

Supporting Information

Asnovolins A–G, Spiromeroterpenoids, as Suppressing Agents of the Fibronectin Expression, from the Fungus *Aspergillus novofumigatus*.

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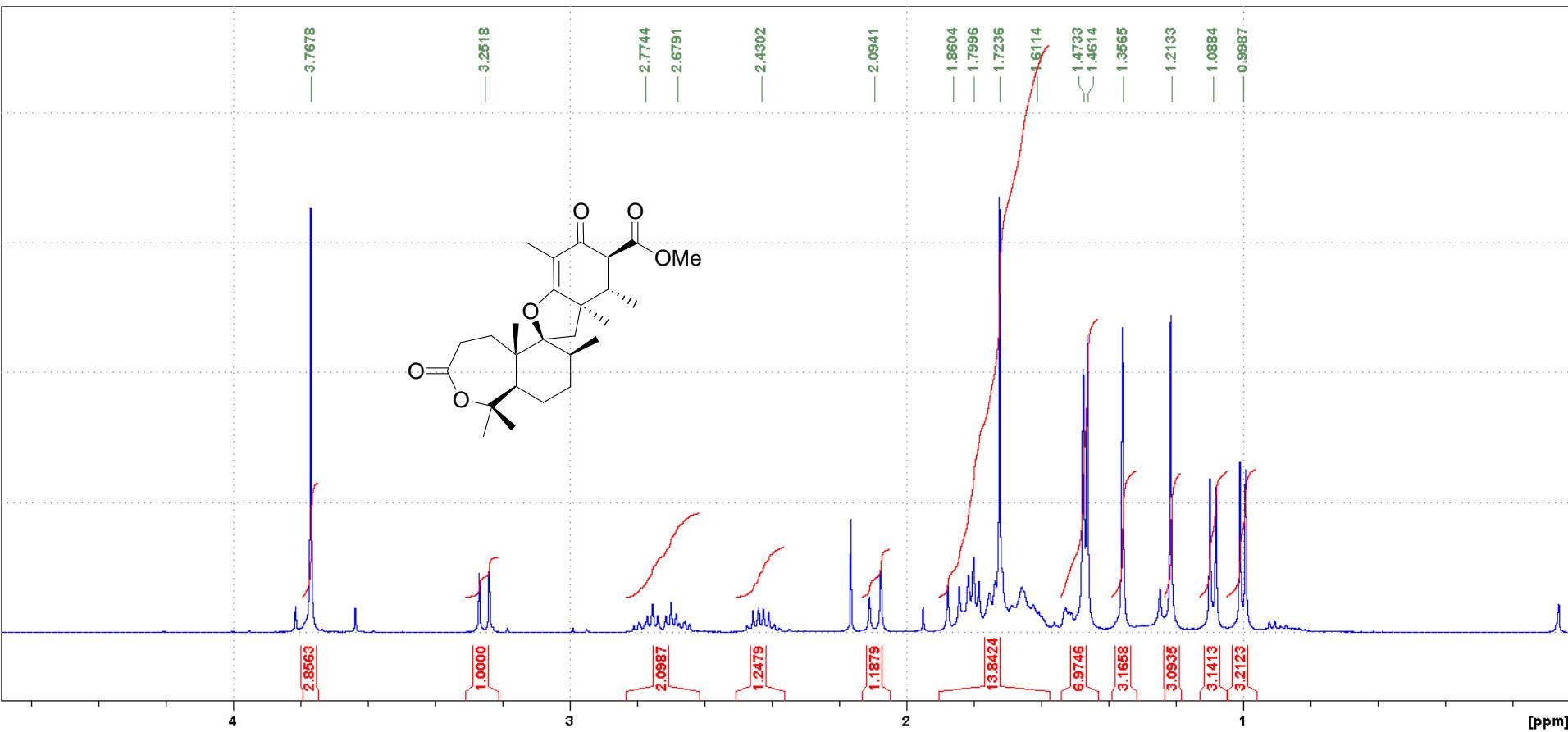


Figure S1. ^1H NMR (400 MHz, CDCl_3) spectrum of asnovolin A (**1**).

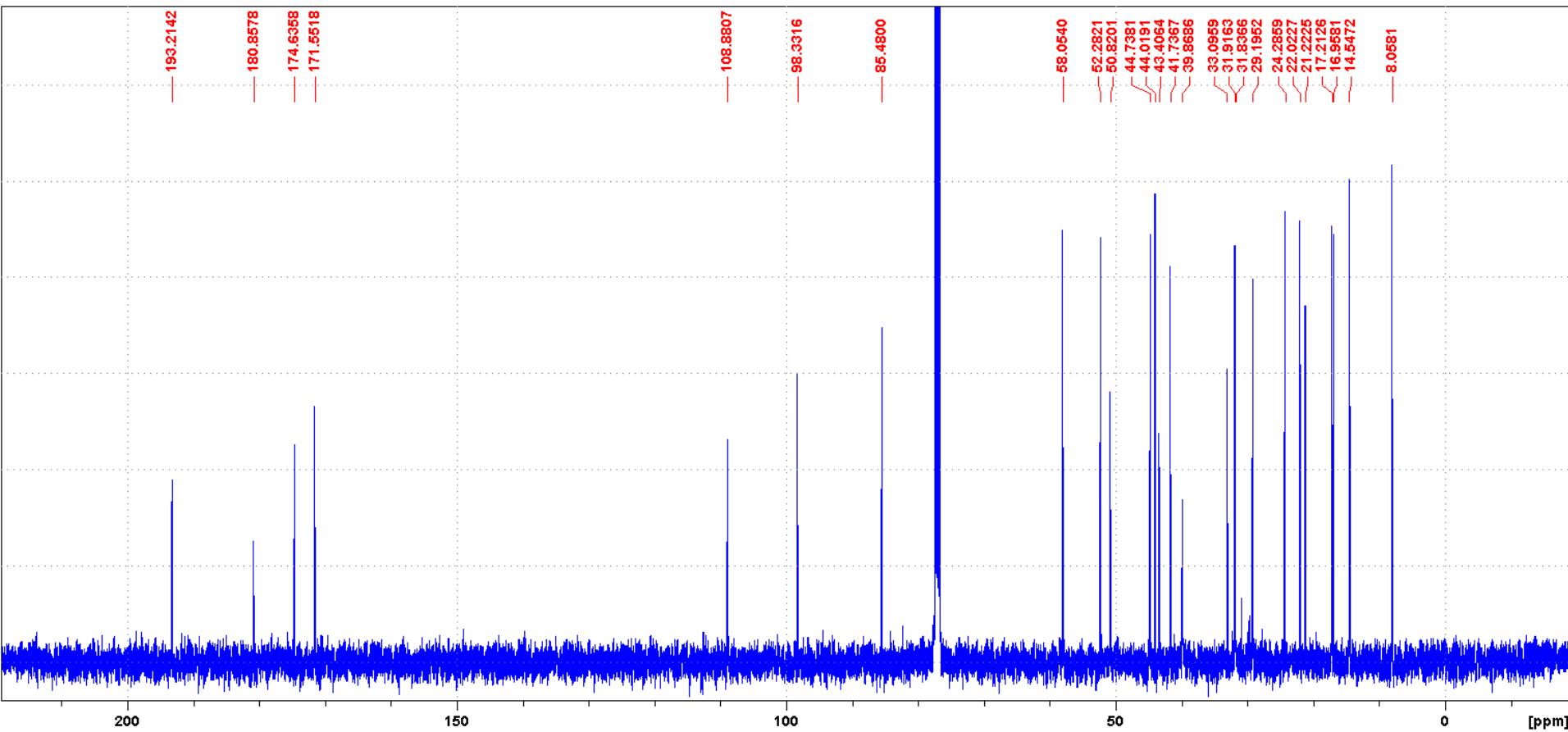


Figure S2. ¹³C NMR (100 MHz, CDCl₃) spectrum of asnovolin A (**1**).

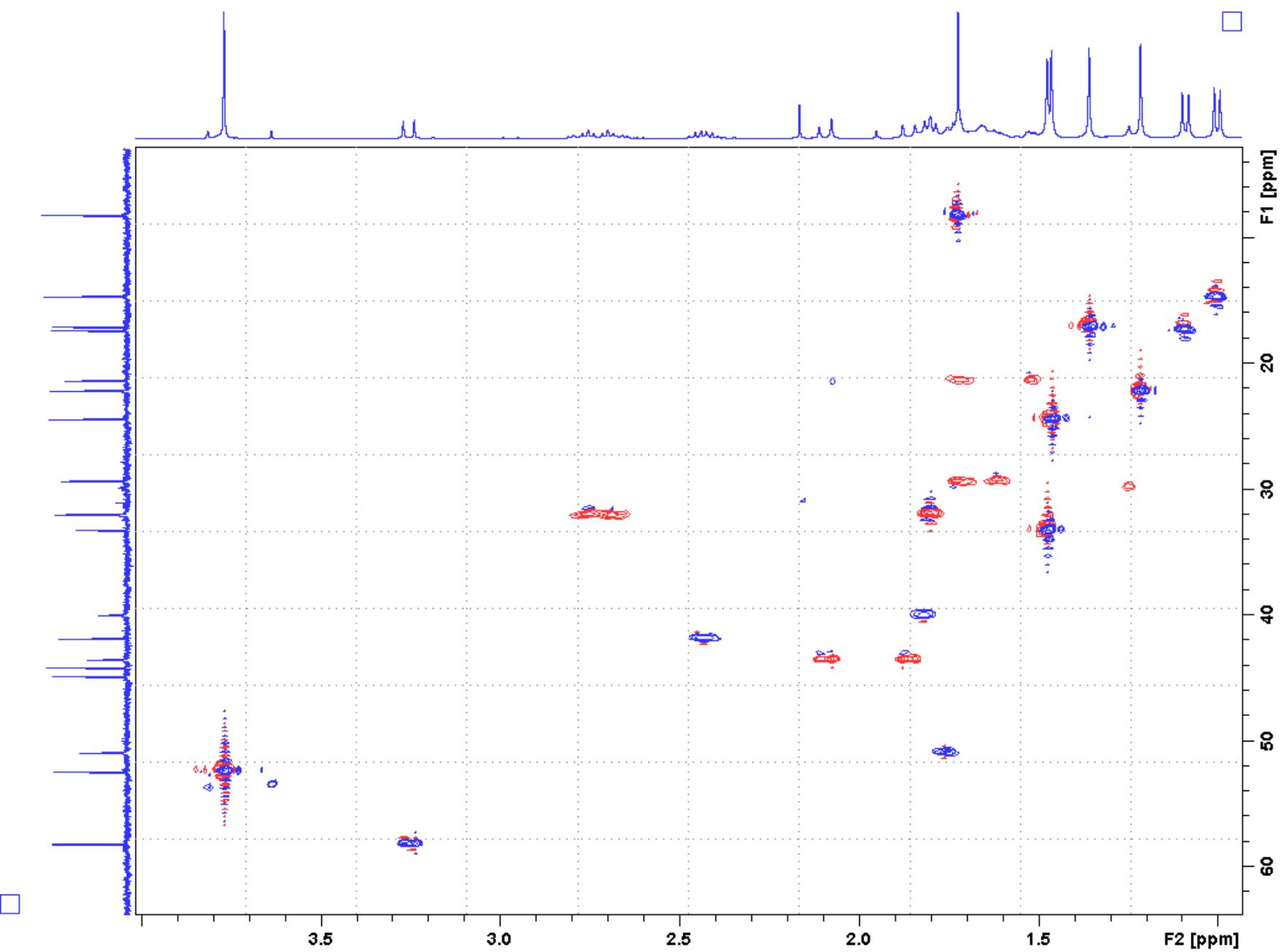


Figure S3. HSQC (400 MHz, CDCl_3) spectrum of asnovolin A (**1**).



Figure S4. HMBC (400 MHz, CDCl_3) spectrum of asnovolin A (**1**).

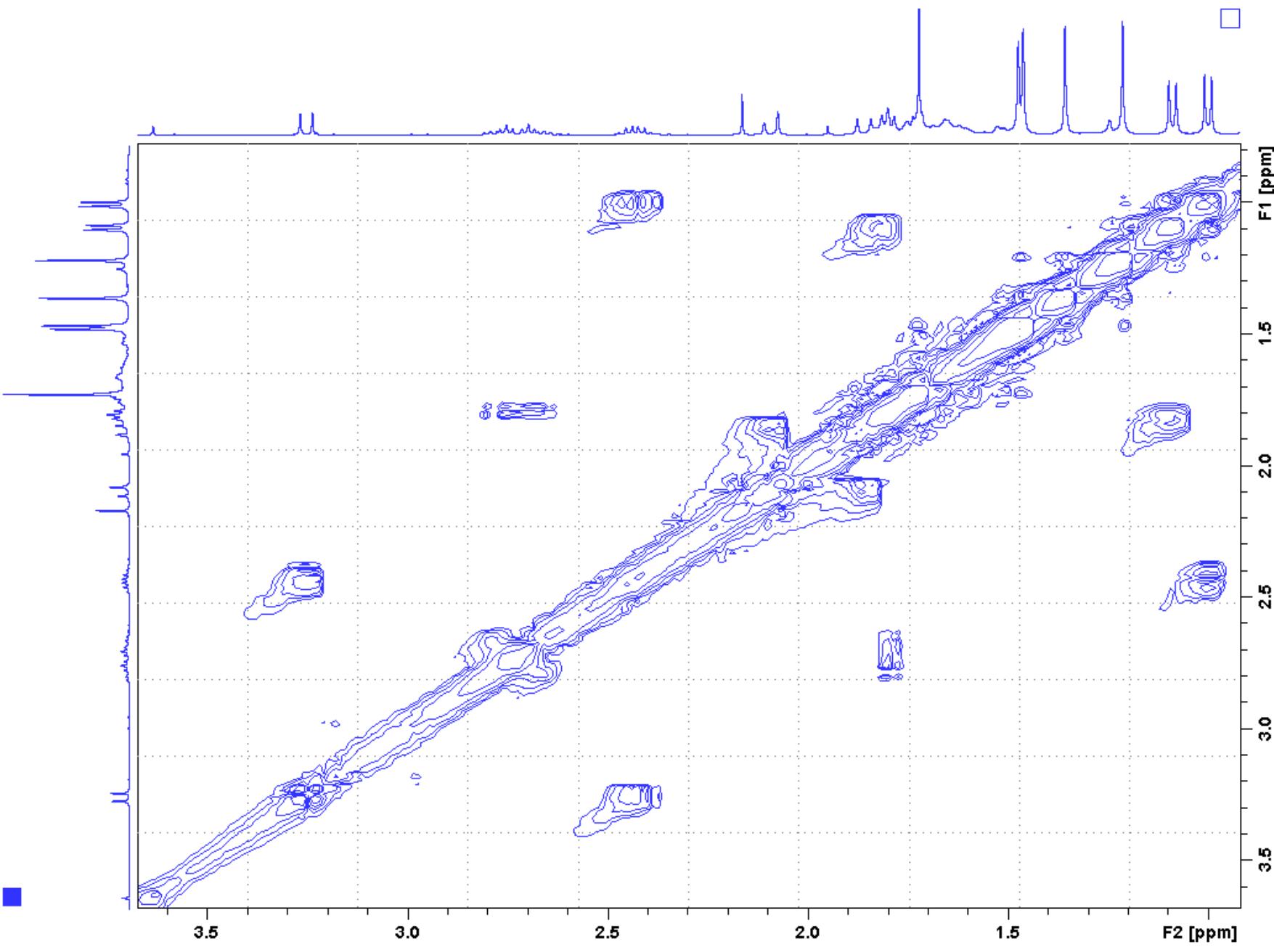


Figure S5. ^1H - ^1H COSY (400 MHz, CDCl_3) spectrum of asnovolin A (**1**).

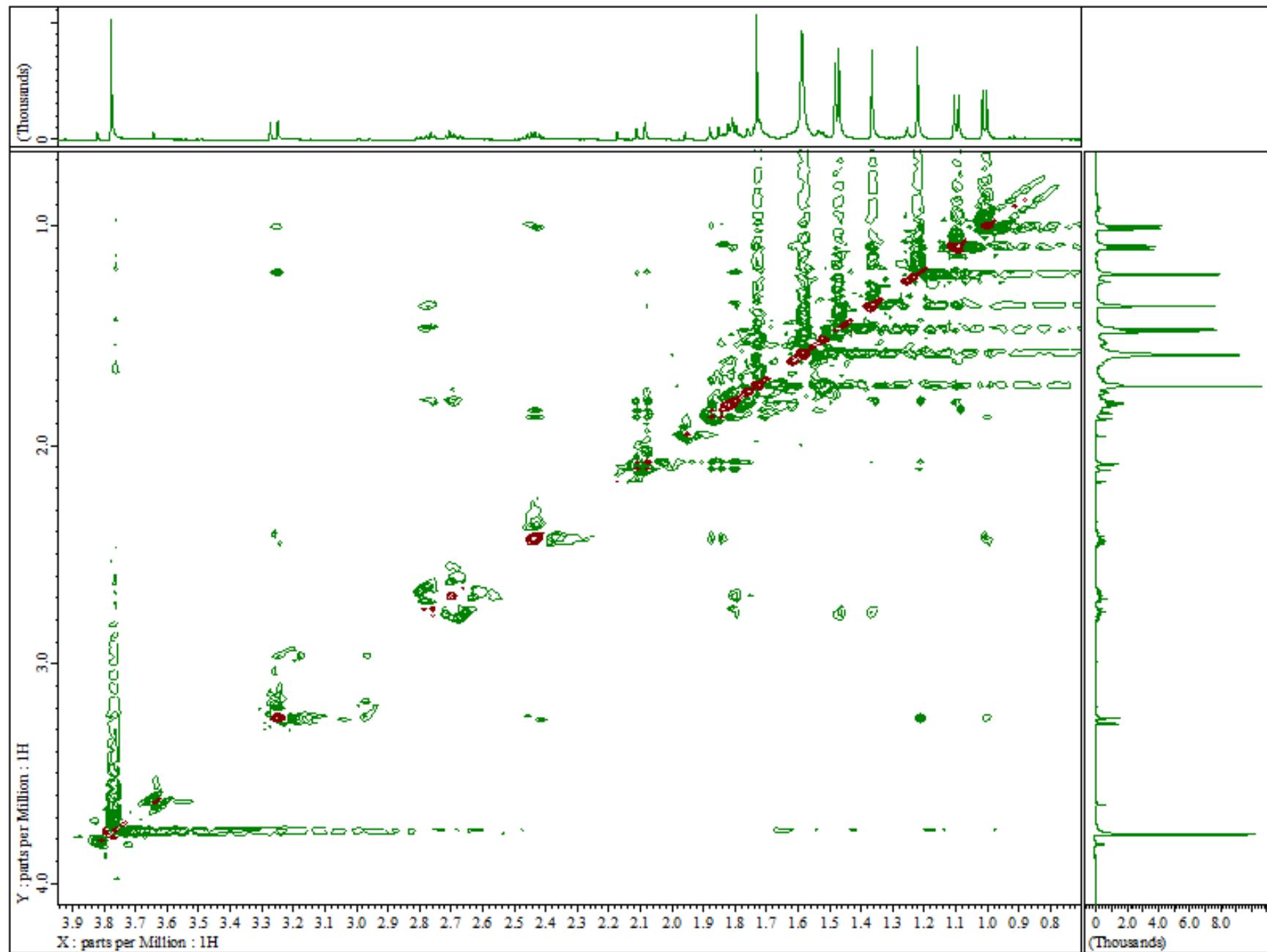


Figure S6. NOESY (400 MHz, CDCl_3) spectrum of asnovolin A (**1**).

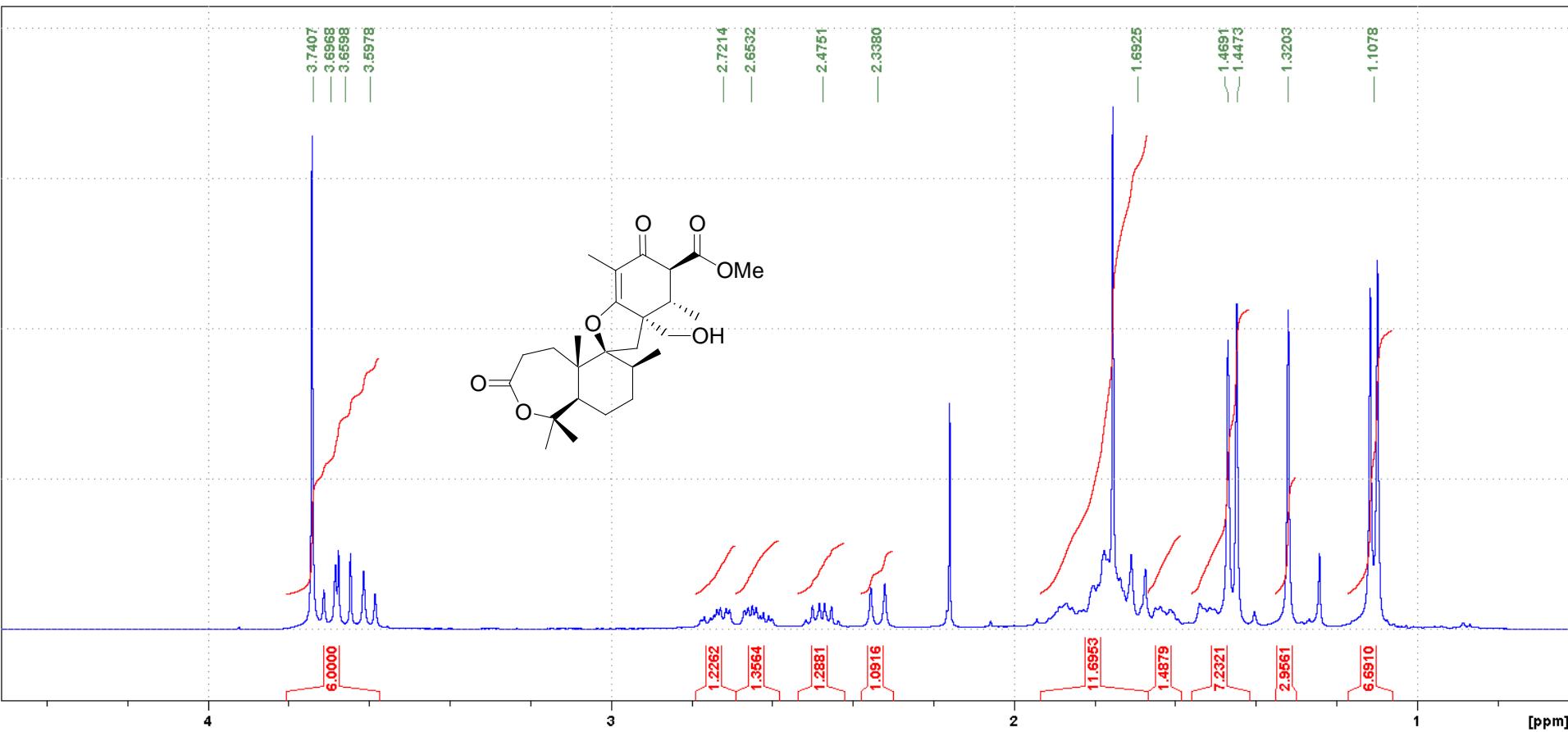


Figure S7. ^1H NMR (400 MHz, CDCl_3) spectrum of asnovolin B (**2**).

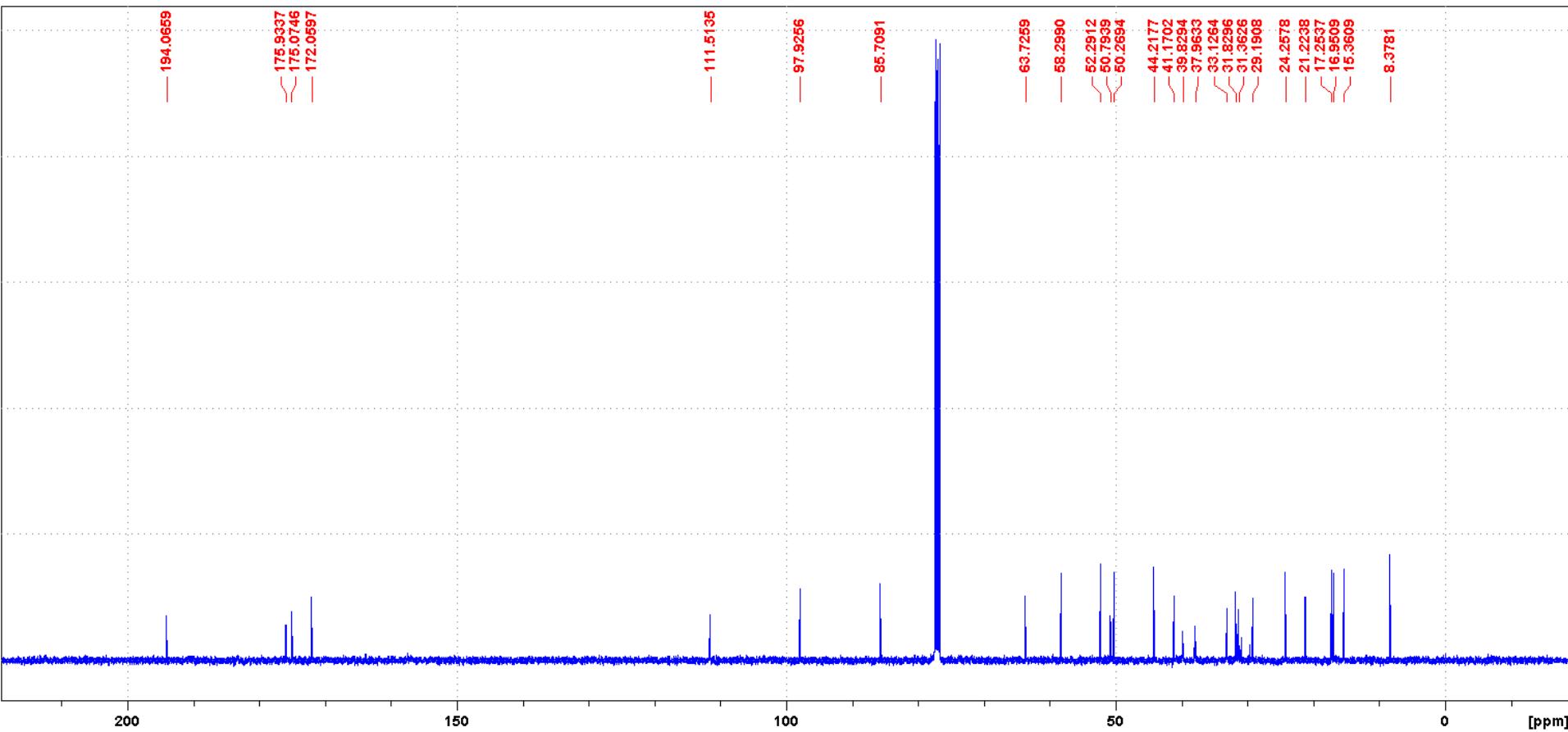


Figure S8. ¹³C NMR (100 MHz, CDCl₃) spectrum of asnovolin B (**2**).

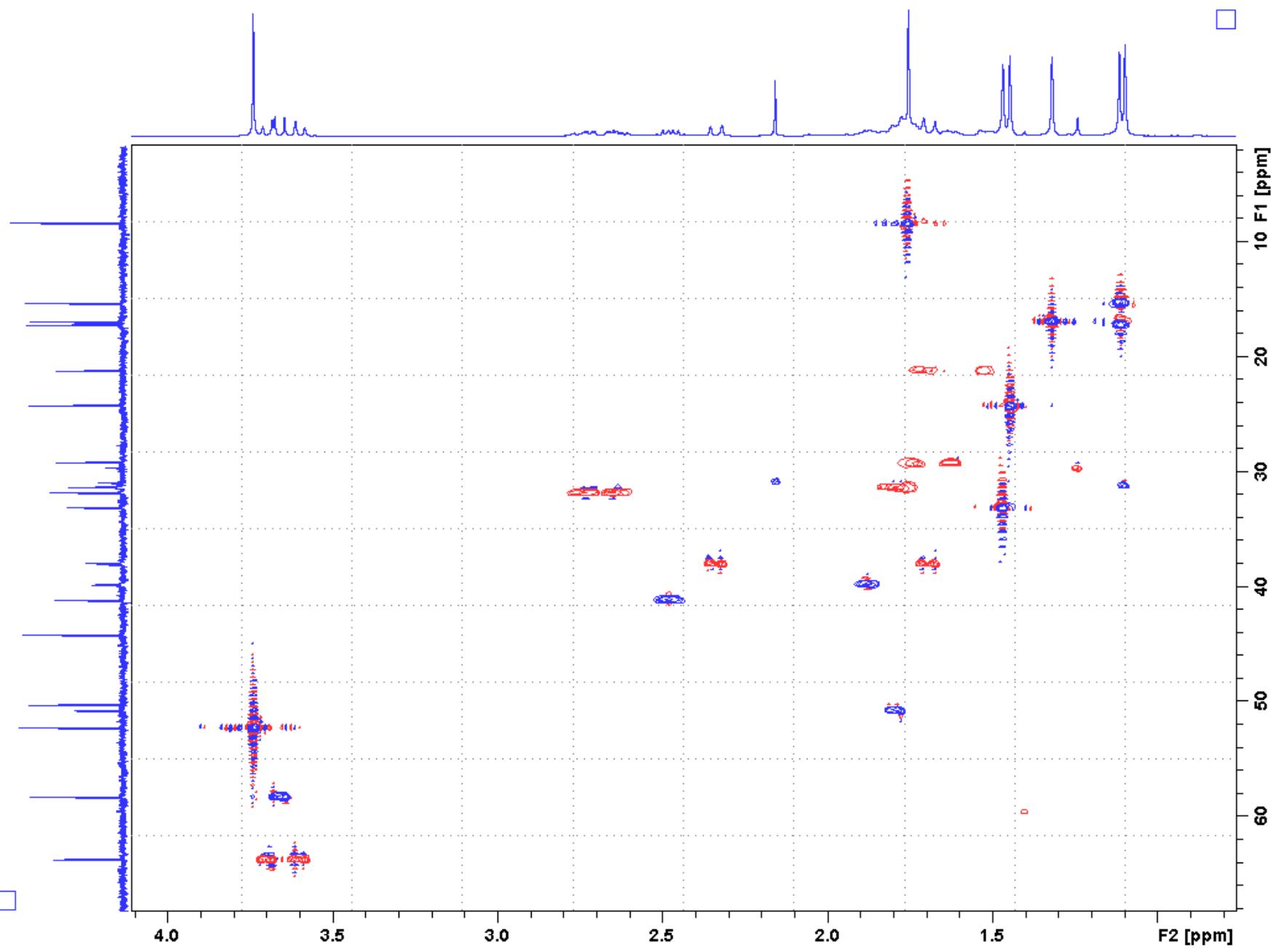


Figure S9. HSQC (400 MHz, CDCl_3) spectrum of asnovolin B (**2**).

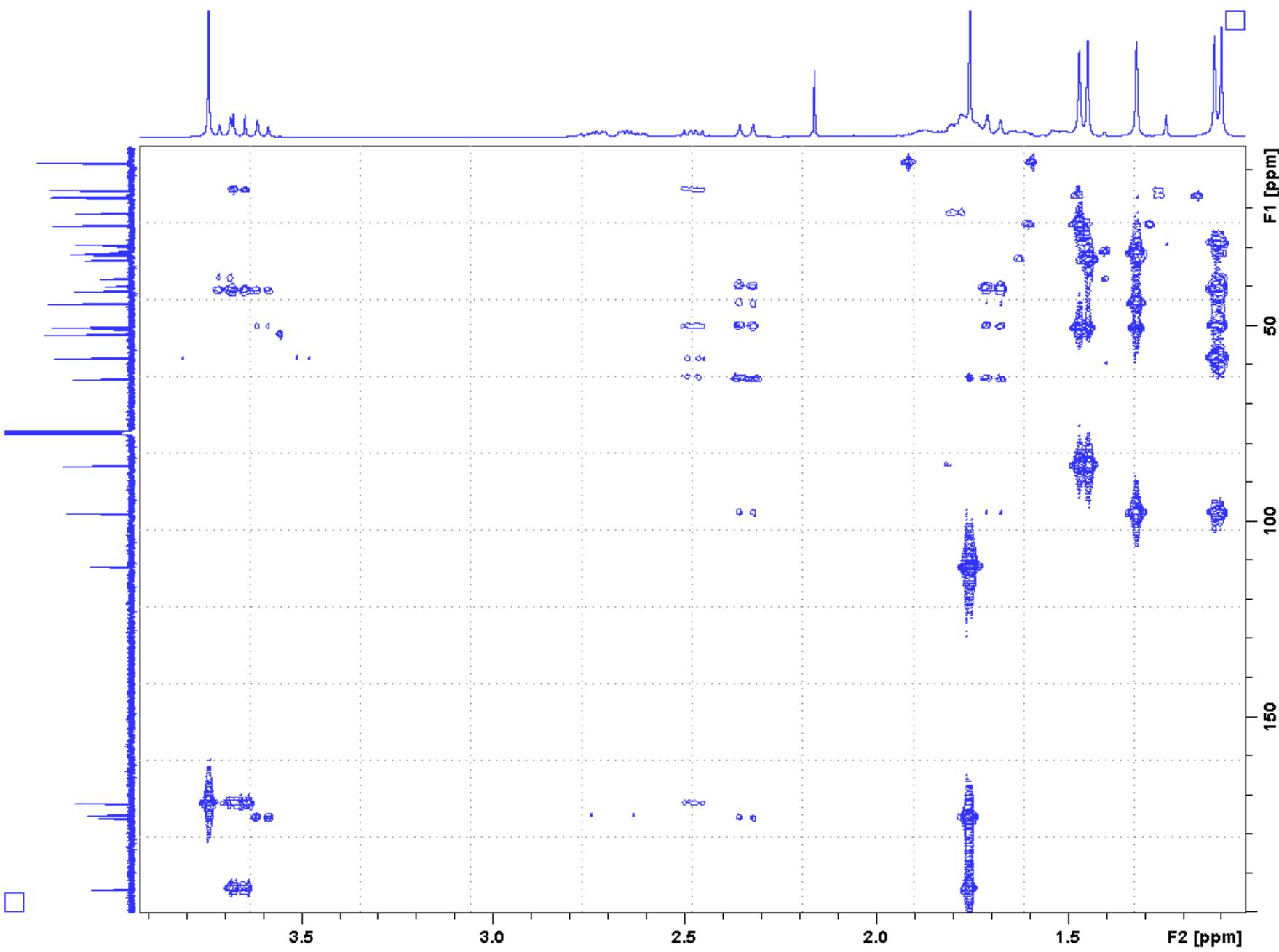


Figure S10. HMBC (400 MHz, CDCl_3) spectrum of asnovolin B (2).

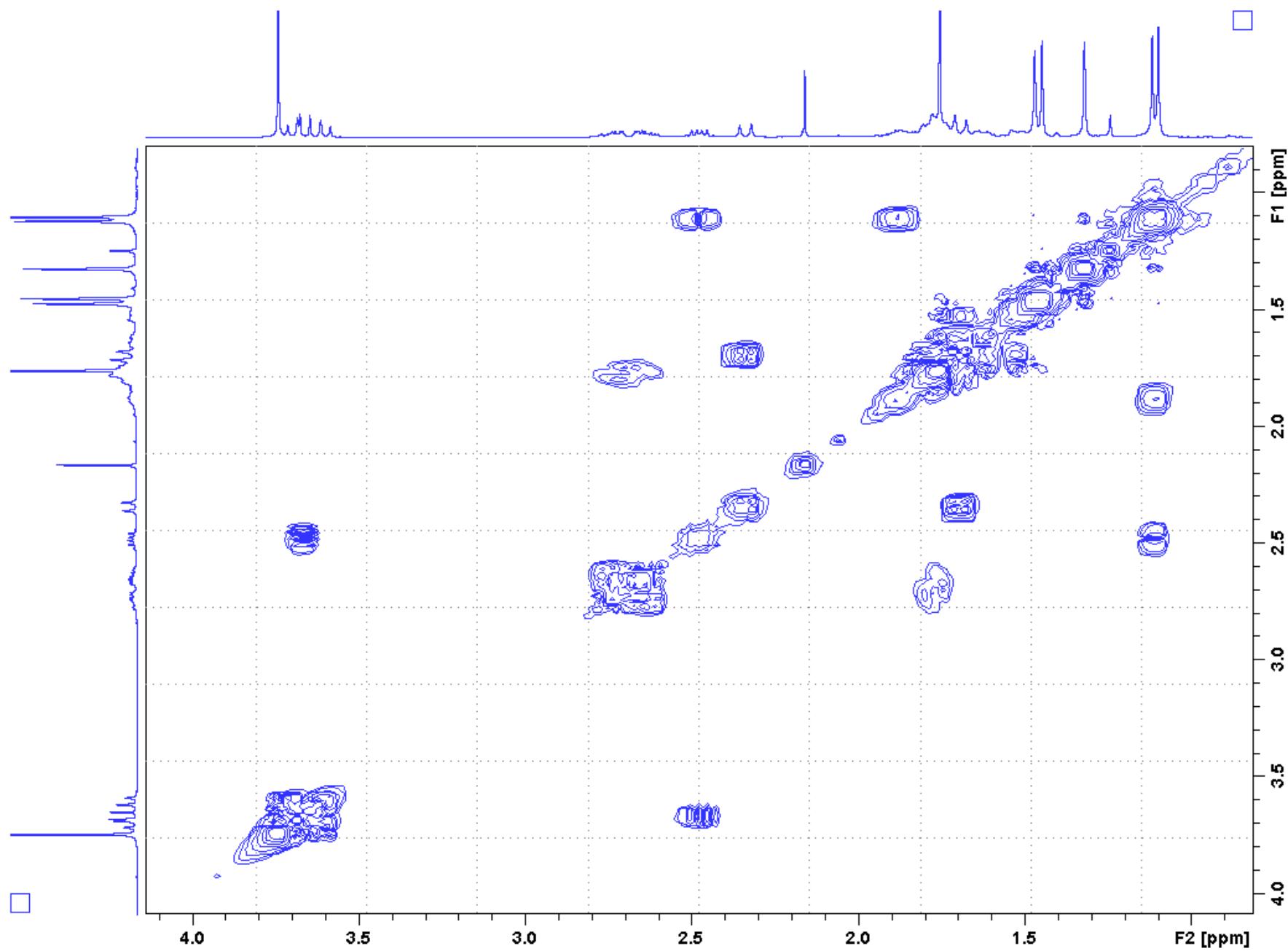


Figure S11. ^1H - ^1H COSY (400 MHz, CDCl_3) spectrum of asnovolin B (**2**).

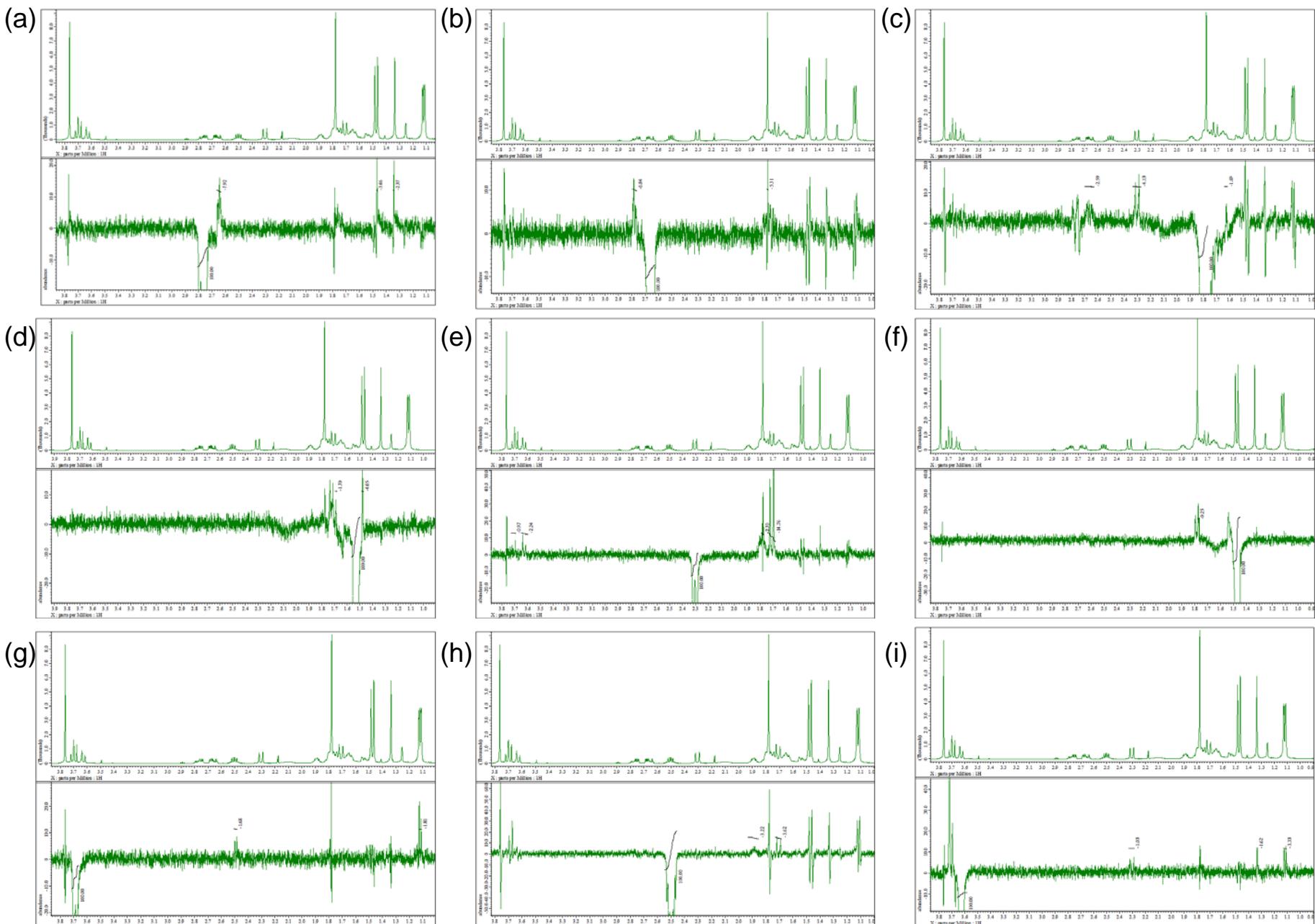


Figure S12. NOE (500 MHz, CDCl_3) spectrum of asnovolin B (2). Irradiation to H-2a (a), H-2b (b), H-5 (c), H-6b (d), H-11a (e), H-13 (f), H-5' (g), H-6' (h) and H-7'b (i).

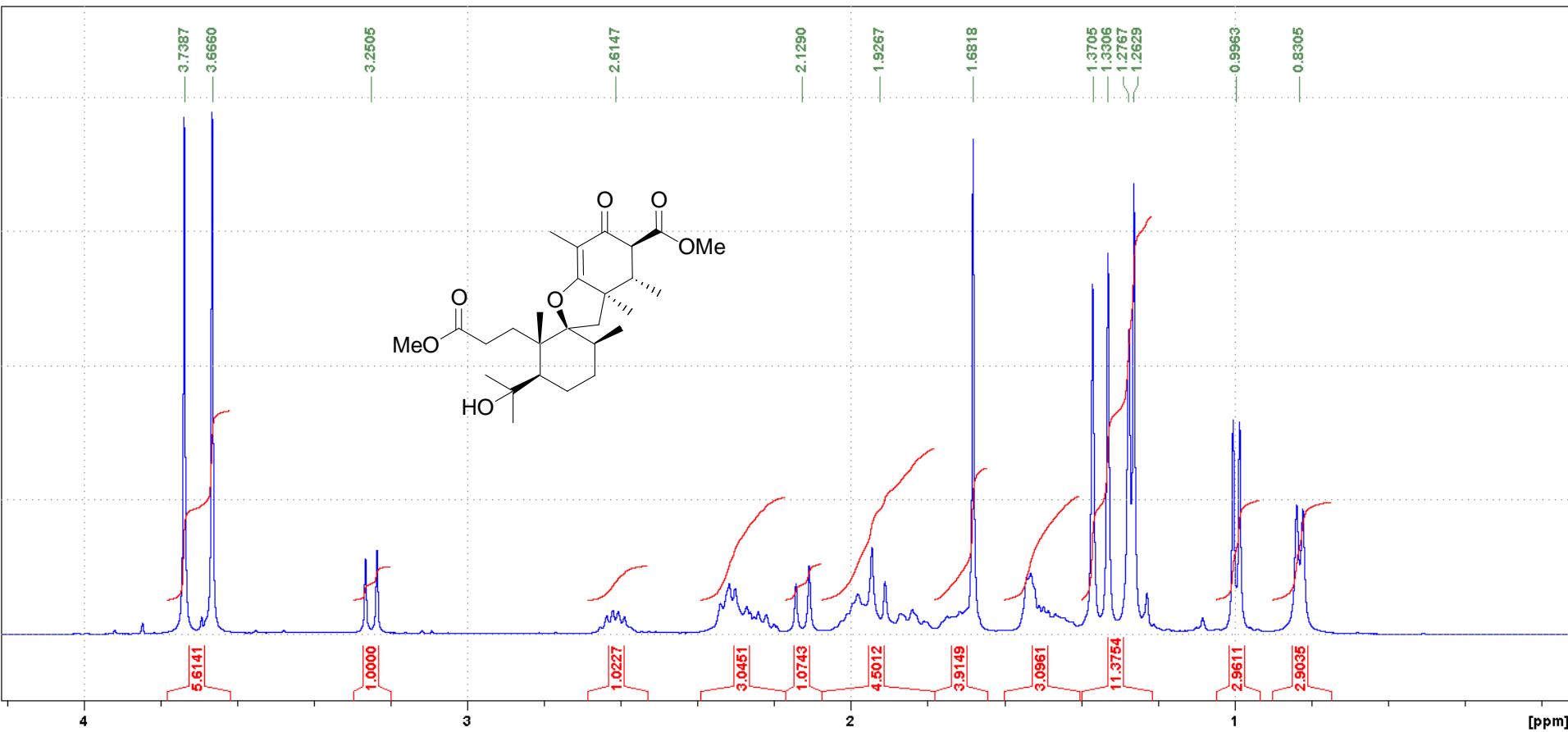


Figure S13. ¹H NMR (400 MHz, CDCl₃) spectrum of asnovolin C (3).

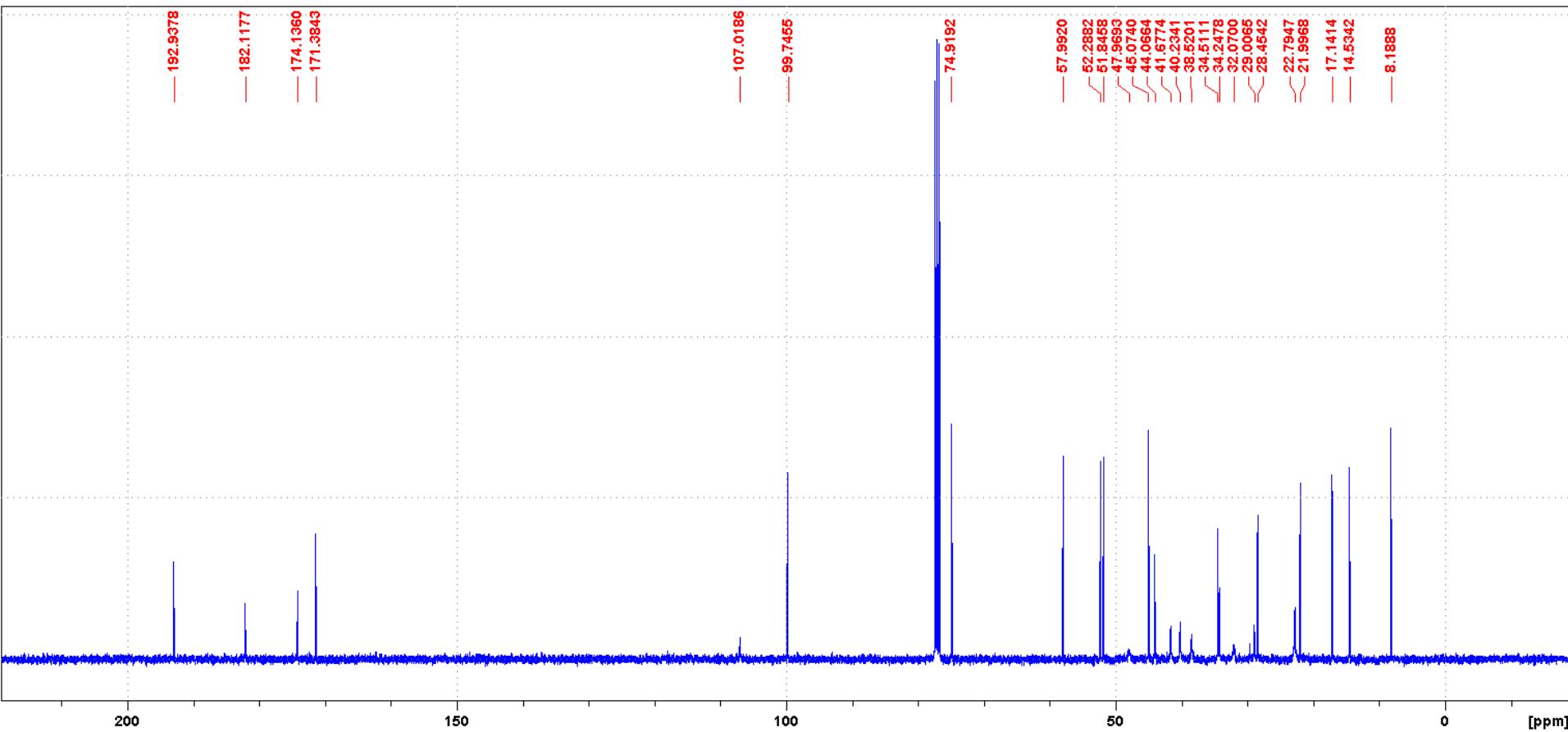


Figure S14. ^{13}C NMR (100 MHz, CDCl_3) spectrum of asnovolin C (3).

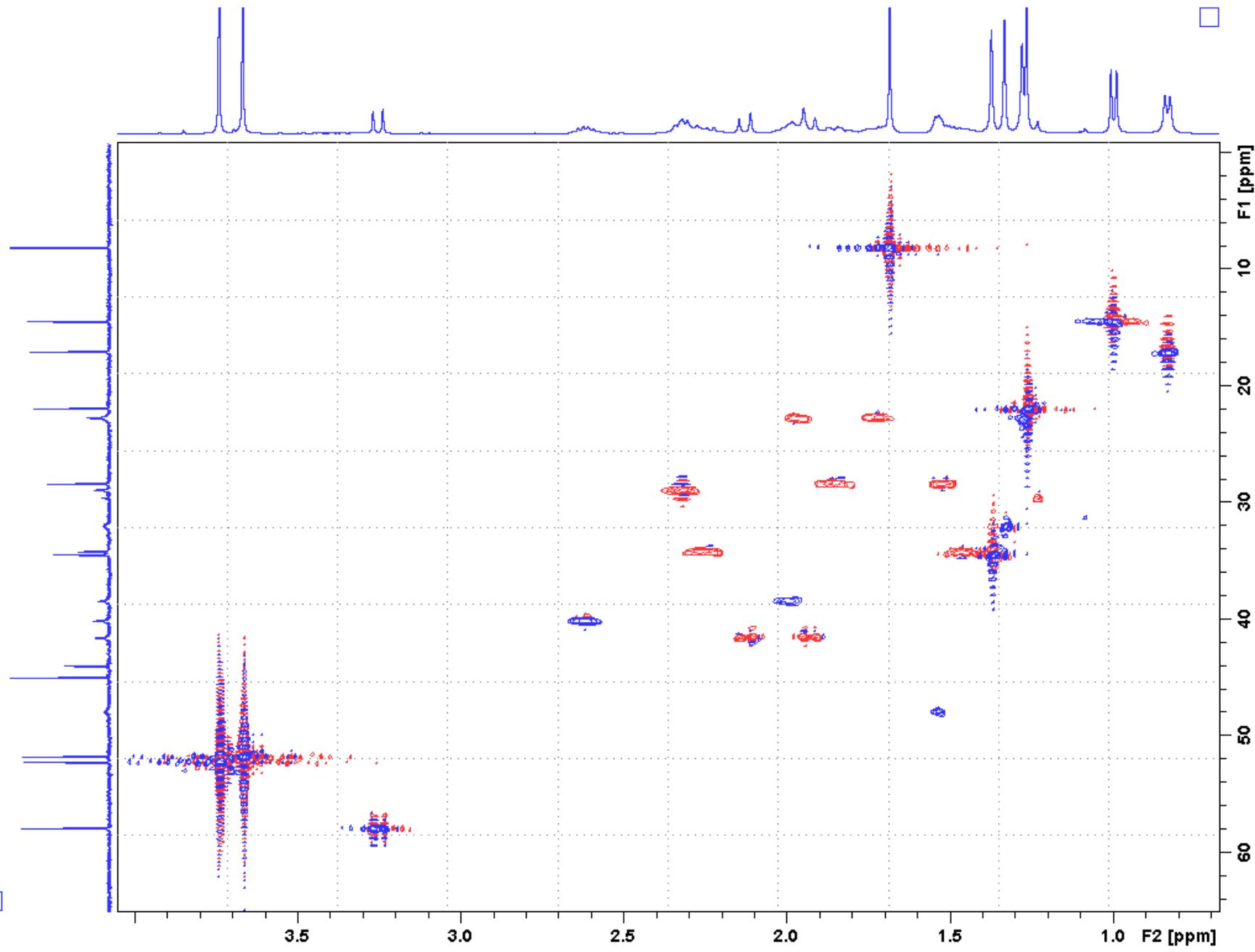


Figure S15. HSQC (400 MHz, CDCl_3) spectrum of asnovolin C (3).

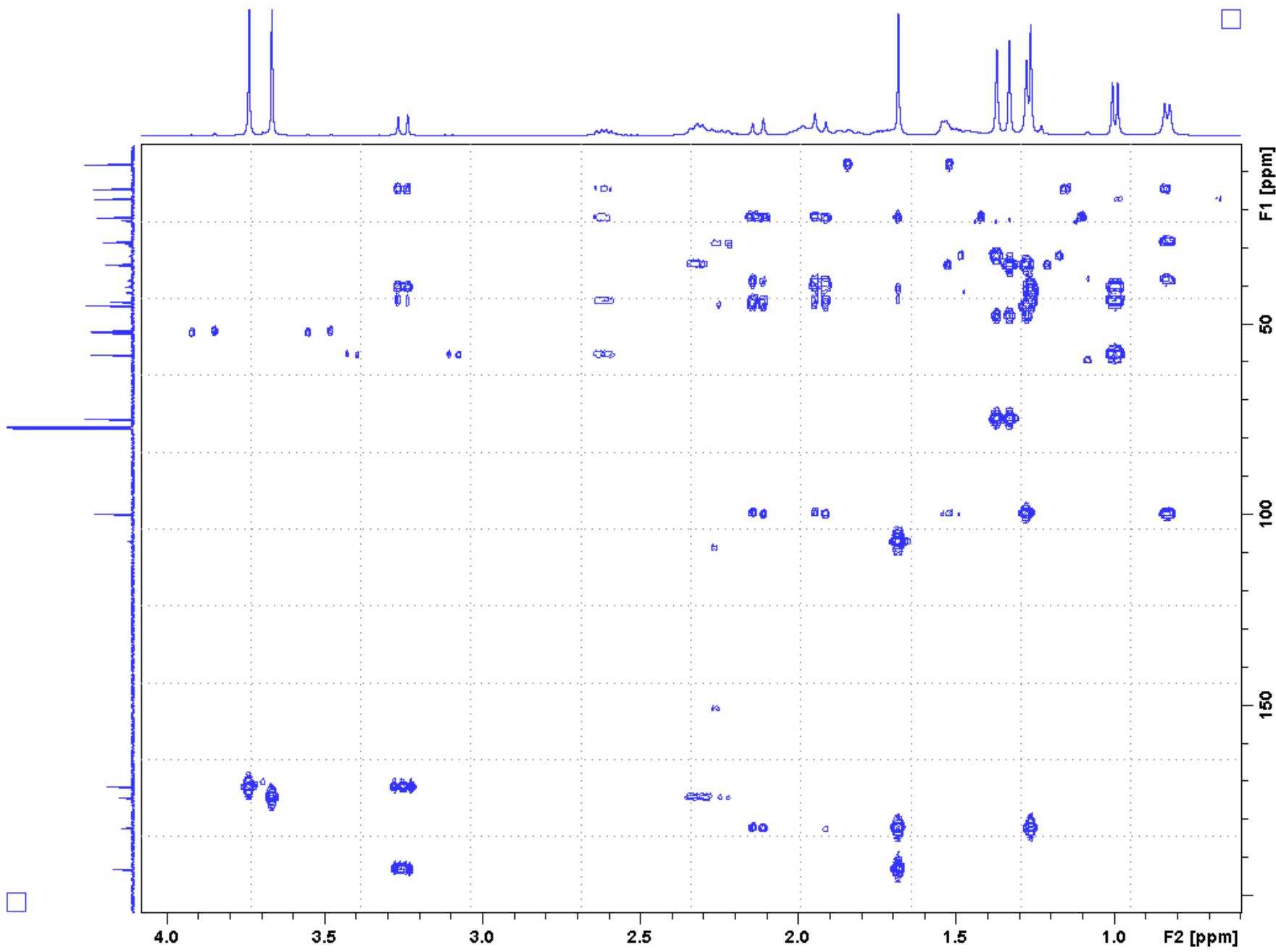


Figure S16. HMBC (400 MHz, CDCl_3) spectrum of asnovolin C (**3**).

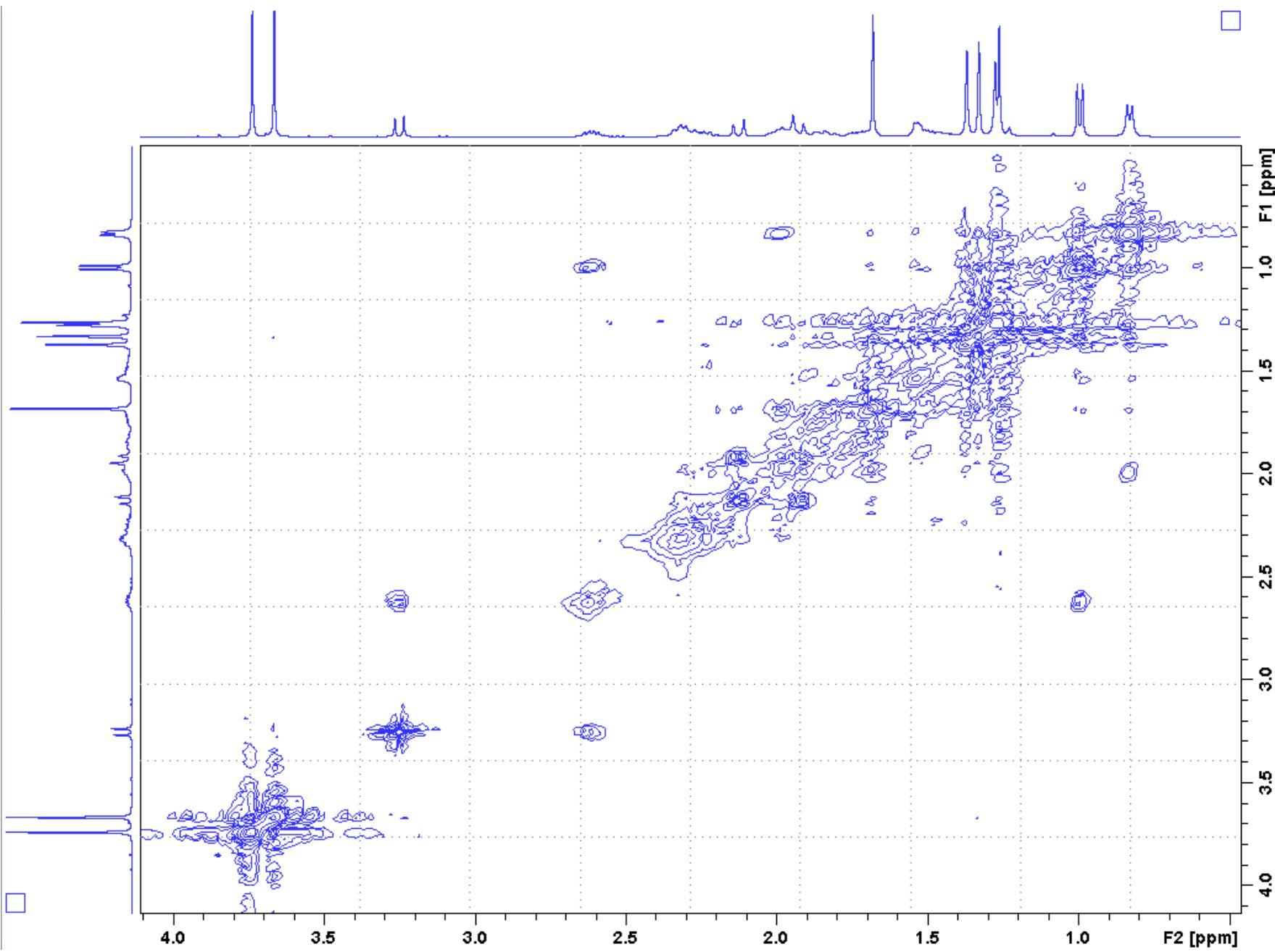


Figure S17. ^1H - ^1H COSY (400 MHz, CDCl_3) spectrum of asnovolin C (**3**).

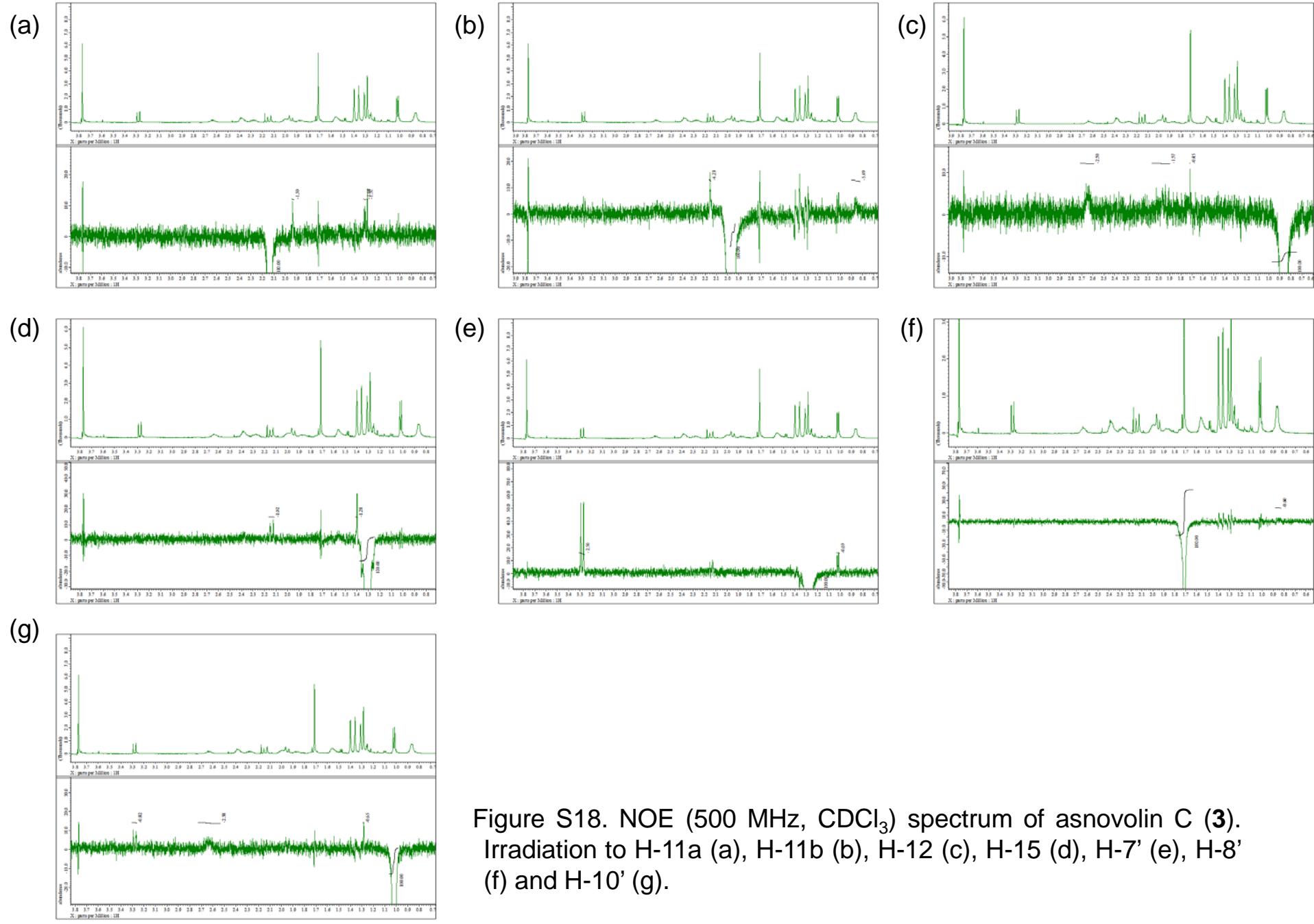


Figure S18. NOE (500 MHz, CDCl_3) spectrum of asnovolin C (**3**). Irradiation to H-11a (a), H-11b (b), H-12 (c), H-15 (d), H-7' (e), H-8' (f) and H-10' (g).

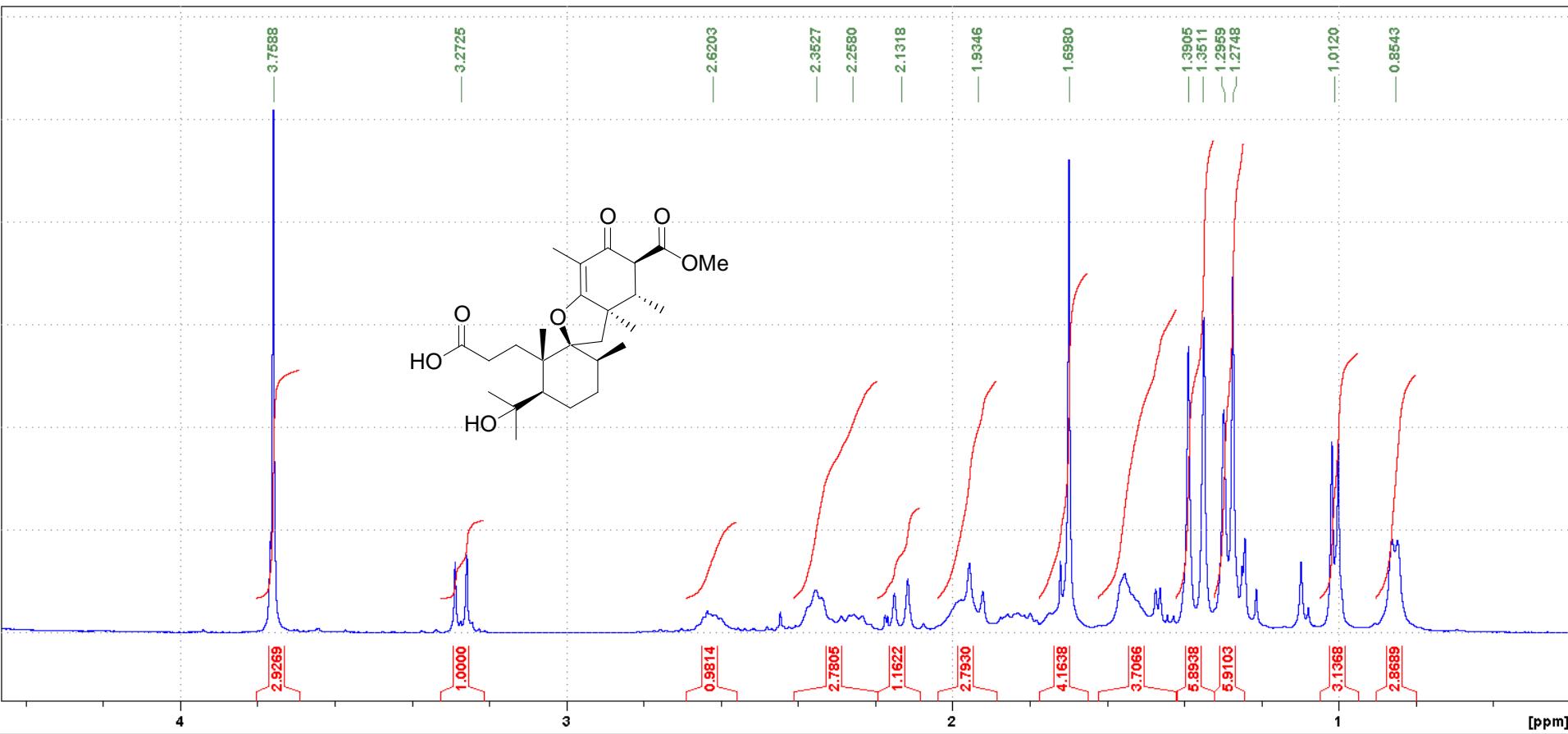


Figure S19. ^1H NMR (400 MHz, CDCl_3) spectrum of asnovolin D (**4**).

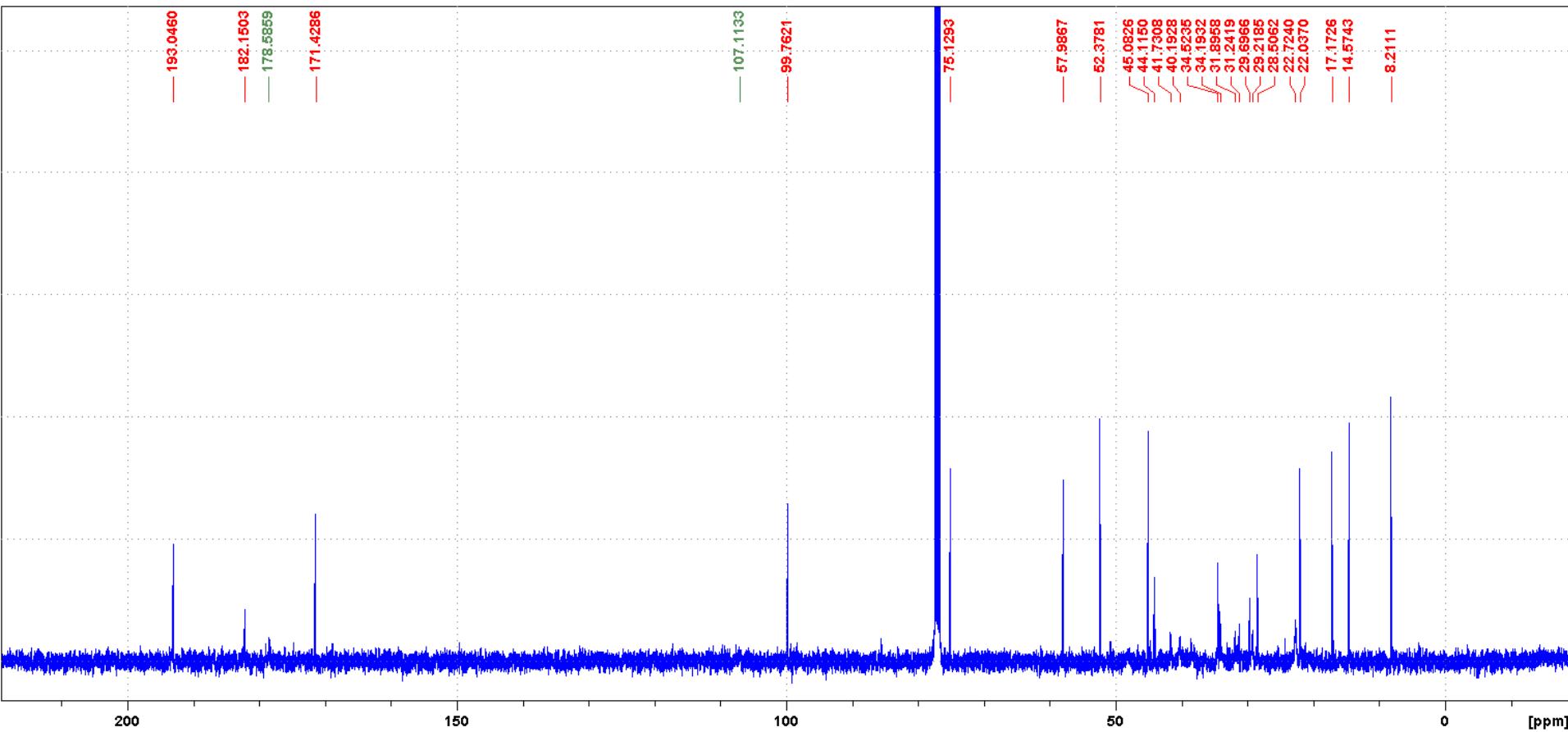


Figure S20. ^{13}C NMR (100 MHz, CDCl_3) spectrum of asnovolin D (4).

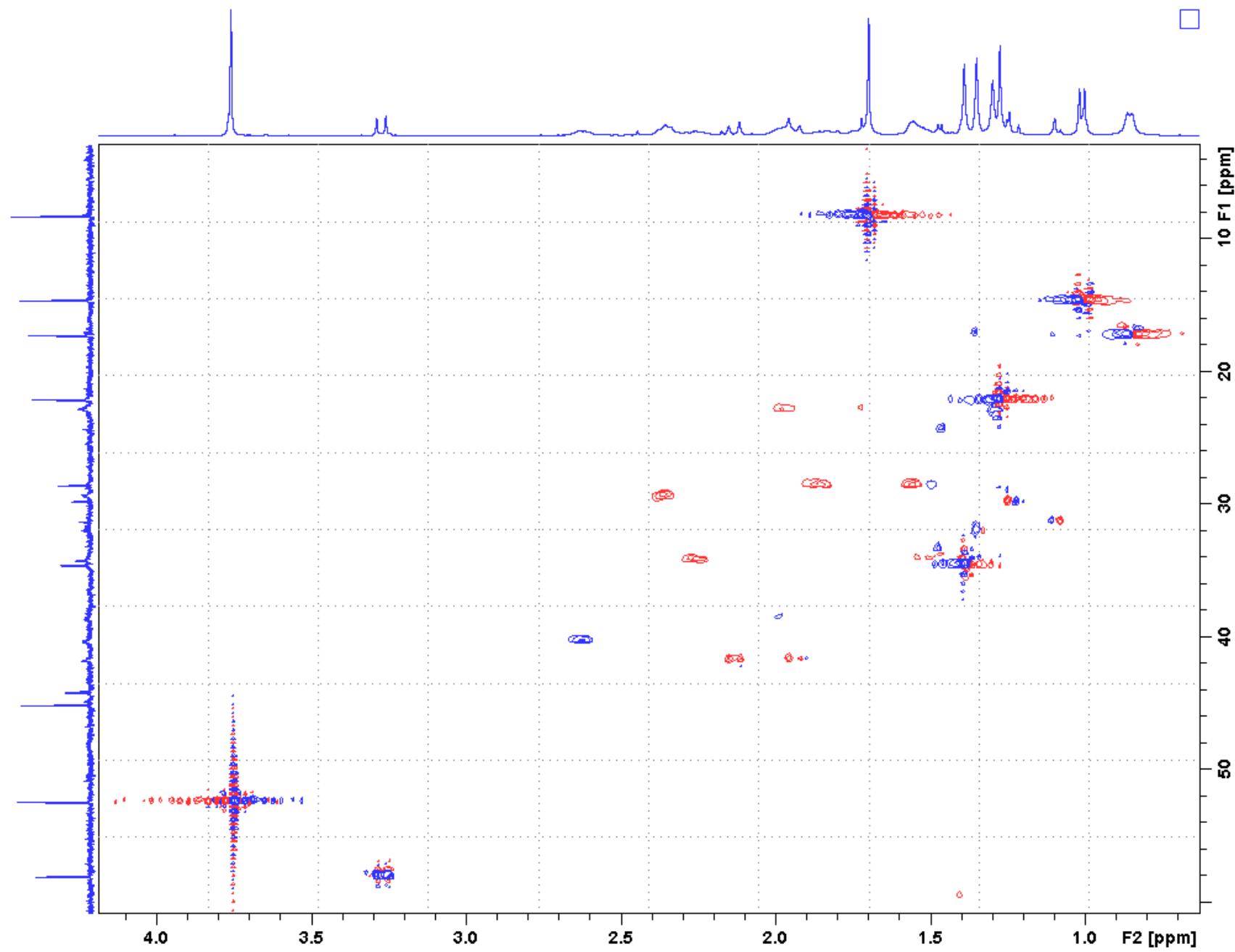


Figure S21. HSQC (400 MHz, CDCl_3) spectrum of asnovolin D (**4**).

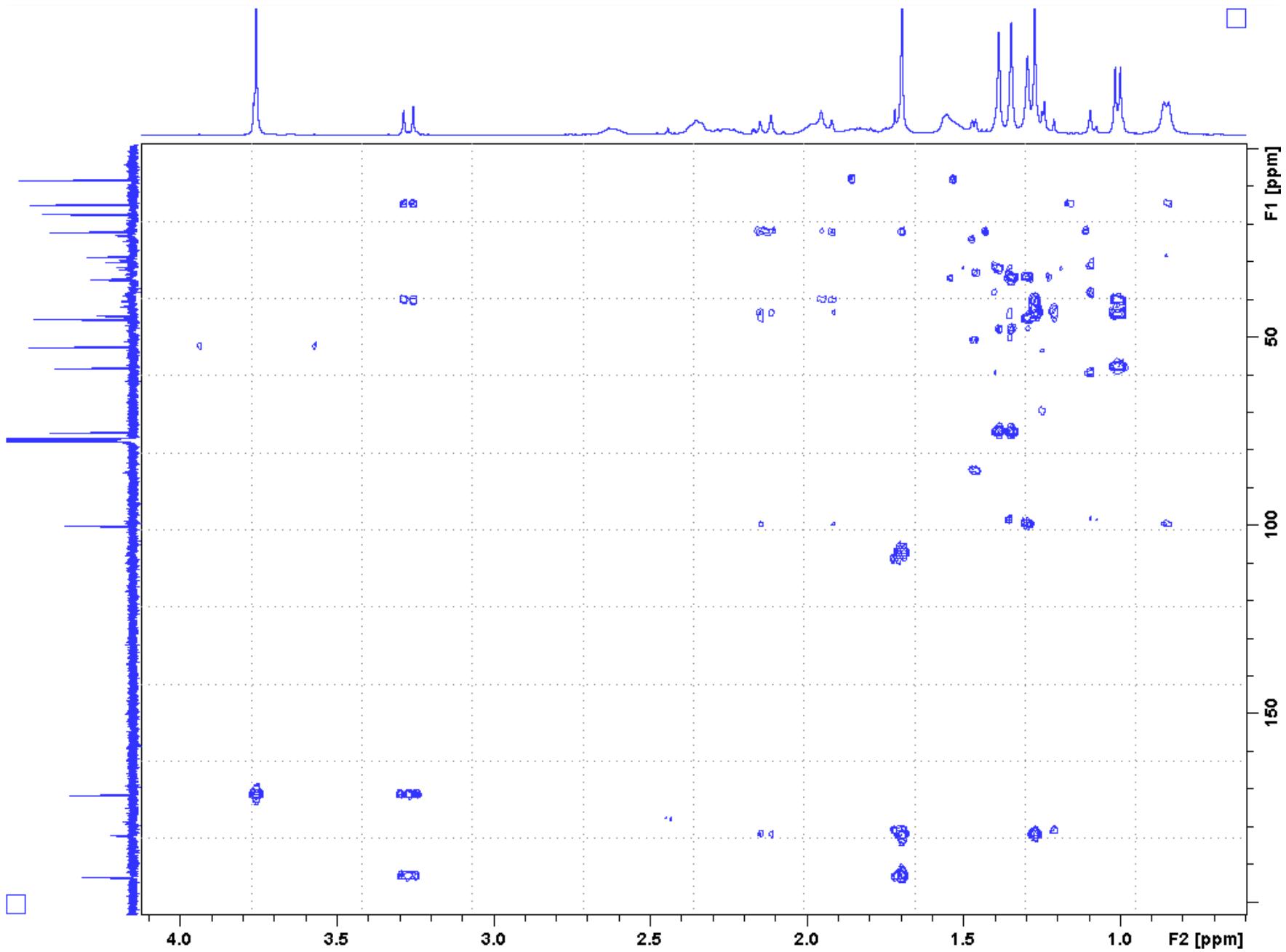


Figure S22. HMBC (400 MHz, CDCl_3) spectrum of asnovolin D (4).

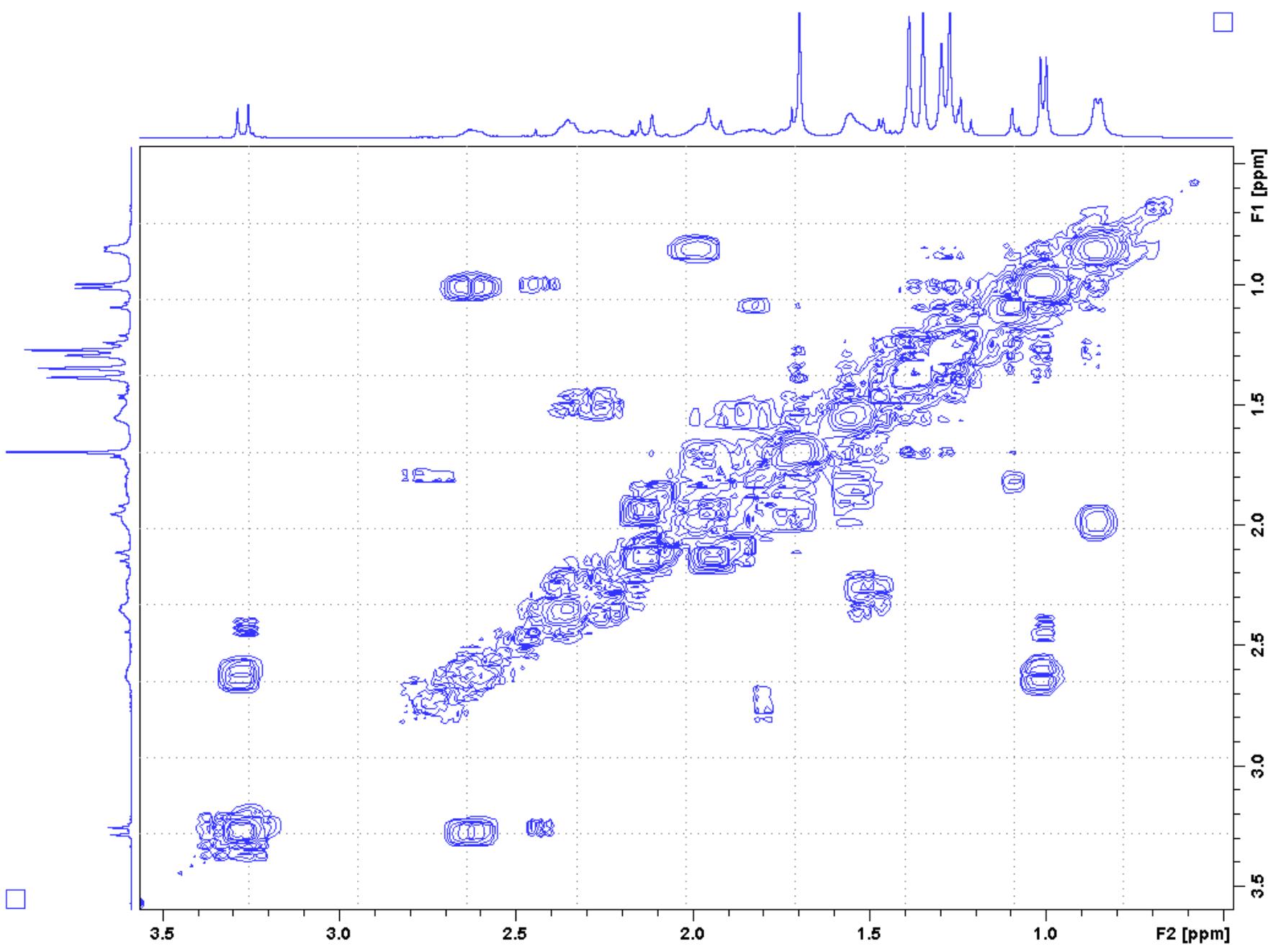


Figure S23. ^1H - ^1H COSY (400 MHz, CDCl_3) spectrum of asnovolin D (**4**).

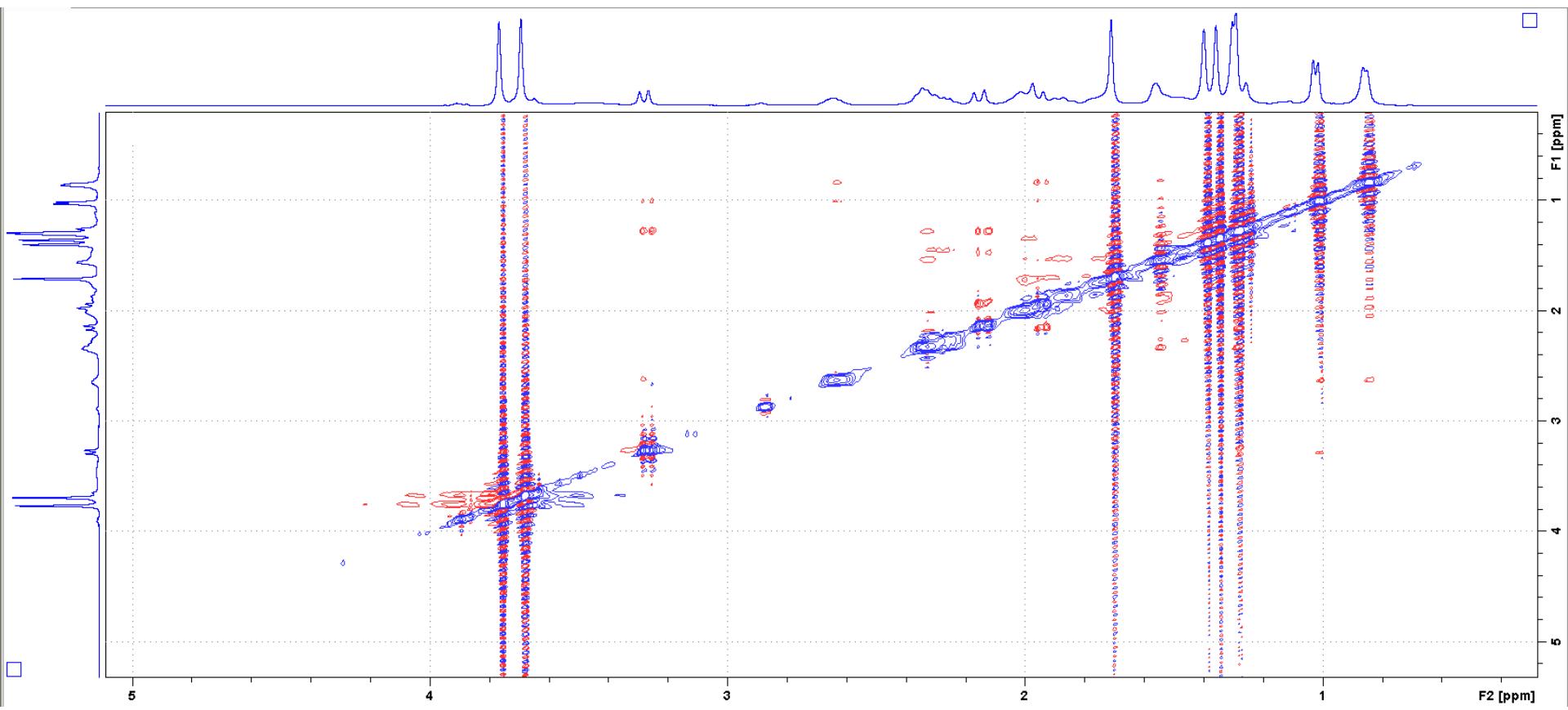


Figure S24. NOESY (400 MHz, CDCl_3) spectrum of asnovolin D (**4**).

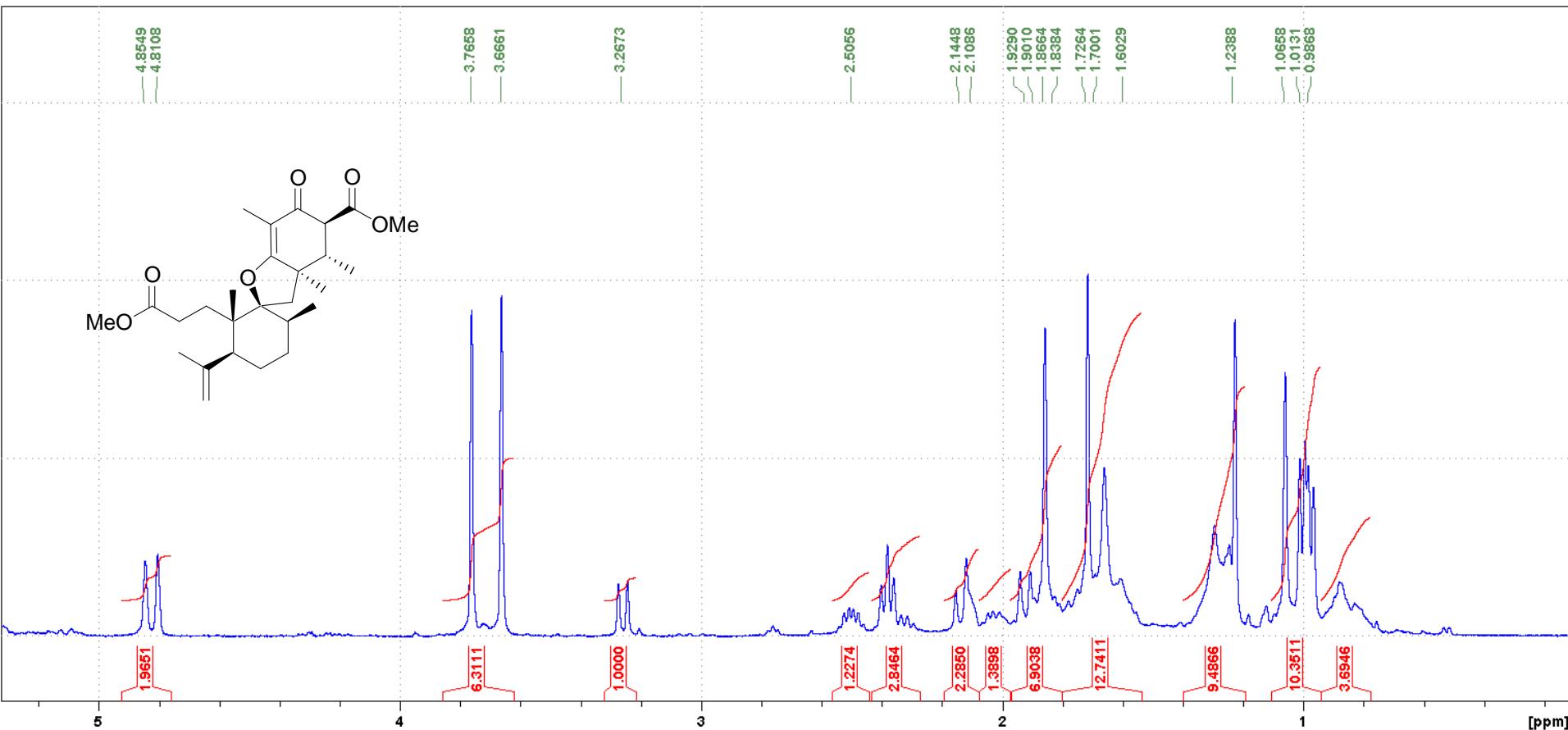


Figure S25. ^1H NMR (400 MHz, CDCl_3) spectrum of asnovolin E (**5**).

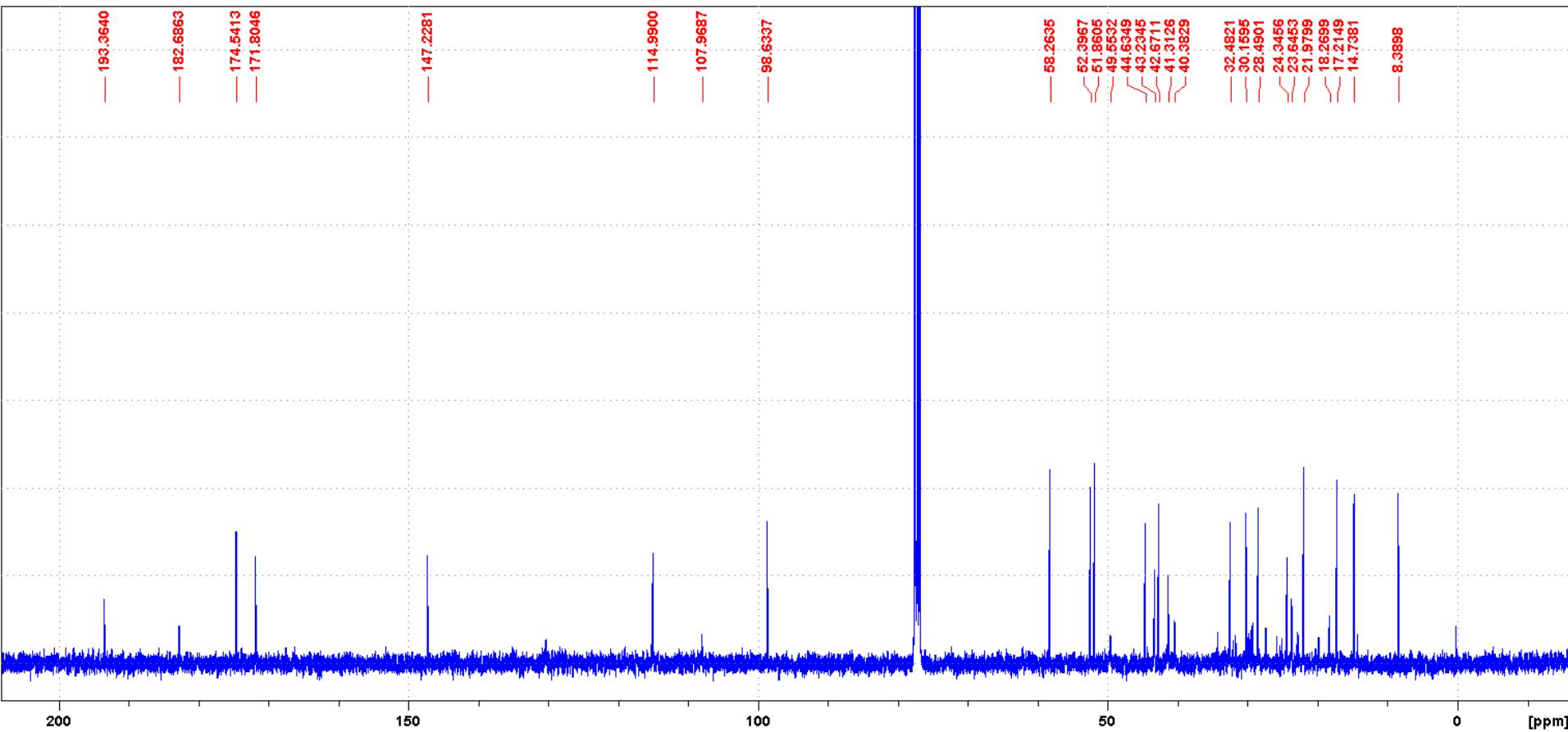


Figure S26. ^{13}C NMR (100 MHz, CDCl_3) spectrum of asnovolin E (5).

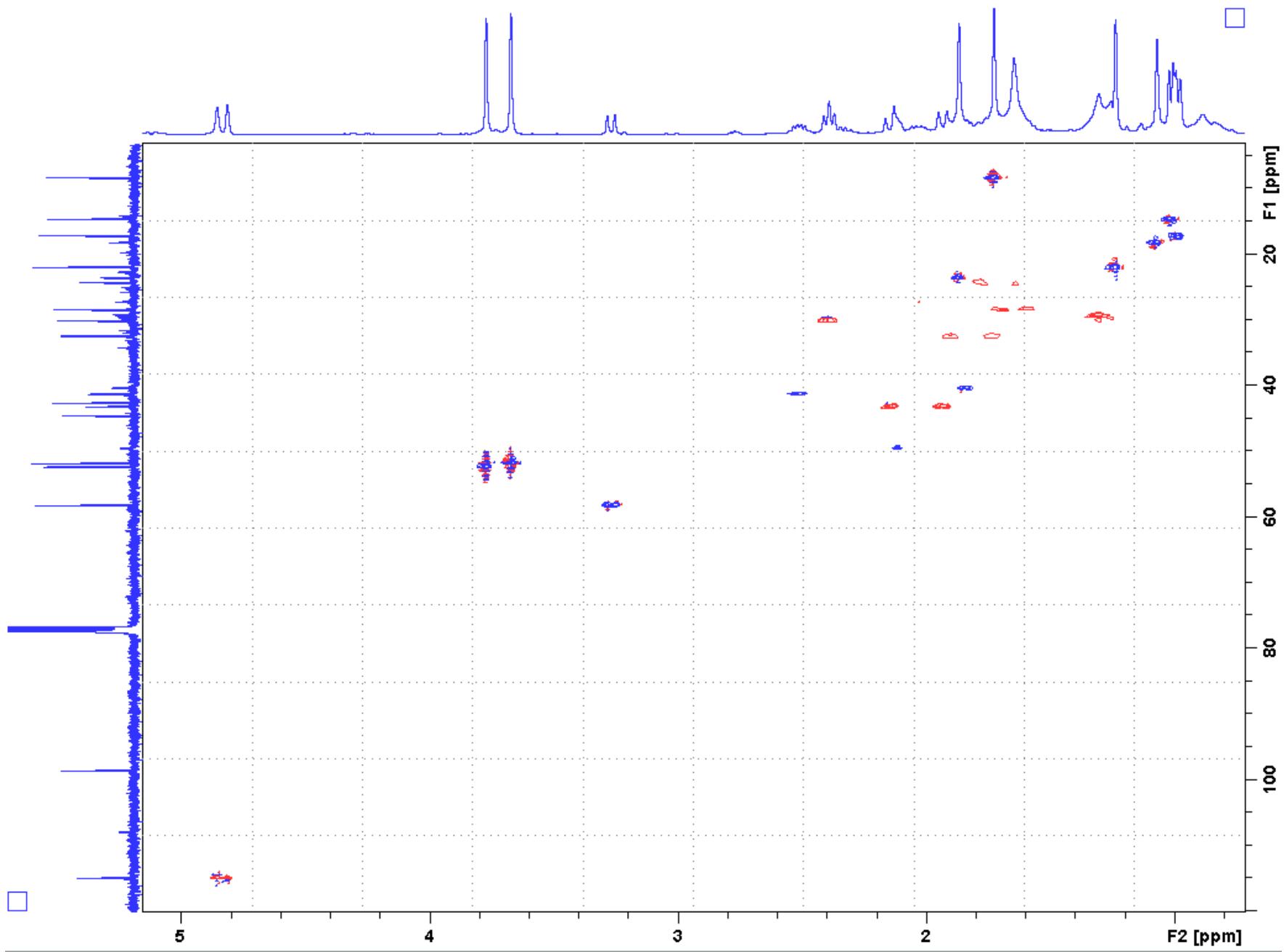


Figure S27. HSQC (400 MHz, CDCl_3) spectrum of asnovolin E (**5**).

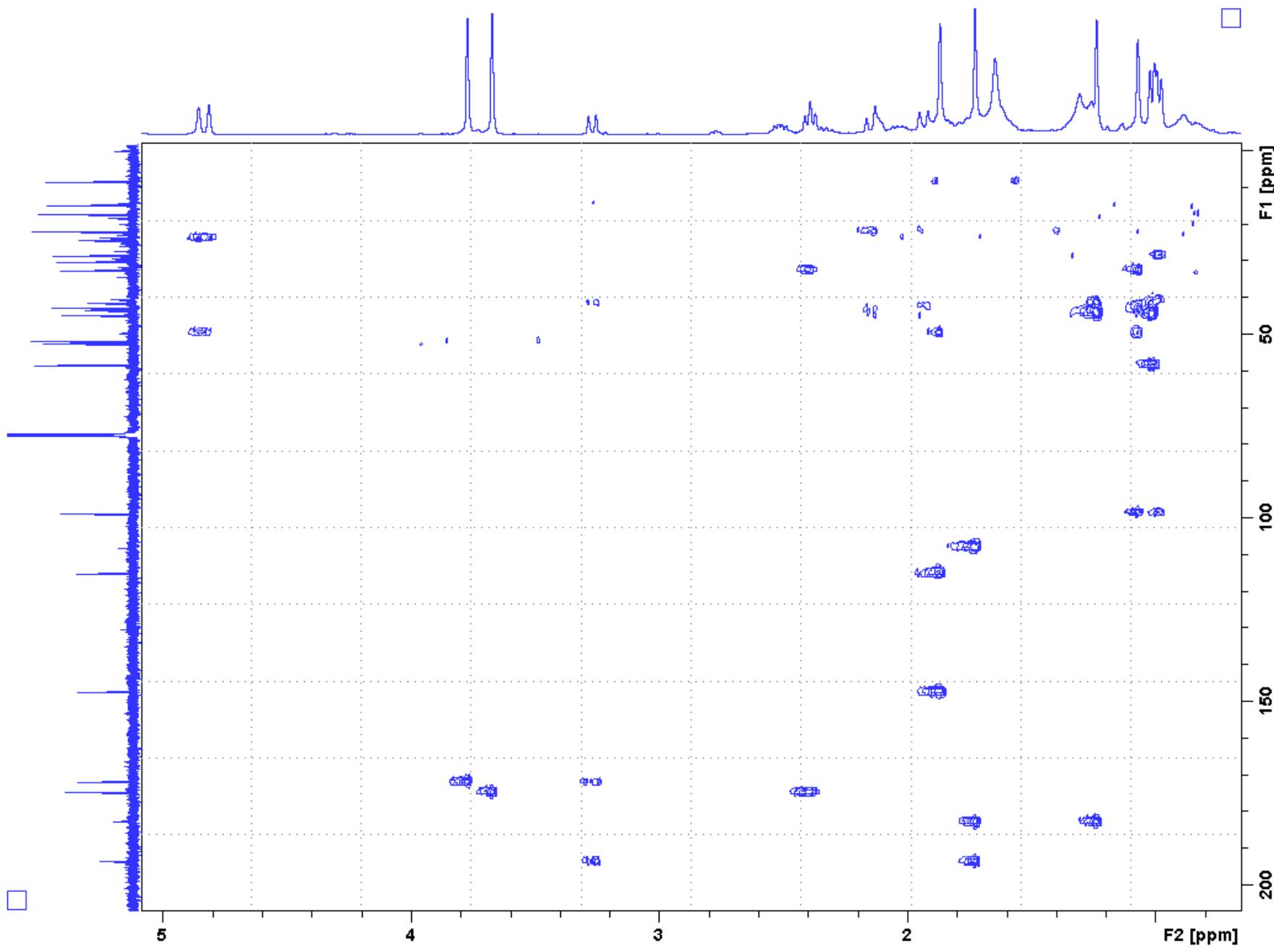


Figure S28. HMBC (400 MHz, CDCl_3) spectrum of asnovolin E (5).

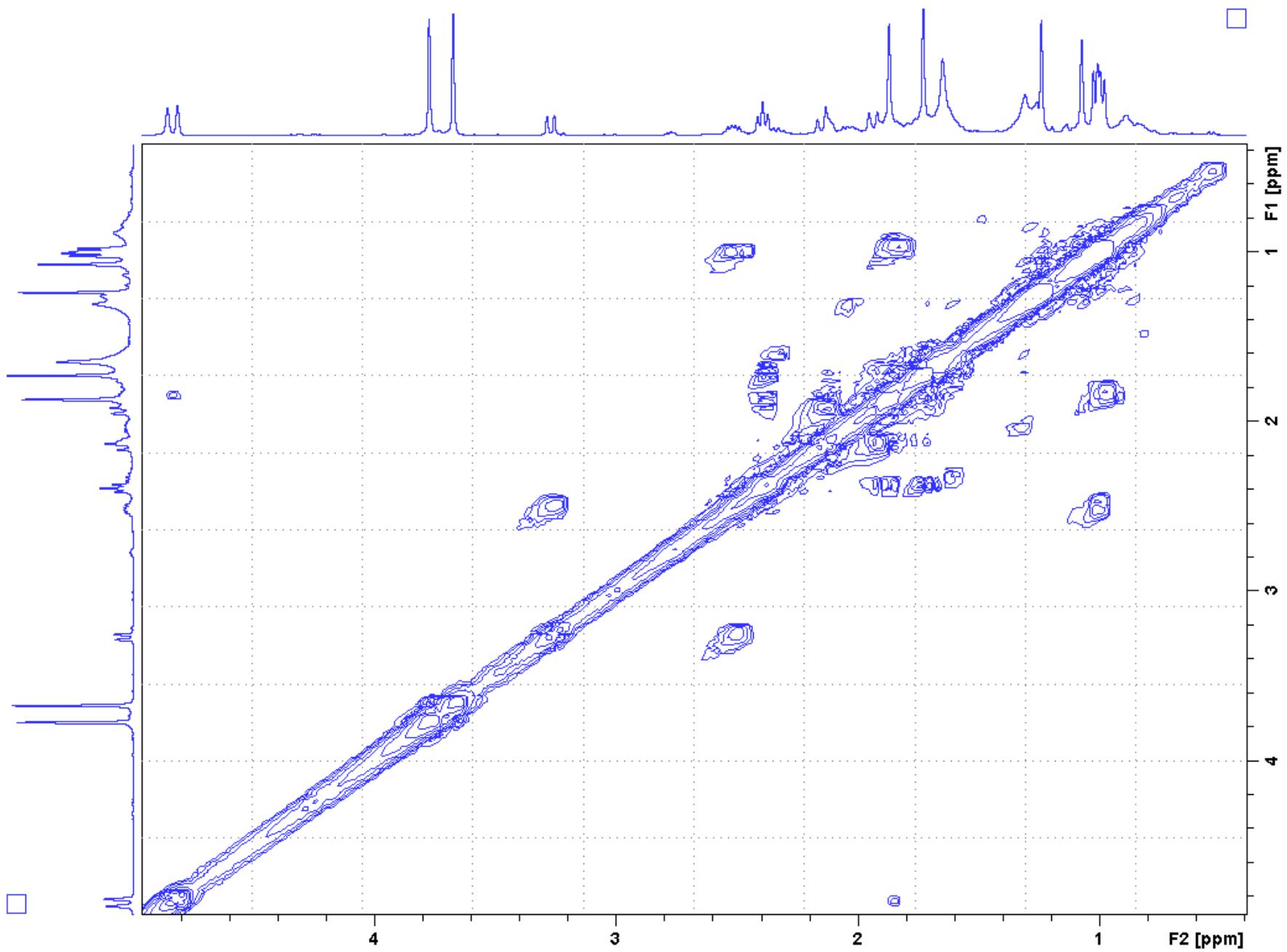


Figure S29. ^1H - ^1H COSY (400 MHz, CDCl_3) spectrum of asnovolin E (5).

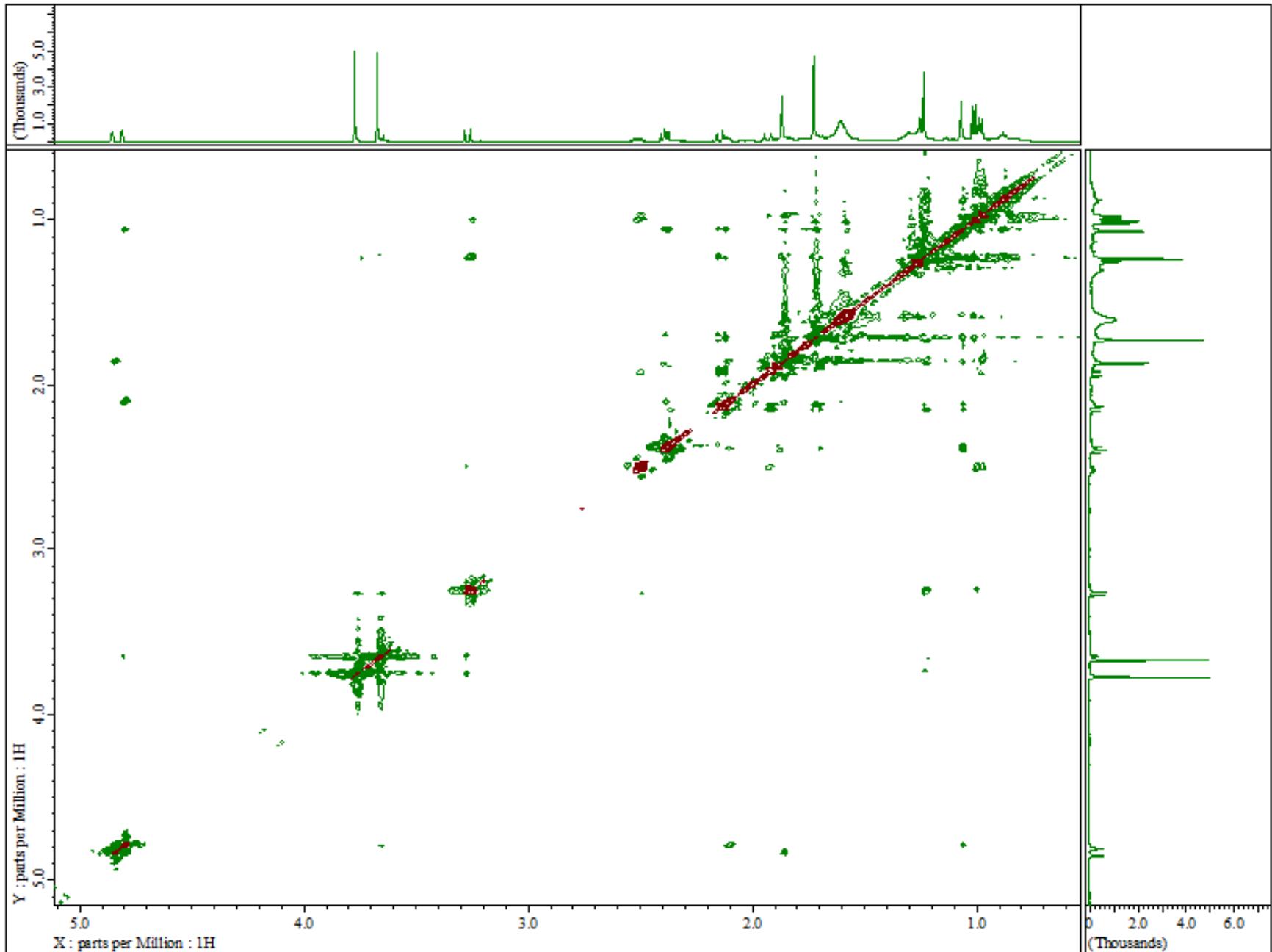


Figure S30. NOESY (400 MHz, CDCl_3) spectrum of asnovolin E (**5**).

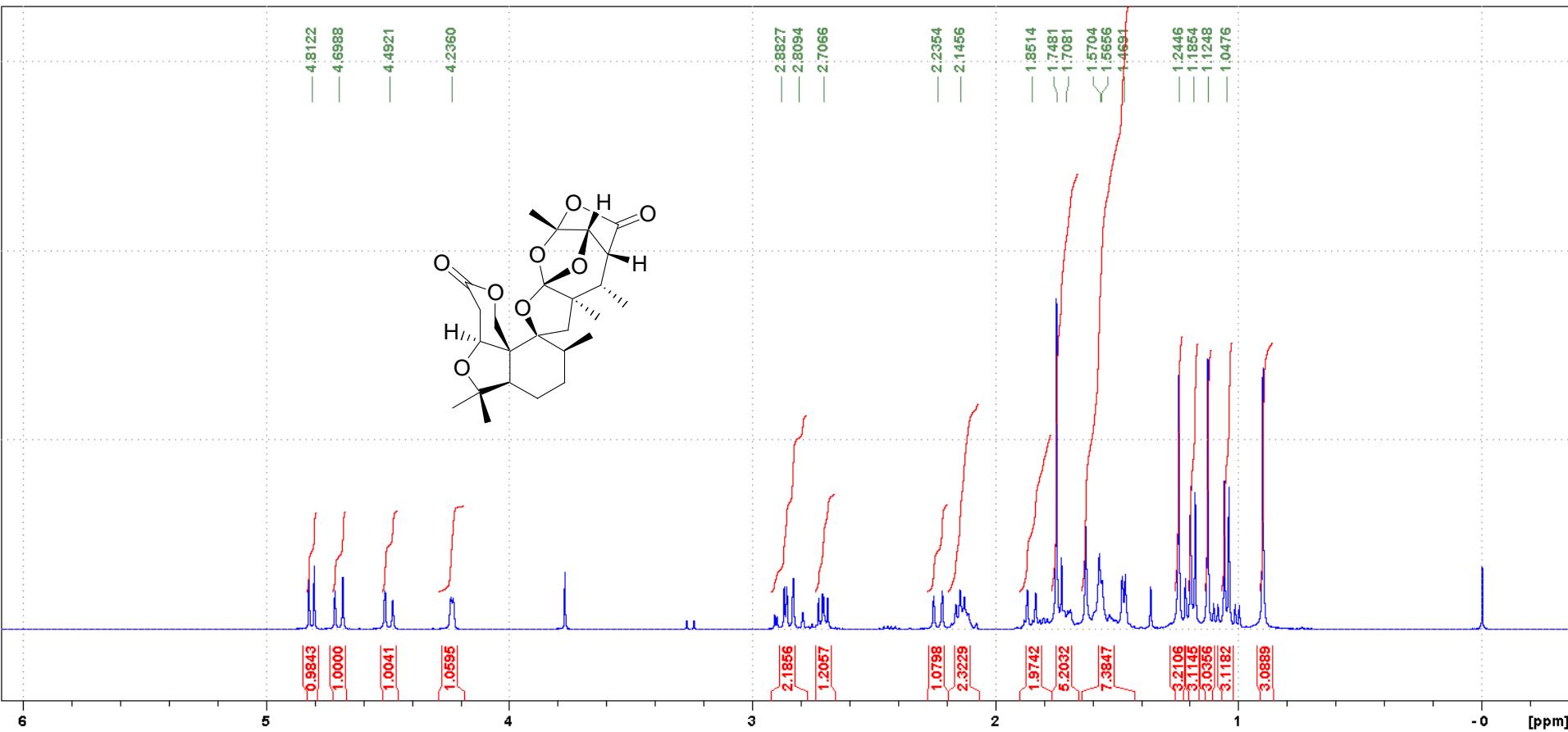


Figure S31. ^1H NMR (400 MHz, CDCl_3) spectrum of asnovolin F (**6**).

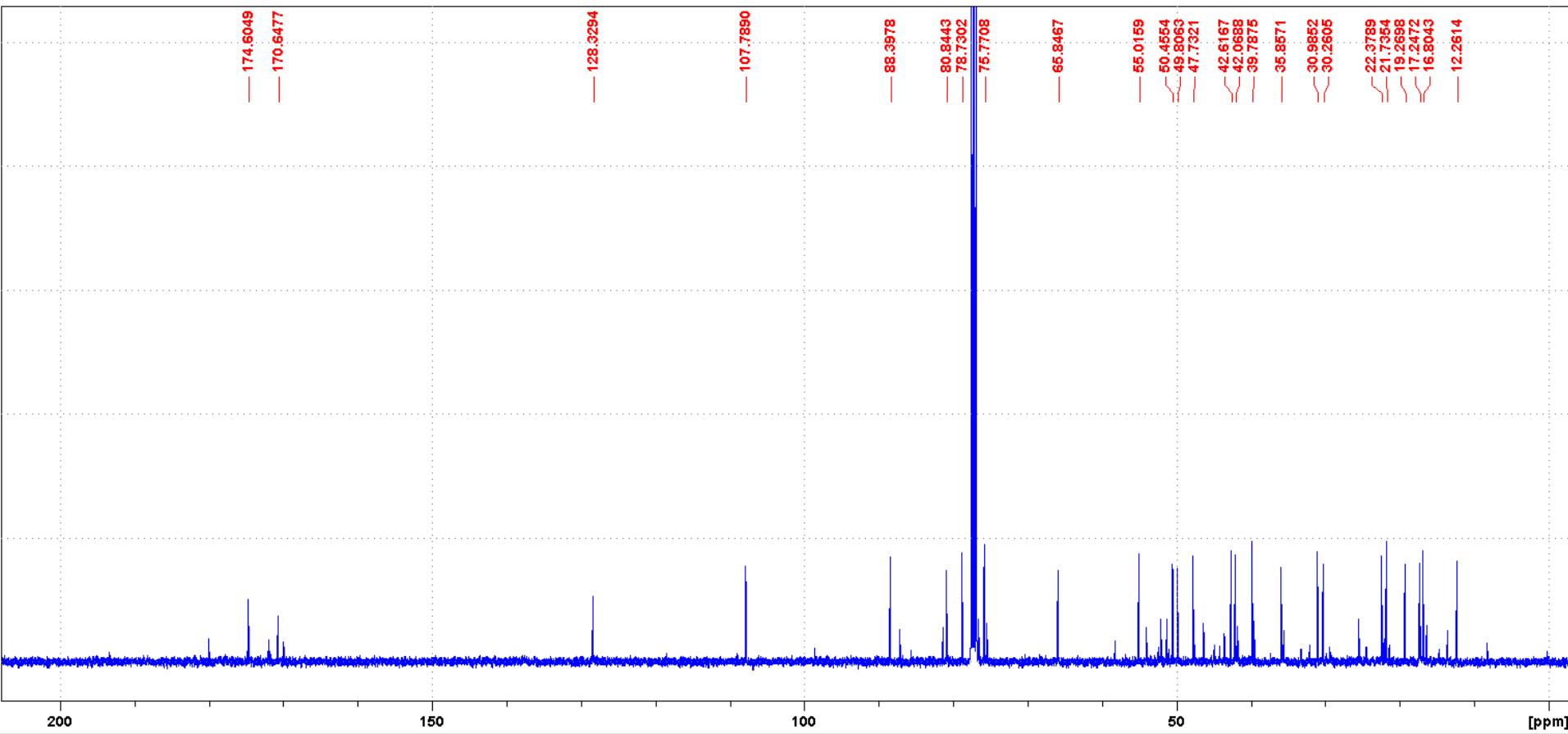


Figure S32. ^{13}C NMR (100 MHz, CDCl_3) spectrum of asnovolin F (**6**).

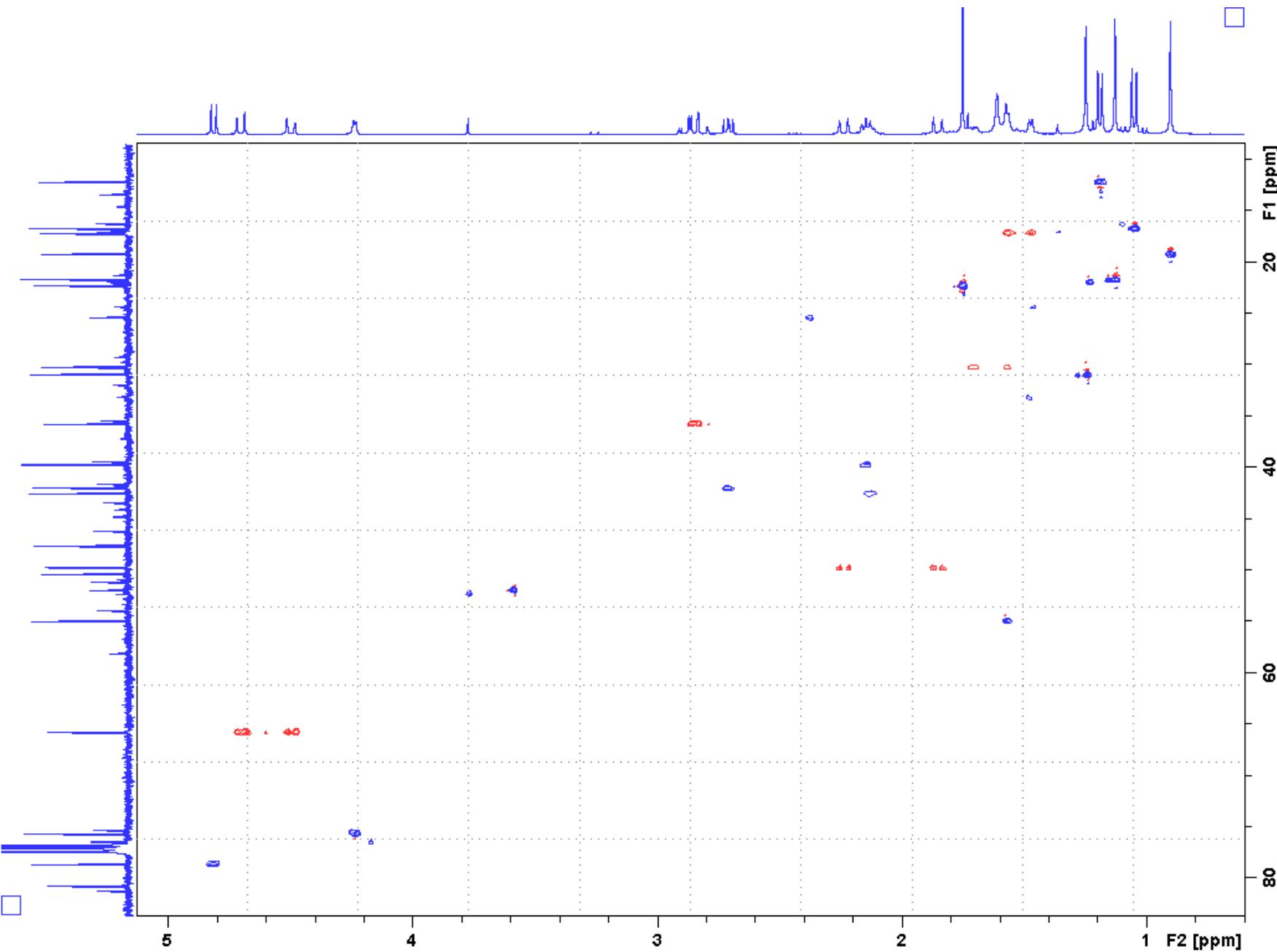


Figure S33. HSQC (400 MHz, CDCl_3) spectrum of asnovolin F (6).

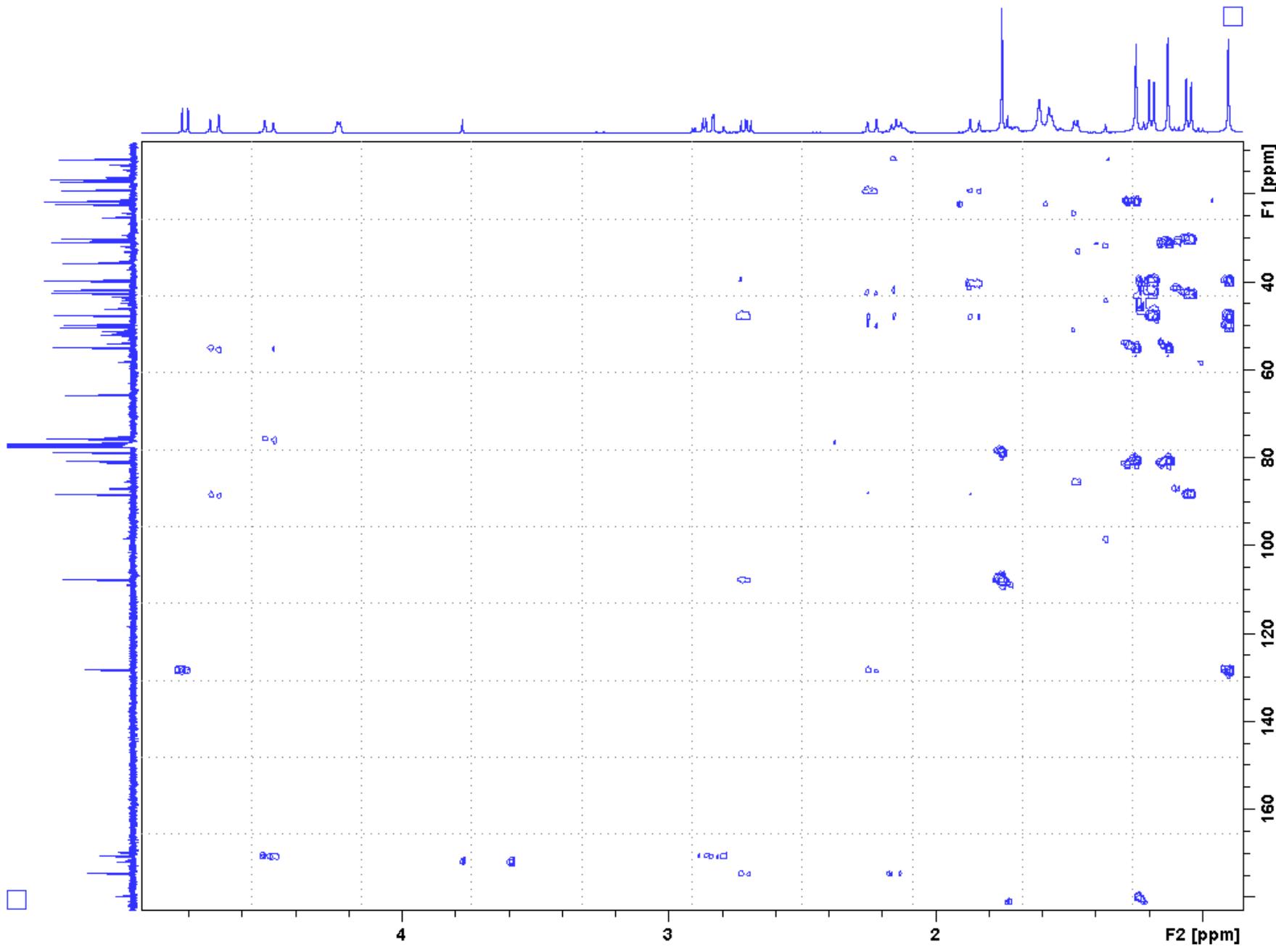


Figure S34. HMBC (400 MHz, CDCl_3) spectrum of asnovolin F (**6**).

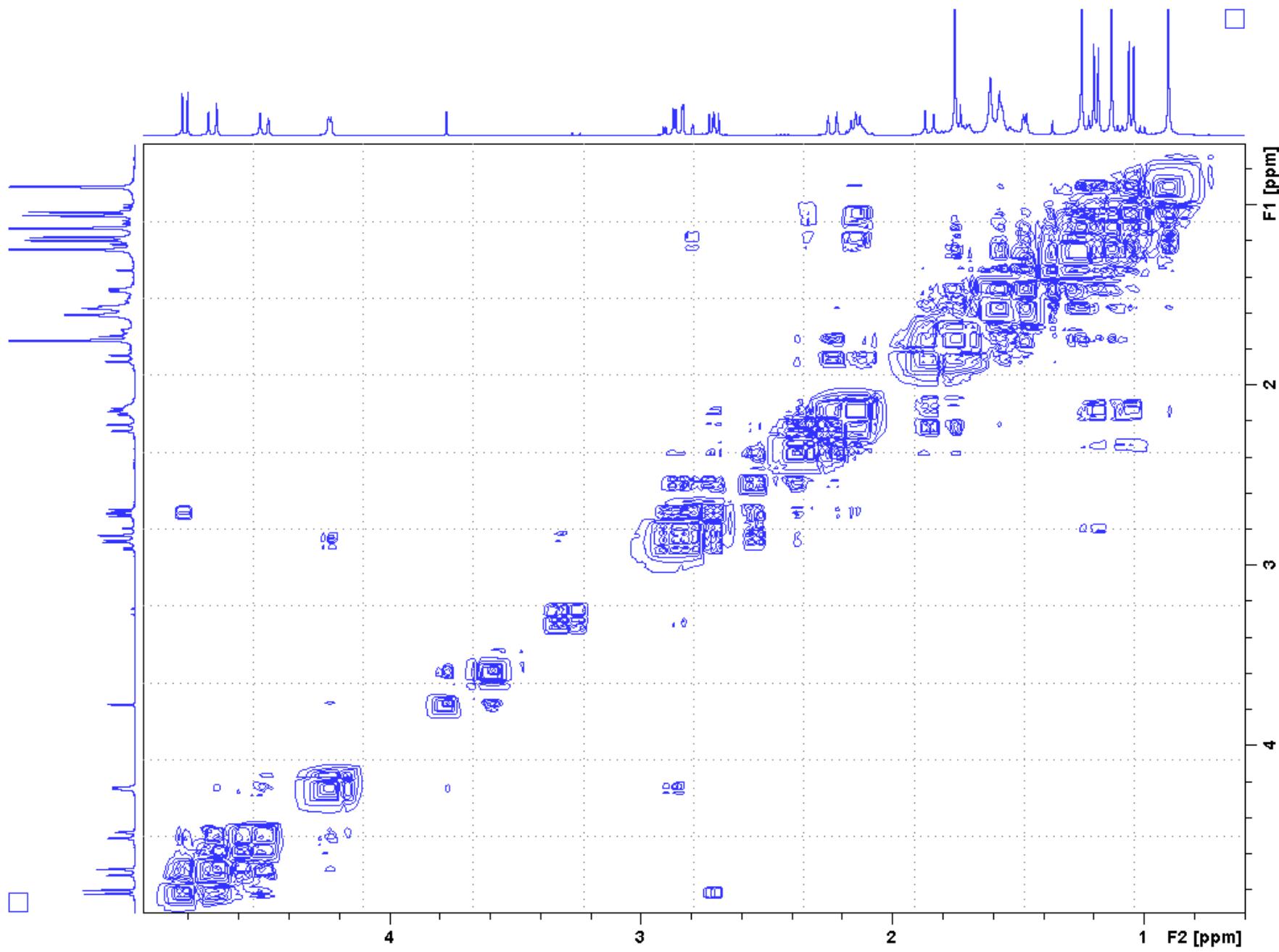


Figure S35. ^1H - ^1H COSY (400 MHz, CDCl_3) spectrum of asnovolin F (6).

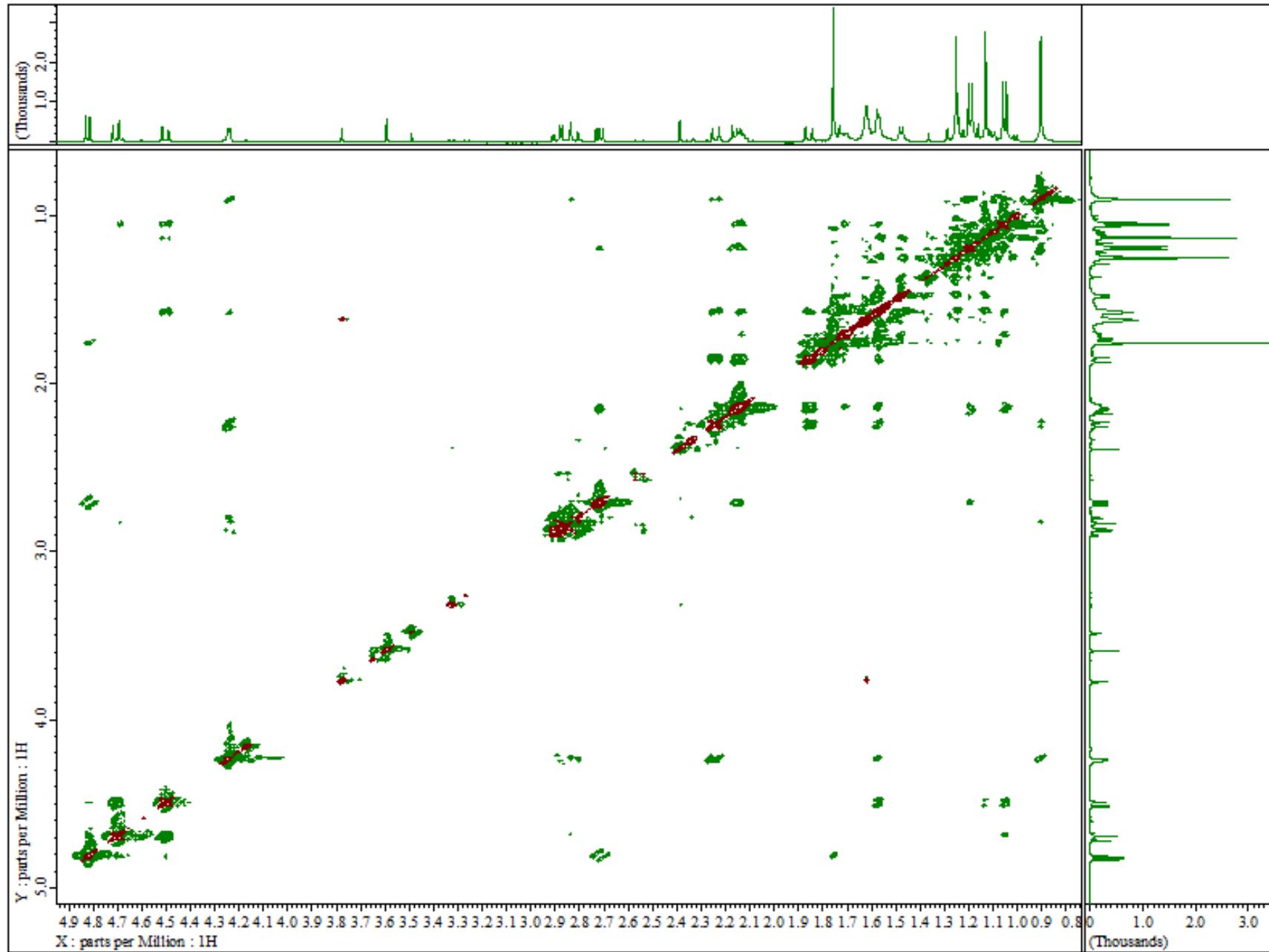


Figure S36. NOESY (400 MHz, CDCl_3) spectrum of asnovolin F (6).

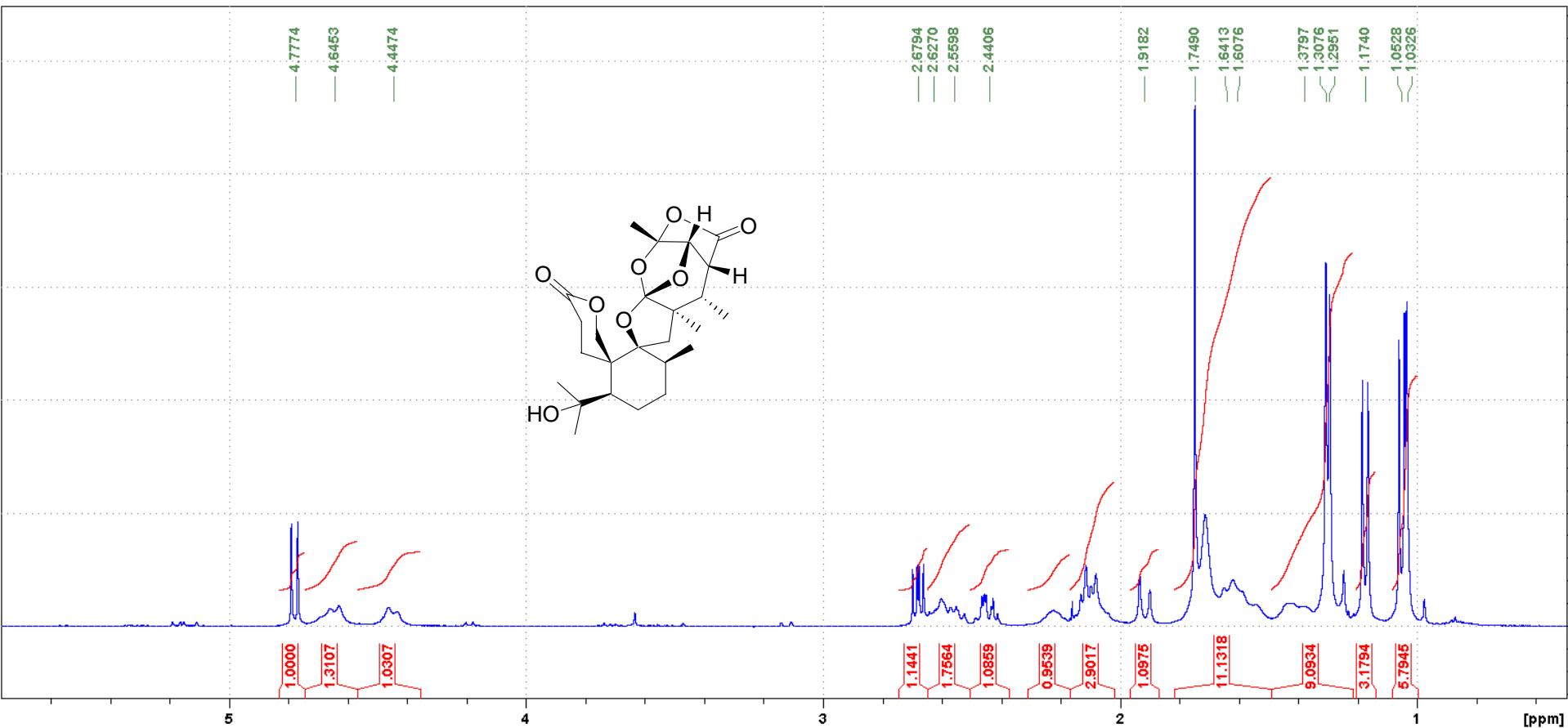


Figure S37. ^1H NMR (400 MHz, CDCl_3) spectrum of asnovolin G (7).

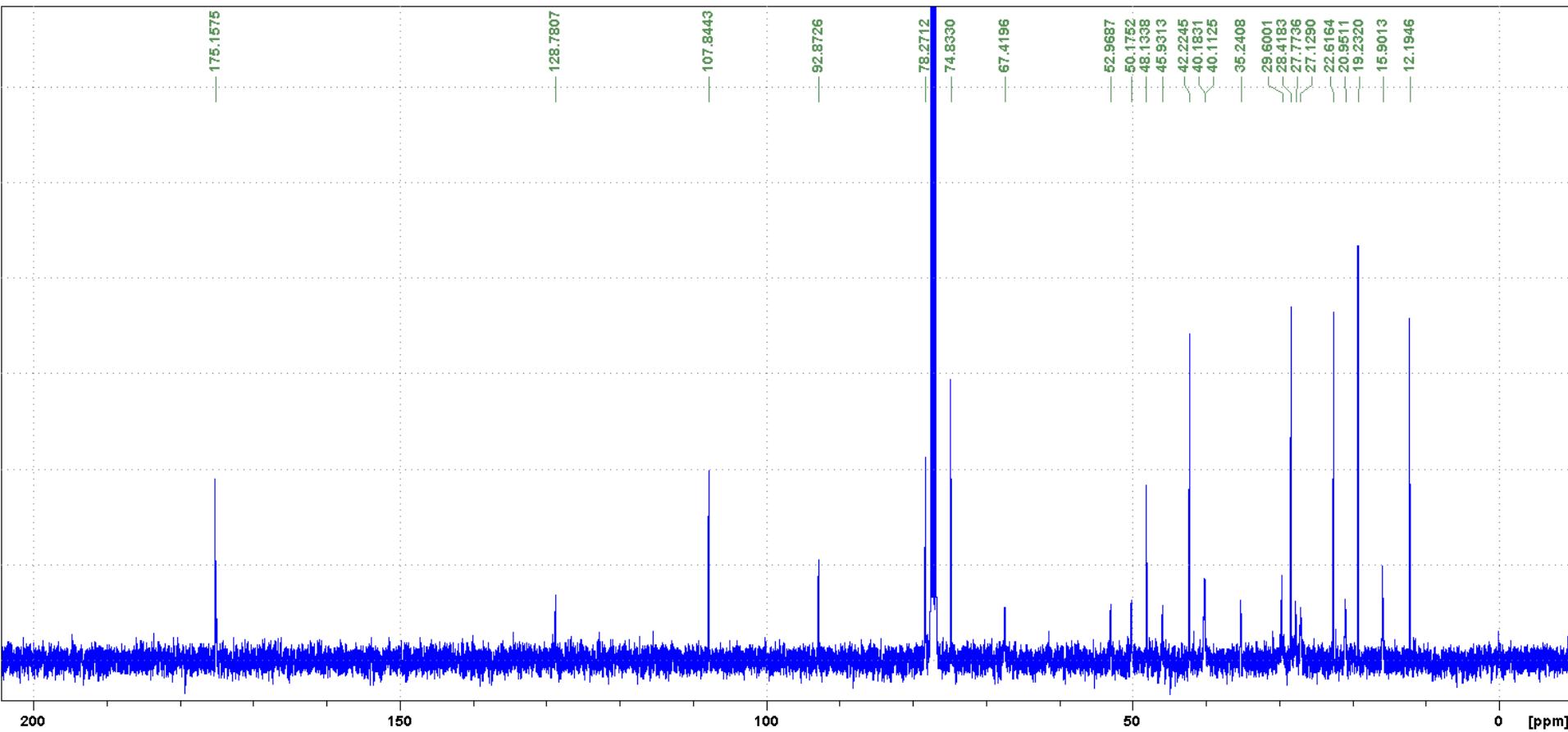


Figure S38. ^{13}C NMR (100 MHz, CDCl_3) spectrum of asnovolin G (7).

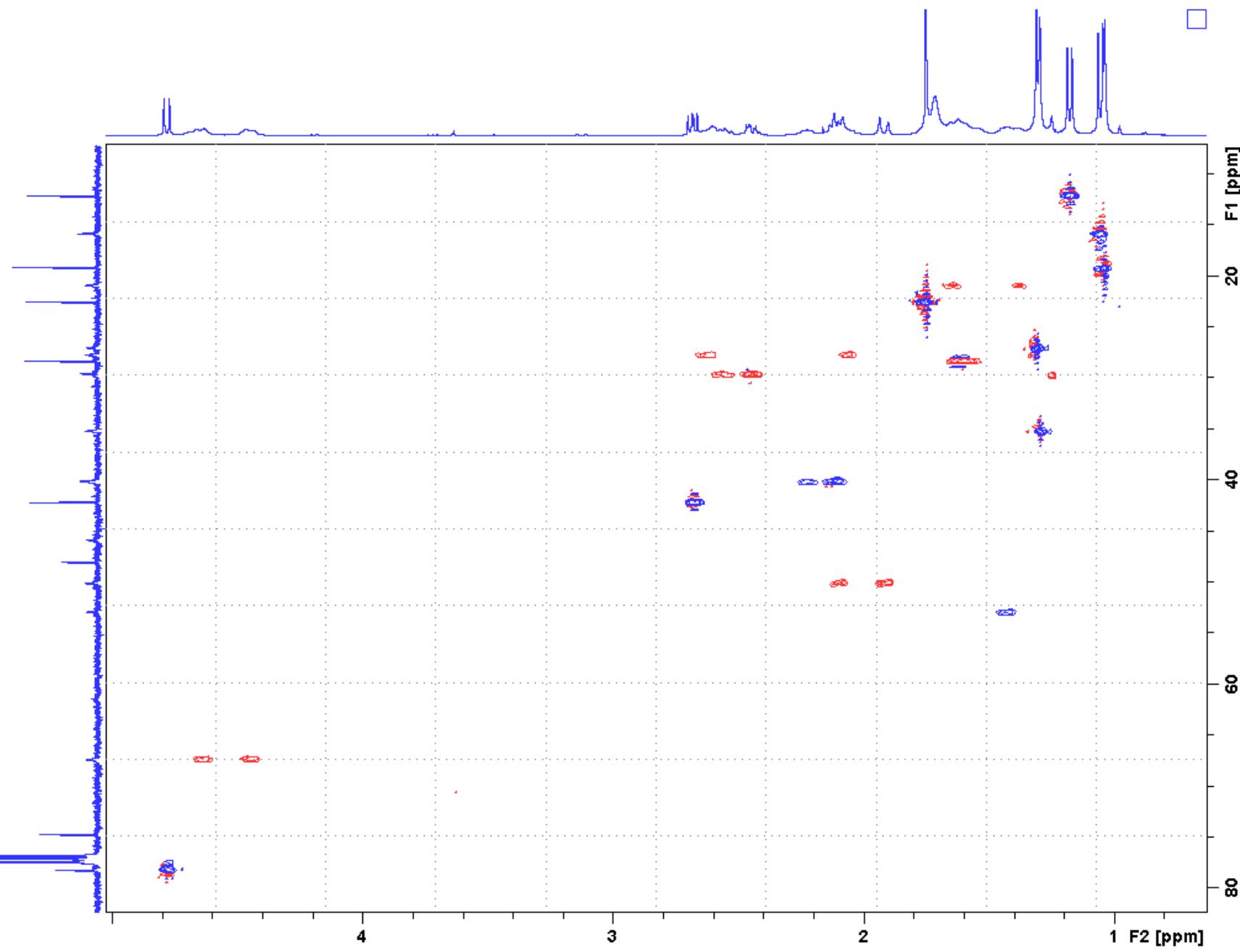


Figure S39. HSQC (400 MHz, CDCl_3) spectrum of asnovolin G (7).

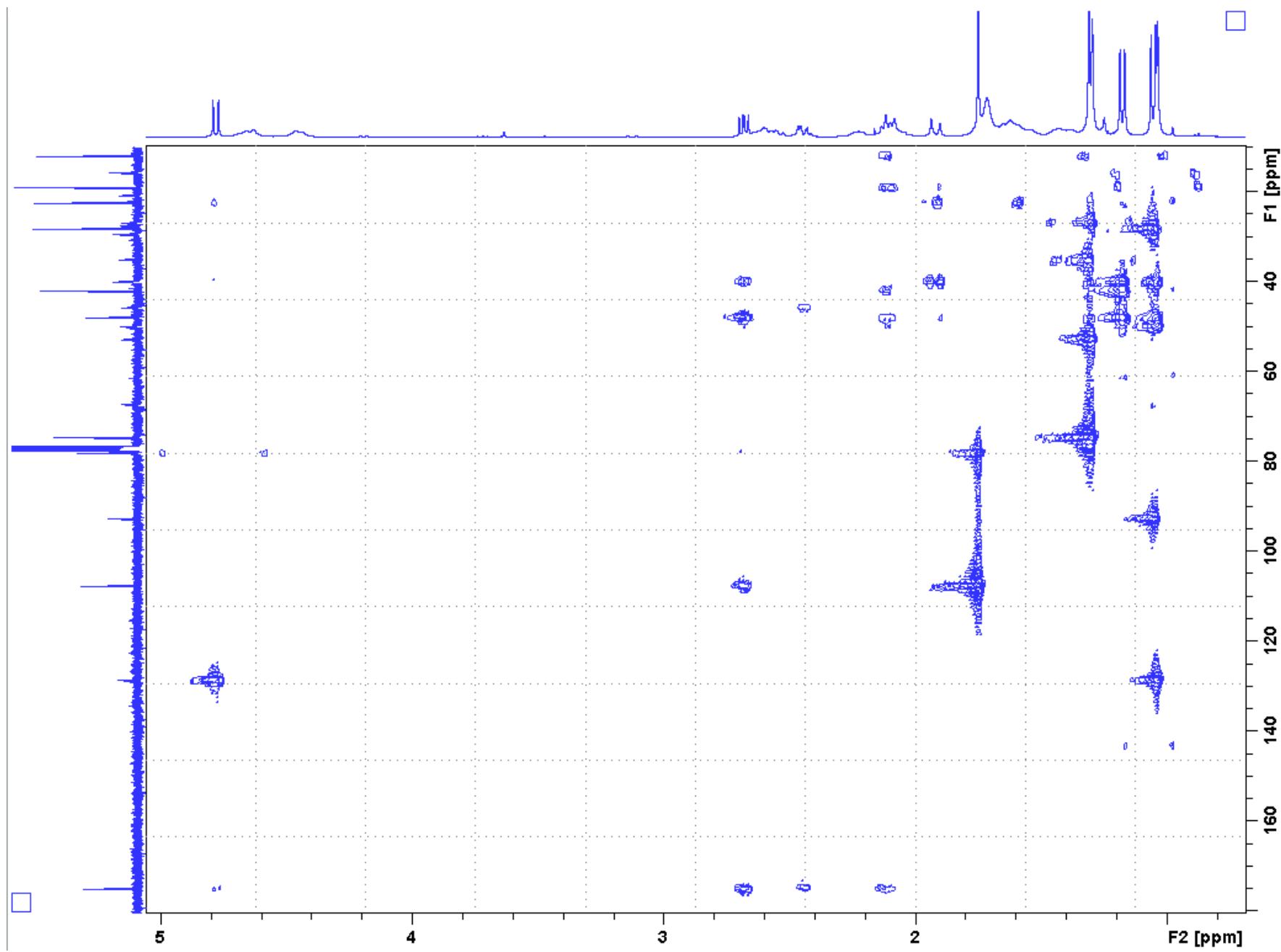


Figure S40. HMBC (400 MHz, CDCl_3) spectrum of asnovolin G (7).

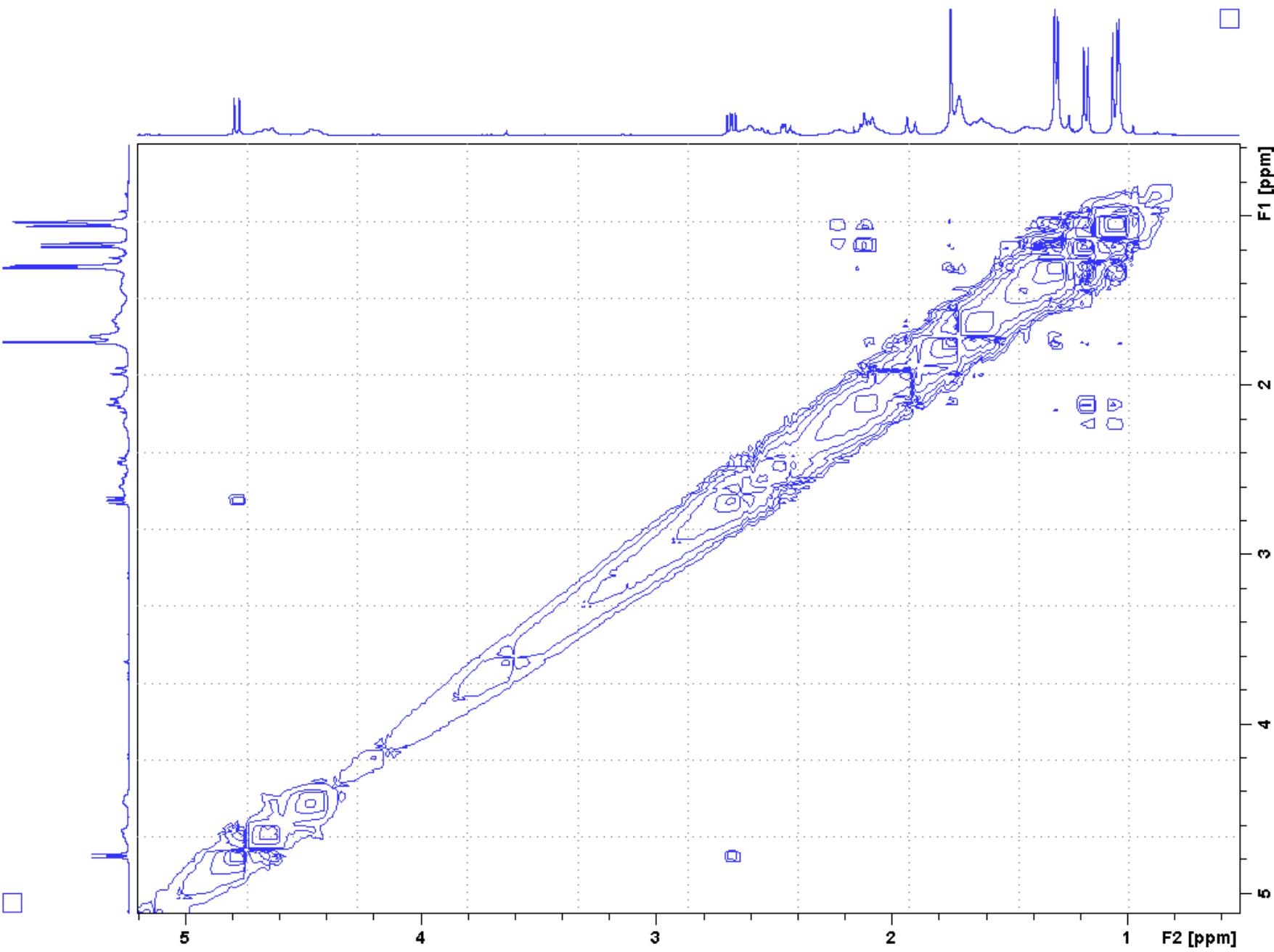


Figure S41. ^1H - ^1H COSY (400 MHz, CDCl_3) spectrum of asnovolin G (7).

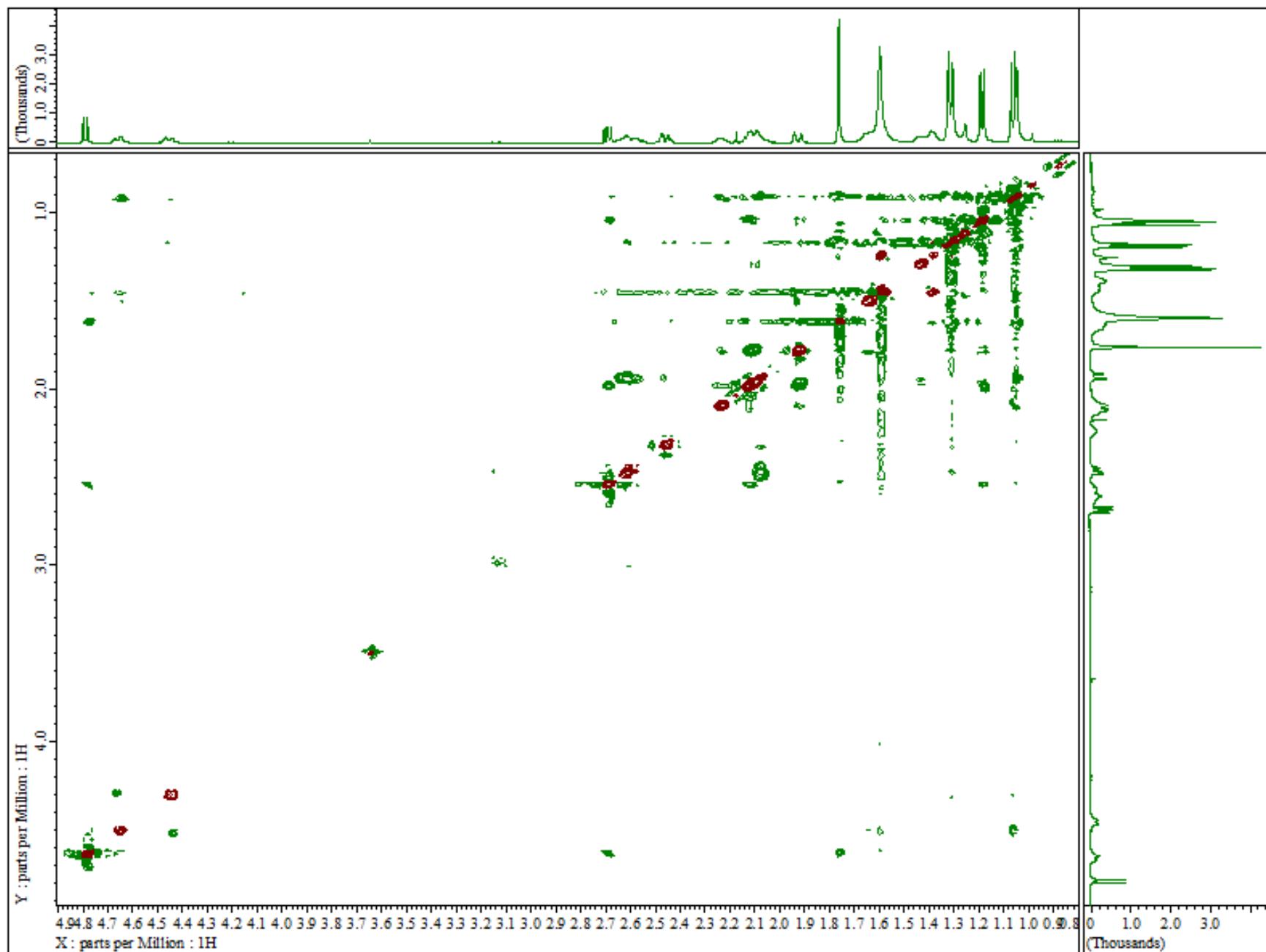


Figure S42. NOESY (400 MHz, CDCl_3) spectrum of asnovolin G (7).

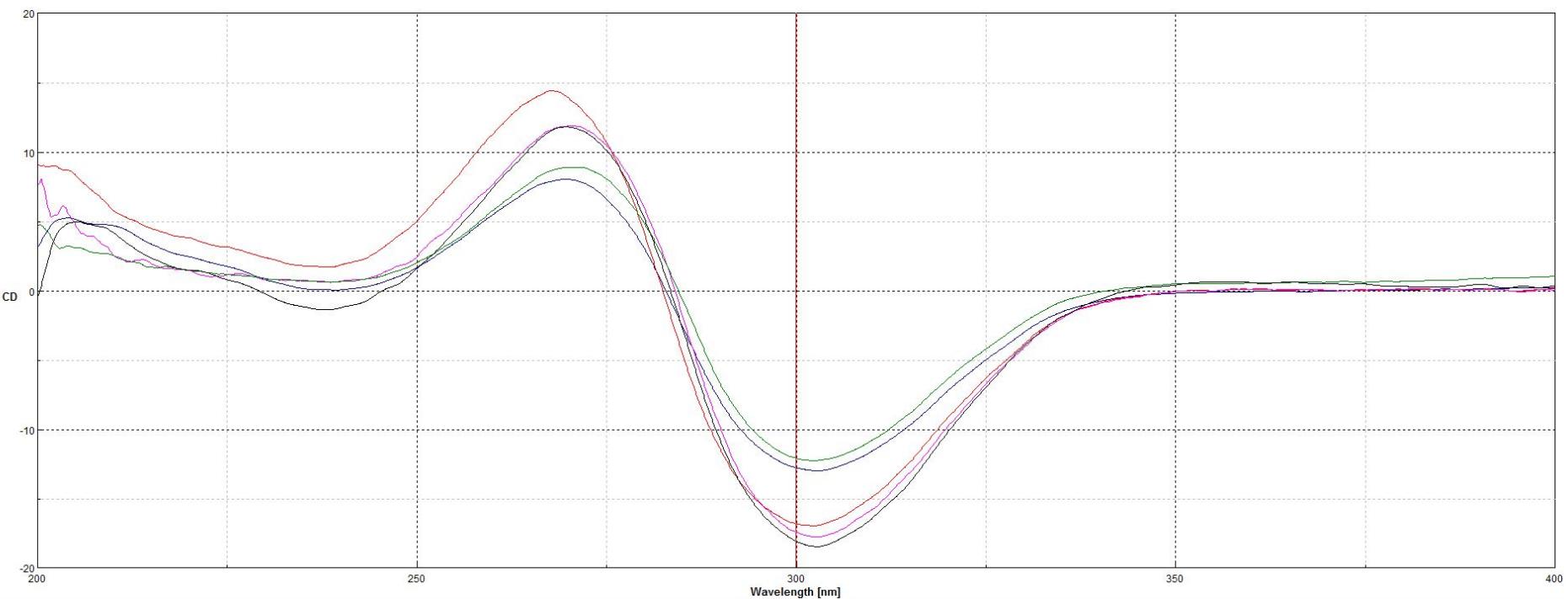
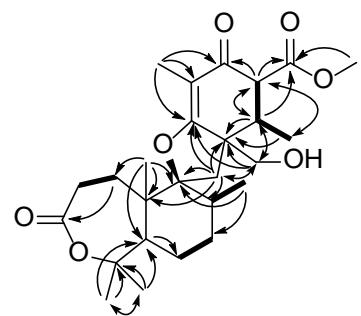
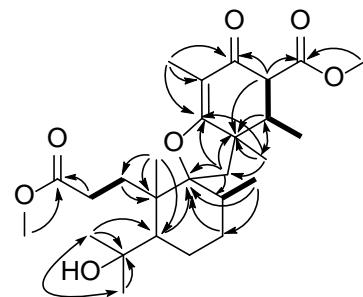


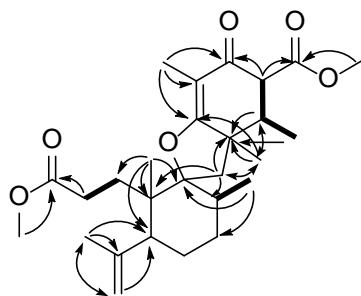
Figure S43. Comparison of CD spectrums of asnovolins A-E (**1–5**) in MeOH. **1** (blue), **2** (red), **3** (pink), **4** (green) and **5** (black).



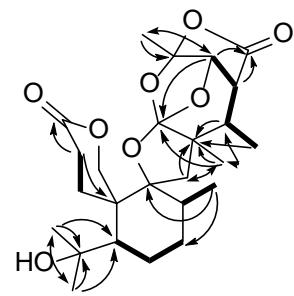
Asnovolin B (**2**)



Asnovolin D (**4**)



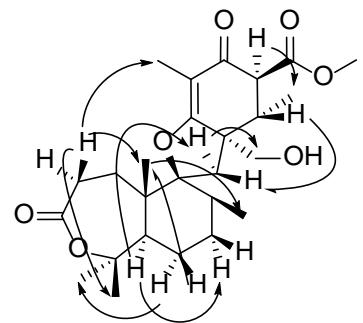
Asnovolin E (**5**)



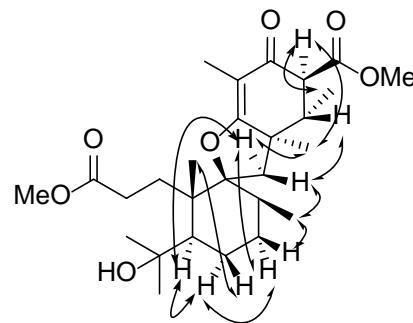
Asnovolin G (**7**)

→ HMBC
— ¹H-¹H COSY

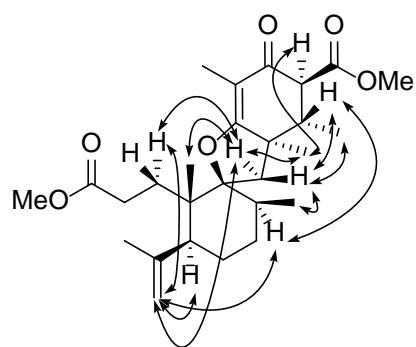
Figure S44. Key 2D-NMR correlations for asnovolins B, D, E and G (**2**, **4**, **5** and **7**)



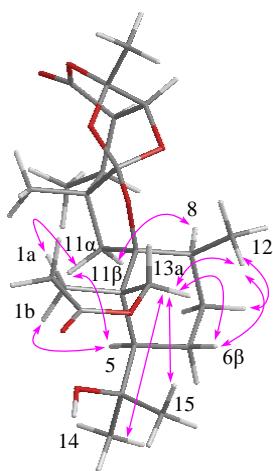
Asnovolin B (**2**)



Asnovolin D (**4**)



Asnovolin E (**5**)



Asnovolin G (**7**)

Figure S45. Key NOESY correlations of asnovolins B, D, E and G (**2**, **4**, **5** and **7**)

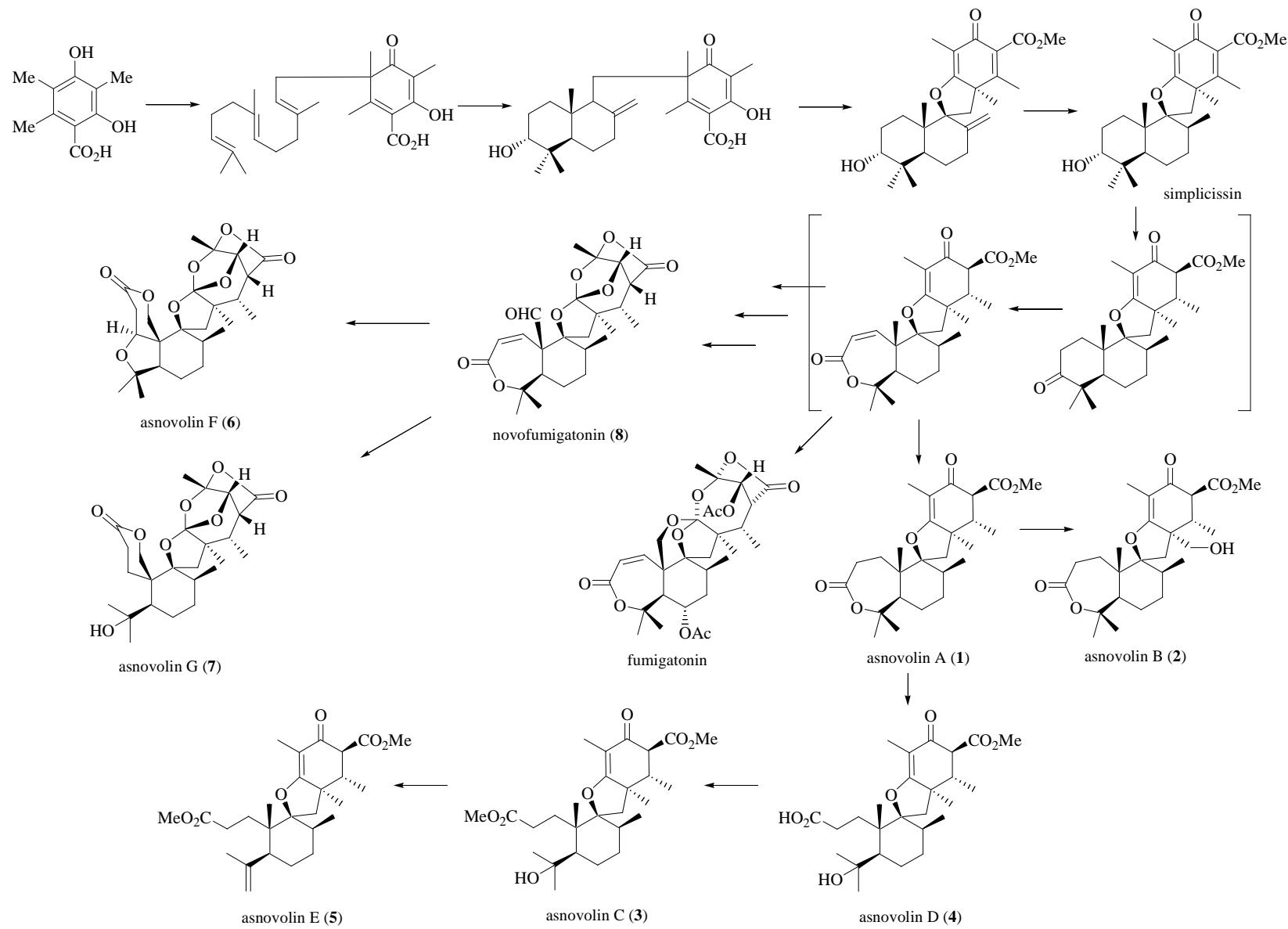


Figure S46. Putative biosynthesis pathway of asnovolins.