

Figure S13. ^1H NMR spectrum of 1-allyl-3-methylimidazolidin-2-one (**3**).

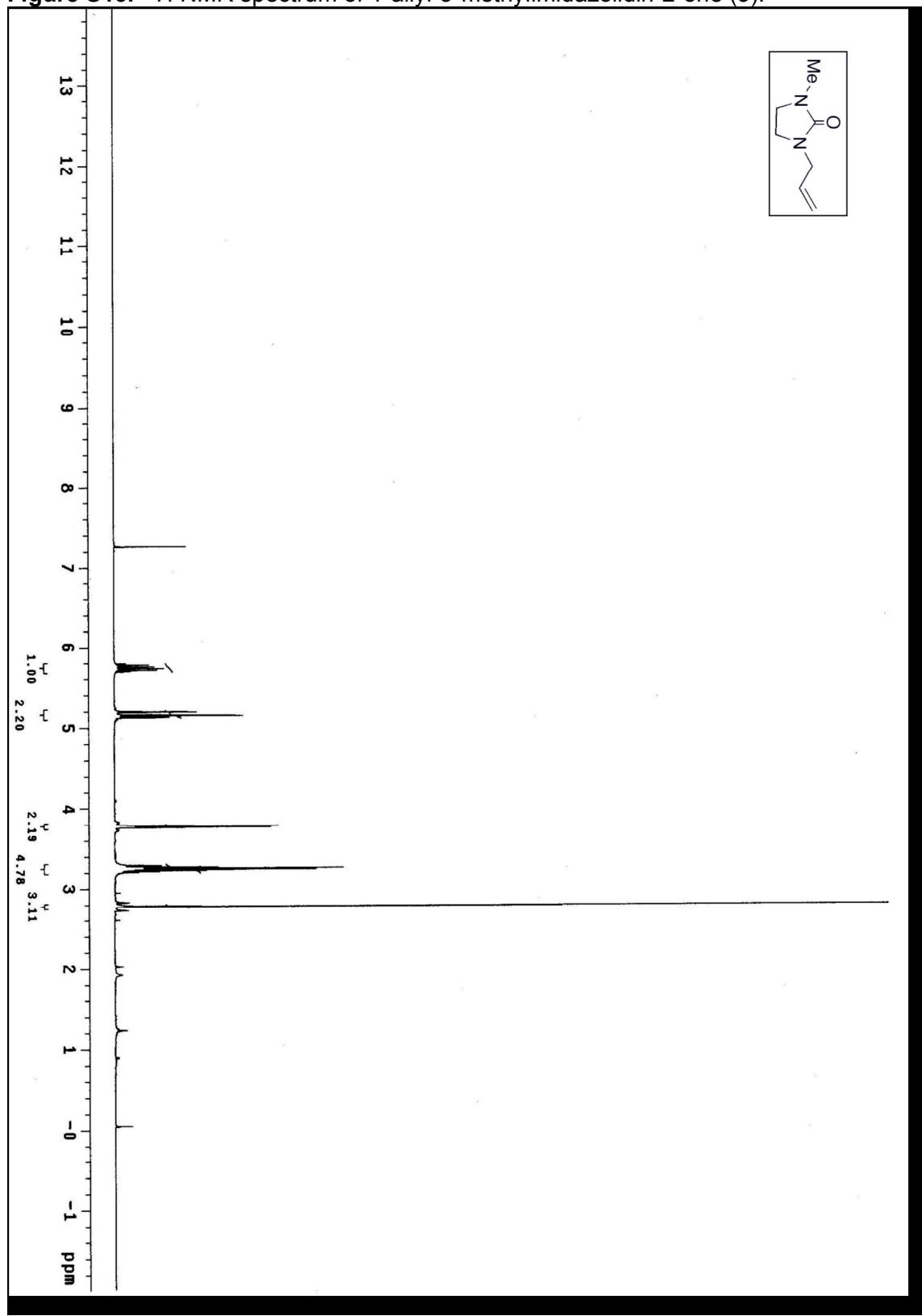


Figure S14. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of 1-allyl-3-methylimidazolidin-2-one (**3**).

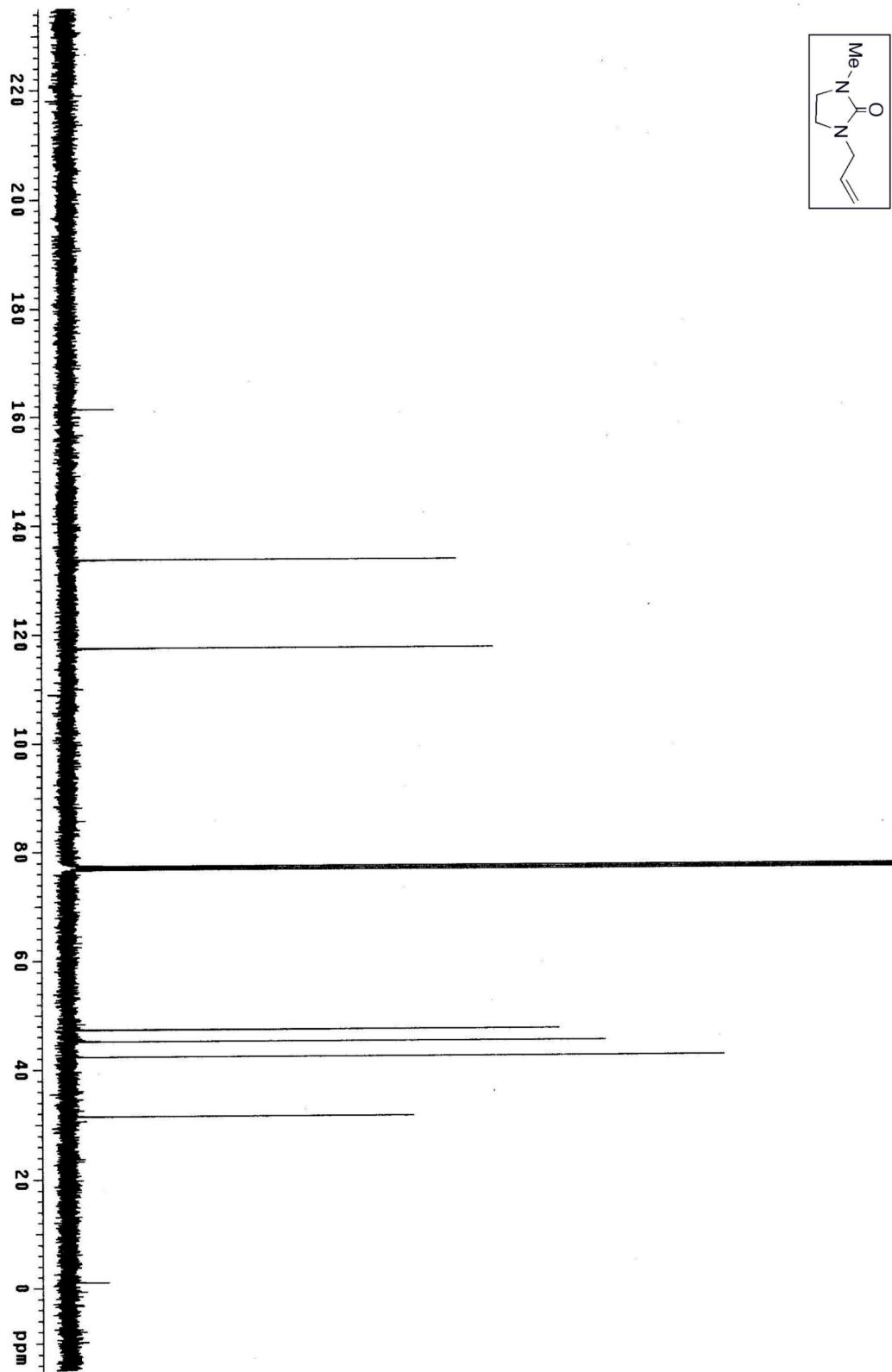


Figure S15. ^1H NMR spectrum of 1,3-diallylimidazolidin-2-one.

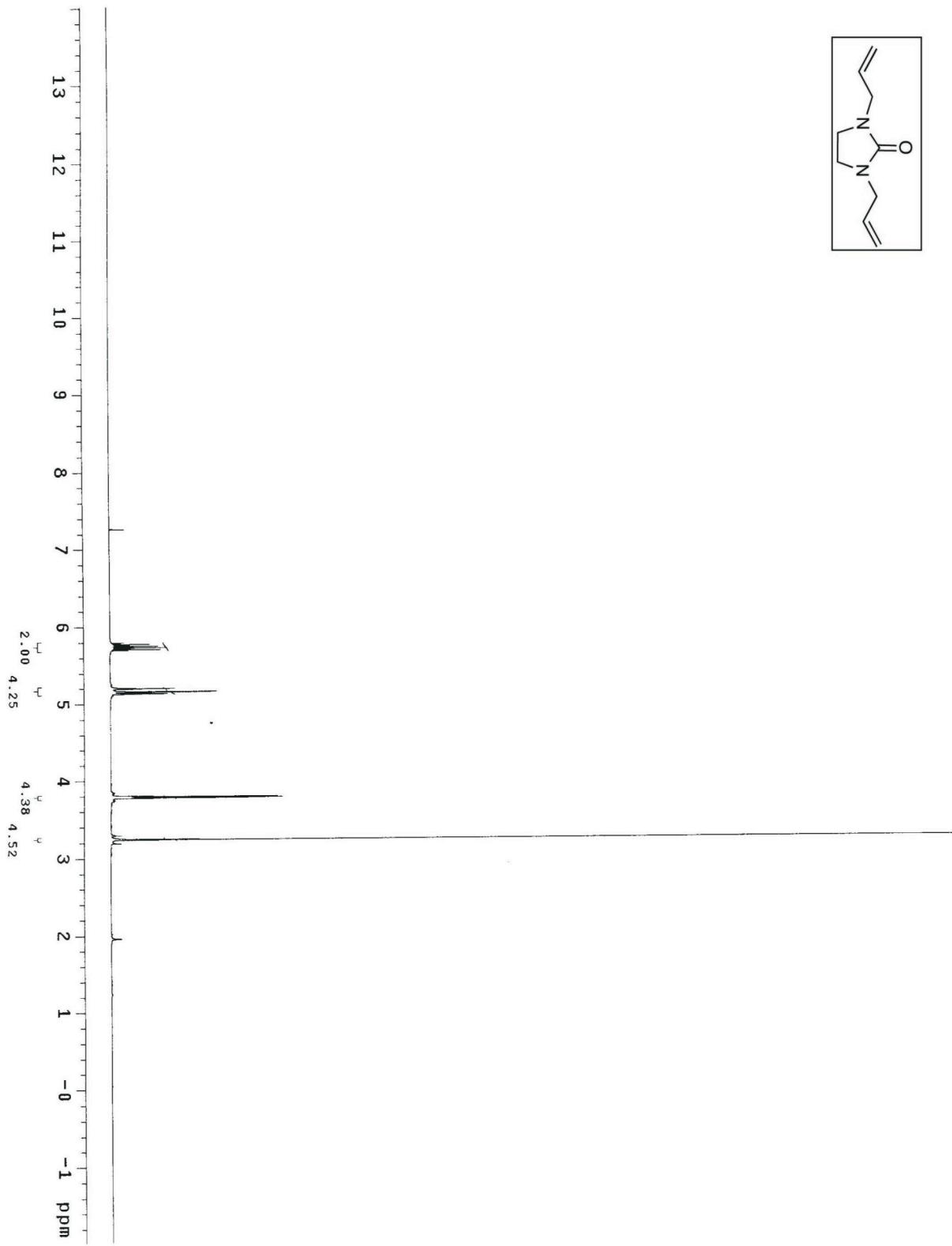


Figure S16. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of 1,3-diallylimidazolidin-2-one.

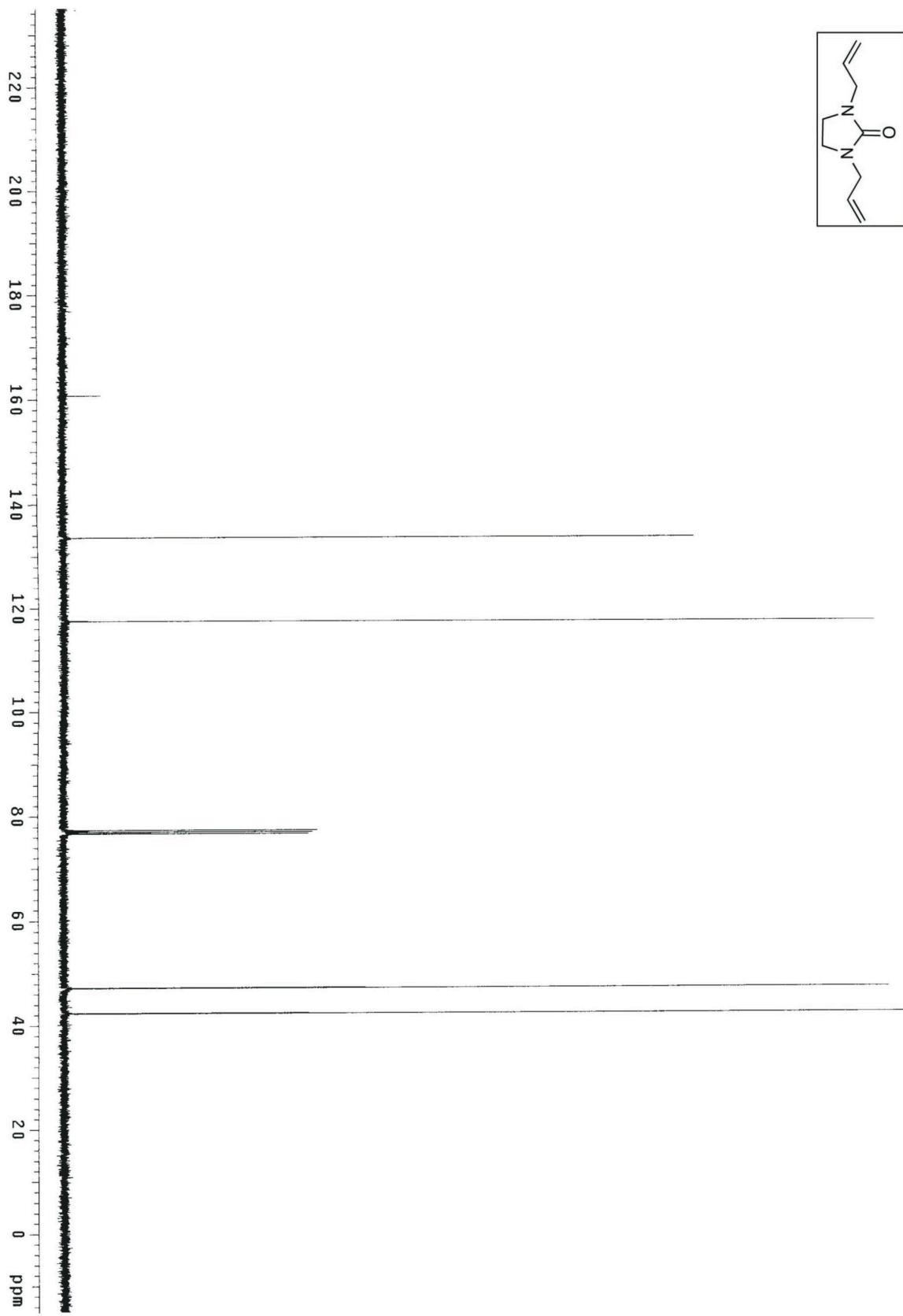


Figure S17. ^1H NMR spectrum of 1-(3,3-dideutero-2-propenyl)-3-methyl-imidazolidin-2-one ($\mathbf{3-\gamma,\gamma-d_2}$).

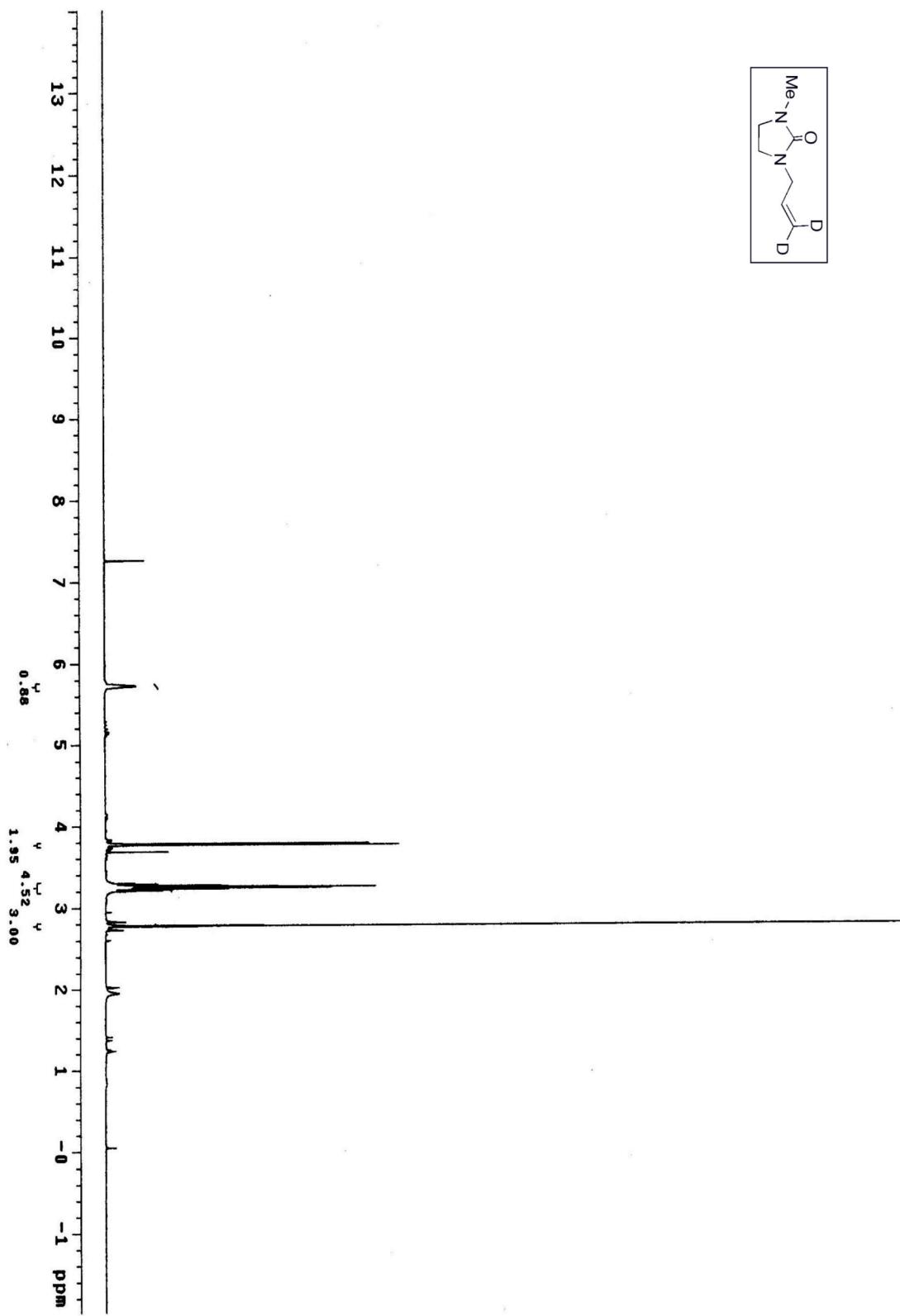


Figure S18. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of 1-(3,3-dideutero-2-propenyl)-3-methyl-imidazolidin-2-one (**3-** γ,γ - d_2).

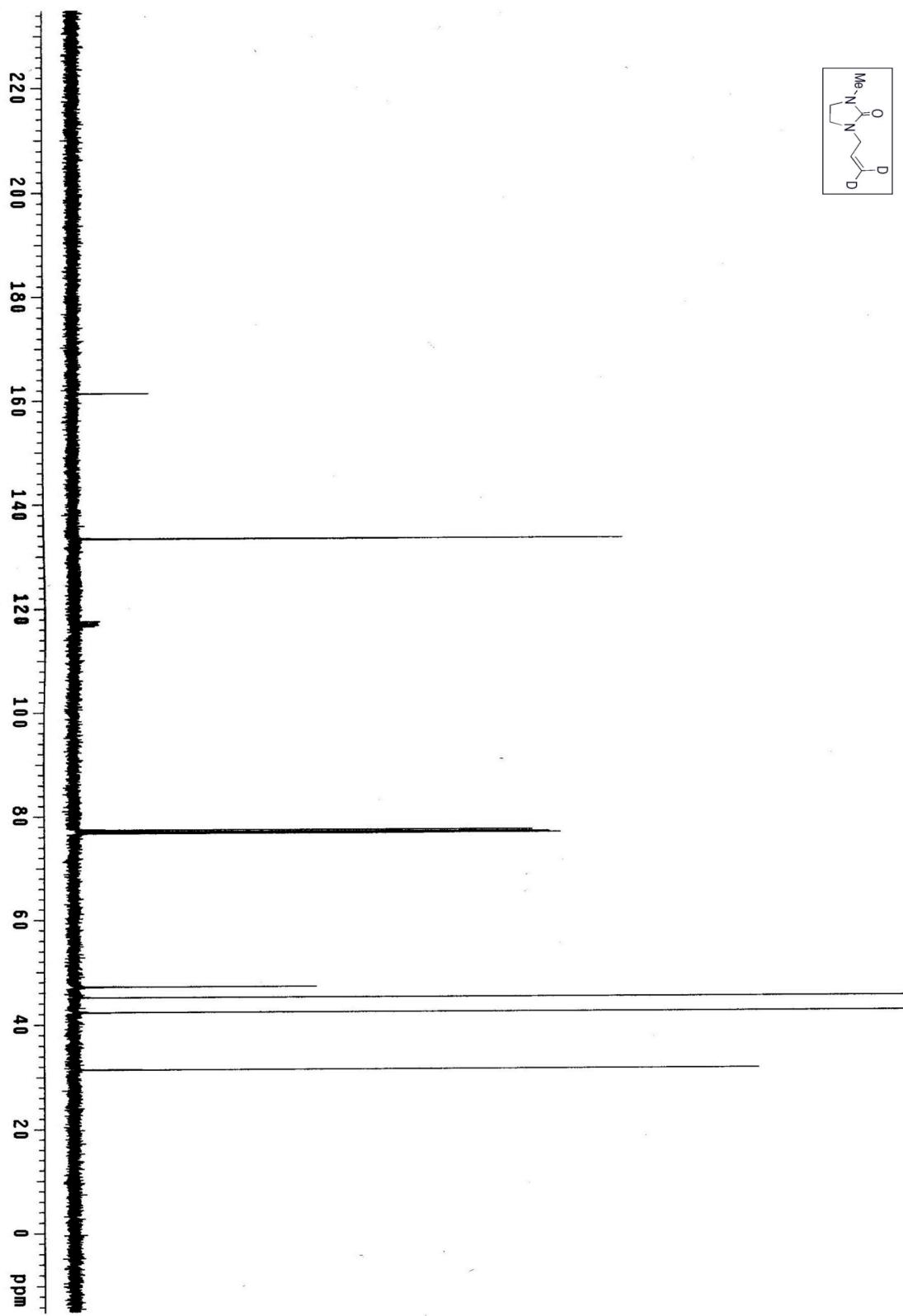


Figure S19. ^1H NMR spectrum of 1-(2-butenyl)-3-methylimidazolidin-2-one (**4**).

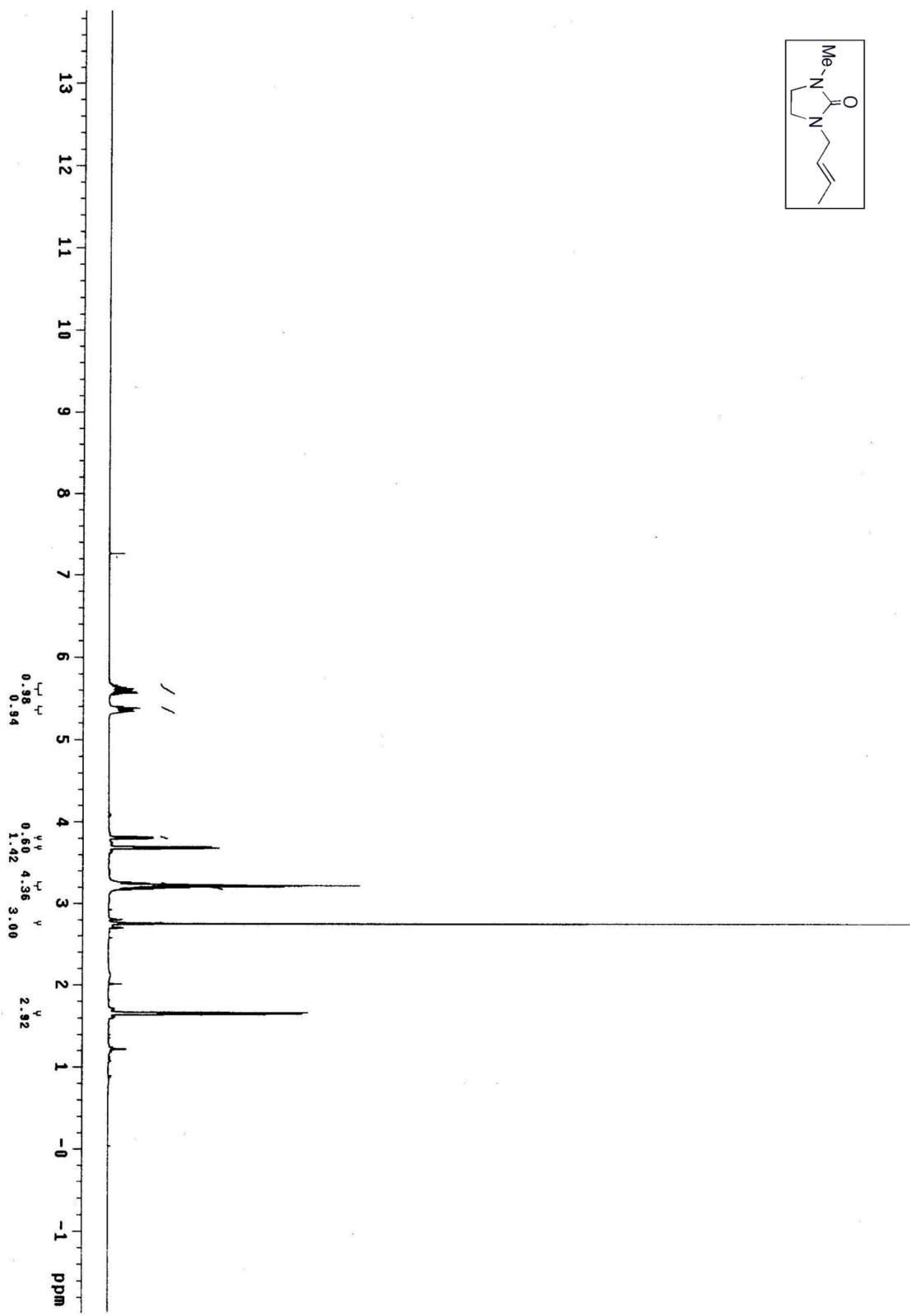


Figure S20. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of 1-(2-butenyl)-3-methylimidazolidin-2-one (**4**).

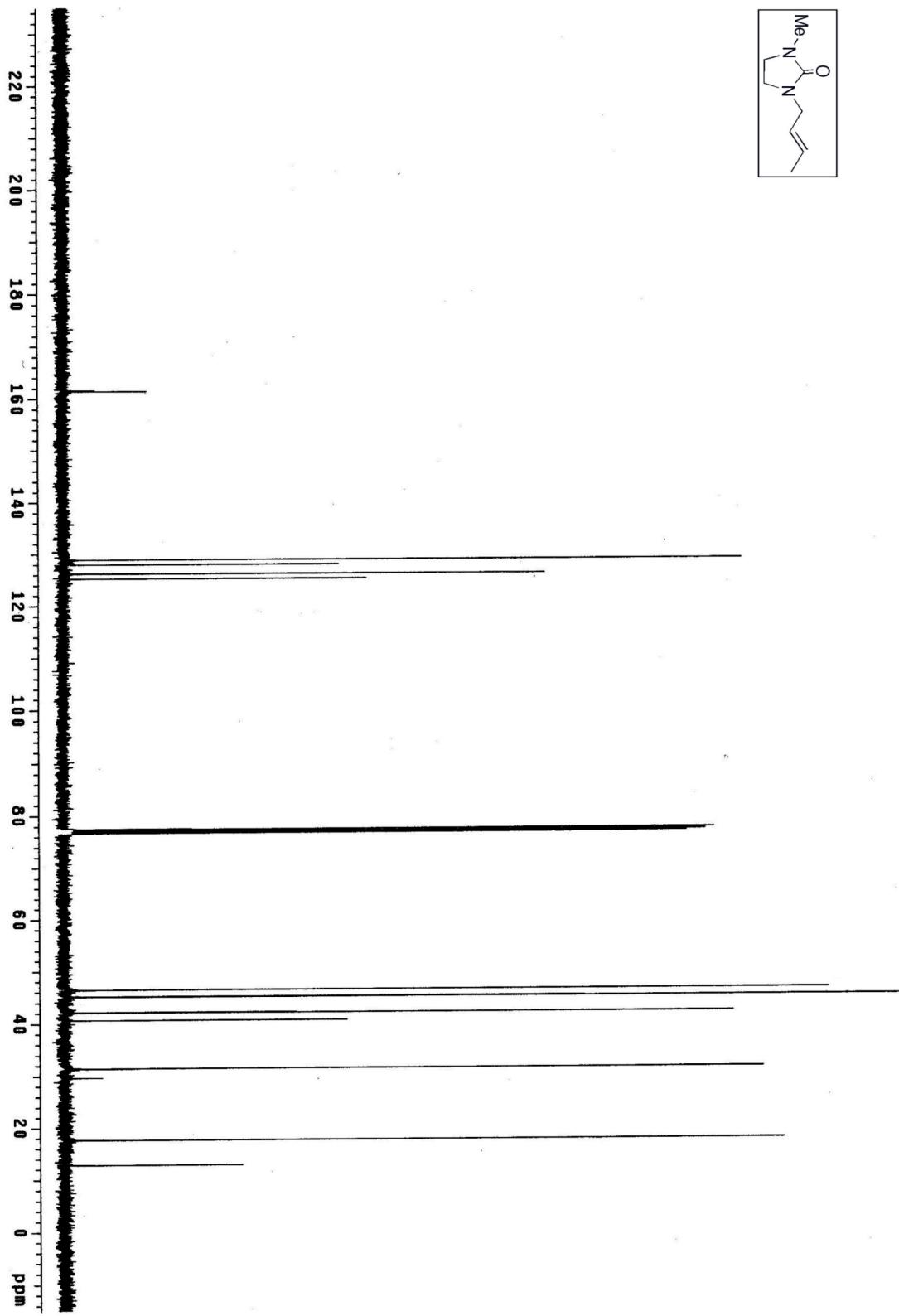


Figure S21. ^1H NMR spectrum of (*E*)-1-cinnamyl-3-methylimidazolidin-2-one [(*E*)-5].

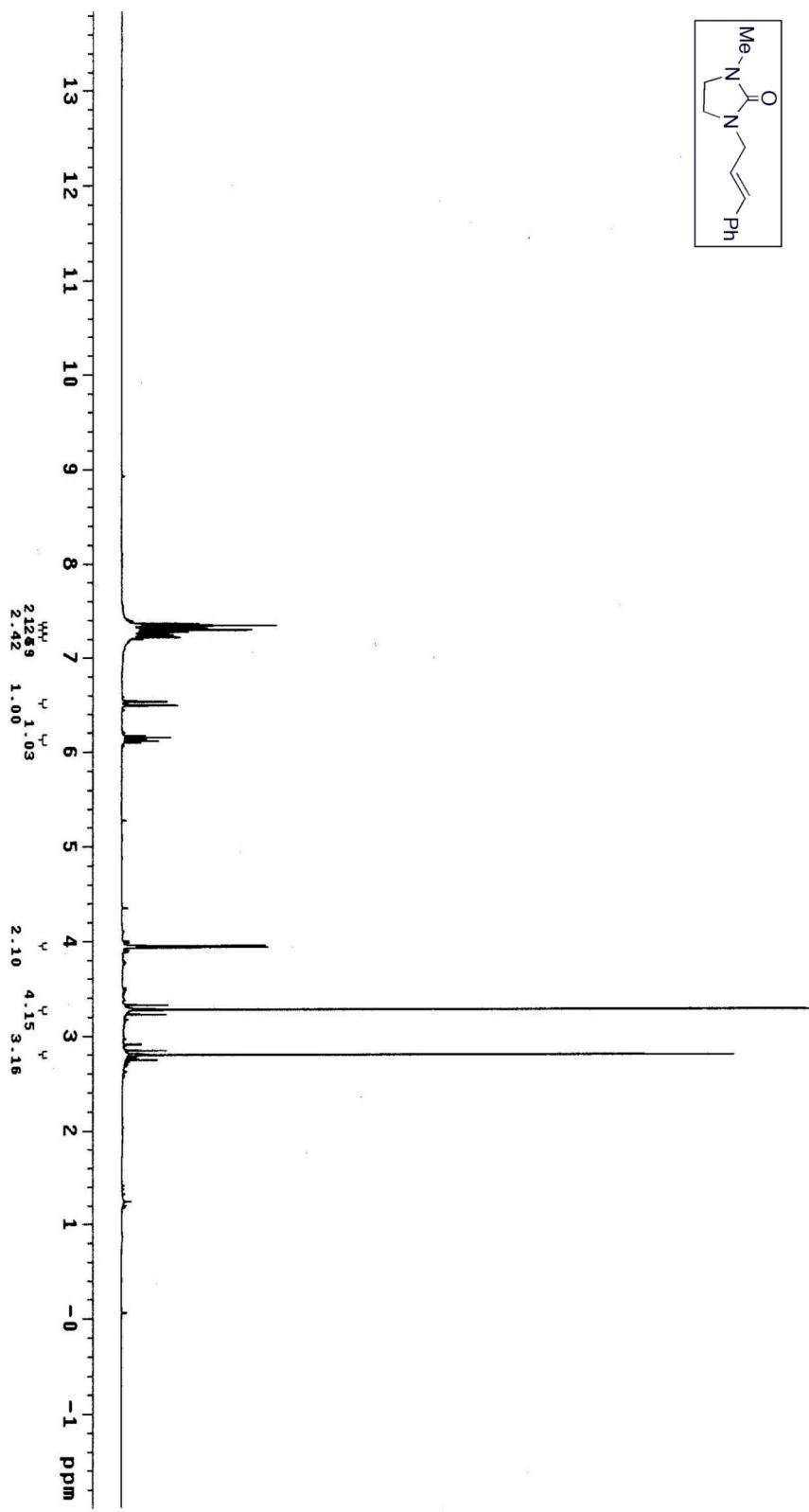


Figure S22. $^{13}\text{C}\{\text{H}\}$ NMR of (*E*)-1-cinnamyl-3-methylimidazolidin-2-one [(*E*)-5].

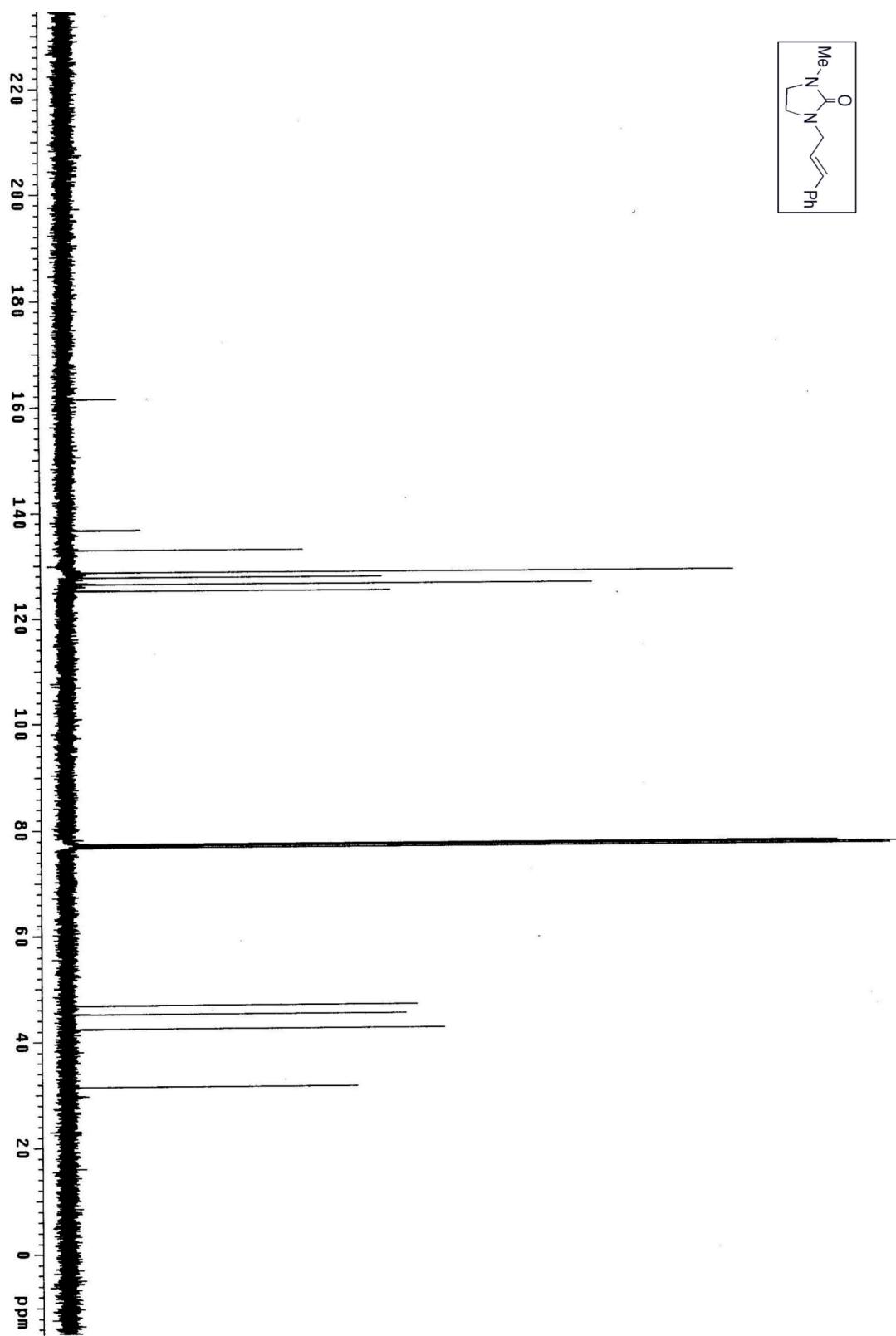


Figure S23. ^1H NMR spectrum of a 6.7:1 mixture of (*E*)-5 and (*Z*)-5.

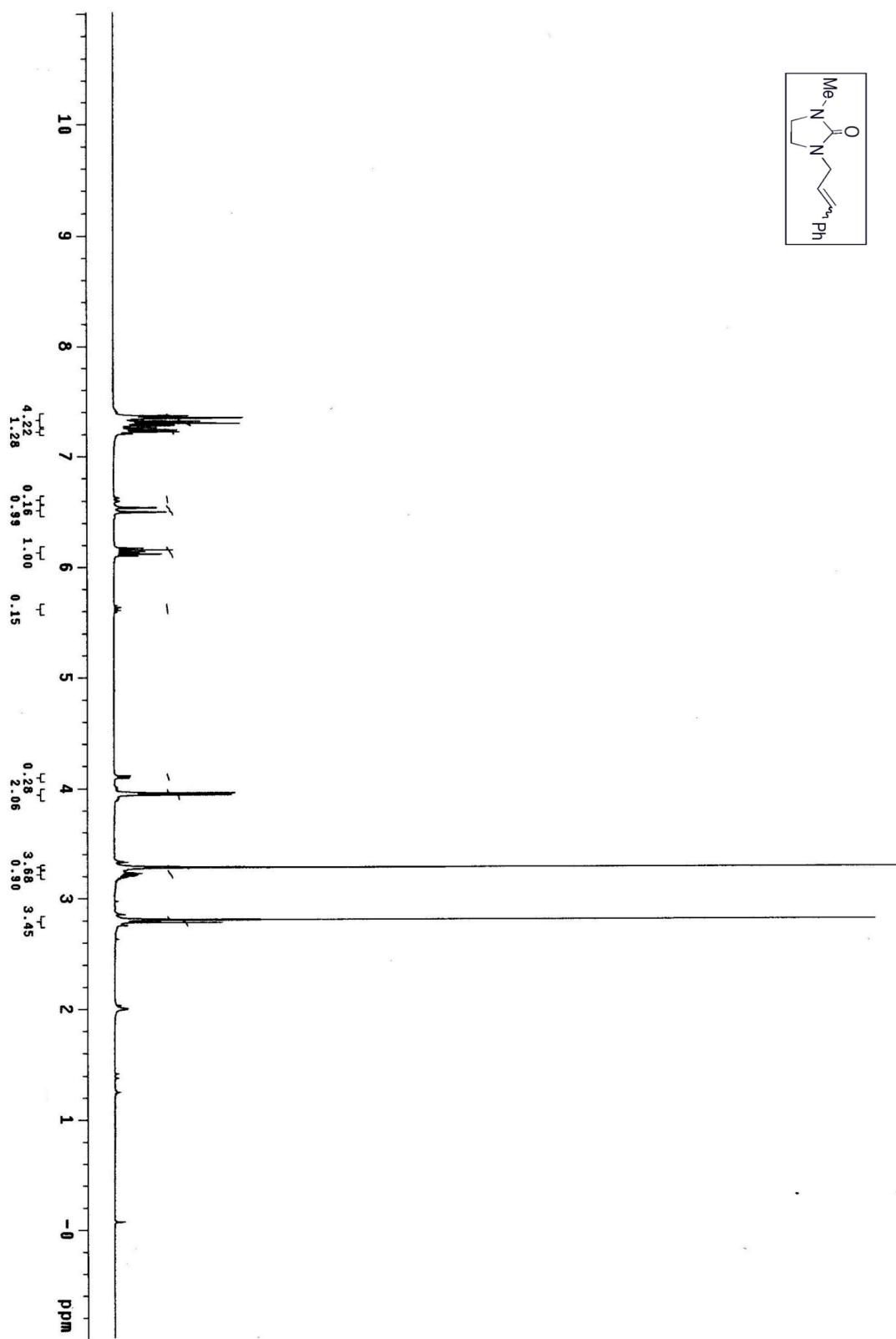


Figure S24. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of a 6.7:1 mixture of (*E*)-5 and (*Z*)-5.

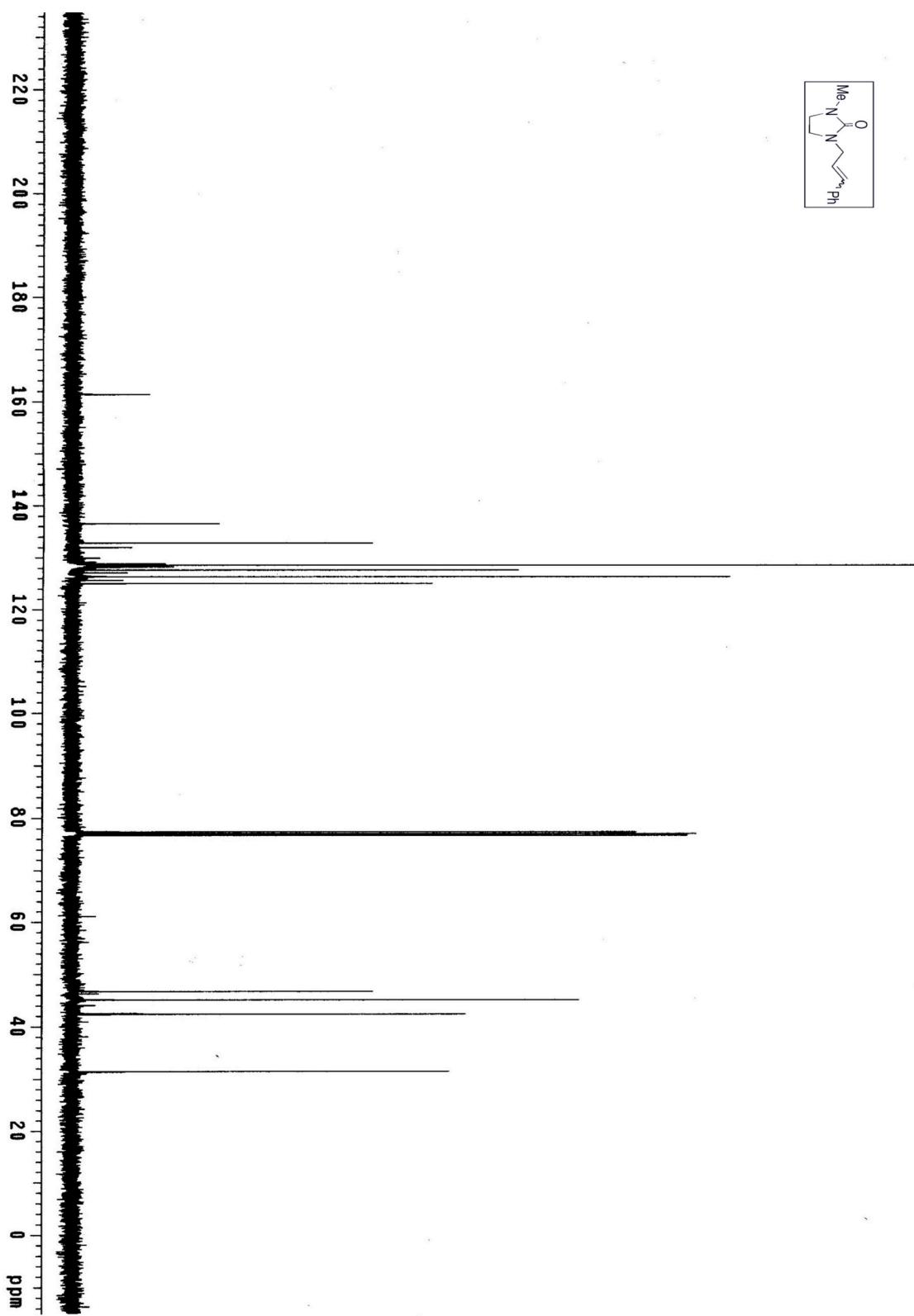


Figure S25. ^1H NMR spectrum of 1-methyl-3-(3-methylbut-2-enyl)imidazolidin-2-one (**6a**).

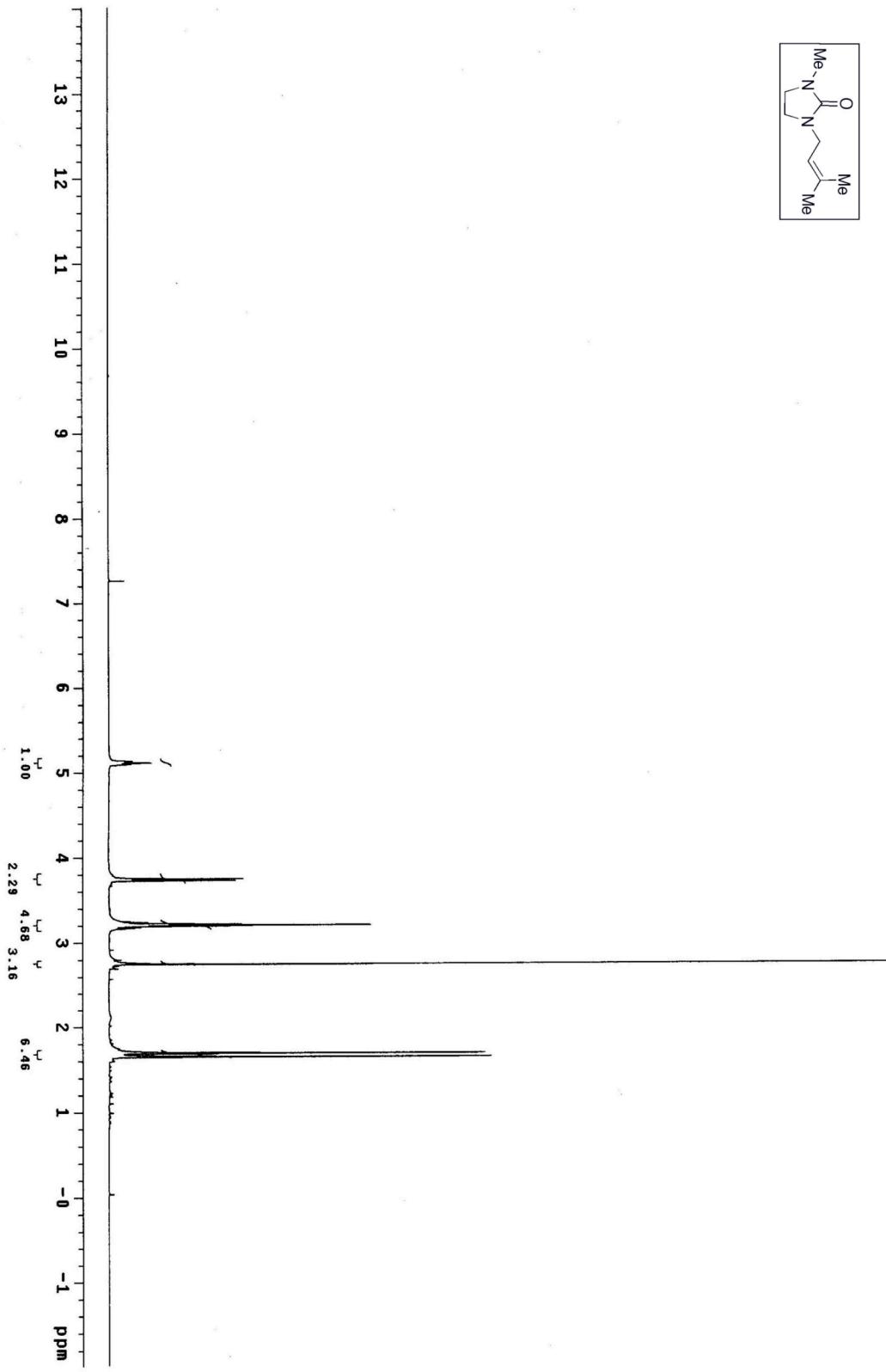


Figure S26. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of 1-methyl-3-(3-methylbut-2-enyl)imidazolidin-2-one (**6a**).

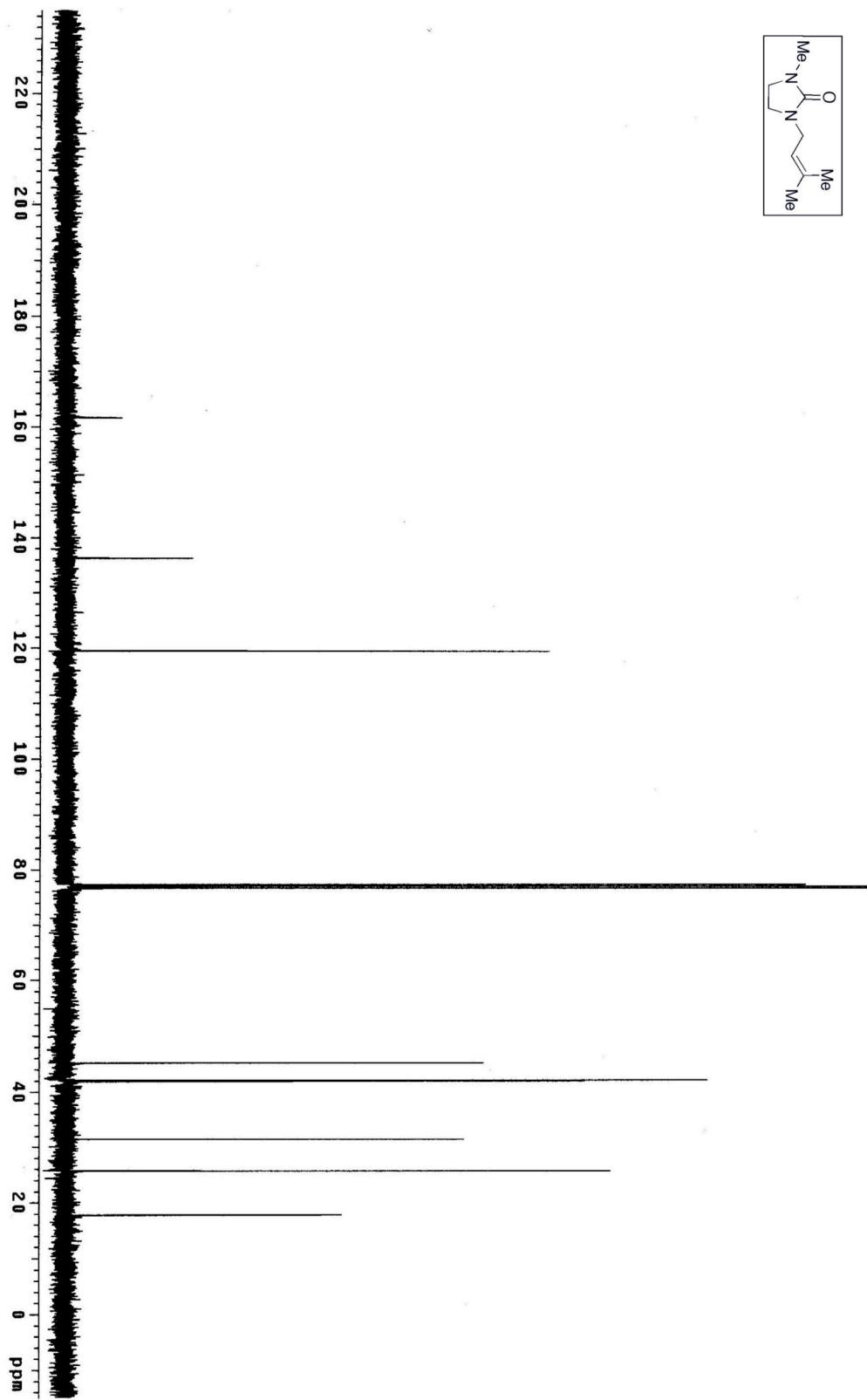


Figure S27. ^1H NMR spectrum of 1-methyl-3-(2-methylbut-3-en-2-yl)imidazolidin-2-one (**6b**).

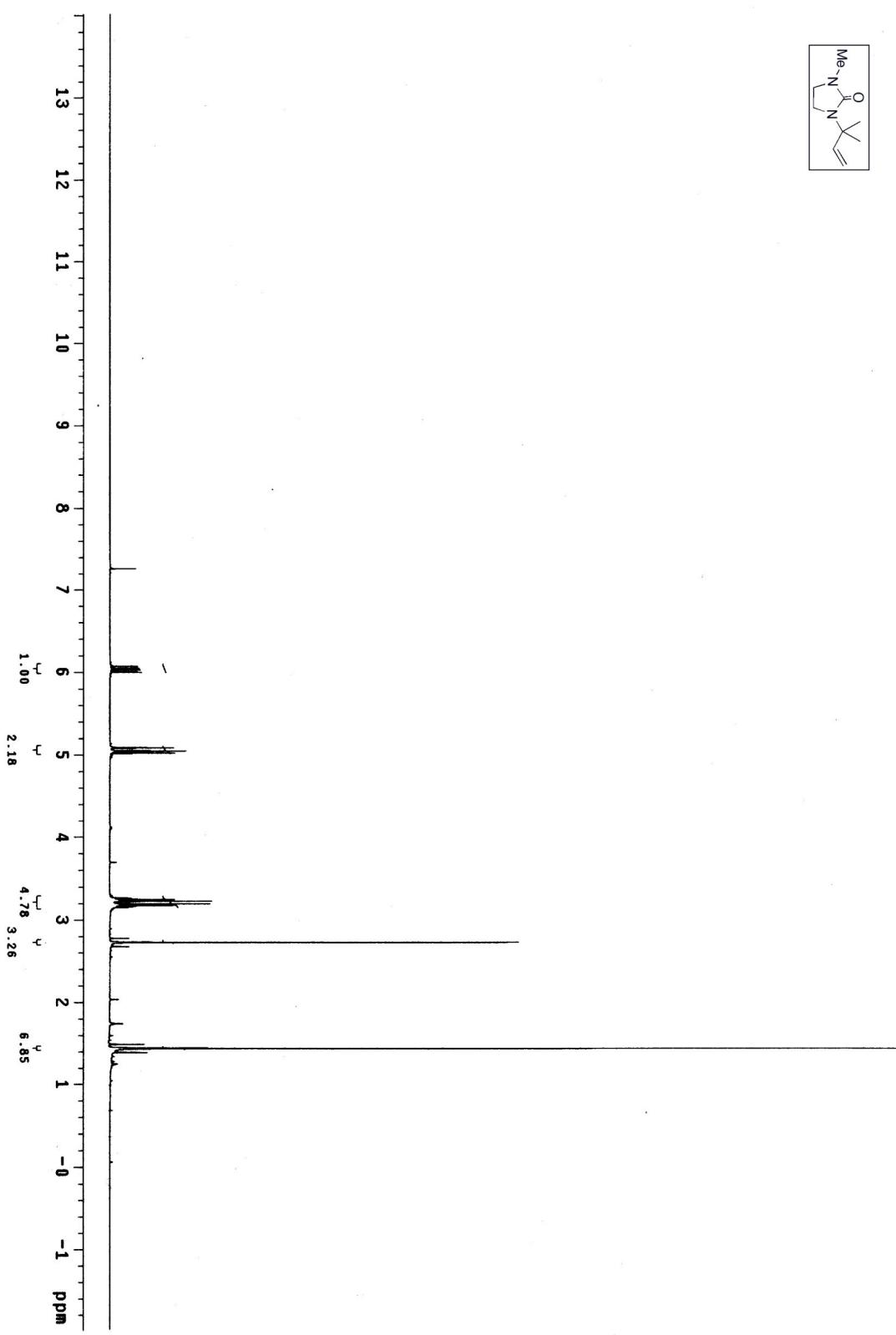


Figure S28. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of 1-methyl-3-(2-methylbut-3-en-2-yl)imidazolidin-2-one (**6b**).

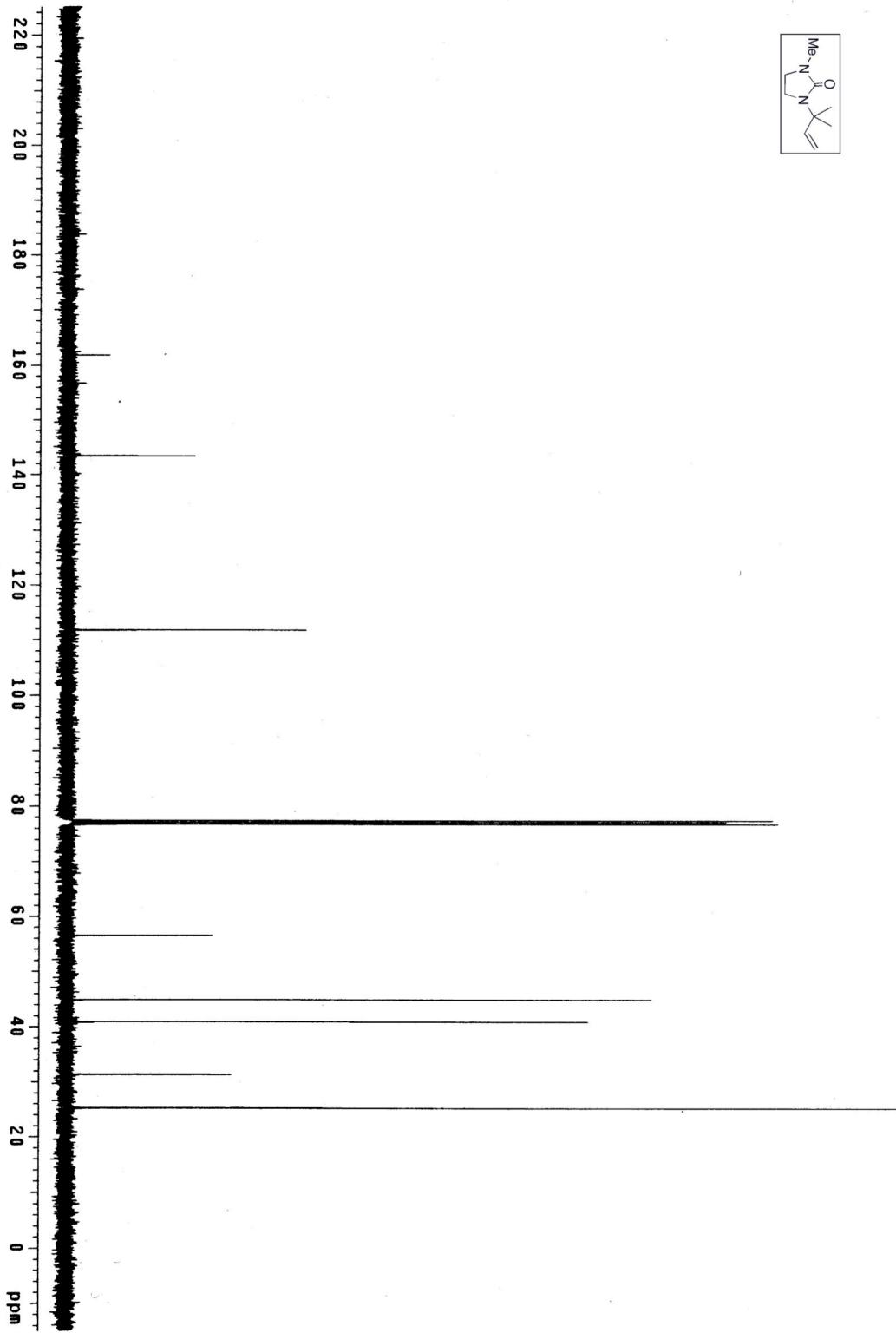


Figure S29. ^1H NMR spectrum of 1-(2-cyclohexylideneethyl)-3-methylimidazolidin-2-one (7).

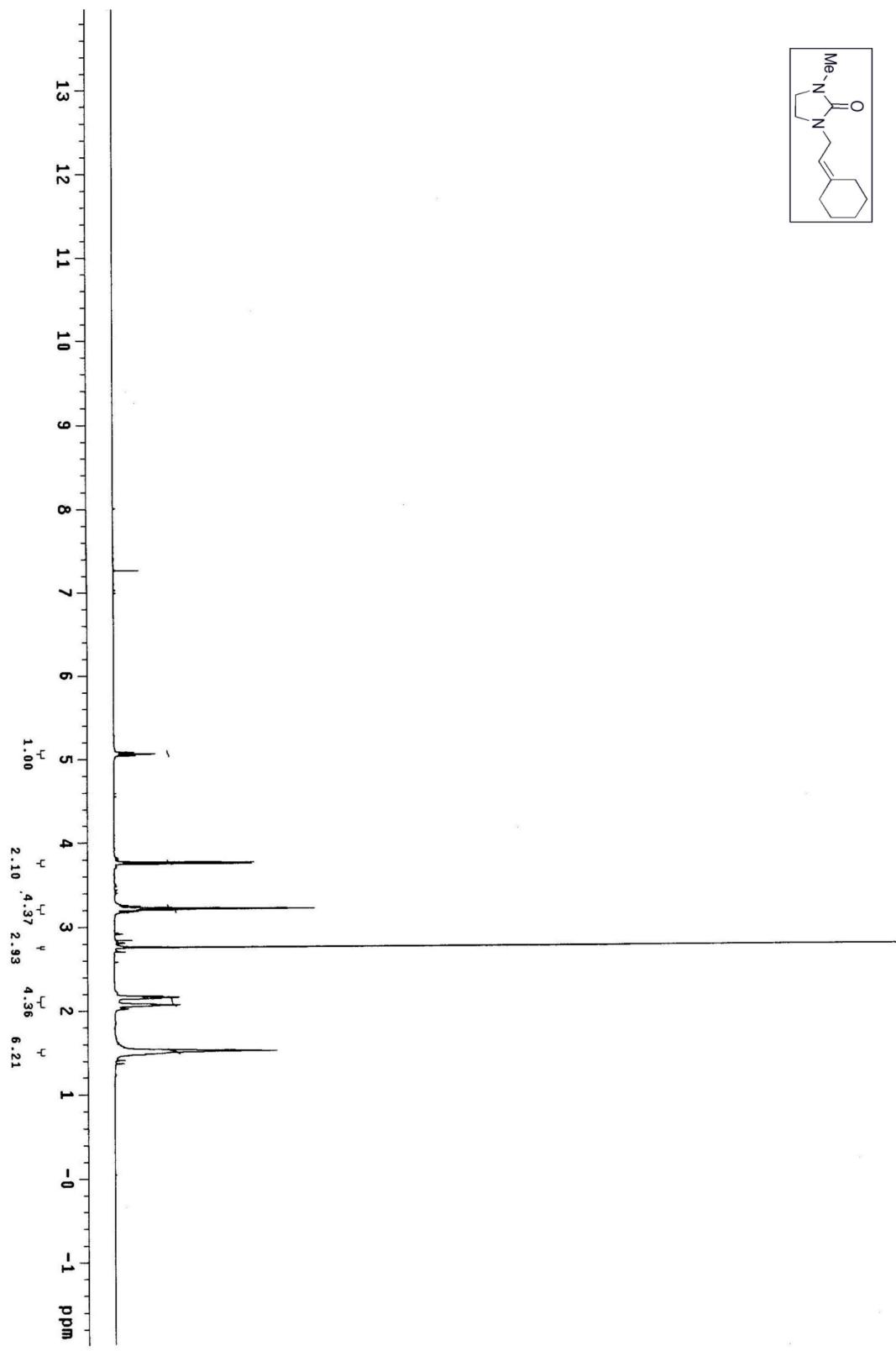


Figure S30. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of 1-(2-cyclohexylideneethyl)-3-methylimidazolidin-2-one (**7**).

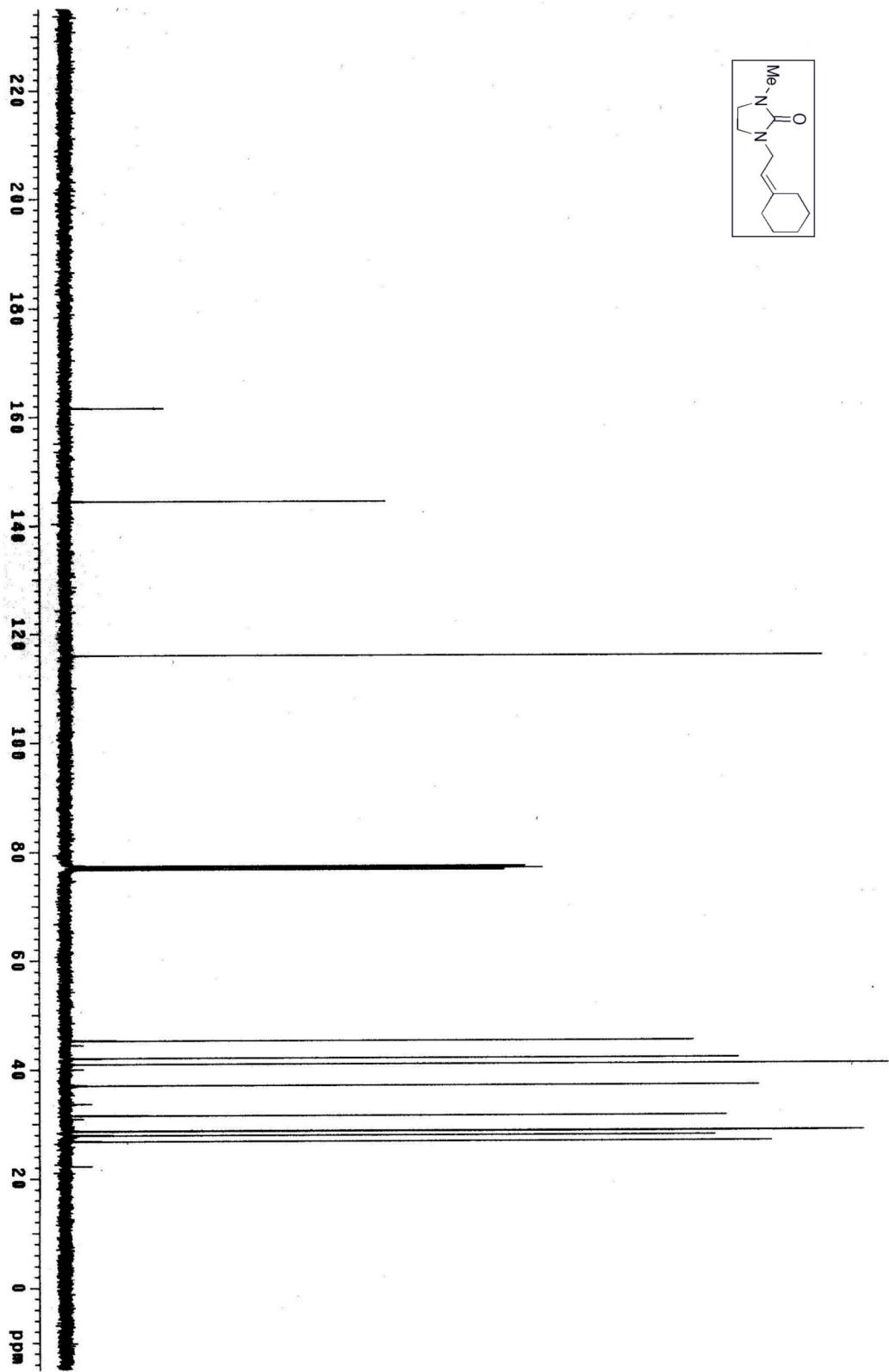


Figure S31. ^1H NMR spectrum of 1-(but-3-en-2-yl)-3-methylimidazolidin-2-one (**8**).

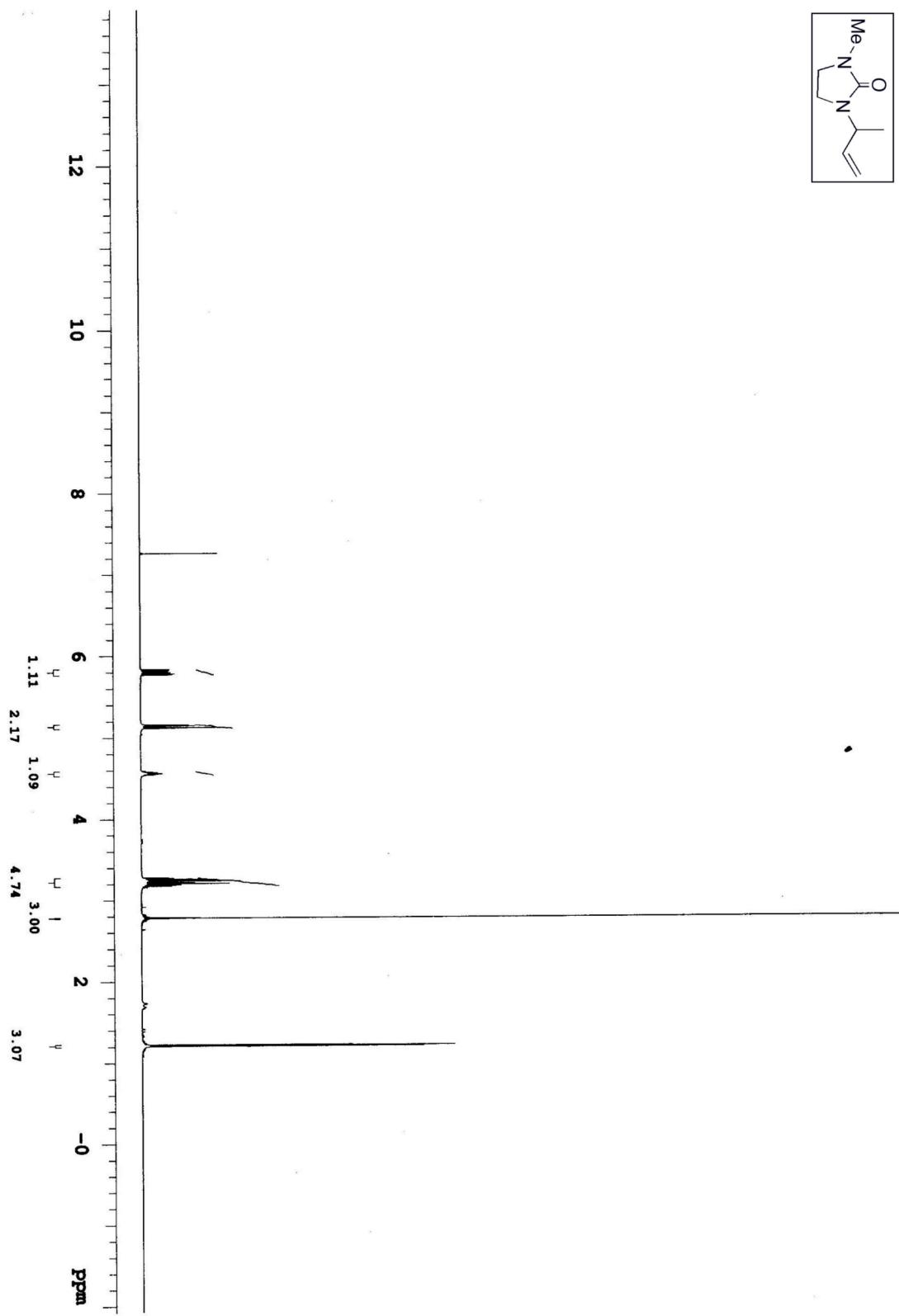


Figure S32. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of 1-(but-3-en-2-yl)-3-methylimidazolidin-2-one (**8**).

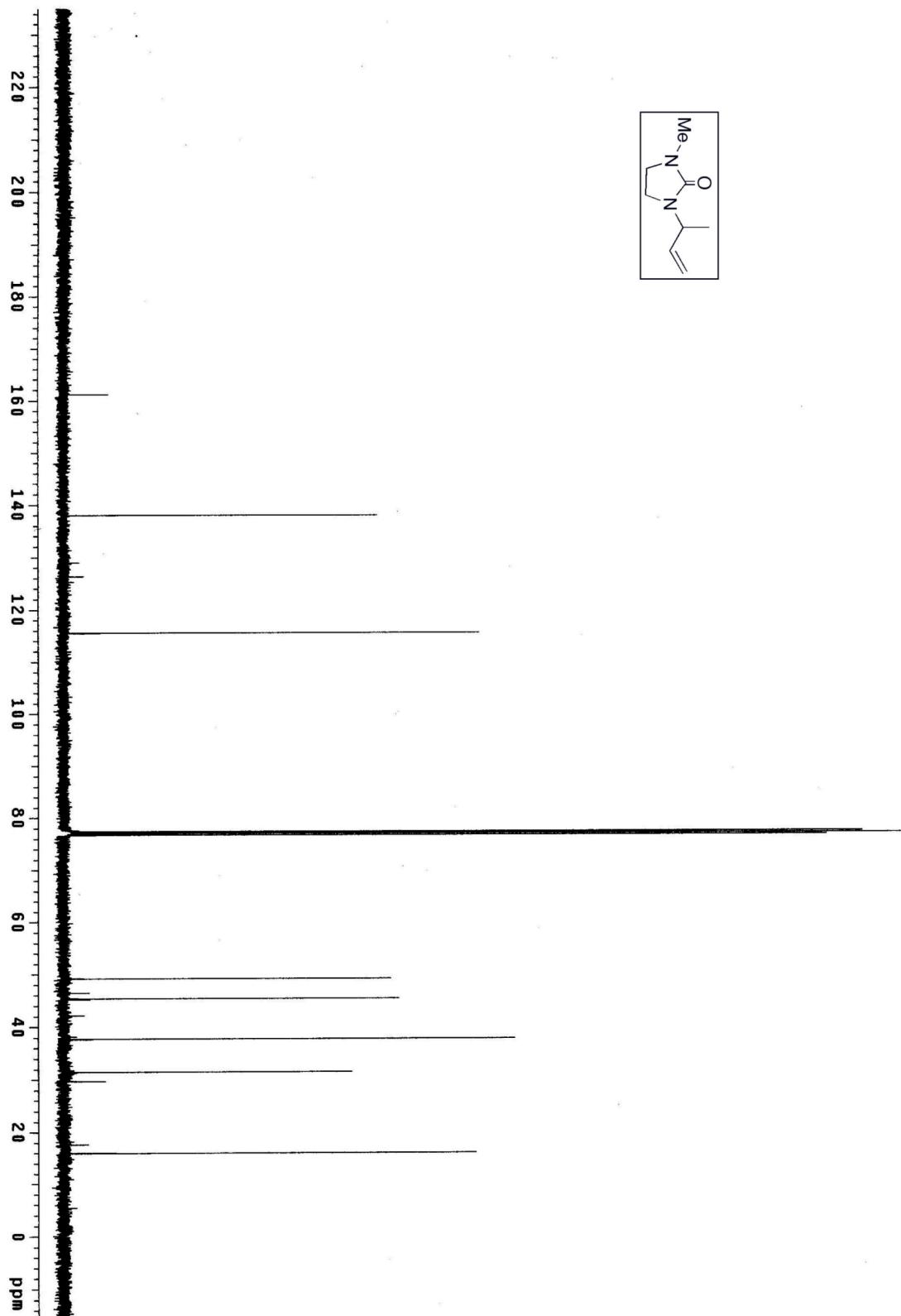


Figure S33. ^1H NMR spectrum of 1-(cyclohex-2-enyl)-3-methylimidazolidin-2-one (**9**).

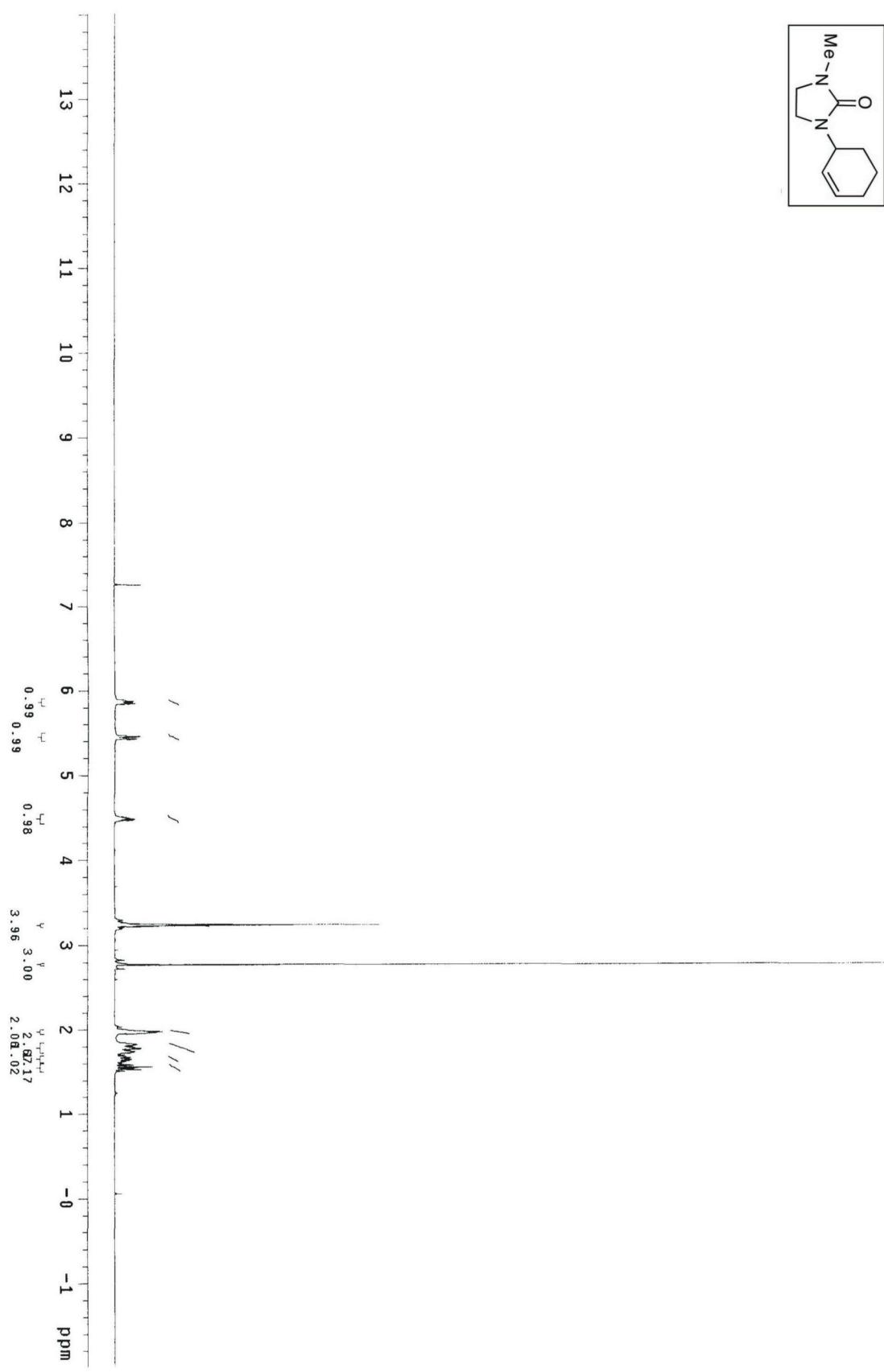


Figure S34. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of 1-(cyclohex-2-enyl)-3-methylimidazolidin-2-one (**9**).

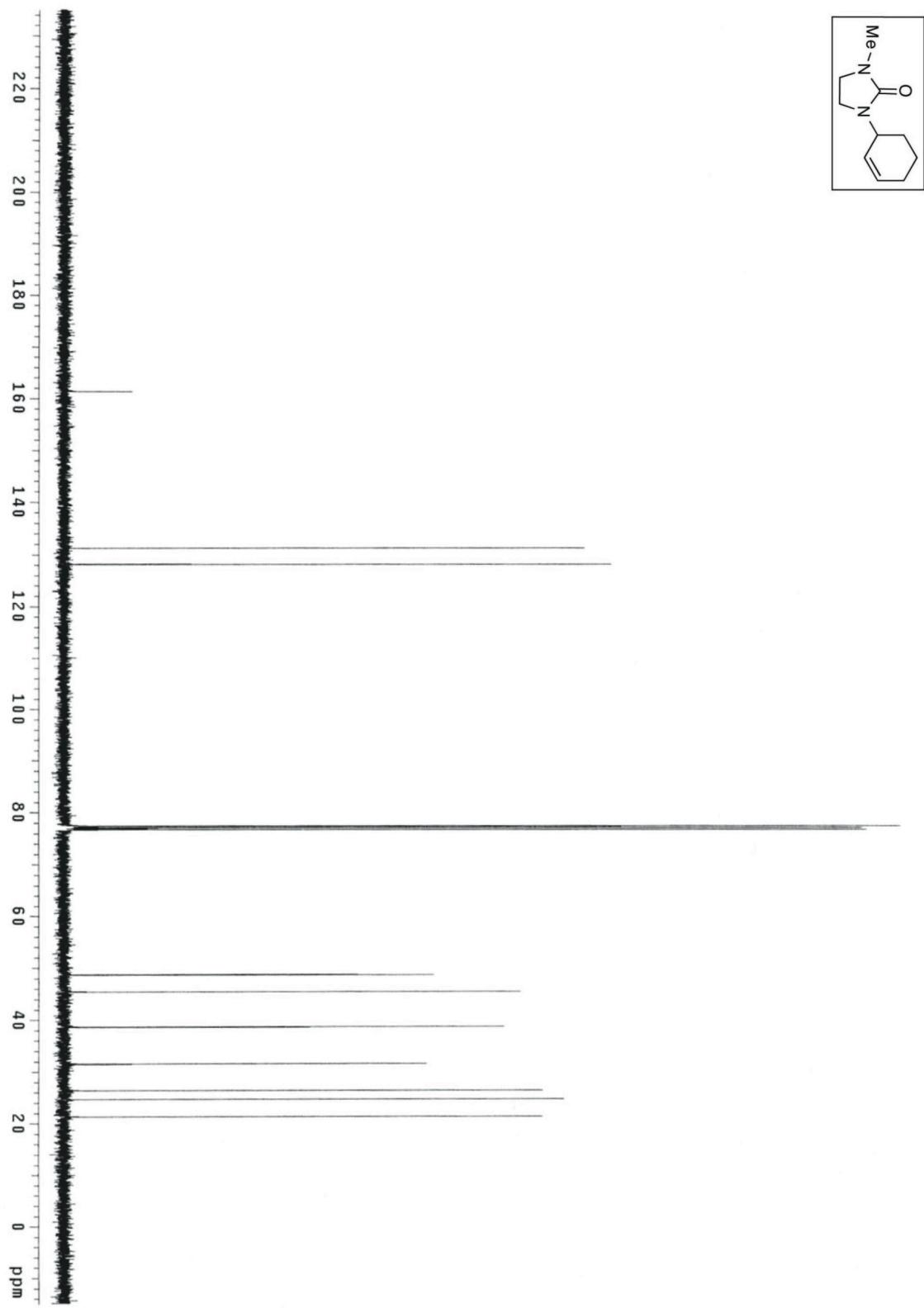


Figure S35. ^1H NMR spectrum of 1-methyl-3-(pent-3-en-2-yl)imidazolidin-2-one (**11**).

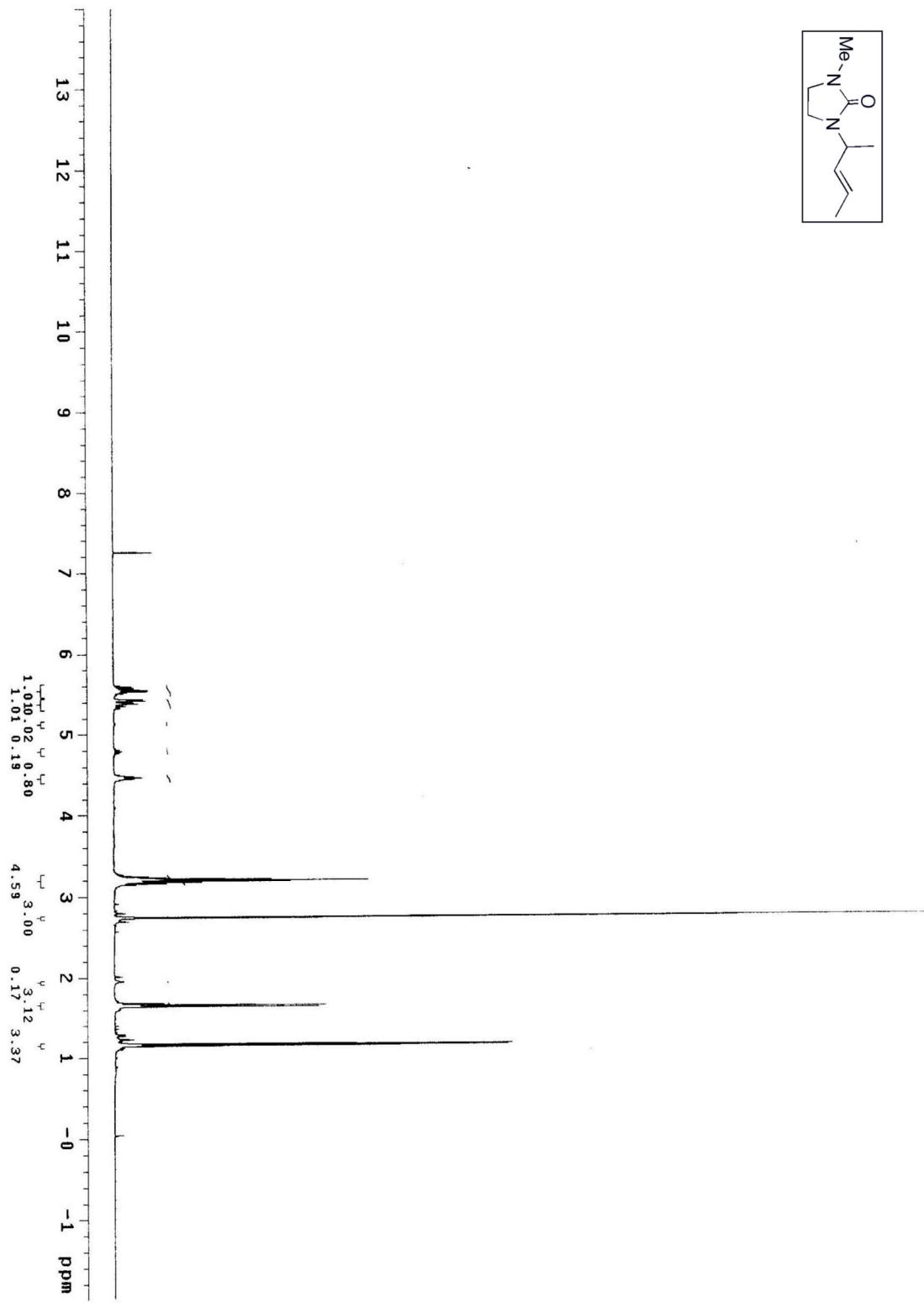


Figure S36. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of 1-methyl-3-(pent-3-en-2-yl)imidazolidin-2-one (11).

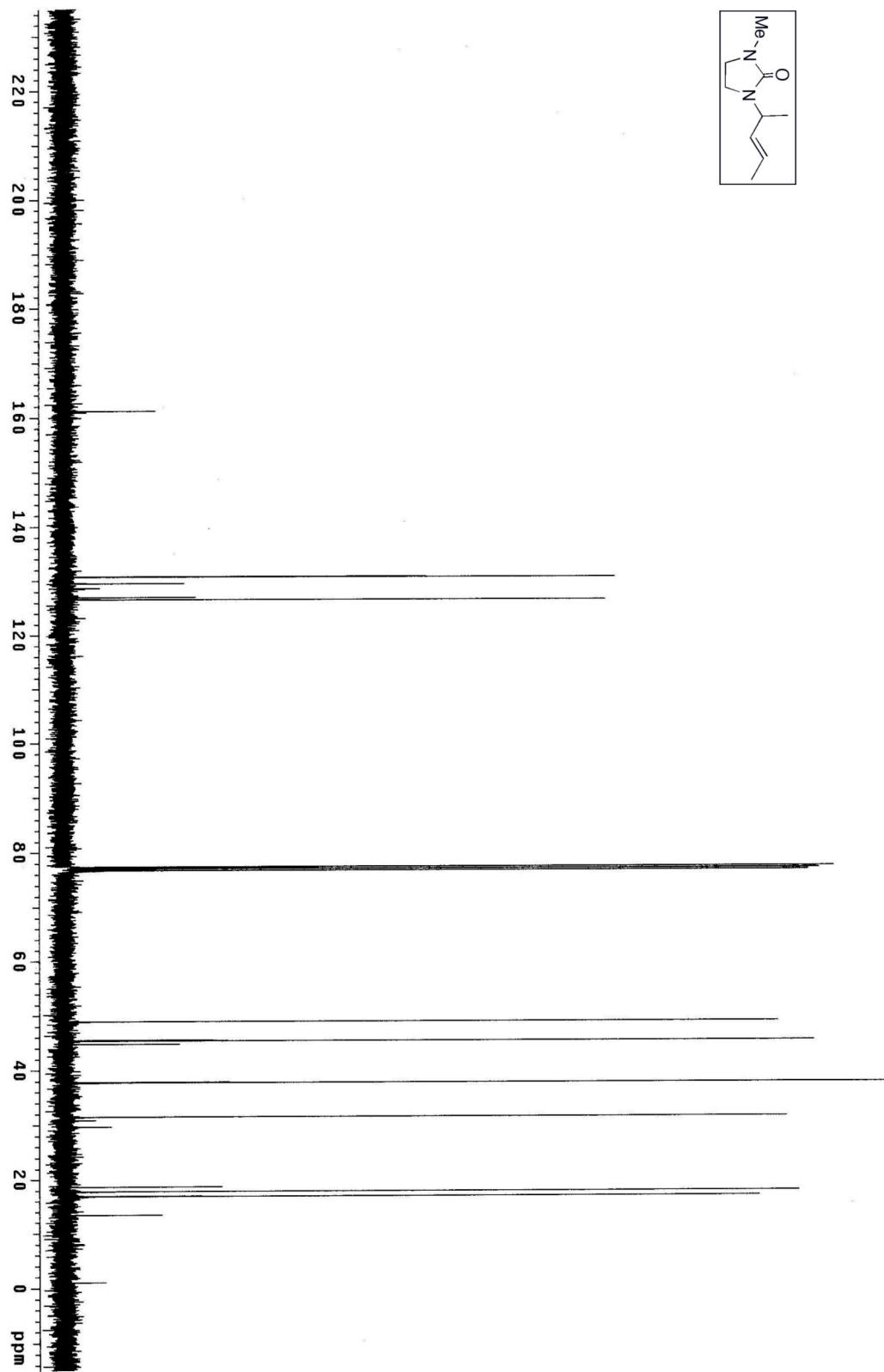


Figure S37. ^1H NMR spectrum of 1-(1-methyl-3-deutero-2-but enyl)-3-methylimidazolidin-2-one (**11**- γ - d_1).

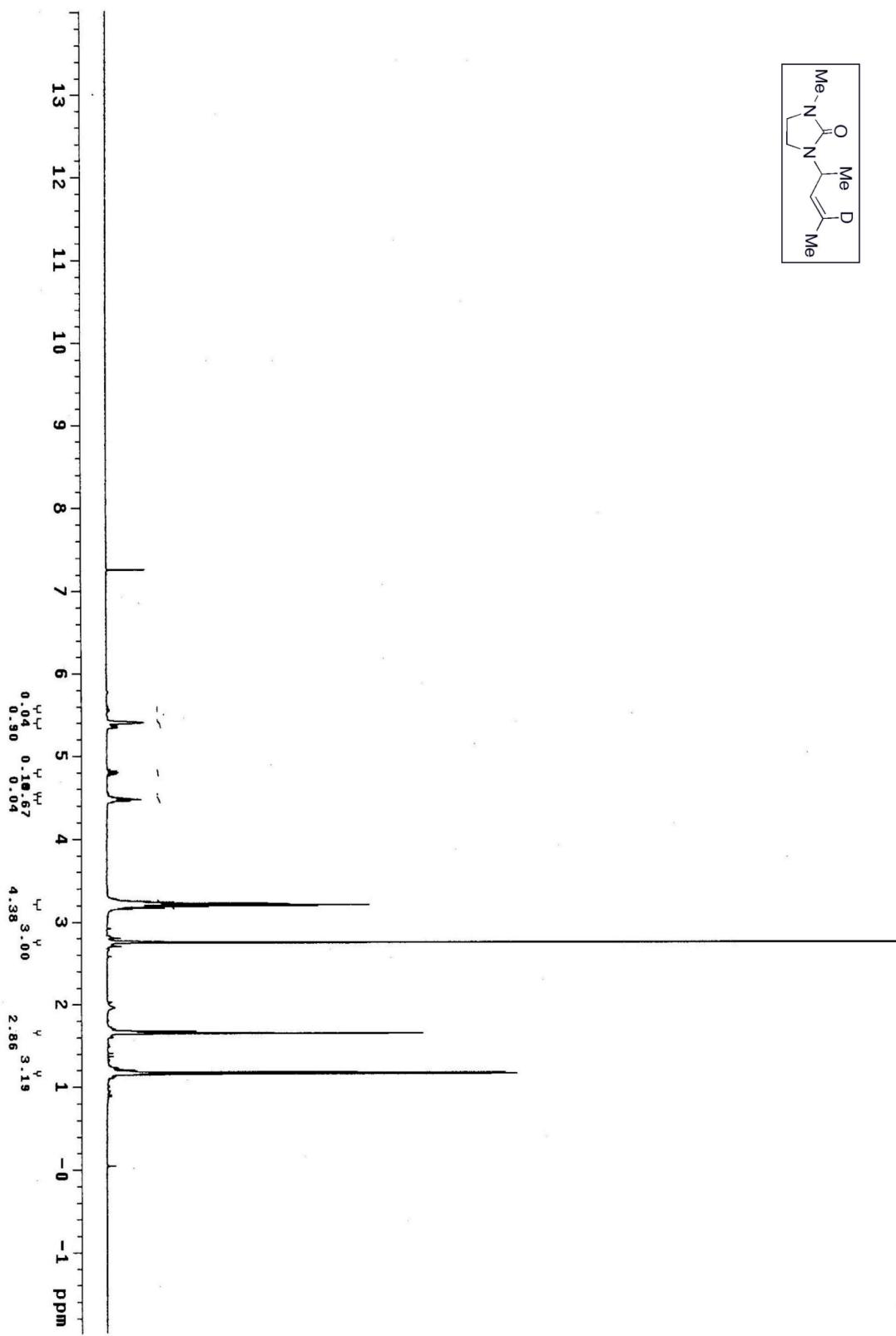


Figure S38. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of 1-(1-methyl-3-deuterio-2-but enyl)-3-methylimidazolidin-2-one (**11**- γ - d_1).

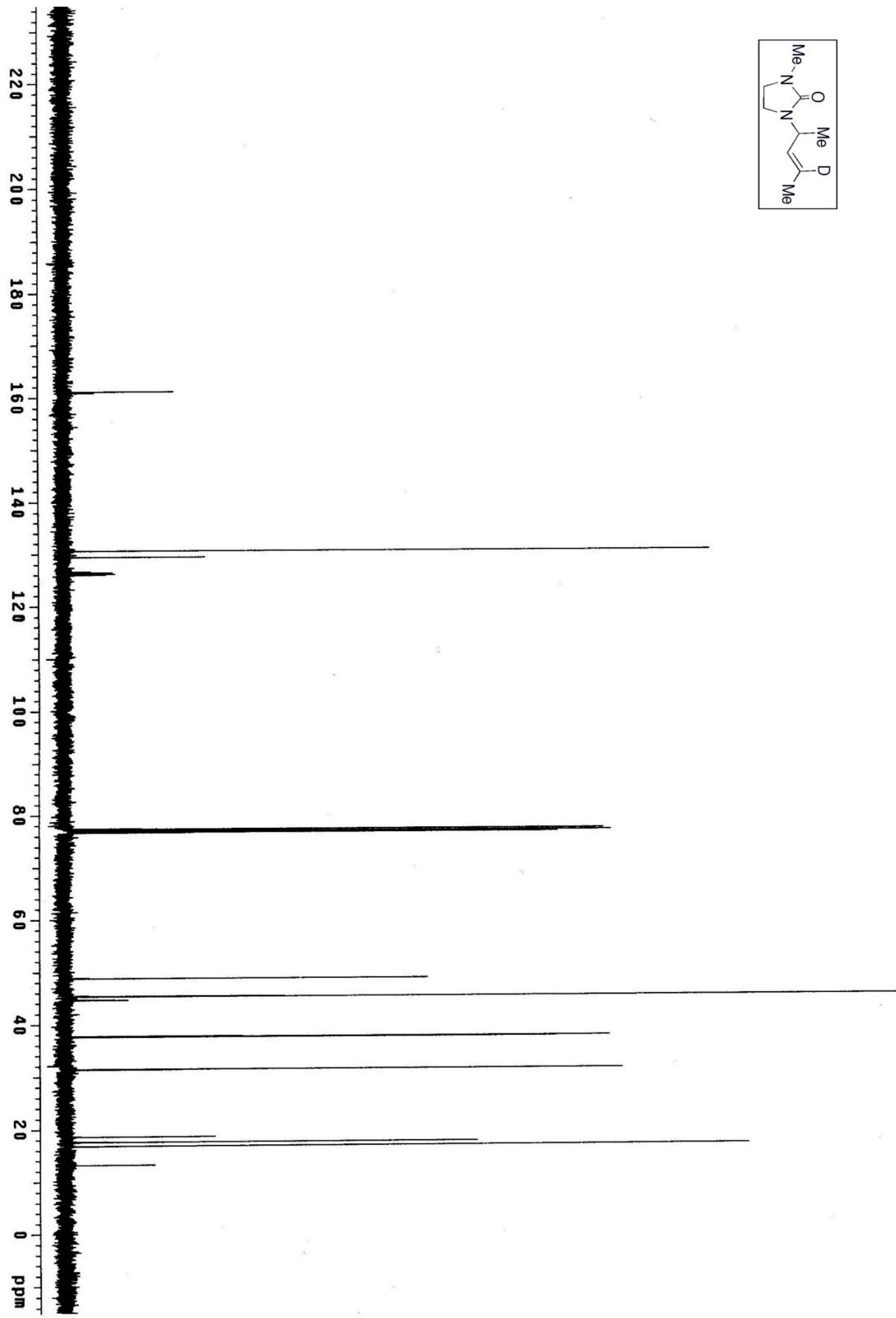


Figure S39. ^1H NMR spectrum of (*E*)-1-(1,3-diphenylallyl)-3-methylimidazolidin-2-one (**12**).

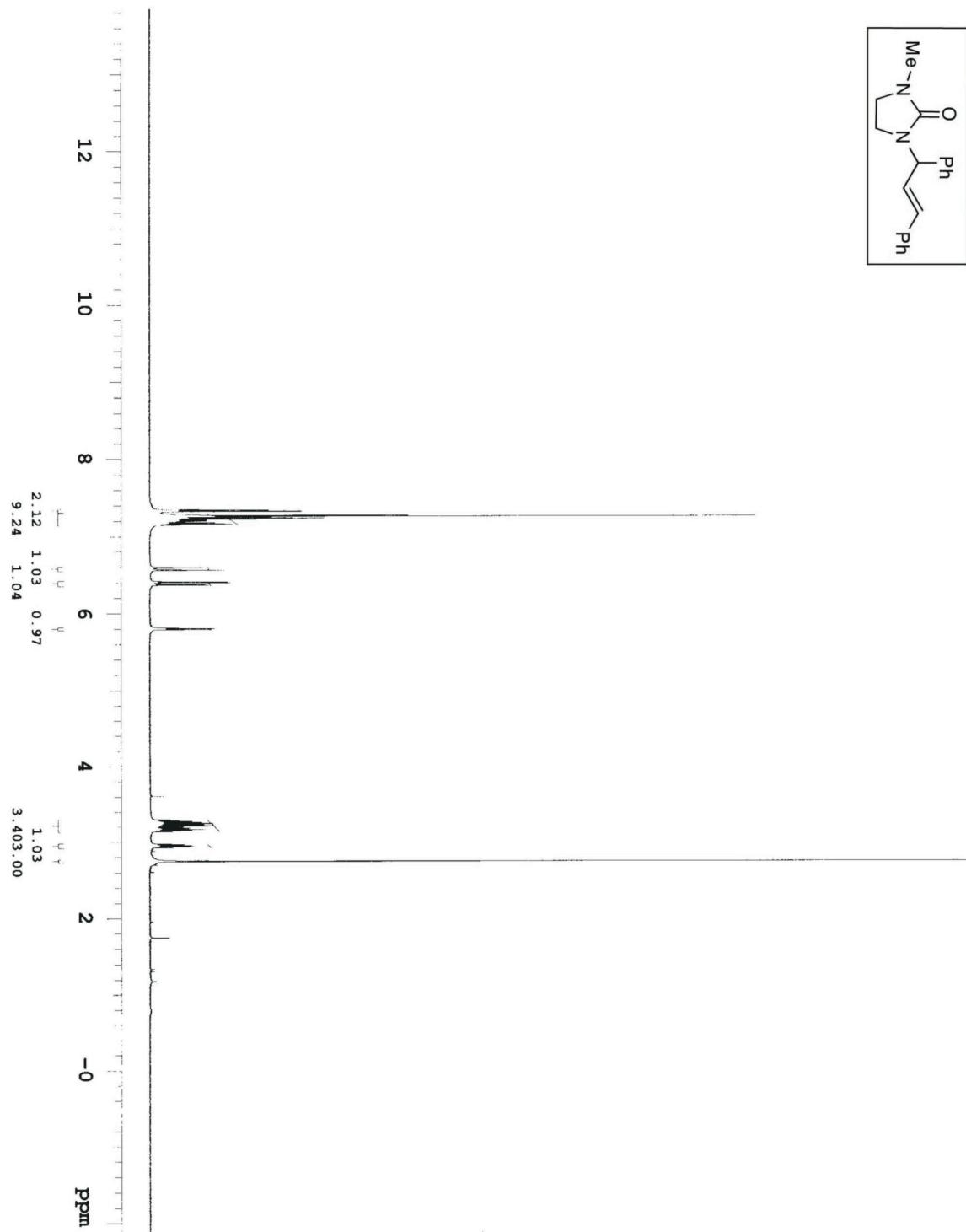


Figure S40. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of (*E*)-1-(1,3-diphenylallyl)-3-methylimidazolidin-2-one (**12**).

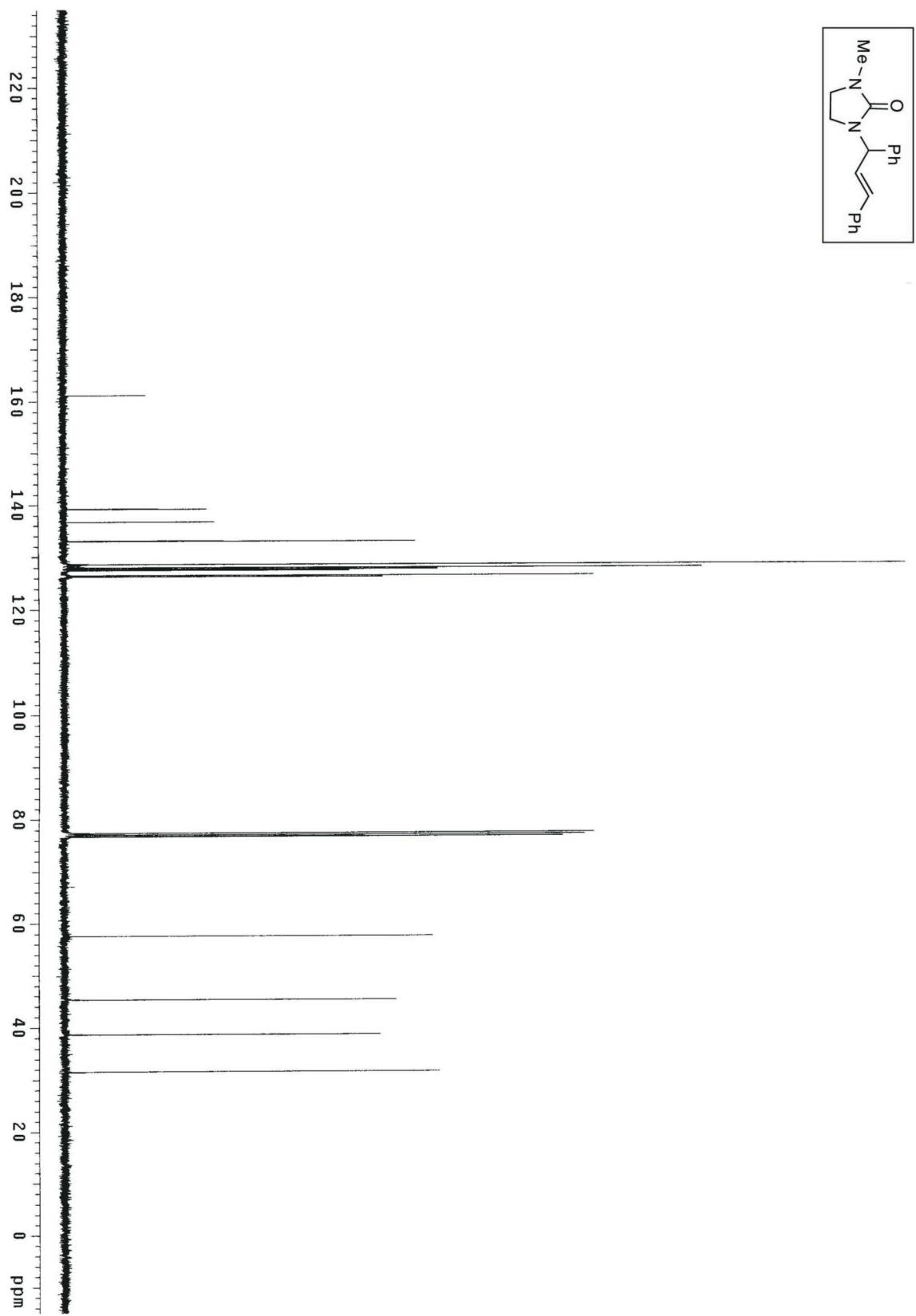


Figure S41. ^1H NMR spectrum of 1-(hex-3-en-2-yl)-3-methylimidazolidin-2-one (**14**).

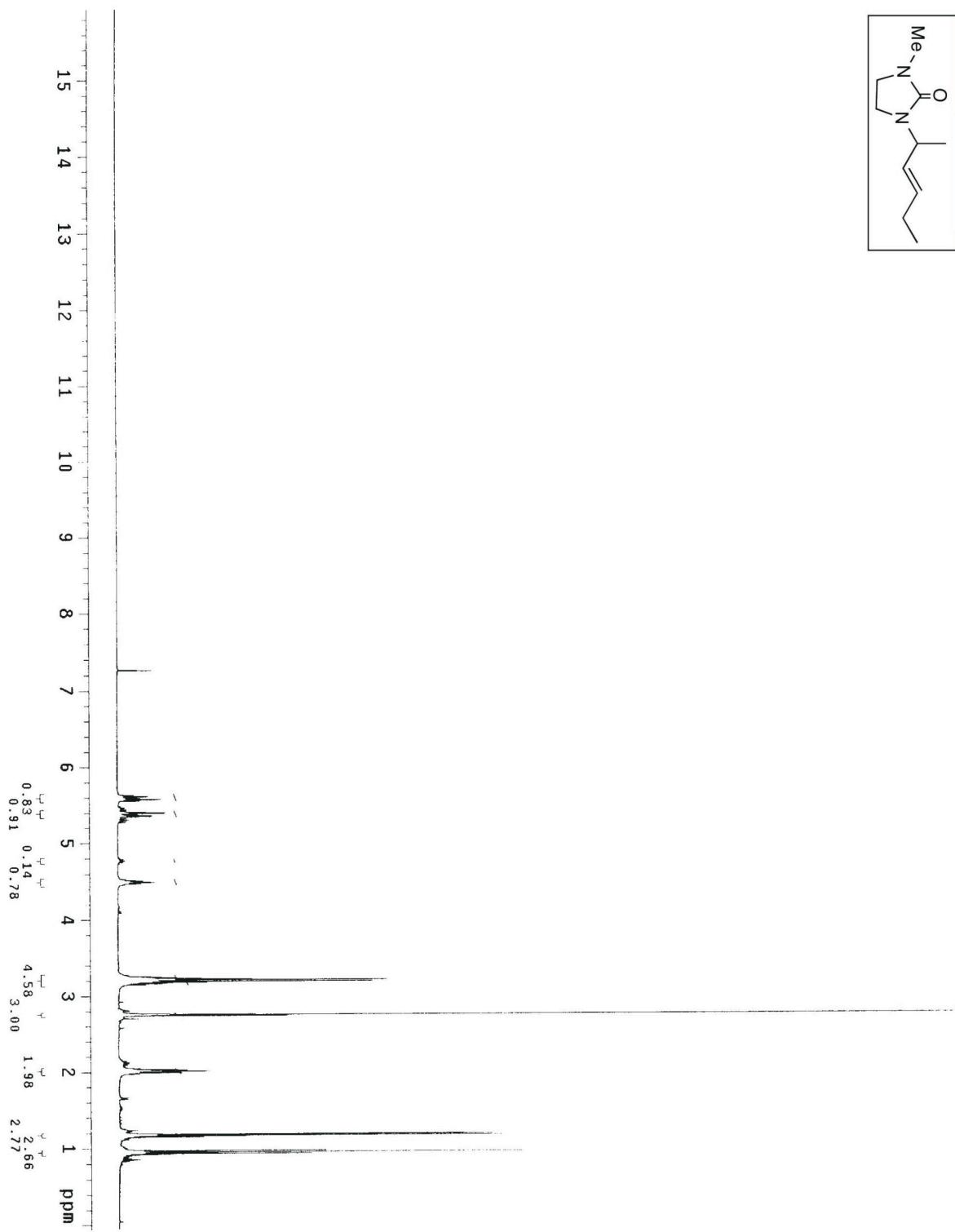


Figure S42. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of 1-(hex-3-en-2-yl)-3-methylimidazolidin-2-one (**14**).

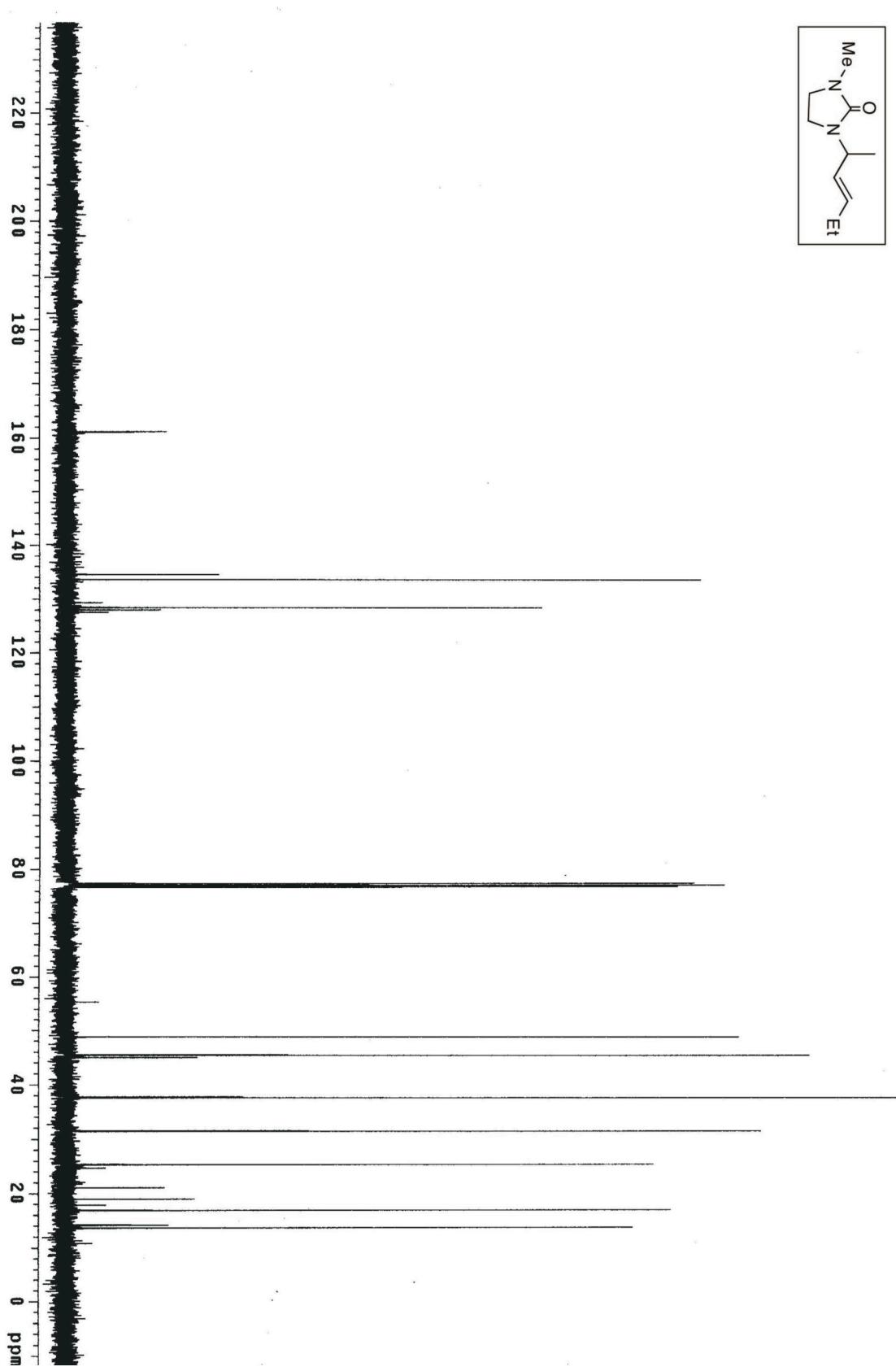


Figure S43. ^1H NMR spectrum of 1-methyl-3-(pentan-2-yl)imidazolidin-2-one (**S3**).

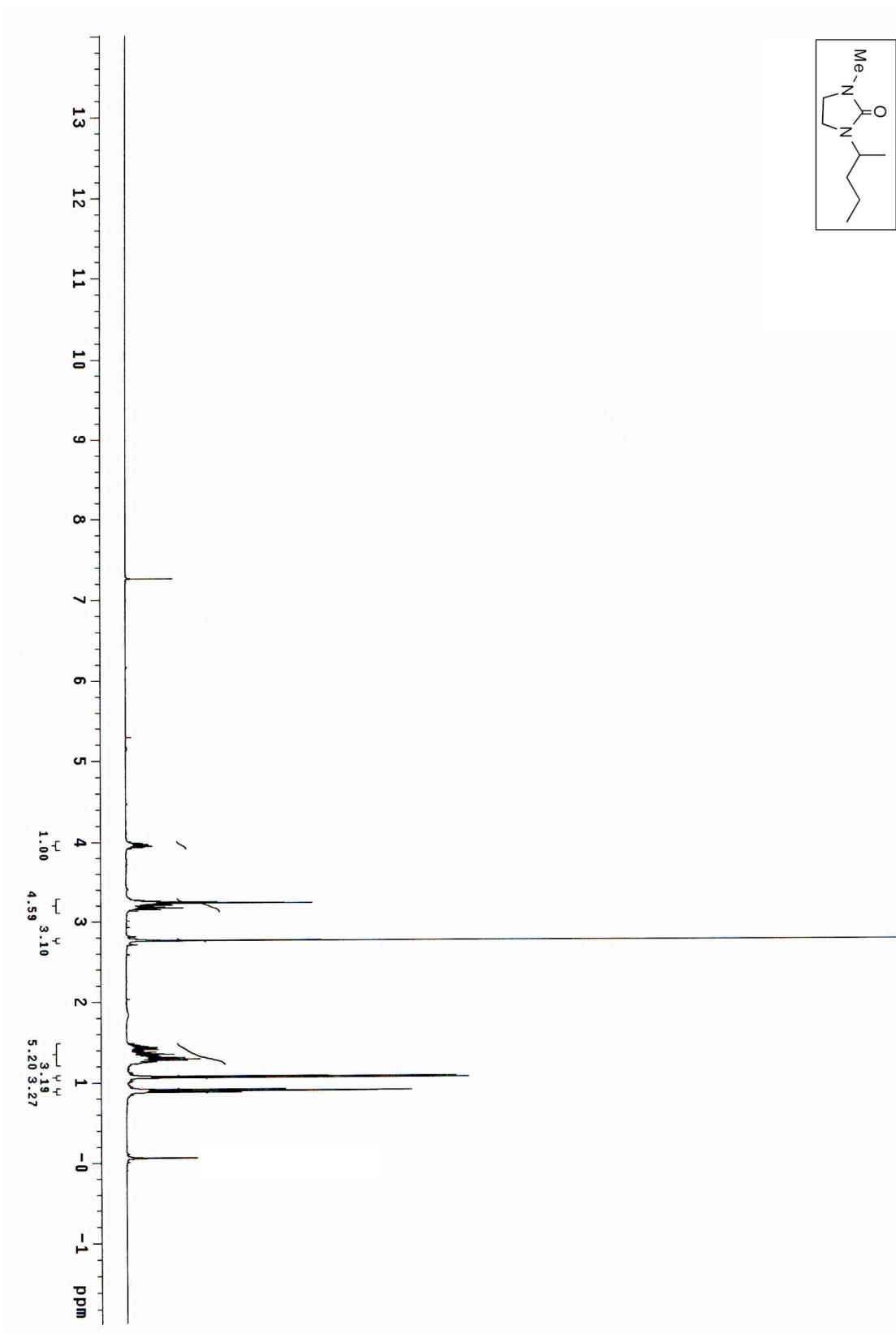


Figure S44. $^{13}\text{C}\{\text{H}\}$ NMR spectrum of 1-methyl-3-(pentan-2-yl)imidazolidin-2-one (**S3**).

