

APPENDIX 1

Spectra Relevant to Chapter 1:

*Photoinduced, Copper-Catalyzed Alkylation of Amides with Unactivated
Secondary Alkyl Halides at Room Temperature*

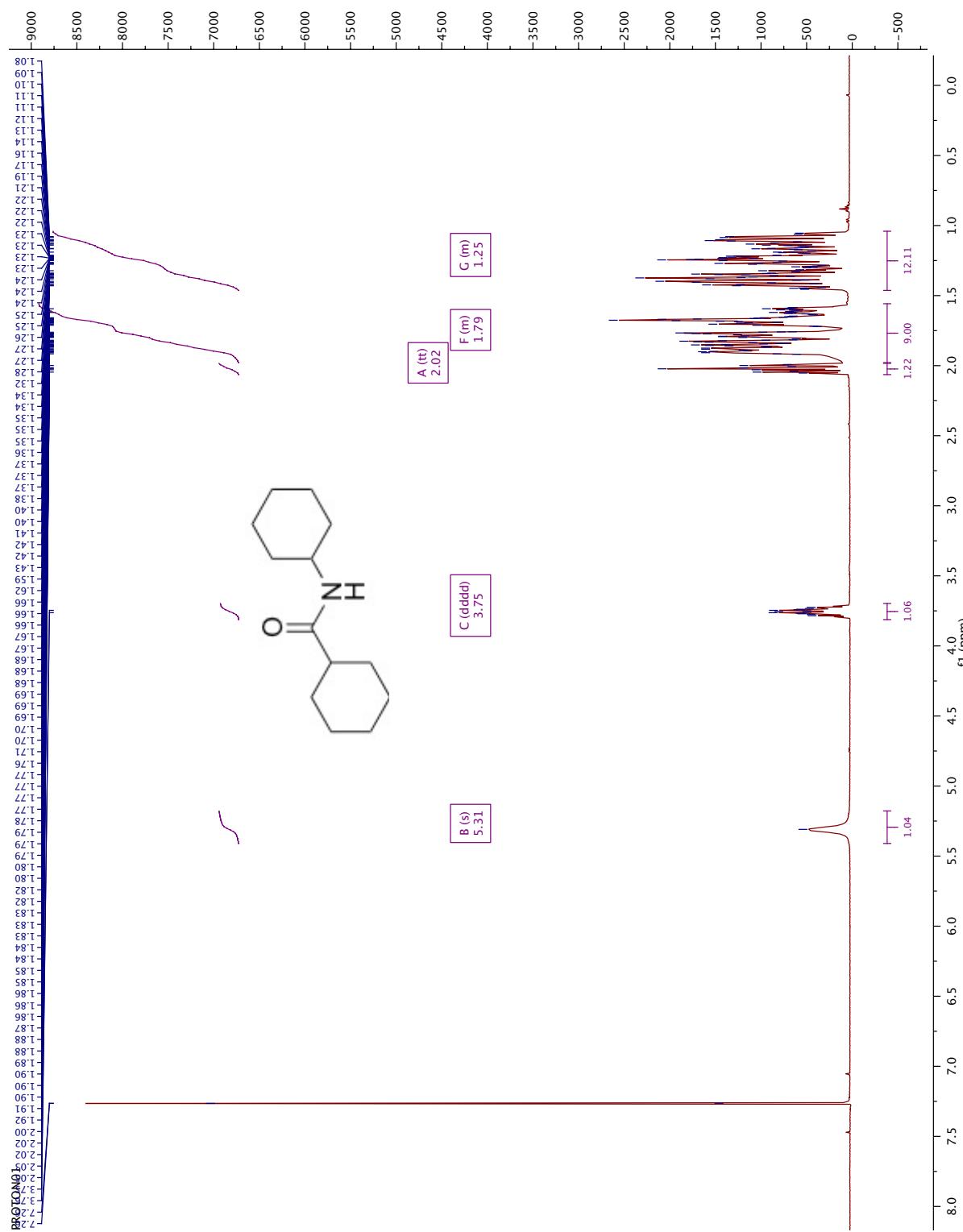
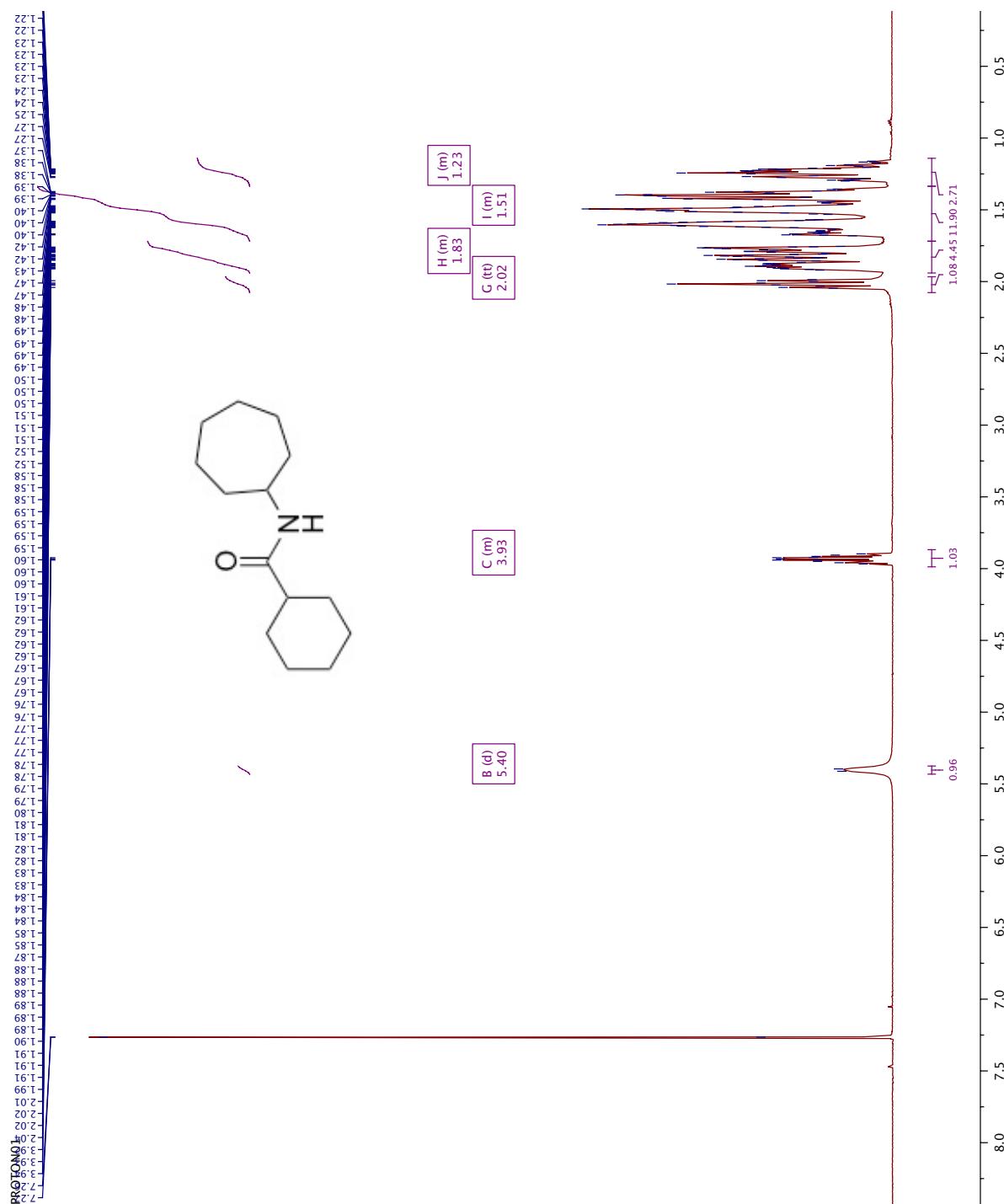
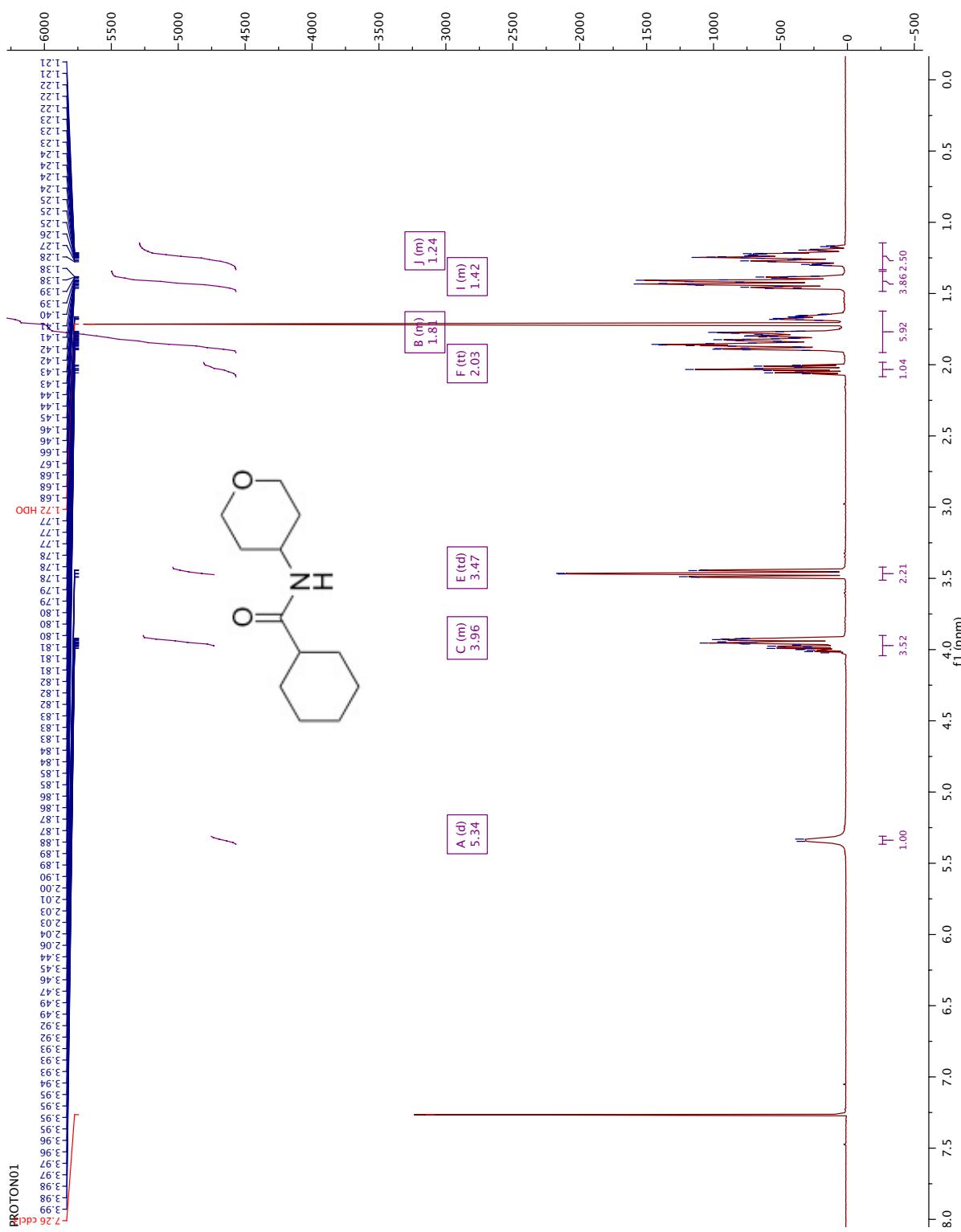


Figure A1.1. ^1H NMR (500 MHz, CDCl_3) of compound **26a**.

Figure A1.2. ^1H NMR (500 MHz, CDCl_3) of compound 26b.

Figure A1.3. ^1H NMR (500 MHz, CDCl_3) of compound 26c.

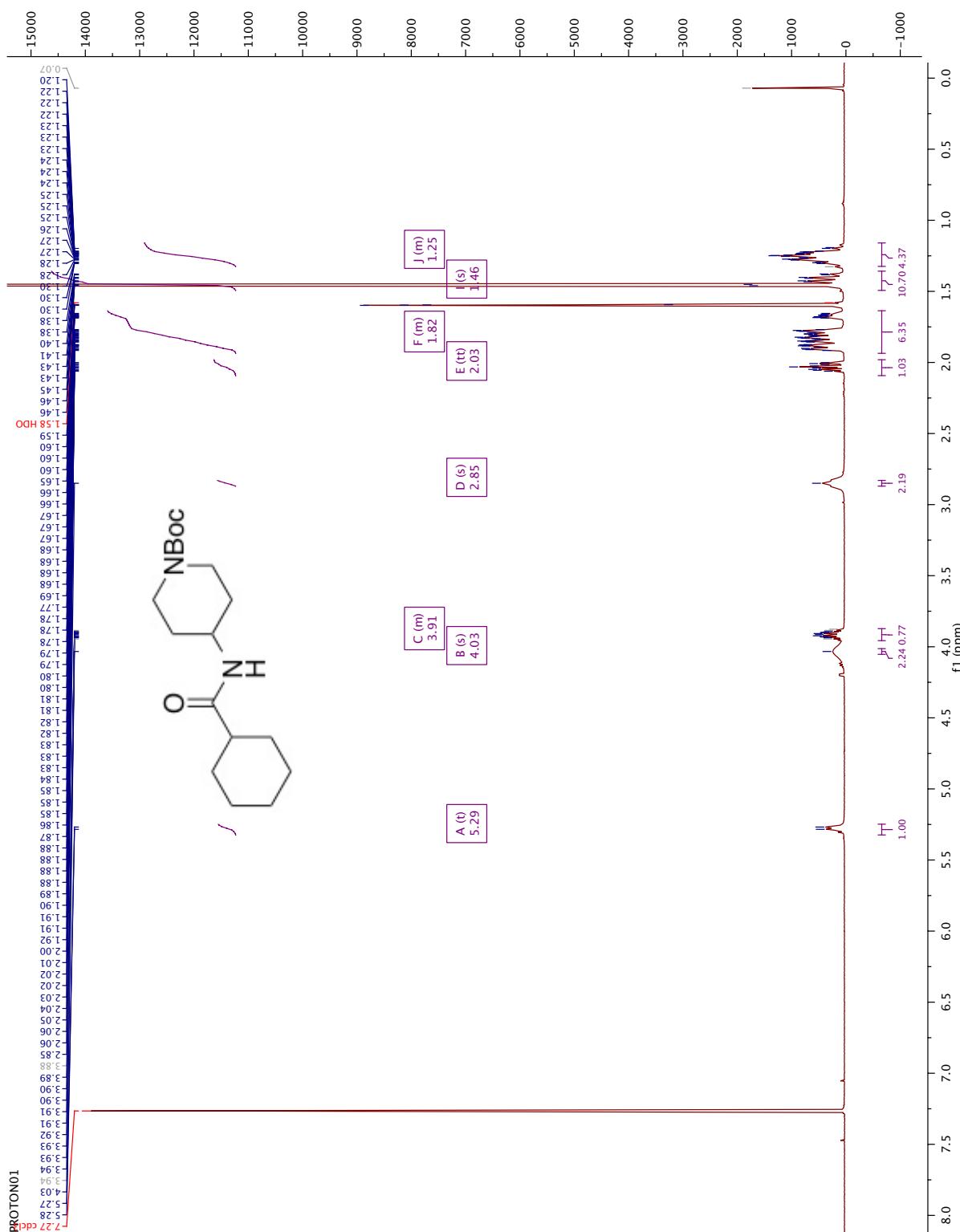


Figure A1.4. ^1H NMR (500 MHz, CDCl_3) of compound 26d.

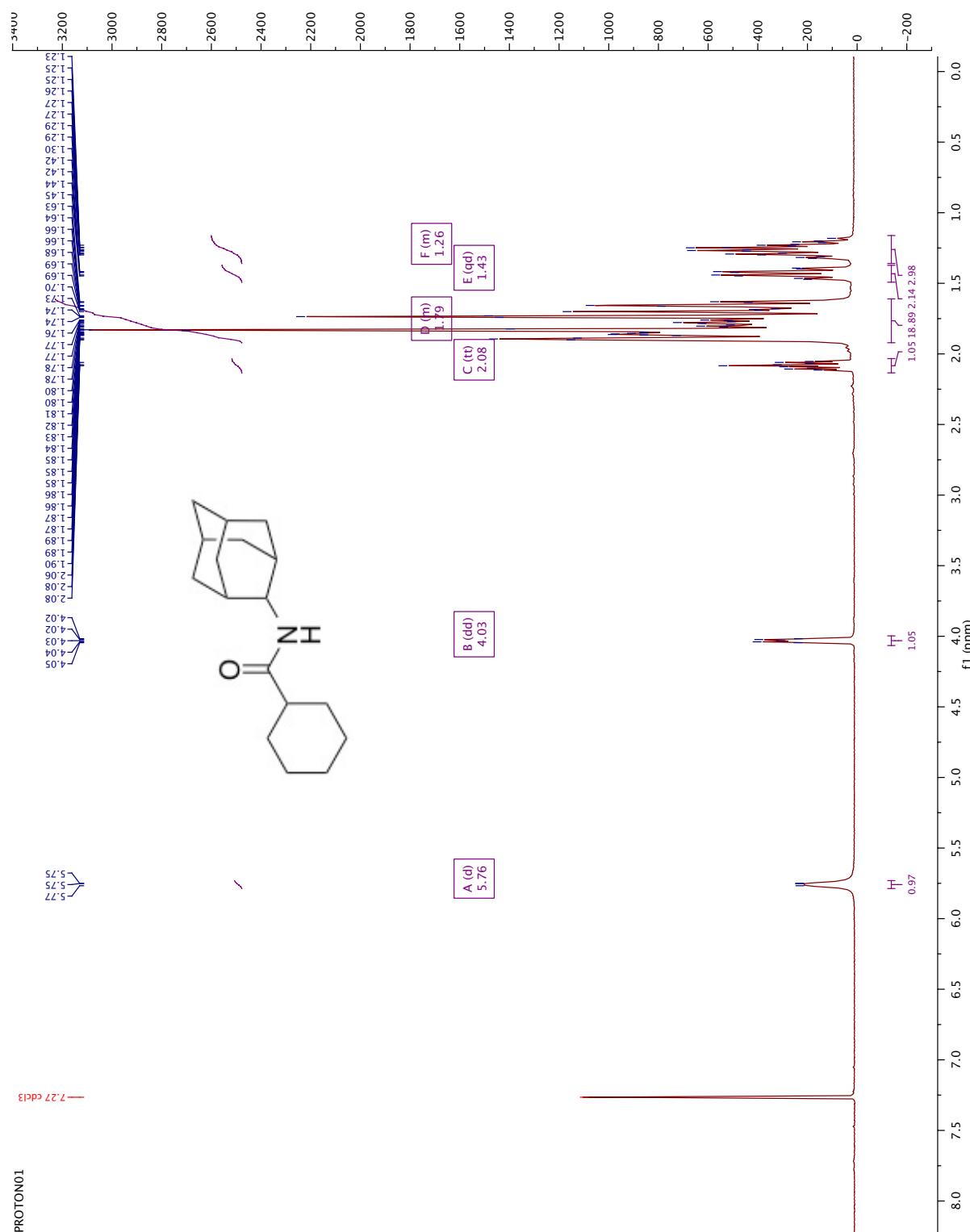
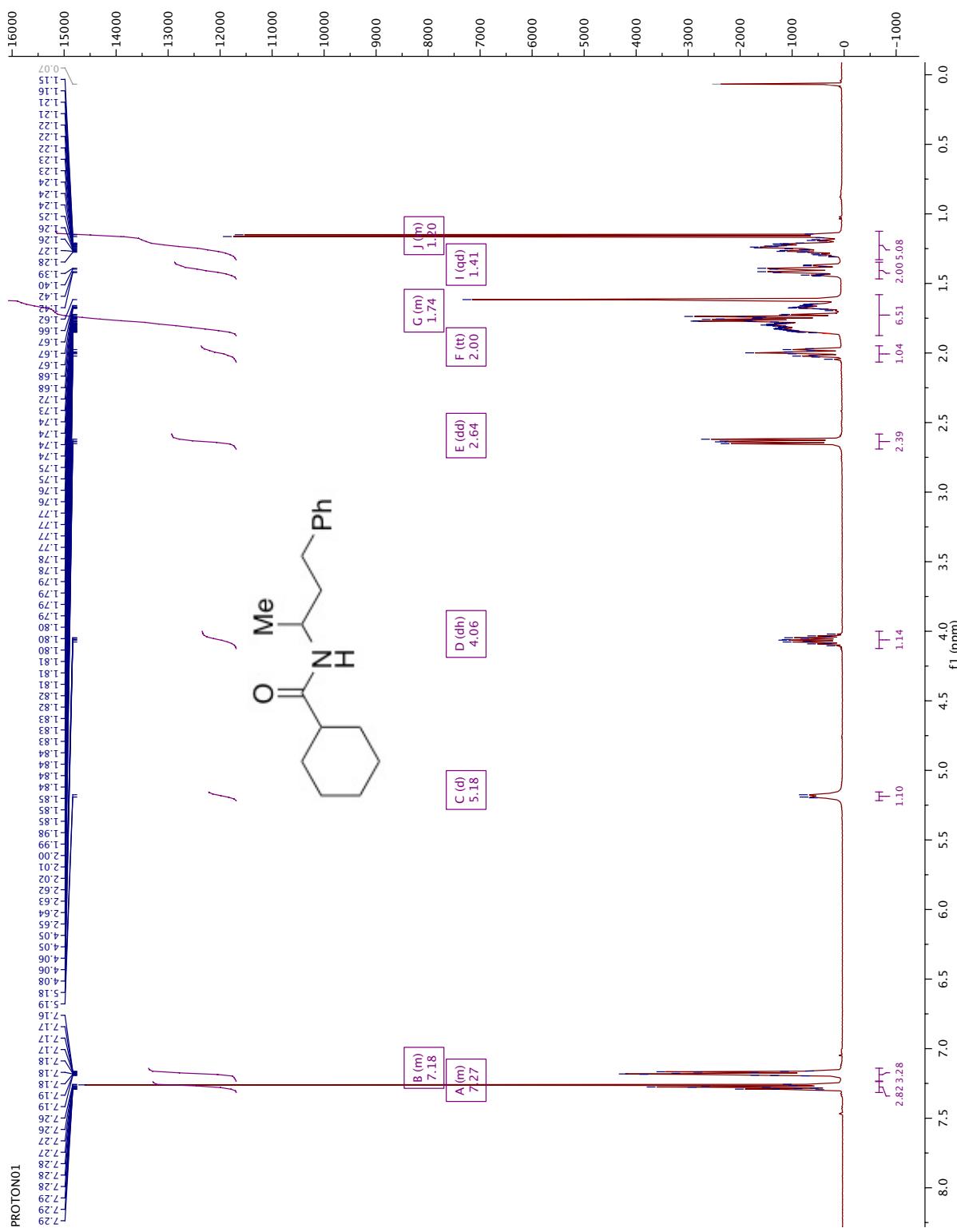
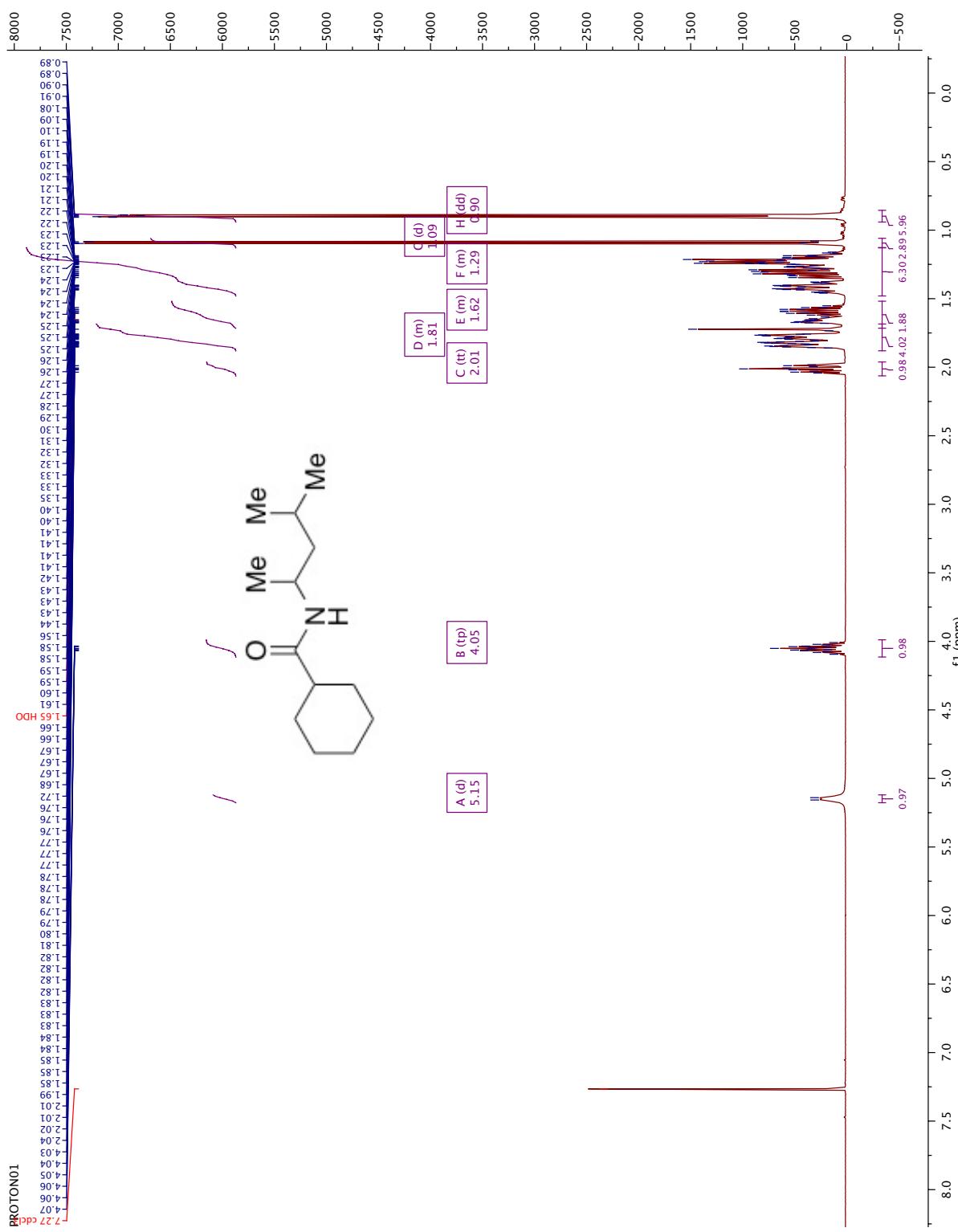


Figure A1.5. ^1H NMR (500 MHz, CDCl_3) of compound 26e.

Figure A1.6. ^1H NMR (500 MHz, CDCl_3) of compound 26f.

Figure A1.7. ^1H NMR (500 MHz, CDCl_3) of compound 26g.

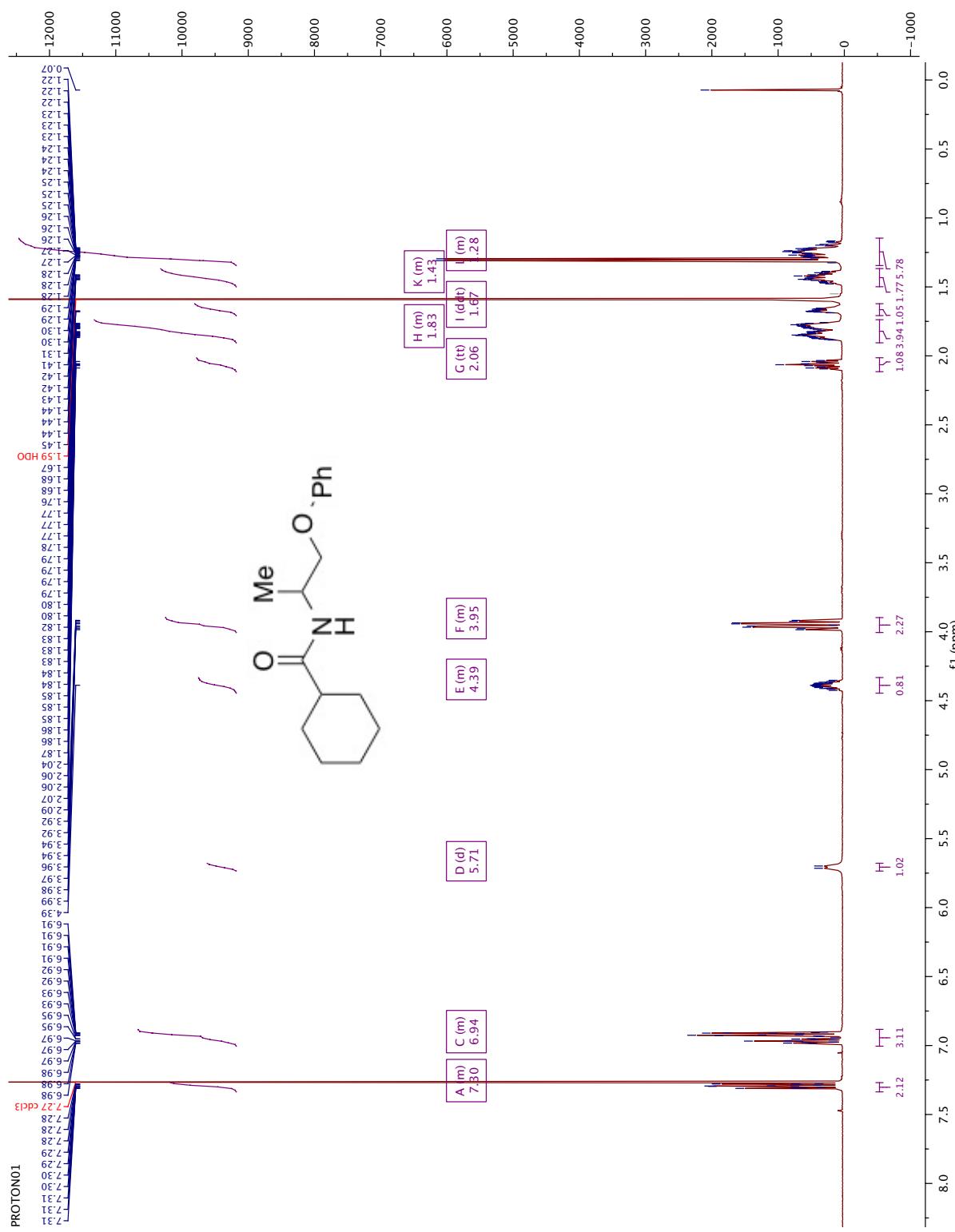
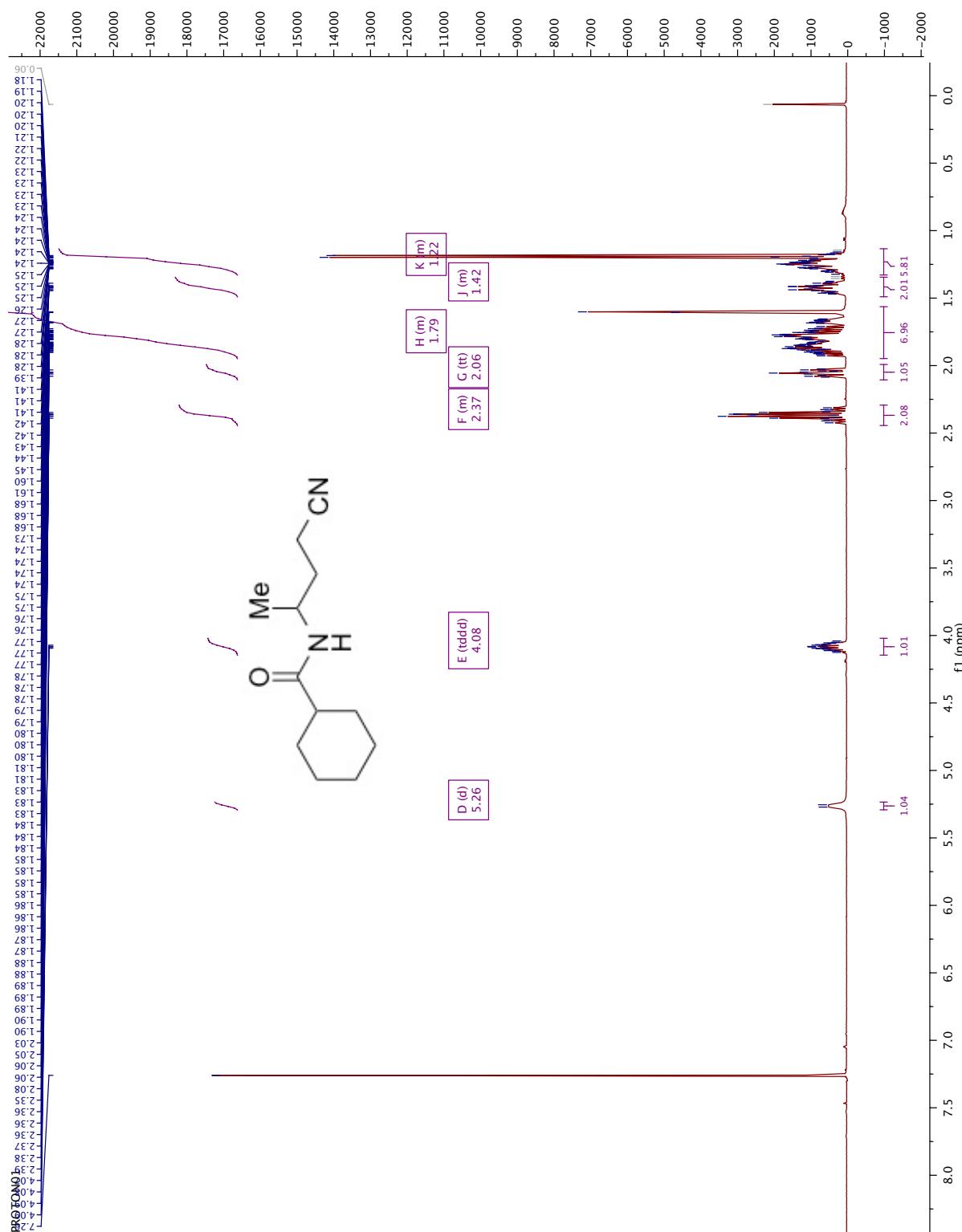


Figure A1.8. ^1H NMR (500 MHz, CDCl_3) of compound 26h.

Figure A1.9. ^1H NMR (500 MHz, CDCl_3) of compound 26i.

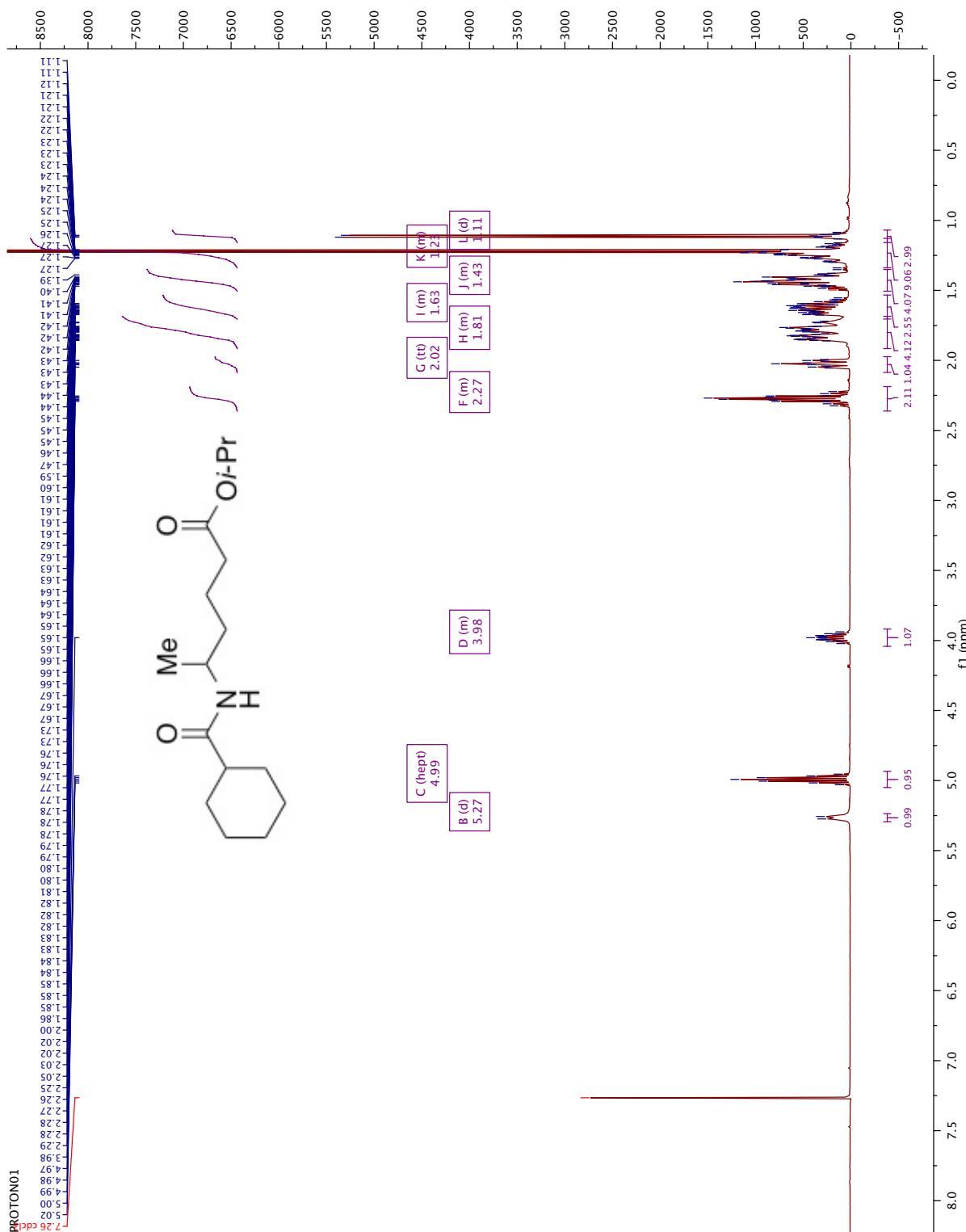
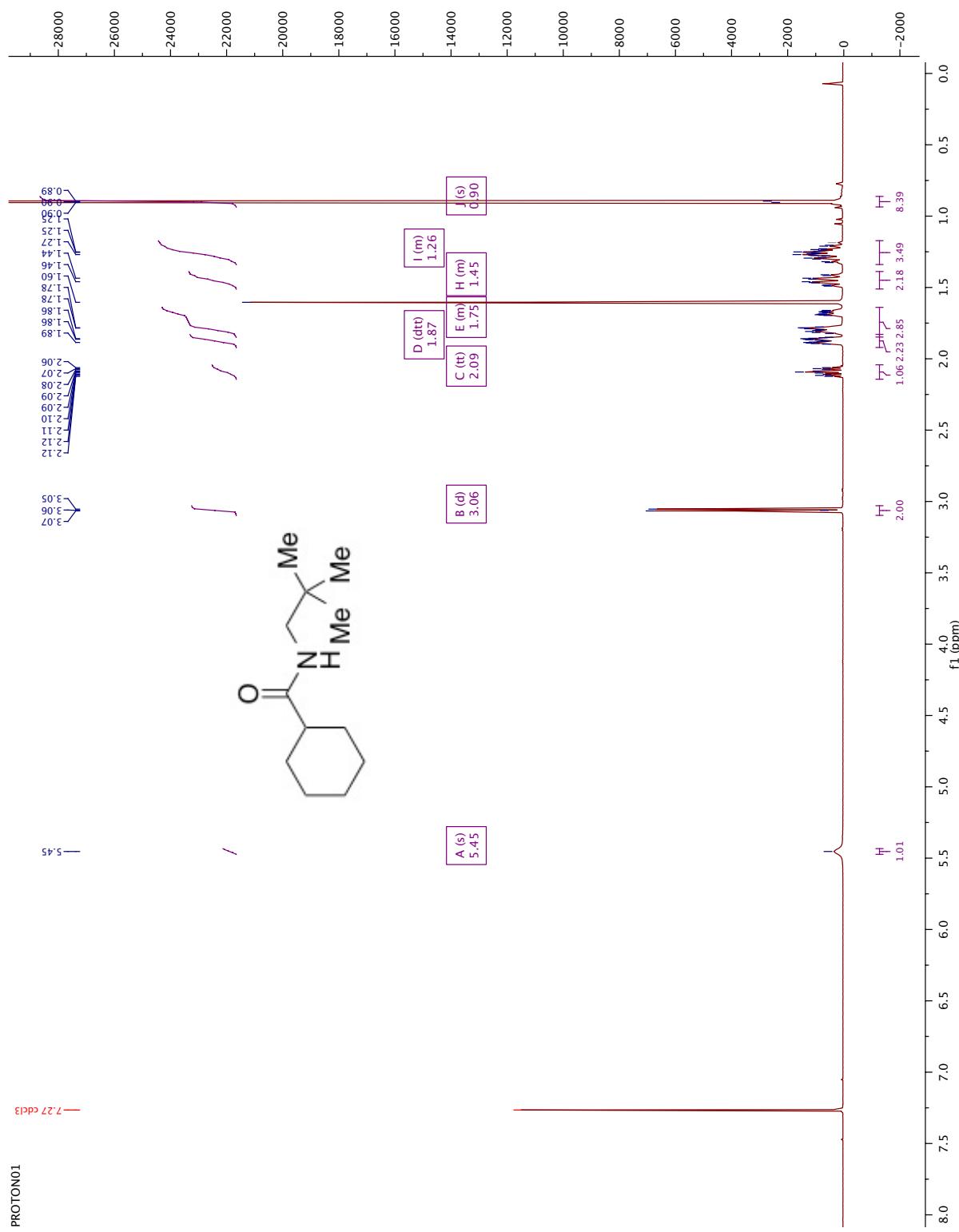
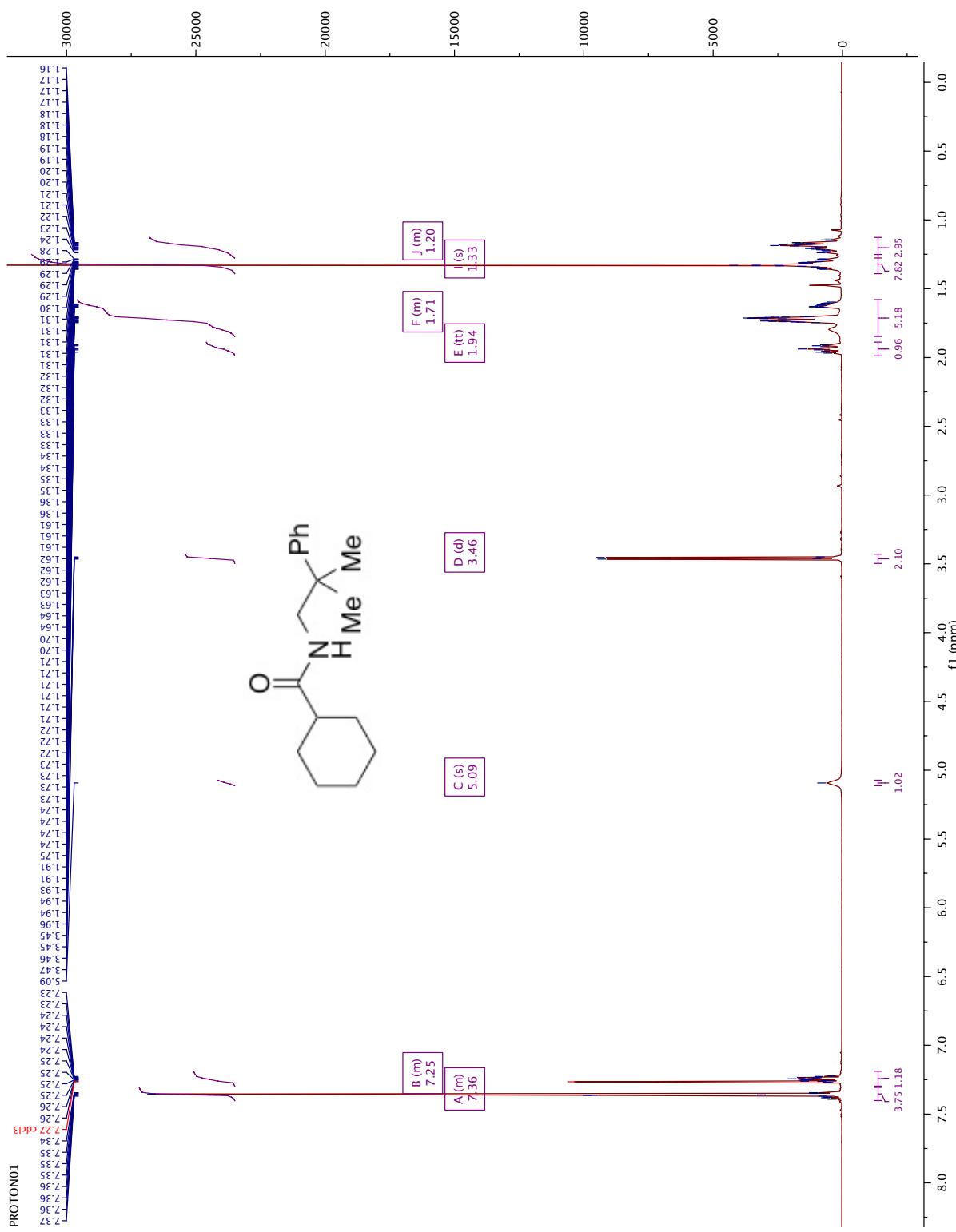
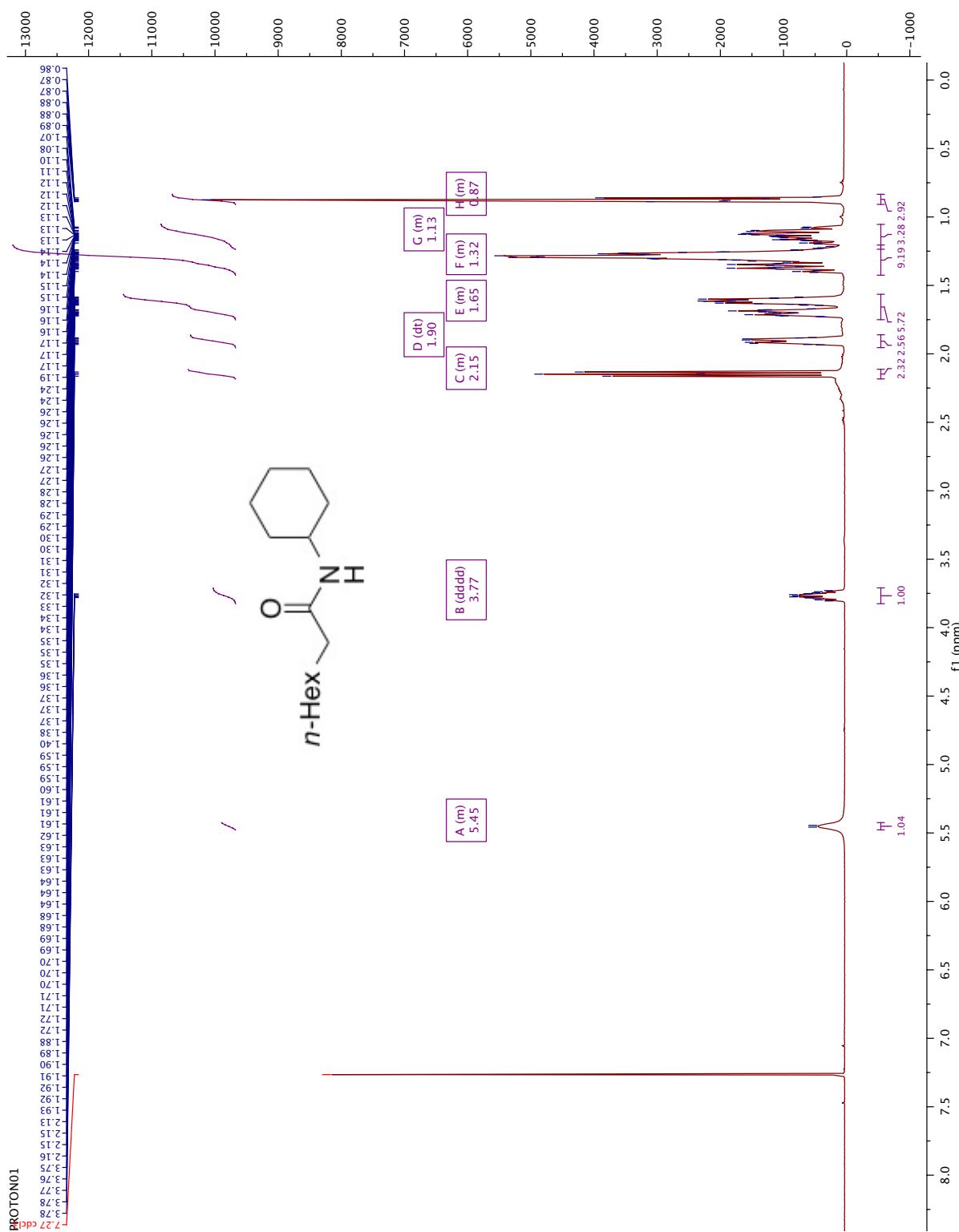
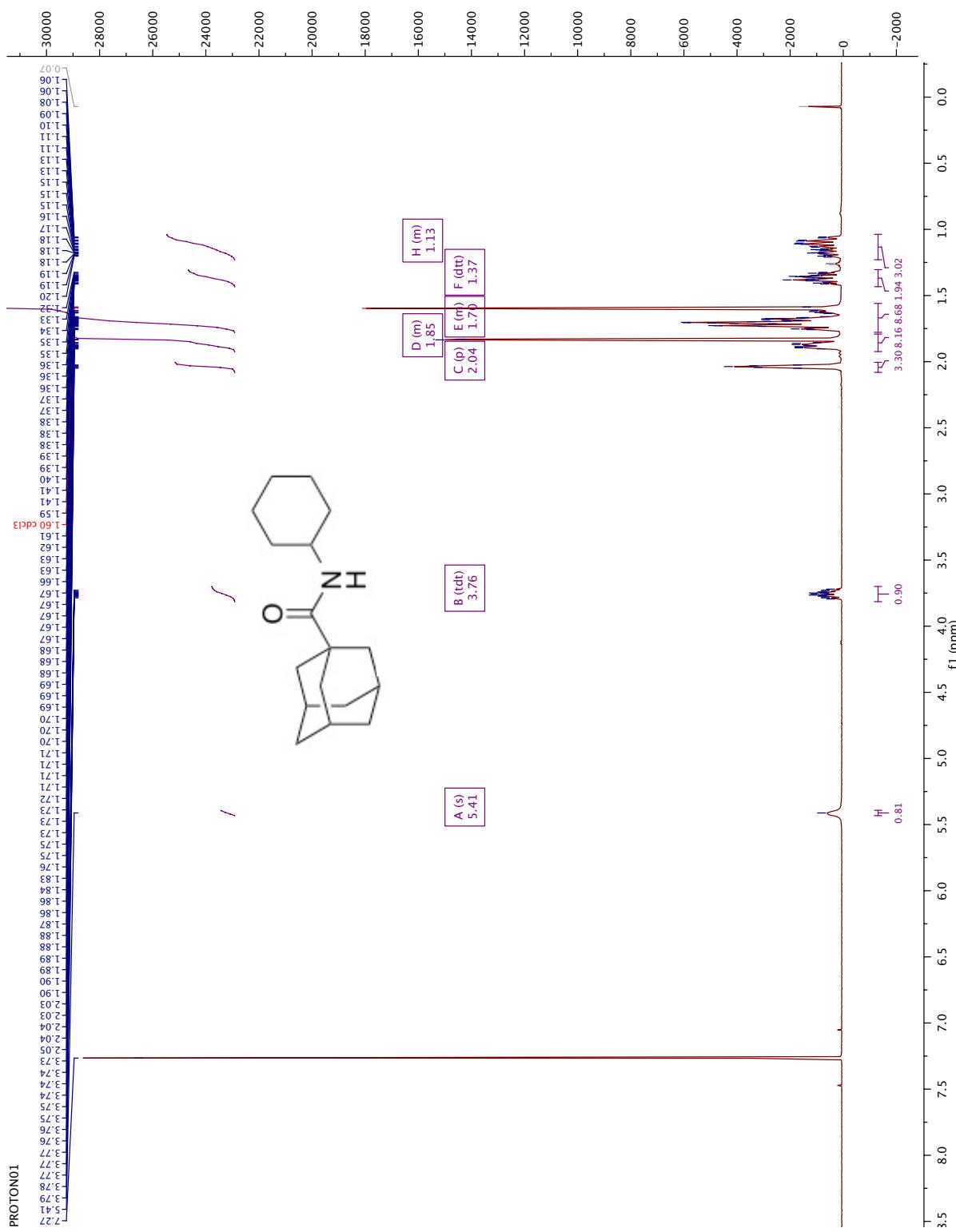


Figure A1.10. ^1H NMR (500 MHz, CDCl_3) of compound 2*j*.

Figure A1.11. ^1H NMR (500 MHz, CDCl_3) of compound 26k.

Figure A1.12. ^1H NMR (500 MHz, CDCl_3) of compound 26l.

Figure A1.13. ^1H NMR (500 MHz, CDCl_3) of compound 26m.

Figure A1.14. ^1H NMR (500 MHz, CDCl_3) of compound 26n.

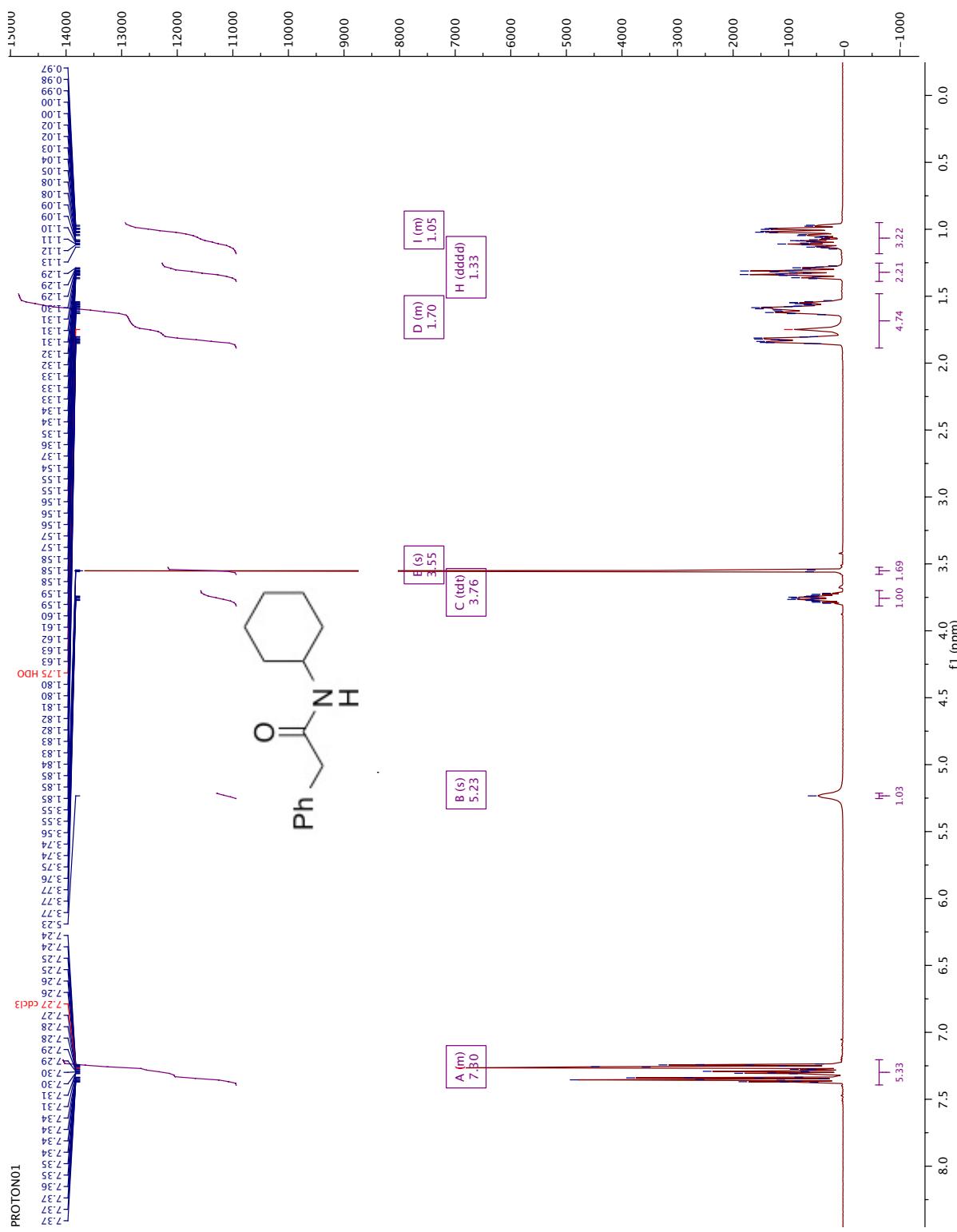


Figure A1.15. ^1H NMR (500 MHz, CDCl_3) of compound **26o**.

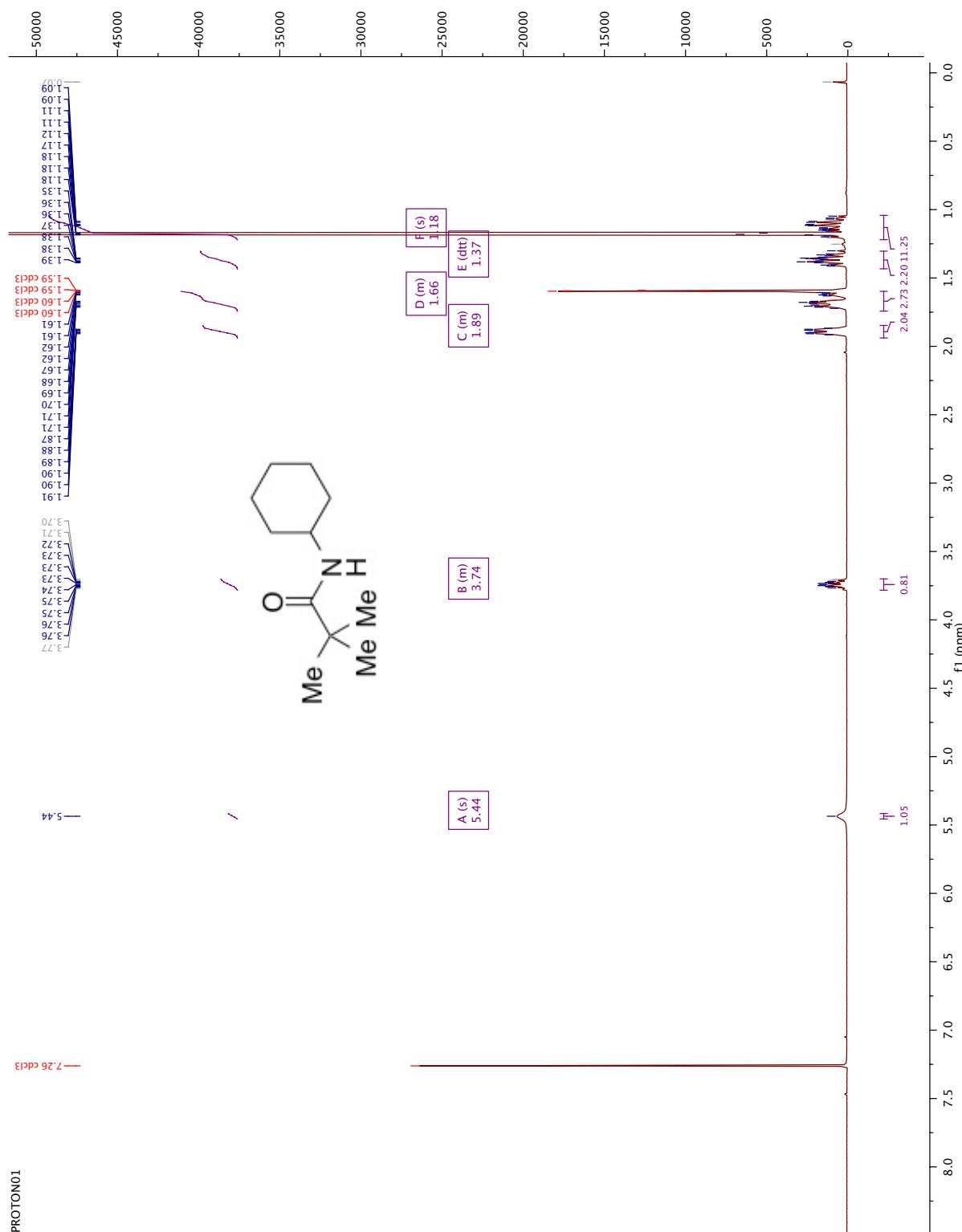
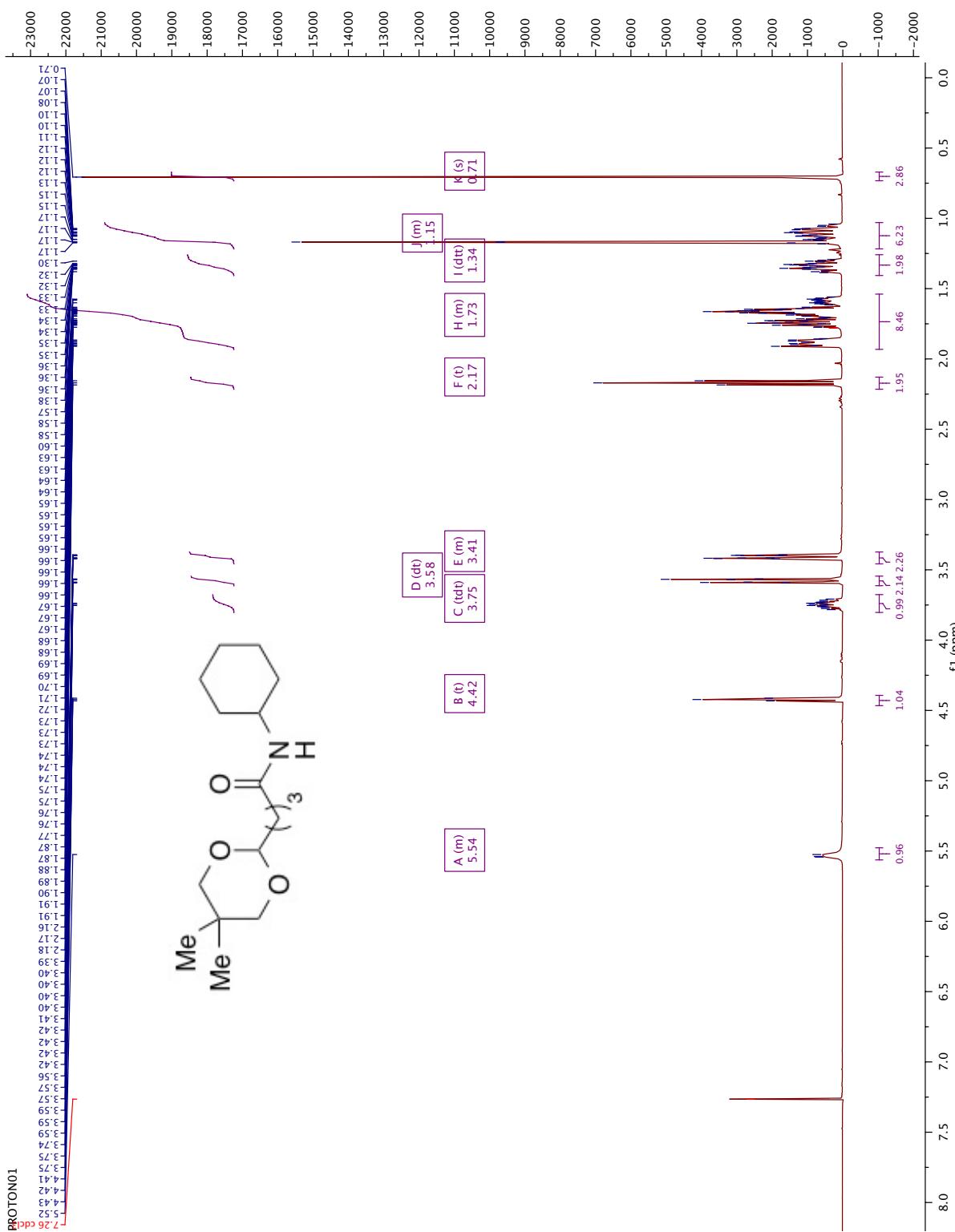


Figure A1.16. ^1H NMR (500 MHz, CDCl_3) of compound 26p.

Figure A1.17. ^1H NMR (500 MHz, CDCl_3) of compound 26q.

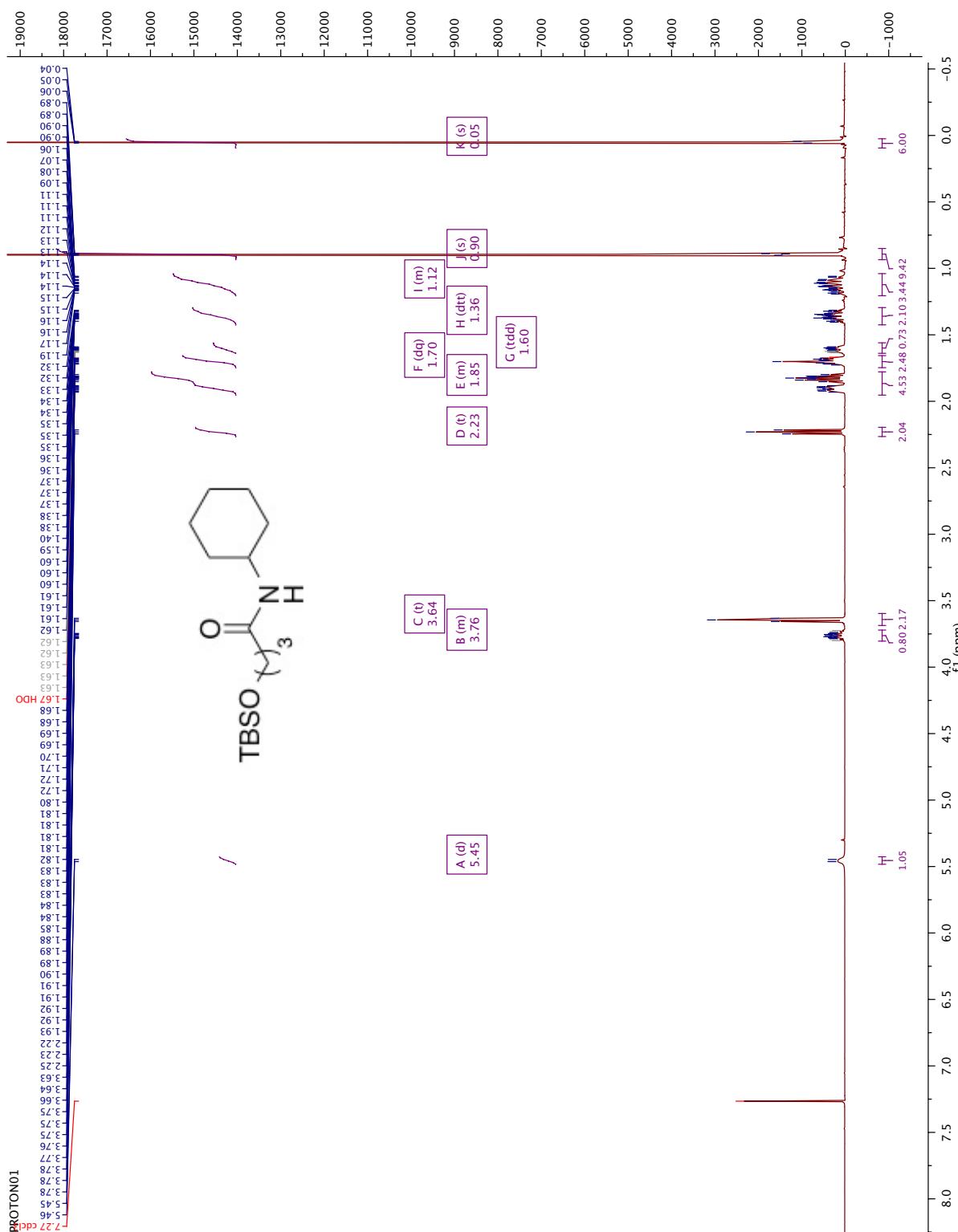
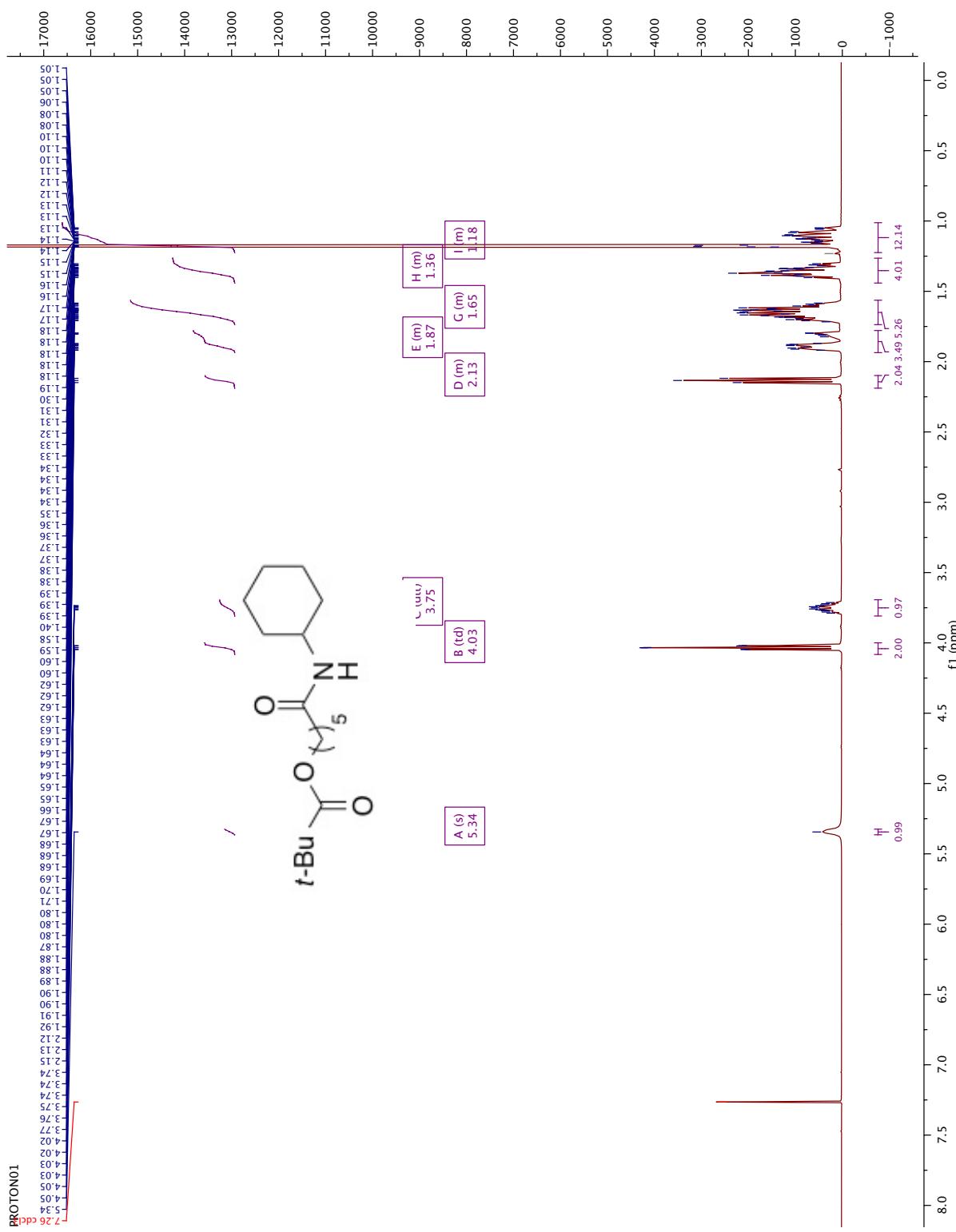
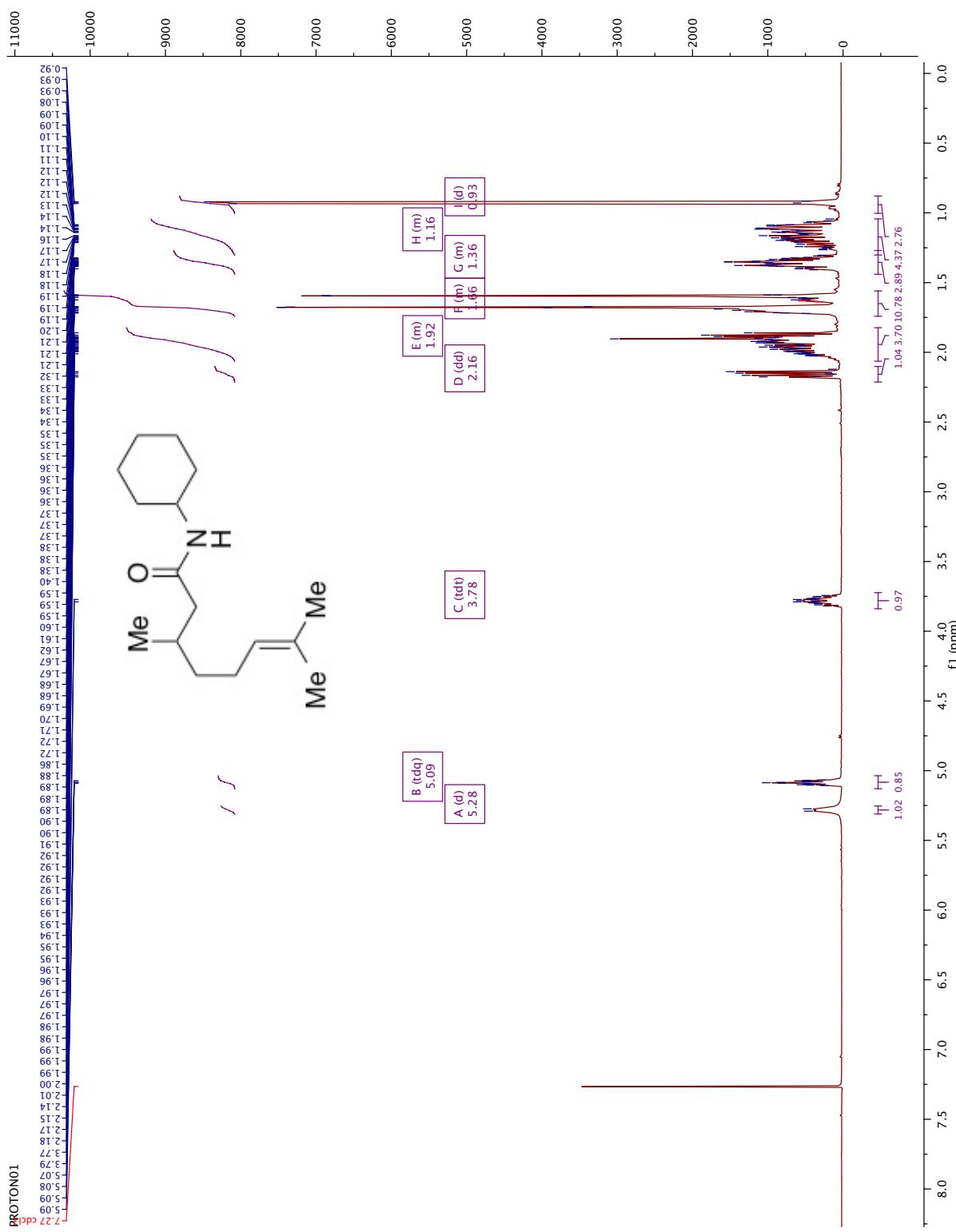


Figure A1.18. ^1H NMR (500 MHz, CDCl_3) of compound **26r**.

Figure A1.19. ^1H NMR (500 MHz, CDCl_3) of compound **26s**.

Figure A1.20. ^1H NMR (500 MHz, CDCl_3) of compound 26t.

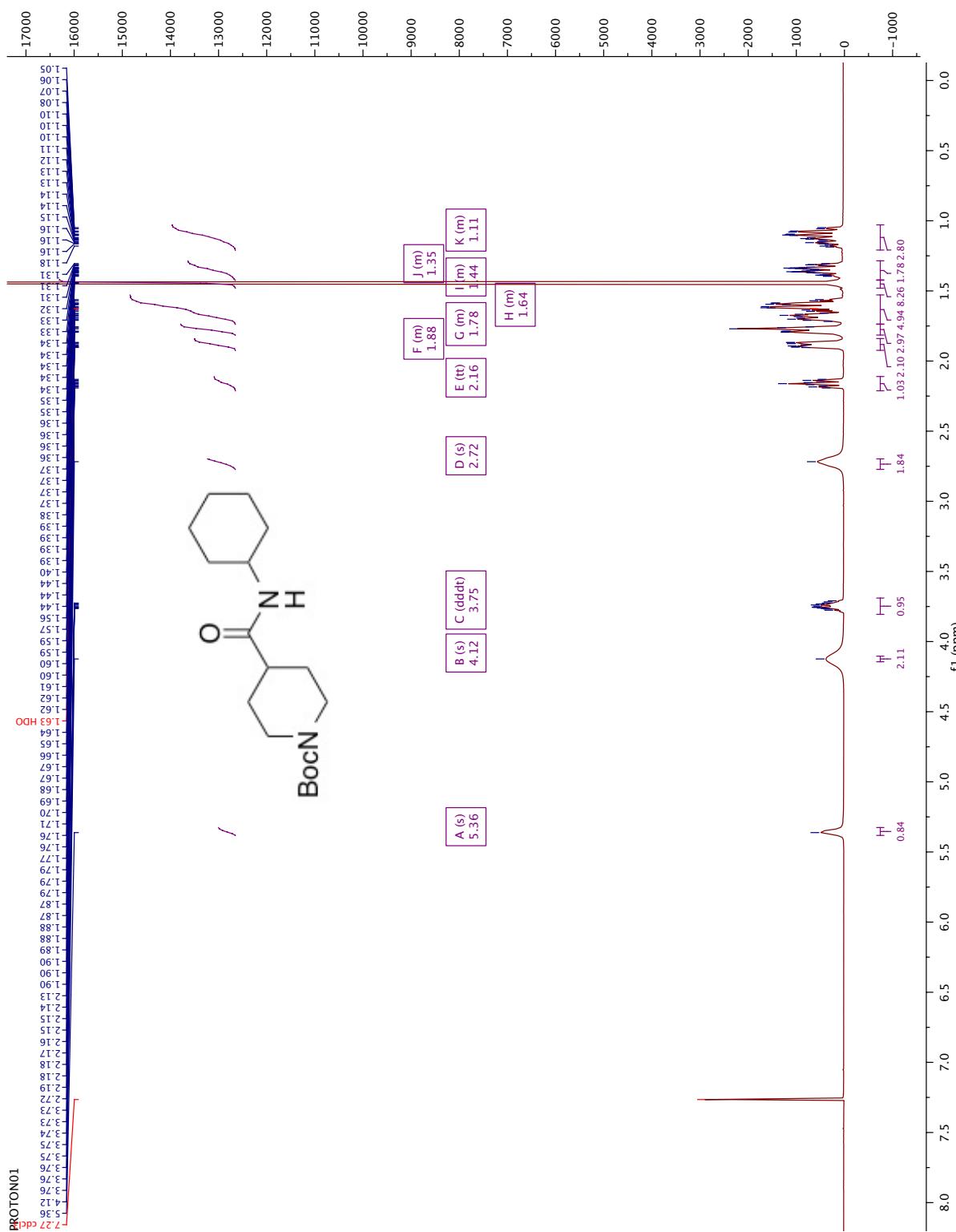


Figure A.21. ^1H NMR (500 MHz, CDCl_3) of compound **26u**.

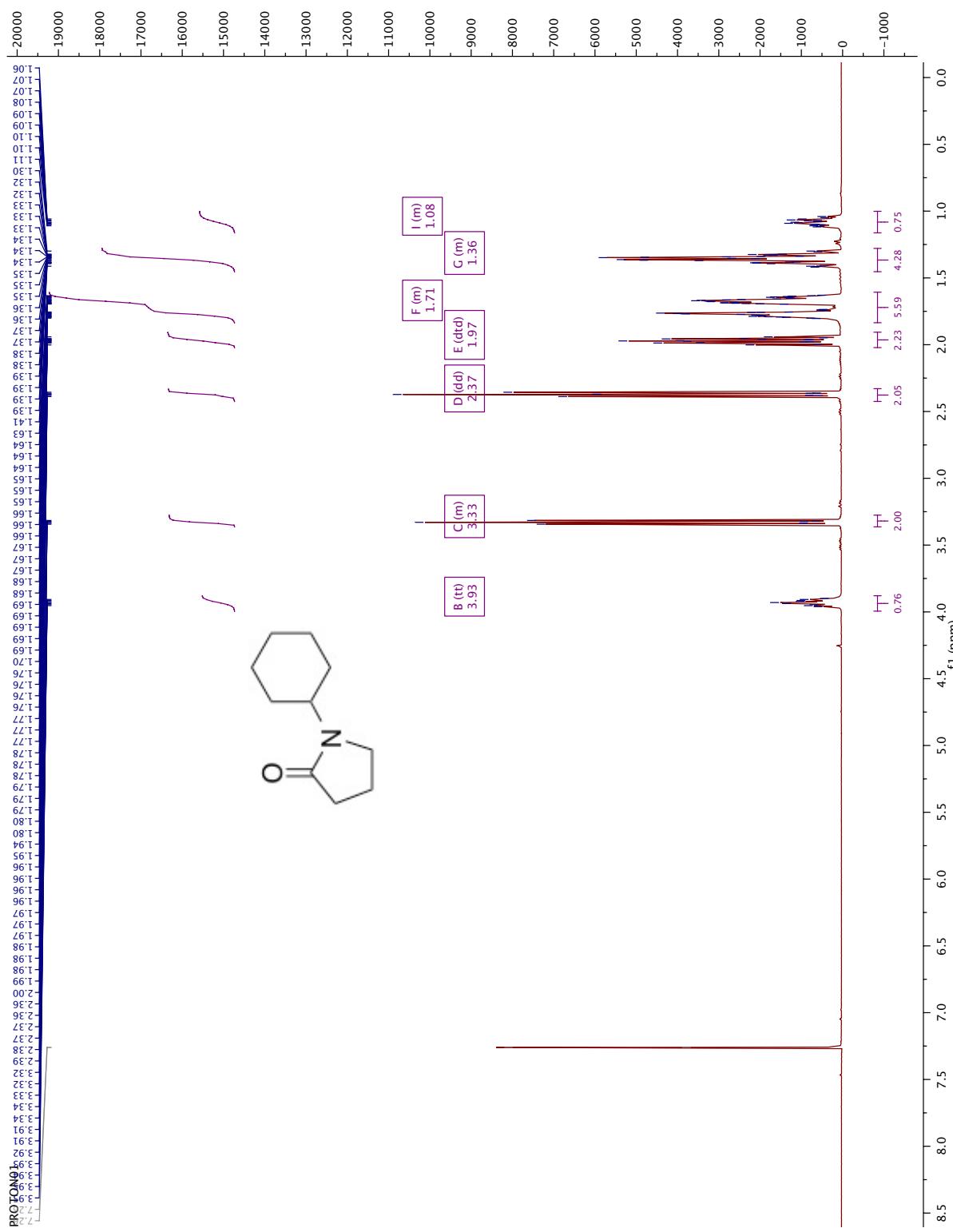


Figure A1.22. ^1H NMR (500 MHz, CDCl_3) of compound 29a.

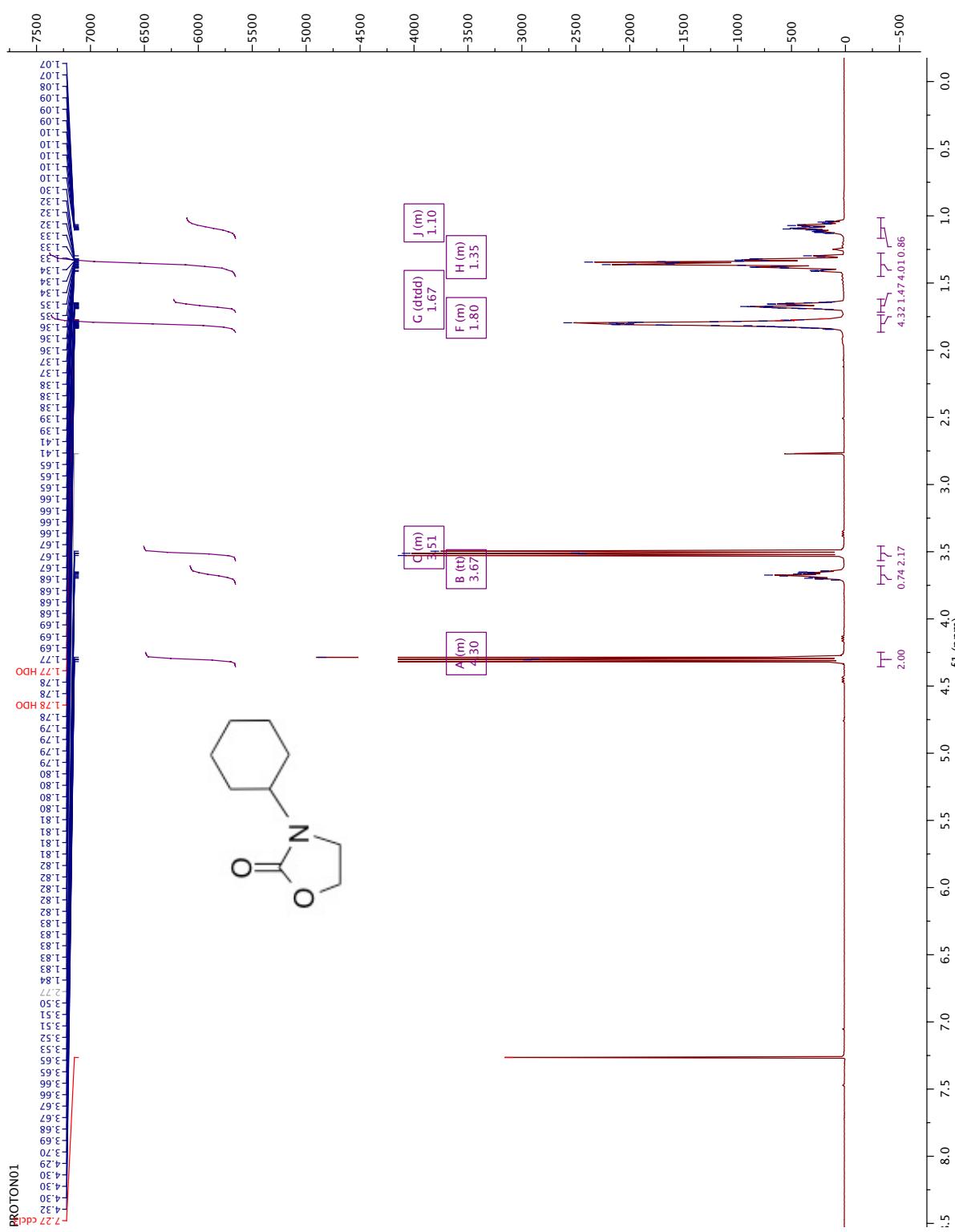
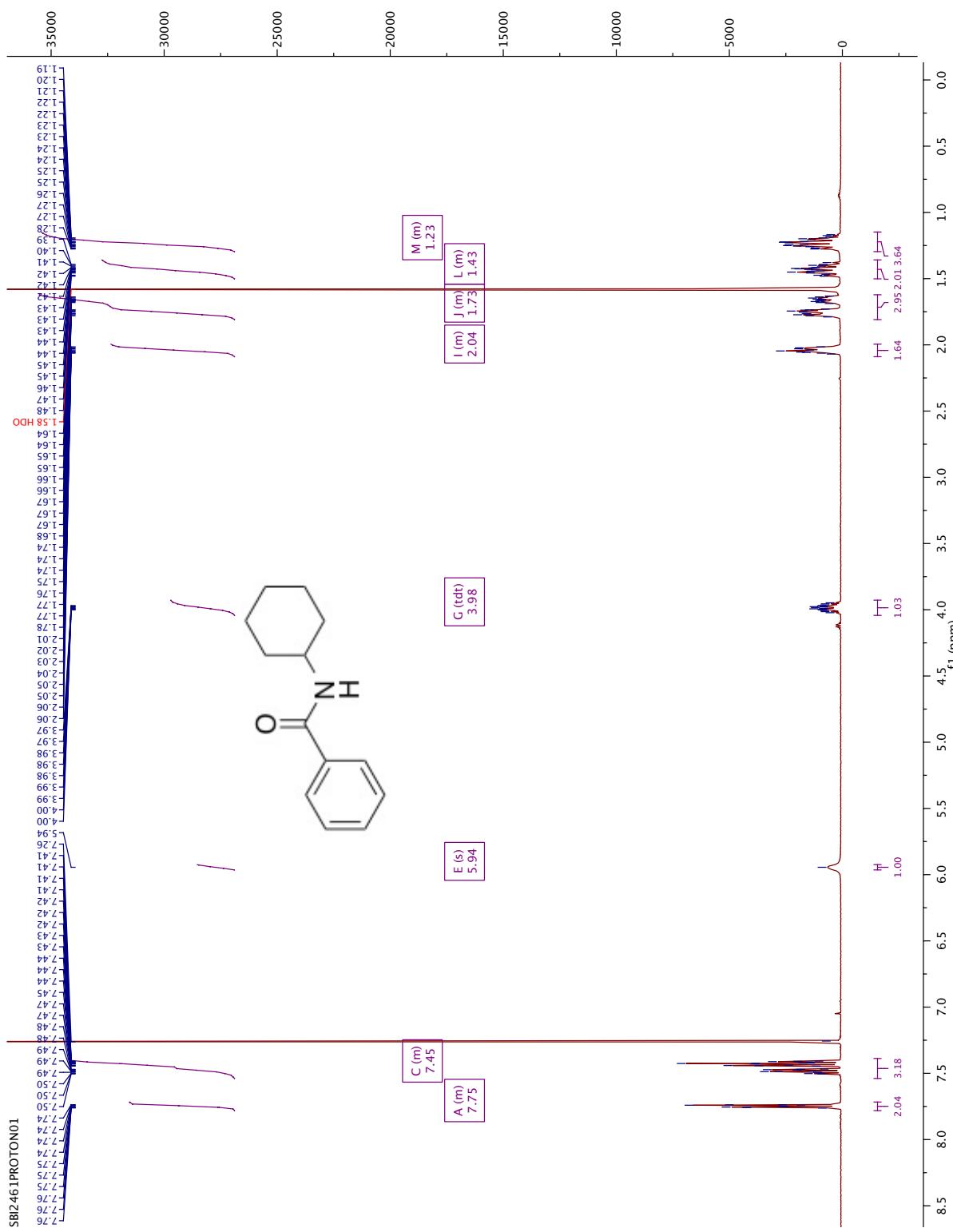
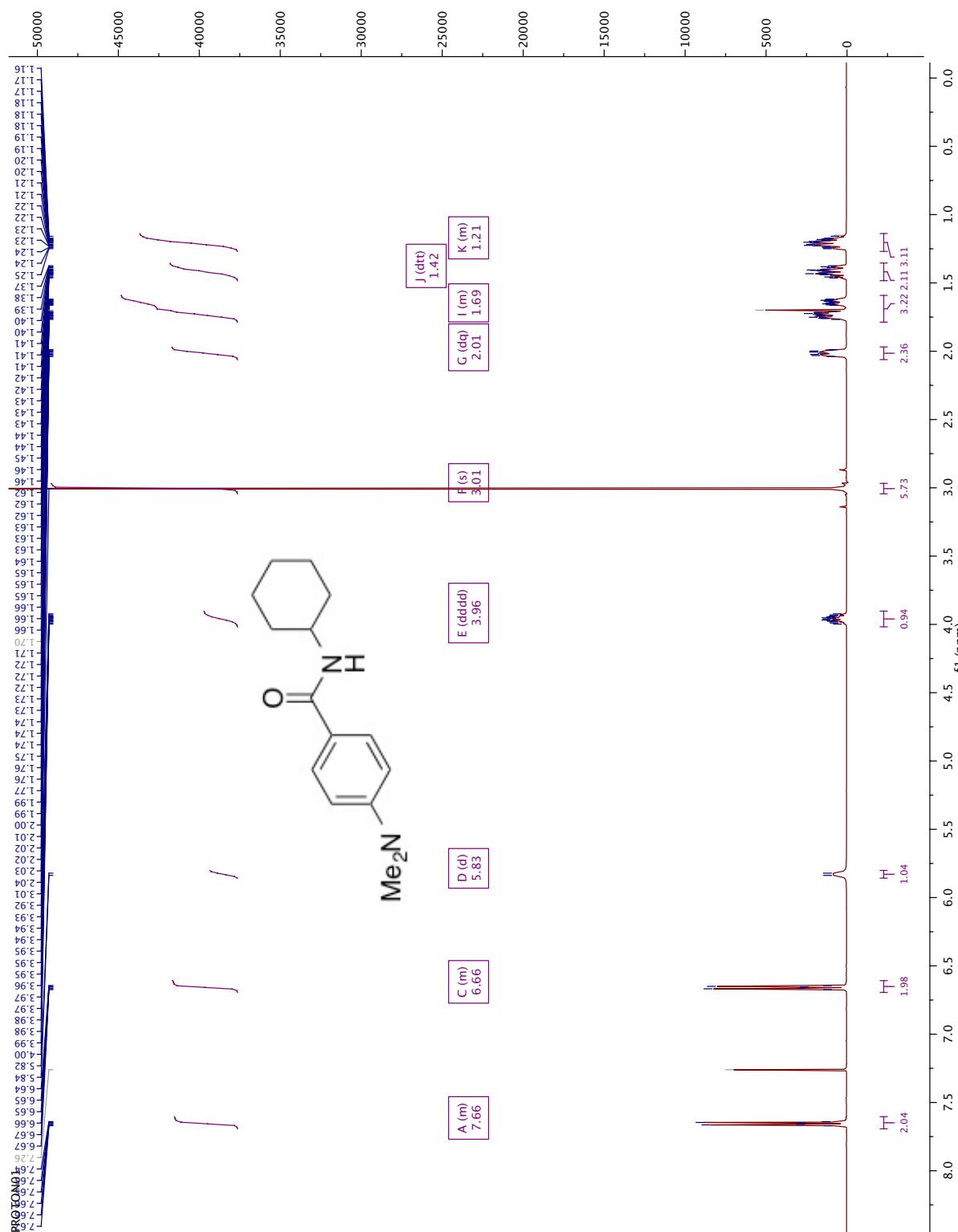


Figure A1.23. ^1H NMR (500 MHz, CDCl_3) of compound 29b.

Figure A1.24. ^1H NMR (500 MHz, CDCl_3) of compound 31a.

Figure A1.25. ^1H NMR (500 MHz, CDCl_3) of compound 31b.

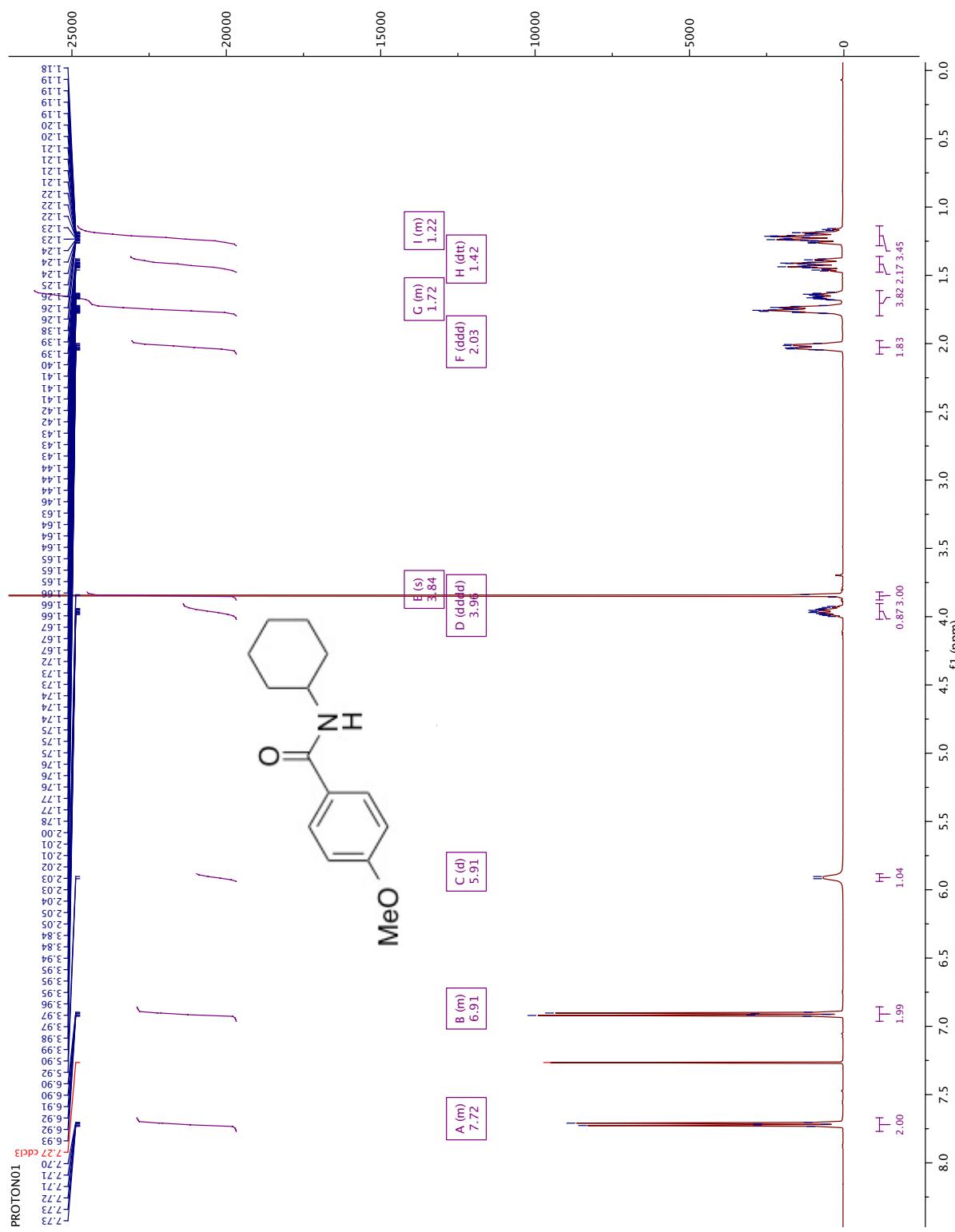


Figure A1.26. ^1H NMR (500 MHz, CDCl_3) of compound 31c.

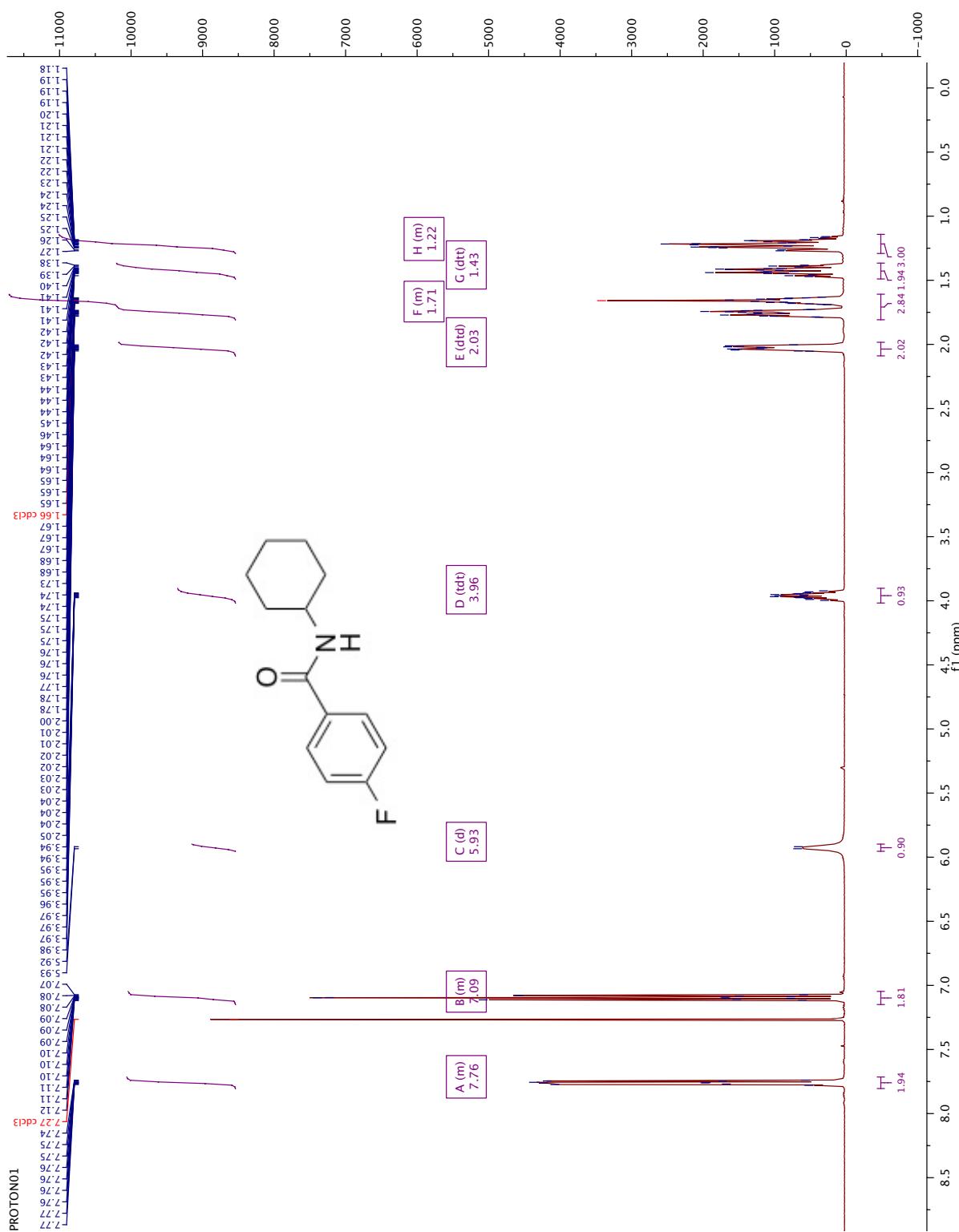


Figure A1.27. ^1H NMR (500 MHz, CDCl_3) of compound 31d.

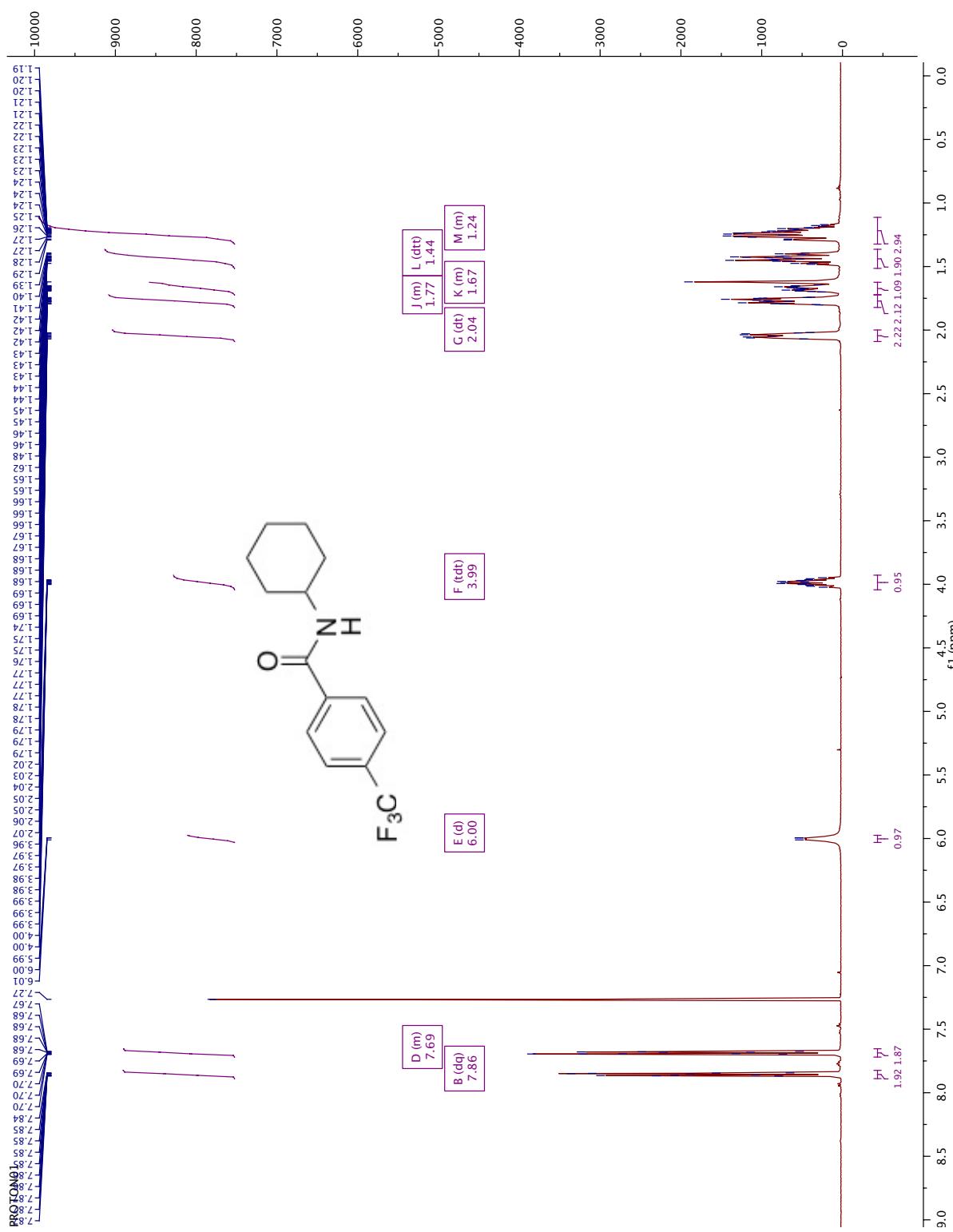
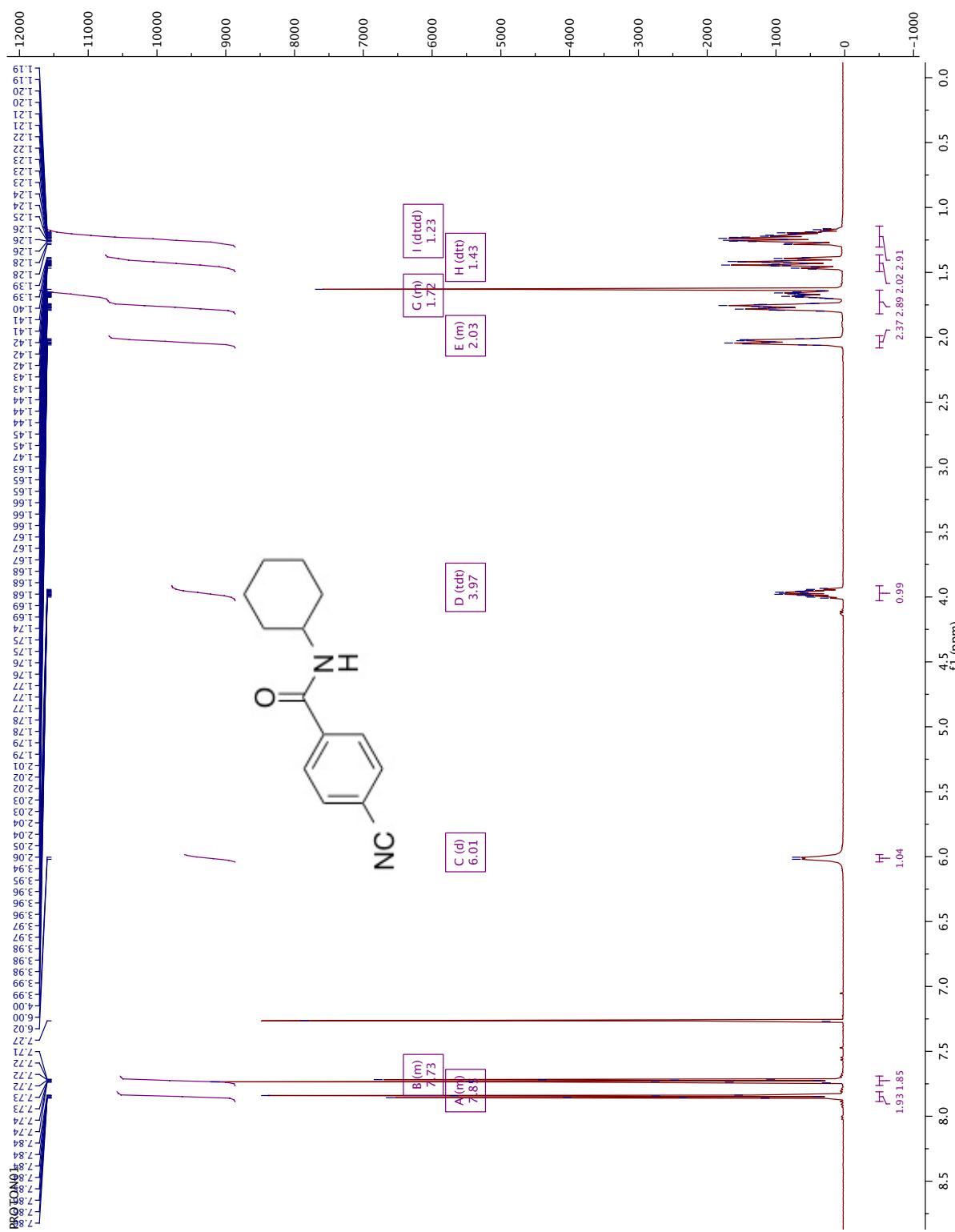
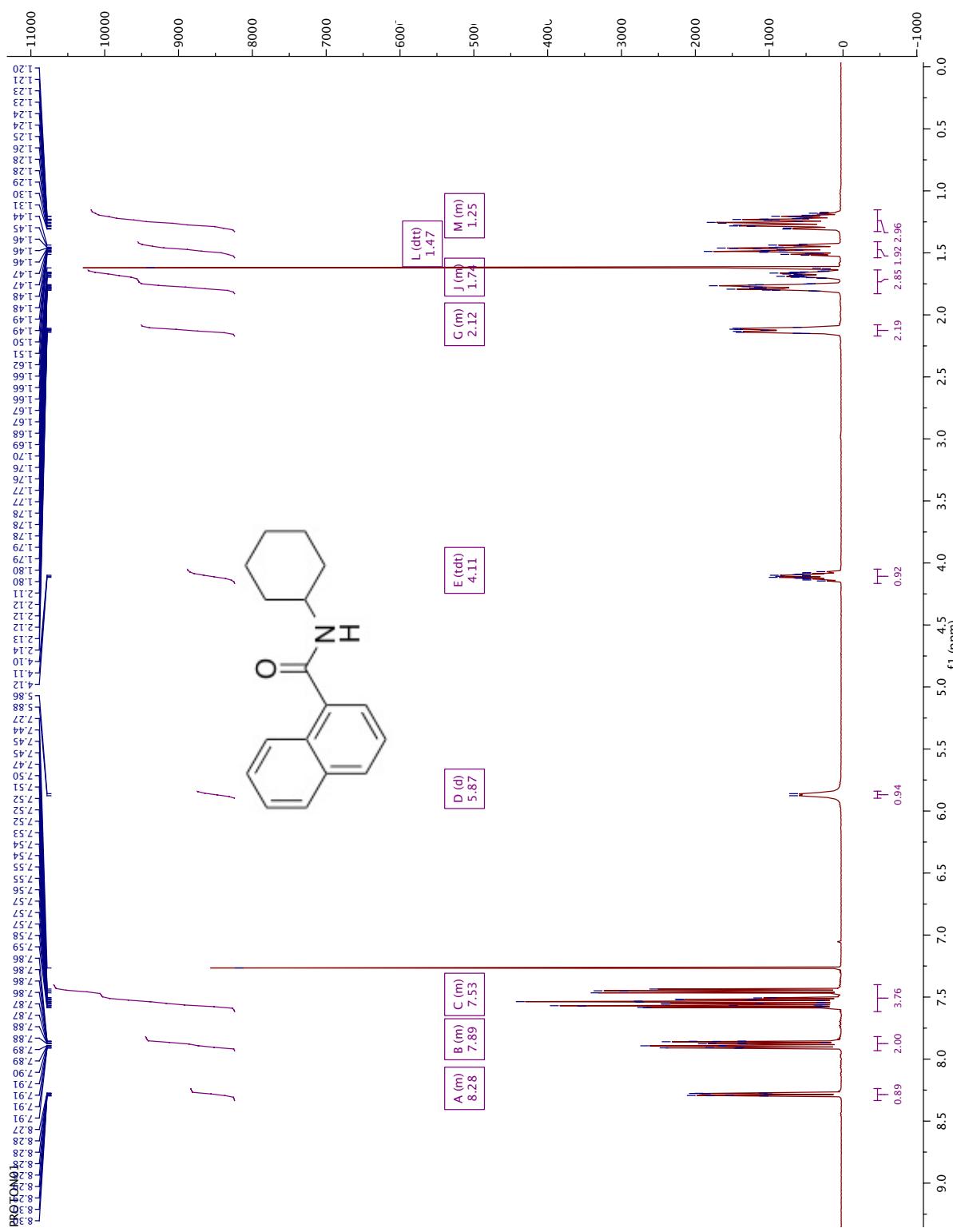
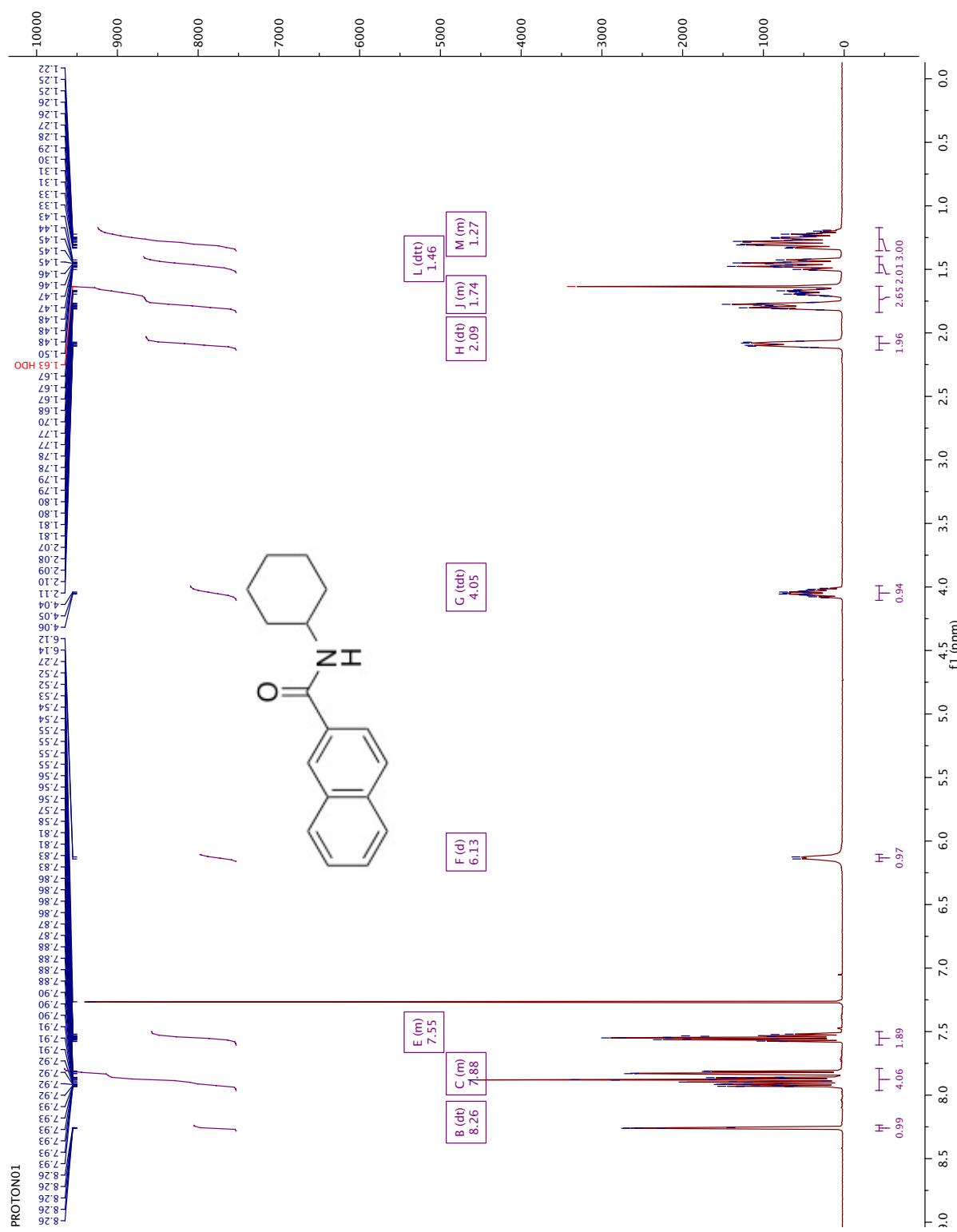
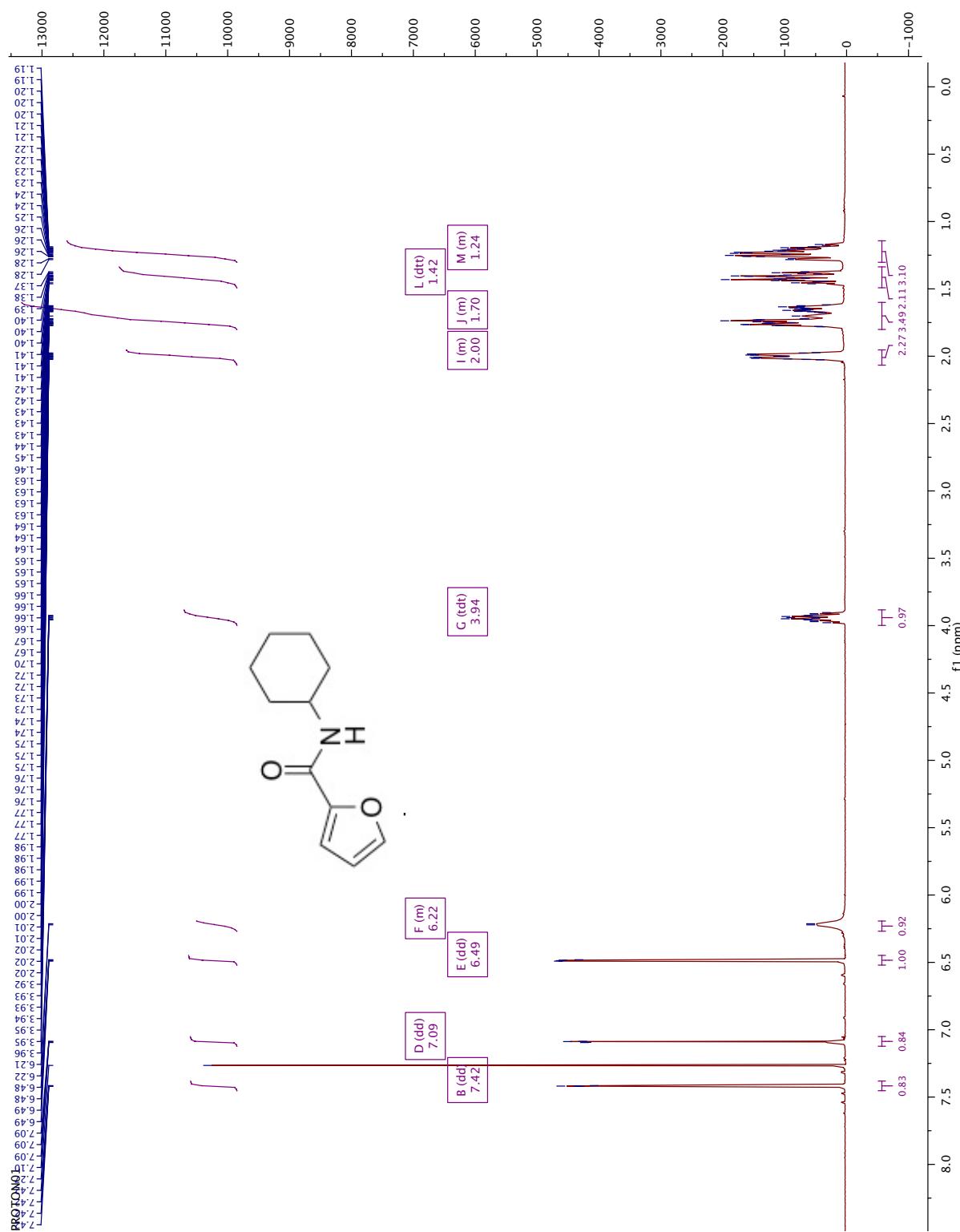


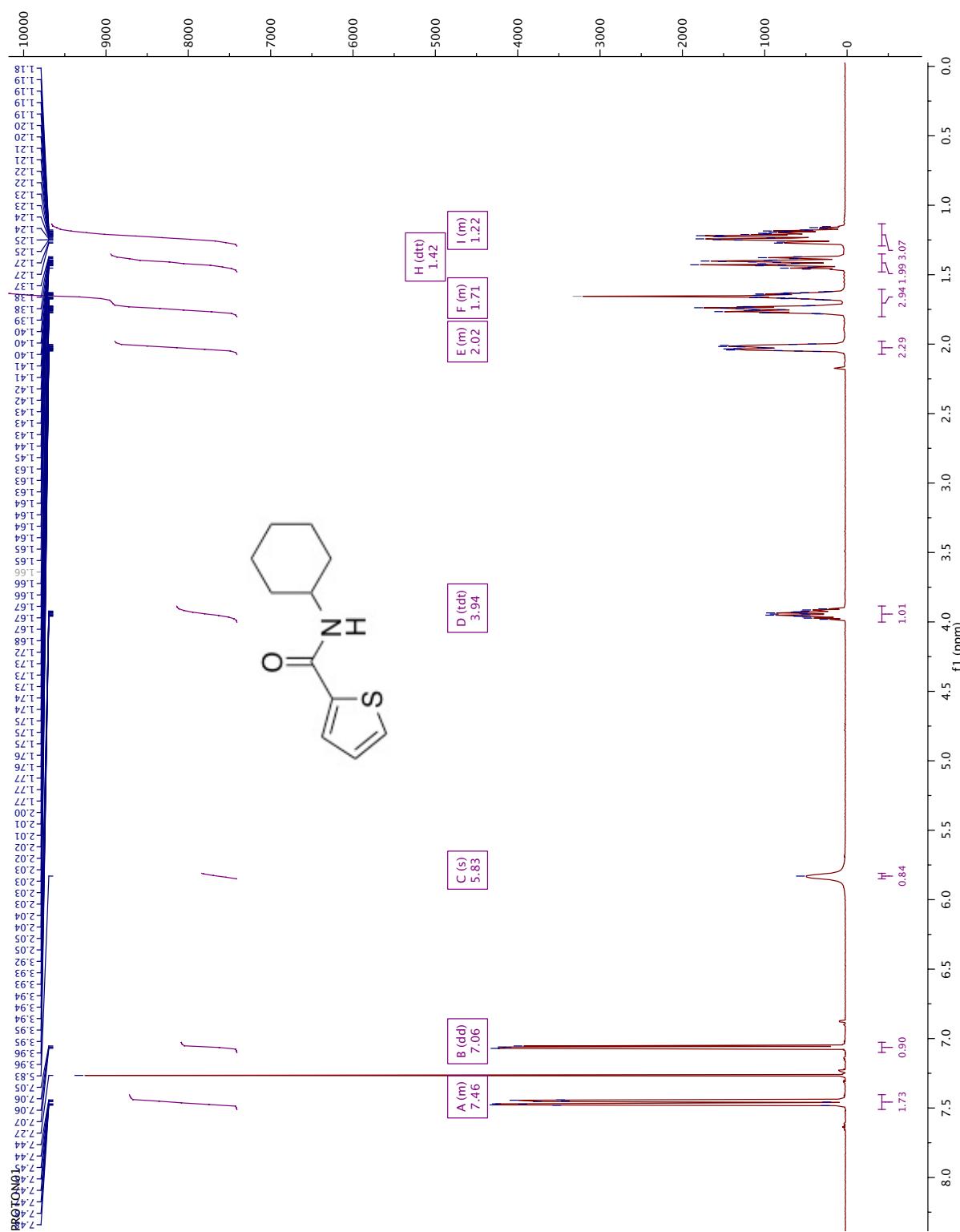
Figure A1.28. ^1H NMR (500 MHz, CDCl_3) of compound 31e.

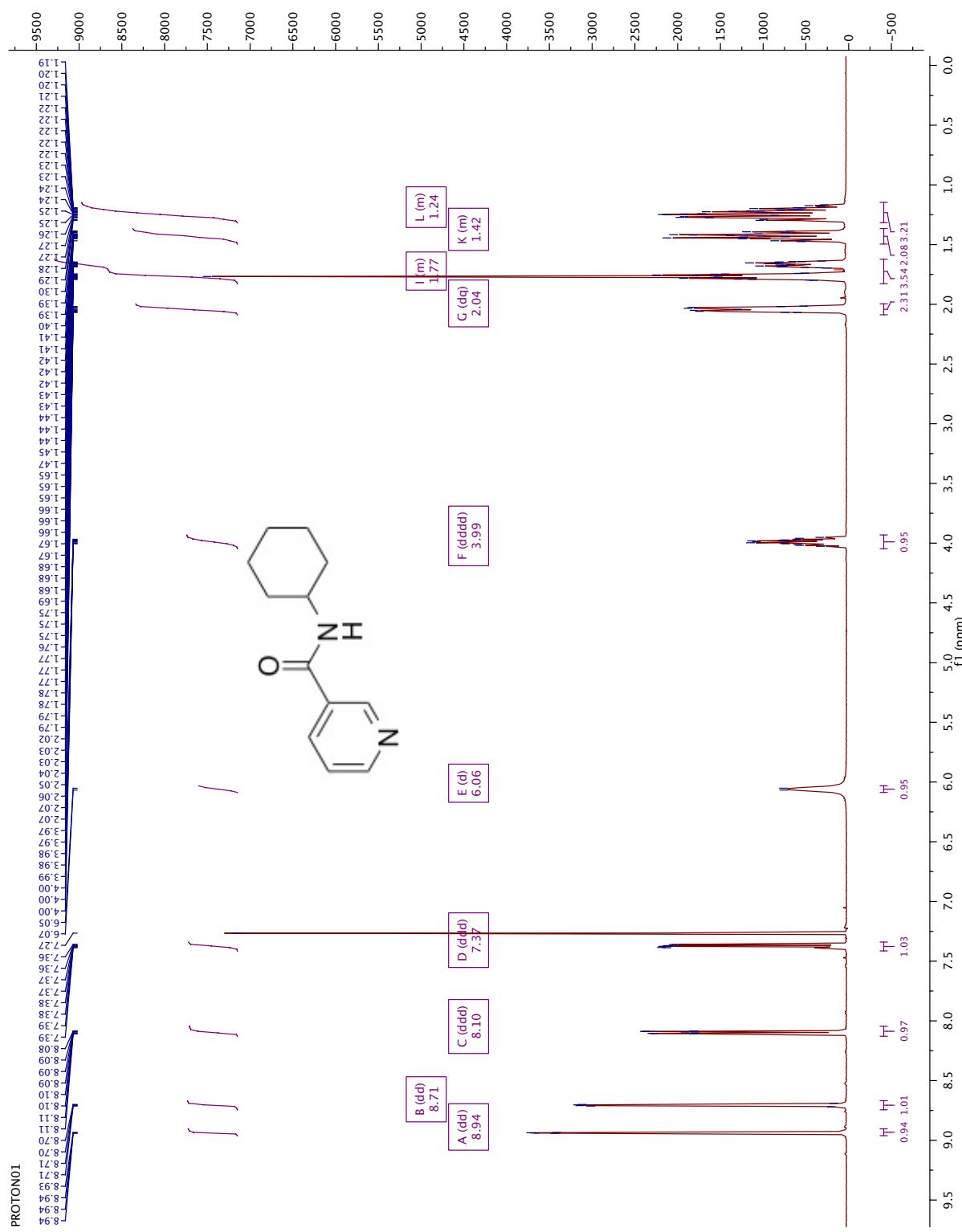
Figure A.1.29. ^1H NMR (500 MHz, CDCl_3) of compound 31f.

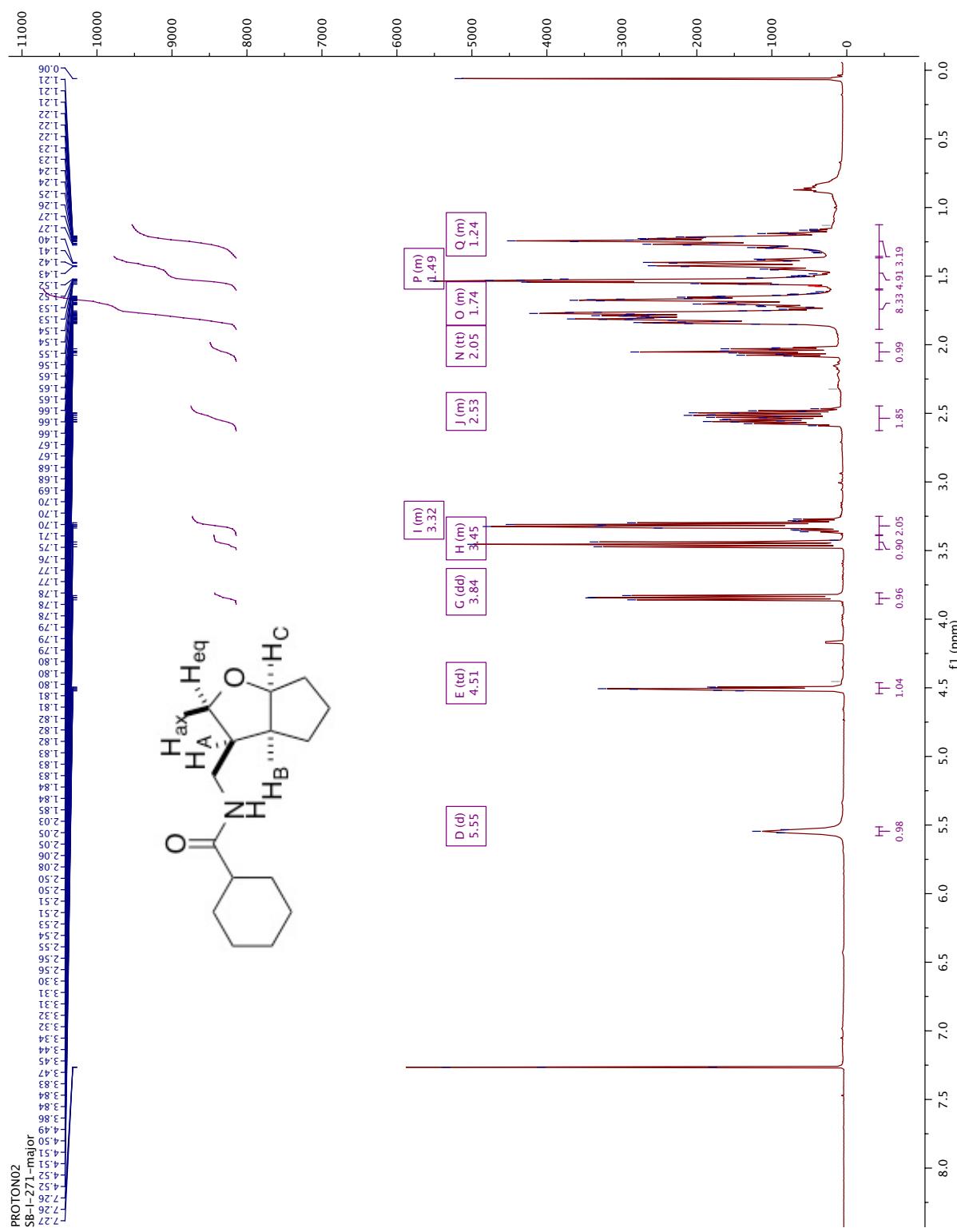
Figure A1.30. ^1H NMR (500 MHz, CDCl_3) of compound 31g.

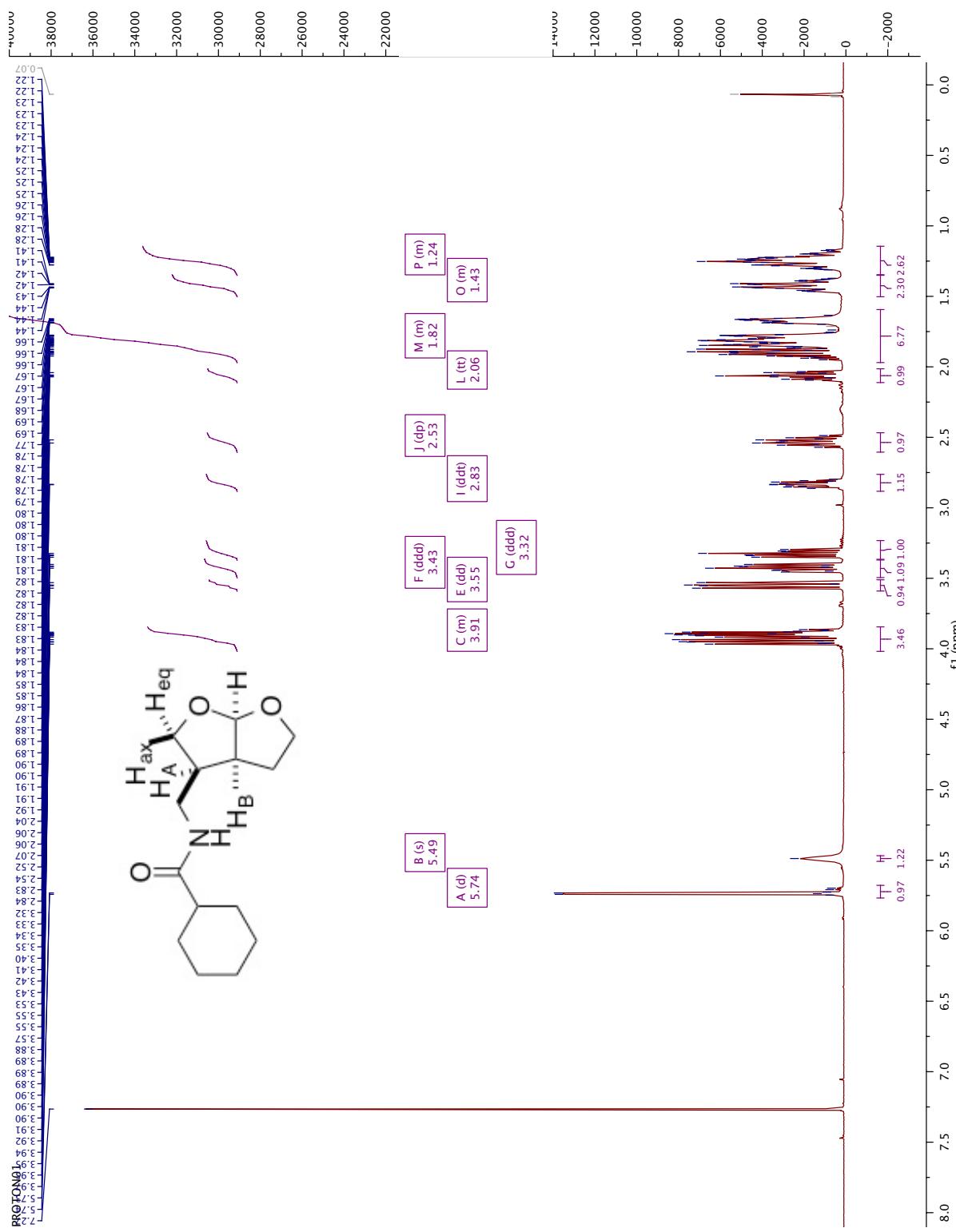
Figure A.1.31. ^1H NMR (500 MHz, CDCl_3) of compound 31h.

Figure A1.32. ¹H NMR (500 MHz, CDCl₃) of compound 31i.

Figure A1.33. ^1H NMR (500 MHz, CDCl_3) of compound 31j.

Figure A1.34. ^1H NMR (500 MHz, CDCl_3) of compound **31k**.

Figure A1.35. ^1H NMR (500 MHz, CDCl_3) of compound 38a.

Figure A1.36. ^1H NMR (500 MHz, CDCl_3) of compound 38b.