

Synthesis of polyheterocyclic pyrrolo[3,4-*b*]pyridin-5-ones via a one-pot (Ugi-3CR/aza Diels-Alder/*N*-acylation/aromatization/*S_N2*) process. A suitable alternative towards novel aza-analogues of falipamil

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CONTENTS

¹H and ¹³C NMR spectra of the products **11a-x**

S2-S49

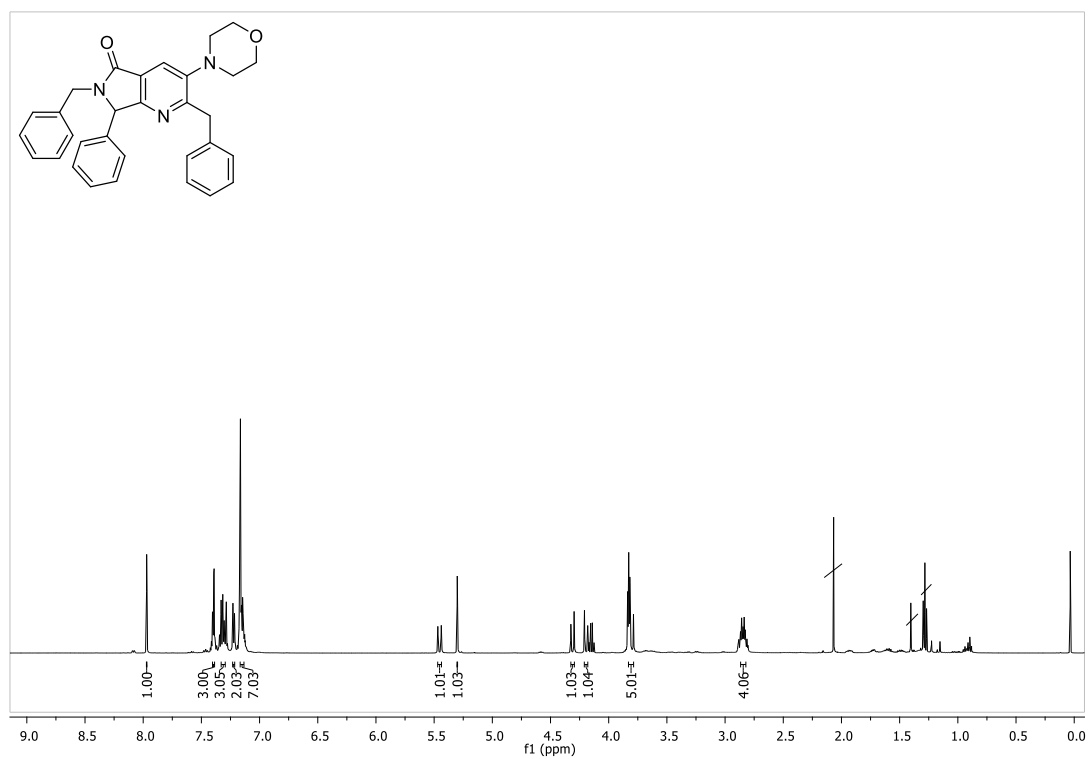


Figure S1. ^1H NMR spectrum of the product **11a**

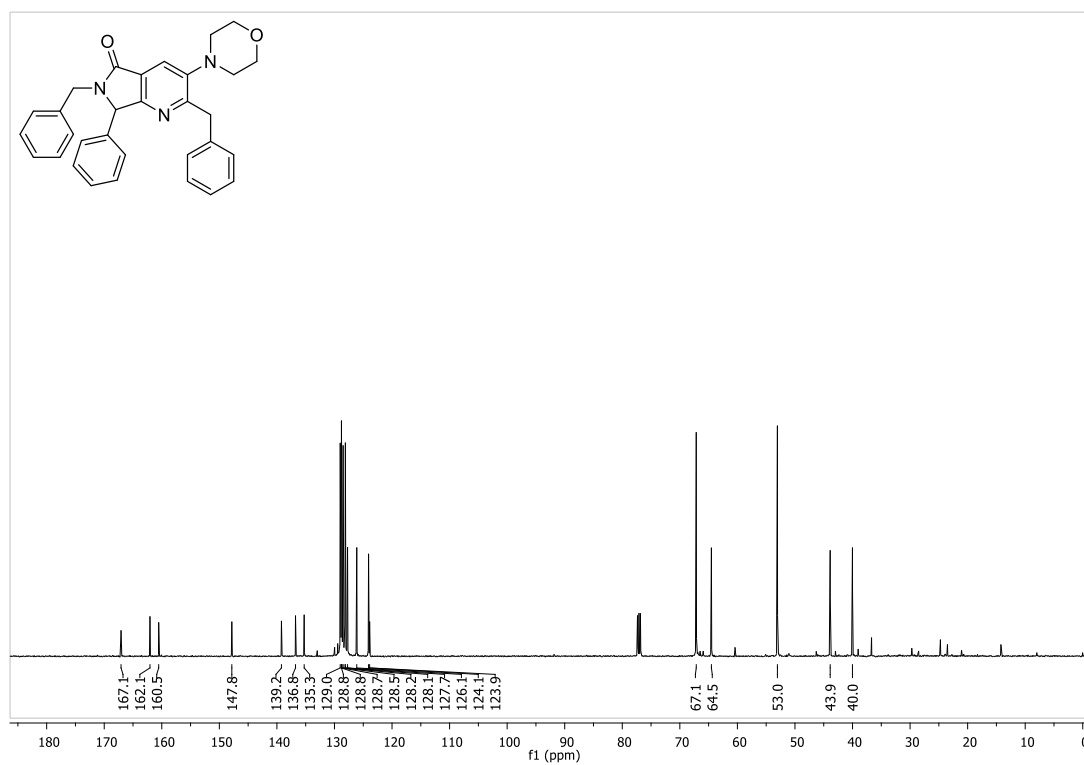


Figure S2. ^{13}C NMR spectrum of the product **11a**

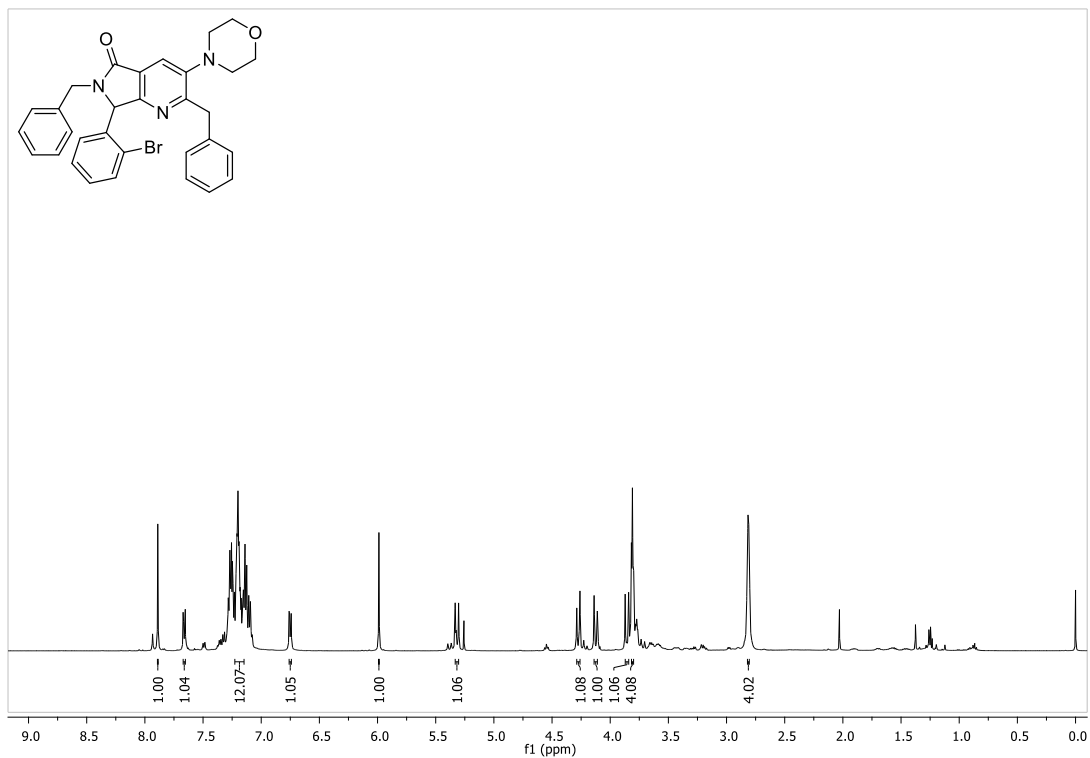


Figure S3. ^1H NMR spectrum of the product **11b**

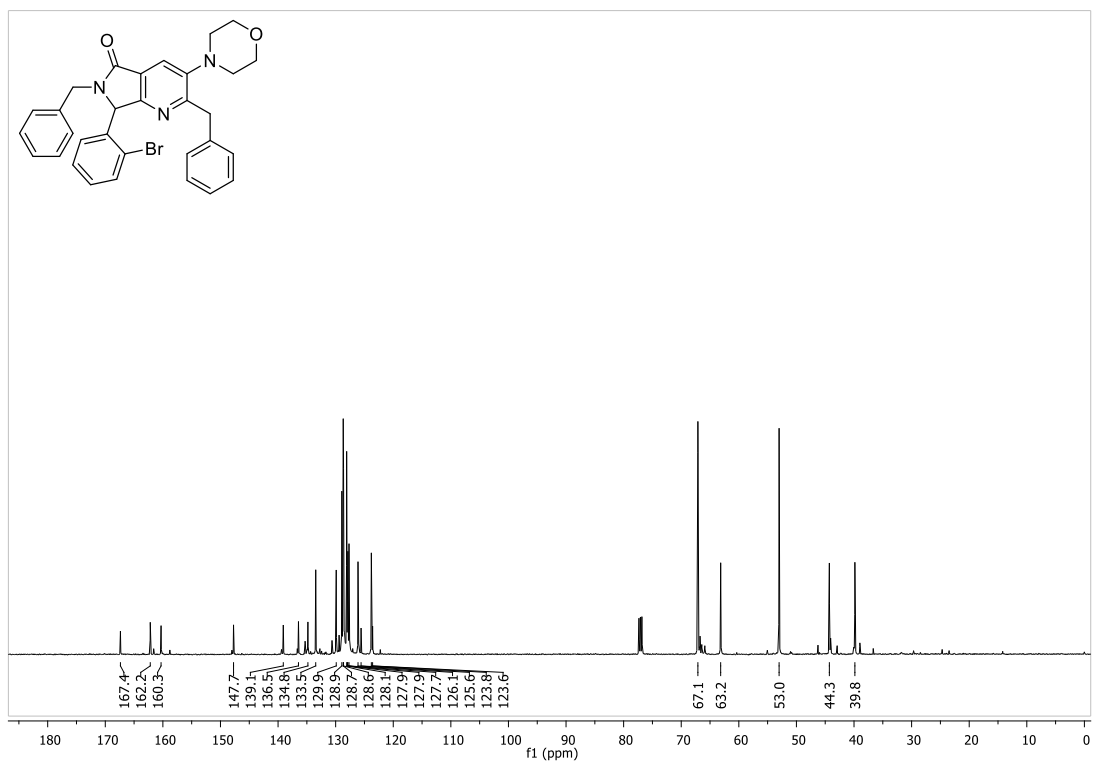


Figure S4. ^{13}C NMR spectrum of the product **11b**

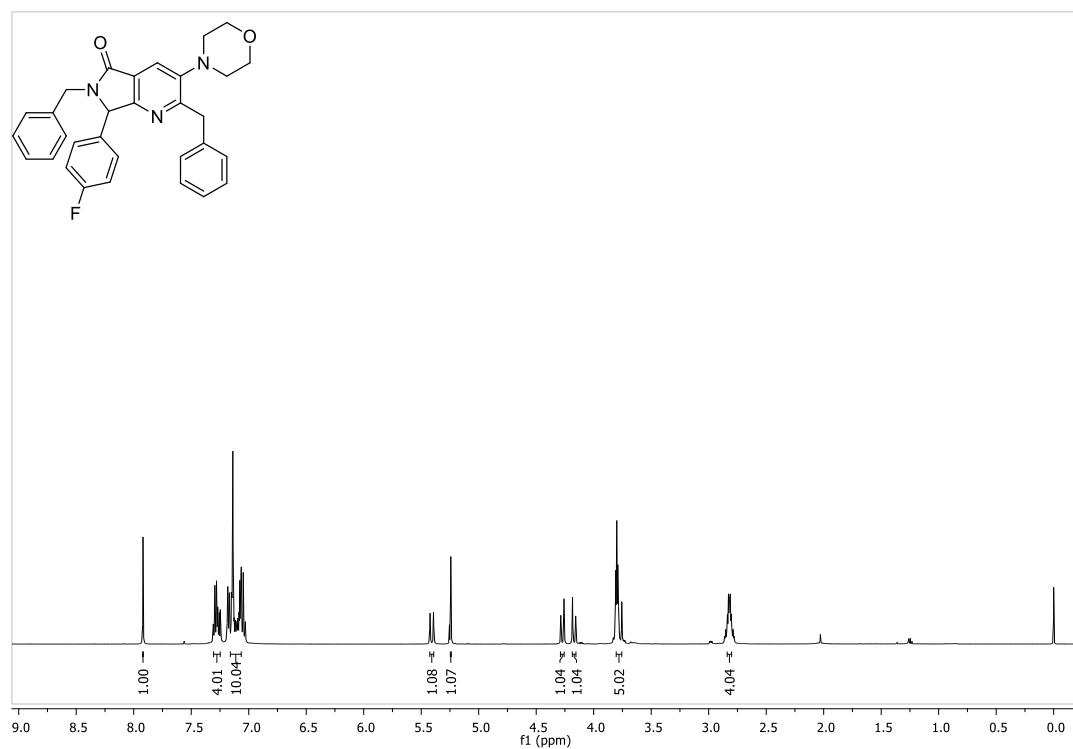


Figure S5. ^1H NMR spectrum of the product **11c**

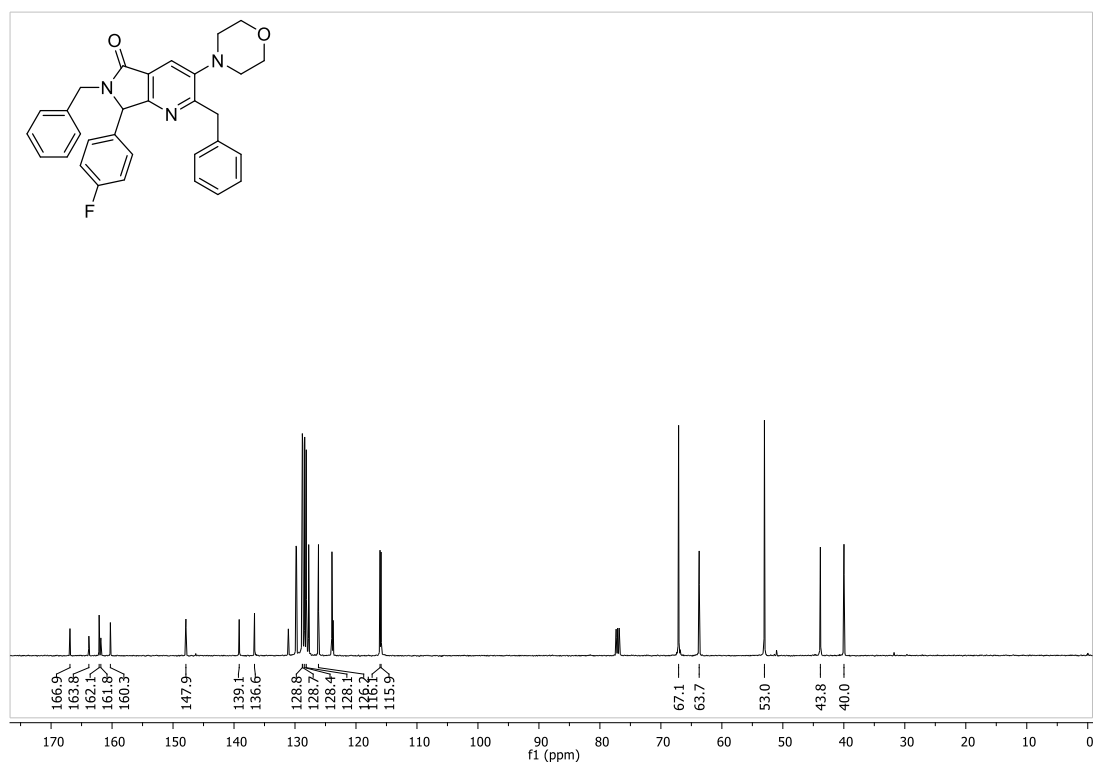


Figure S6. ^{13}C NMR spectrum of the product **11c**

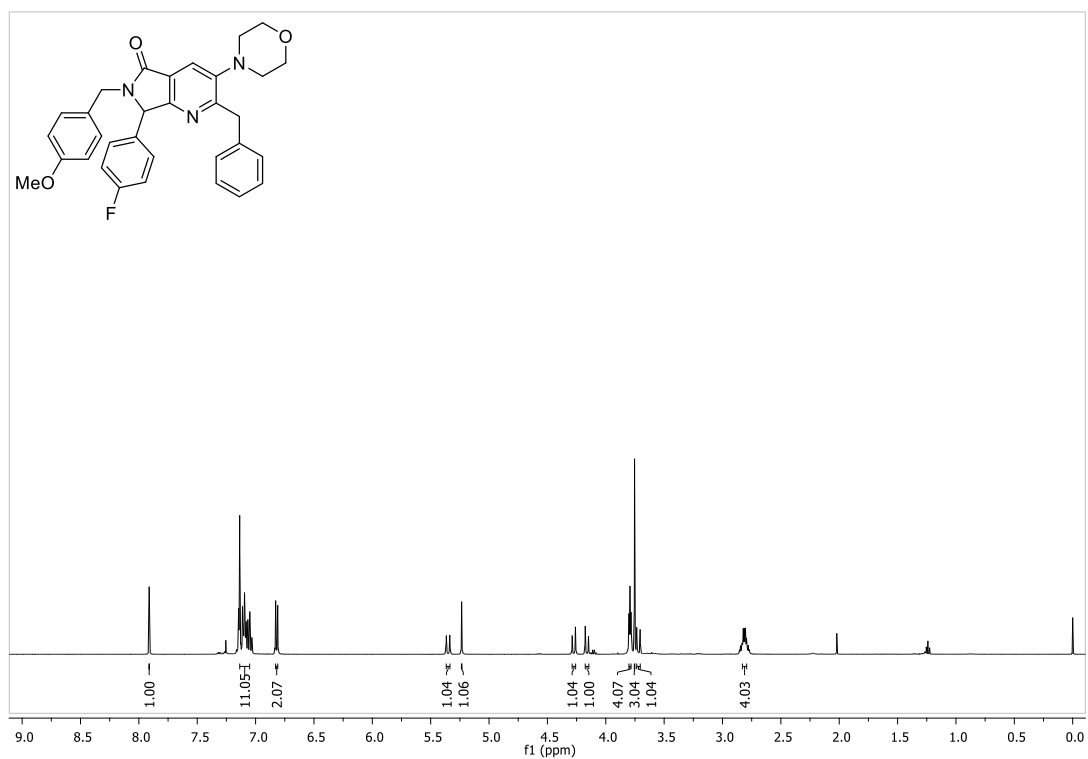


Figure S7. ^1H NMR spectrum of the product **11d**

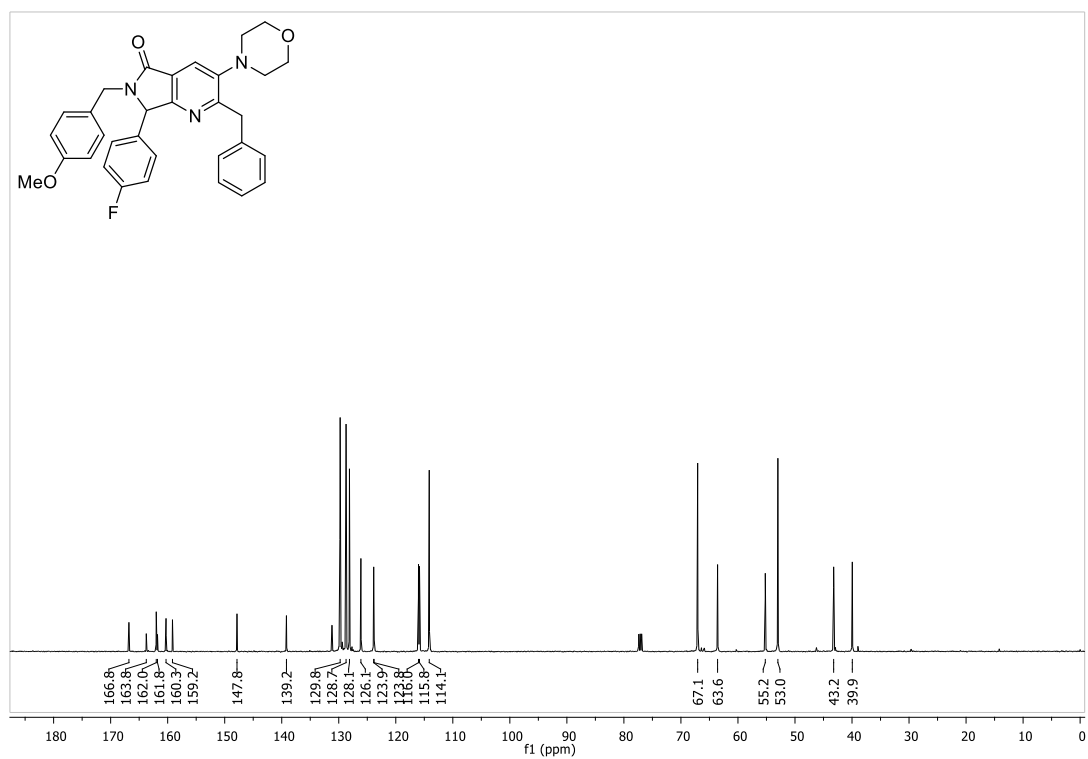


Figure S8. ^{13}C NMR spectrum of the product **11d**

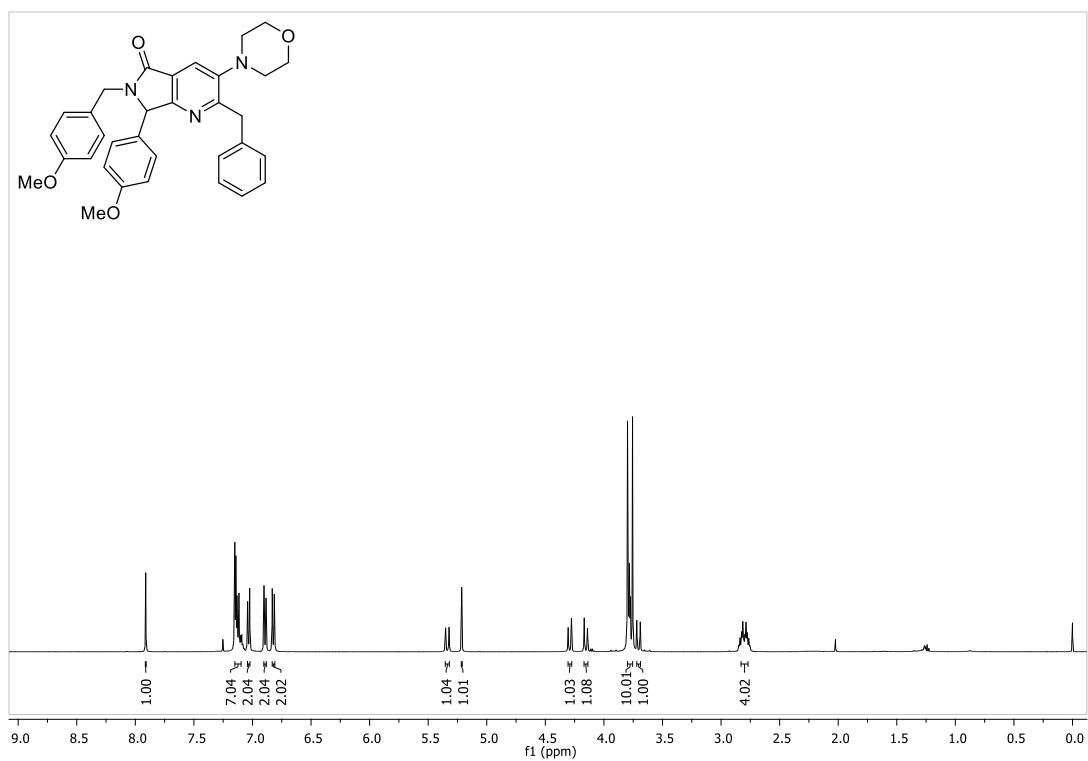


Figure S9. ^1H NMR spectrum of the product **11e**

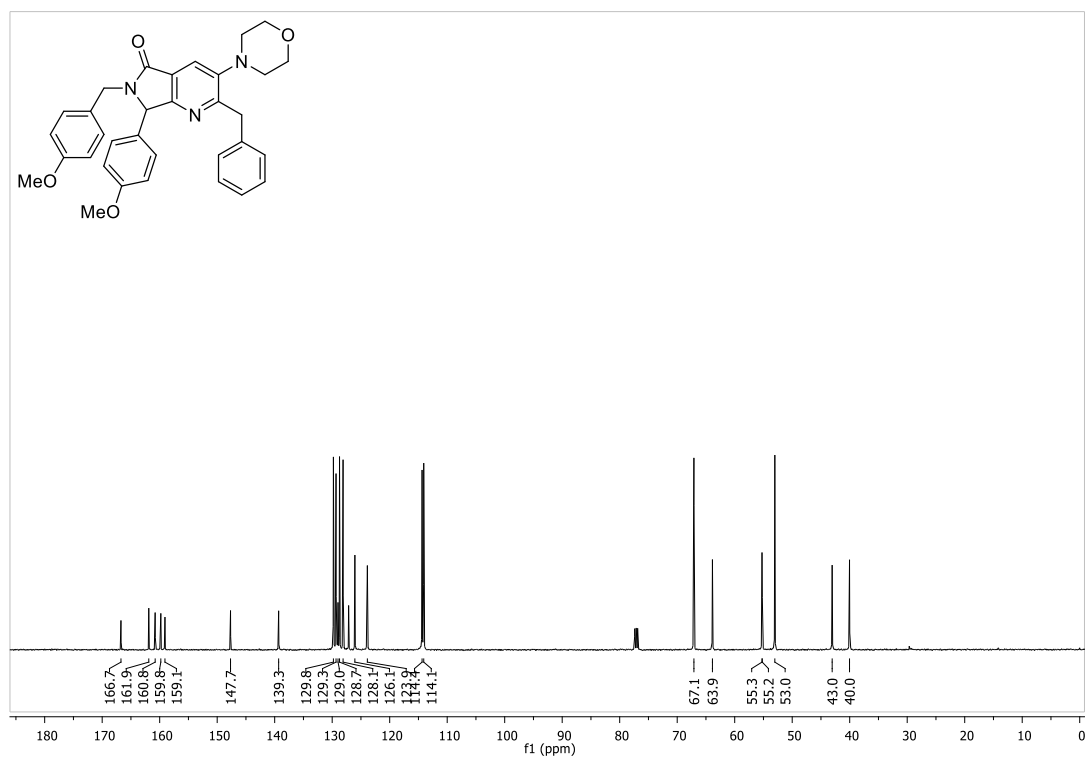


Figure S10. ^{13}C NMR spectrum of the product **11e**

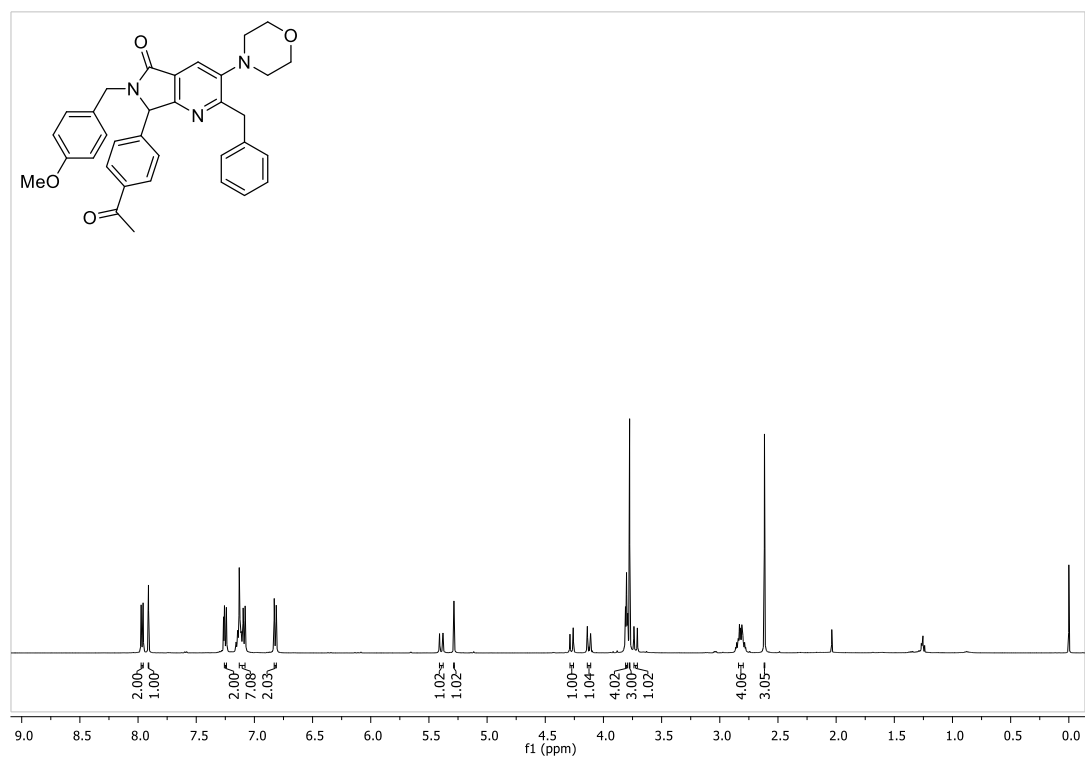


Figure S11. ^1H NMR spectrum of the product **11f**

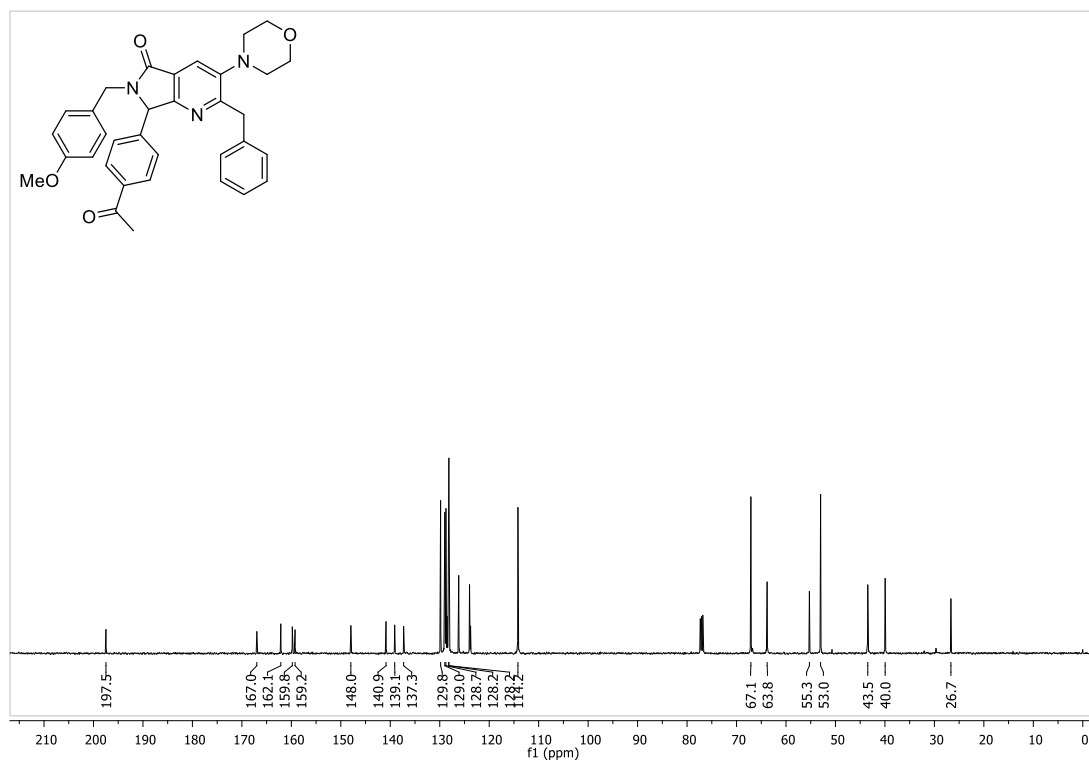


Figure S12. ^{13}C NMR spectrum of the product **11f**

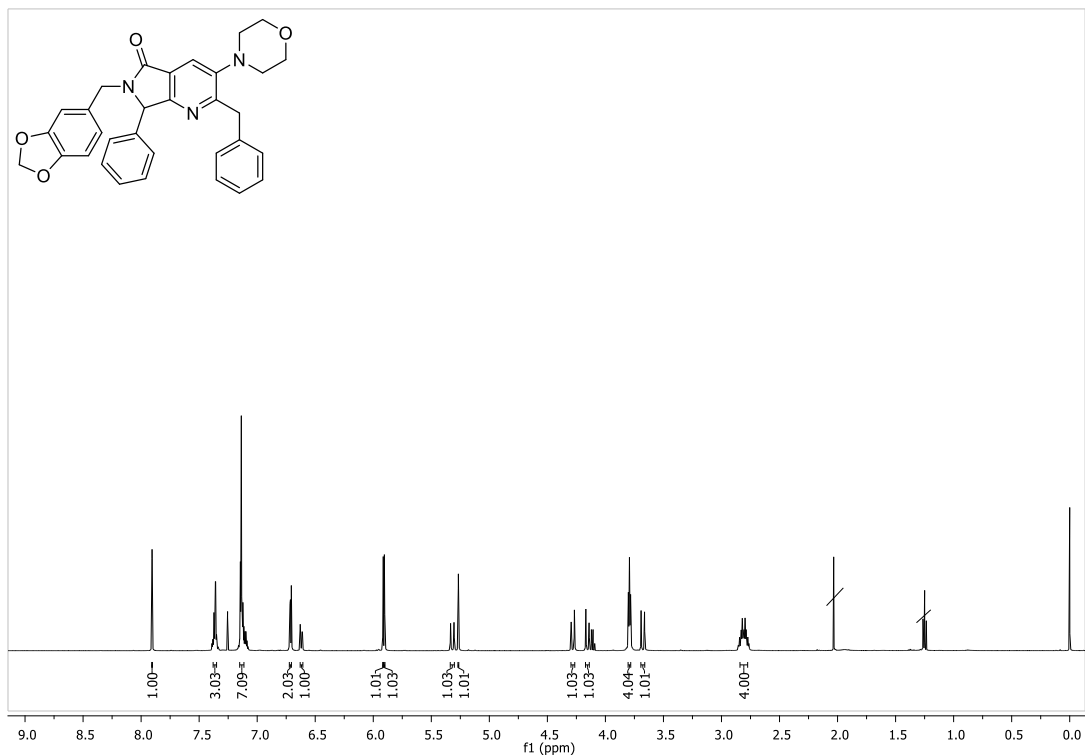


Figure S11. ^1H NMR spectrum of the product **11g**

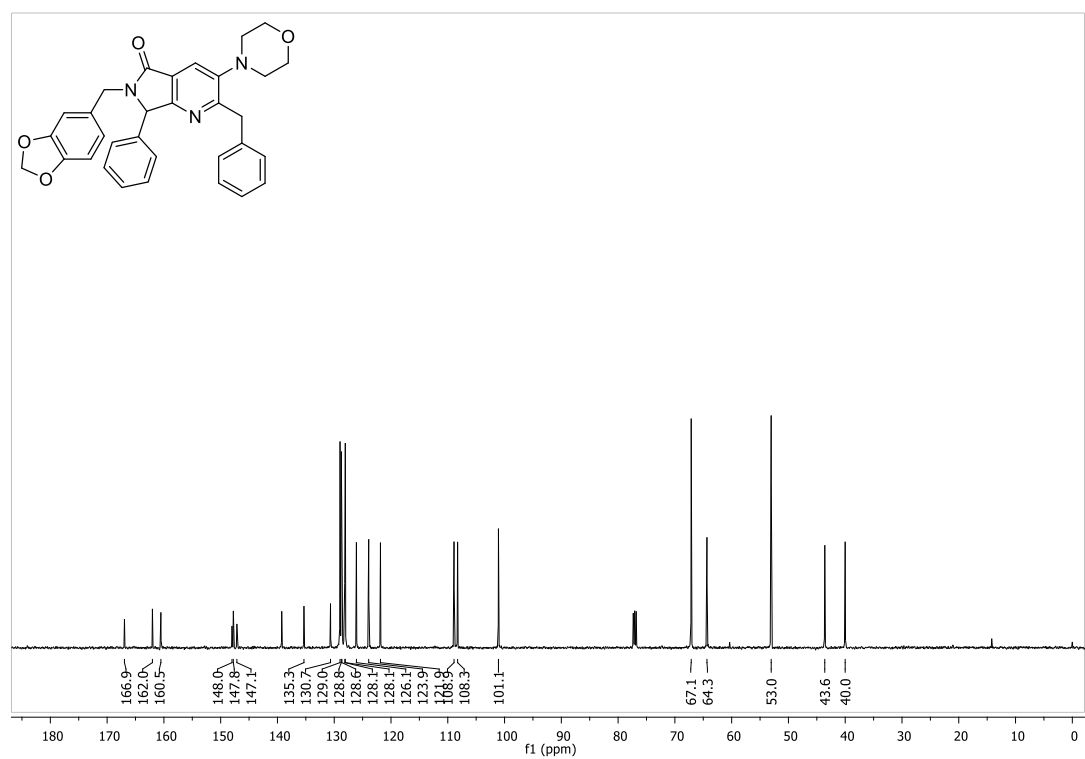


Figure S14. ^{13}C NMR spectrum of the product **11g**

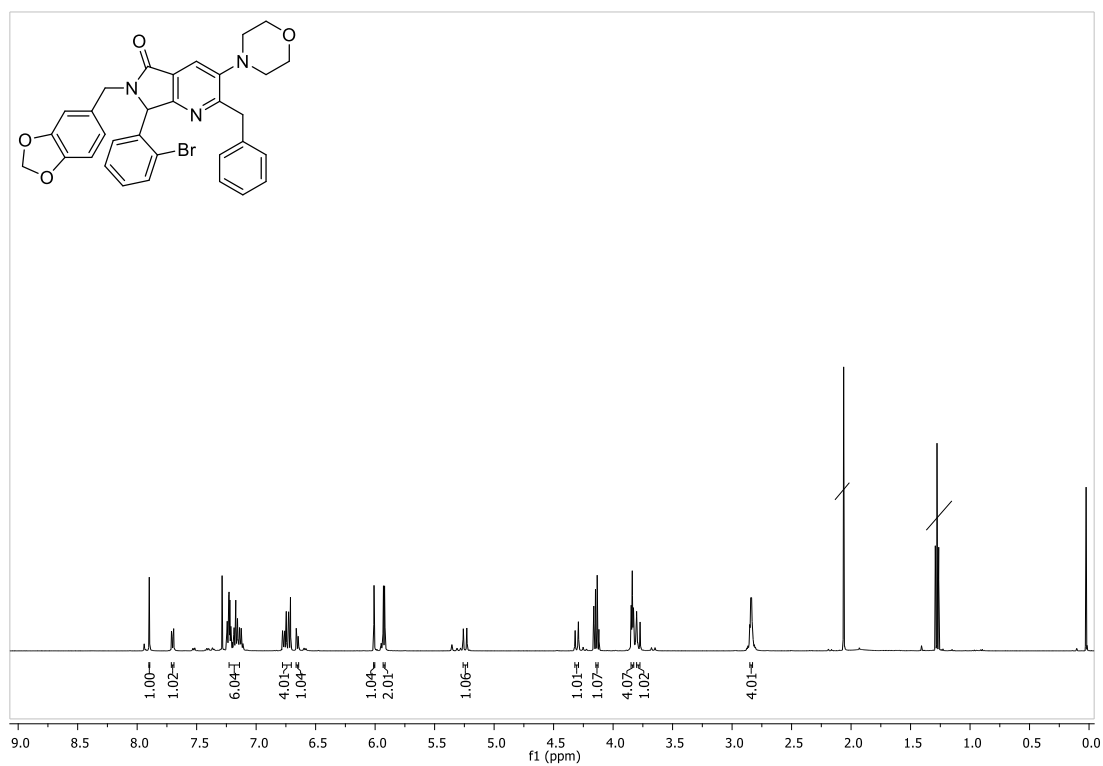


Figure S15. ^1H NMR spectrum of the product **11h**

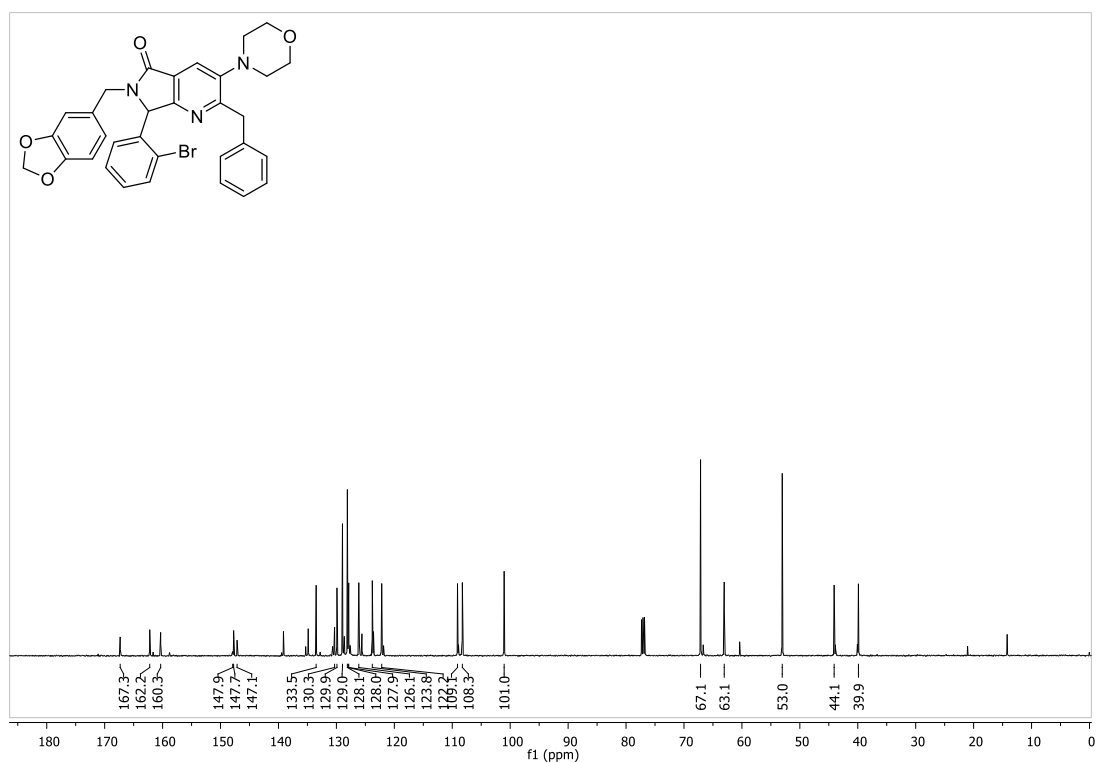


Figure S16. ^{13}C NMR spectrum of the product **11h**

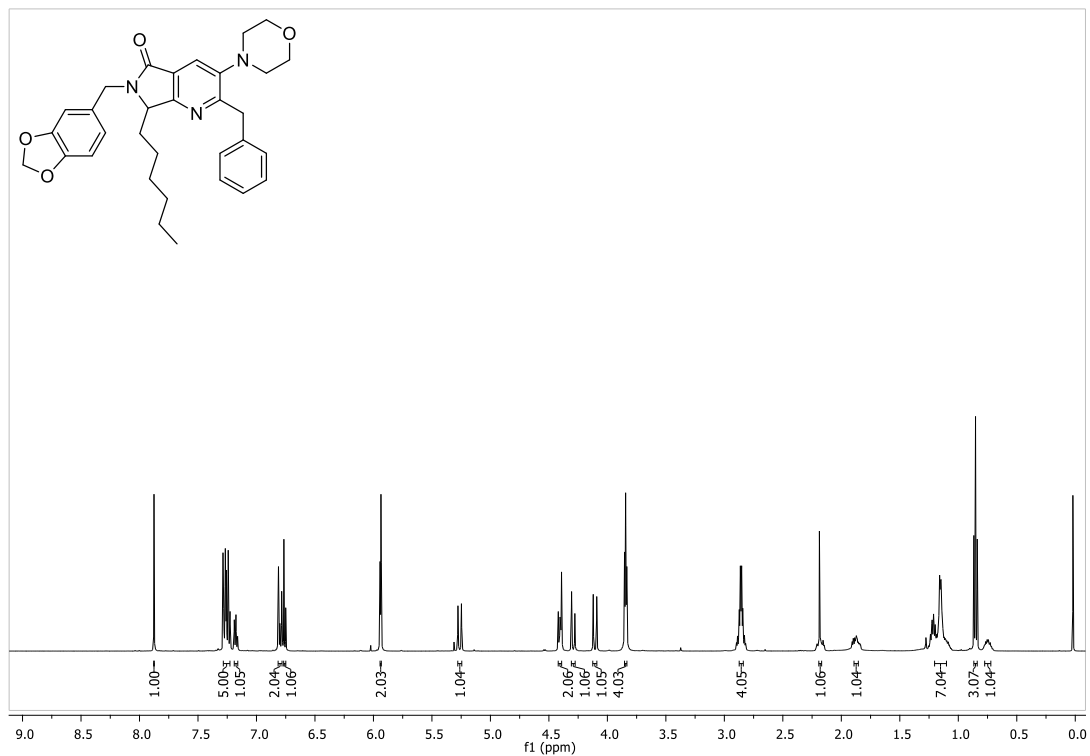


Figure S17. ^1H NMR spectrum of the product **11i**

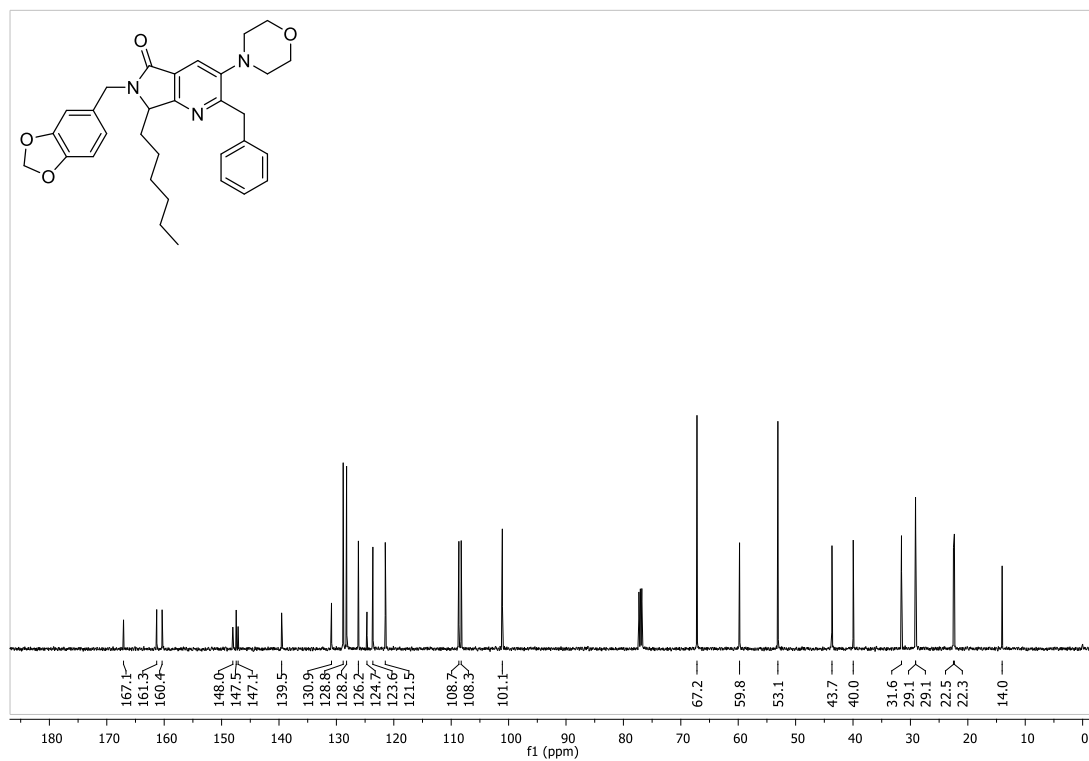


Figure S18. ^{13}C NMR spectrum of the product **11i**

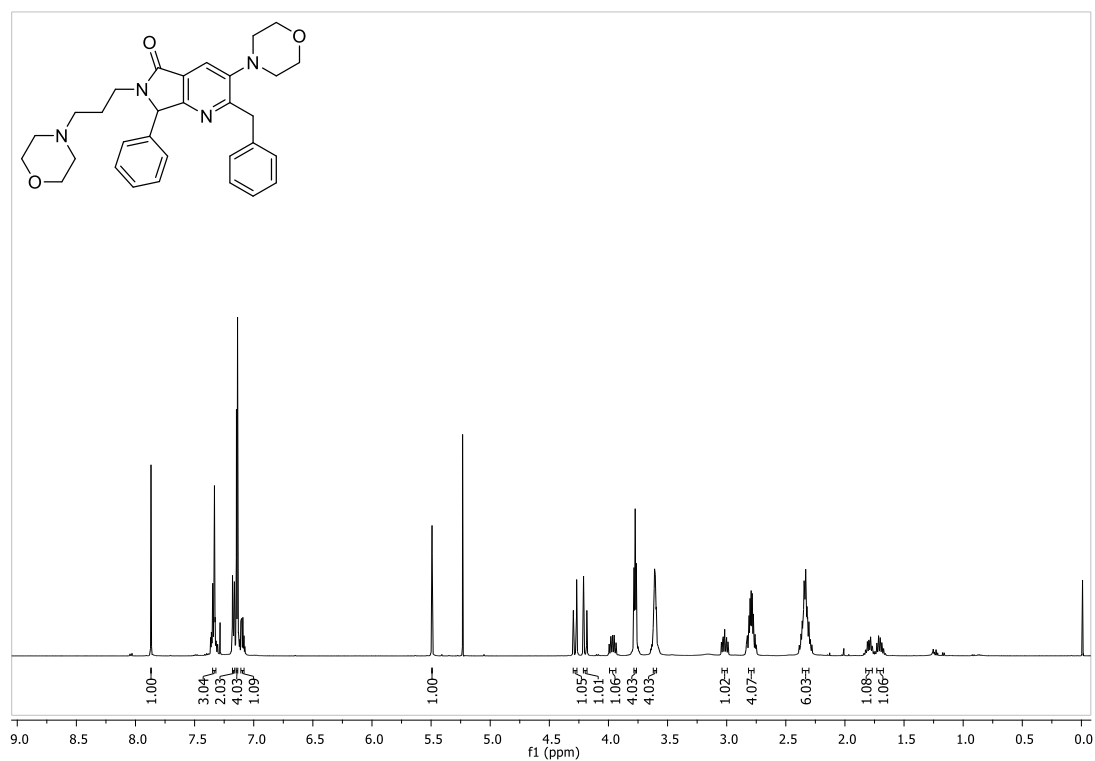


Figure S19. ^1H NMR spectrum of the product **11j**

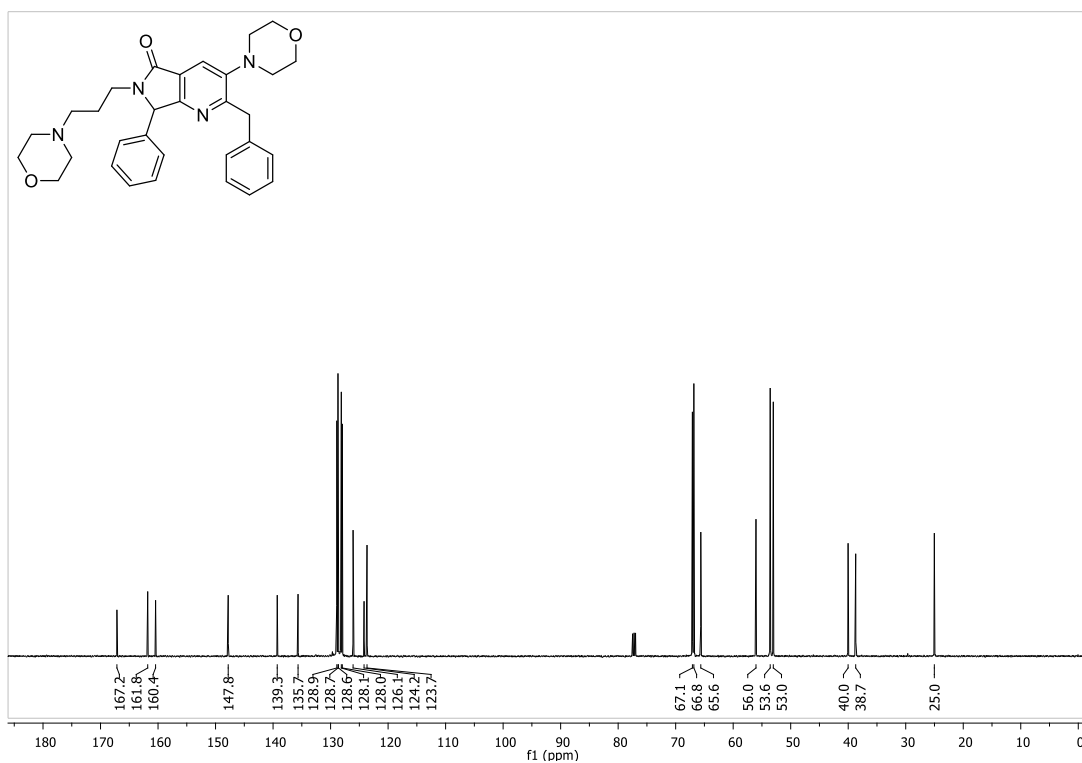


Figure S20. ^{13}C NMR spectrum of the product **11j**

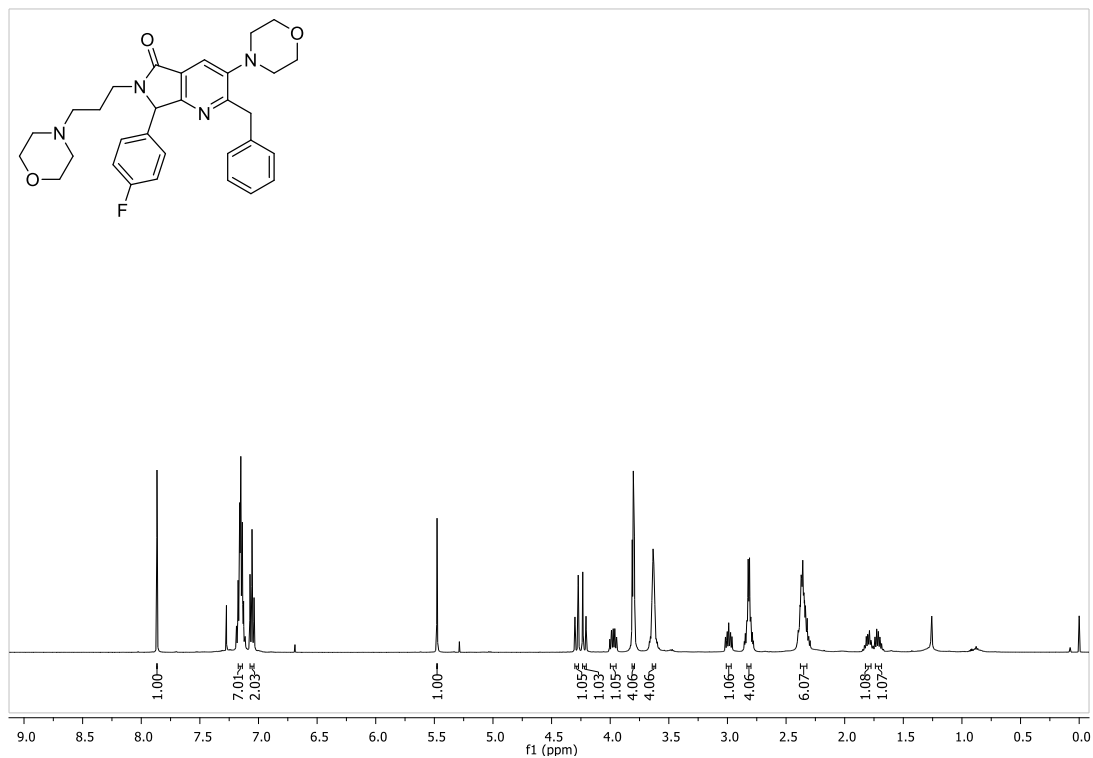


Figure S21. ^1H NMR spectrum of the product **11k**

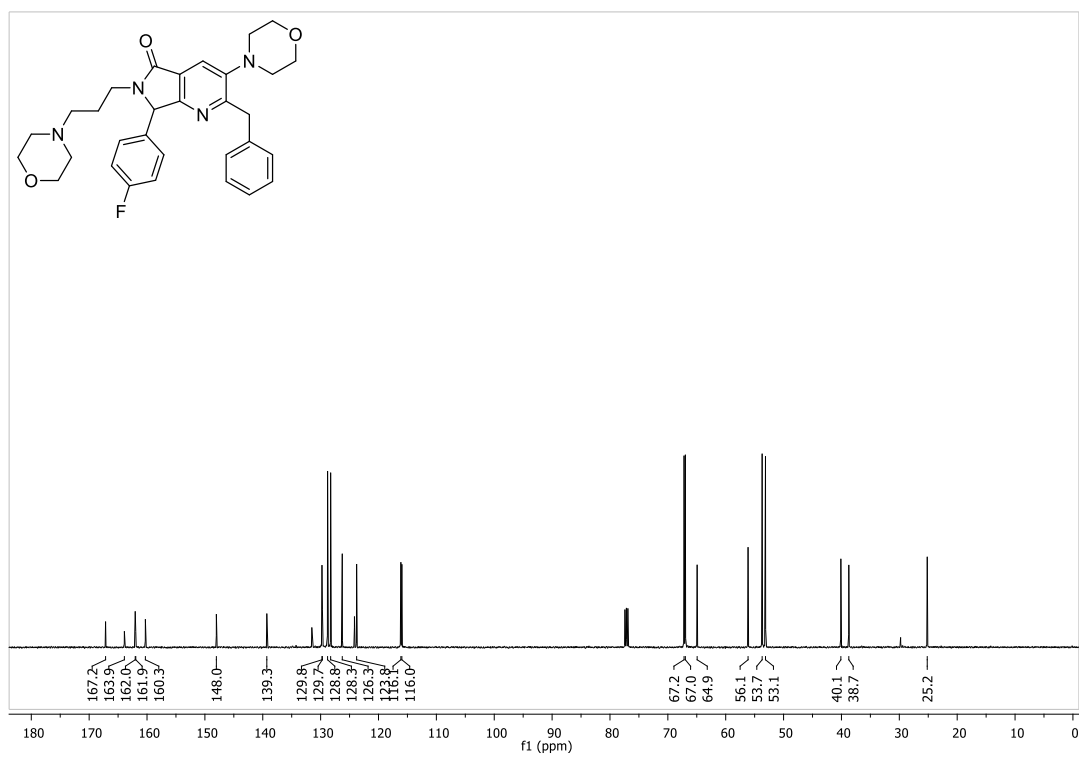


Figure S22. ^{13}C NMR spectrum of the product **11k**

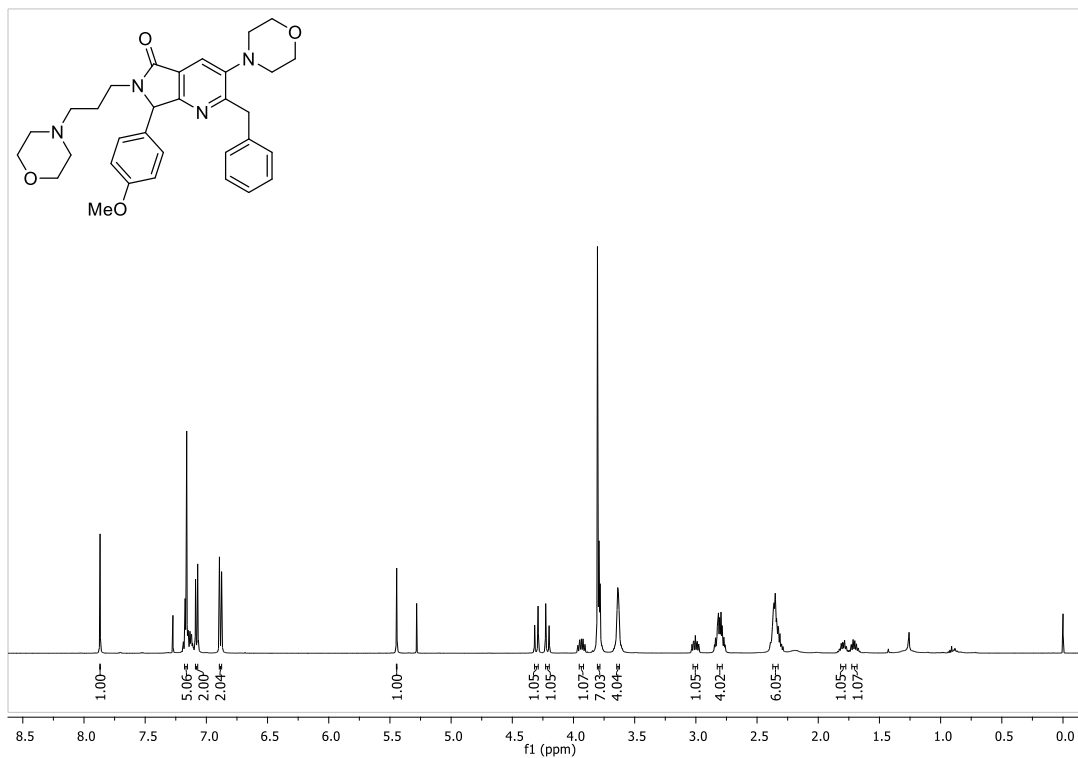


Figure S23. ^1H NMR spectrum of the product **11l**

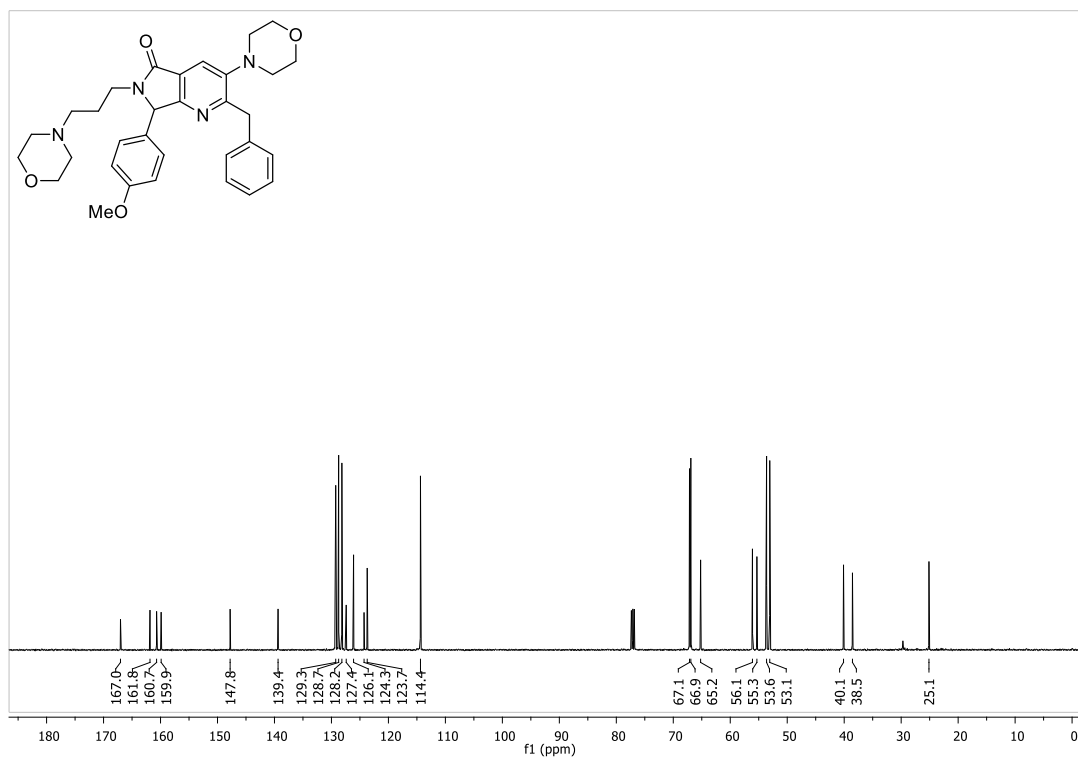


Figure S24. ^{13}C NMR spectrum of the product **11l**

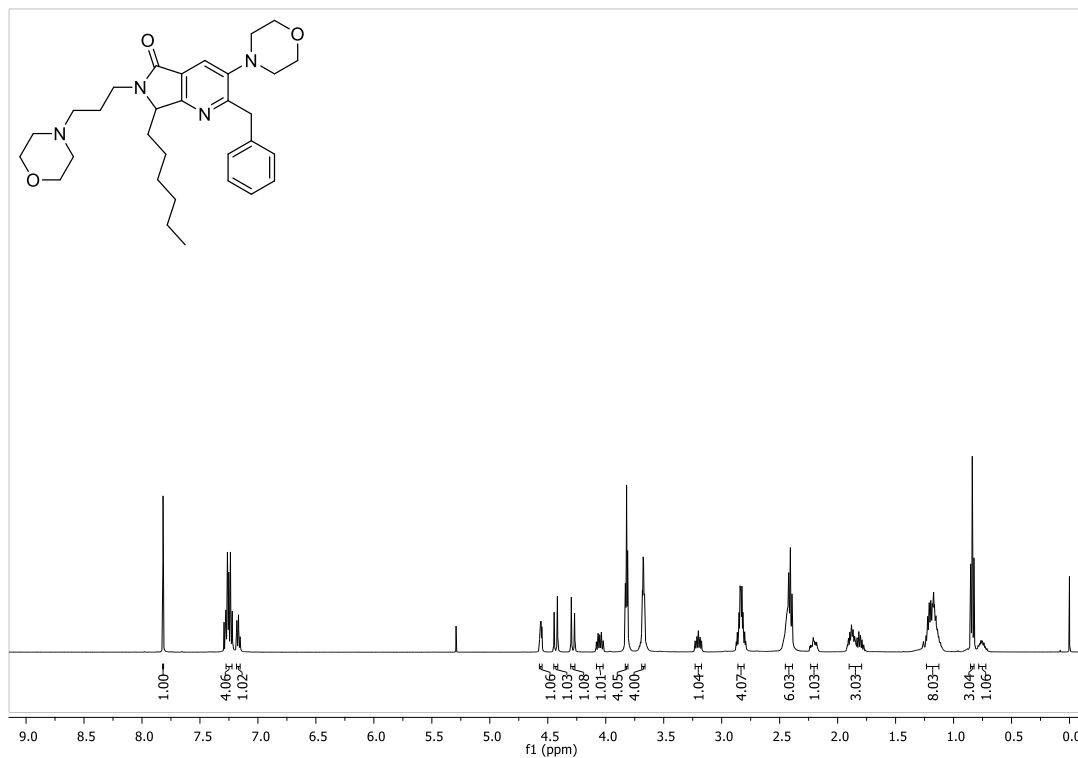


Figure S25. ^1H NMR spectrum of the product **11m**

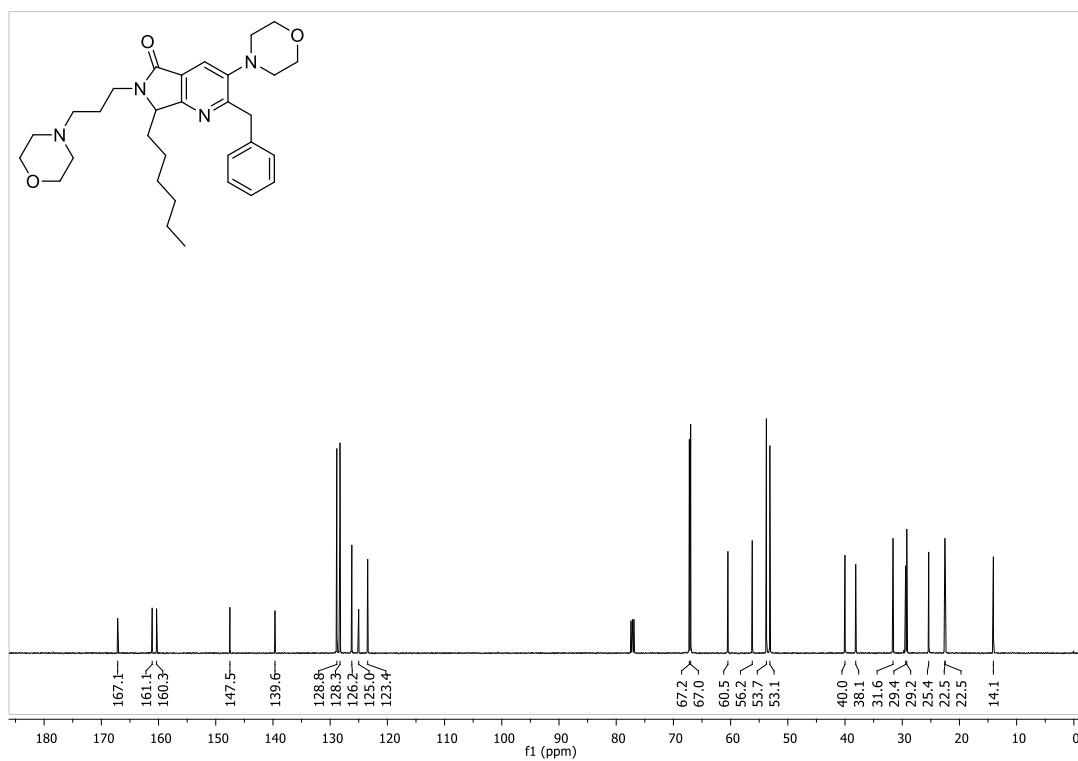


Figure S26. ^{13}C NMR spectrum of the product **11m**

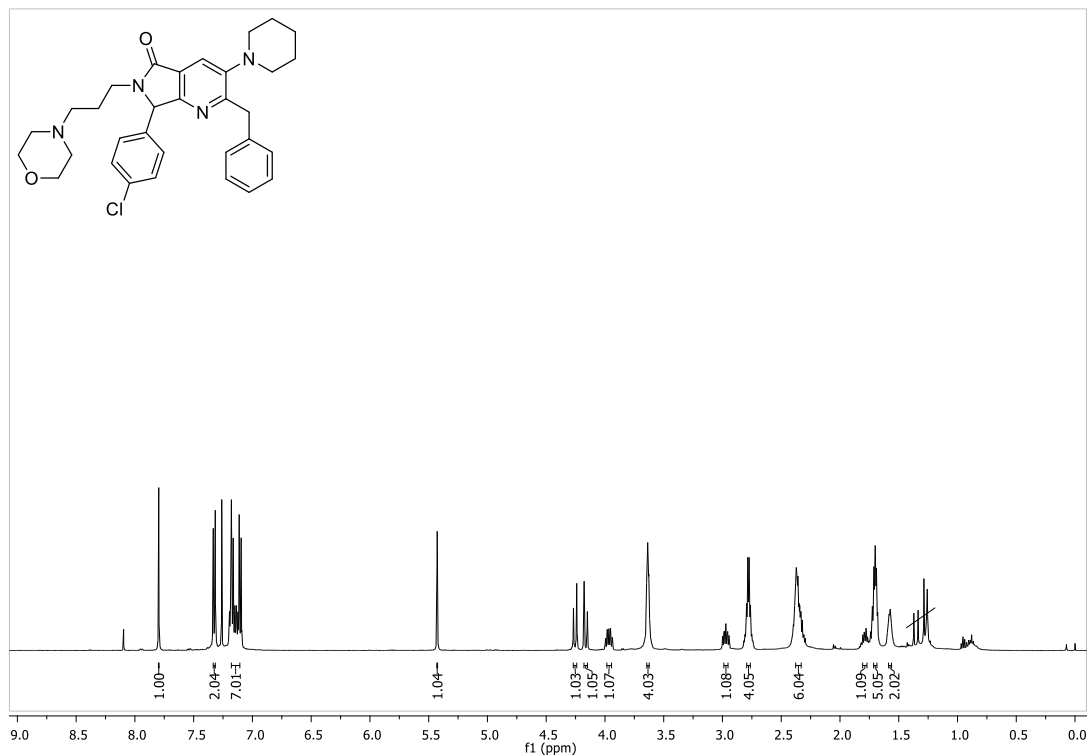


Figure S27. ^1H NMR spectrum of the product **11n**

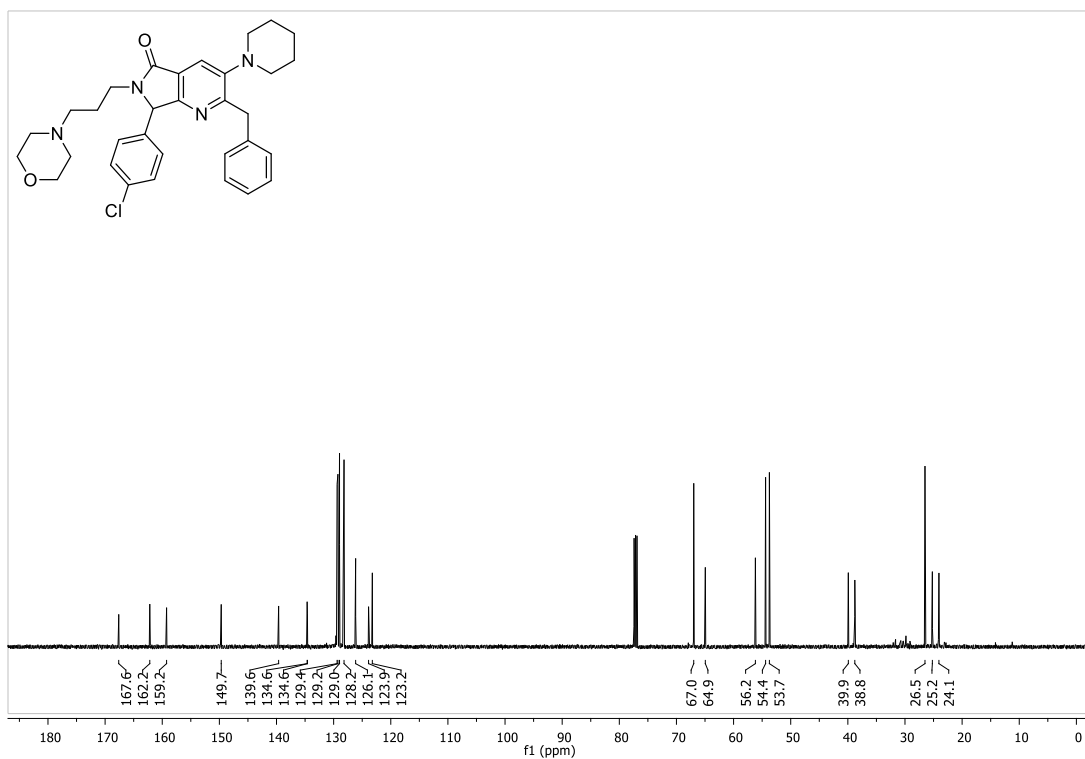


Figure S28. ^{13}C NMR spectrum of the product **11n**

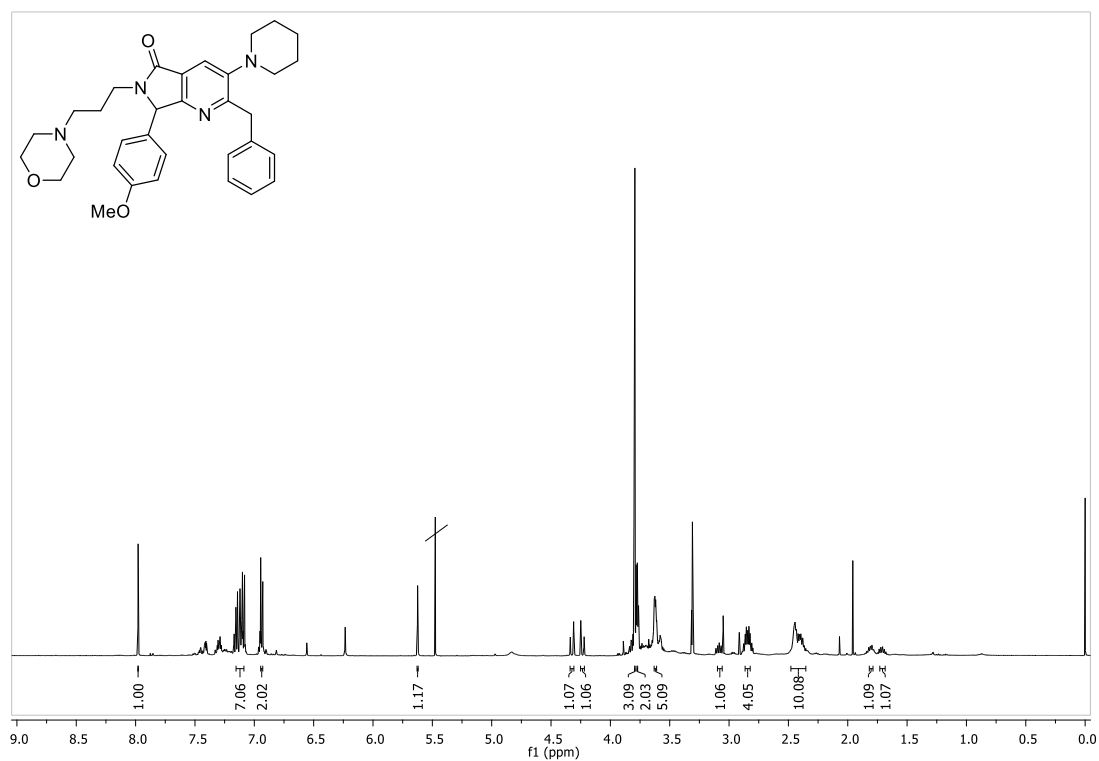


Figure S29. ^1H NMR spectrum of the product **11o**

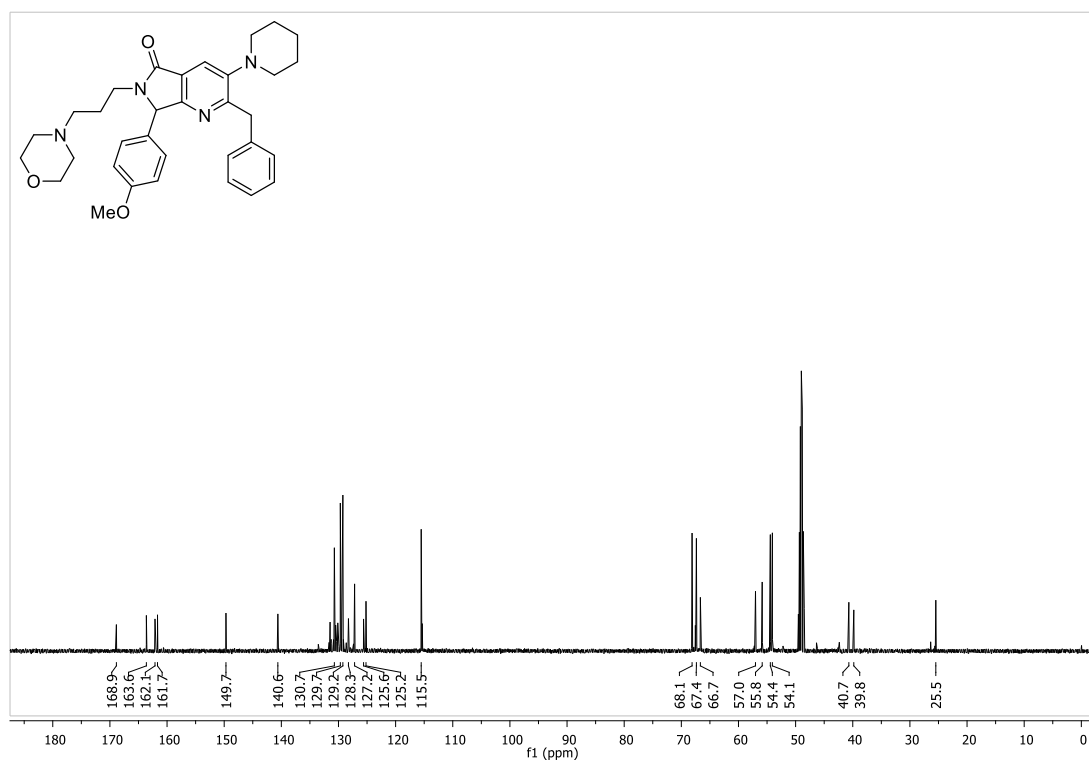


Figure S30. ^{13}C NMR spectrum of the product **11o**

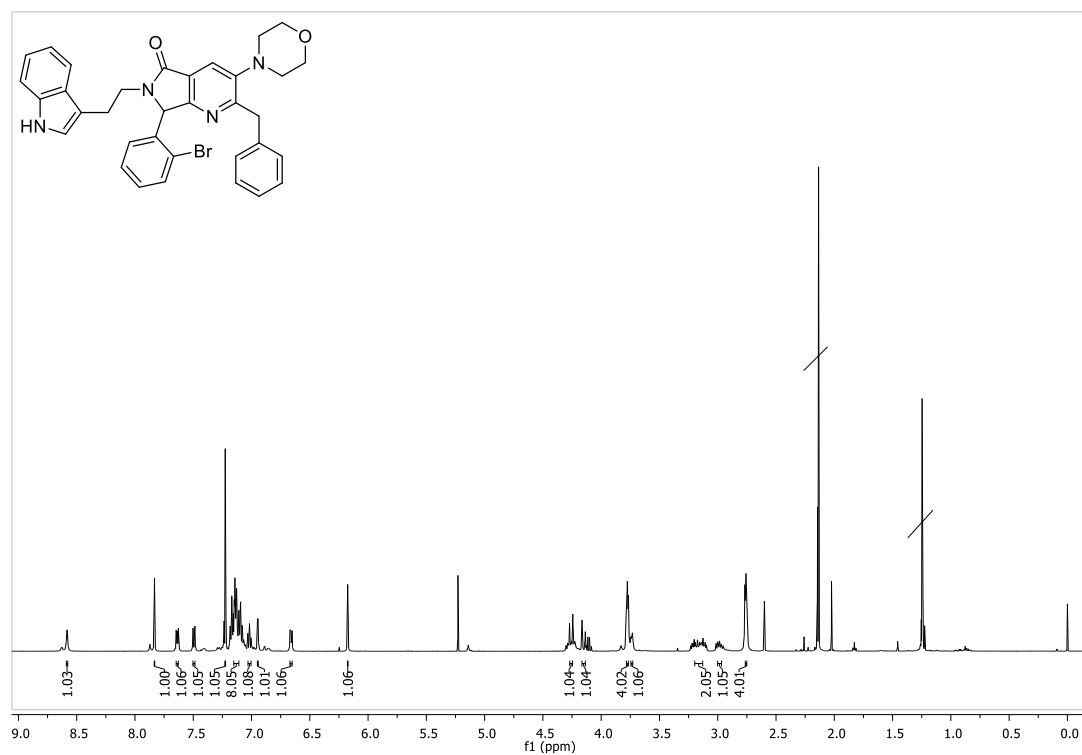


Figure S31. ^1H NMR spectrum of the product **11p**

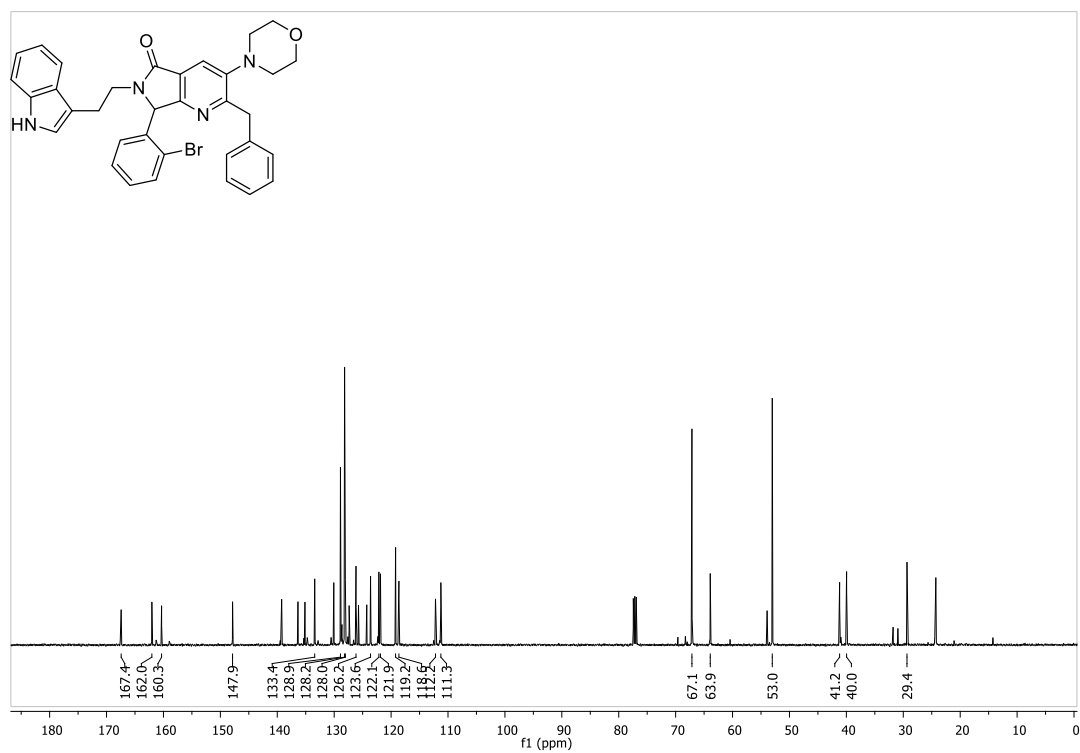


Figure S32. ^{13}C NMR spectrum of the product **11p**

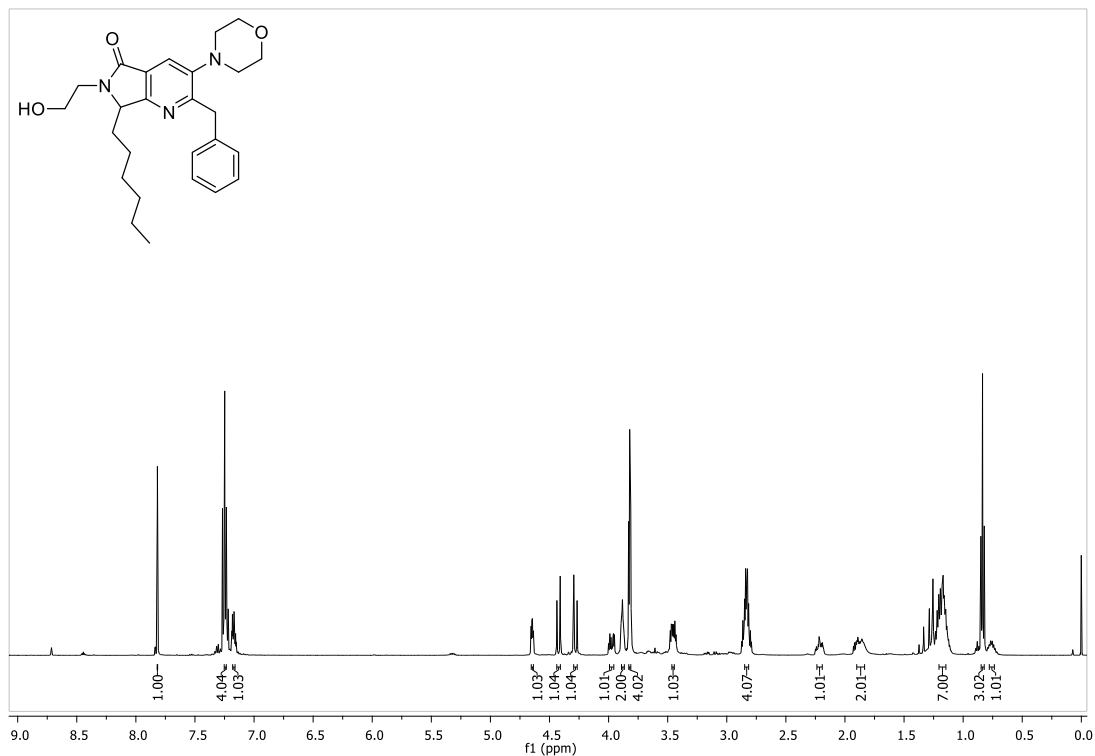


Figure S33. ^1H NMR spectrum of the product **11q**

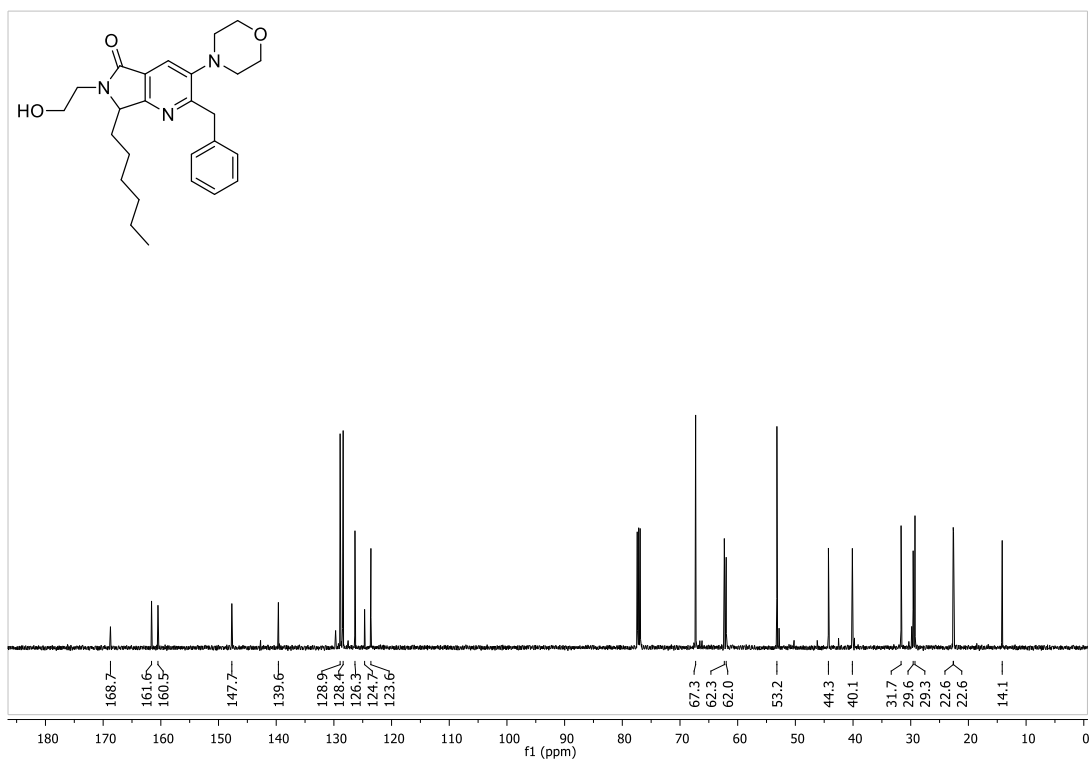


Figure S34. ^{13}C NMR spectrum of the product **11q**

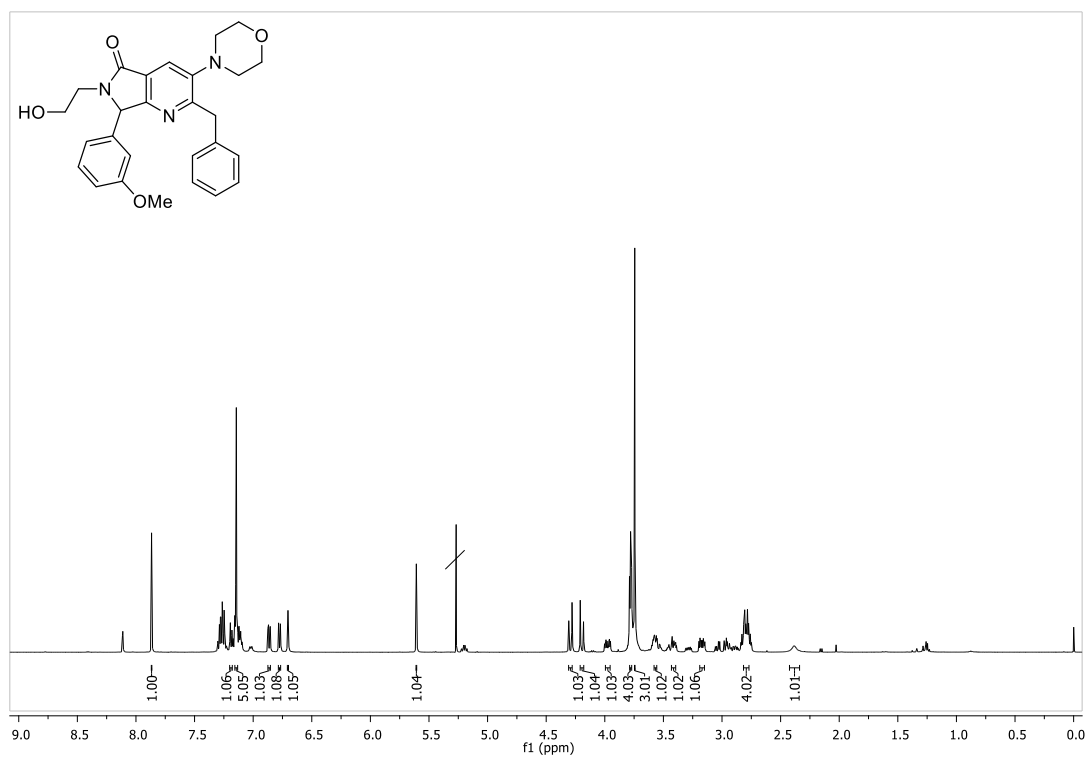


Figure S35. ^1H NMR spectrum of the product **11r**

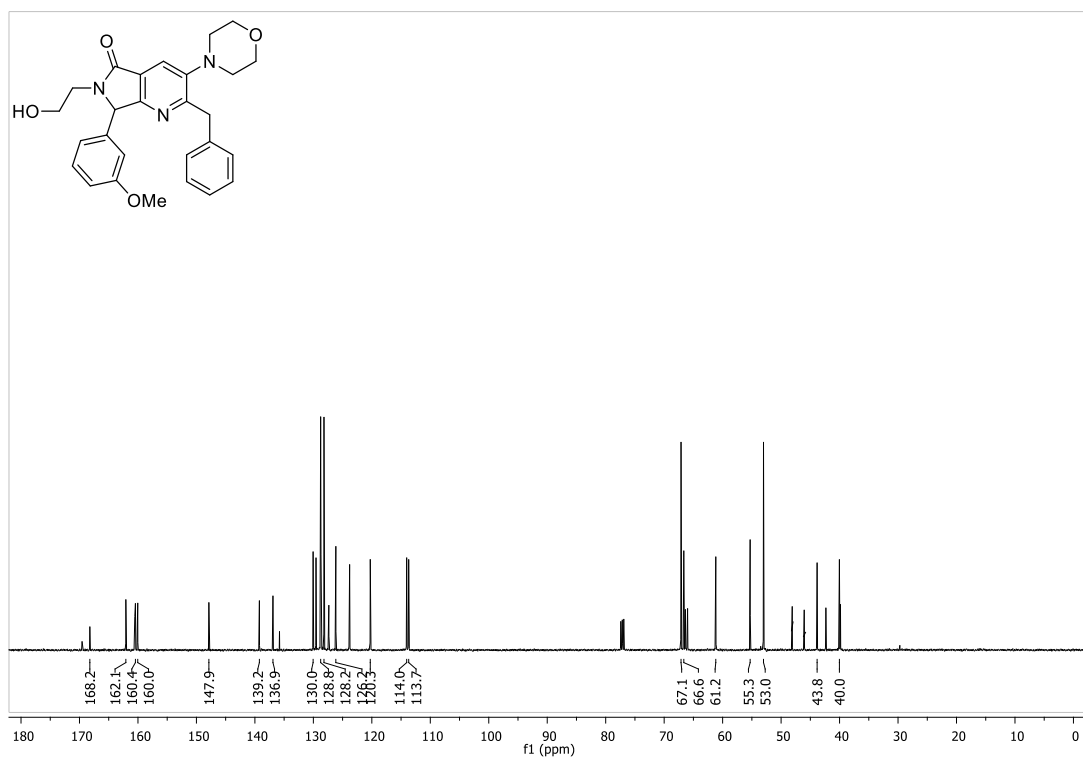


Figure S36. ^{13}C NMR spectrum of the product **11r**

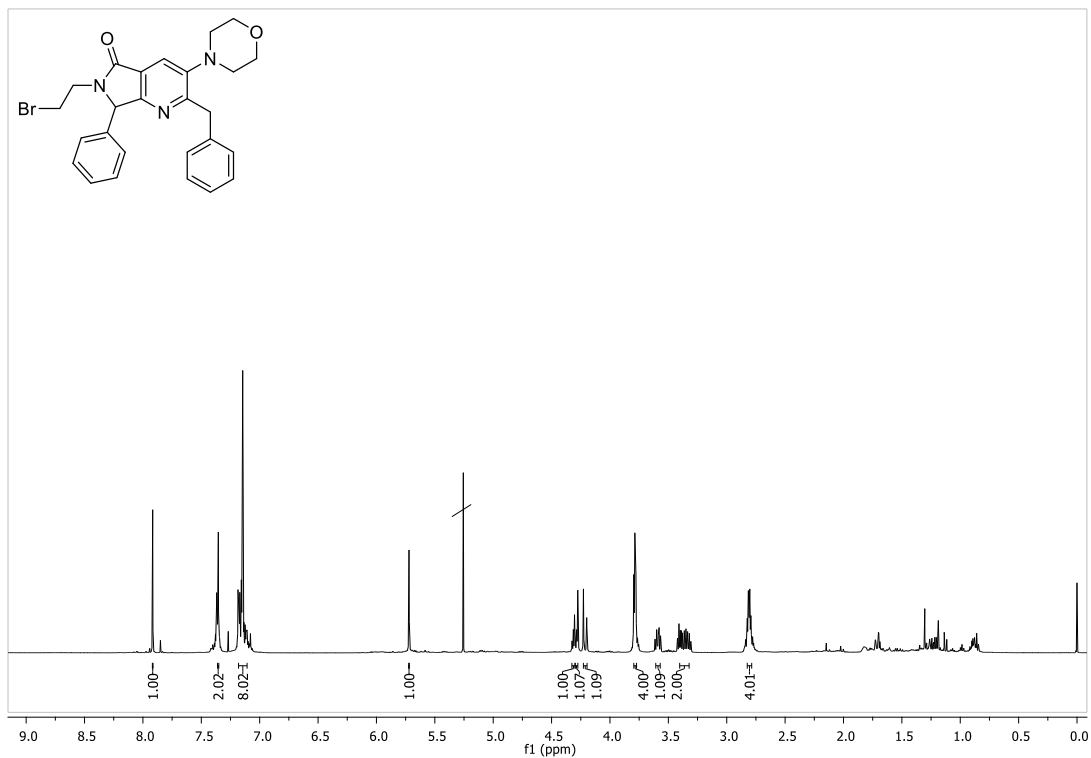


Figure S37. ¹H NMR spectrum of the product **11s**

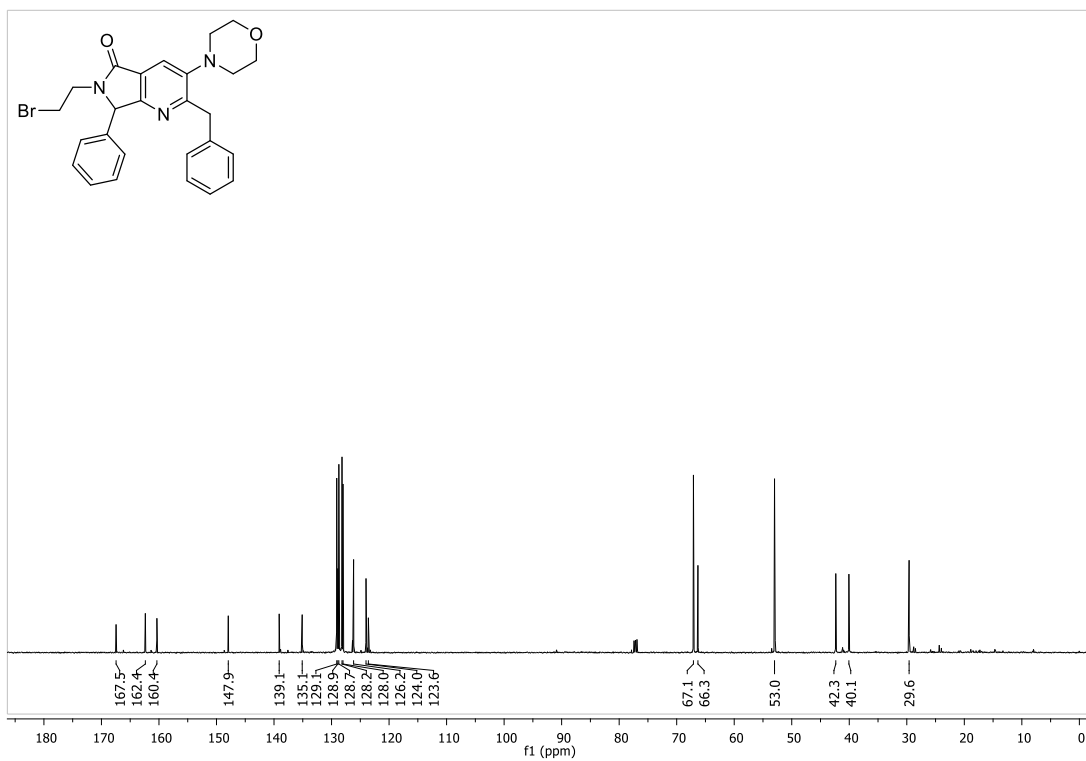


Figure S38. ¹³C NMR spectrum of the product **11s**

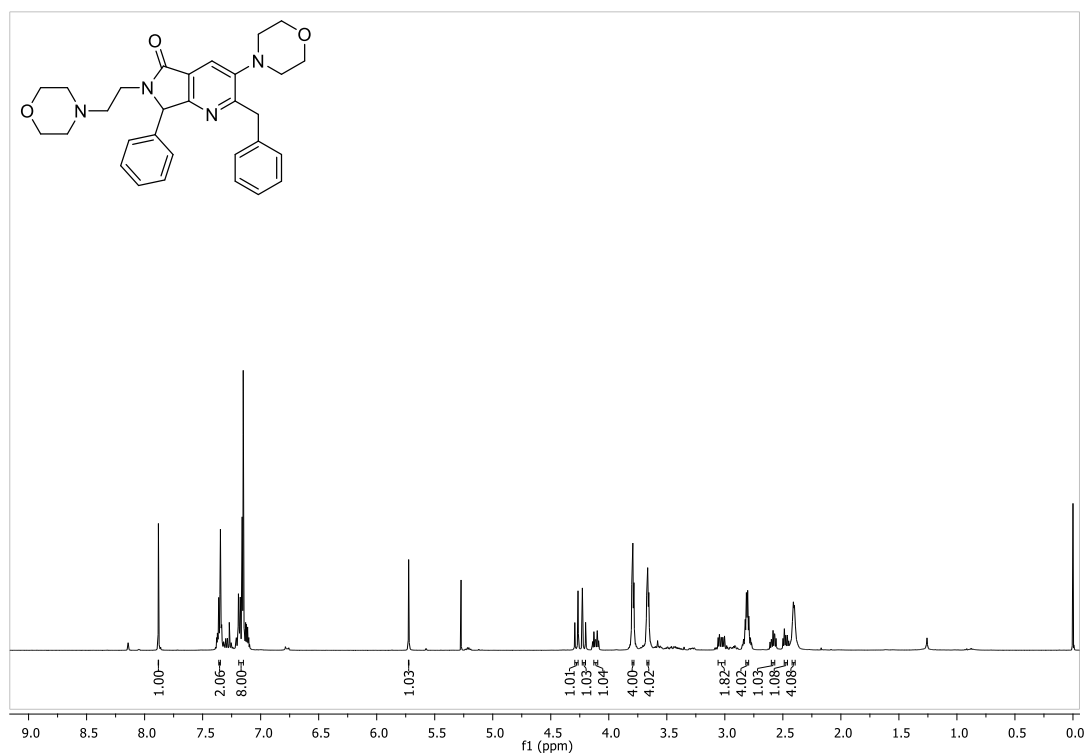


Figure S39. ^1H NMR spectrum of the product **11t**

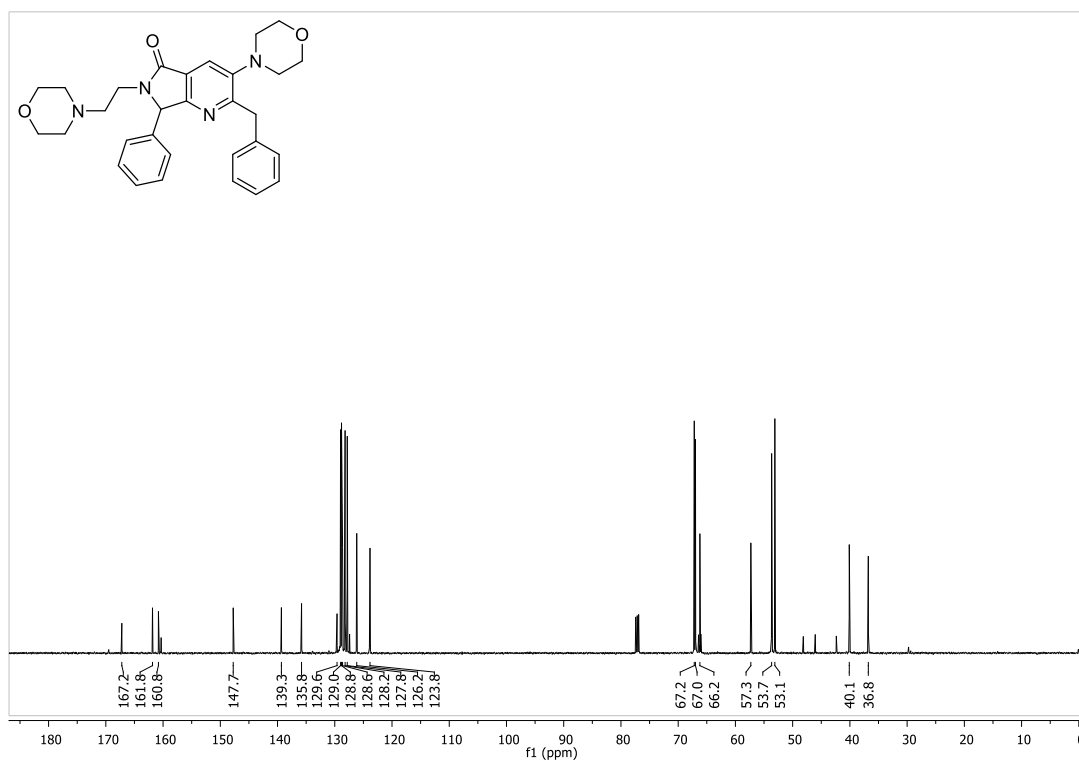


Figure S40. ^{13}C NMR spectrum of the product **11t**

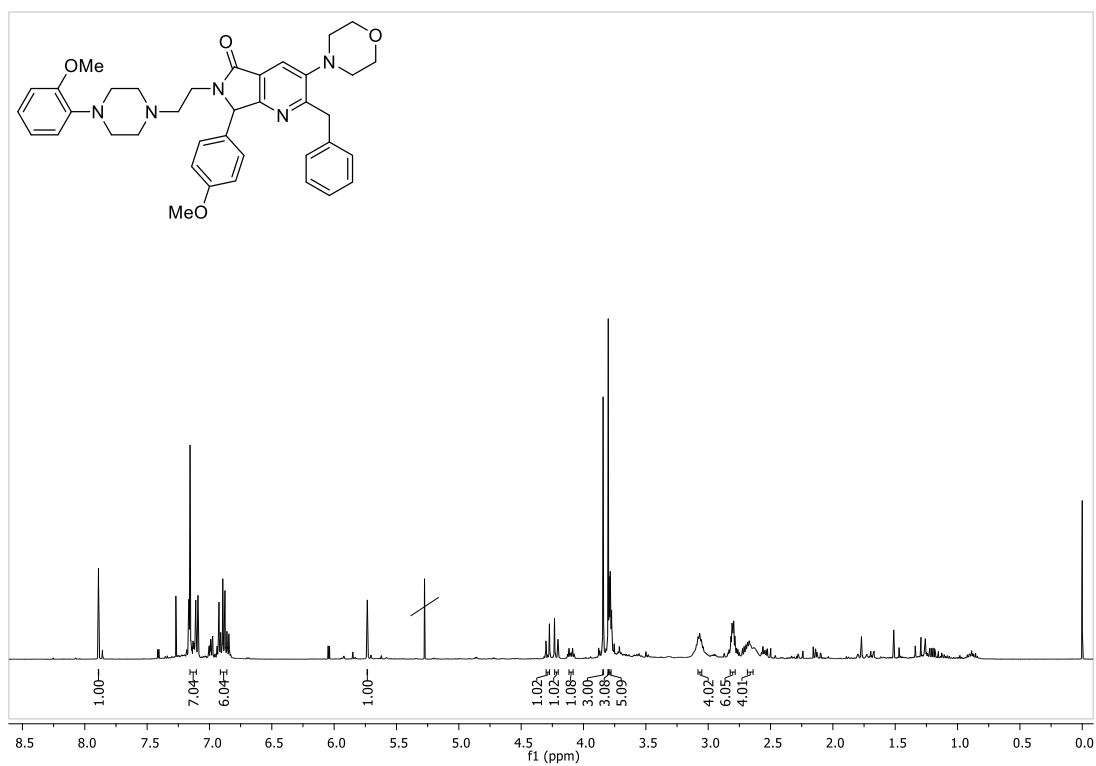


Figure S41. ^1H NMR spectrum of the product **11u**

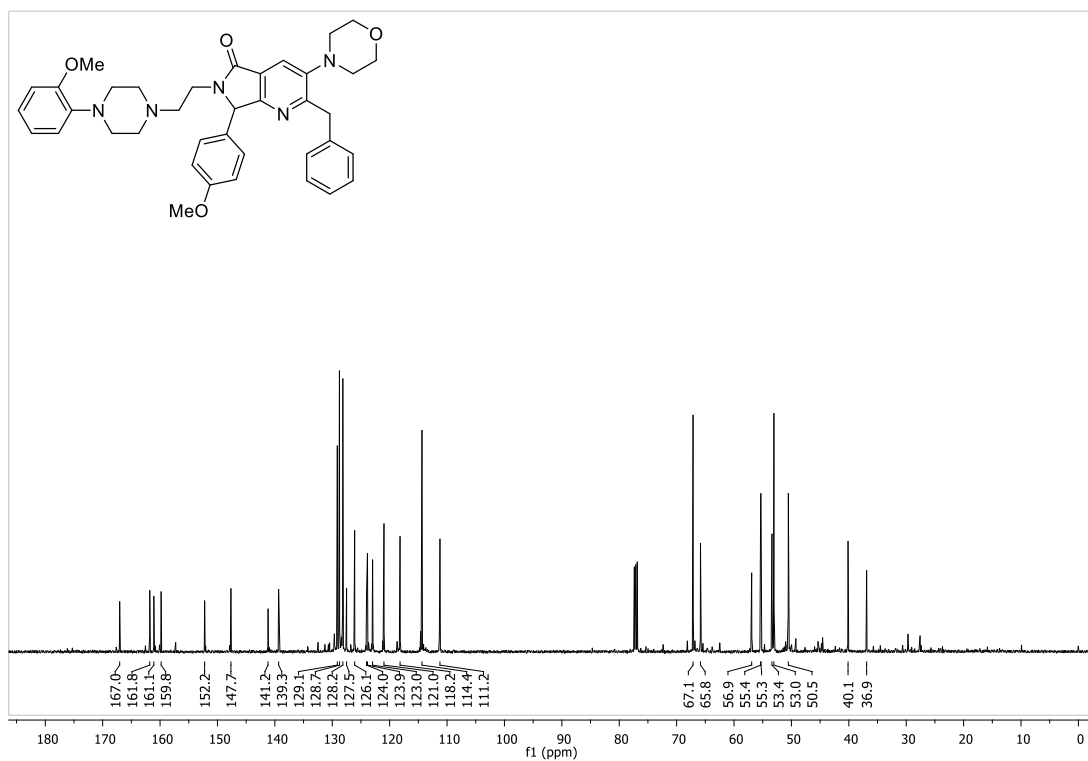


Figure S42. ^{13}C NMR spectrum of the product **11u**

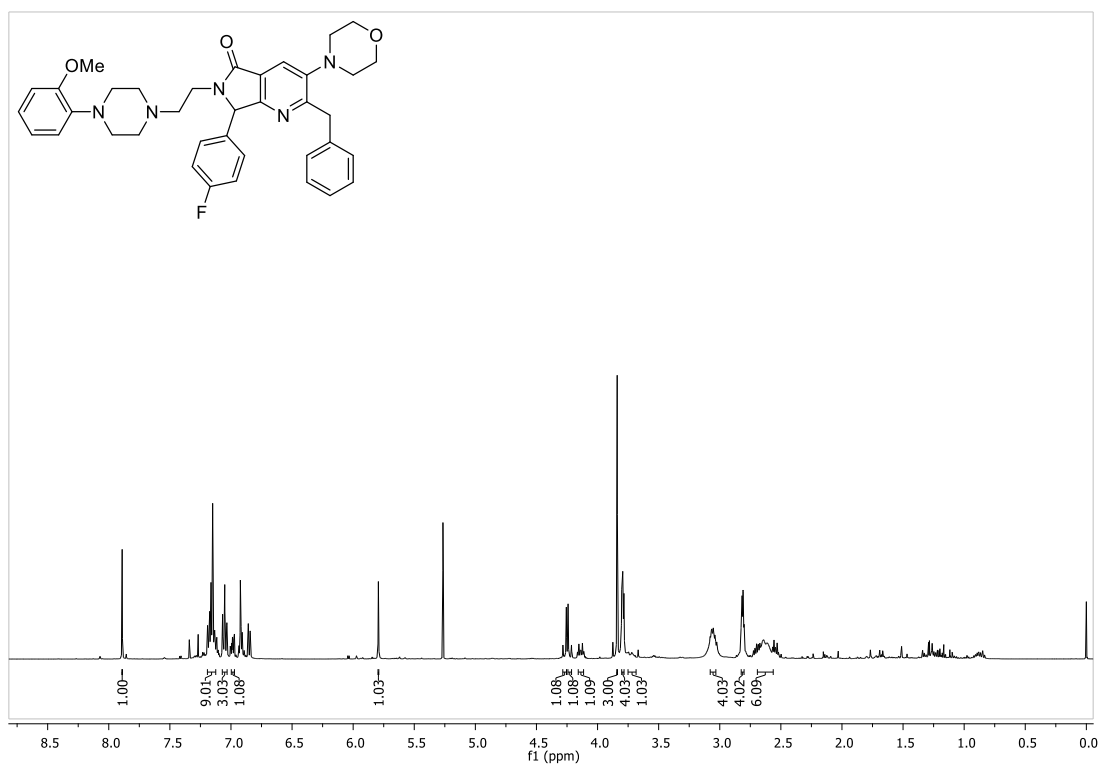


Figure S43. ¹H NMR spectrum of the product **11v**

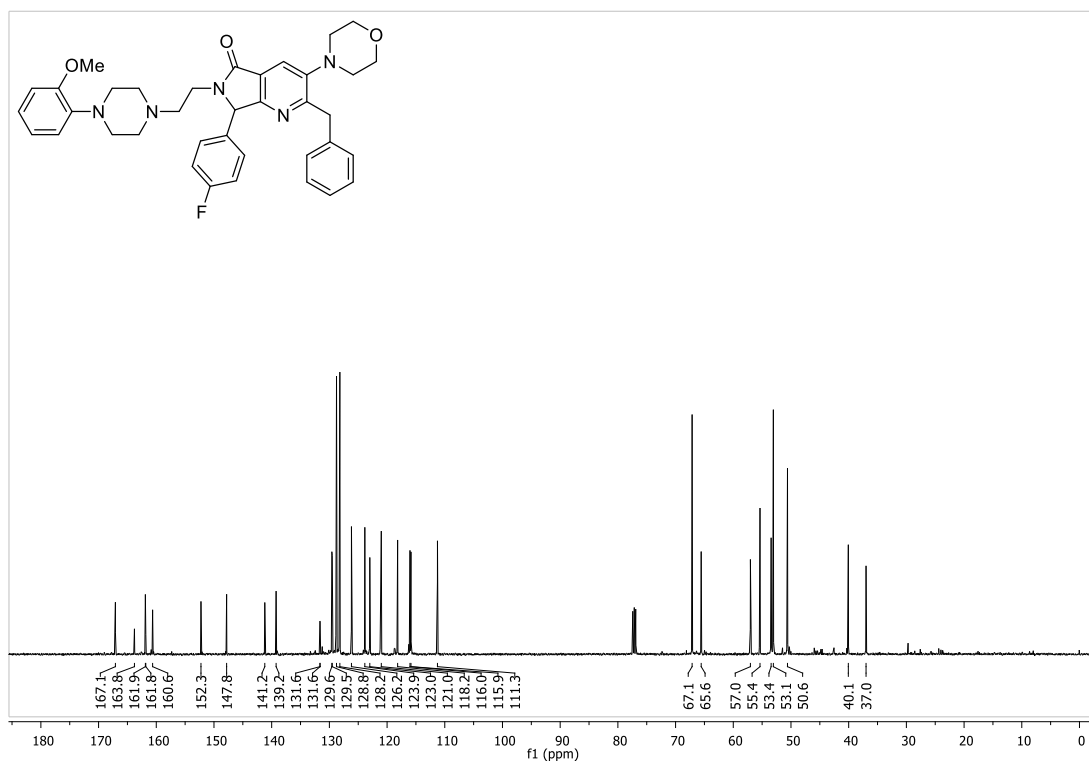


Figure S44. ¹³C NMR spectrum of the product **11v**

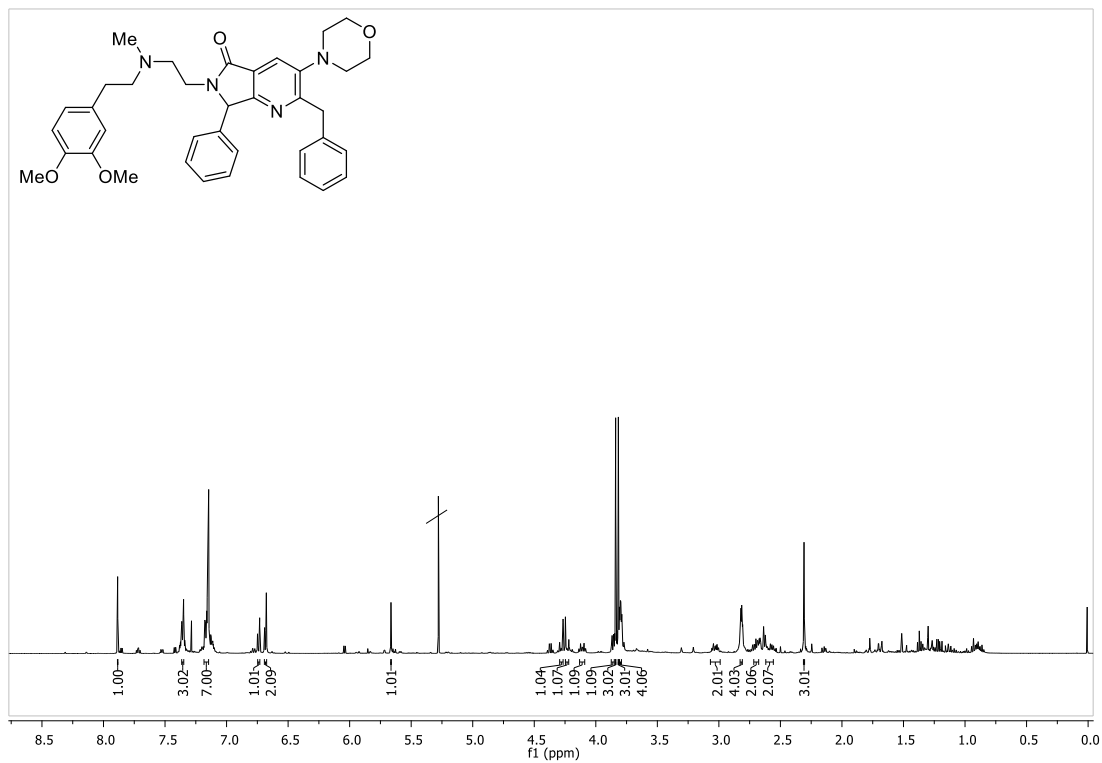


Figure S45. ¹H NMR spectrum of the product 11w

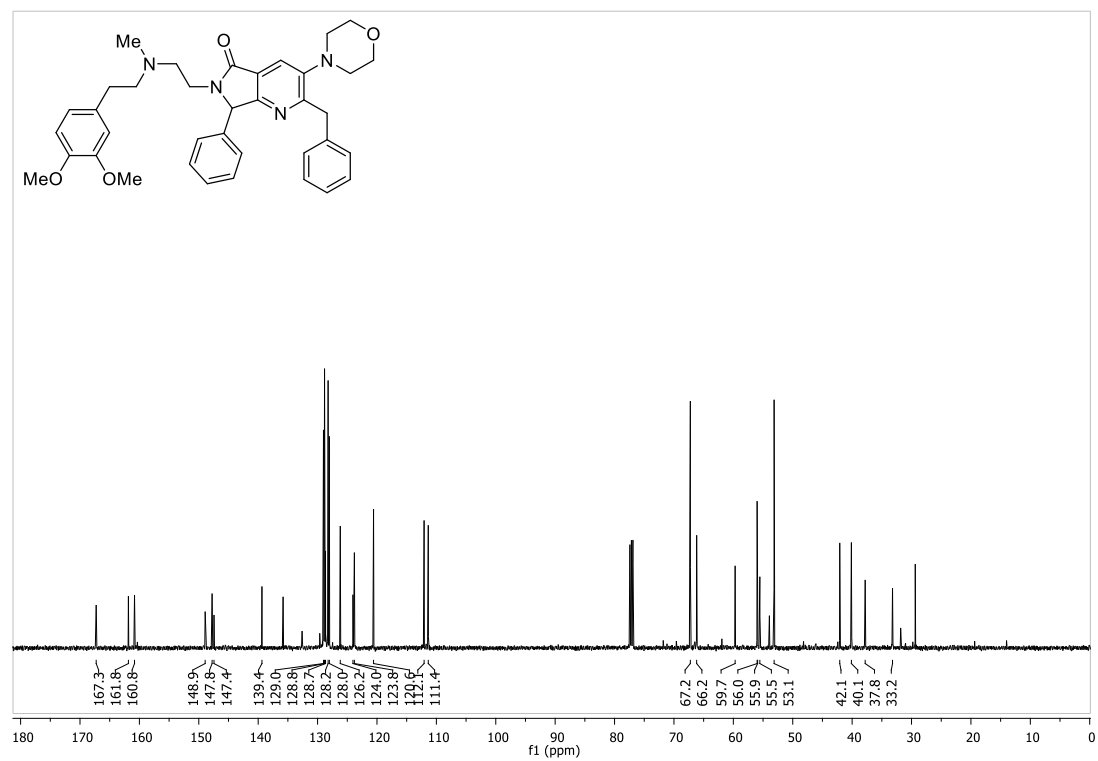


Figure S46. ¹³C NMR spectrum of the product 11w

