

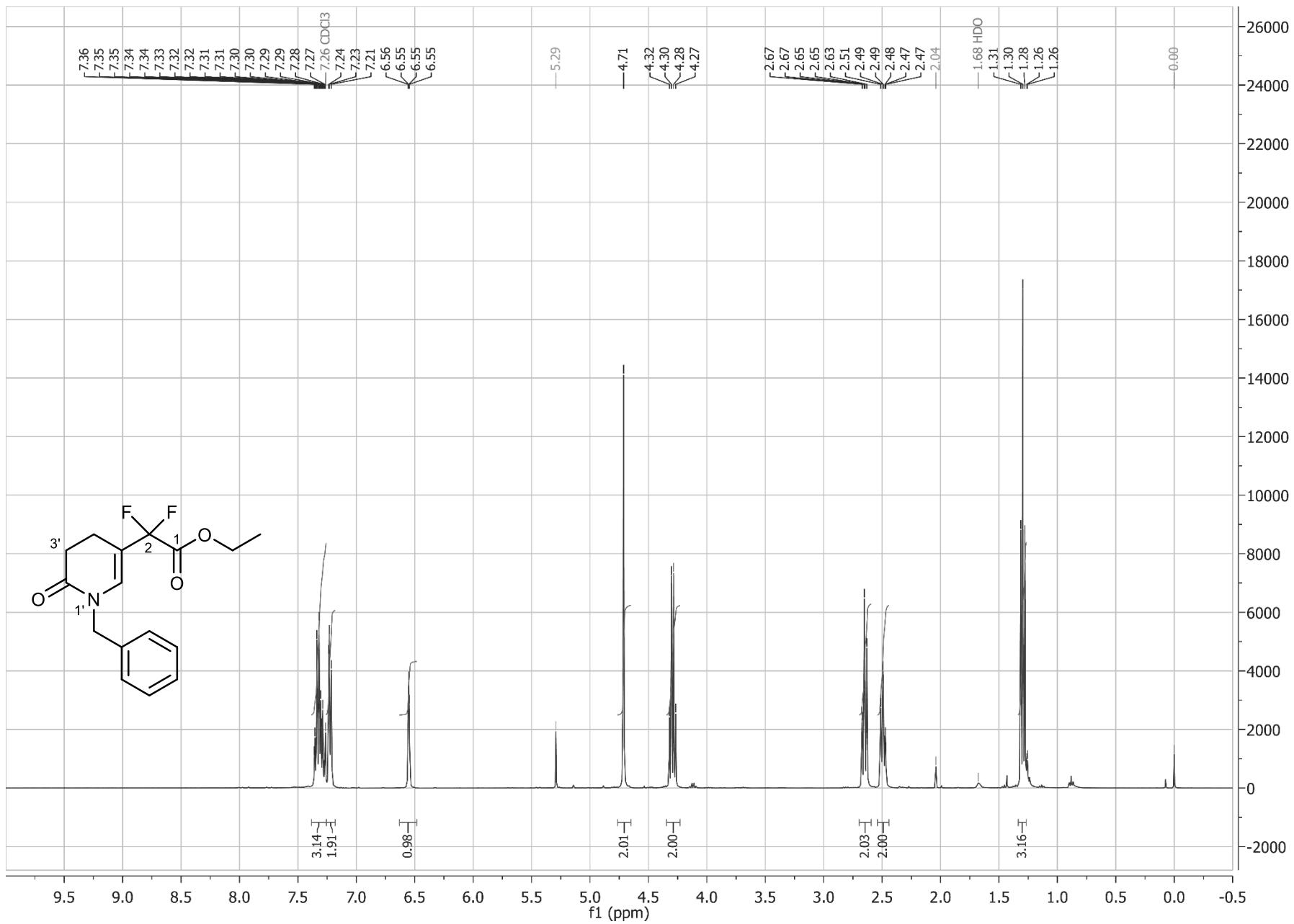
Supporting Information

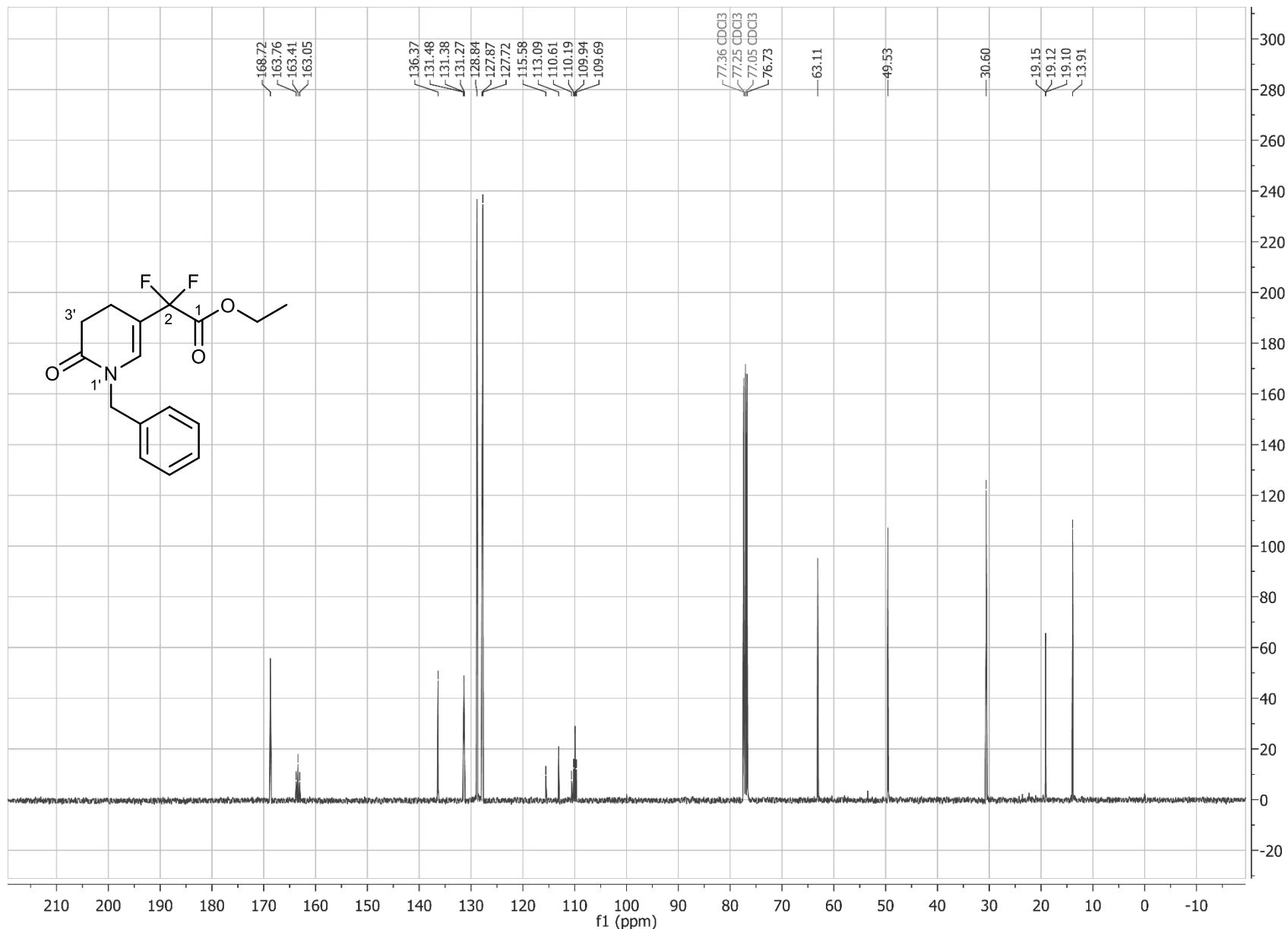
Iron Catalyzed β C(sp^2)-H Alkylation of Enamides

Sylvain Bertho,^a Radhouan Maazaoui,^a Damla Torun,^a Ismaël Dondasse,^a Raoudha Abderrahim,^b Cyril Nicolas^{a*} and Isabelle Gillaizeau^{a*}

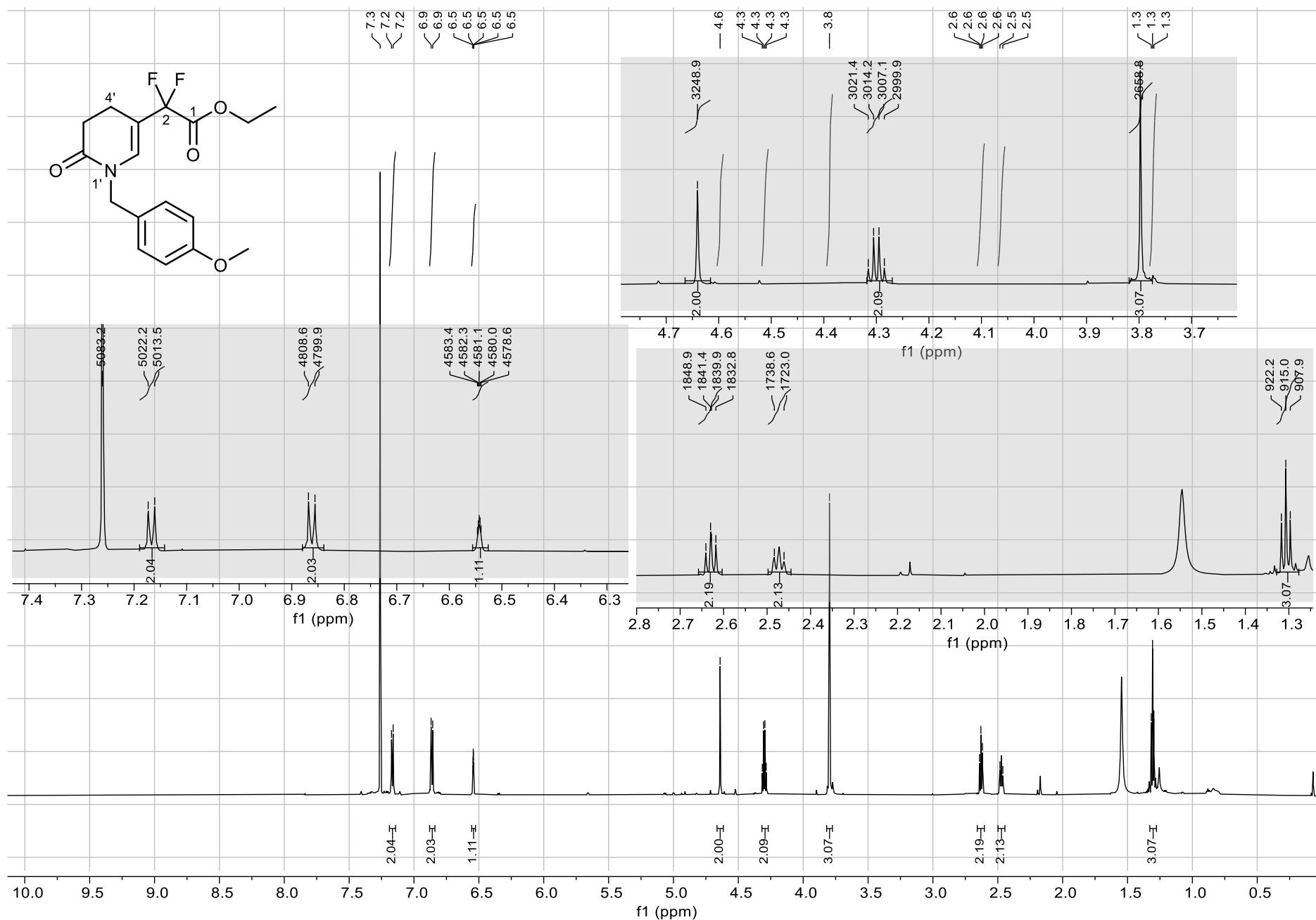
^aInstitut de Chimie Organique et Analytique, UMR 7311 CNRS, rue de Chartes, Université d'Orléans, F-45067 Orléans Cedex 2, France; sylvain-bertho@wanadoo.fr (S.B.); radhouan.maazaoui@hotmail.com (R.M.); damla.torun@univ-orleans.fr (D.T.); ismaelfelixdondasse@gmail.com (I.D.); cyril.nicolas@univ-orleans.fr (C.N.); isabelle.gillaizeau@univ-orleans.fr (I.G.)

^bUniversité de Carthage, Faculté des Sciences de Bizerte, Laboratoire de Synthèse Hétérocyclique, 7021 Jarzouna, Bizerte, Tunisia
Correspondence: isabelle.gillaizeau@univ-orleans.fr; Tel.: +33 (0)2 38 49 45 83

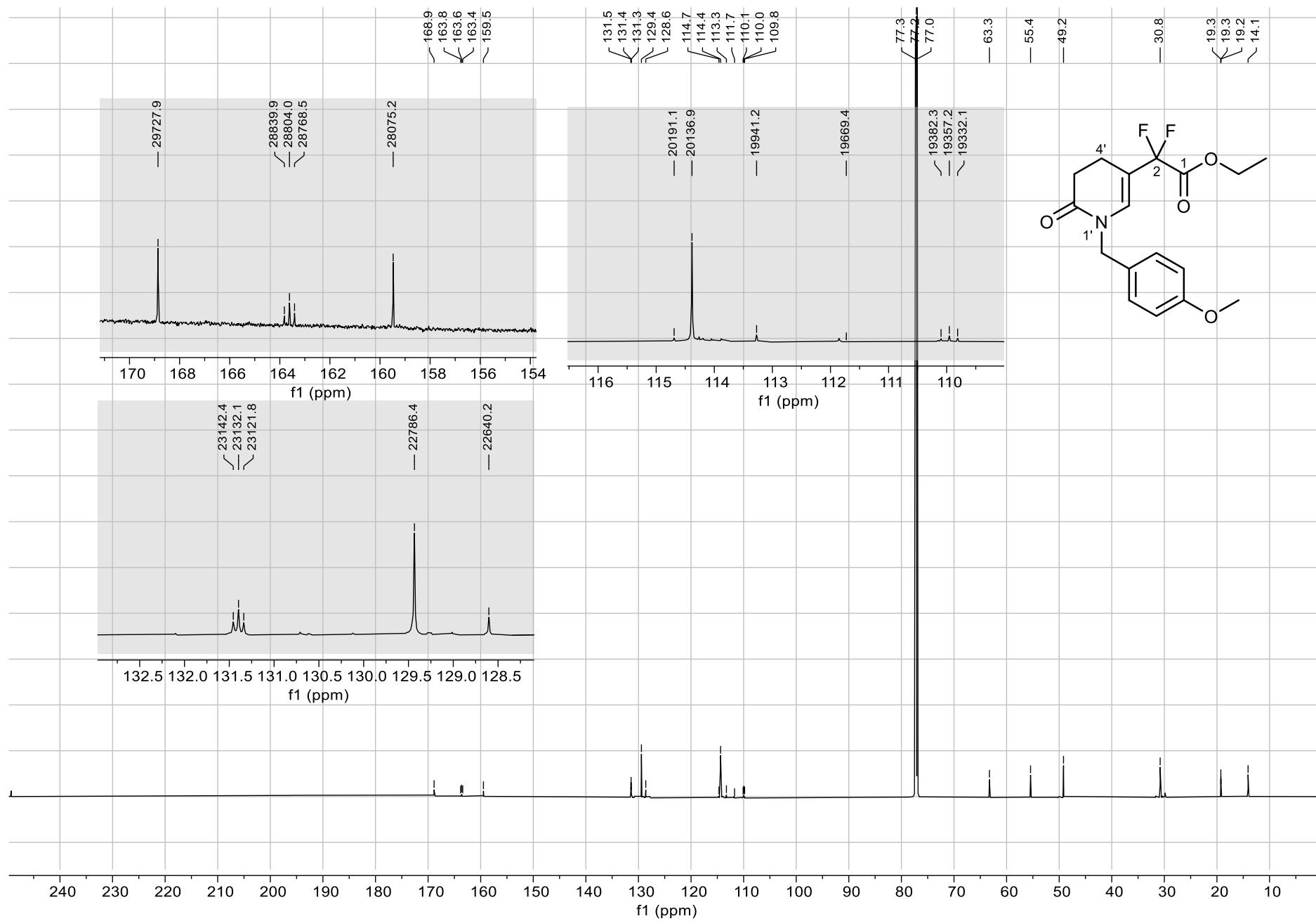
^1H NMR (400 MHz, CDCl_3/TMS) Spectrum of Compound 3a.

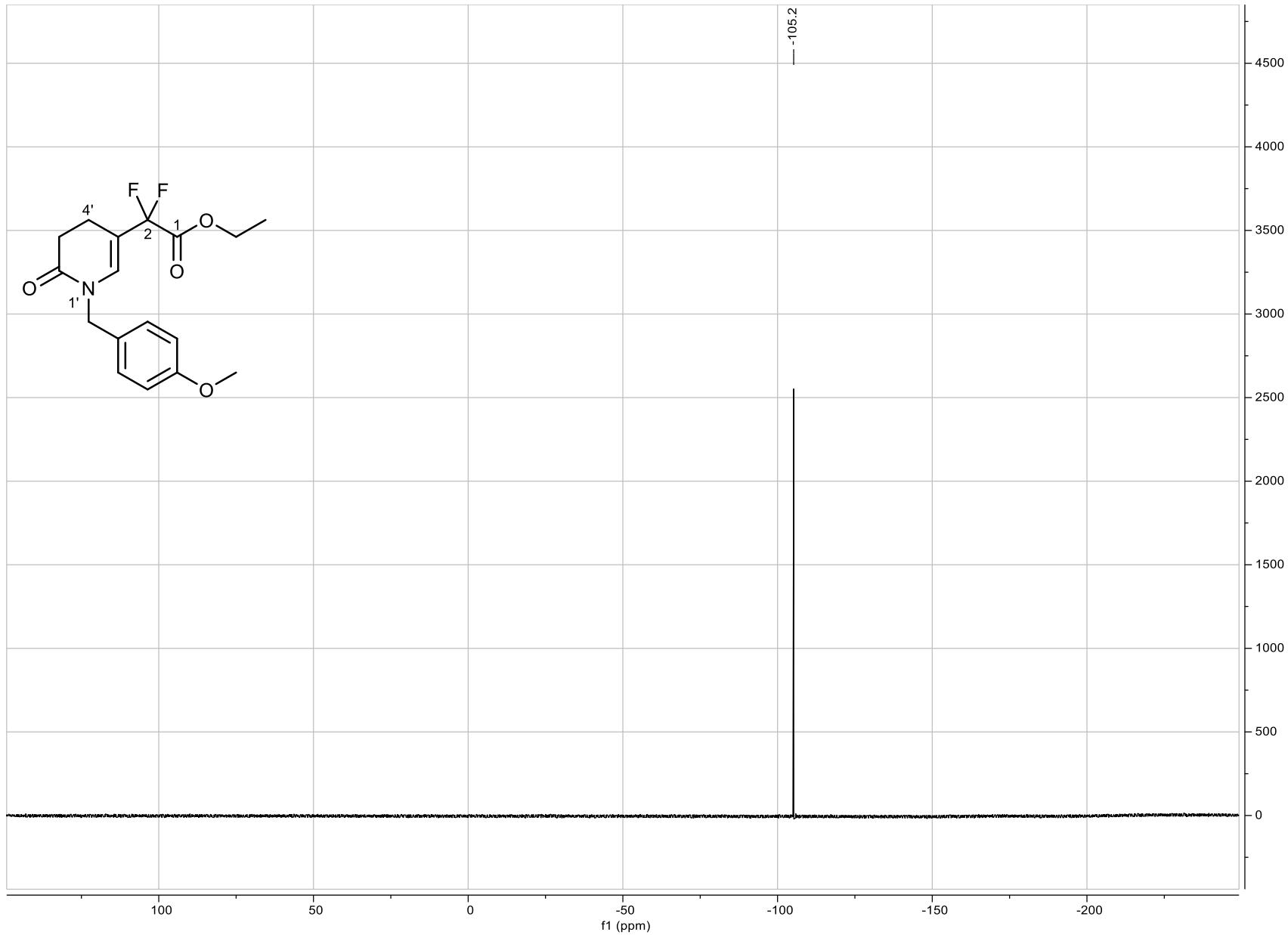
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3a.

¹H NMR (700 MHz, CDCl₃) Spectrum of Compound 3b.

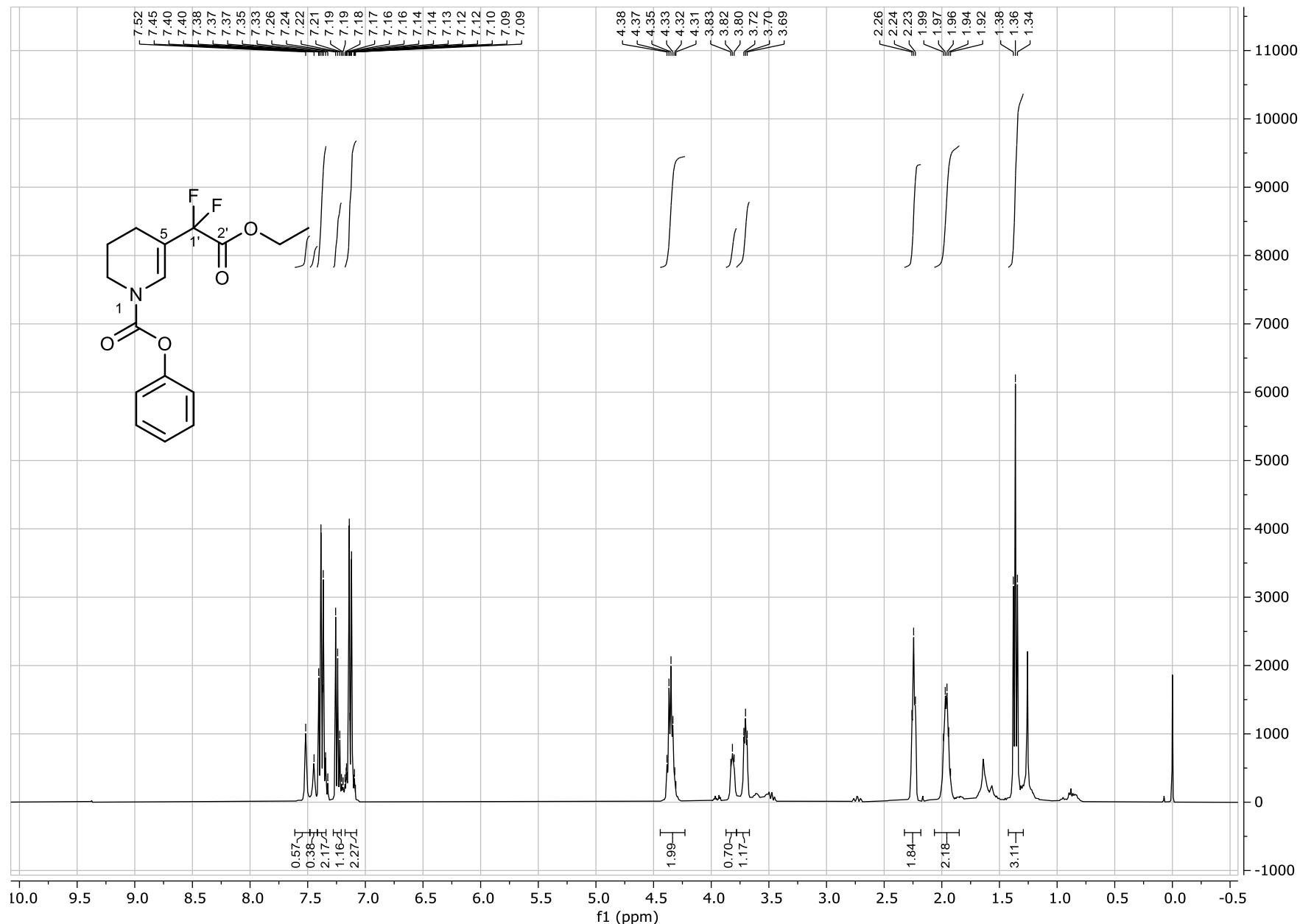


¹³C NMR (176 MHz, CDCl₃) Spectrum of Compound 3b.

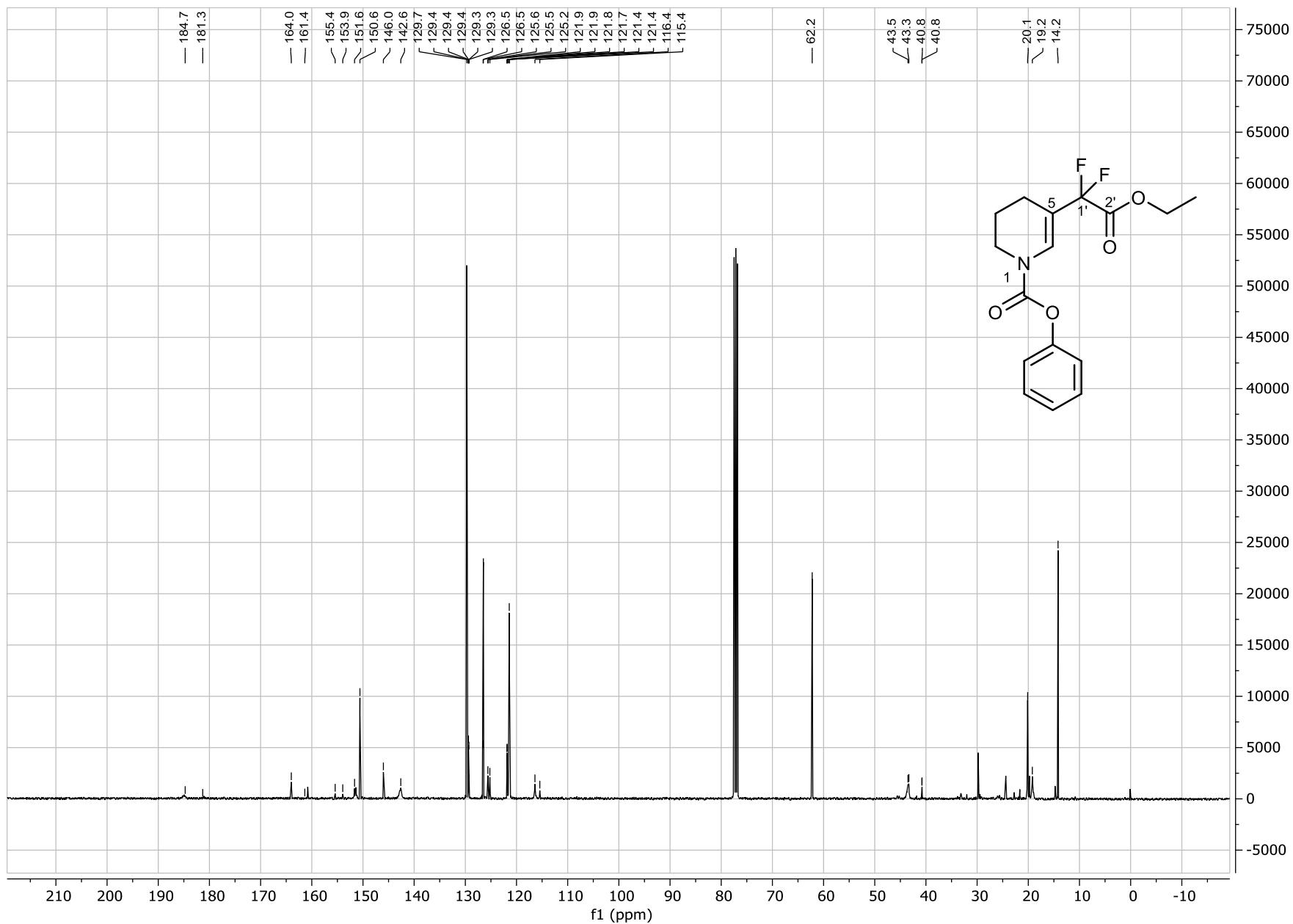


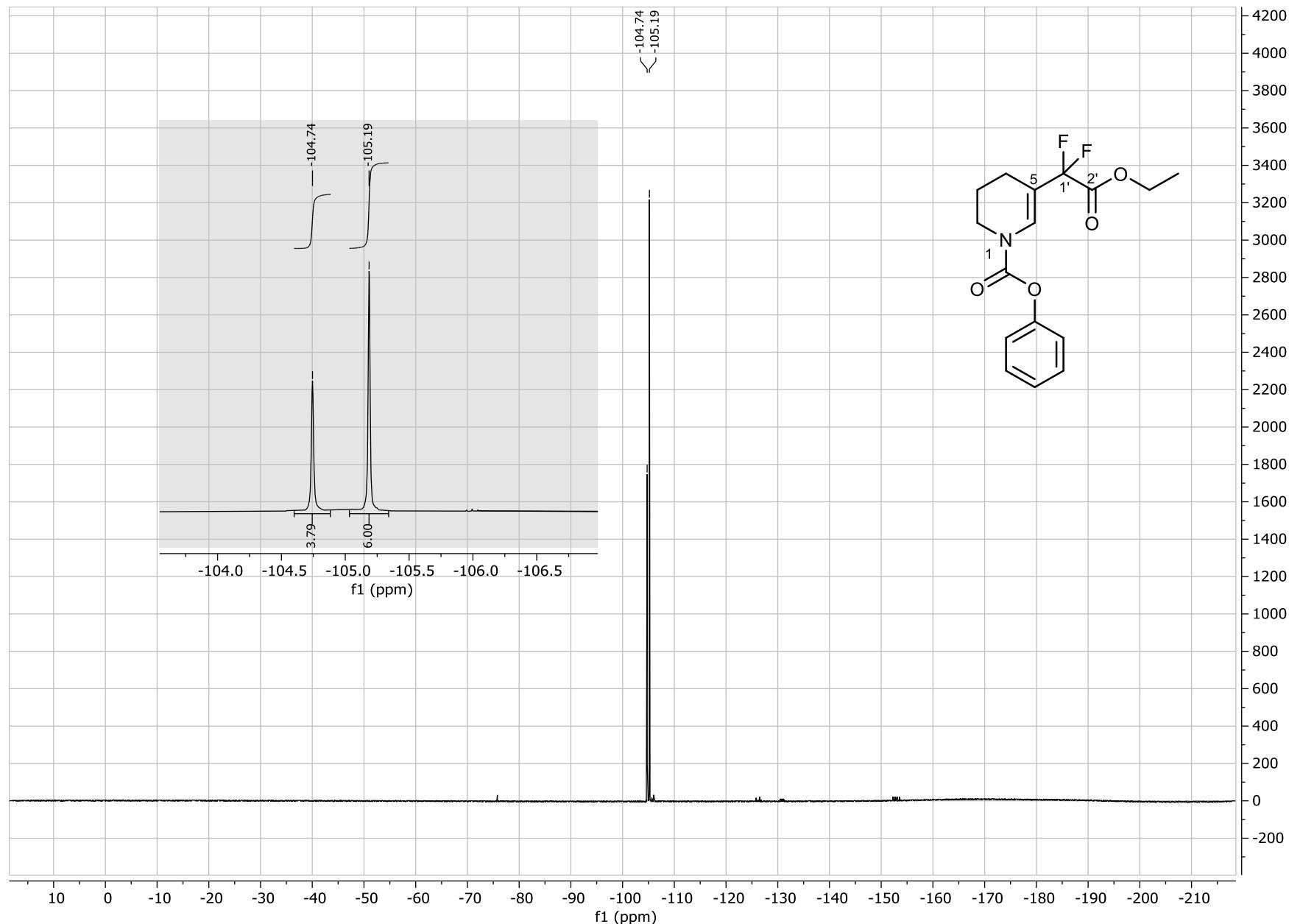
¹⁹F NMR (235 MHz, CDCl₃) Spectrum of Compound 3b.

^1H NMR (400 MHz, CDCl_3/TMS) Spectrum of Compound 3c.

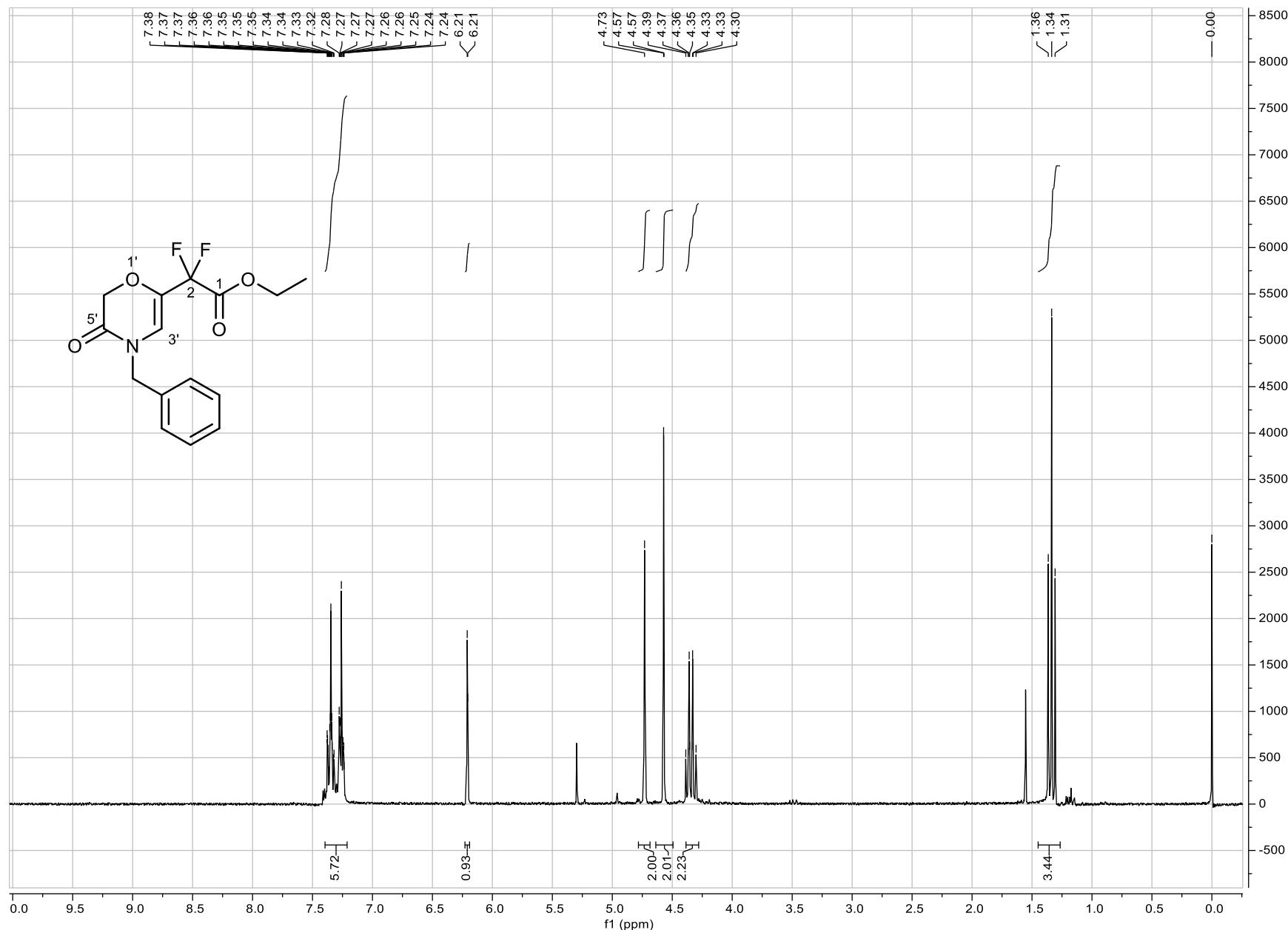


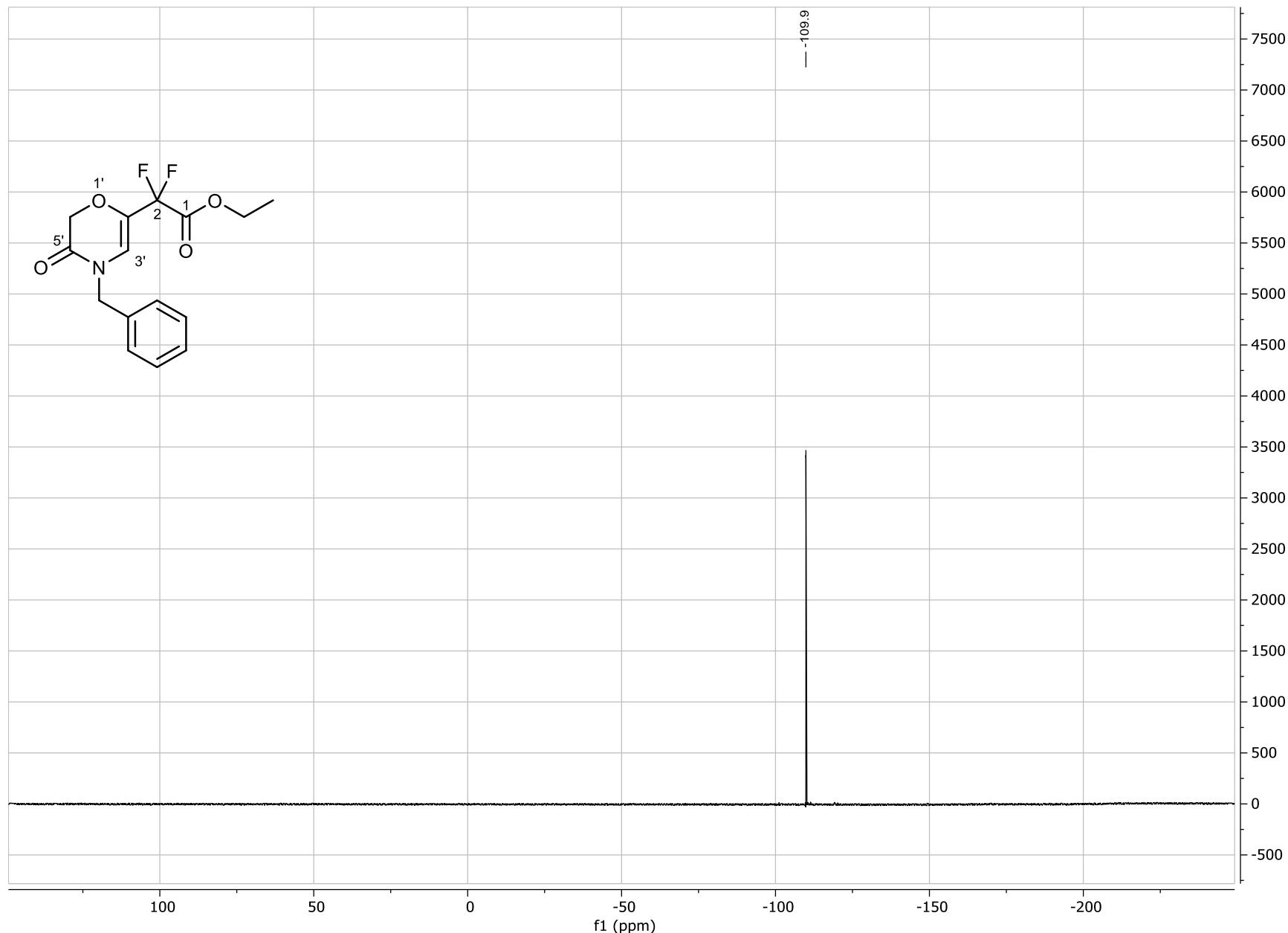
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3c.



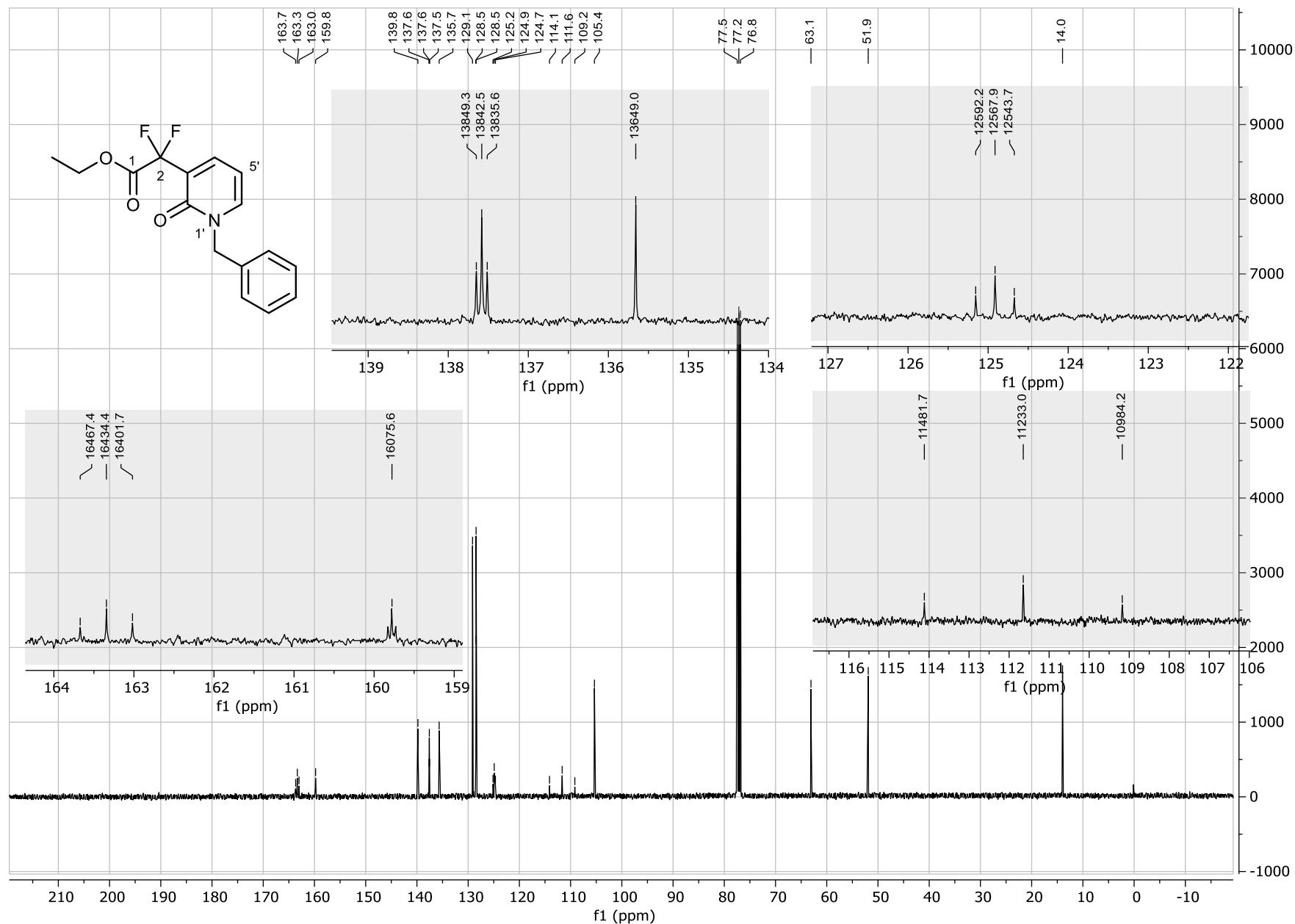
¹⁹F NMR (376 MHz, CDCl₃) Spectrum of Compound 3c.

^1H NMR (250 MHz, CDCl_3/TMS) Spectrum of Compound 3d.

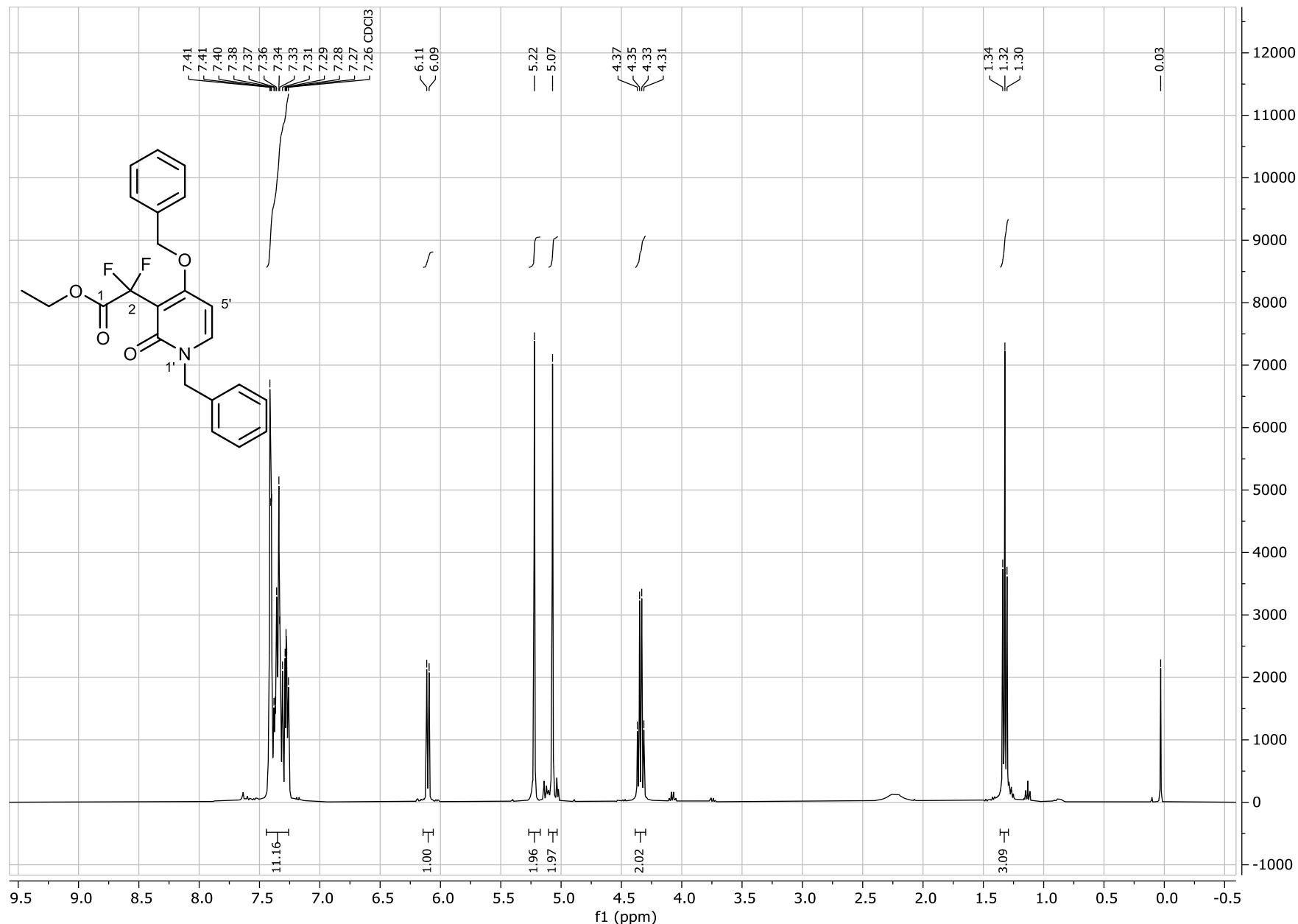


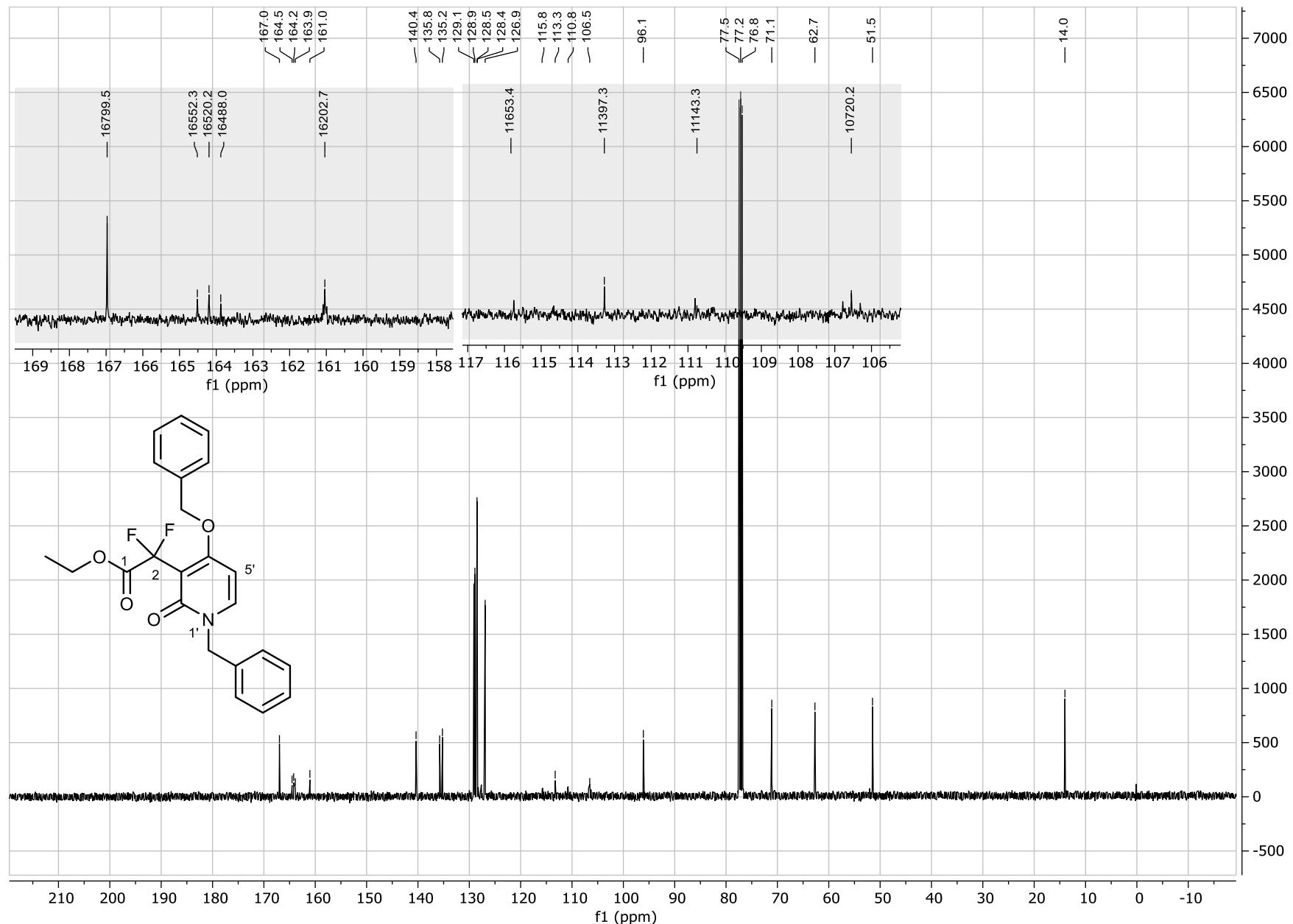
¹⁹F NMR (235 MHz, CDCl₃) Analysis of Compound 3d.

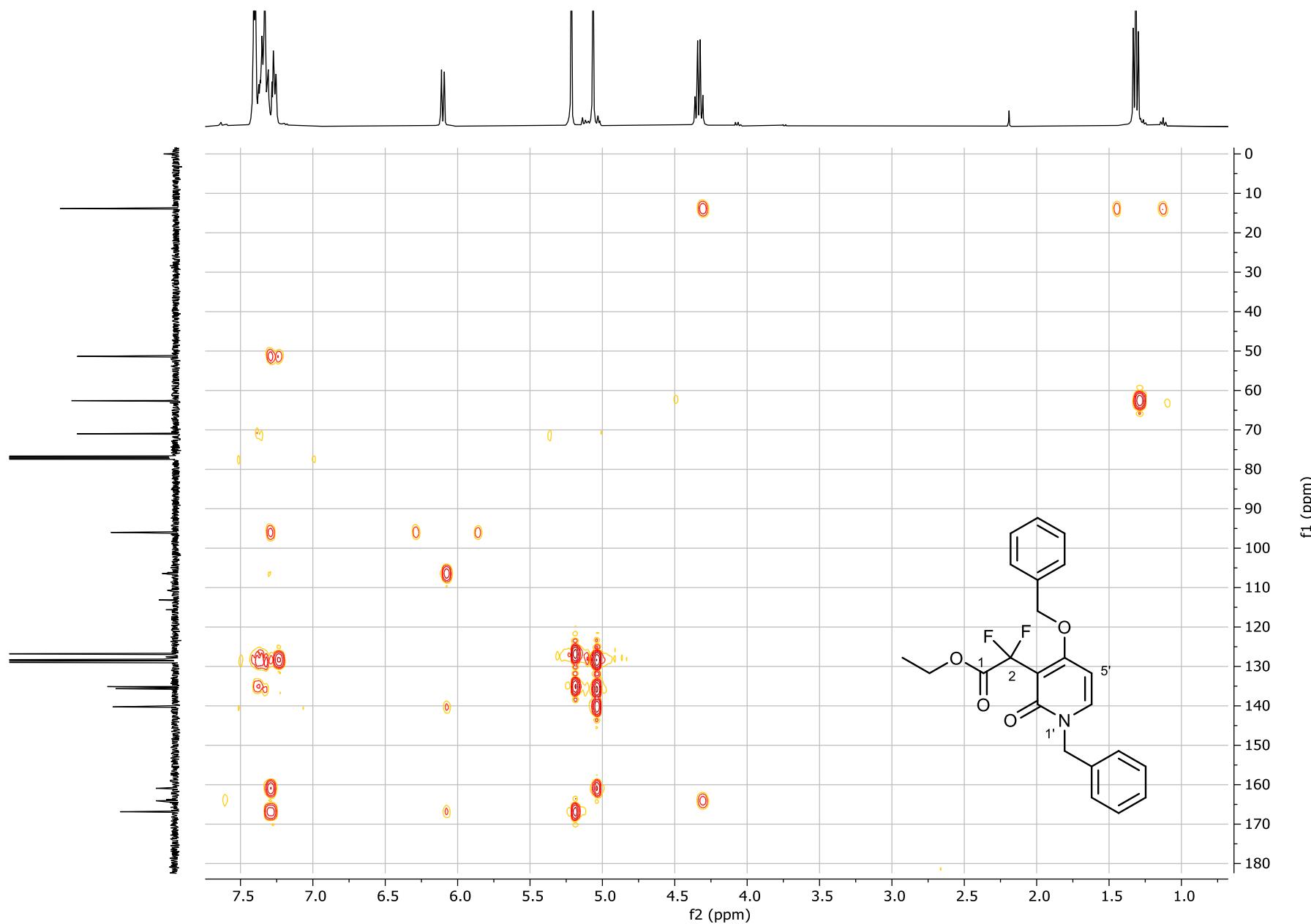
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3e.



¹⁹F NMR (376 MHz, CDCl₃) Spectrum of Compound 3e.

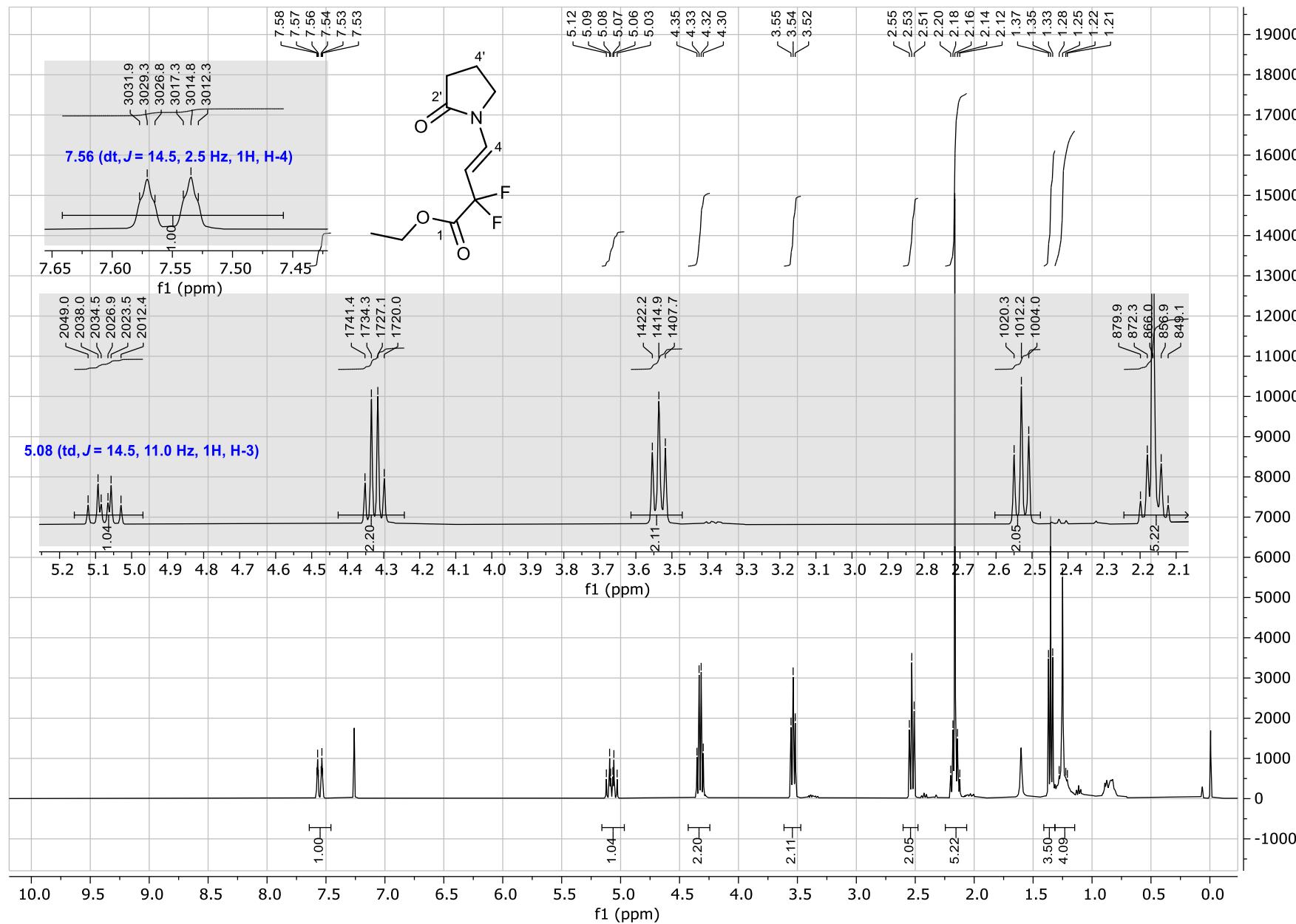
^1H NMR (400 MHz, CDCl_3/TMS) Spectrum of Compound 3f.

¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3f.

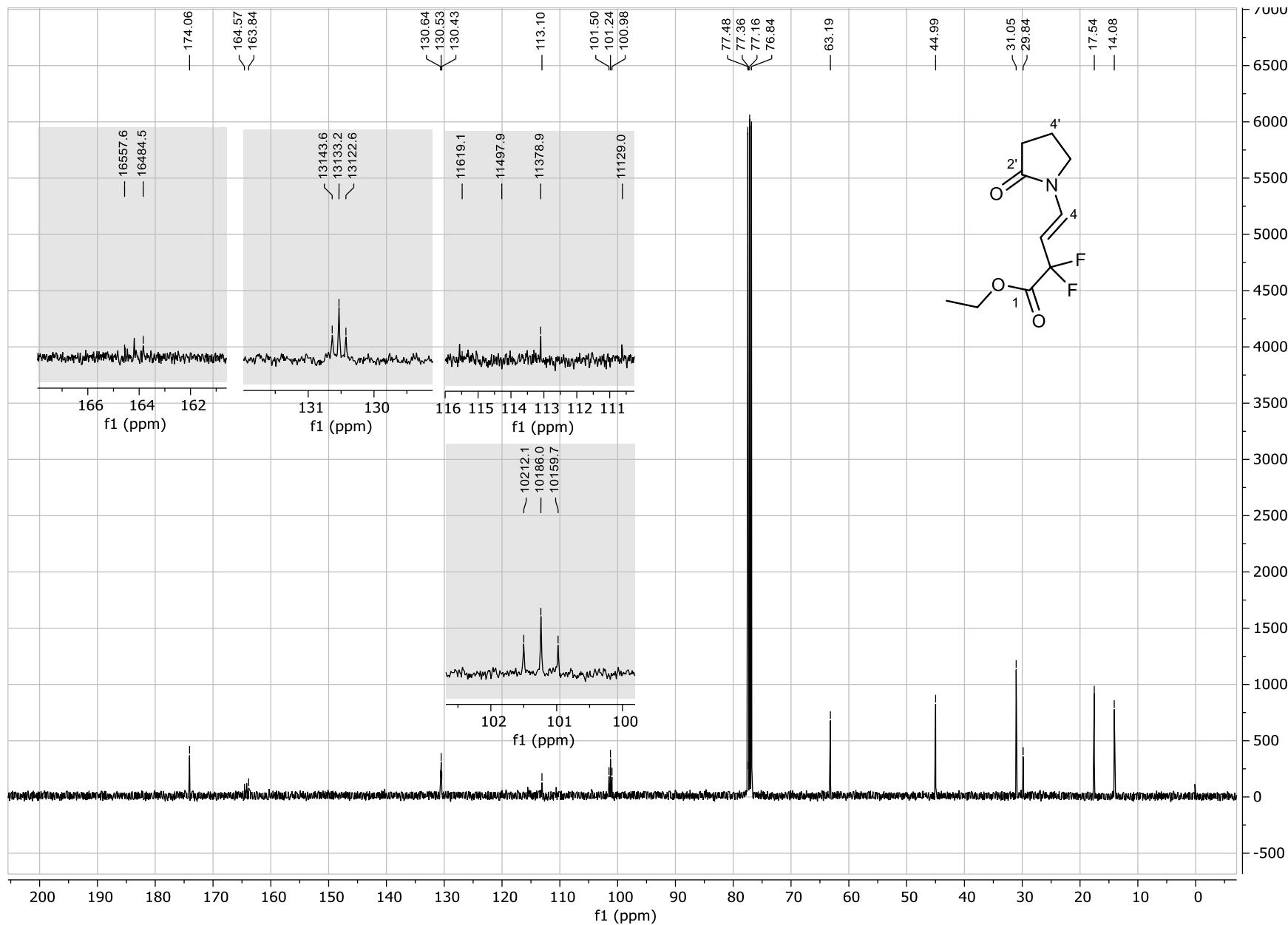
HMBC NMR (400,101 MHz, CDCl₃) Spectrum of Compound 3f.

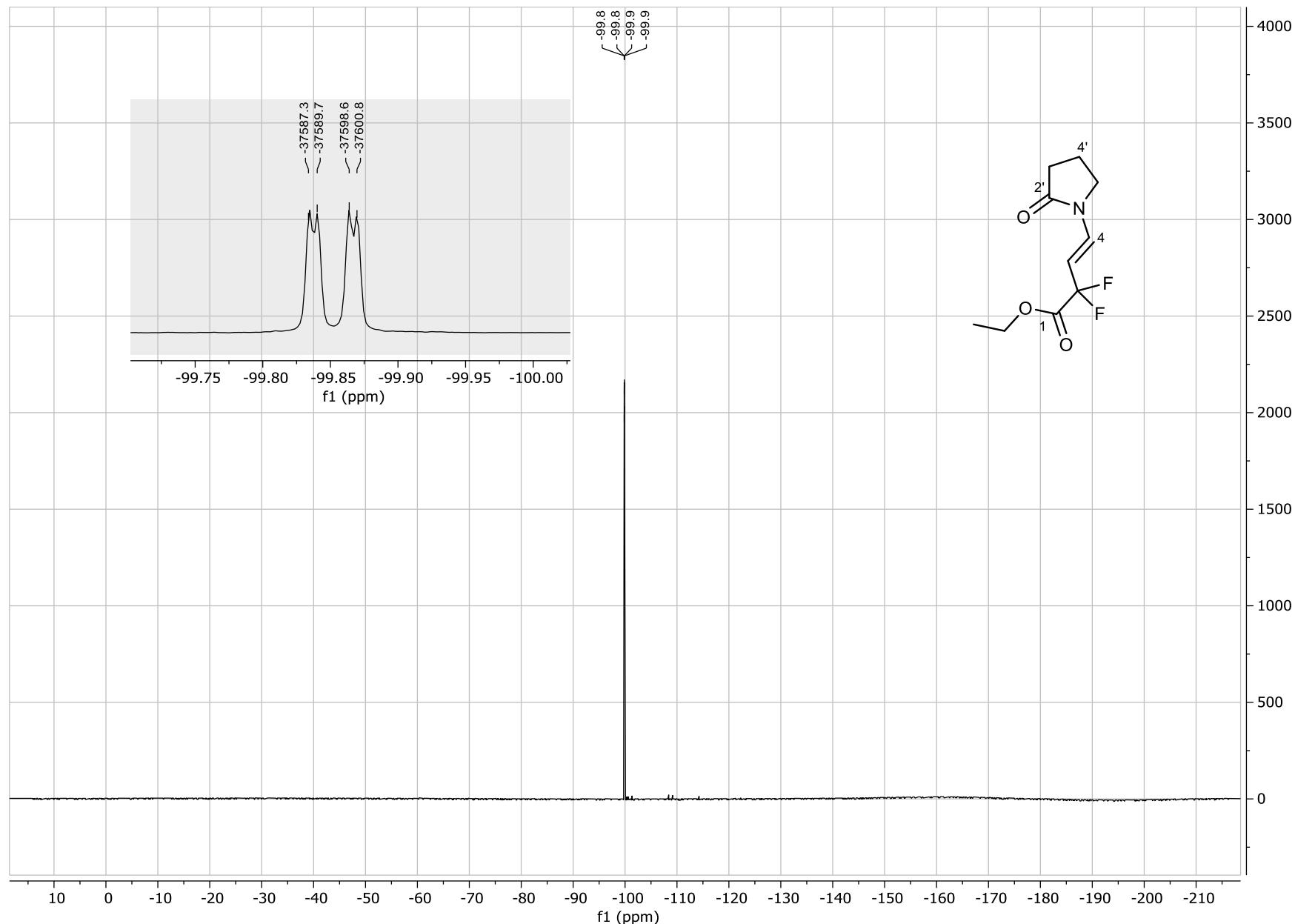
¹⁹F NMR (376 MHz, CDCl₃) Spectrum of Compound 3f.

¹H NMR (400 MHz, CDCl₃) Spectrum of Compound 3g.

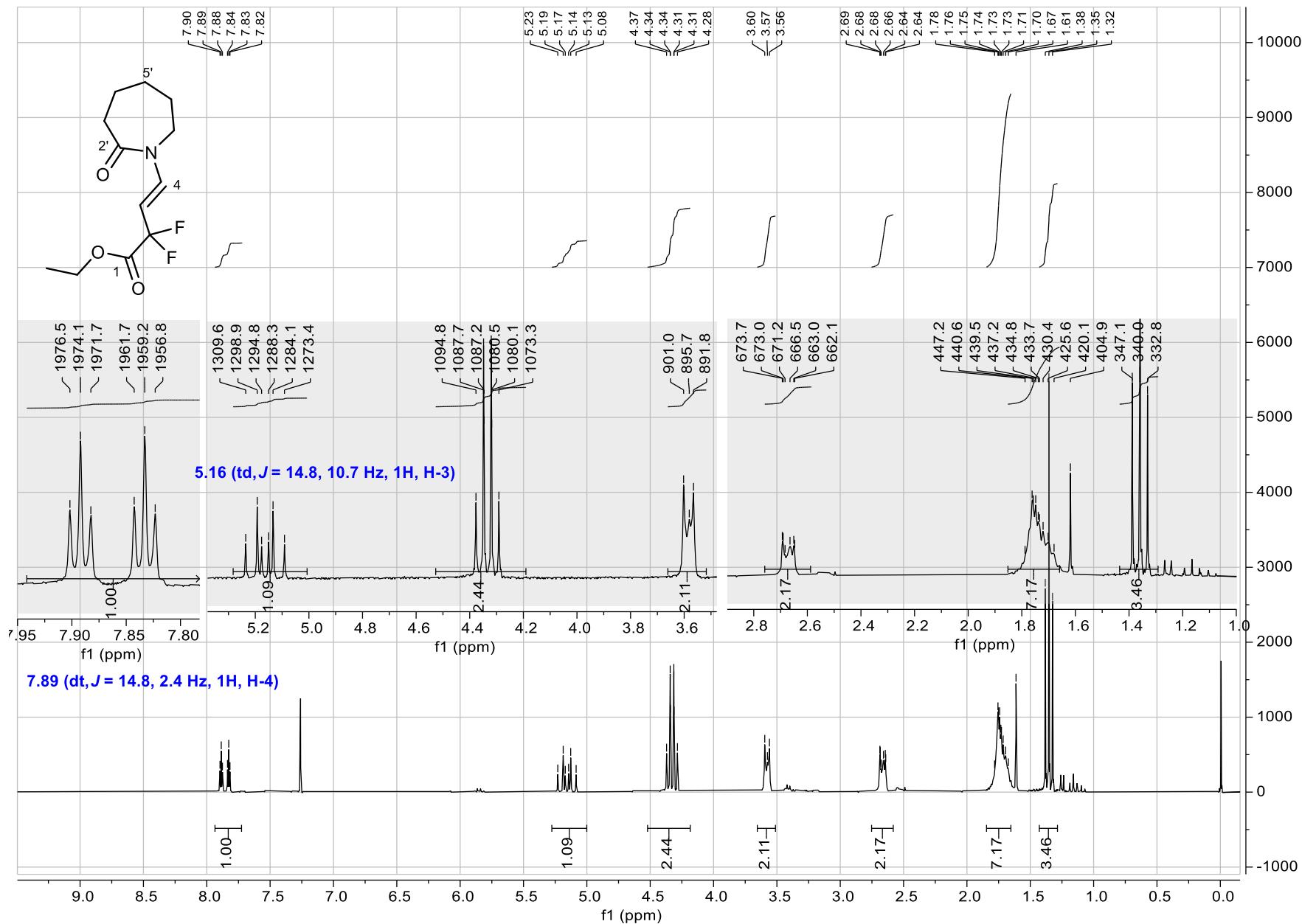


¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3g.

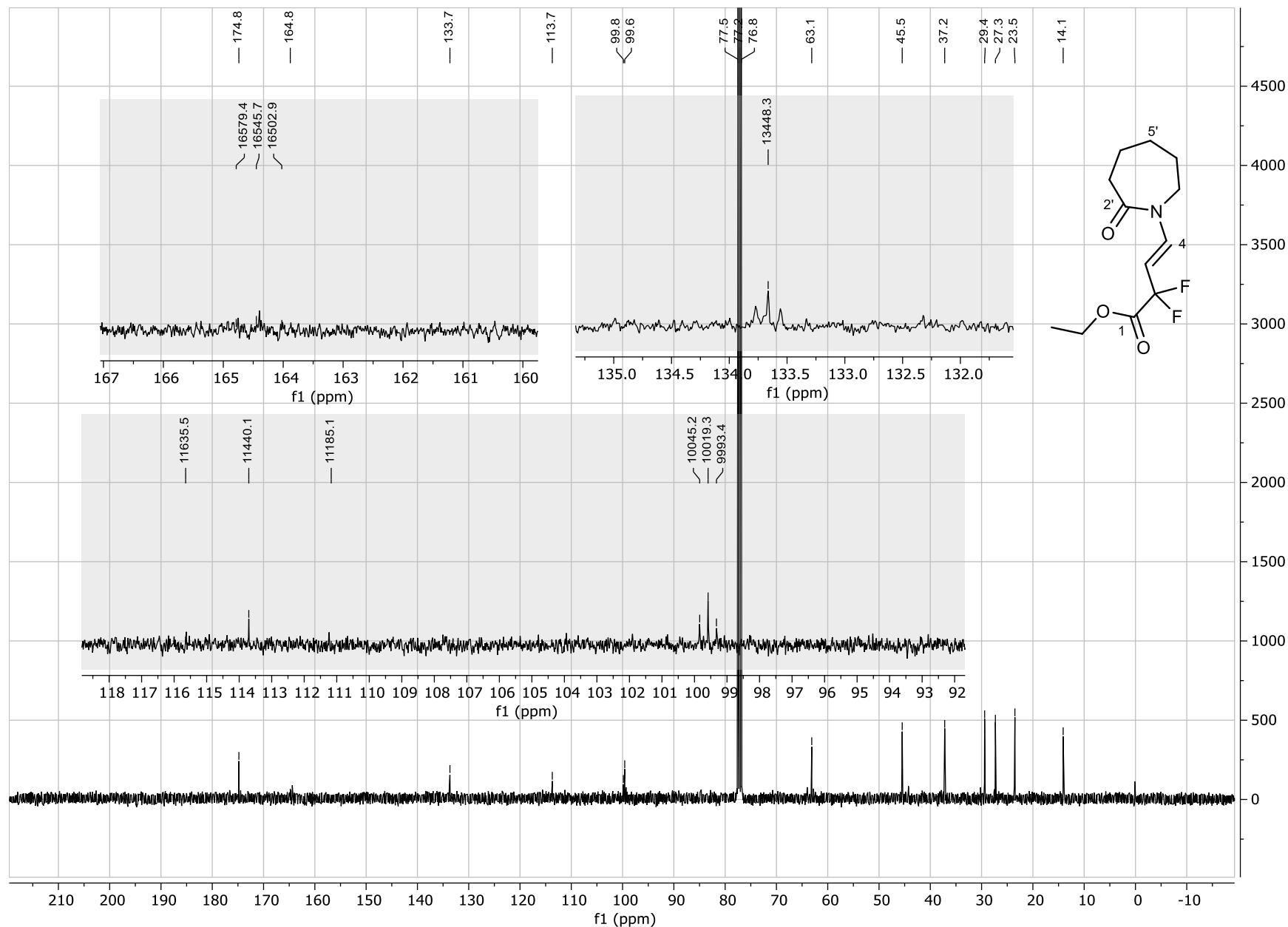


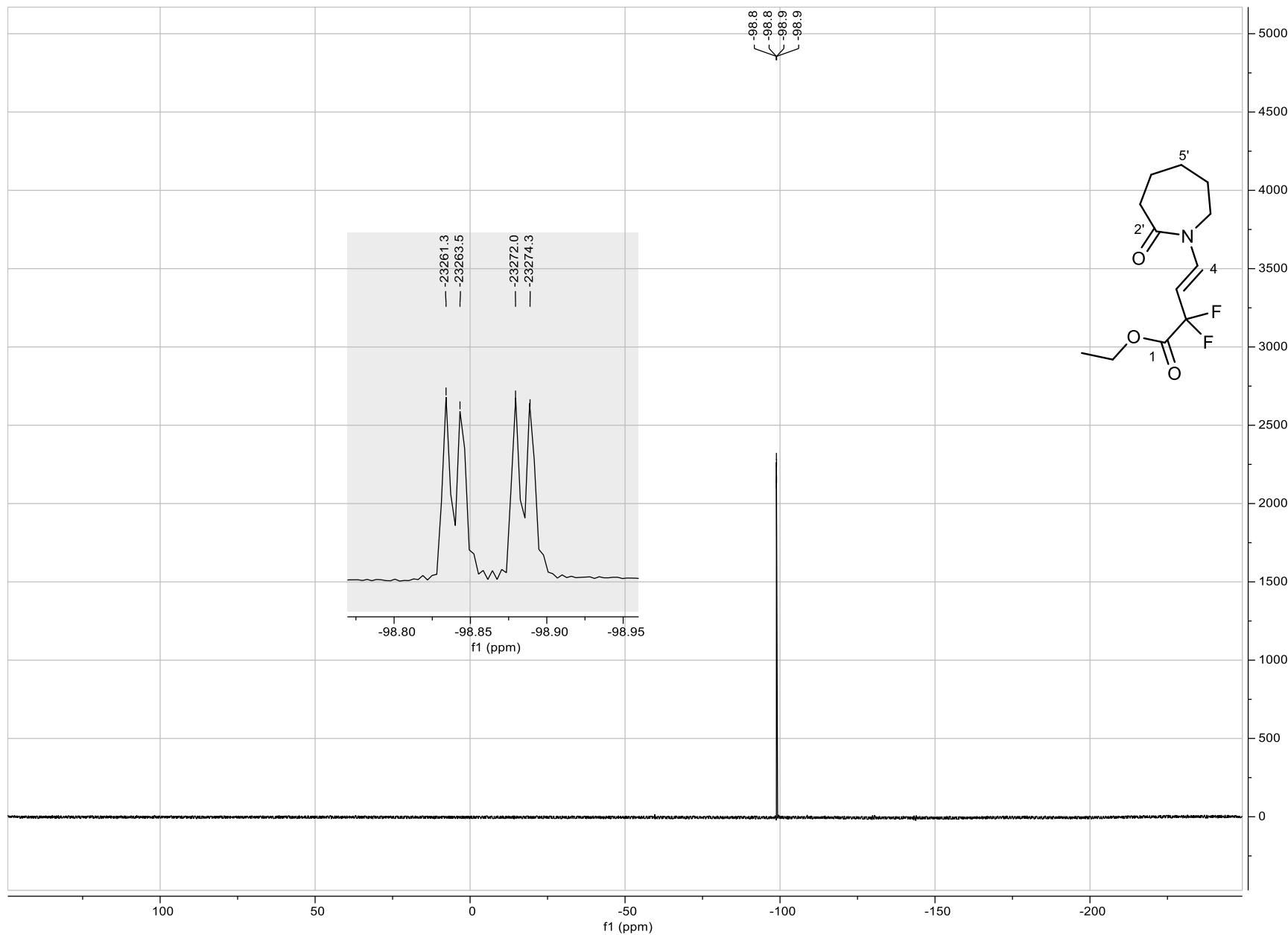
¹⁹F NMR (376 MHz, CDCl₃) Spectrum of Compound 3g.

¹H NMR (250 MHz/TMS, CDCl₃) Spectrum of Compound 3h.

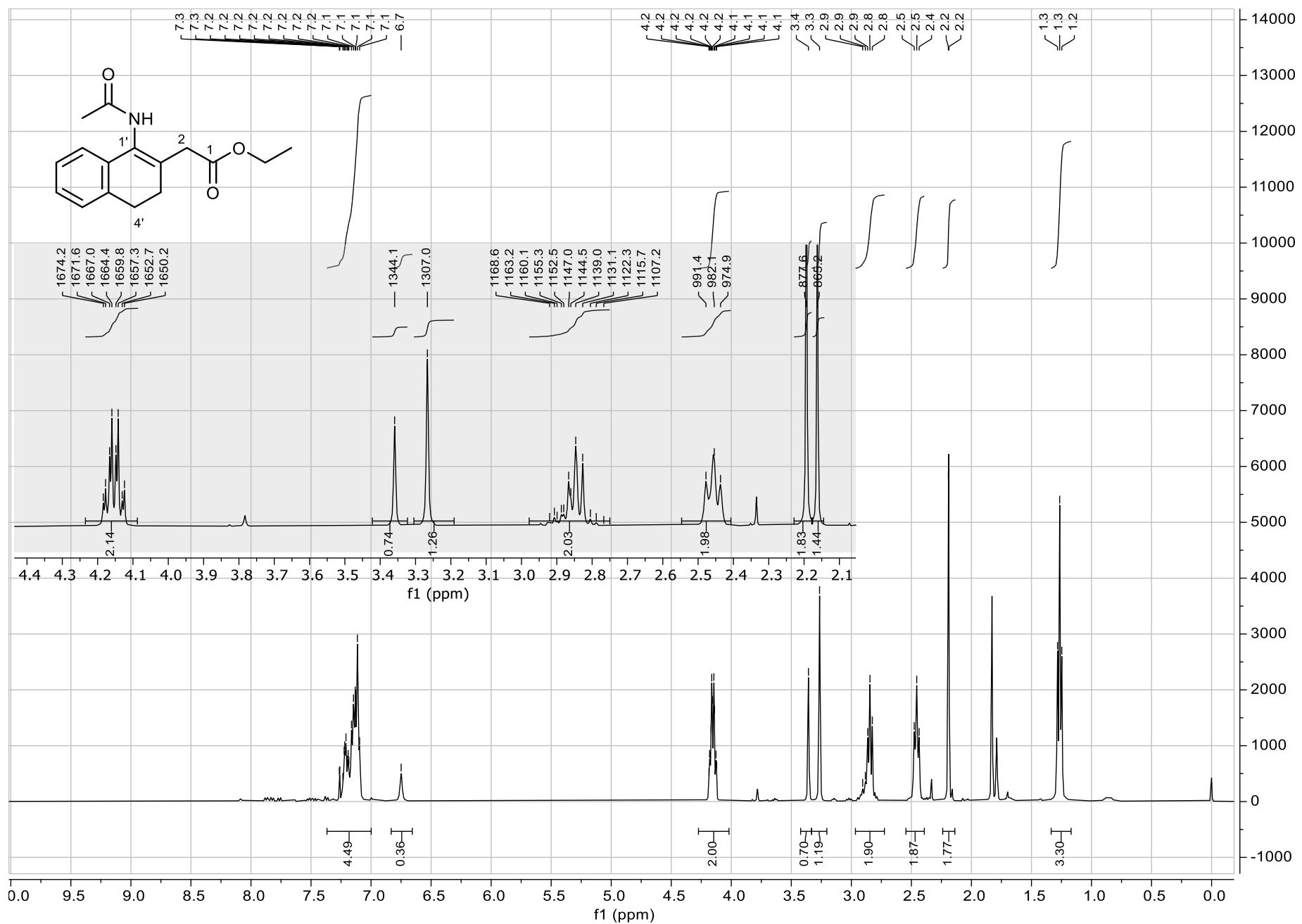


¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3h.

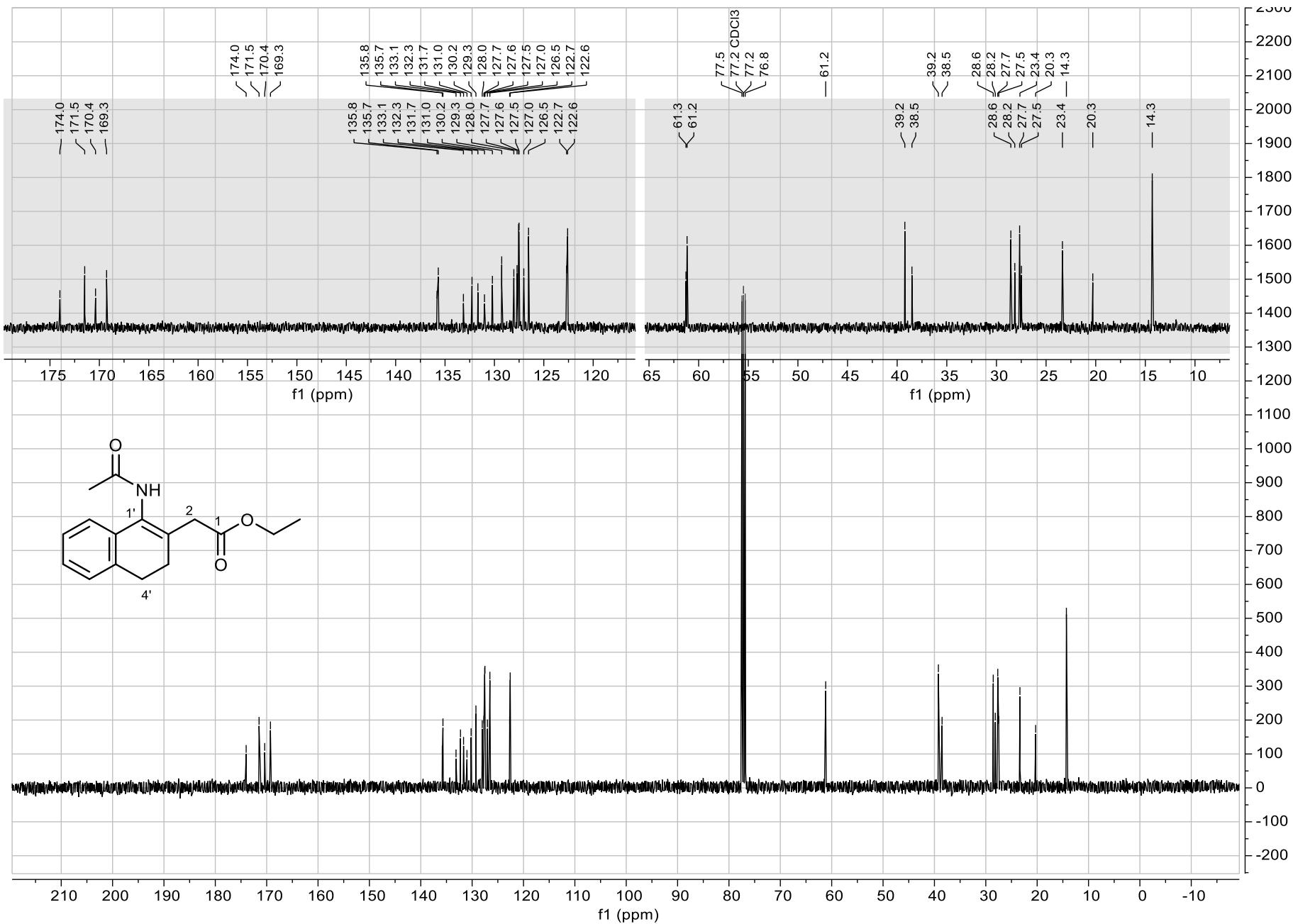


¹⁹F NMR (235 MHz, CDCl₃) Analysis of Compound 3h.

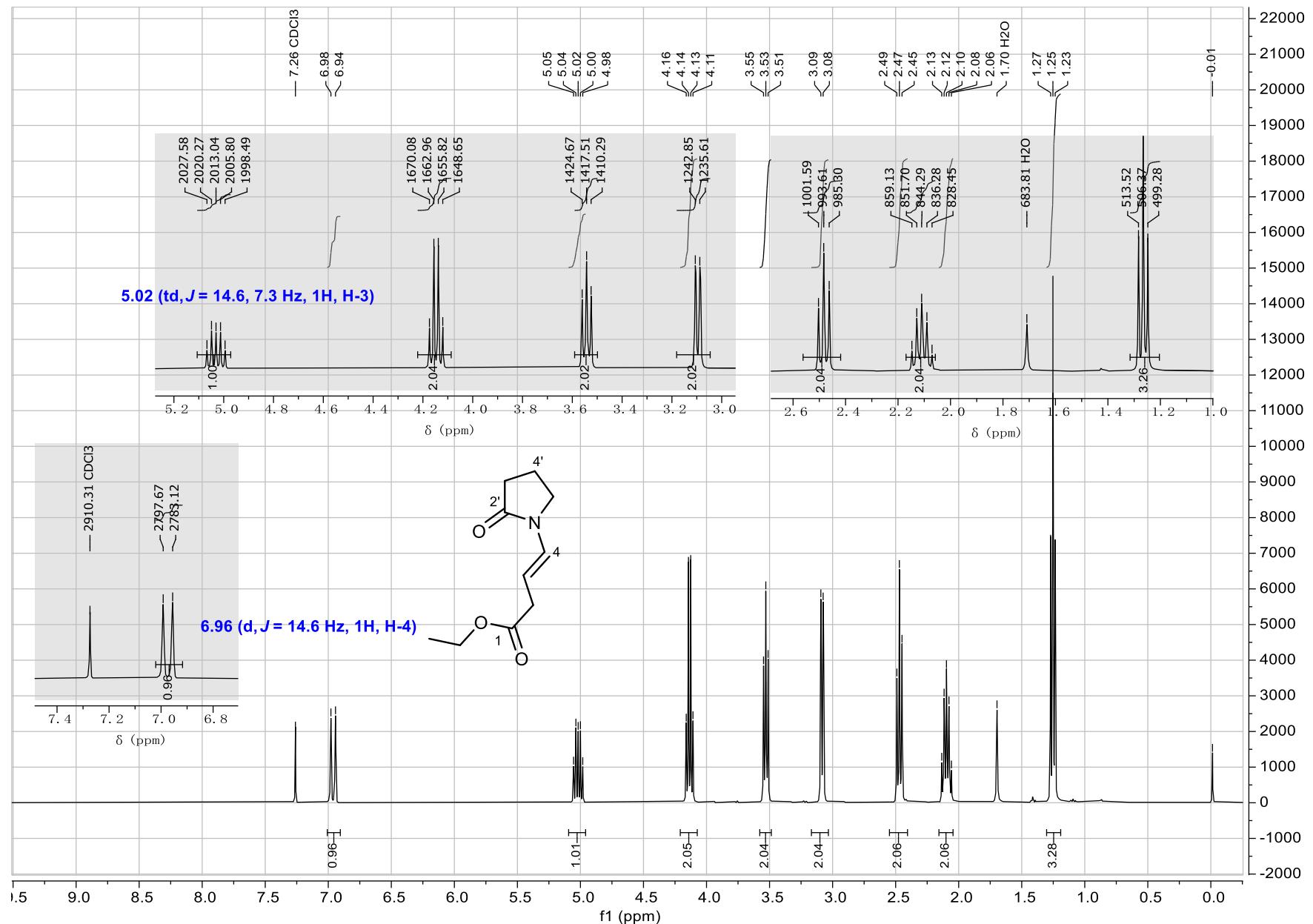
¹H NMR (400 MHz, CDCl₃/TMS) Spectrum of Compound 3i.

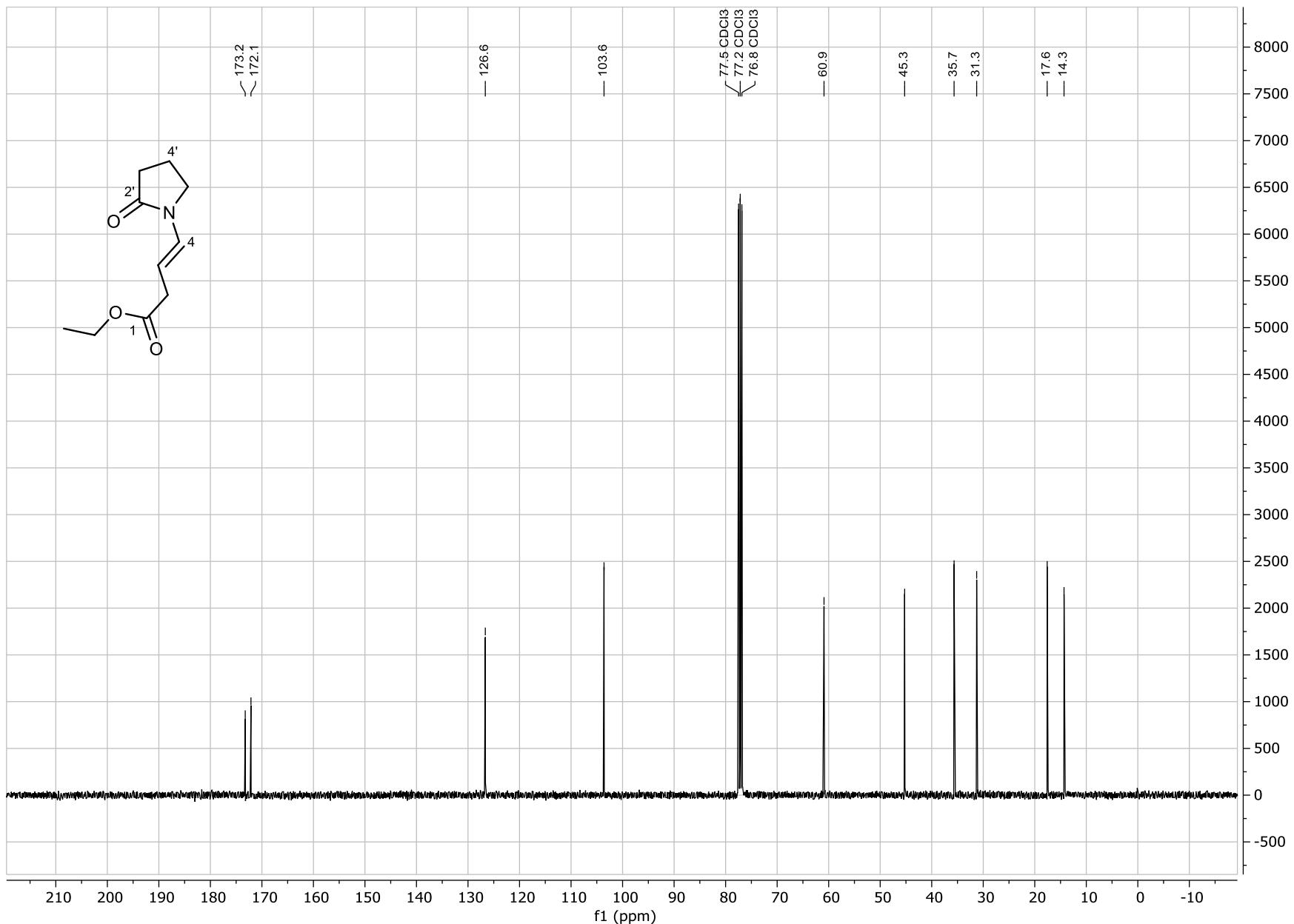


¹³C NMR (101 MHz, CDCl₃) Analysis of Compound 3i.

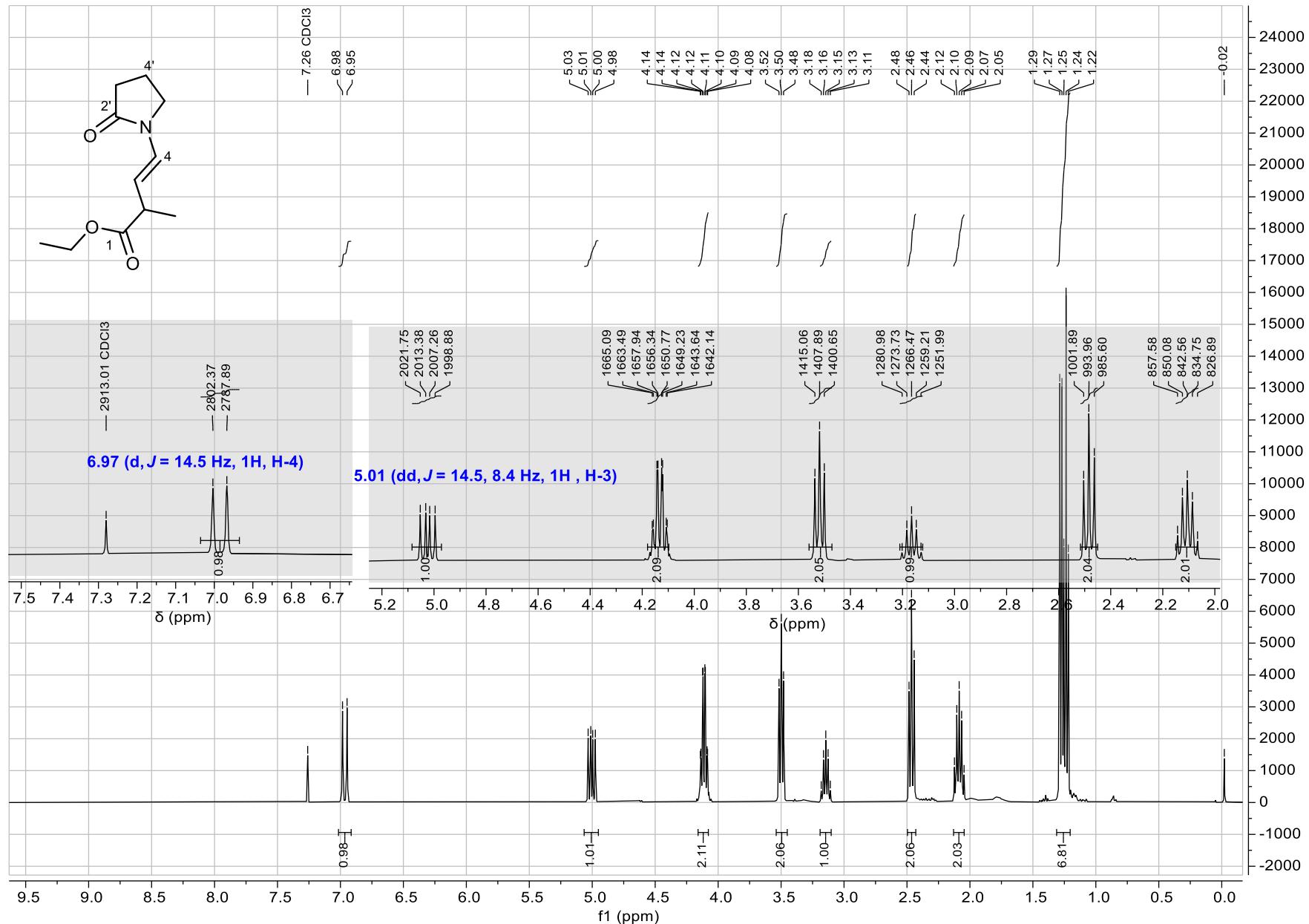


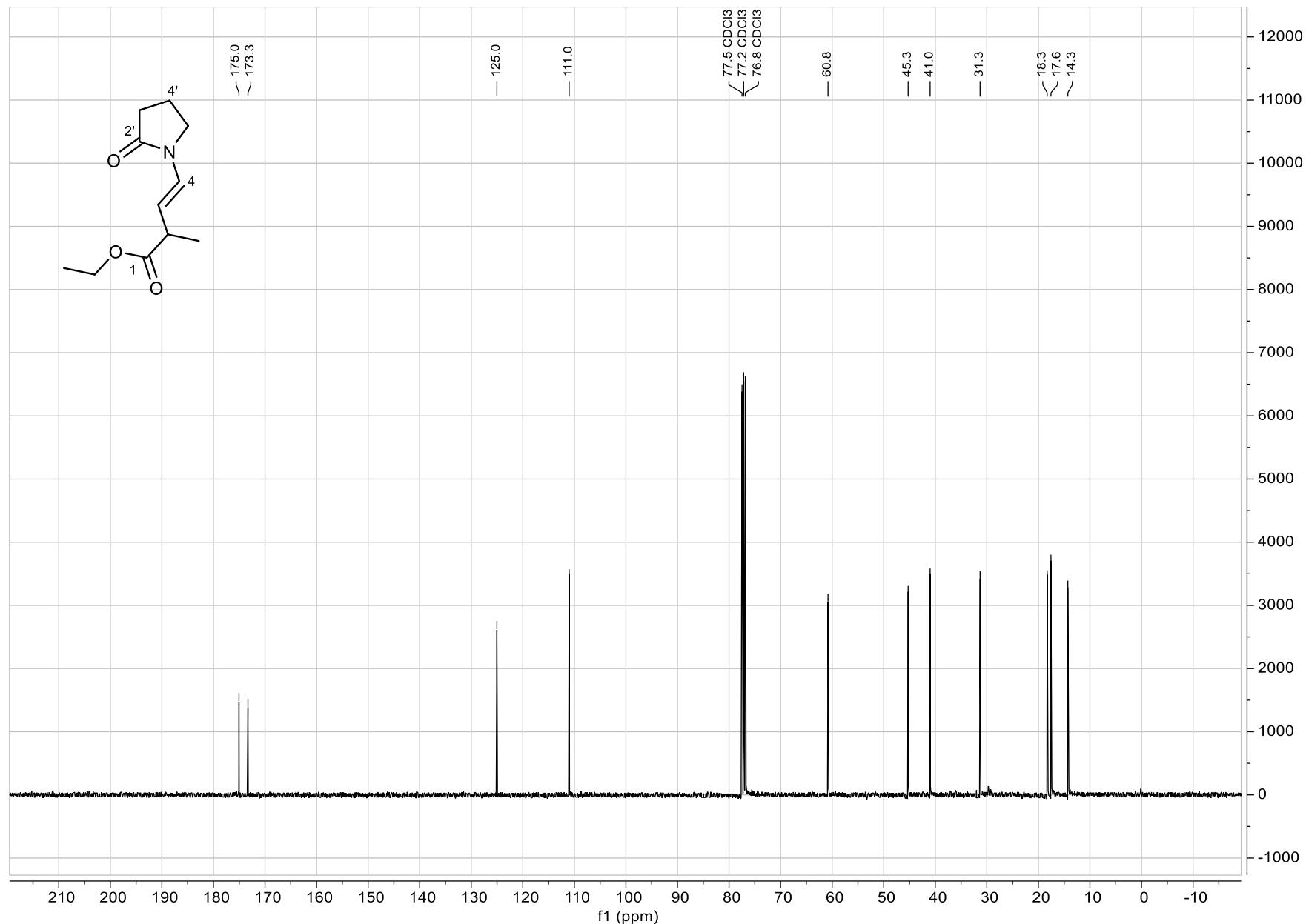
¹H NMR (400 MHz, CDCl₃) Spectrum of Compound 3j.



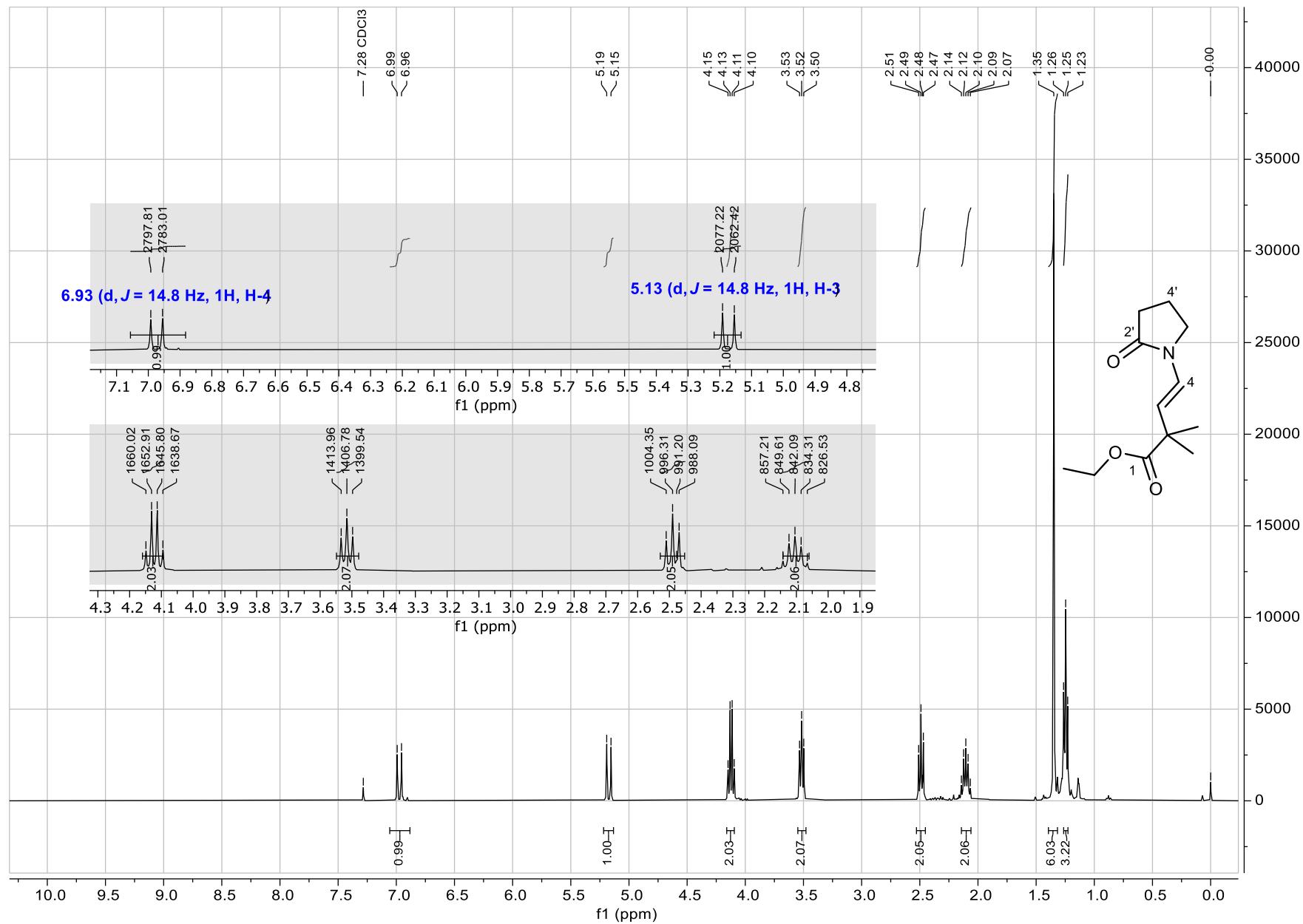
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3j.

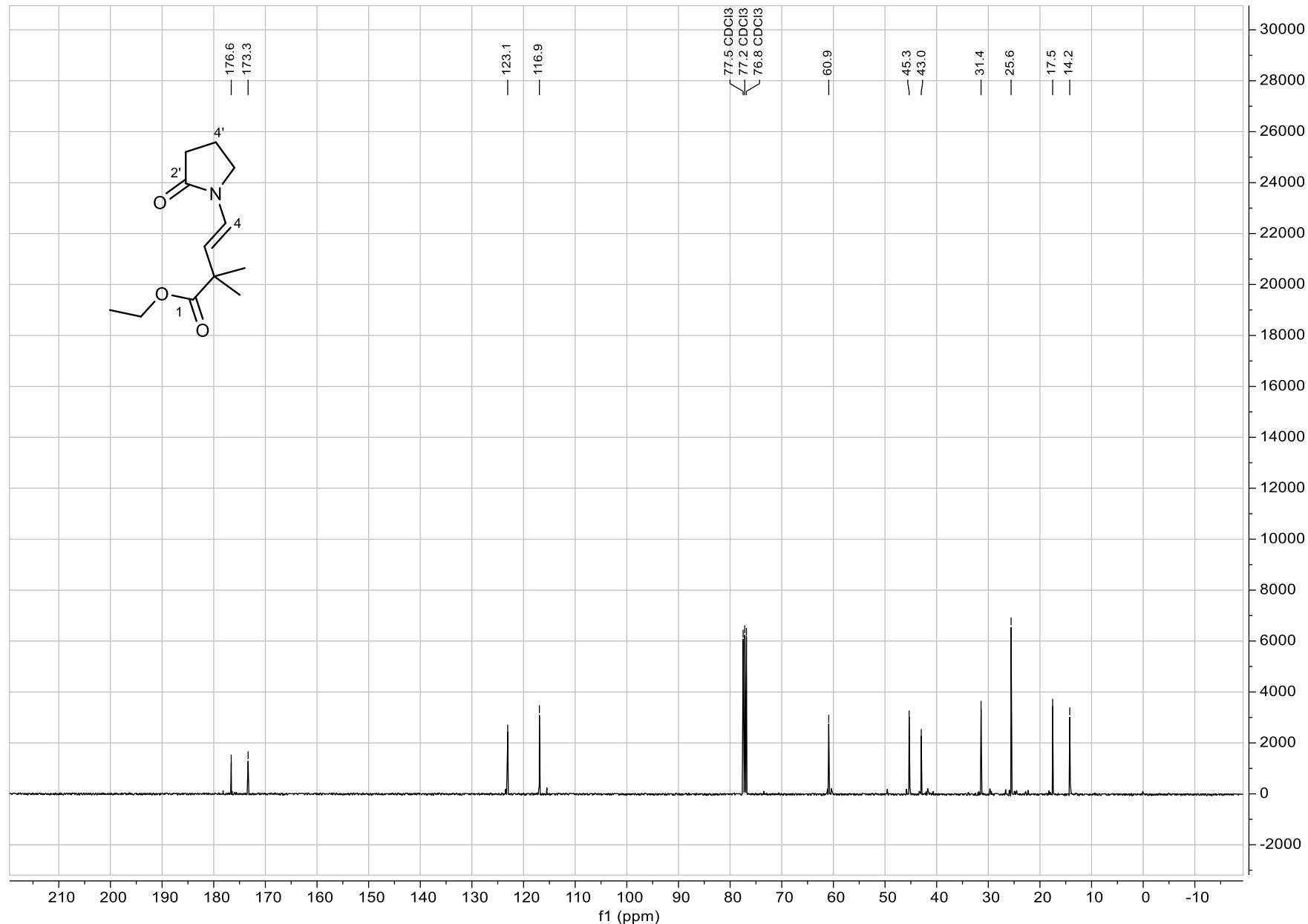
¹H NMR (400 MHz, CDCl₃/TMS) Spectrum of Compound 3k.

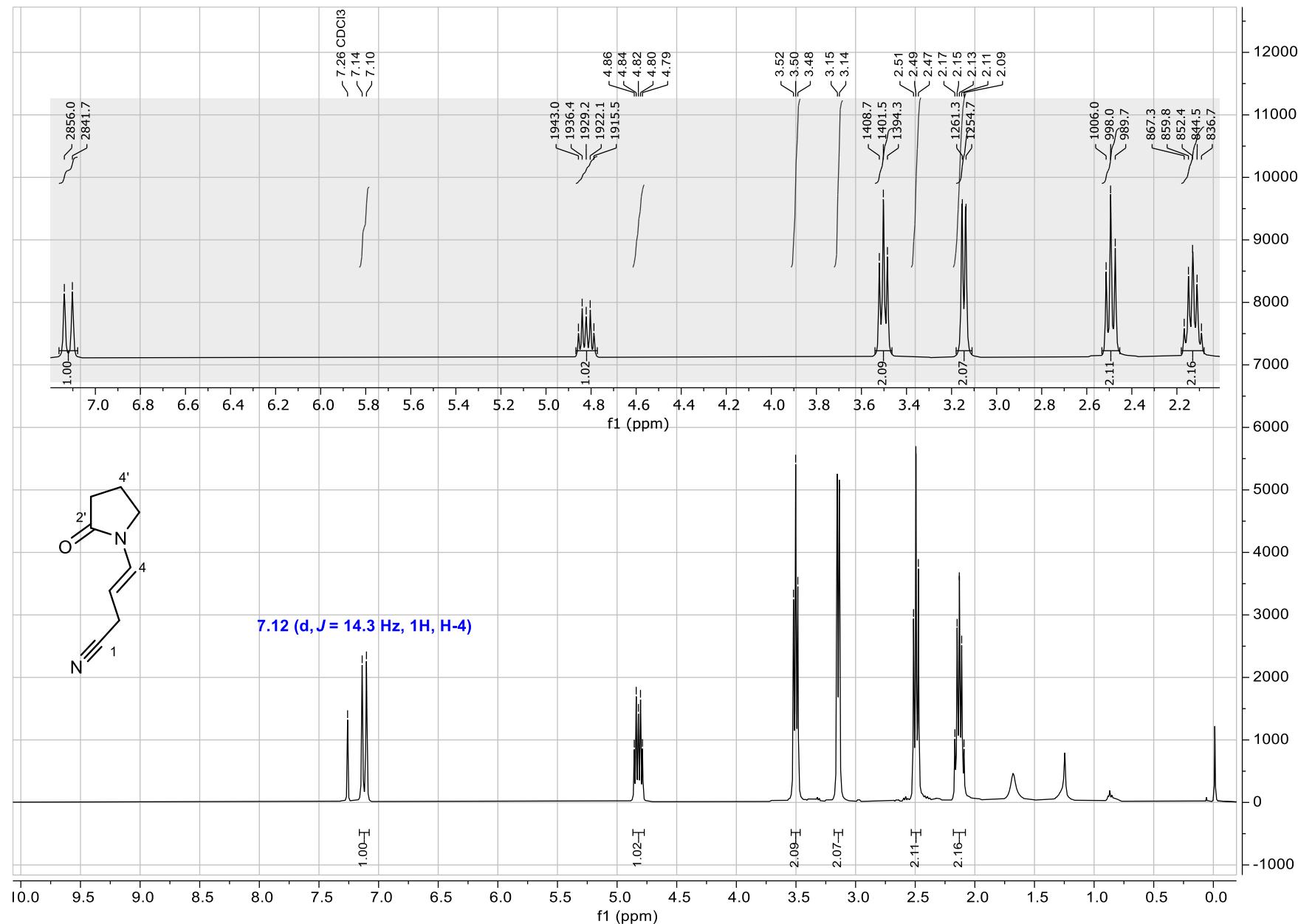


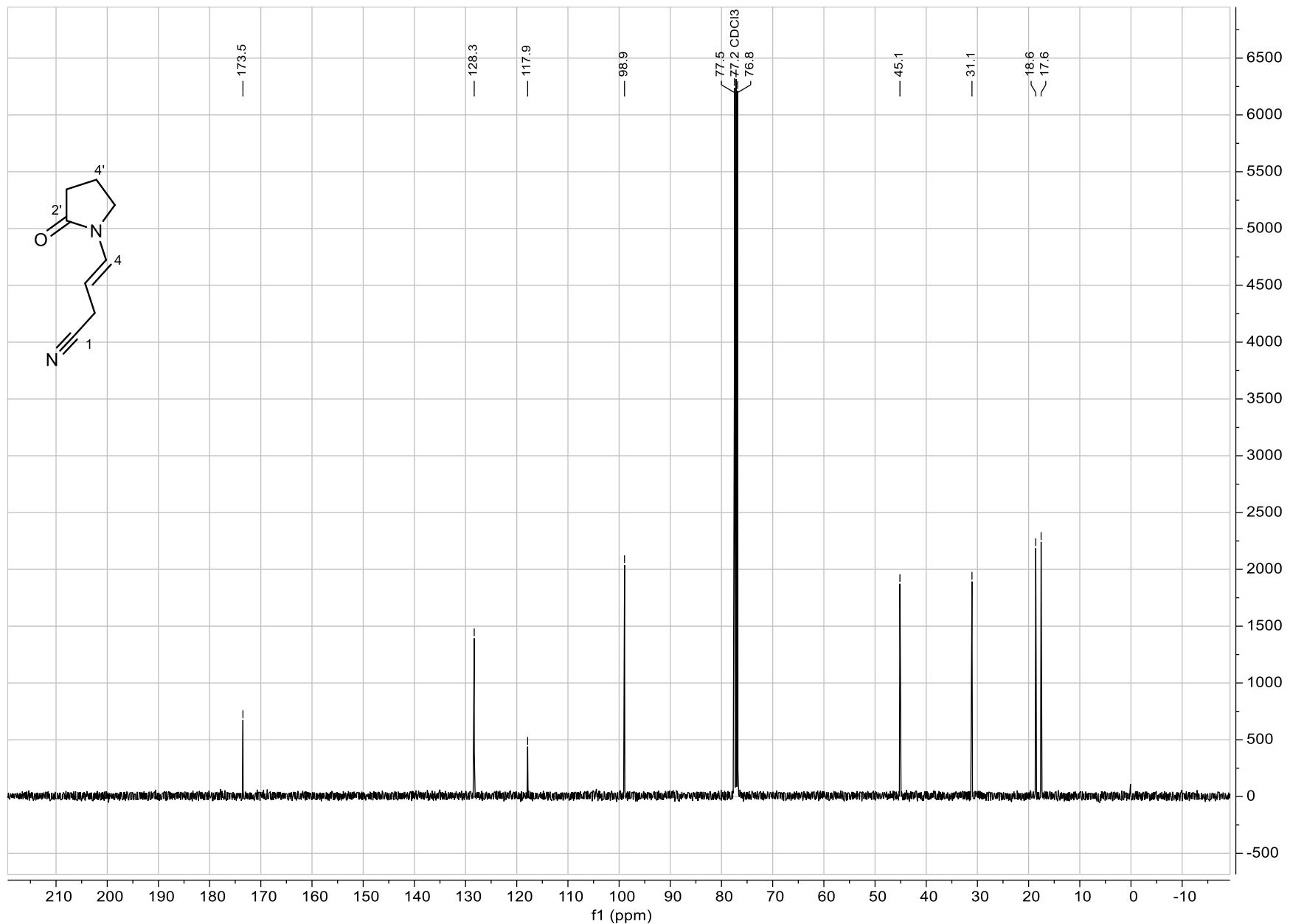
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3k.

¹H NMR (400 MHz, CDCl₃) Spectrum of Compound 3l.

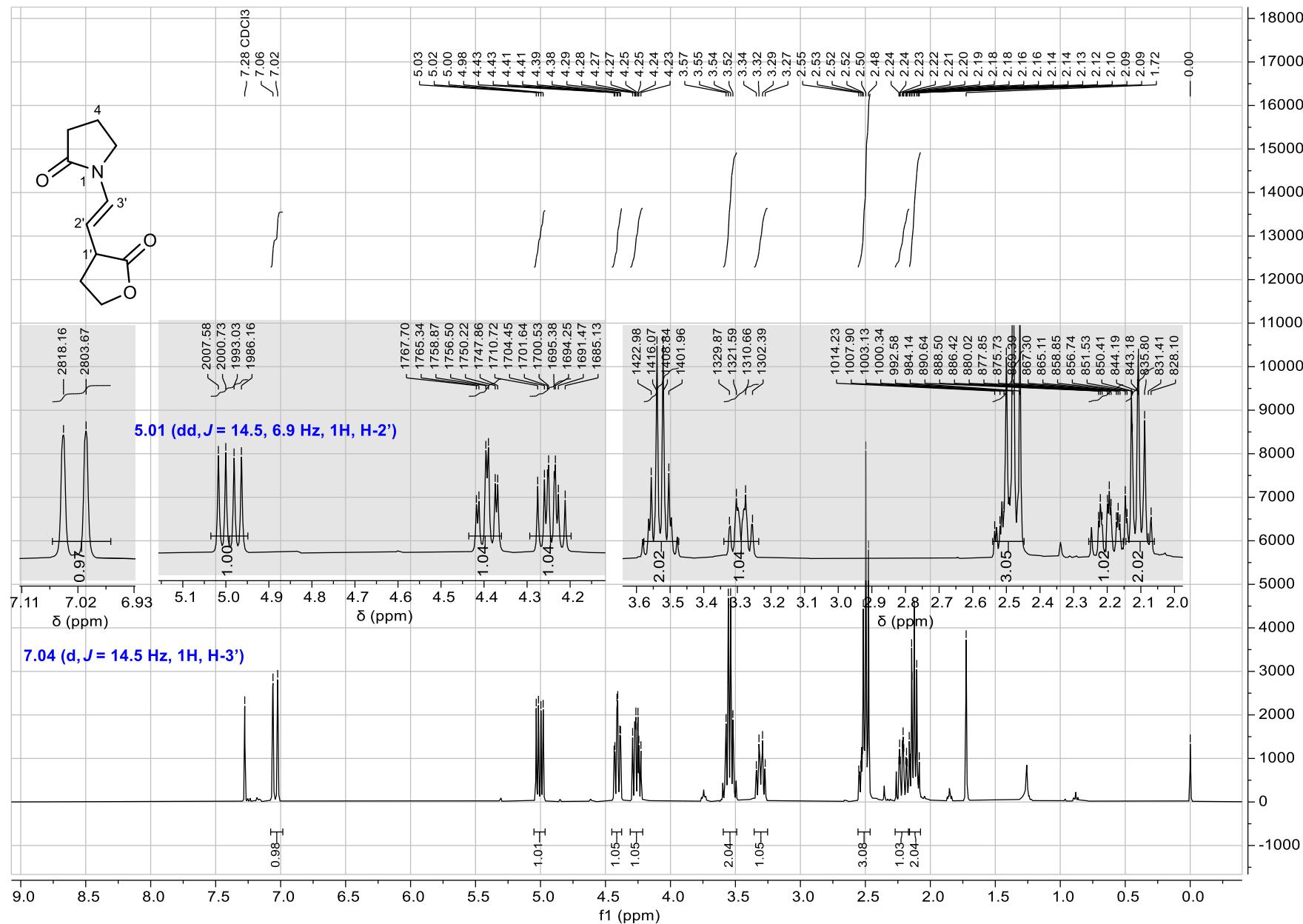


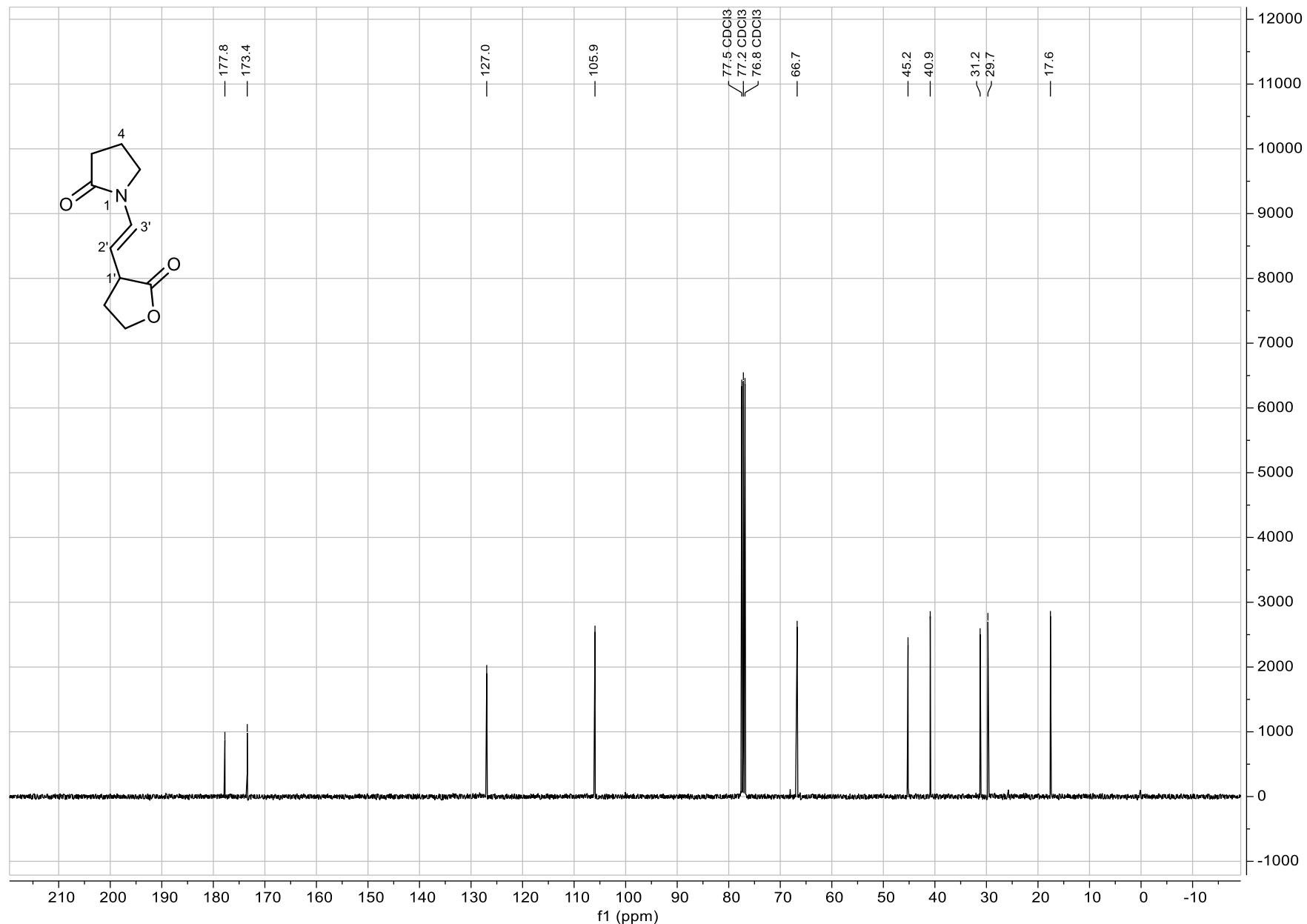
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3l.

^1H NMR (400 MHz, CDCl_3) Spectrum of Compound 3m.

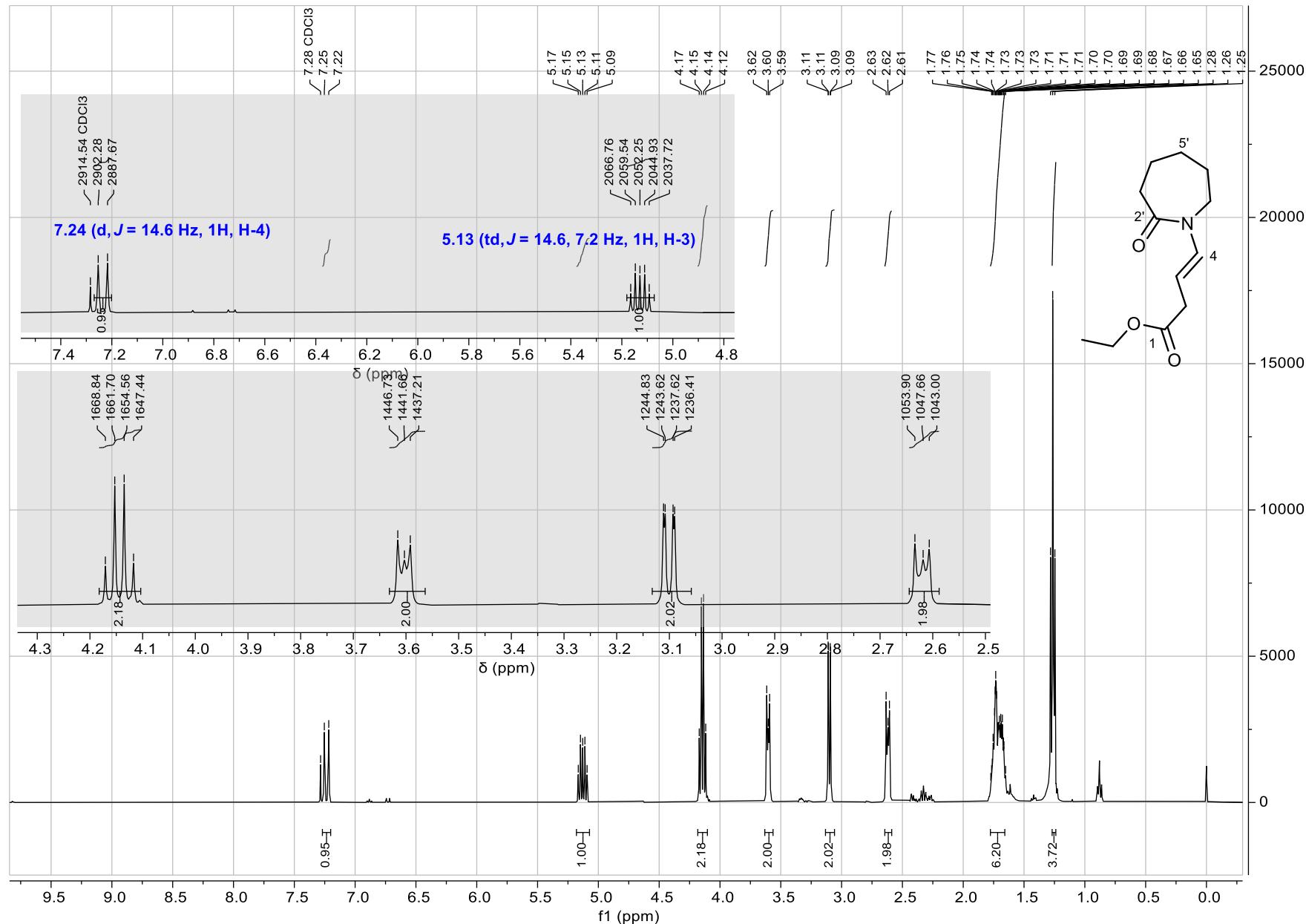
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3m.

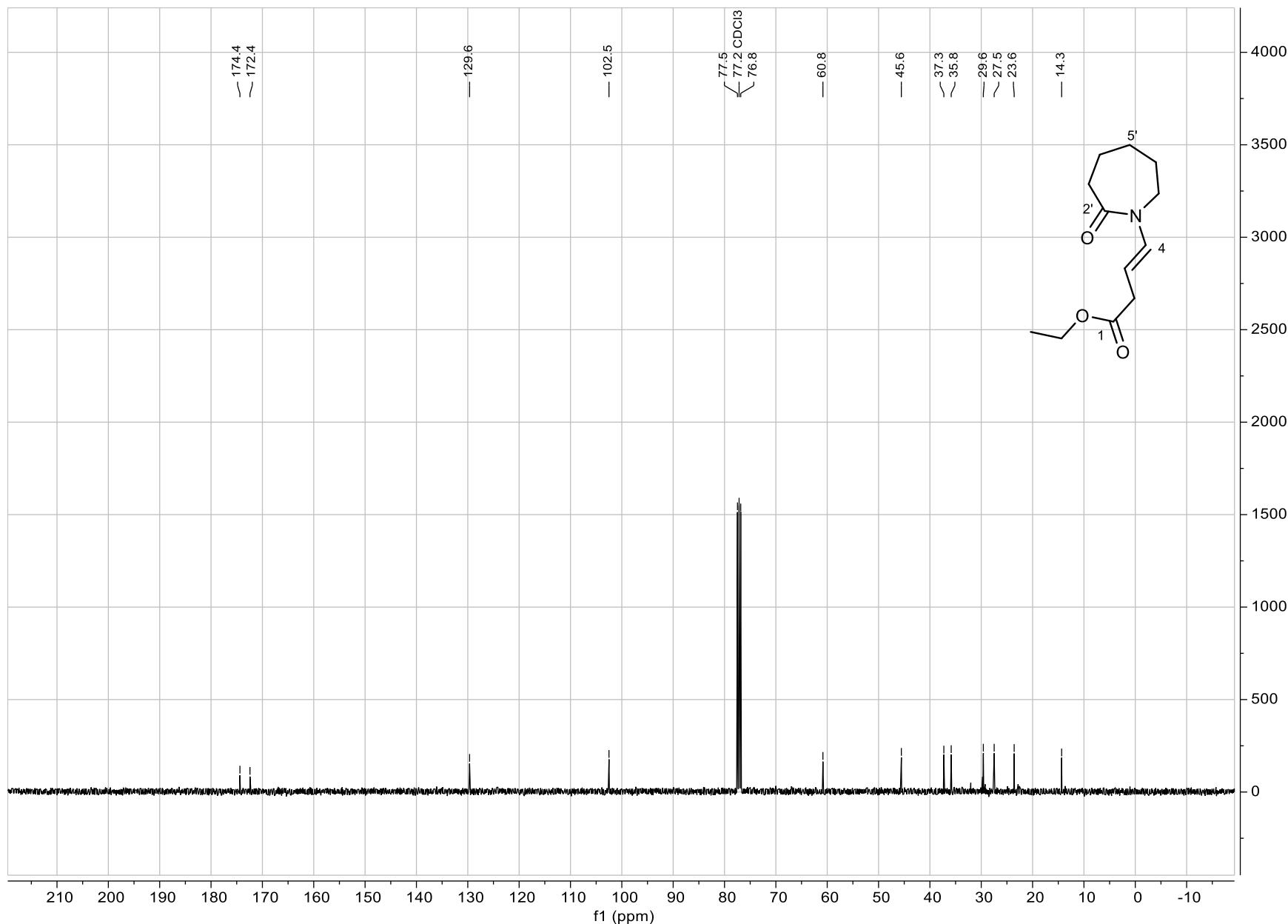
¹H NMR (400 MHz, CDCl₃) Spectrum of Compound 3n.

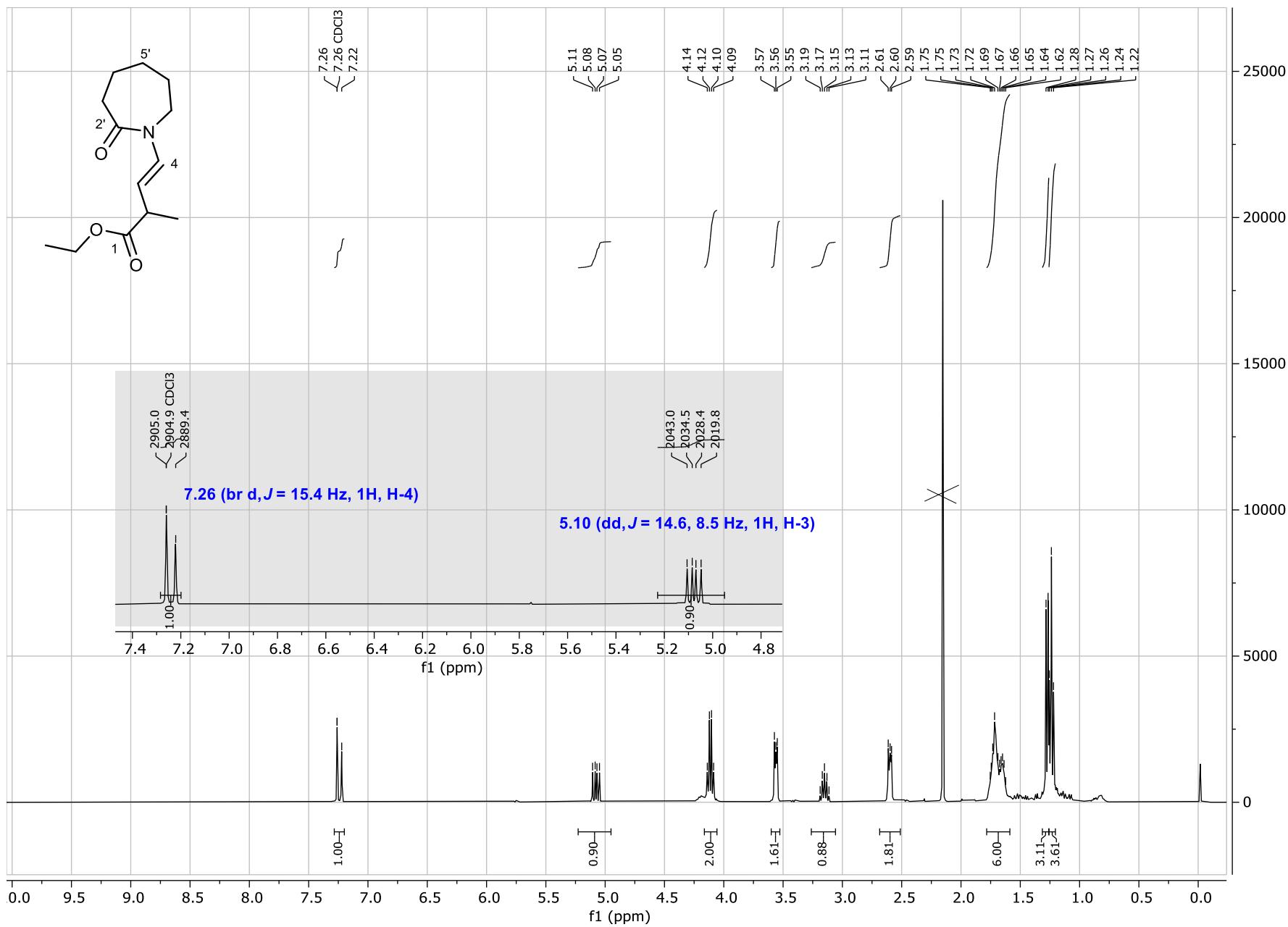


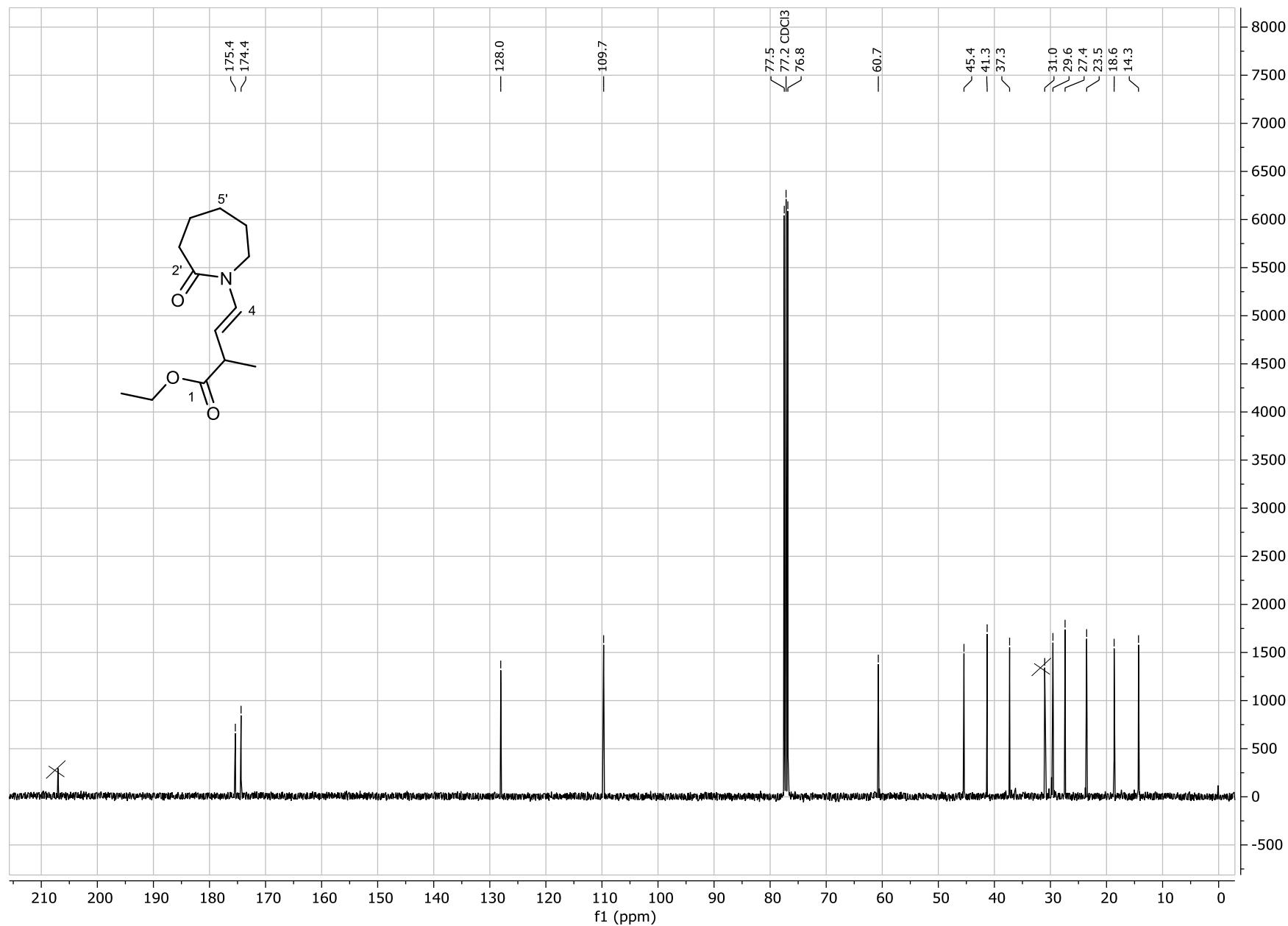
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3n.

¹H NMR (400 MHz, CDCl₃) Spectrum of Compound 3o.

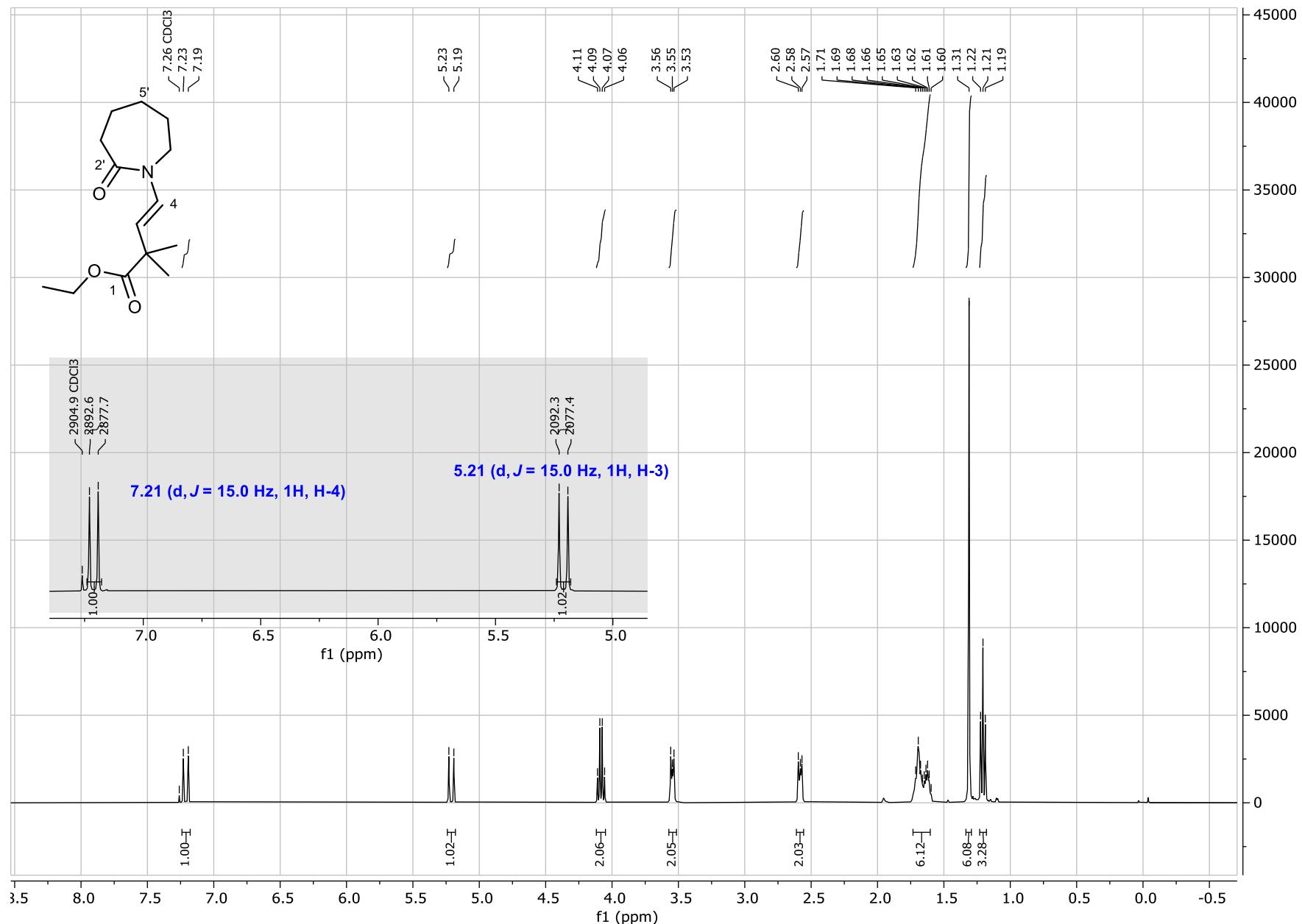


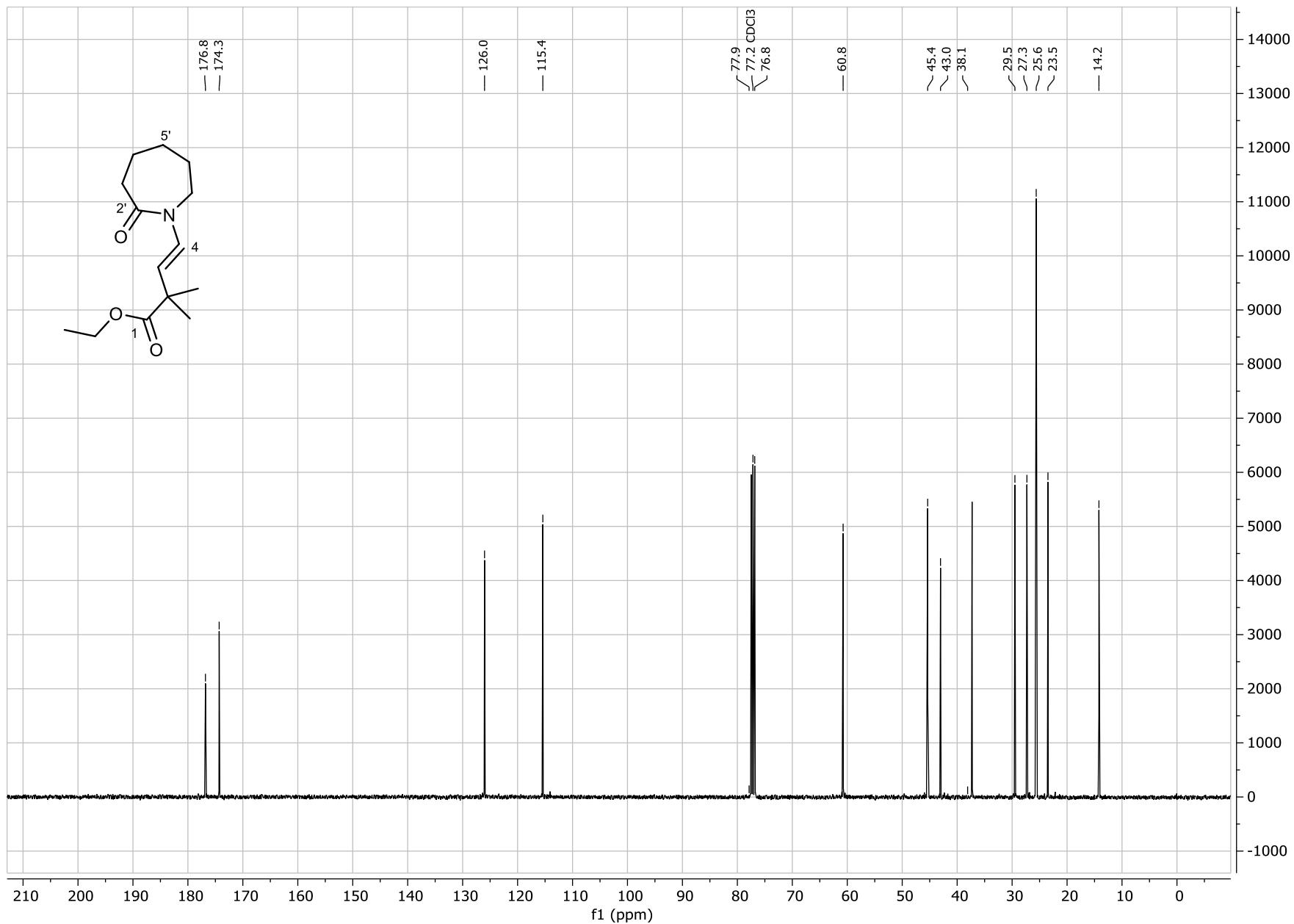
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3o.

¹H NMR (400 MHz, CDCl₃) Spectrum of Compound 3p.


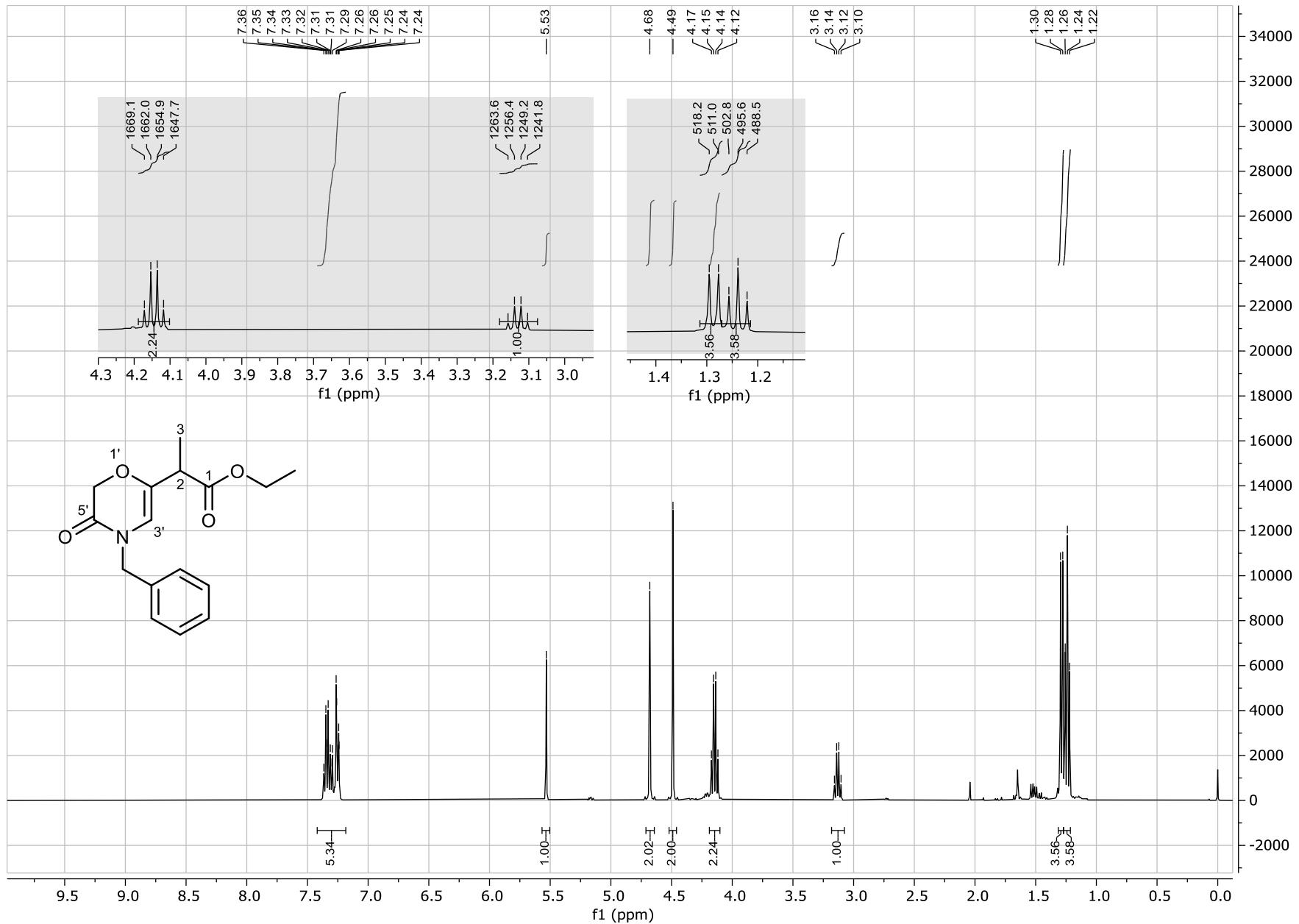
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3p.

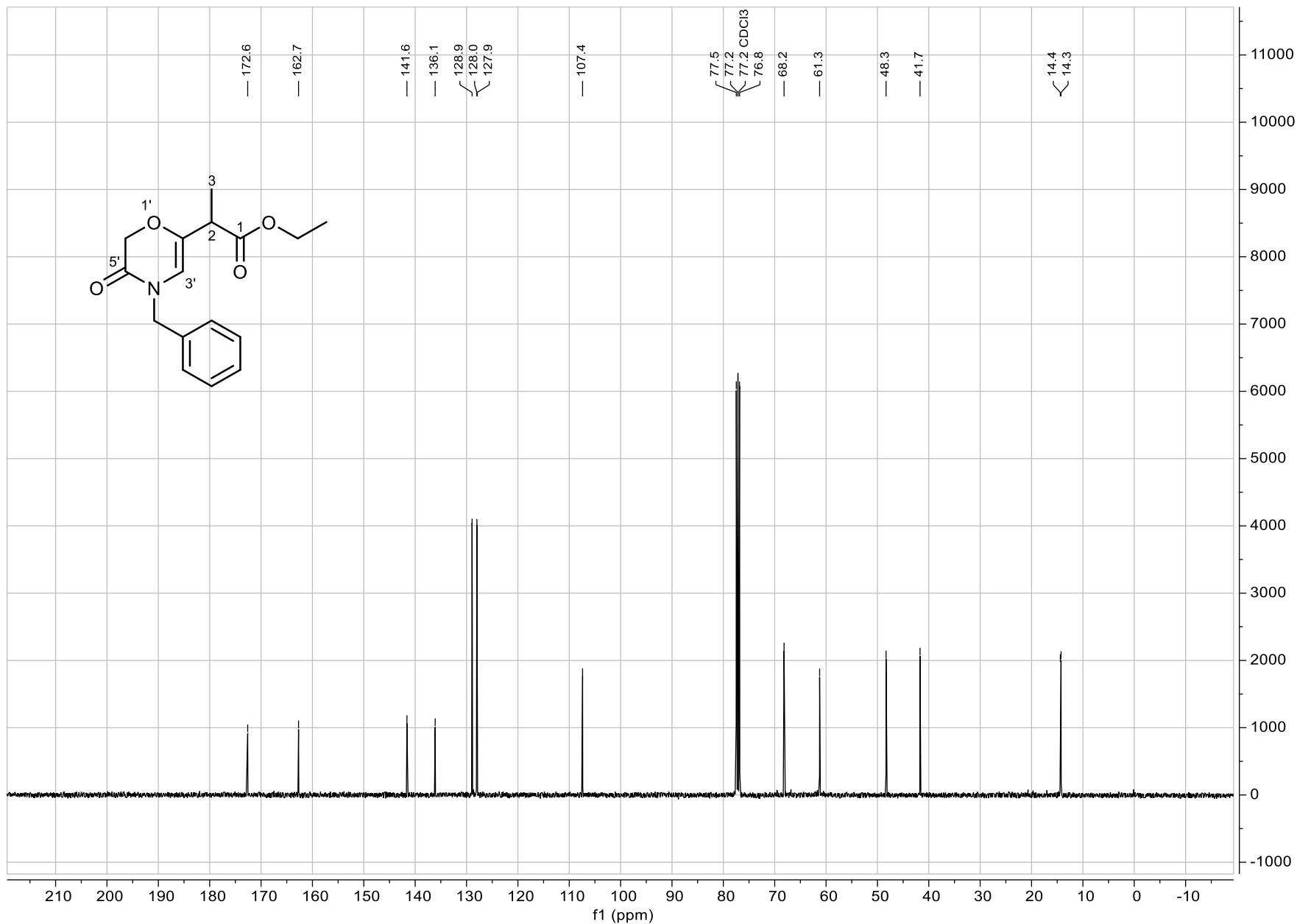
¹H NMR (400 MHz, CDCl₃) Spectrum of Compound 3q.



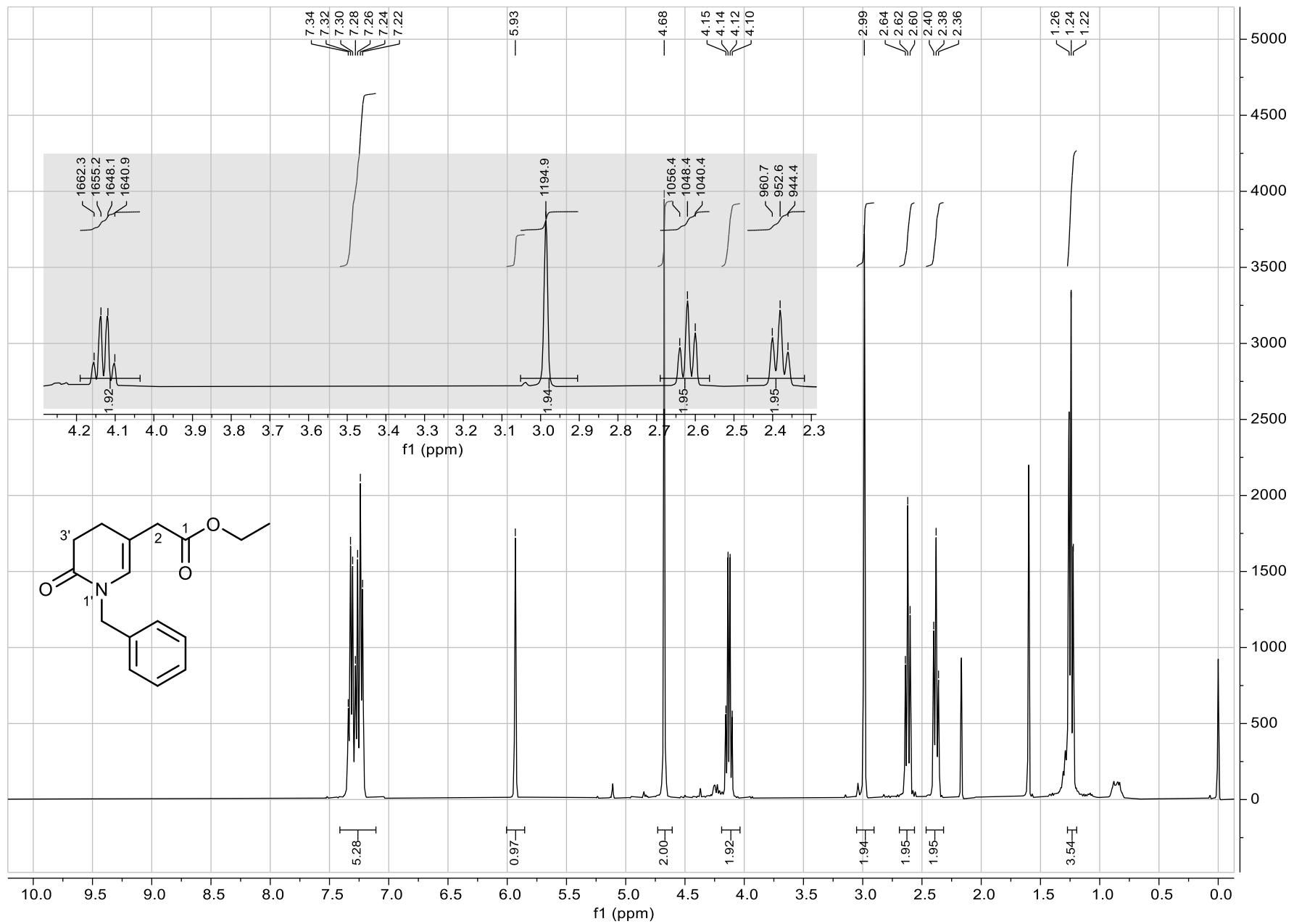
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3q.

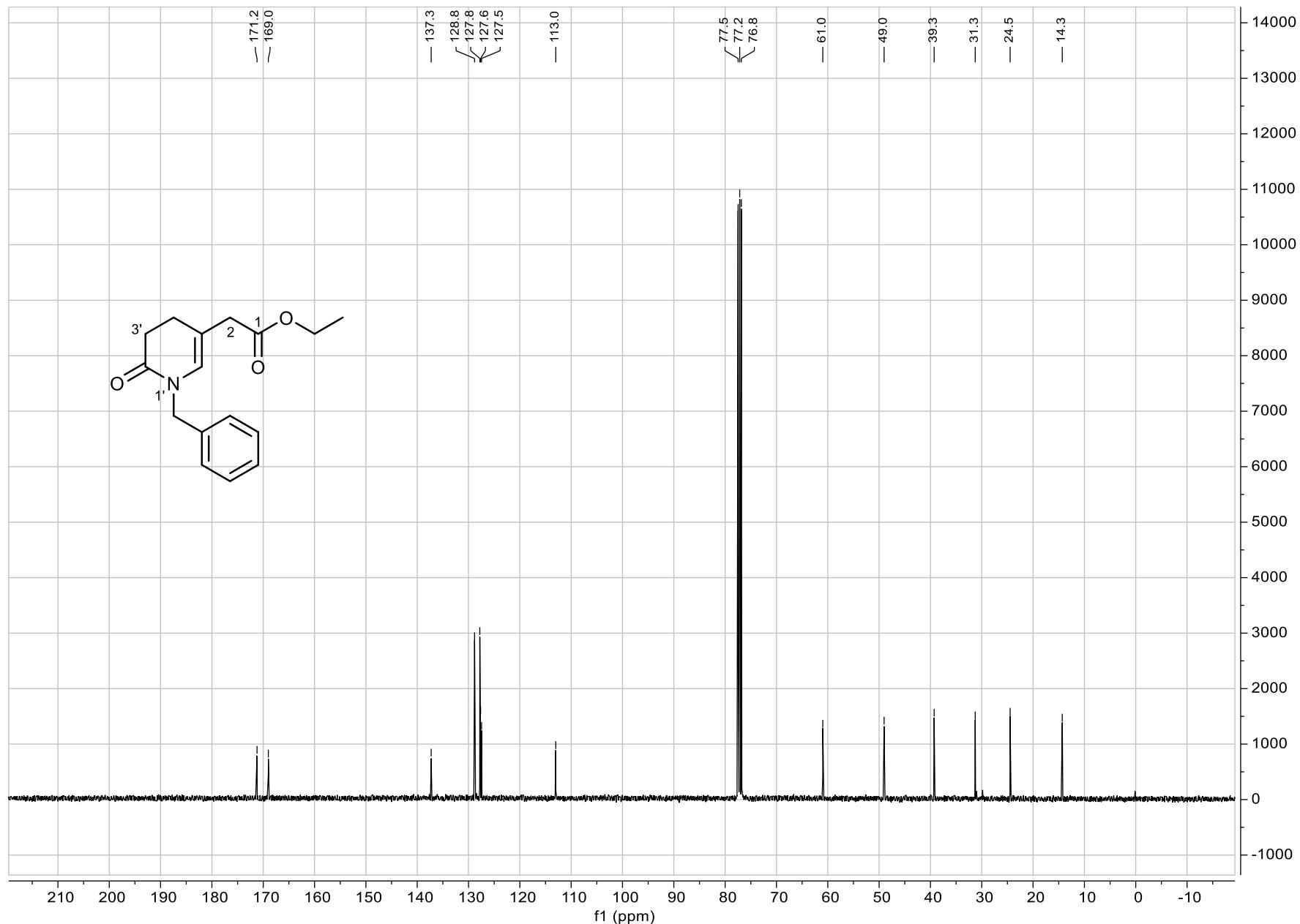
¹H NMR (400 MHz, CDCl₃/TMS) Spectrum of Compound 3r.

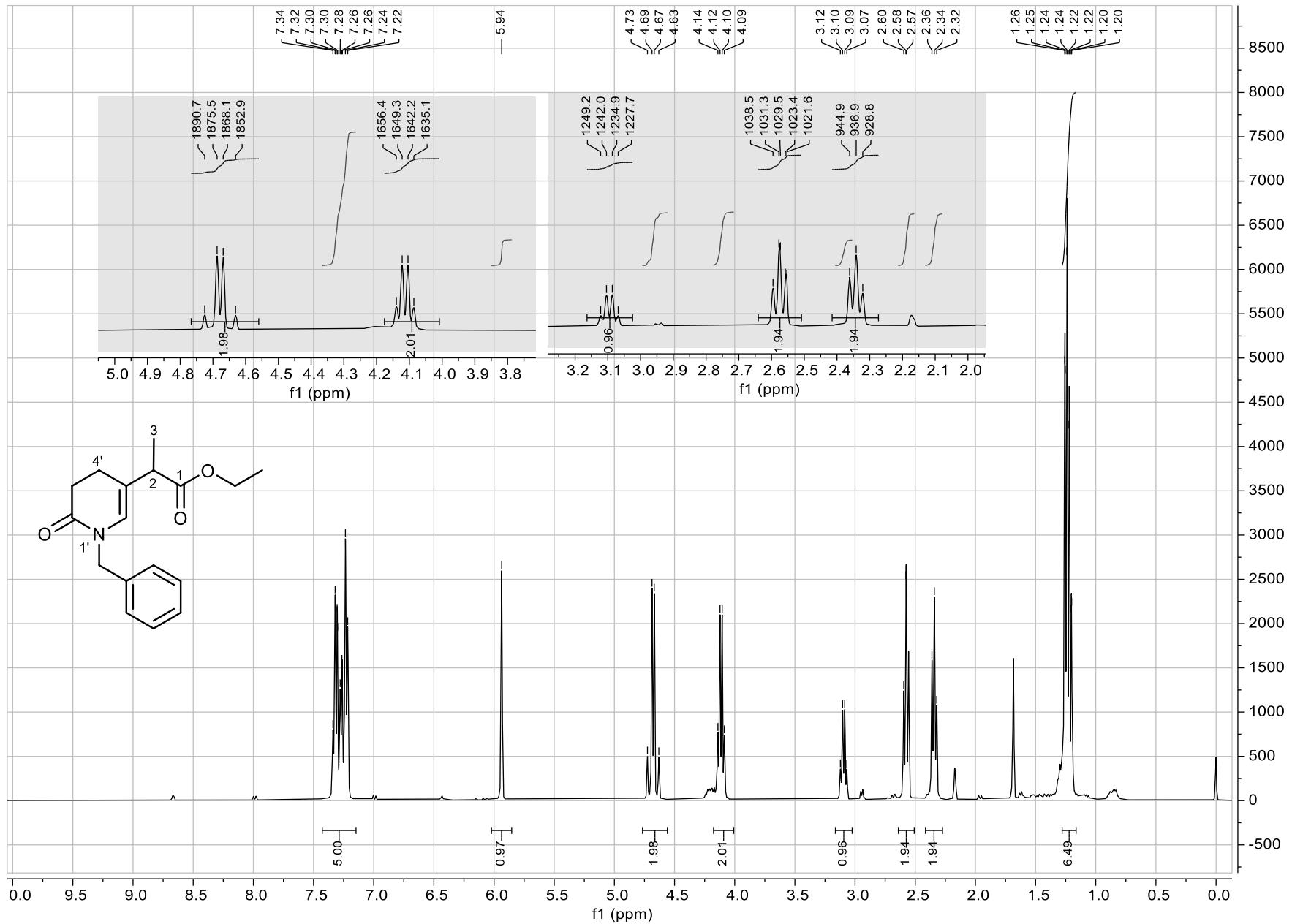


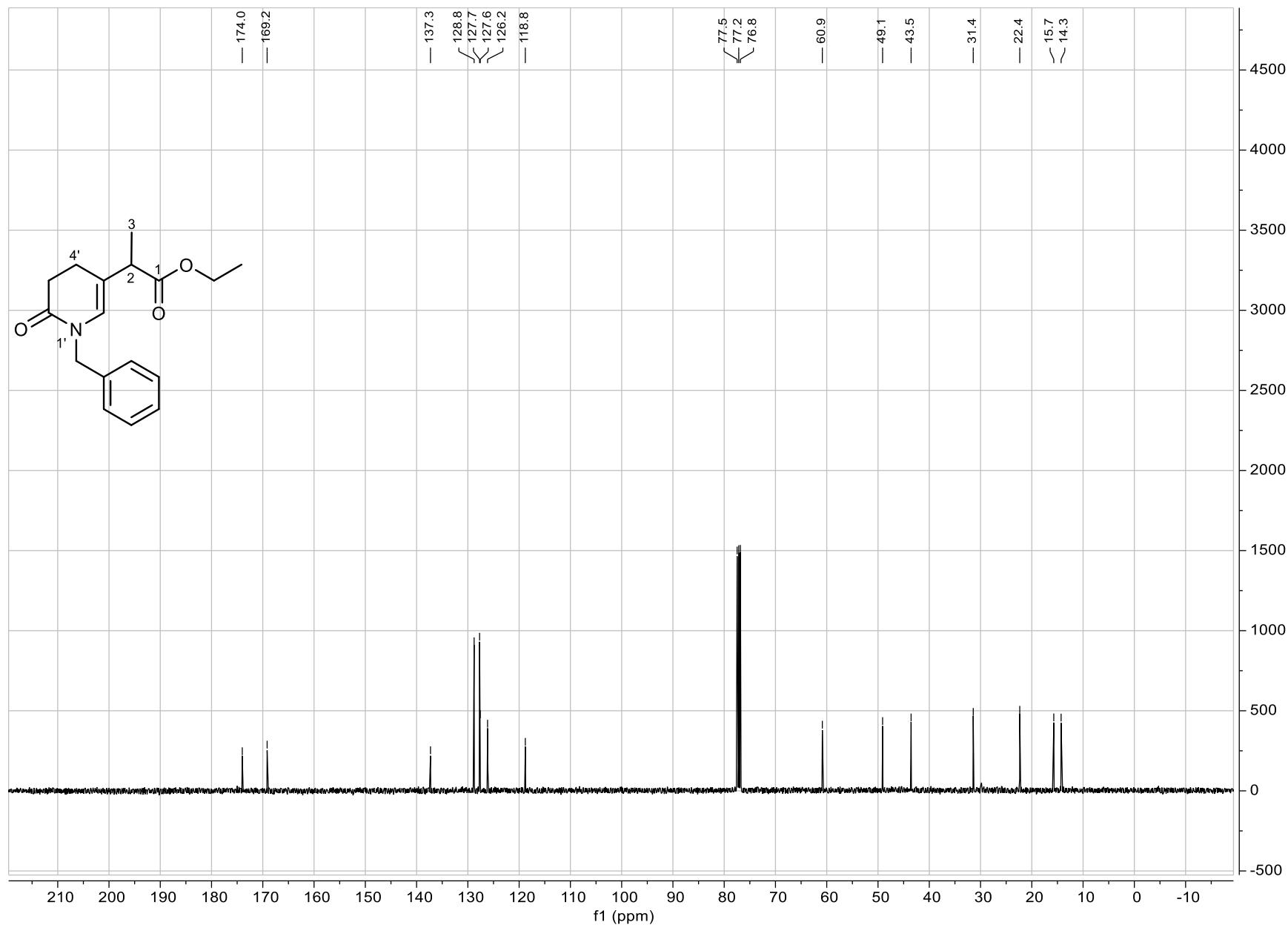
¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3r.

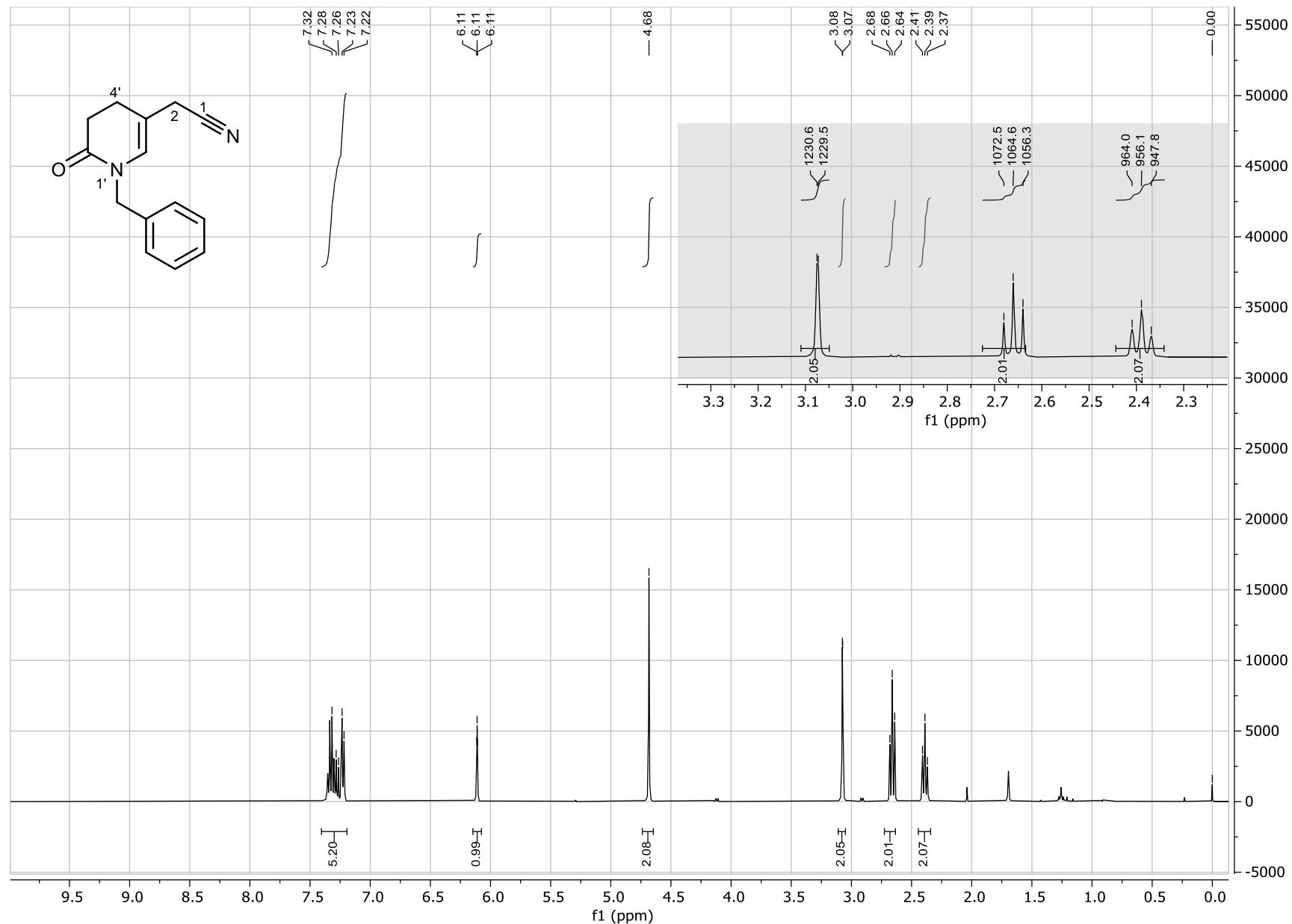
¹H NMR (400 MHz, CDCl₃/TMS) Spectrum of Compound 3s.

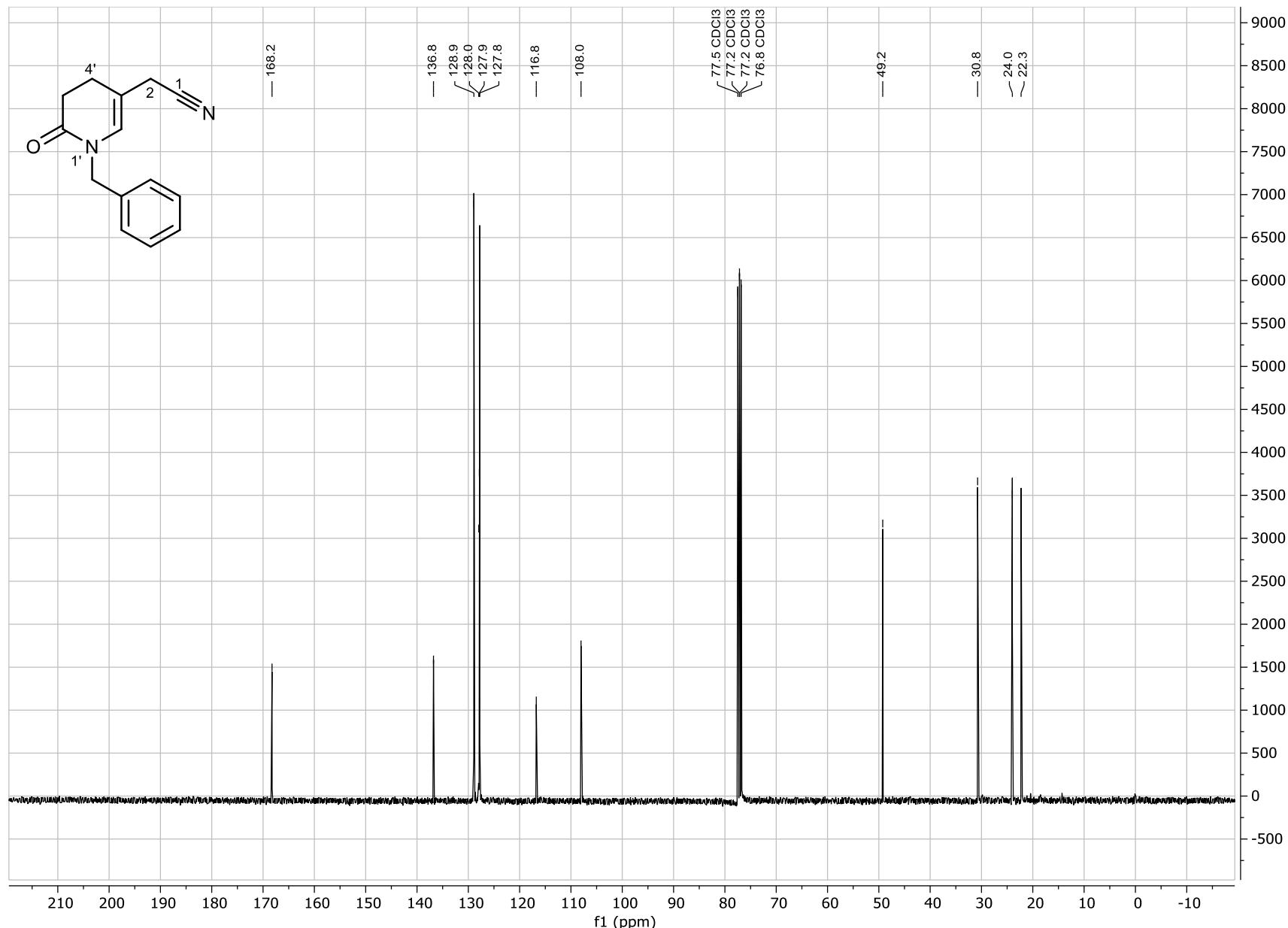


¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3s.

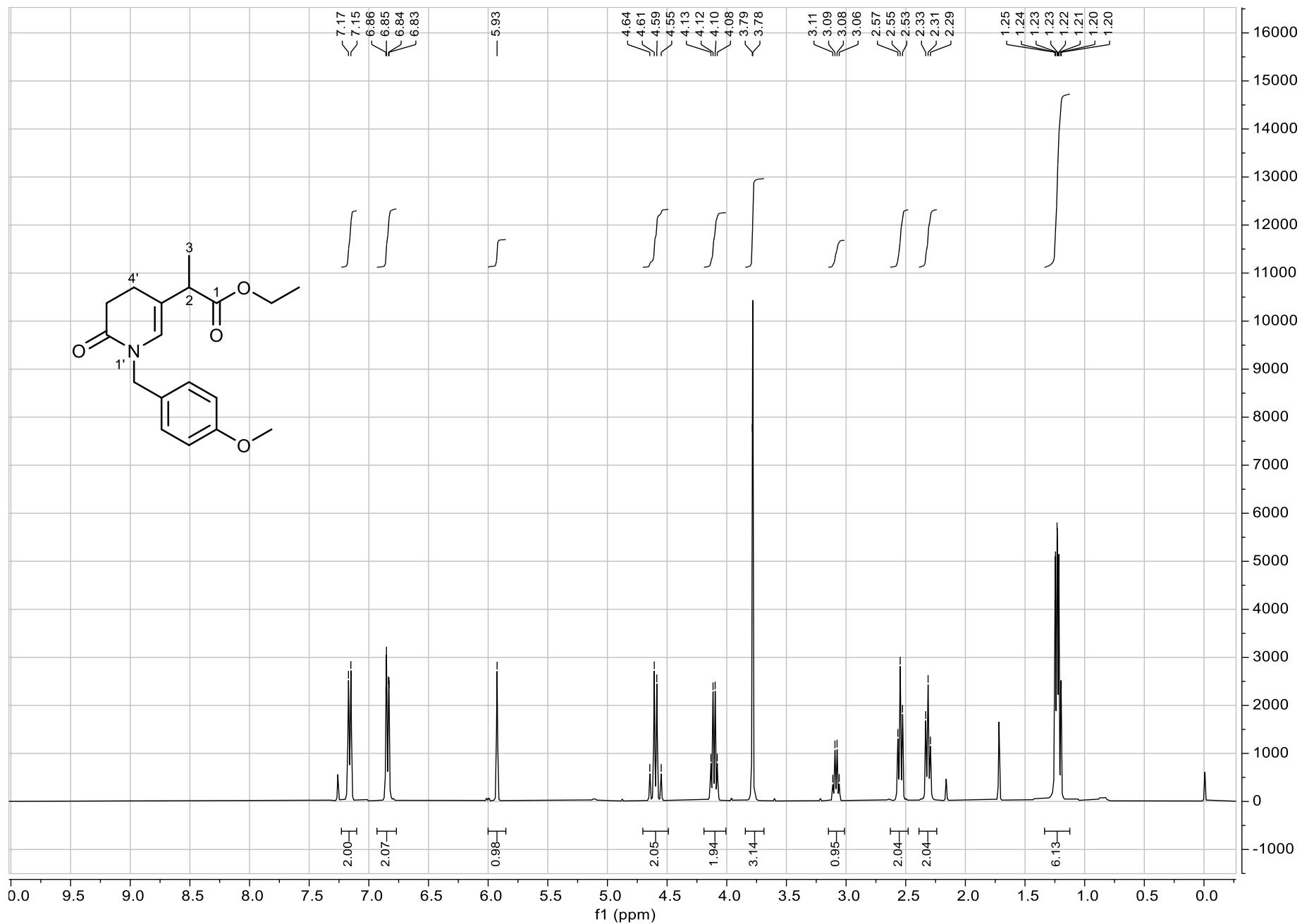
^1H NMR (400 MHz, CDCl₃/TMS) Spectrum of Compound 3t.

¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3t.

^1H NMR (400 MHz, CDCl_3/TMS) Spectrum of Compound 3u.

¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3u.

^1H NMR (400 MHz, CDCl_3) Spectrum of Compound 3v.



¹³C NMR (101 MHz, CDCl₃) Spectrum of Compound 3v.