

Supplementary Data

Genome Scanning Inspired Isolation of Reedsmycins A-F, Polyene-polyol Macrolides from *Streptomyces* sp. CHQ-64

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Table S1. Alignment of the conserved motifs in KR domains

Domain	Motif I	Motif II	Type	Predicted configuration
KR1	AAGVSHYRLLGDL	IAGV W GSAGDGAYAAANAF	A	S-OH
KR2	AAGVSRNGLLGDL	IAGV W GSAGDGAYAAANAF	A	S-OH
KR3	AAGVSRAMLLGDL	IAGV W GAAGDGAYAVANAF	A	S-OH
KR4	TAGV I DDGILTSL	TSGLFGASGQANYAAANTF	B	<i>E/Z</i>
KR5	AAGV L EDGVFSSL	AAGVLGNAGQAAYGAANAY	B	<i>E/Z</i>
KR6	AAGV L EDGVFSSL	AAGVLGNAGQAAYGAANAY	B	<i>E/Z</i>

Figure S1. ^1H NMR Spectrum (400 MHz) of reedsmycin A (**1**) in DMSO-d_6

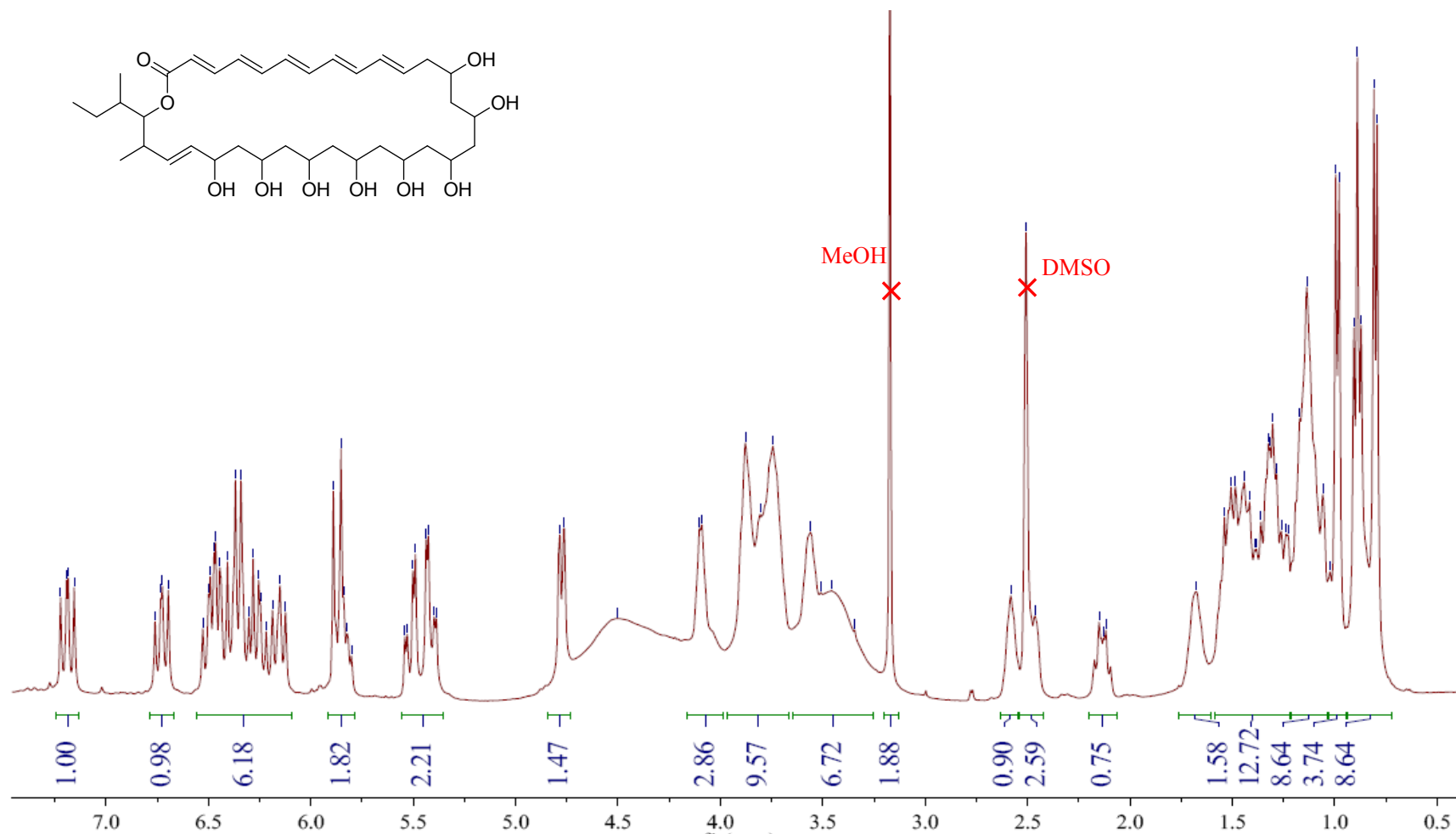


Figure S2. ^{13}C NMR Spectrum (100 MHz) of reedsmycin A (1) in DMSO-d_6

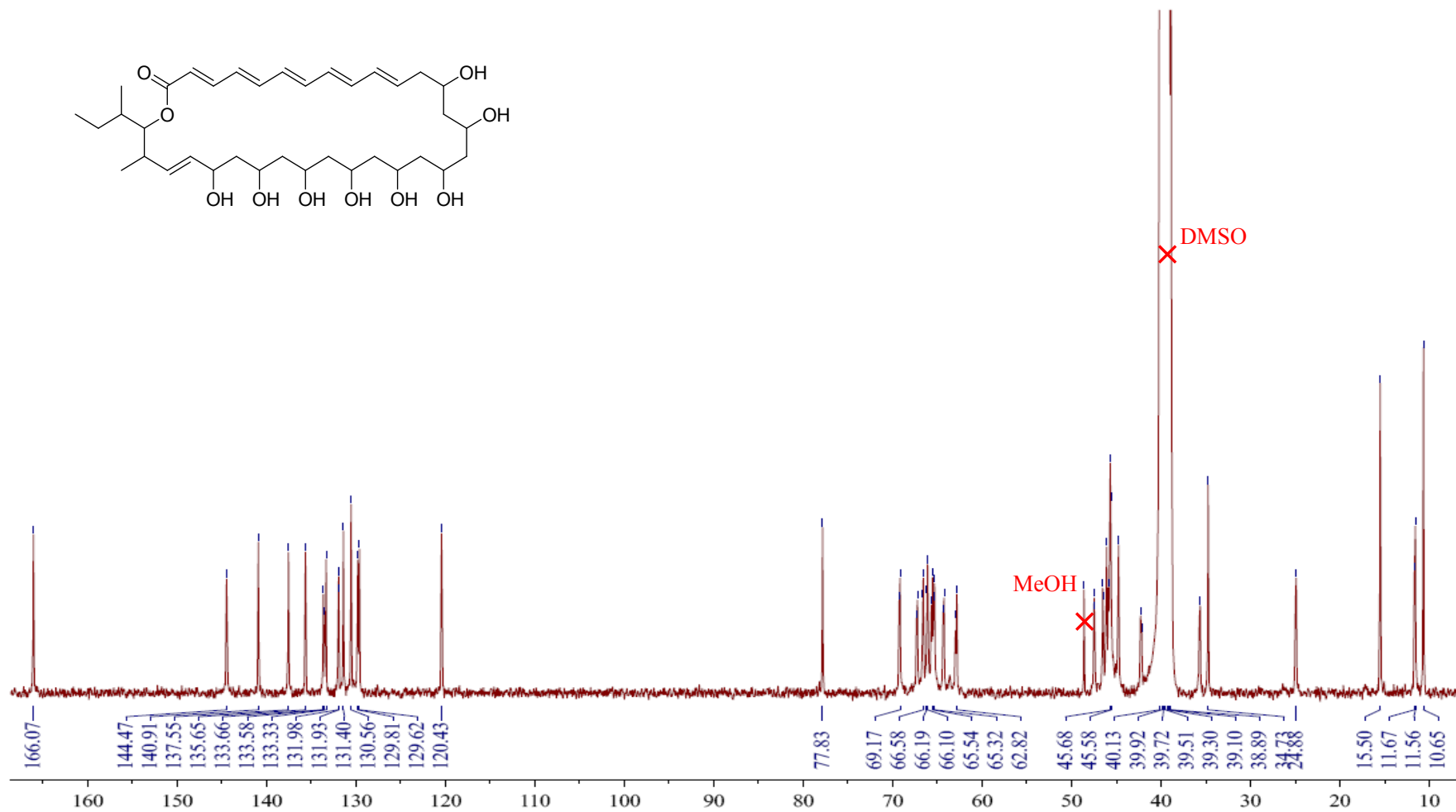


Figure S3. DEPT Spectrum (100 MHz) of reedsmycin A (**1**) in DMSO-d₆

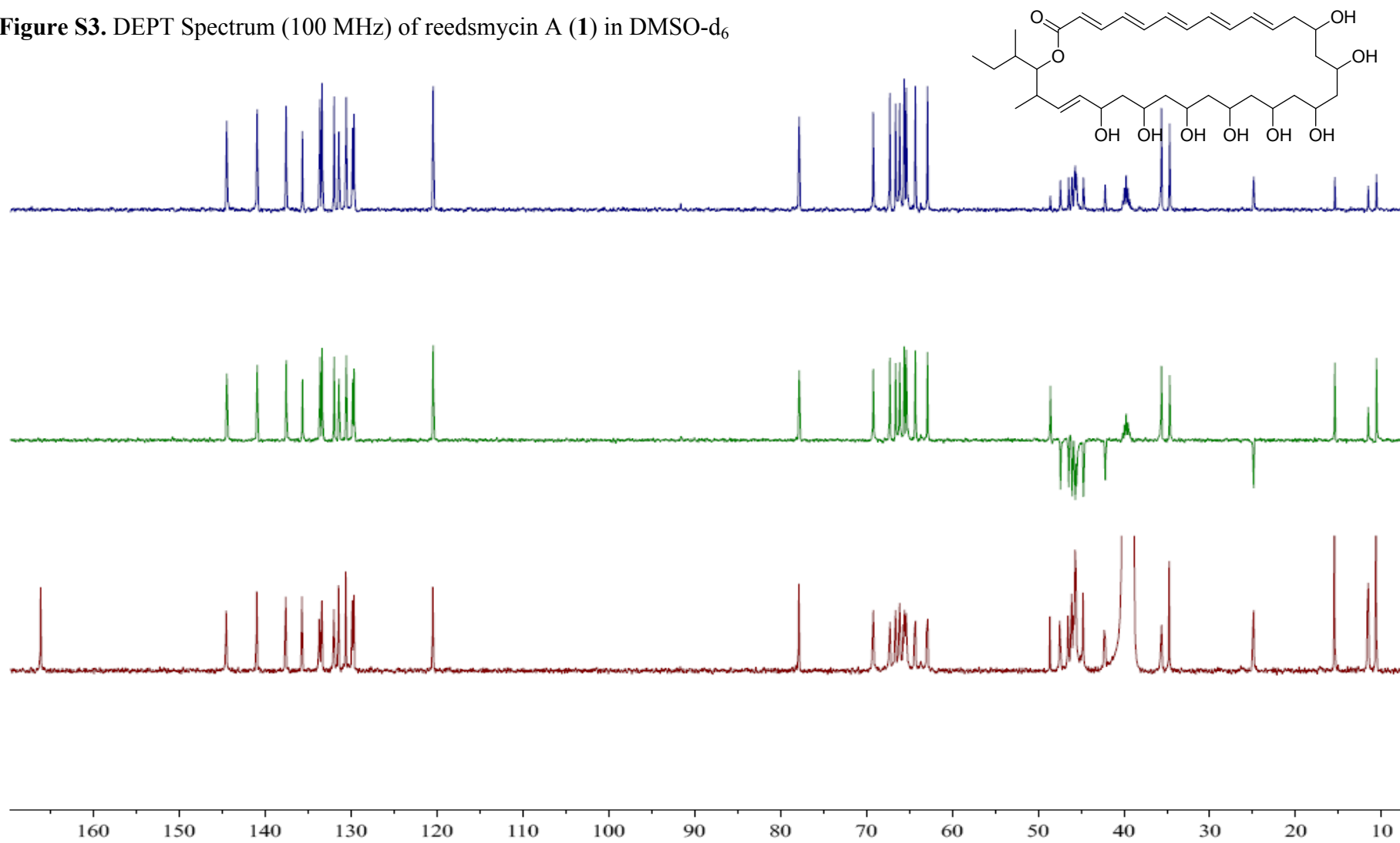


Figure S4. HMQC Spectrum of reedsmycin A (**1**) in DMSO-d₆

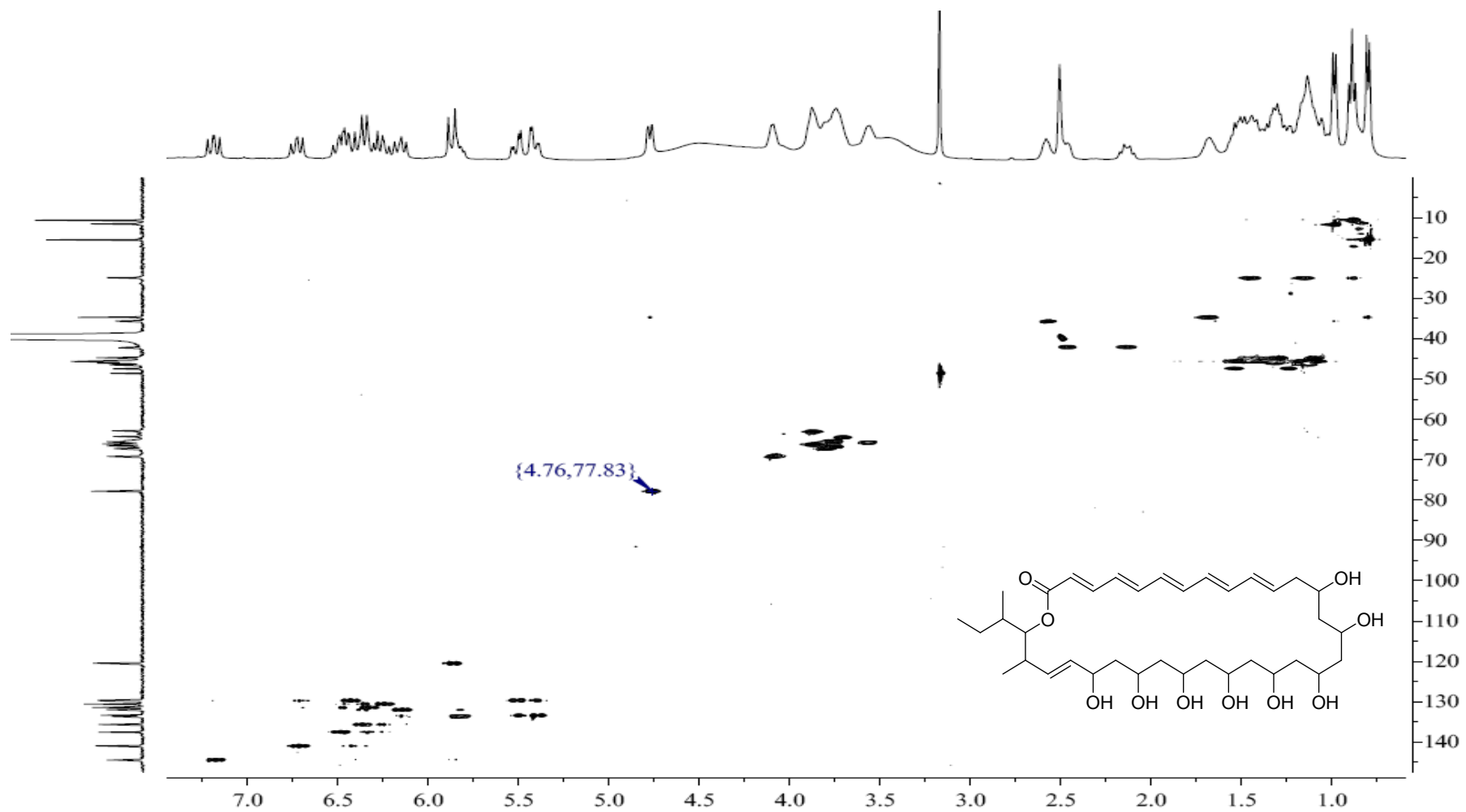


Figure S5. ^1H - ^1H COSY Spectrum of reedsmycin A (**1**) in DMSO-d_6

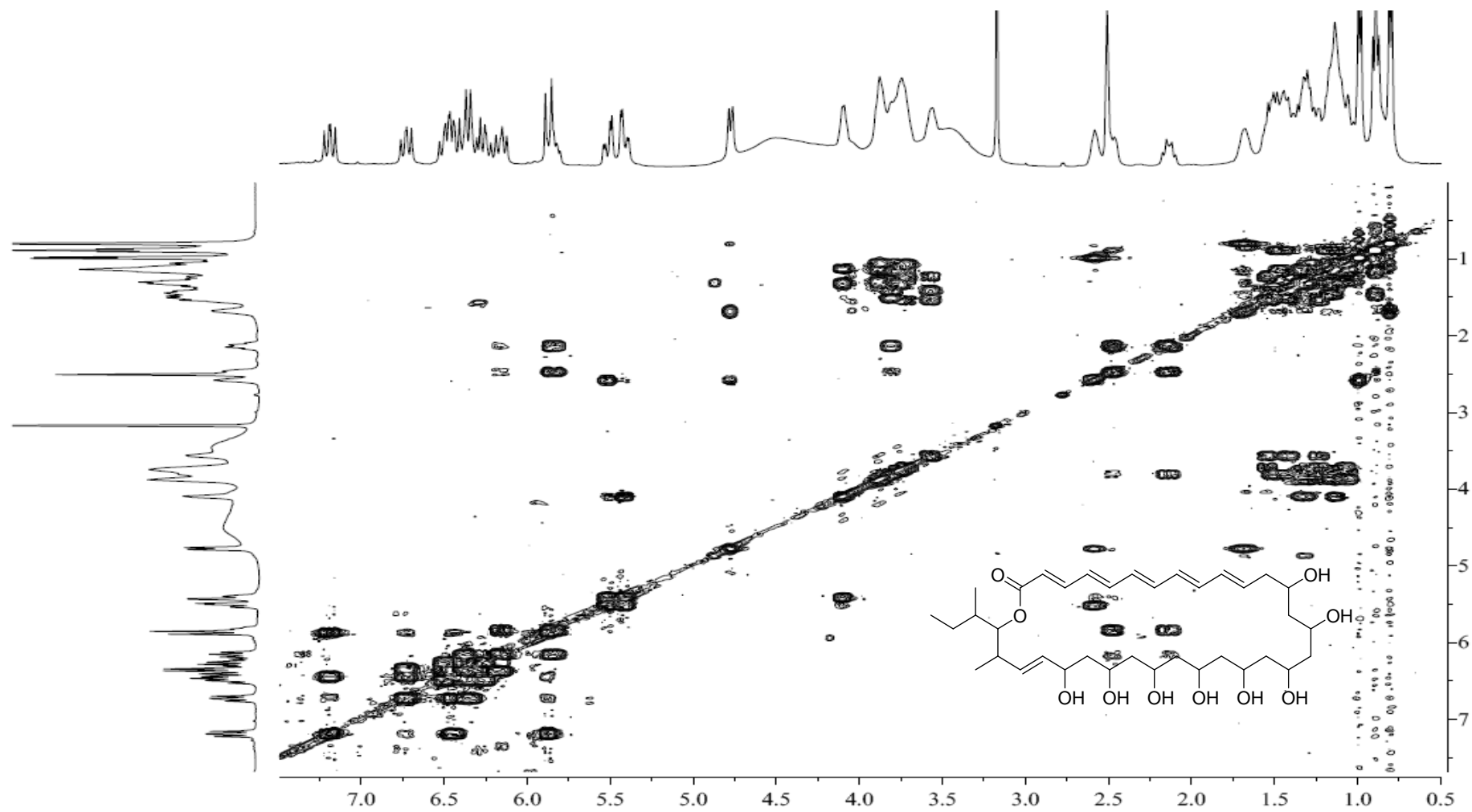


Figure S6. HMBC Spectrum of reedsmycin A (**1**) in DMSO-d₆

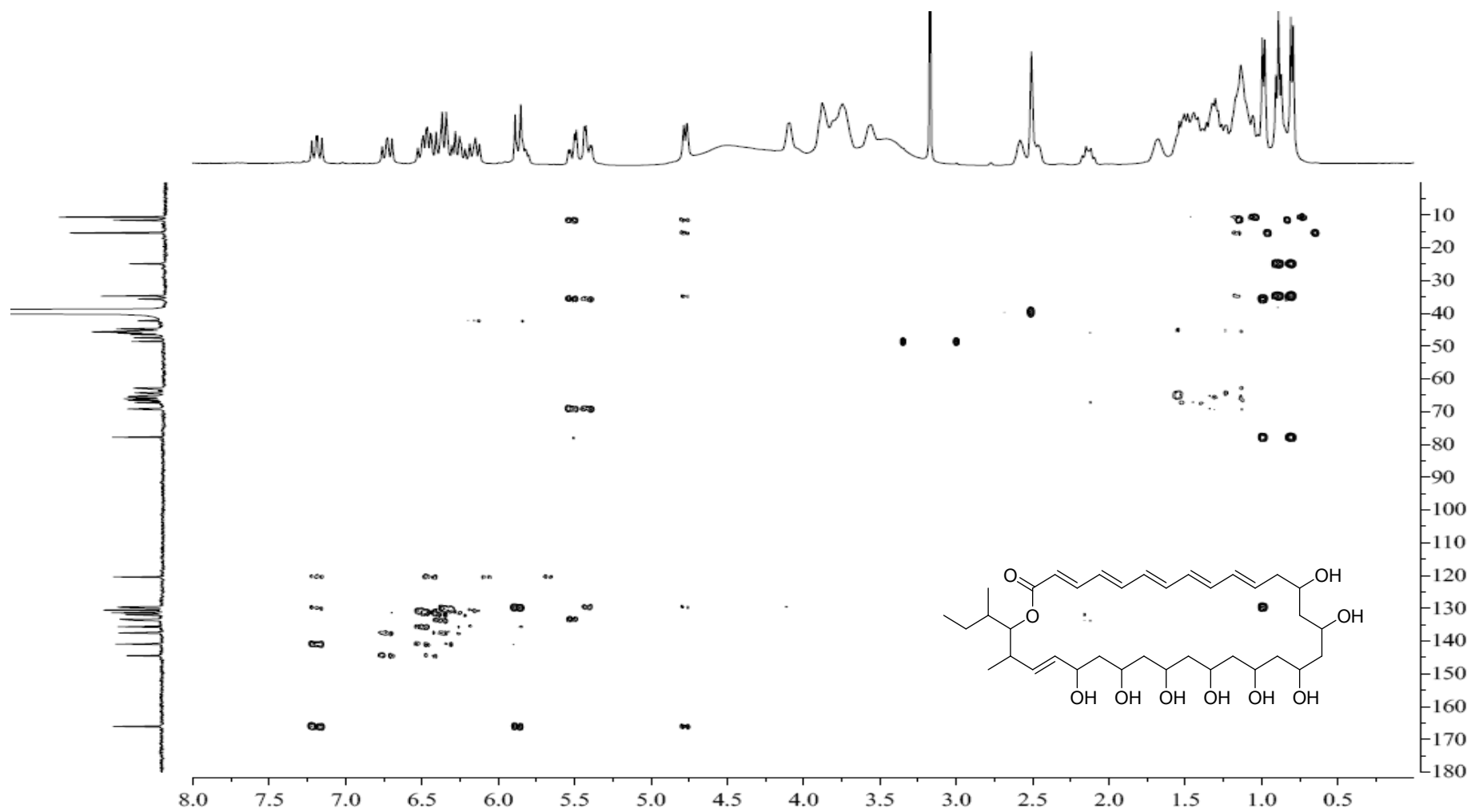


Figure S7. NOESY Spectrum of reedsmycin A (1) in DMSO-d₆

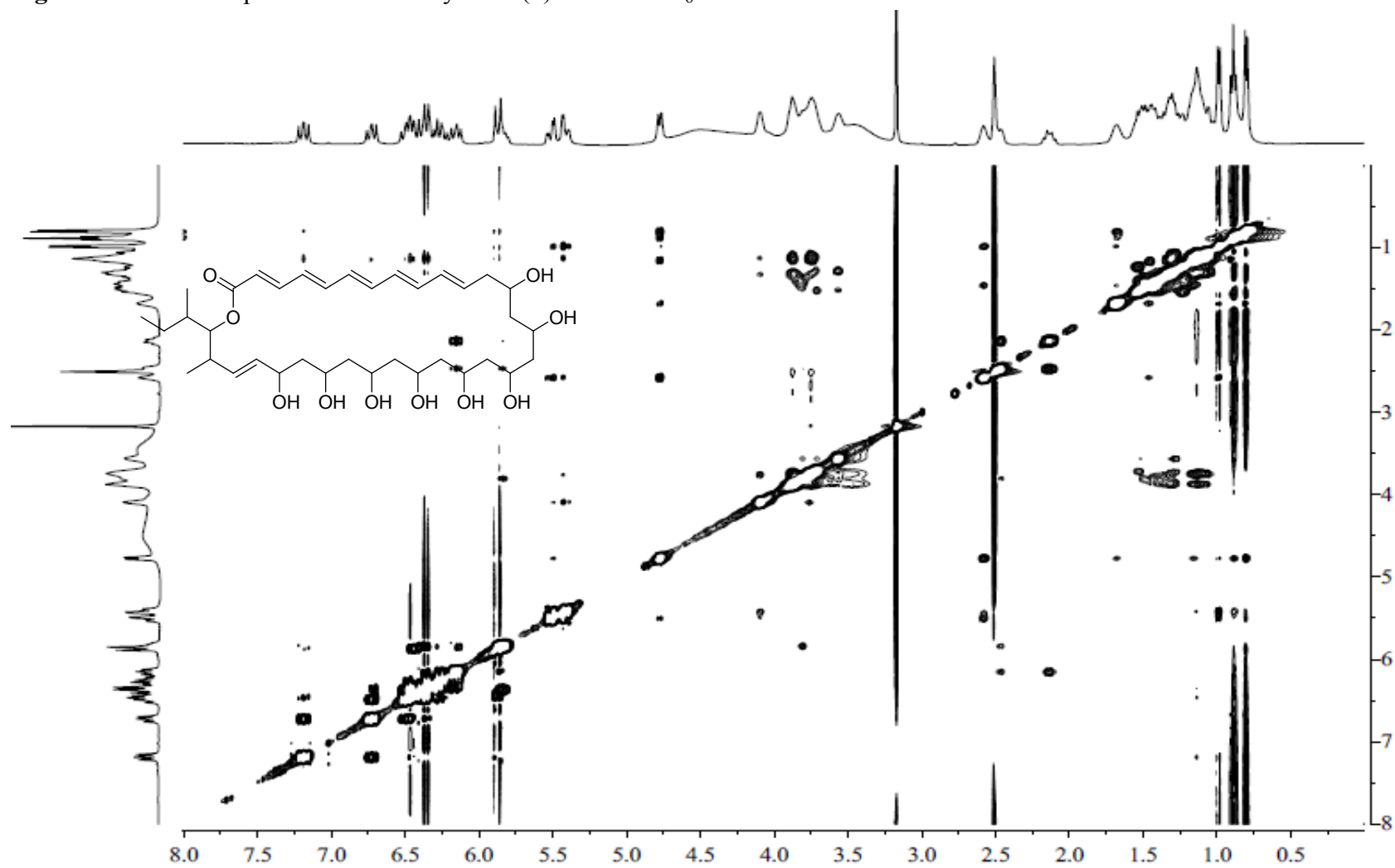


Figure S8. HRESIMS Spectrum of reedsmycin A (1)

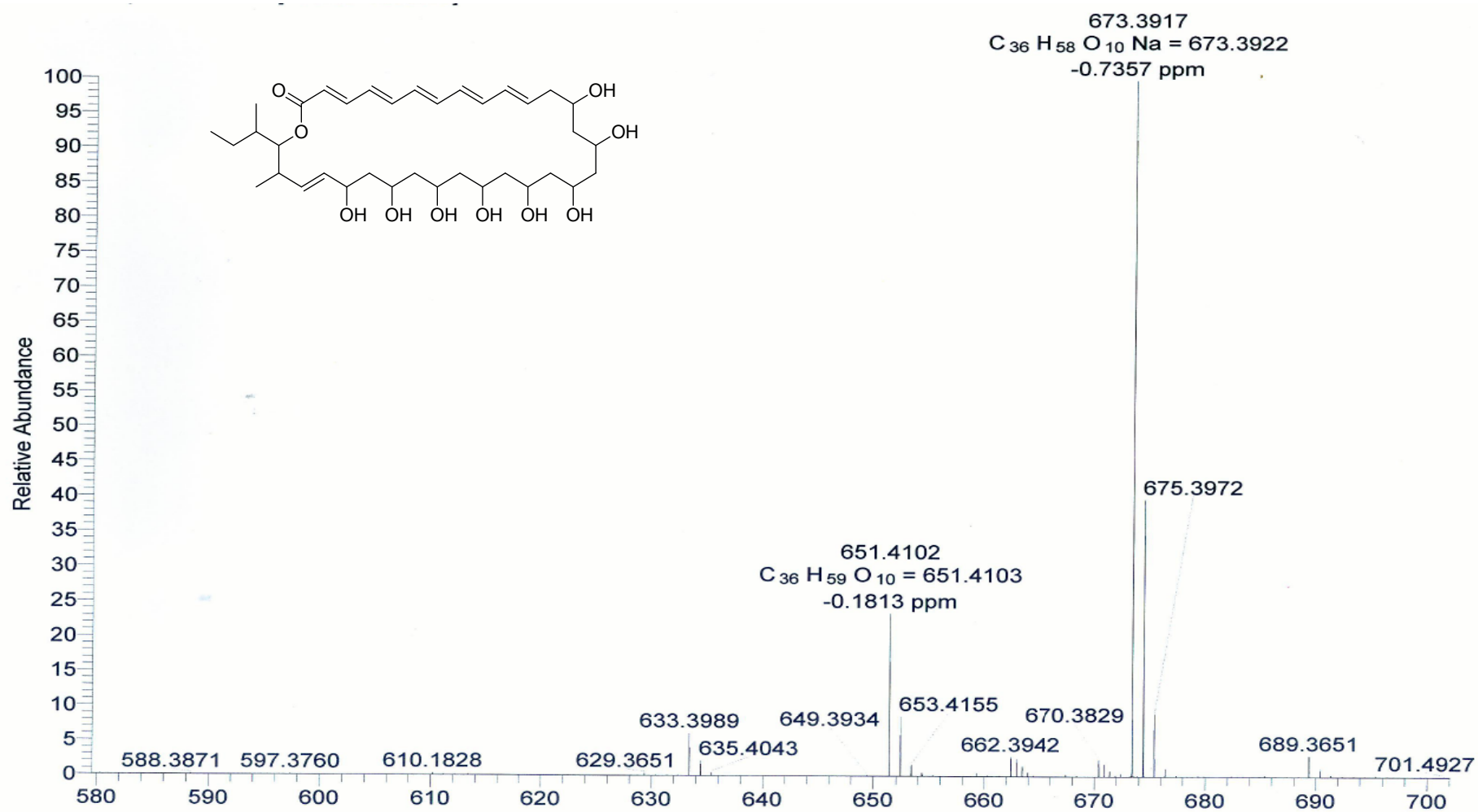


Figure S9. IR Spectrum of reedsmycin A (1)

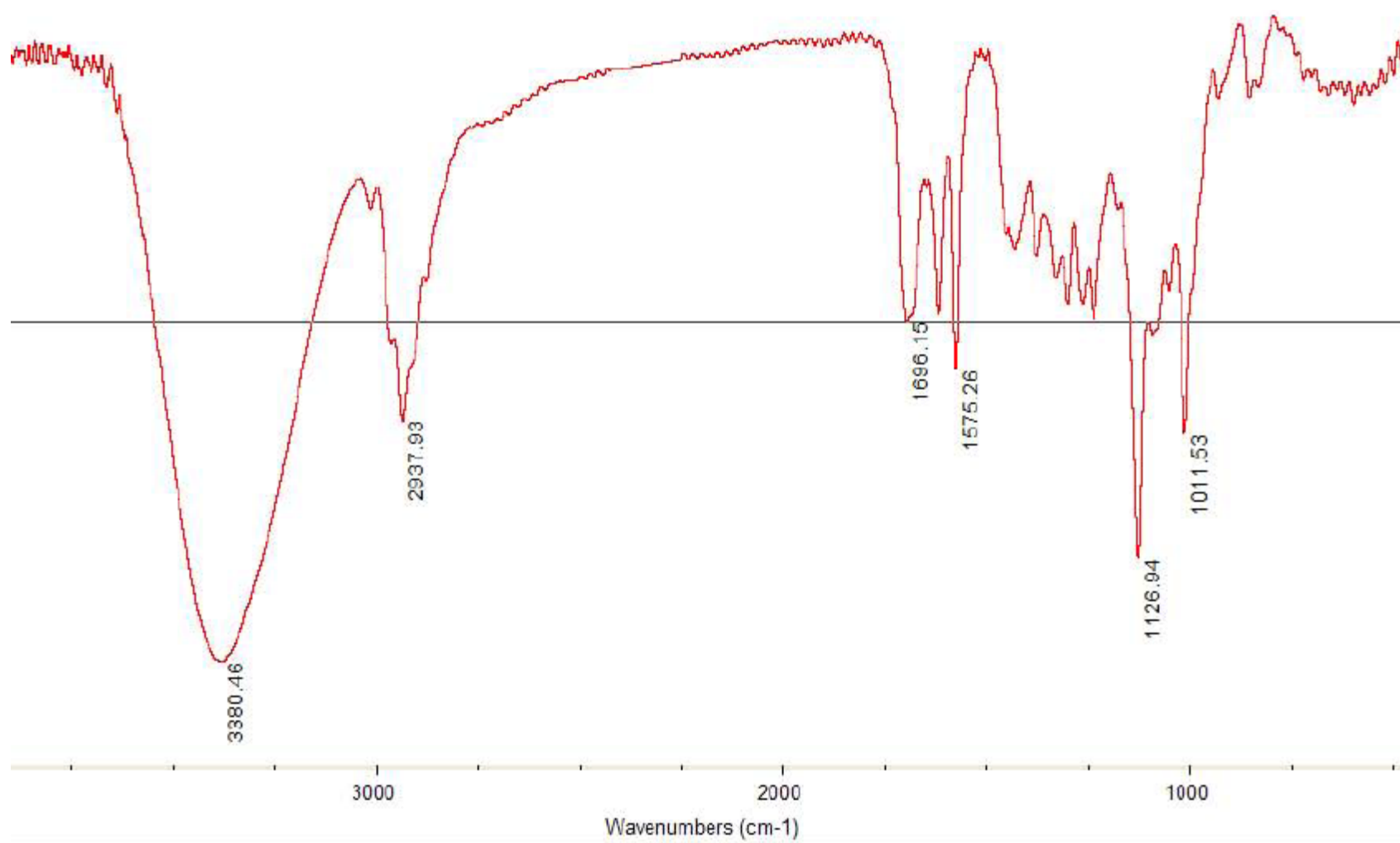


Figure S10. ^1H NMR Spectrum (600 MHz) of reedsmycin B (**2**) in DMSO-d_6

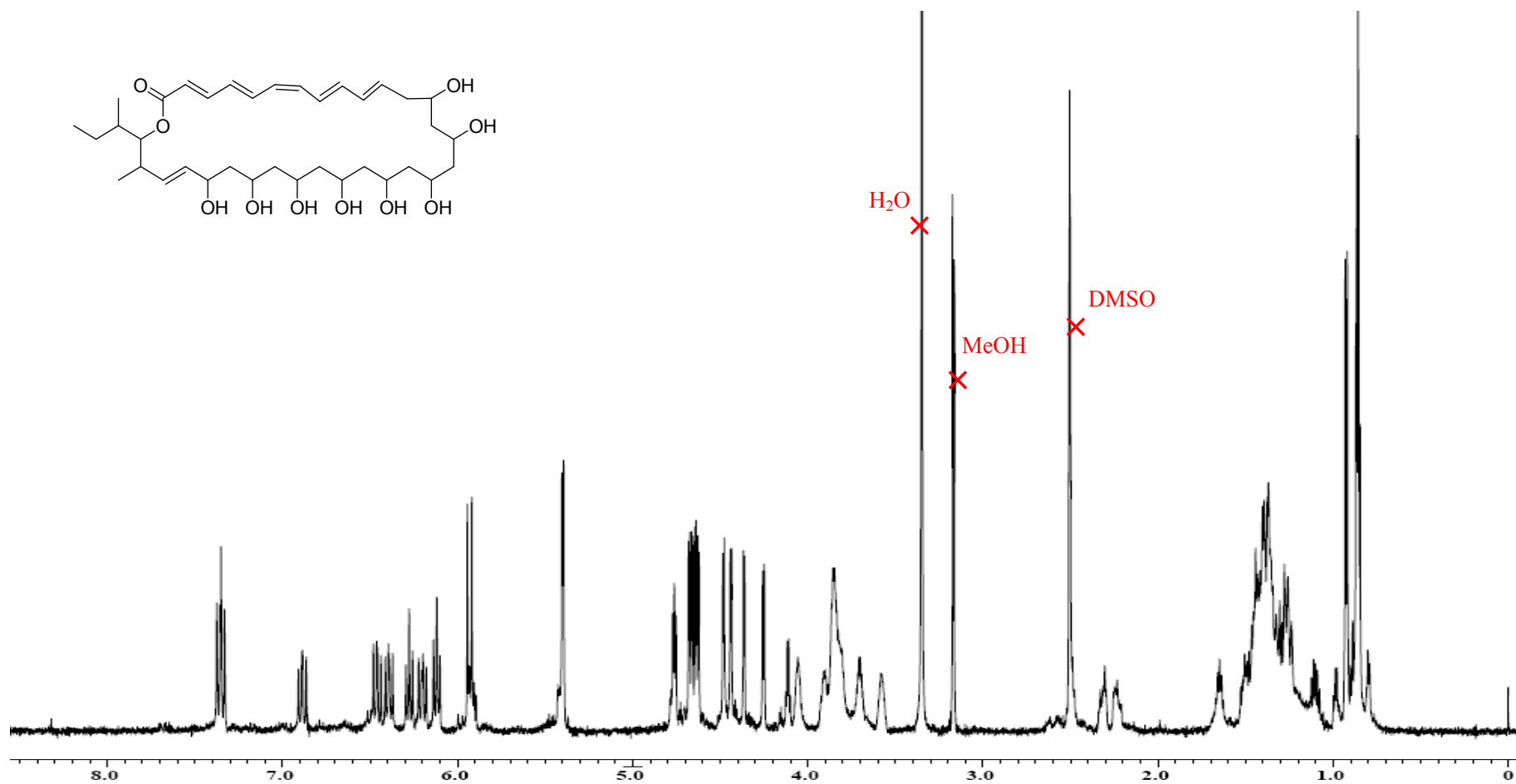


Figure S11. ^{13}C NMR Spectrum (150 MHz) of reedsmycin B (**2**) in DMSO-d_6

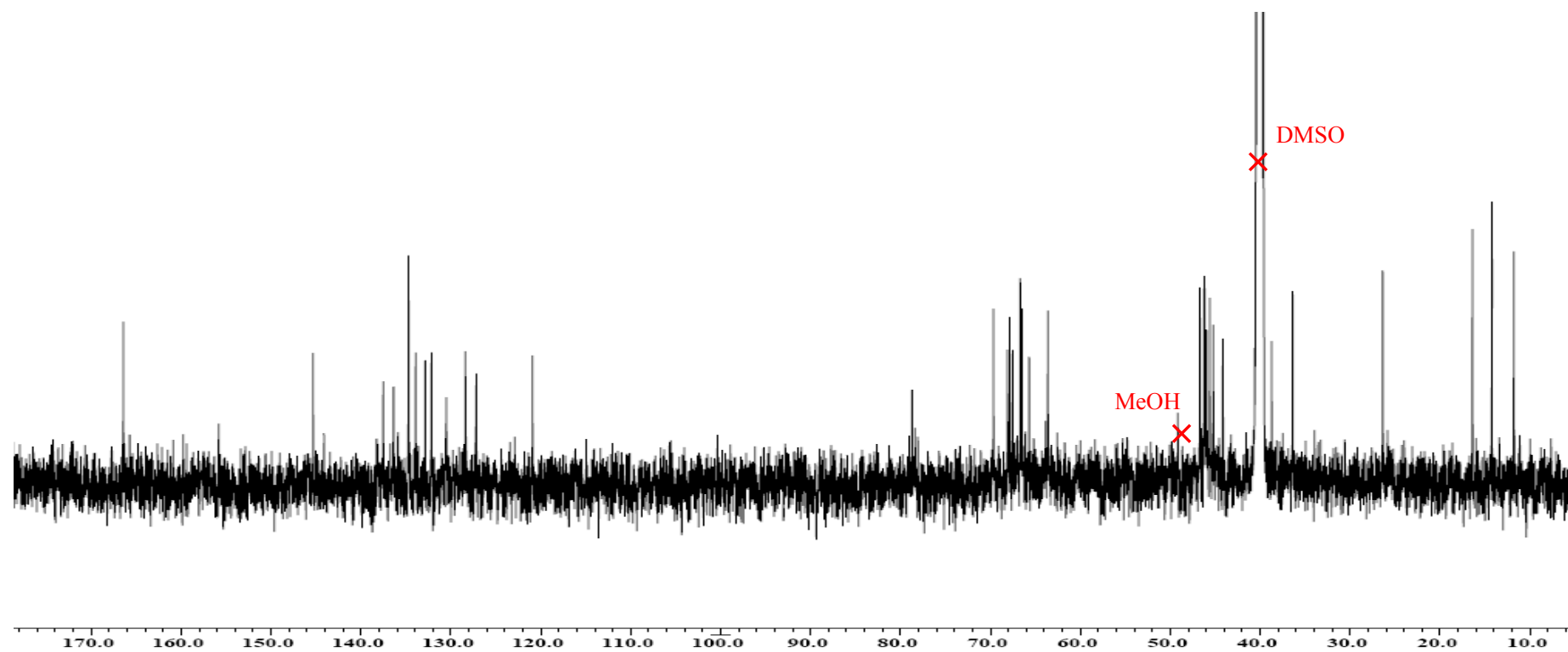
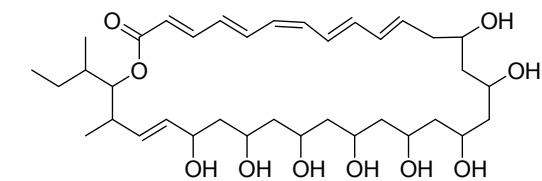


Figure S12. DEPT Spectrum (150 MHz) of reedsmycin B (2) in DMSO-d₆

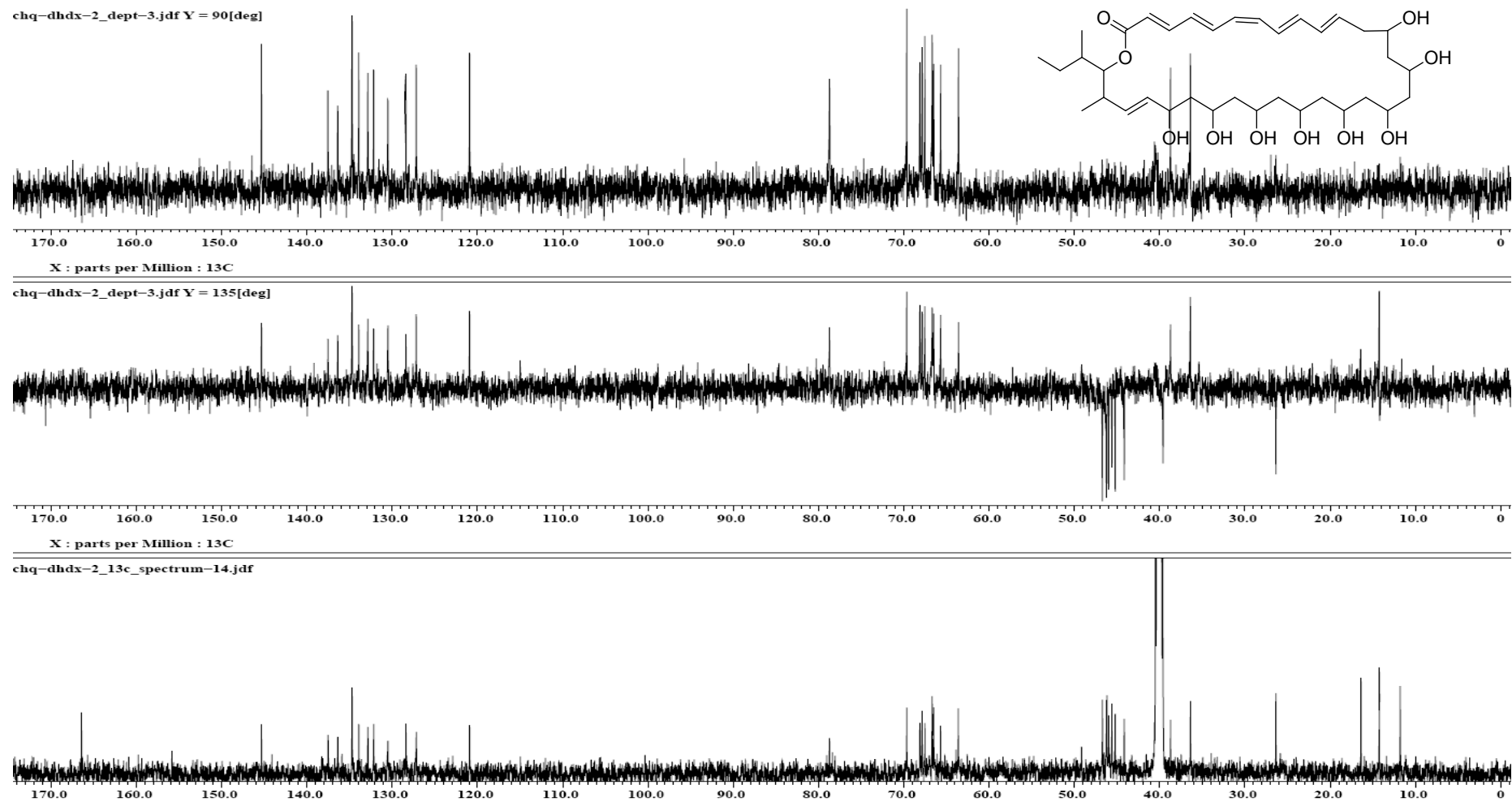


Figure S16. HRESIMS Spectrum of reedsmycin B (2)

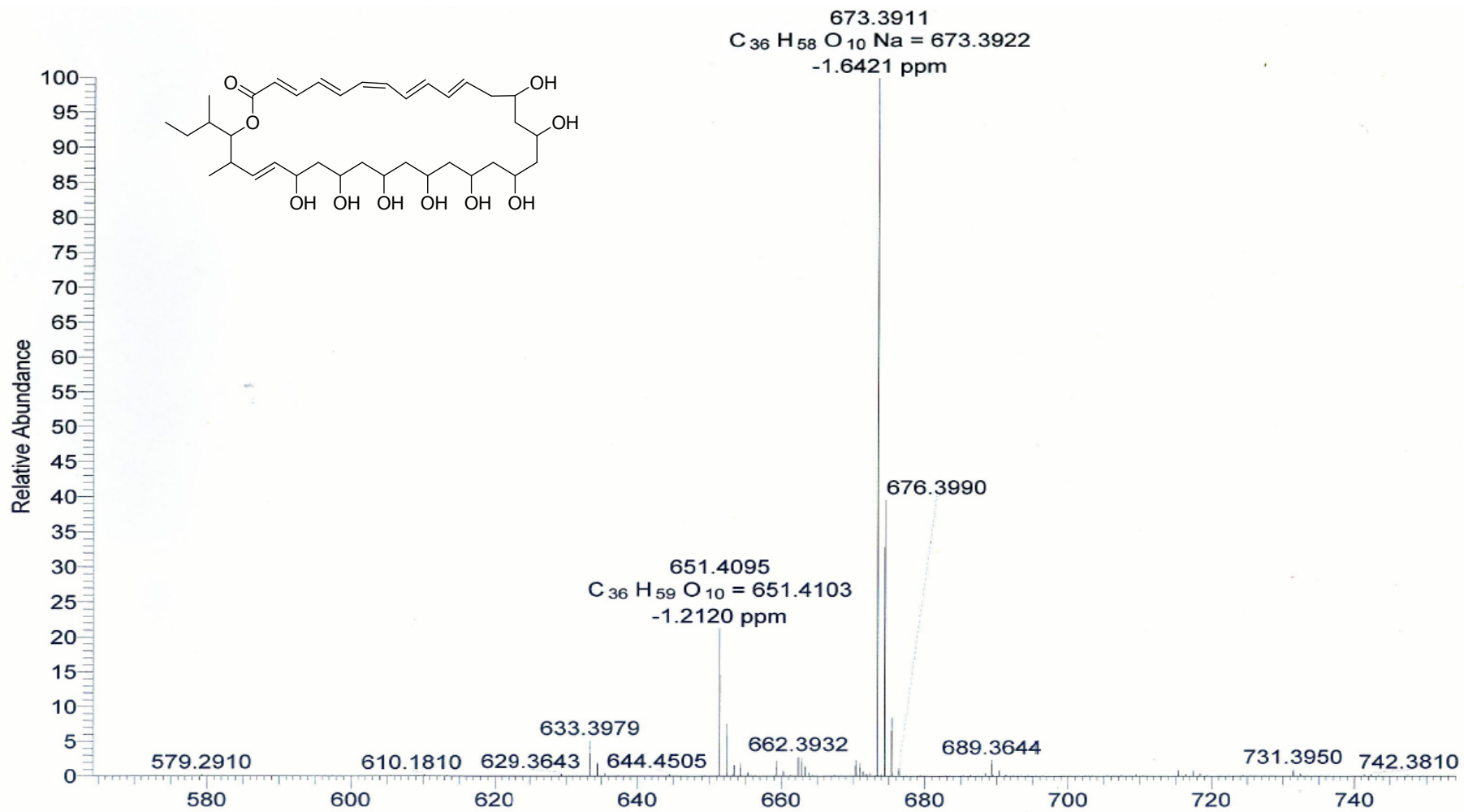


Figure S17. IR Spectrum of reedsmycin B (2)

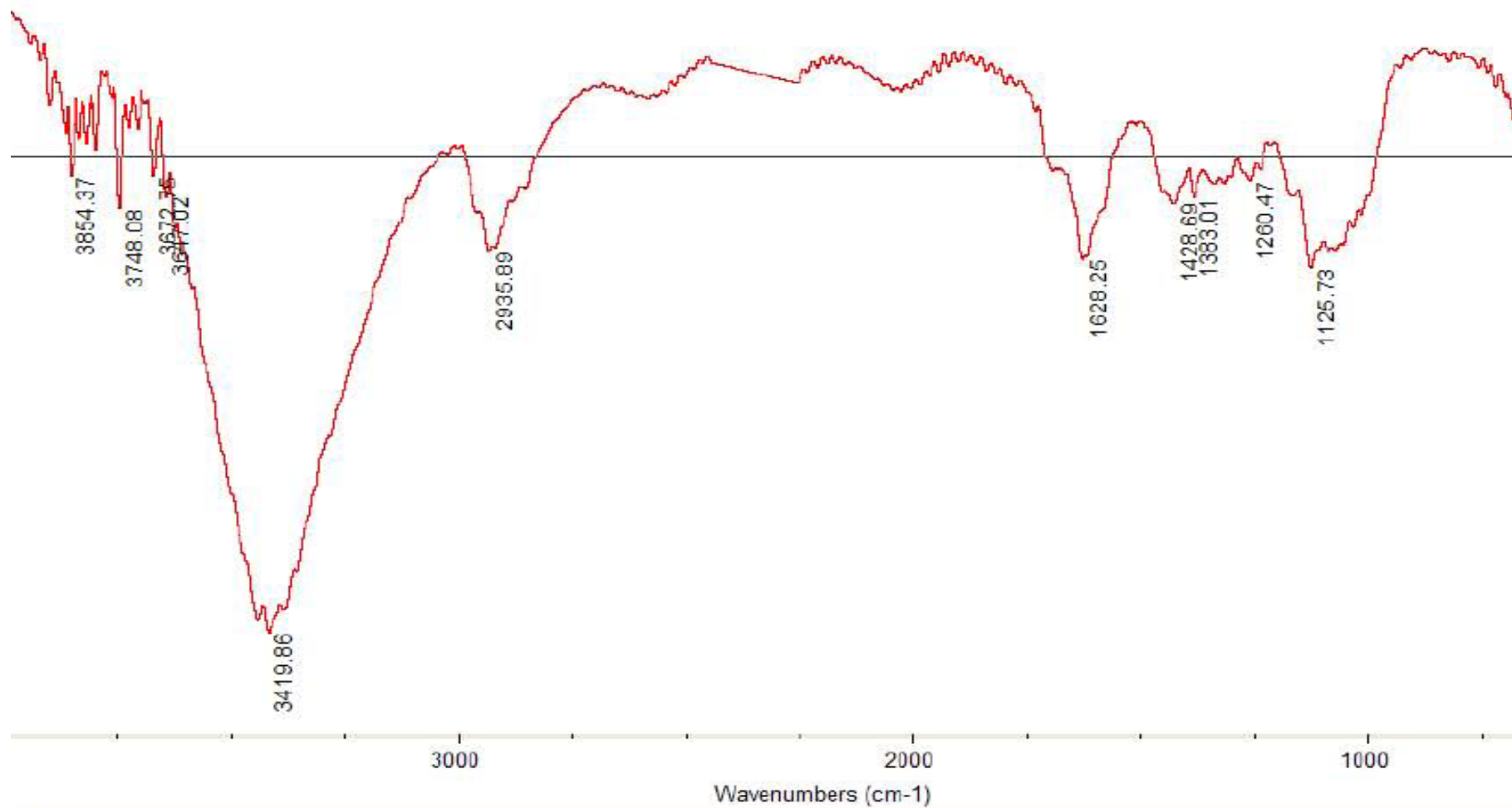


Figure S18. ^1H NMR Spectrum (600 MHz) of reedsmycin C (**3**) in DMSO-d_6

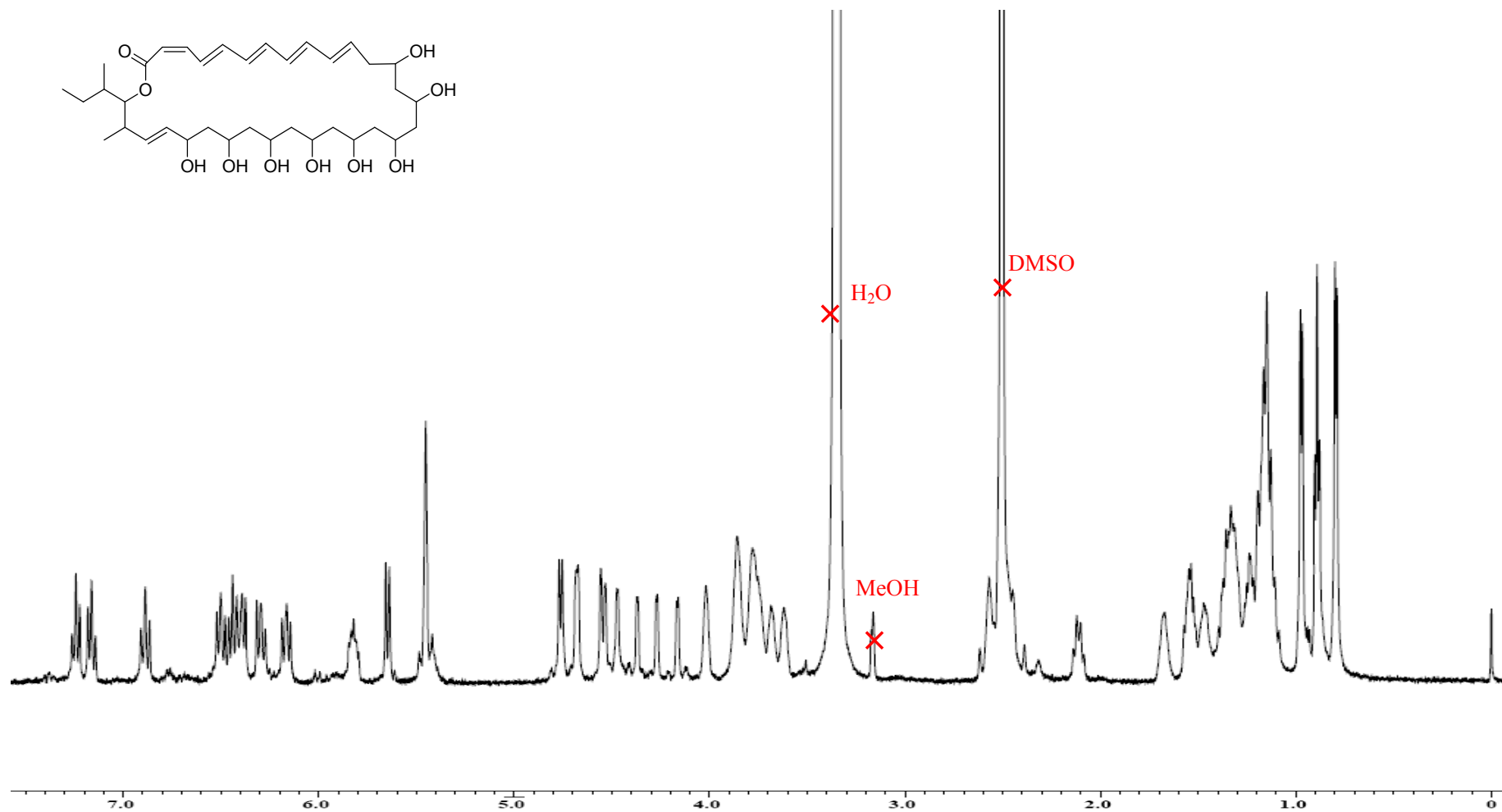


Figure S19. ^{13}C NMR Spectrum (150 MHz) of reedsmycin C (**3**) in DMSO-d_6

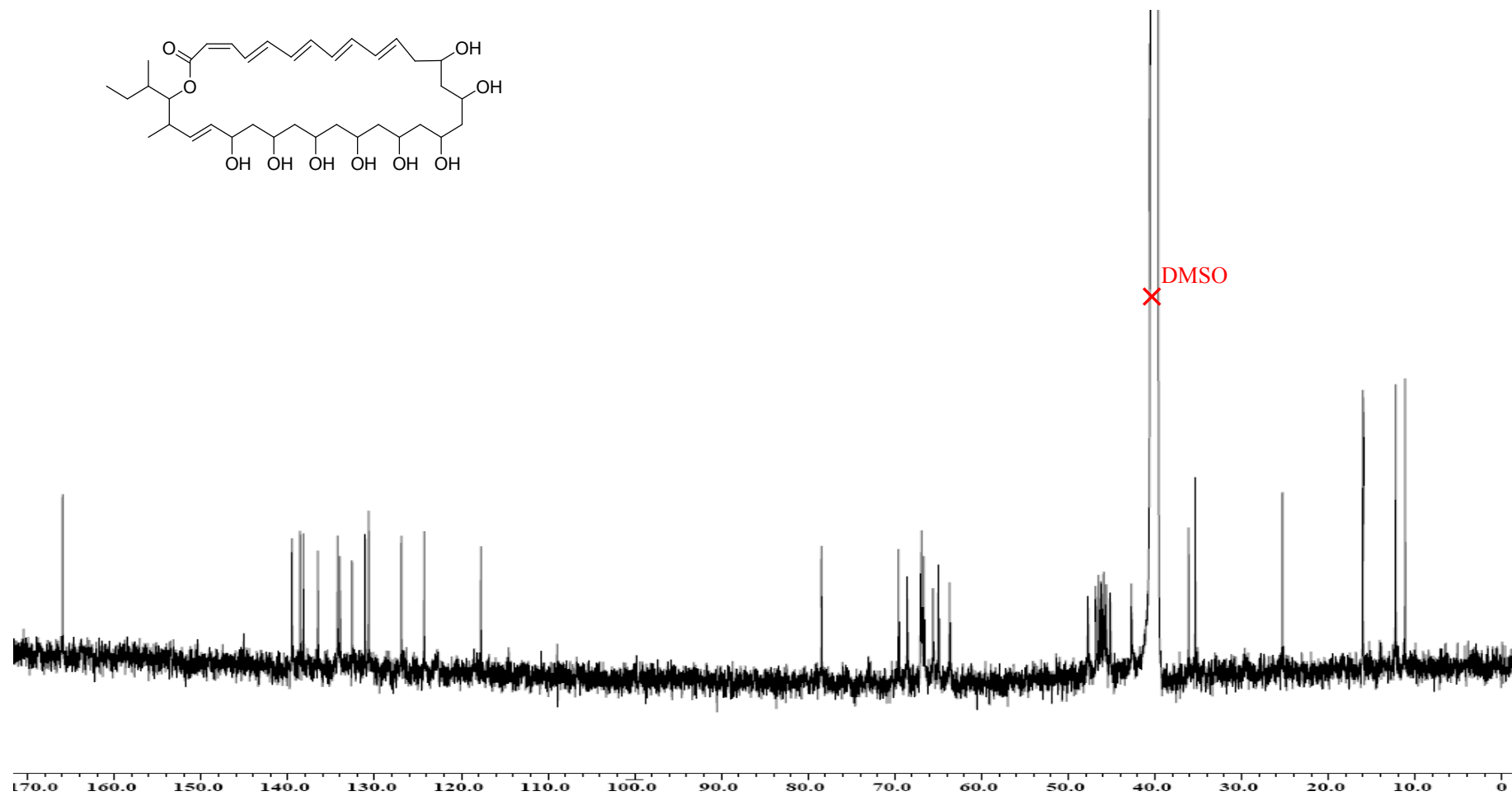
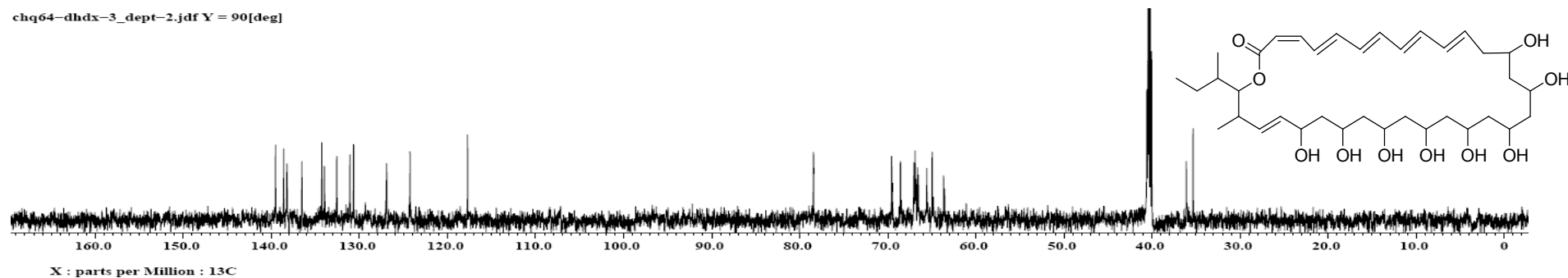


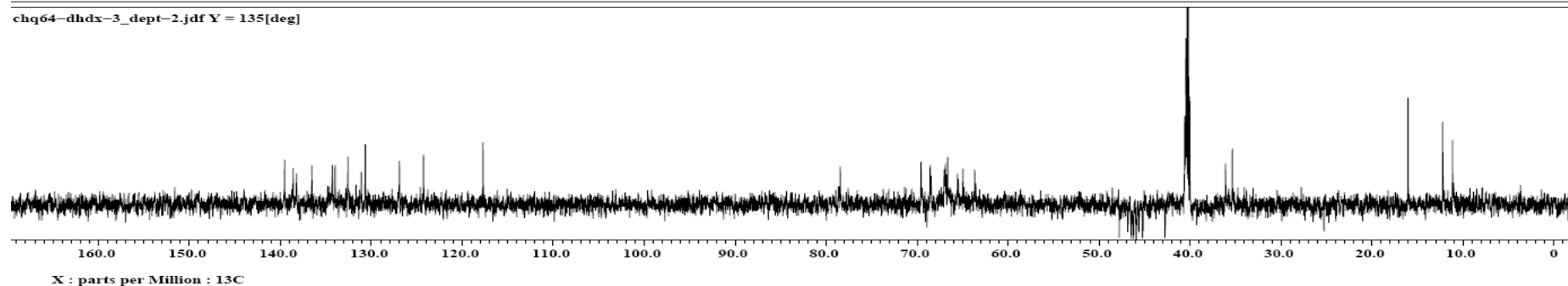
Figure S20. DEPT Spectrum (150 MHz) of reedsmycin C (**3**) in DMSO-d₆

chq64-dhdx-3_dept-2.jdf Y = 90[deg]



X : parts per Million : 13C

chq64-dhdx-3_dept-2.jdf Y = 135[deg]



X : parts per Million : 13C

chq64-dhdx-3_13c_spectrum-14.jdf

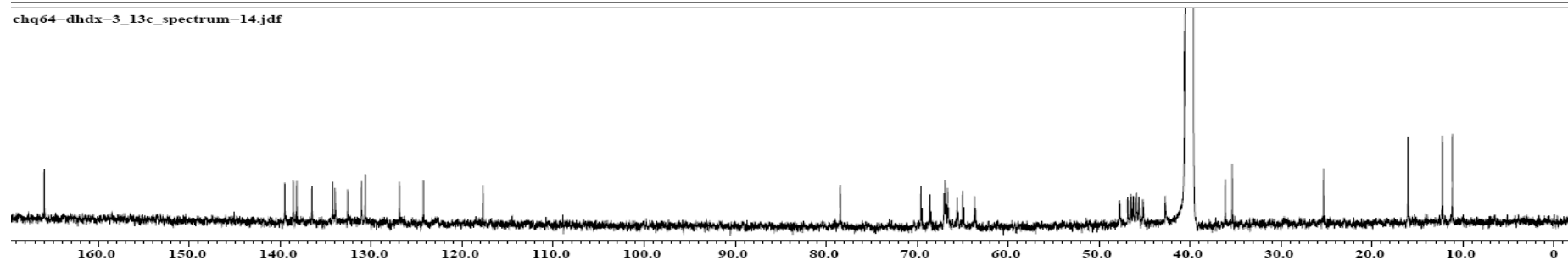


Figure S21. HMQC Spectrum of reedsmycin C (3) in DMSO-d₆

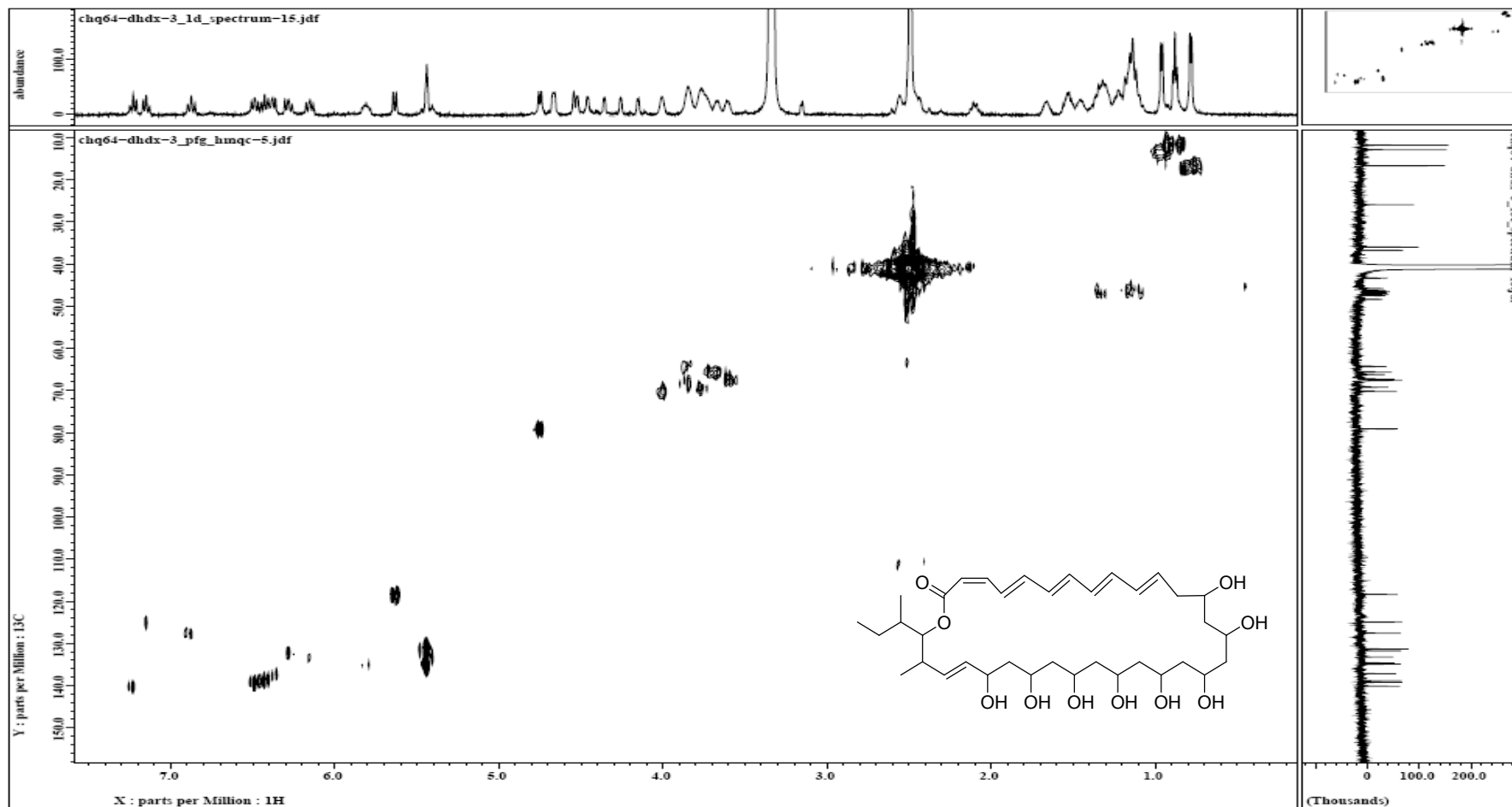


Figure S22. ^1H - ^1H COSY Spectrum of reedsmycin C (3) in DMSO-d_6

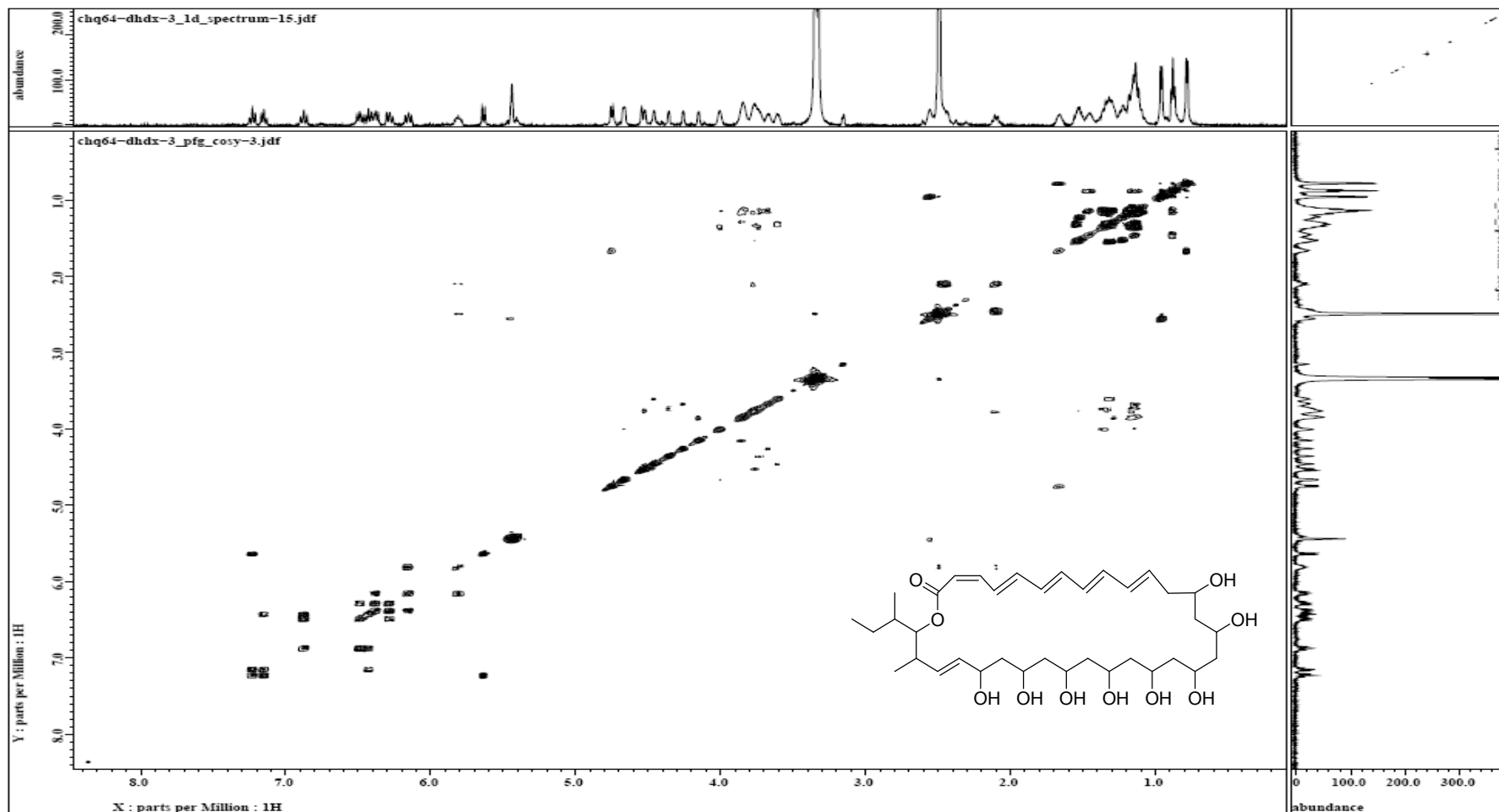


Figure S23. HMBC Spectrum of reedsmycin C (3) in DMSO-d₆

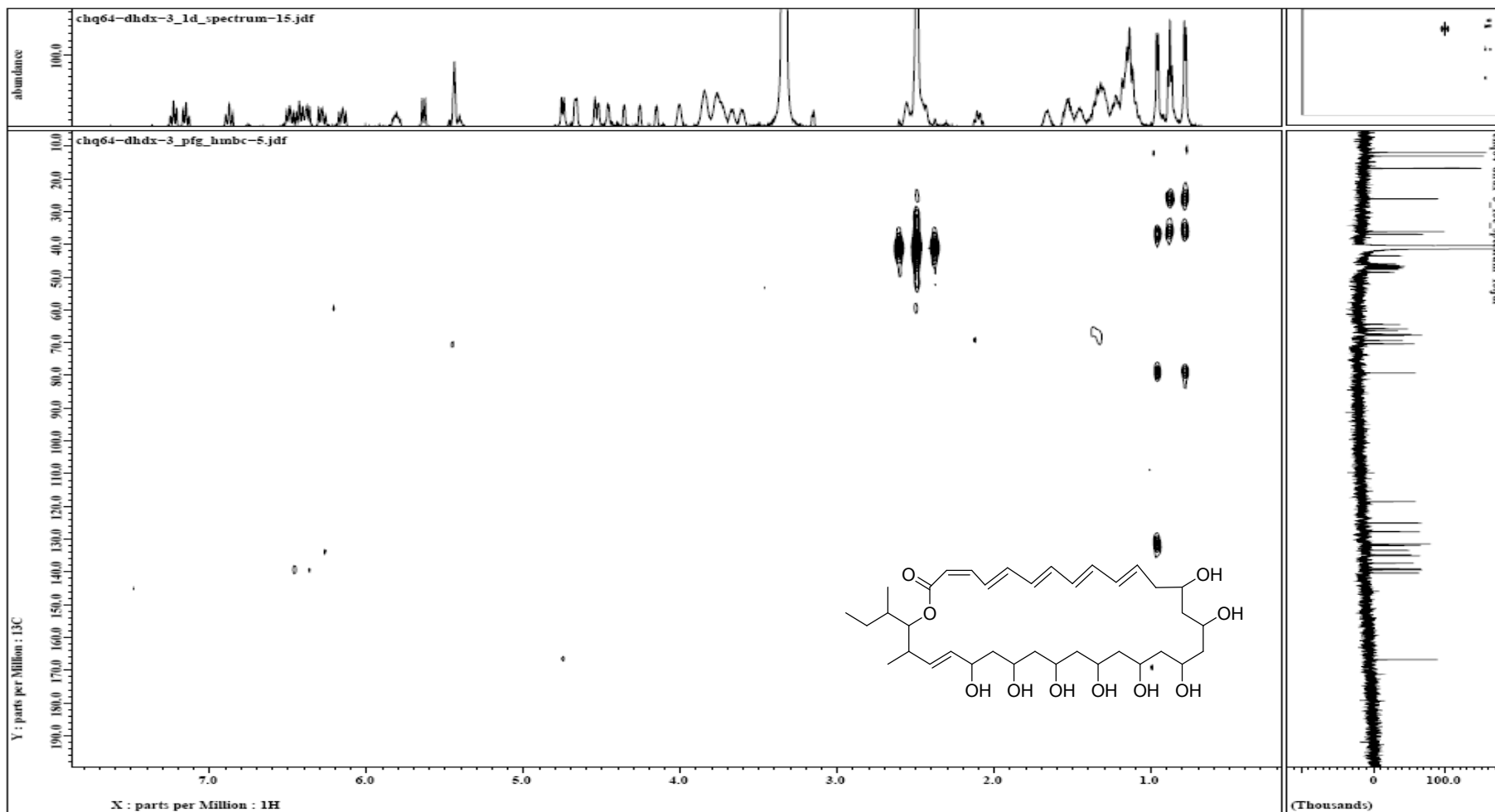


Figure S24. HRESIMS Spectrum of reedsmycin C (3)

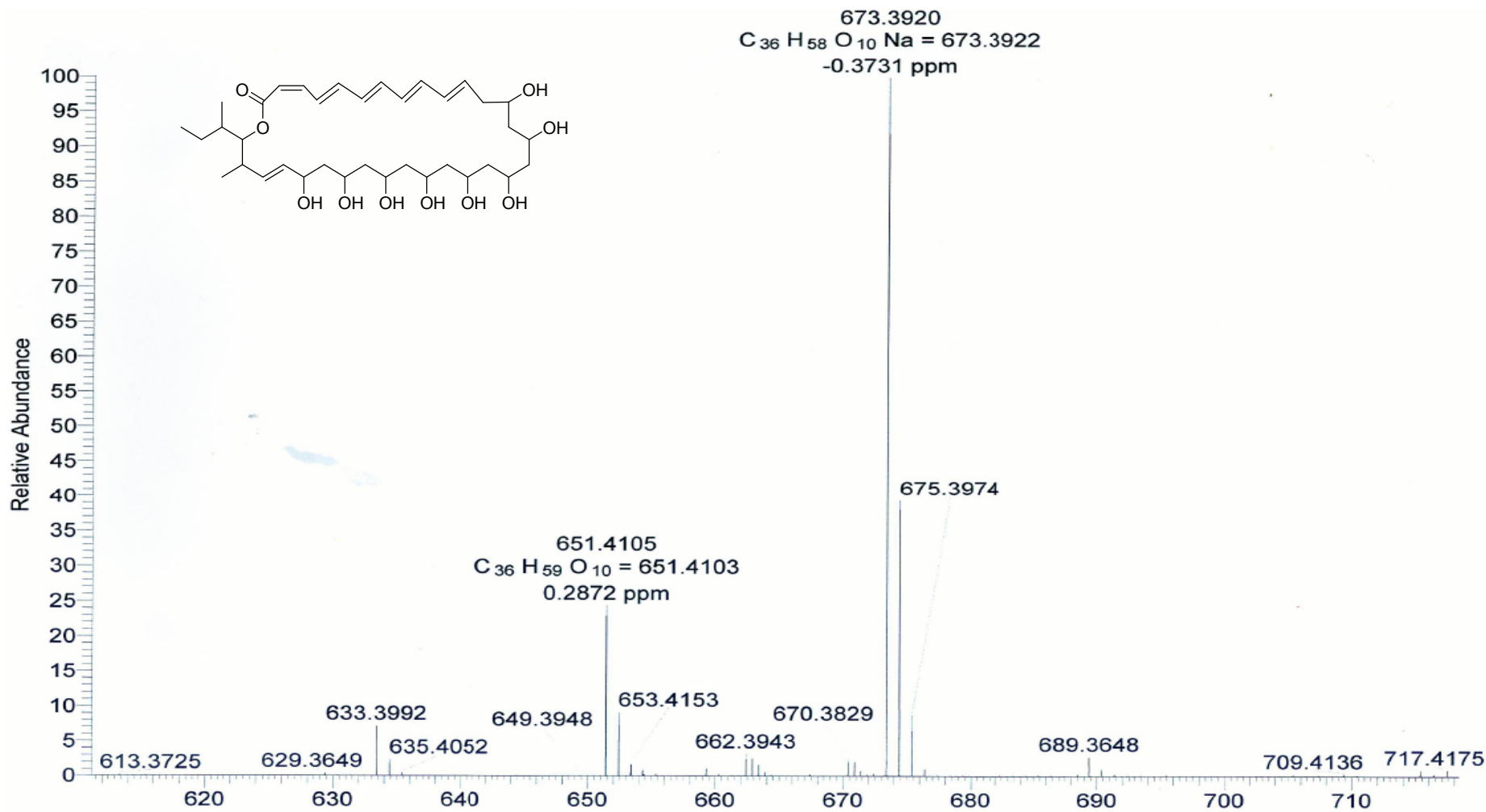


Figure S25. IR Spectrum of reedsmycin C (3)

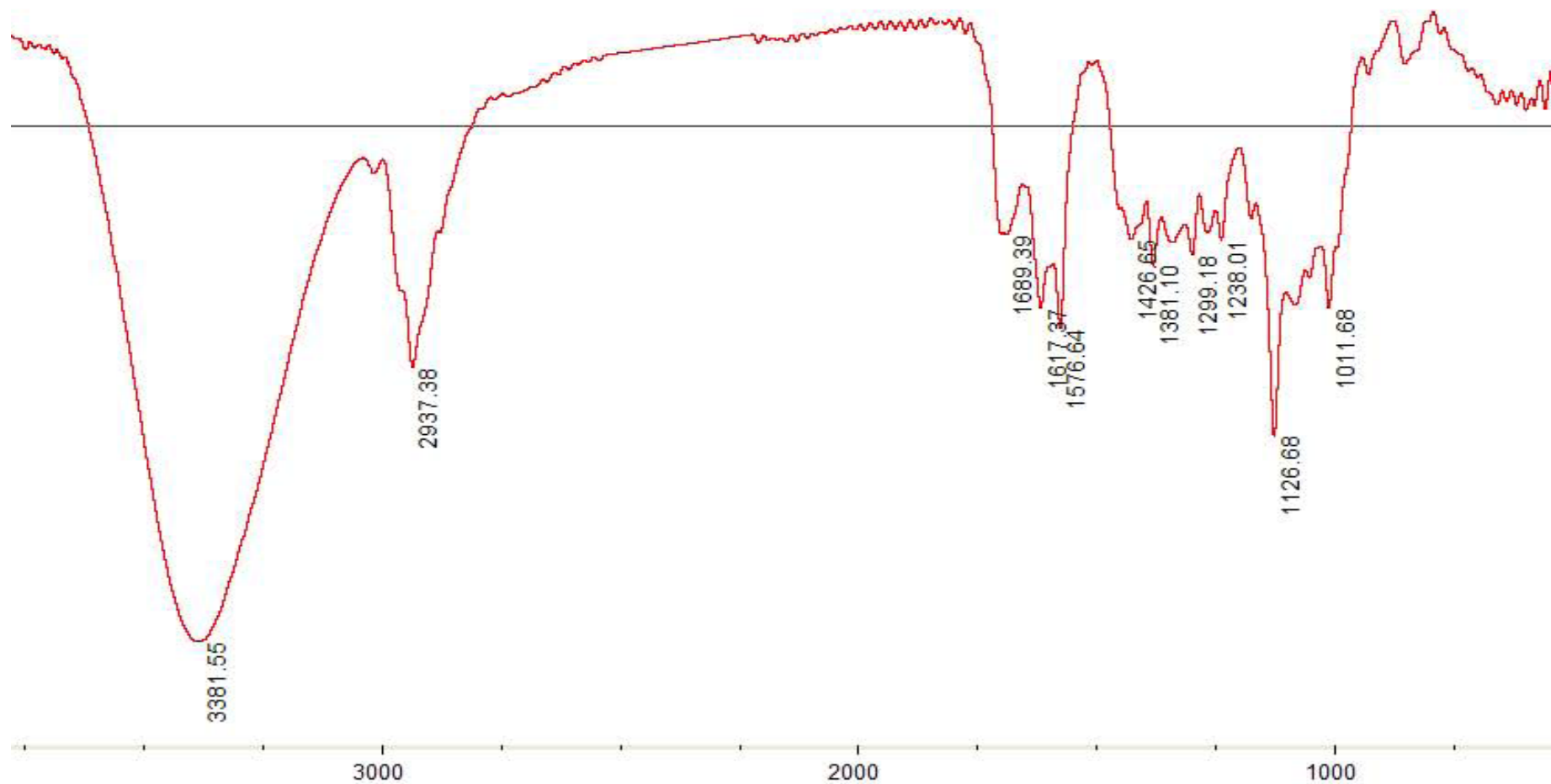


Figure S26. ^1H NMR Spectrum (600 MHz) of reedsmycin D (**4**) in DMSO-d_6

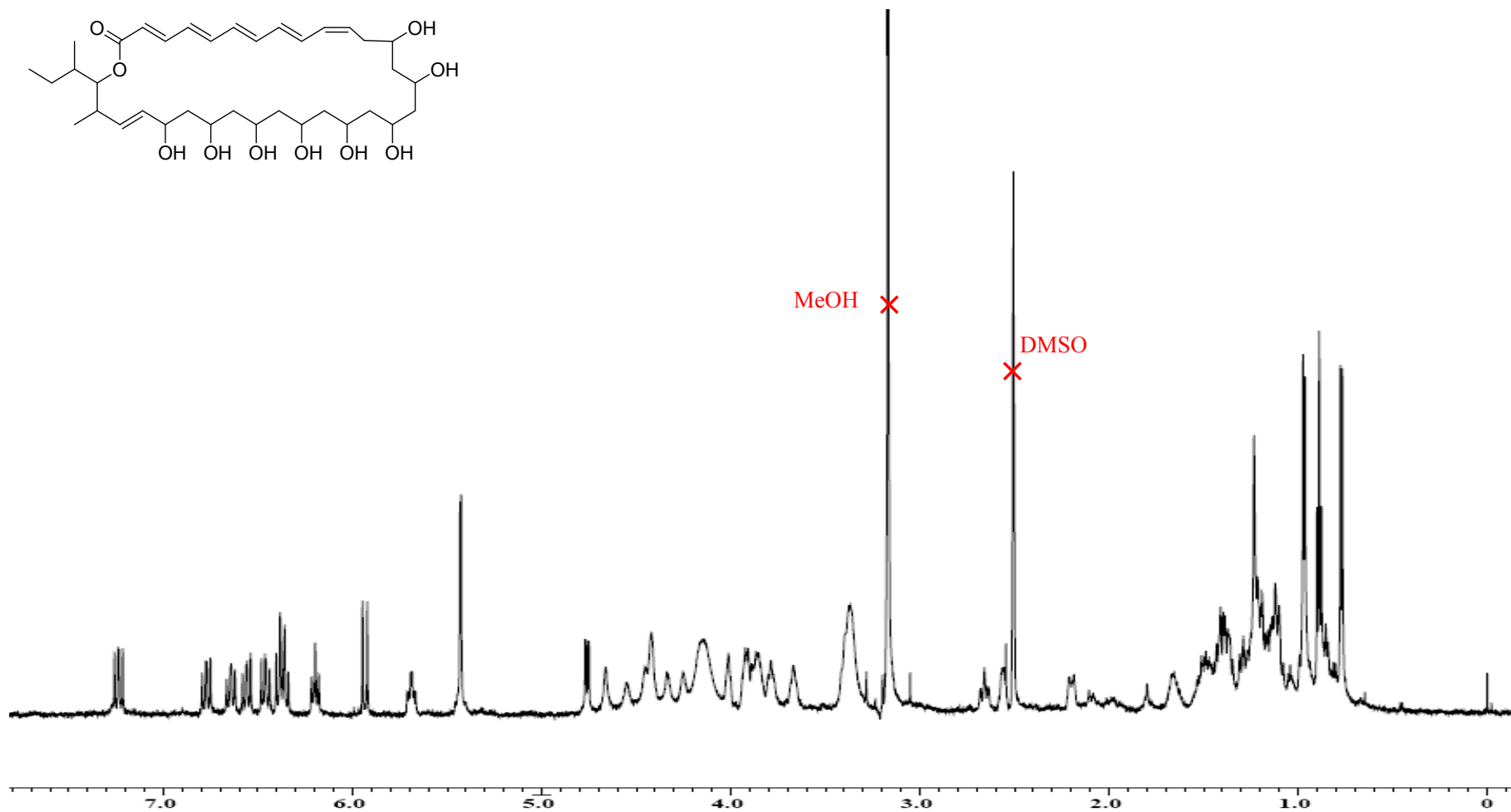


Figure S27. ^{13}C NMR Spectrum (150 MHz) of reedsmycin D (4) in DMSO-d_6

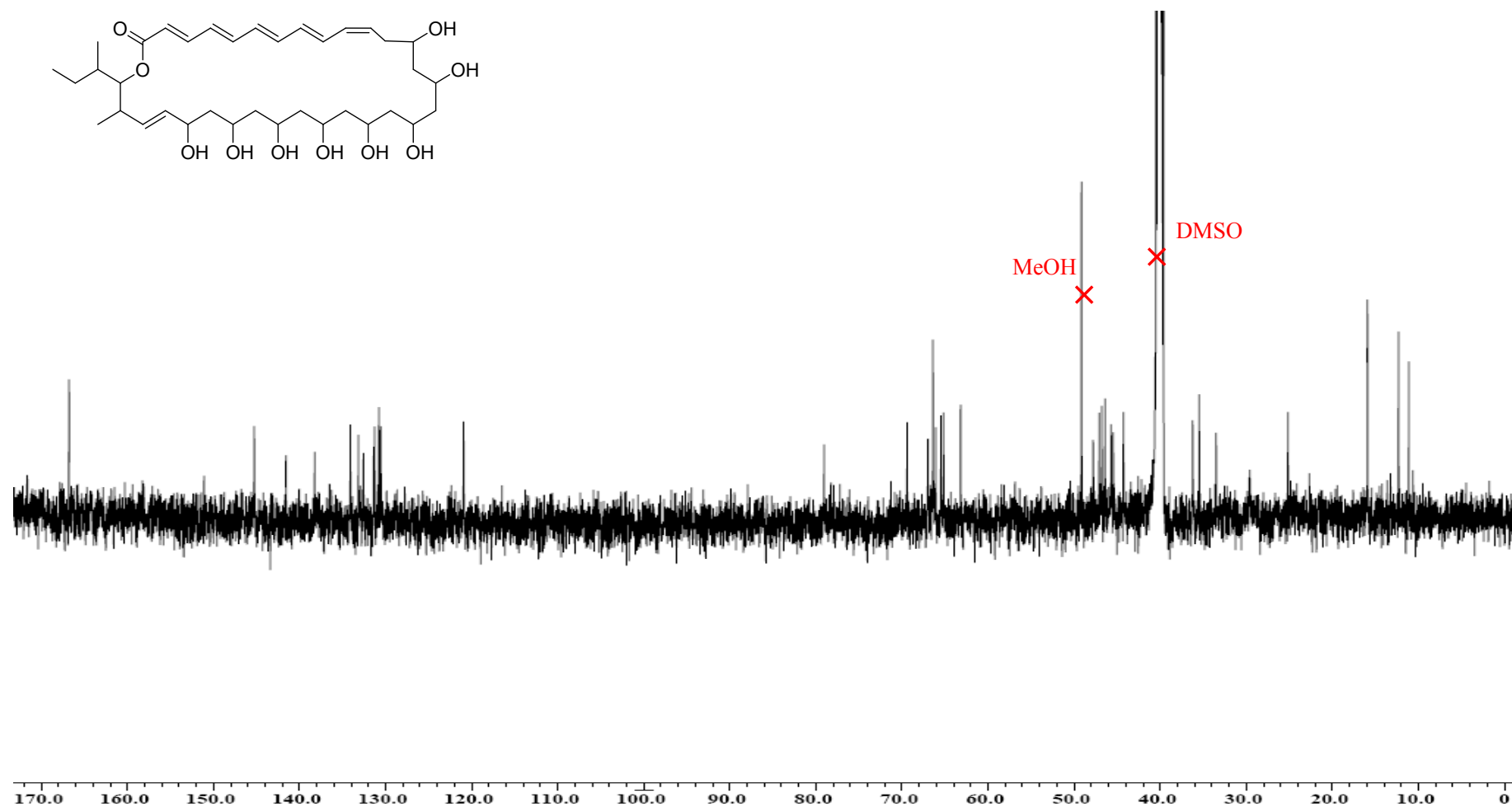


Figure S30. ^1H - ^1H COSY Spectrum of reedsmycin D (4) in DMSO-d_6

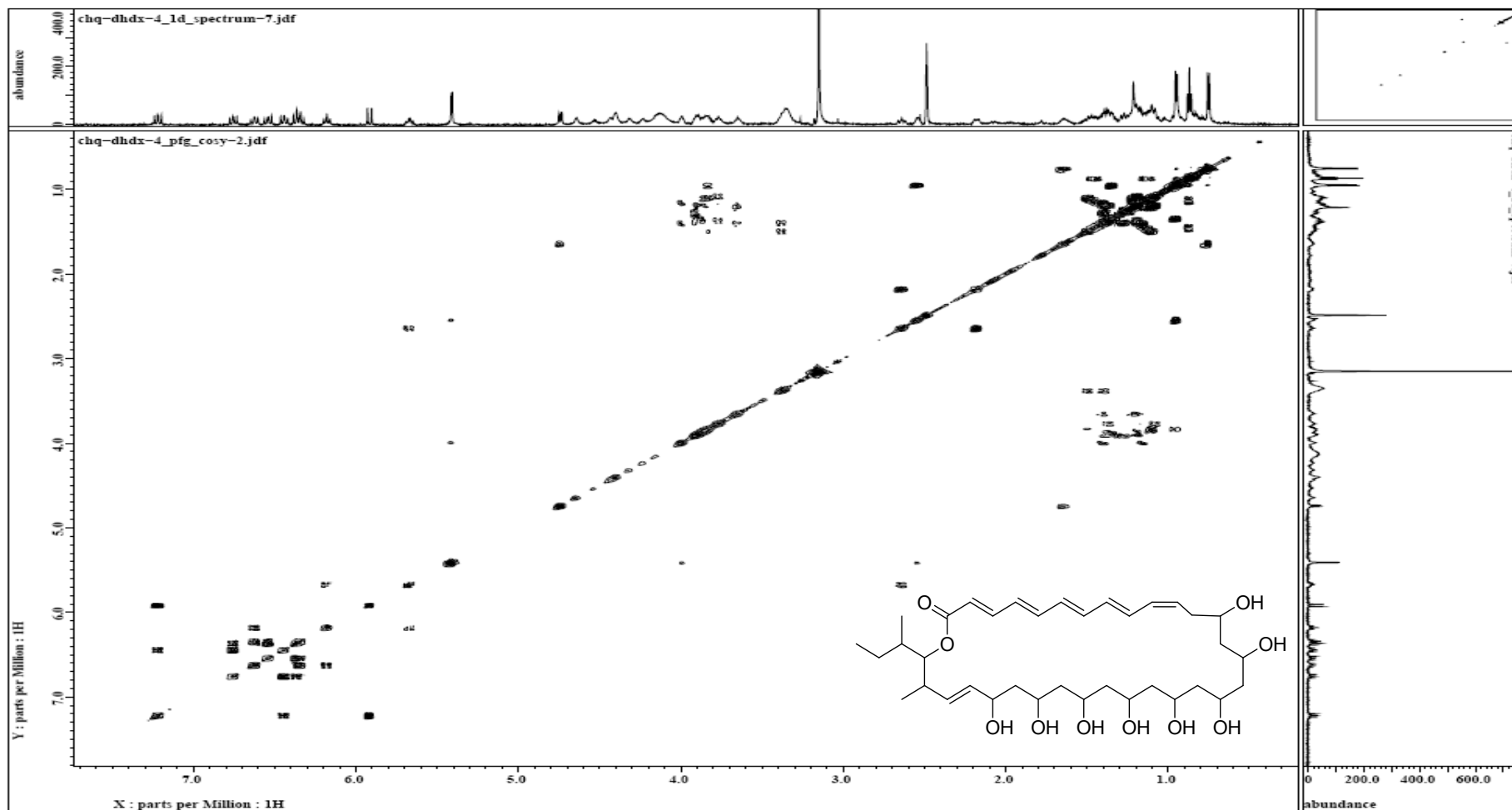


Figure S31. HMBC Spectrum of reedsmycin D (4) in DMSO-d₆

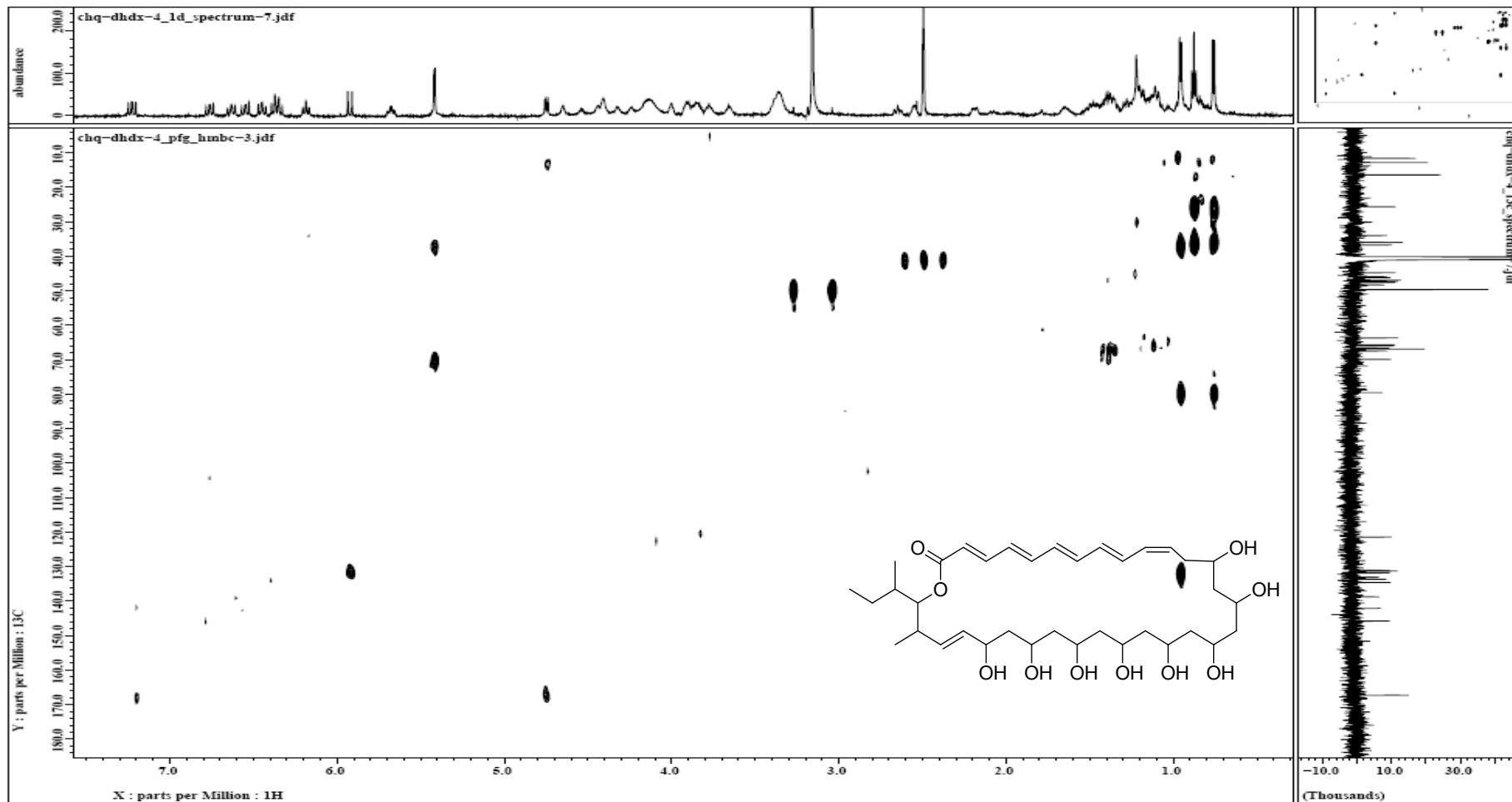


Figure S32. HRESIMS Spectrum of reedsmycin D (4)

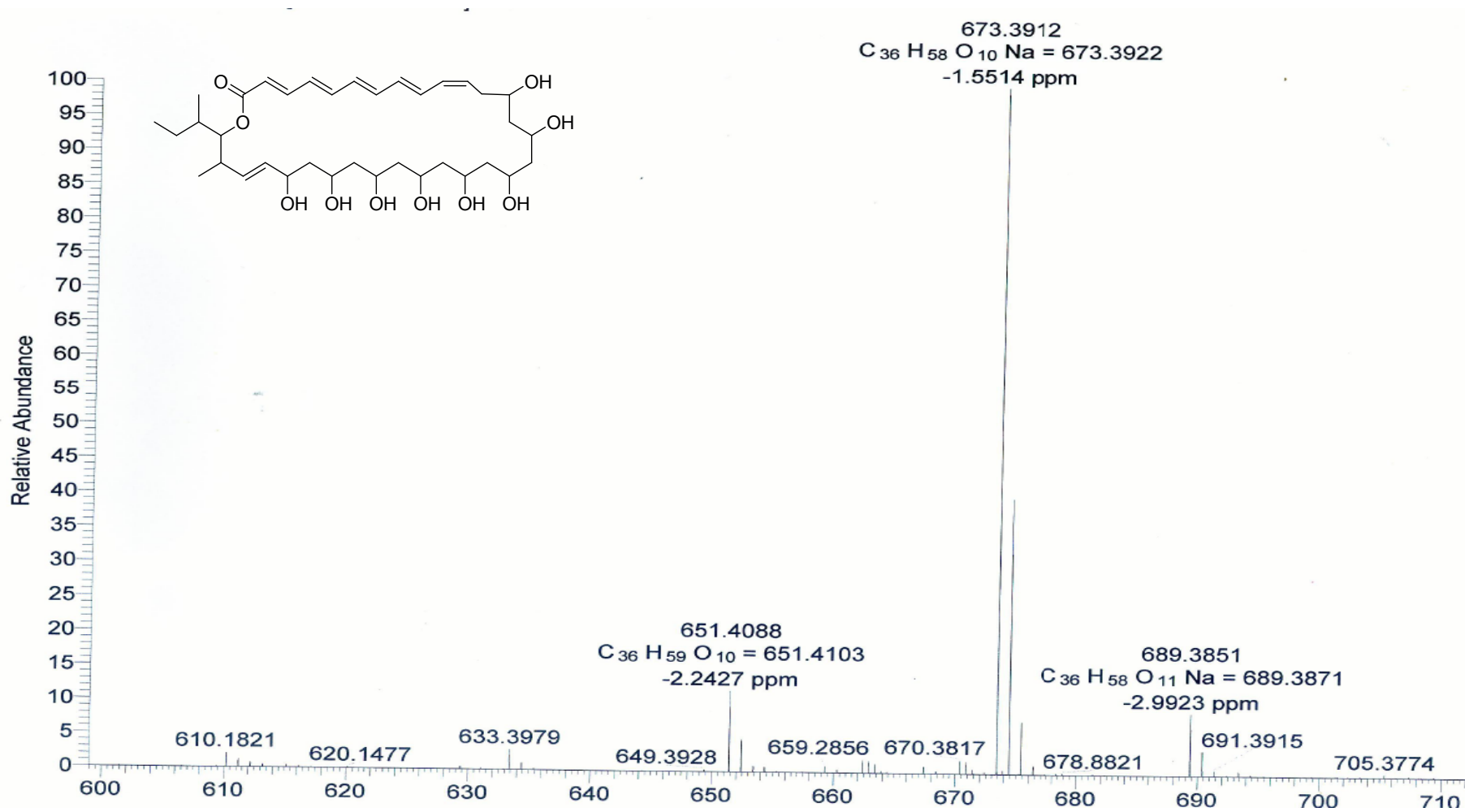


Figure S33. IR Spectrum of reedsmycin D (4)

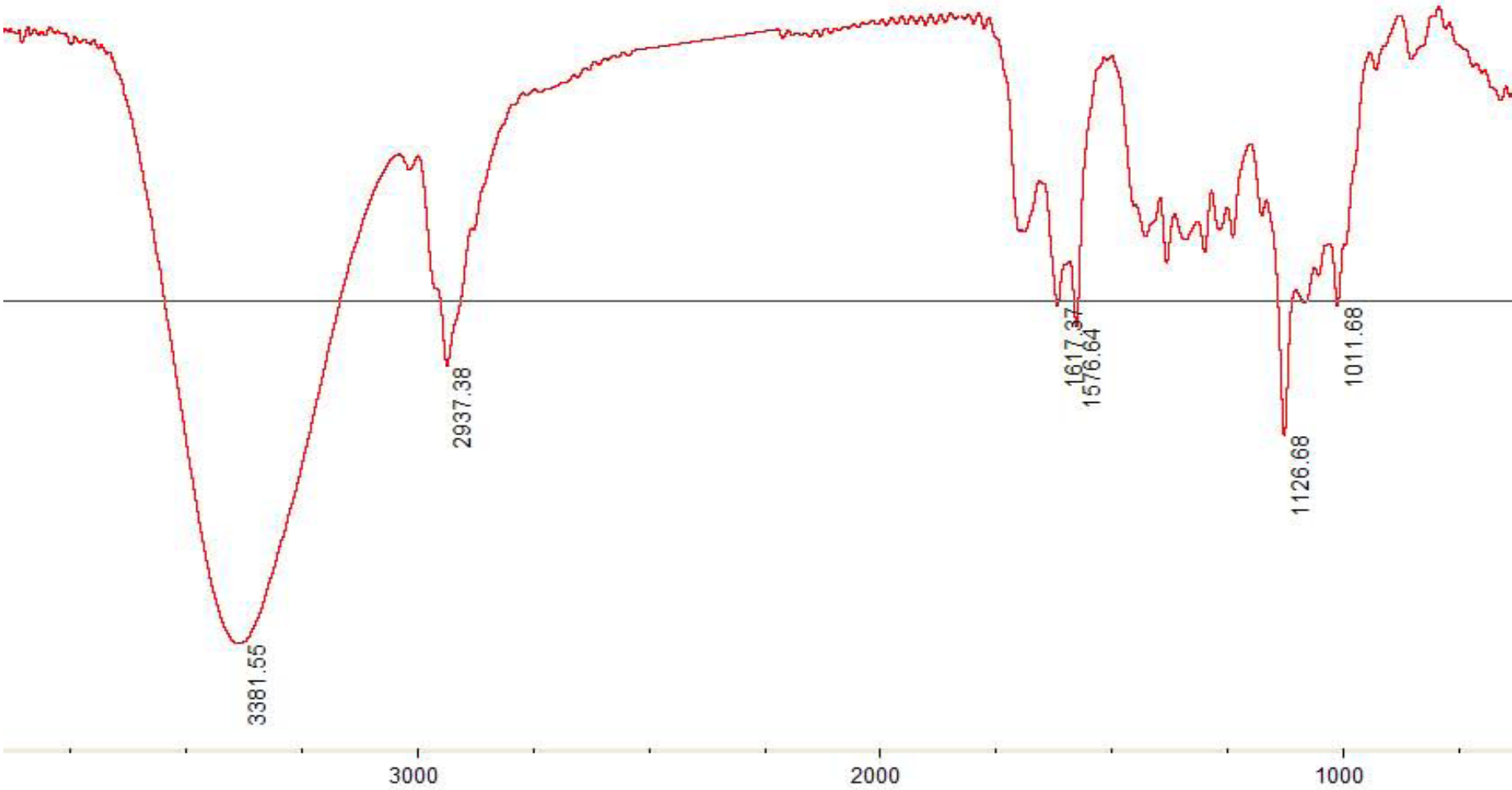


Figure S34. ^1H NMR Spectrum (400 MHz) of reedsmycin E (**5**) in DMSO-d_6

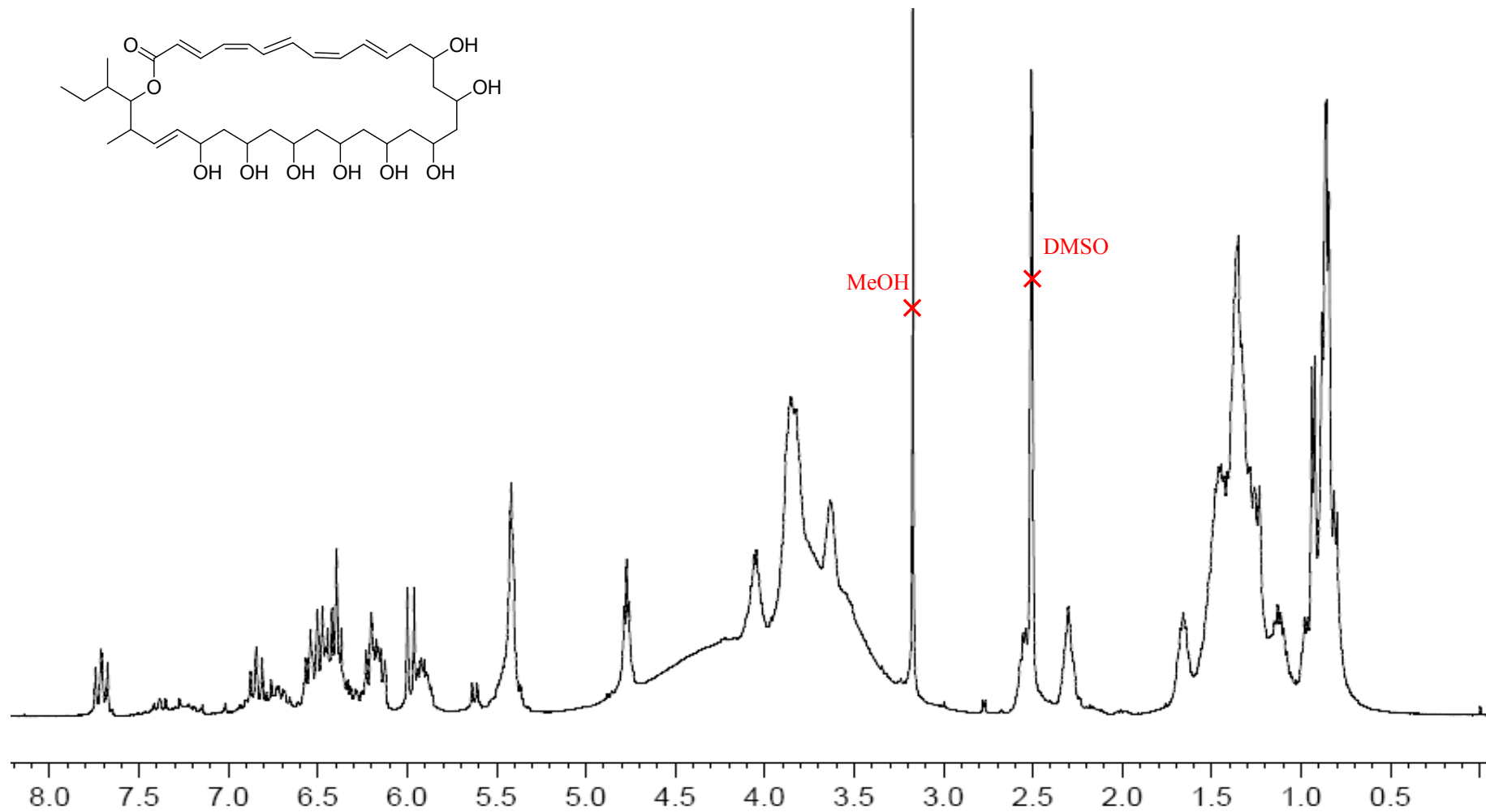


Figure S36. DEPT Spectrum (100 MHz) of reedsmycin E (**5**) in DMSO-d₆

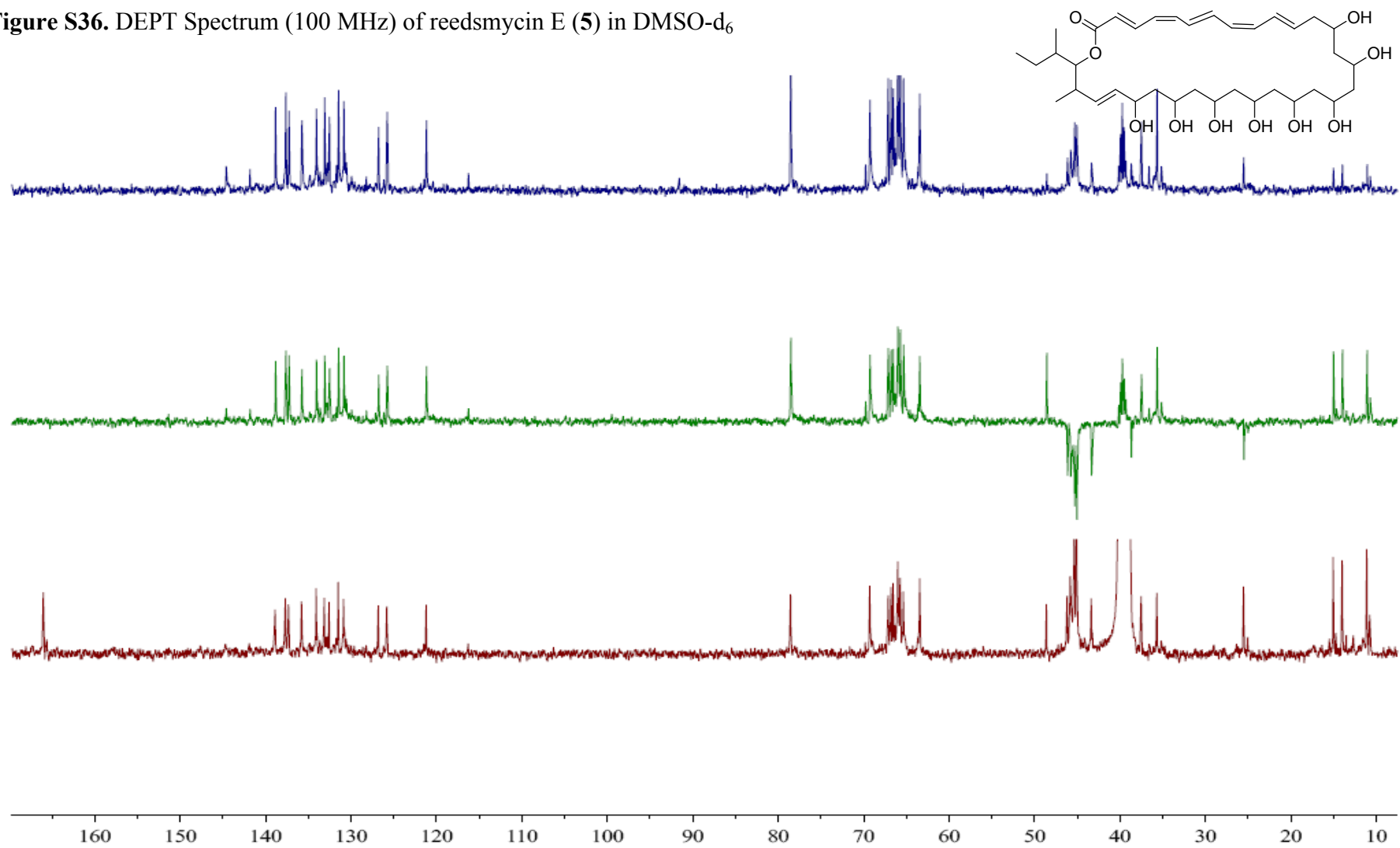


Figure S37. HMQC Spectrum of reedsmycin E (5) in DMSO-d₆

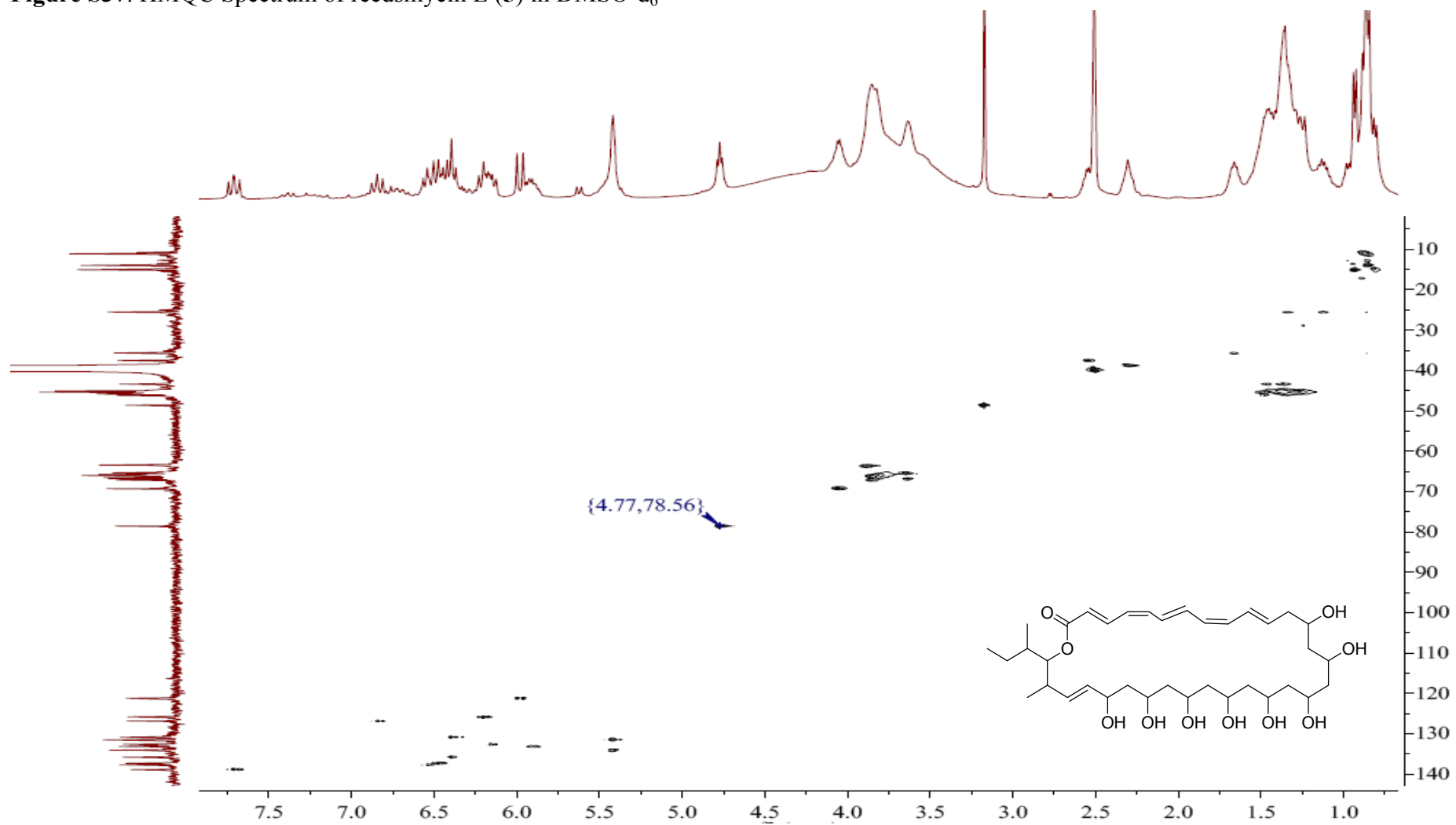


Figure S40. HRESIMS Spectrum of reedsmycin E (5)

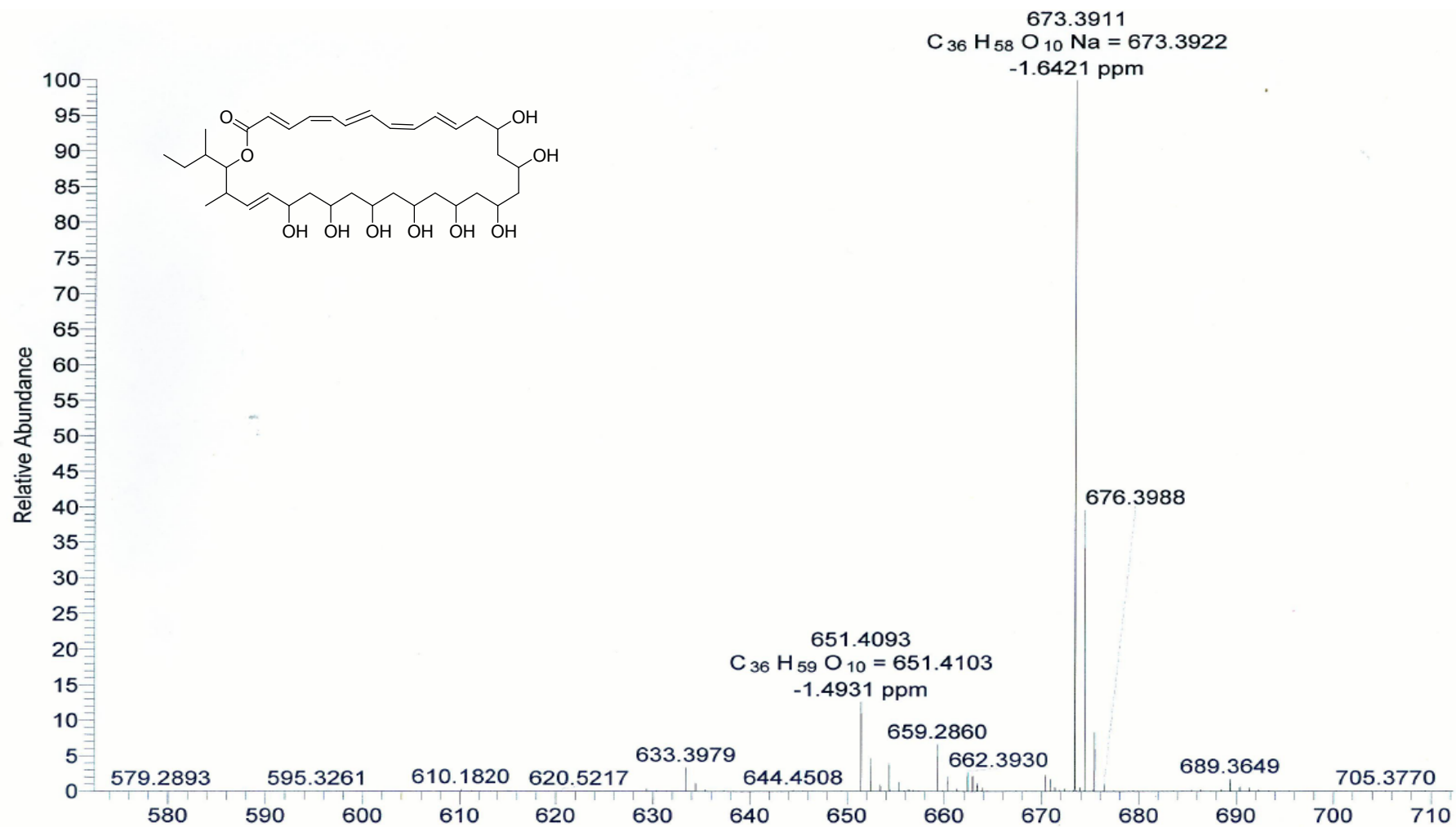


Figure S41. IR Spectrum of reedsmycin E (5)

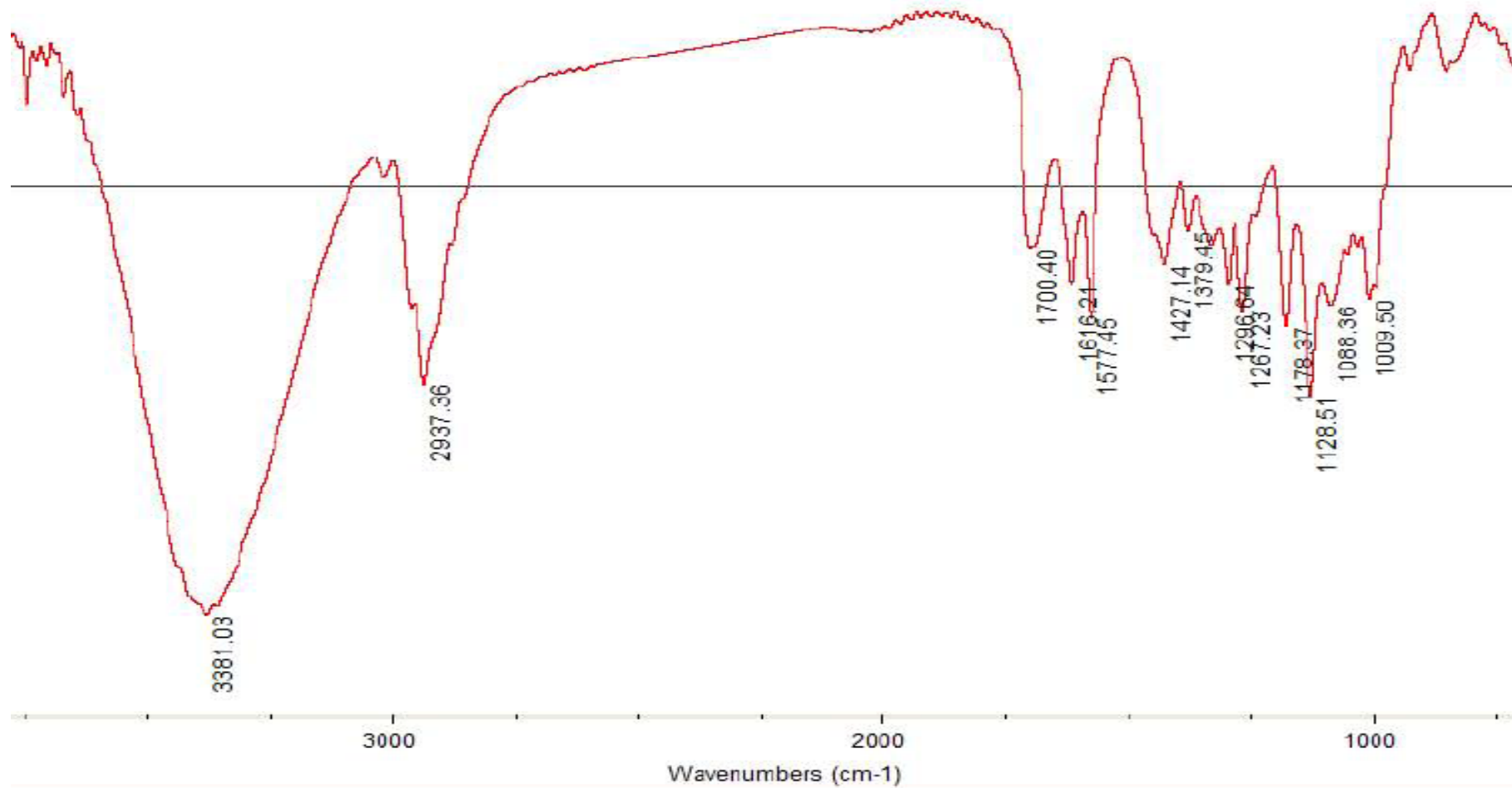


Figure S42. ^1H NMR Spectrum (600 MHz) of reedsmycin F (**6**) in DMSO-d_6

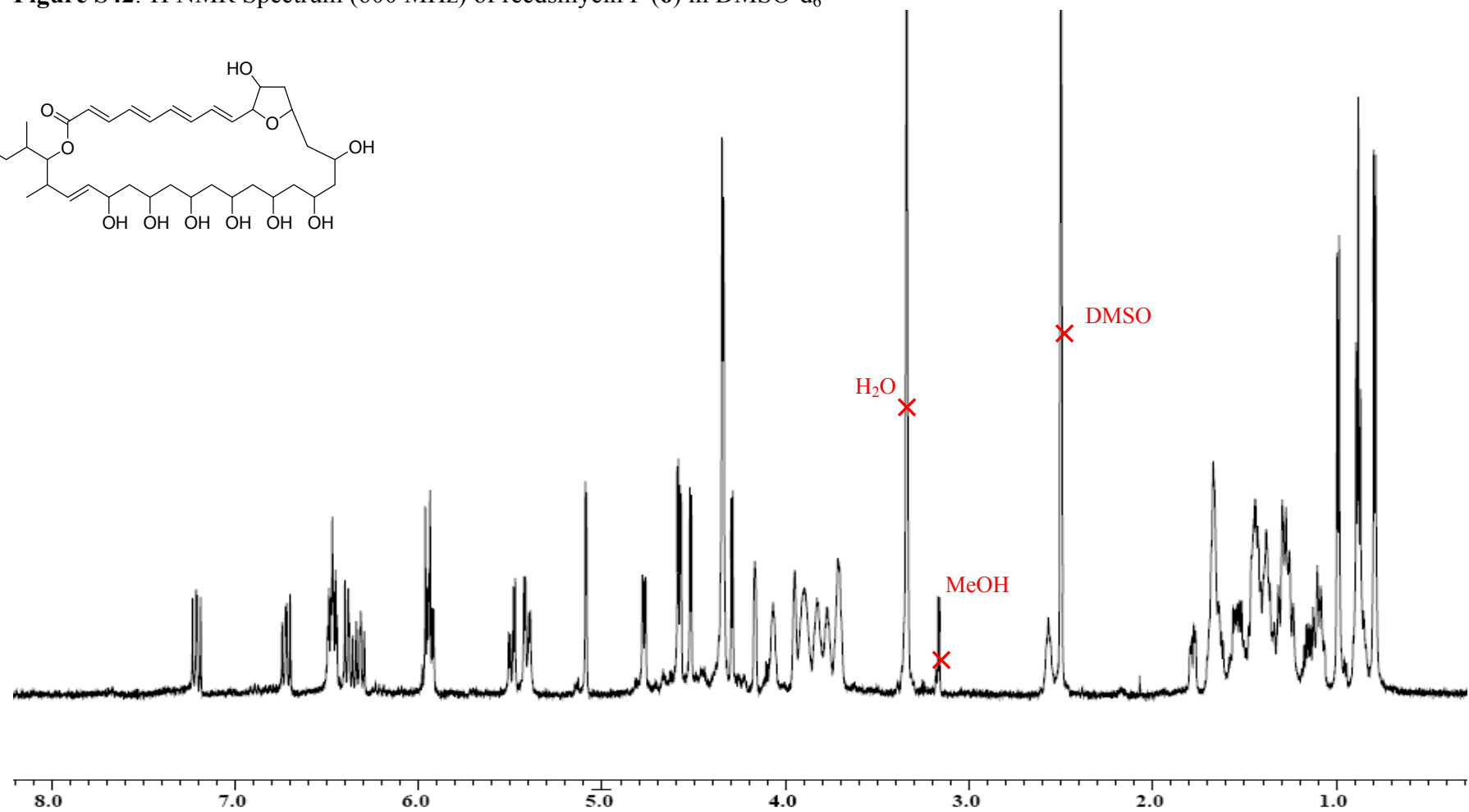
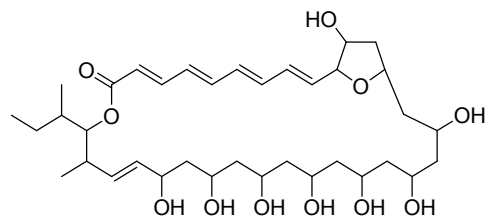


Figure S43. ^{13}C NMR Spectrum (150 MHz) of reedsmycin F (**6**) in DMSO-d_6

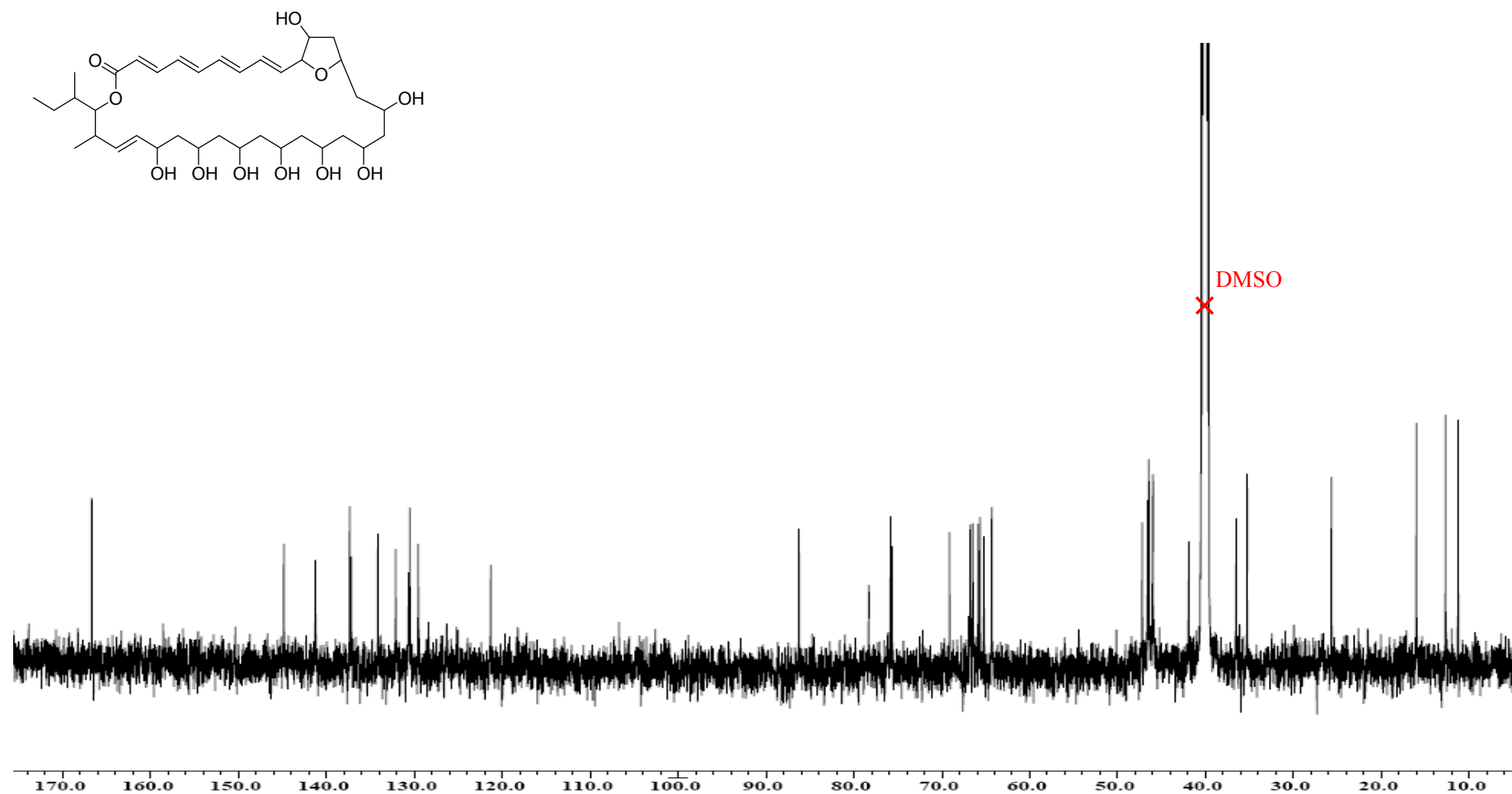


Figure S45. HMQC Spectrum of reedsmycin F (6) in DMSO-d₆

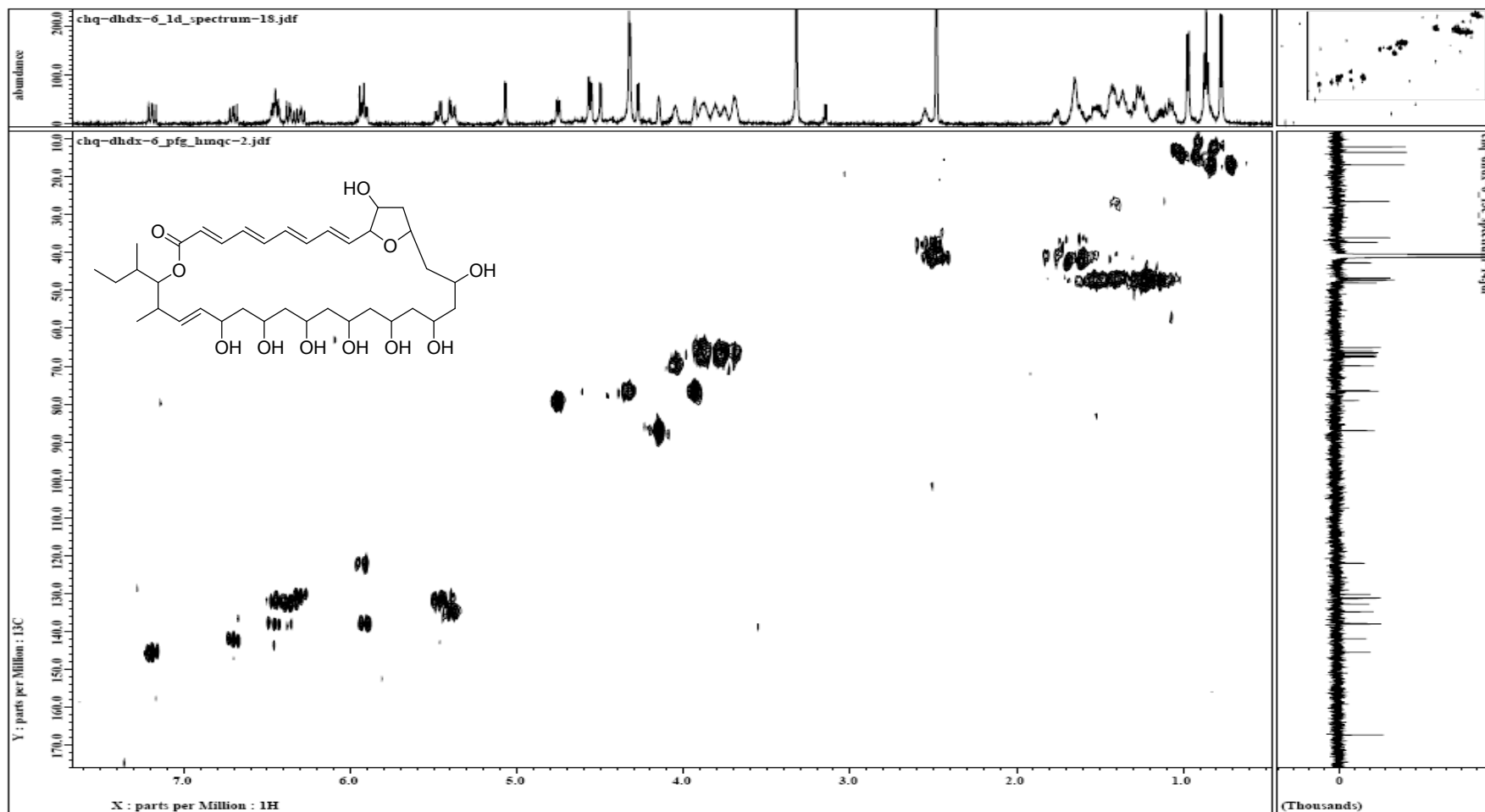


Figure S46. ^1H - ^1H COSY Spectrum of reedsmycin F (6) in DMSO-d_6

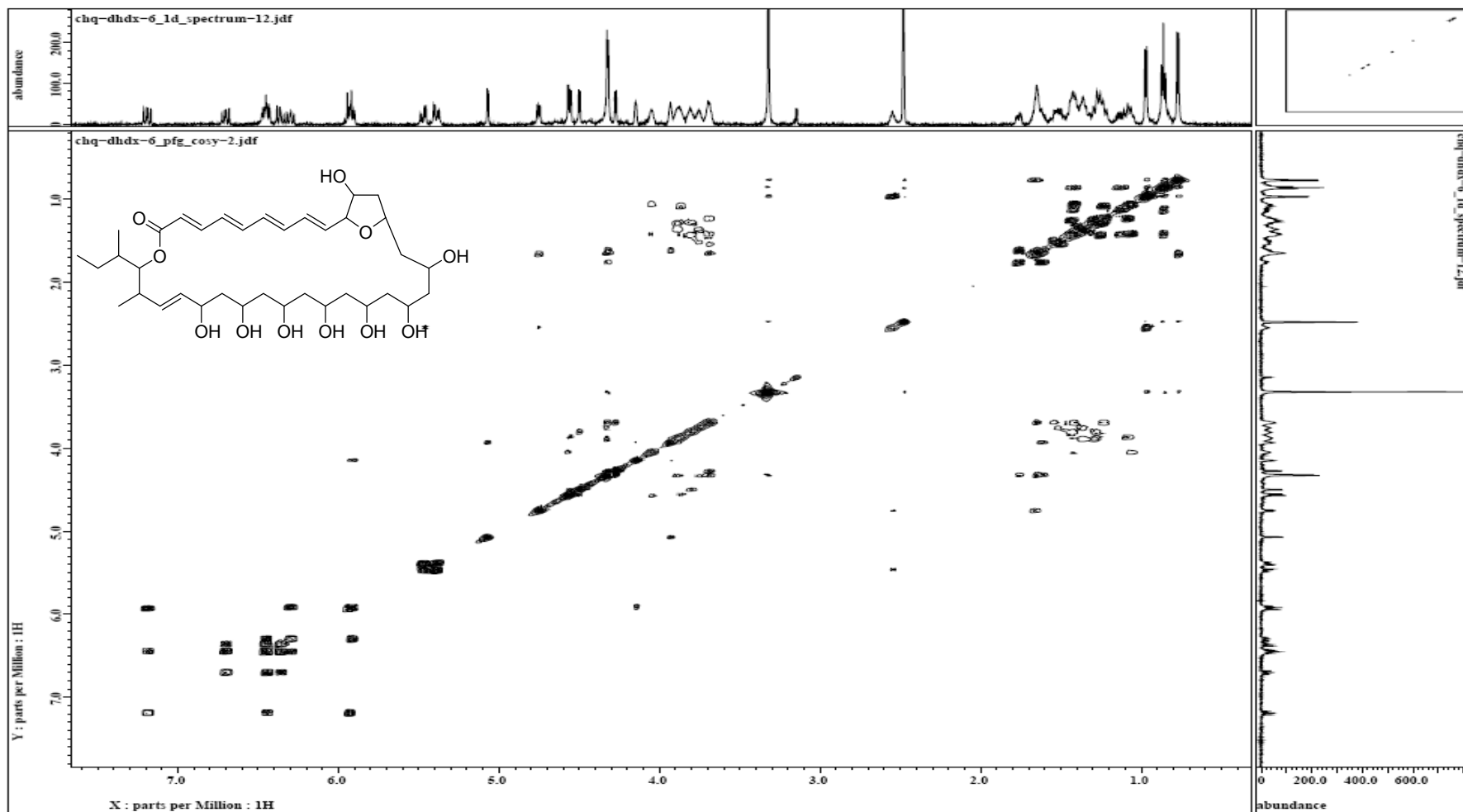


Figure S47. HMBC Spectrum of reedsmycin F (6) in DMSO-d₆

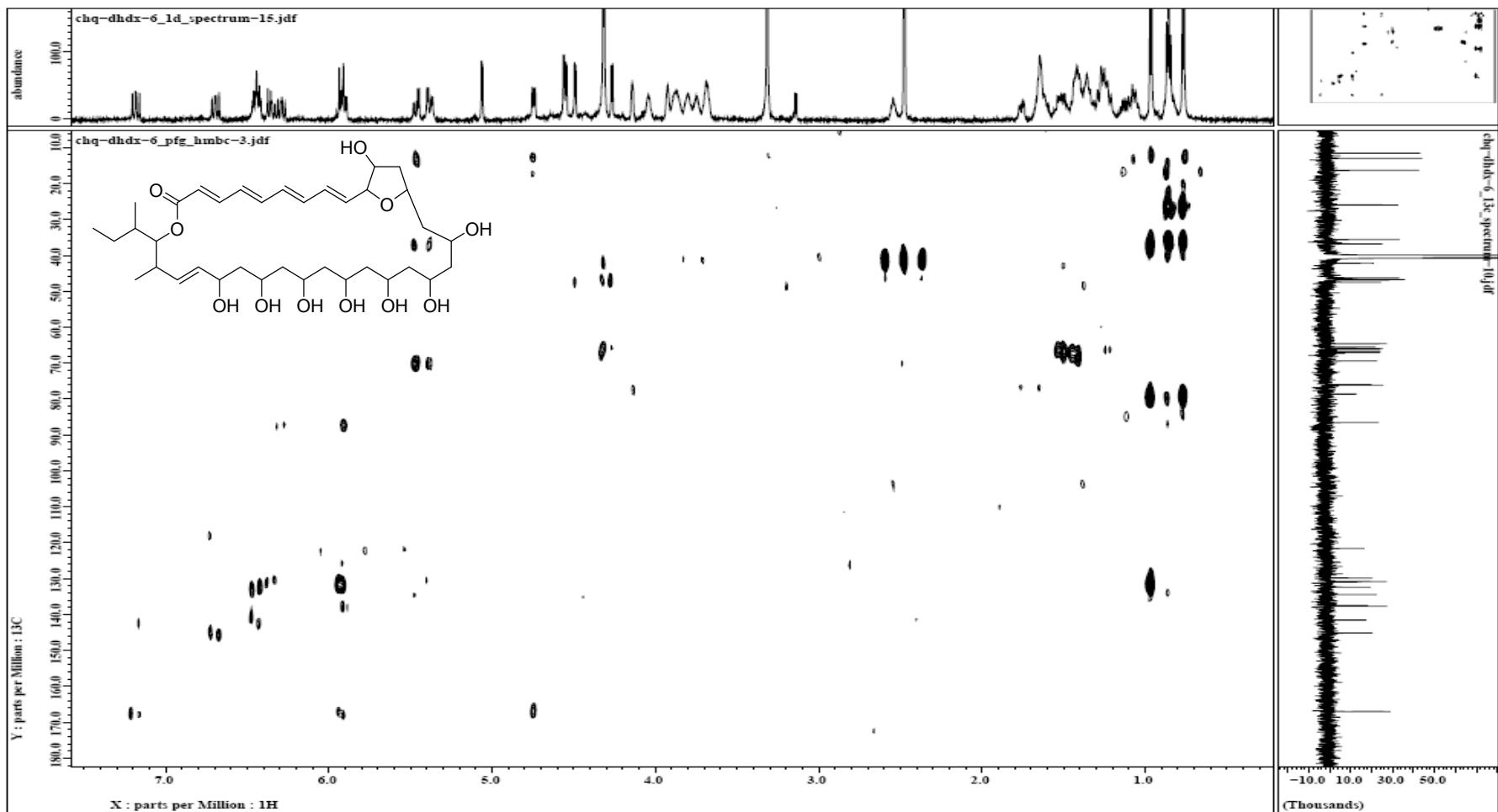


Figure S48. HRESIMS Spectrum of reedsmycin F (**6**)

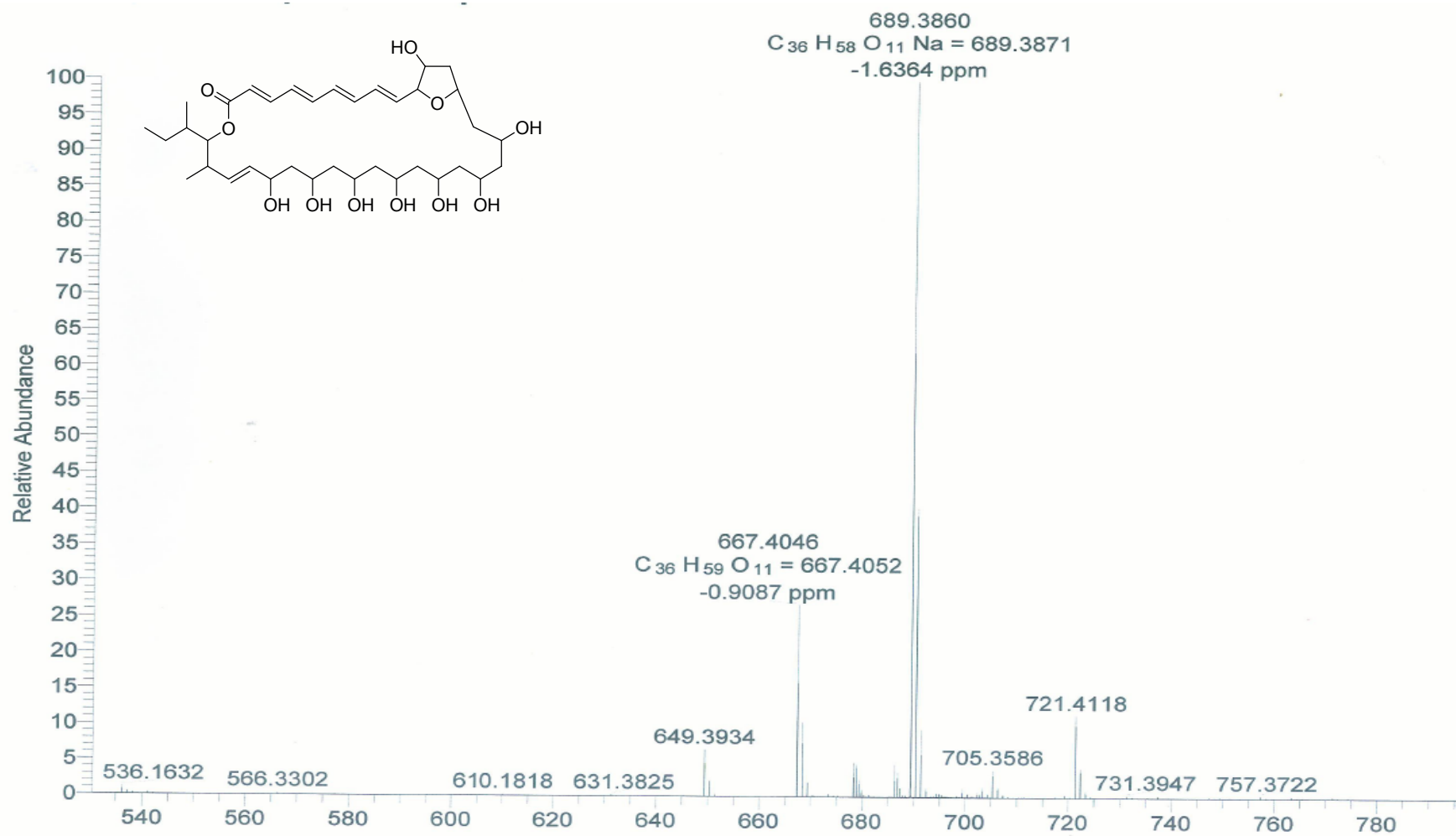


Figure S49. IR Spectrum of reedsmycin F (6)

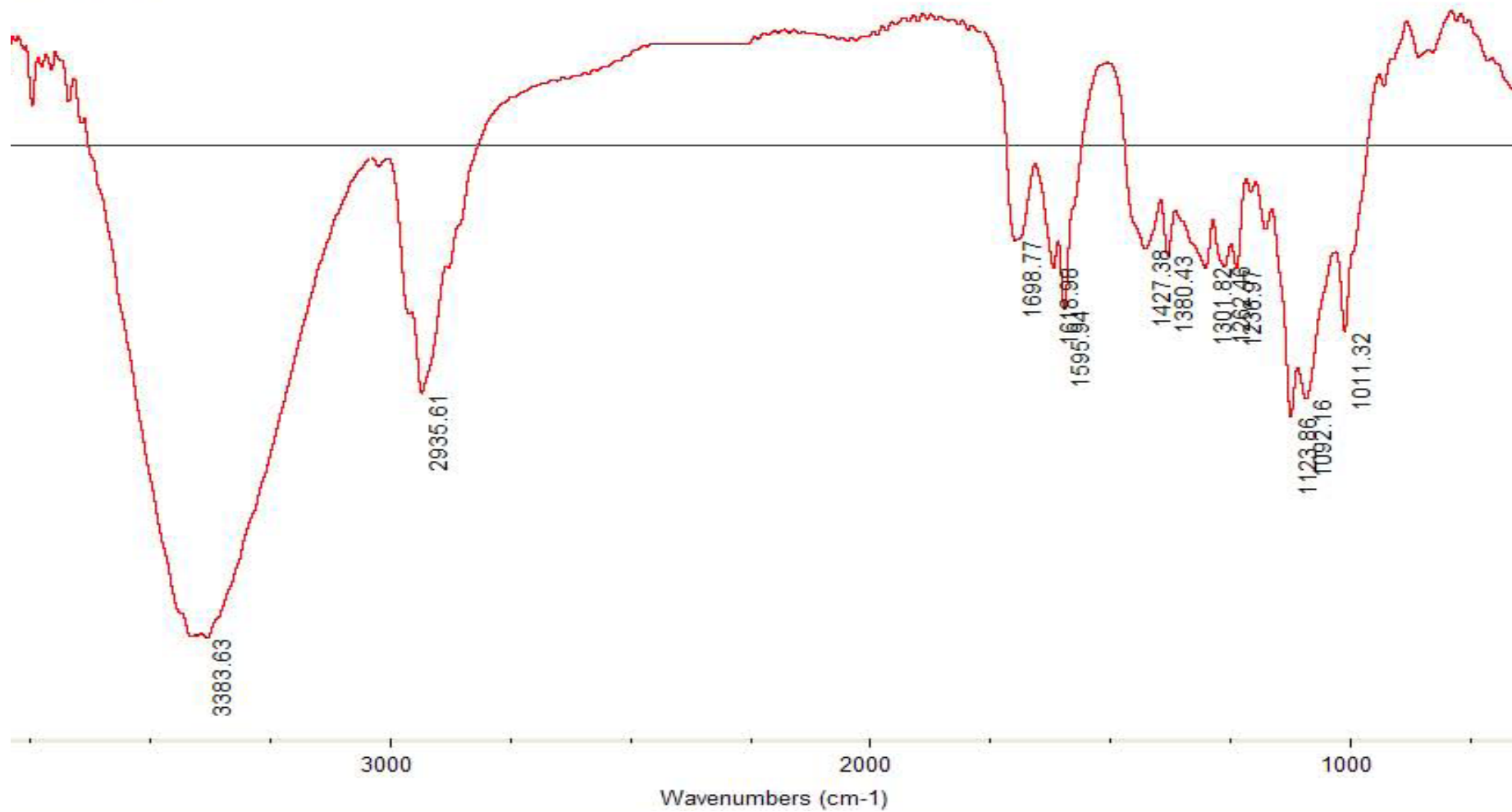


Figure S50. The HPLC profiles for the crude mixture and the fraction 7 (HPLC analysis by methanol: water = 5:95~100:0 from 5 min to 45 min, gradiently).

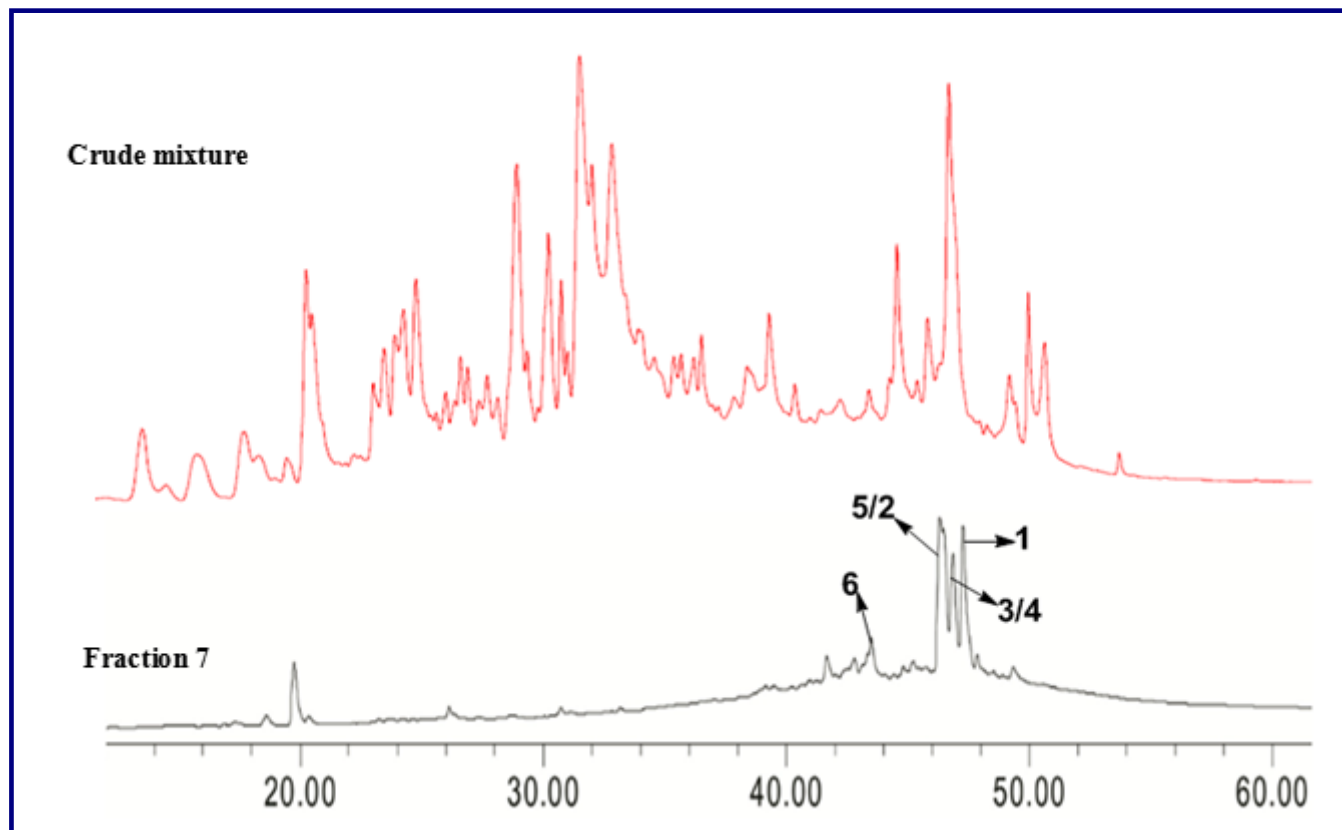


Figure S51. The TLC profiles for the crude extract and fraction 7.

