

Electronic Supplementary Information

SnCl₄-Mediated One-Pot Synthesis of 2,4,5-Trisubstituted Thiazoles from Nitro-Substituted Donor-Acceptor Cyclopropanes and Thioamides

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A. Copies of ^1H NMR and ^{13}C NMR Spectra

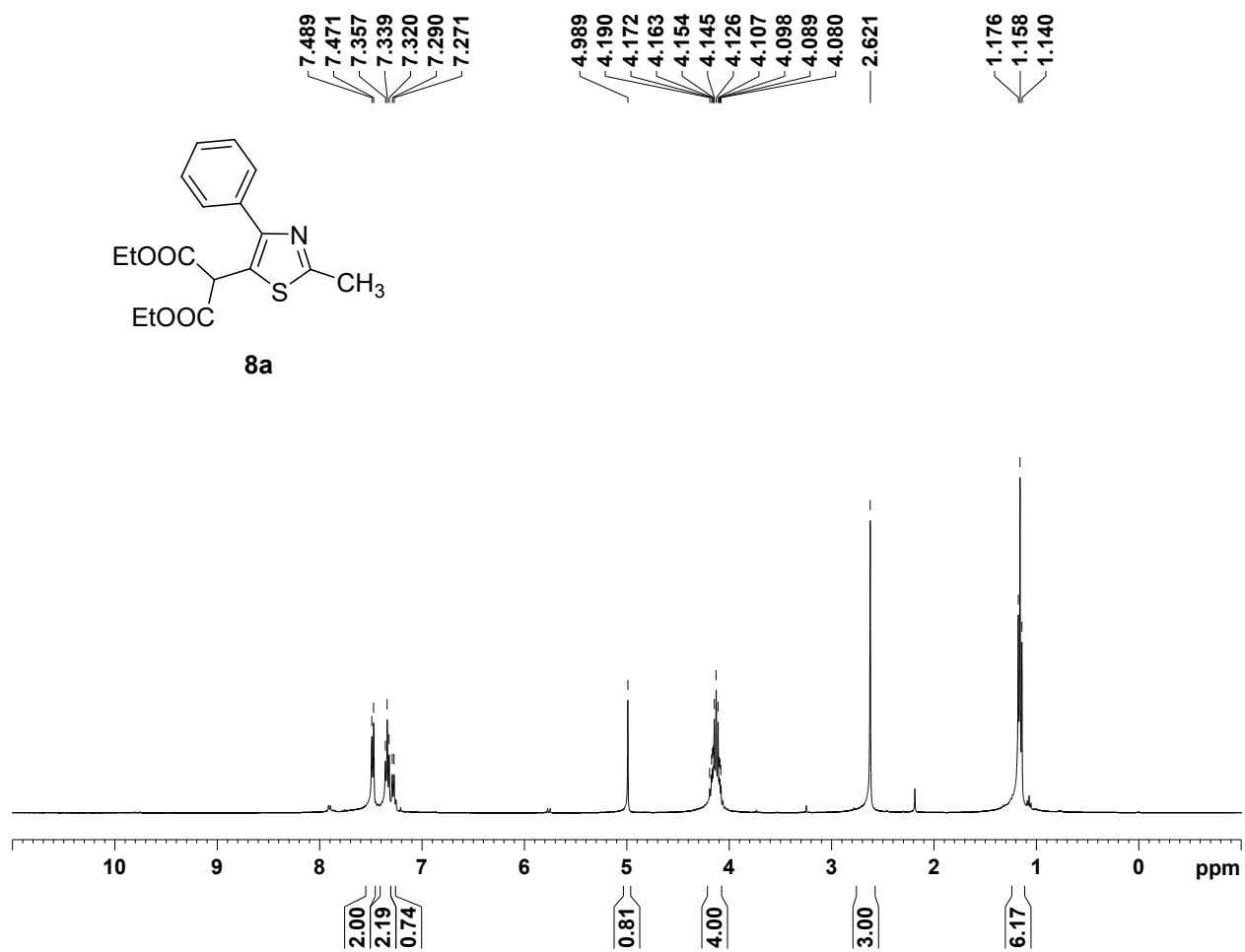


Figure 1. ^1H NMR (400 MHz, CDCl_3) spectrum of **8a**

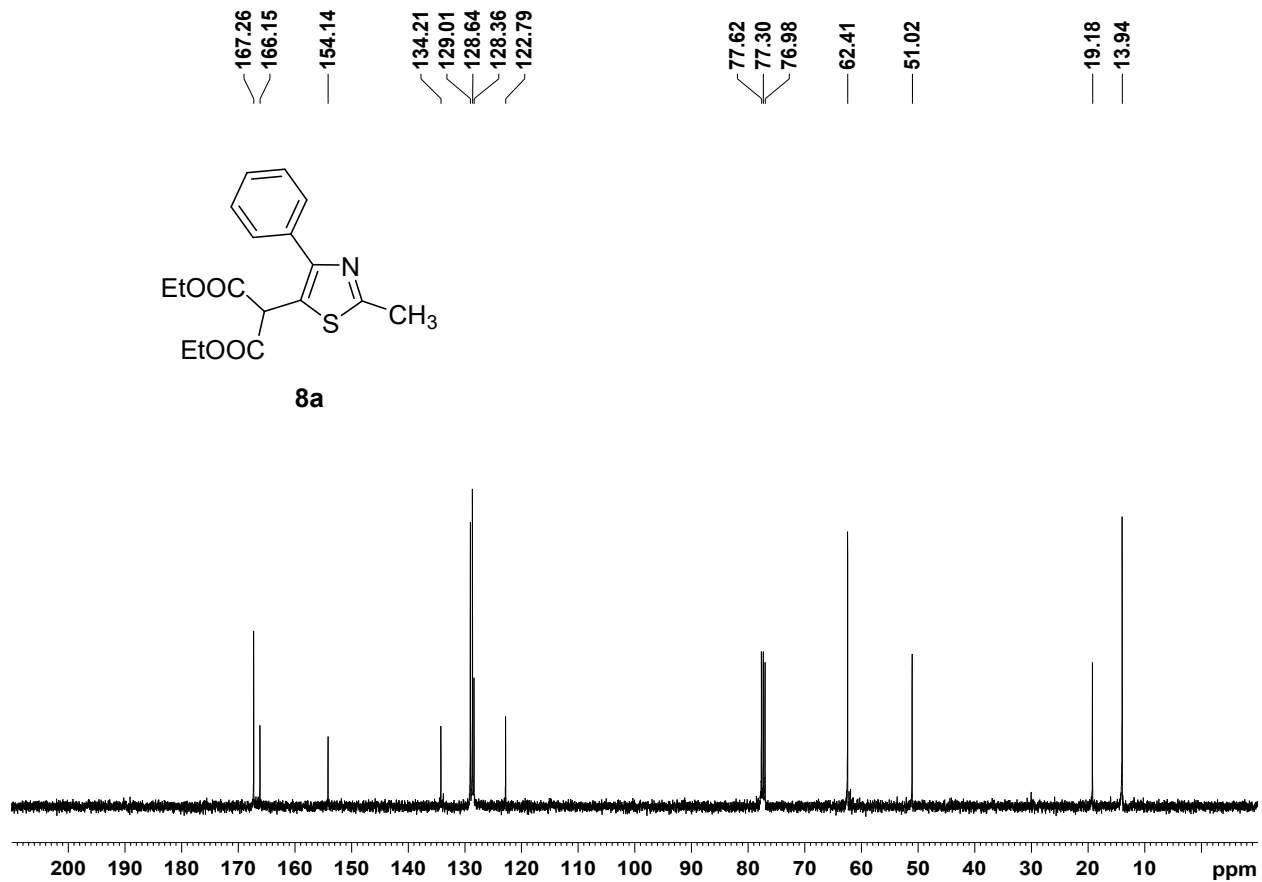


Figure 2. ^{13}C NMR (100 MHz, CDCl_3) spectrum of **8a**

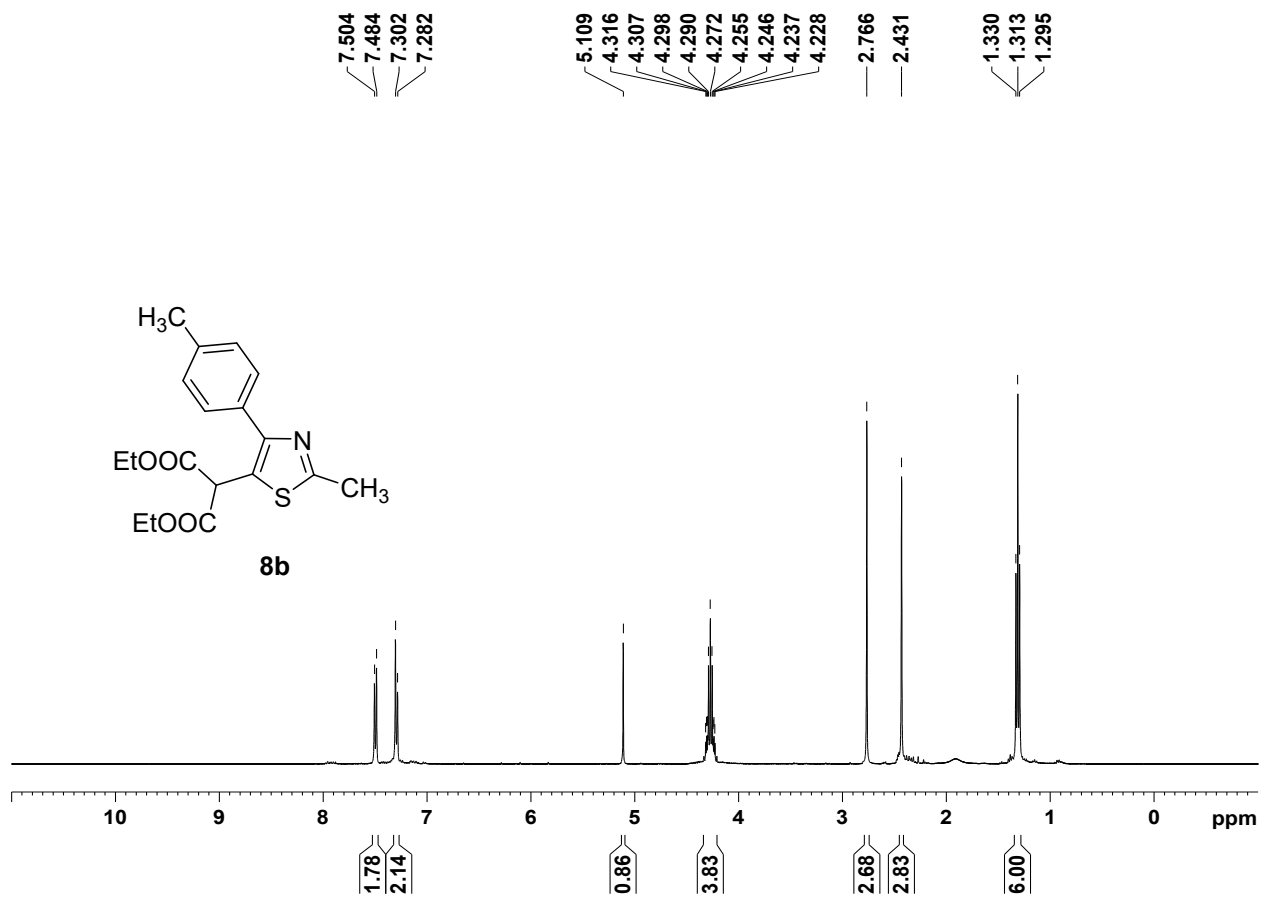


Figure 3. ¹H NMR (400 MHz, CDCl₃) spectrum of **8b**

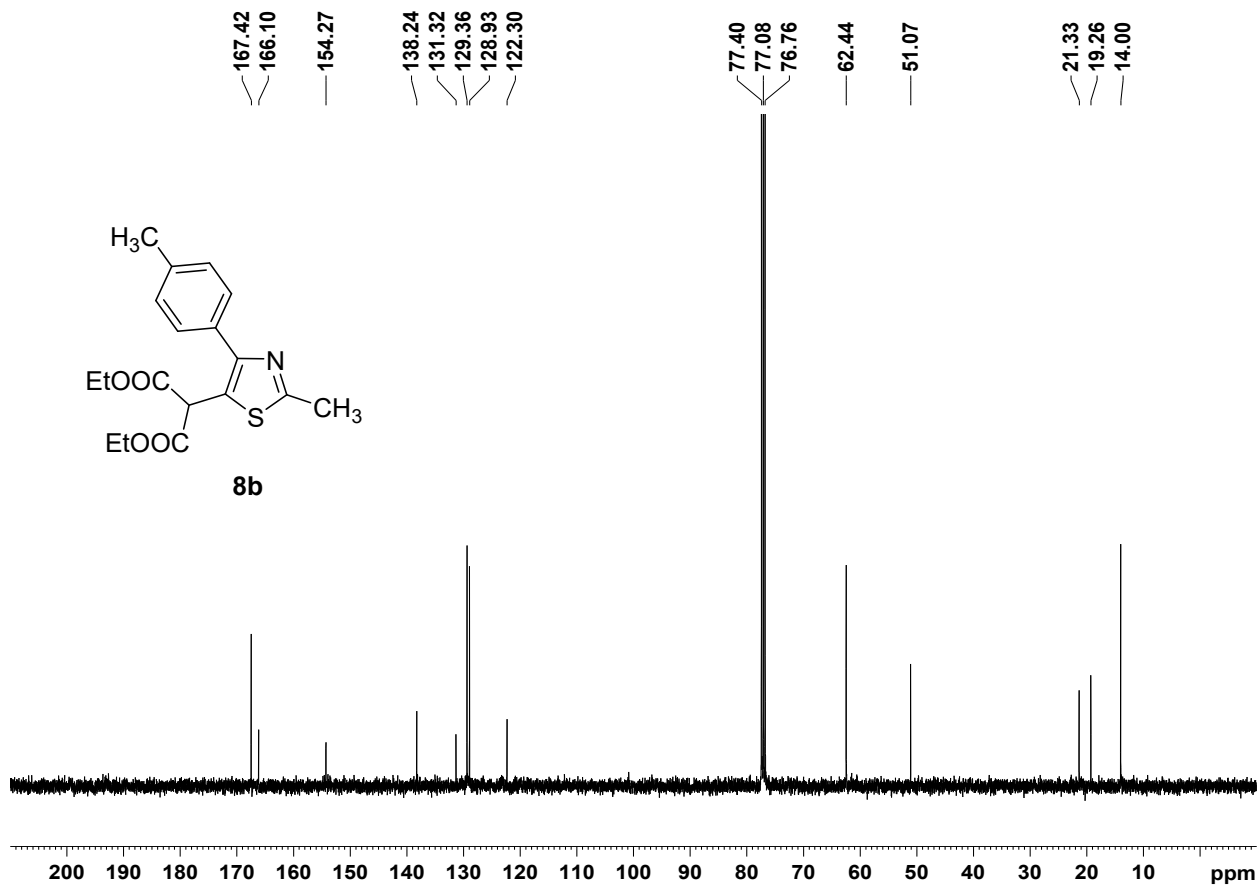


Figure 4. ¹³C NMR (100 MHz, CDCl₃) spectrum of **8b**

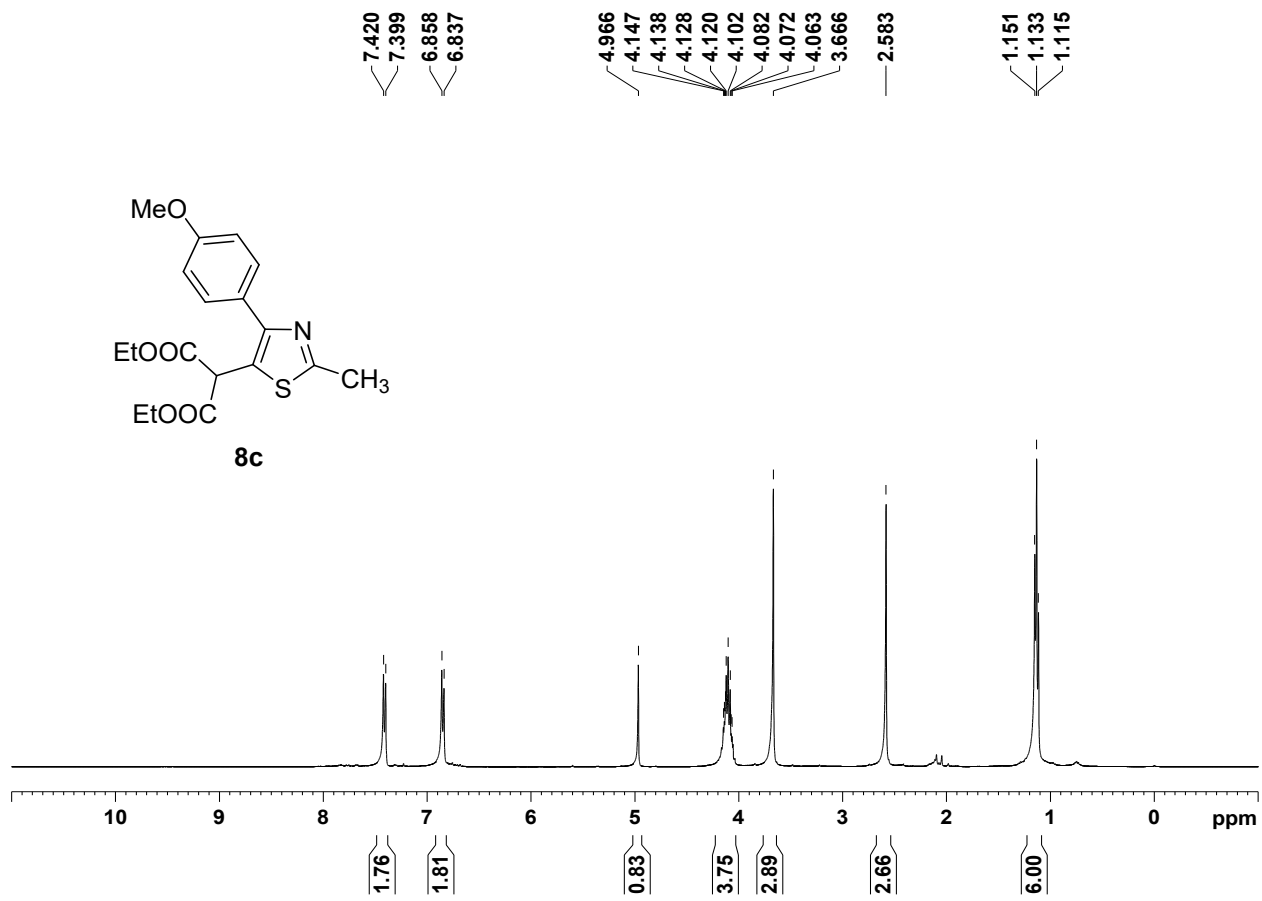


Figure 5. ¹H NMR (400 MHz, CDCl₃) spectrum of **8c**

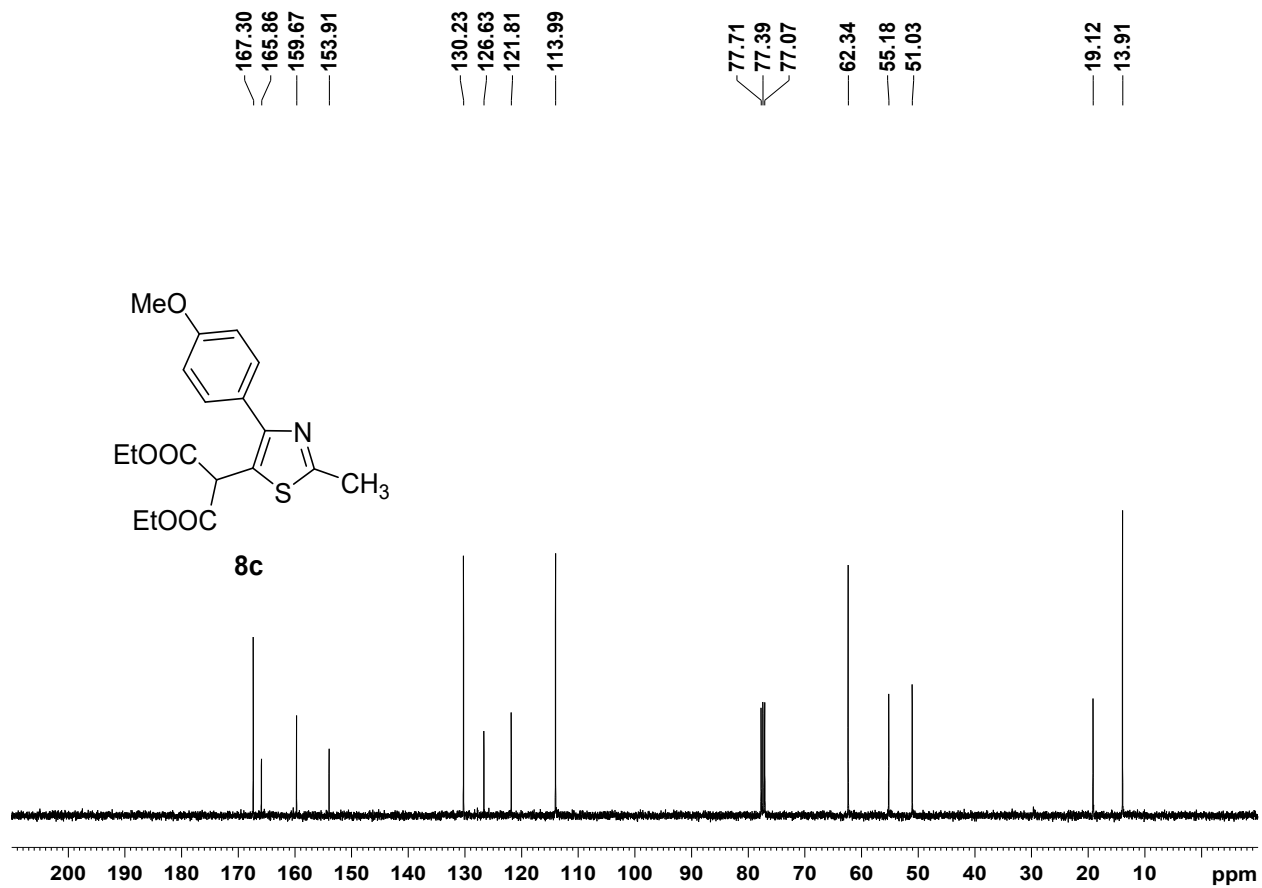


Figure 6. ¹³C NMR (100 MHz, CDCl₃) spectrum of **8c**

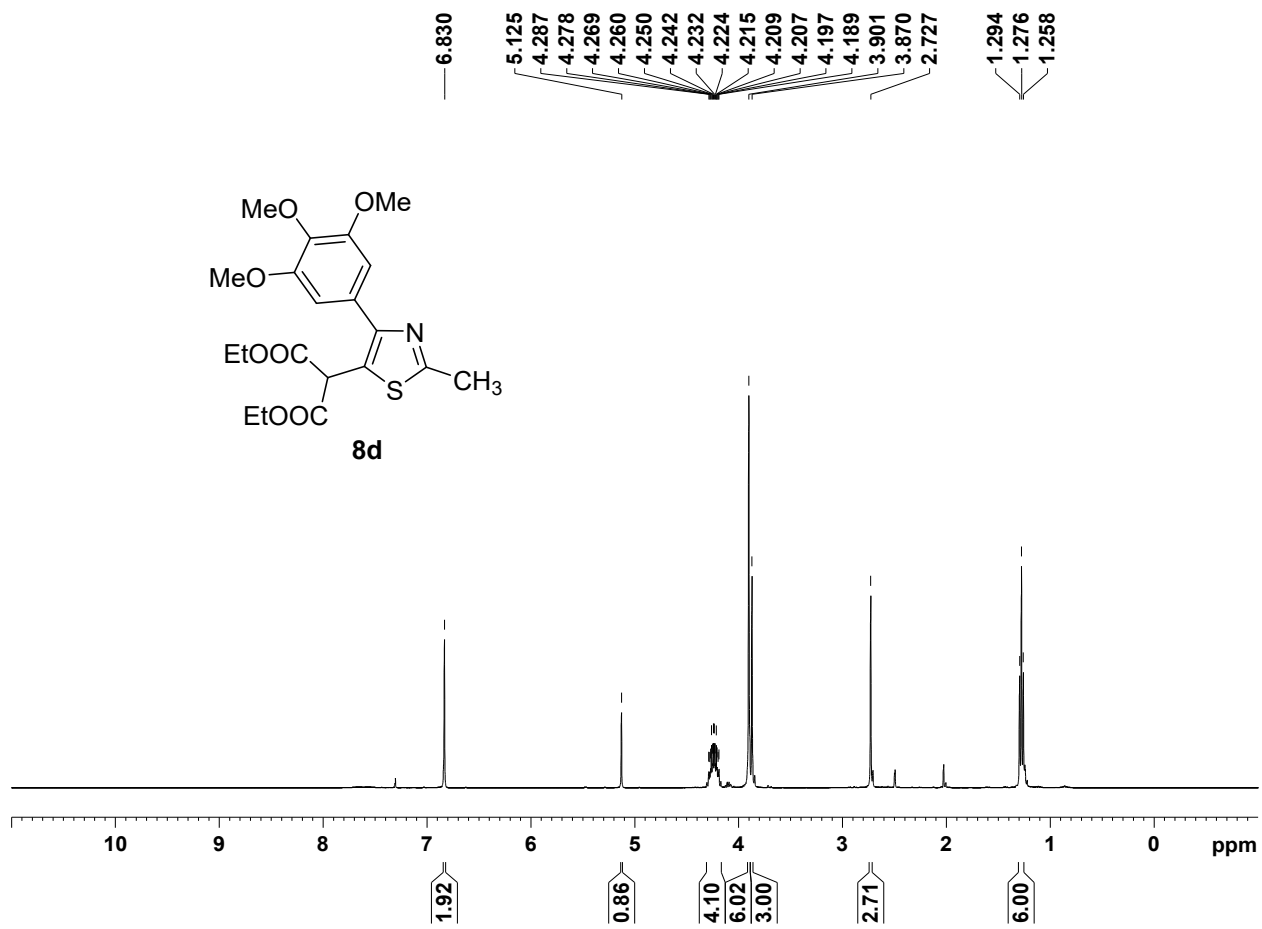


Figure 7. ¹H NMR (400 MHz, CDCl₃) spectrum of **8d**

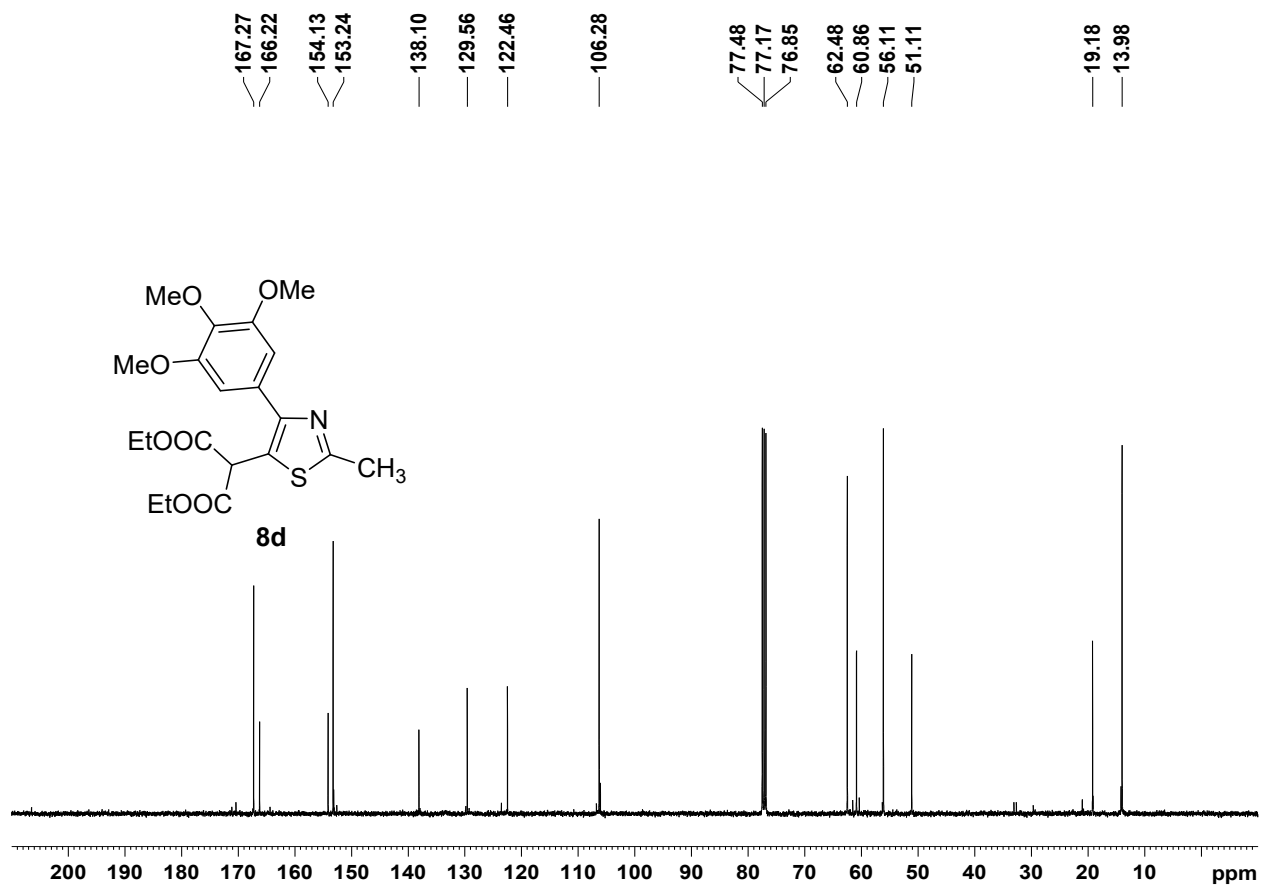


Figure 8. ^{13}C NMR (100 MHz, CDCl_3) spectrum of **8d**

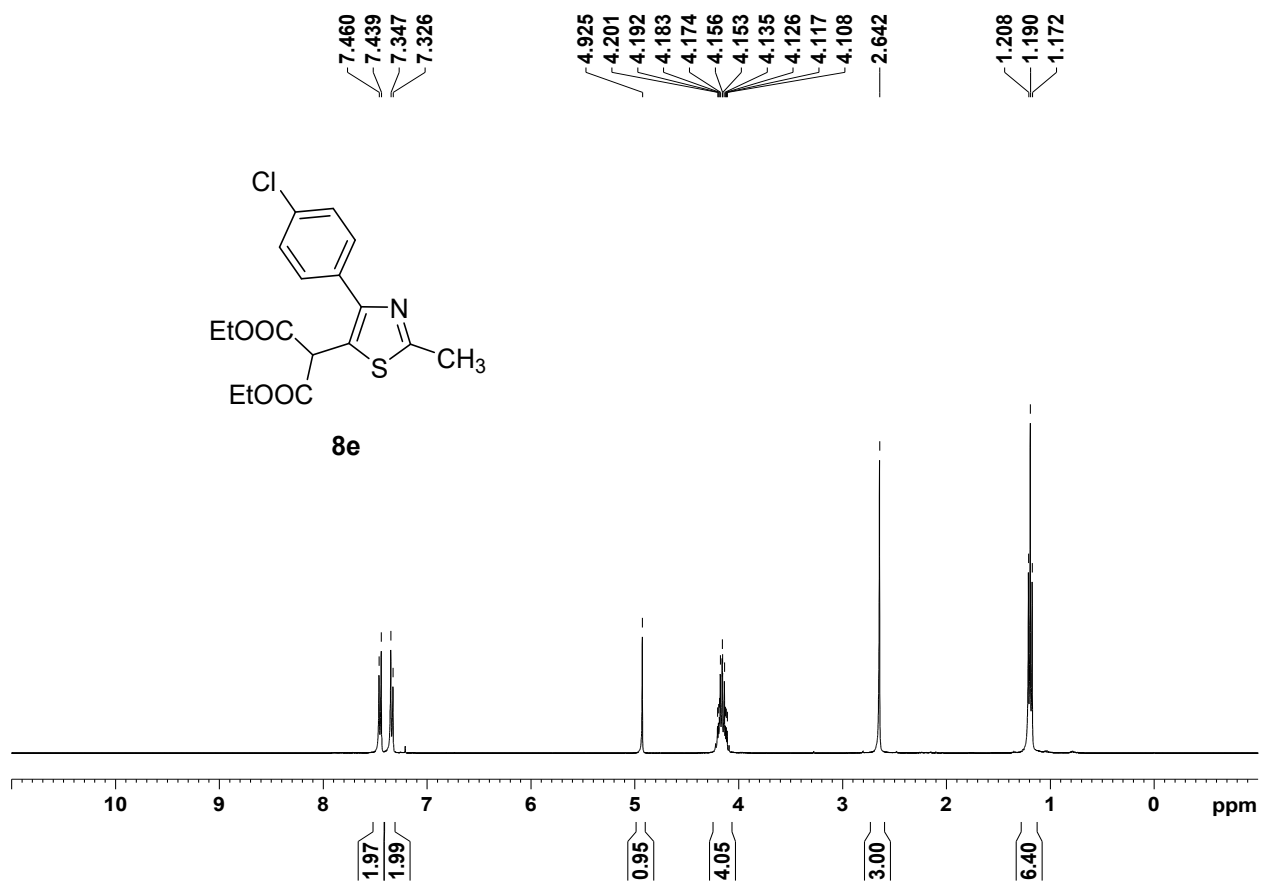


Figure 9. ¹H NMR (400 MHz, CDCl₃) spectrum of **8e**

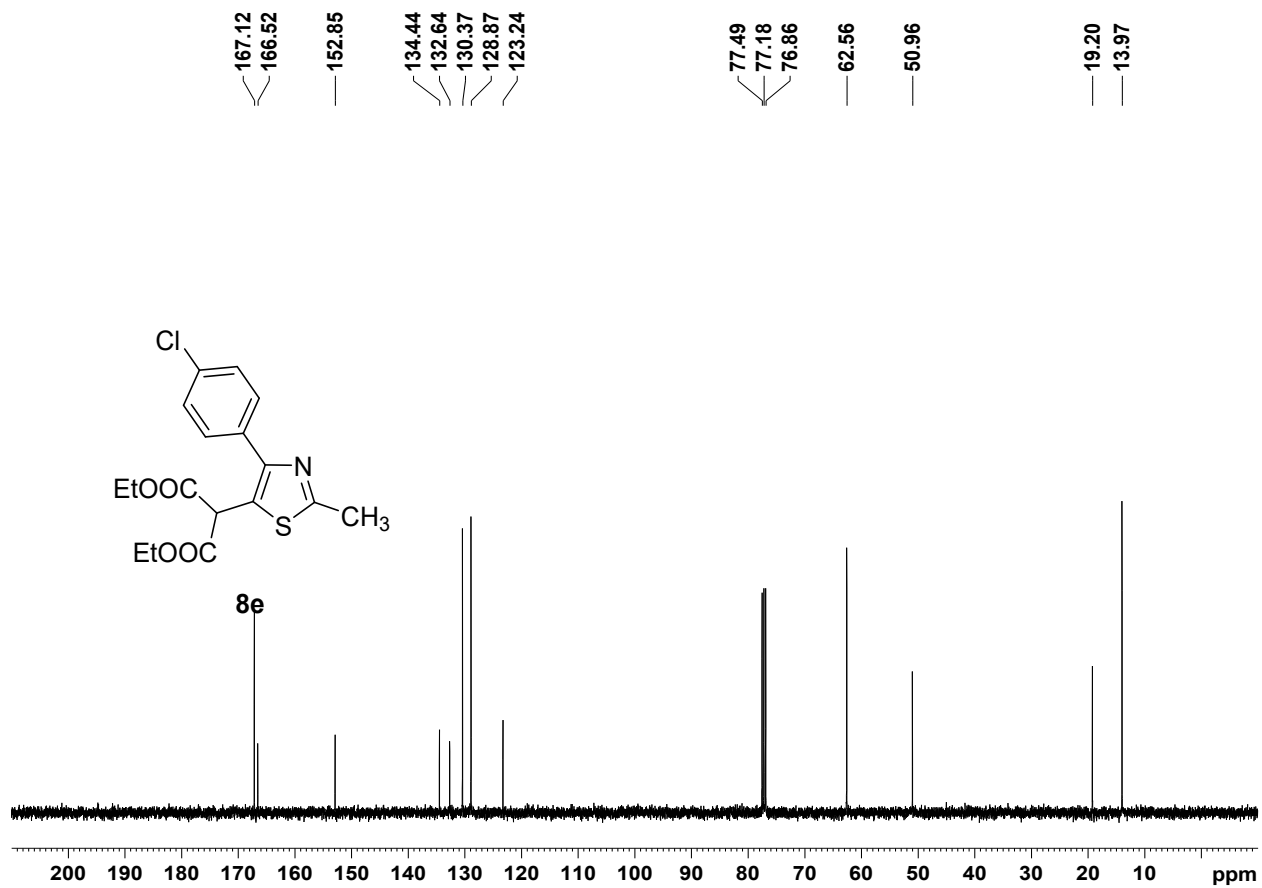


Figure 10. ^{13}C NMR (100 MHz, CDCl_3) spectrum of **8e**

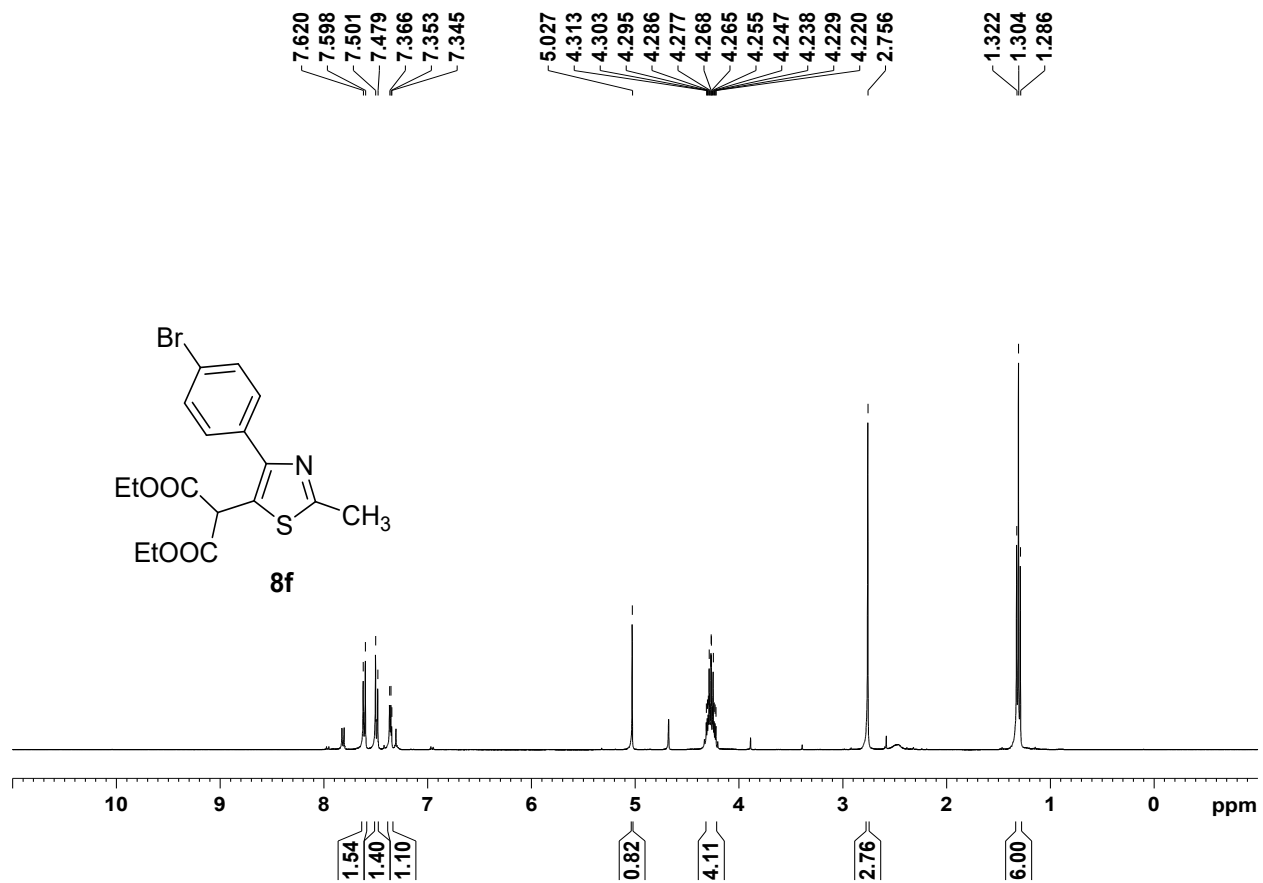


Figure 11. ¹H NMR (400 MHz, CDCl₃) spectrum of **8f**

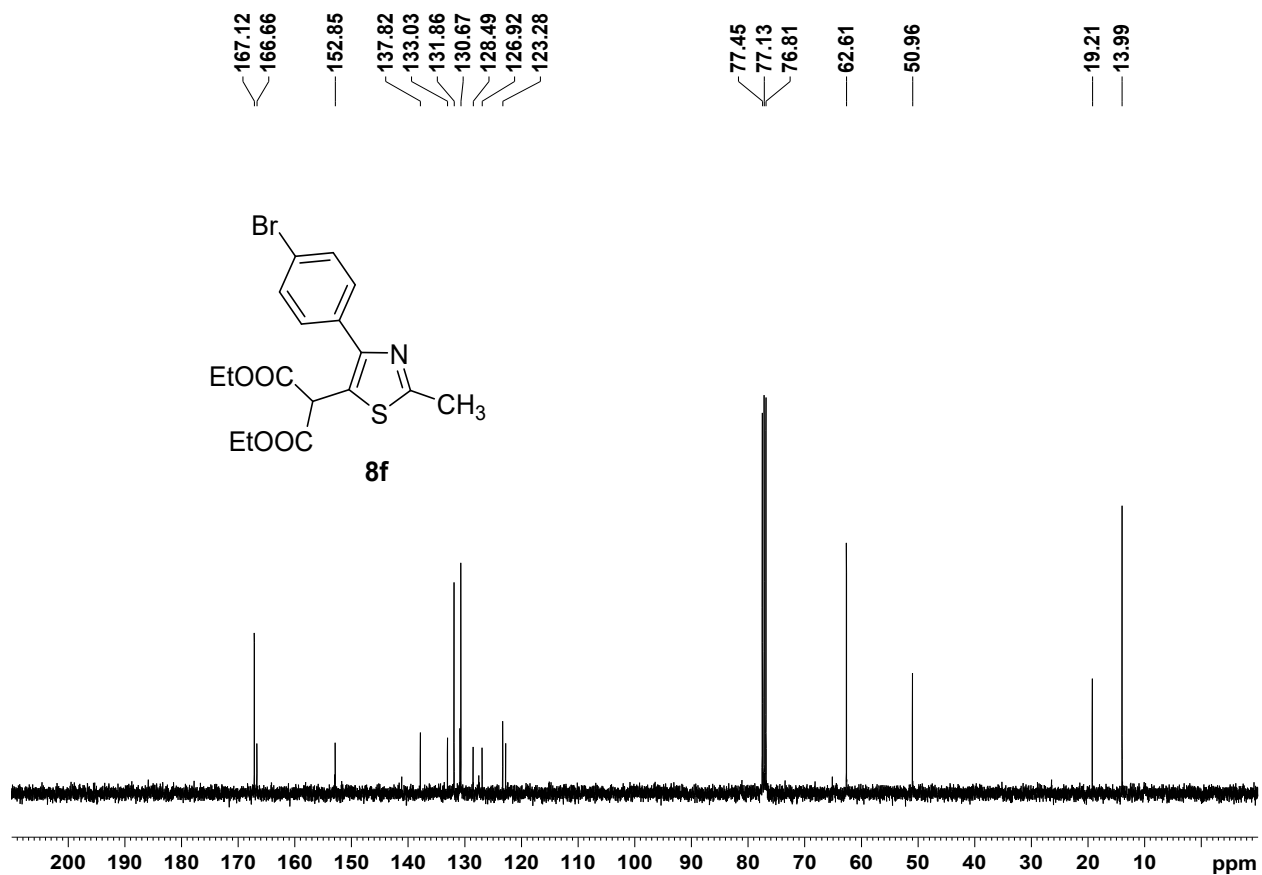


Figure 12. ¹³C NMR (100 MHz, CDCl₃) spectrum of **8f**

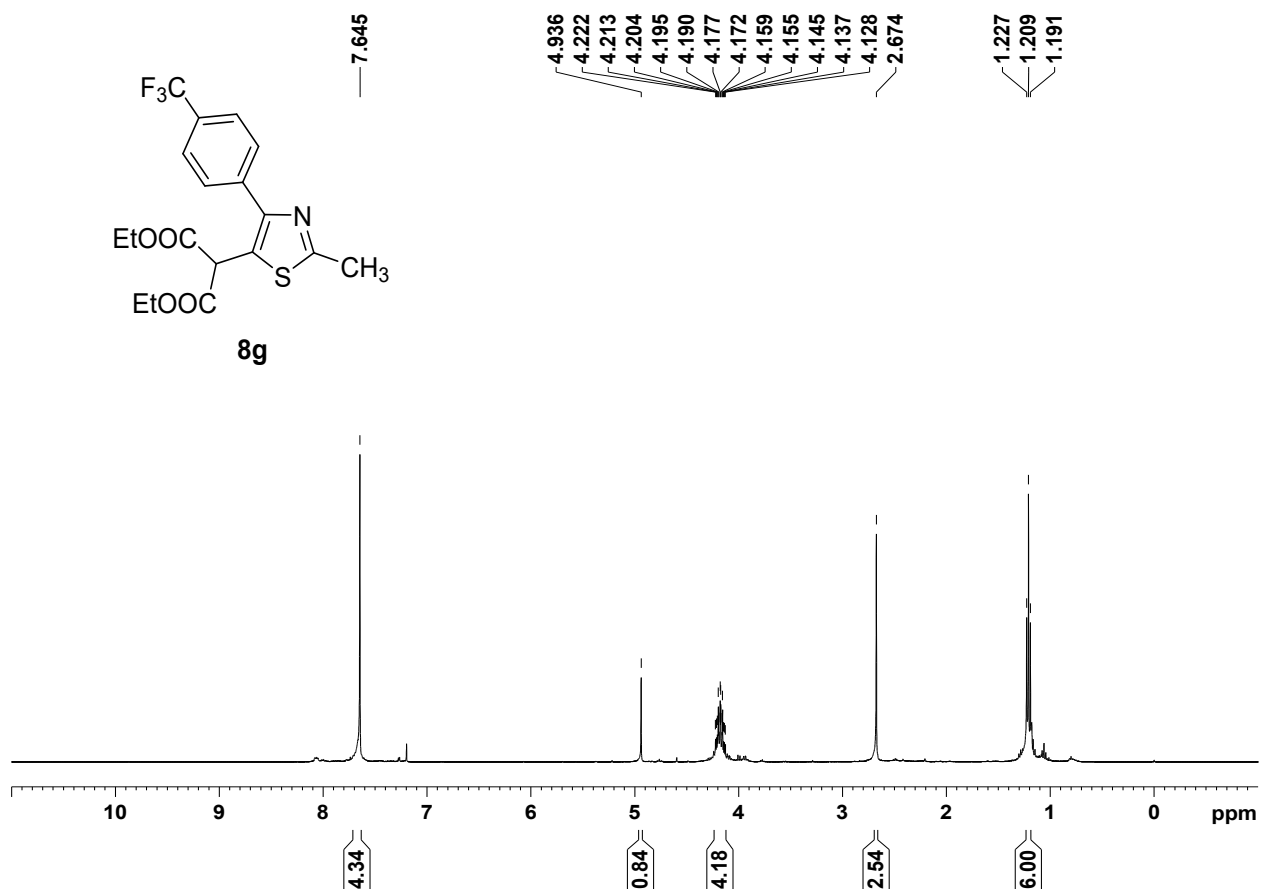


Figure 13. ¹H NMR (400 MHz, CDCl₃) spectrum of **8g**

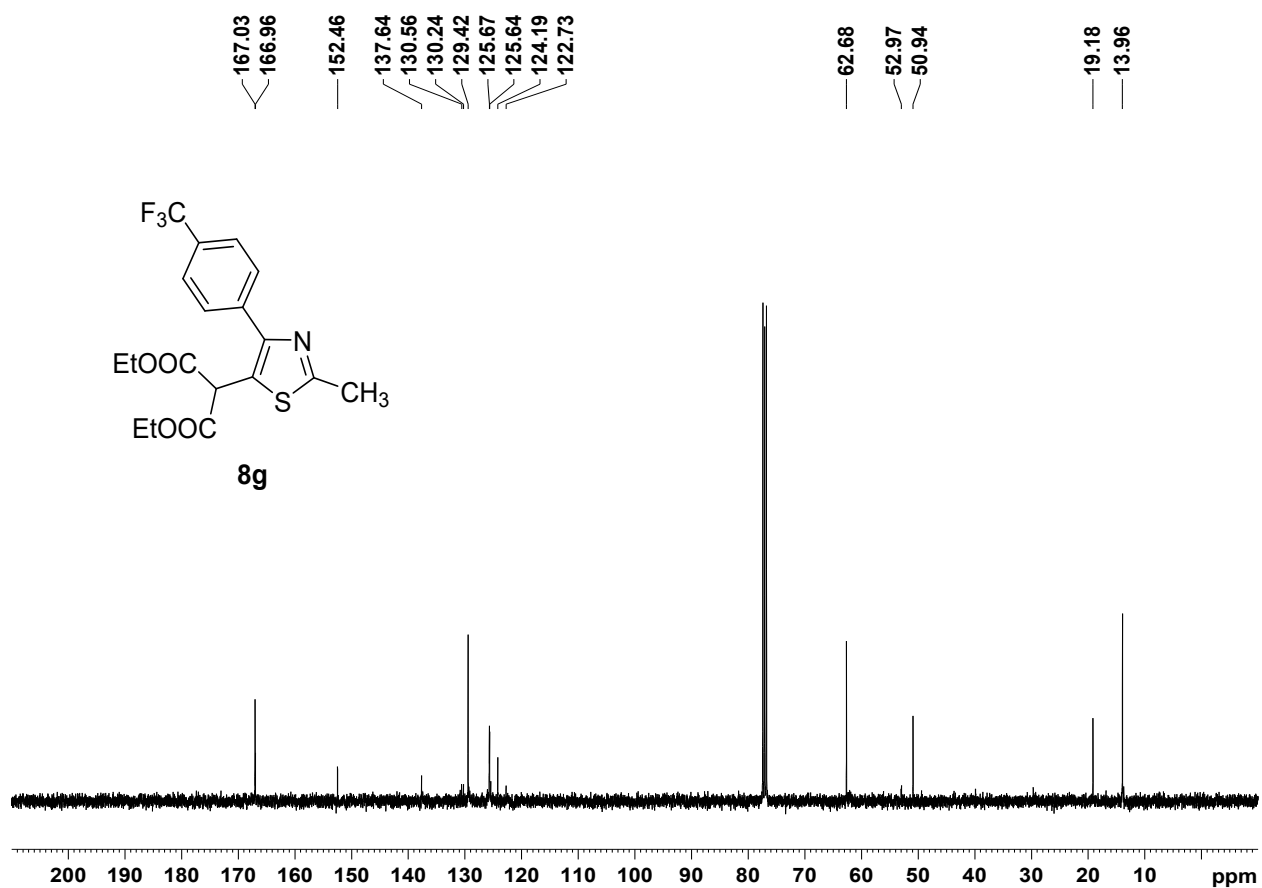


Figure 14. ¹³C NMR (100 MHz, CDCl₃) spectrum of **8g**

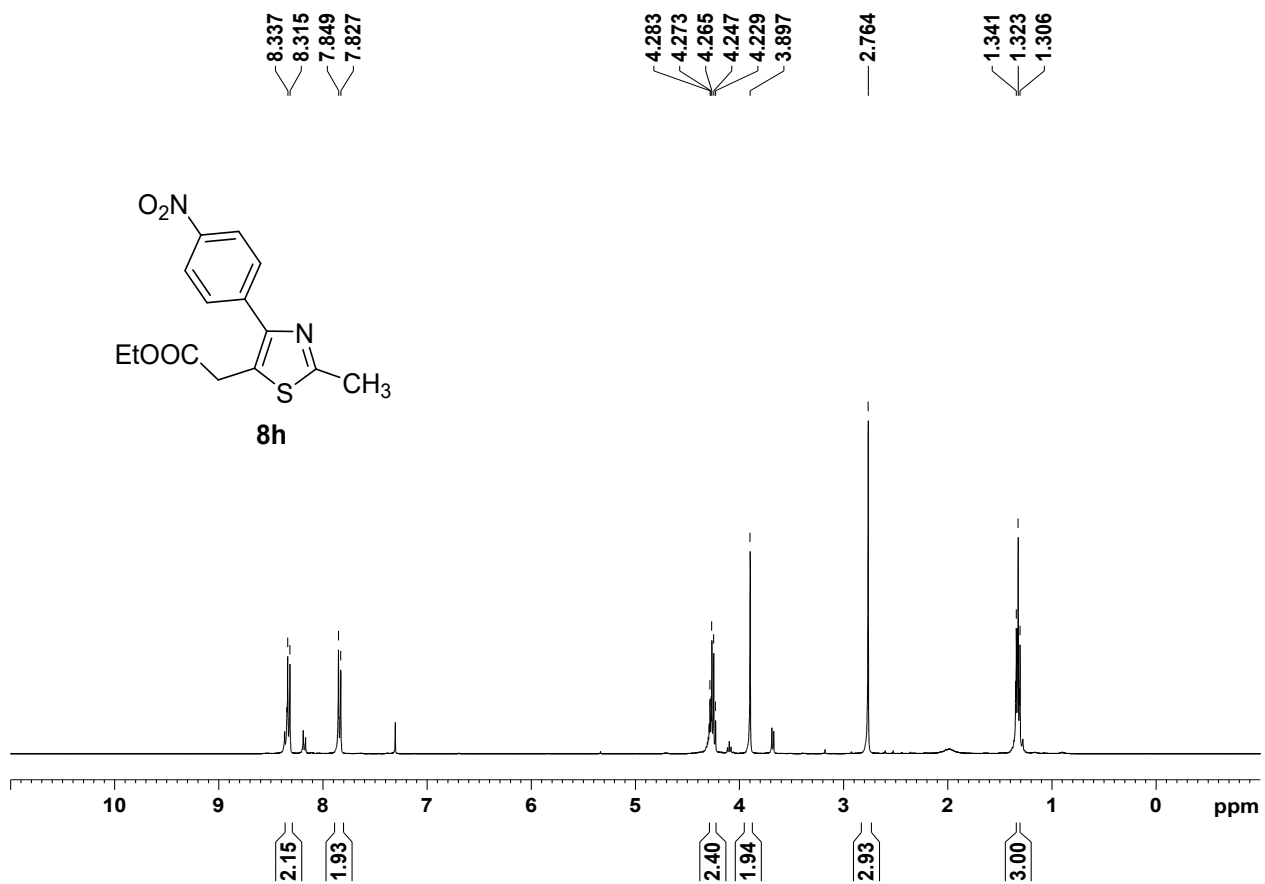


Figure 15. ¹H NMR (400 MHz, CDCl₃) spectrum of **8h**

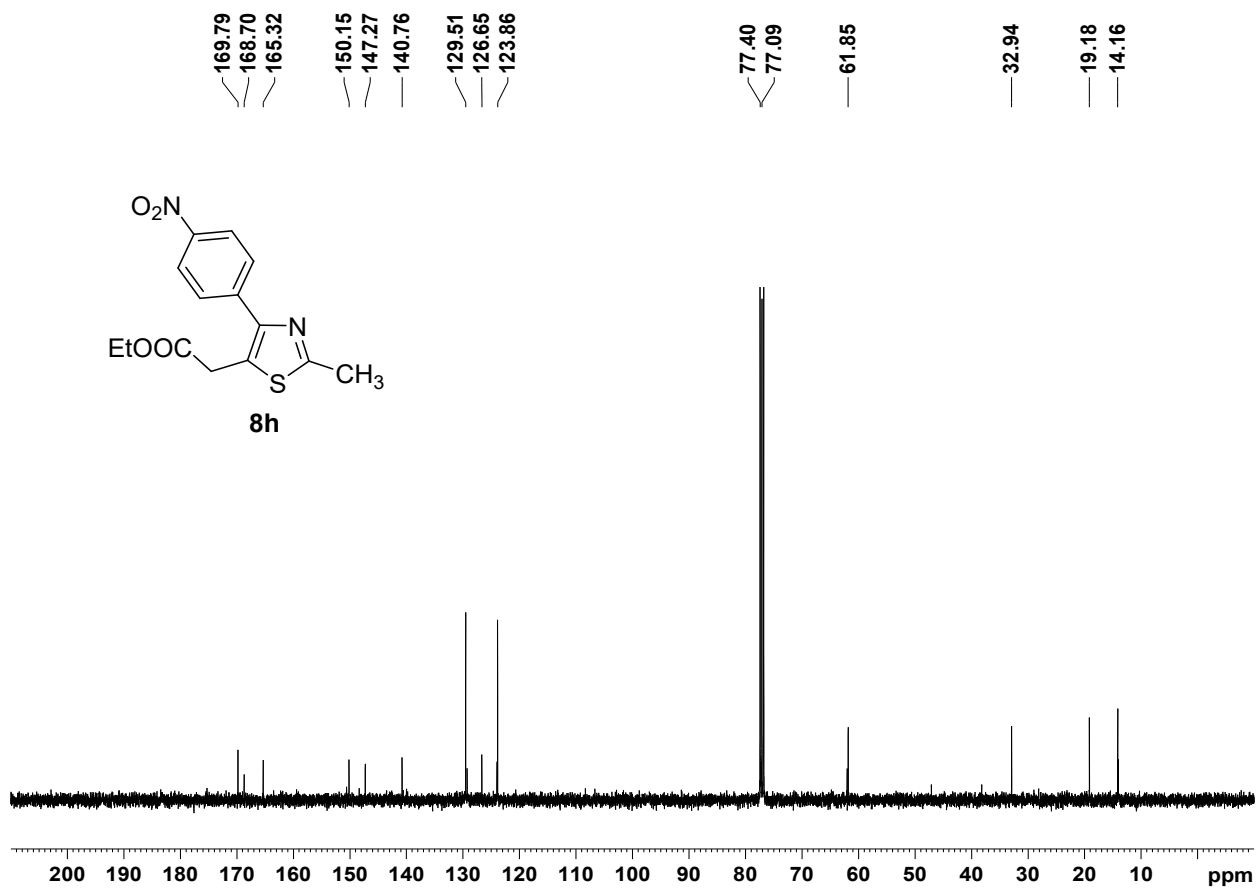


Figure 16. ¹³C NMR (100 MHz, CDCl₃) spectrum of **8h**

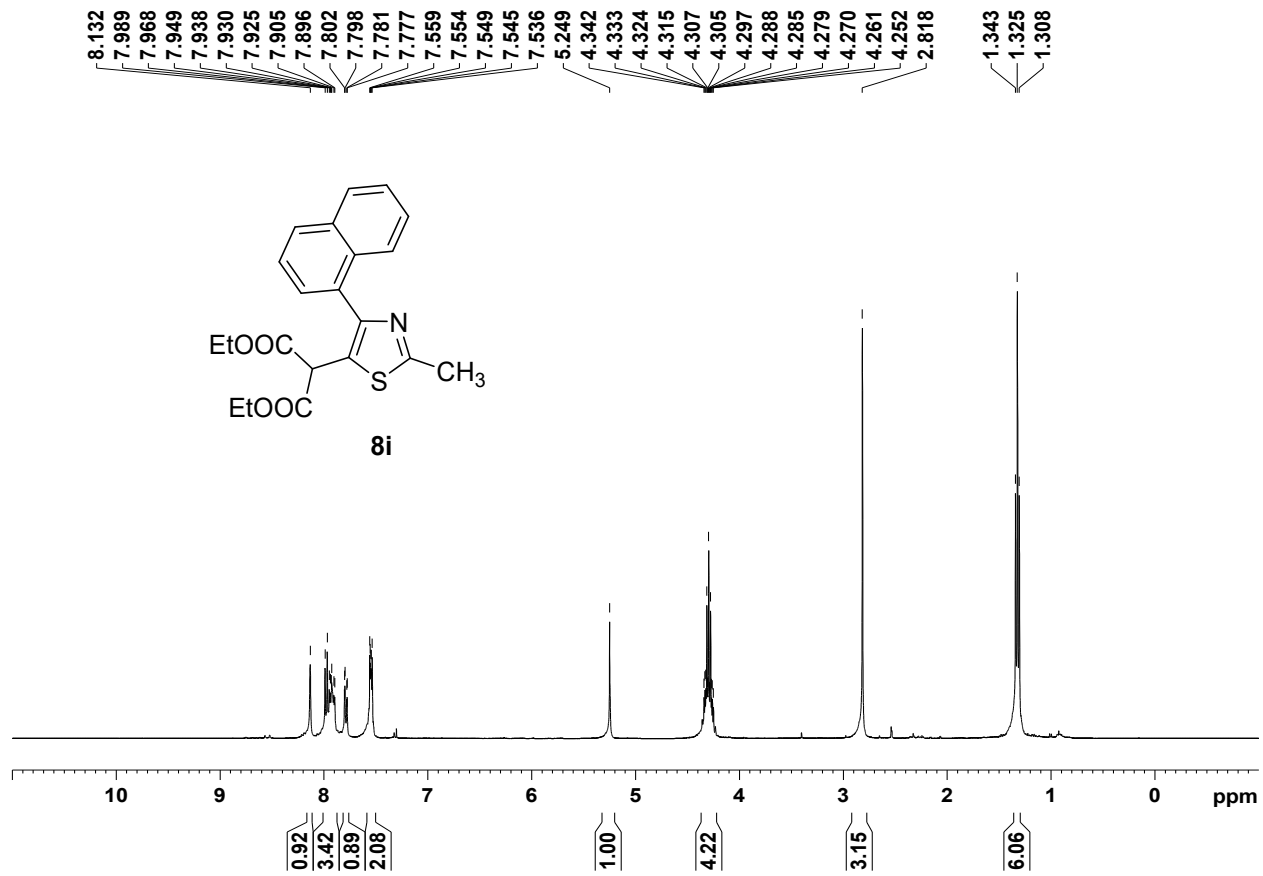


Figure 17. ¹H NMR (400 MHz, CDCl₃) spectrum of **8i**

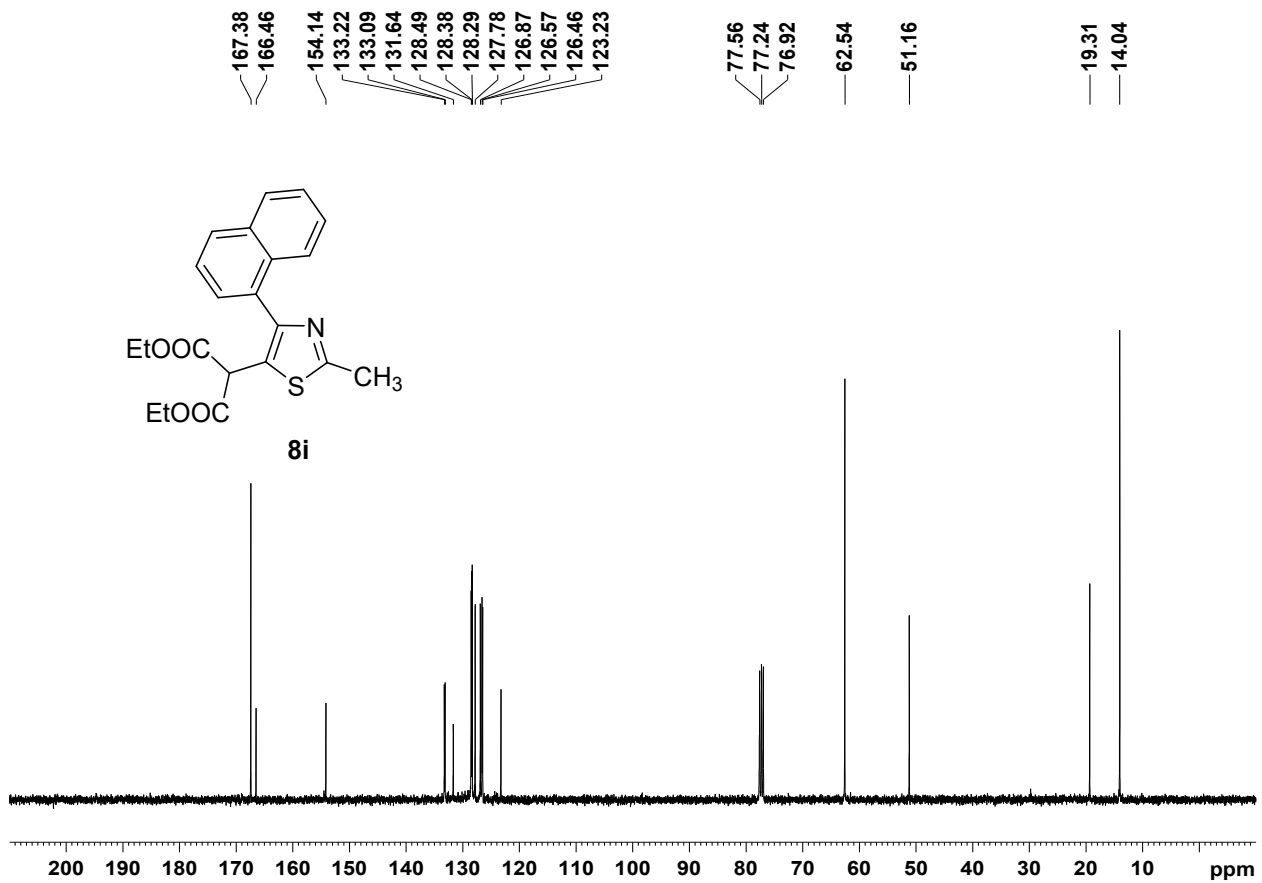


Figure 18. ^{13}C NMR (100 MHz, CDCl_3) spectrum of **8i**

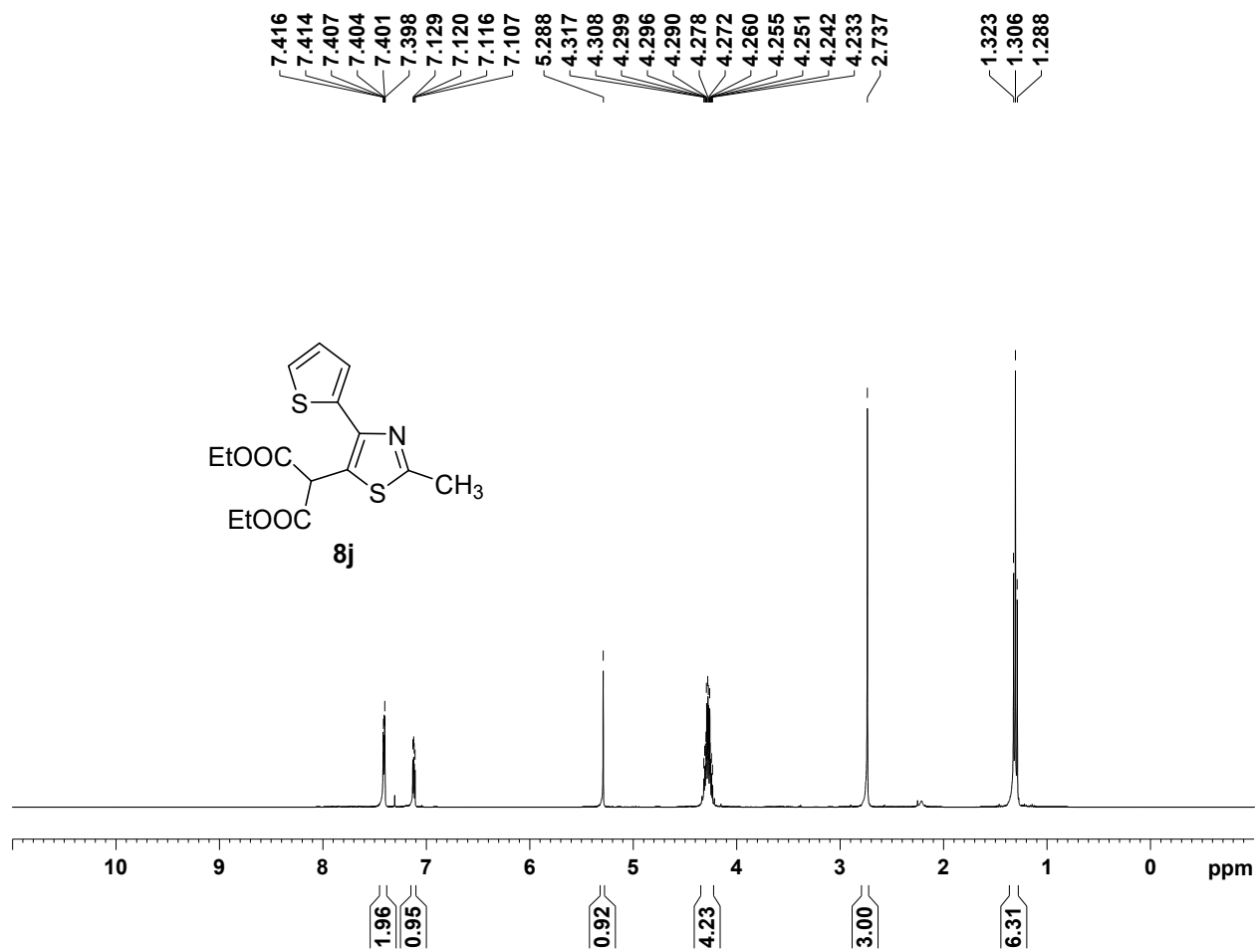


Figure 19. ¹H NMR (400 MHz, CDCl₃) spectrum of **8j**

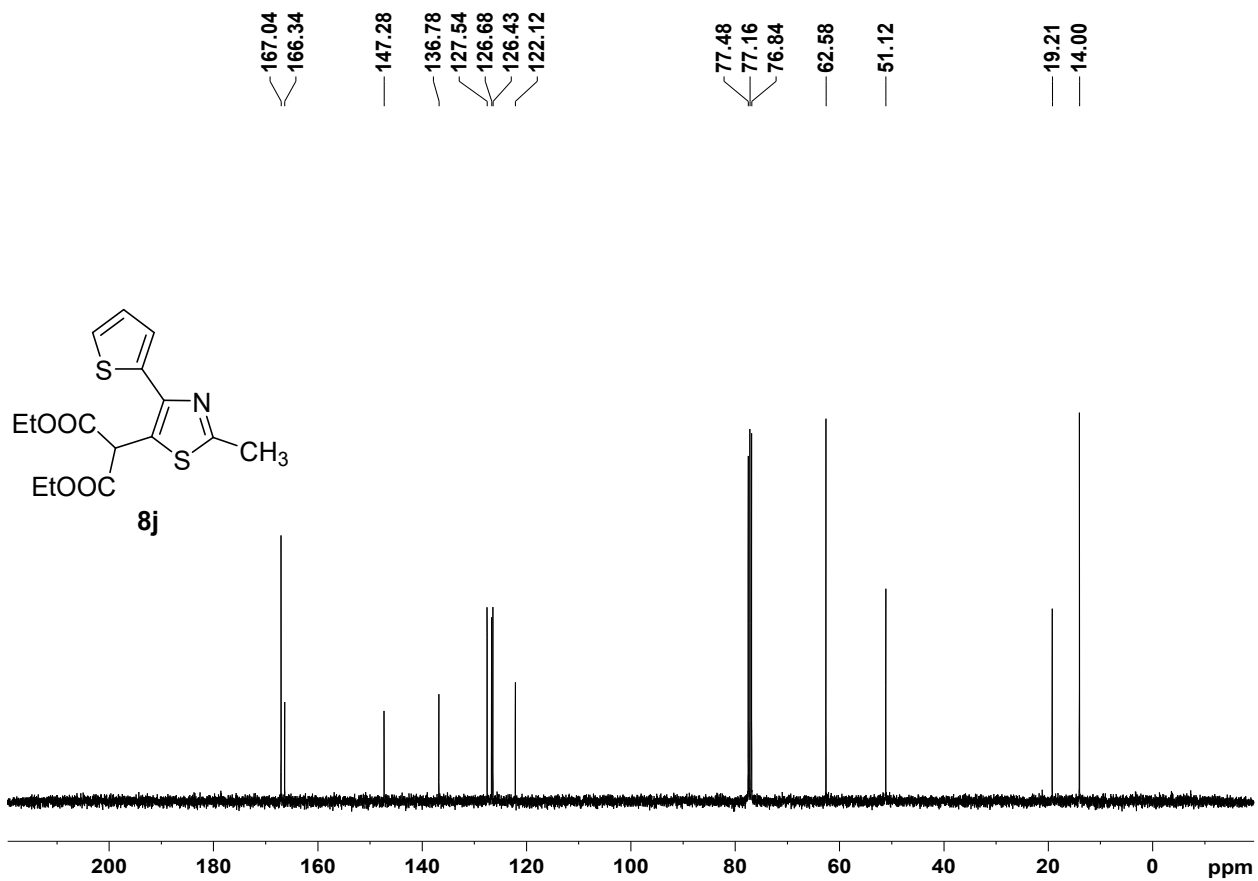


Figure 20. ¹³C NMR (100 MHz, CDCl₃) spectrum of **8j**

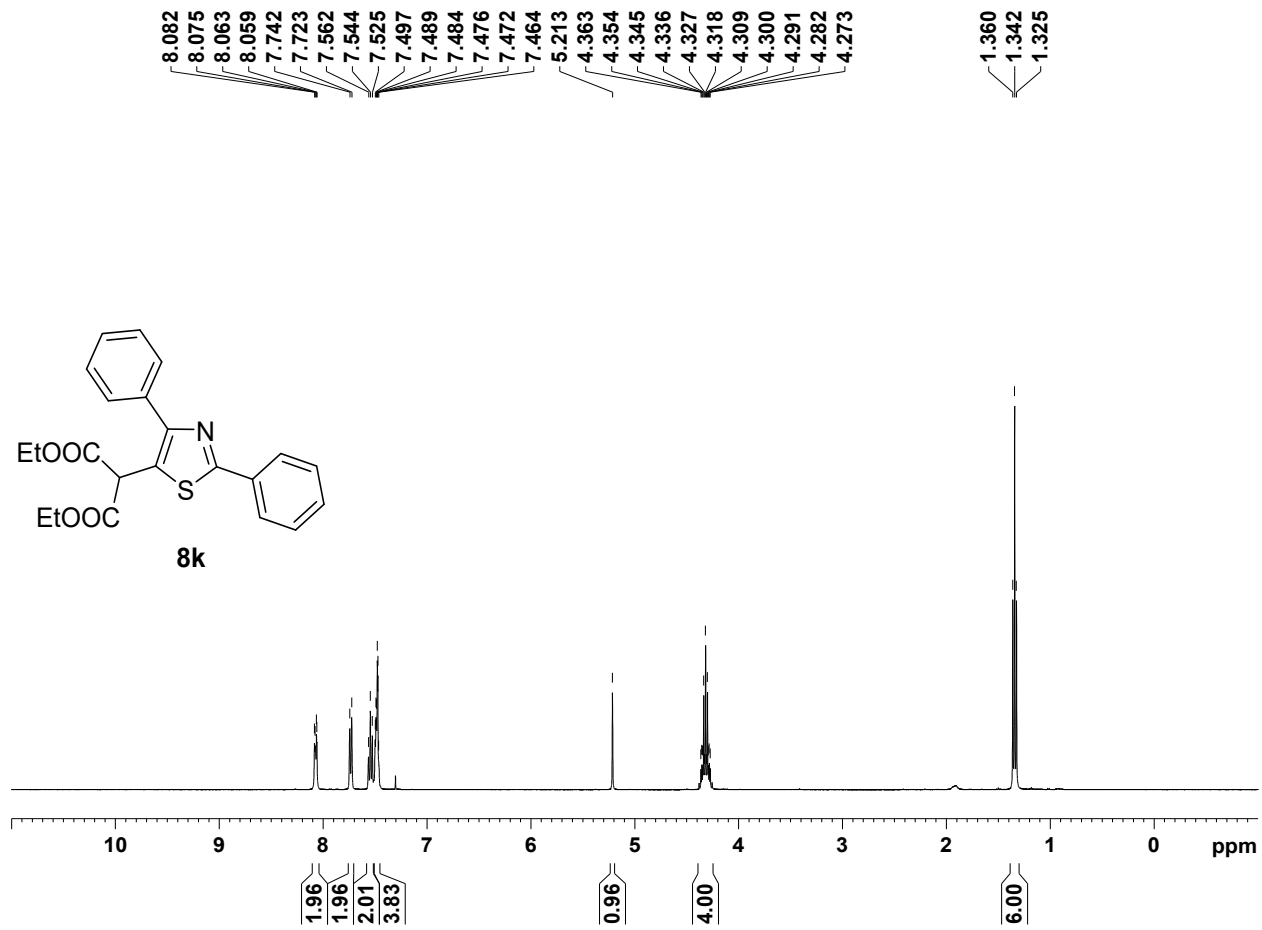


Figure 21. ¹H NMR (400 MHz, CDCl₃) spectrum of **8k**

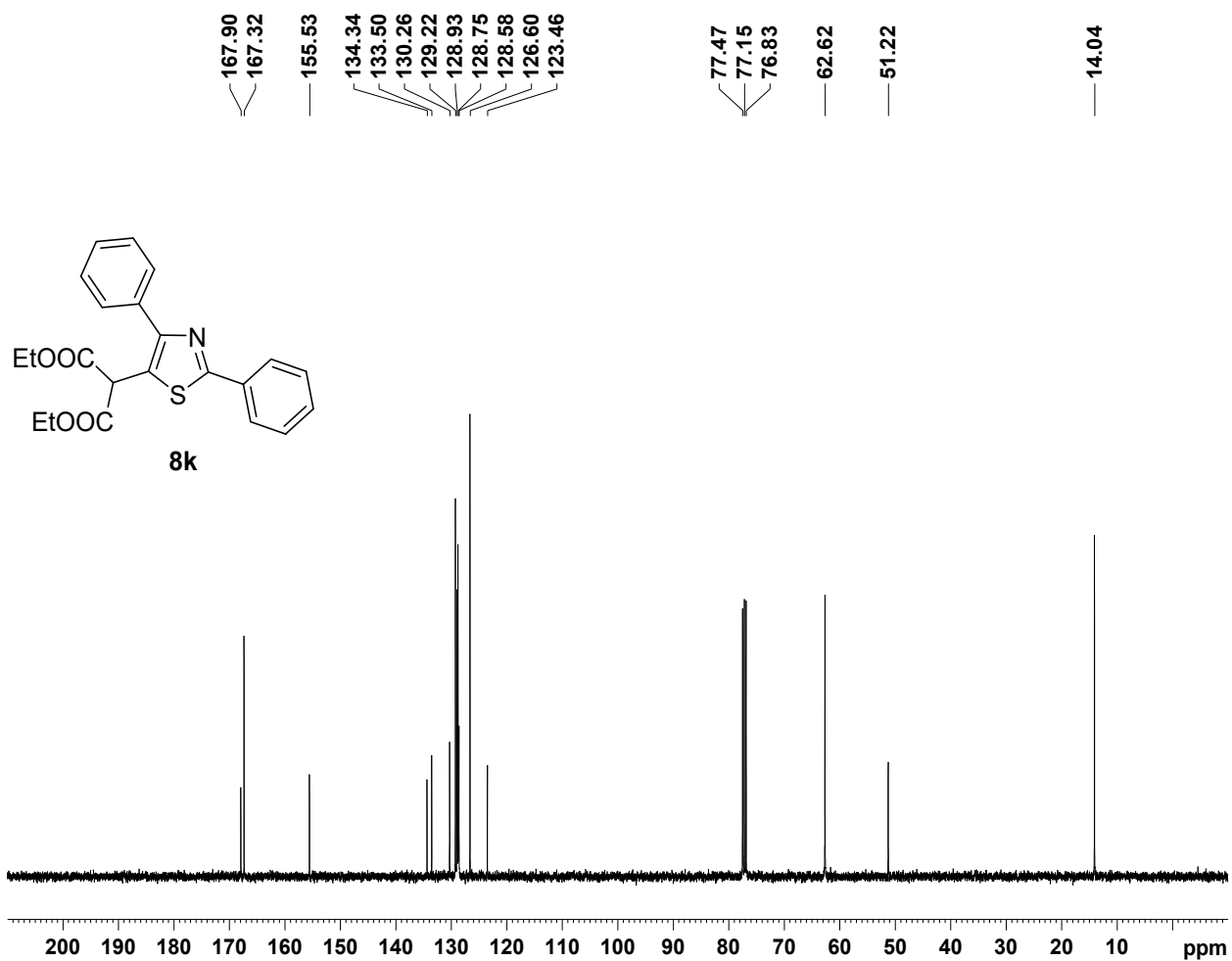


Figure 22. ¹³C NMR (100 MHz, CDCl₃) spectrum of **8k**

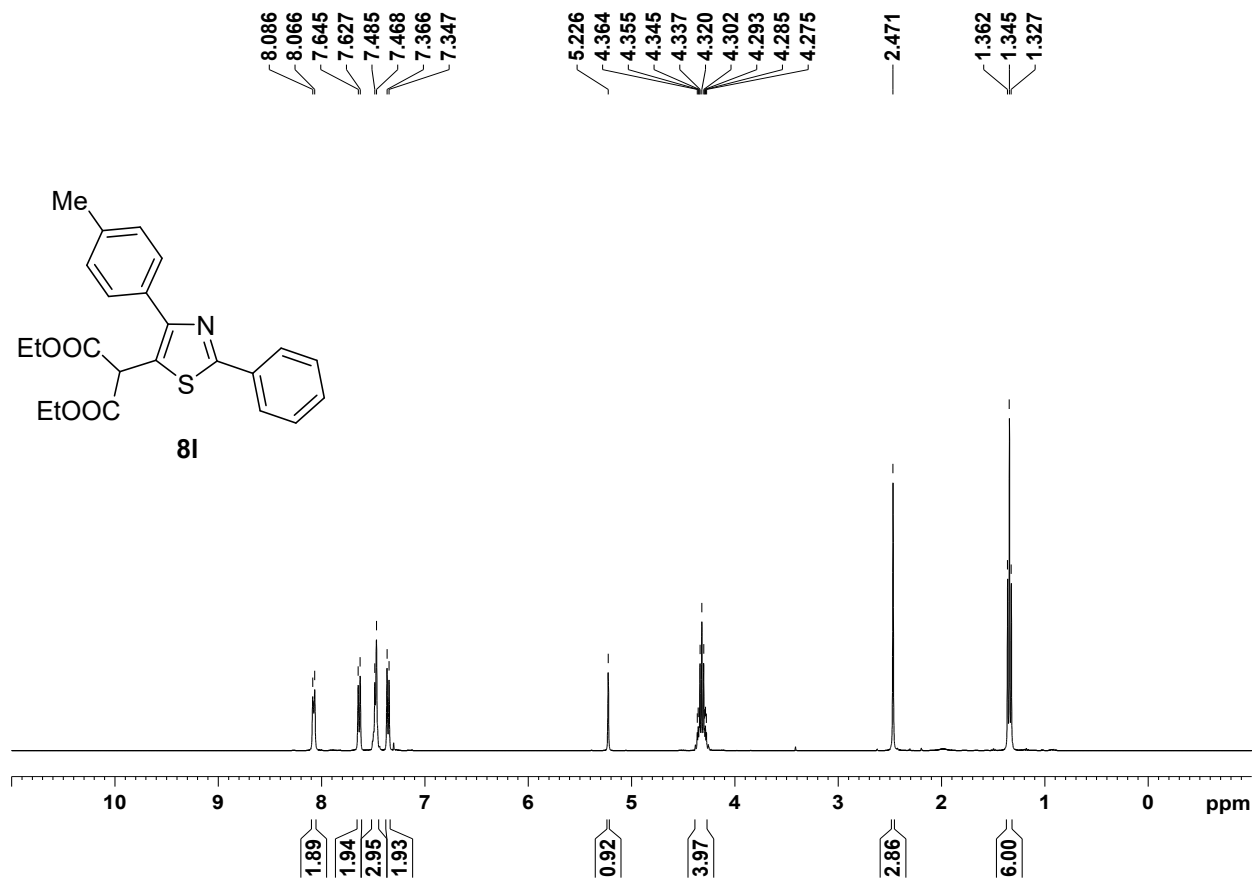


Figure 23. ¹H NMR (400 MHz, CDCl₃) spectrum of **8I**

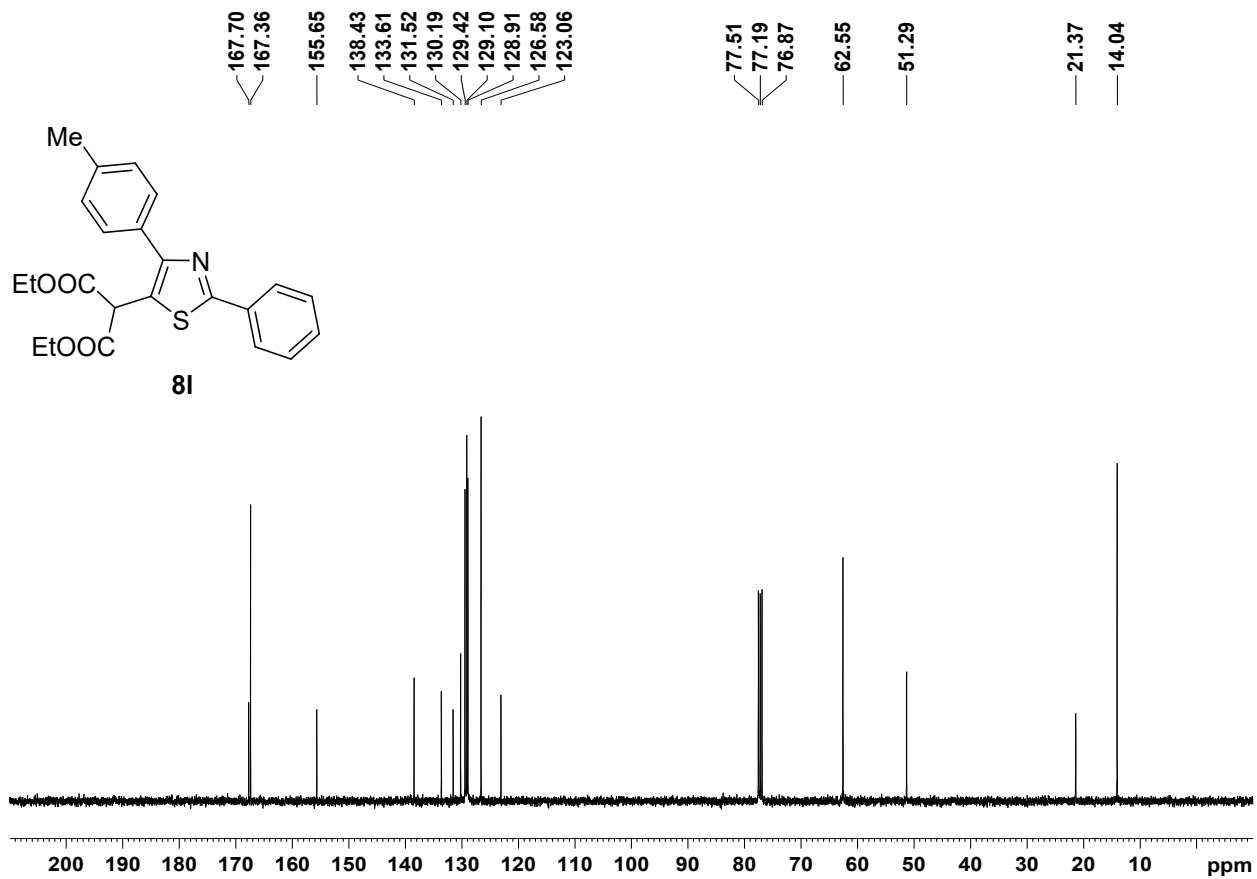


Figure 24. ¹³C NMR (100 MHz, CDCl₃) spectrum of **8I**

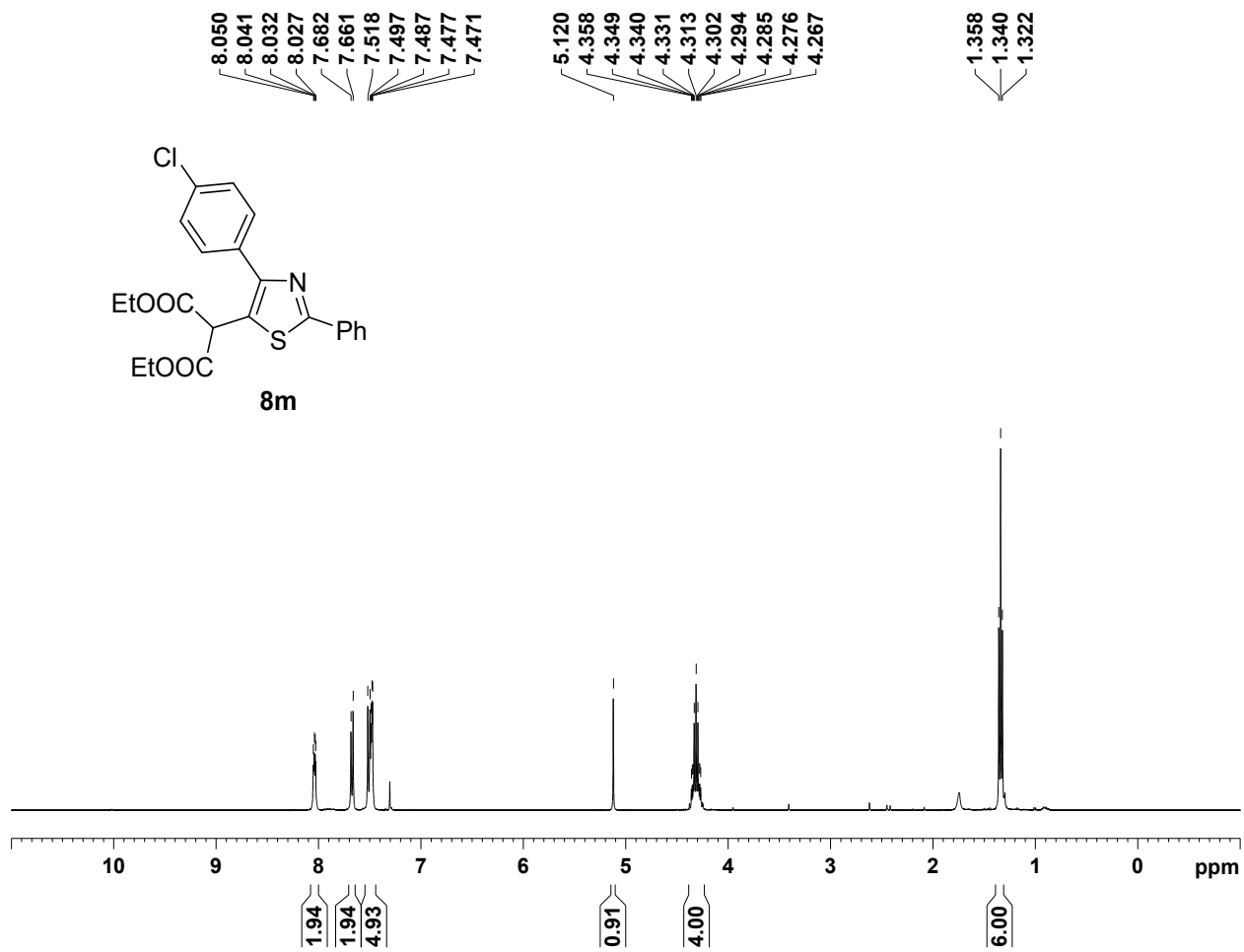


Figure 25. ¹H NMR (400 MHz, CDCl₃) spectrum of **8m**

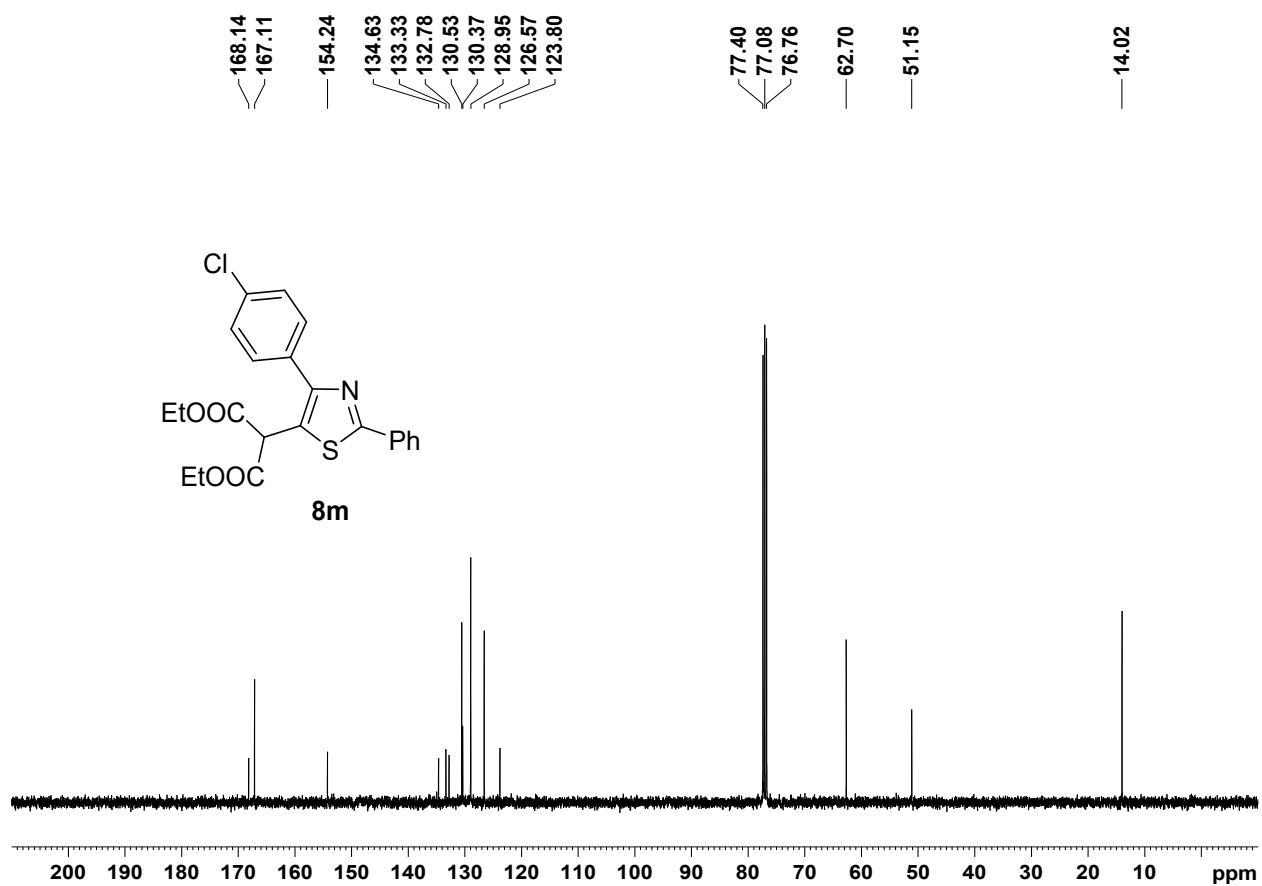


Figure 26. ^{13}C NMR (100 MHz, CDCl_3) spectrum of **8m**

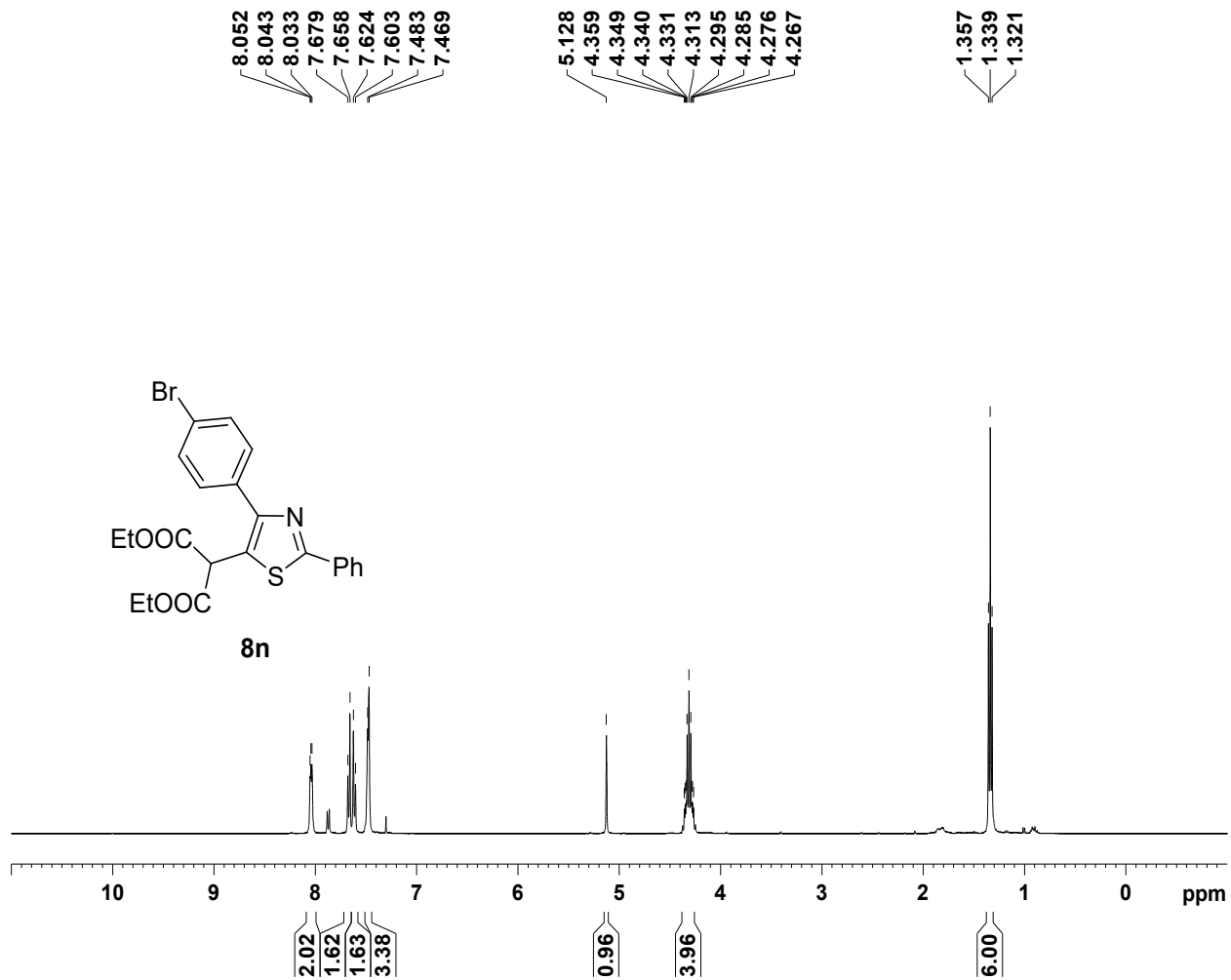


Figure 27. ¹H NMR (400 MHz, CDCl₃) spectrum of **8n**

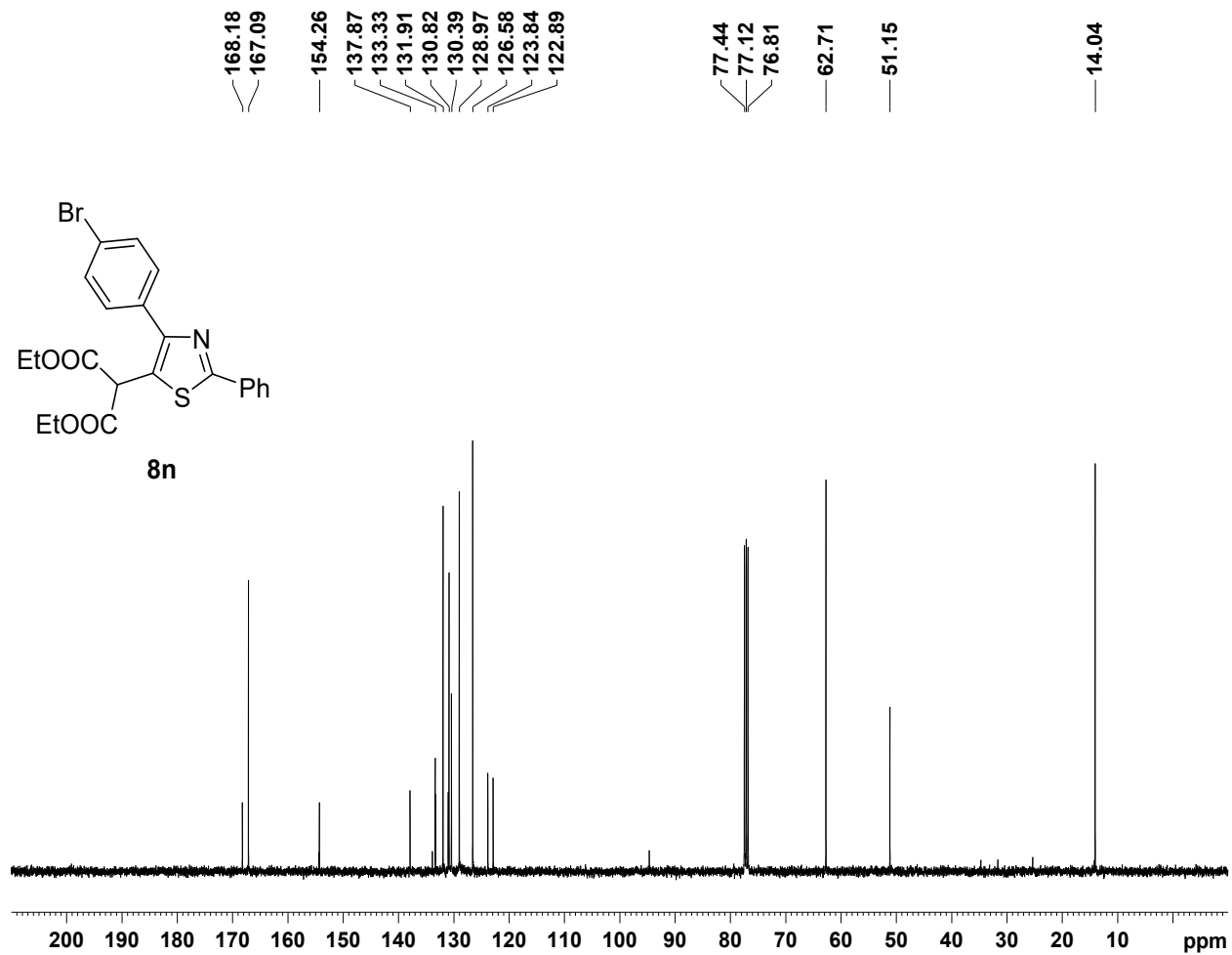


Figure 28. ¹³C NMR (100 MHz, CDCl₃) spectrum of **8n**

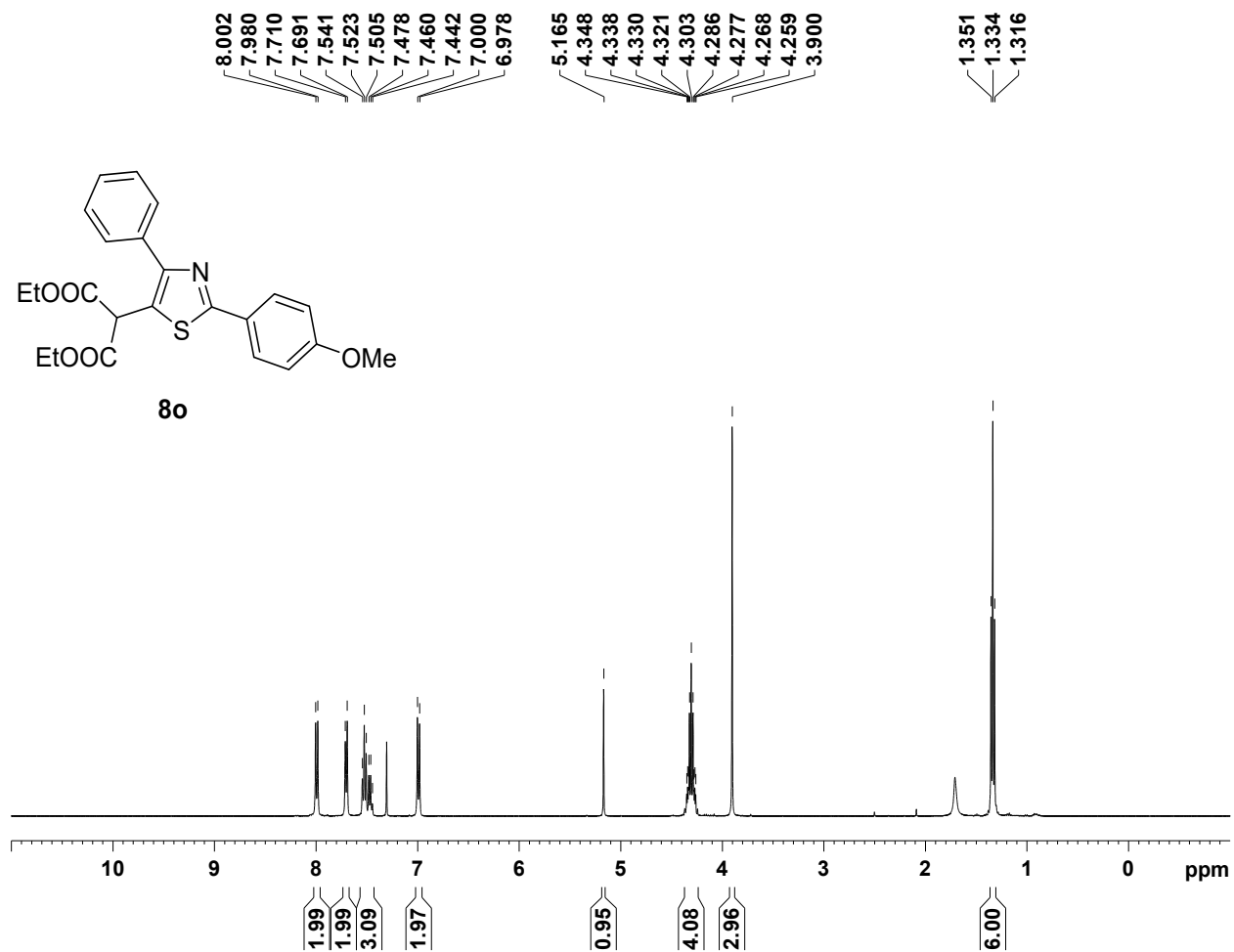


Figure 29. ¹H NMR (400 MHz, CDCl₃) spectrum of **8o**

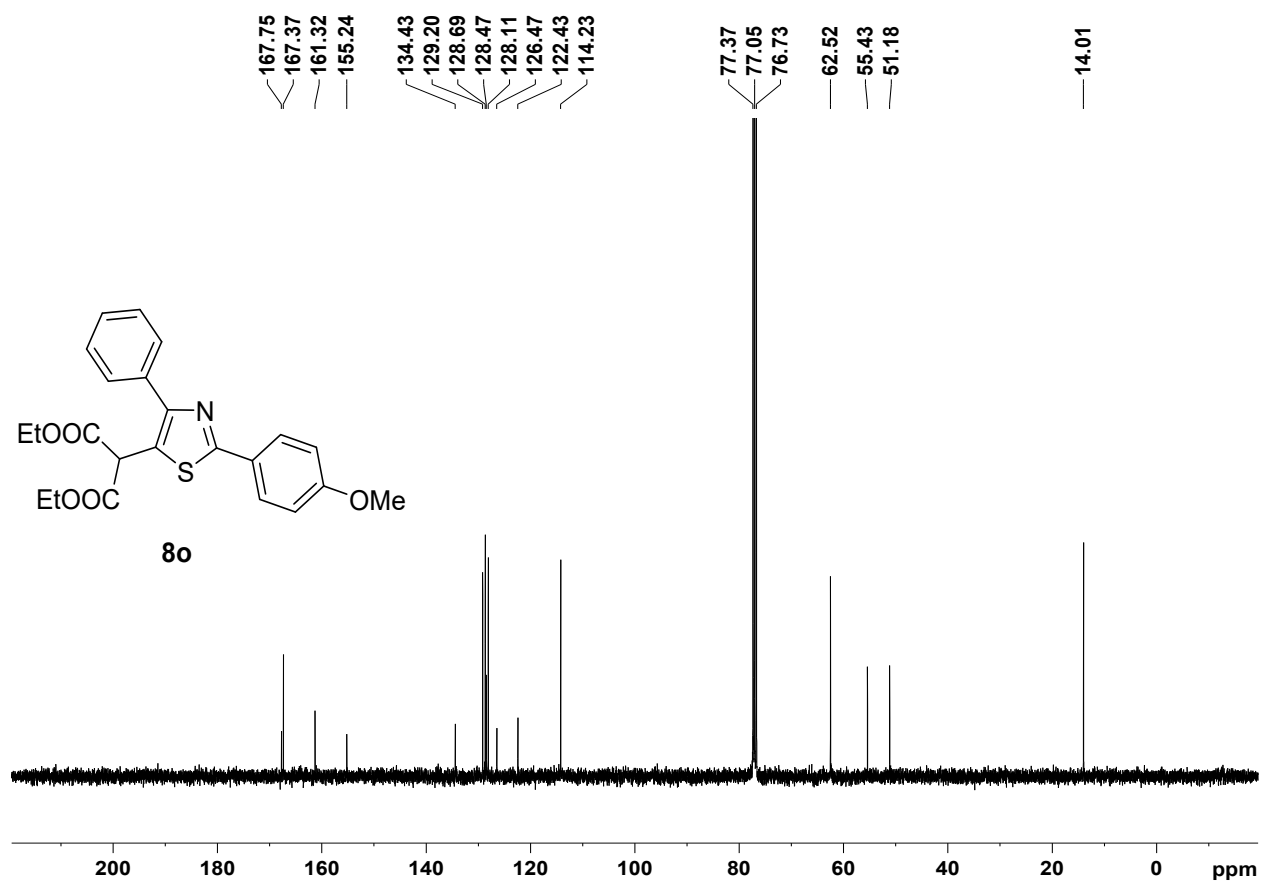


Figure 30. ^{13}C NMR (100 MHz, CDCl_3) spectrum of **8o**

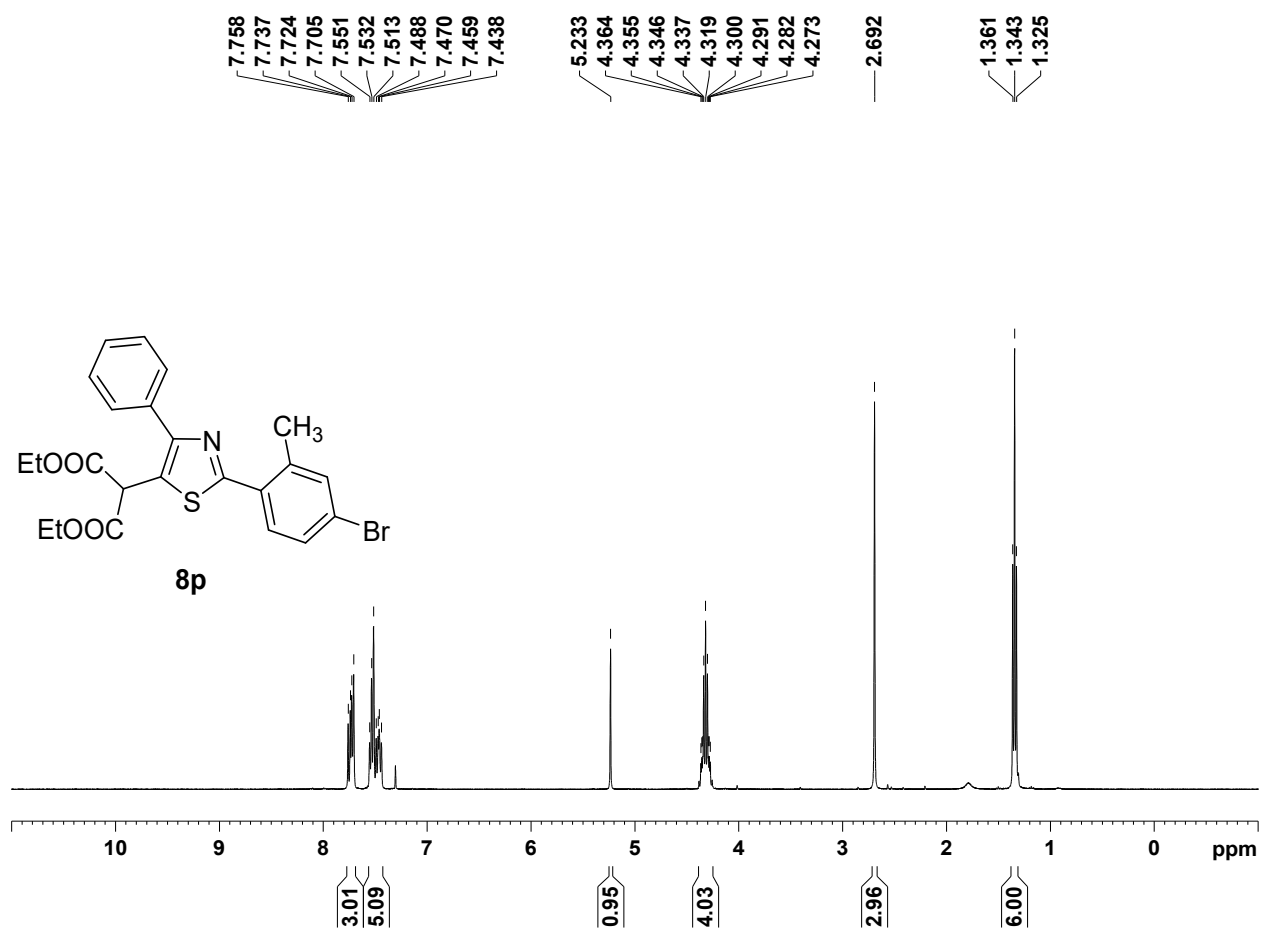


Figure 31. ¹H NMR (400 MHz, CDCl₃) spectrum of **8p**

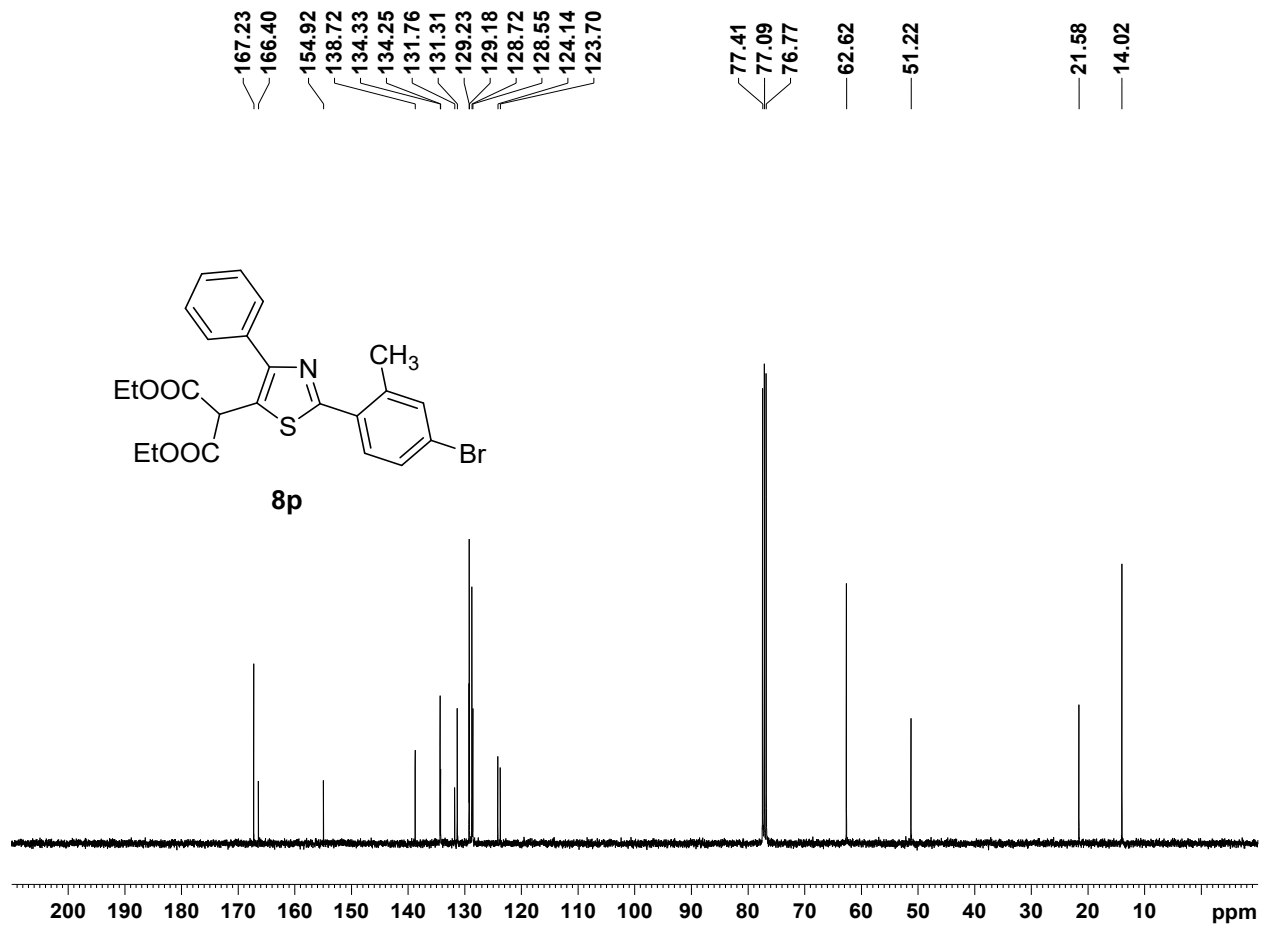


Figure 32. ^{13}C NMR (100 MHz, CDCl_3) spectrum of **8p**

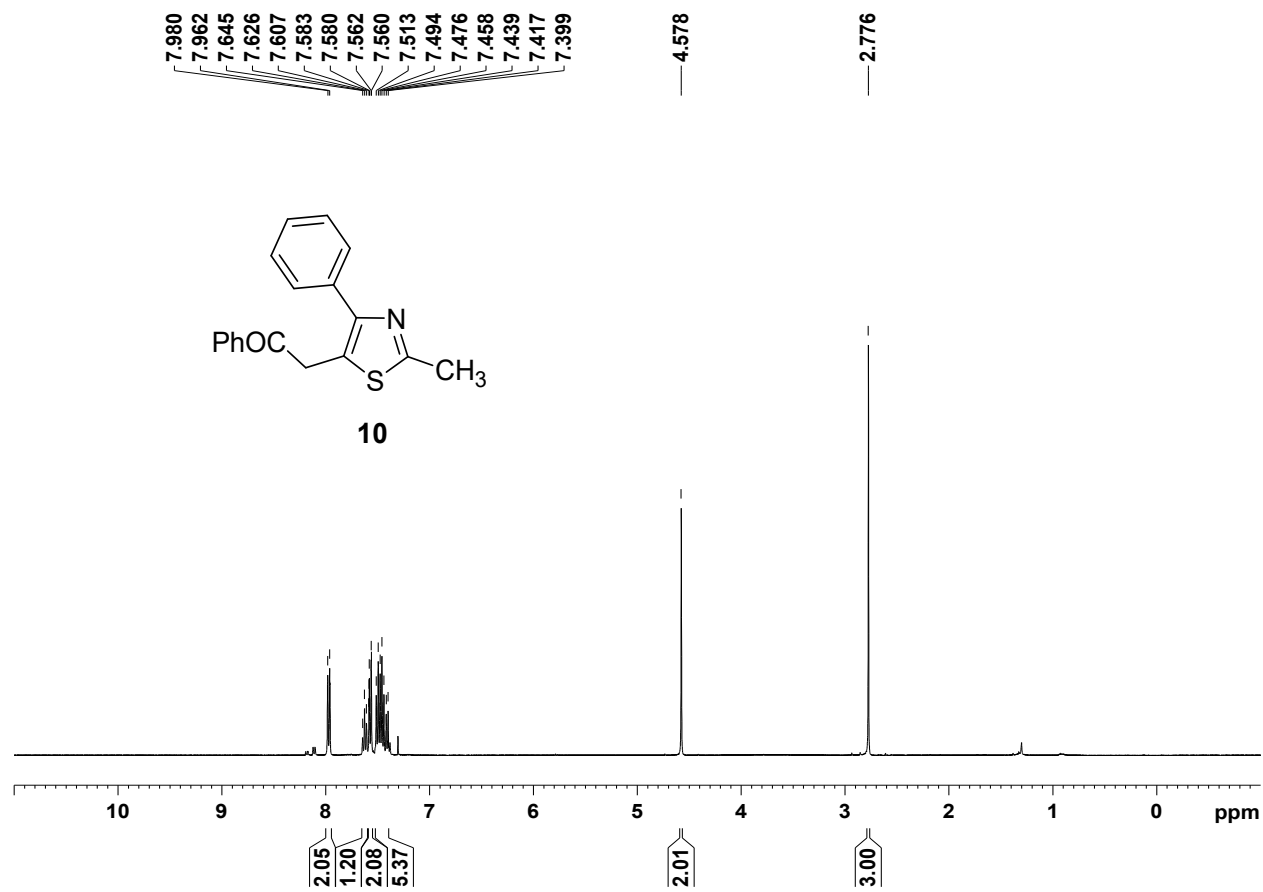


Figure 33. ¹H NMR (400 MHz, CDCl₃) spectrum of **10**

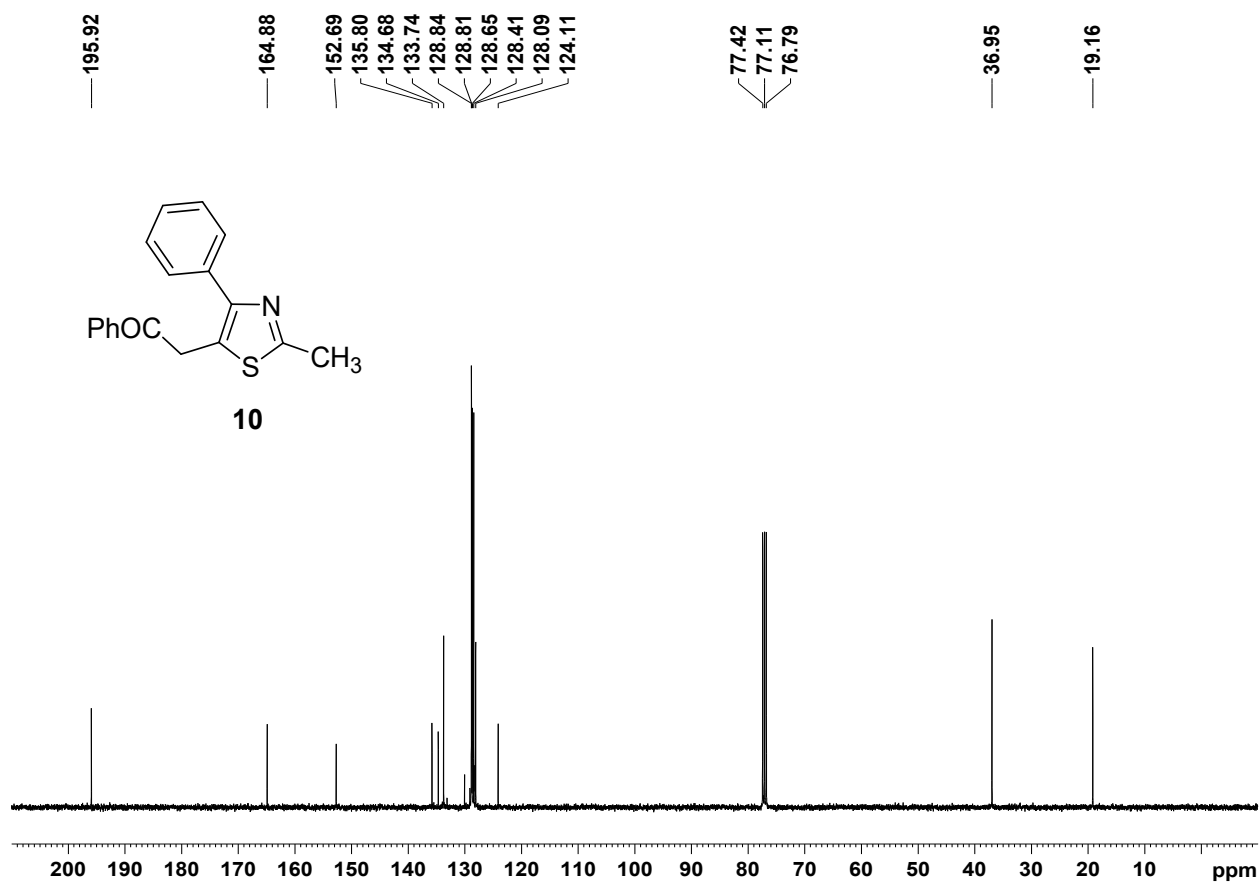


Figure 34. ^{13}C NMR (100 MHz, CDCl_3) spectrum of **10**

B. X-ray structure of **8o**

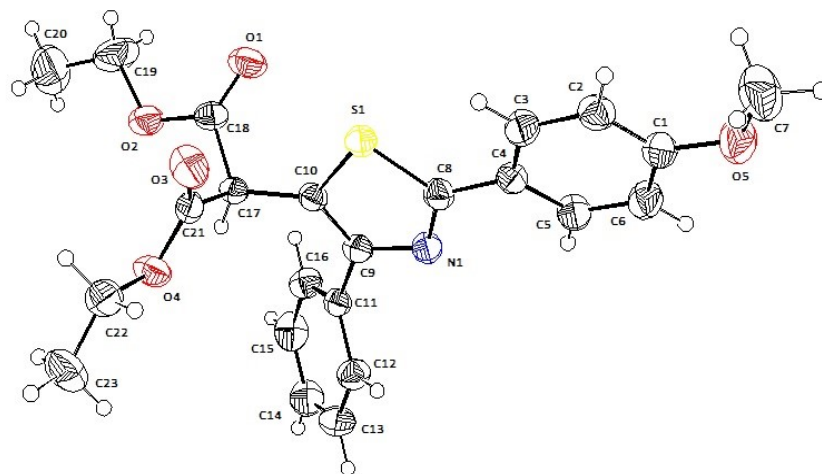


Figure 1. ORTEP plot of the crystal structure of **8o** (at 40% probability level)

Crystal structure determination: Single crystals suitable for X-ray studies were grown by recrystallization of **8o** from DCM/chloroform (1:9). X-ray data were collected on a CCD diffractometer using graphite-monochromated Mo-K α radiation.

Table 1. Selected crystal parameters and refinement metrics for **8o**

CCDC Number for 8o	2201951
Chemical formula	C ₂₃ H ₂₃ NO ₅ S
Formula weight	425.4990
Crystal system	Monoclinic
Space group	P 2 ₁ /c
a (Å)	9.7261 (9)
b (Å)	26.408 (3)
c (Å)	8.5437 (7)
α (°)	90
β (°)	91.509 (3)
γ (°)	90
Volume (Å ³)	2193.7 (2)
Z	4
Reflections collected	3859
R, wR2	0.0924, 0.2053
Goodness-of-fit on F ²	1.152