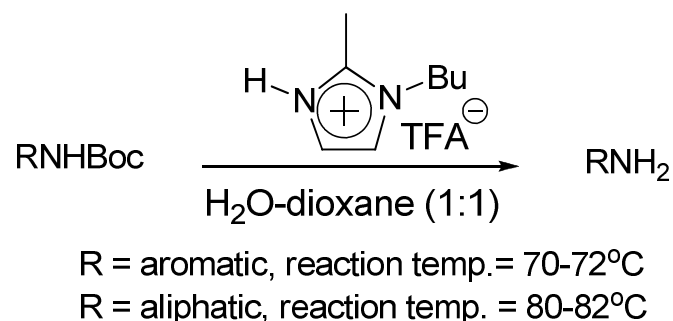


A protic ionic liquid catalyzed strategy for selective hydrolytic cleavage of *tert*-butyloxycarbonyl amine (N-Boc)

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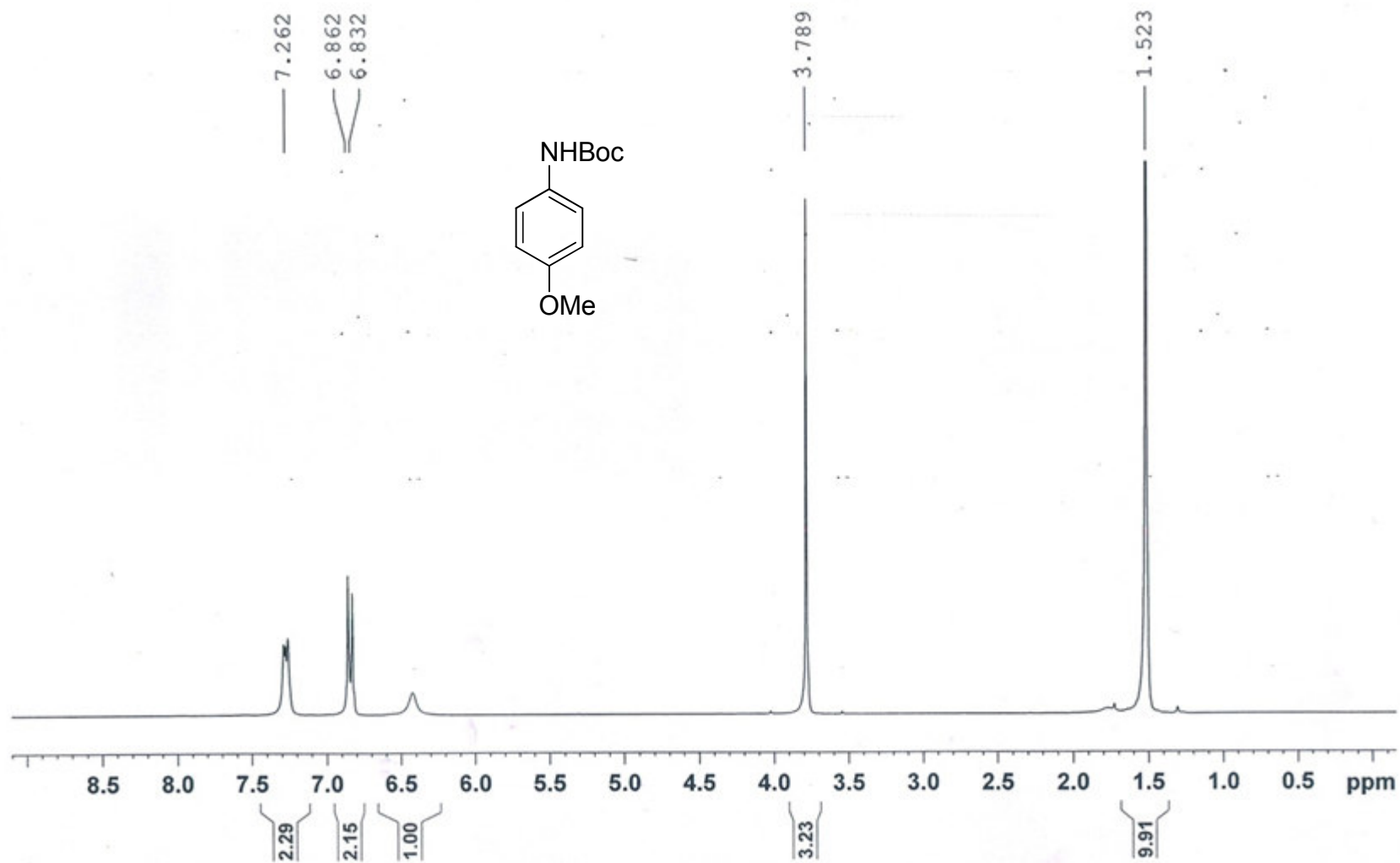
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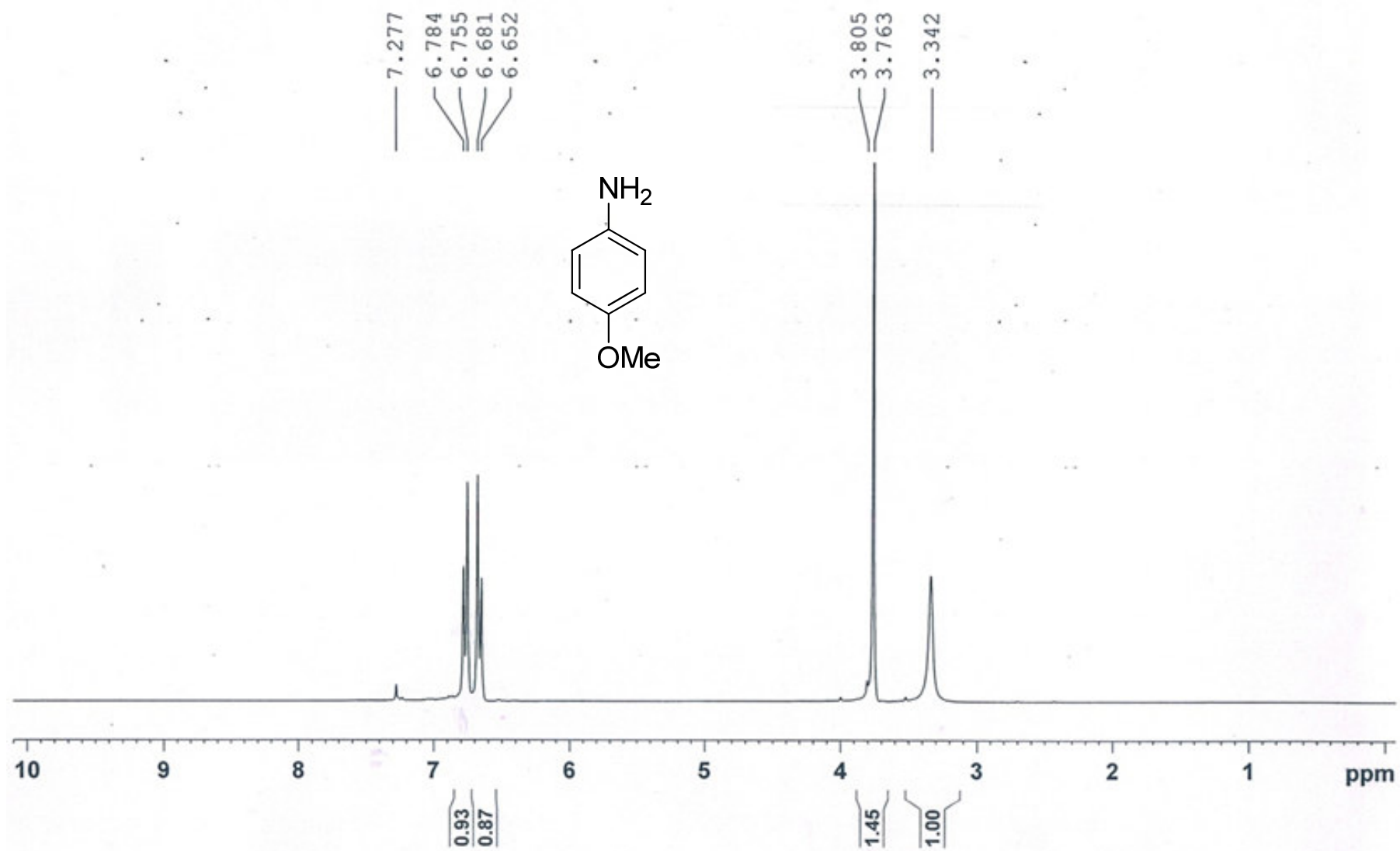


General procedure: To a stirred solution of N-Boc amine (1 mmol) in water-dioxane (1:1, 2 ml), protic ionic liquid I (1 equiv. or 10 mol%) was added and then the mixture was heated at 70-72°C or 80-82°C (depending upon the nature of substrate as indicated in Table 2-5) until the complete consumption of starting material (reaction monitored by TLC). After completion of the reaction, dioxane was removed under reduced pressure and the mixture was diluted with water (5 ml). Then the mixture was extracted with diethyl ether or ethyl acetate (3x5 ml), washed with water, dried over anhydrous Na₂SO₄ and concentrated under reduced pressure. The crude product was then passed through a short pad silica-gel to afford parent amines. The product was characterized by IR, ¹H and ¹³C NMR spectral data and compare with authentic samples. The aqueous part containing ionic liquid was recycled. Selected ¹H and ¹³C NMR spectra were given below.

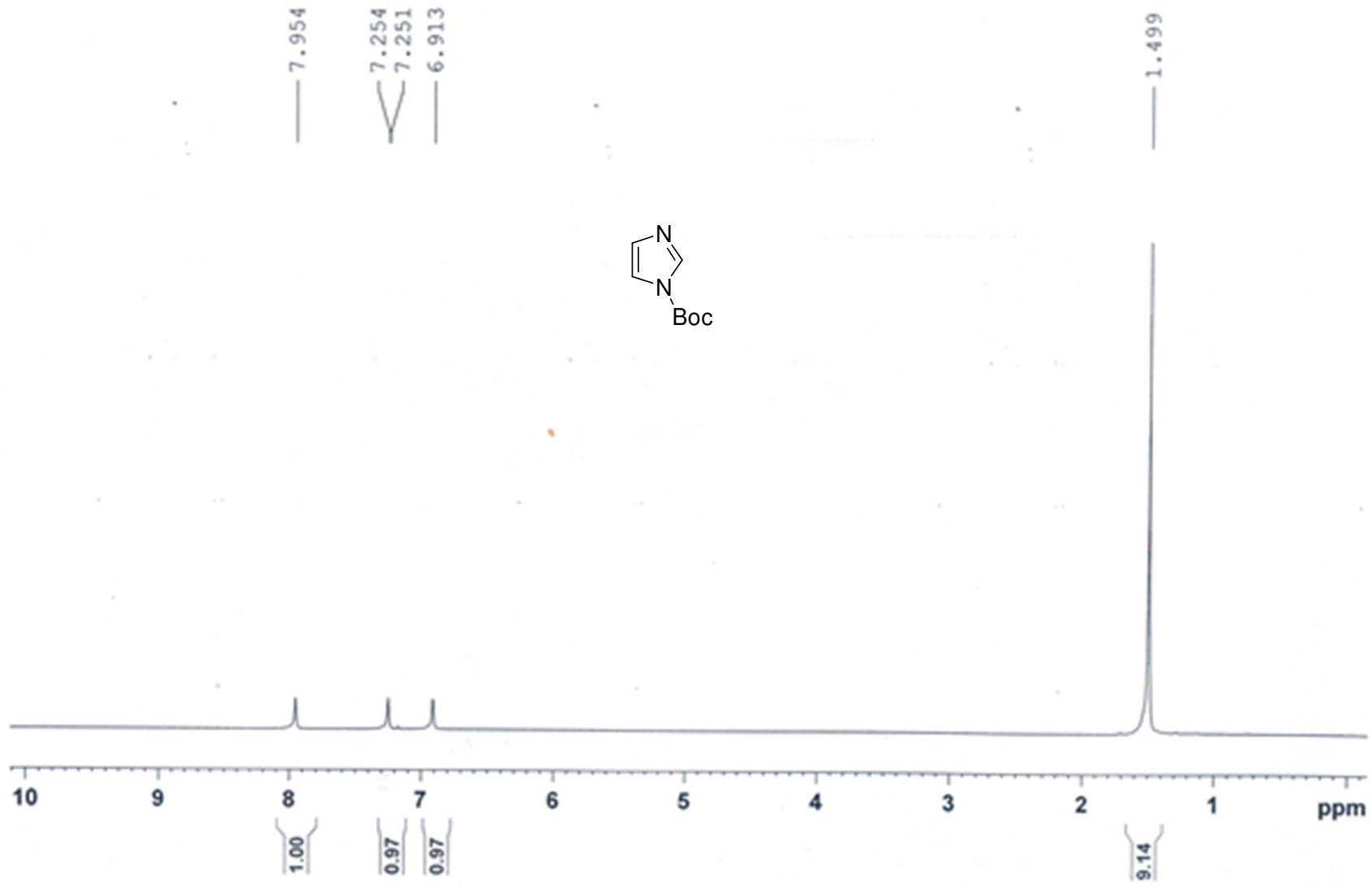
^1H NMR of **1e** (CDCl_3 , 300 MHz)



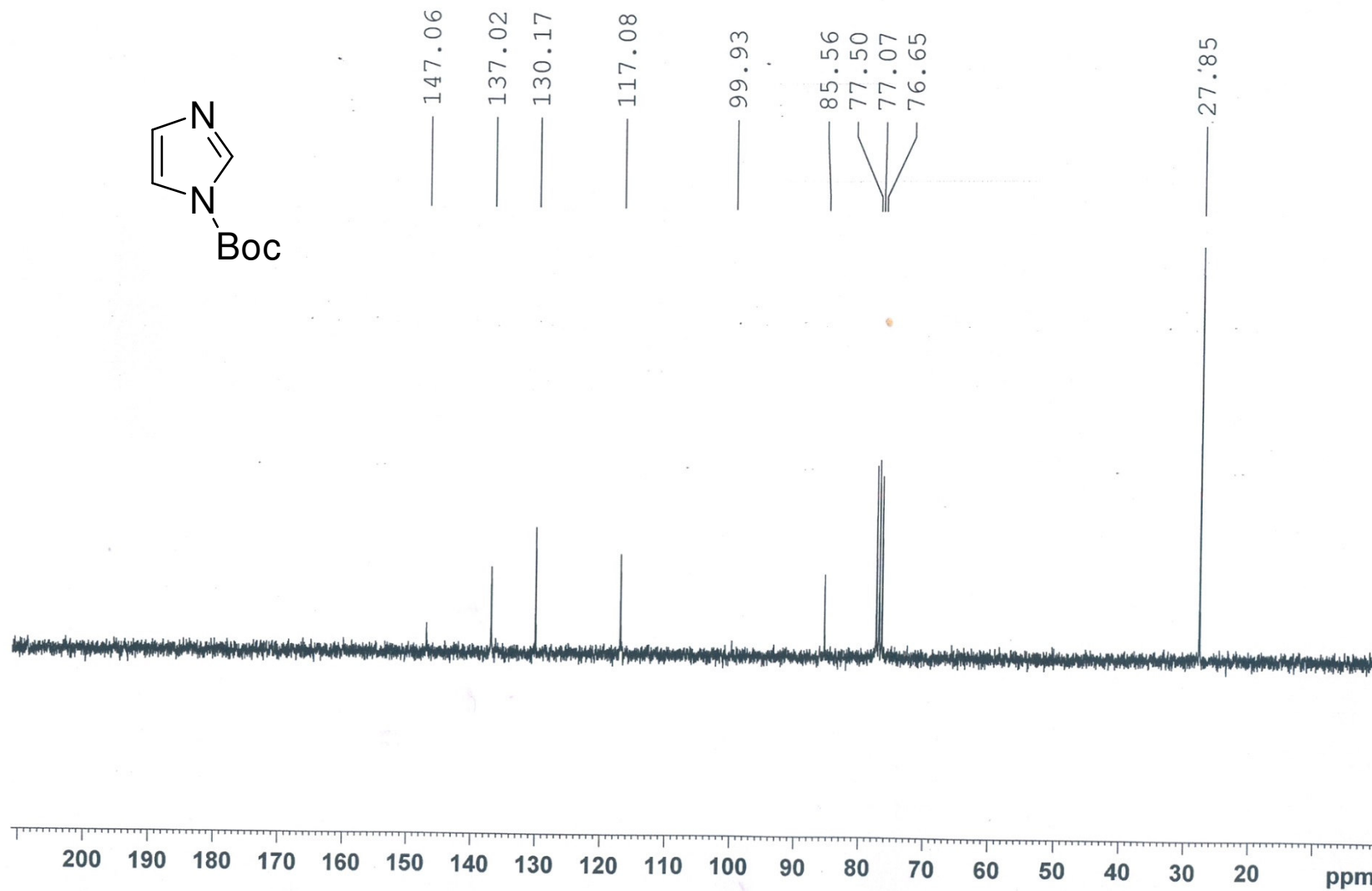
^1H NMR of **2e** (CDCl_3 , 300 MHz)



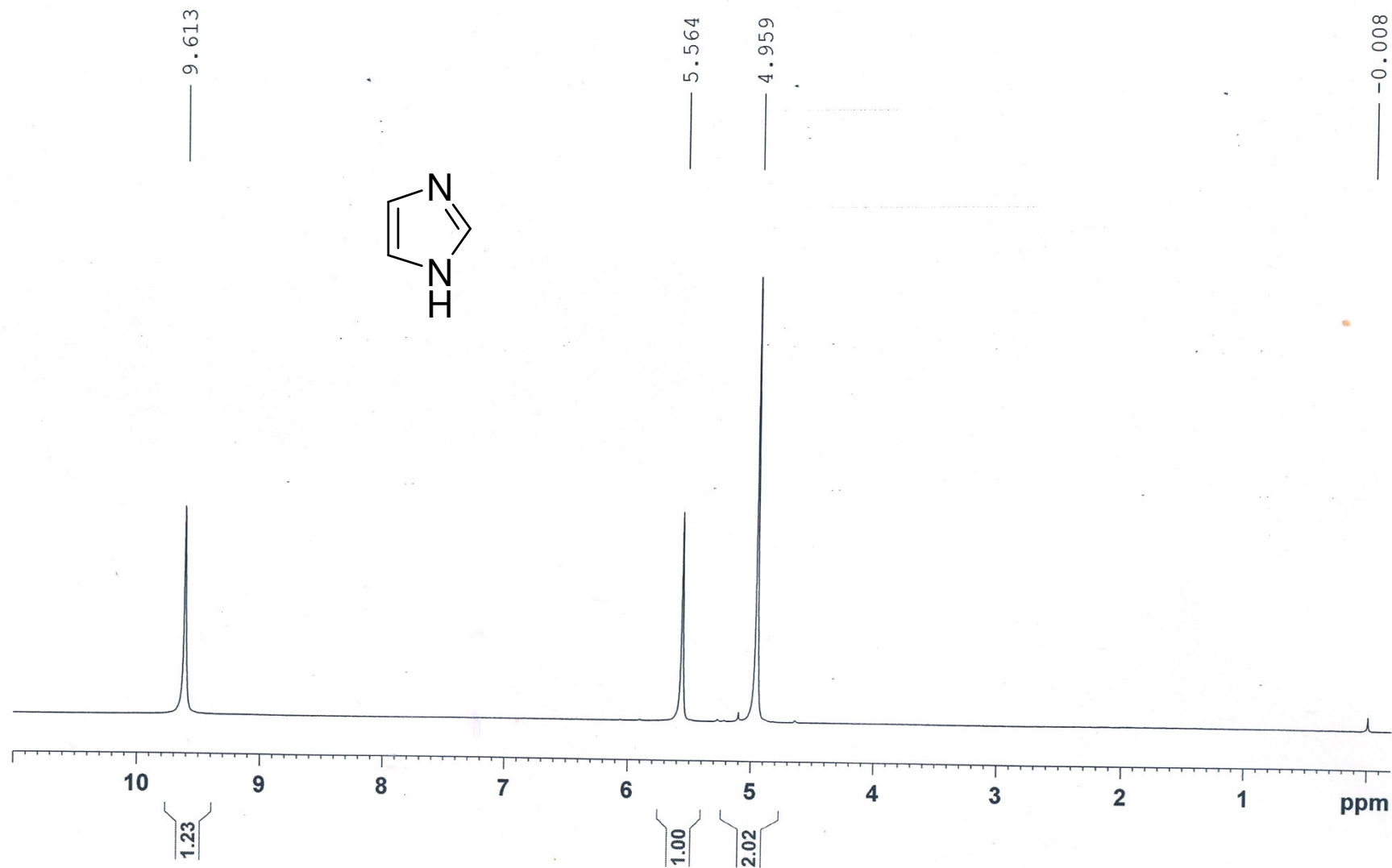
^1H NMR of **1g** (CDCl_3 , 300 MHz)



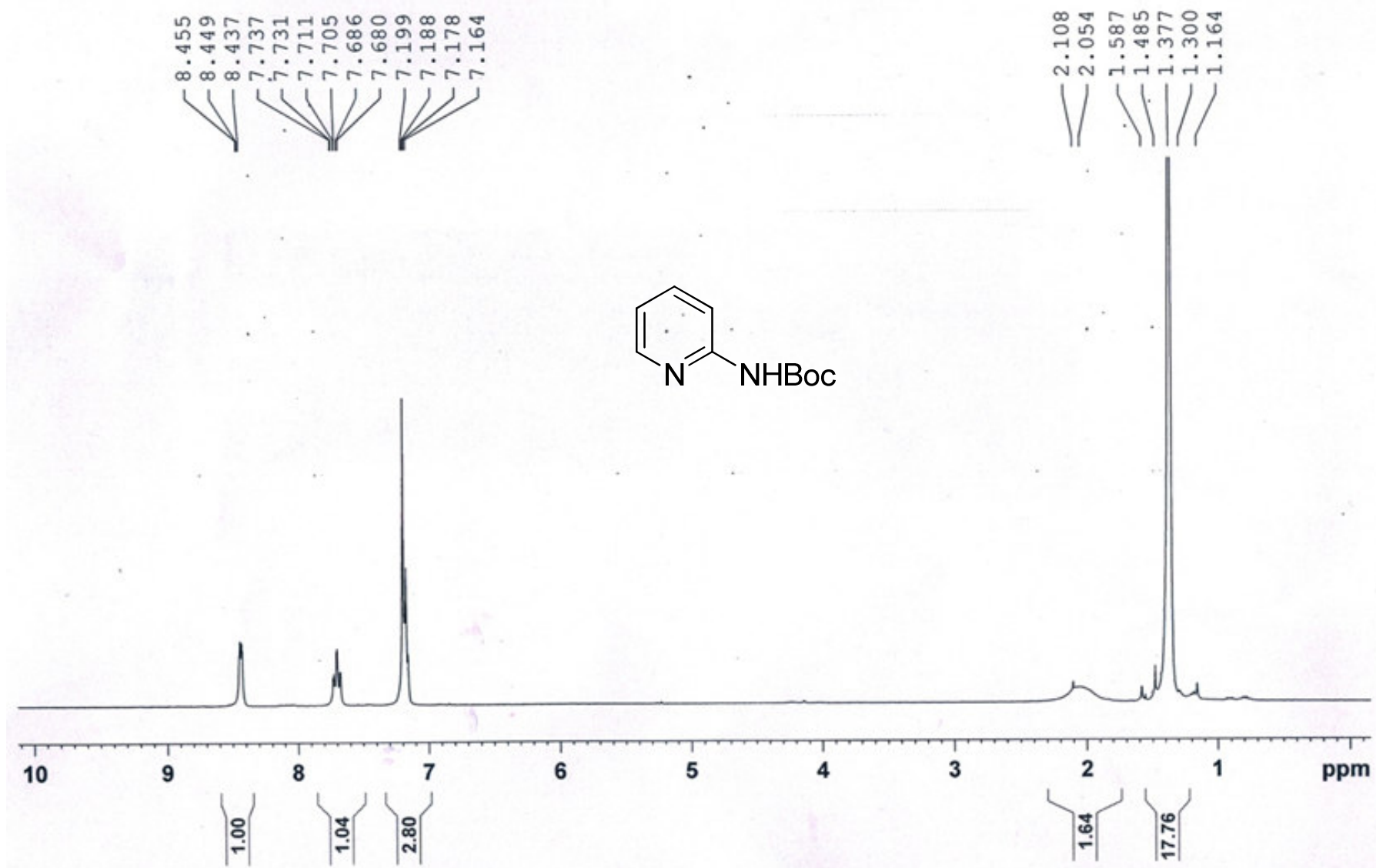
^{13}C NMR of **1g** (CDCl_3 , 75 MHz)



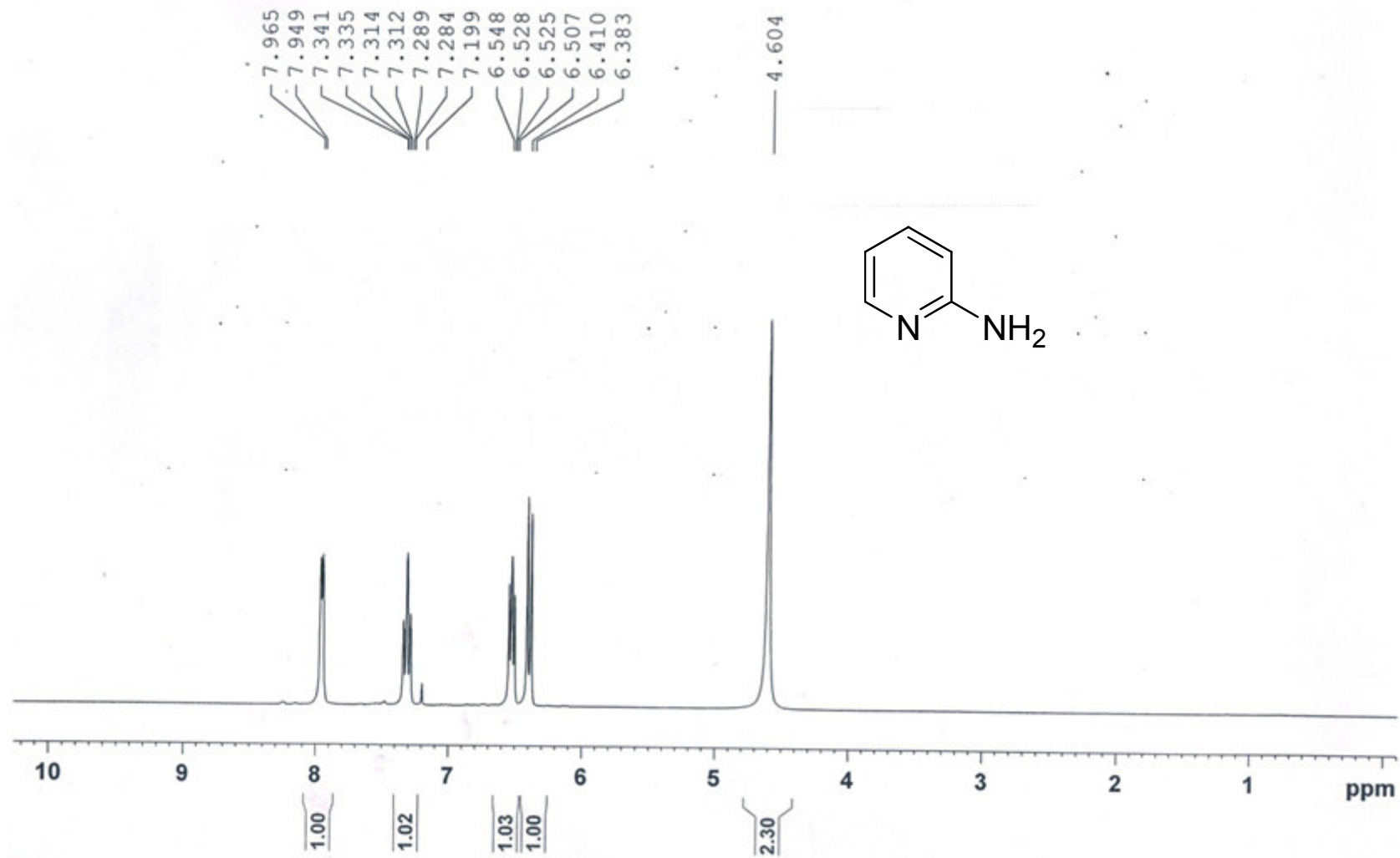
^1H NMR of **2g** (CDCl_3 , 300 MHz)



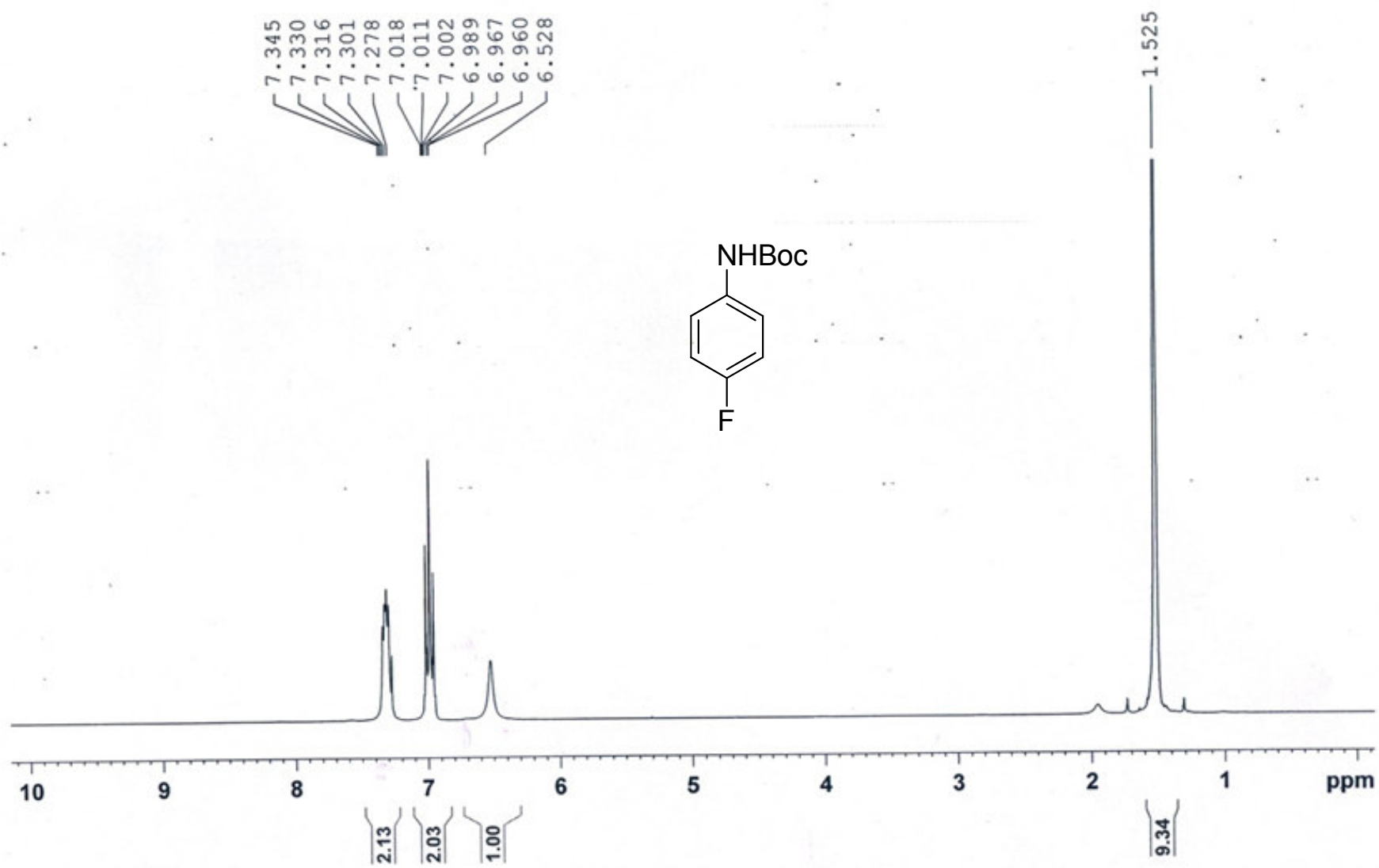
^1H NMR of **1i** (CDCl_3 , 300 MHz)



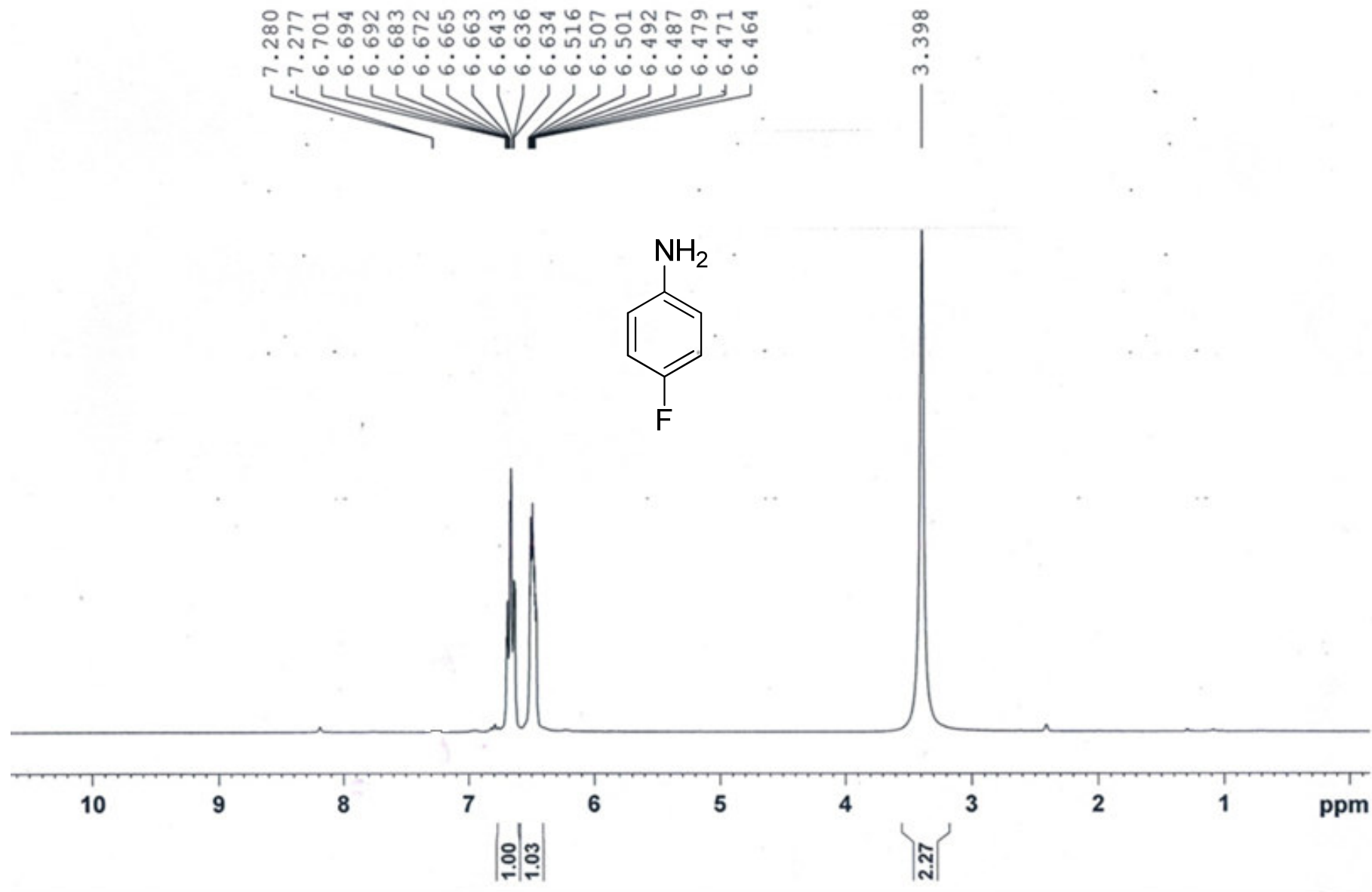
^1H NMR of **2i** (CDCl_3 , 300 MHz)



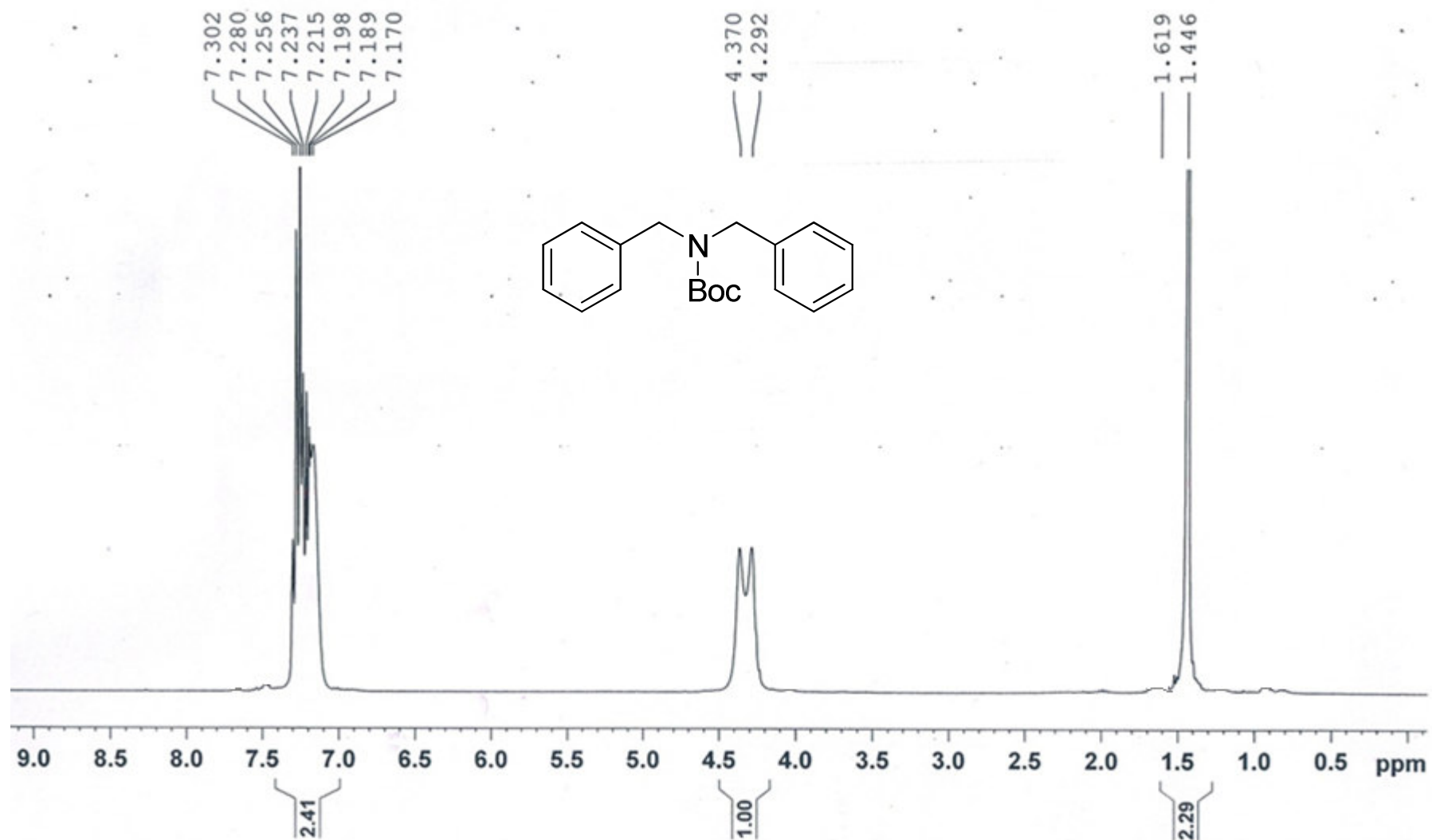
^1H NMR of **1j** (CDCl_3 , 300 MHz)



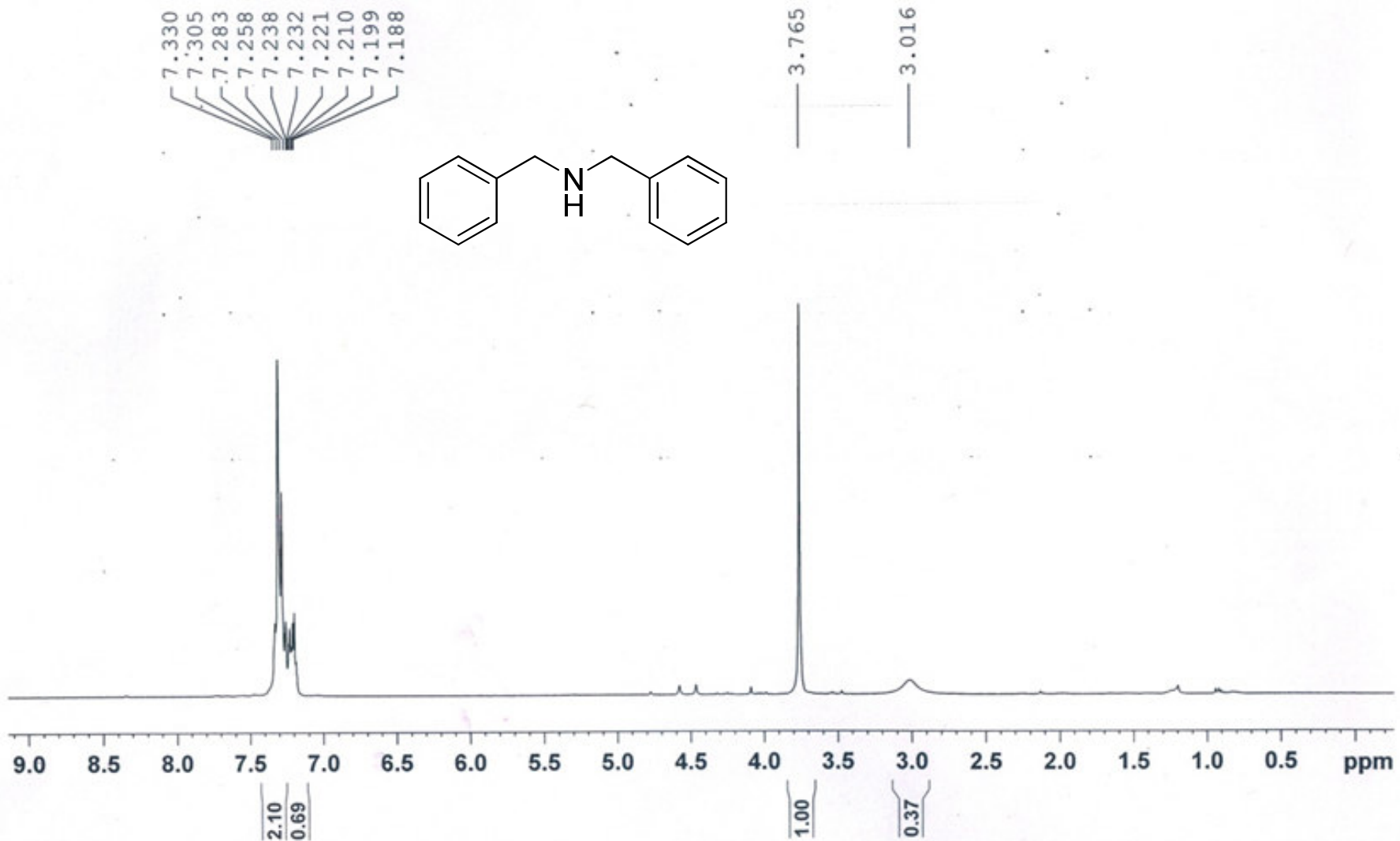
^1H NMR of **2j** (DMSO- d_6 , 300 MHz)



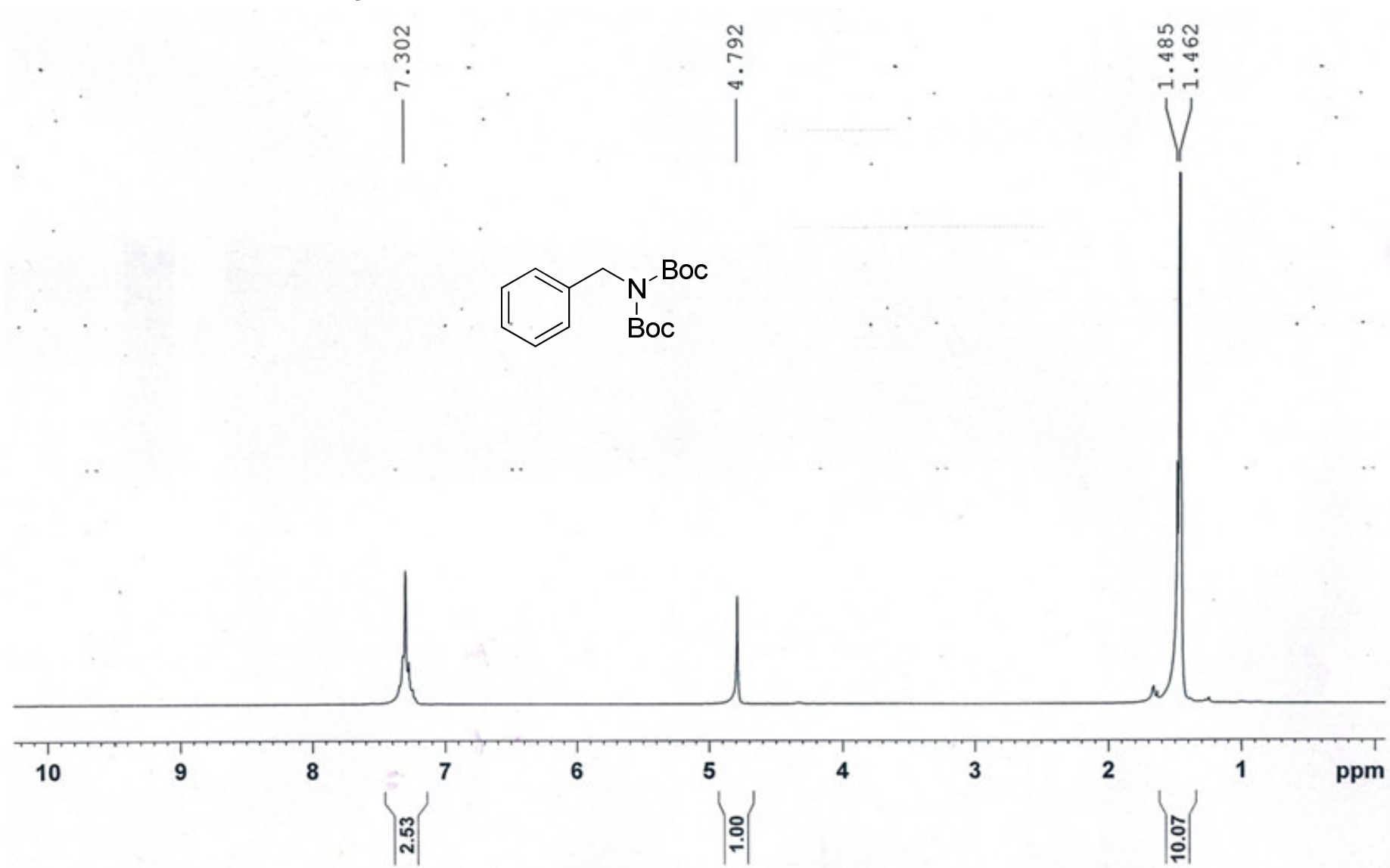
^1H NMR of **3d** (CDCl_3 , 300 MHz)



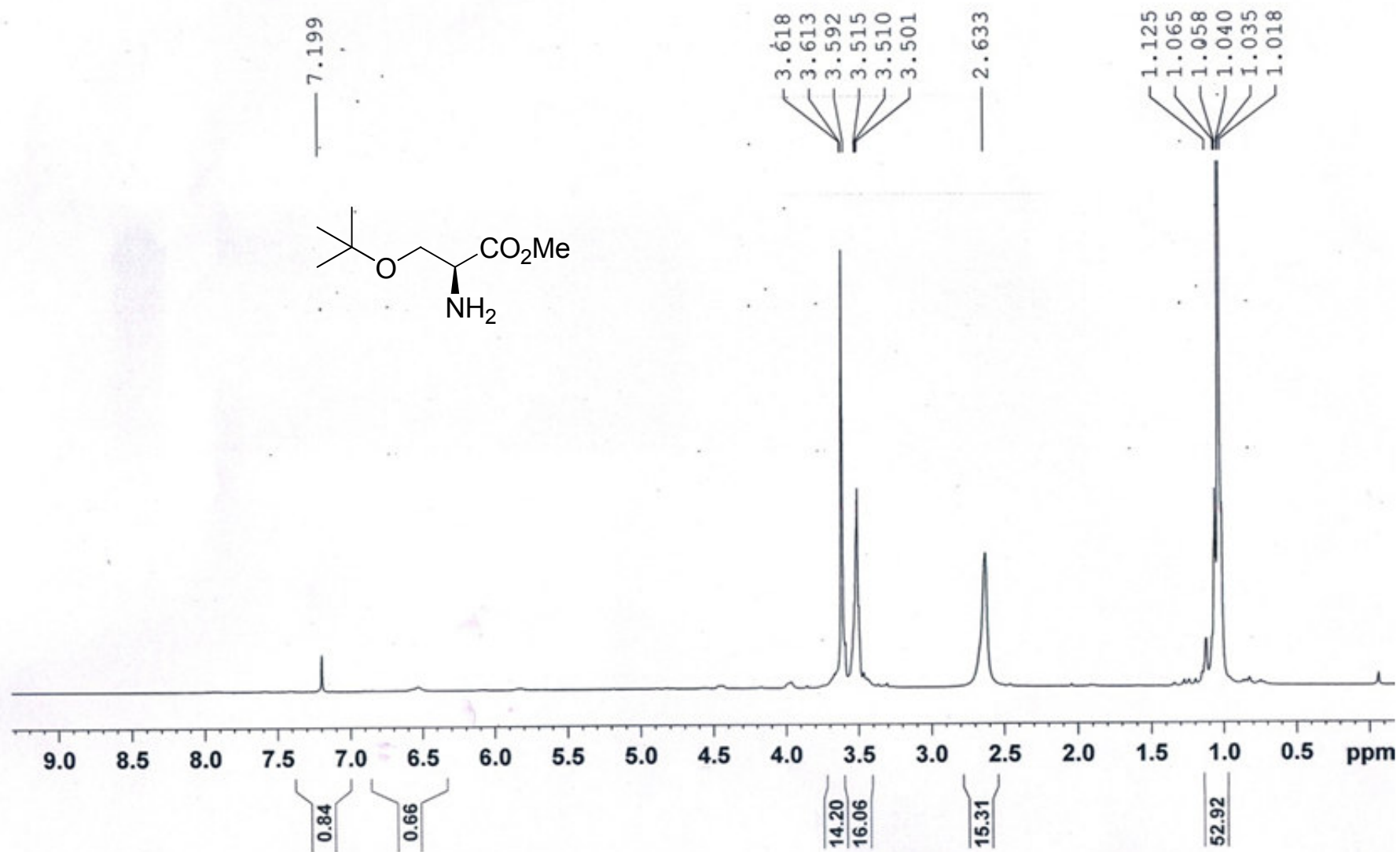
^1H NMR of **4d** (CDCl_3 , 300 MHz)



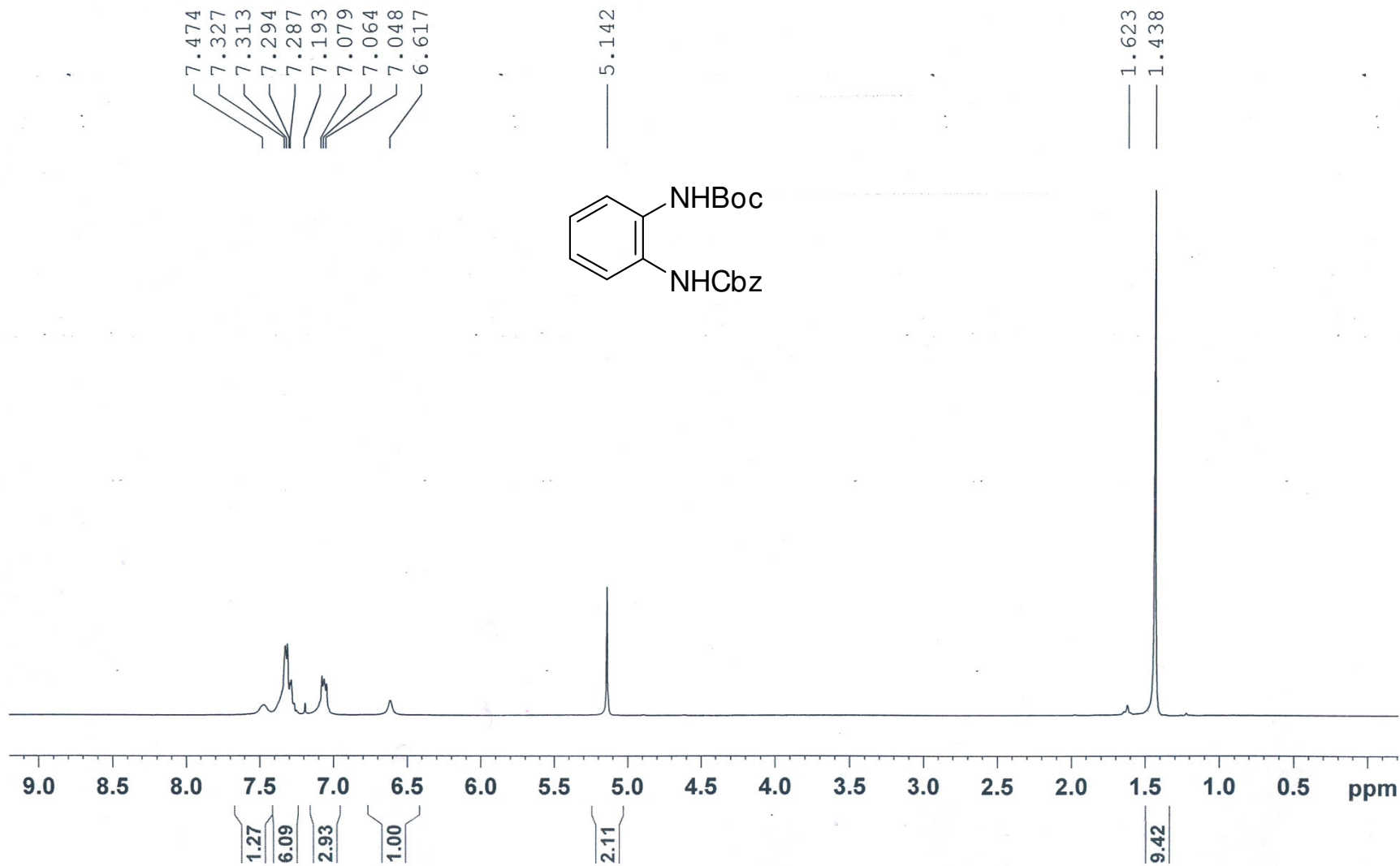
^1H NMR of **3e** (CDCl_3 , 300 MHz)



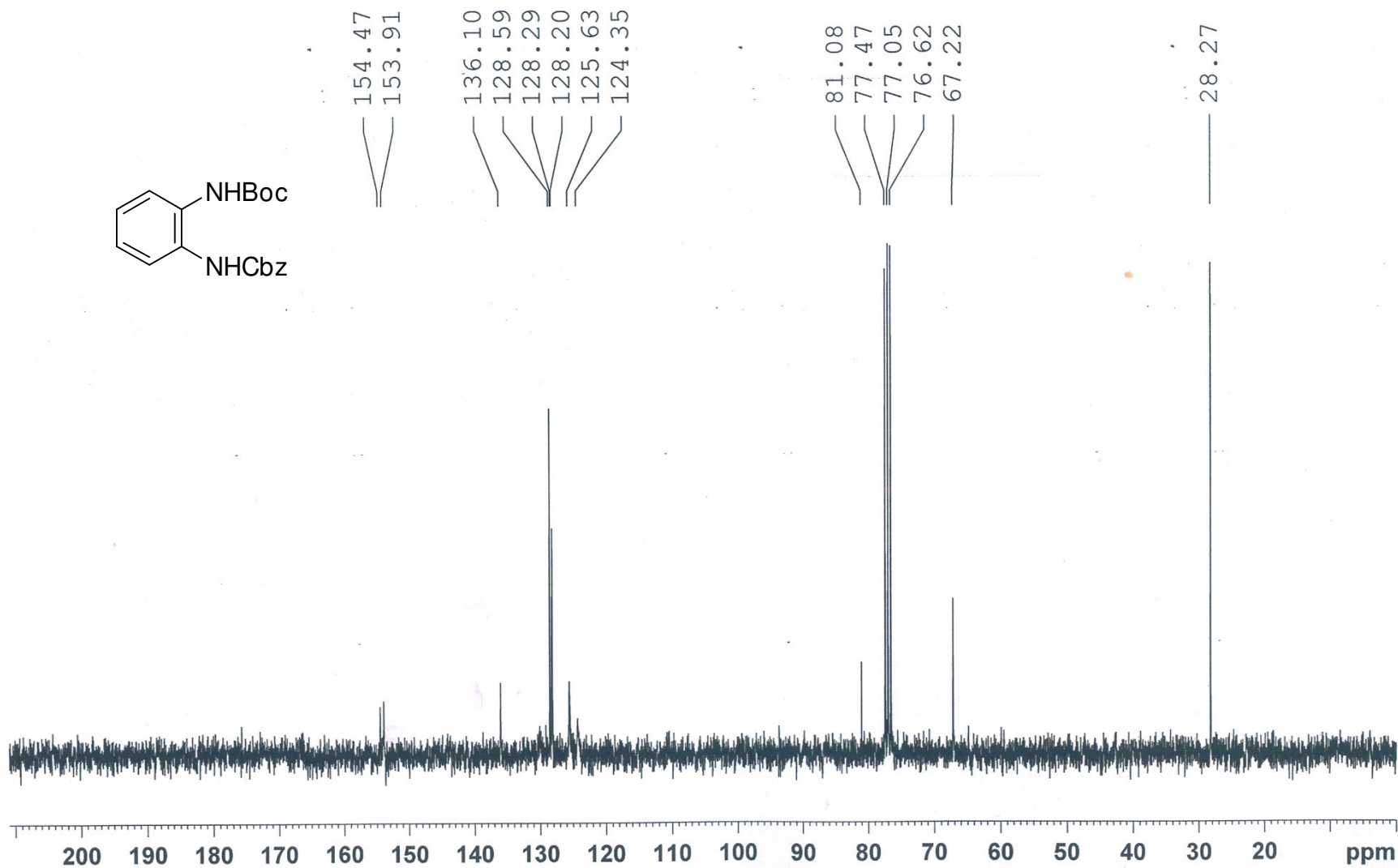
^1H NMR of **8c** (CDCl_3 , 300 MHz)



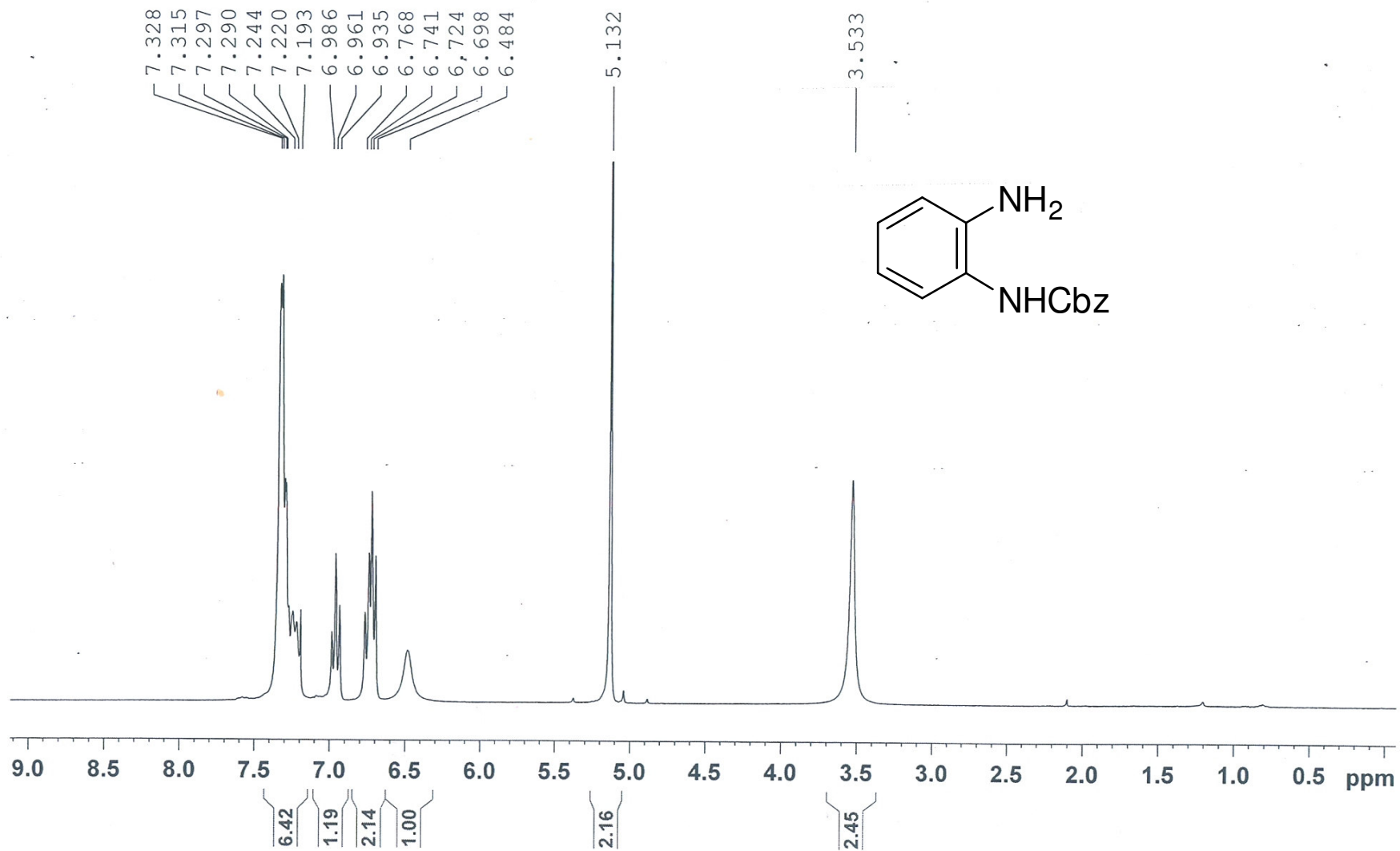
^1H NMR of **7g** (CDCl_3 , 300 MHz)



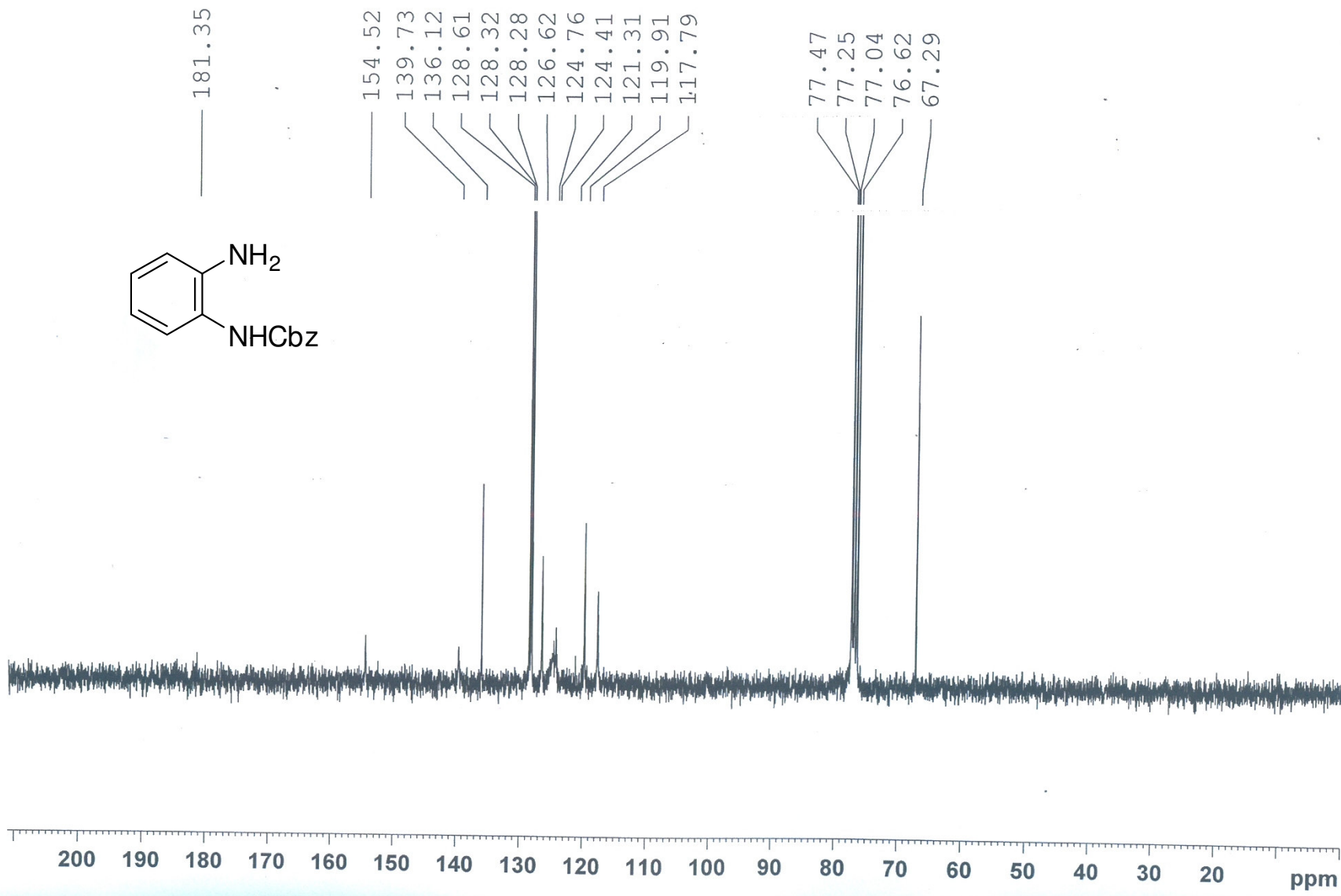
^{13}C NMR of **7g** (CDCl_3 , 75 MHz)



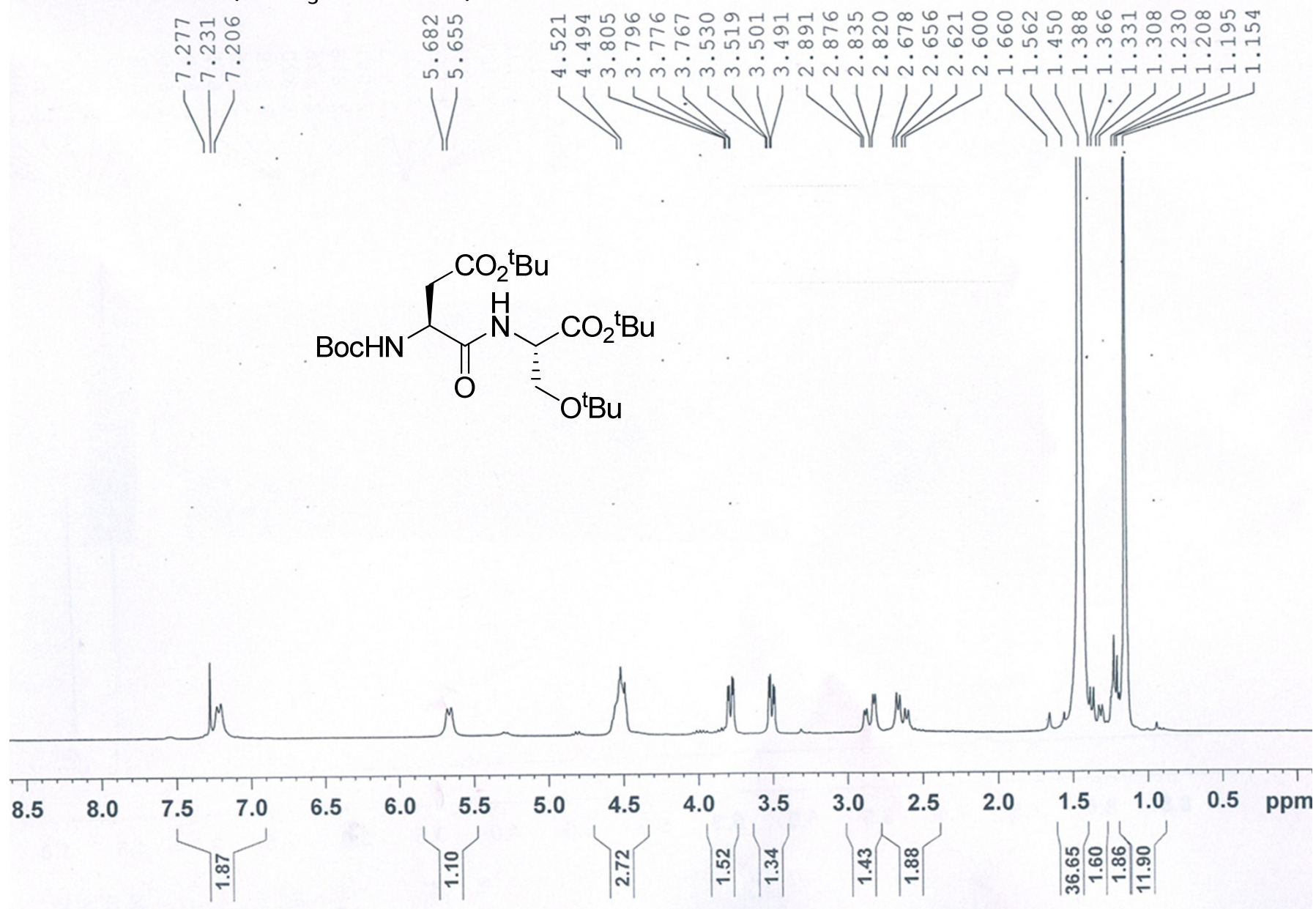
^1H NMR of **8g** (CDCl_3 , 300 MHz)



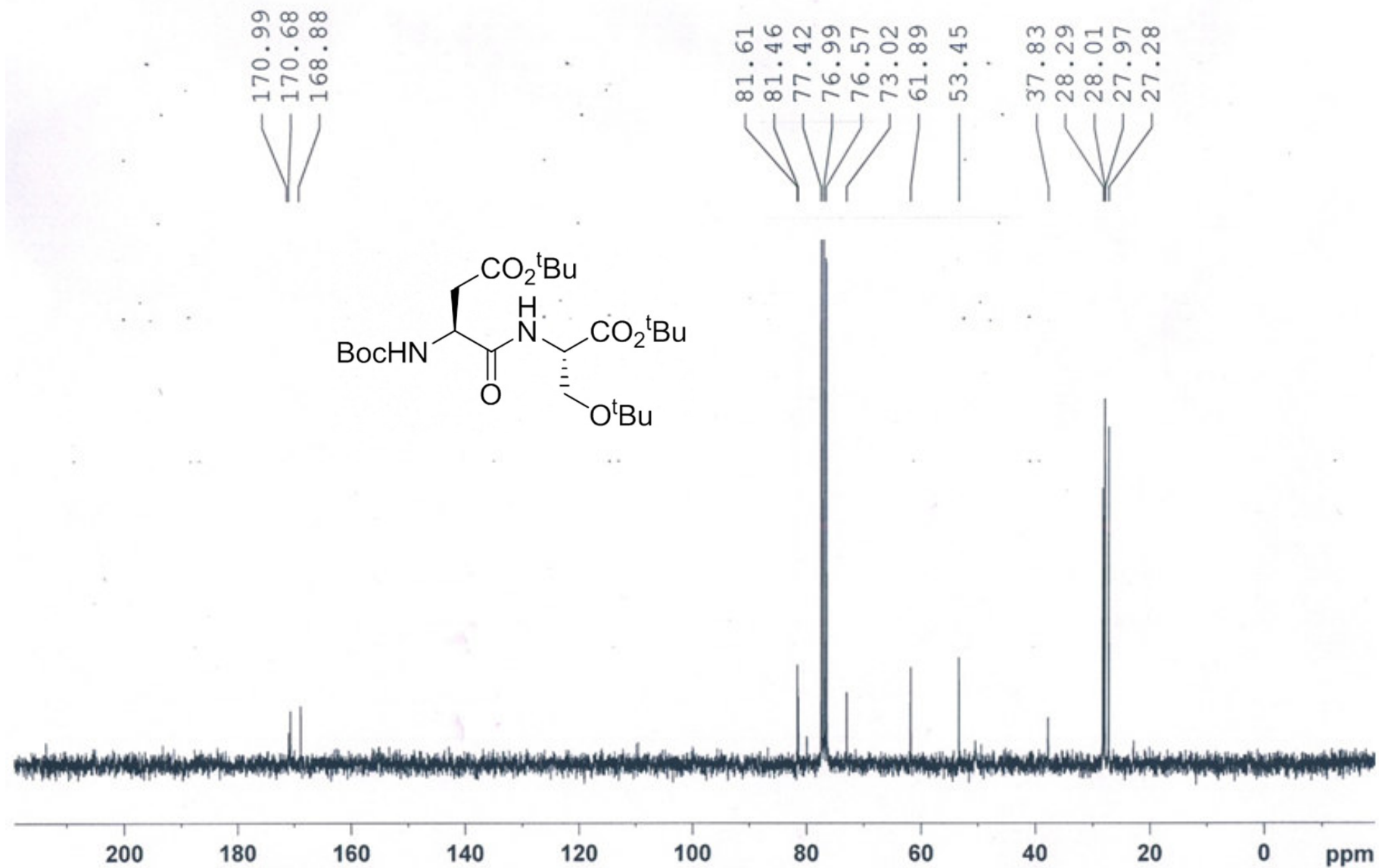
^{13}C NMR of **8g** (CDCl_3 , 300 MHz)



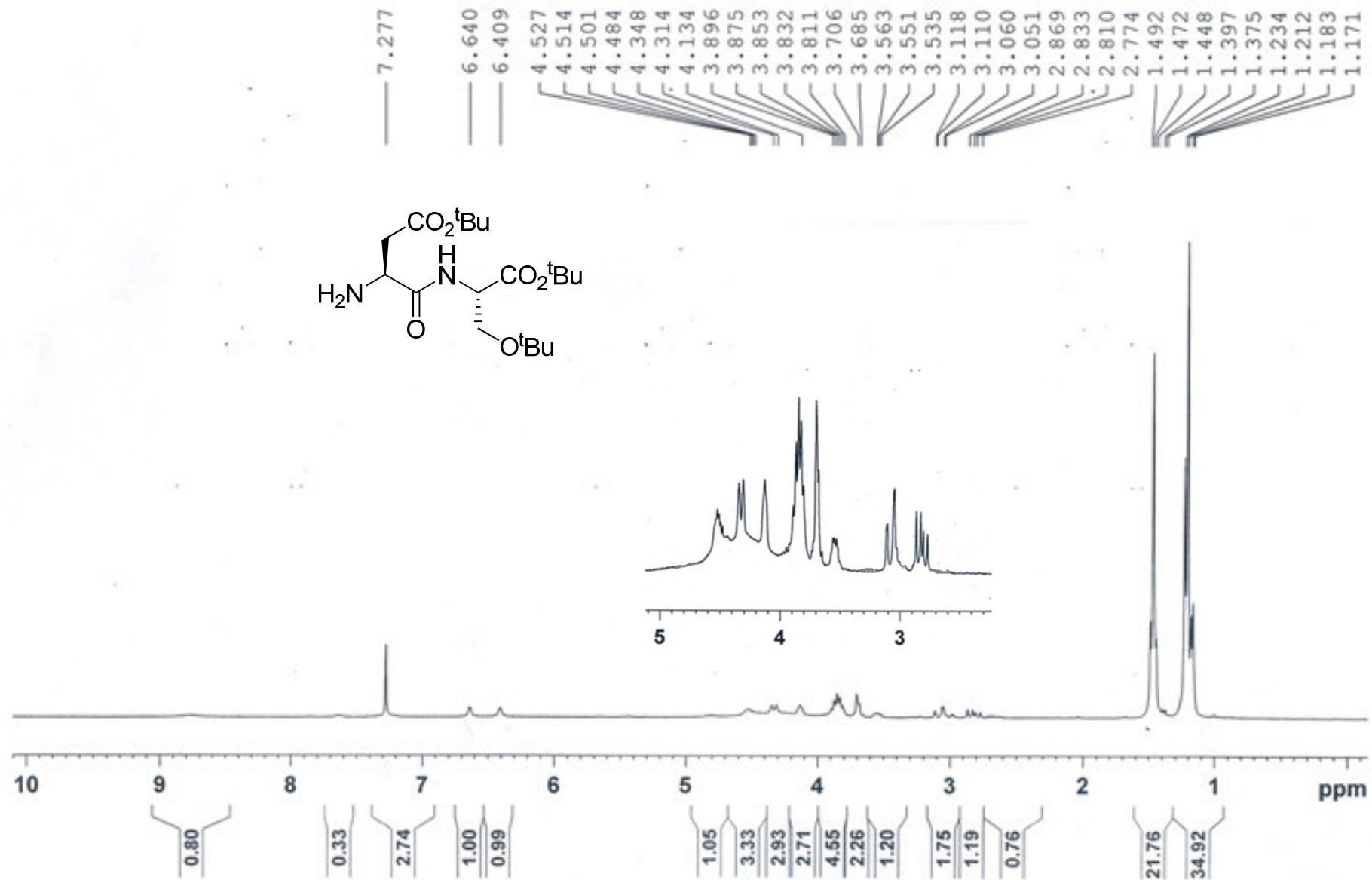
^1H NMR of **7h** (CDCl_3 , 300 MHz)



^{13}C NMR of **7h** (CDCl_3 , 75 MHz)



^1H NMR of **8h** (CDCl_3 , 300 MHz)



^{13}C NMR of **8h** (CDCl_3 , 75 MHz)

