

Aza-Claisen rearrangement on 2-C-hydroxymethyl glycals as a versatile Strategy towards Synthesis of isofagomine and related biologically important azasugars

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NMR spectra of Compounds:

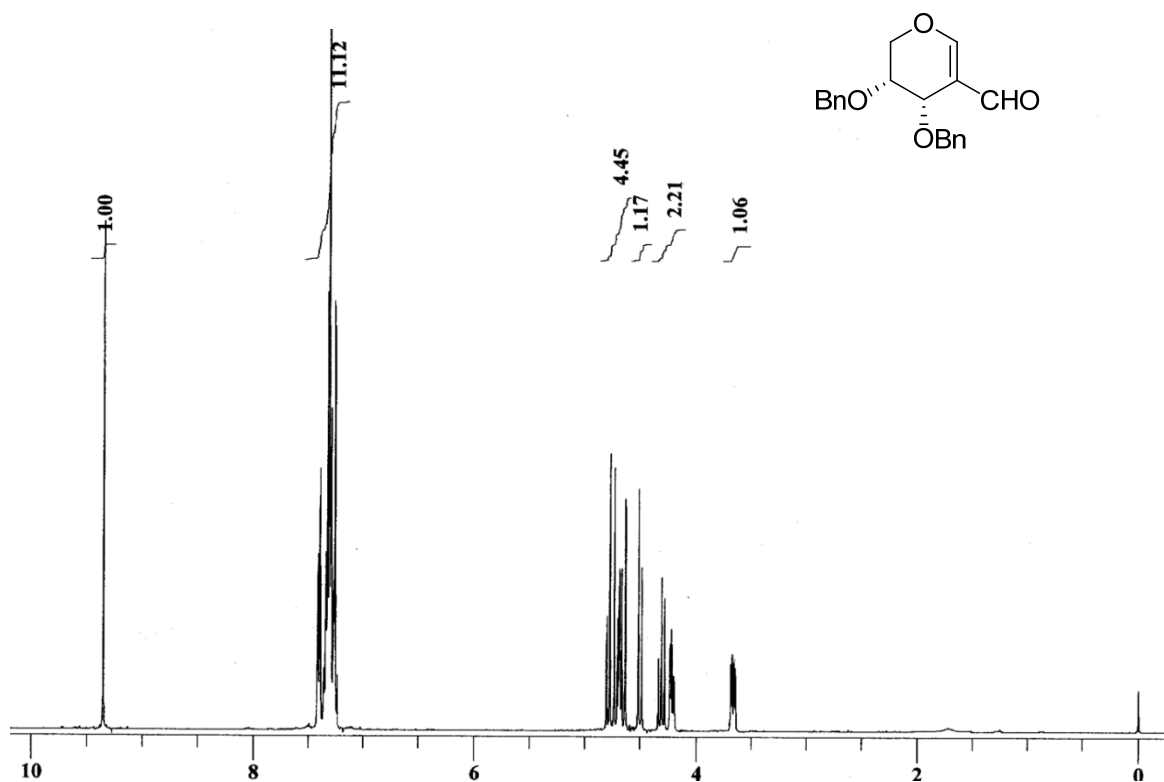


Figure 1: ¹H NMR (400 MHz) Spectrum of Compound 19

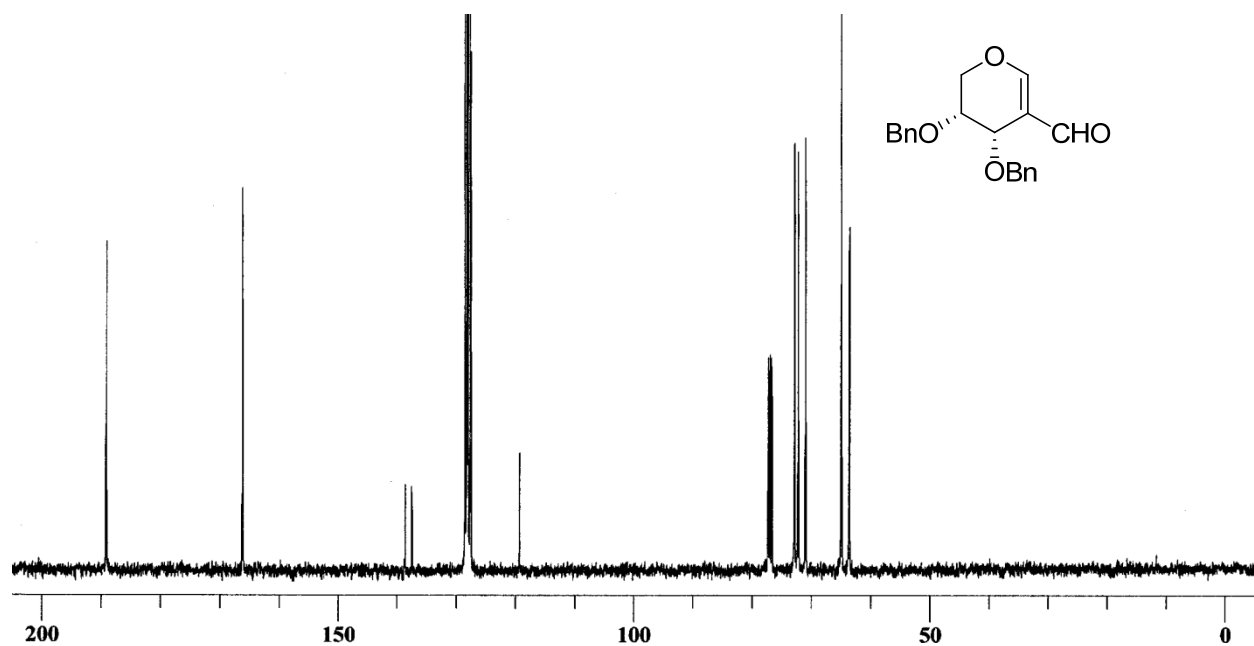


Figure 2: ¹³C NMR (100 MHz) Spectrum of Compound 19

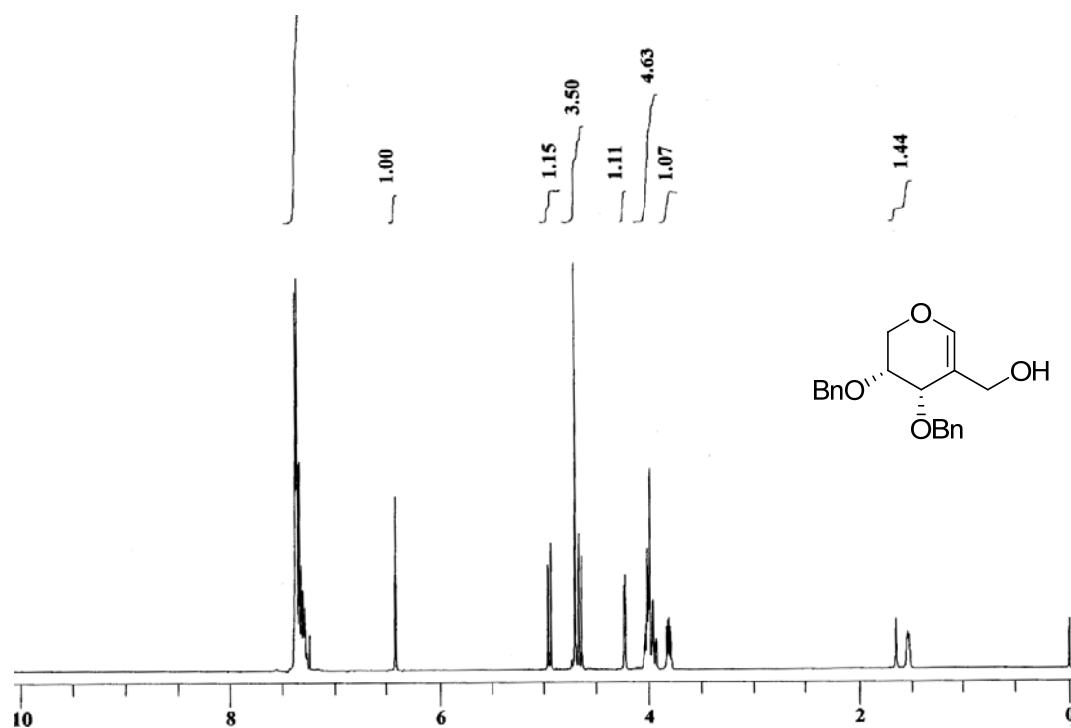


Figure 3: ^1H NMR (400 MHz) Spectrum of Compound 20

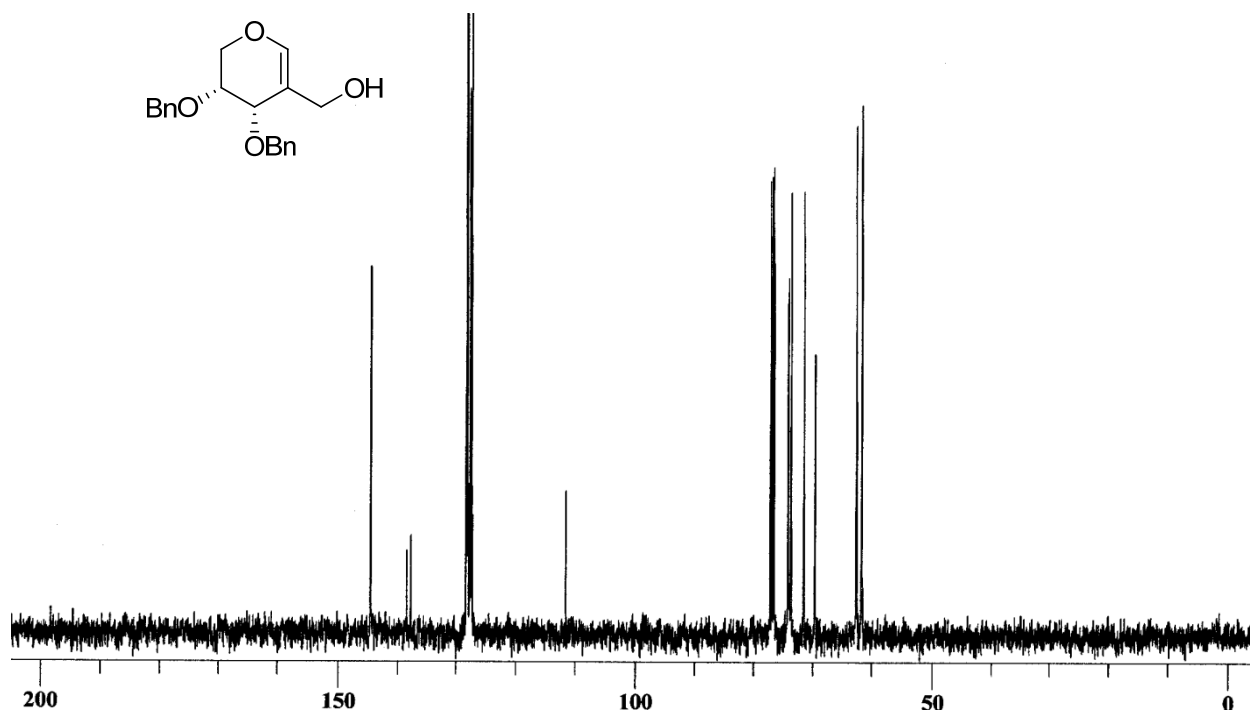


Figure 4: ^{13}C NMR (100 MHz) Spectrum of Compound 20

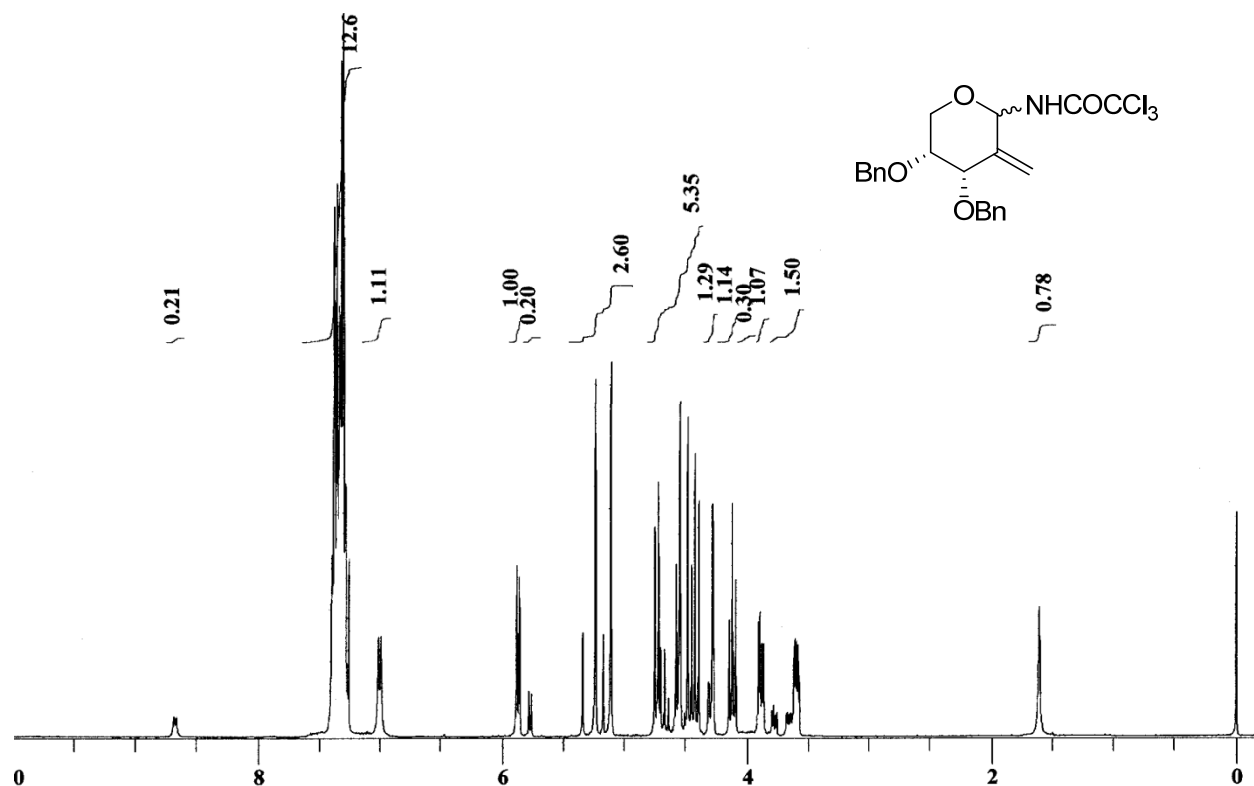


Figure 5: ¹H NMR (400 MHz) Spectrum of Compound 21a/b

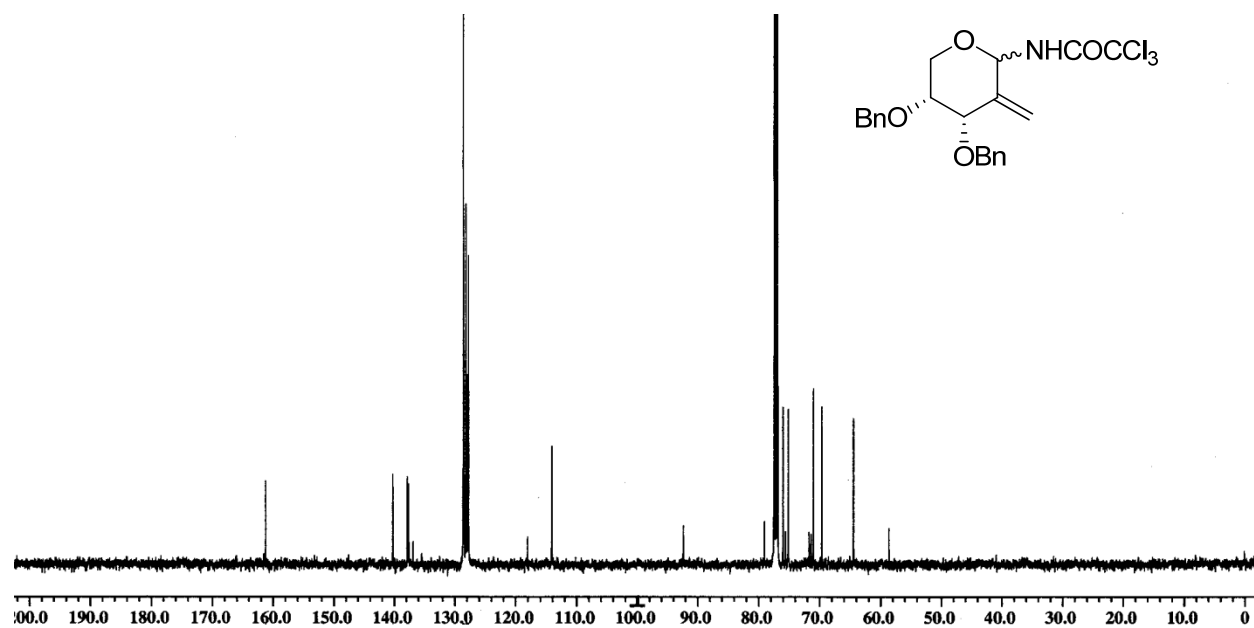


Figure 6: ¹³C NMR (125 MHz) Spectrum of Compound 21a/b

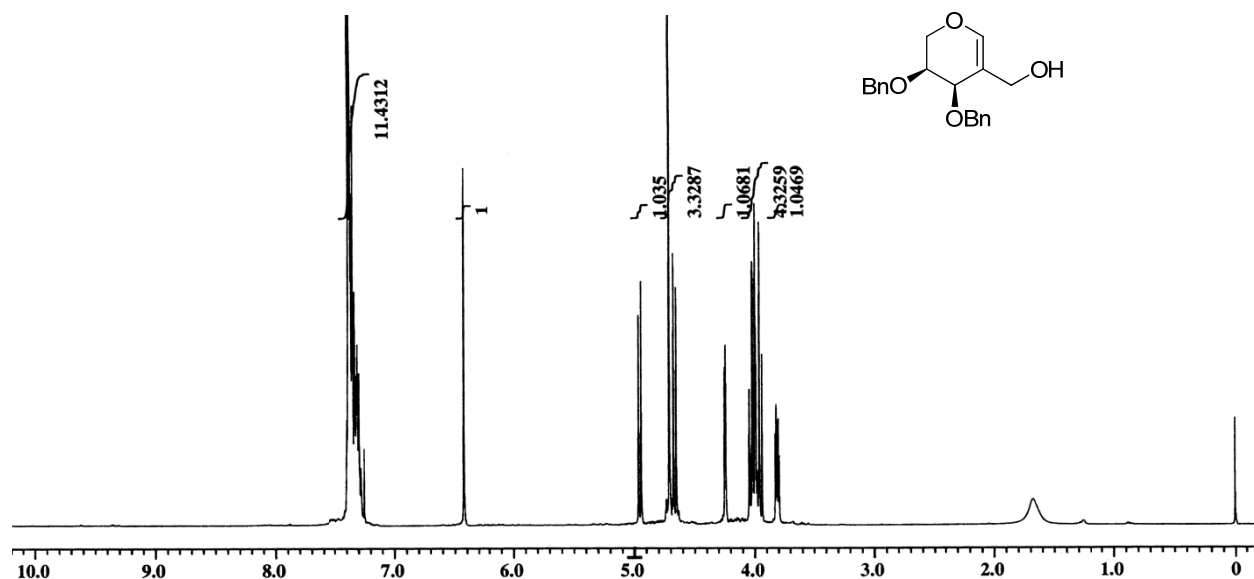


Figure 7: ^1H NMR (500 MHz) Spectrum of Compound 24

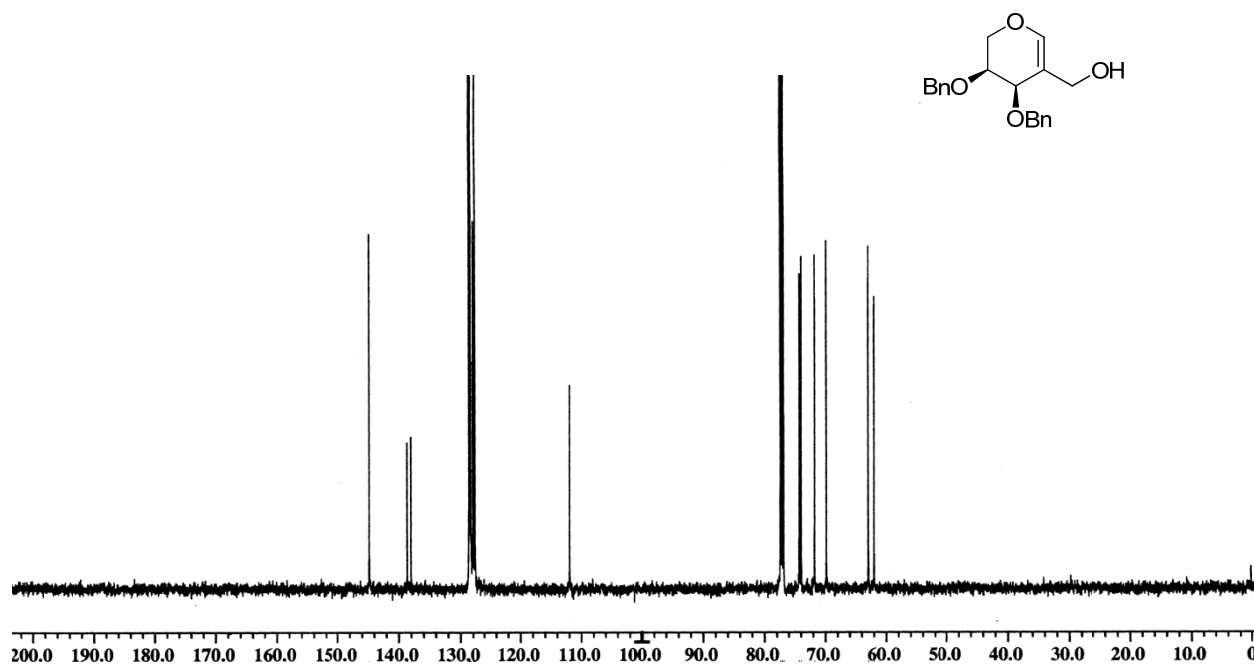


Figure 8: ^{13}C NMR (125 MHz) Spectrum of Compound 24

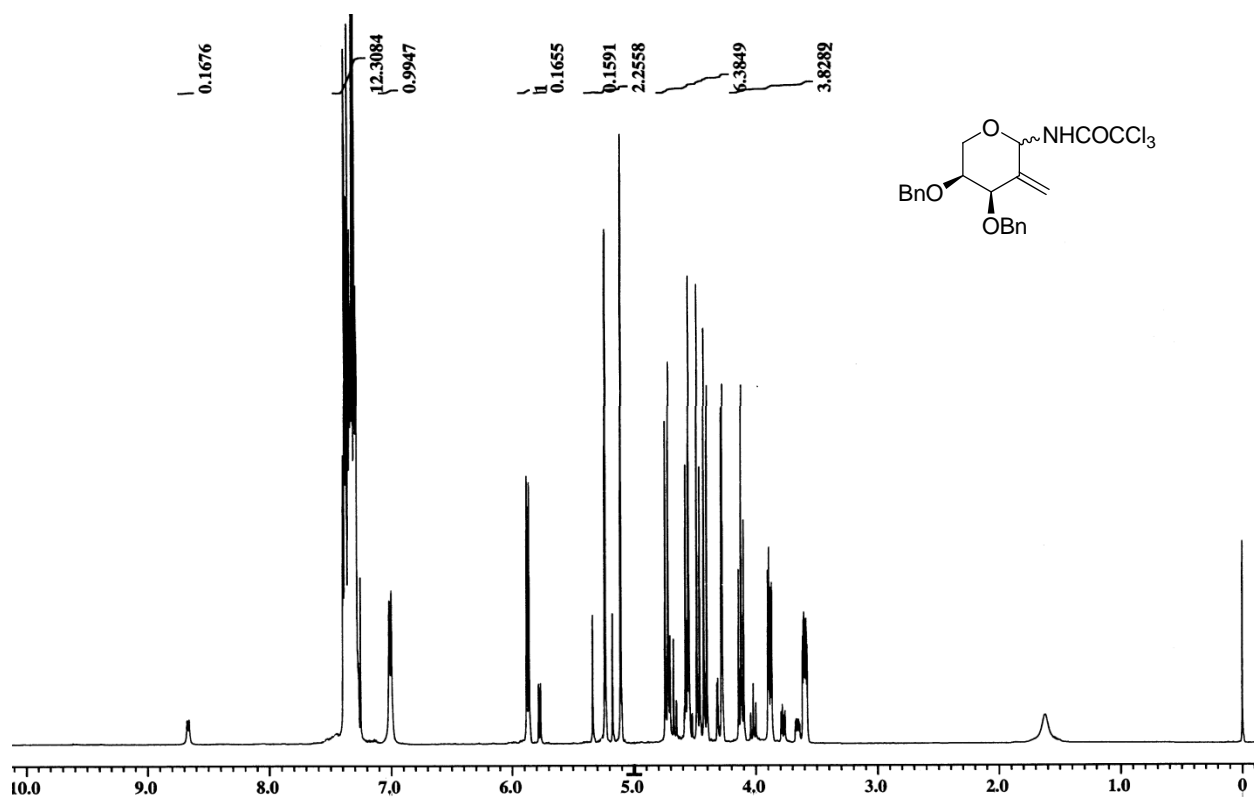


Figure 9: ¹H NMR (500 MHz) Spectrum of Compound 25a/b

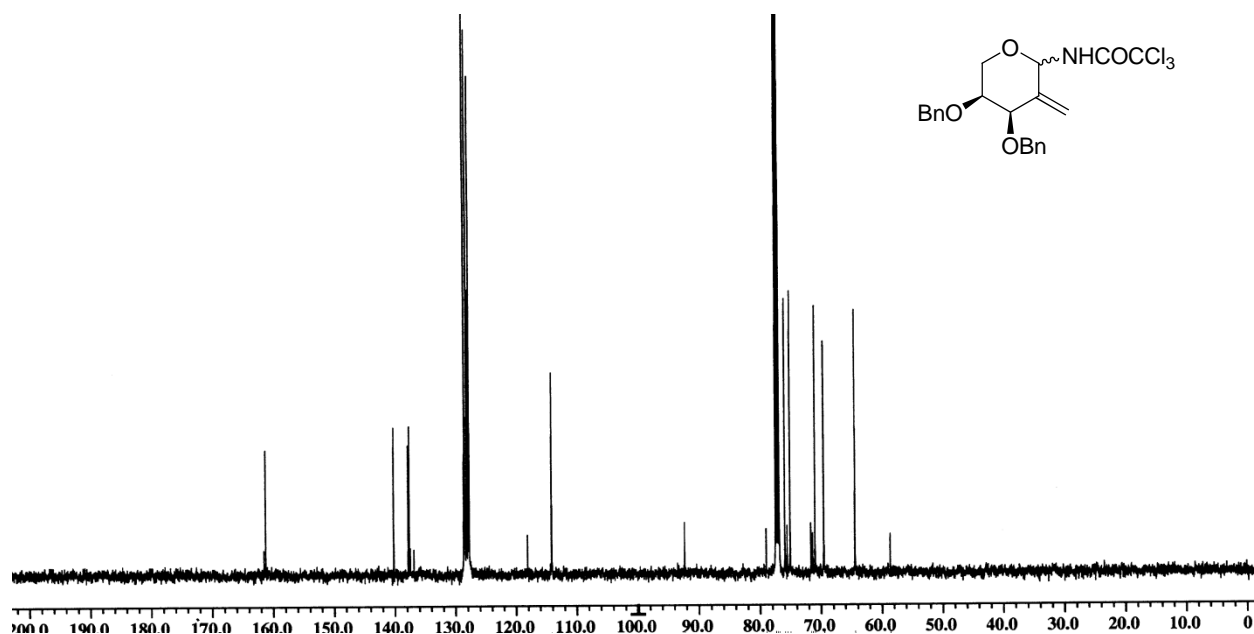


Figure 10: ¹³C NMR (125 MHz) Spectrum of Compound 25a/b

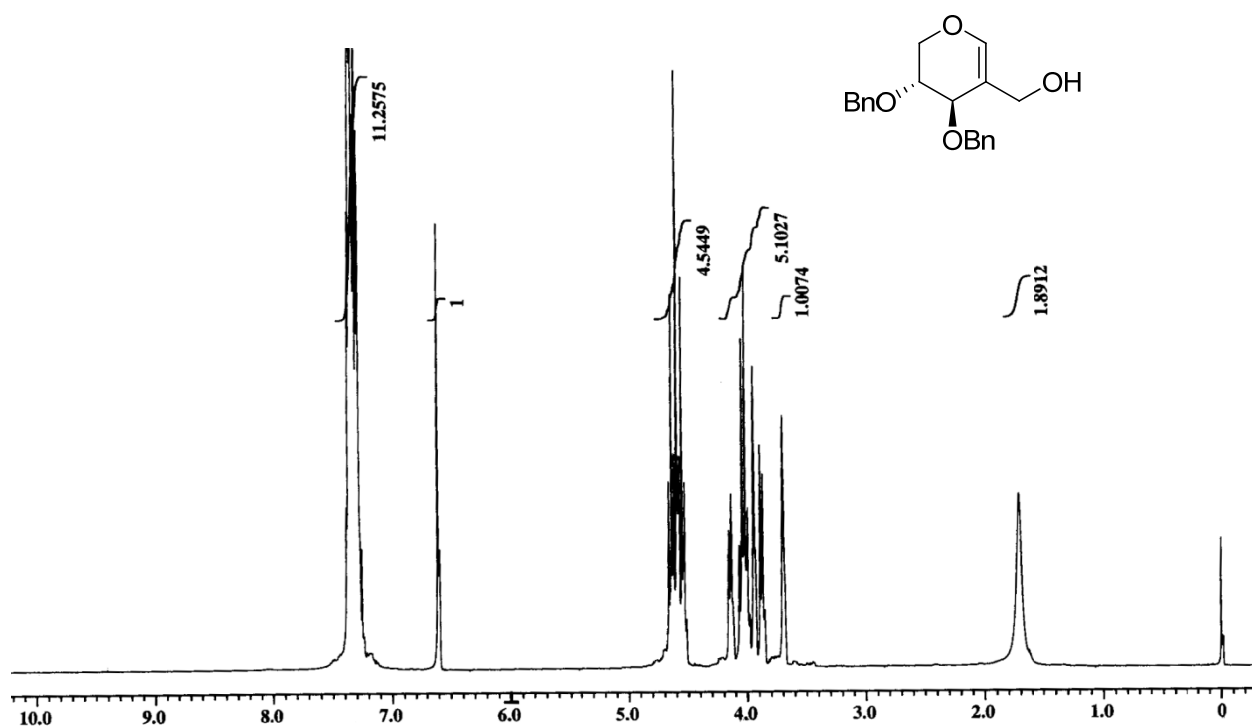


Figure 11: ¹H NMR (500 MHz) Spectrum of Compound 28

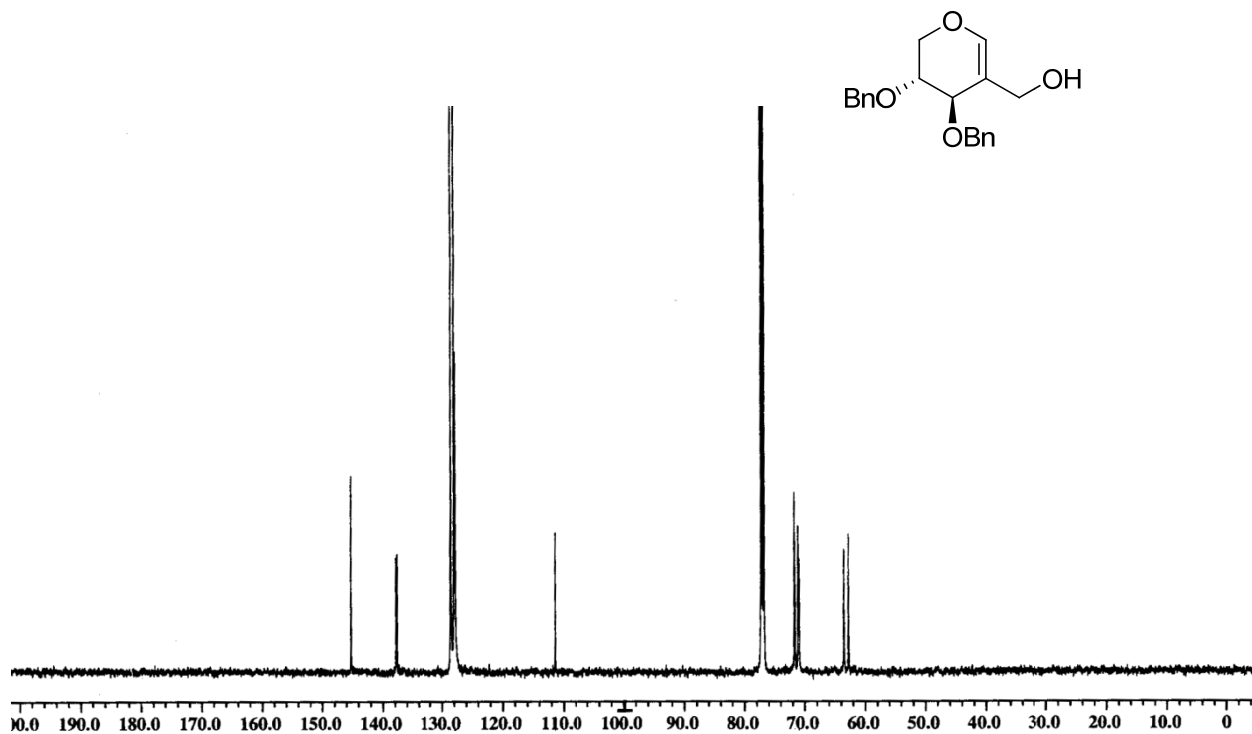


Figure 12: ¹³C NMR (125 MHz) Spectrum of Compound 28

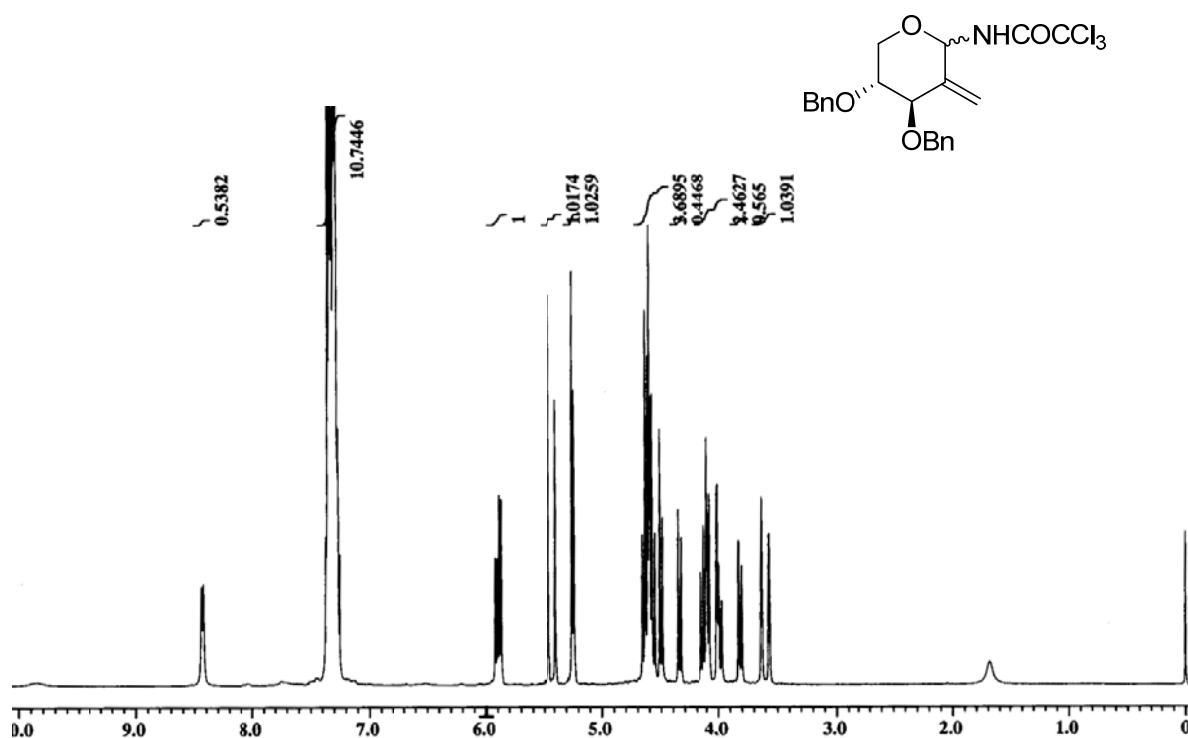


Figure 13: ¹H NMR (500 MHz) Spectrum of Compound 29a/b

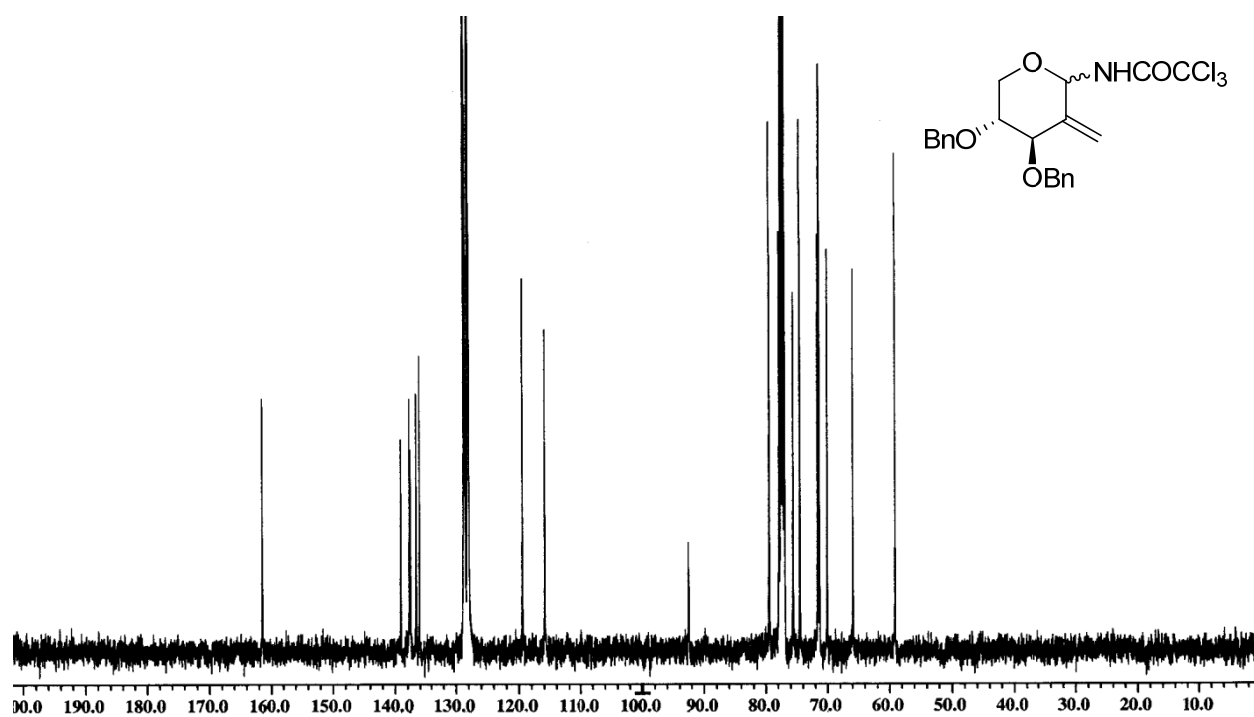


Figure 14: ¹³C NMR (125 MHz) Spectrum of Compound 29a/b

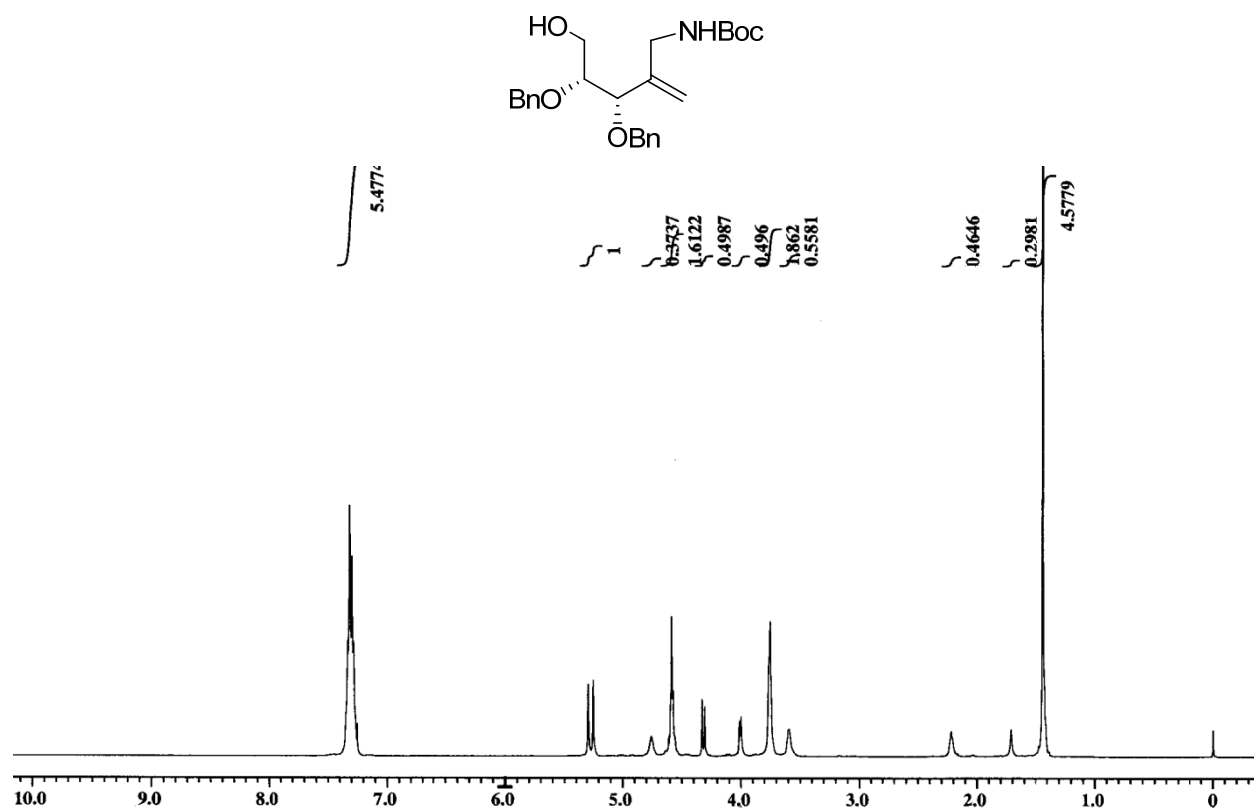


Figure 15: ¹H NMR (500 MHz) Spectrum of Compound 30

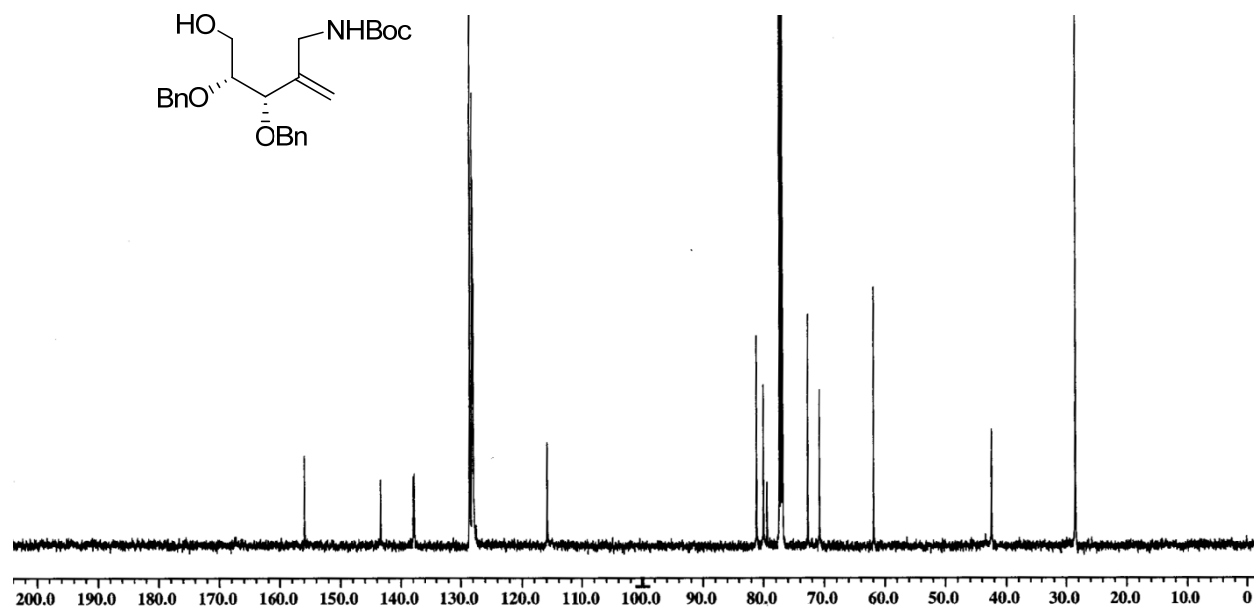


Figure 16: ¹³C NMR (125 MHz) Spectrum of Compound 30

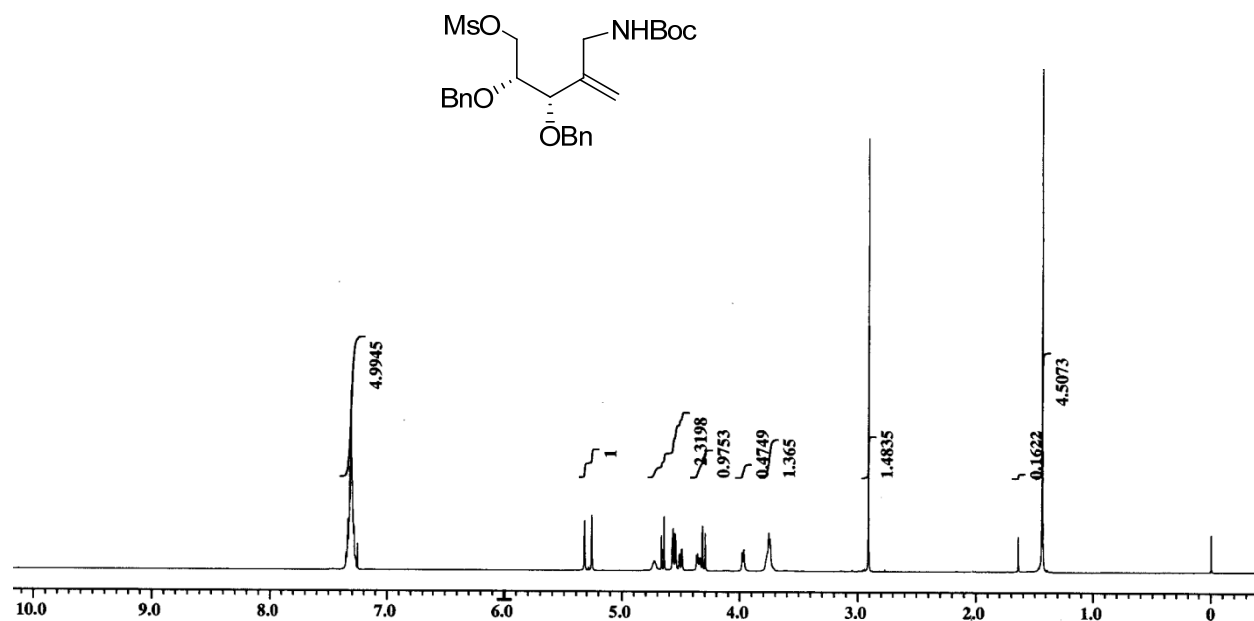


Figure 17: ¹H NMR (500 MHz) Spectrum of Compound 31

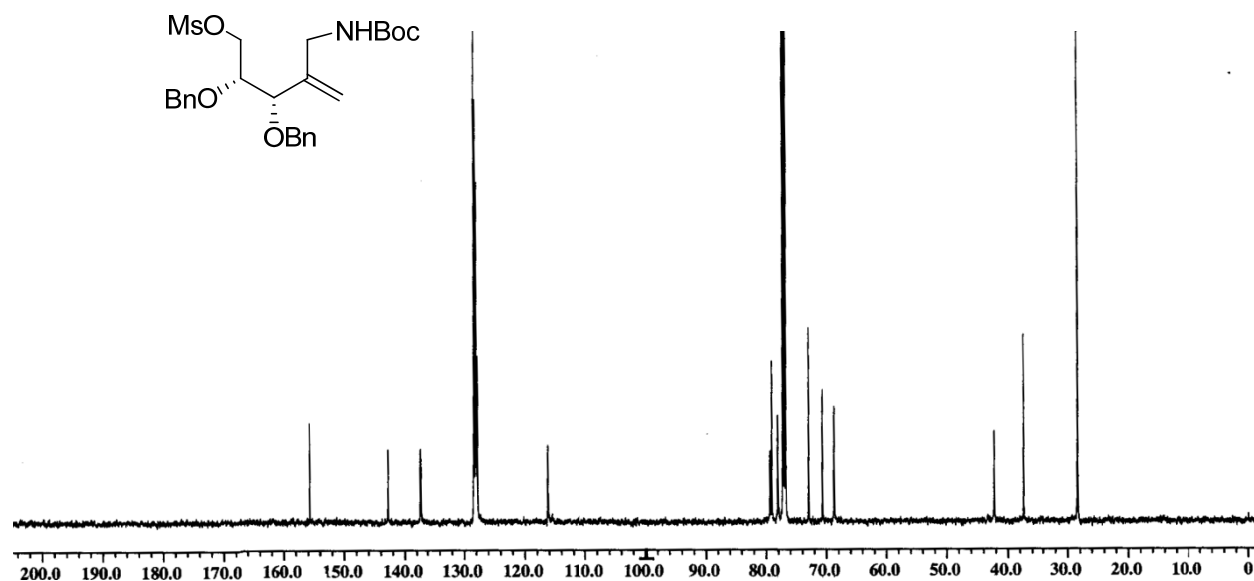


Figure 18: ¹³C NMR (125 MHz) Spectrum of Compound 31

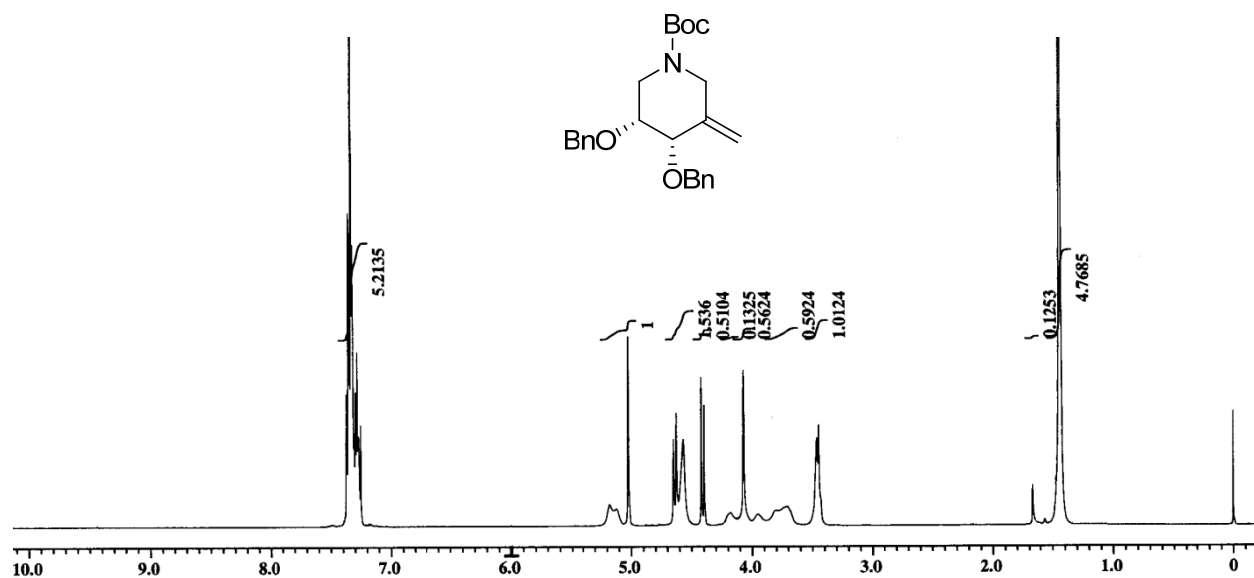


Figure 19: ¹H NMR (500 MHz) Spectrum of Compound 32

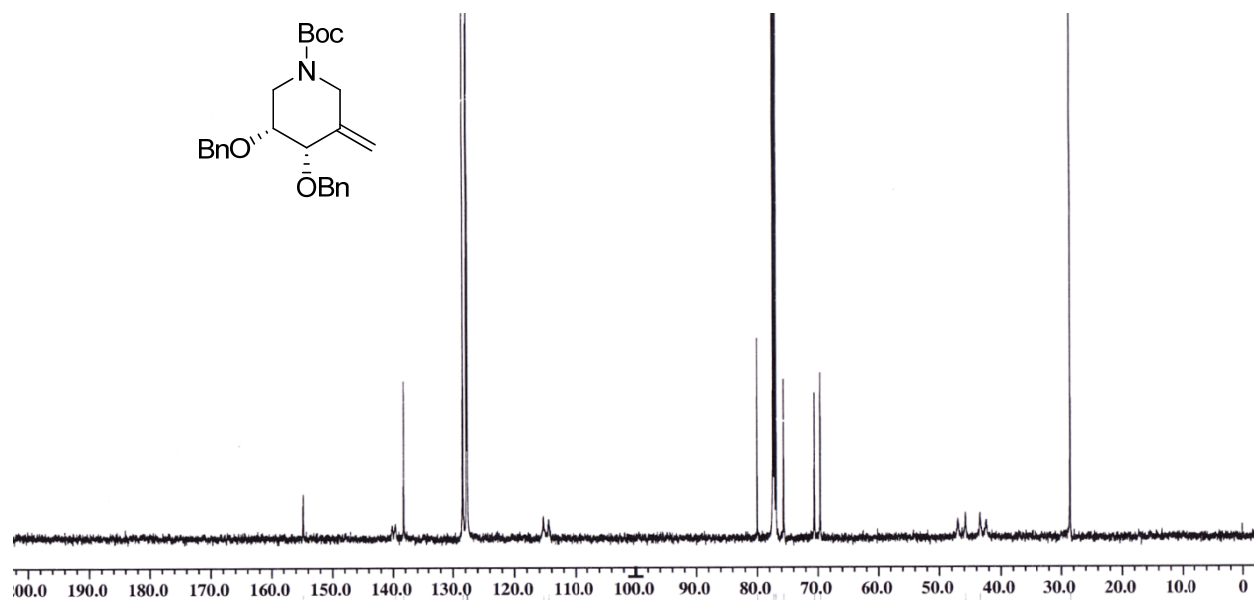


Figure 20: ¹³C NMR (125 MHz) Spectrum of Compound 32

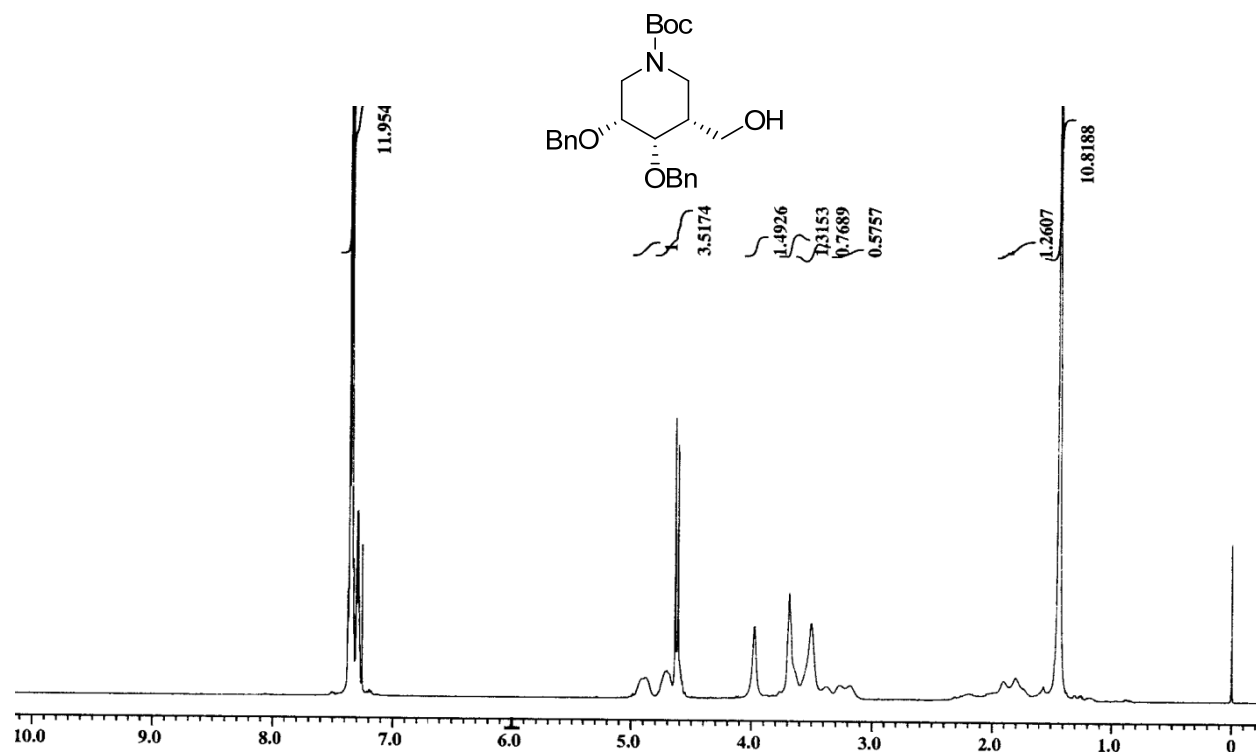


Figure 21: ^1H NMR (500 MHz) Spectrum of Compound 33

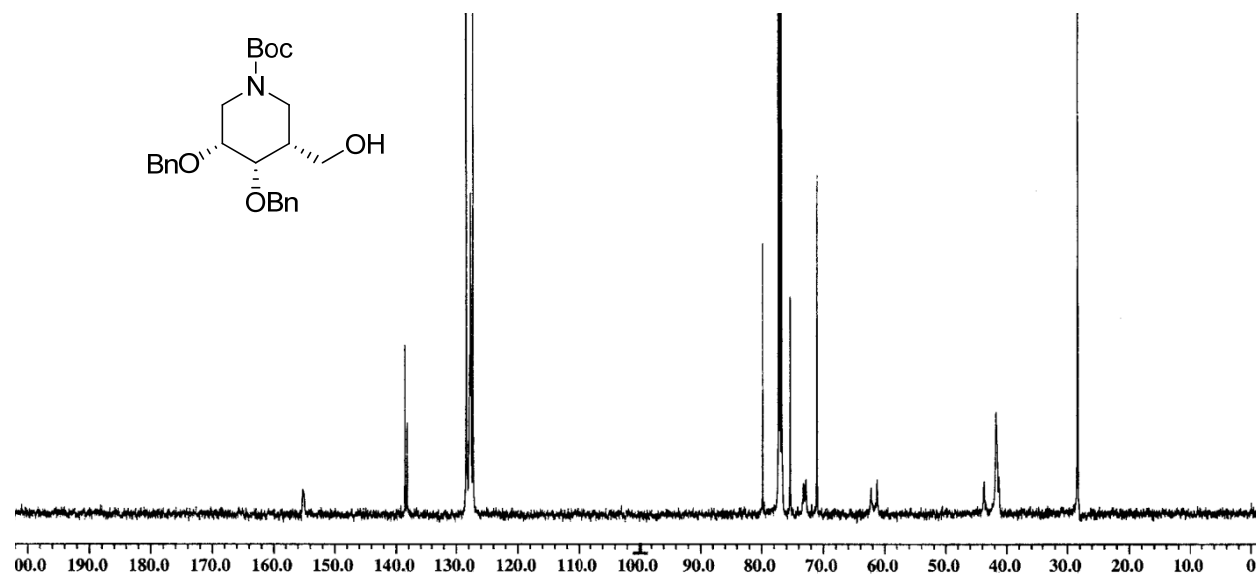


Figure 22: ^{13}C NMR (125 MHz) Spectrum of Compound 33

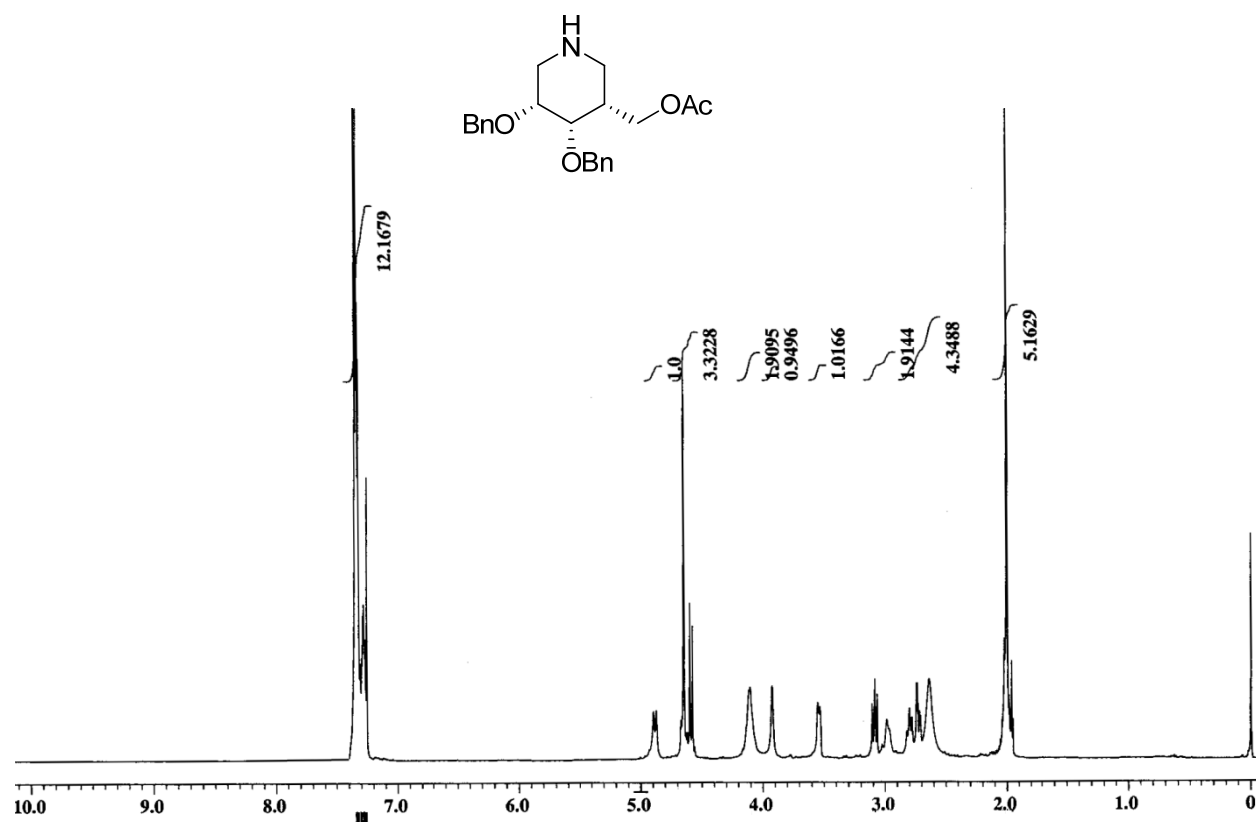


Figure 23: ¹H NMR (500 MHz) Spectrum of Compound 34

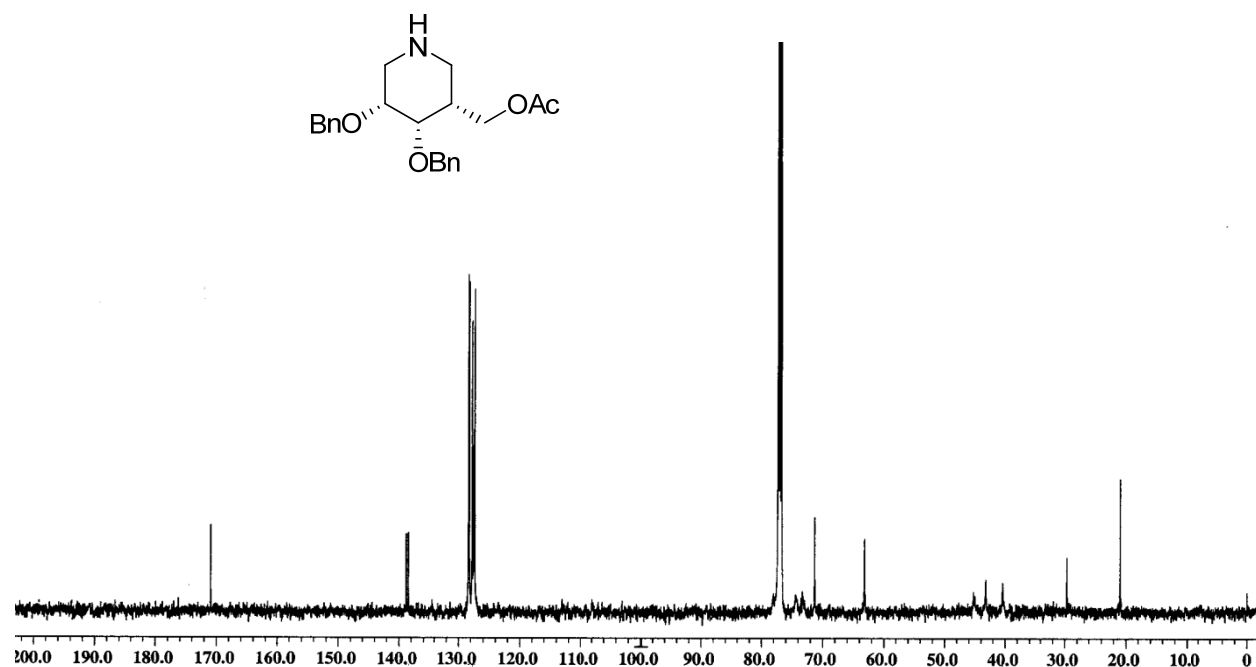


Figure 24: ¹³C NMR (125 MHz) Spectrum of Compound 34

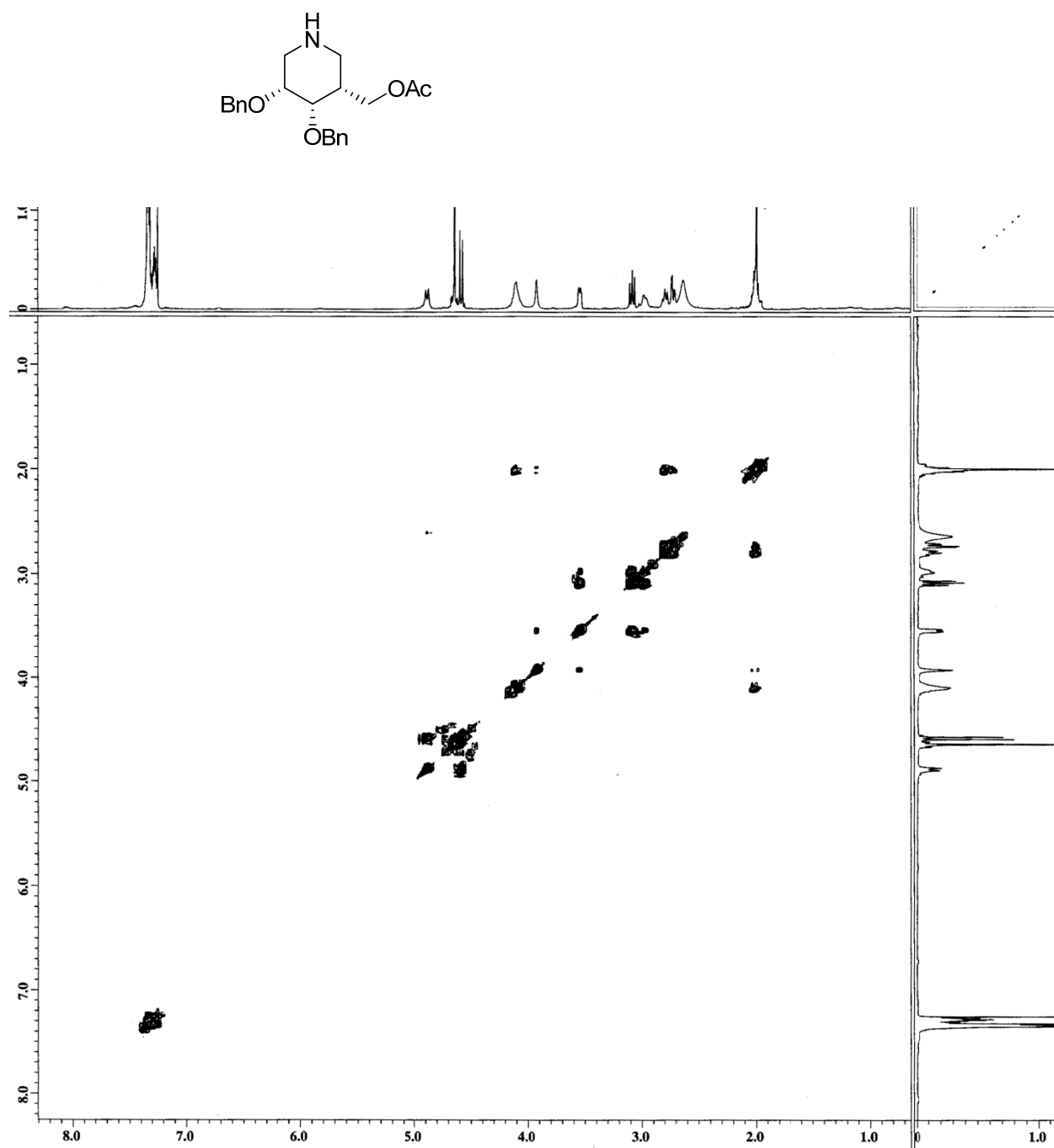


Figure 25: ^1H - ^1H COSY (500 MHz) Spectrum of Compound **34**

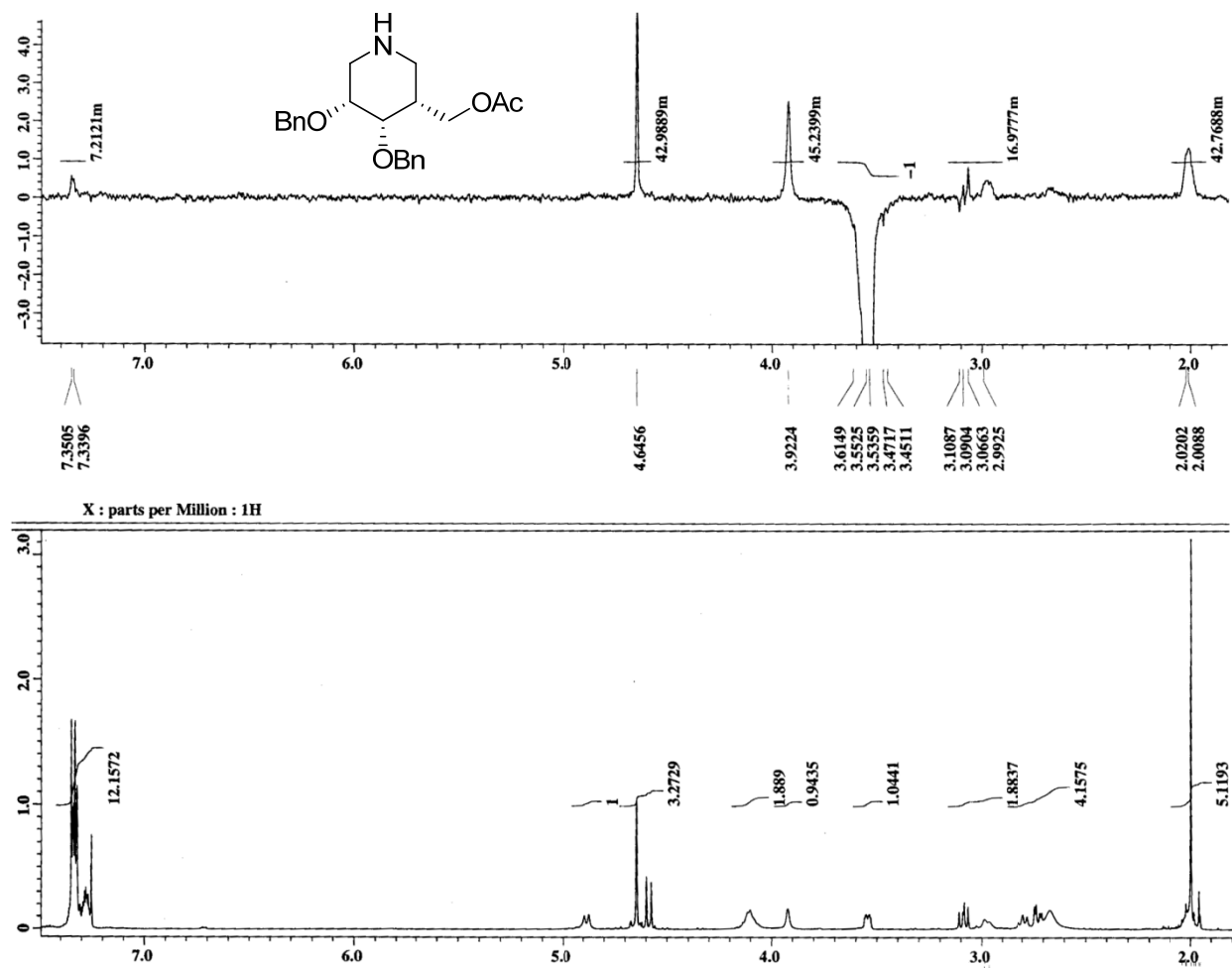


Figure 26: ^1H - ^1H nOe (irradiation of H-5) Spectrum of Compound 34

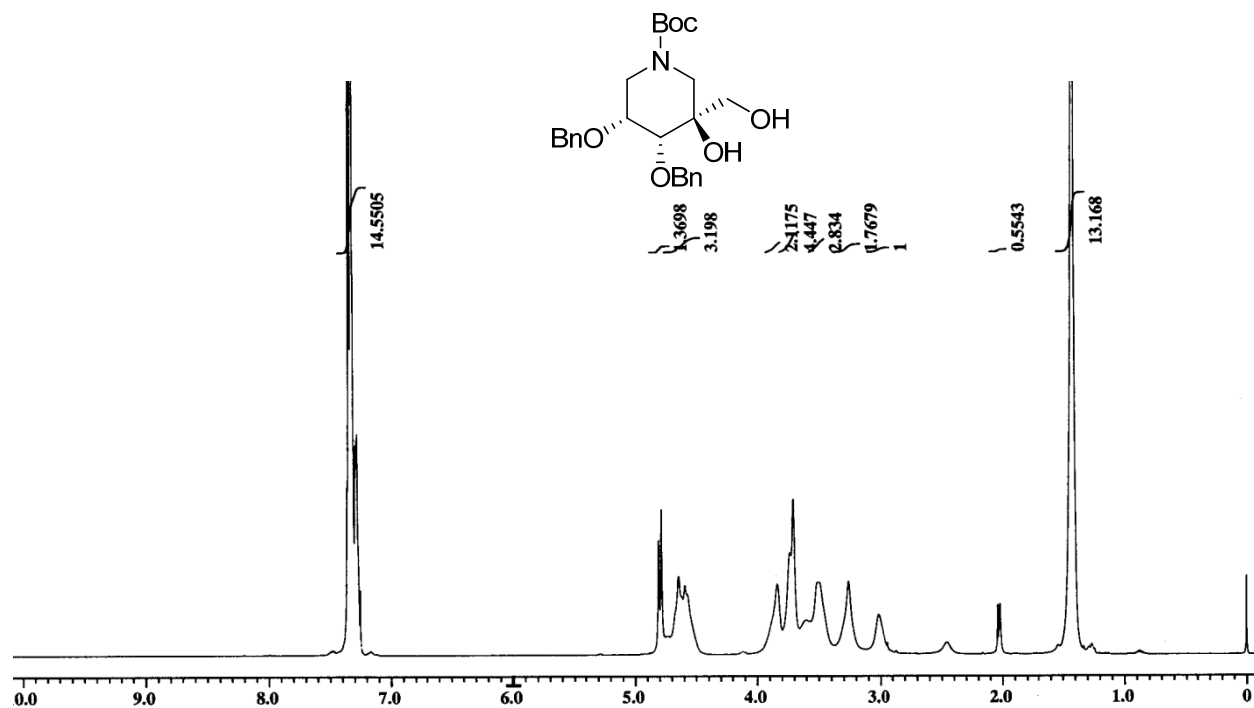


Figure 27: ¹H NMR (500 MHz) Spectrum of Compound 35

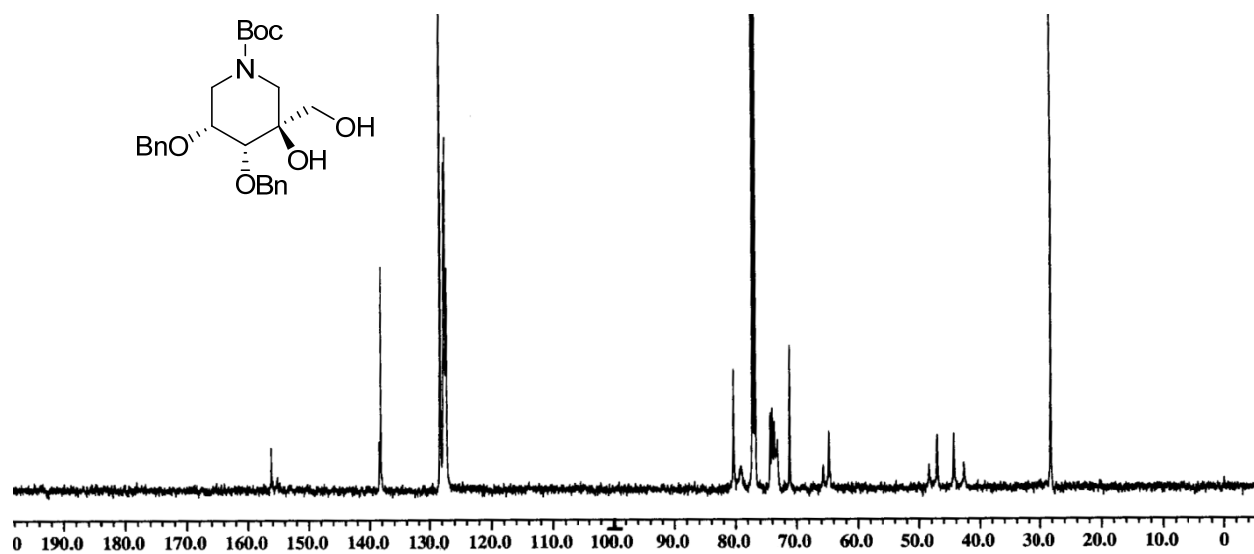


Figure 28: ¹³C NMR (125 MHz) Spectrum of Compound 35

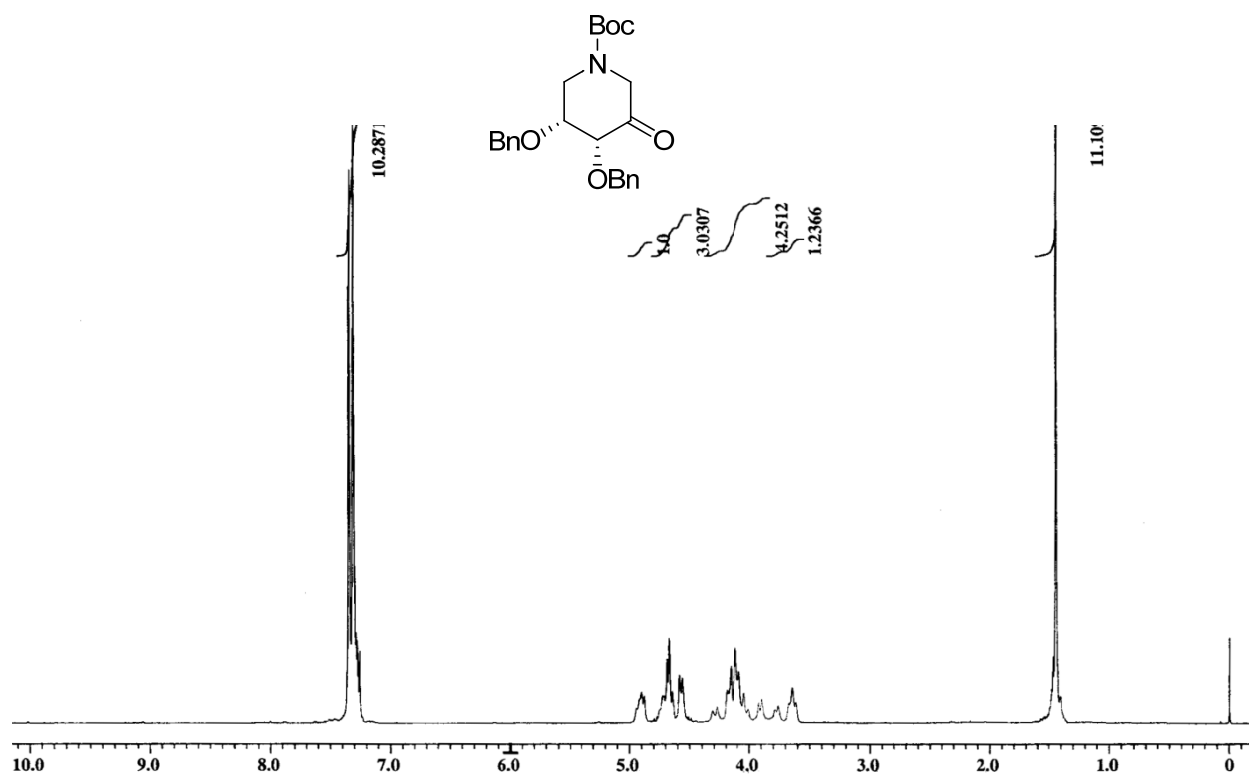


Figure 29: ¹H NMR (500 MHz) Spectrum of Compound 36

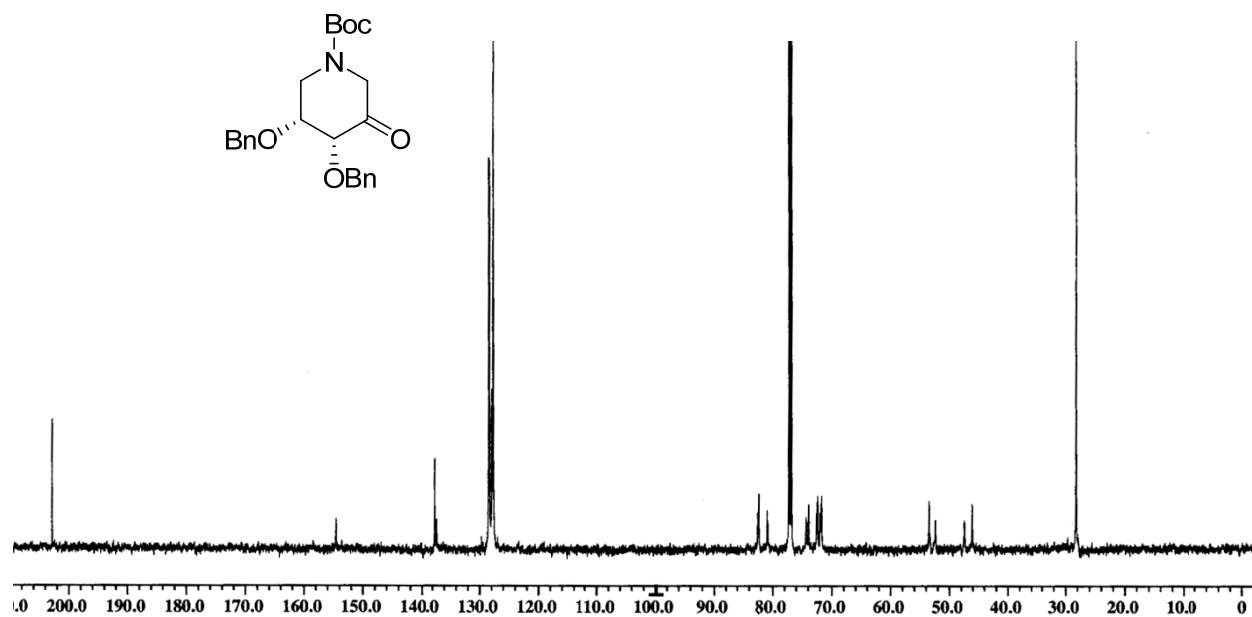


Figure 30: ¹³C NMR (125 MHz) Spectrum of Compound 36

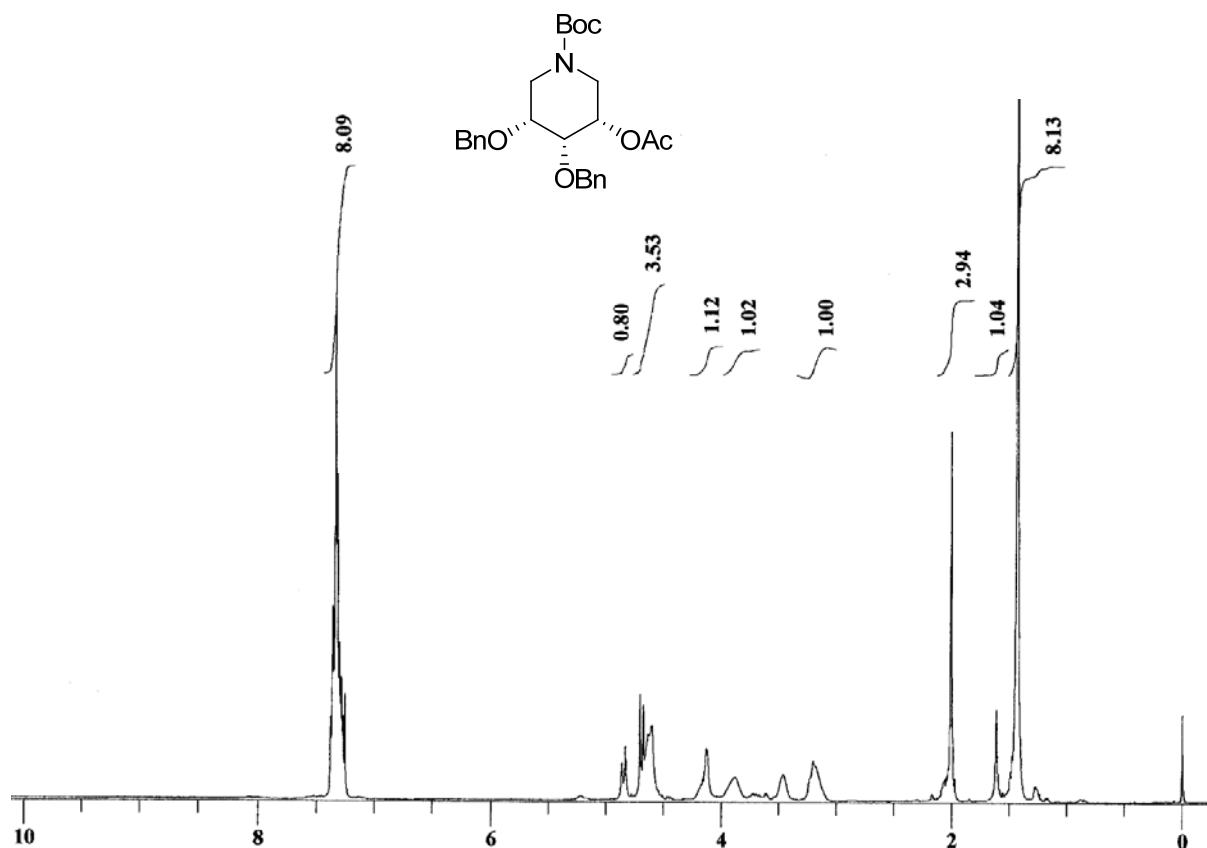


Figure 31: ¹H NMR (400 MHz) Spectrum of Compound 37

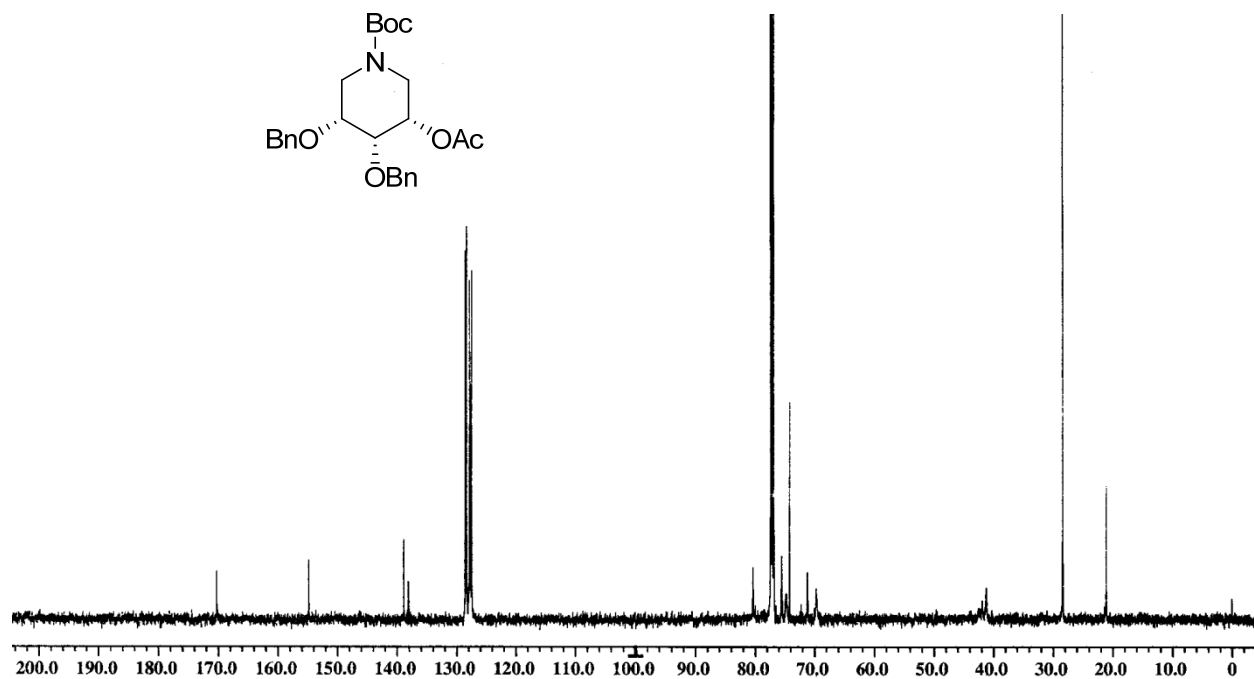


Figure 32: ¹³C NMR (125 MHz) Spectrum of Compound 37

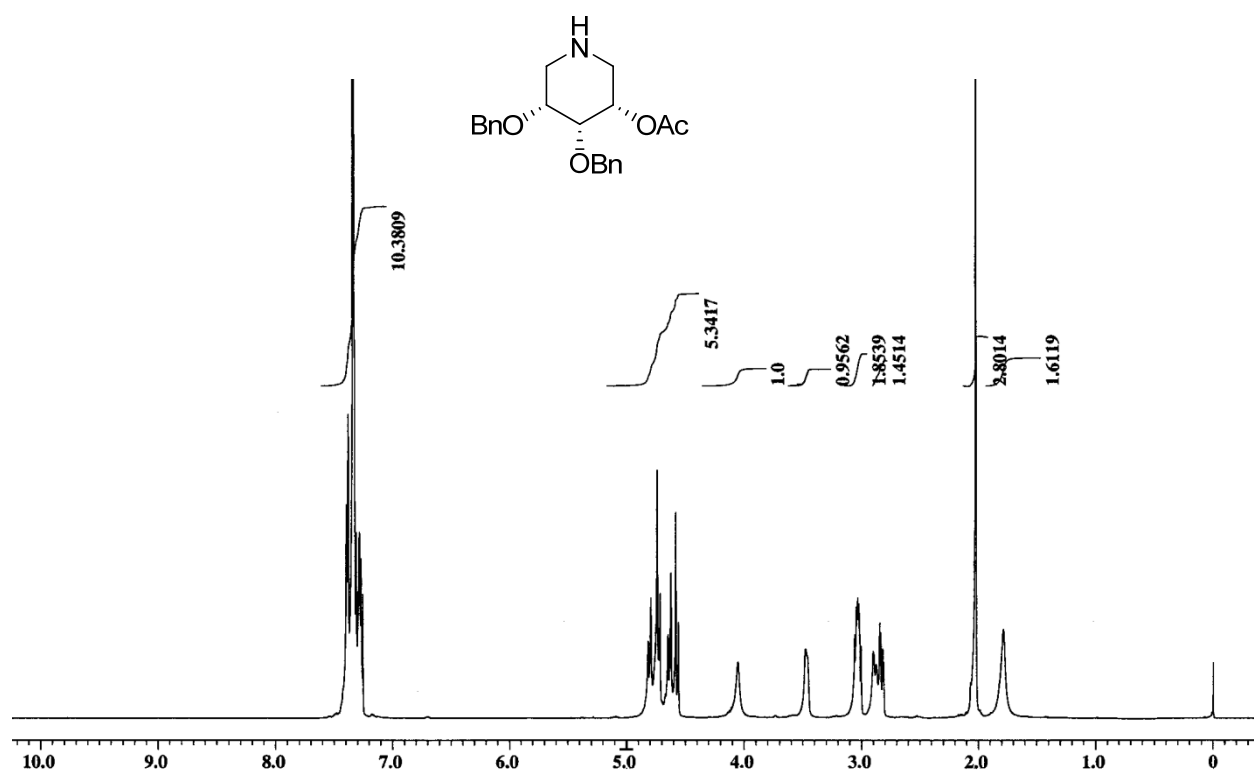


Figure 33: ¹H NMR (500 MHz) Spectrum of Compound 38

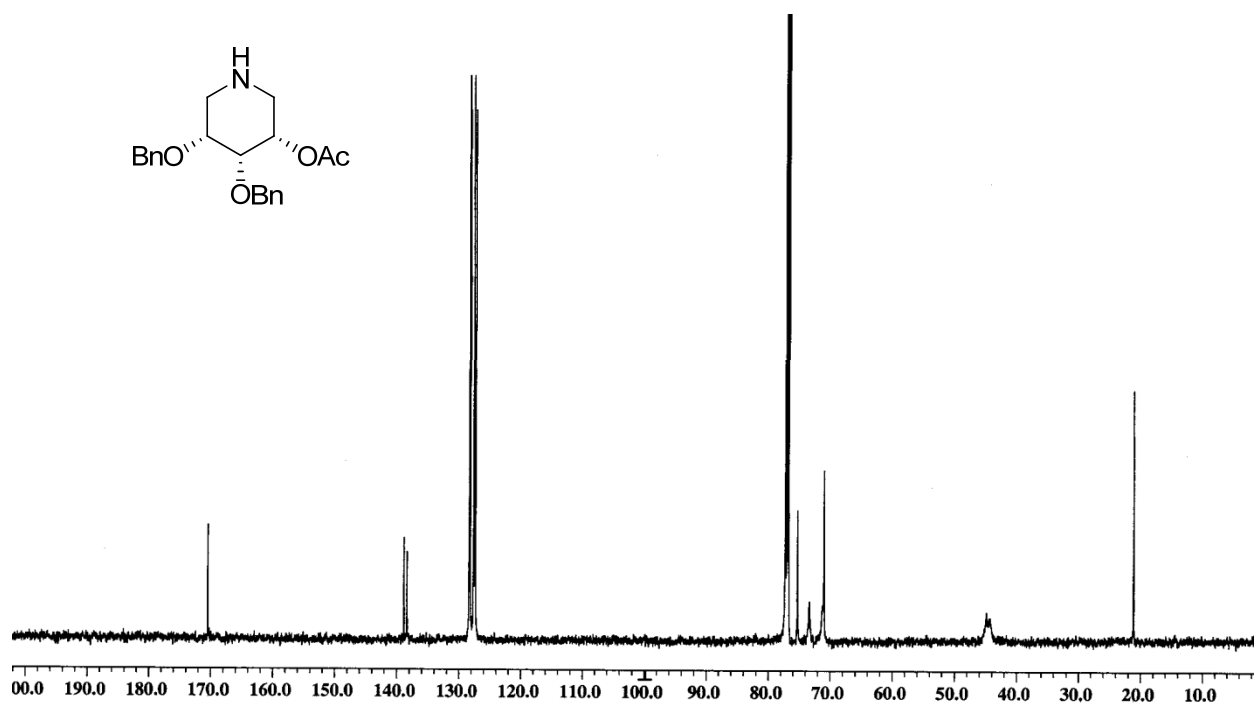


Figure 34: ¹³C NMR (125 MHz) Spectrum of Compound 38

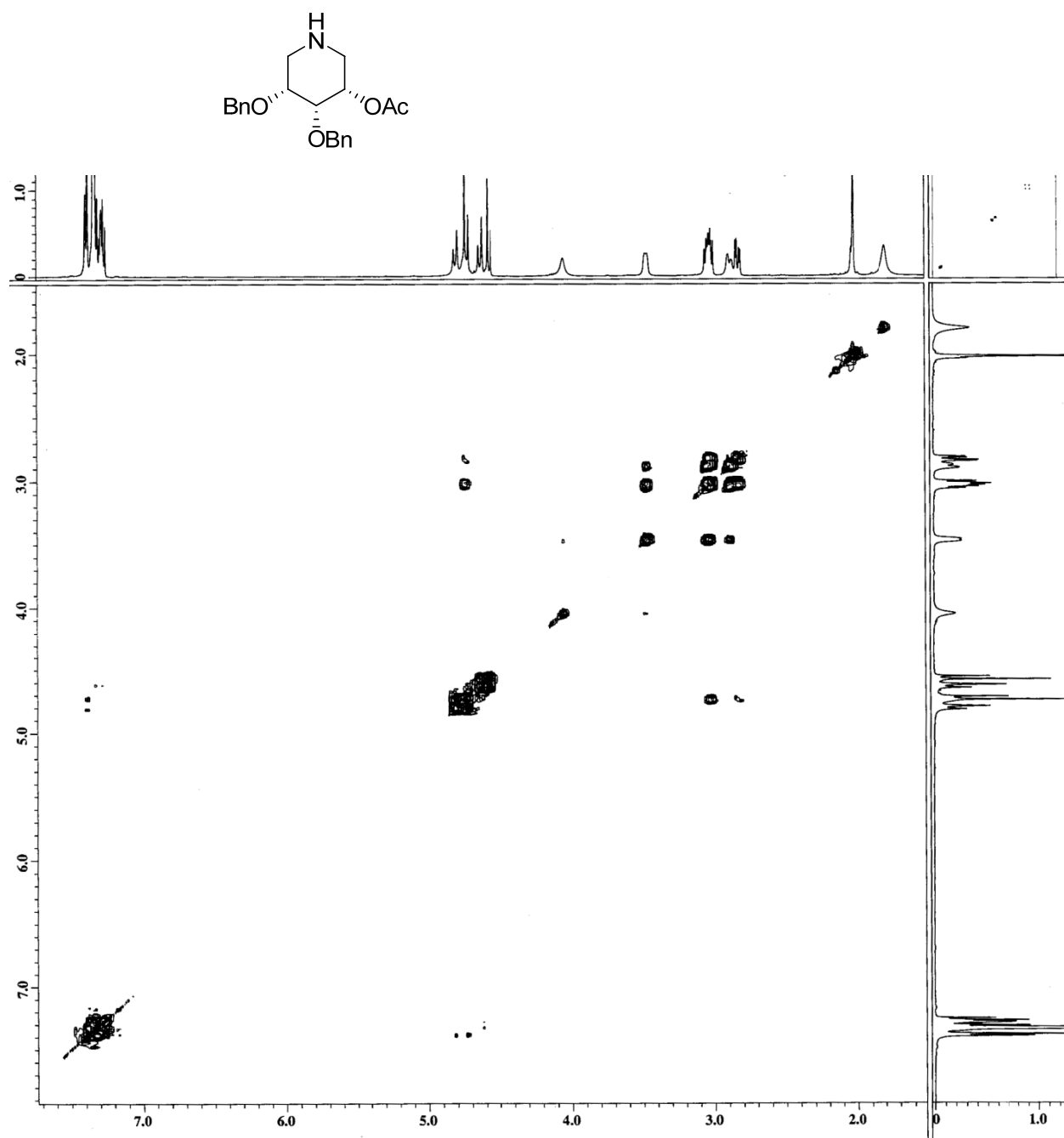


Figure 35: ^1H - ^1H COSY (500 MHz) Spectrum of Compound **38**

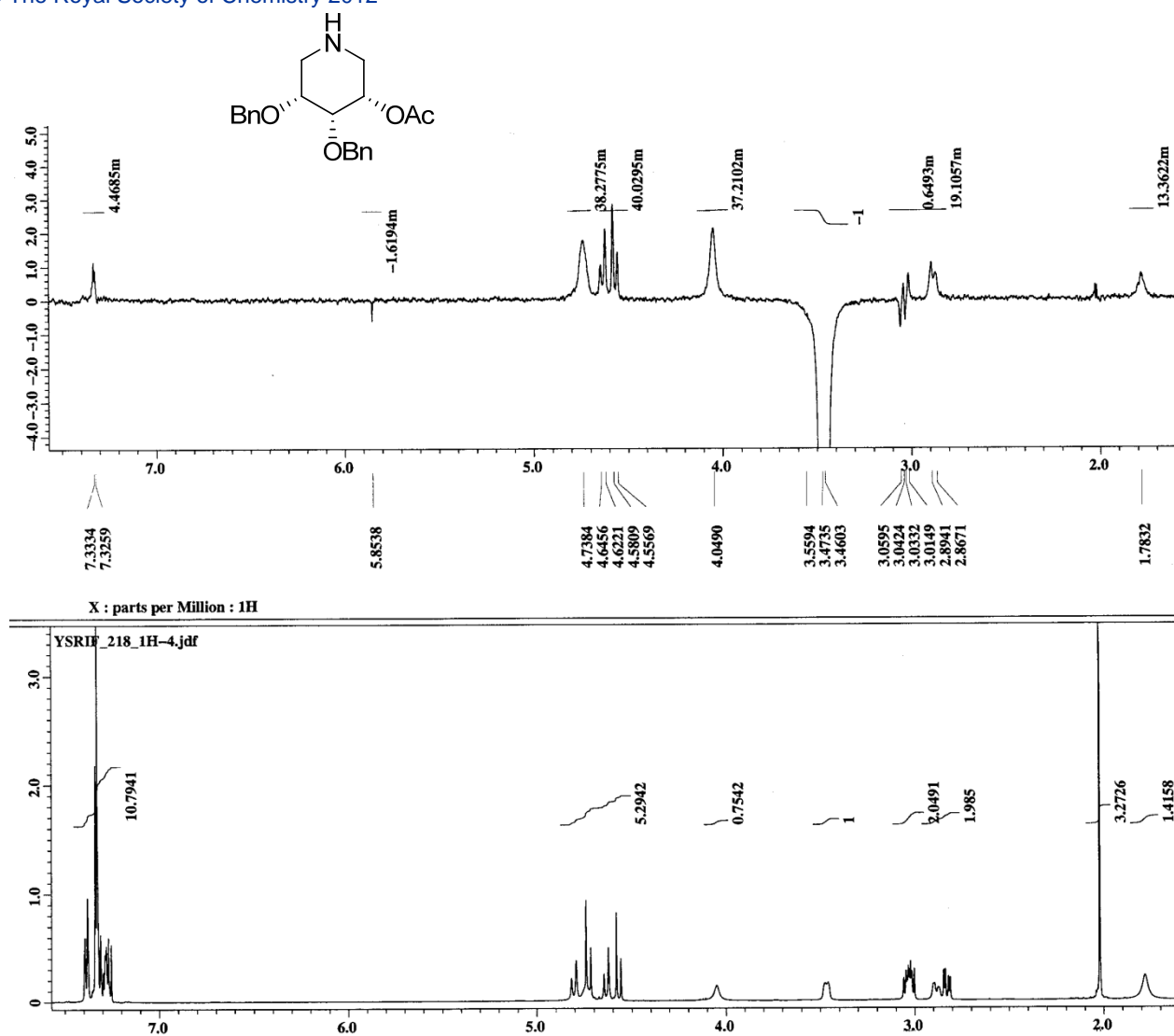


Figure 36: ^1H - ^1H nOe (irradiation of H-5) Spectrum of Compound 38

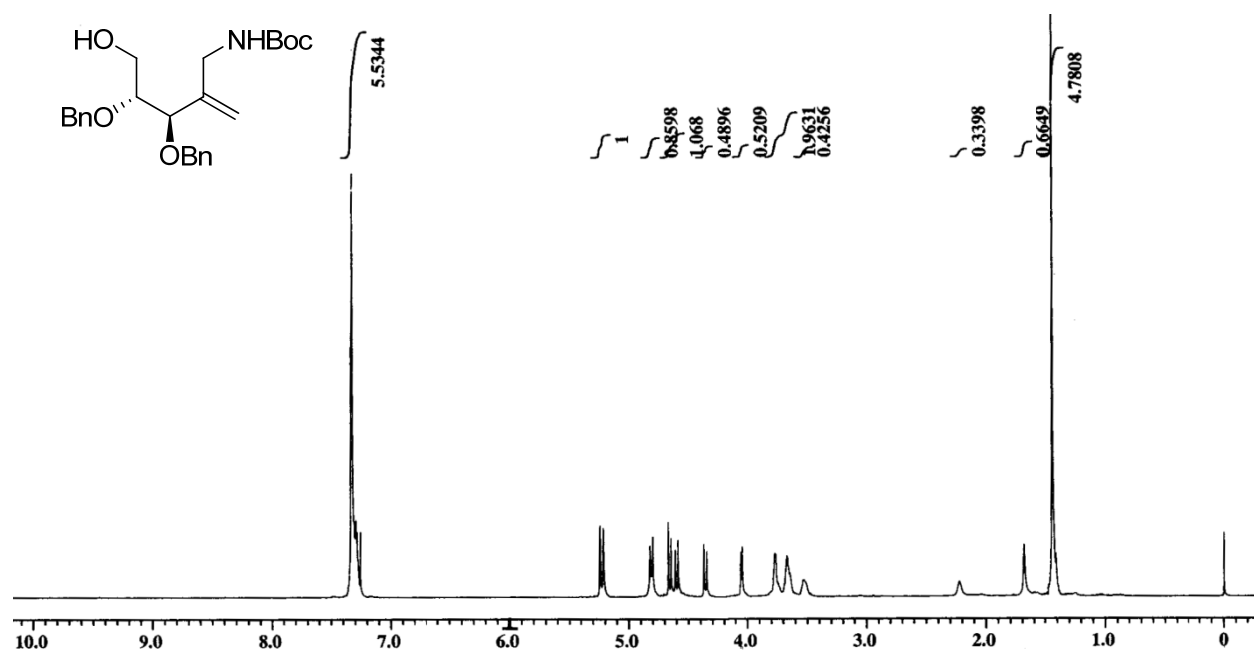


Figure 37: ¹H NMR (500 MHz) Spectrum of Compound 39

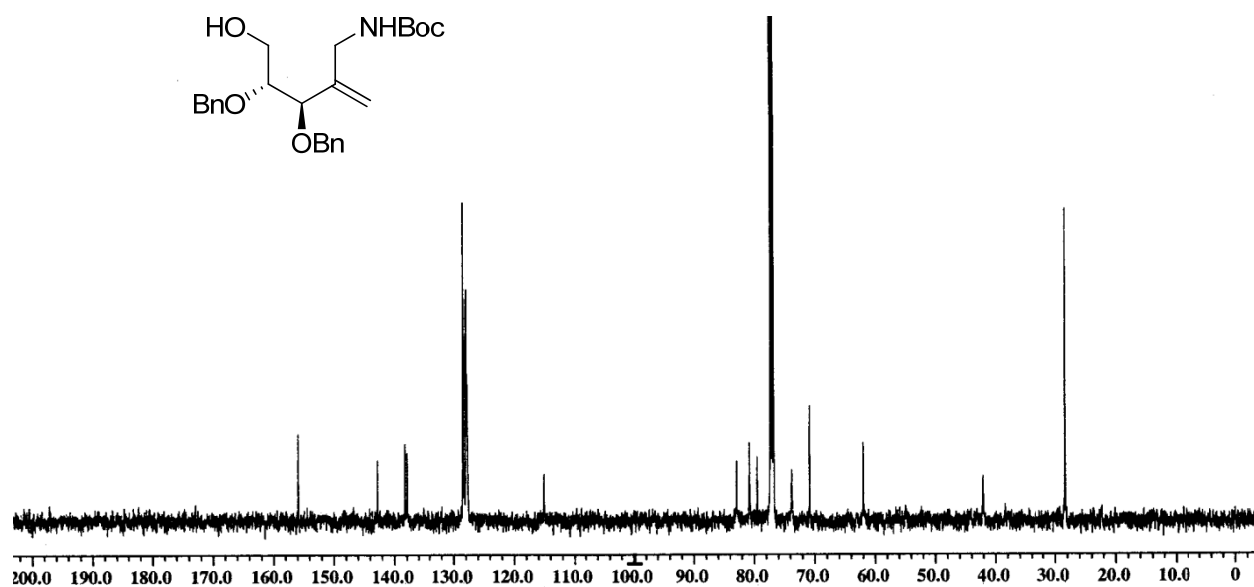


Figure 38: ¹³C NMR (125 MHz) Spectrum of Compound 39

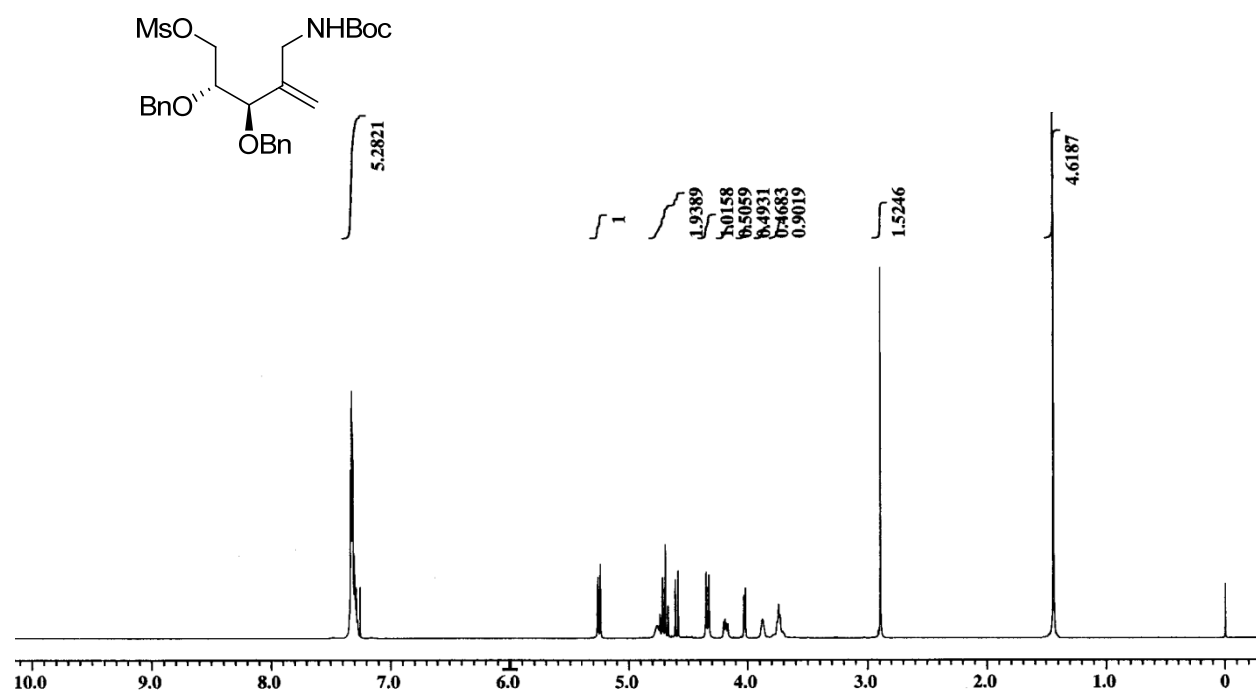


Figure 39: ¹H NMR (500 MHz) Spectrum of Compound 40

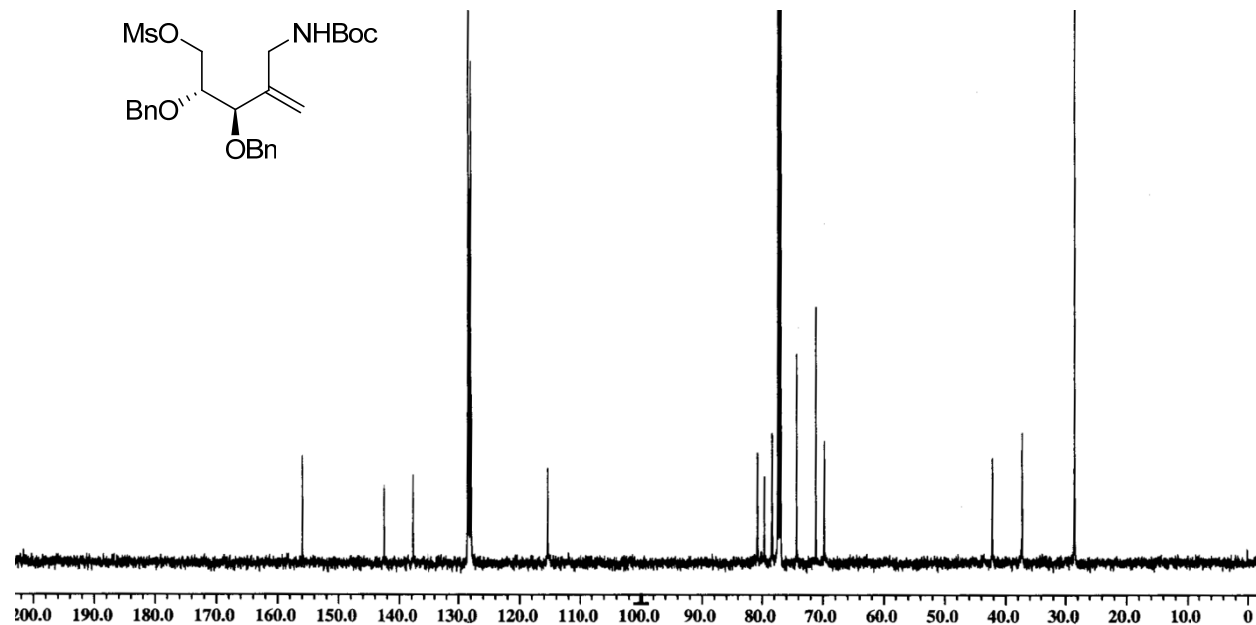


Figure 40: ¹³C NMR (125 MHz) Spectrum of Compound 40

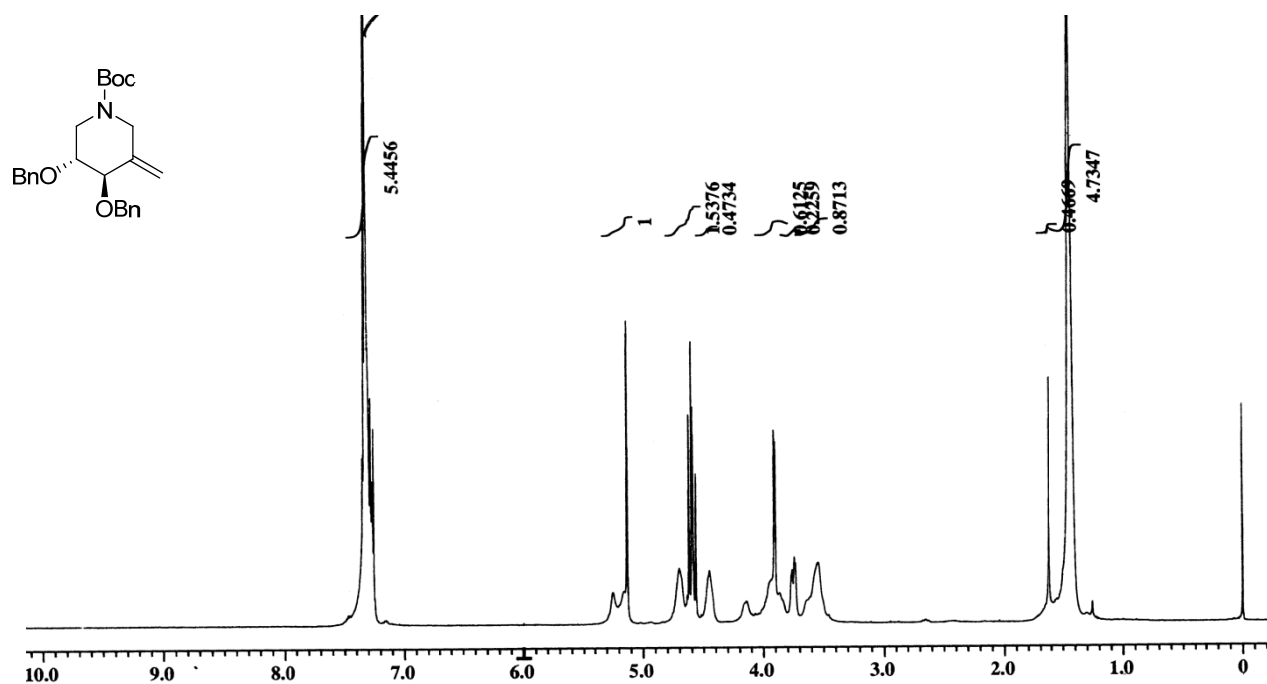


Figure 41: ¹H NMR (500 MHz) Spectrum of Compound 41

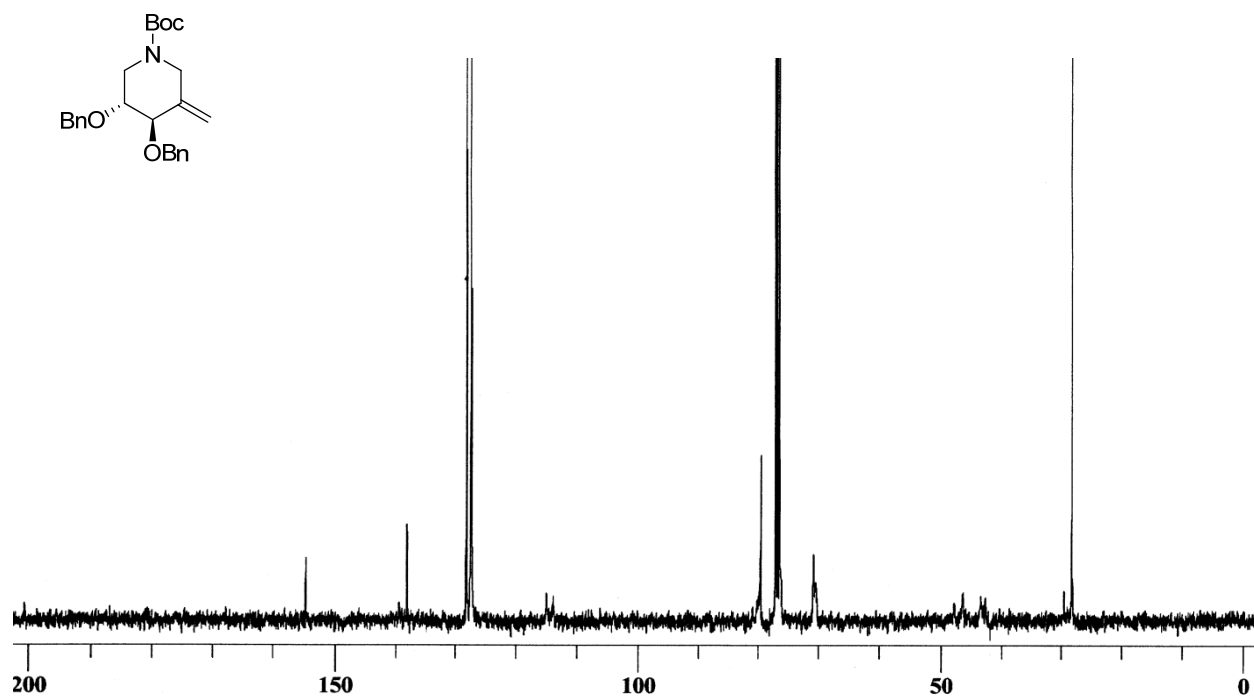
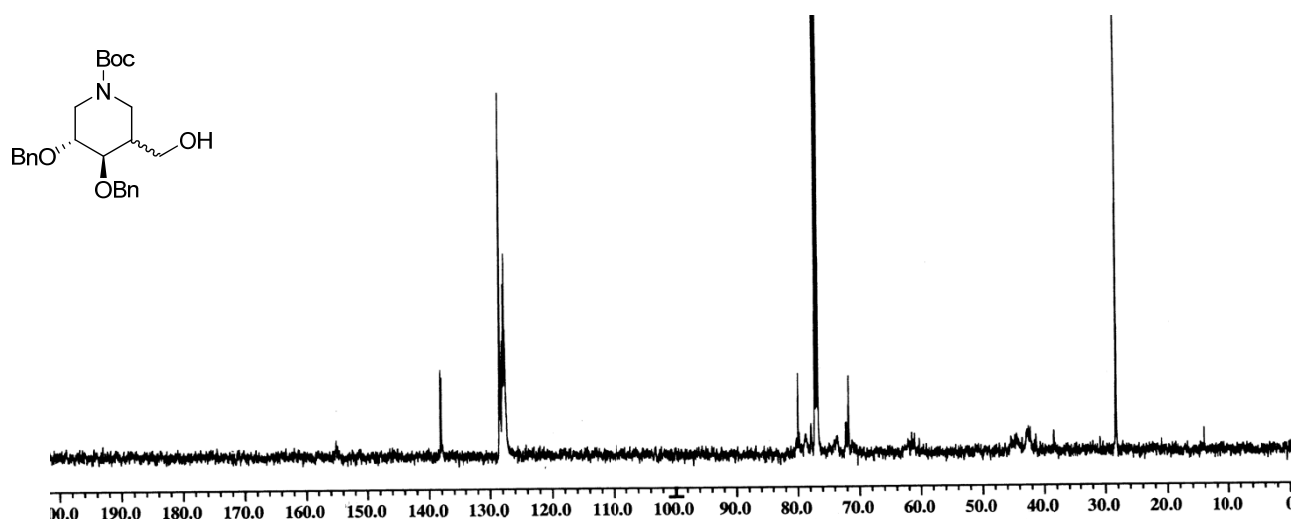
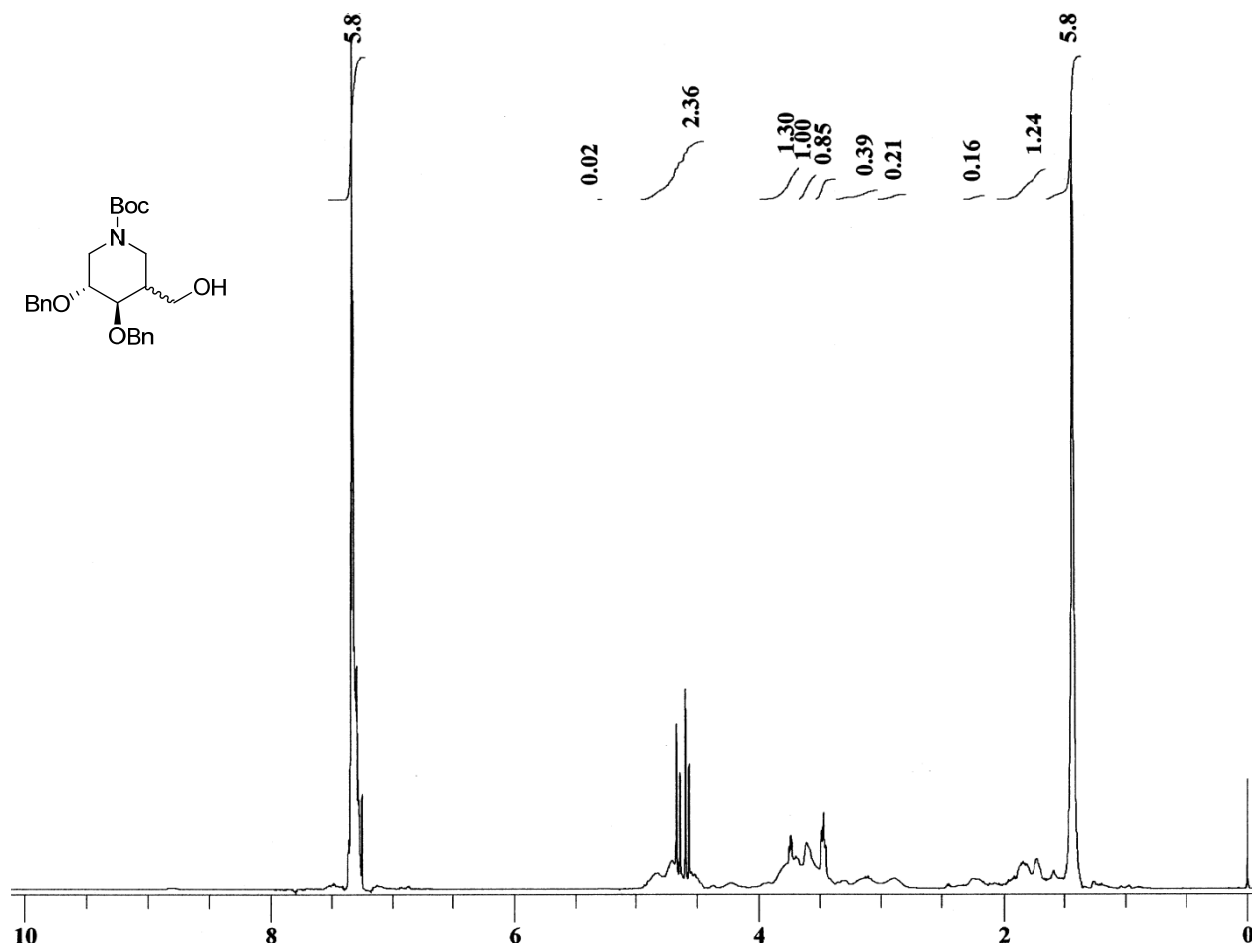


Figure 42: ¹³C NMR (100 MHz) Spectrum of Compound 41



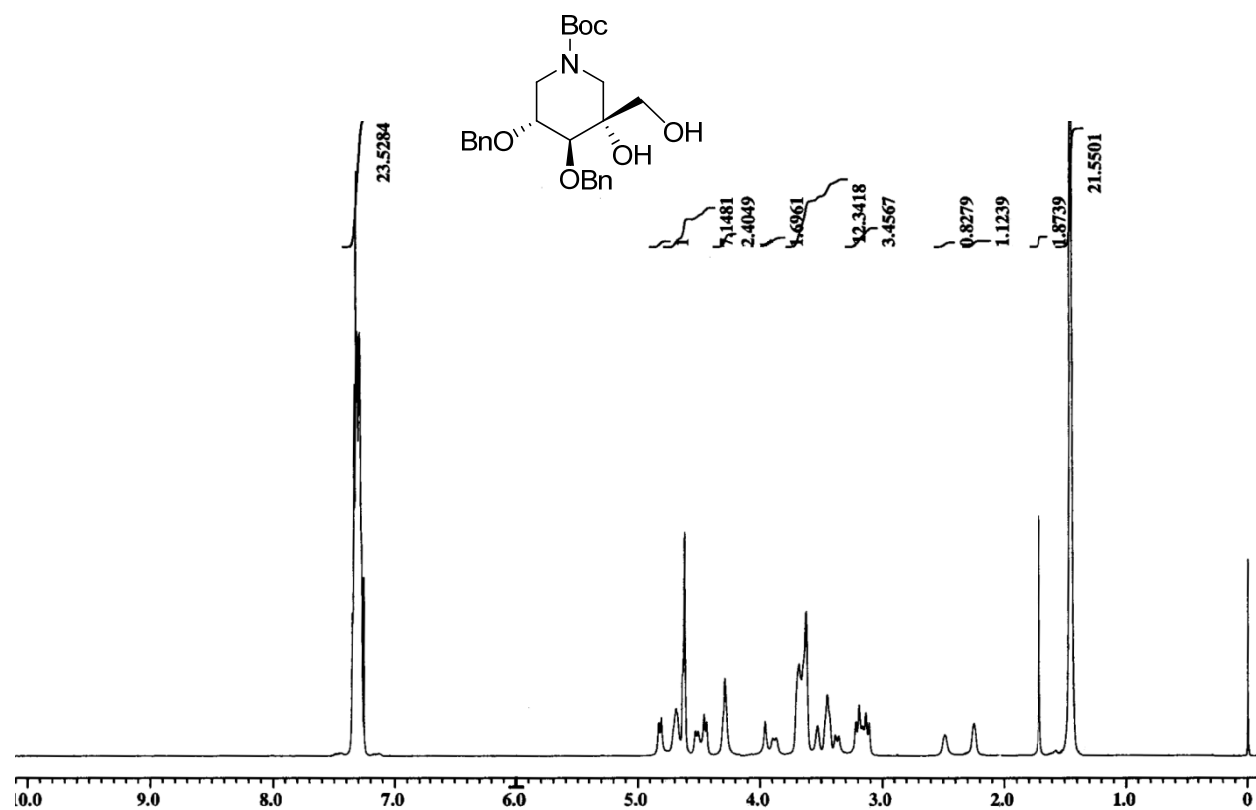


Figure 45: ¹H NMR (500 MHz) Spectrum of Compound 43

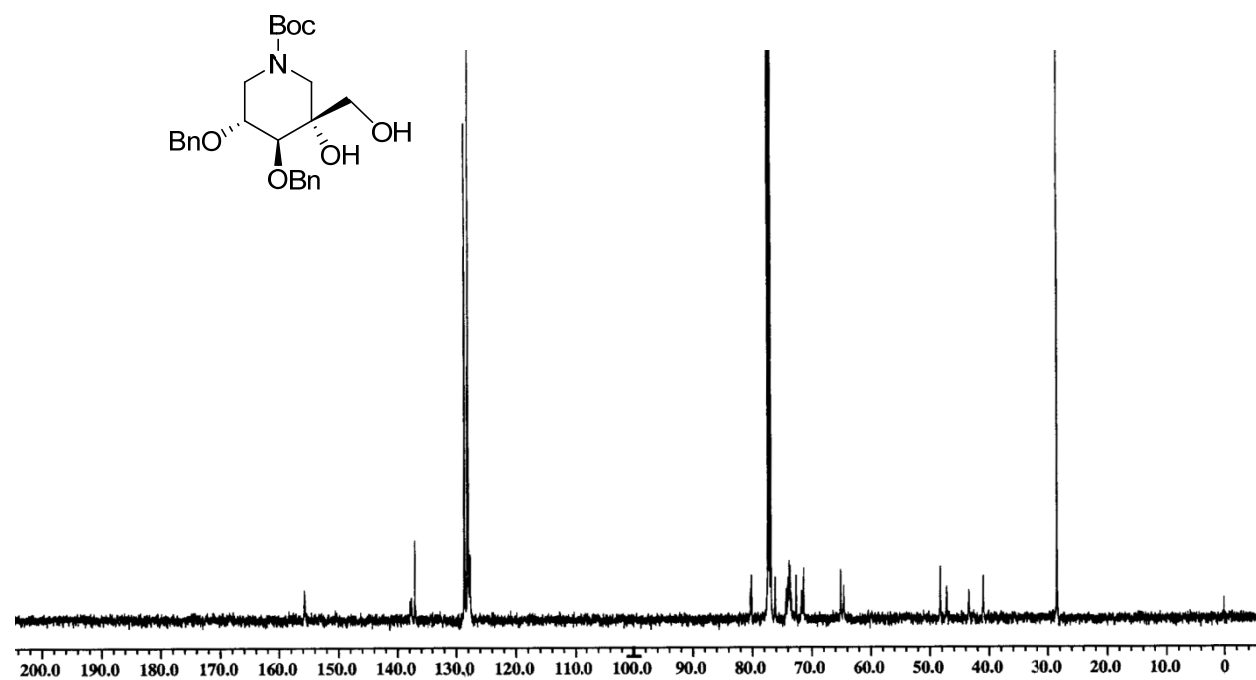


Figure 46: ¹³C NMR (125 MHz) Spectrum of Compound 43

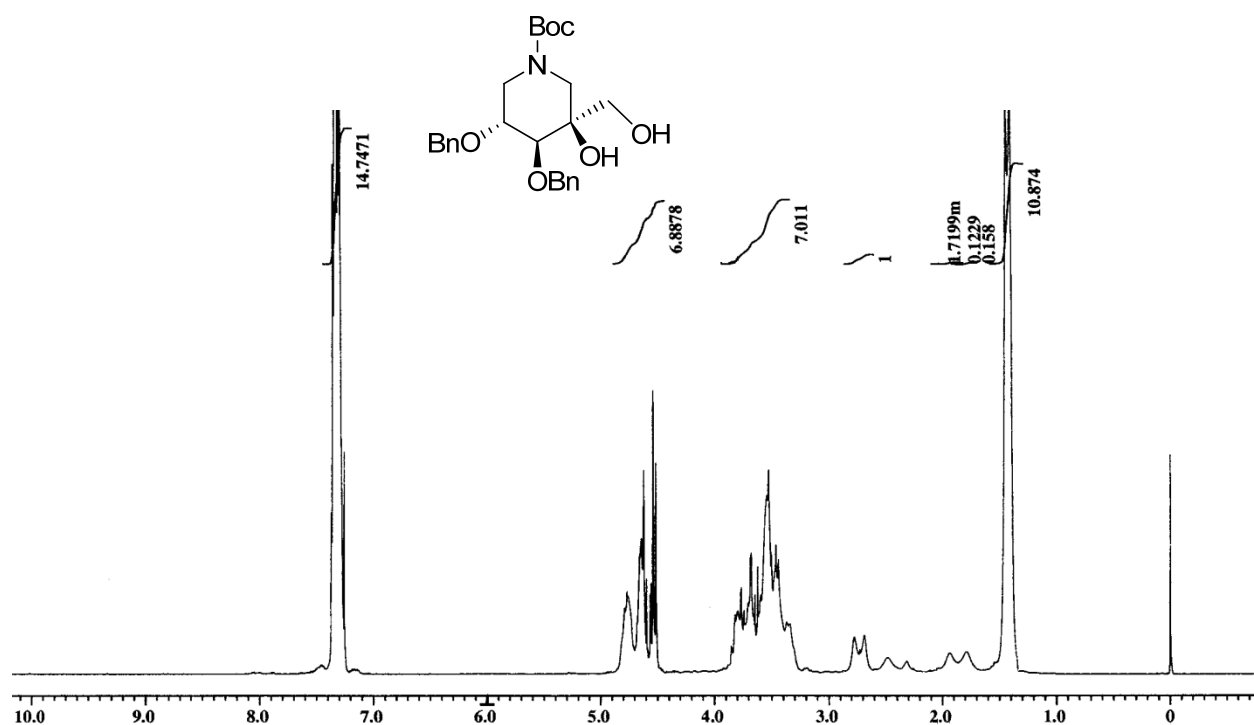


Figure 47: ¹H NMR (500 MHz) Spectrum of Compound 44

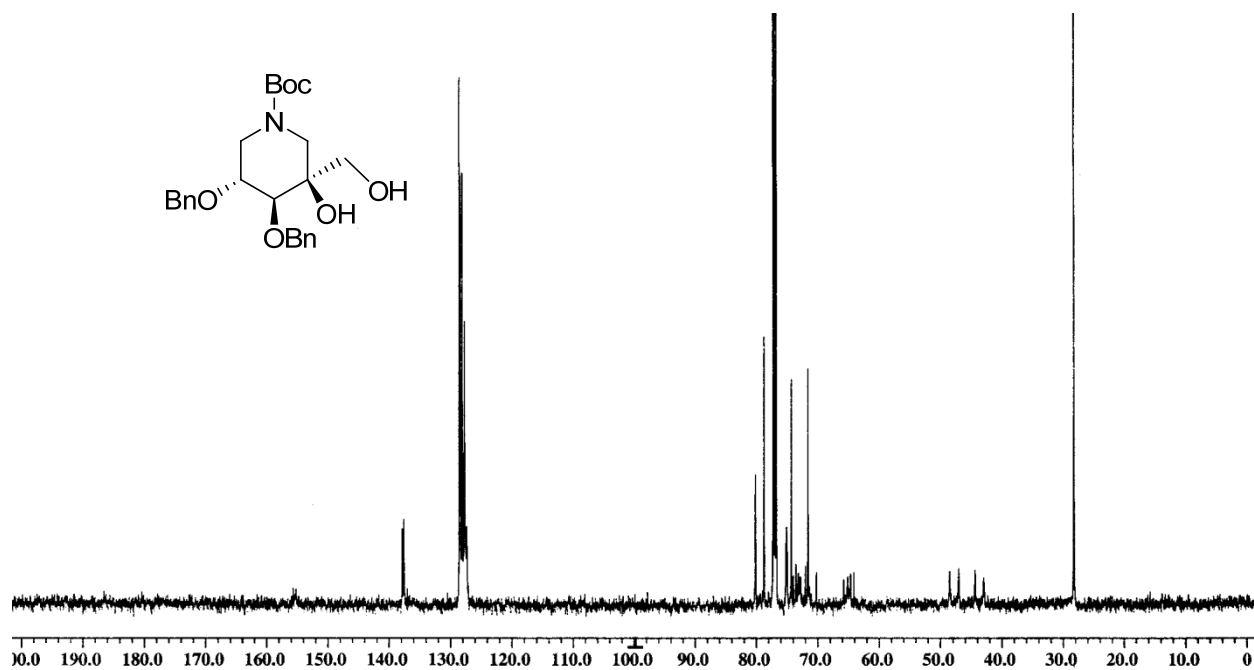


Figure 48: ¹³C NMR (125 MHz) Spectrum of Compound 44

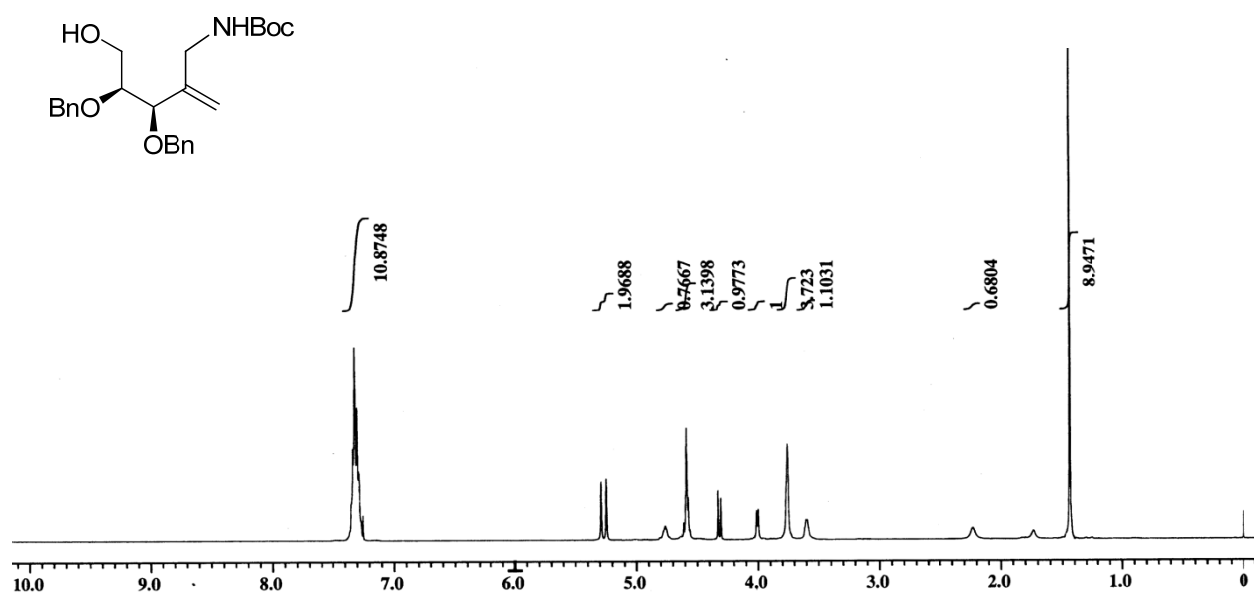


Figure 49: ¹H NMR (500 MHz) Spectrum of Compound 45

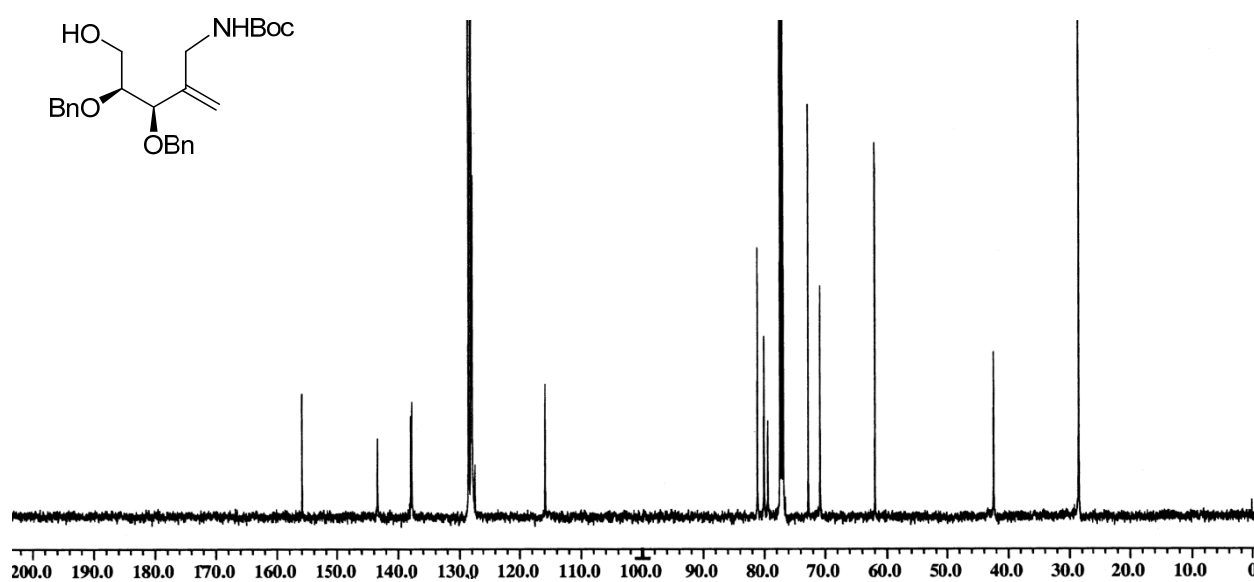


Figure 50: ¹³C NMR (125 MHz) Spectrum of Compound 45

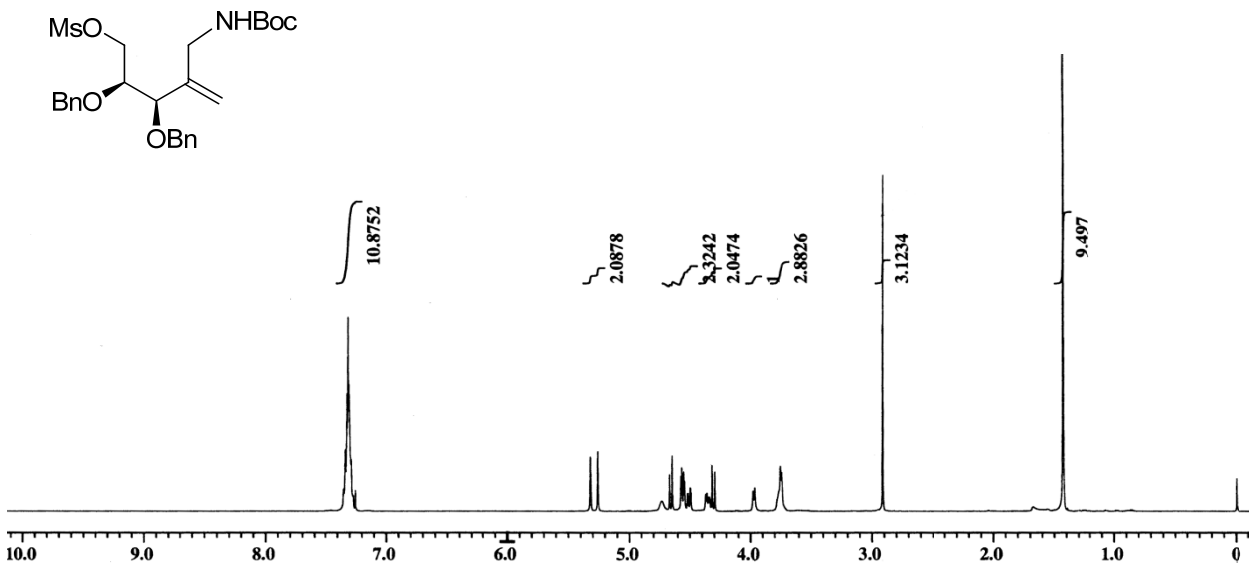


Figure 51: ^1H NMR (500 MHz) Spectrum of Compound **46**

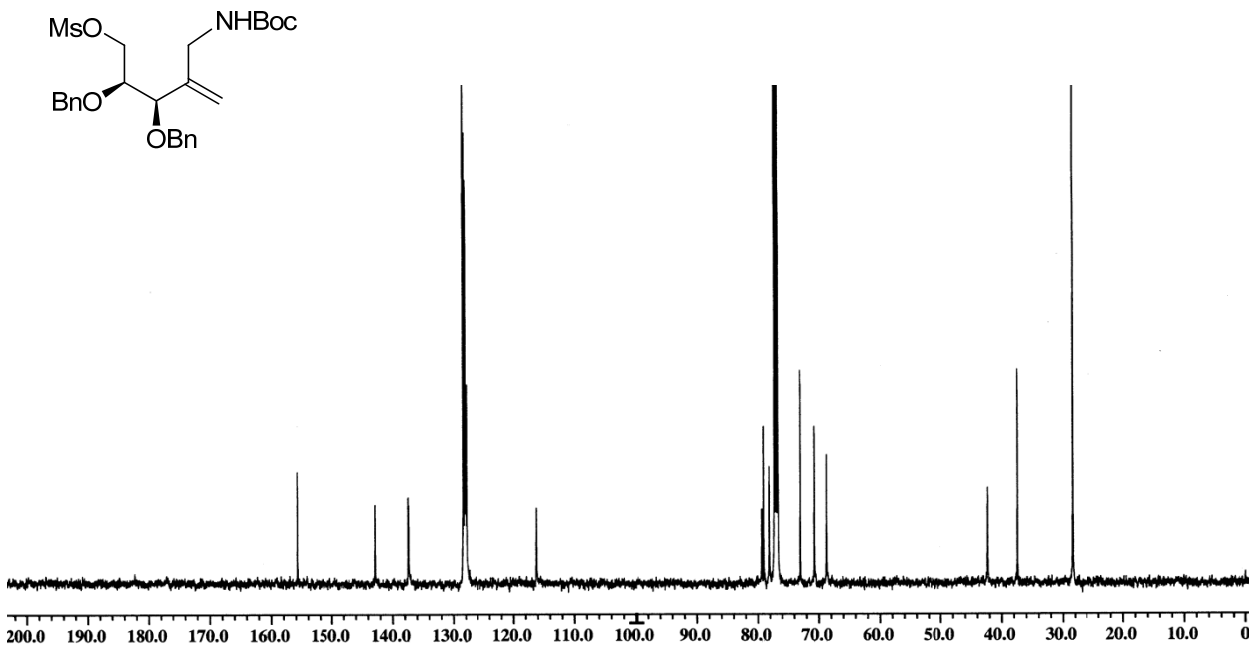


Figure 52: ^{13}C NMR (125 MHz) Spectrum of Compound **46**

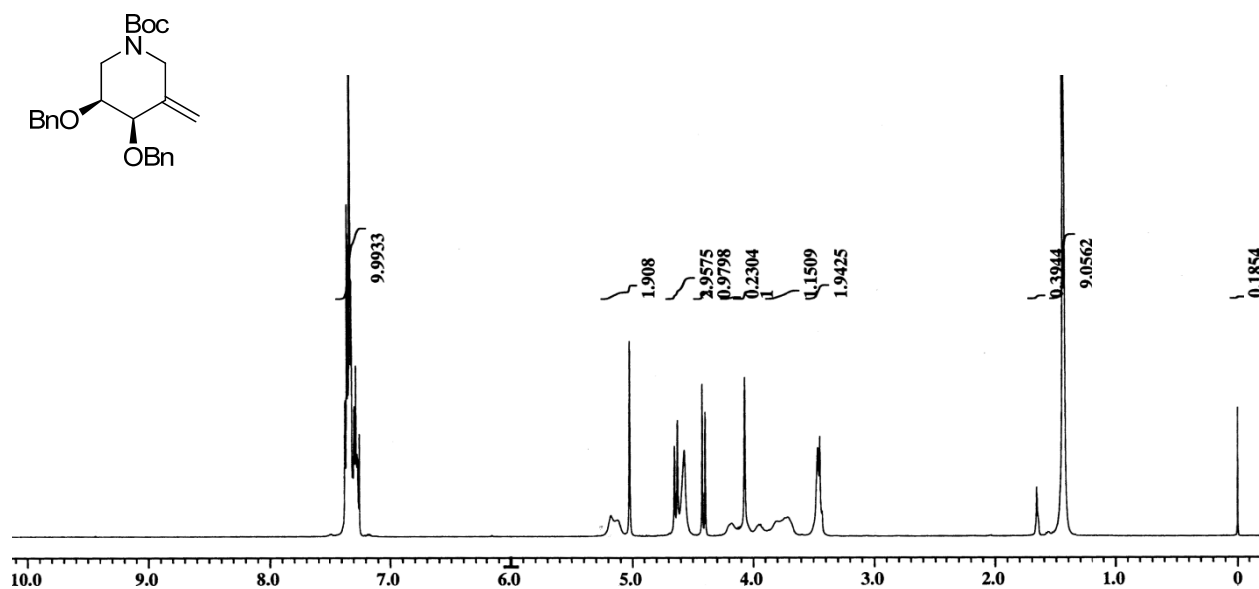


Figure 53: ¹H NMR (500 MHz) Spectrum of Compound 47

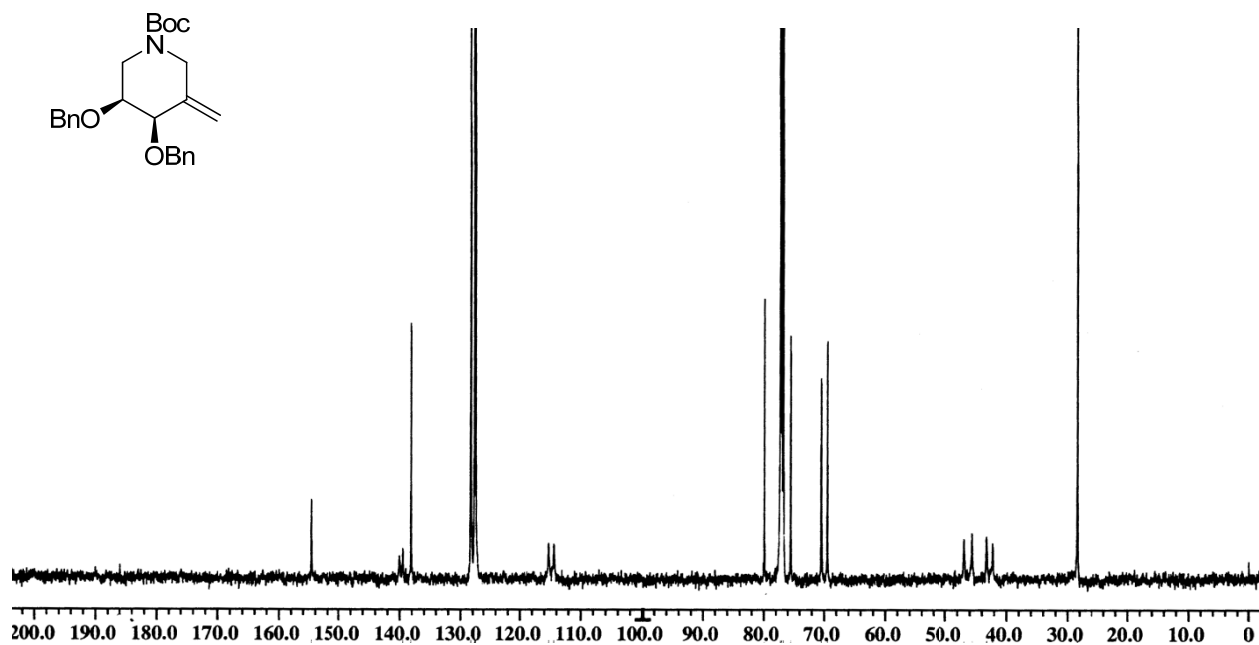
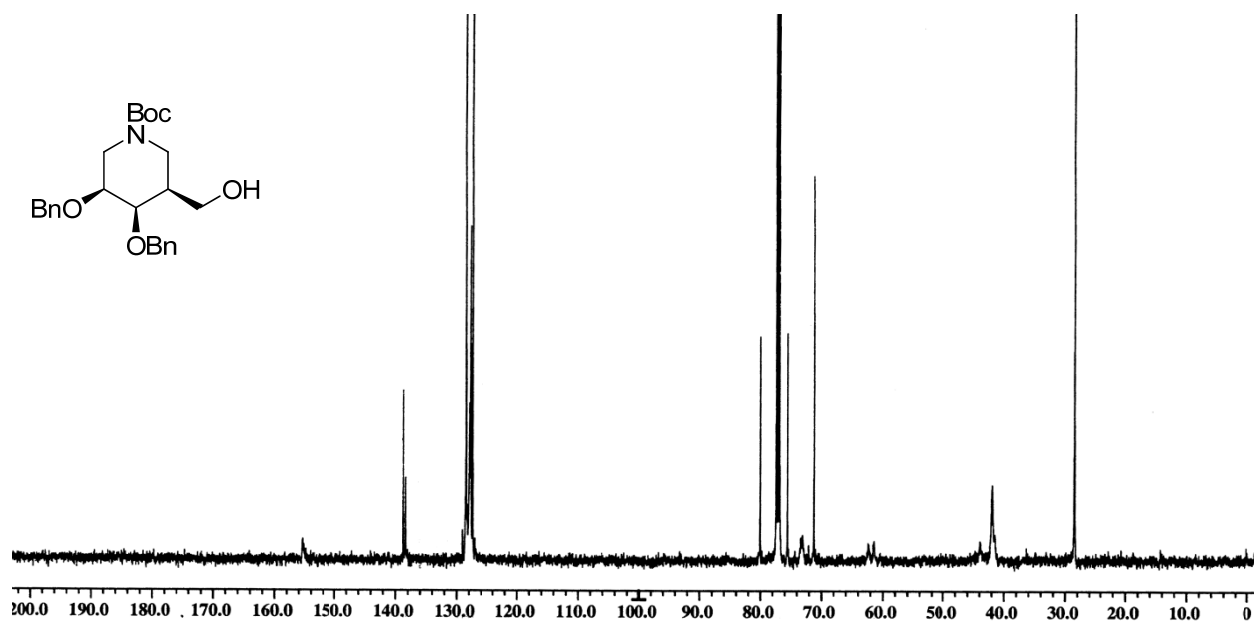
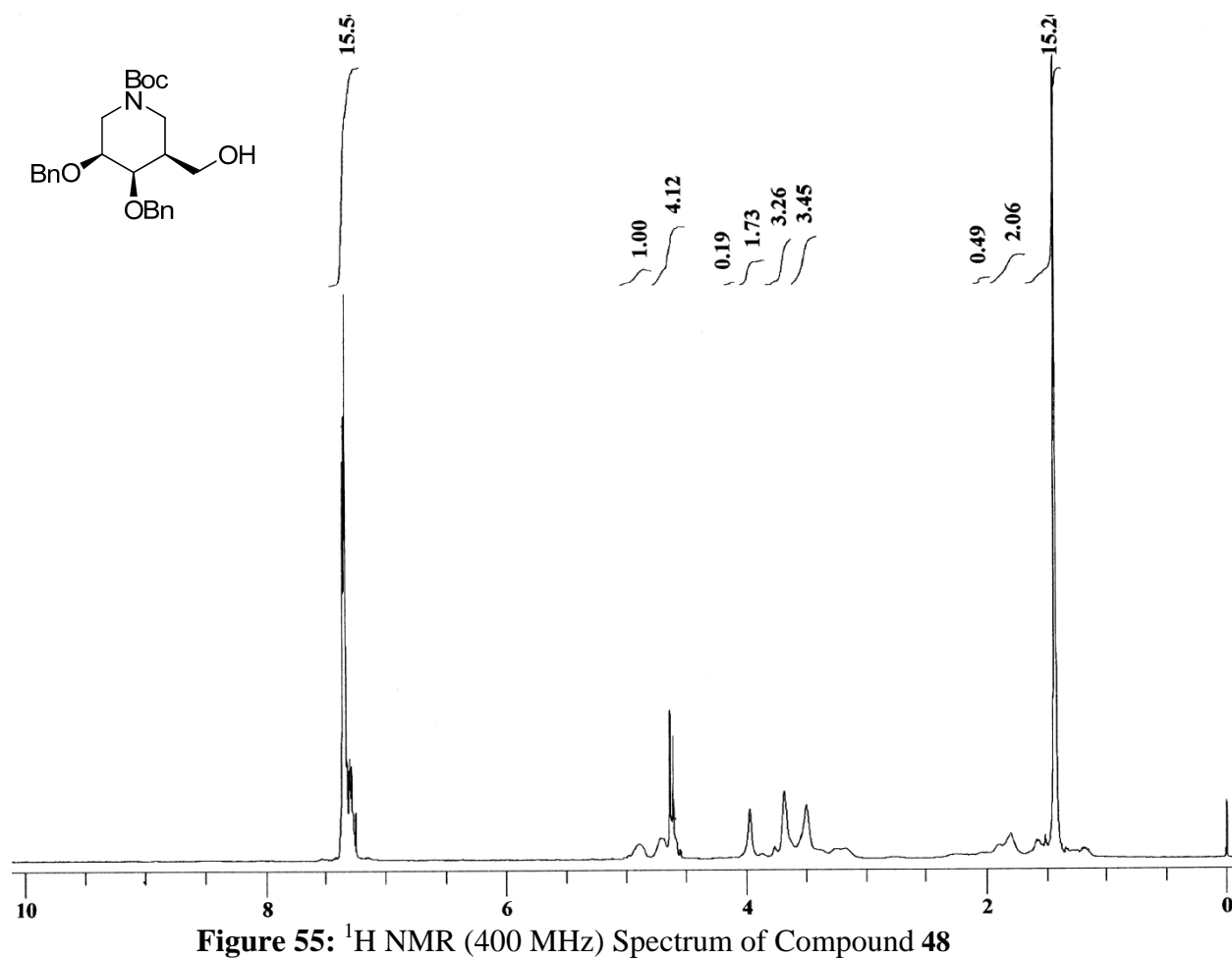


Figure 54: ¹³C NMR (125 MHz) Spectrum of Compound 47



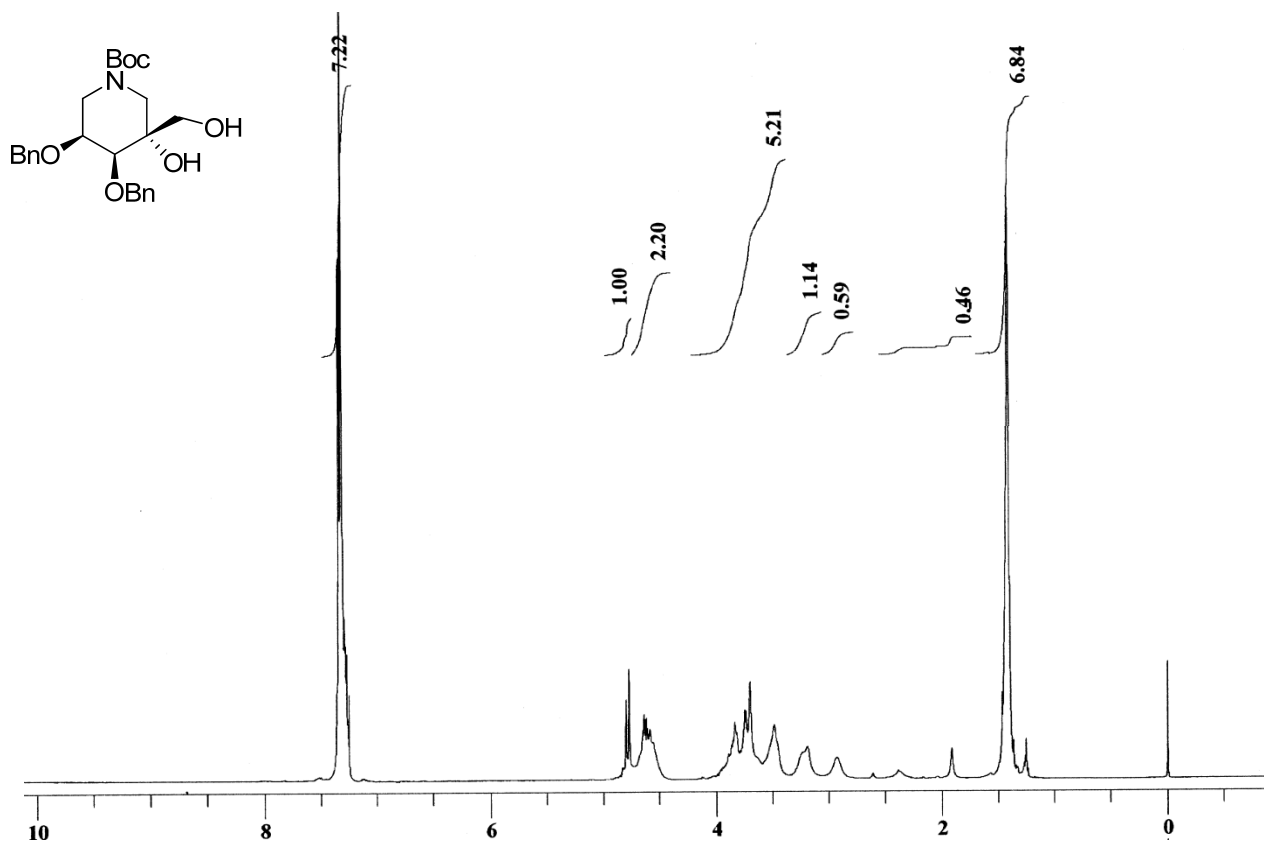


Figure 57: ¹H NMR (400 MHz) Spectrum of Compound 49

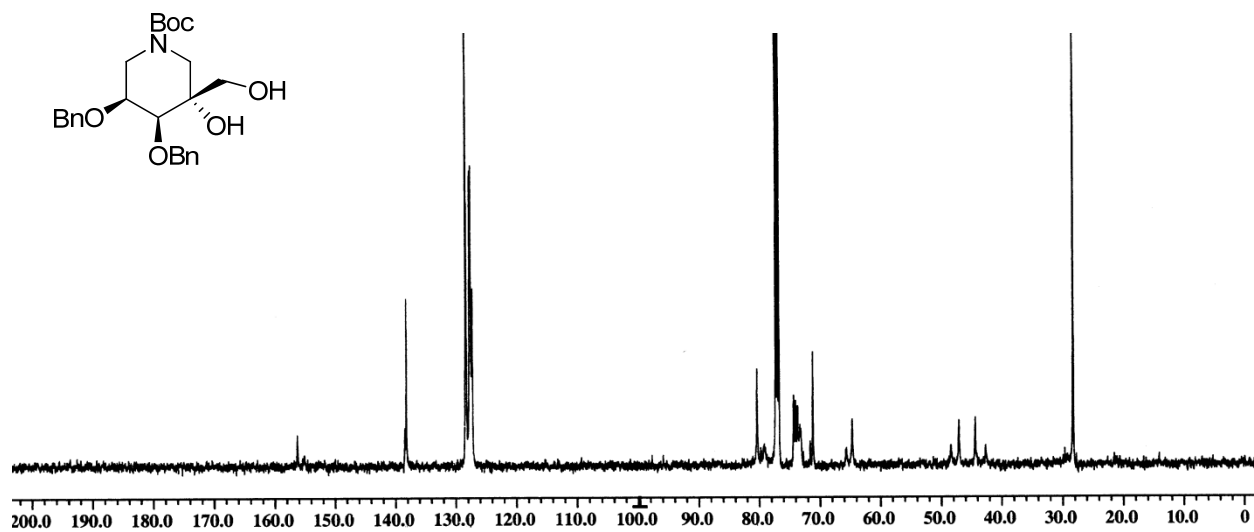


Figure 58: ¹³C NMR (125 MHz) Spectrum of Compound 49

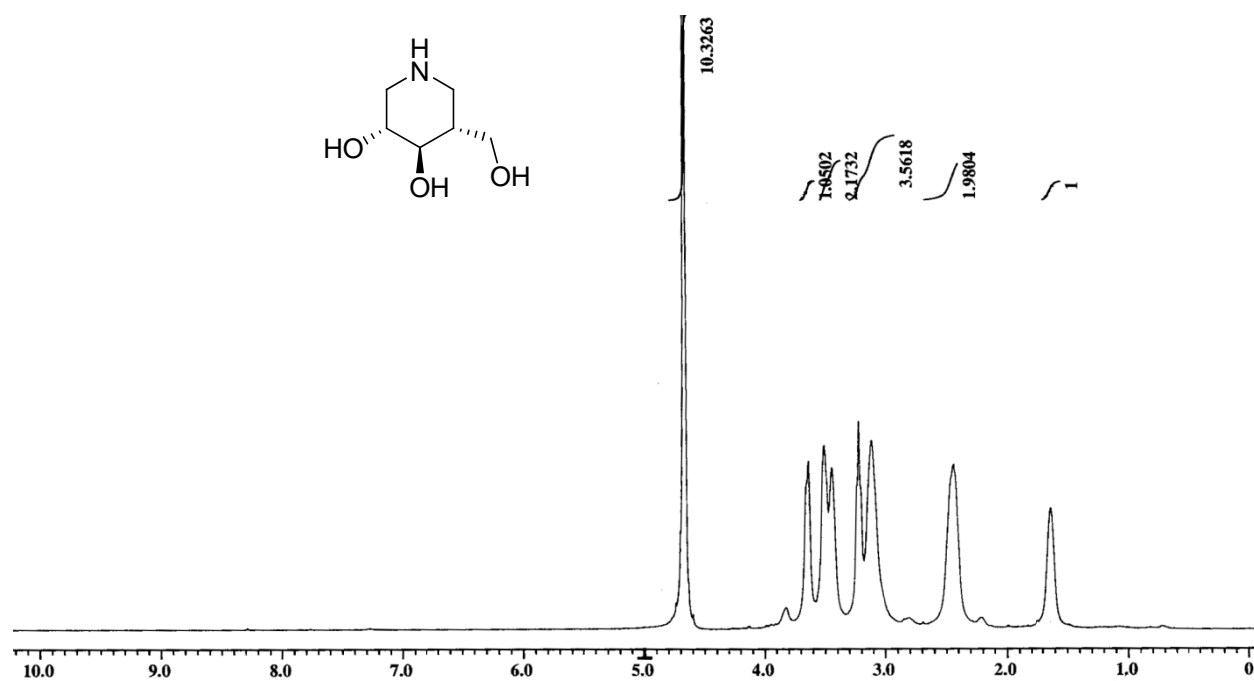


Figure 59: ¹H NMR (500 MHz) Spectrum of Compound 4A

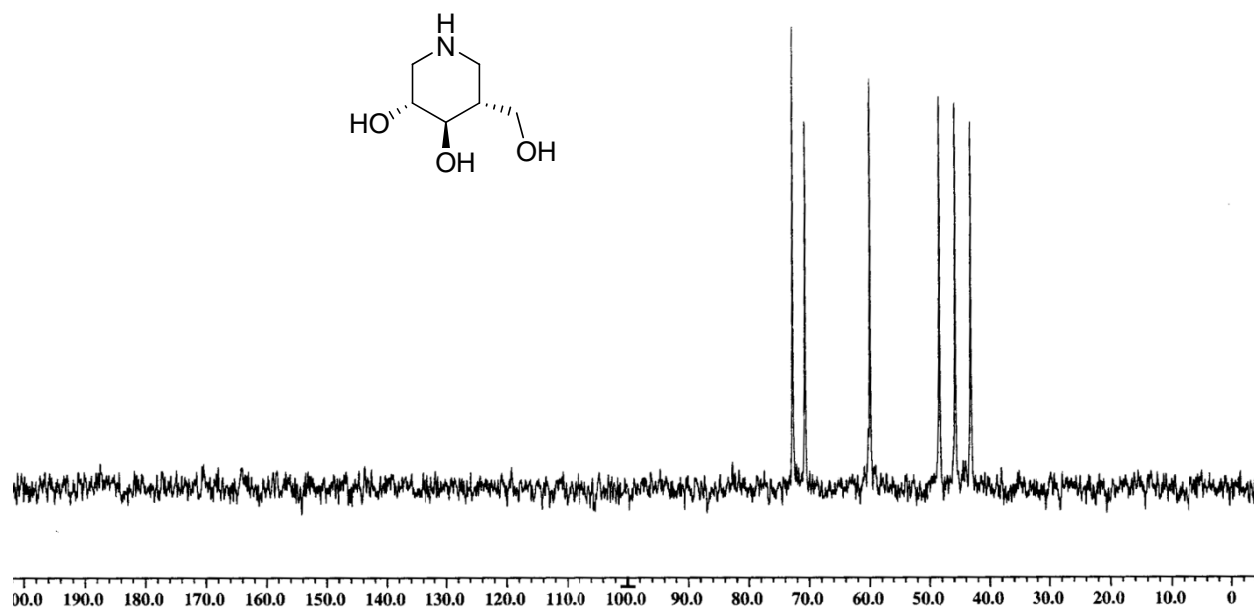


Figure 60: ¹³C NMR (125 MHz) Spectrum of Compound 4A

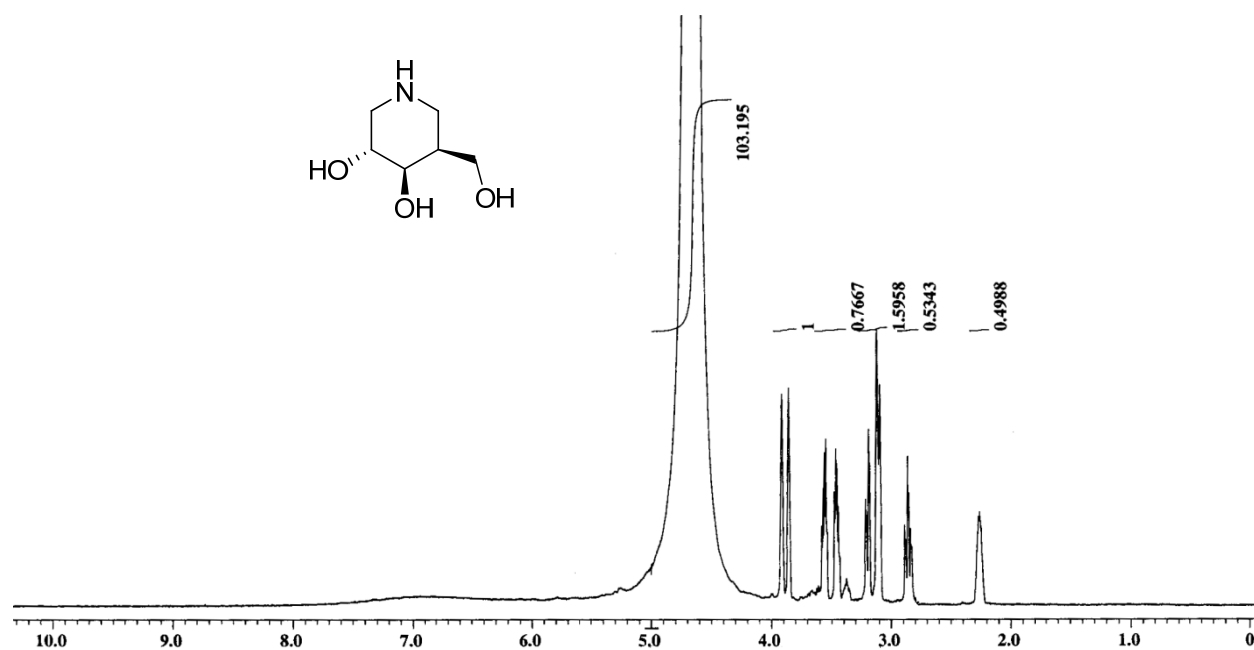


Figure 61: ¹H NMR (500 MHz) Spectrum of Compound **4B**

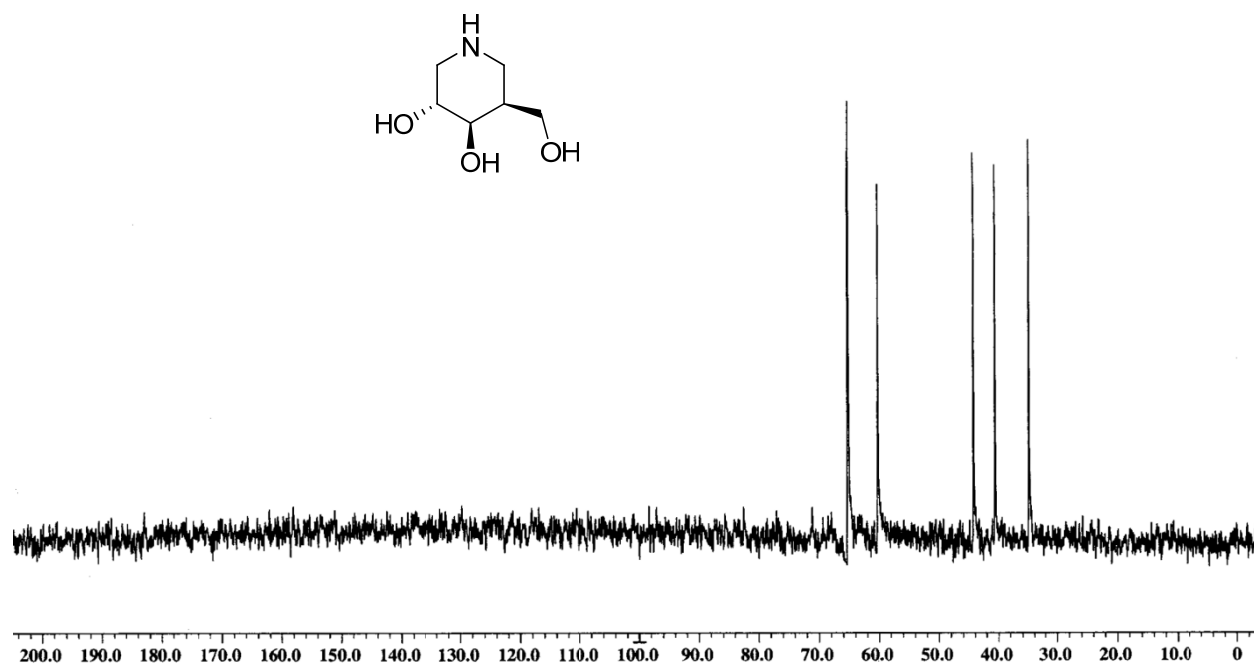


Figure 62: ¹³C NMR (125 MHz) Spectrum of Compound **4B**

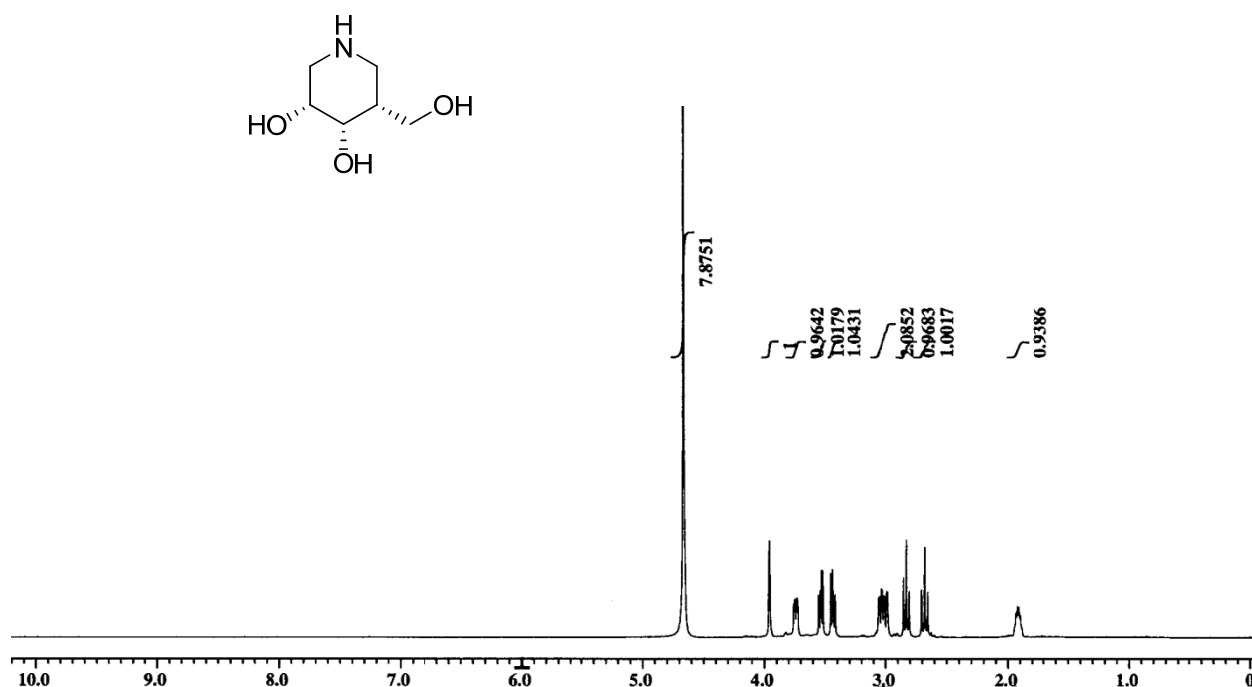


Figure 63: ^1H NMR (500 MHz) Spectrum of Compound 5

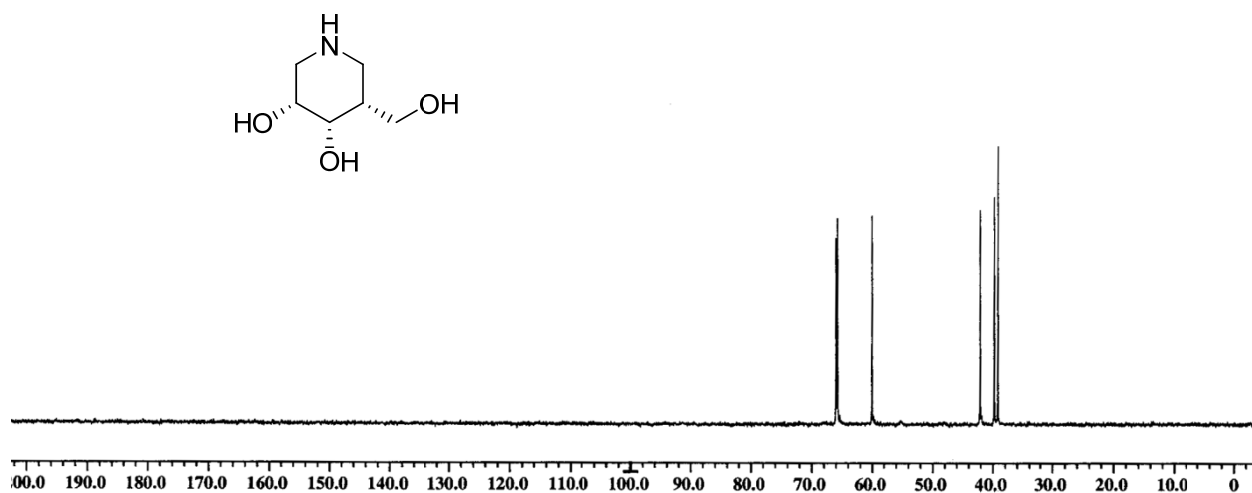


Figure 64: ^{13}C NMR (125 MHz) Spectrum of Compound 5

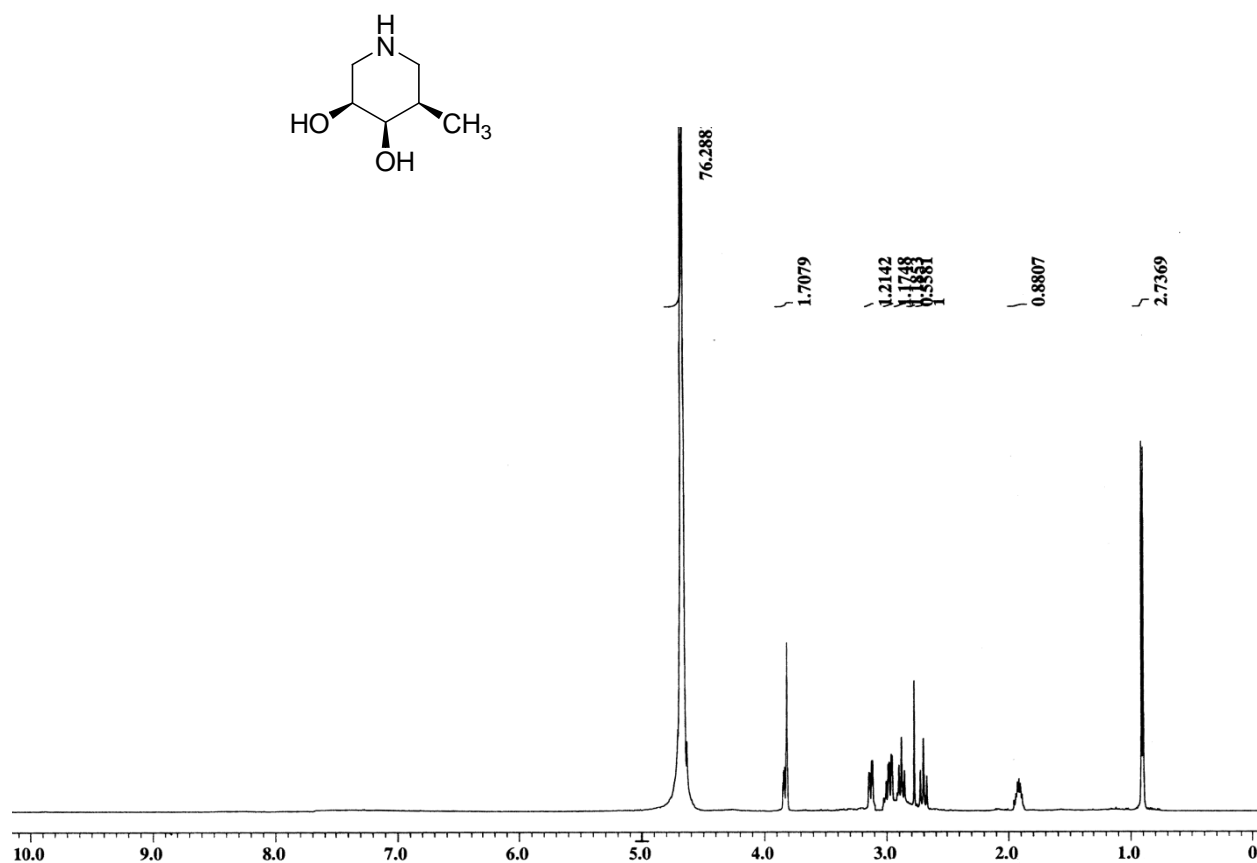


Figure 65: ¹H NMR (500 MHz) Spectrum of Compound 6

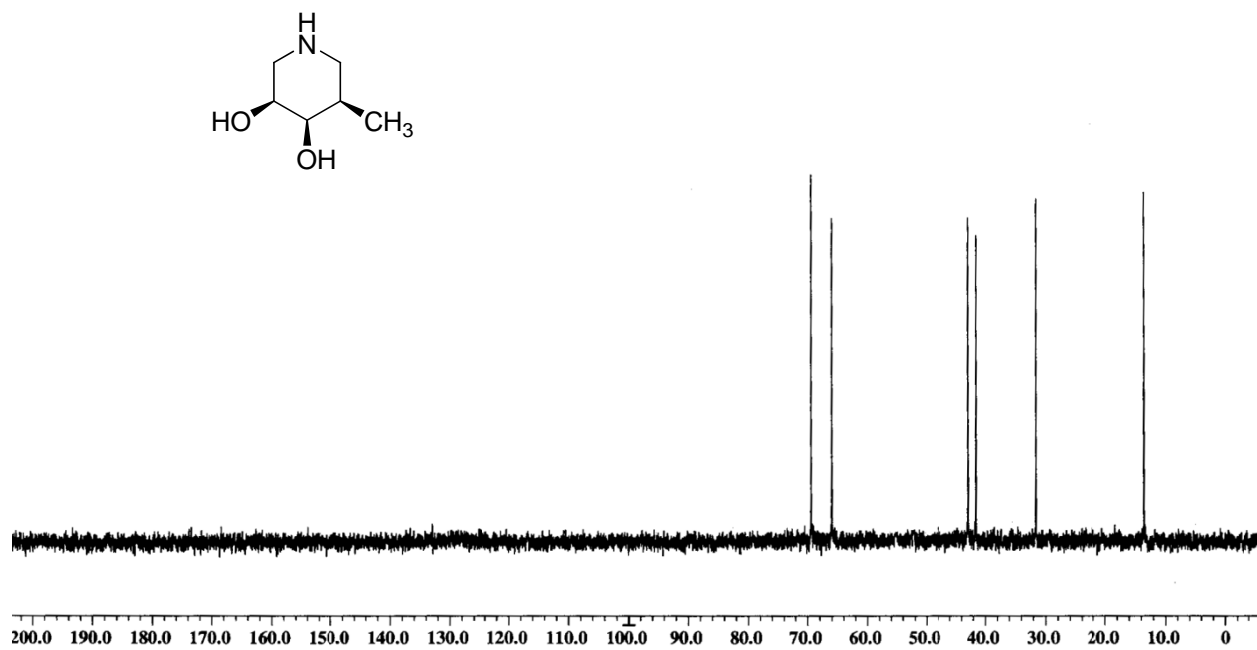


Figure 66: ¹³C NMR (125 MHz) Spectrum of Compound 6

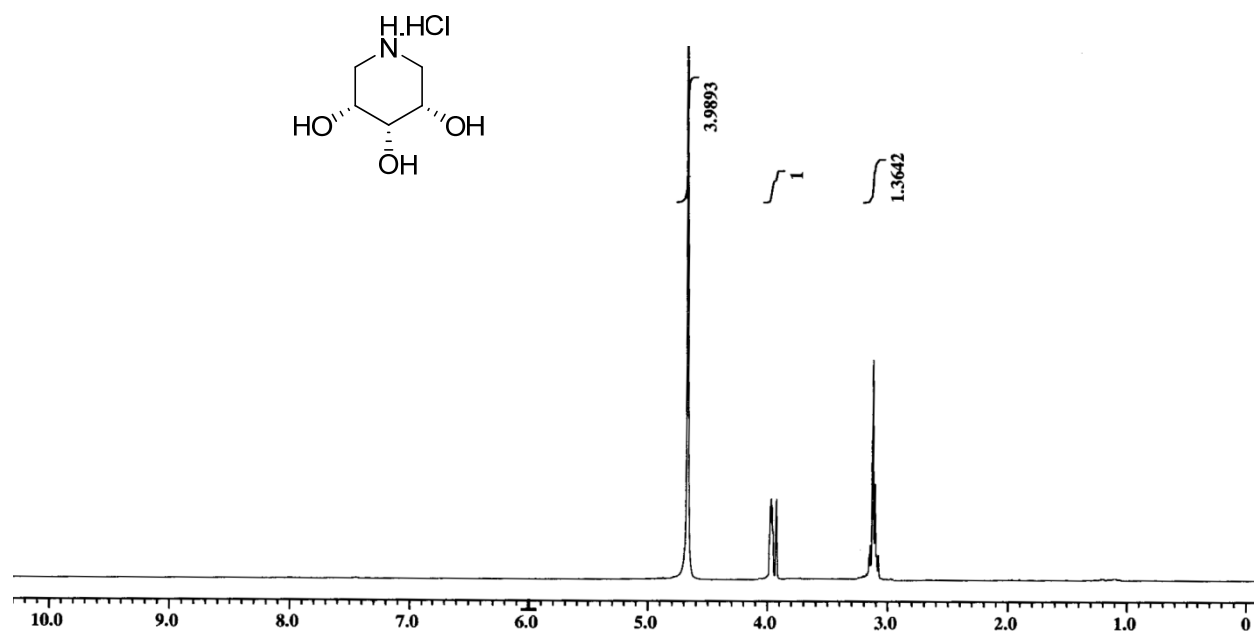


Figure 67: ¹H NMR (500 MHz) Spectrum of Compound 7

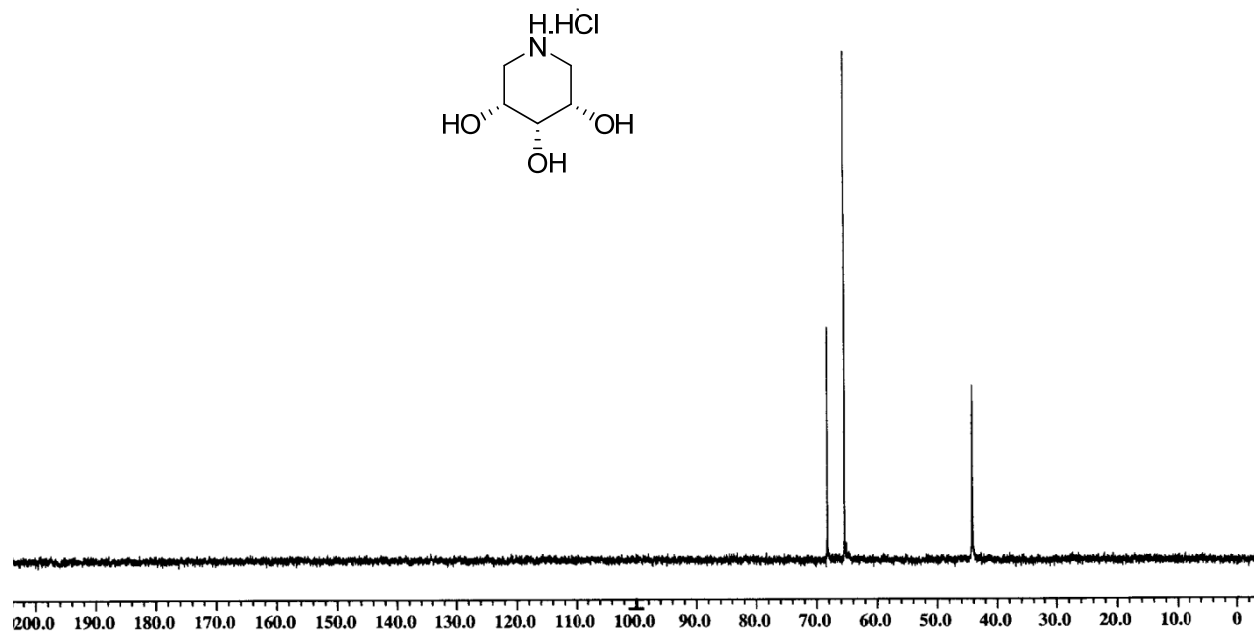


Figure 68: ¹³C NMR (125 MHz) Spectrum of Compound 7

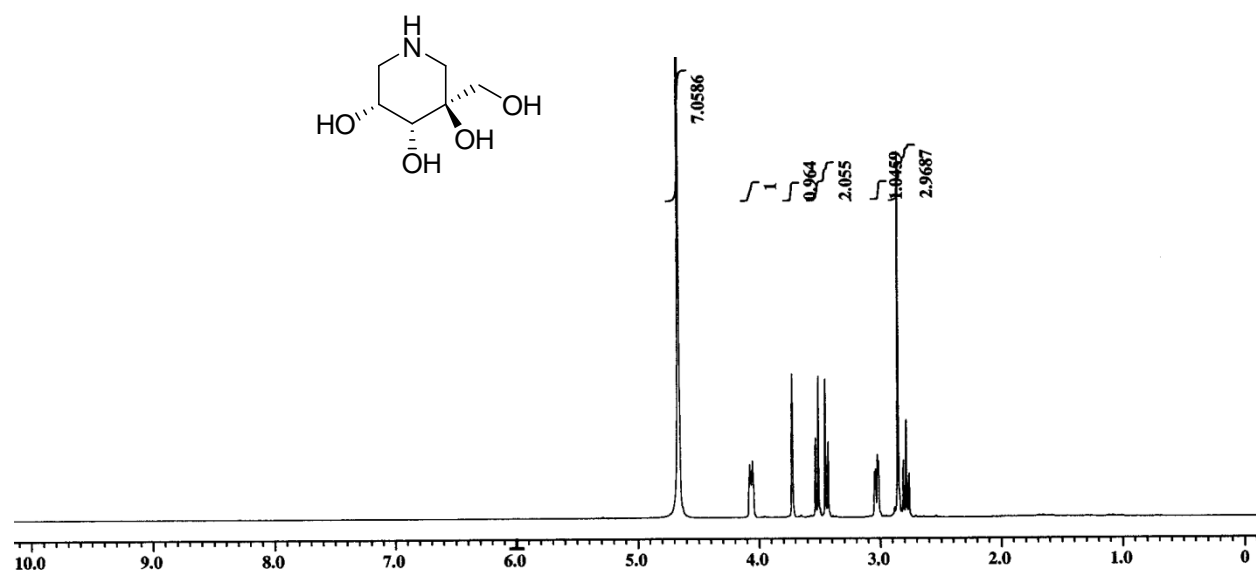


Figure 69: ¹H NMR (500 MHz) Spectrum of Compound 8

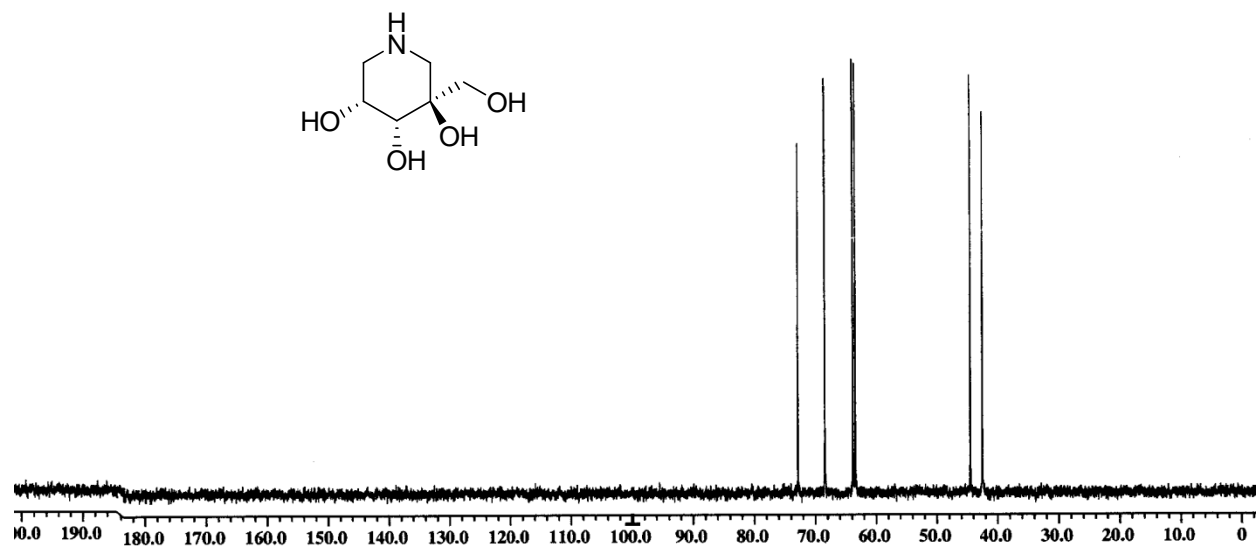


Figure 70: ¹³C NMR (125 MHz) Spectrum of Compound 8

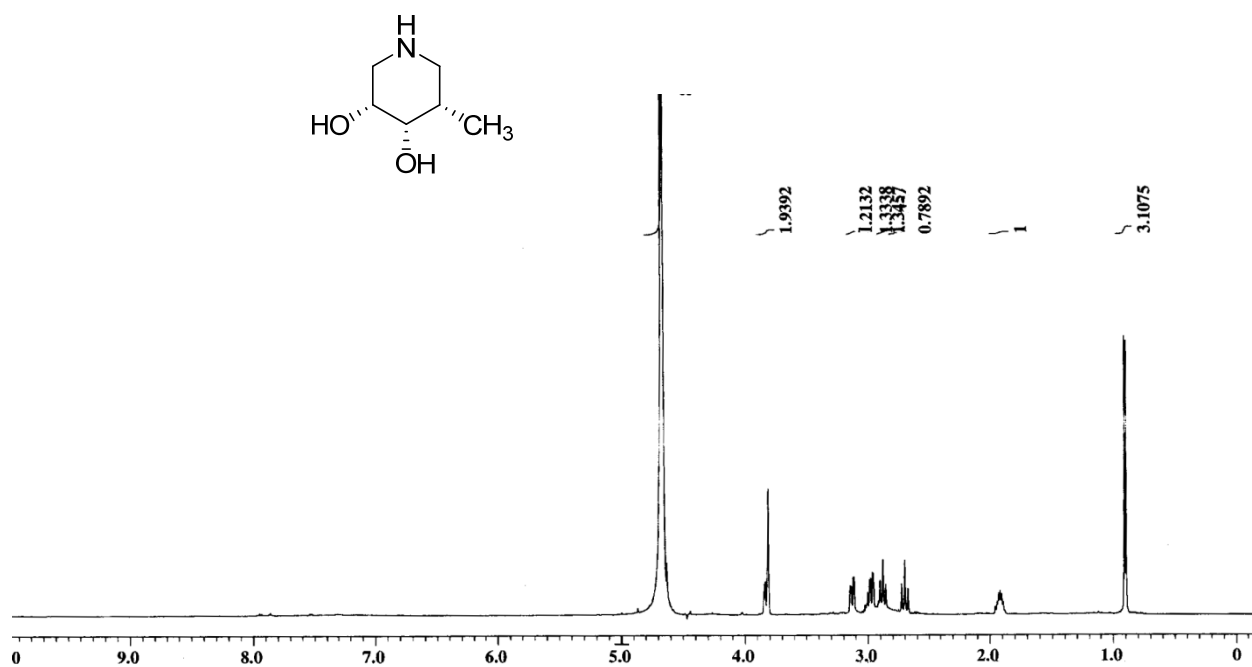


Figure 71: ¹H NMR (500 MHz) Spectrum of Compound 9

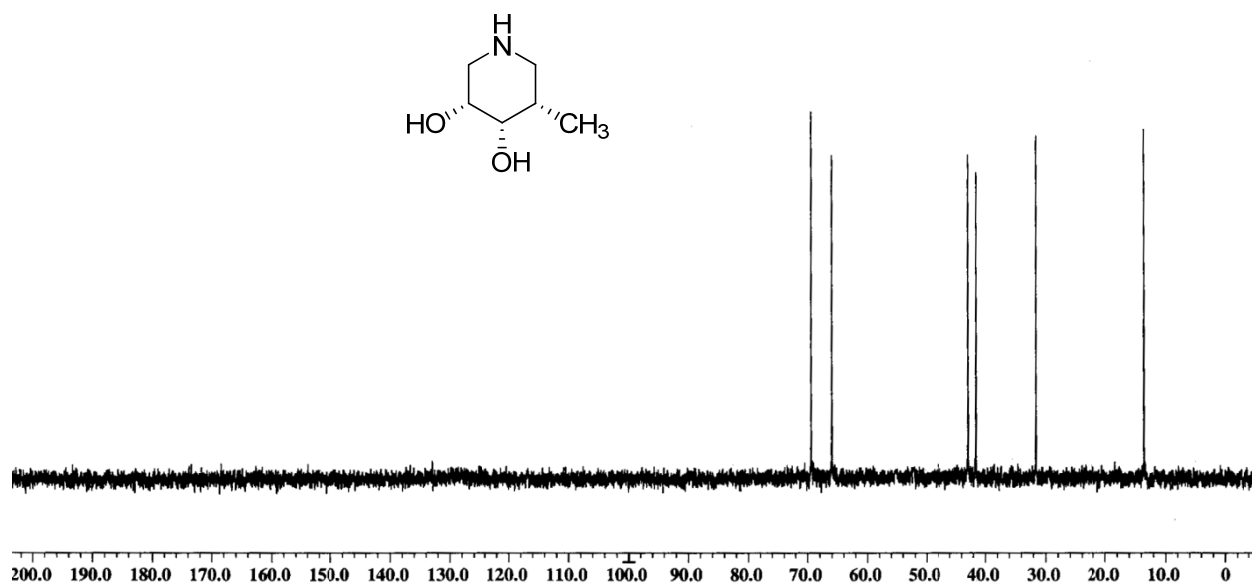


Figure 72: ¹³C NMR (125 MHz) Spectrum of Compound 9

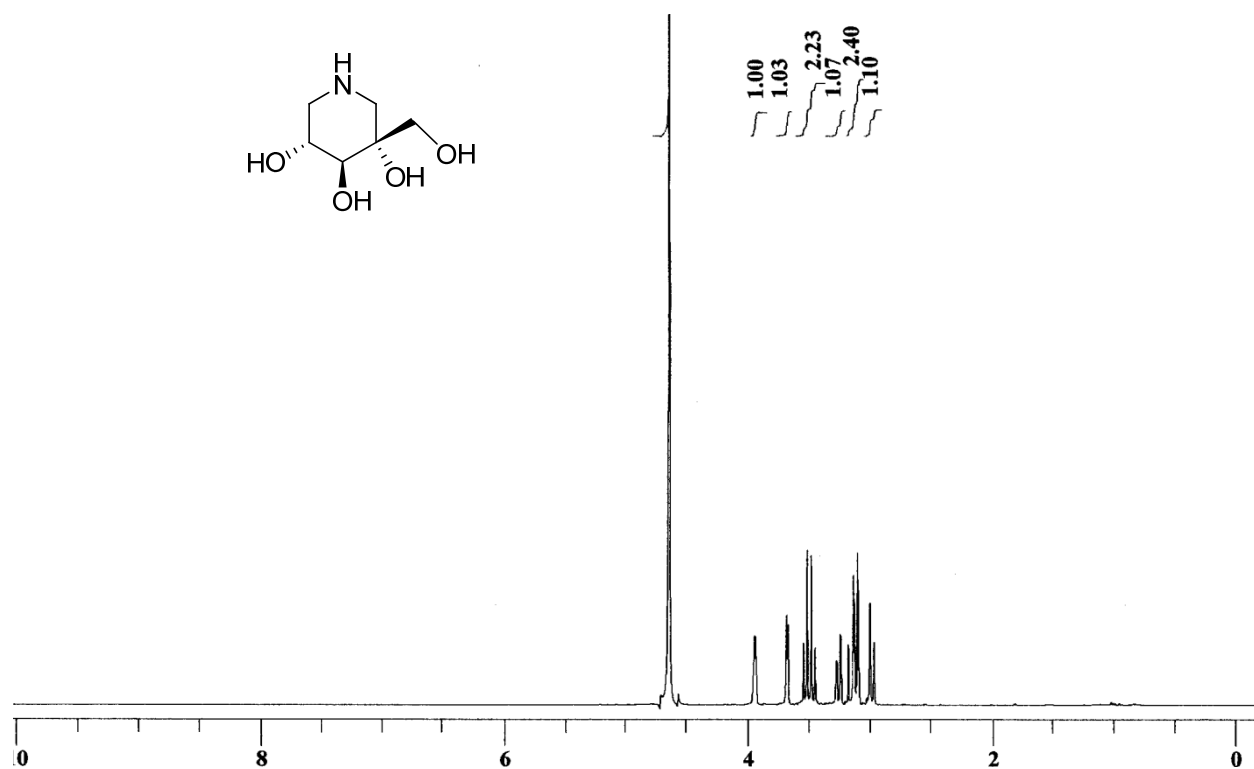


Figure 73: ^1H NMR (400 MHz) Spectrum of Compound 10

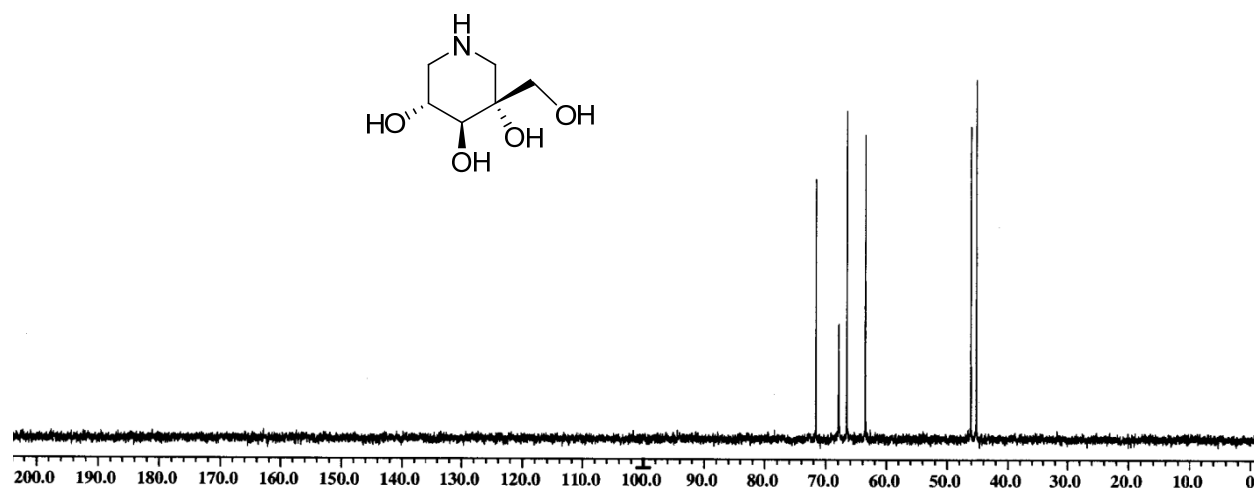


Figure 74: ^{13}C NMR (125 MHz) Spectrum of Compound 10

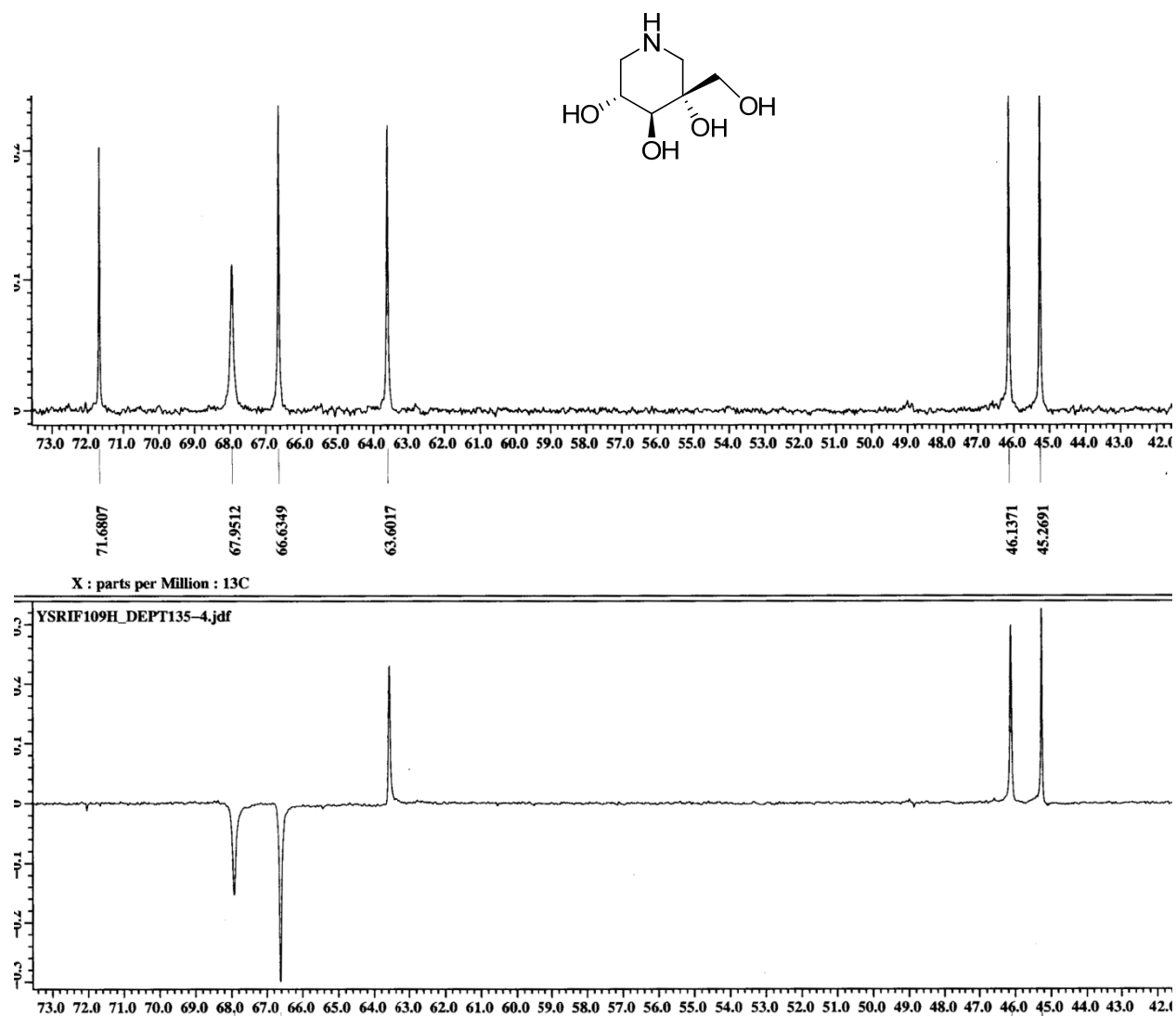


Figure 75: DEPT (125 MHz) Spectrum of Compound **10**

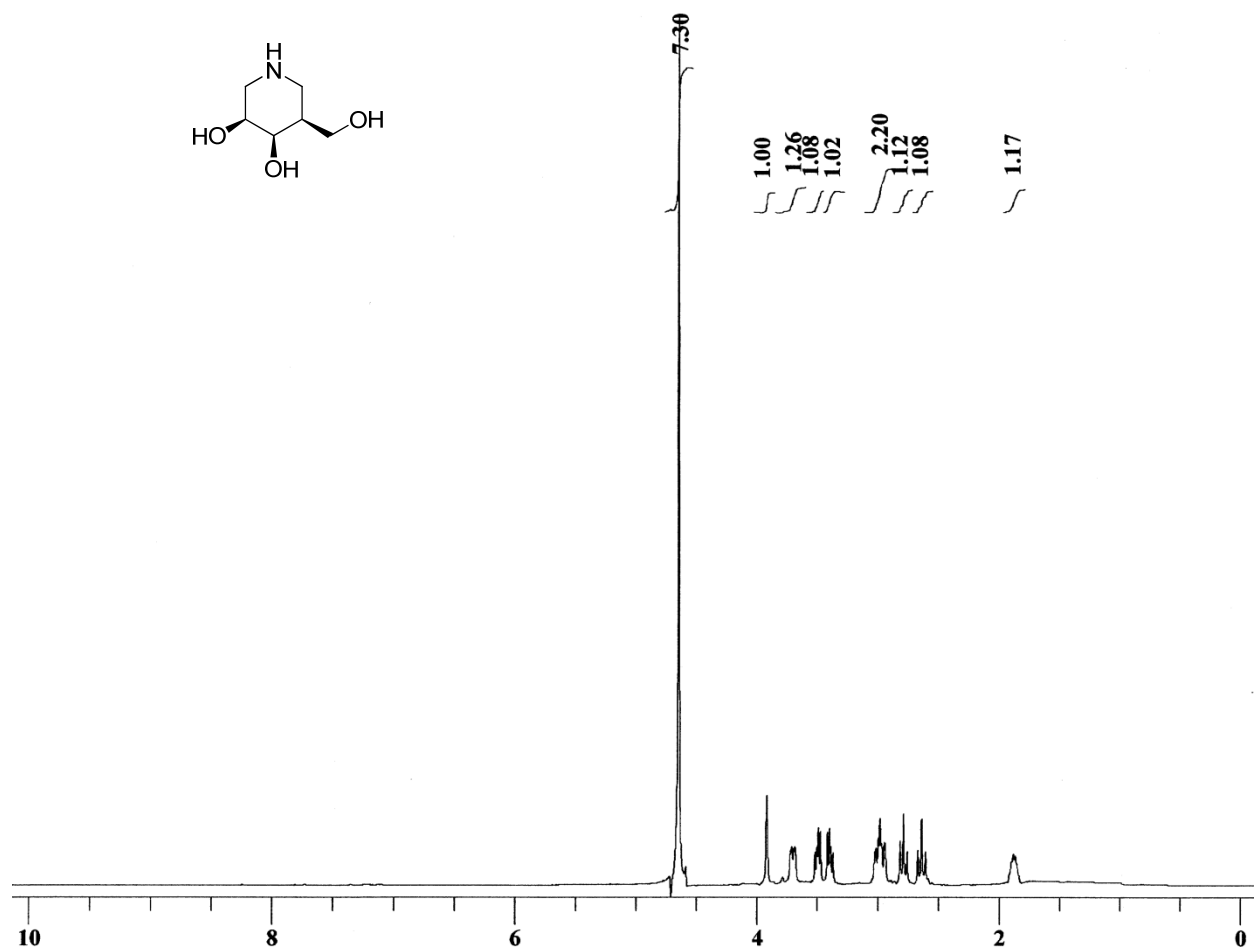


Figure 76: ¹H NMR (400 MHz) Spectrum of Compound 11

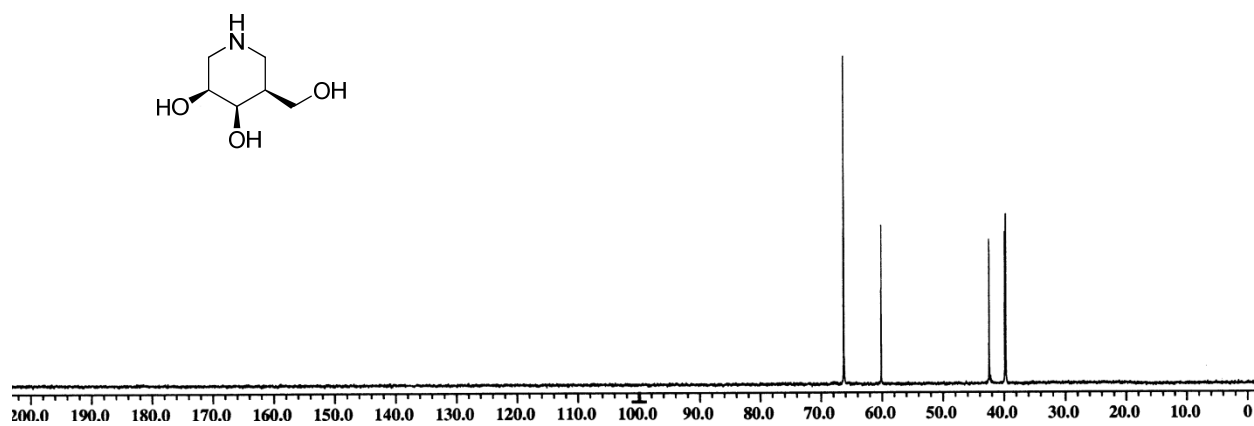


Figure 77: ¹³C NMR (125 MHz) Spectrum of Compound 11

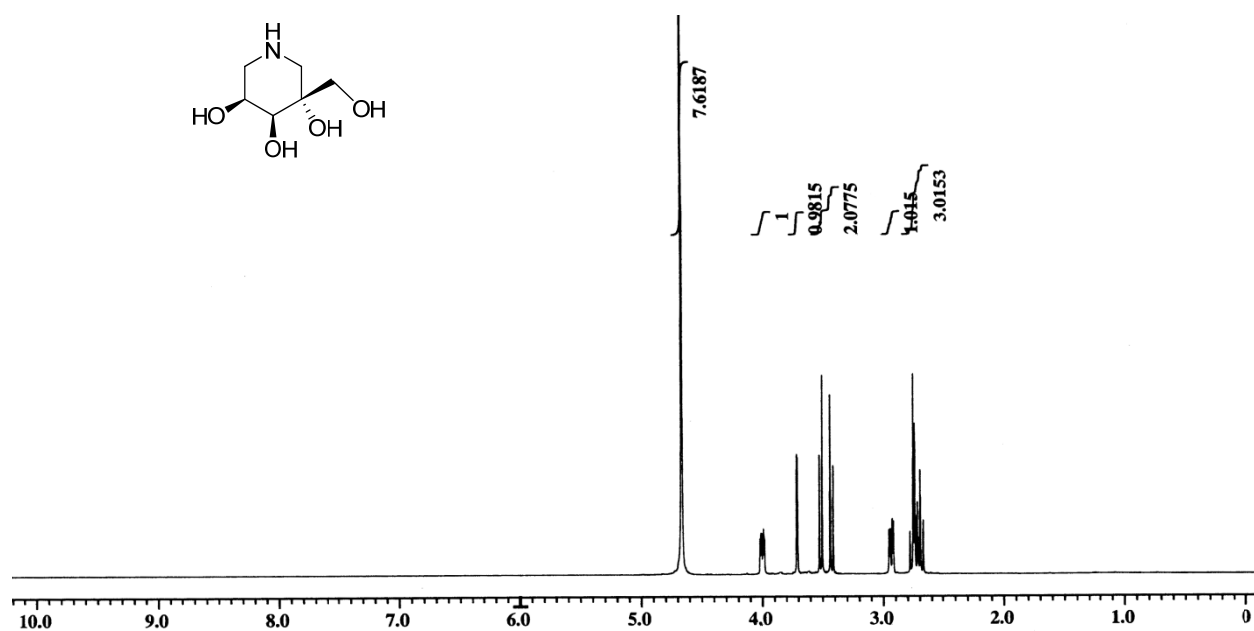


Figure 78: ¹H NMR (500 MHz) Spectrum of Compound 12

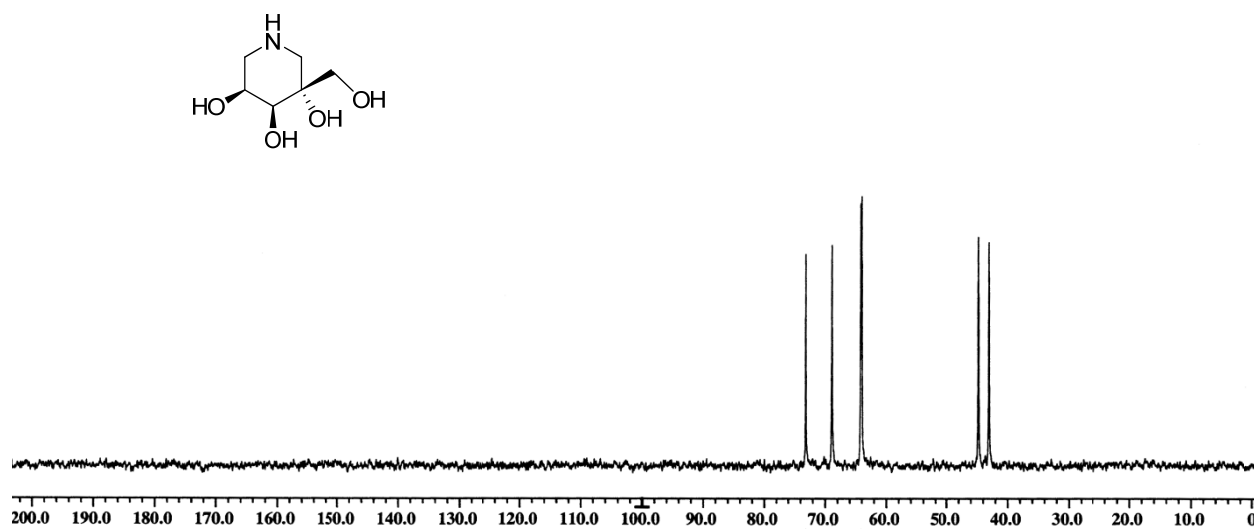


Figure 79: ¹³C NMR (125 MHz) Spectrum of Compound 12