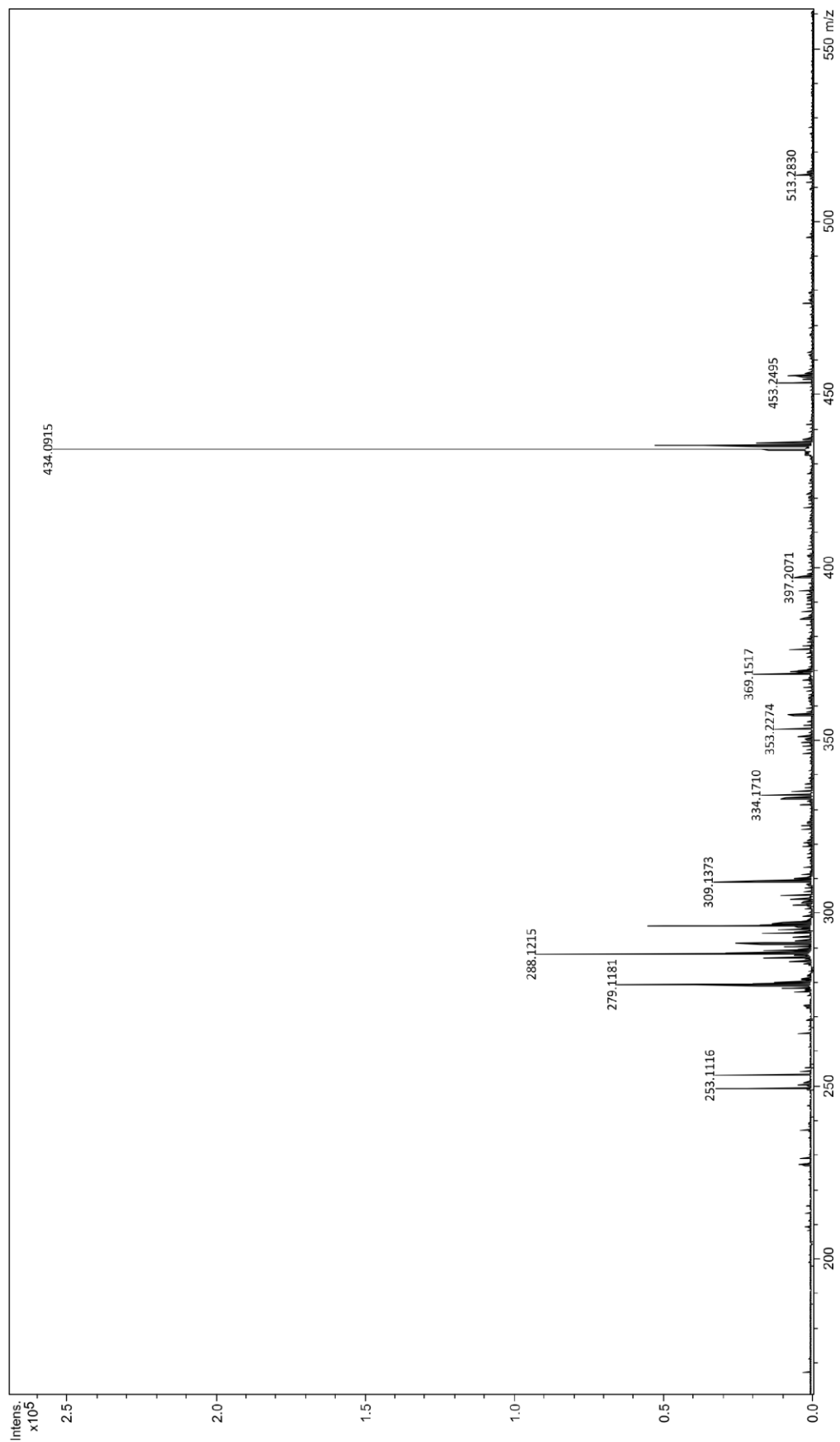


Figure S30. HRESIMS spectrum (negative-ion mode) of hypalocrinin E (**5**).

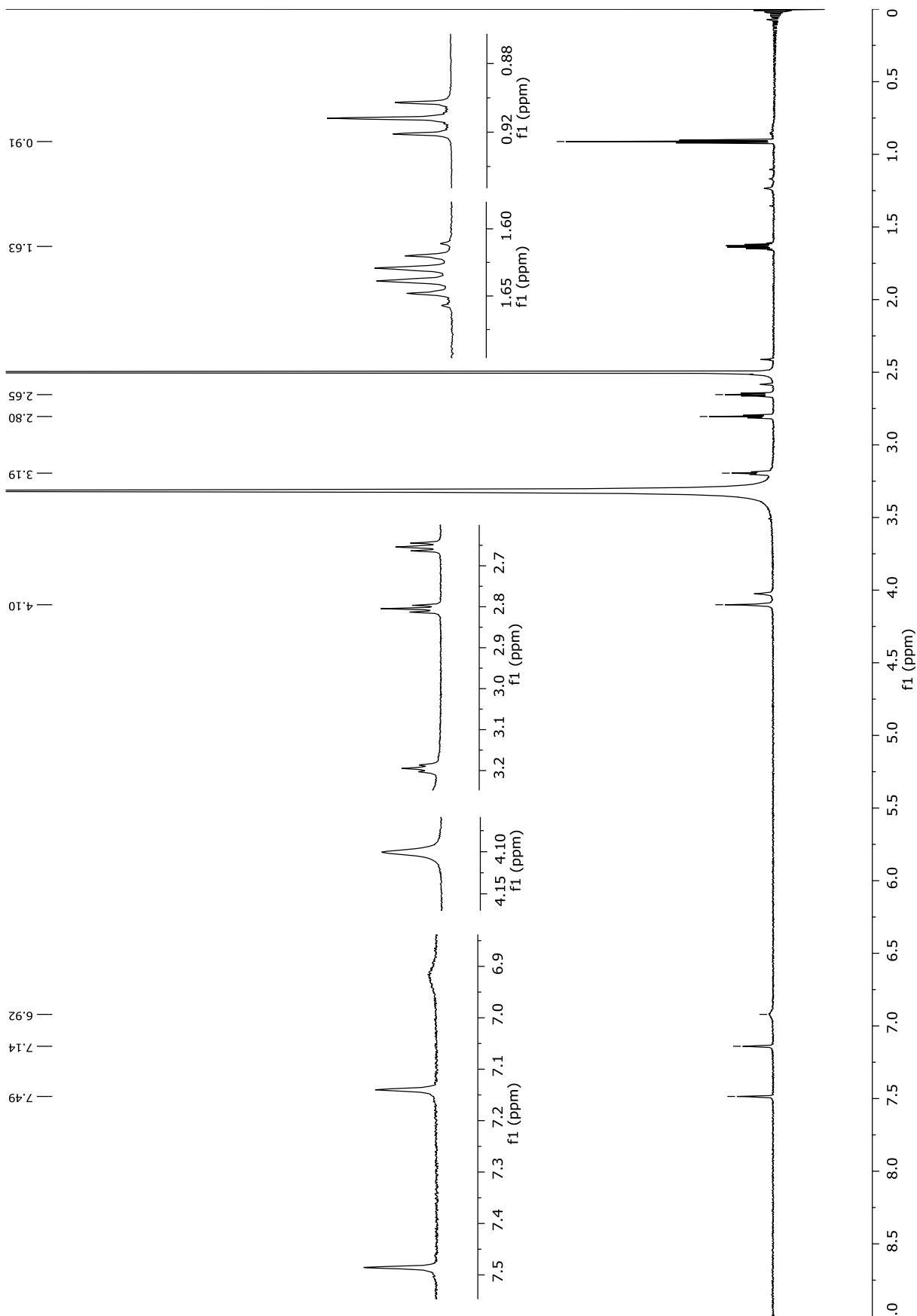


Figure S31. ^1H NMR spectrum (800 MHz, $\text{DMSO-}d_6$) of hyalocrinin E (5).

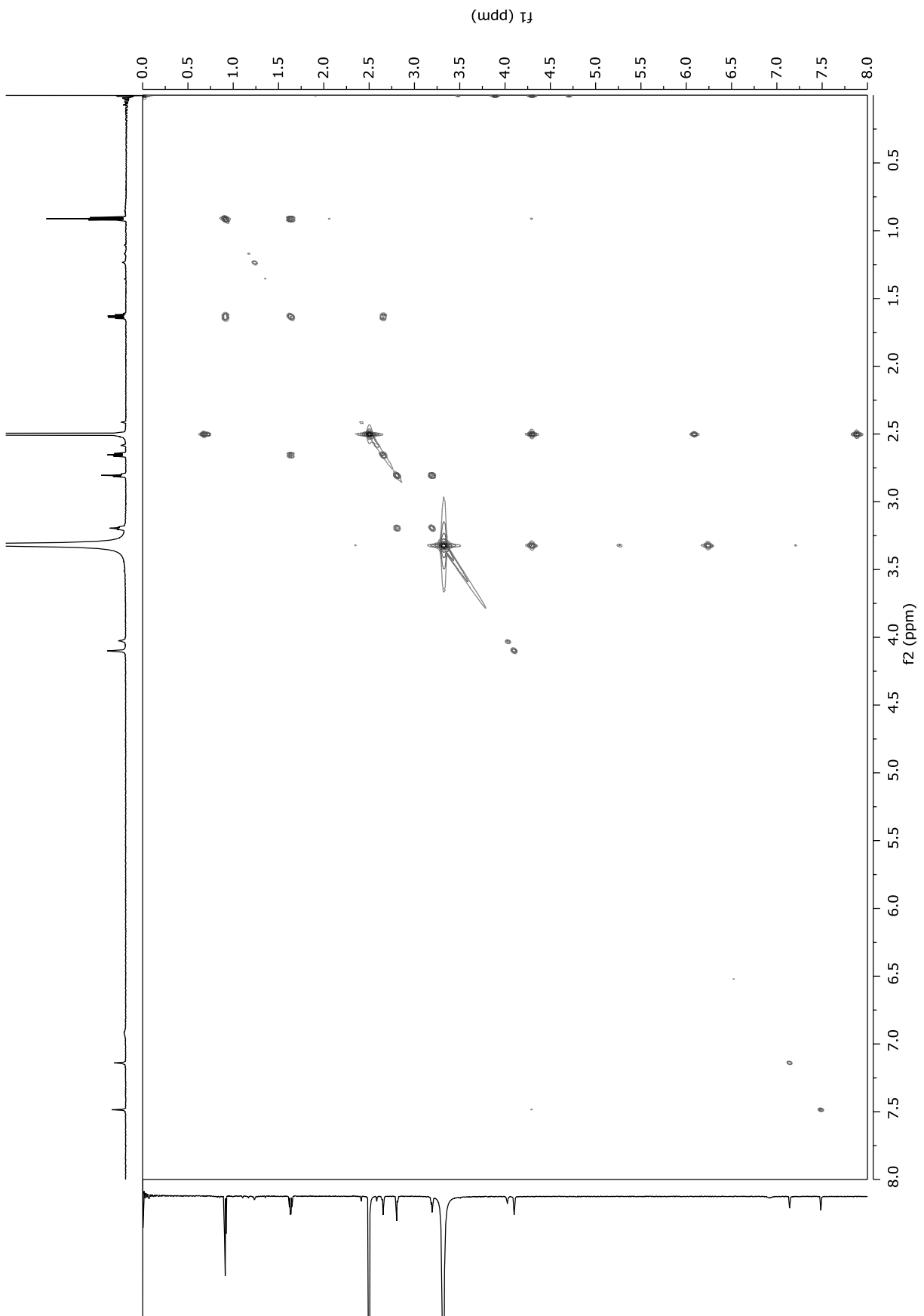


Figure S32. COSY spectrum (800 MHz, DMSO-*d*₆) of hypalocrinin E (**5**).

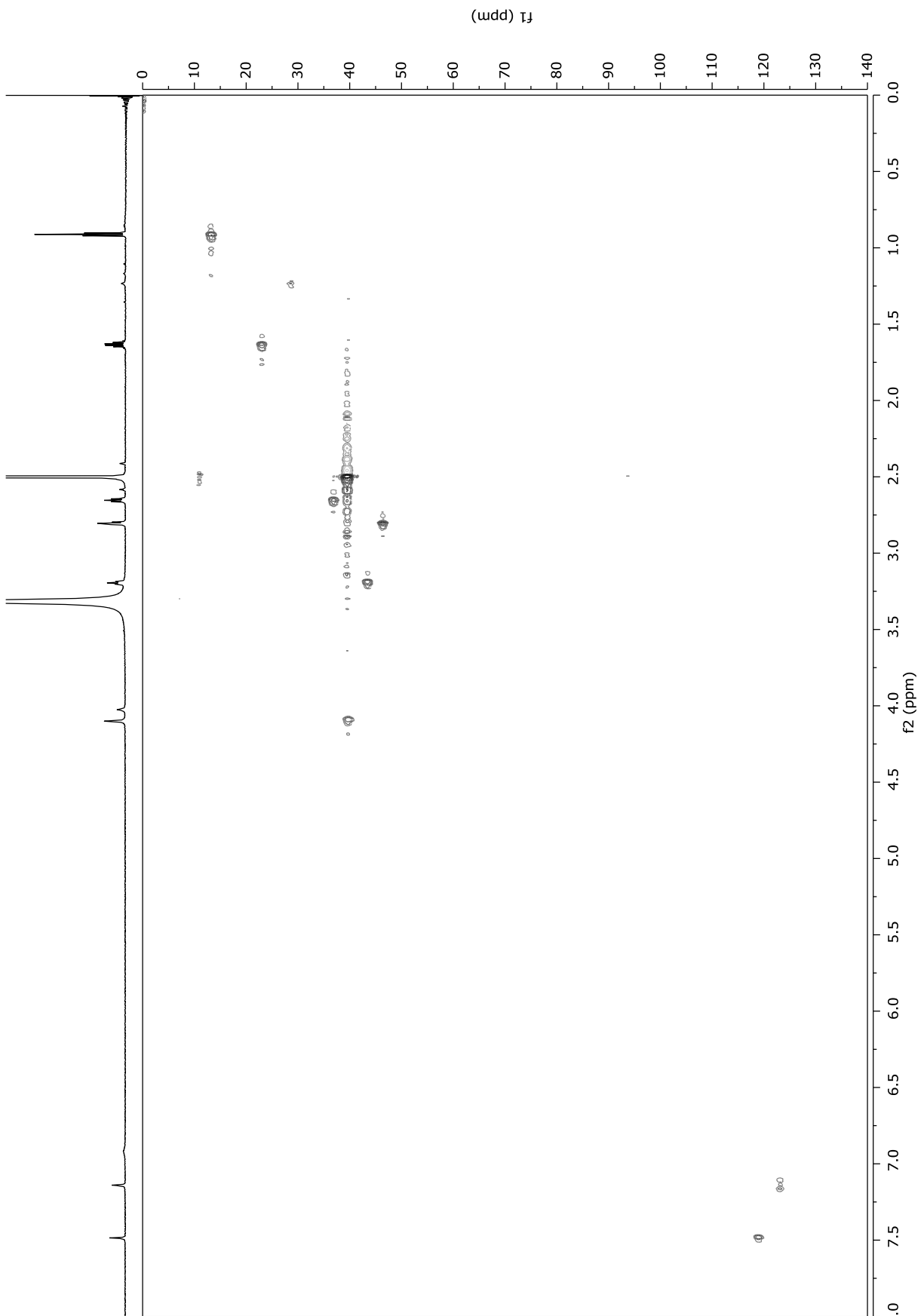


Figure S33. HSQC spectrum (800 MHz, DMSO-*d*₆) of hypalocrinin E (5).

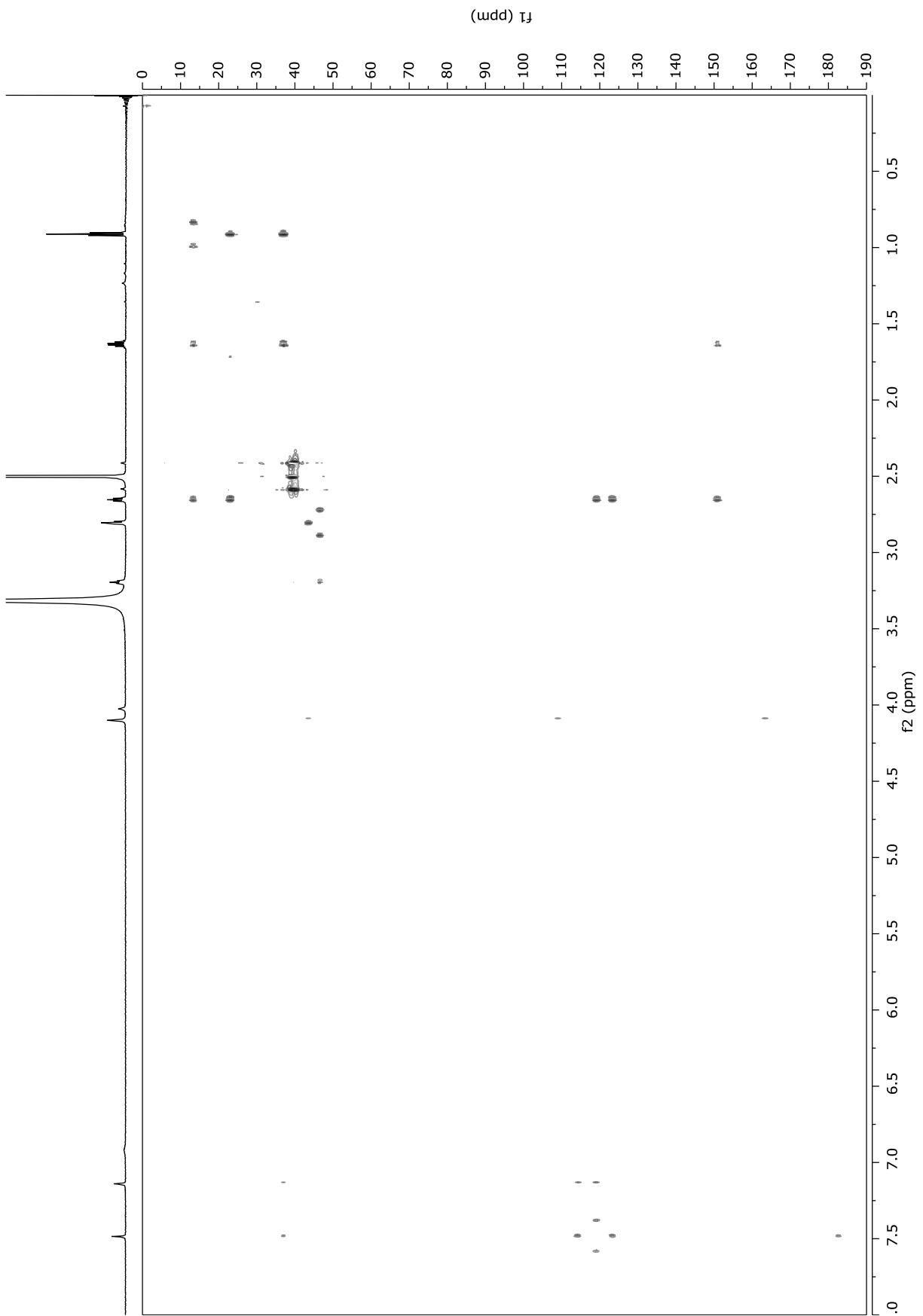


Figure S34. HMBC spectrum (800 MHz, DMSO- d_6) of hypalocrinin E (**5**).

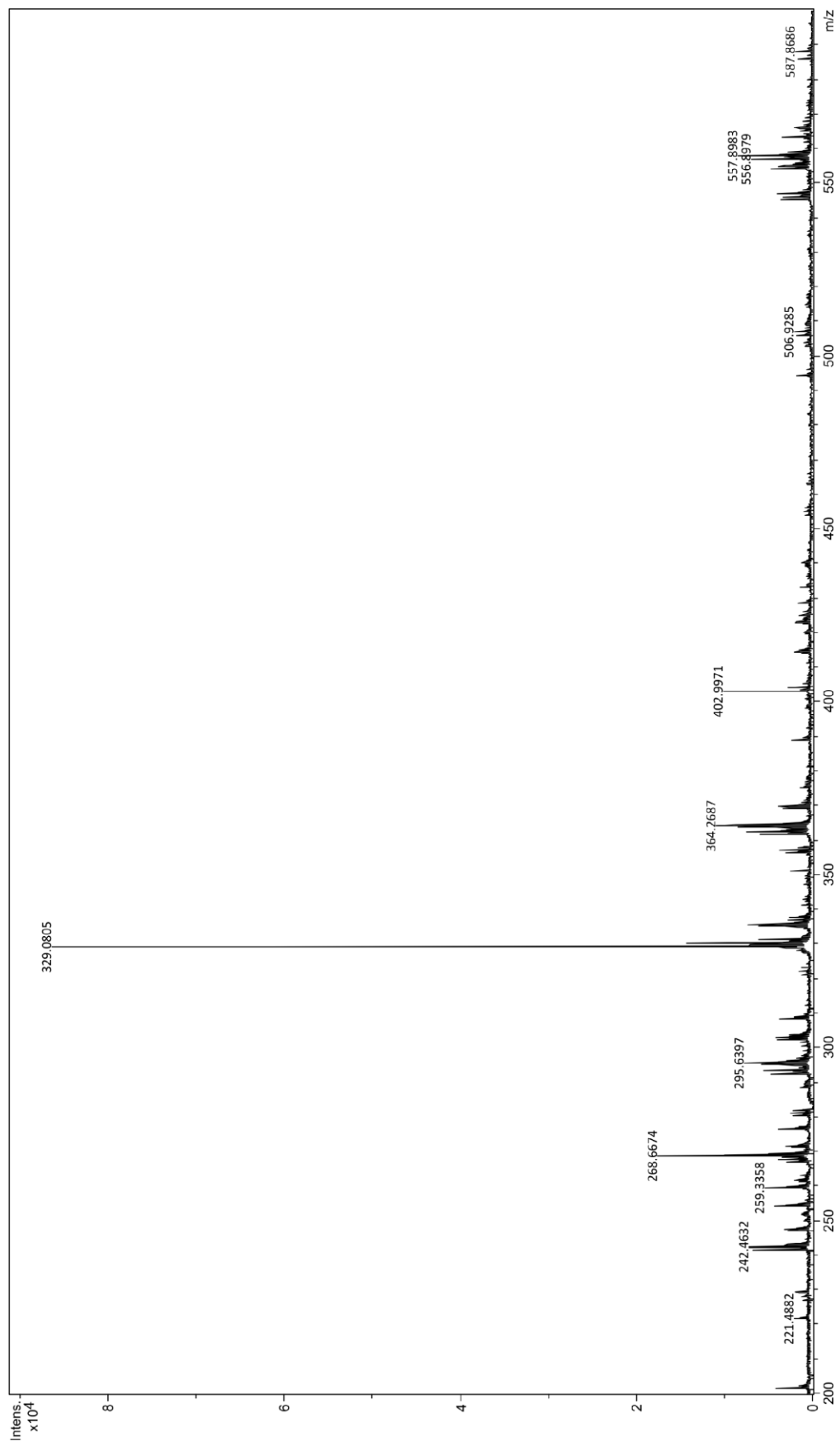


Figure S35. HRESIMS spectrum (negative-ion mode) of hypalocrinin F (**6**).

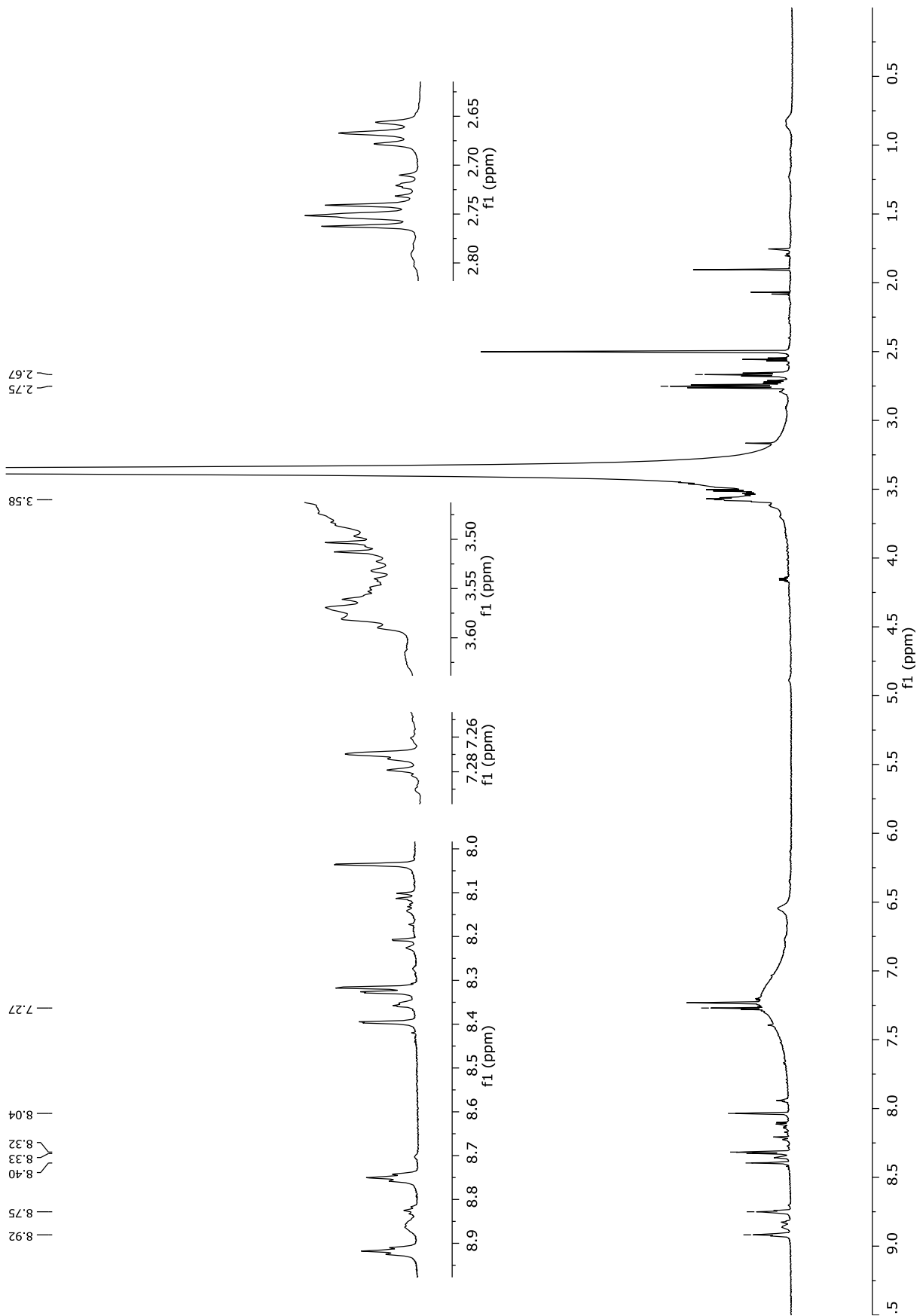


Figure S36. ^1H NMR spectrum (700 MHz, $\text{DMSO-}d_6$) of hyalocrinin F (6).

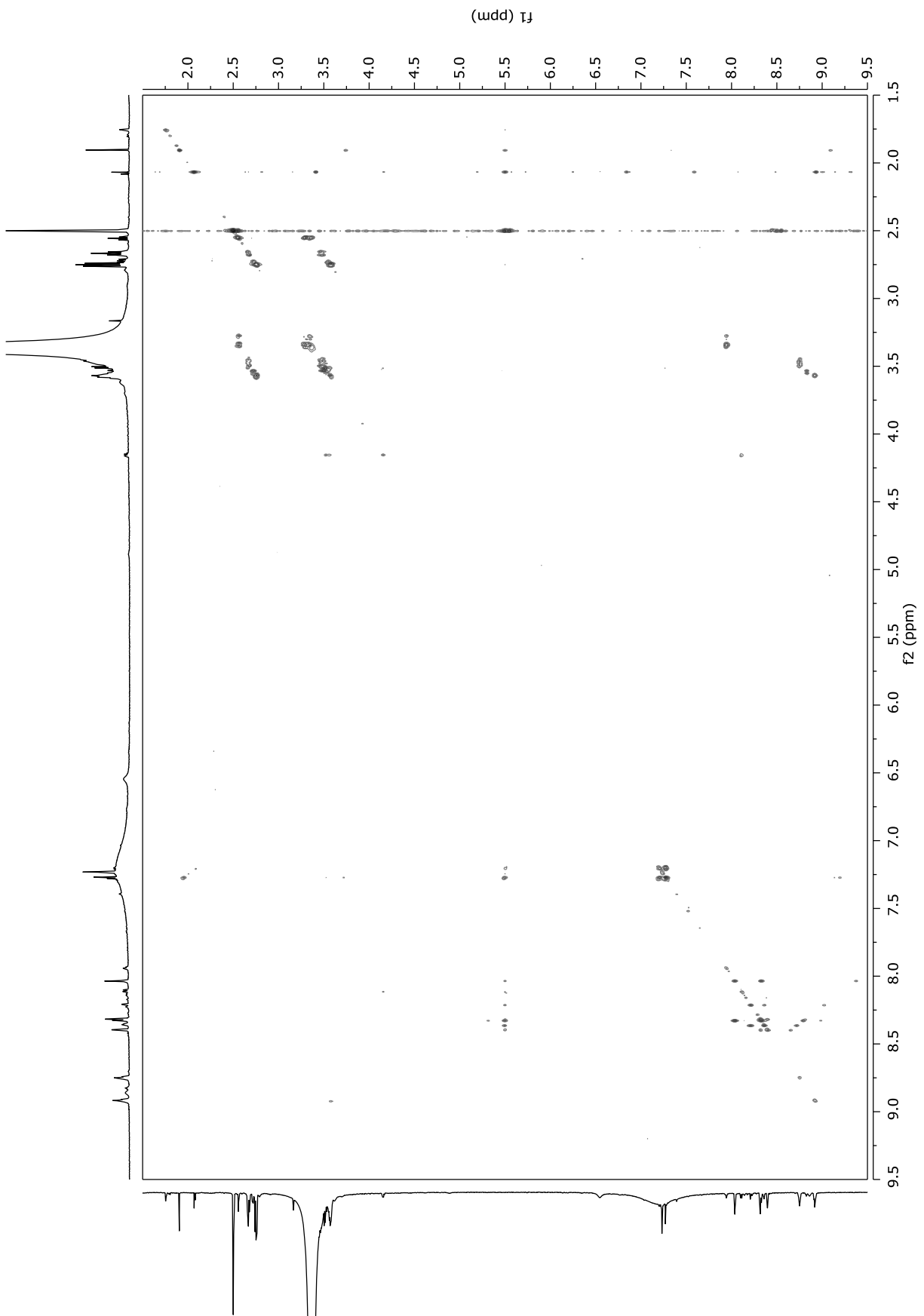


Figure S37. COSY spectrum (700 MHz, DMSO-*d*₆) of hypalocrinin F (**6**).

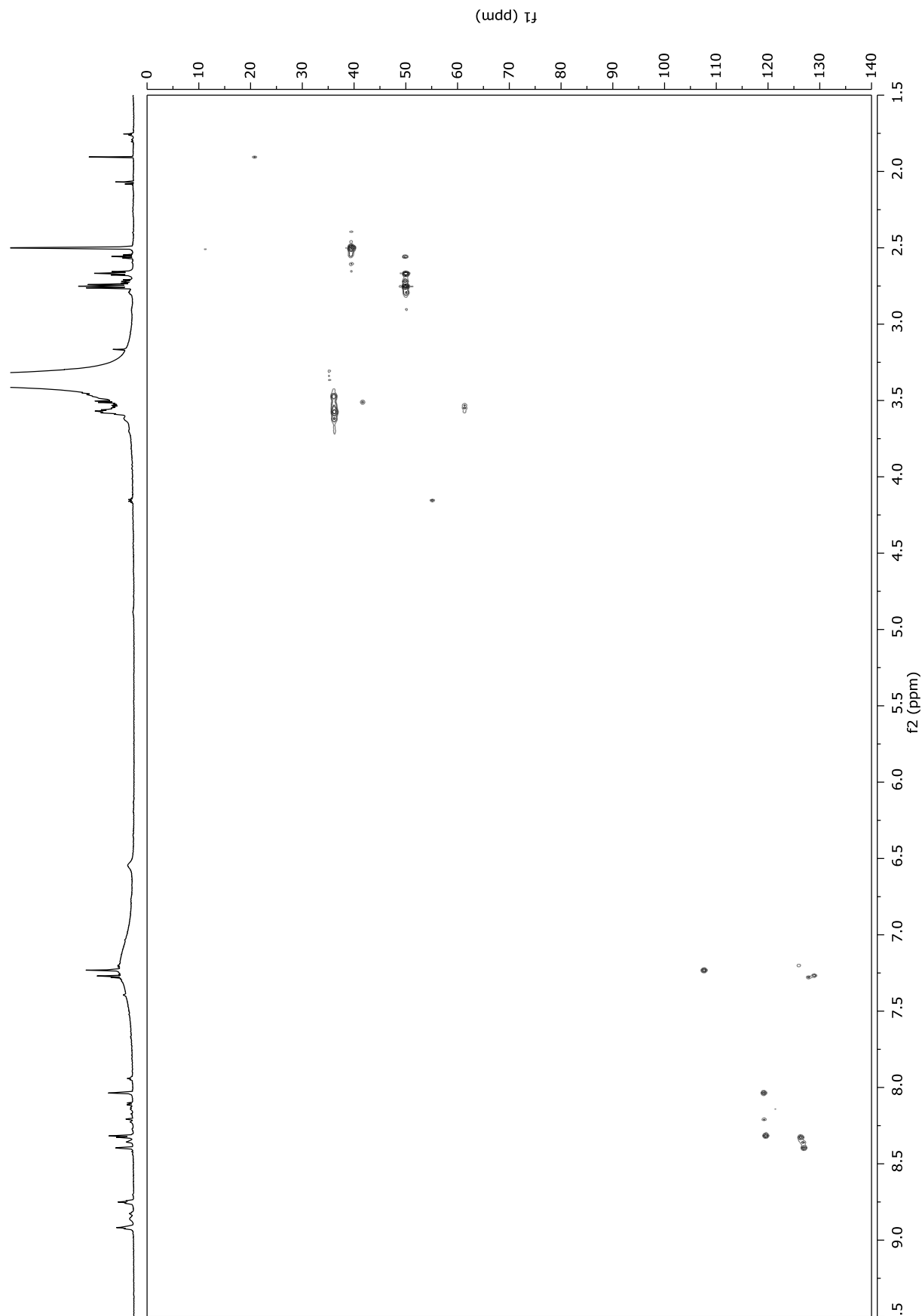


Figure S38. HSQC spectrum (700 MHz, DMSO-*d*₆) of hypalocrinin F (**6**).

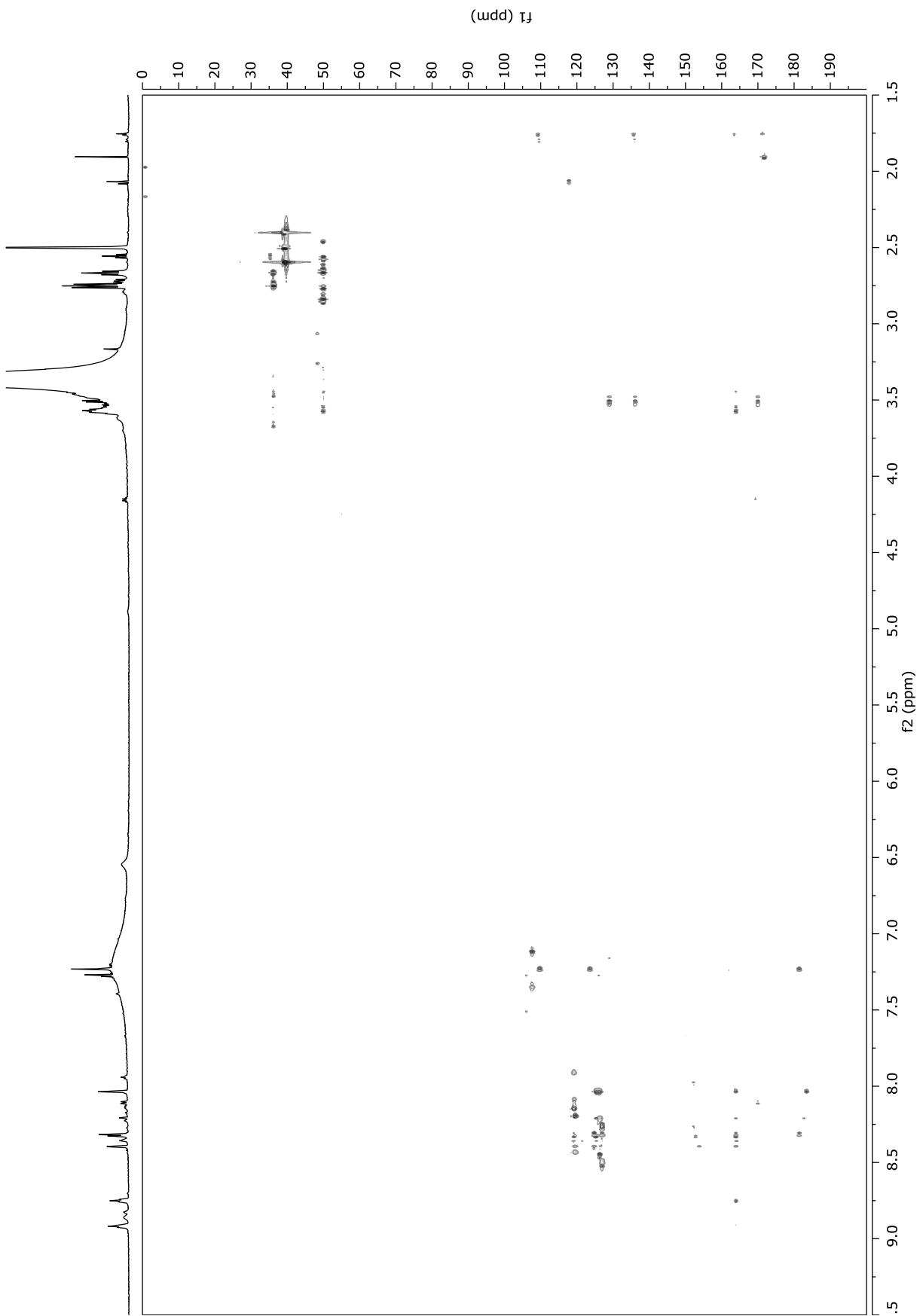


Figure S39. HMBC spectrum (700 MHz, DMSO-*d*₆) of hyalocrinin F (**6**).

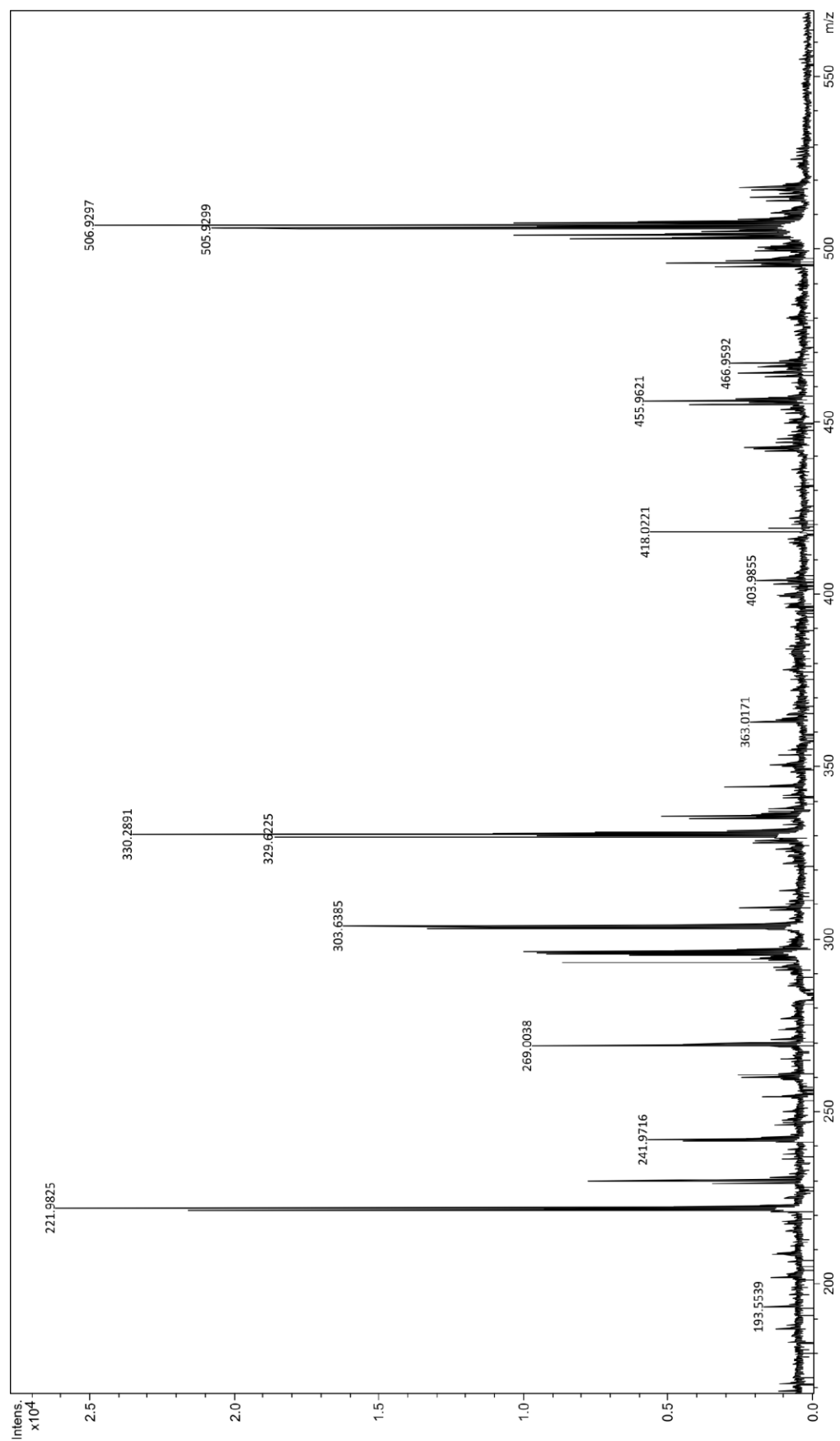


Figure S40. HRESIMS spectrum (negative-ion mode) of hypalocrinin G (7).

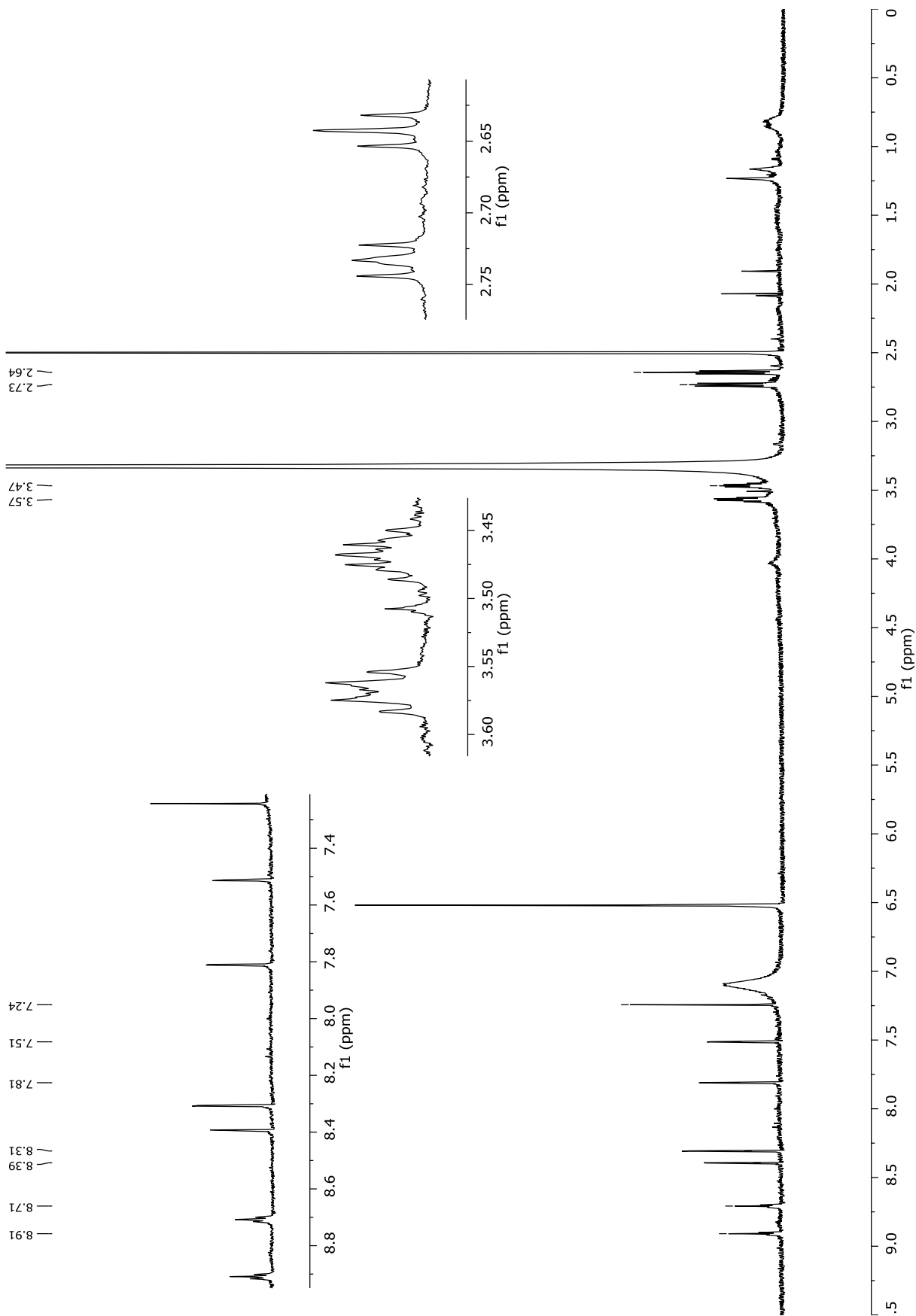


Figure S41. ^1H NMR spectrum (700 MHz, $\text{DMSO-}d_6$) of hyalocrinin G (7).

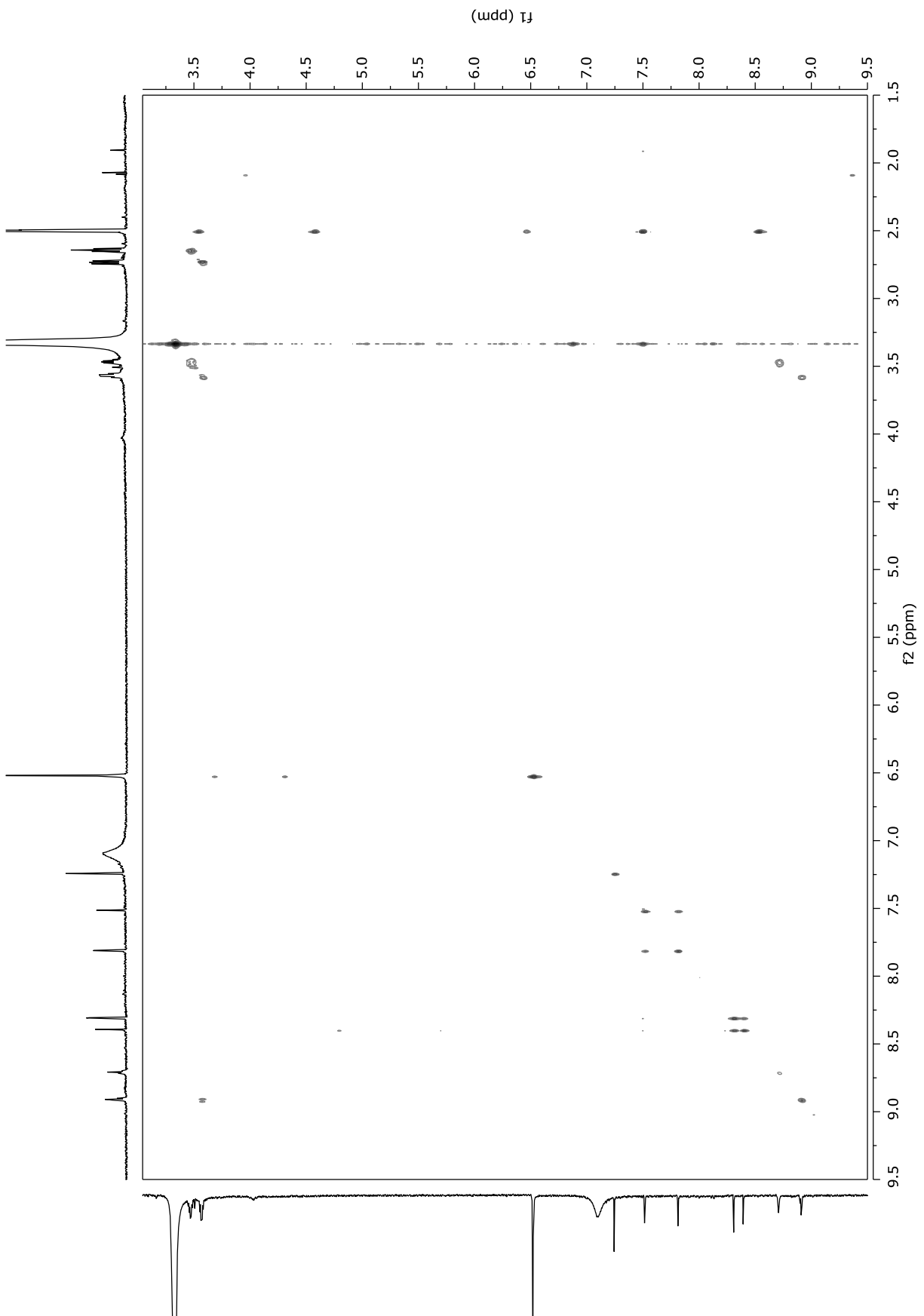


Figure S42. COSY spectrum (700 MHz, DMSO- d_6) of hypalocrinin G (7).

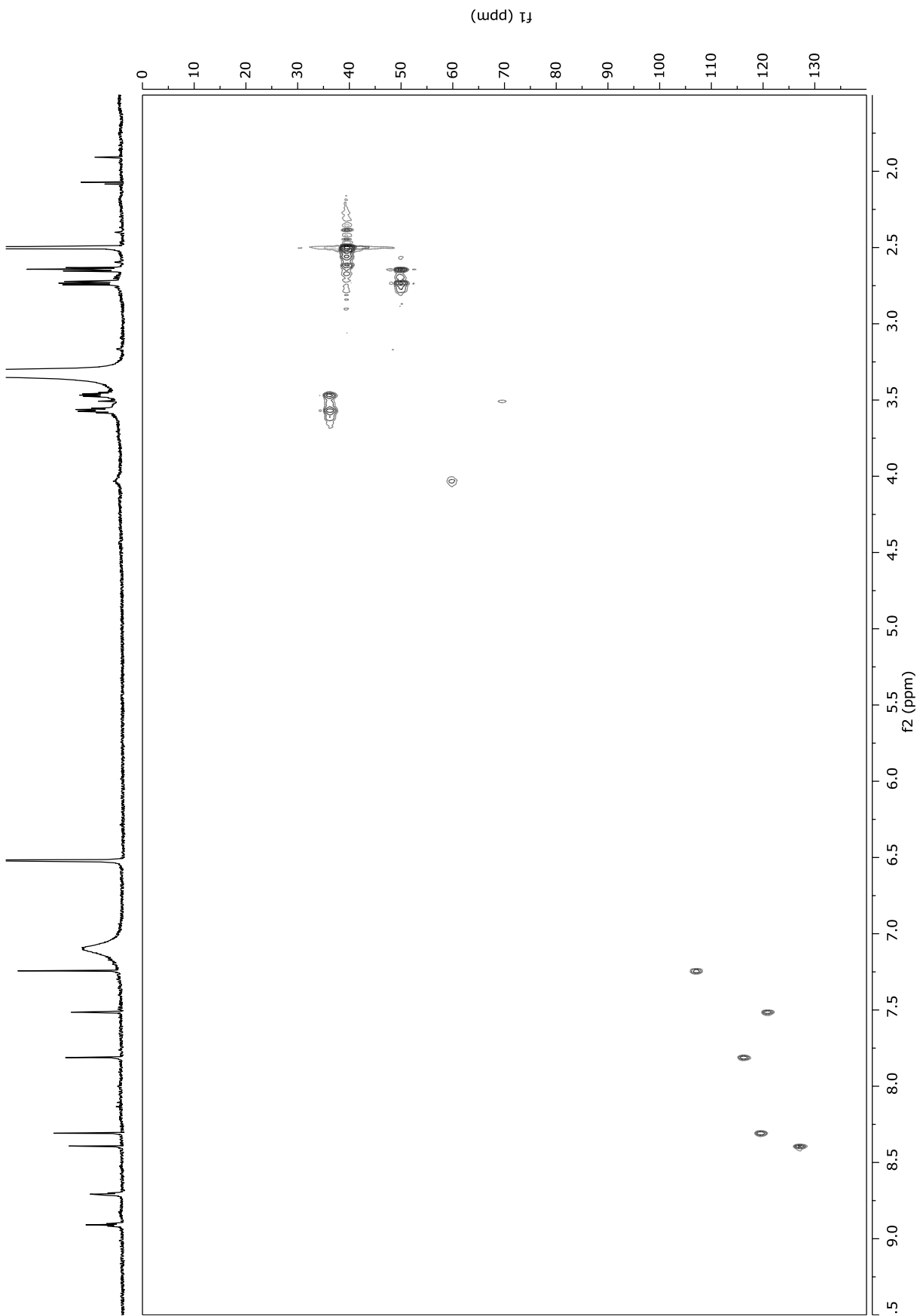


Figure S43. HSQC spectrum (700 MHz, DMSO-*d*₆) of hypalocrinin G (7).

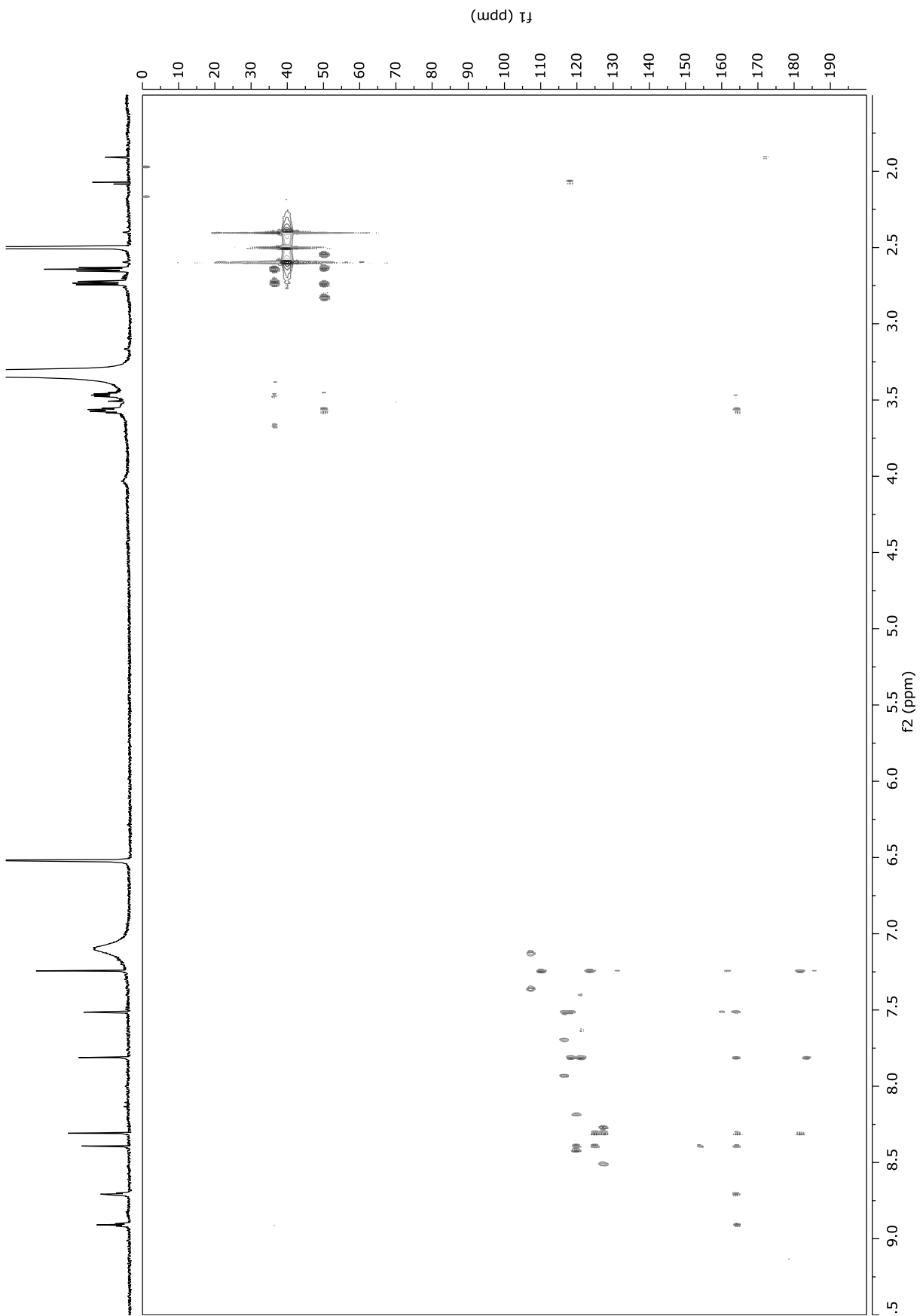


Figure S44. HMBC spectrum (700 MHz, DMSO- d_6) of hyalocrinin G (7).

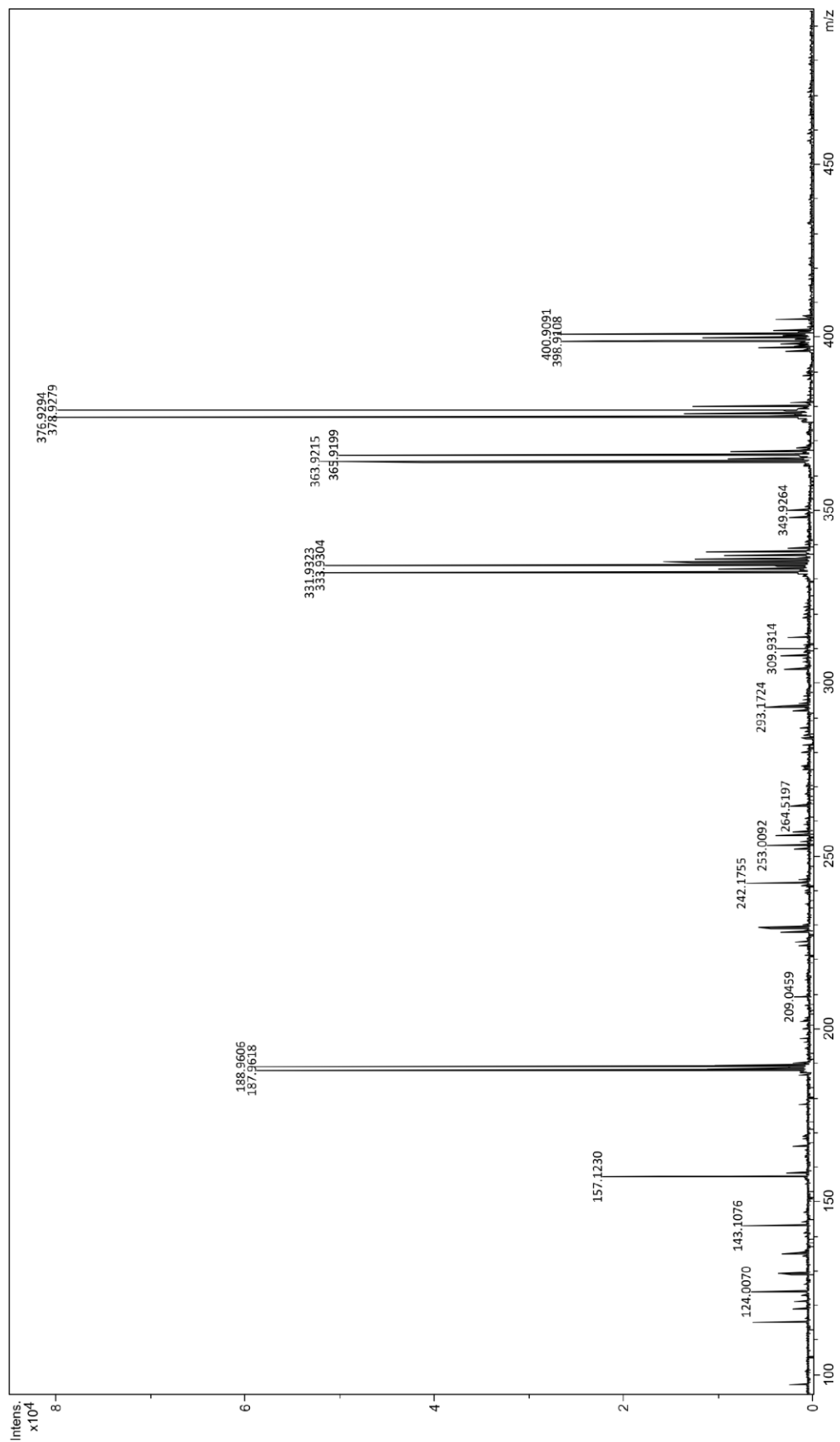


Figure S45. HRESIMS spectrum (negative-ion mode) of 6-bromoemodic acid (**8**).

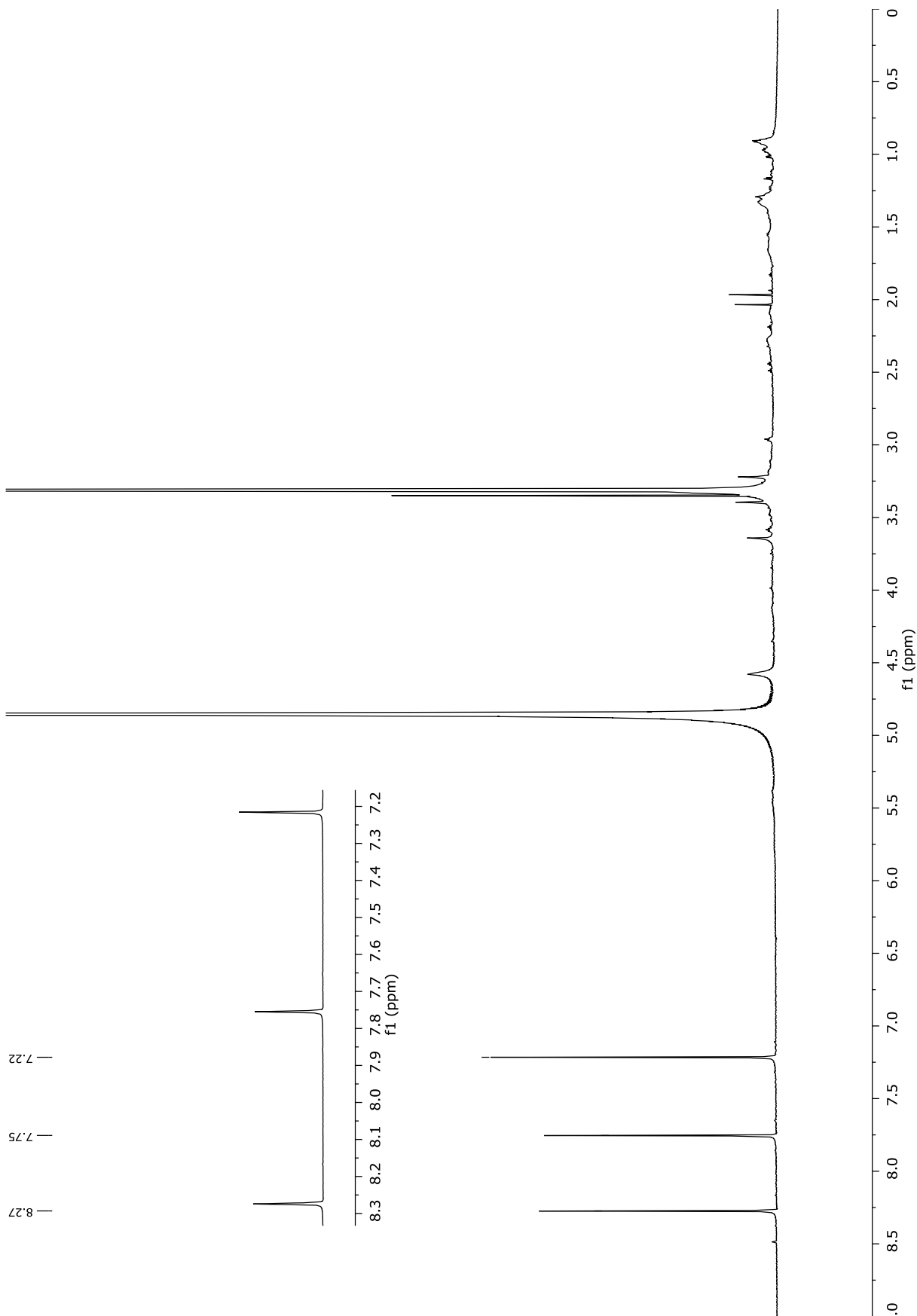


Figure S46. ^1H NMR spectrum (800 MHz, $\text{MeOH-}d_4$) of 6-bromoemodic acid (**8**).

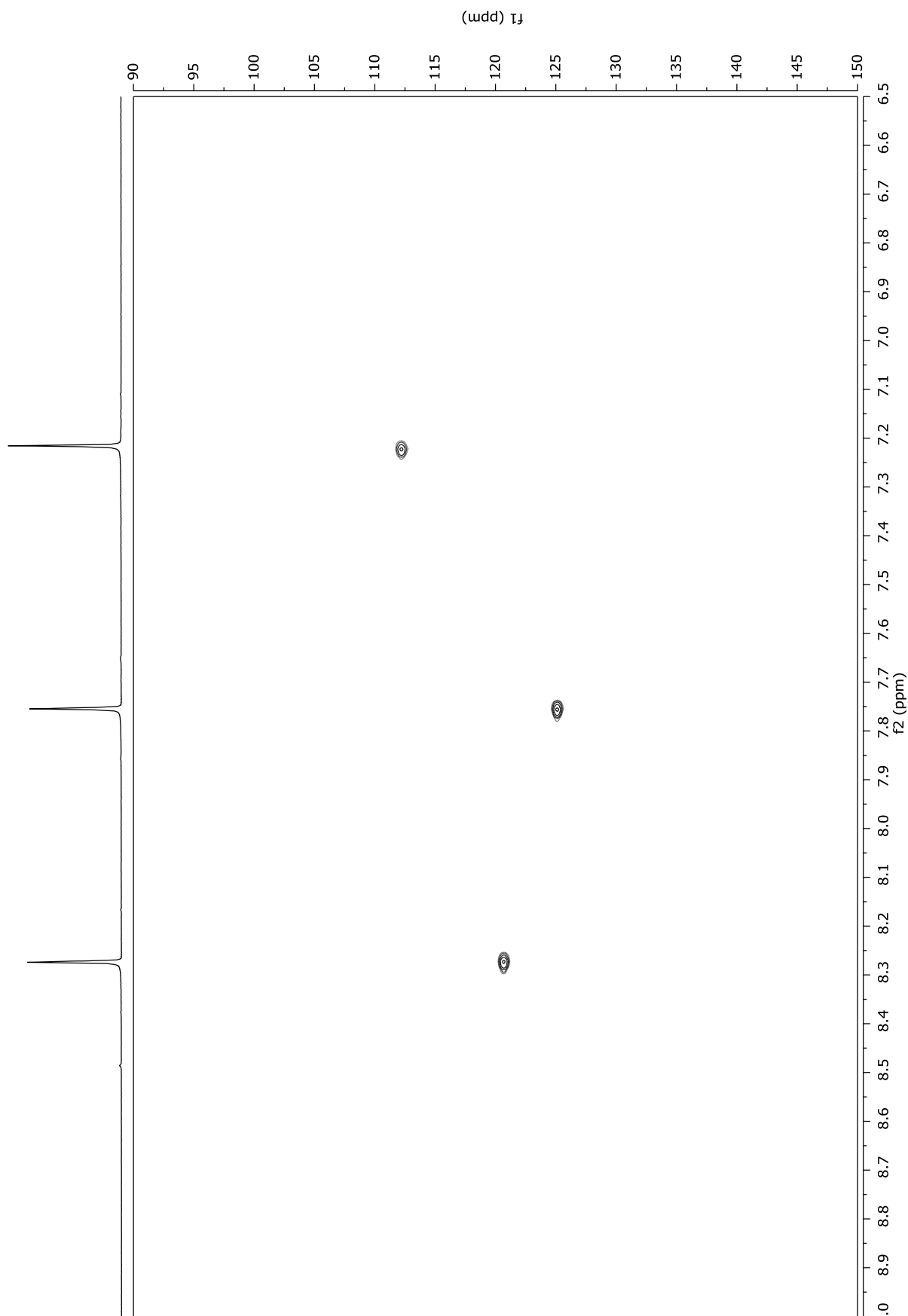


Figure S47. HSQC spectrum (800 MHz, MeOH-*d*₄) of 6-bromoemodic acid (**8**).

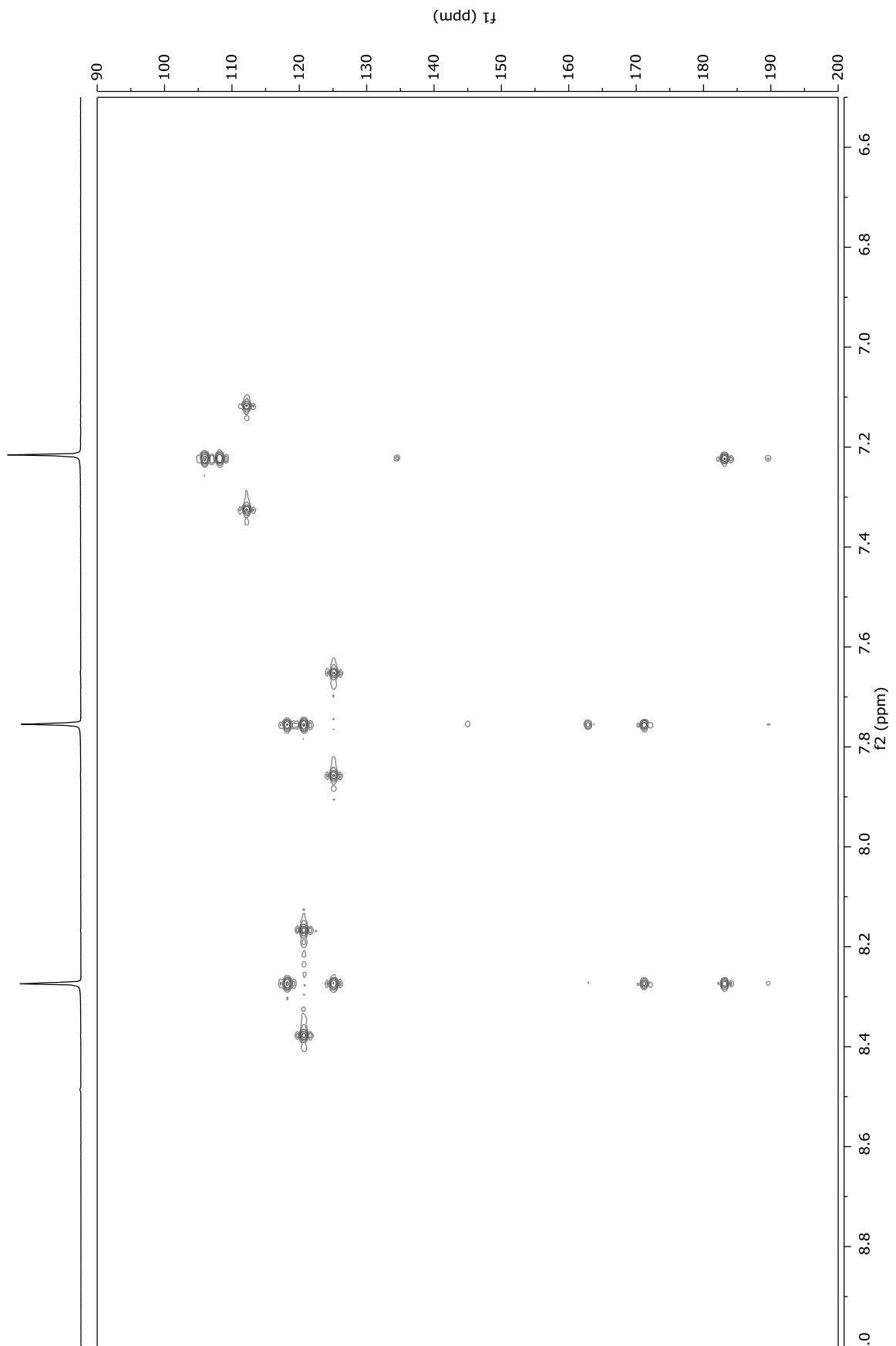


Figure S48. HMBC spectrum (800 MHz, MeOH- d_4) of 6-bromoemodic acid (**8**).

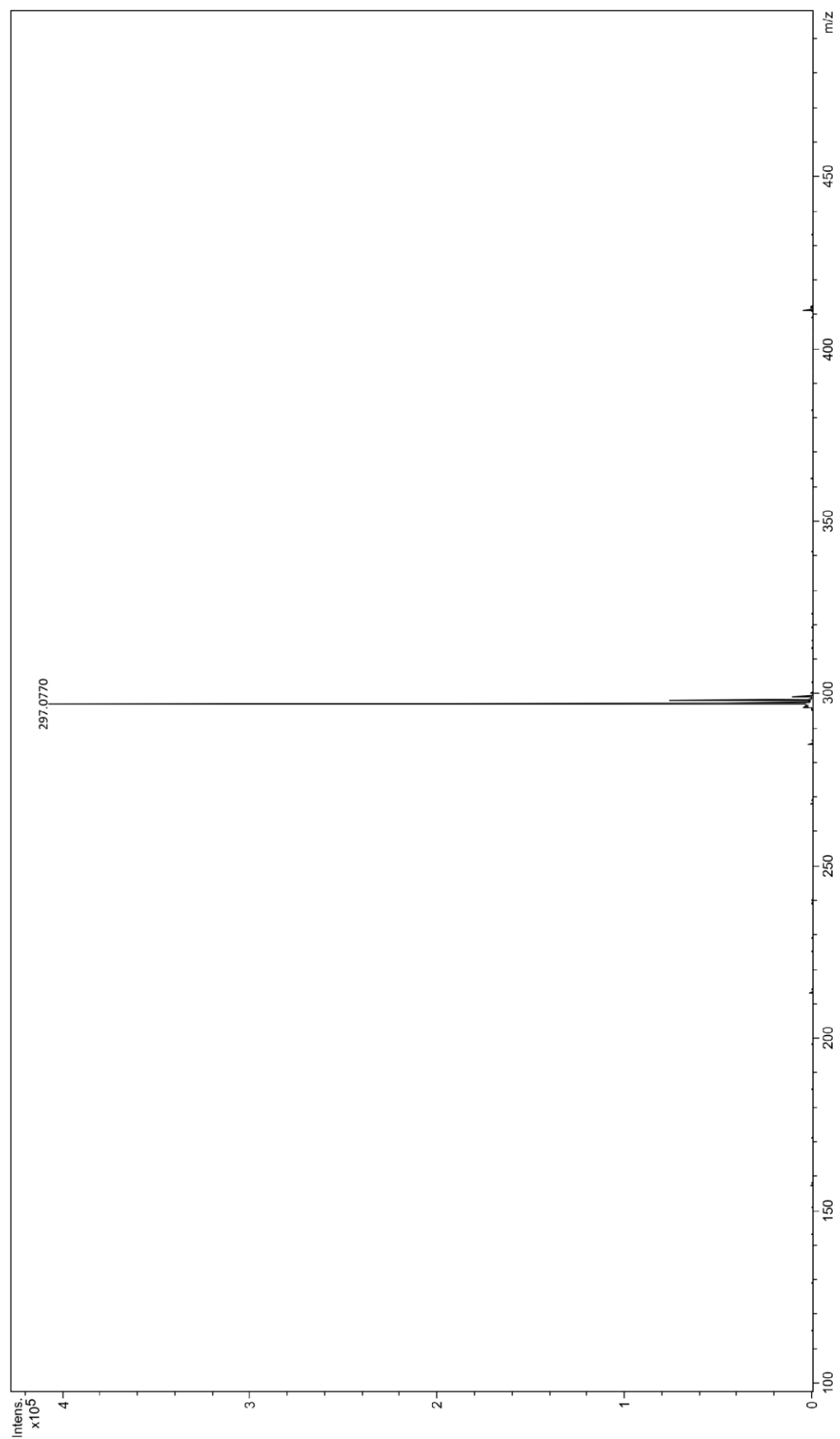


Figure S49. HRESIMS spectrum (negative-ion mode) of crinemodin (**9**).

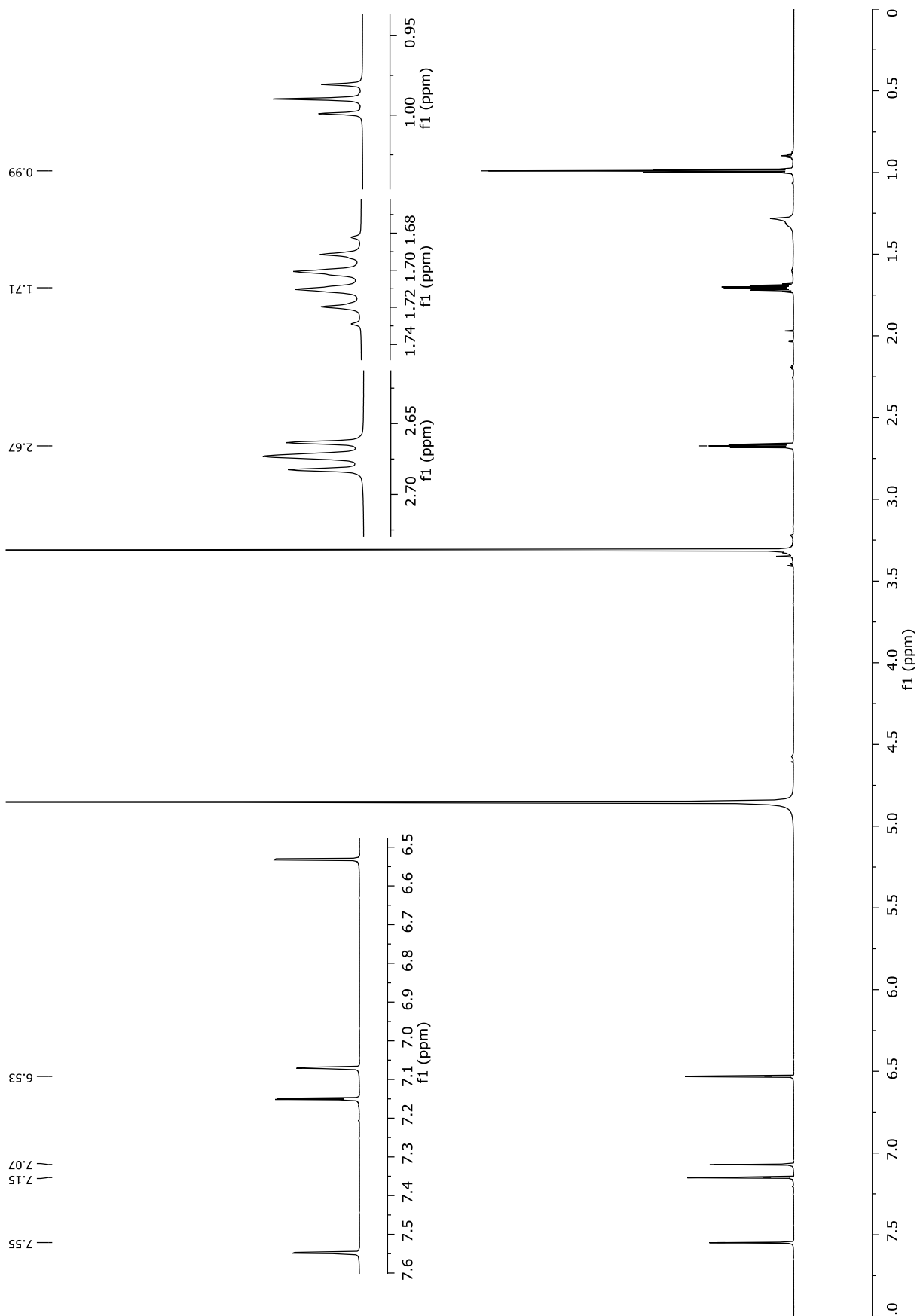


Figure S50. ^1H NMR spectrum (800 MHz, $\text{MeOH-}d_4$) of crinemodin (9).

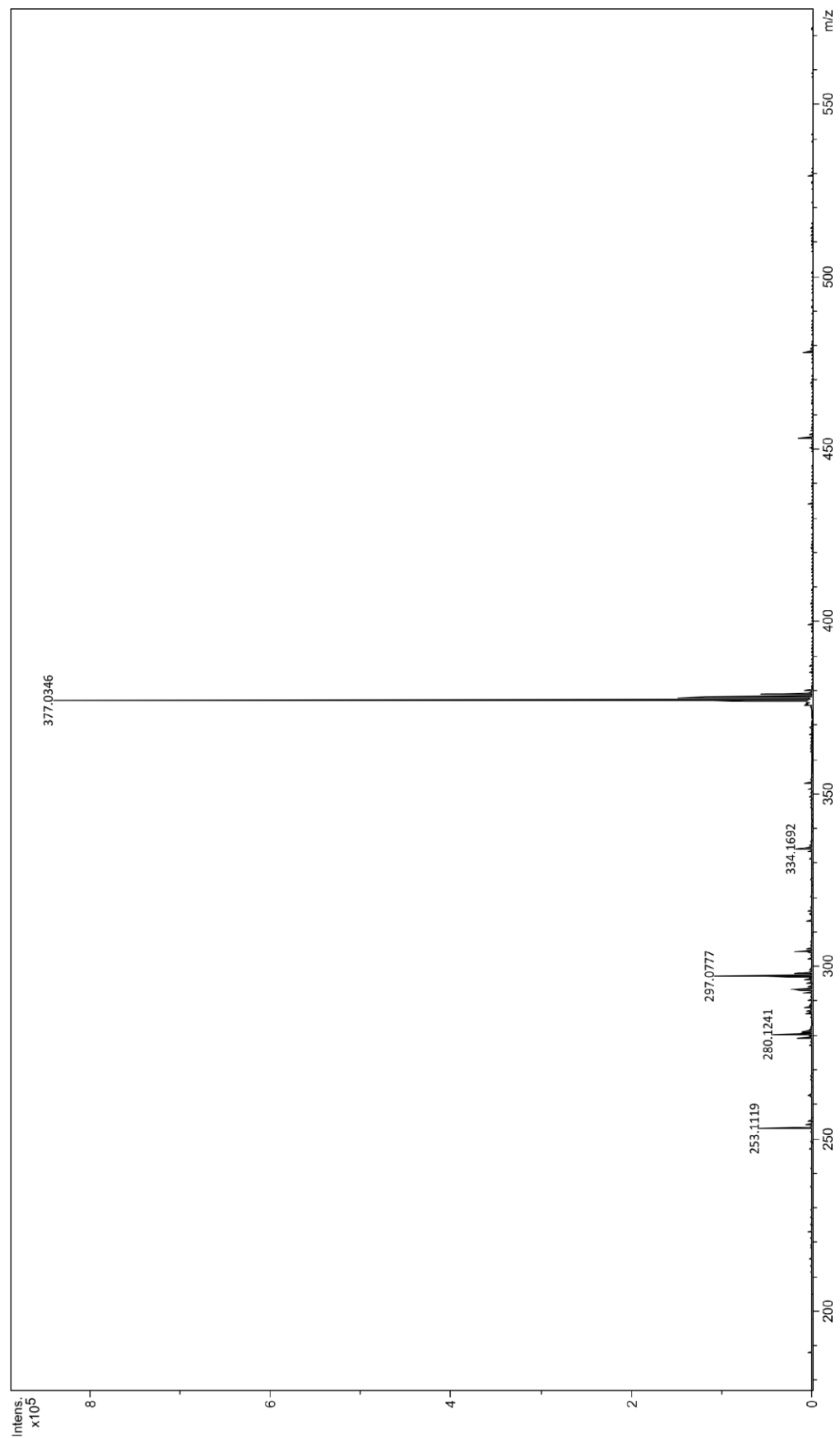


Figure S51. HRESIMS spectrum (negative-ion mode) of crinemodin sulfate (**10**).

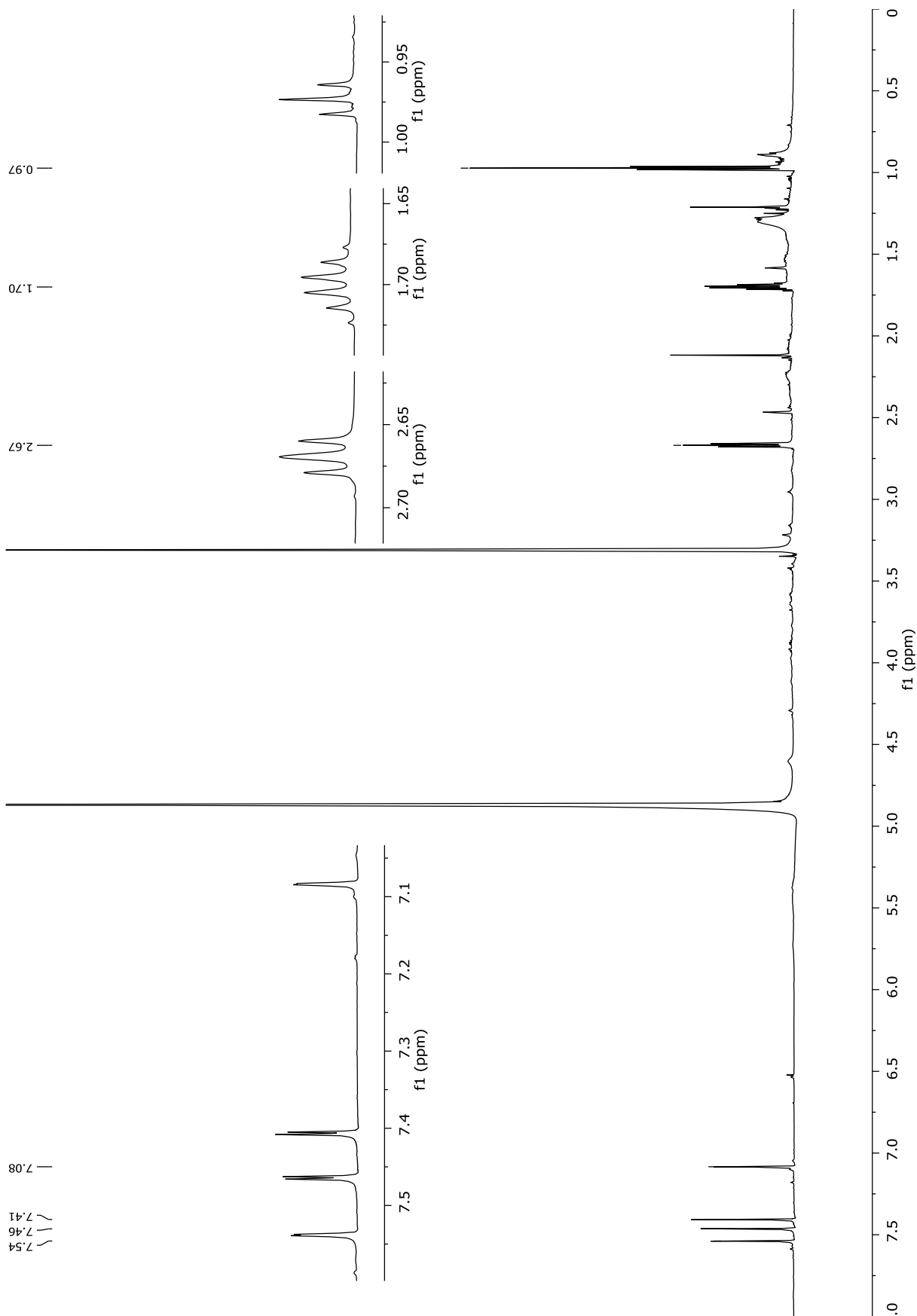


Figure S52. ^1H NMR spectrum (800 MHz, $\text{MeOH-}d_3$) of crinemodin sulfate (10).