

SUPPORTING INFORMATION

Synthesis and Antiproliferative Activity of Novel Dehydroabietic Acid- Chalcone hybrids

Sophia Grigoropoulou ¹, Dimitra Manou ², Antonia I. Antoniou ¹, Artemis Tsirogianni ¹, Carlo Siciliano ³, Achilleas D. Theocharis ^{2,*} and Constantinos M. Athanassopoulos ^{1,*}

¹ Synthetic Organic Chemistry Laboratory, Department of Chemistry, University of Patras, GR-26504 Patras, Greece; grigorsophia@hotmail.com (S.G.); tonadoniou@upatras.gr (A.I.A.); kath@chemistry.upatras.gr (C.M.A.)

² Biochemistry, Biochemical Analysis & Matrix Pathobiology Research Group, Laboratory of Biochemistry, Department of Chemistry, University of Patras, GR-26504 Patras, Greece; dimitramanou@outlook.com (D.M.); atheoch@upatras.gr (A.D.T.)

³ Department of Pharmacy, Health and Nutritional Sciences, Edificio Polifunzionale, I-87036 Arcavacata di Rende (CS), Italy; carlo.siciliano@unical.it (C.S)

* Correspondence: kath@chemistry.upatras.gr; Tel.: +30-2610-997909 and atheoch@upatras.gr; Tel.: +30-2610-996029

Copies of NMR spectra

Table of contents

Figure S1. ^1H -NMR spectrum of compound 31.....	4
Figure S2. ^{13}C -NMR spectrum of compound 31.....	4
Figure S3. ^1H -NMR spectrum of compound 32.....	5
Figure S4. ^{13}C -NMR spectrum of compound 32.....	5
Figure S5. ^1H -NMR spectrum of compound 33.....	6
Figure S6. ^{13}C -NMR spectrum of compound 33.....	6
Figure S7. APT-NMR spectrum of compound 33.	7
Figure S8. ^1H -NMR spectrum of compound 34.....	7
Figure S9. ^{13}C -NMR spectrum of compound 34.....	8
Figure S10. ^1H -NMR spectrum of compound 35.....	8
Figure S11. ^{13}C -NMR spectrum of compound 35.....	9
Figure S12. ^1H -NMR spectrum of compound 36.....	9
Figure S13. ^{13}C -NMR spectrum of compound 36.....	10
Figure S14. ^1H -NMR spectrum of compound 37.....	10
Figure S15. ^{13}C -NMR spectrum of compound 37.....	11
Figure S16. APT-NMR spectrum of compound 37.	11
Figure S17. ^1H -NMR spectrum of compound 38.....	12
Figure S18. ^{13}C -NMR spectrum of compound 38.....	12
Figure S19. APT-NMR spectrum of compound 38.	13
Figure S20. ^1H -NMR spectrum of compound 39.....	13
Figure S21. ^{13}C -NMR spectrum of compound 39.....	14
Figure S22. ^1H -NMR spectrum of compound 40.....	14
Figure S23. ^{13}C -NMR spectrum of compound 40.....	15
Figure S24. ^1H -NMR spectrum of compound 41.....	15
Figure S25. ^{13}C -NMR spectrum of compound 41.....	16
Figure S26. APT-NMR spectrum of compound 41.	16
Figure S27. ^1H -NMR spectrum of compound 42.....	17
Figure S28. ^{13}C -NMR spectrum of compound 42.....	17
Figure S29. ^1H -NMR spectrum of compound 43.....	18

Figure S30. ^{13}C -NMR spectrum of compound 43.....	18
Figure S31. APT-NMR spectrum of compound 43.	19
Figure S32. ^1H -NMR spectrum of compound 44.....	19
Figure S33. ^{13}C -NMR spectrum of compound 44.....	20
Figure S34. APT-NMR spectrum of compound 44.	20
Figure S35. ^1H -NMR spectrum of compound 45.....	21
Figure S36. ^{13}C -NMR spectrum of compound 45.....	21
Figure S37. ^1H -NMR spectrum of compound 46.....	22
Figure S38. ^{13}C -NMR spectrum of compound 46.....	22
Figure S39. ^1H -NMR spectrum of compound 47.....	23
Figure S40. ^{13}C -NMR spectrum of compound 47.....	23
Figure S40. APT-NMR spectrum of compound 47.	24
Figure S42. ^1H -NMR spectrum of compound 48.....	24
Figure S43. ^{13}C -NMR spectrum of compound 48.....	25
Figure S44. ^1H -NMR spectrum of compound 49.....	25
Figure S45. ^{13}C -NMR spectrum of compound 49.....	26
Figure S46. ^1H -NMR spectrum of compound 50.....	26
Figure S47. ^{13}C -NMR spectrum of compound 50.....	27
Figure S48. ^1H -NMR spectrum of compound 51.....	27
Figure S49. ^{13}C -NMR spectrum of compound 51.....	28
Figure S50. APT-NMR spectrum of compound 51.	28
Figure S51 ^1H -NMR spectrum of compound 52.....	29
Figure S52. ^{13}C -NMR spectrum of compound 52.....	29
Figure S53. ^1H -NMR spectrum of compound 53.....	30
Figure S54. ^{13}C -NMR spectrum of compound 53.....	30

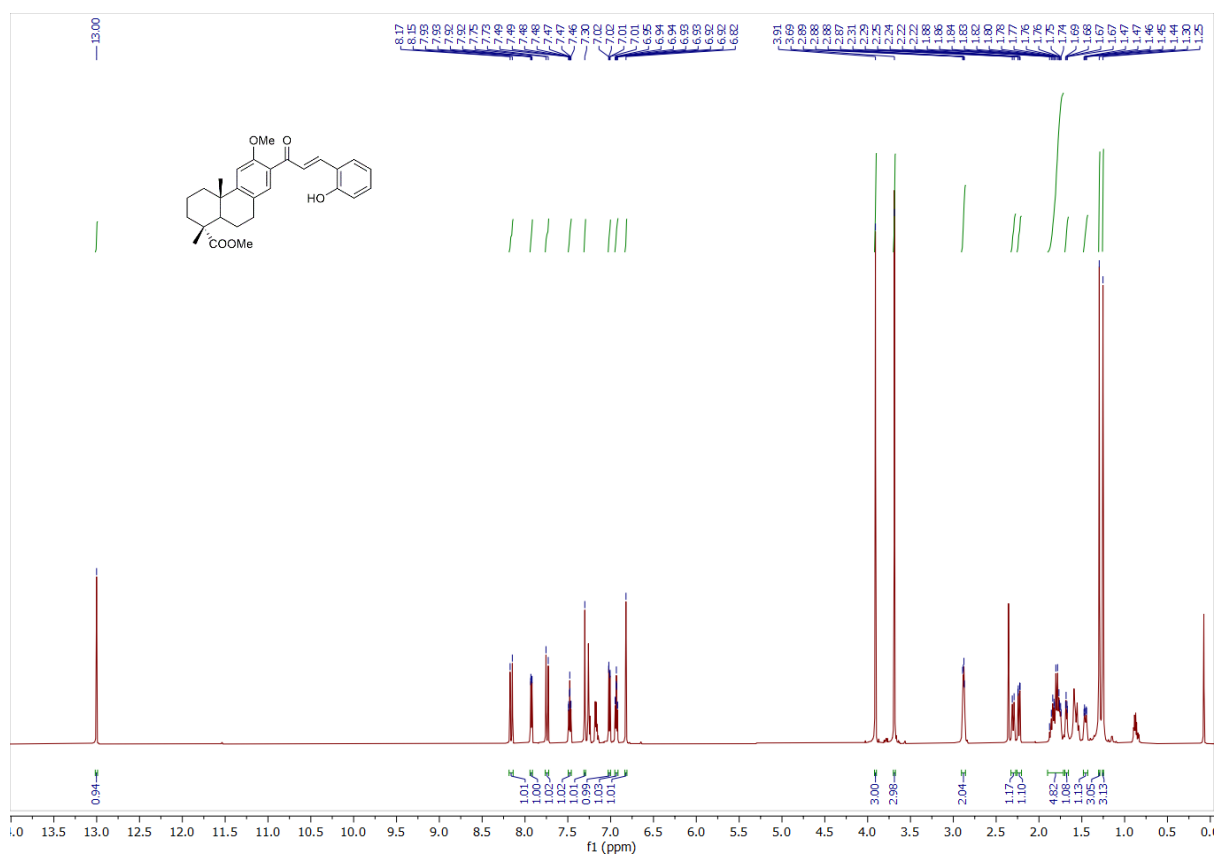


Figure S1. ¹H-NMR spectrum of compound 31.

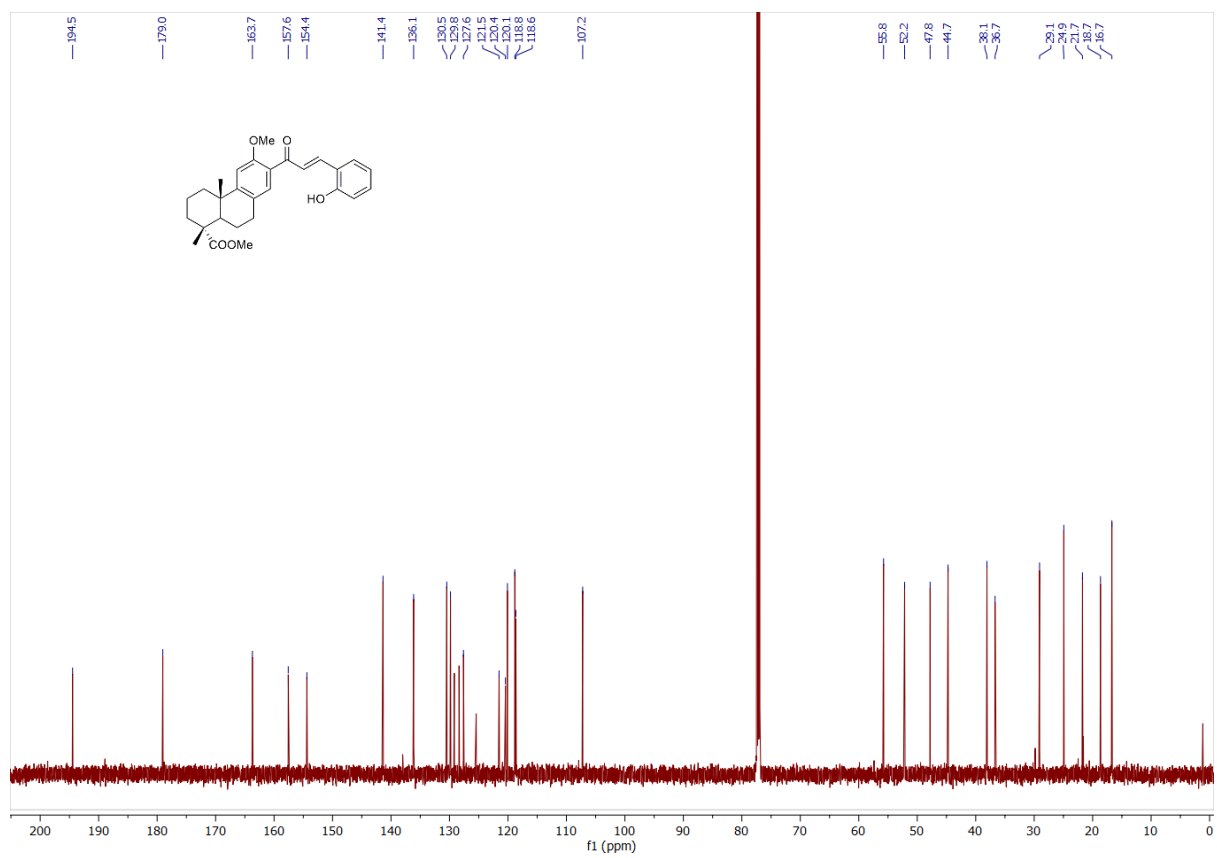


Figure S2. ¹³C-NMR spectrum of compound 31.

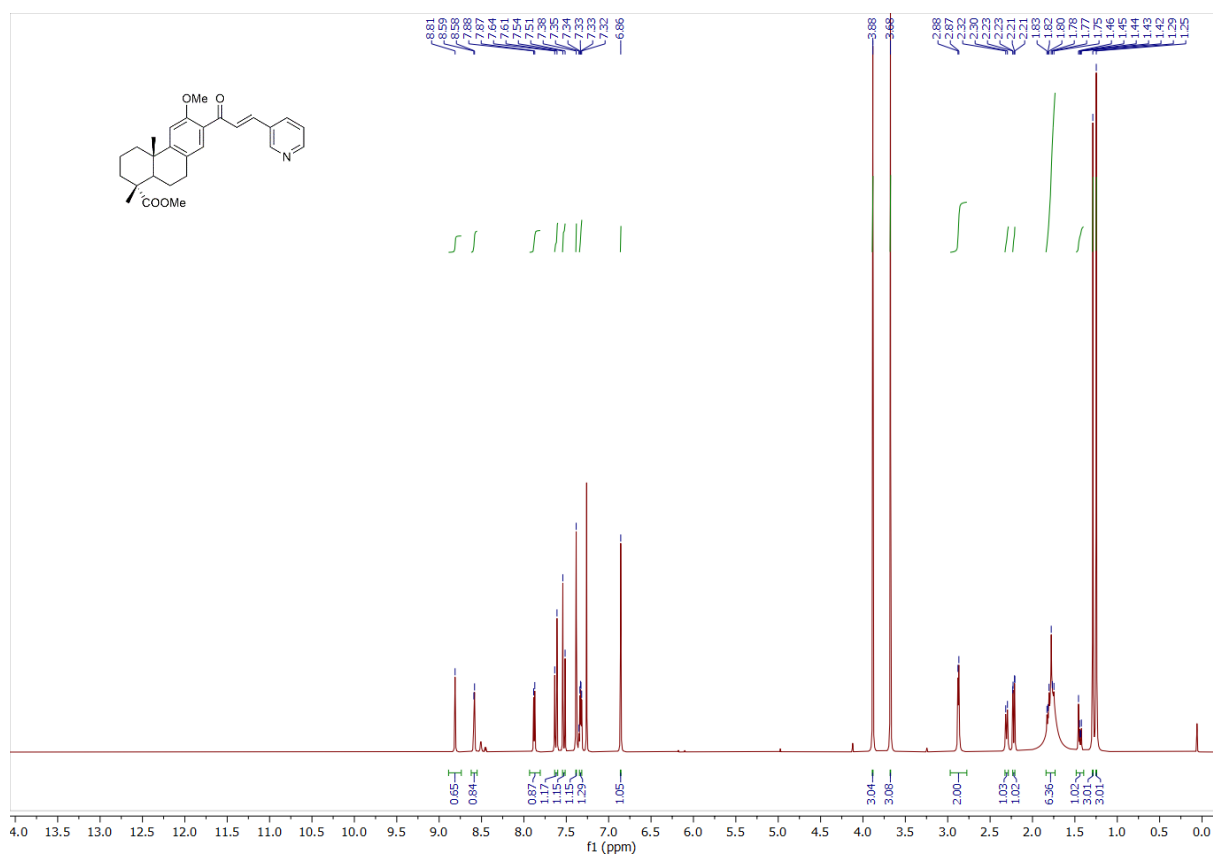


Figure S3. ¹H-NMR spectrum of compound 32.

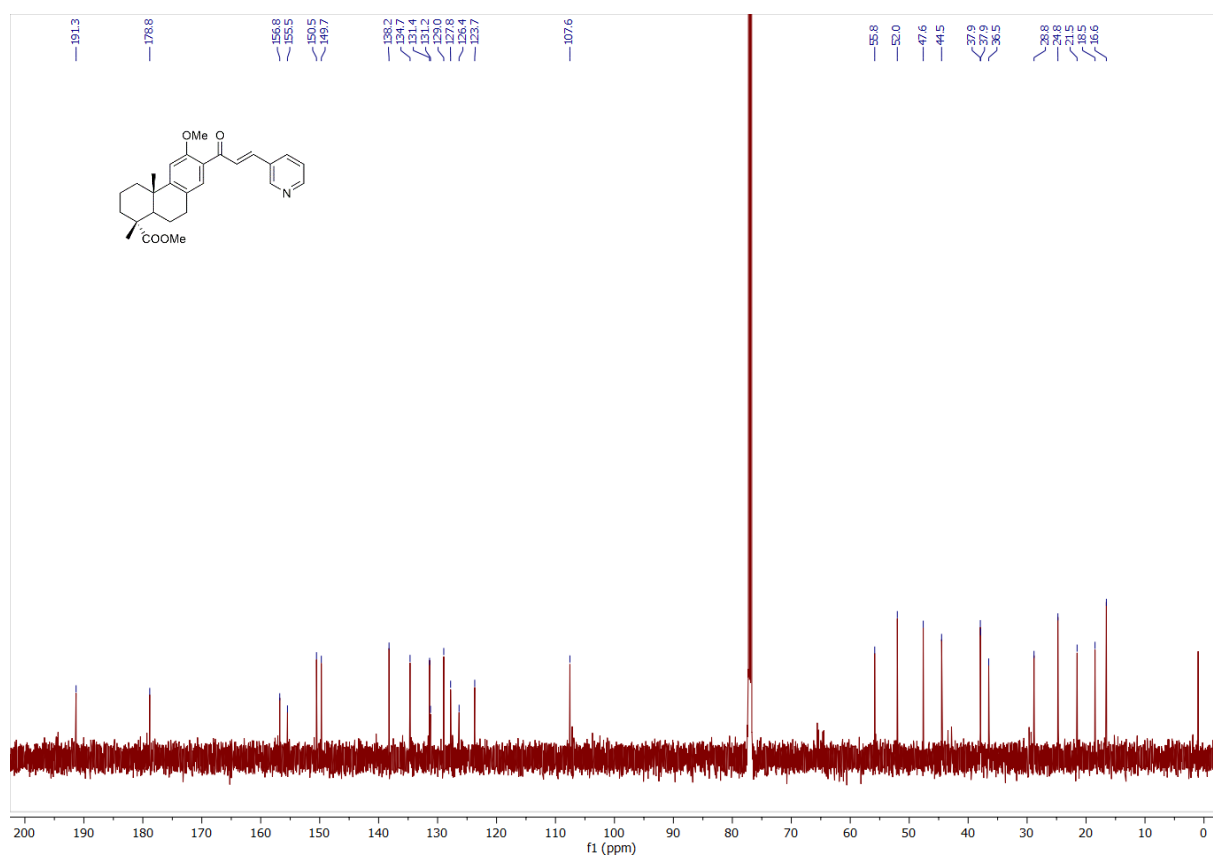


Figure S4. ¹³C-NMR spectrum of compound 32.

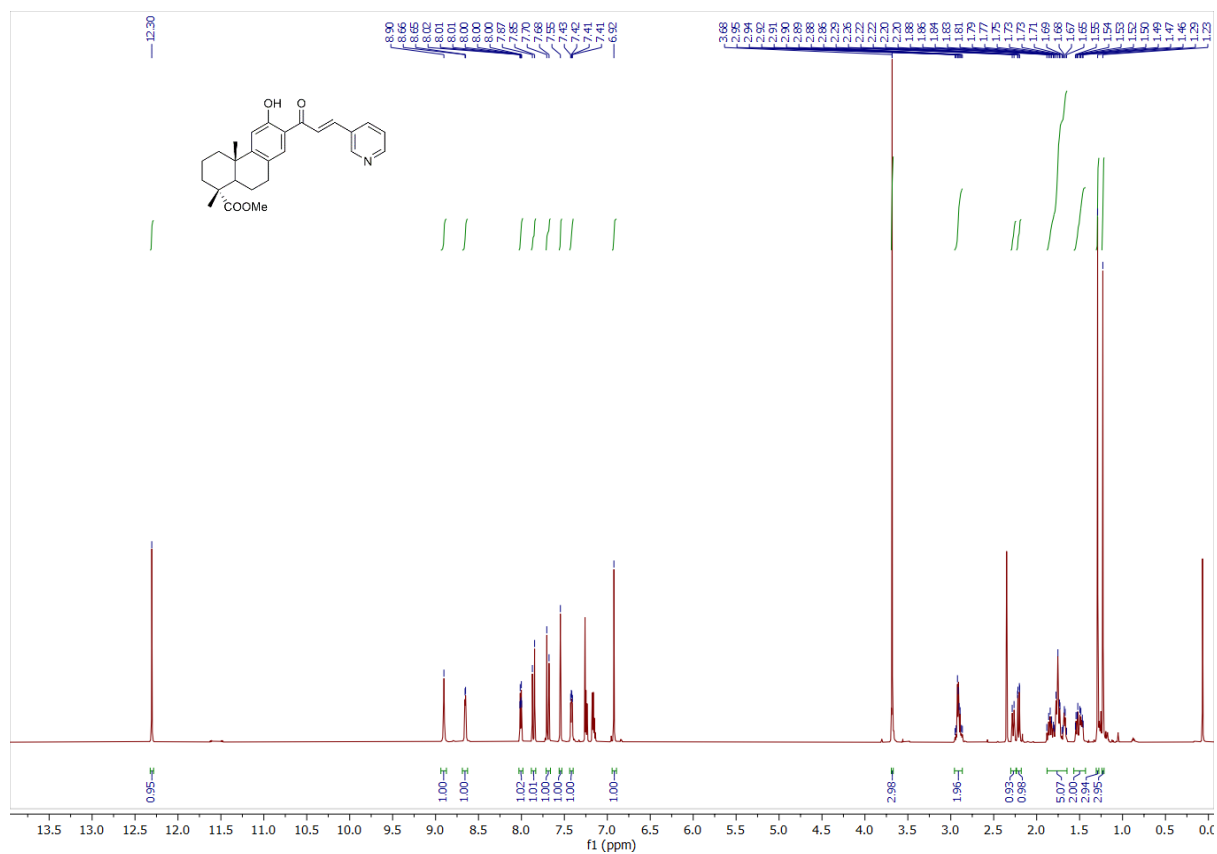


Figure S5. ¹H-NMR spectrum of compound 33.

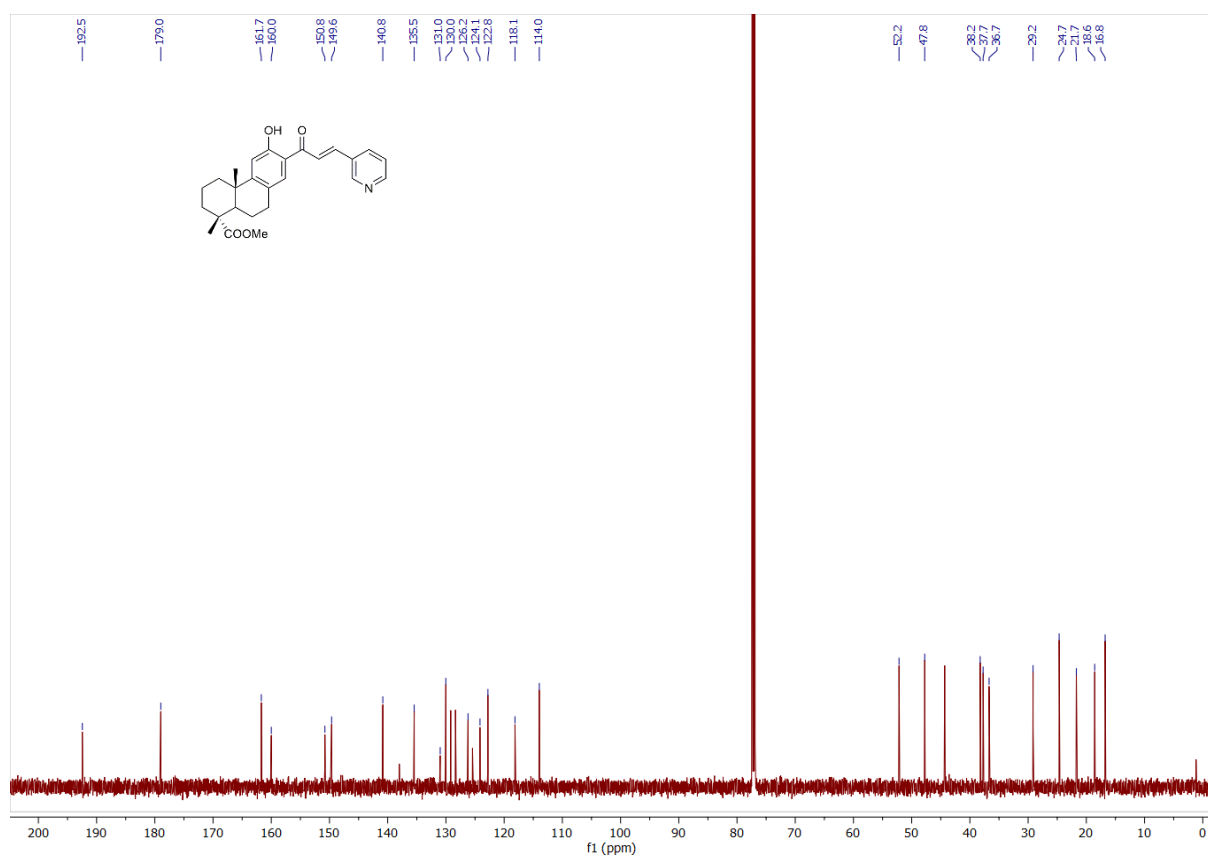


Figure S6. ¹³C-NMR spectrum of compound 33.

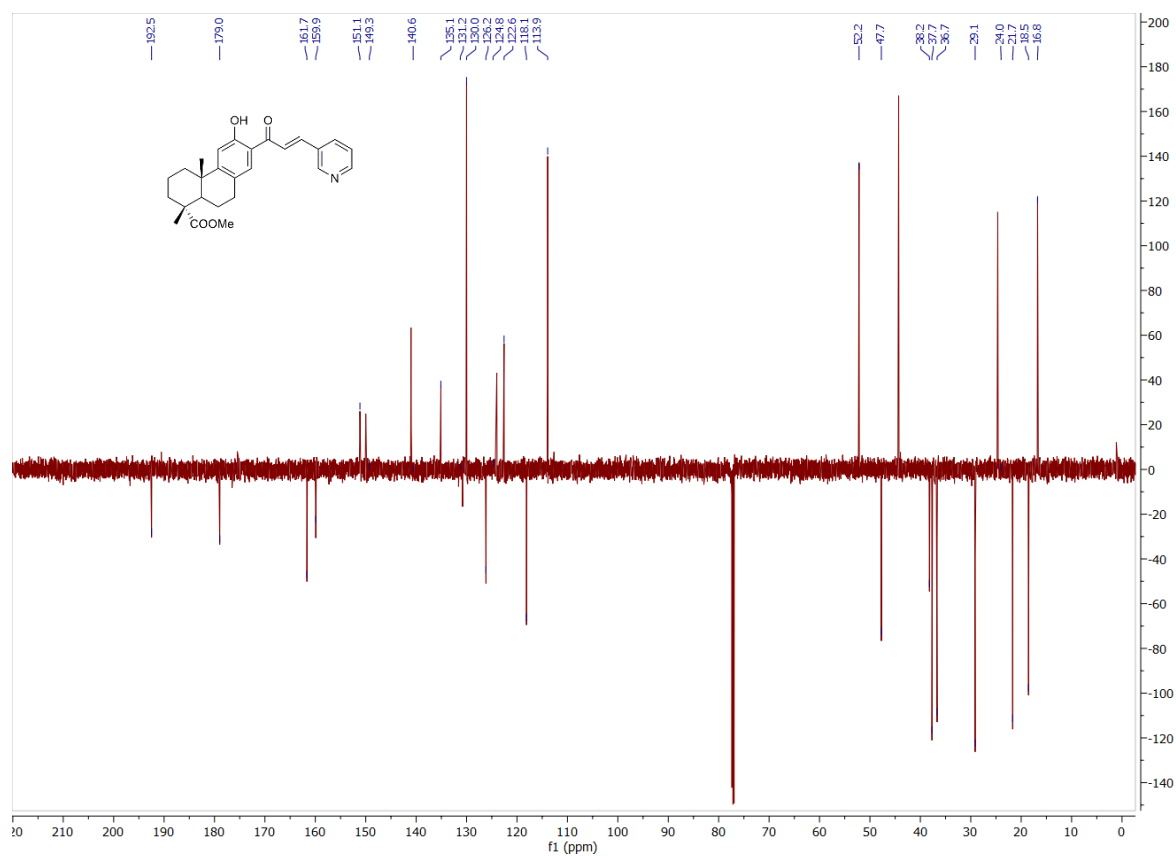


Figure S7. APT-NMR spectrum of compound 33.

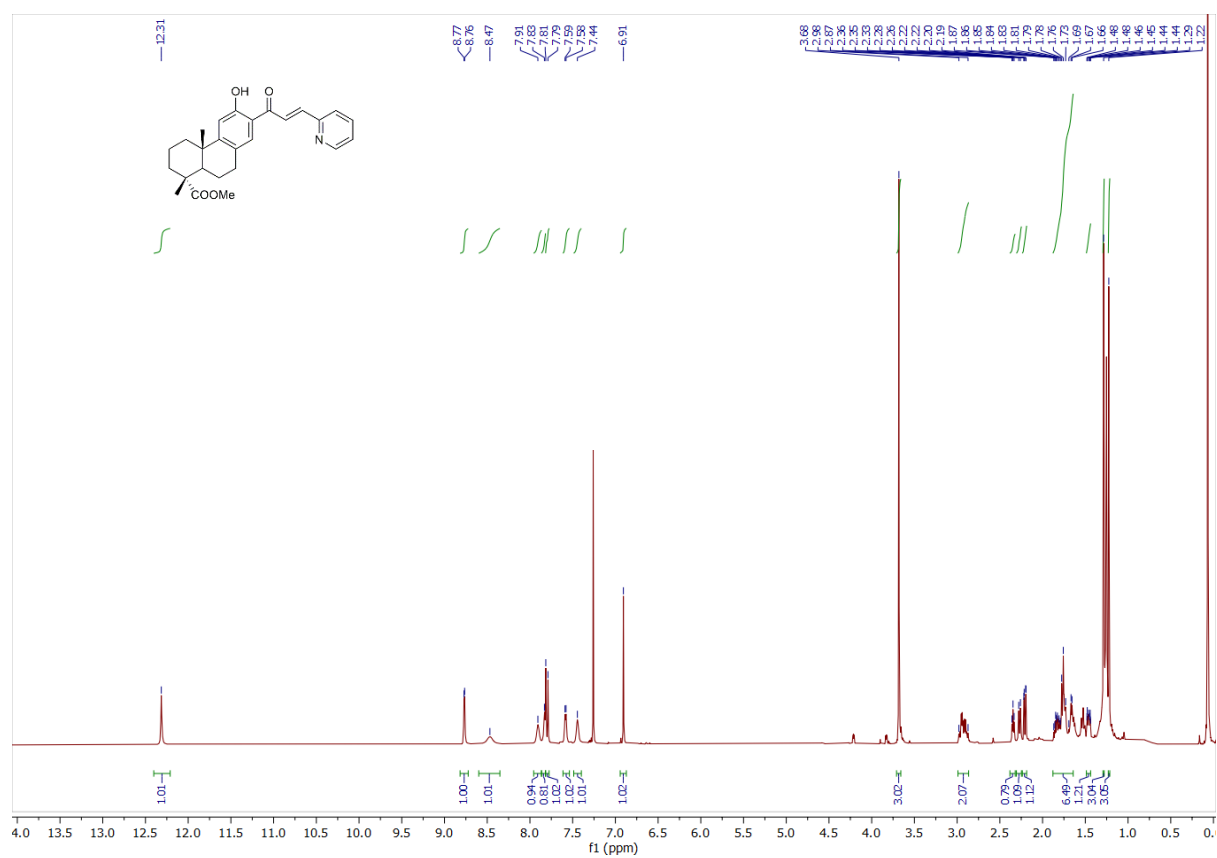


Figure S8. ^1H -NMR spectrum of compound 34.

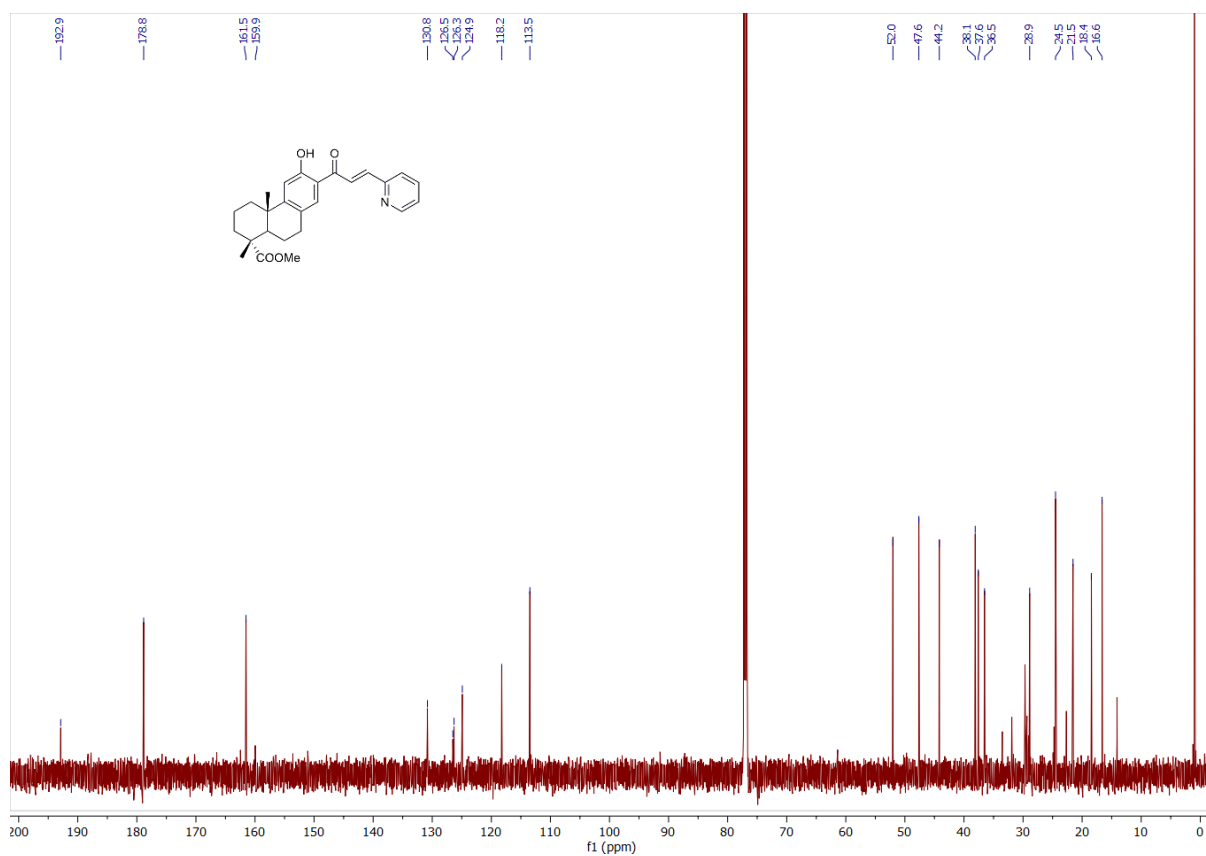


Figure S9. ¹³C-NMR spectrum of compound 34.

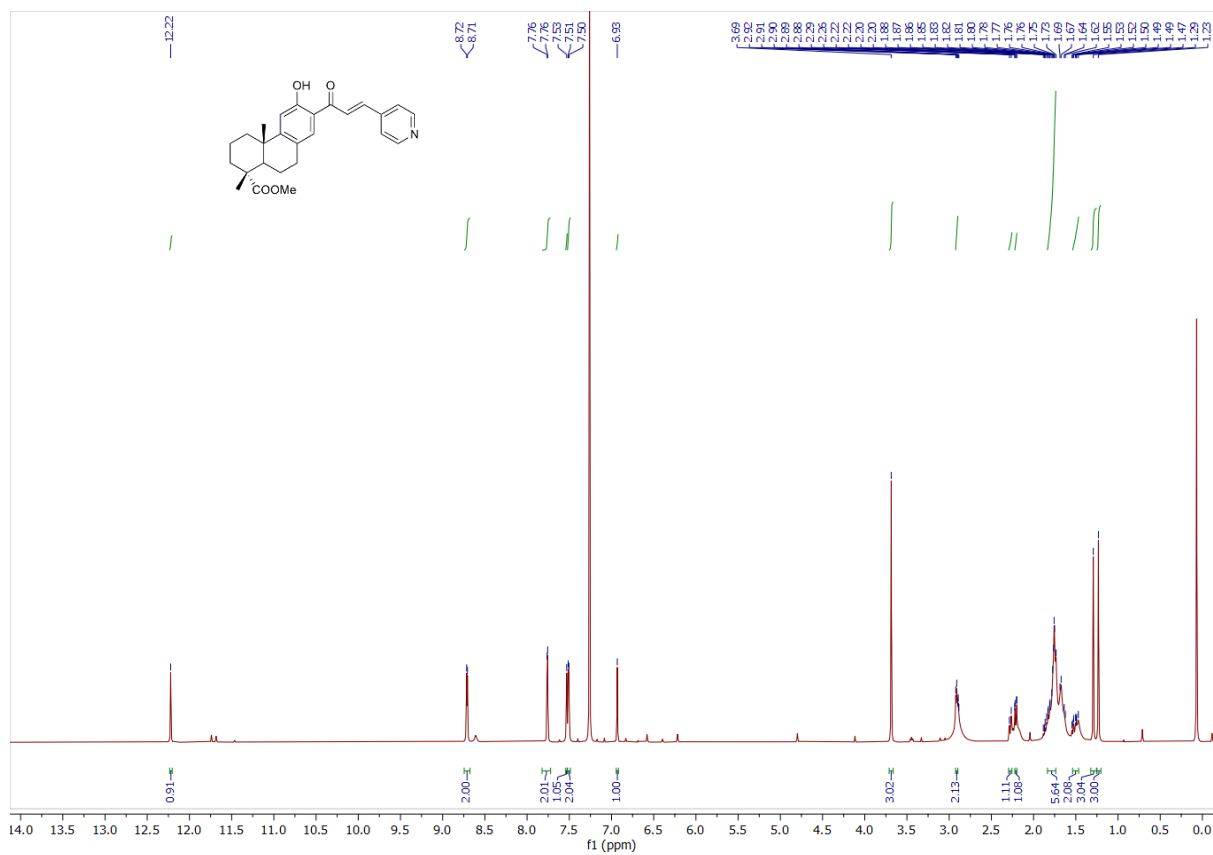


Figure S10. ¹H-NMR spectrum of compound 35.

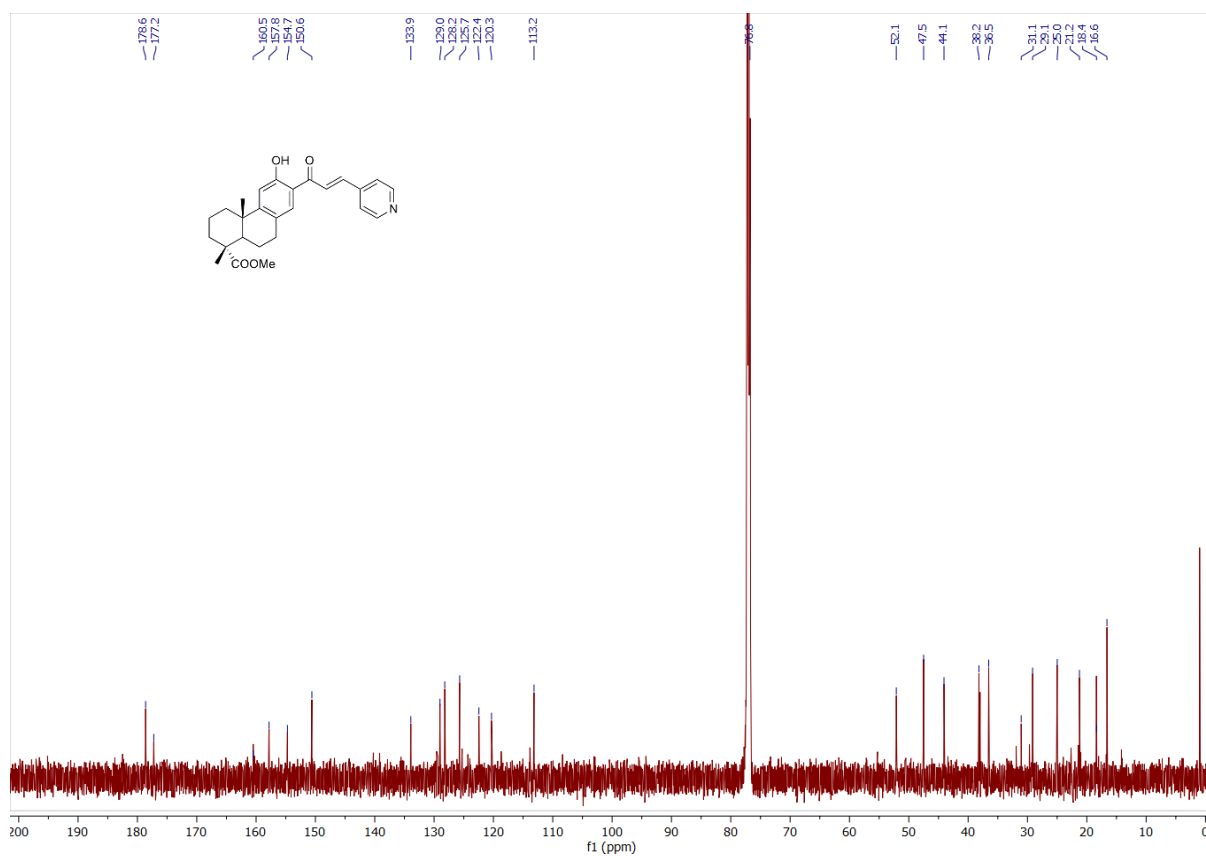


Figure S11. ¹³C-NMR spectrum of compound 35.

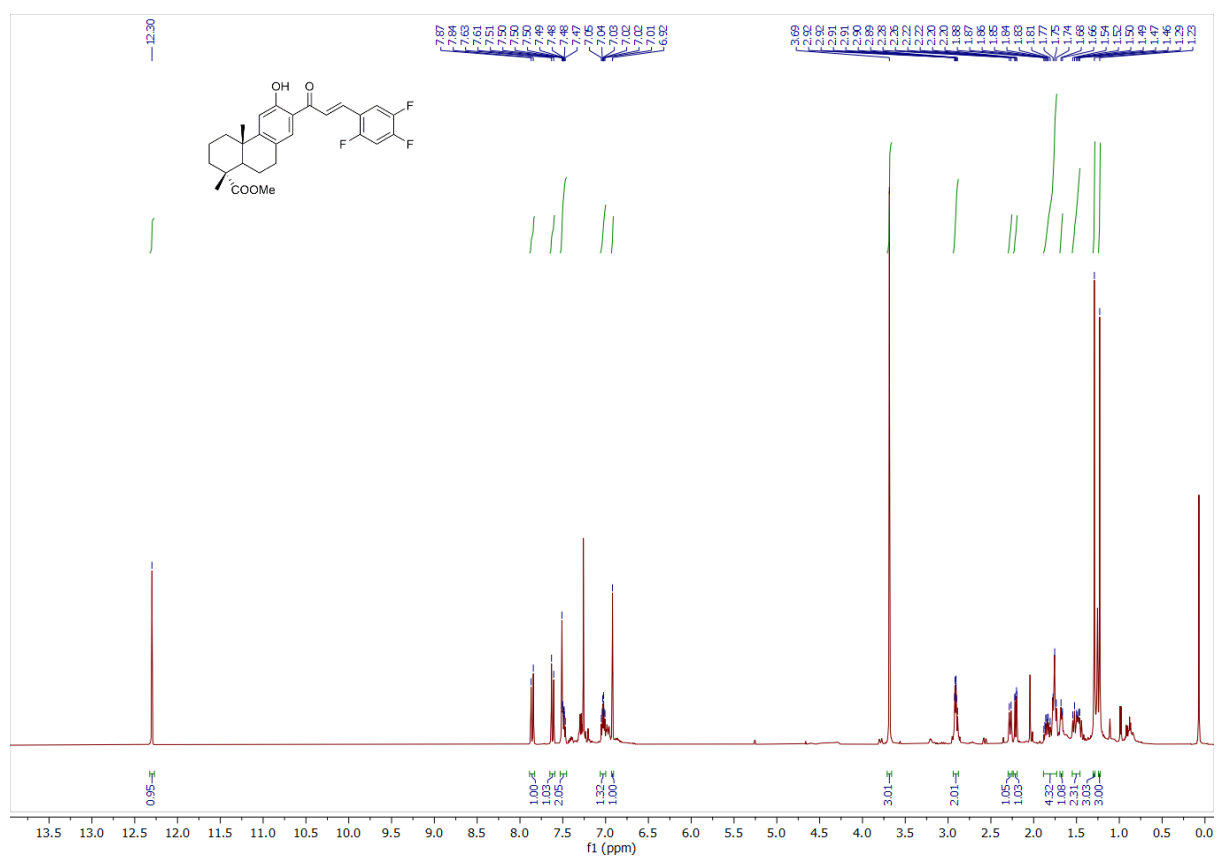


Figure S12. ¹H-NMR spectrum of compound 36.

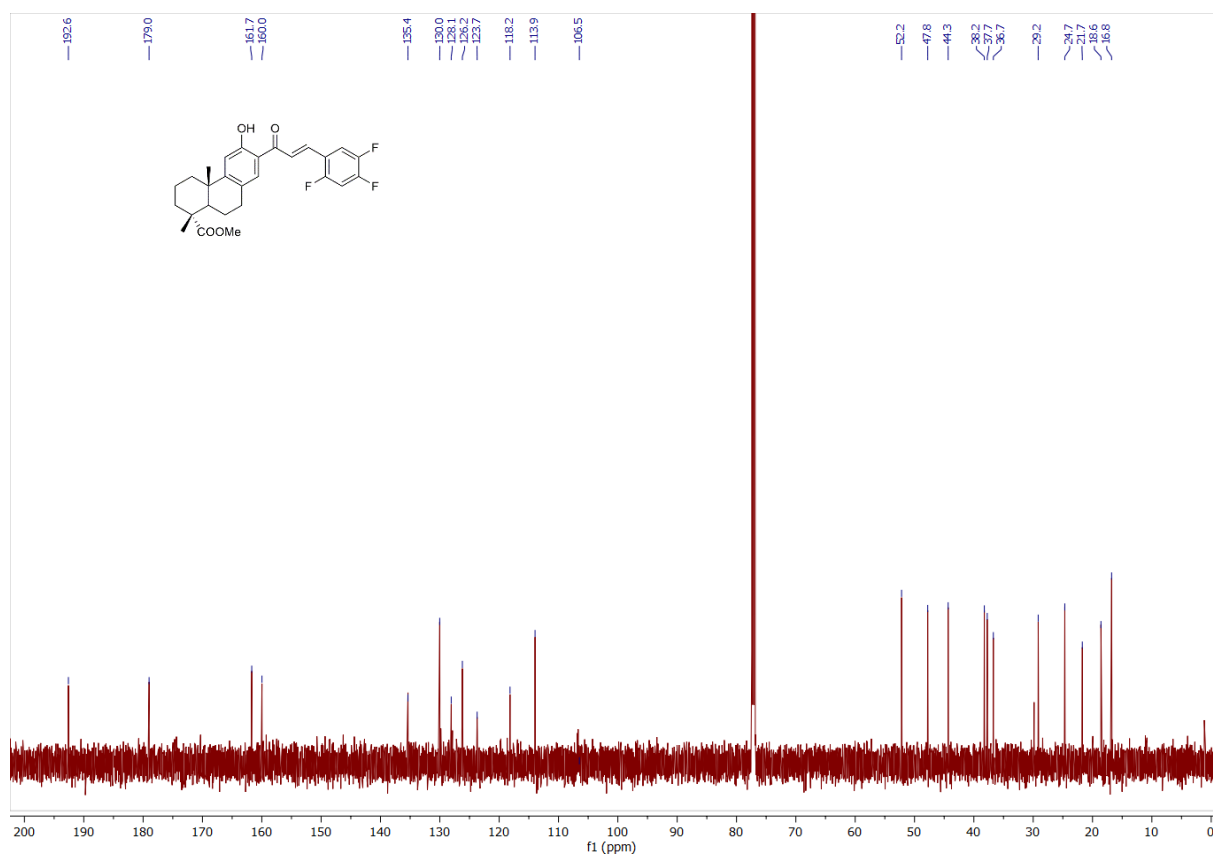


Figure S13. ^{13}C -NMR spectrum of compound 36.

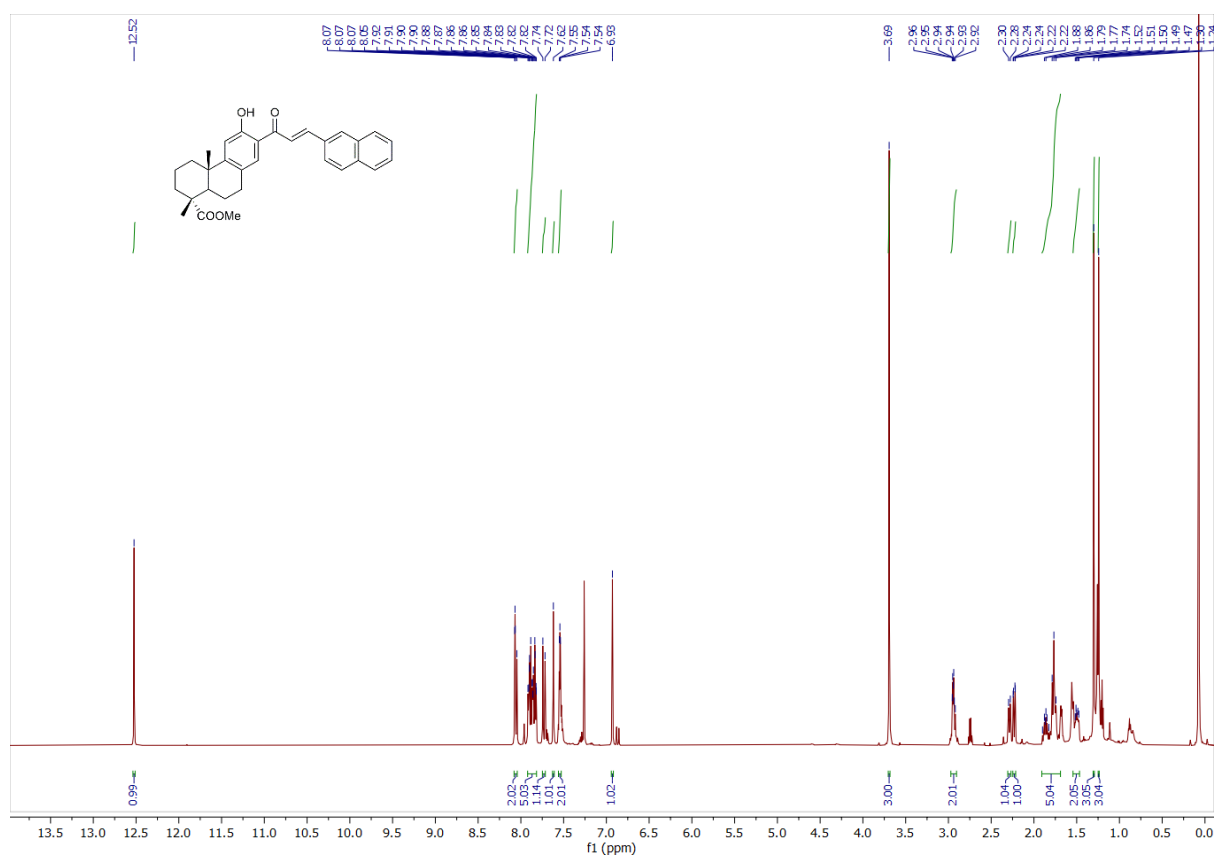


Figure S14. ^1H -NMR spectrum of compound 37.

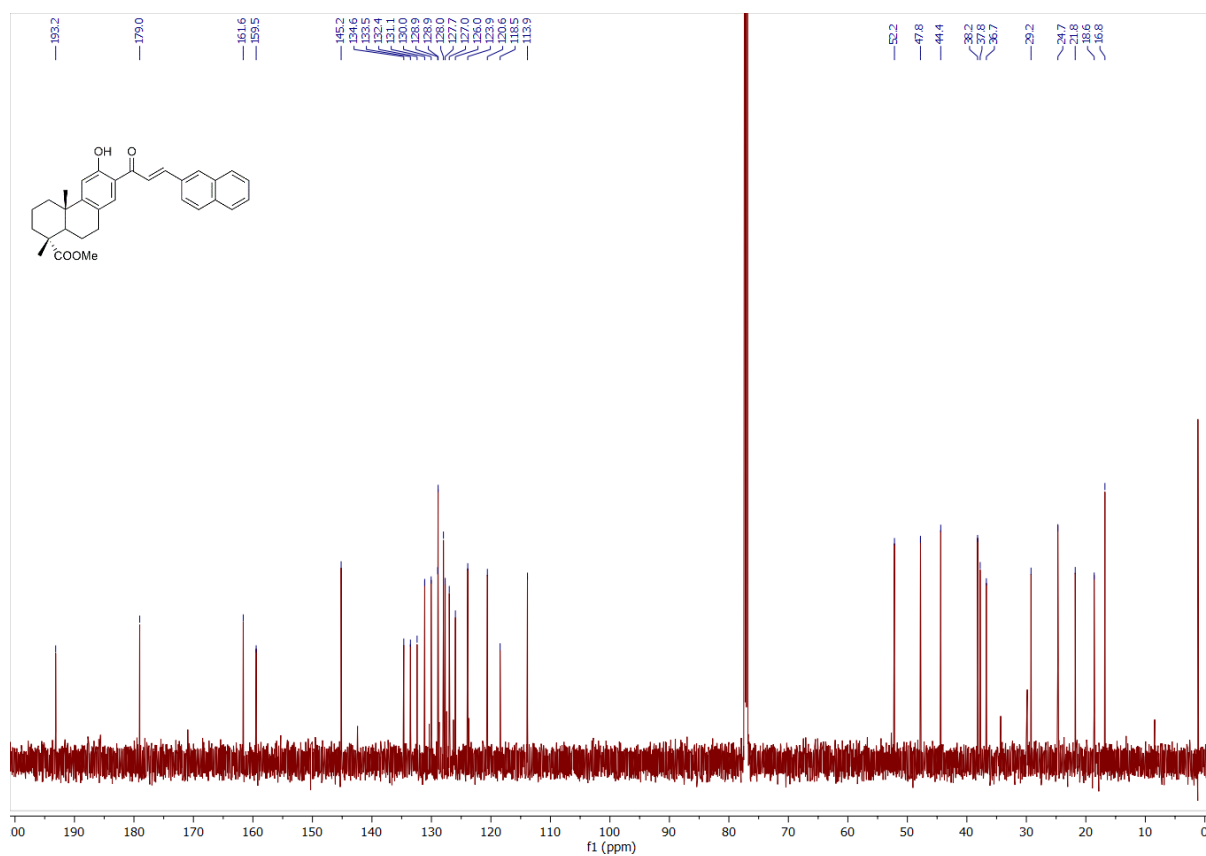


Figure S15. ¹³C-NMR spectrum of compound 37.

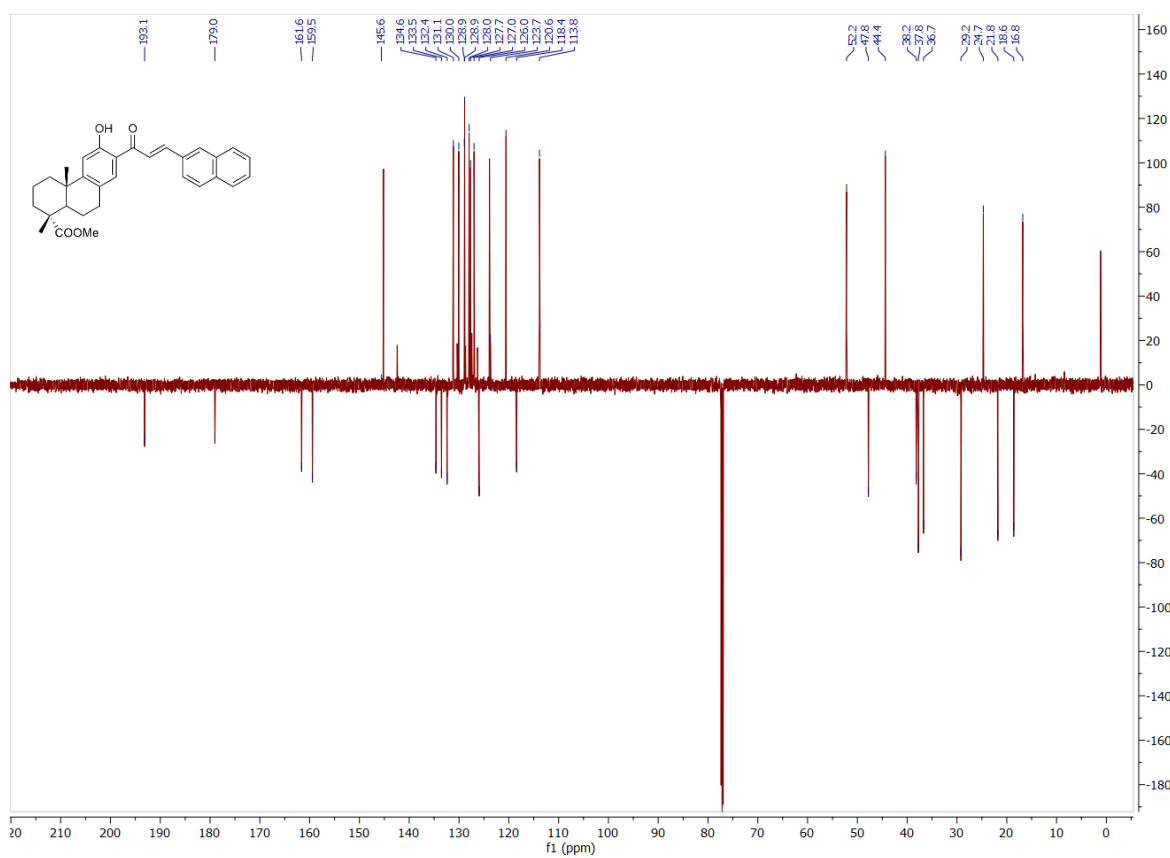


Figure S16. APT-NMR spectrum of compound 37.

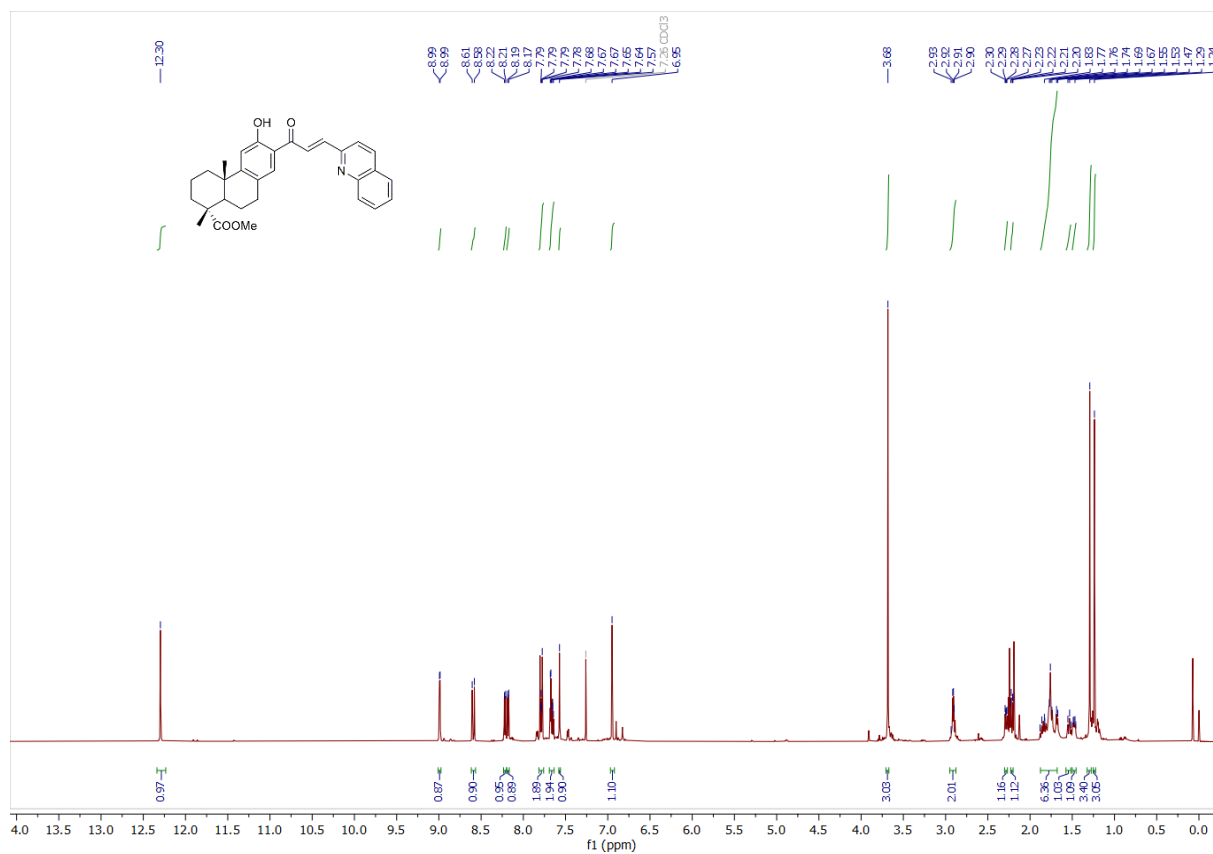


Figure S17. ¹H-NMR spectrum of compound 38.

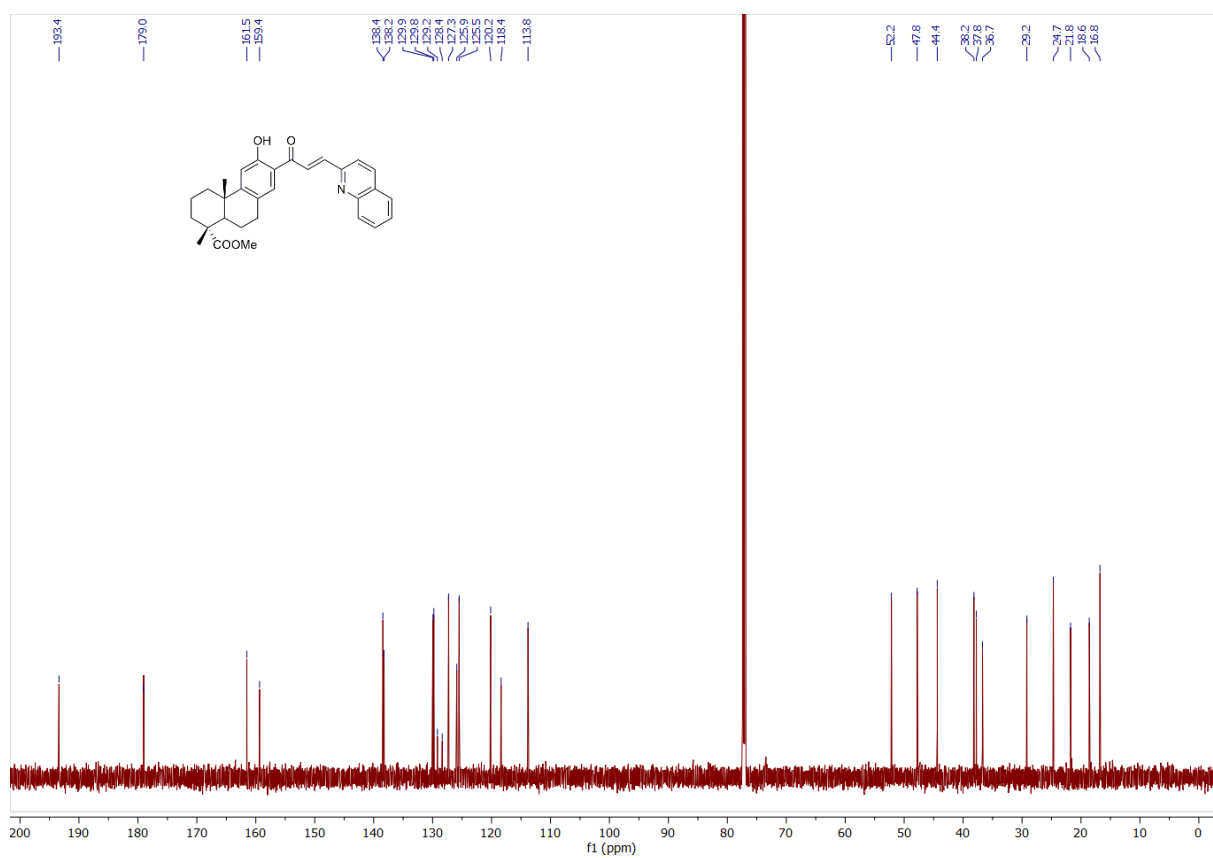


Figure S18. ¹³C-NMR spectrum of compound 38.

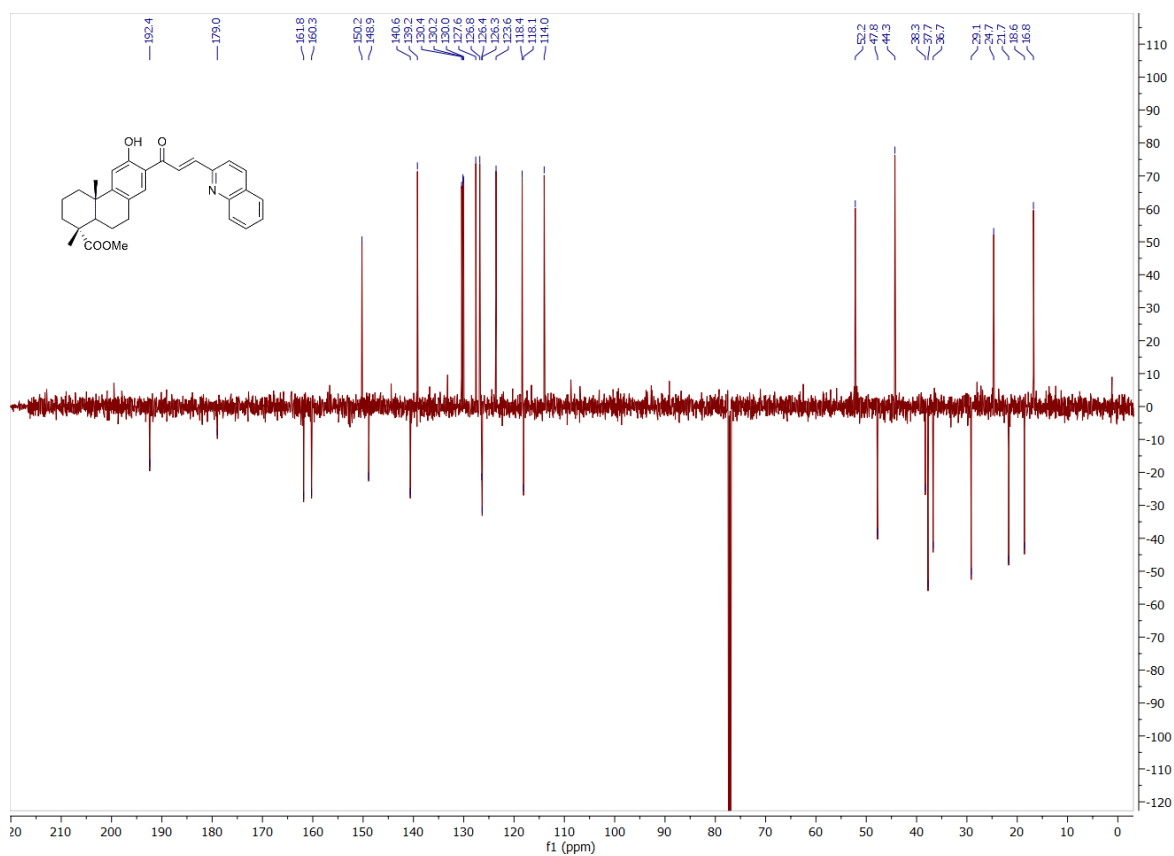


Figure S19. APT-NMR spectrum of compound 38.

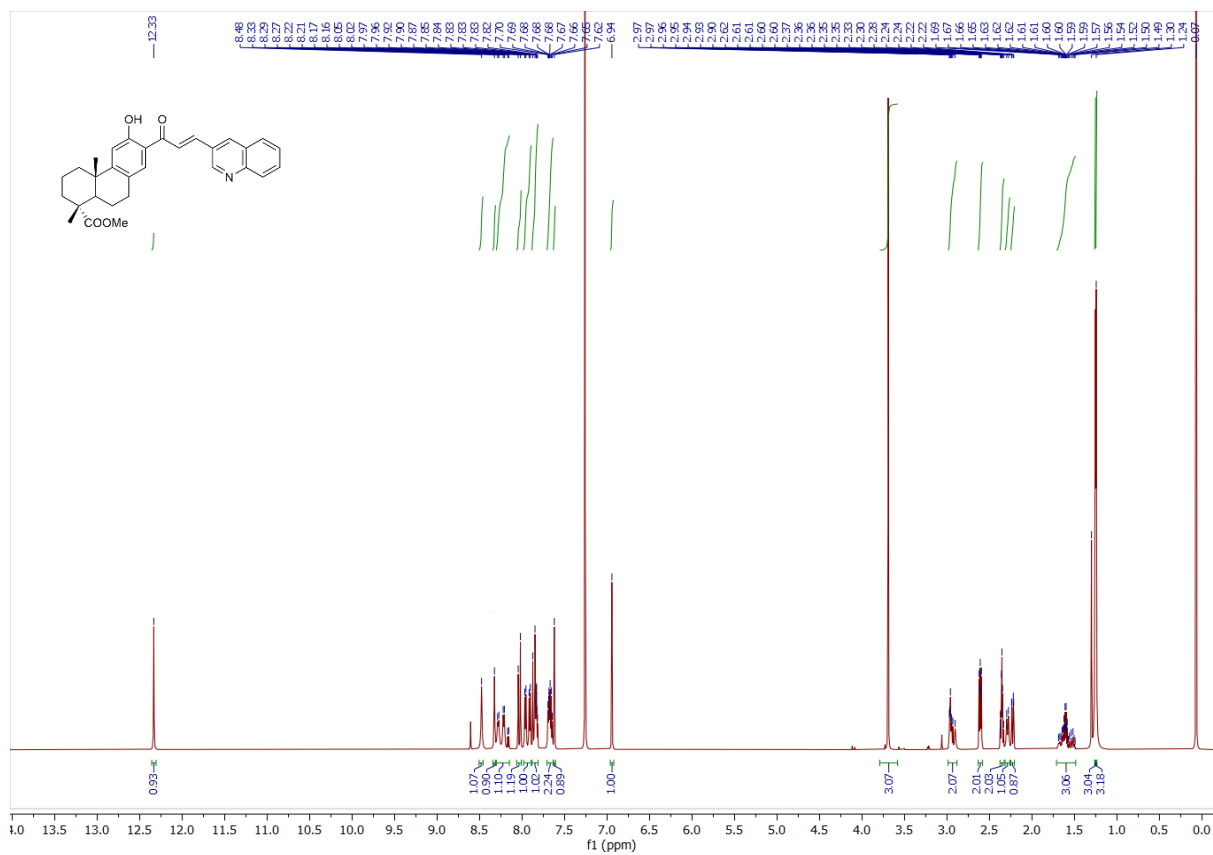


Figure S20. ¹H-NMR spectrum of compound 39.

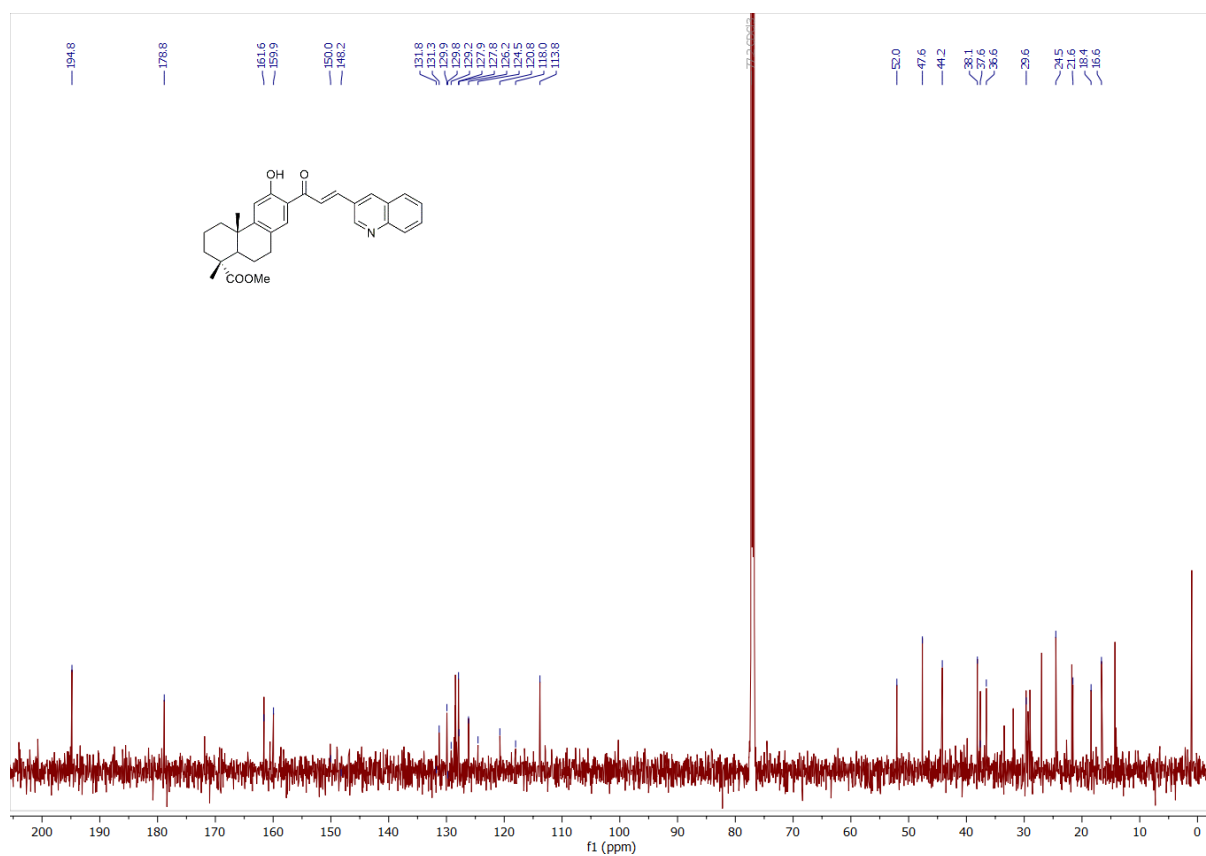


Figure S21. ^{13}C -NMR spectrum of compound 39.

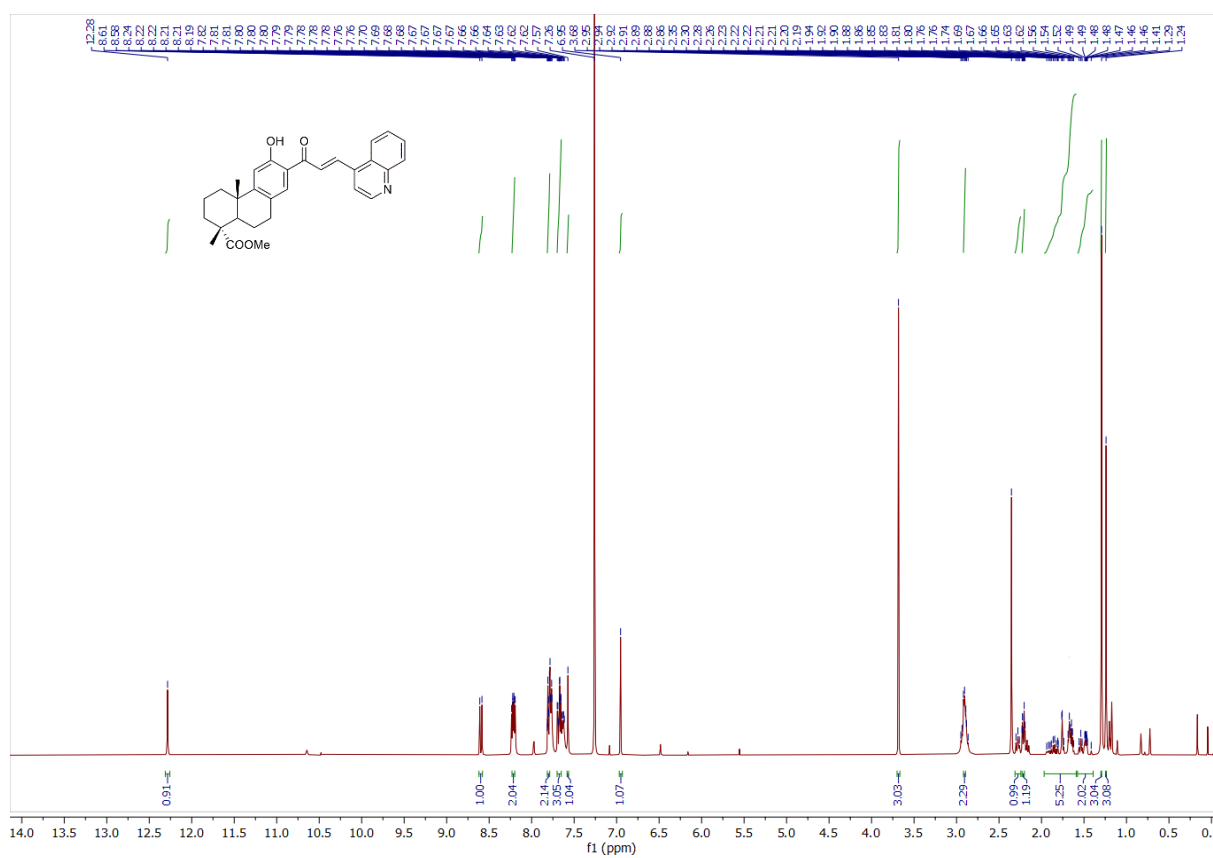


Figure S22. ¹H-NMR spectrum of compound 40.

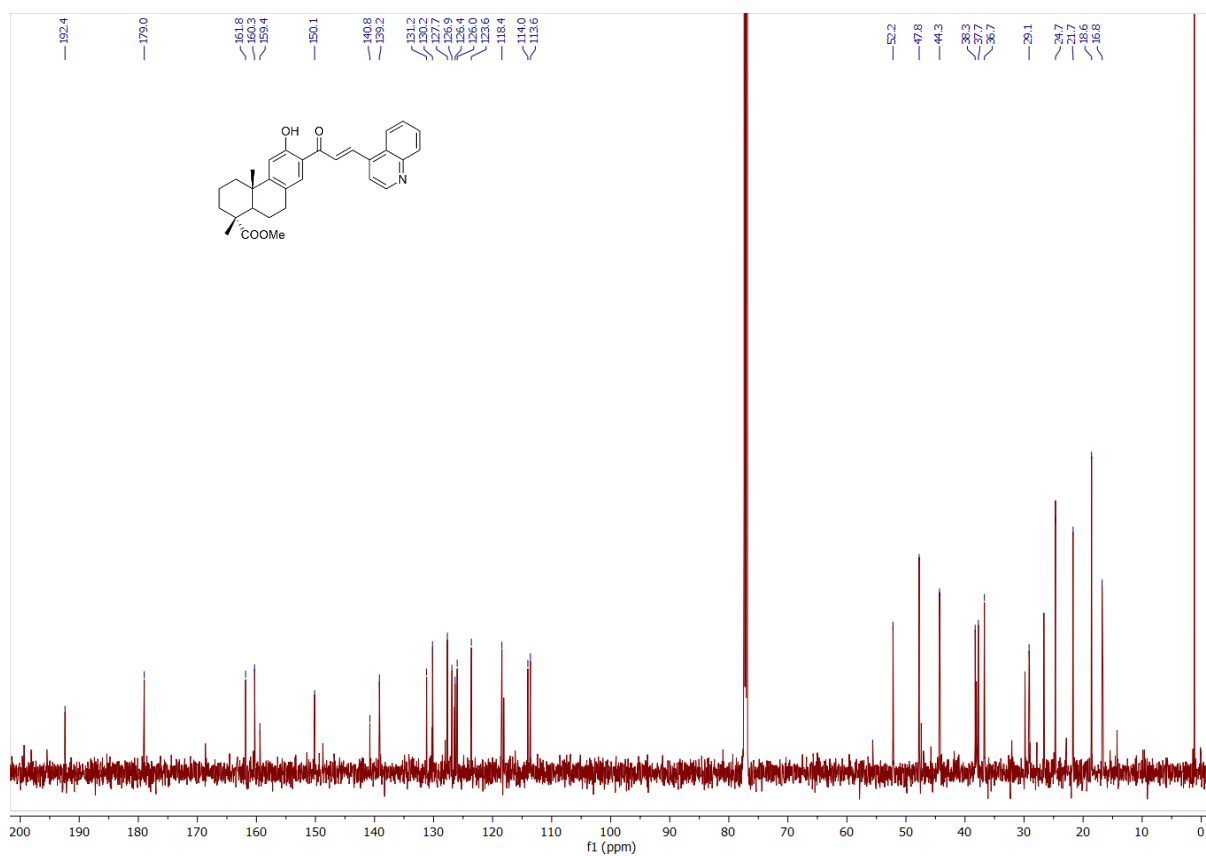


Figure S23. ¹³C-NMR spectrum of compound 40.

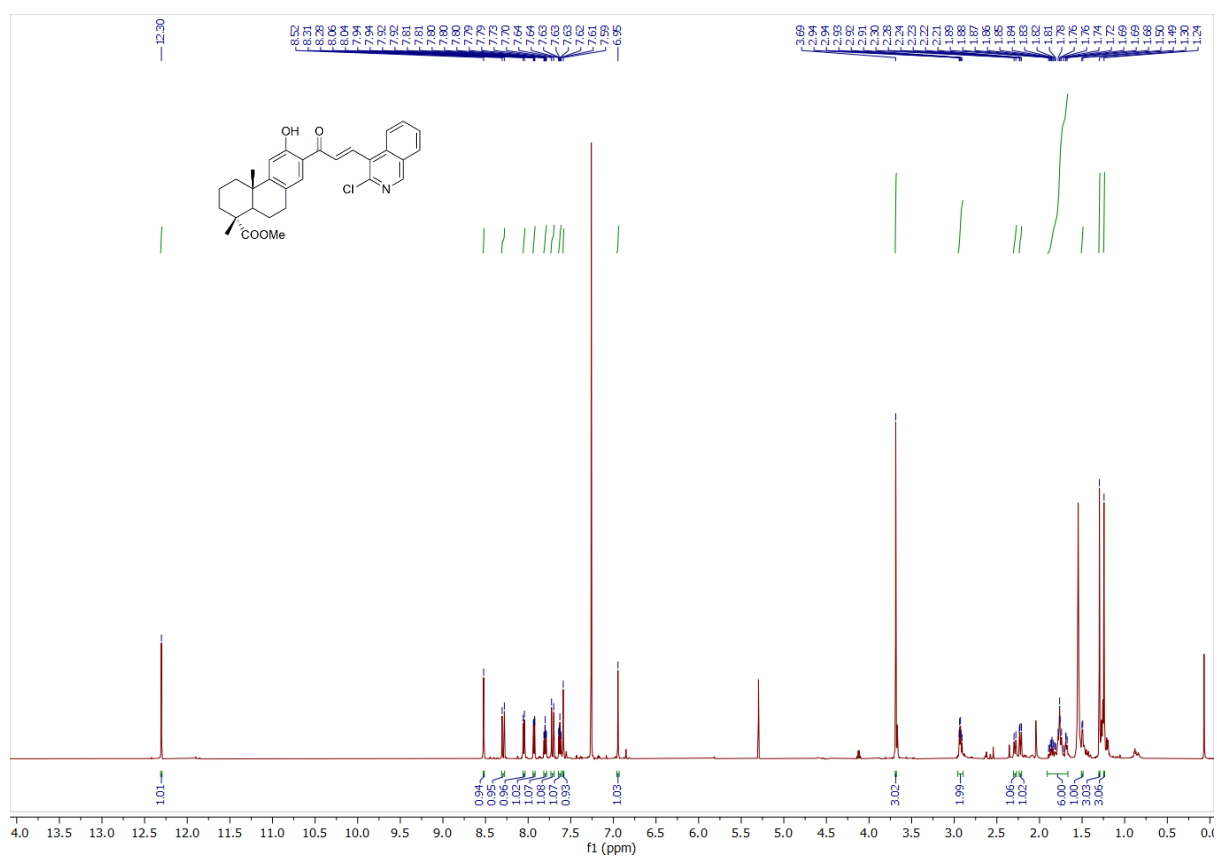


Figure S24. ¹H-NMR spectrum of compound 41.

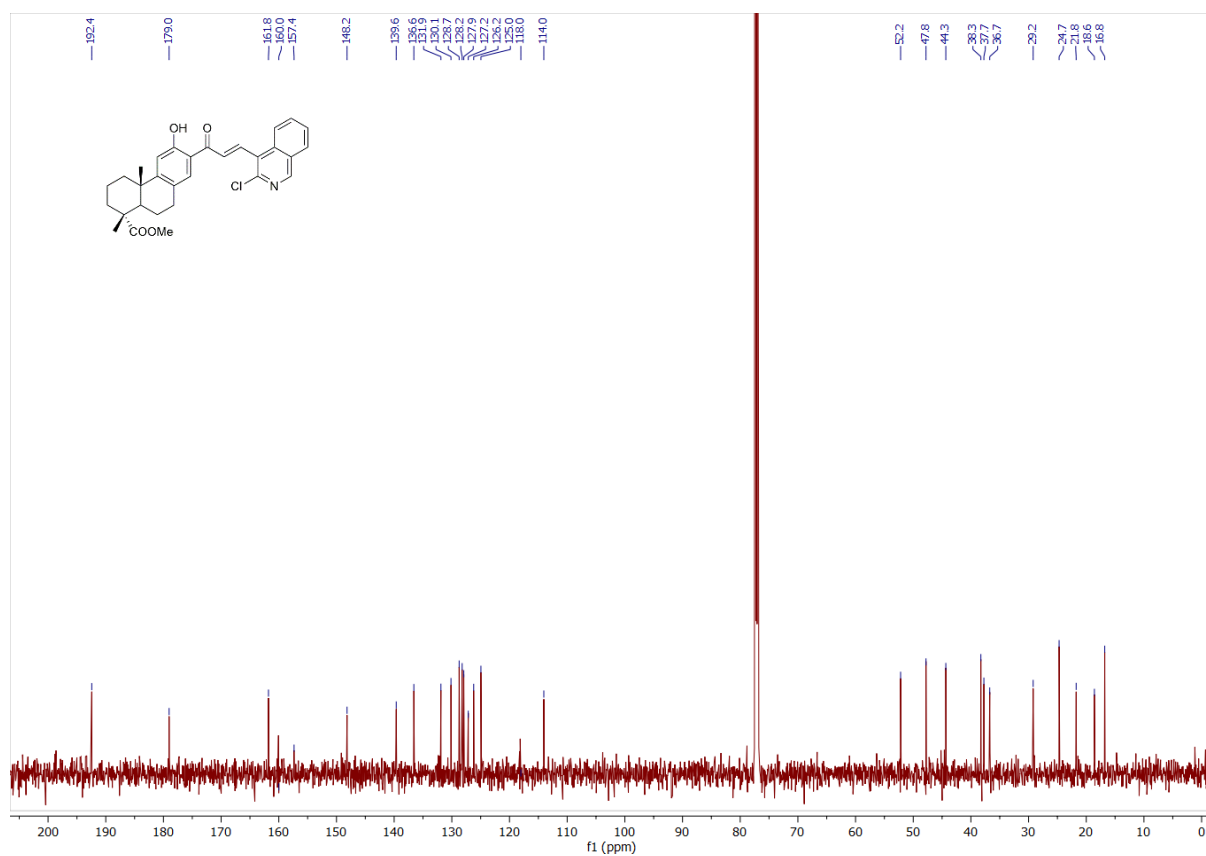


Figure S25. ^{13}C -NMR spectrum of compound 41.

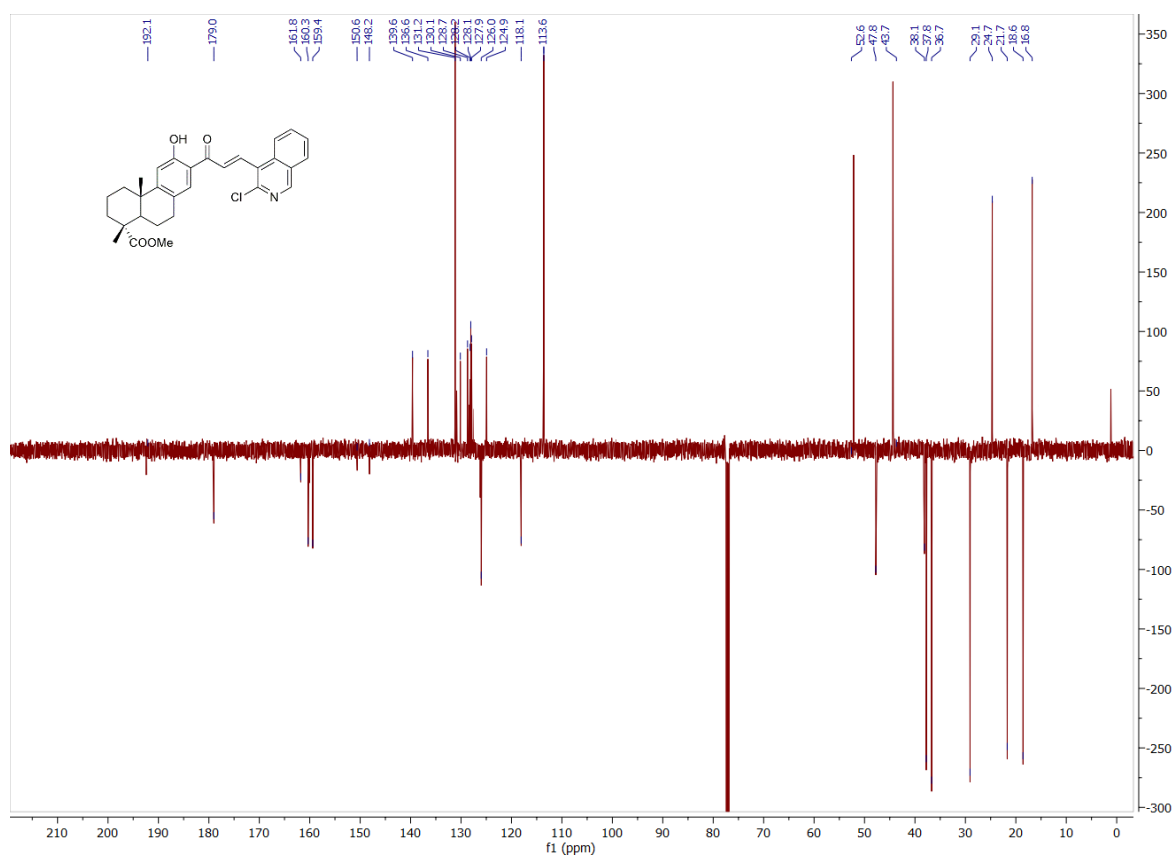


Figure S26. APT-NMR spectrum of compound 41.

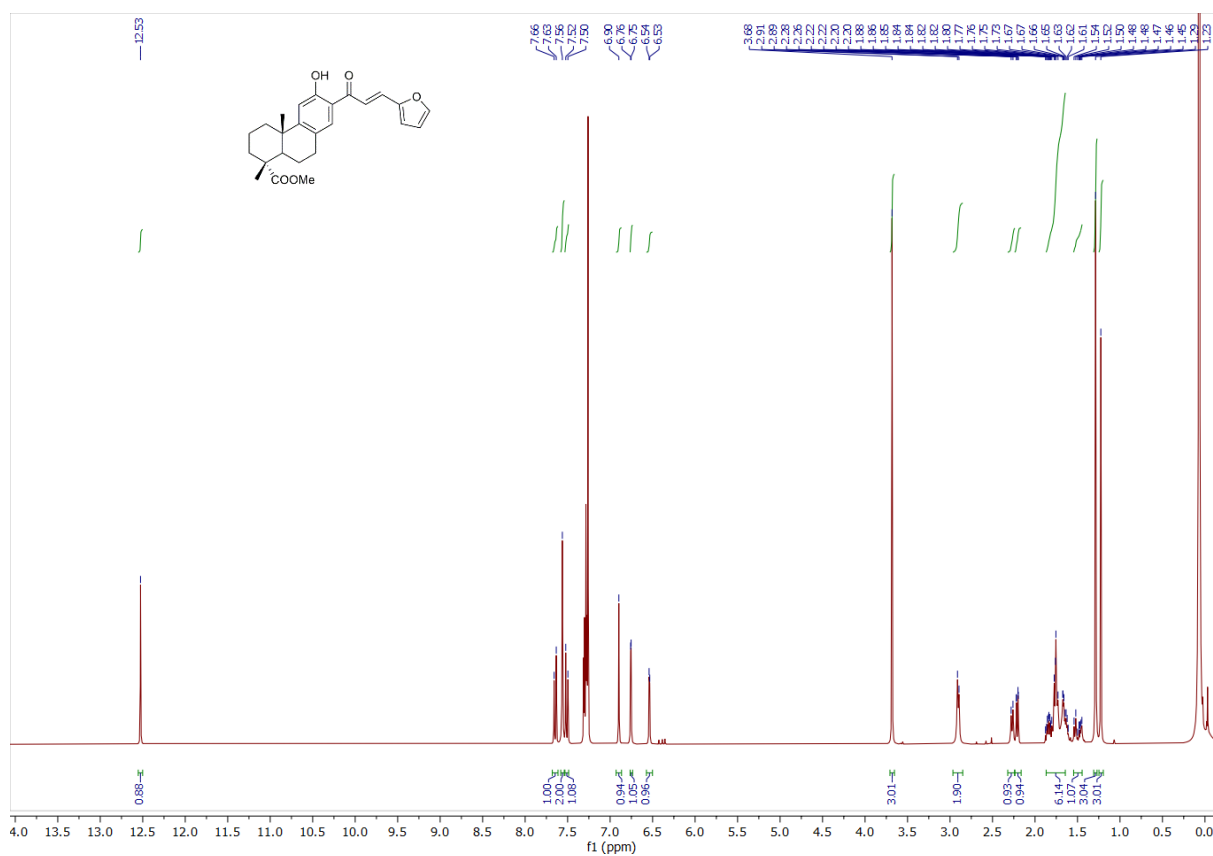


Figure S27. ¹H-NMR spectrum of compound 42.

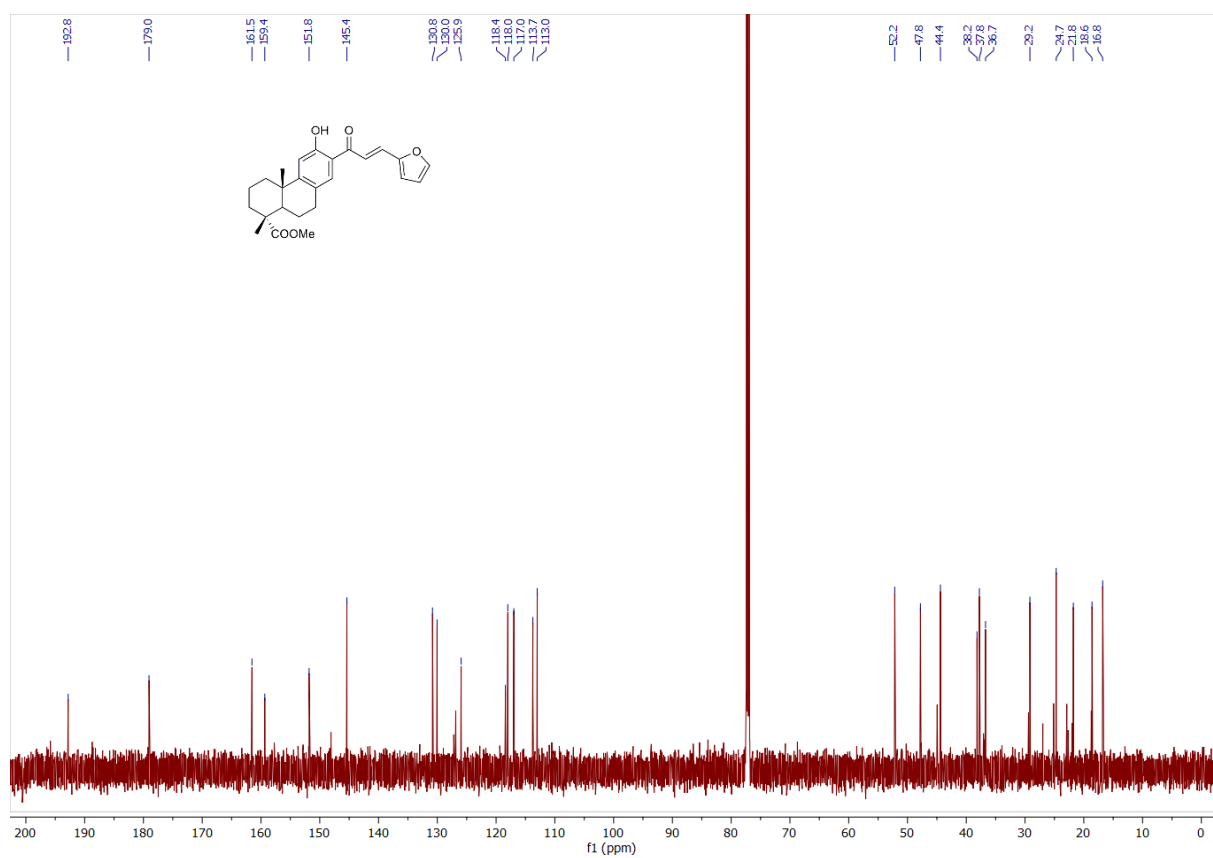


Figure S28. ¹³C-NMR spectrum of compound 42.

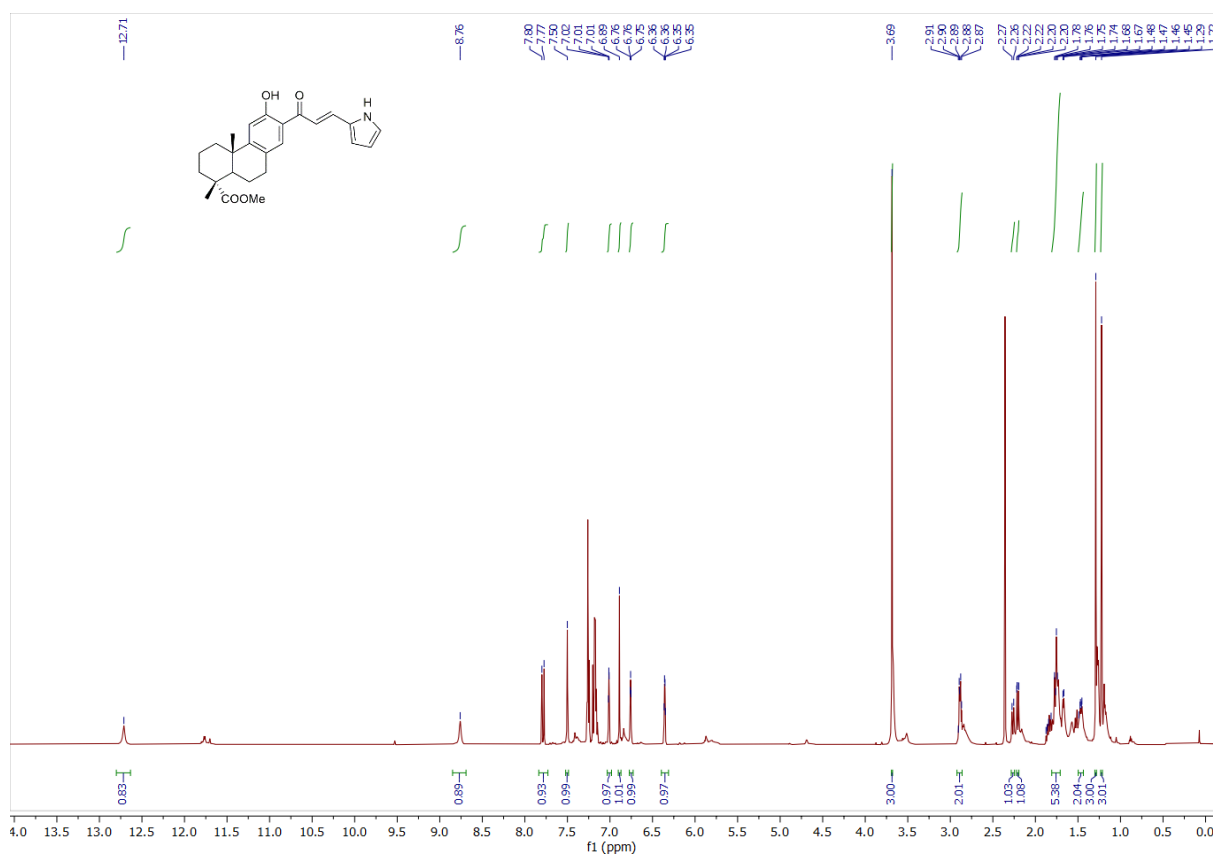


Figure S29. ¹H-NMR spectrum of compound 43.

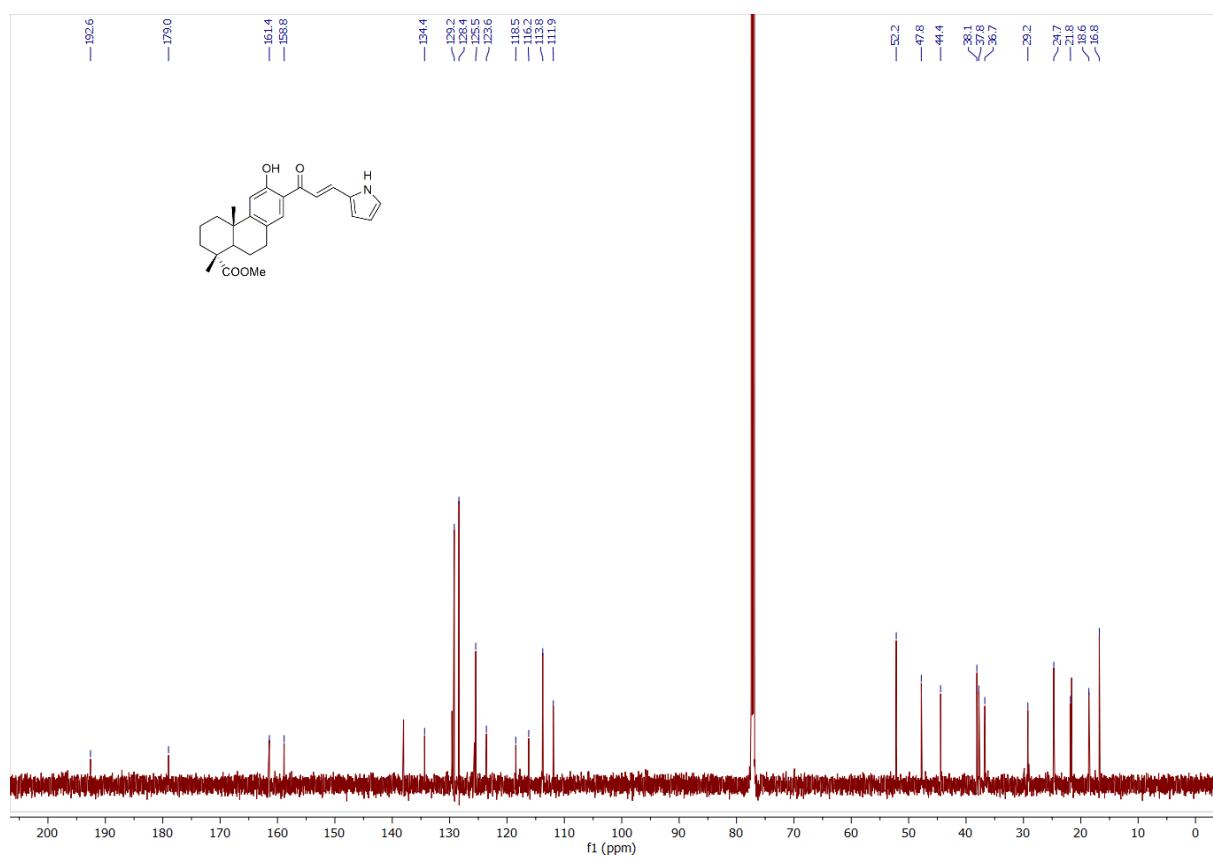


Figure S30. ¹³C-NMR spectrum of compound 43.

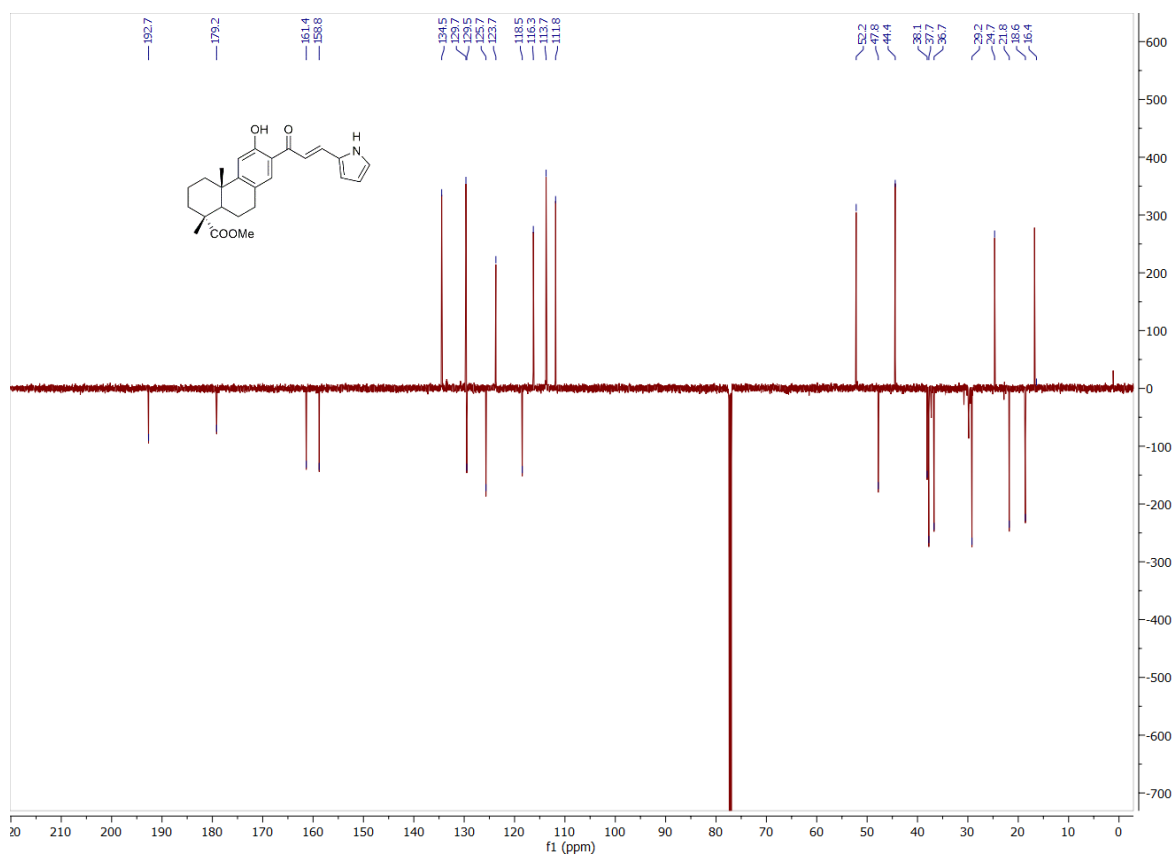


Figure S31. APT-NMR spectrum of compound 43.

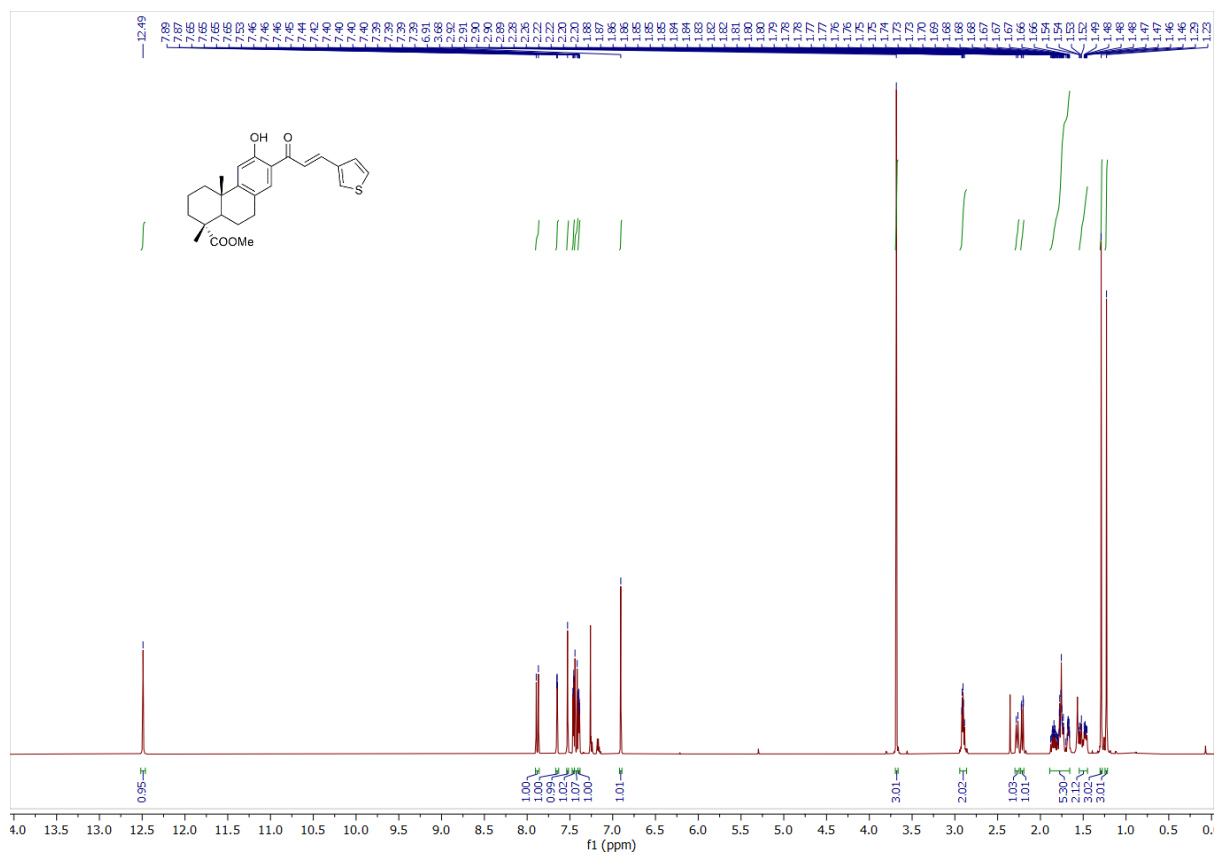


Figure S32. ^1H -NMR spectrum of compound 44.

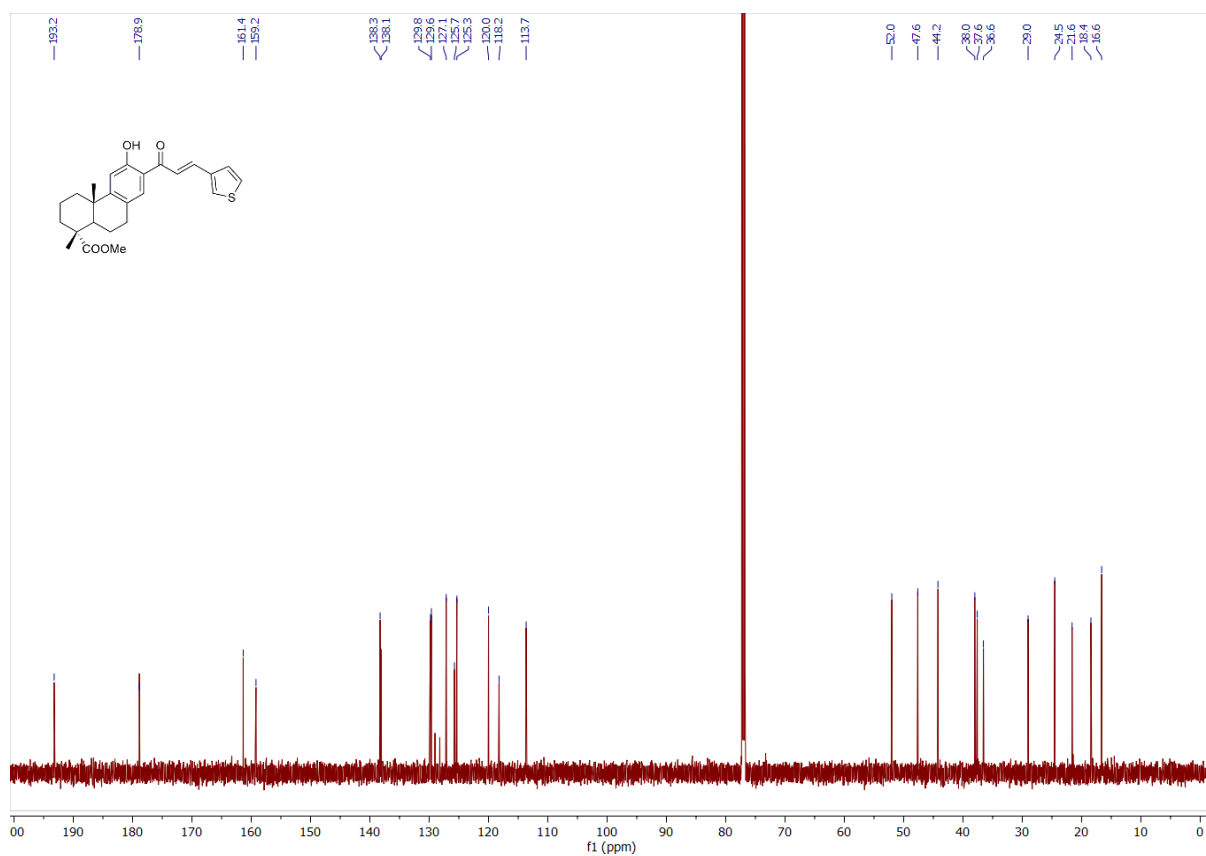


Figure S33. ¹³C-NMR spectrum of compound 44.

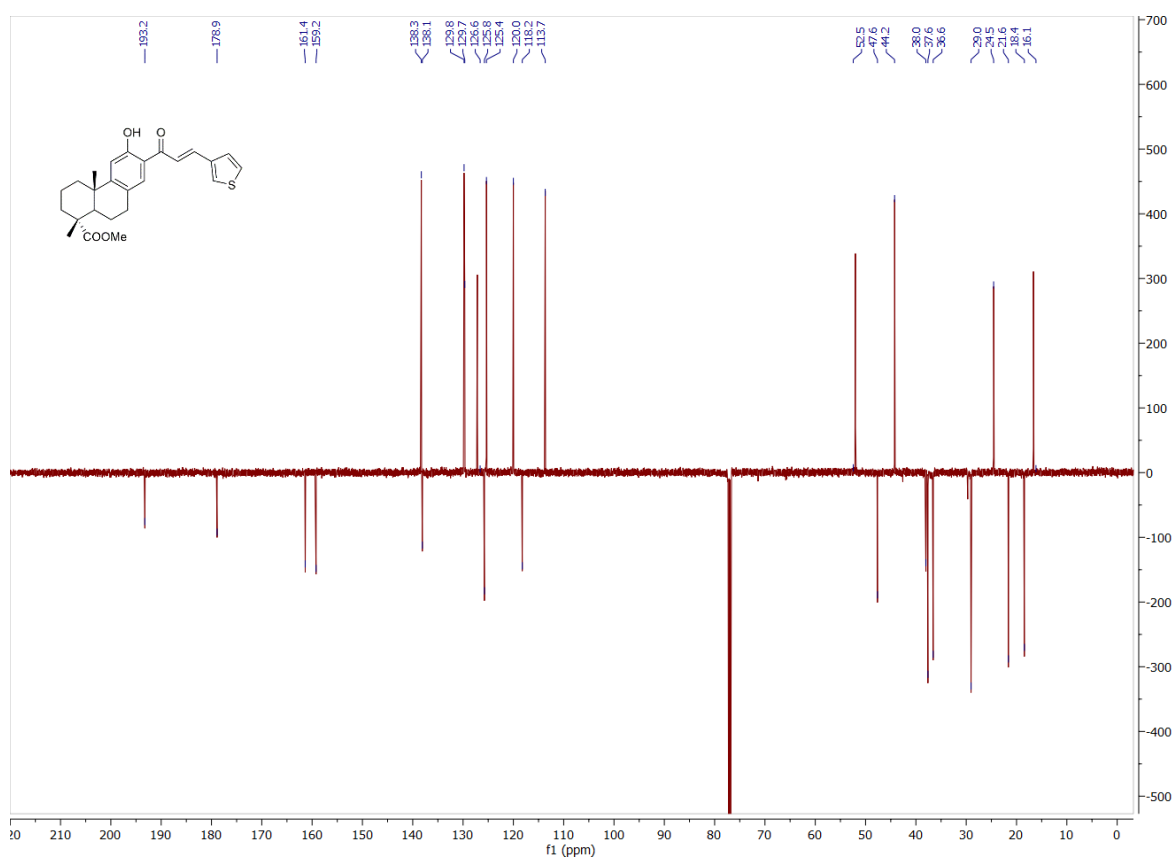
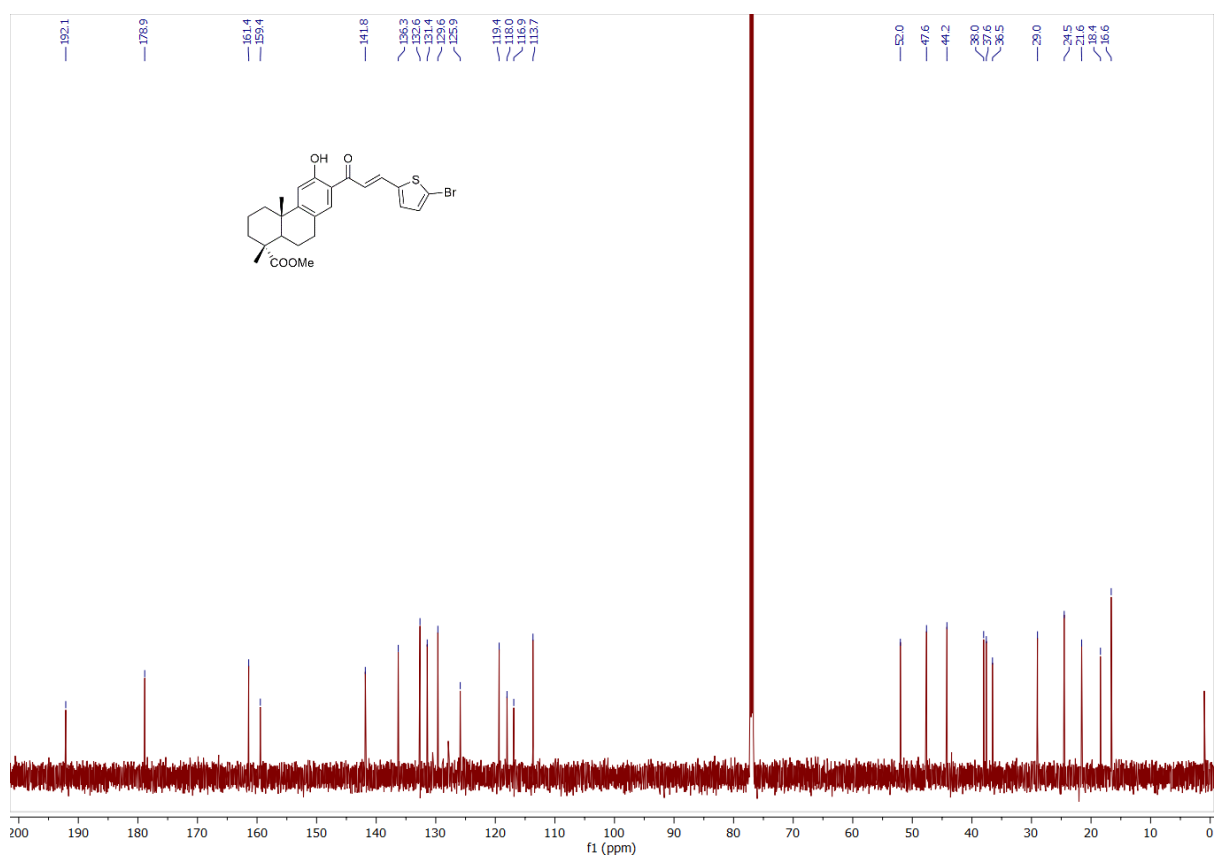
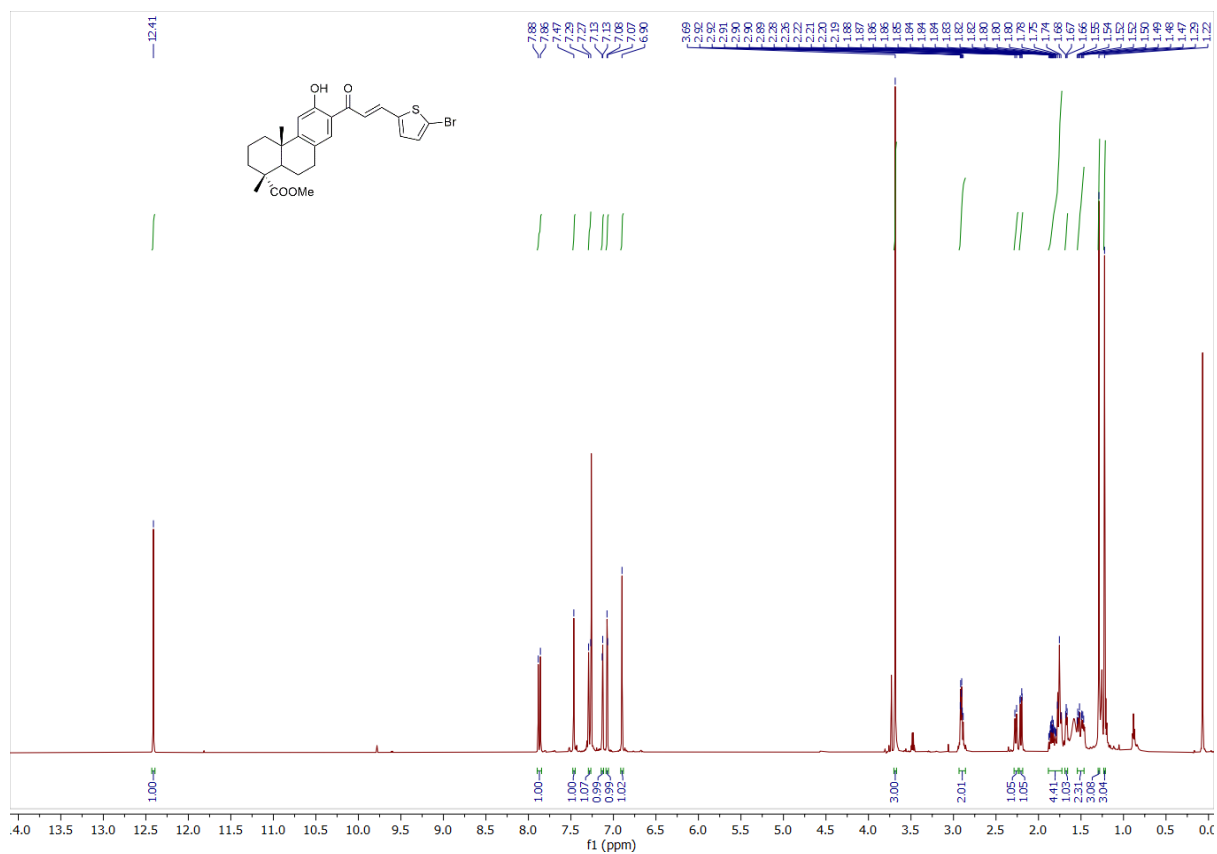


Figure S34. APT-NMR spectrum of compound 44.



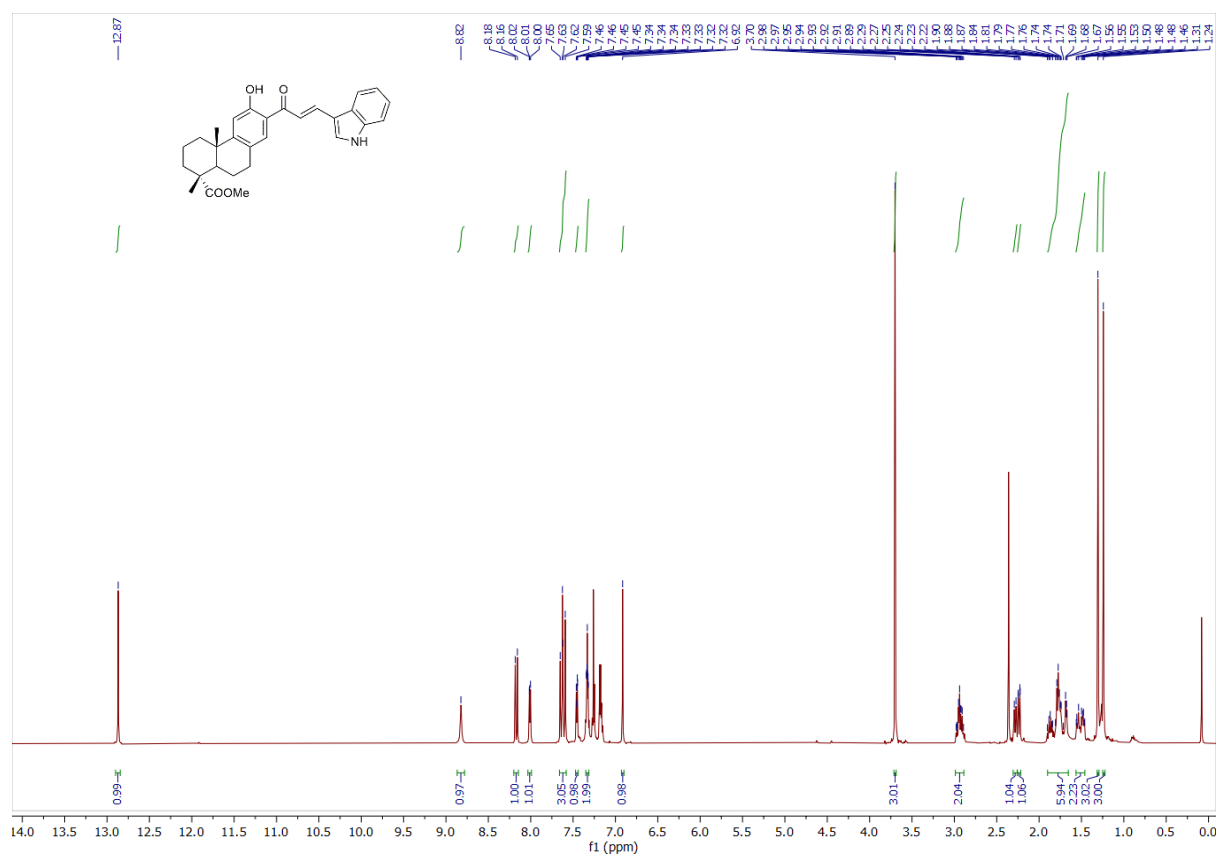


Figure S37. ¹H-NMR spectrum of compound 46.

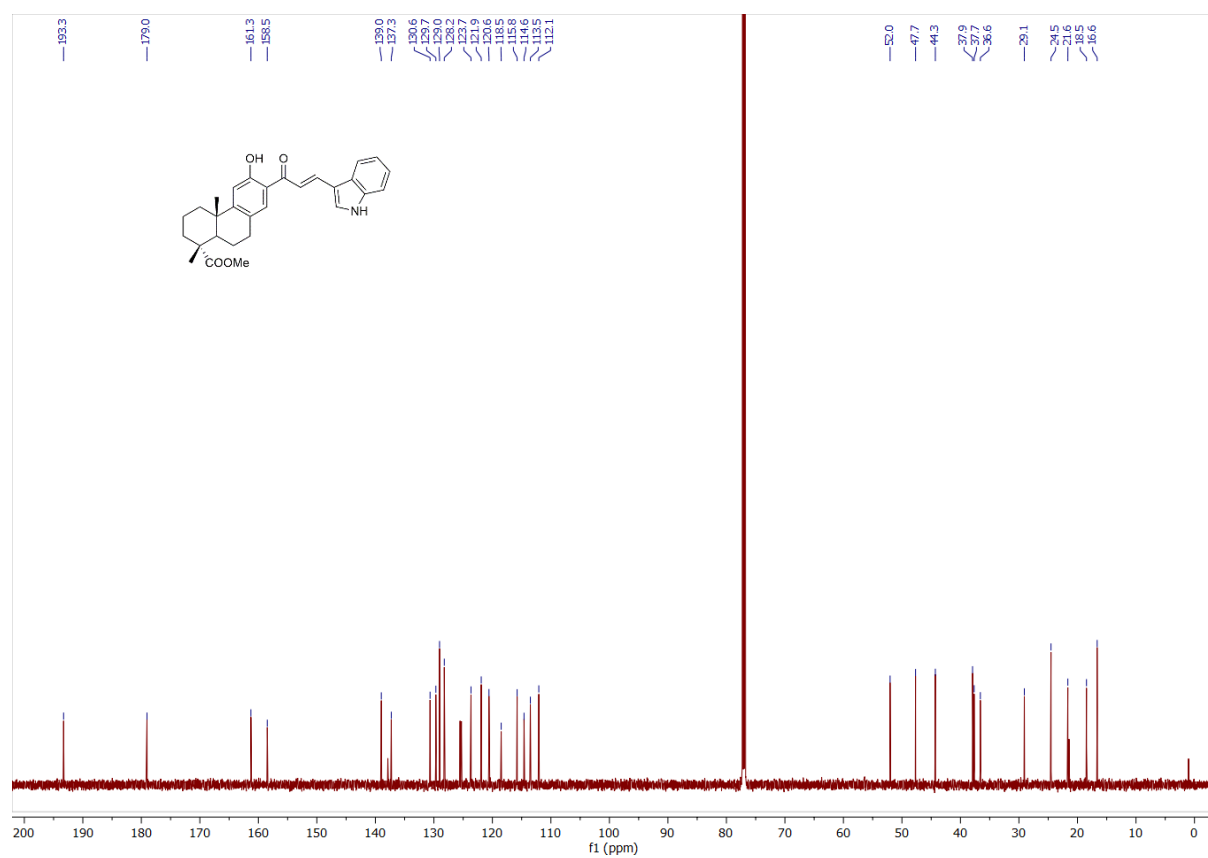


Figure S38. ¹³C-NMR spectrum of compound 46.

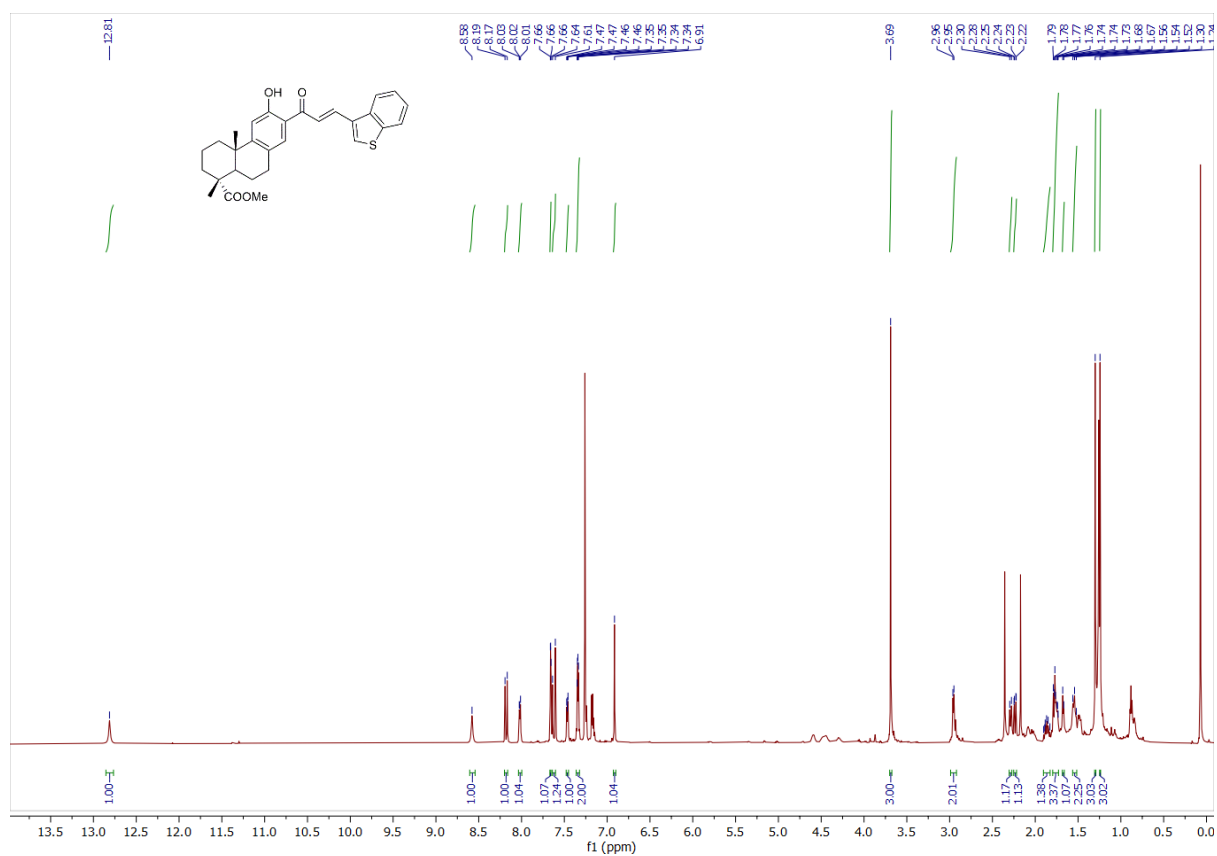


Figure S39. ¹H-NMR spectrum of compound 47.

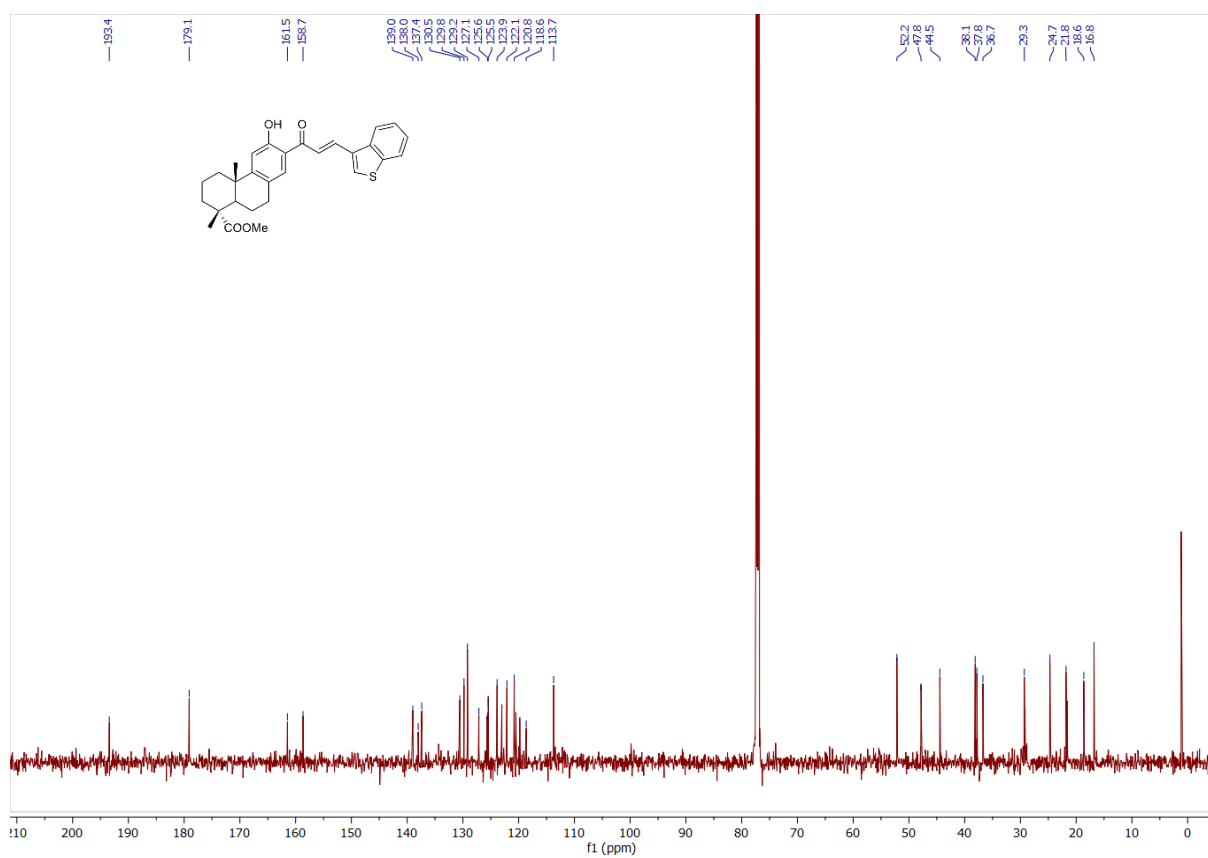


Figure S40. ¹³C-NMR spectrum of compound 47.

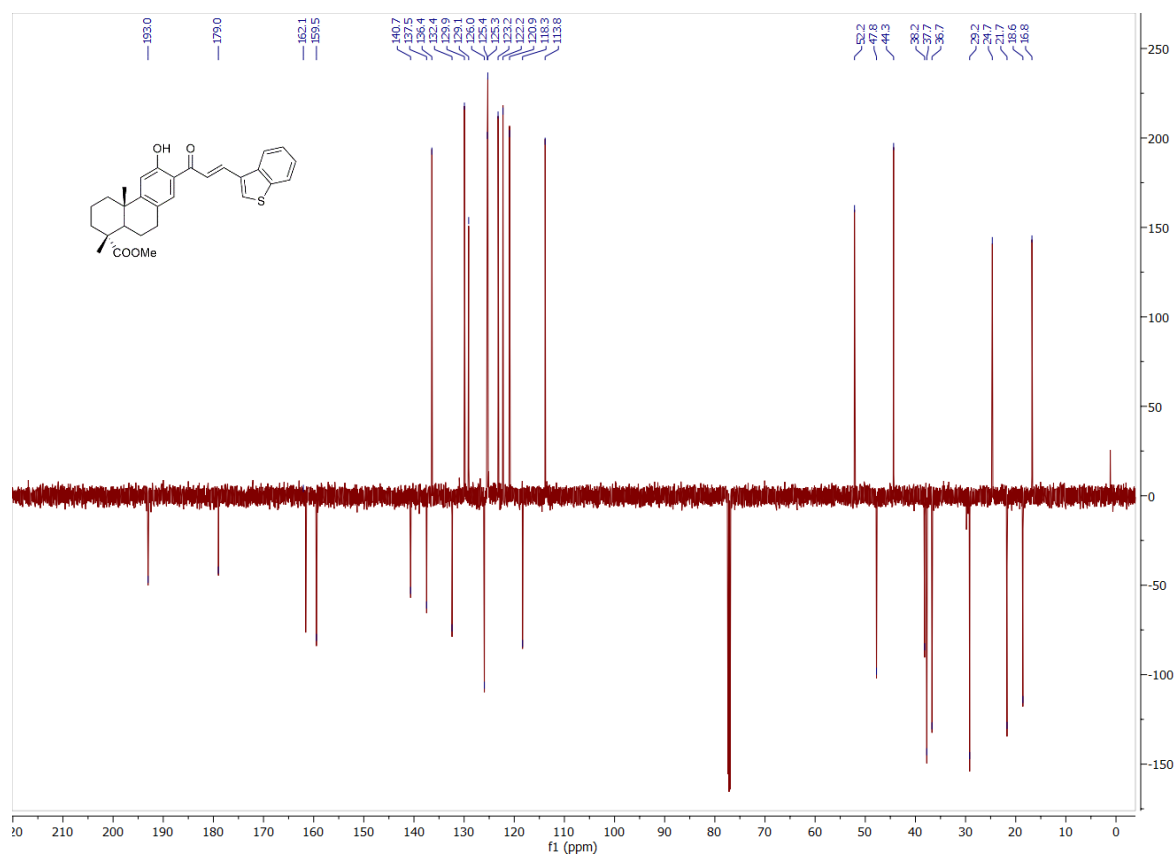


Figure S40. APT-NMR spectrum of compound 47.

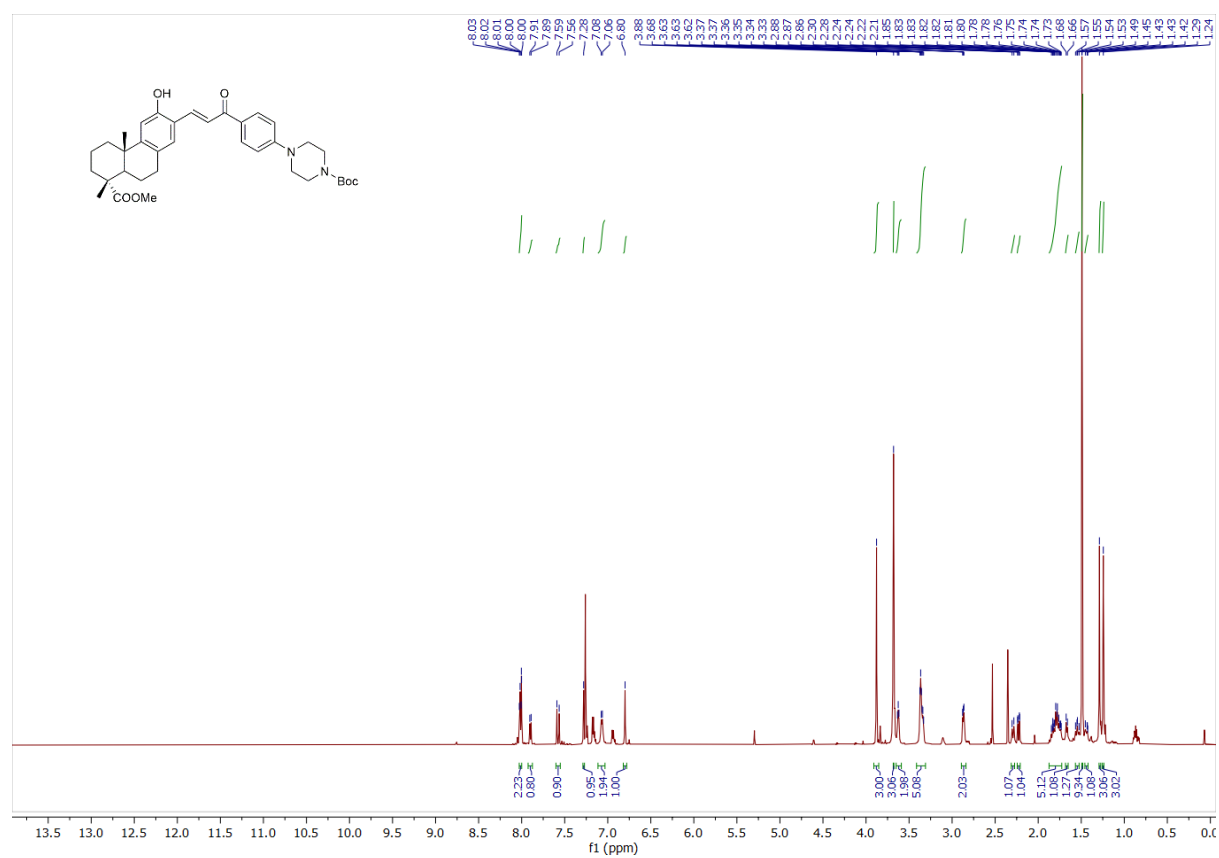


Figure S42. ¹H-NMR spectrum of compound 48.

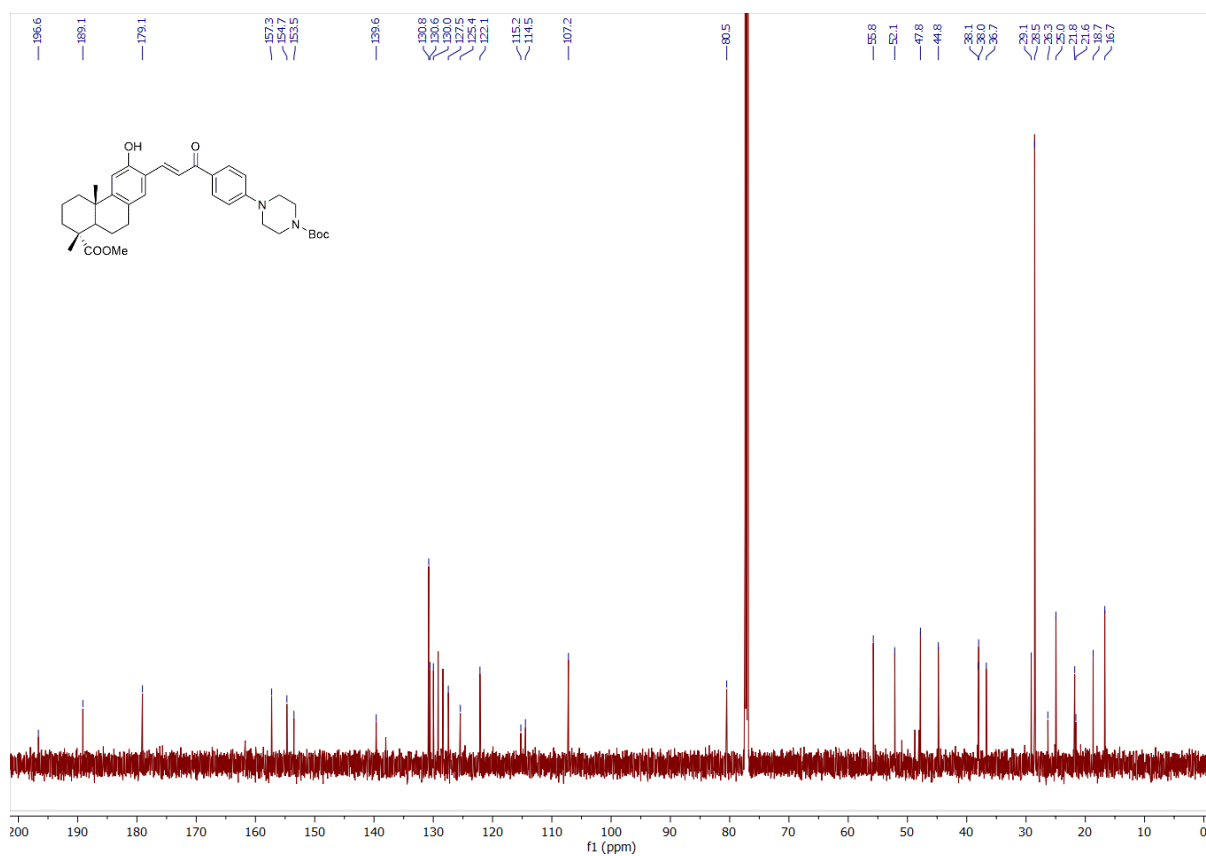


Figure S43. ¹³C-NMR spectrum of compound 48.

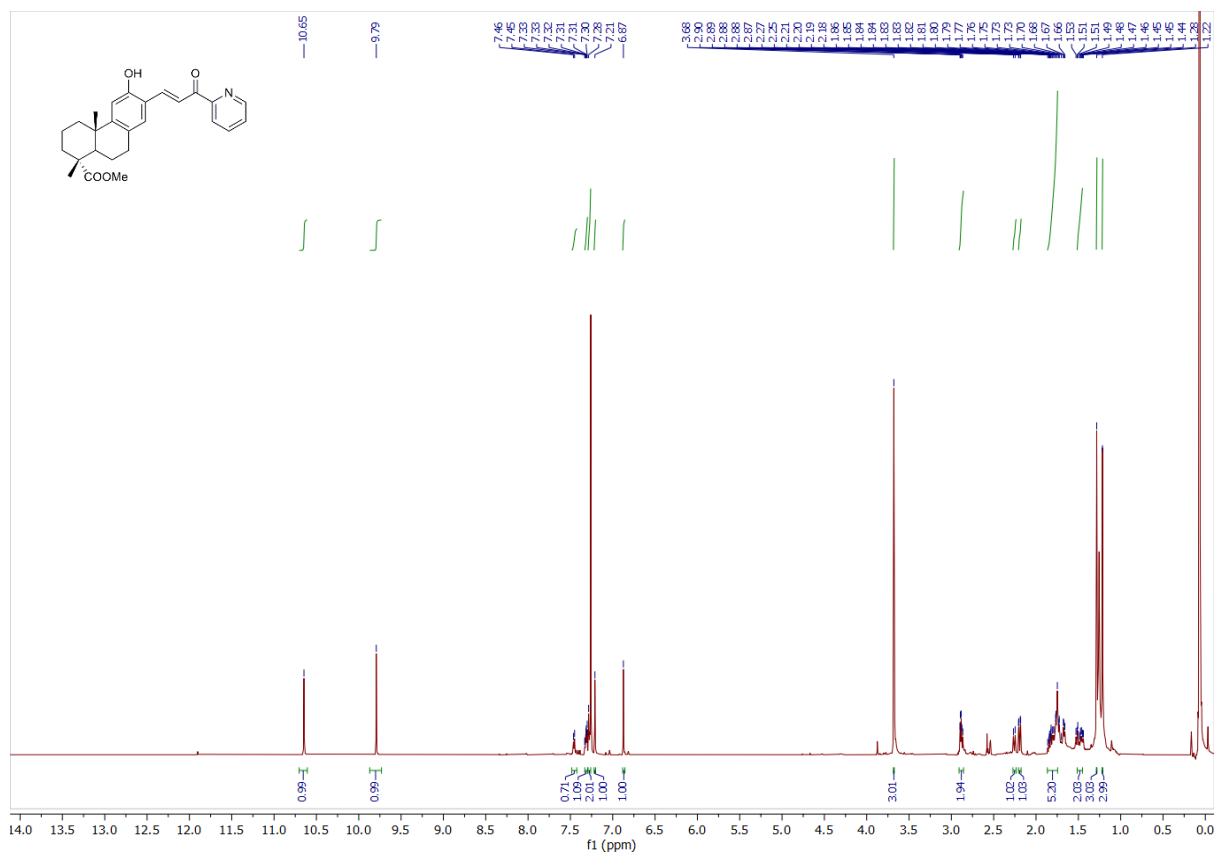


Figure S44. ¹H-NMR spectrum of compound 49.

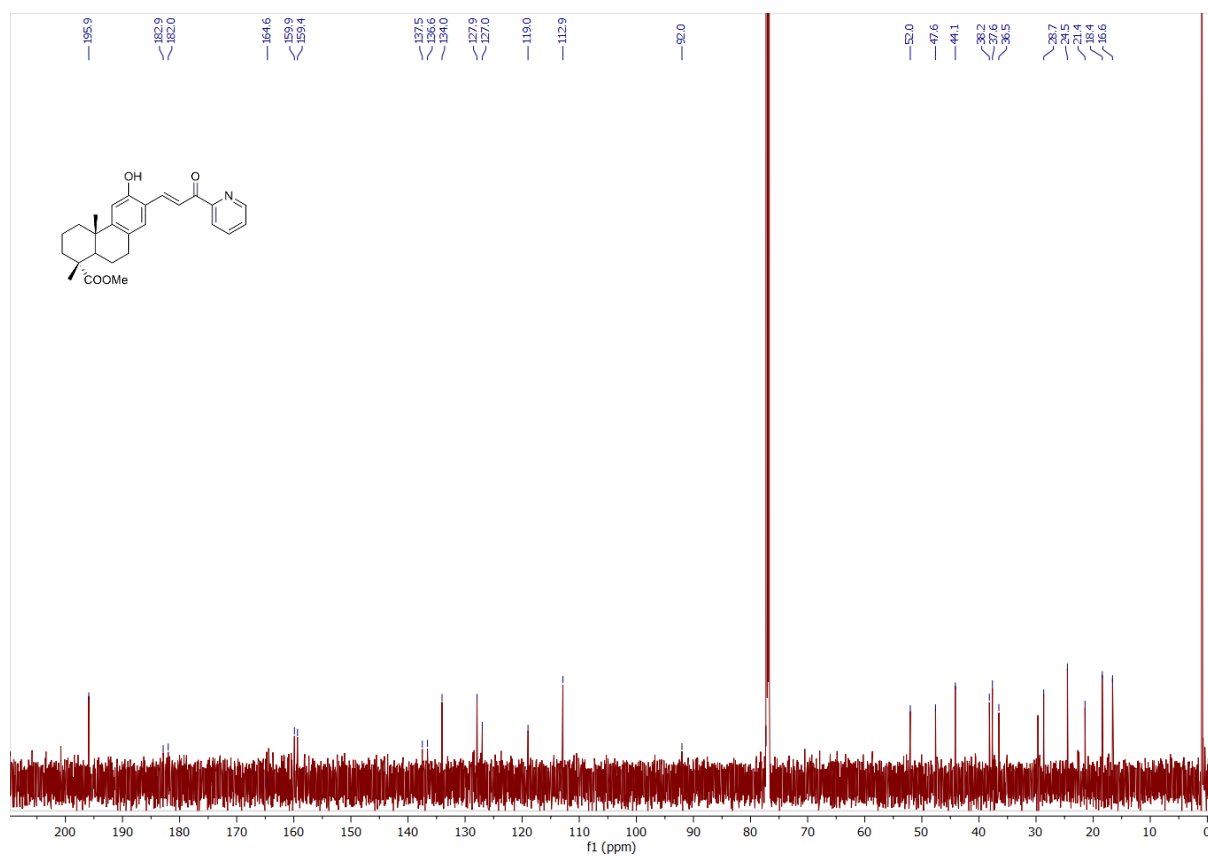


Figure S45. ¹³C-NMR spectrum of compound 49.

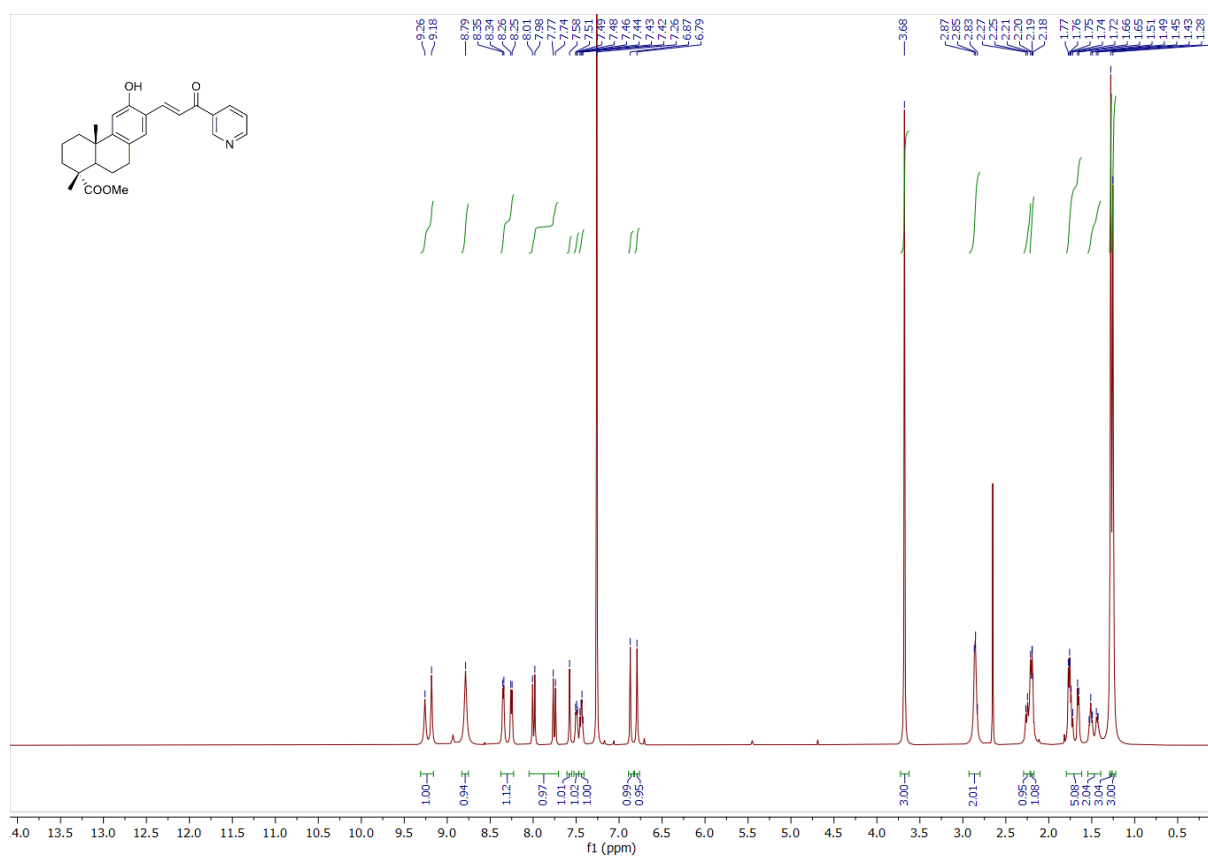


Figure S46. ¹H-NMR spectrum of compound 50.

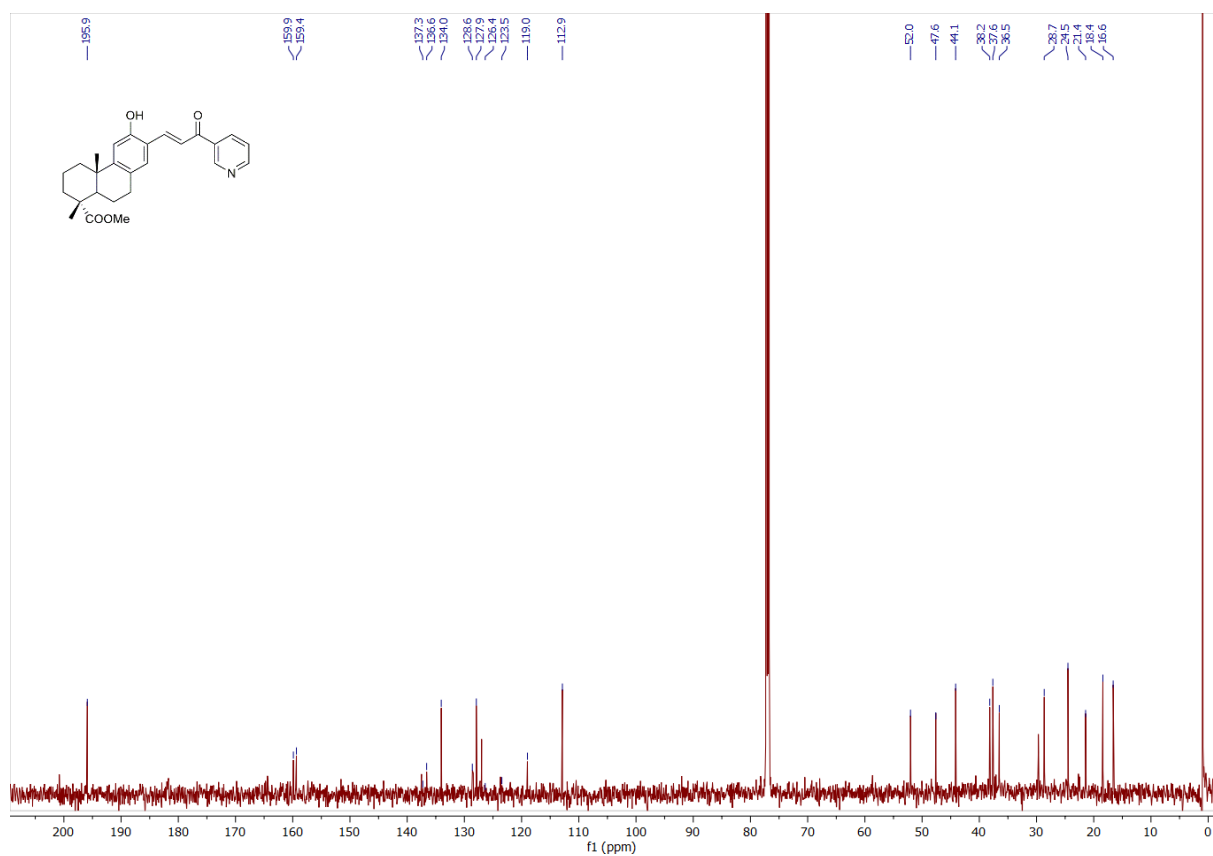


Figure S47. ¹³C-NMR spectrum of compound 50.

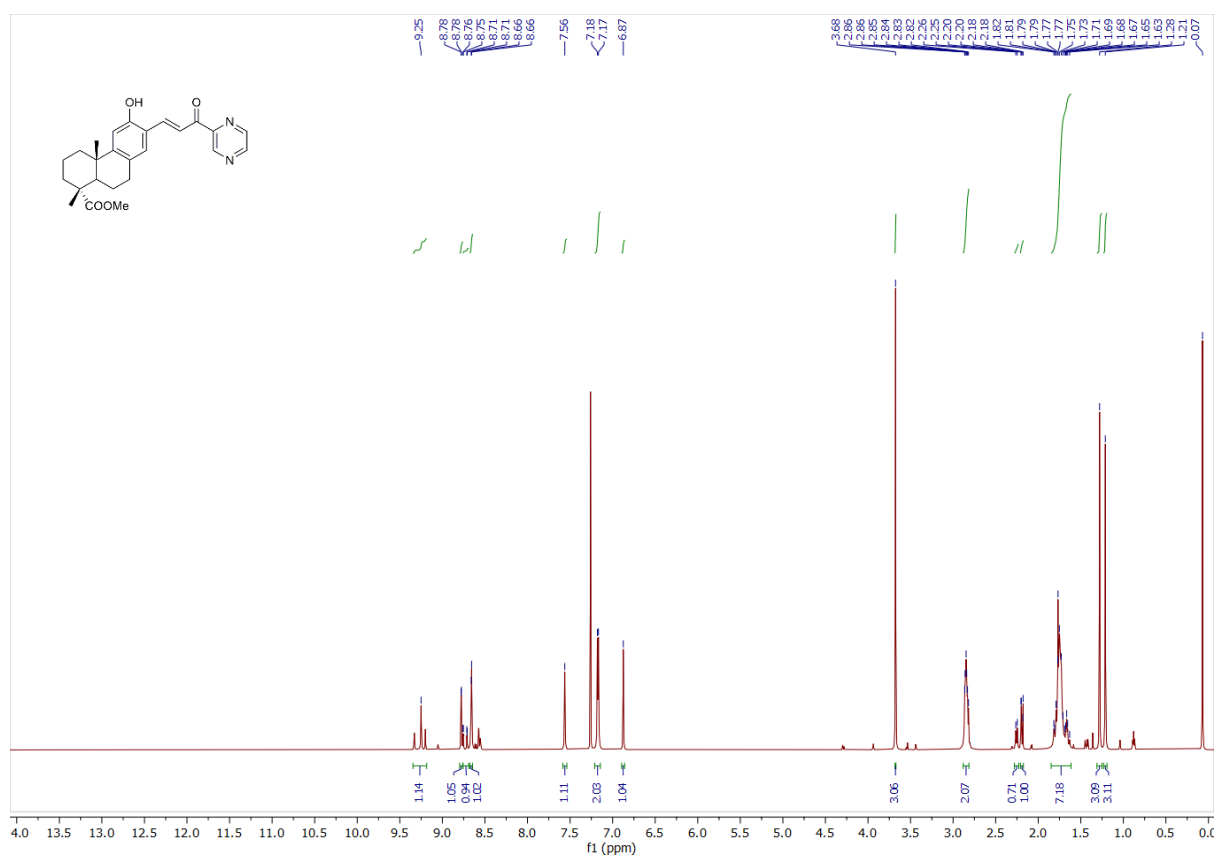


Figure S48. ¹H-NMR spectrum of compound 51.

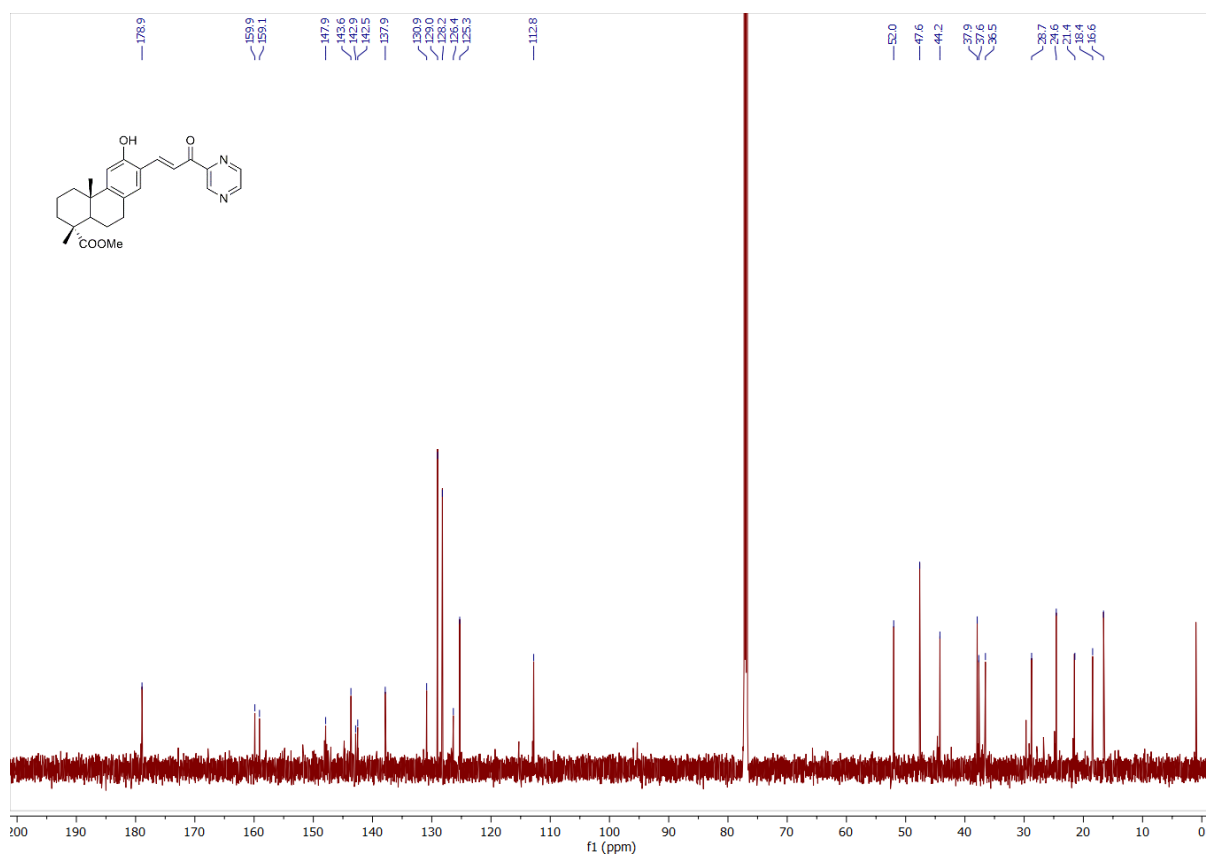


Figure S49. ¹³C-NMR spectrum of compound 51.

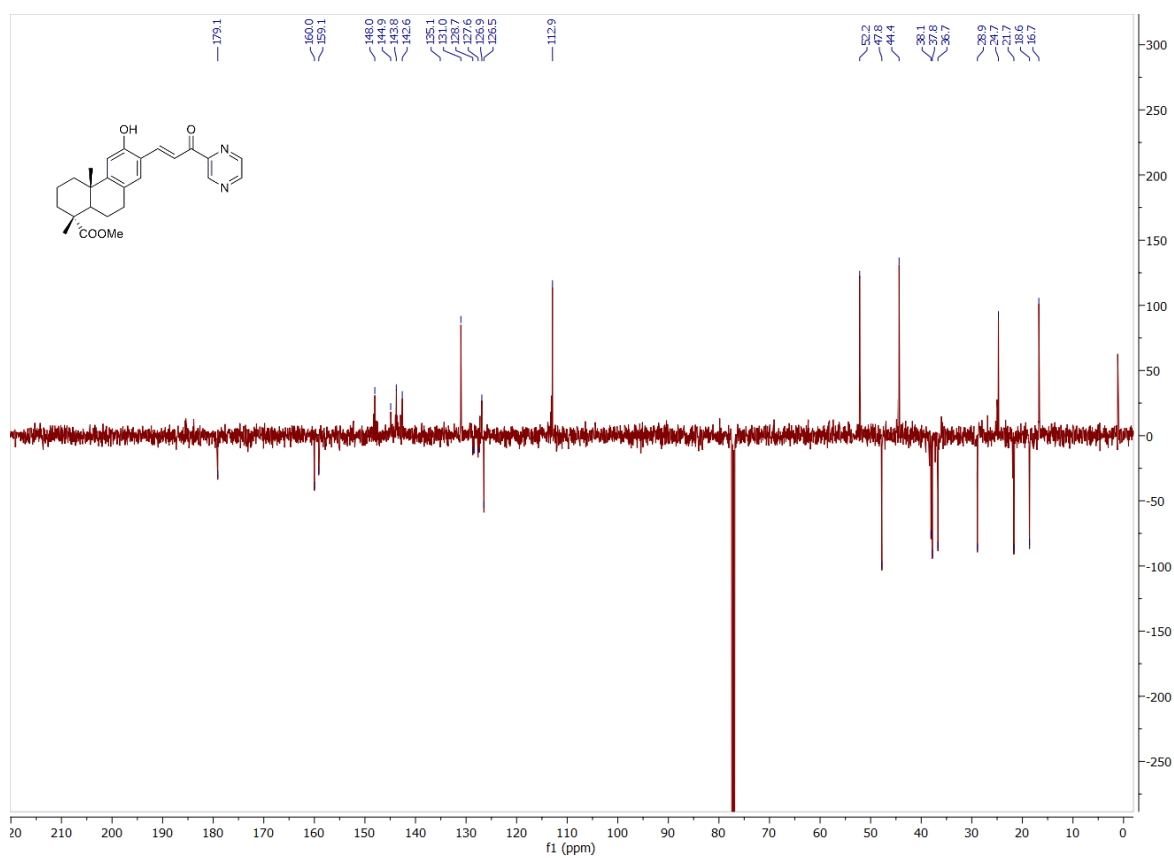


Figure S50. APT-NMR spectrum of compound 51.

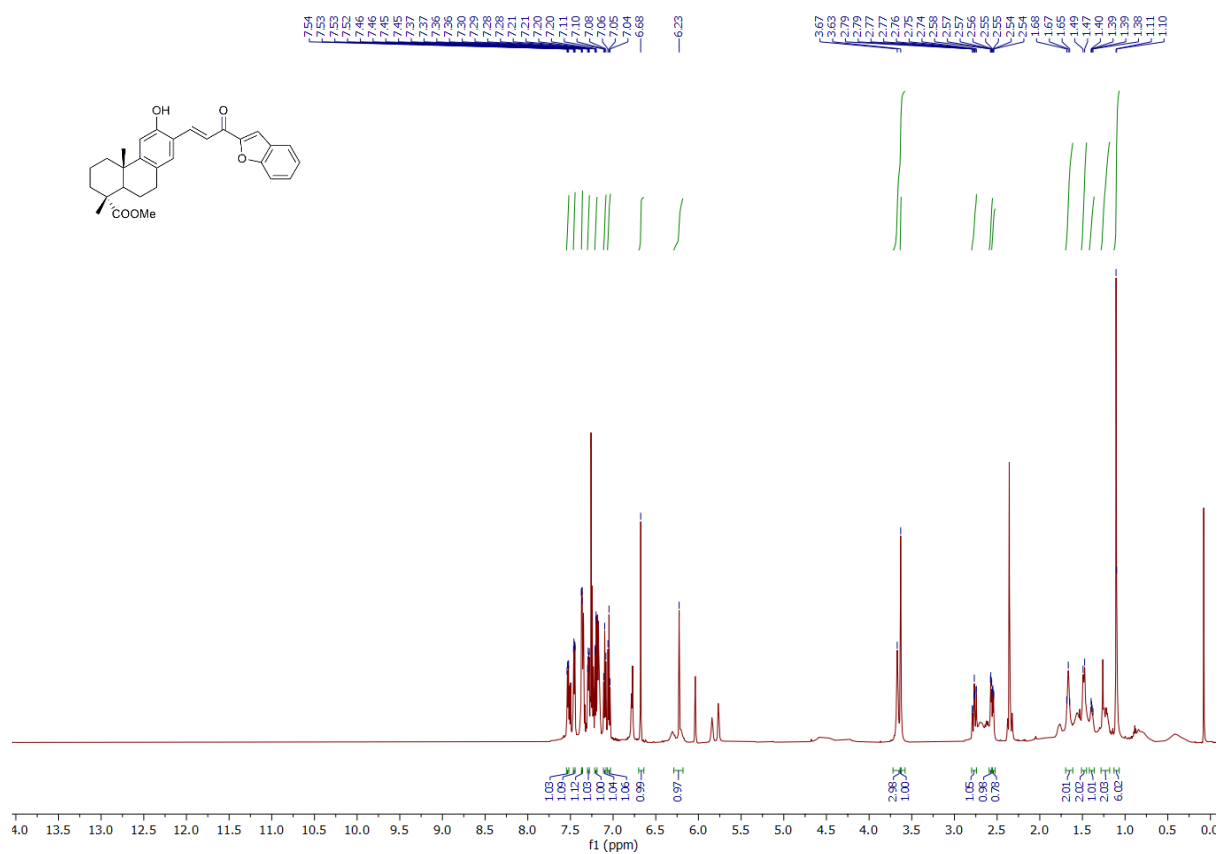


Figure S51 ¹H-NMR spectrum of compound 52.

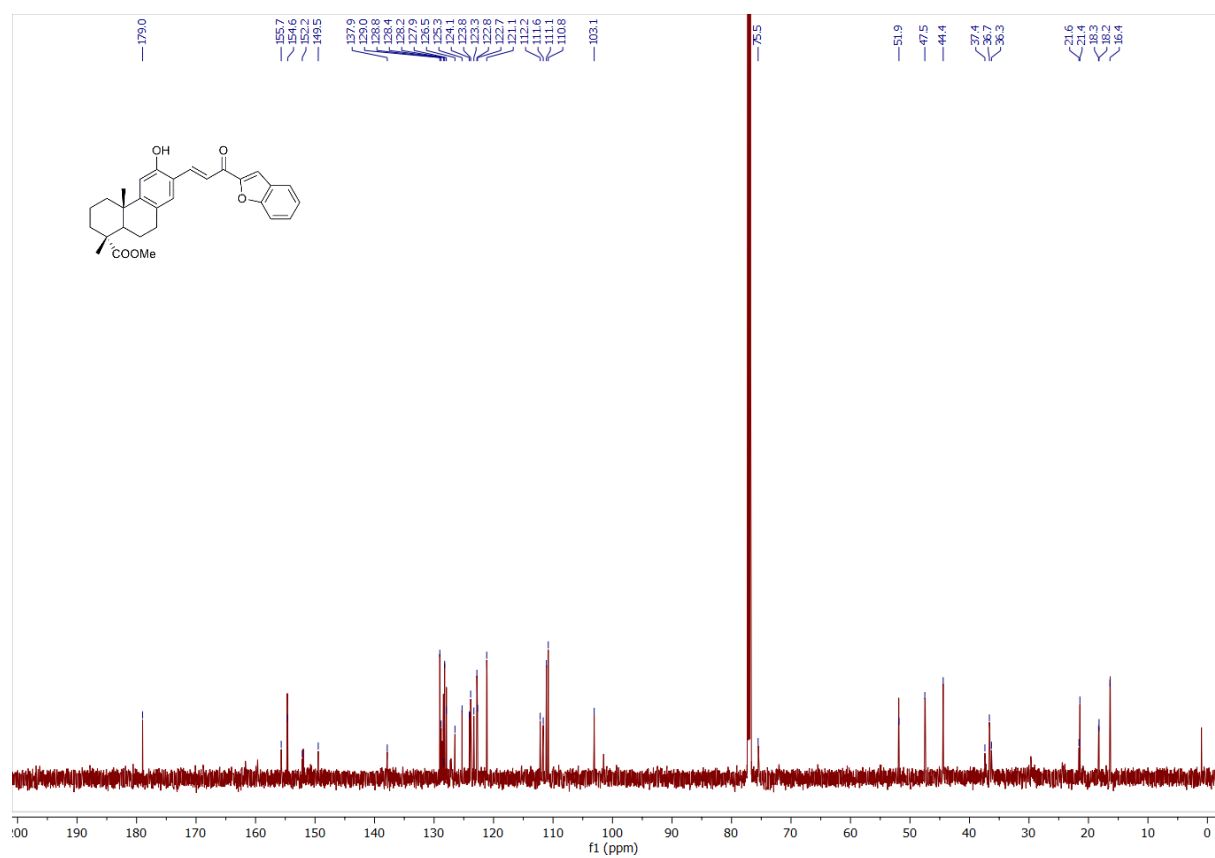


Figure S52. ¹³C-NMR spectrum of compound 52.

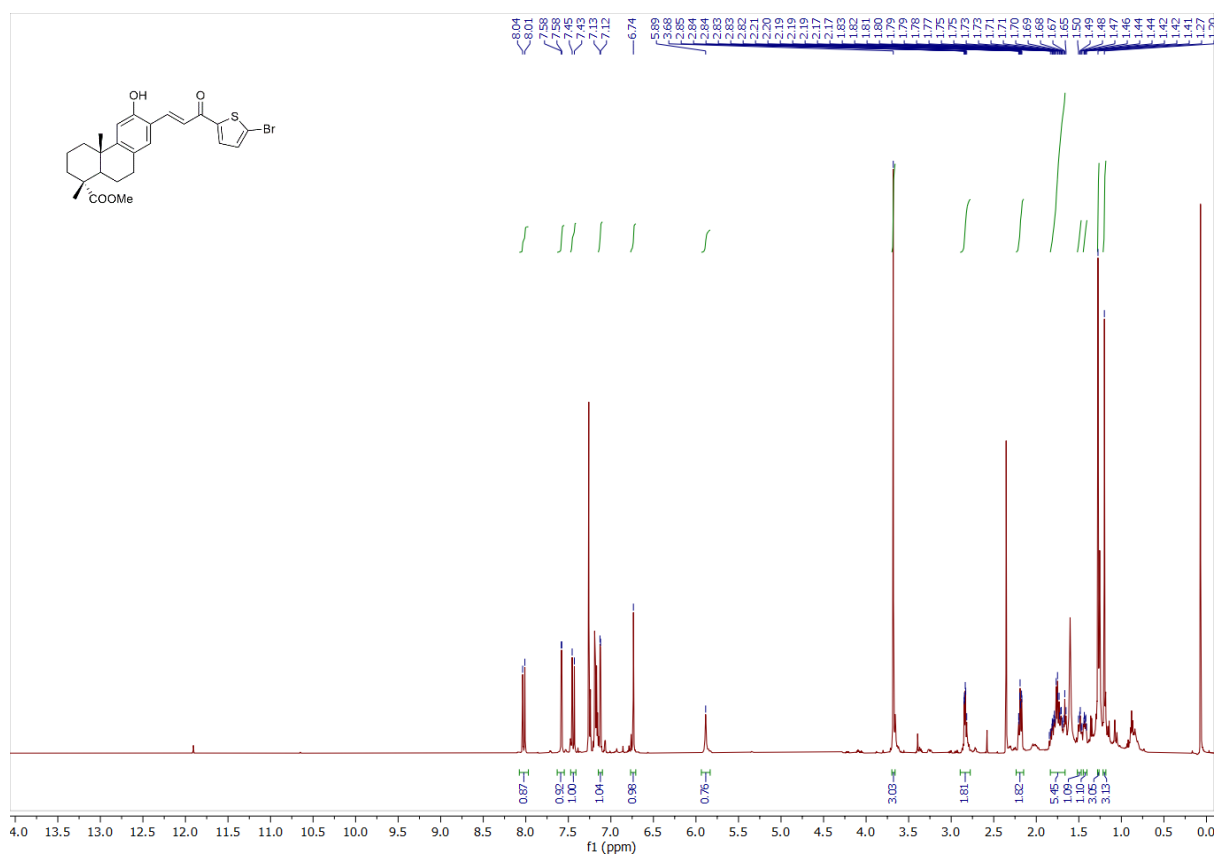


Figure S53. ¹H-NMR spectrum of compound 53.

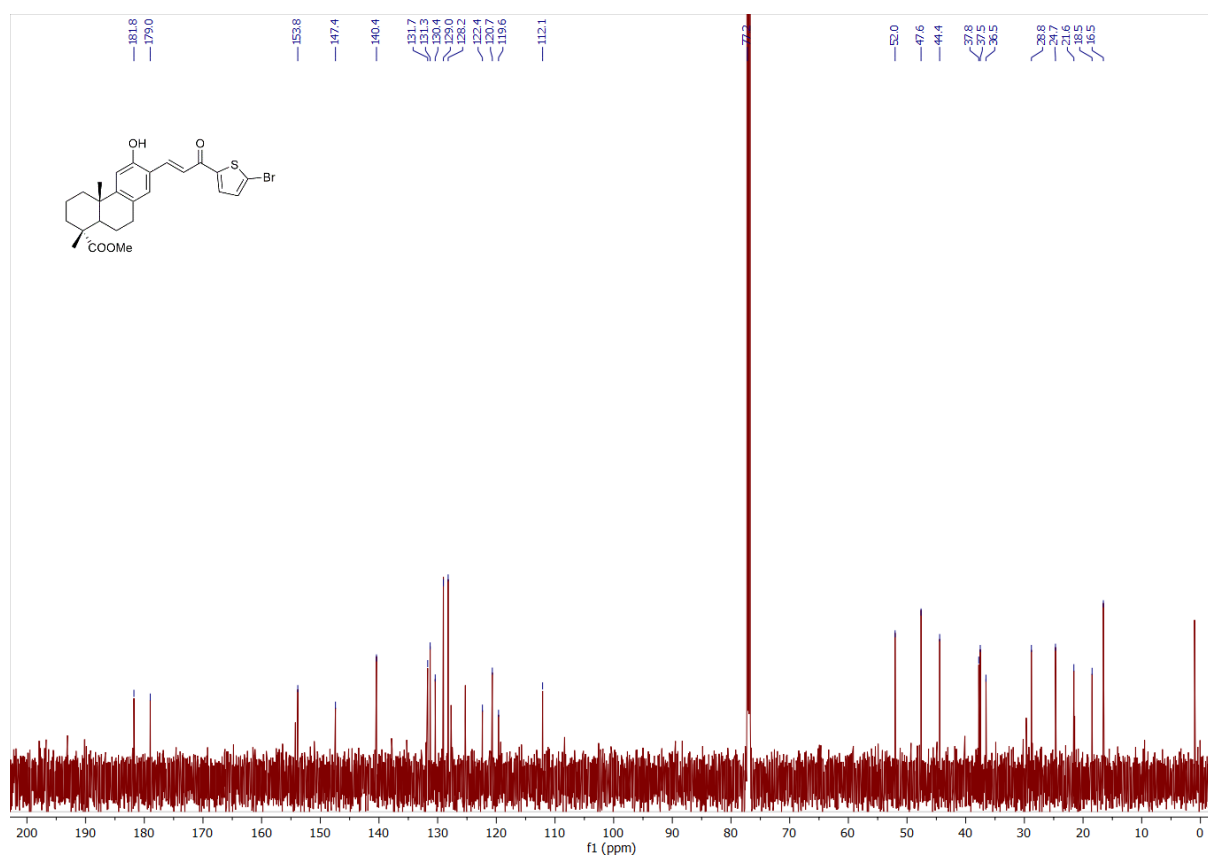


Figure S54. ¹³C-NMR spectrum of compound 53.