

**[2+2+2] Cyclotrimerization with Propargyl Halides as Co-partners: Formal
Total Synthesis of Anti-tumor Hsp90 Inhibitor AT13387**

Sambasivarao Kotha,^{a,*} Gaddamedi Sreevani^a

^aDepartment of Chemistry, Indian Institute of Technology-Bombay, Powai, Mumbai-400076,
India.

Contents

¹H and ¹³C NMR Copies.....	S2-S11
---	---------------

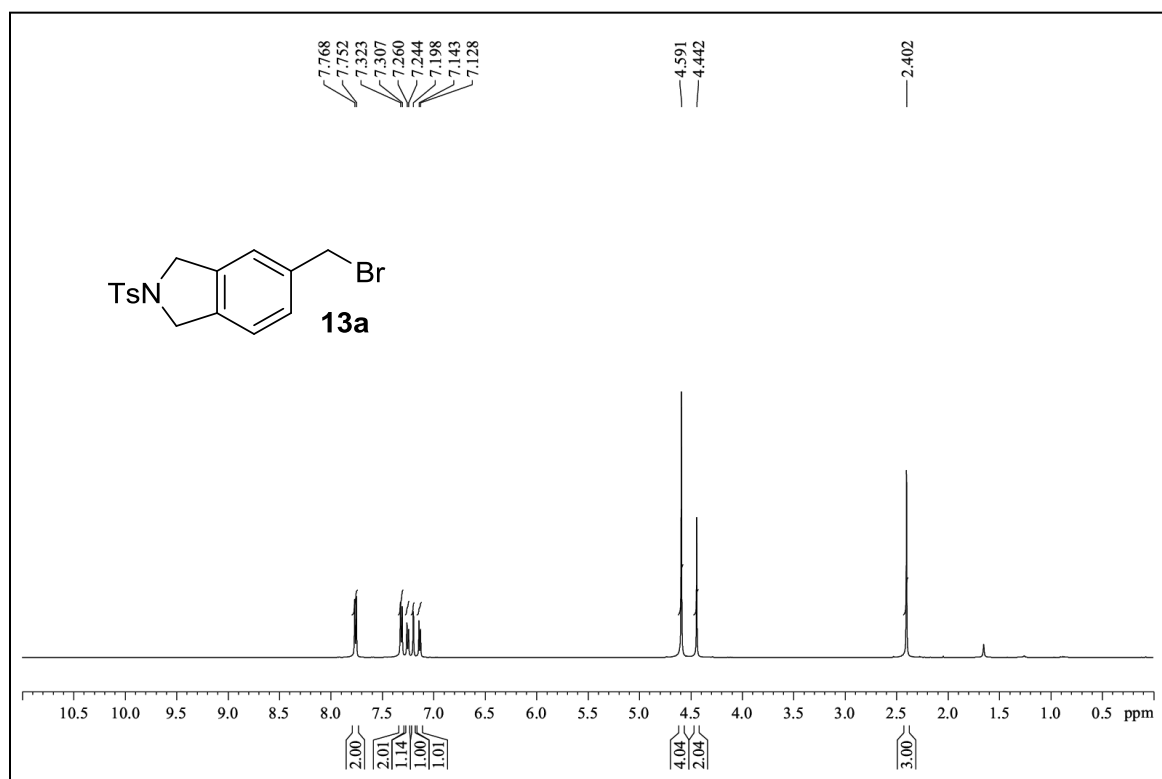


Figure S1: ^1H NMR (500 MHz, CDCl_3) of compound **13a**

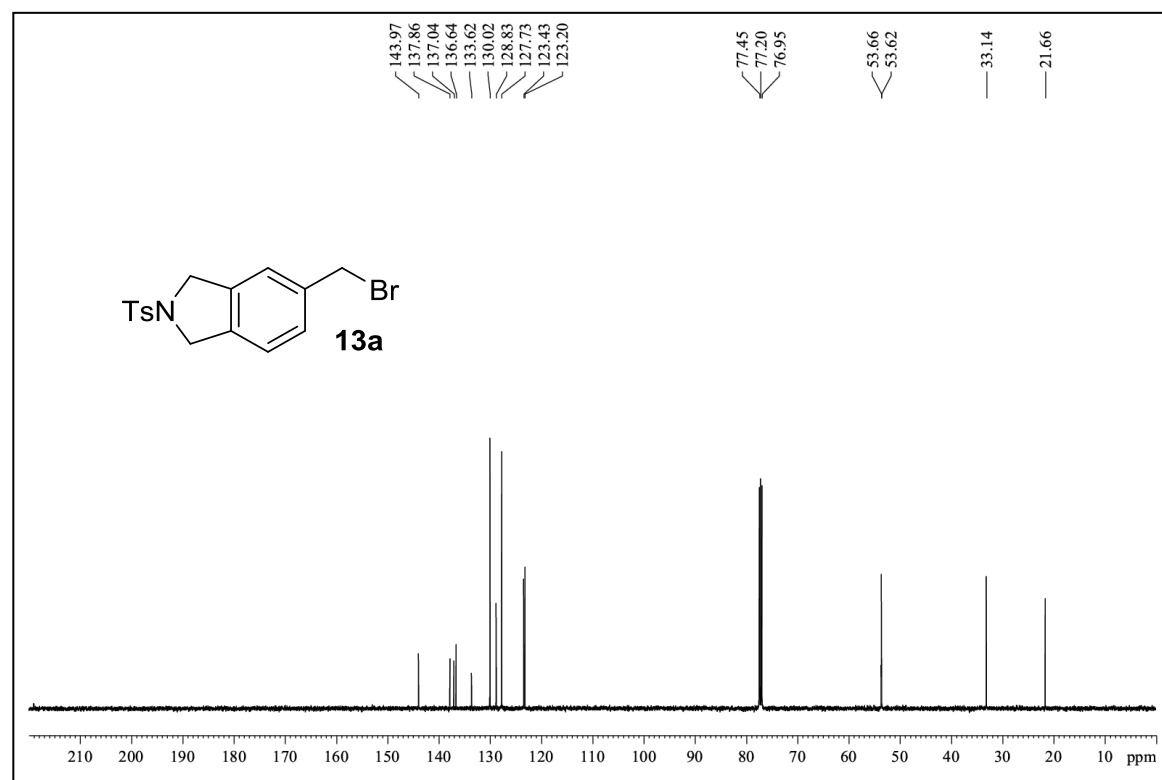


Figure S2: ^{13}C NMR (125 MHz, CDCl_3) of compound **13a**

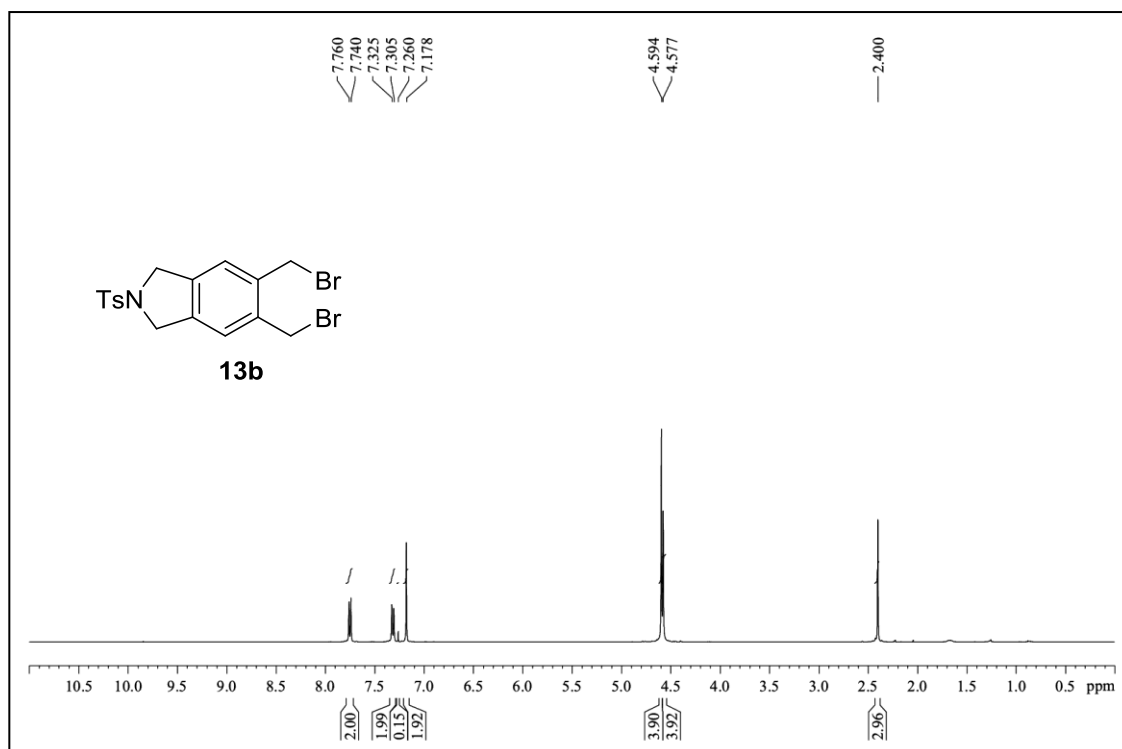


Figure S3: ^1H NMR (400 MHz, CDCl_3) of compound **13b**

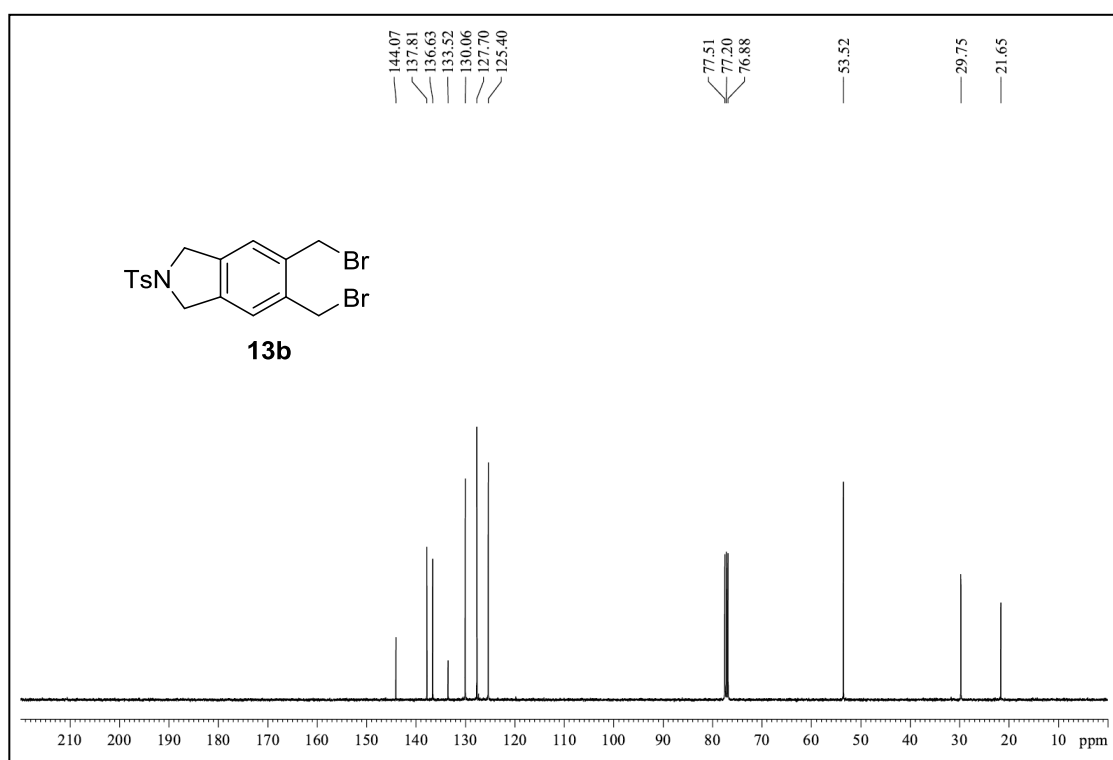


Figure S4: ^{13}C NMR (100 MHz, CDCl_3) of compound **13b**

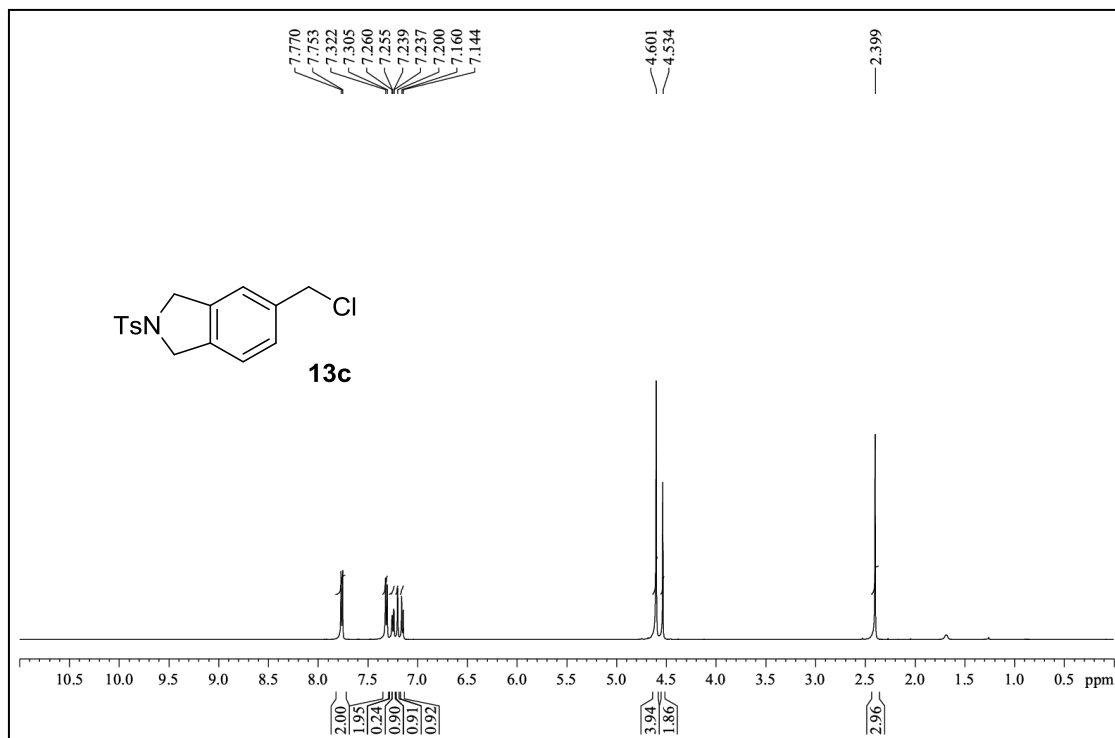


Figure S5: ¹H NMR (500 MHz, CDCl₃) of compound **13c**

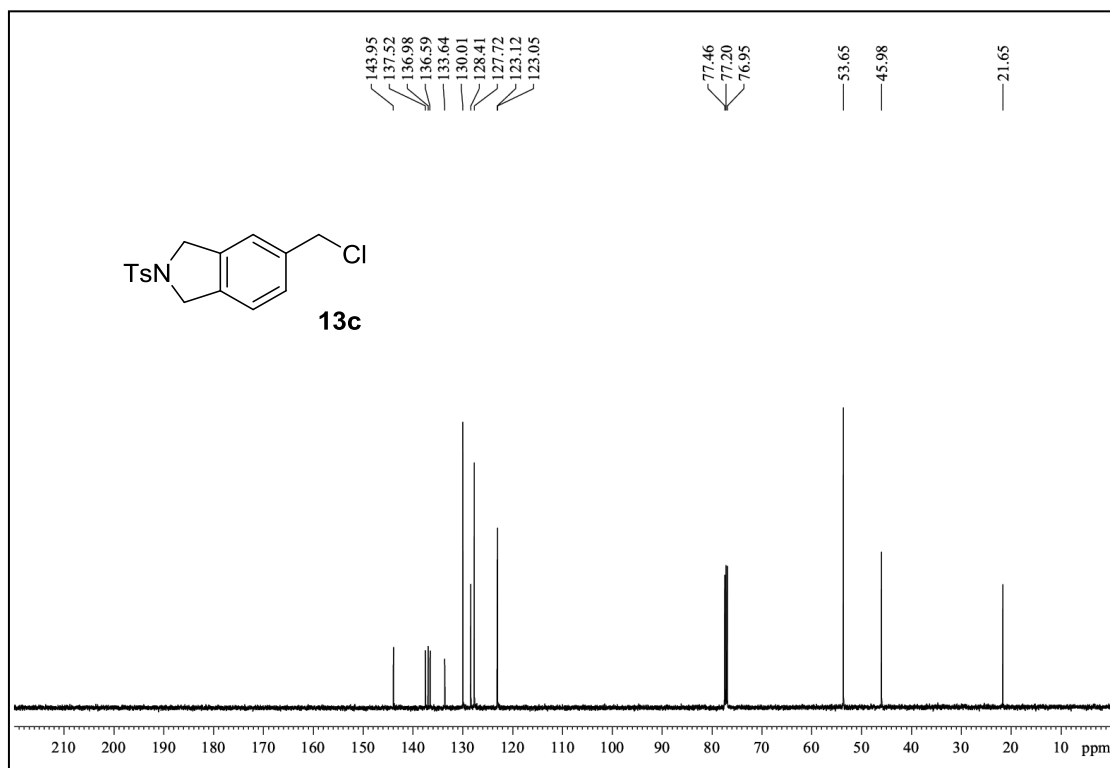


Figure S6: ¹³C NMR (125 MHz, CDCl₃) of compound **13c**

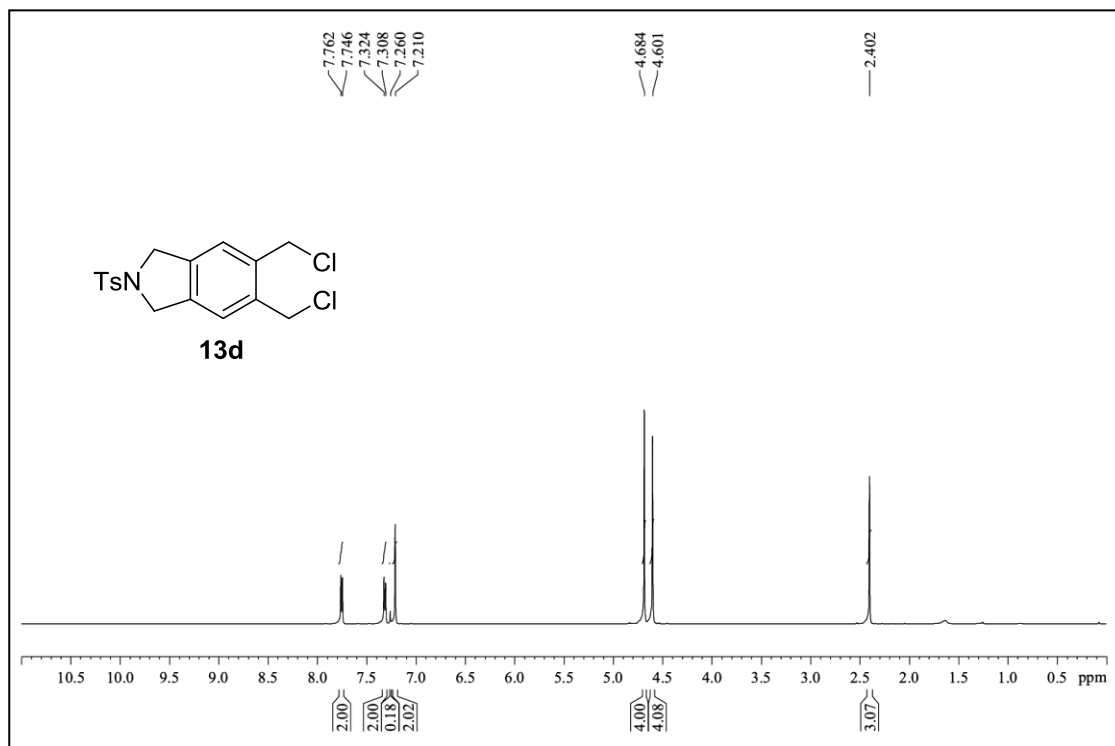


Figure S7: ^1H NMR (500 MHz, CDCl_3) of compound **13d**

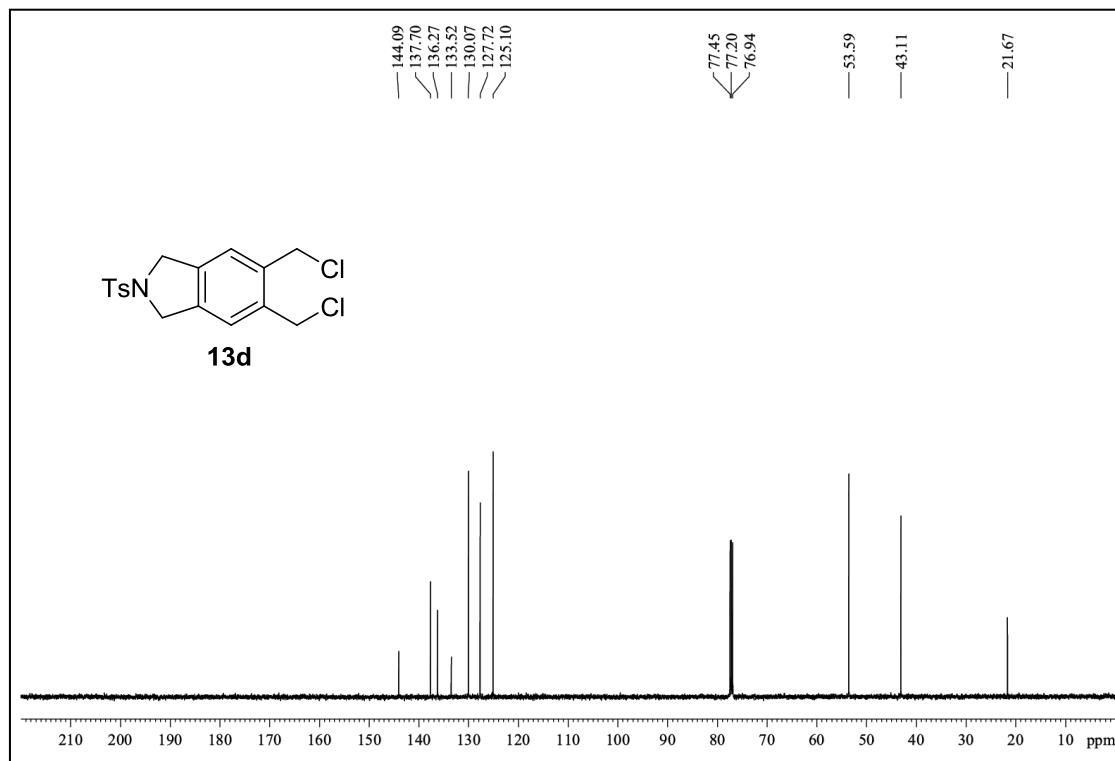


Figure S8: ^{13}C NMR (125 MHz, CDCl_3) of compound **13d**

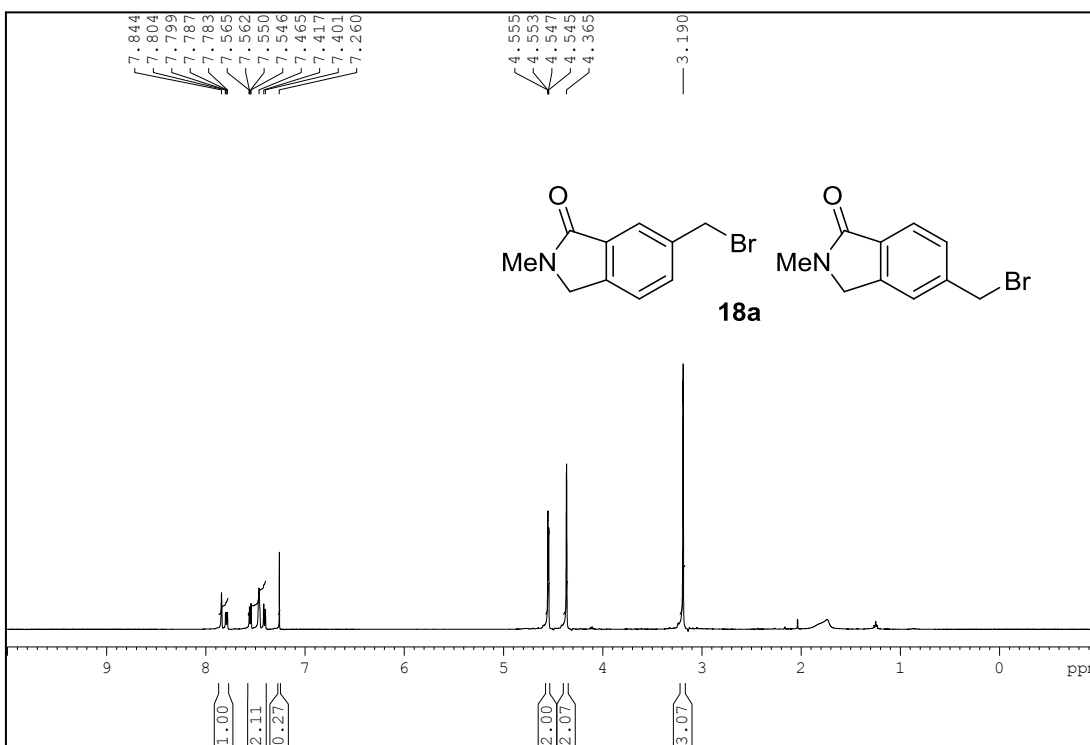


Figure S9: ¹H NMR (500 MHz, CDCl₃) of compound **18a**

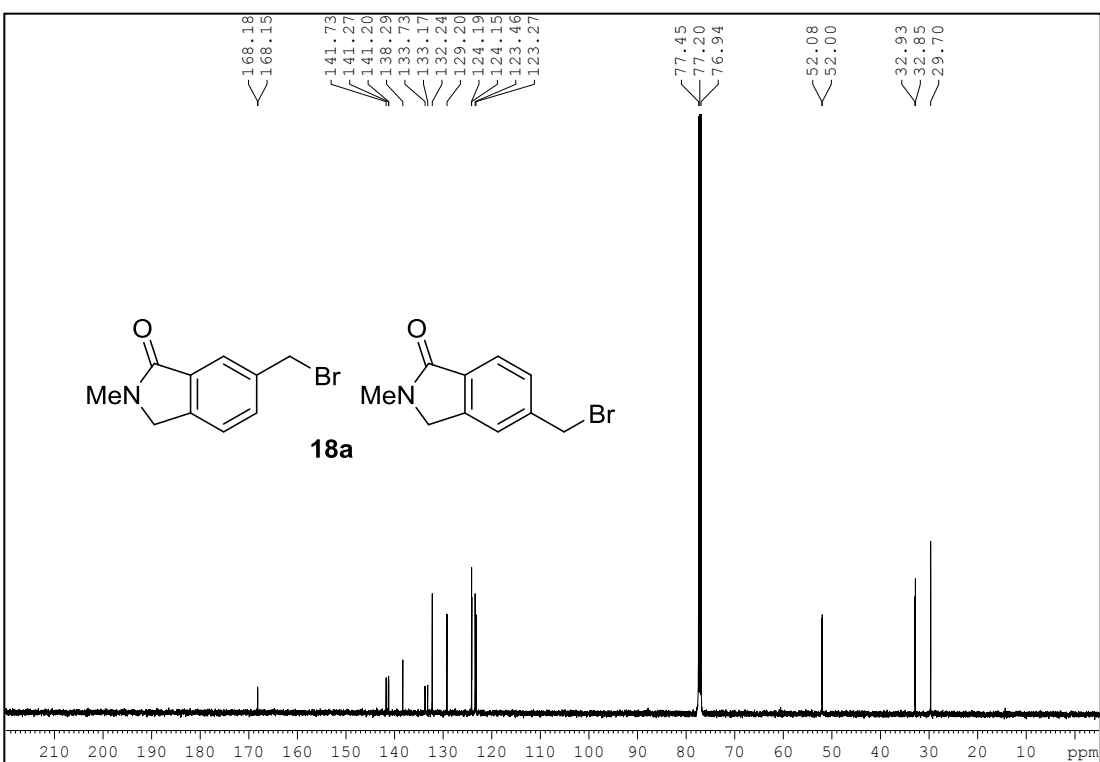


Figure S10: ¹³C NMR (125 MHz, CDCl₃) of compound **18a**

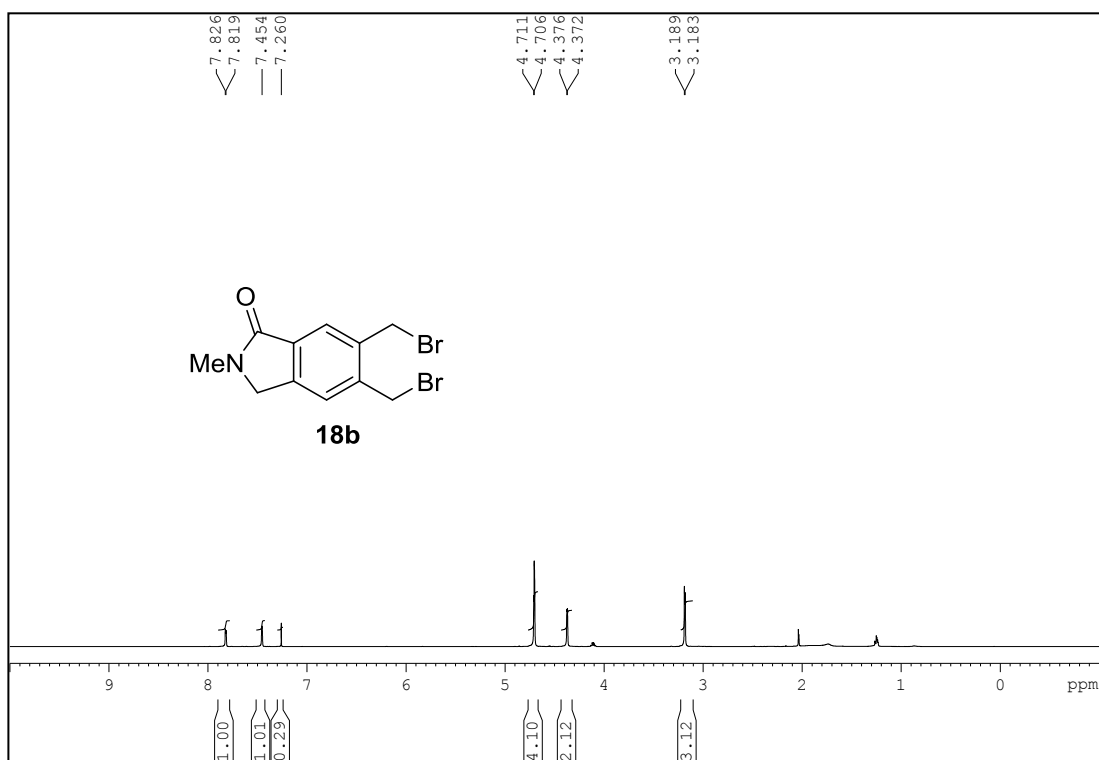


Figure S11: ¹H NMR (500 MHz, CDCl₃) of compound **18b**

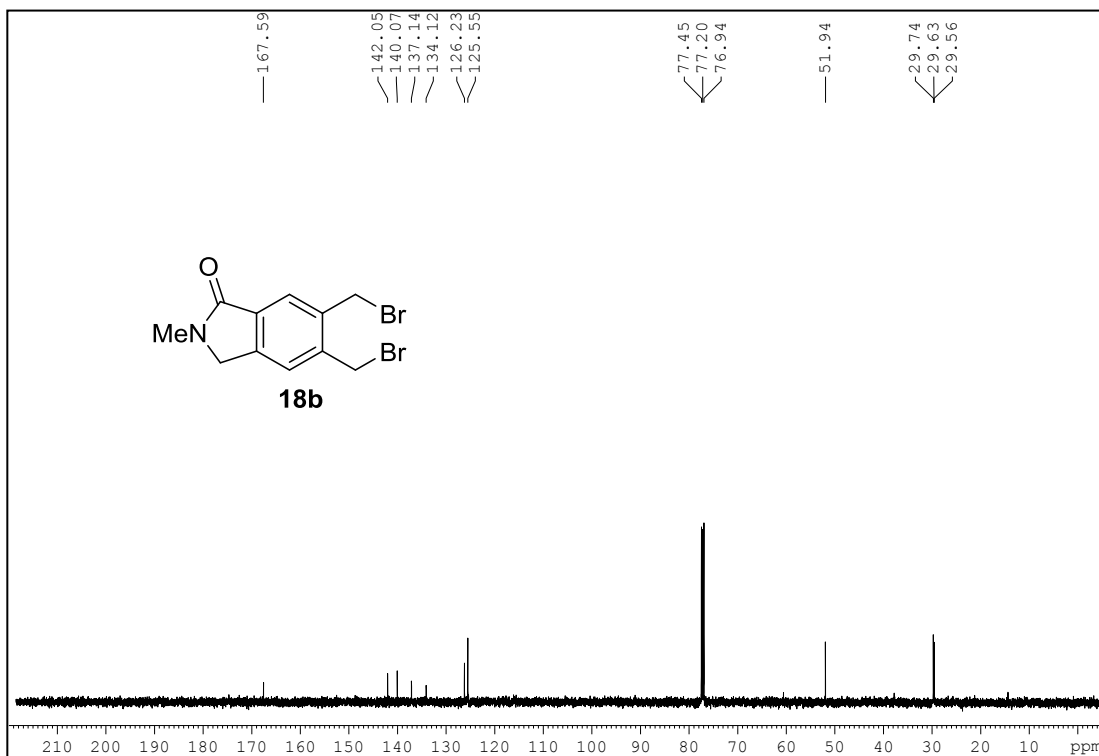


Figure S12: ¹³C NMR (100 MHz, CDCl₃) of compound **18b**

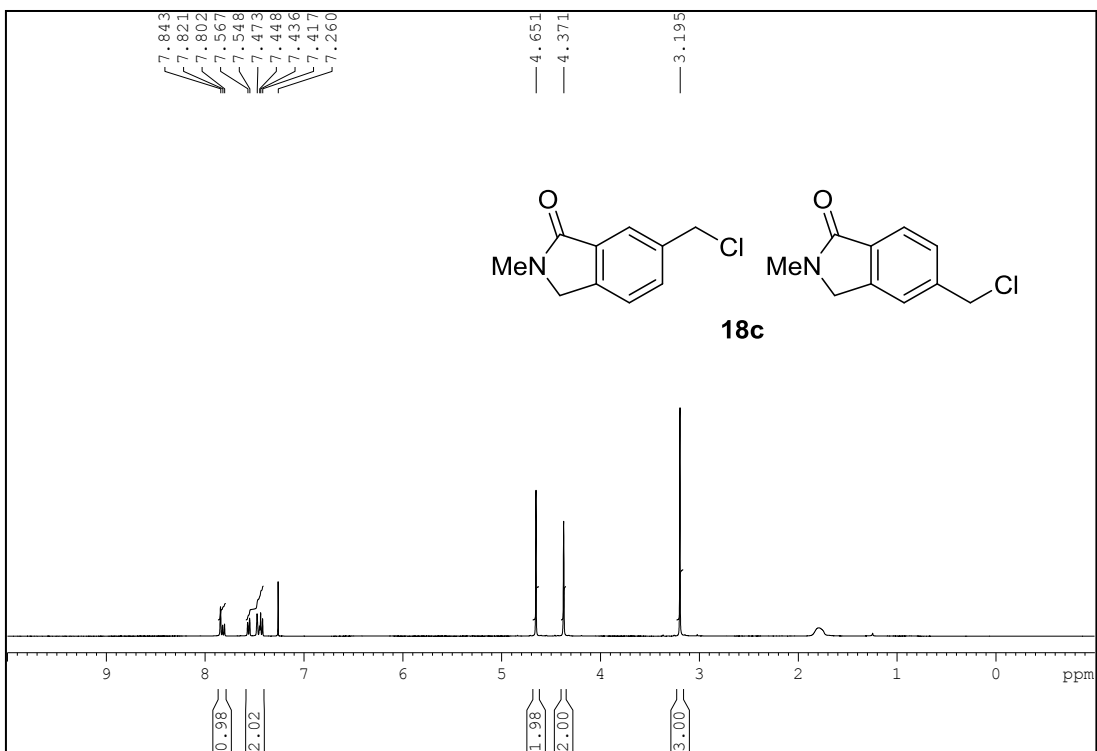


Figure S13: ¹H NMR (400 MHz, CDCl₃) of compound **18c**

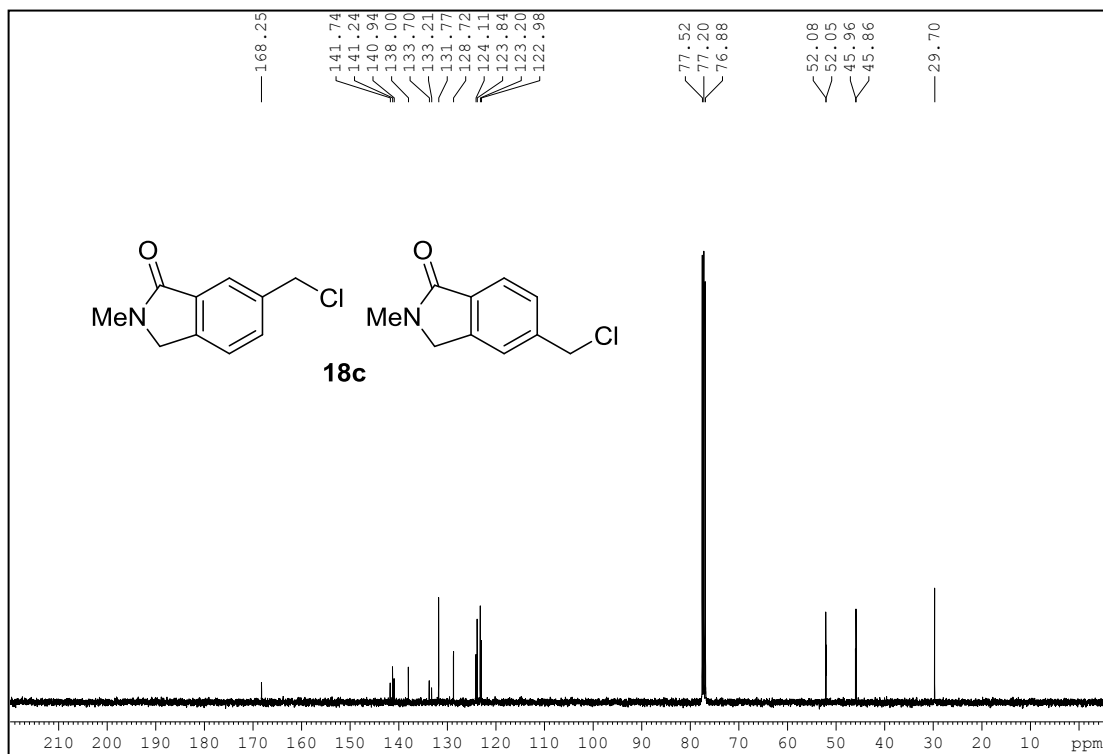


Figure S14: ¹³C NMR (100 MHz, CDCl₃) of compound **18c**

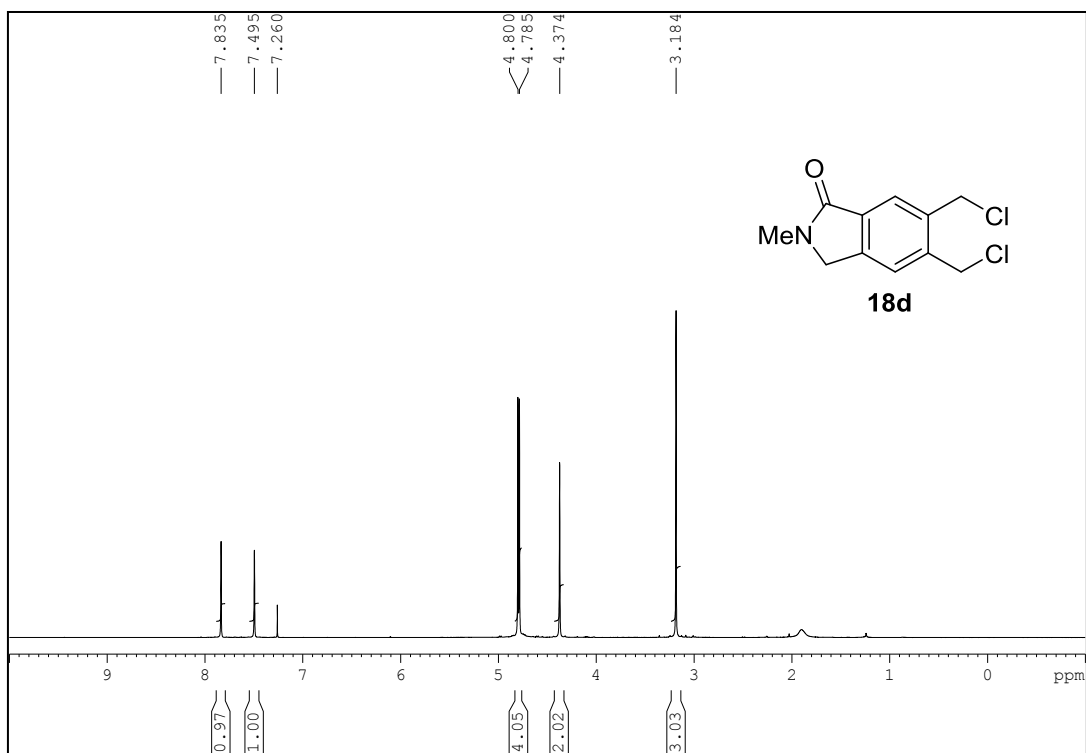


Figure S15: ¹H NMR (400 MHz, CDCl₃) of compound **18d**

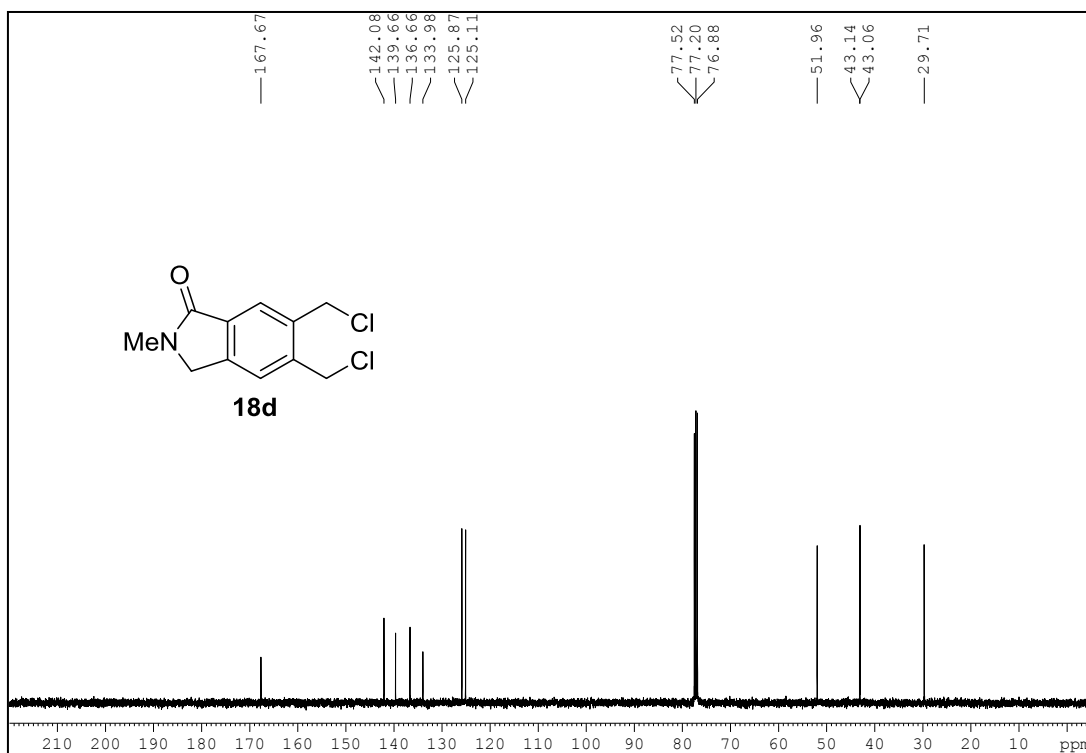


Figure S16: ¹³C NMR (100 MHz, CDCl₃) of compound **18d**

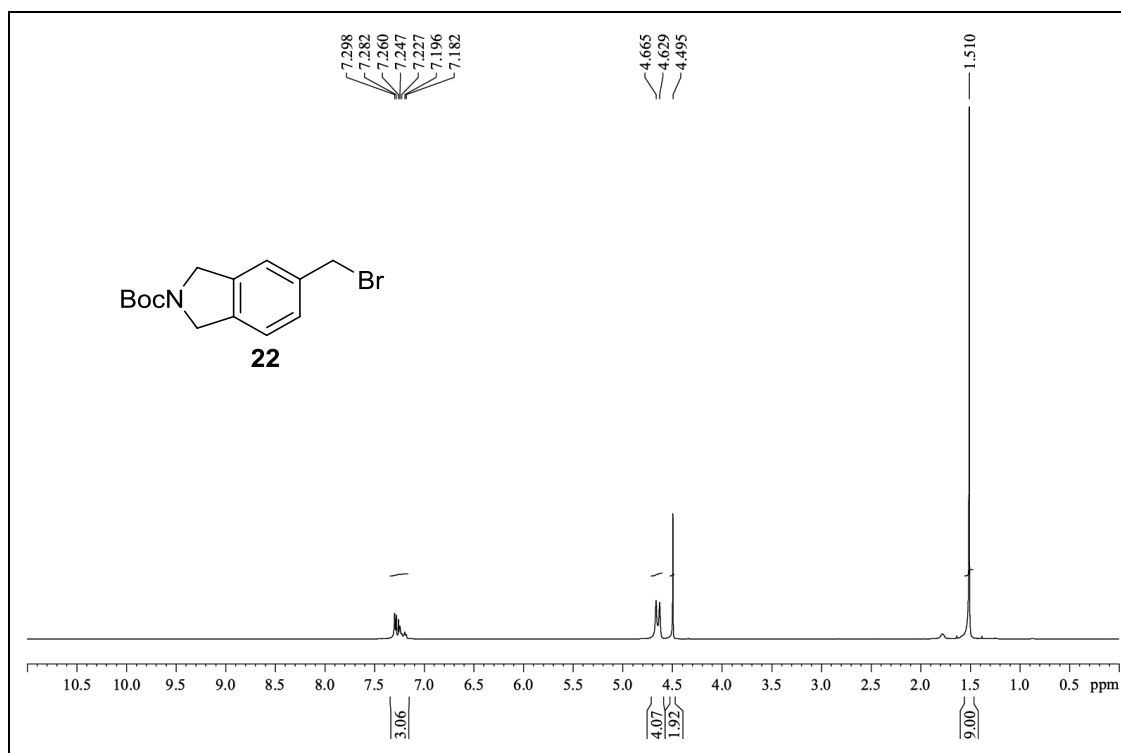


Figure S17: ¹H NMR (500 MHz, CDCl₃) of compound **22**

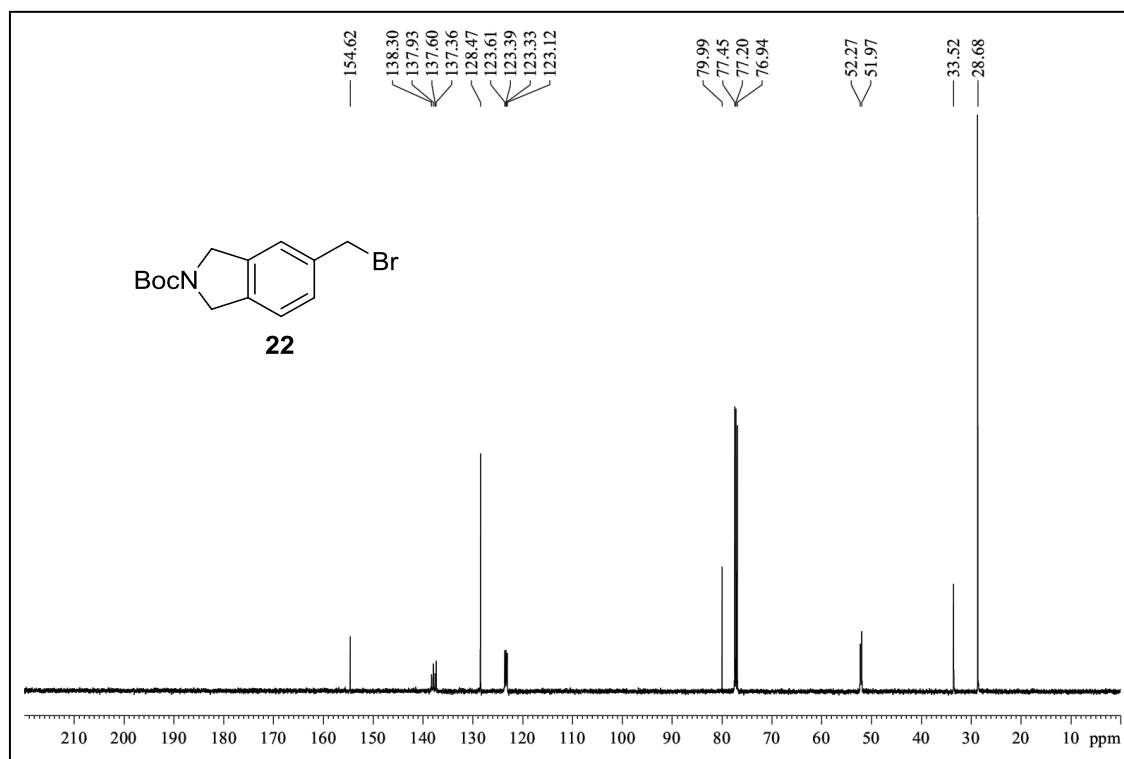


Figure S18: ¹³C NMR (125 MHz, CDCl₃) of compound **22**

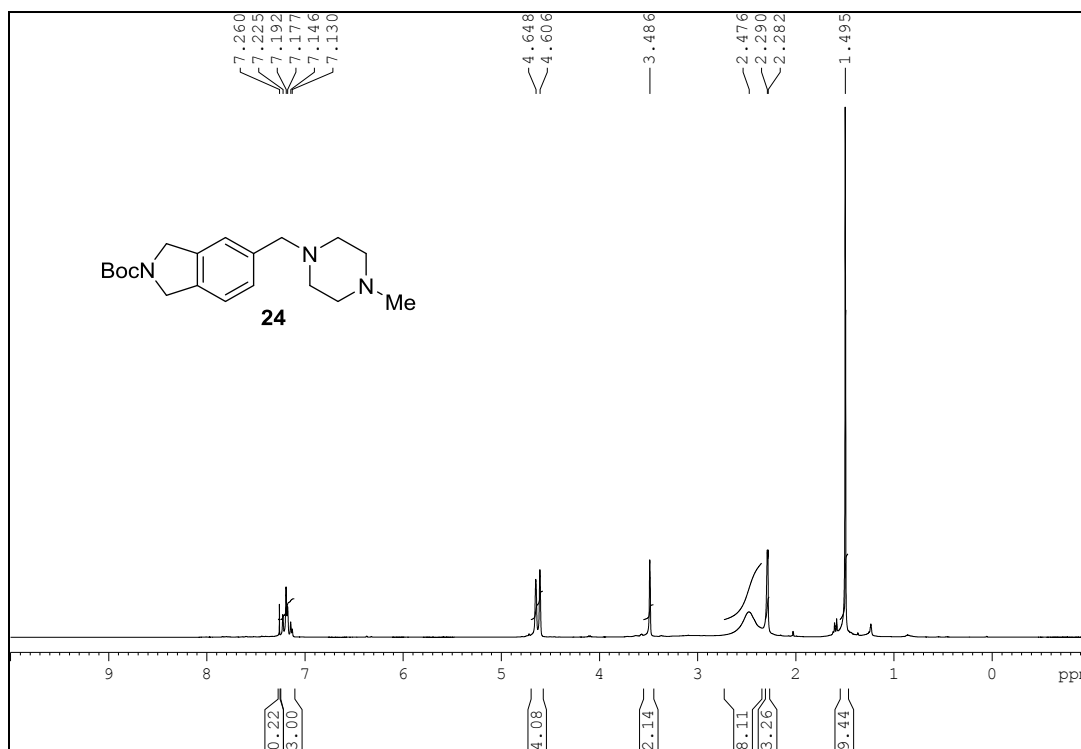


Figure S19: ¹H NMR (500 MHz, CDCl₃) of compound **24**

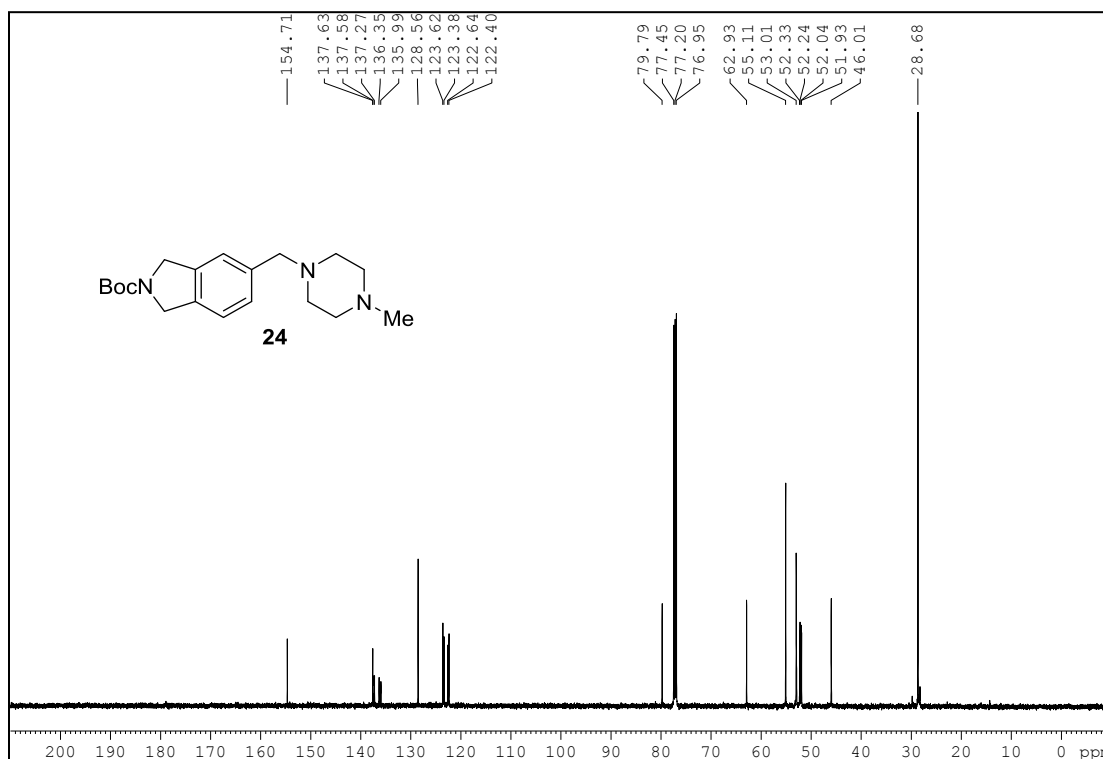


Figure S20: ¹³C NMR (125 MHz, CDCl₃) of compound **24**