

SUPPORTING INFORMATION

“All water” one-pot diverse synthesis of 1,2-disubstituted benzimidazoles: hydrogen bond driven ‘synergistic electrophile-nucleophile dual activation’ by water

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Preparation of Pure water

Pure water (15 MΩ-cm resistivity at 25 °C): The pure water was prepared by subjecting the tap water for reverse osmosis and ionic/organic removal by passing through pre-packed cartridge.

Preparation of Ultrapure water

Ultrapure water (18.2 MΩ-cm resistivity at 25 °C): The ultrapure water was prepared by subjecting the pure water for UV treatment (185/254 nm UV Lamp), deionization by passing through deionization cartridge followed by ultra membrane filtration (0.01µm) under pressures up to 145 psi (10 bar). Ultrapure water (UPW) is generally considered to be ≥ 18.2 MΩ-cm resistivity at 25°C, low ppt in metals, less than 50 ppt in inorganic anions and ammonia, less than 0.2 ppb in organic anions, and below 1 ppb total organic carbon (TOC) and silica (dissolved and colloidal).

Scanned NMR spectra

Table 5, Entry 1: ¹H NMR

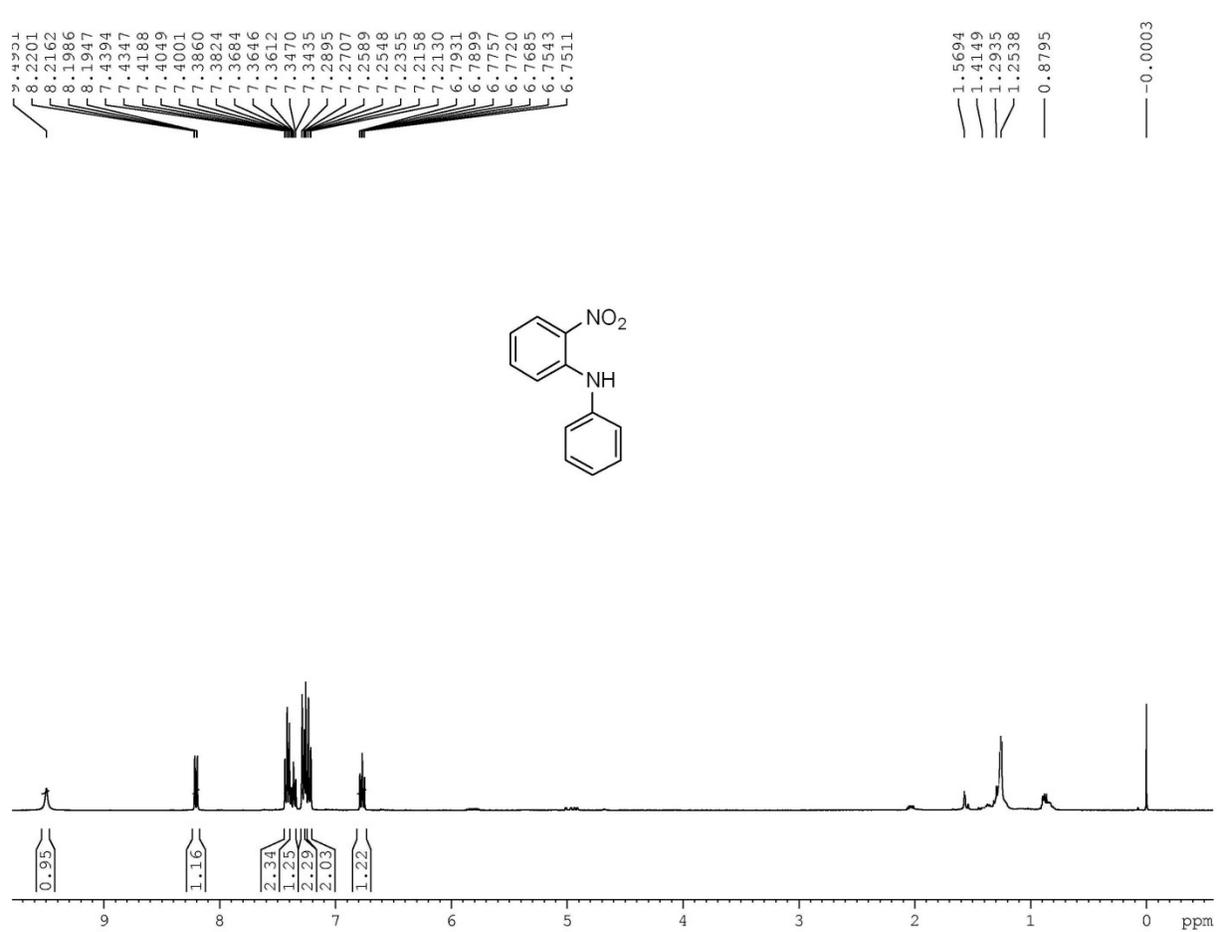


Table 5, Entry 2: ^1H NMR

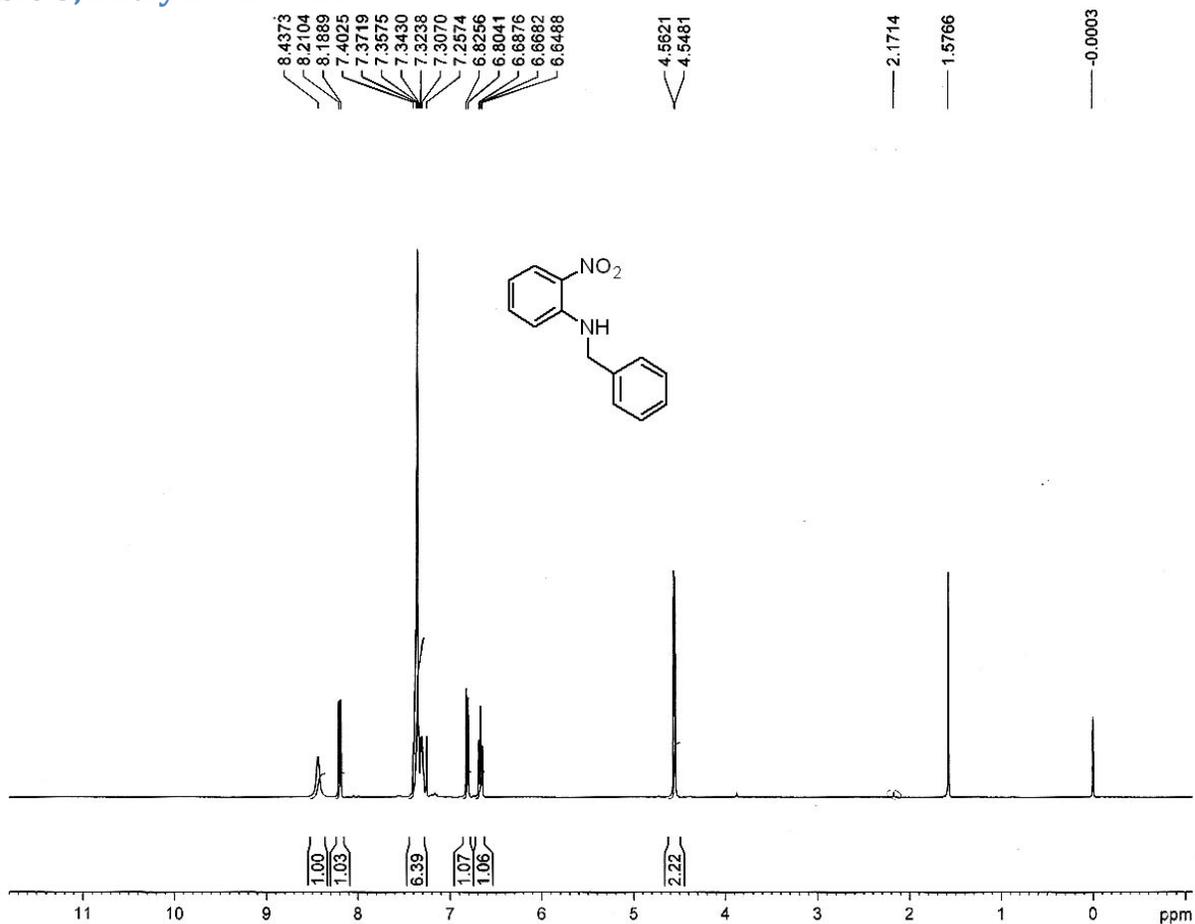


Table 5, Entry 3: ^1H NMR

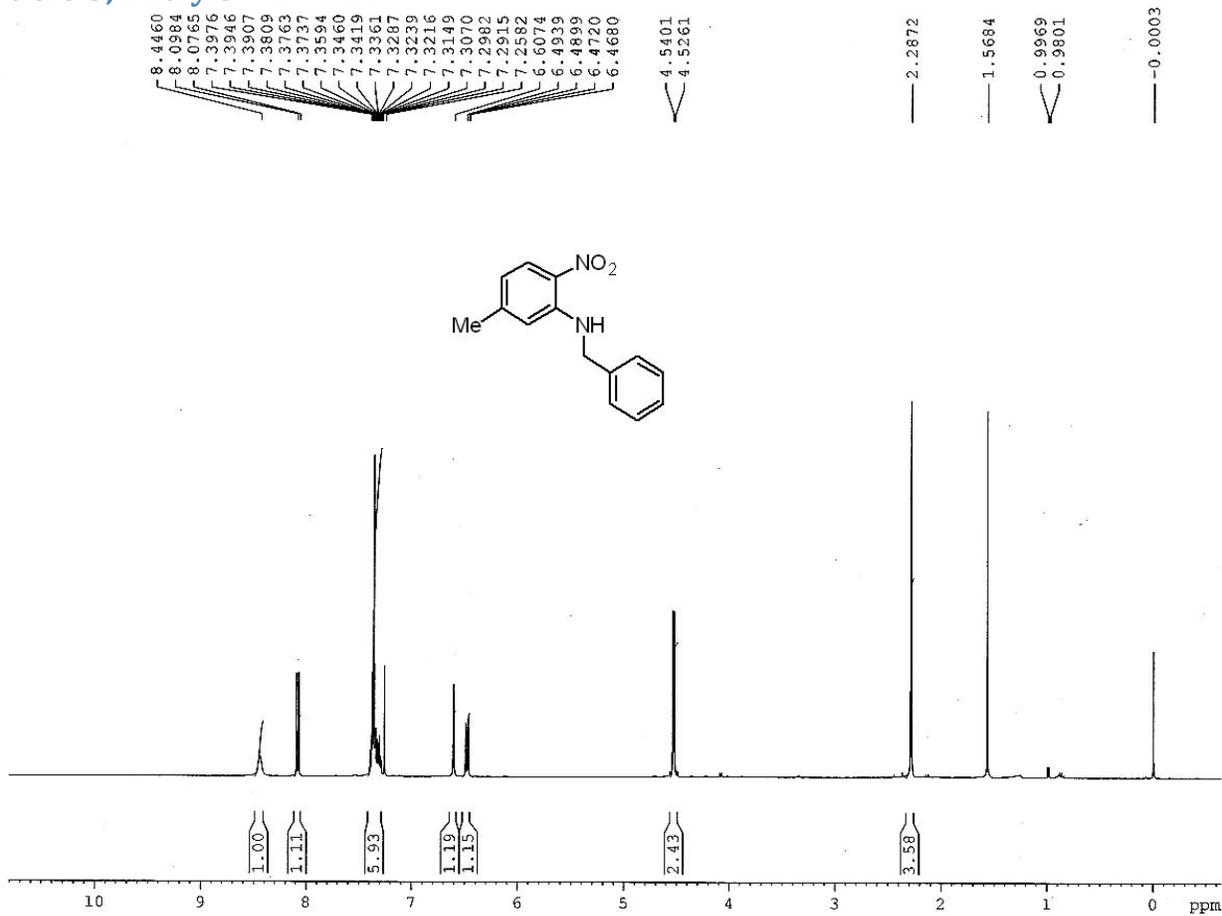


Table 5, Entry 4: ^1H NMR

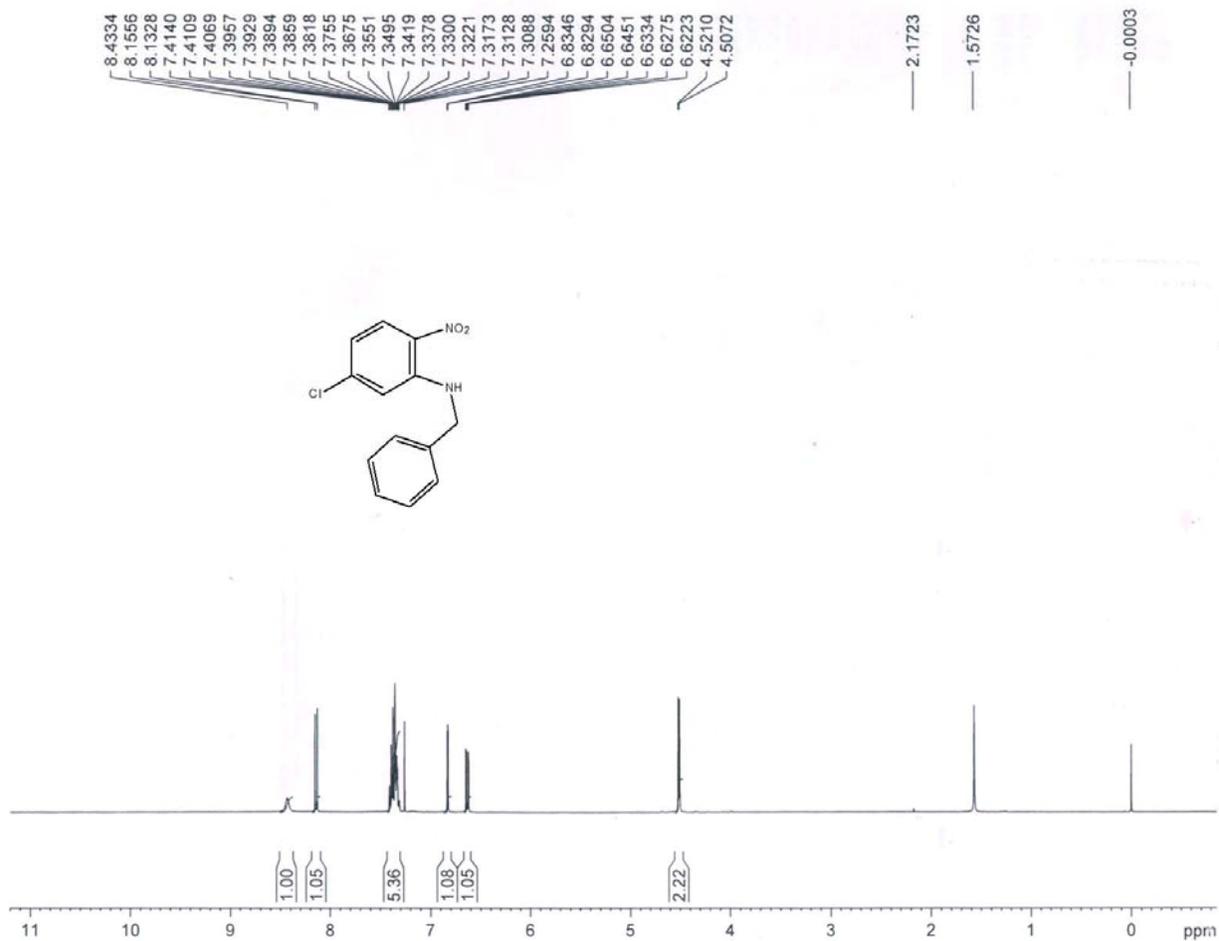


Table 5, Entry 5: ¹H NMR

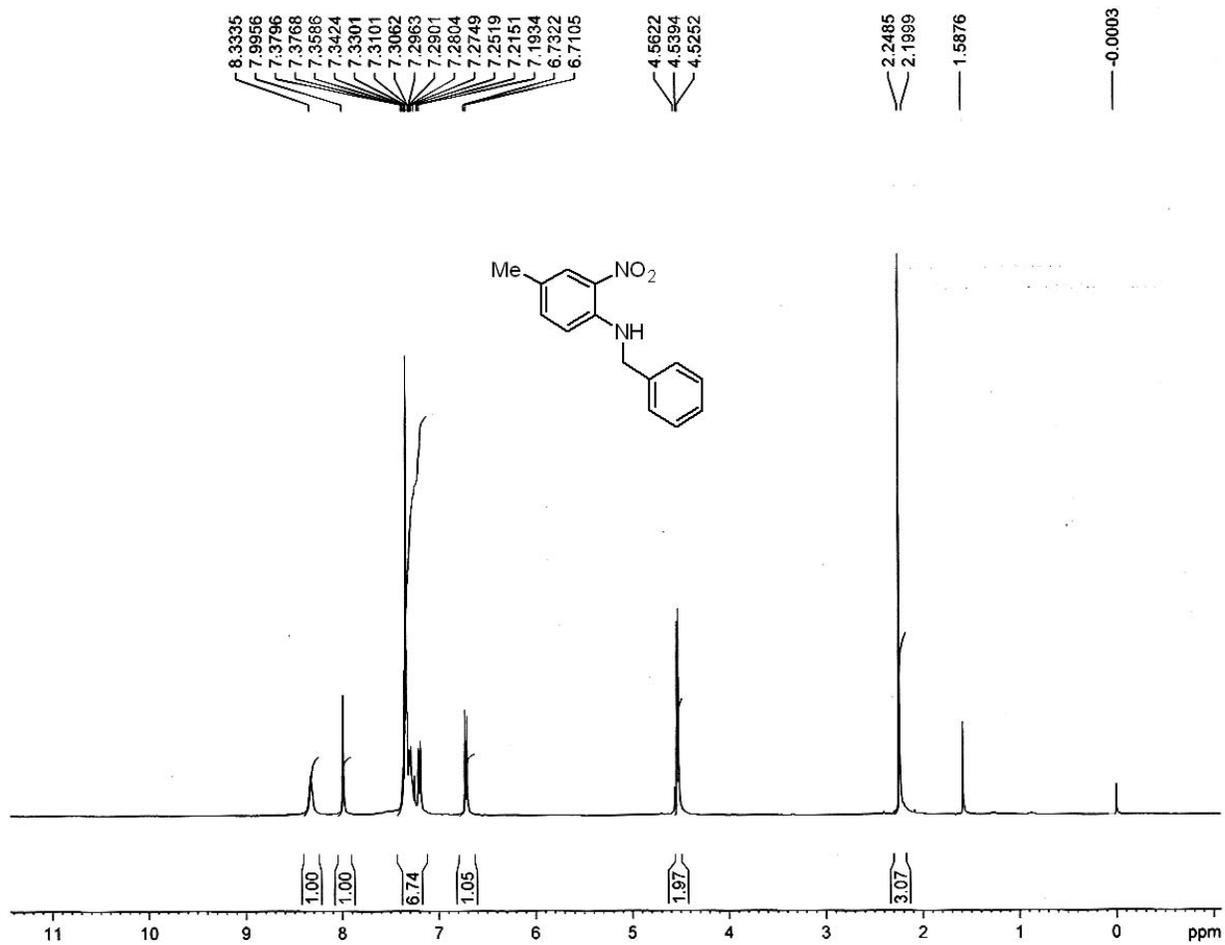


Table 5, Entry 6: ^1H NMR

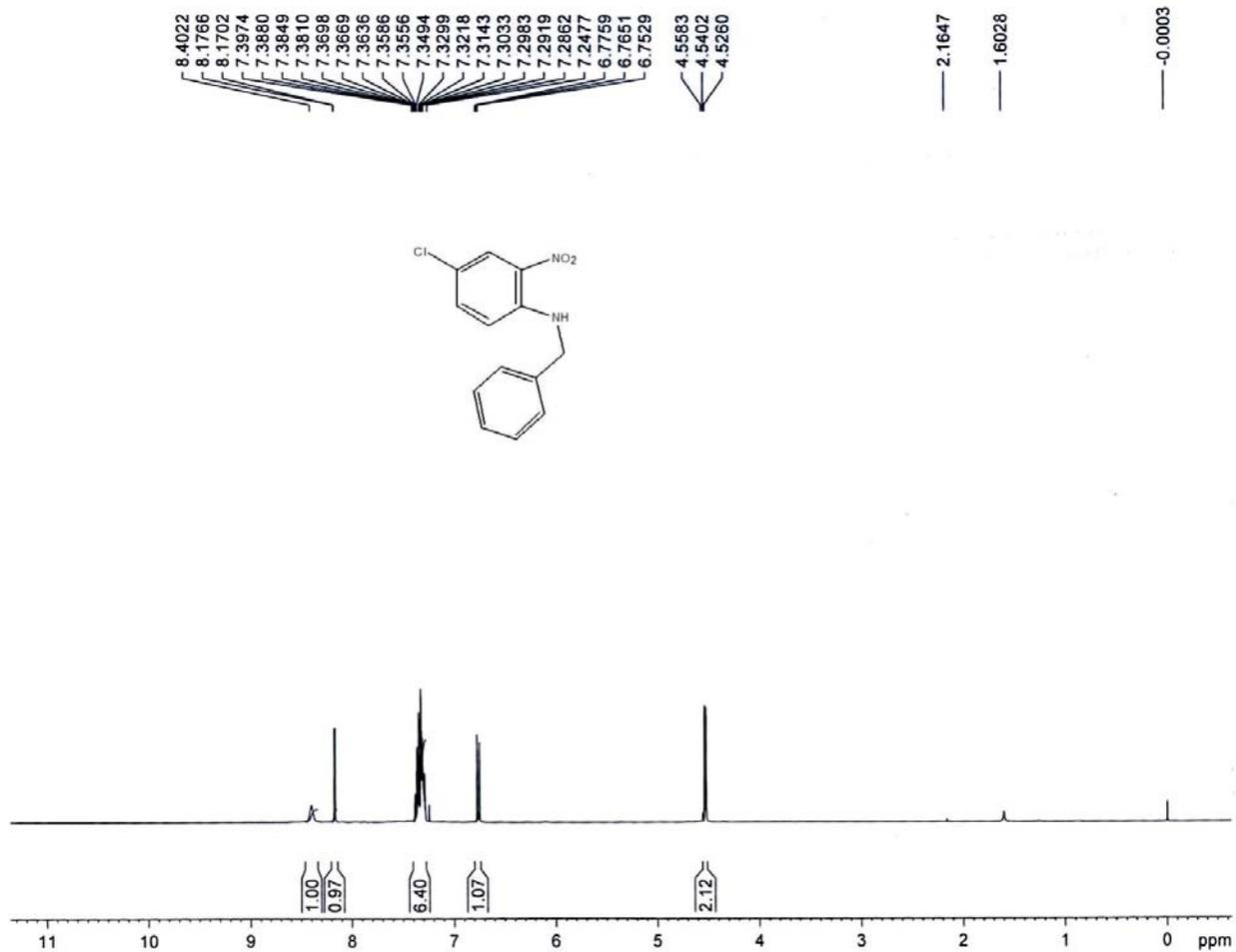


Table 5, Entry 7: ¹H NMR

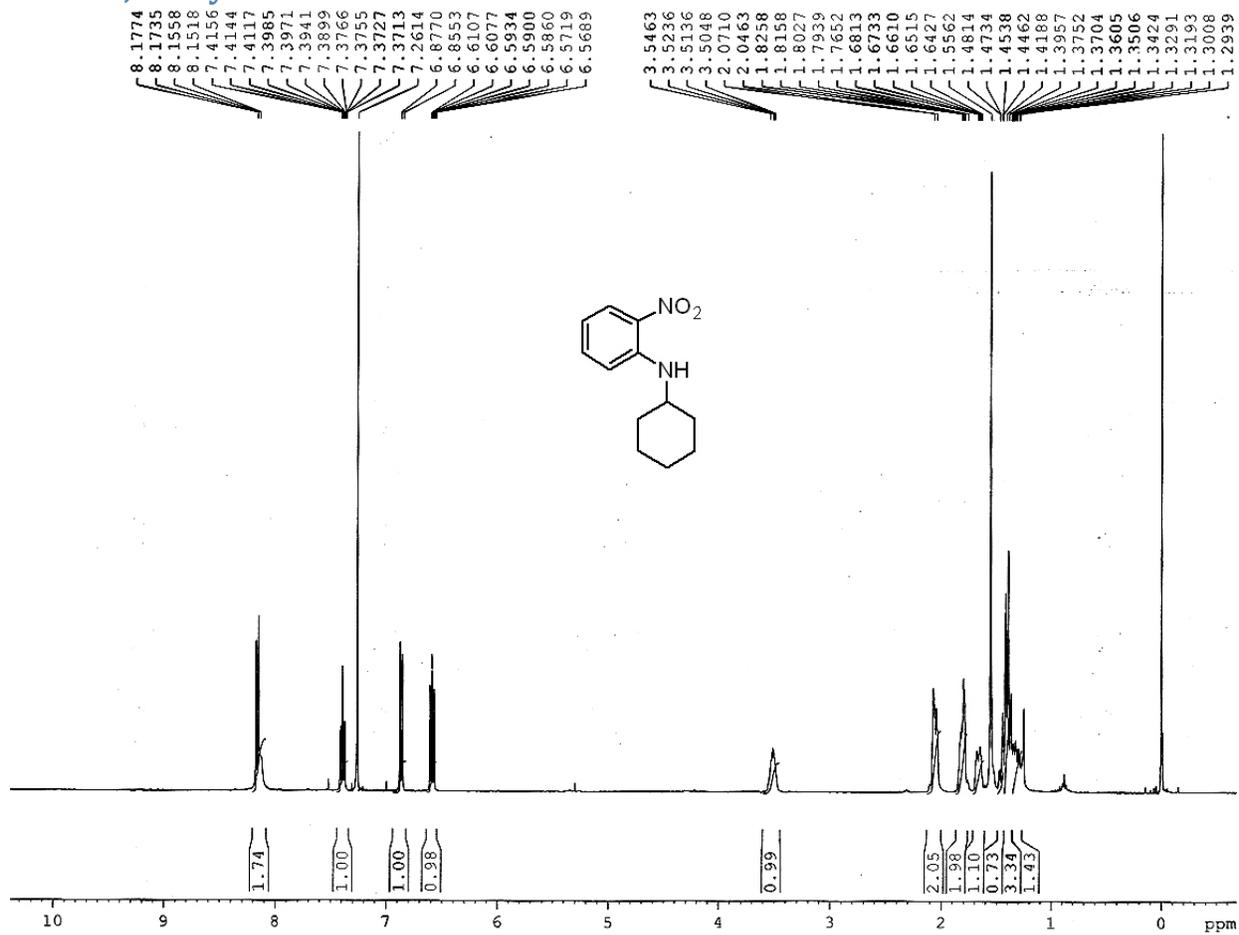


Table 5, Entry 7: ^{13}C NMR

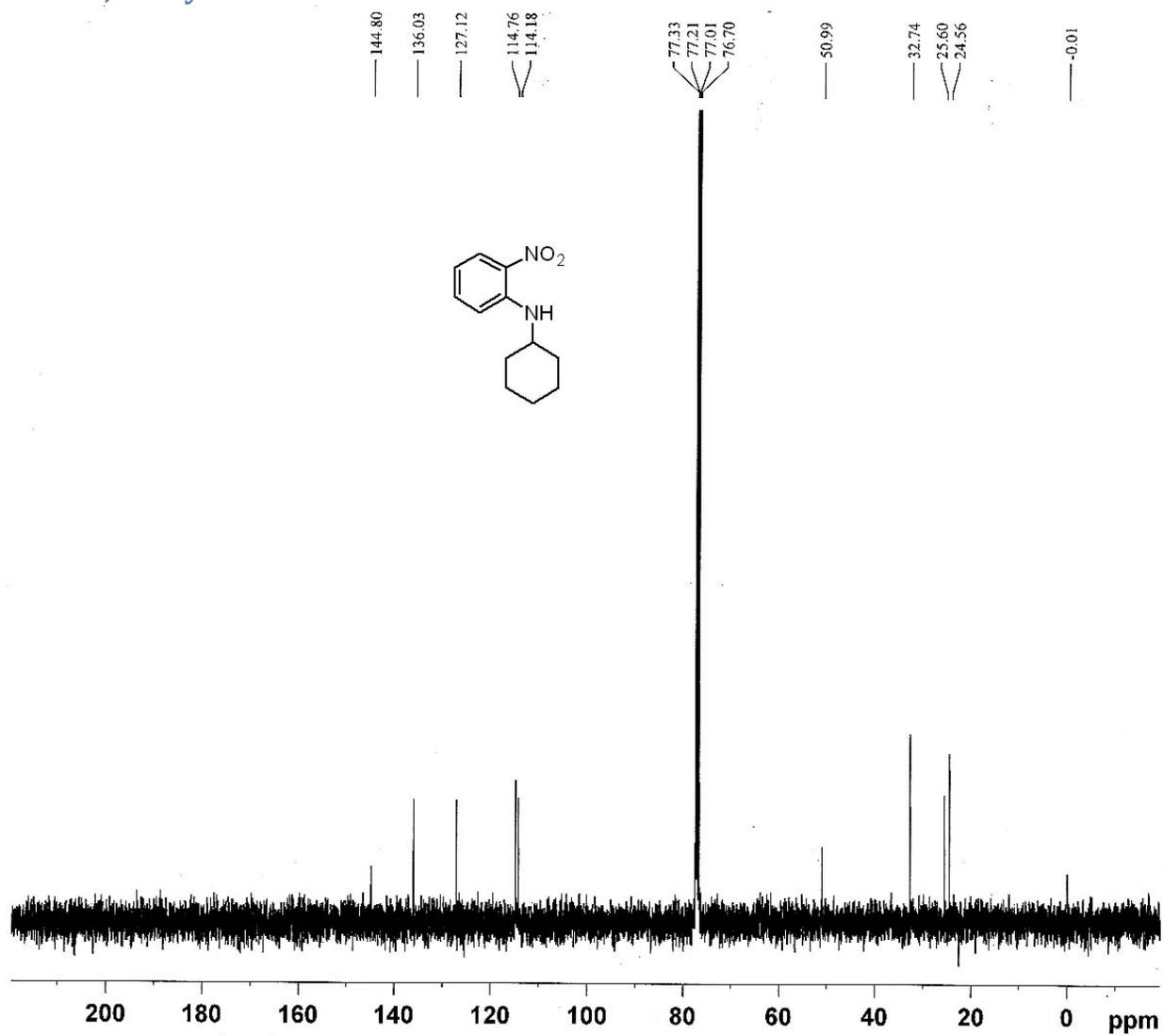


Table 5, Entry 8: ¹H NMR

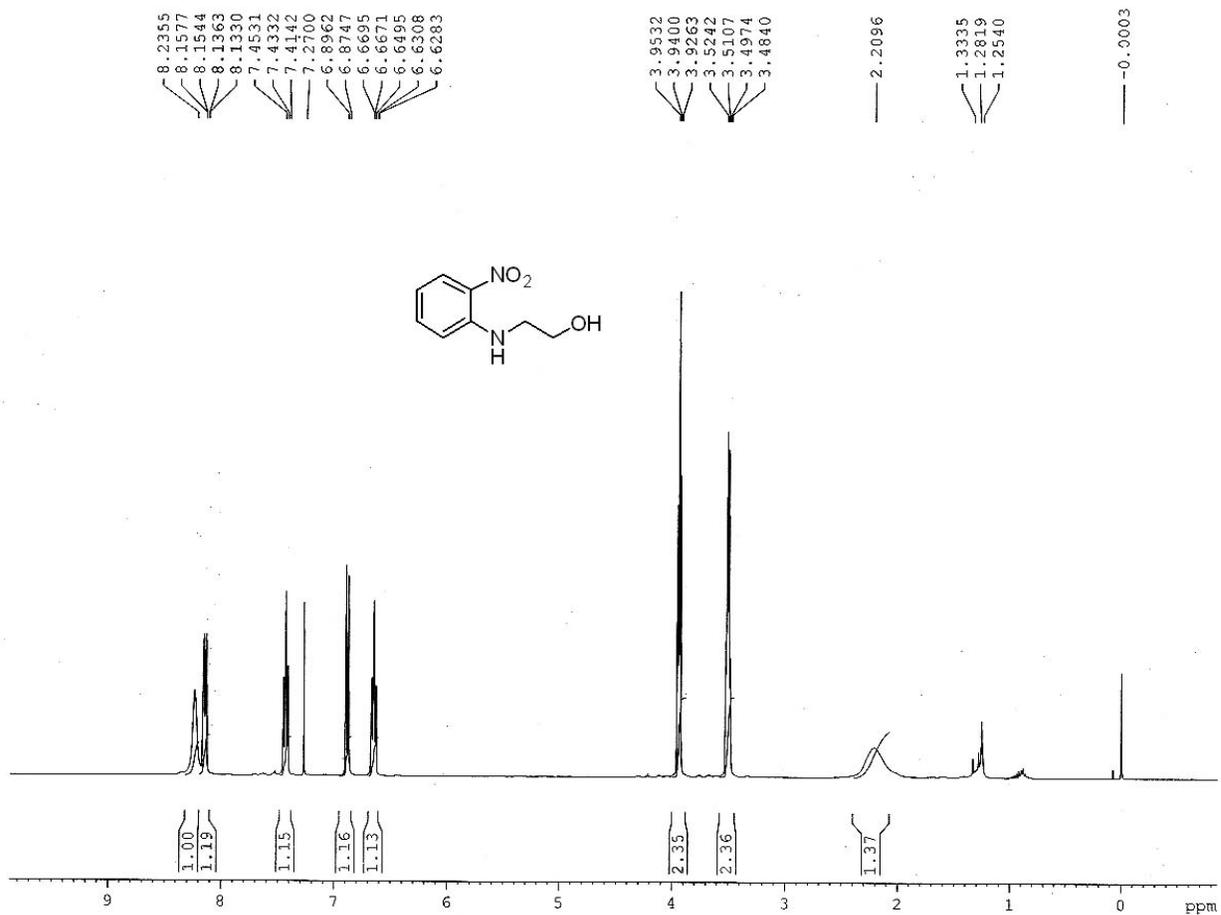


Table 5, Entry 9: ¹H NMR

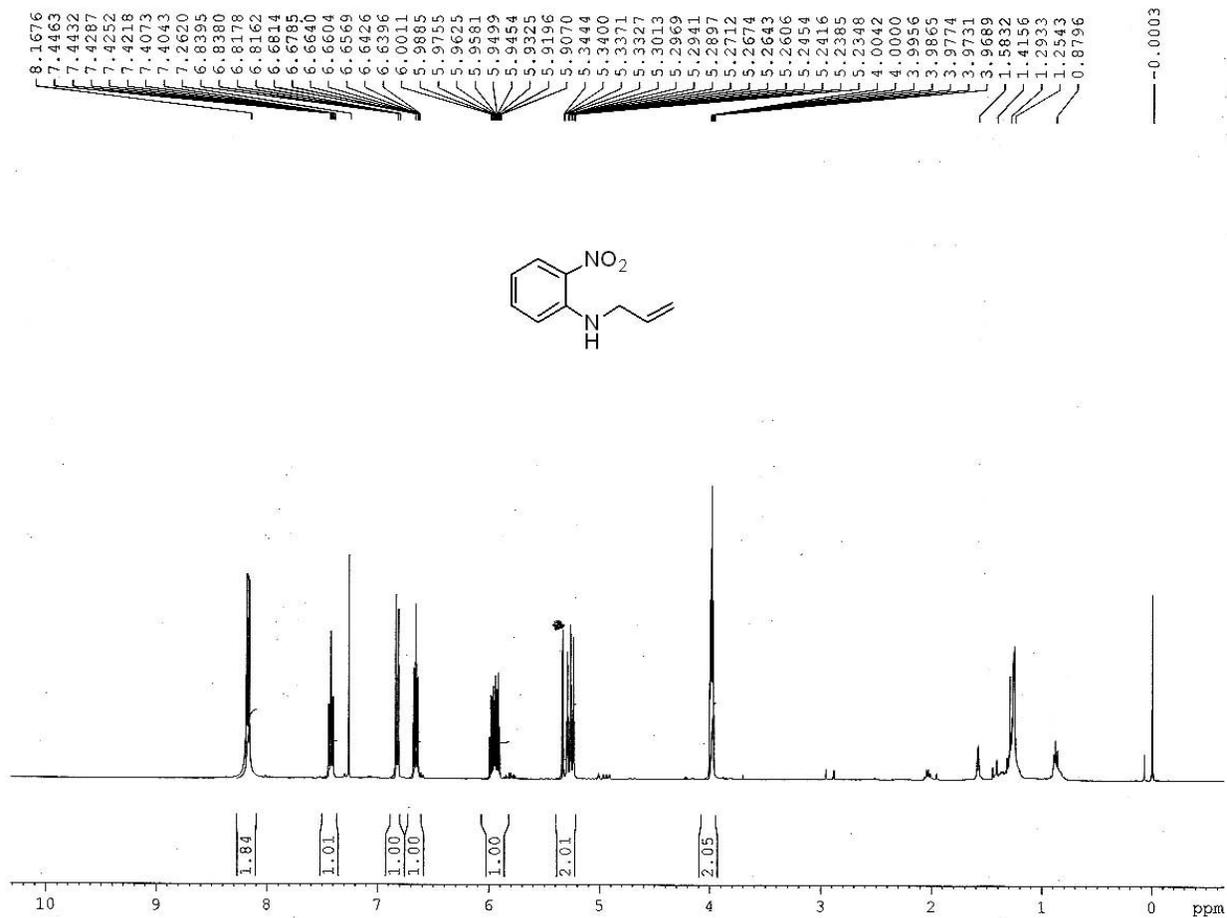


Table 5, Entry 10: ^1H NMR

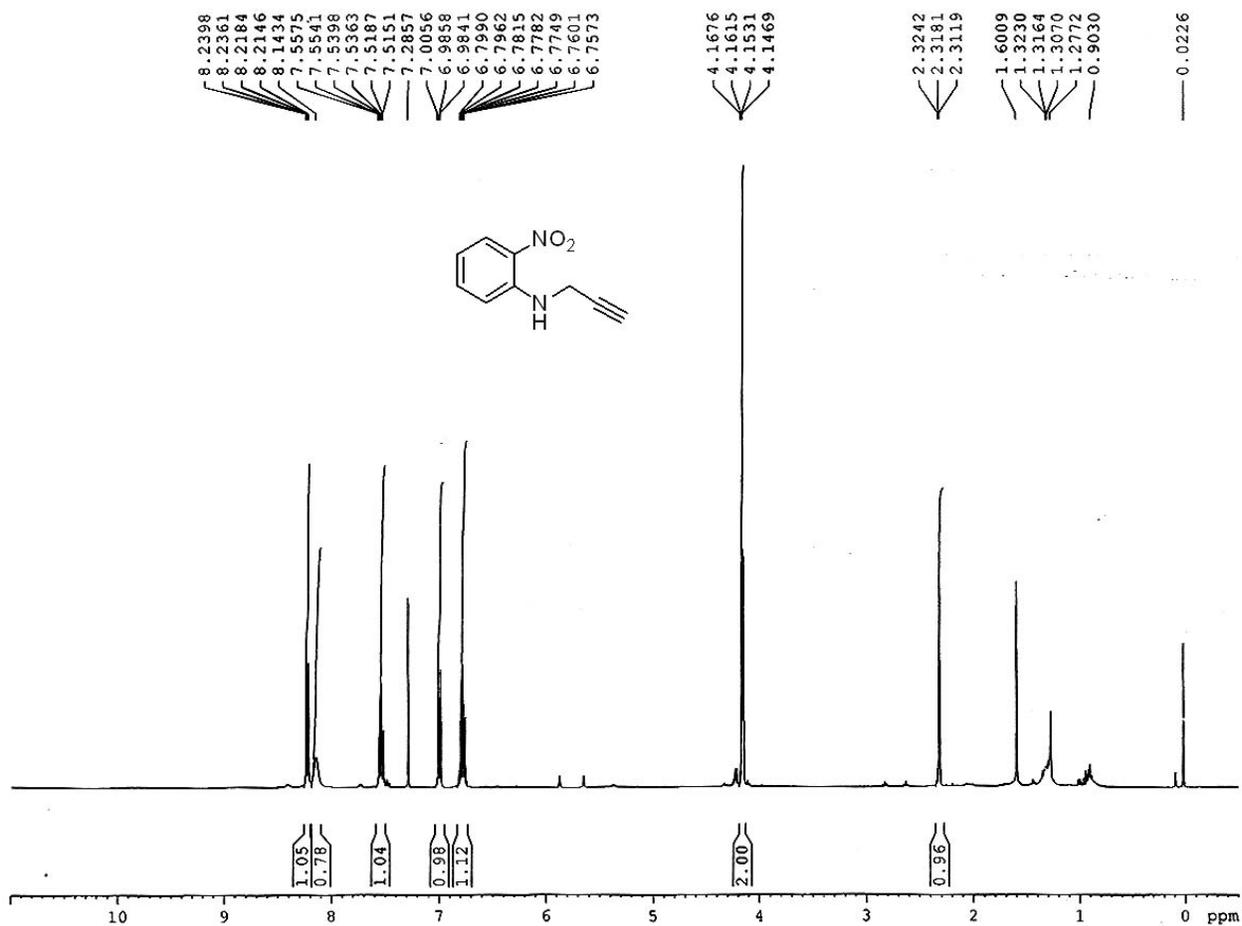
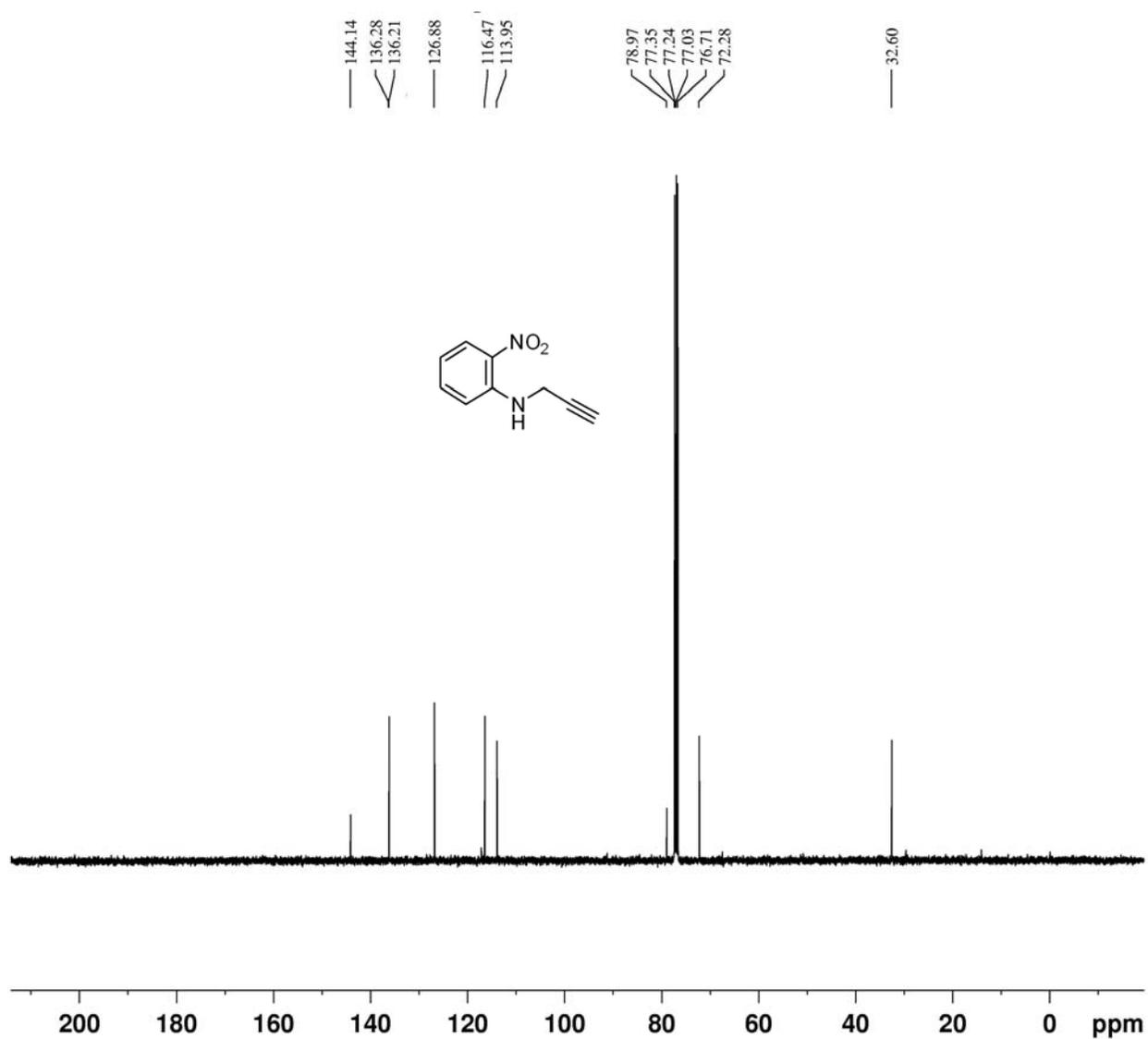


Table 5, Entry 10: ^{13}C NMR



^1H NMR spectra of *N*¹-phenylbenzene-1,2-diamine

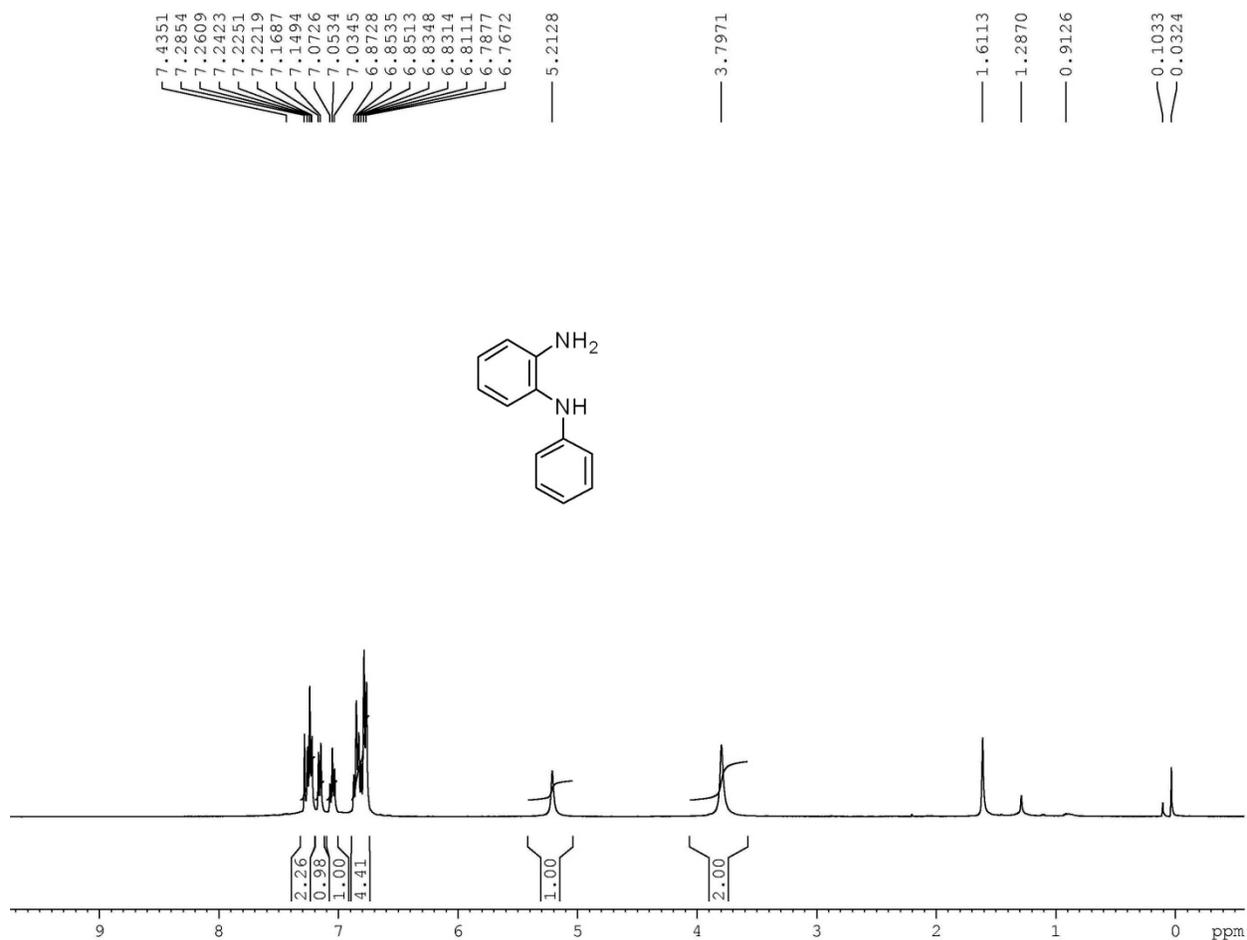


Table 6, Entry 1: ^1H NMR

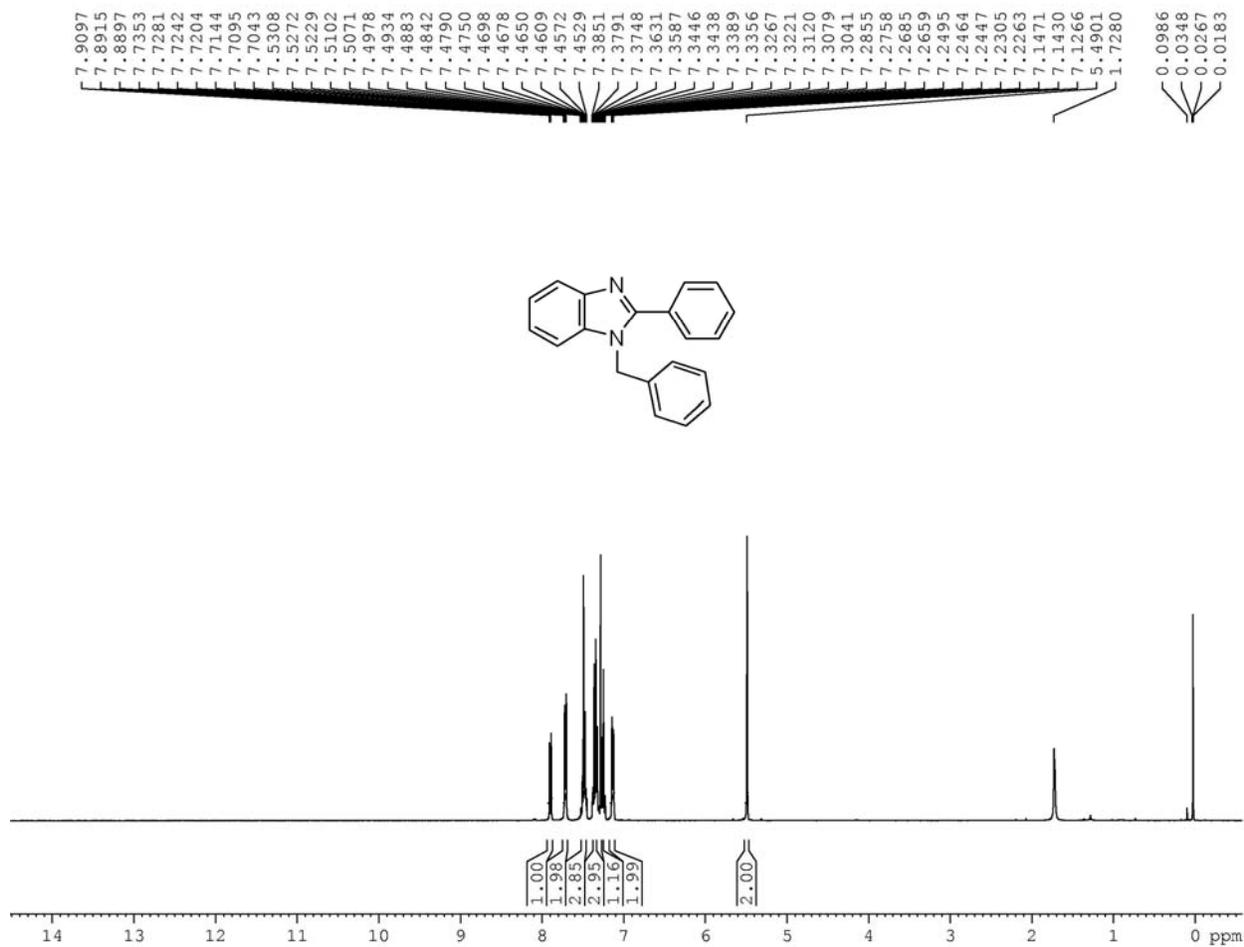


Table 6, Entry 2: ¹H NMR

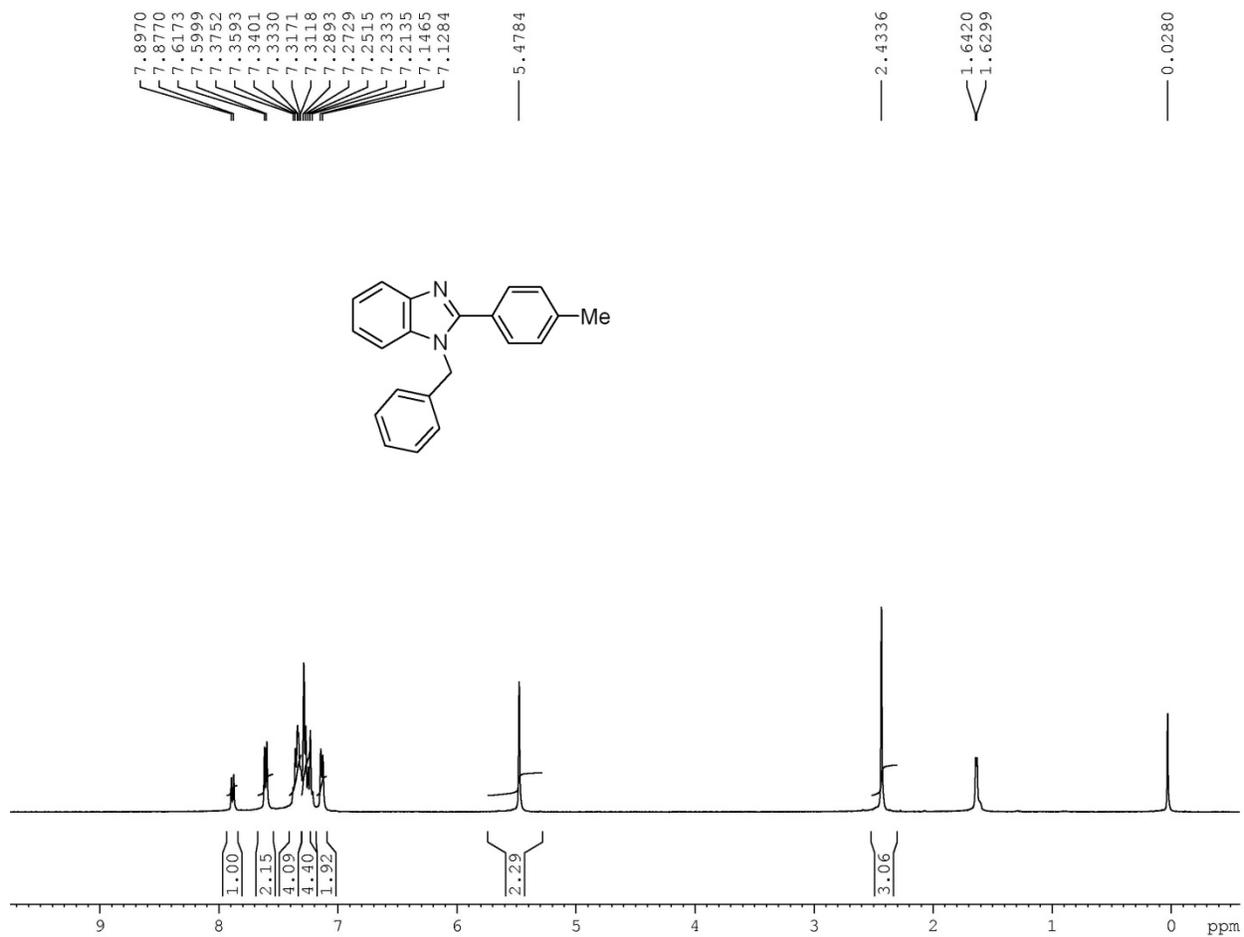


Table 6, Entry 3: ^1H NMR

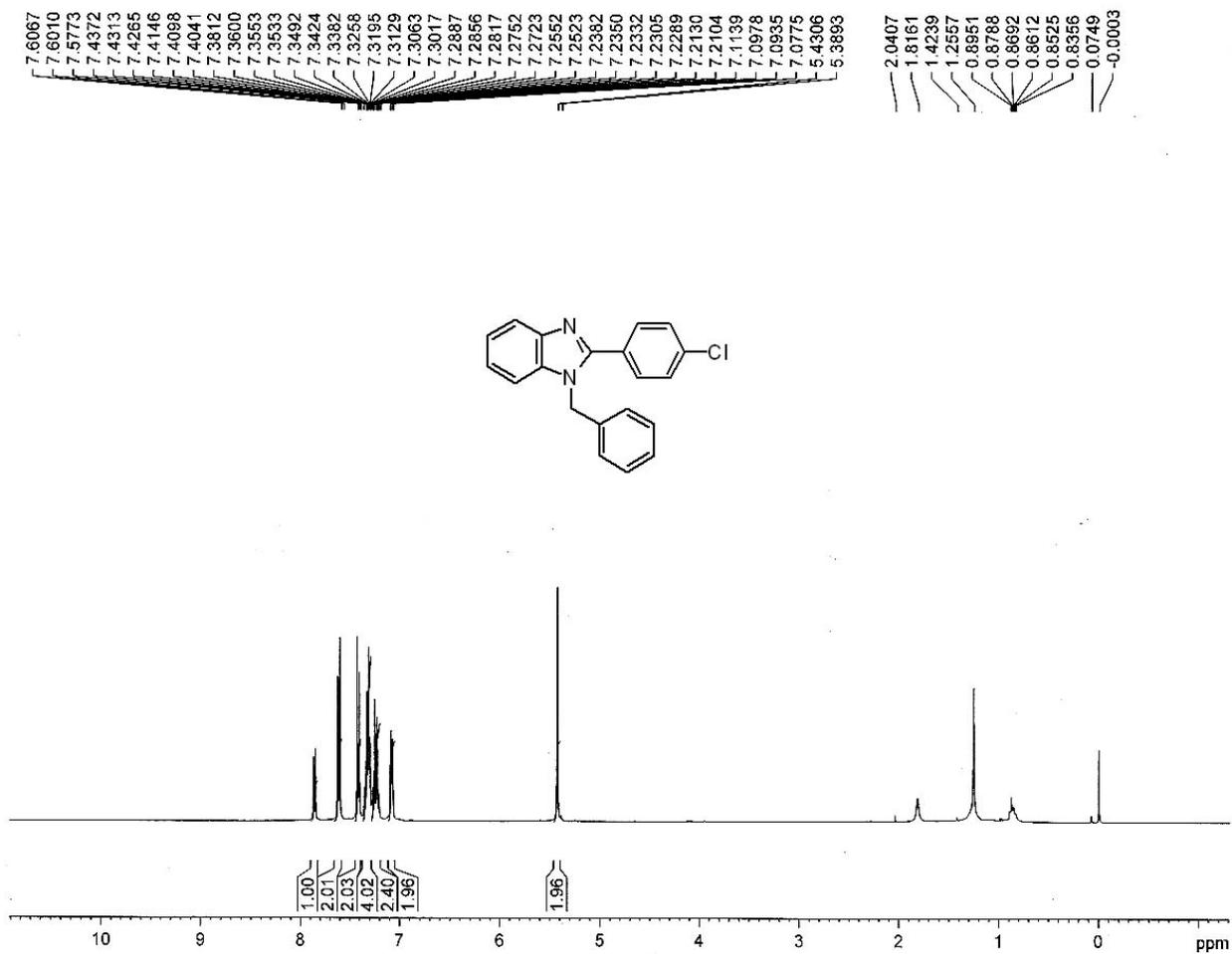


Table 6, Entry 4: ^1H NMR

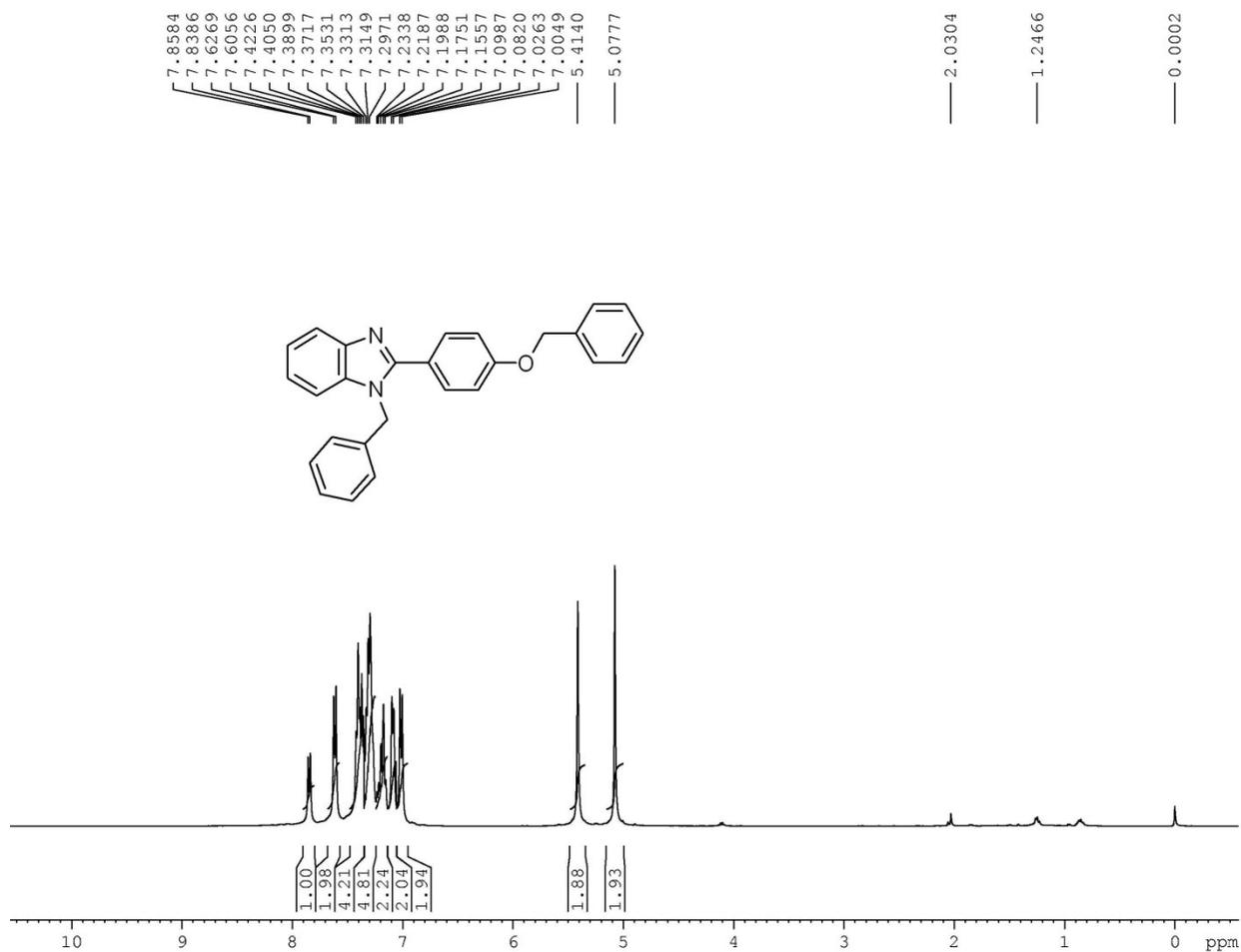


Table 6, Entry 4: ^{13}C NMR

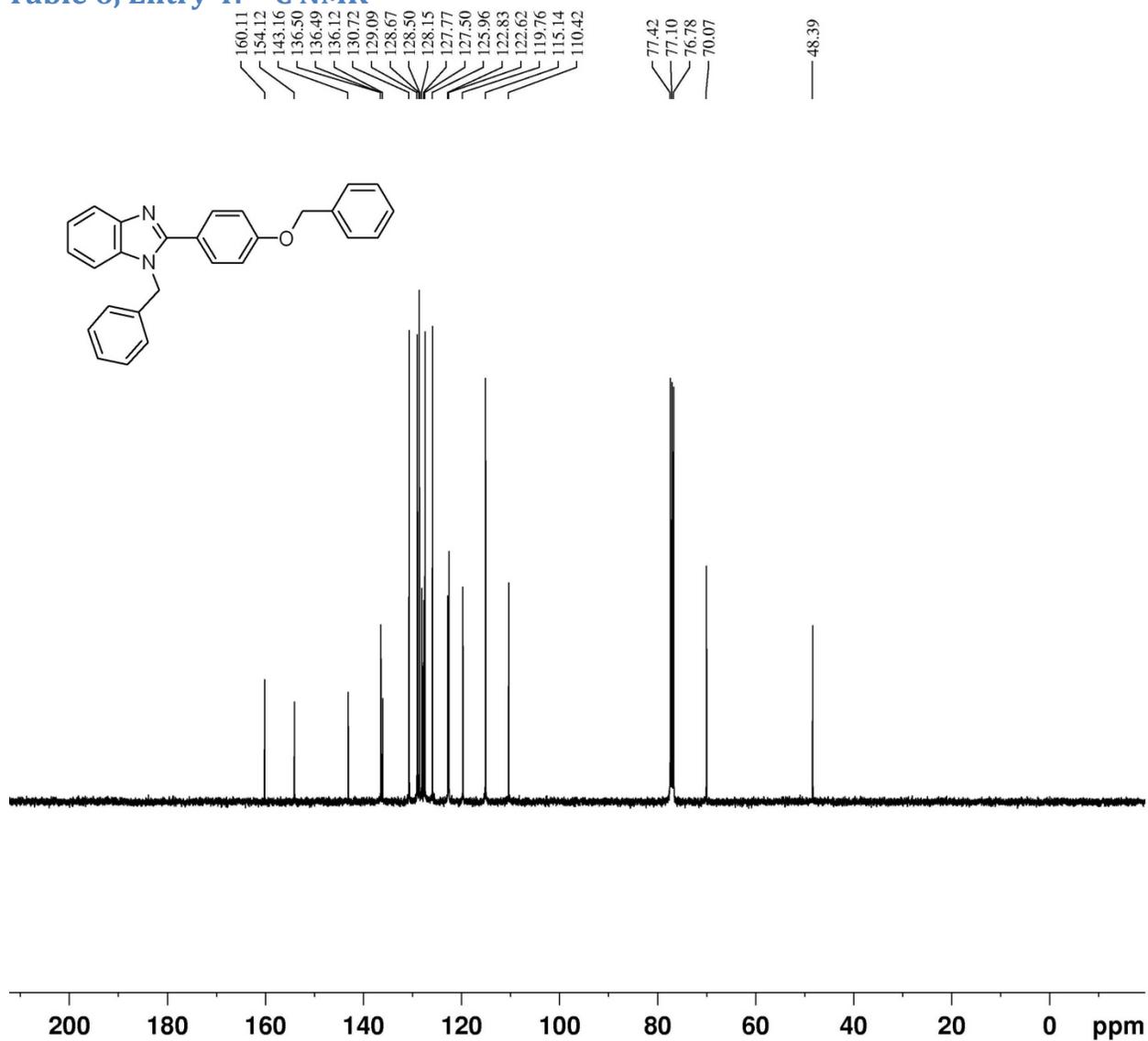


Table 6, Entry 5: ^1H NMR

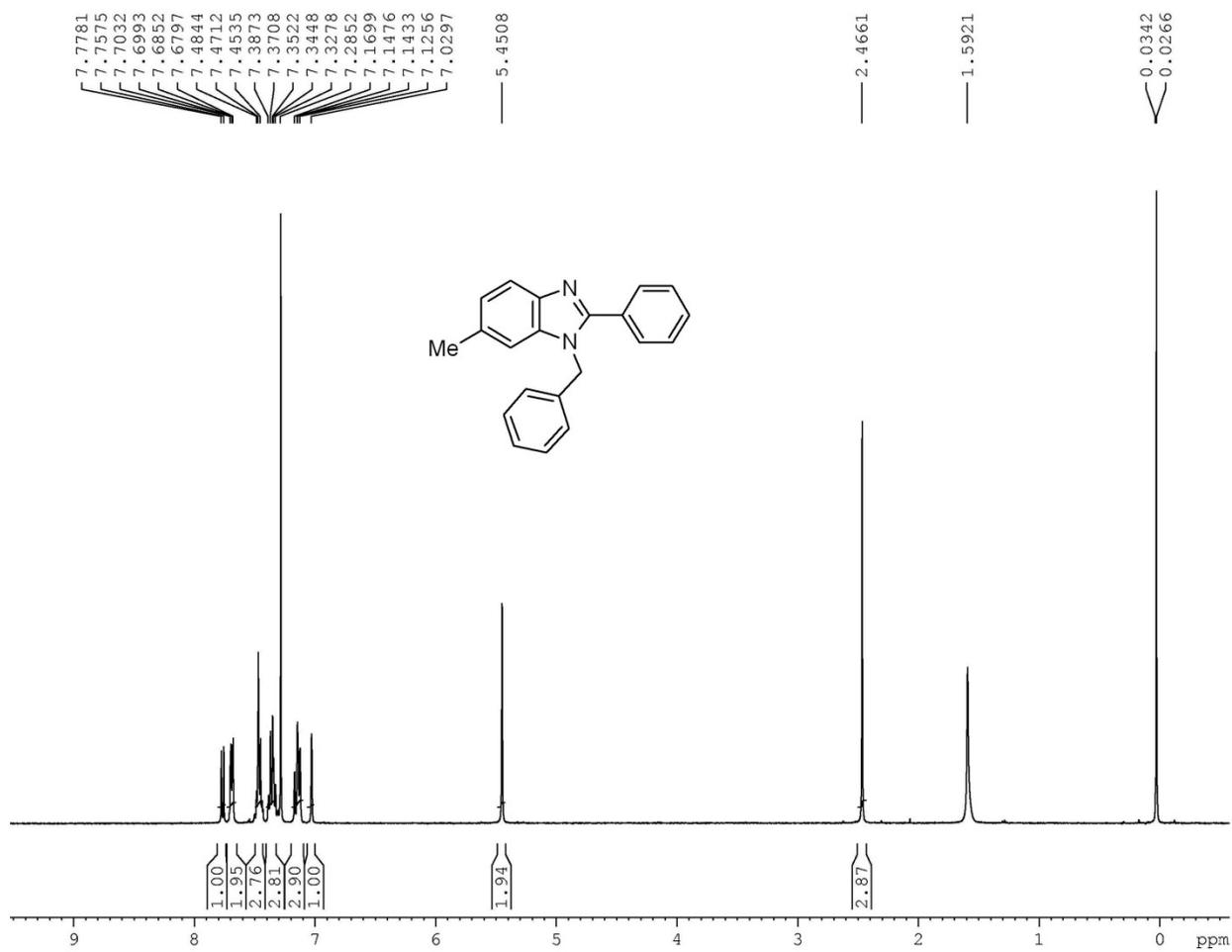


Table 6, Entry 6: ^1H NMR

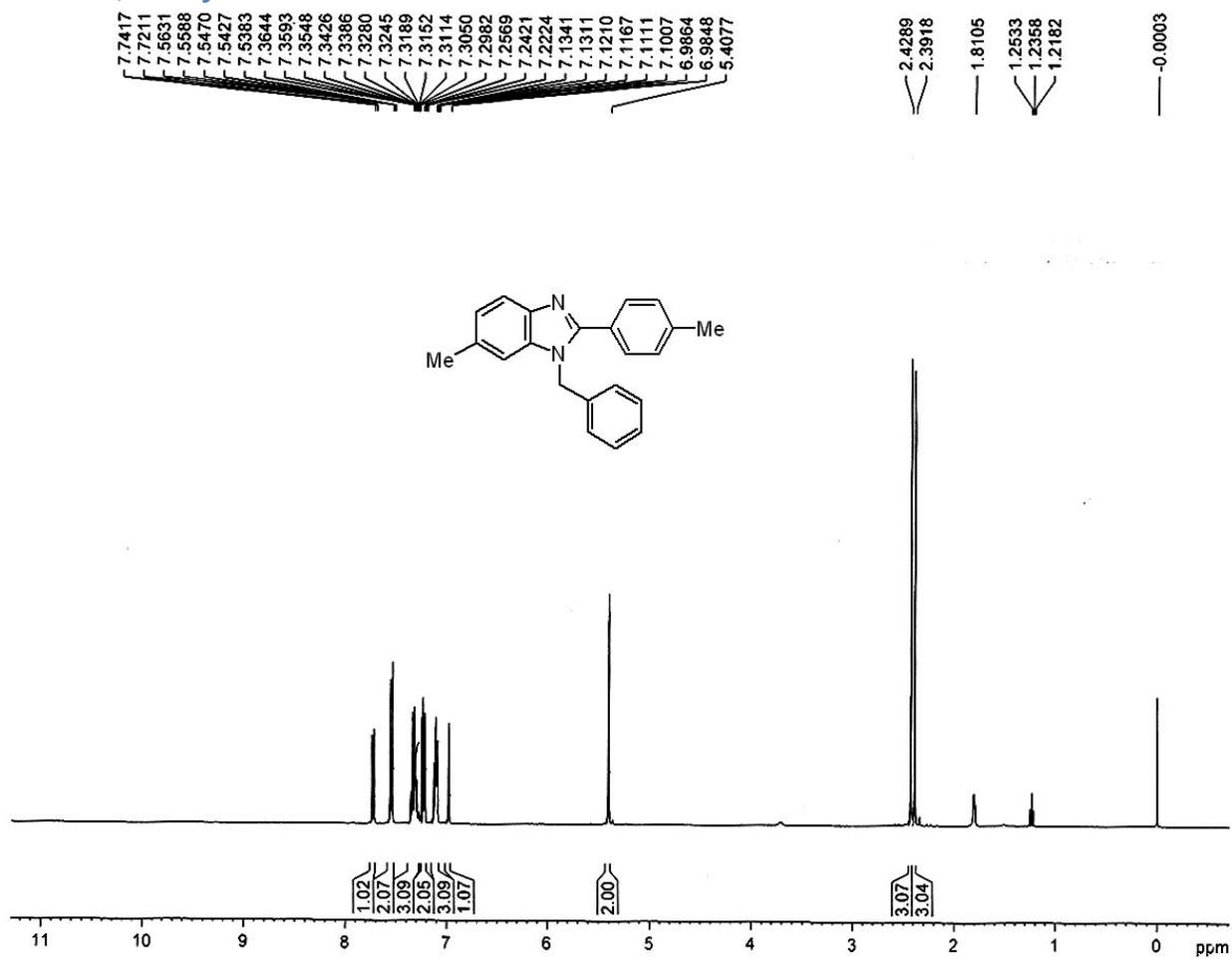


Table 6, Entry 6: ^{13}C NMR

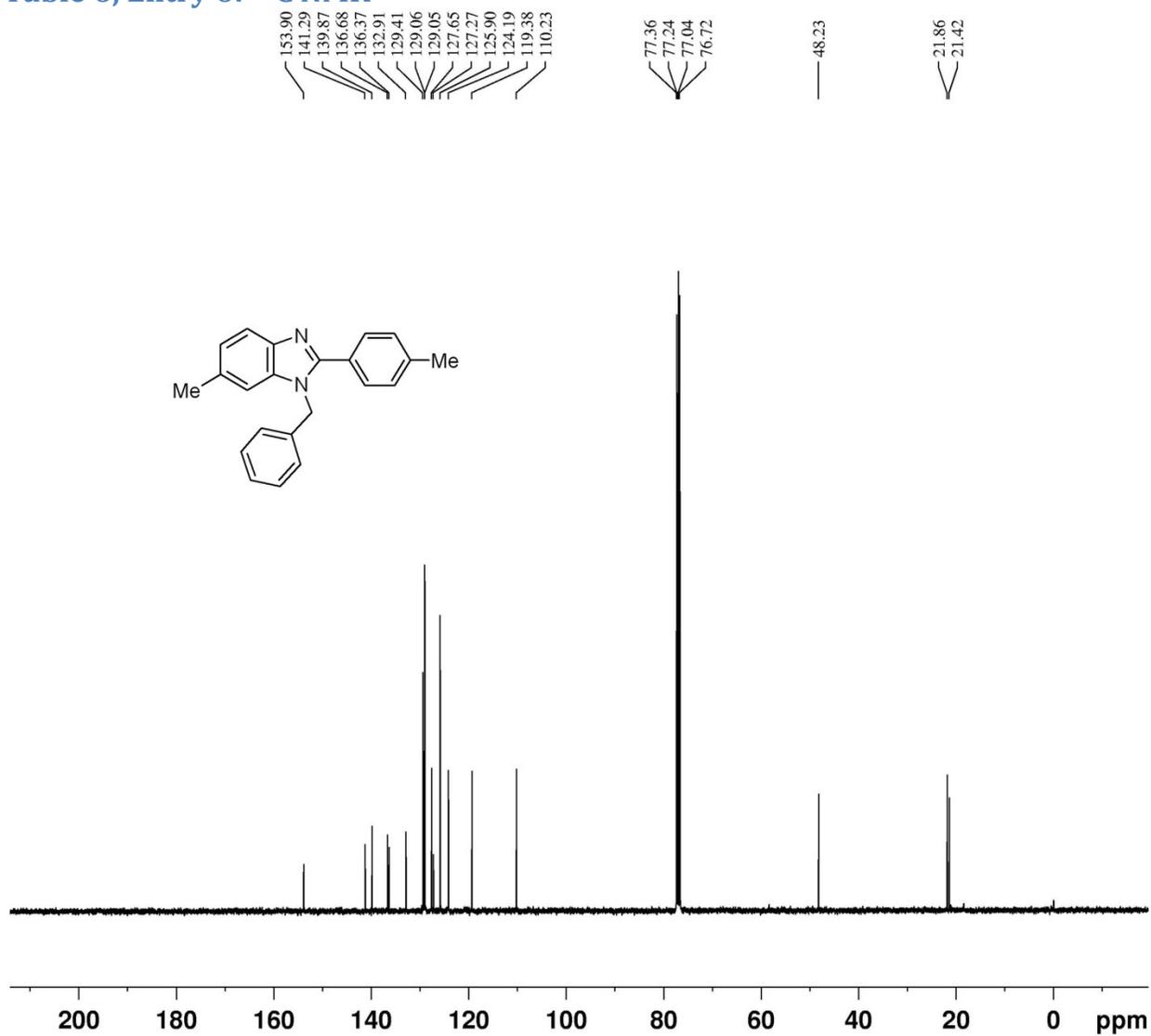


Table 6, Entry 7: ^1H NMR

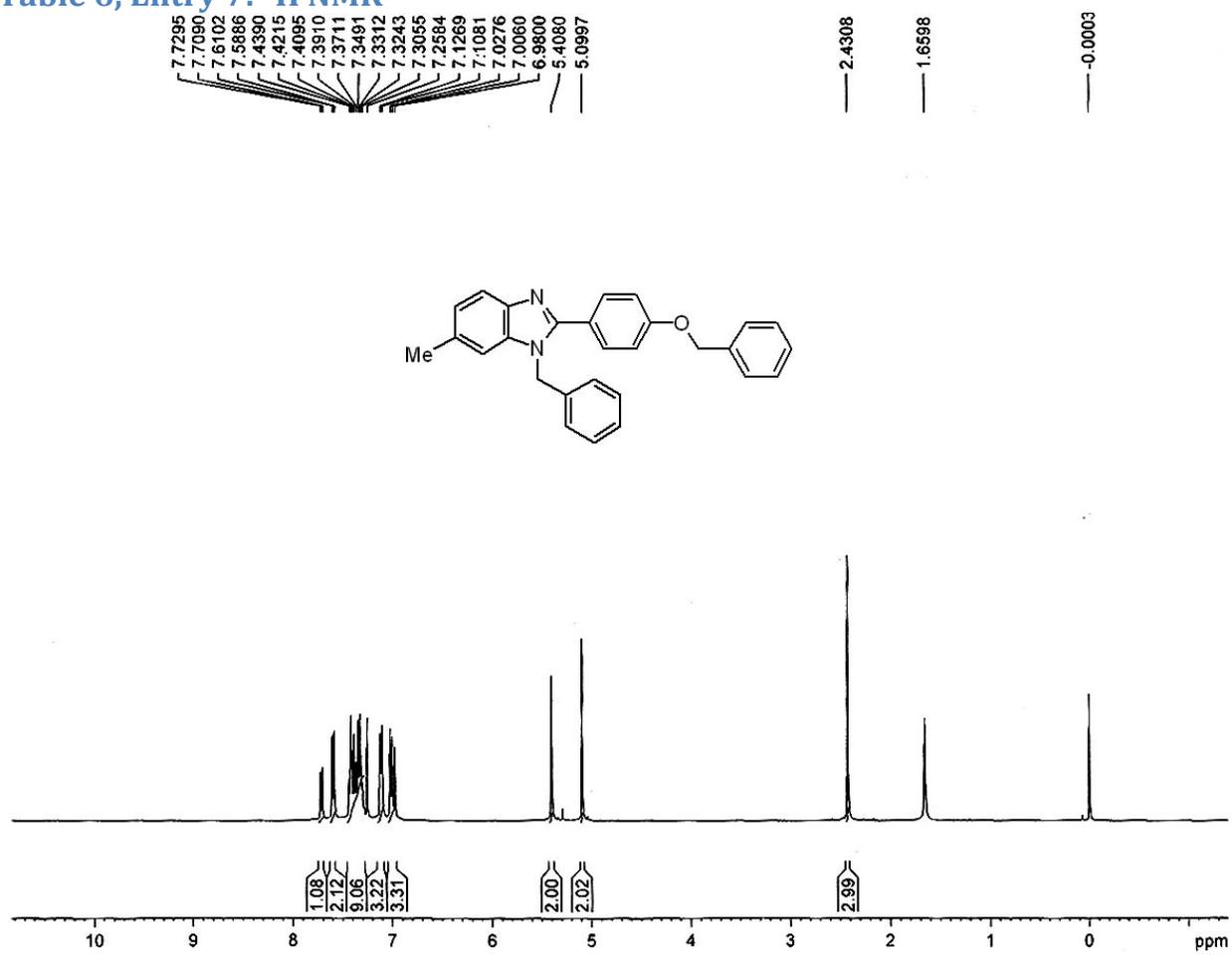


Table 6, Entry 7: ^{13}C NMR

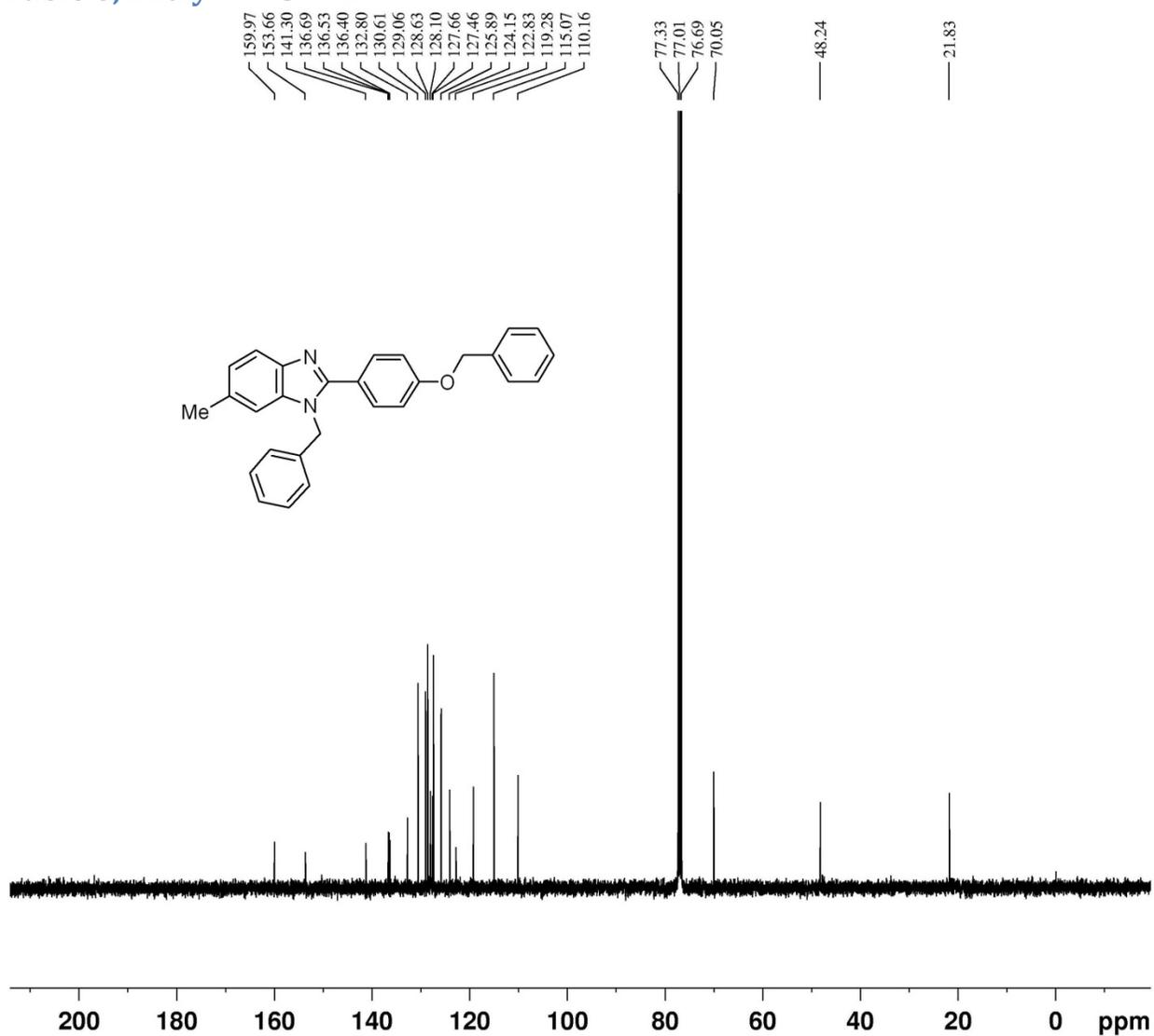


Table 6, Entry 8: ^1H NMR

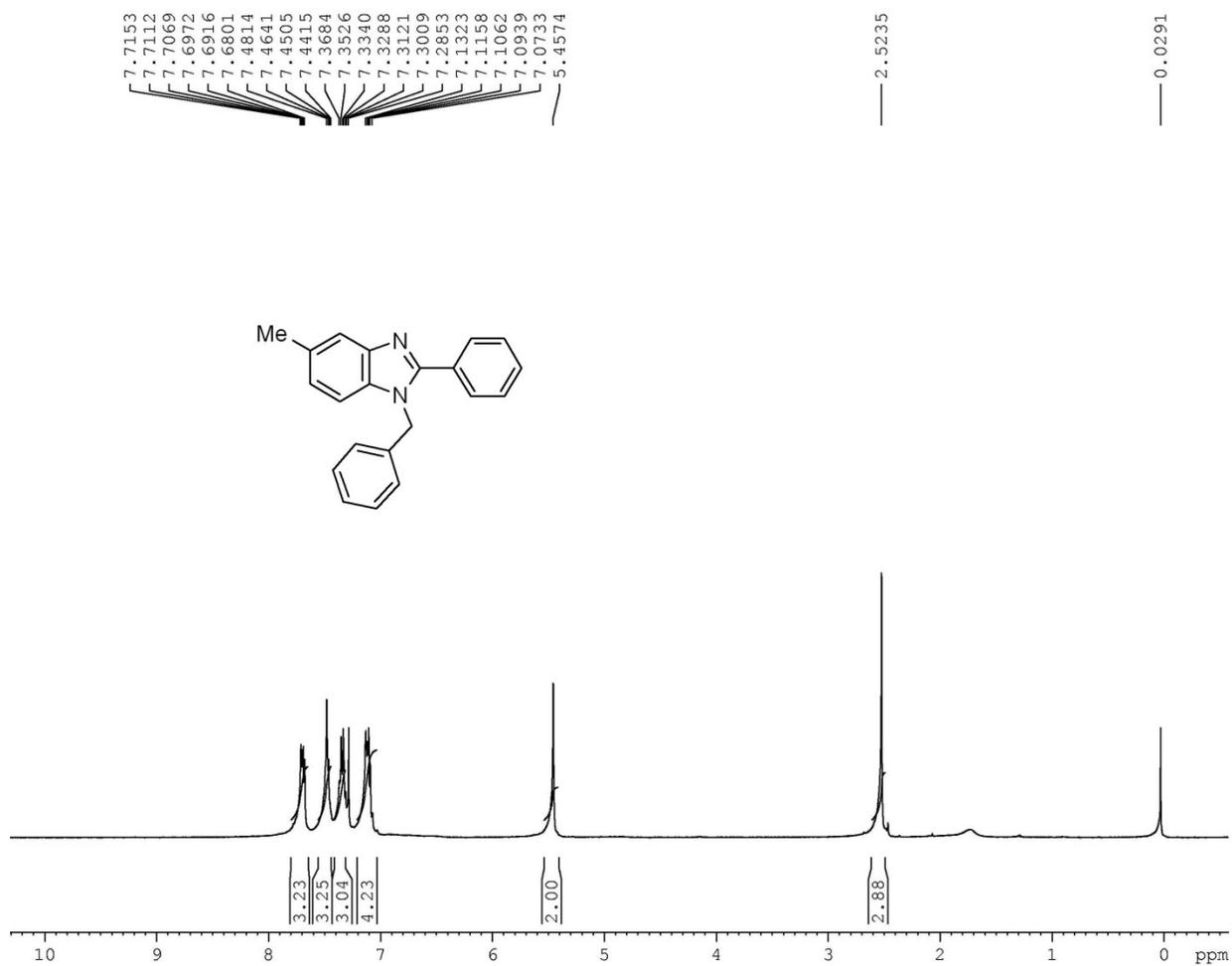


Table 6, Entry 9: ¹H NMR

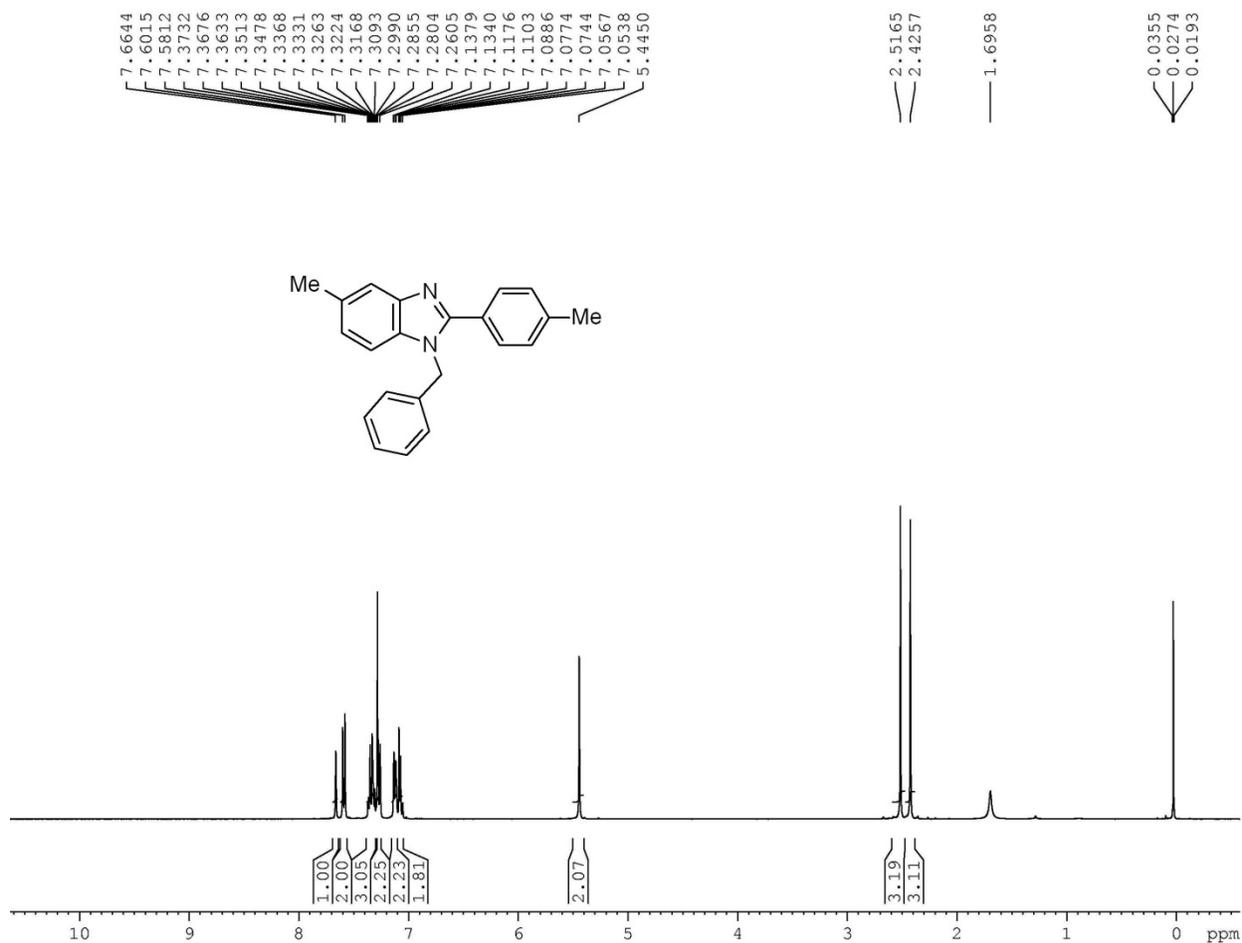


Table 6, Entry 10: ¹HNMR

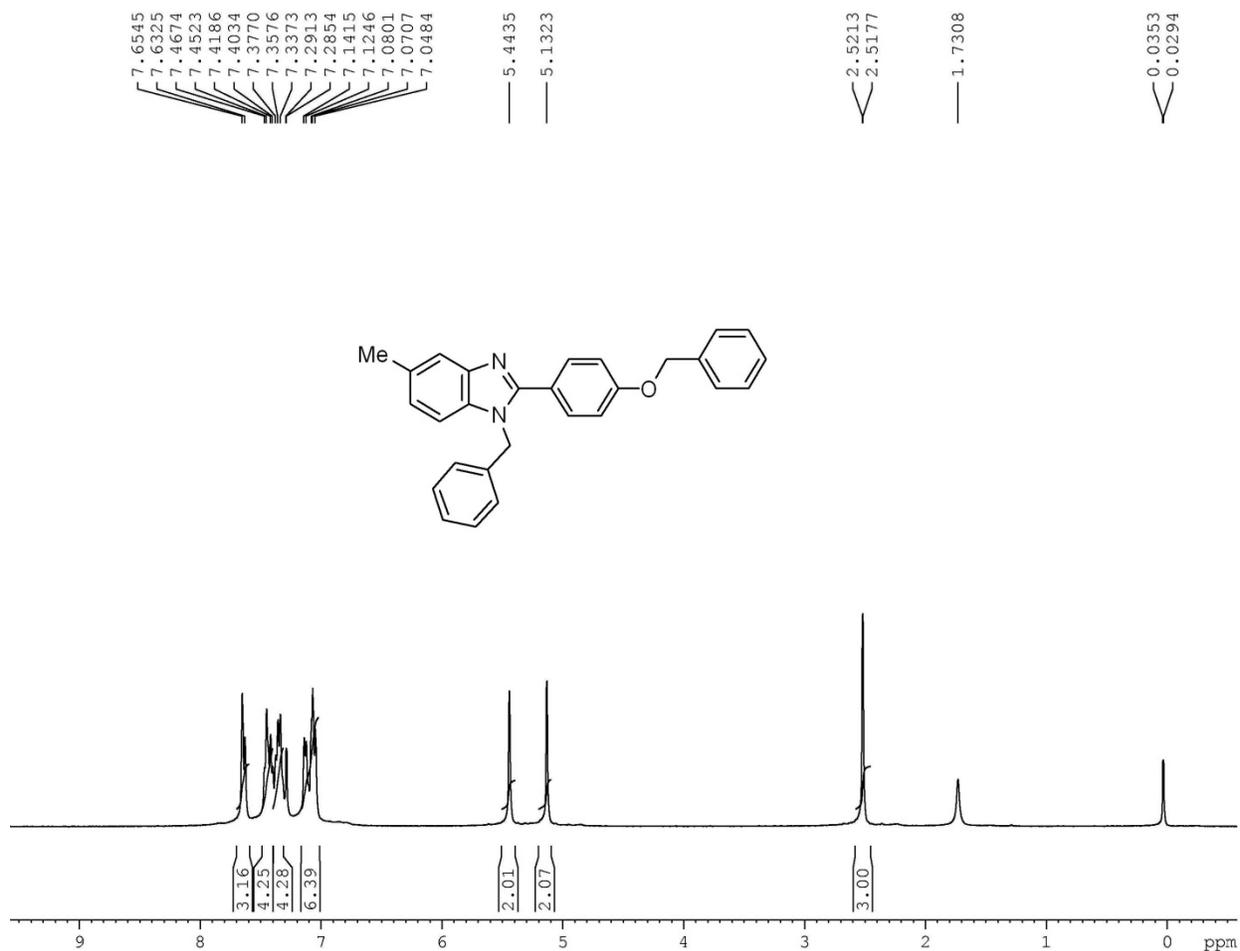


Table 6, Entry 10: ^{13}C NMR

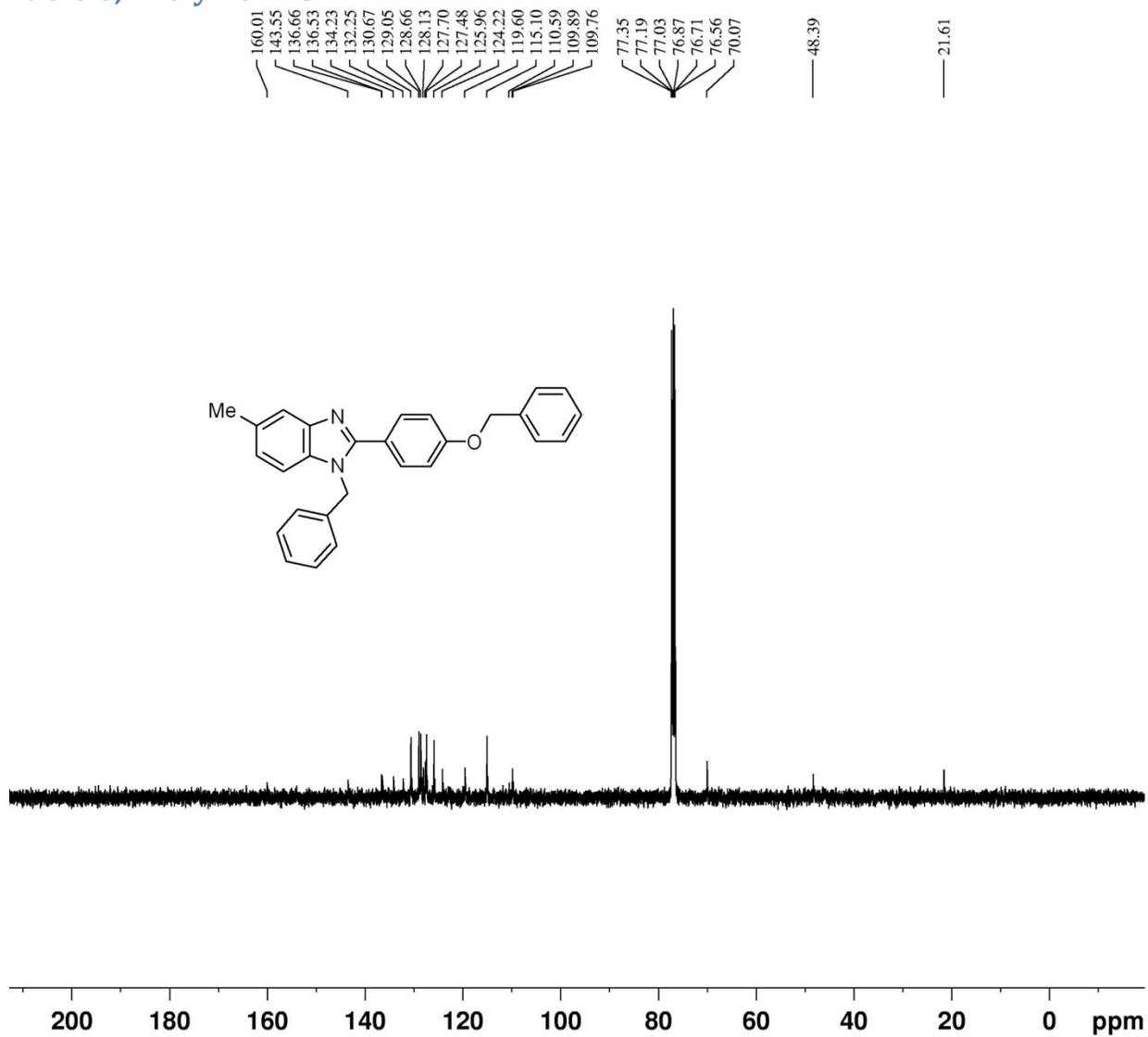


Table 6, Entry 11: ^1H NMR

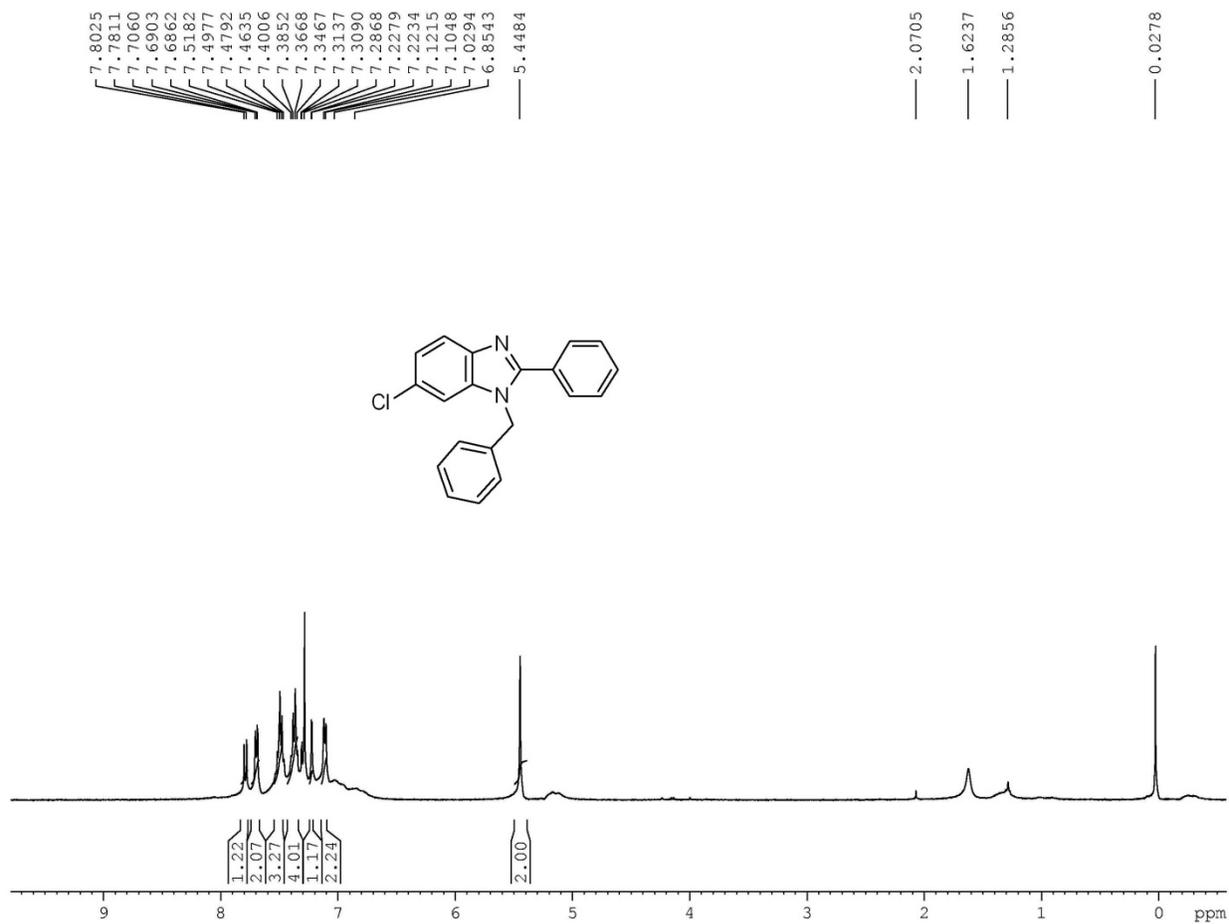


Table 6, Entry 12: ^1H NMR

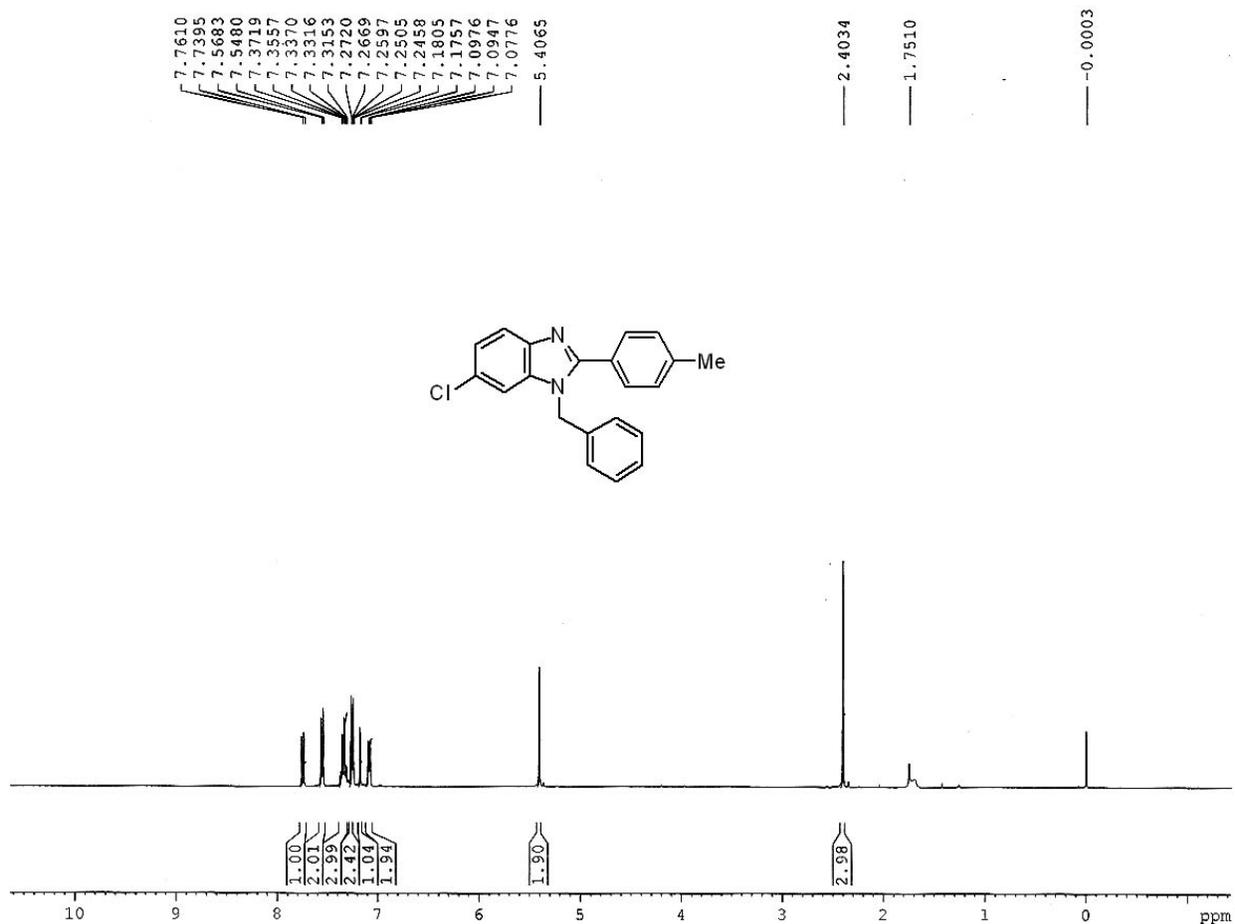


Table 6, Entry 12: ^{13}C NMR

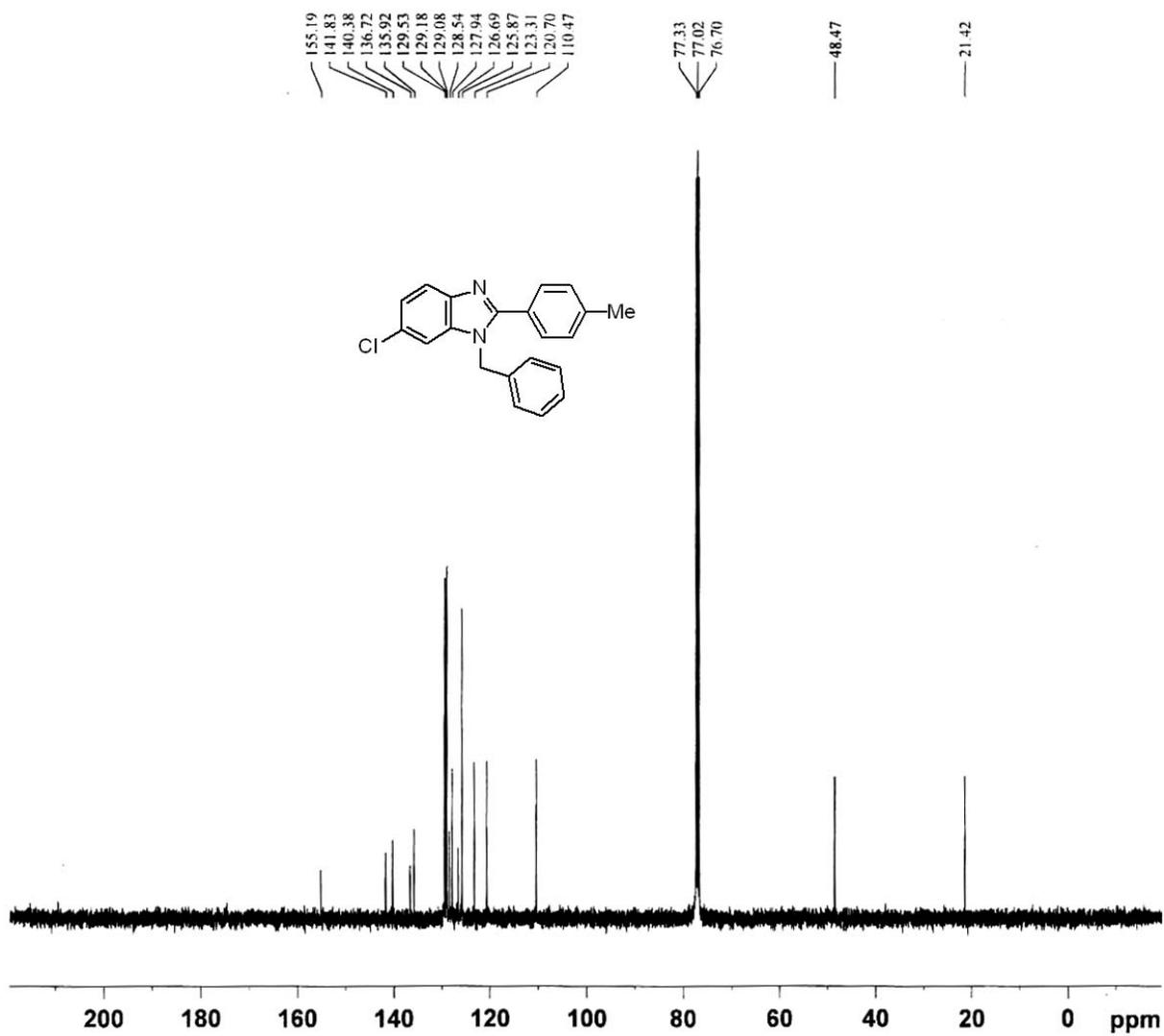


Table 6, Entry 13: ^1H NMR

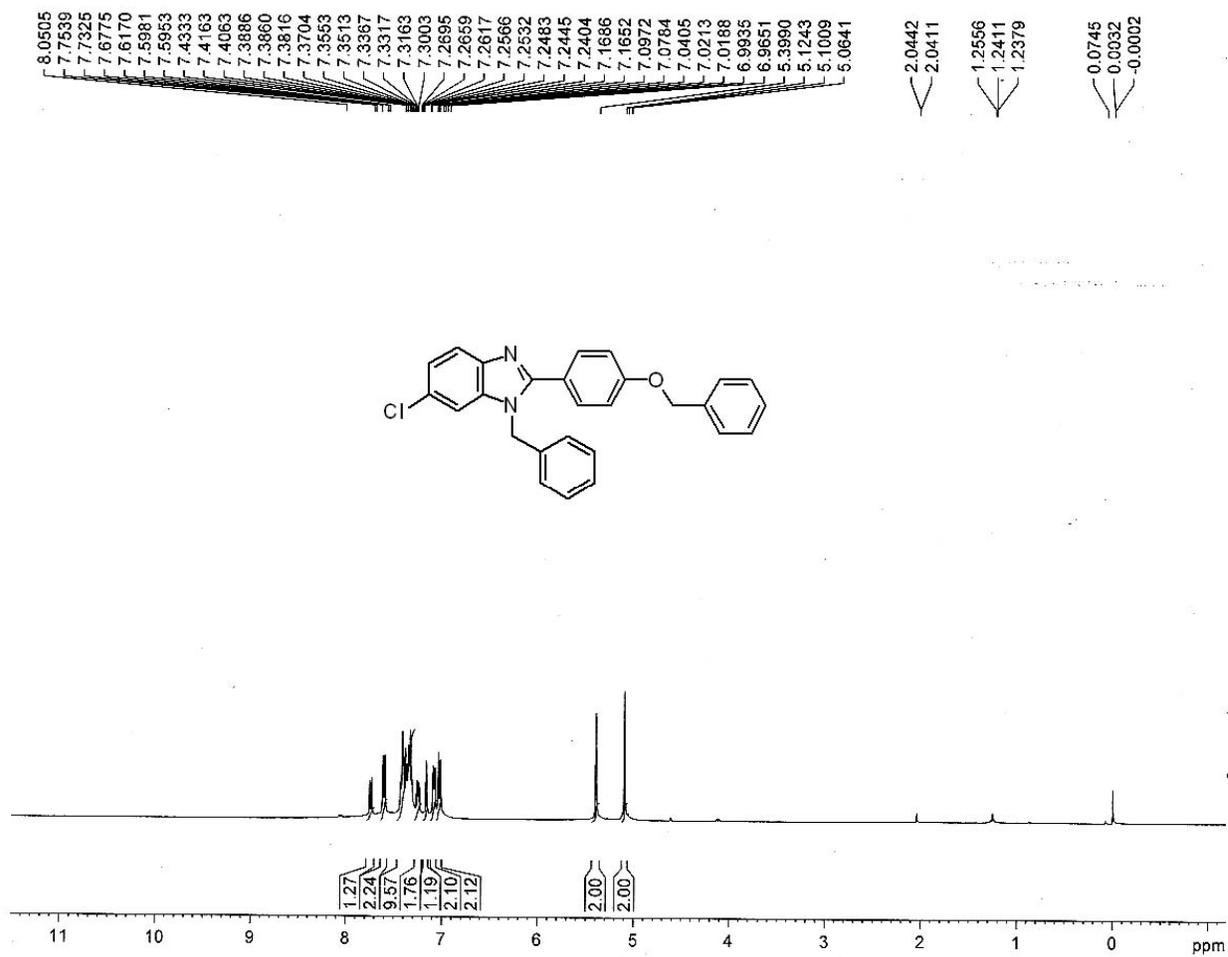


Table 6, Entry 13: ^{13}C NMR

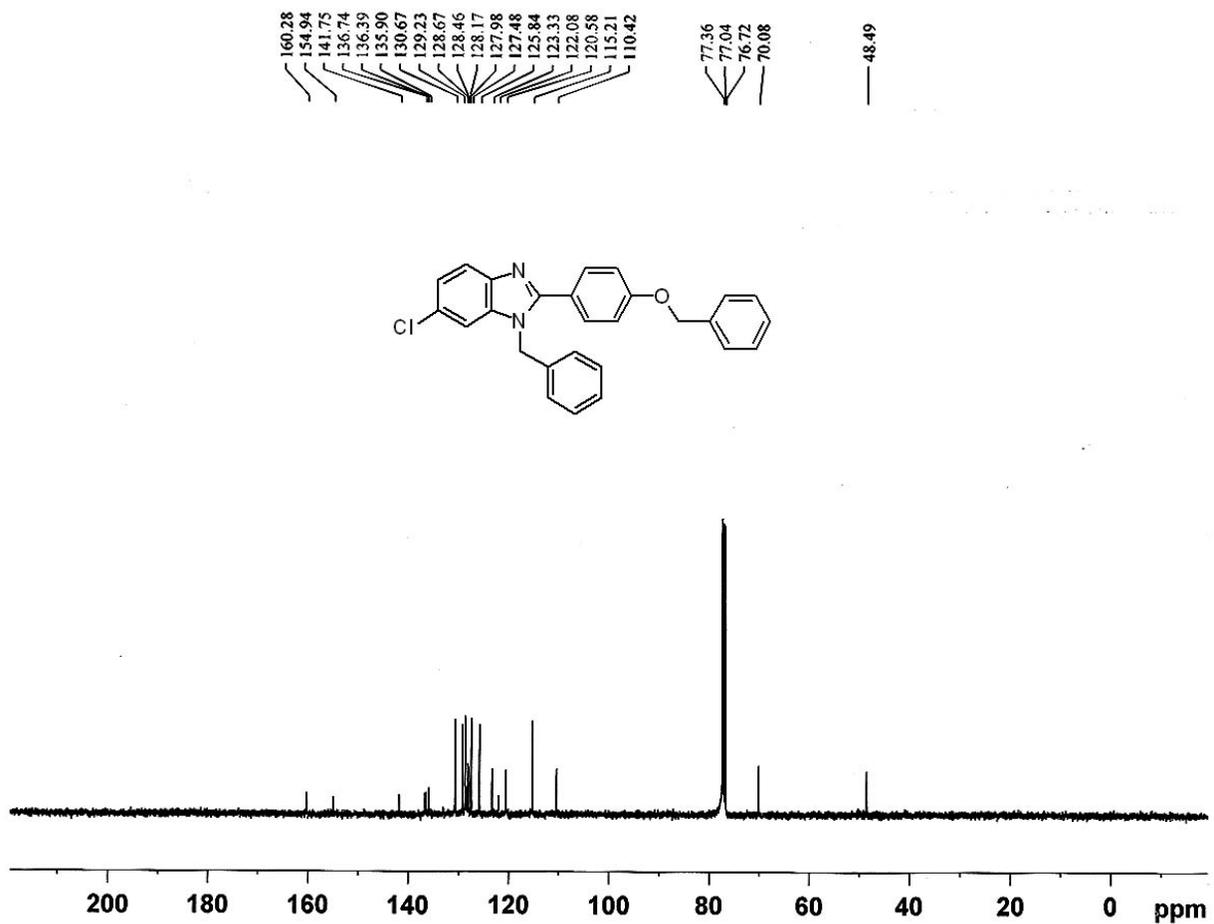


Table 6, Entry 14: ^1H NMR

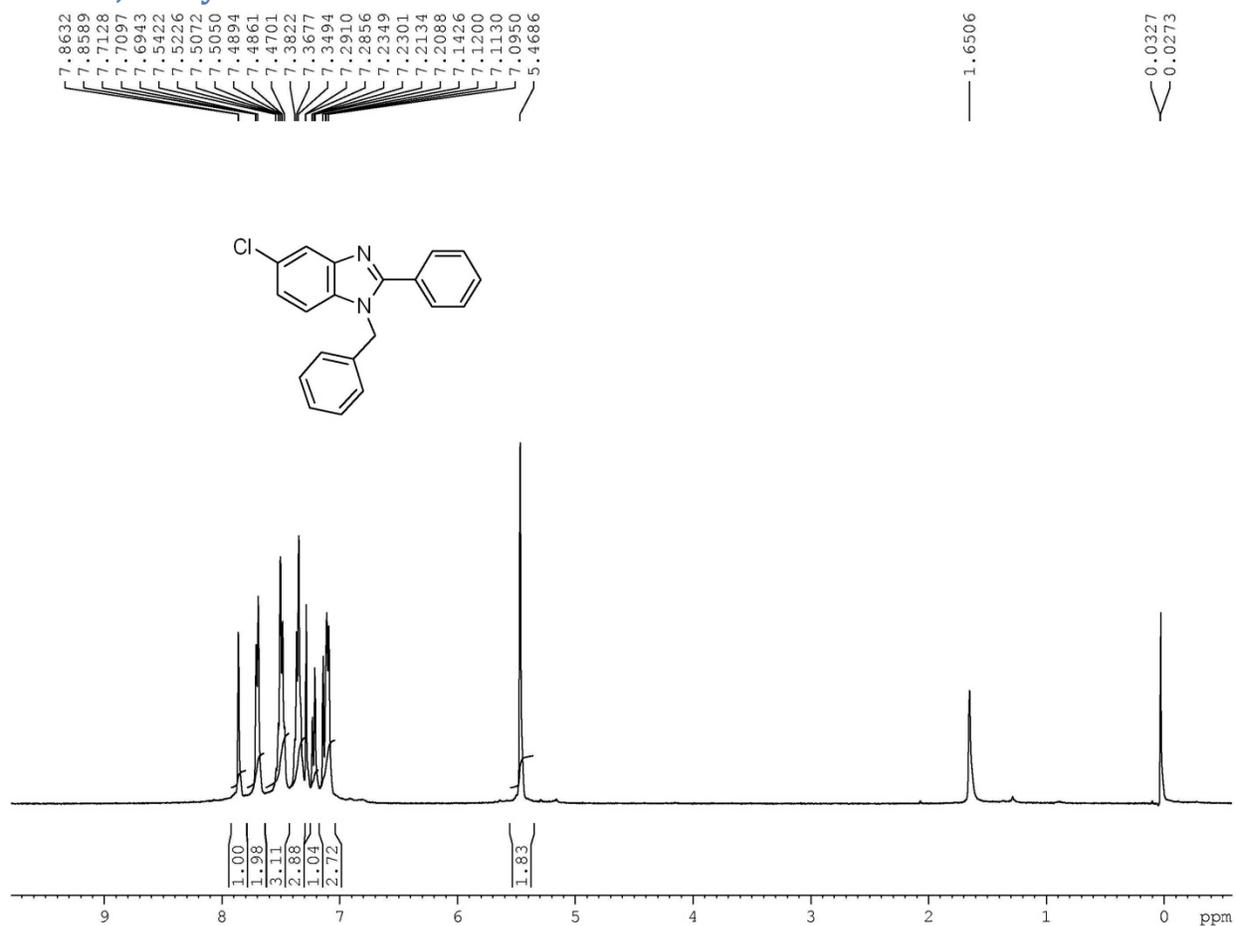


Table 6, Entry 15: ^1H NMR

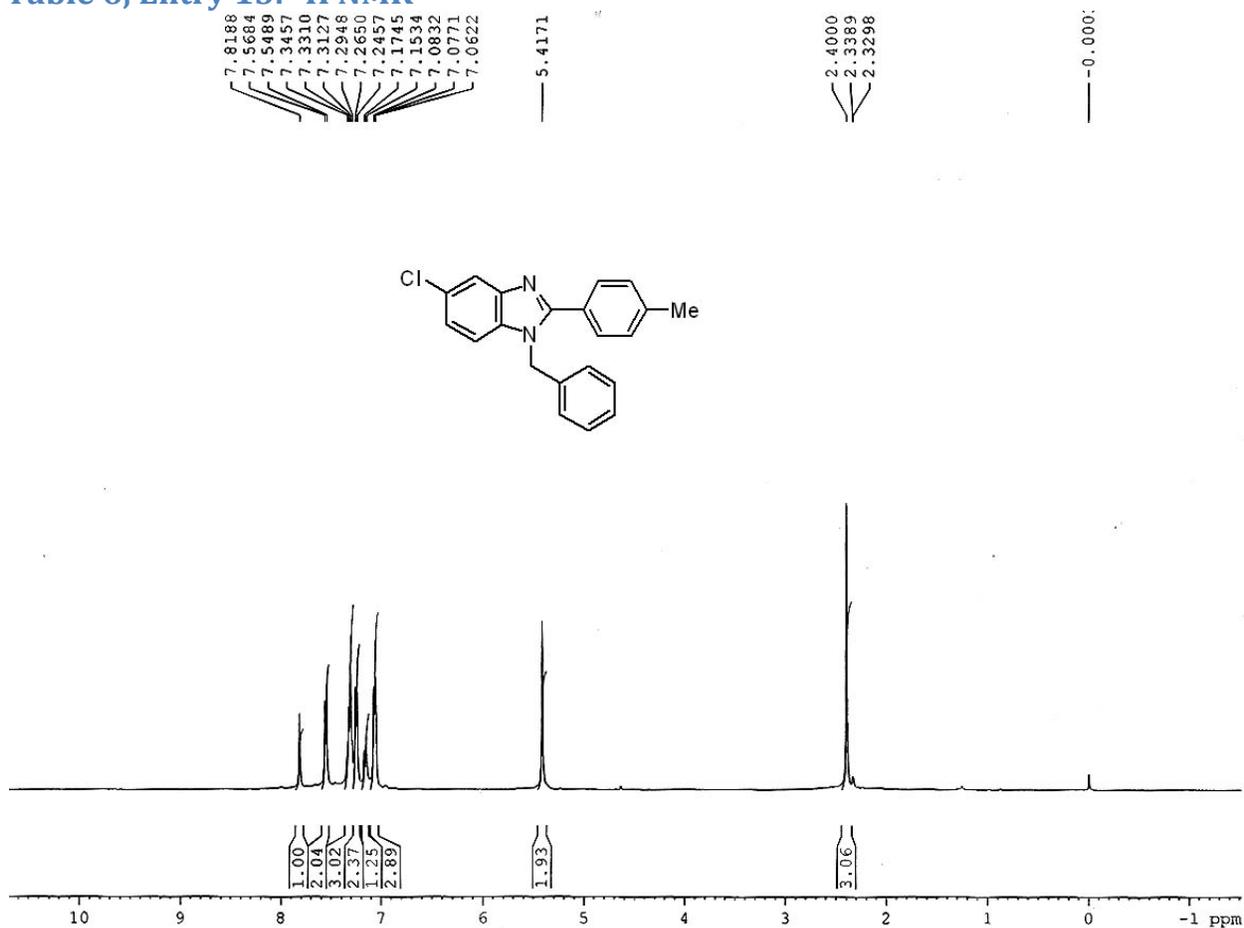


Table 6, Entry 16: ^1H NMR

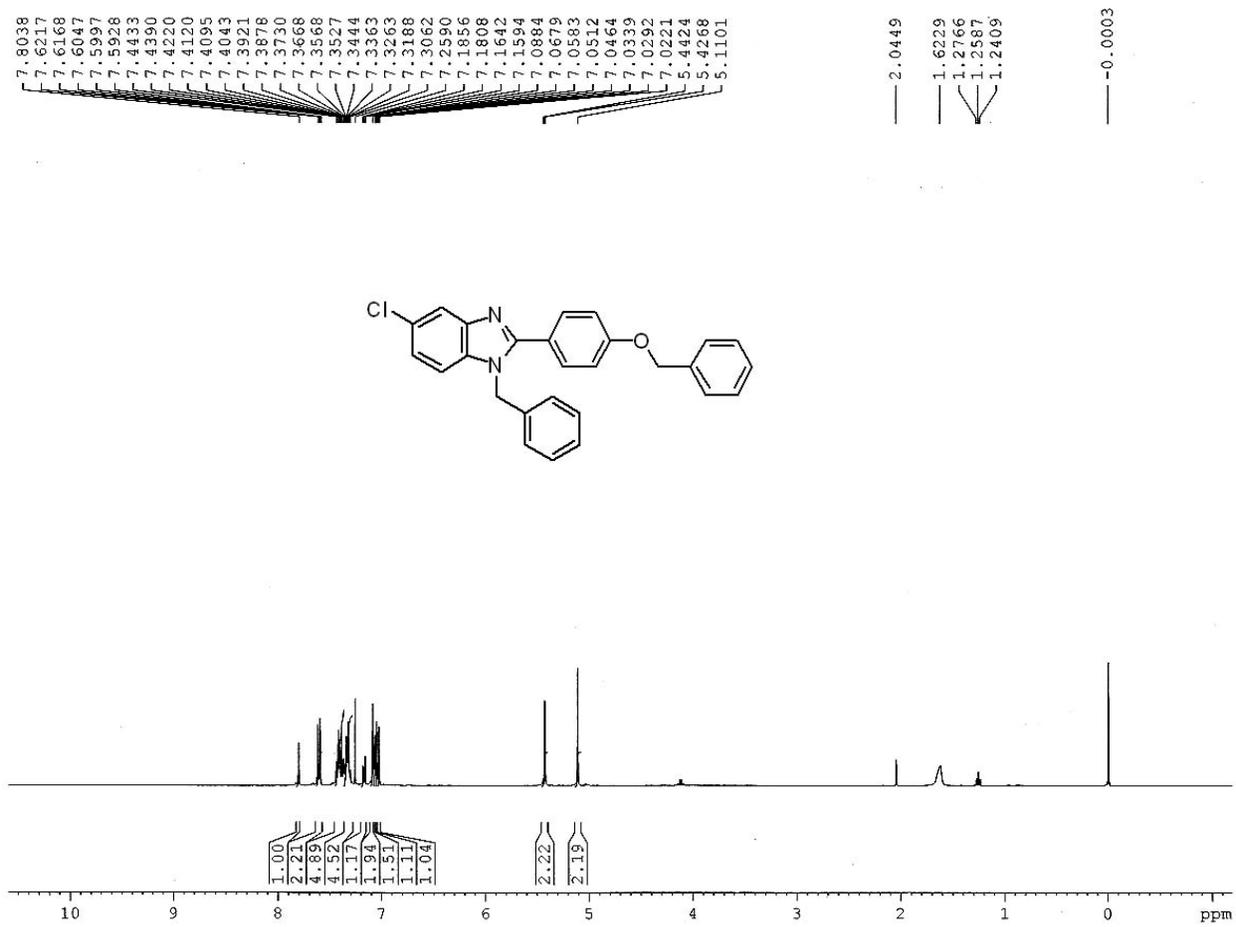


Table 6, Entry 16: ^{13}C NMR

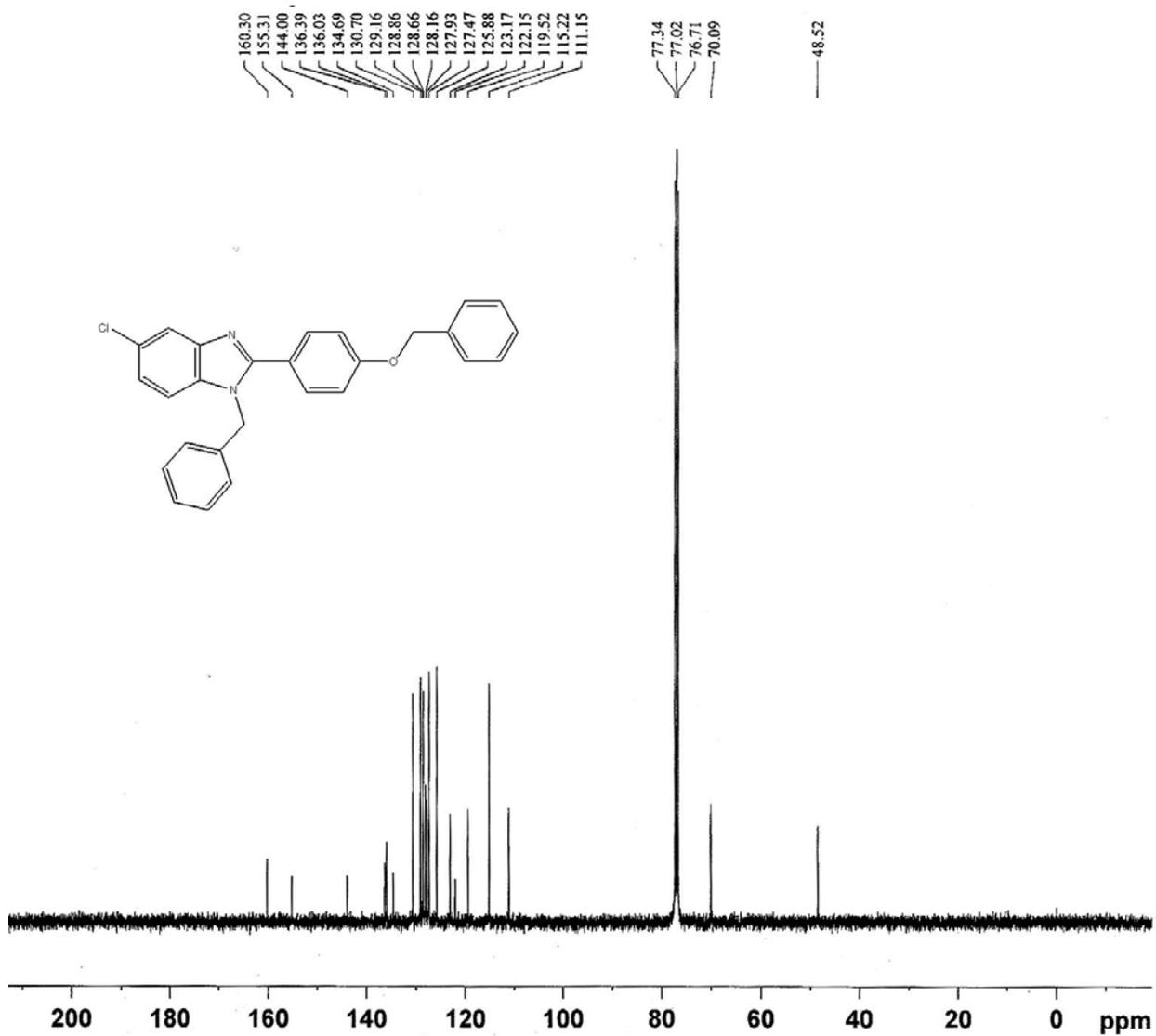


Table 6, Entry 17: ^1H NMR

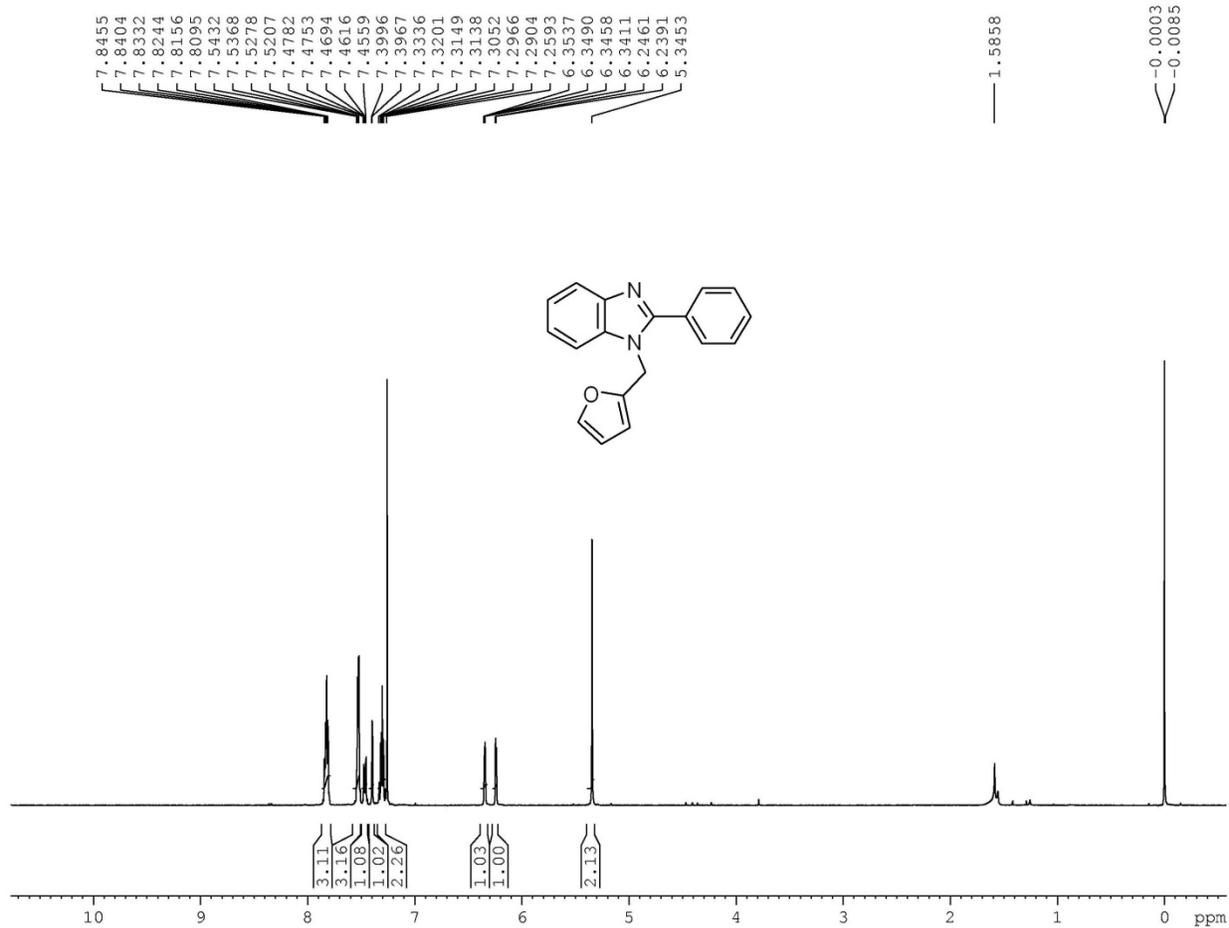


Table 6, Entry 17: ^{13}C NMR

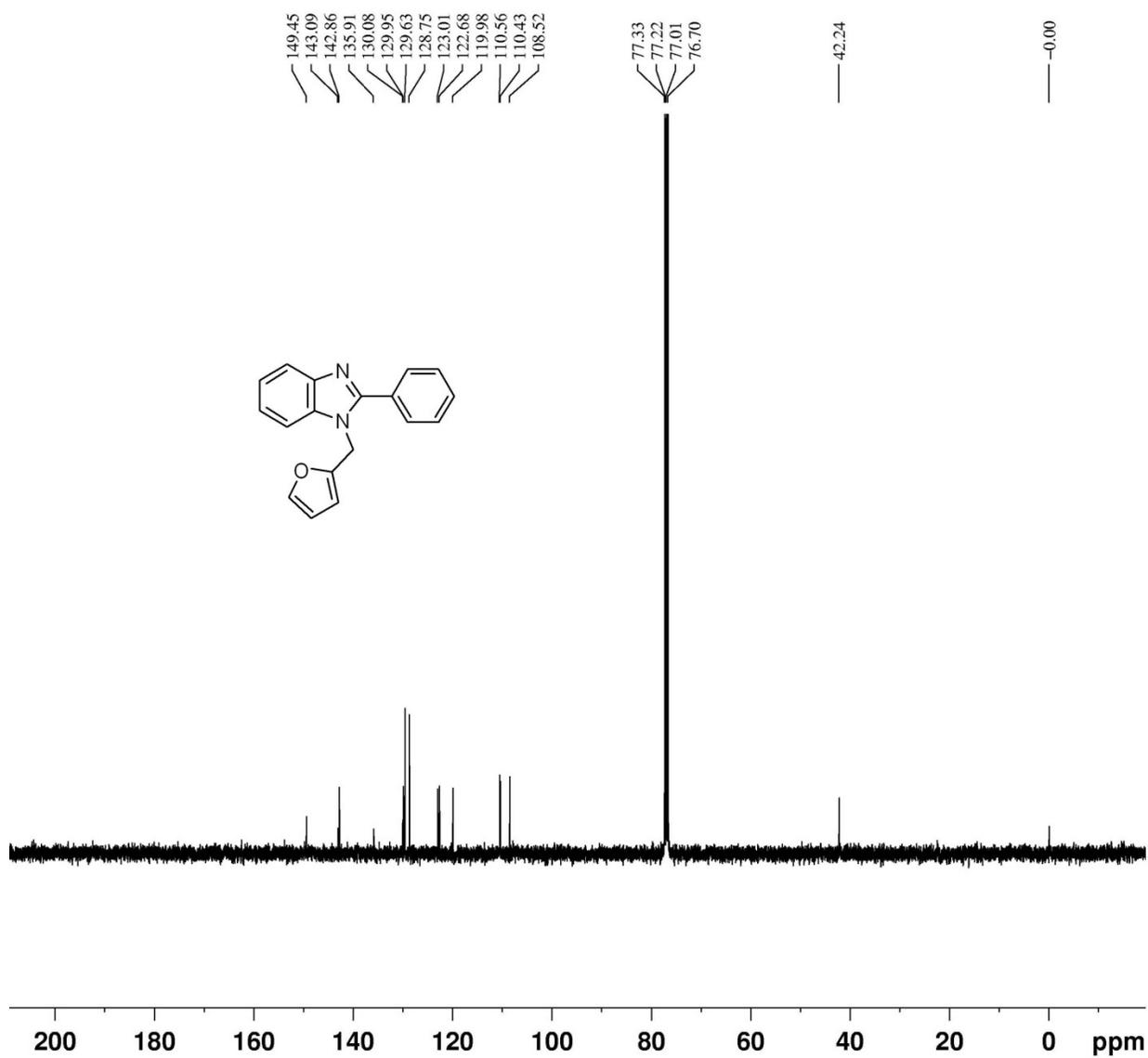


Table 6, Entry 18: ^1H NMR

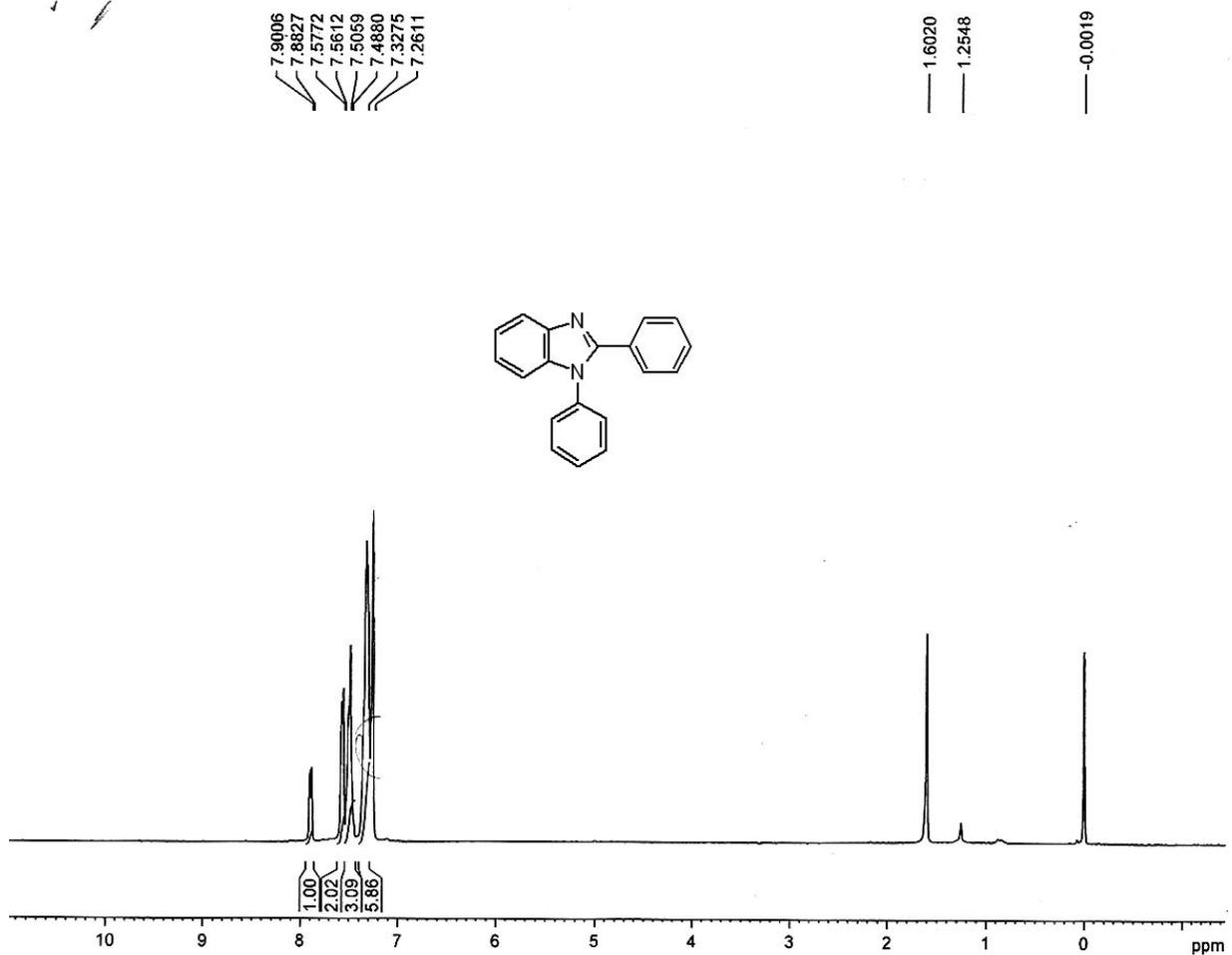


Table 6, Entry 19: ^1H NMR

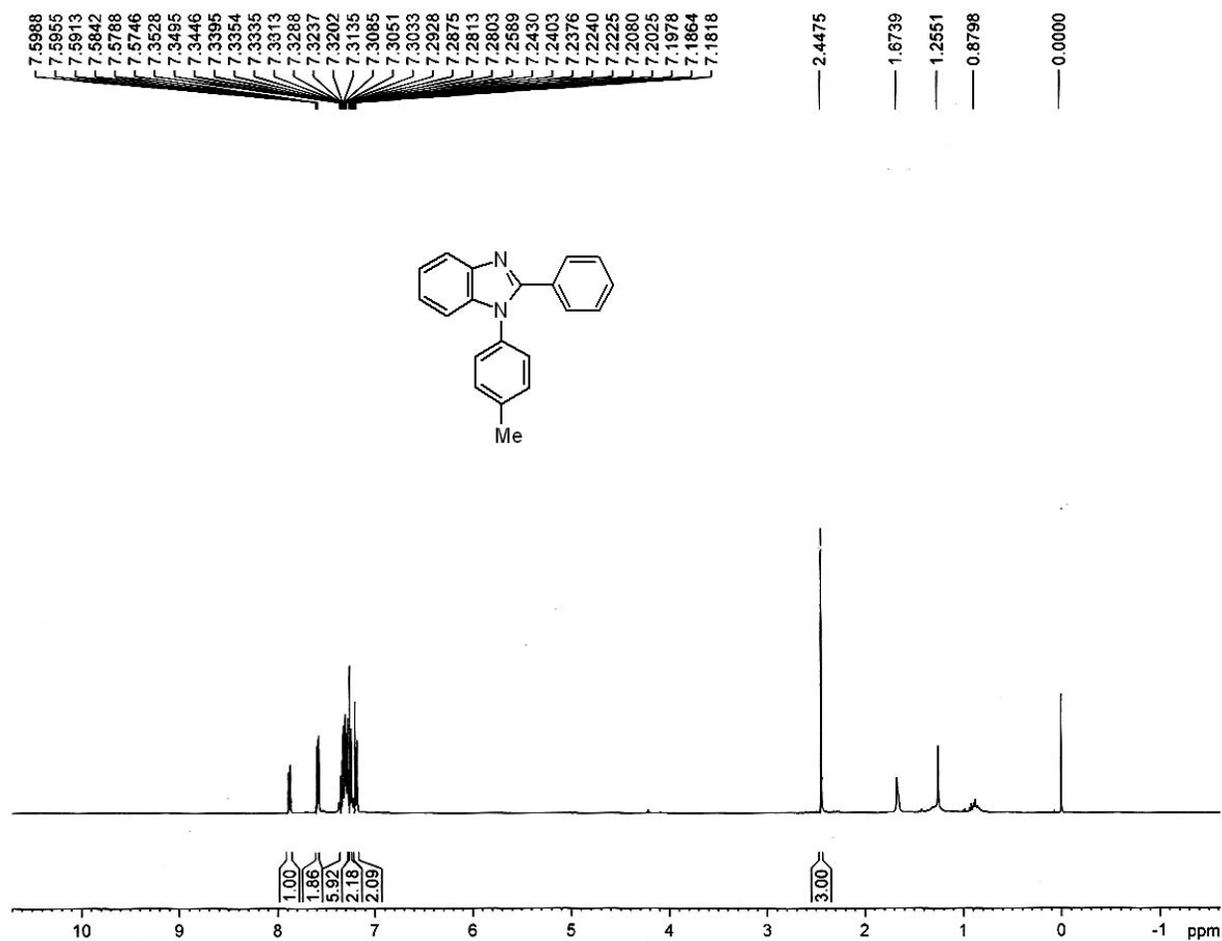


Table 6, Entry 20: ^1H NMR

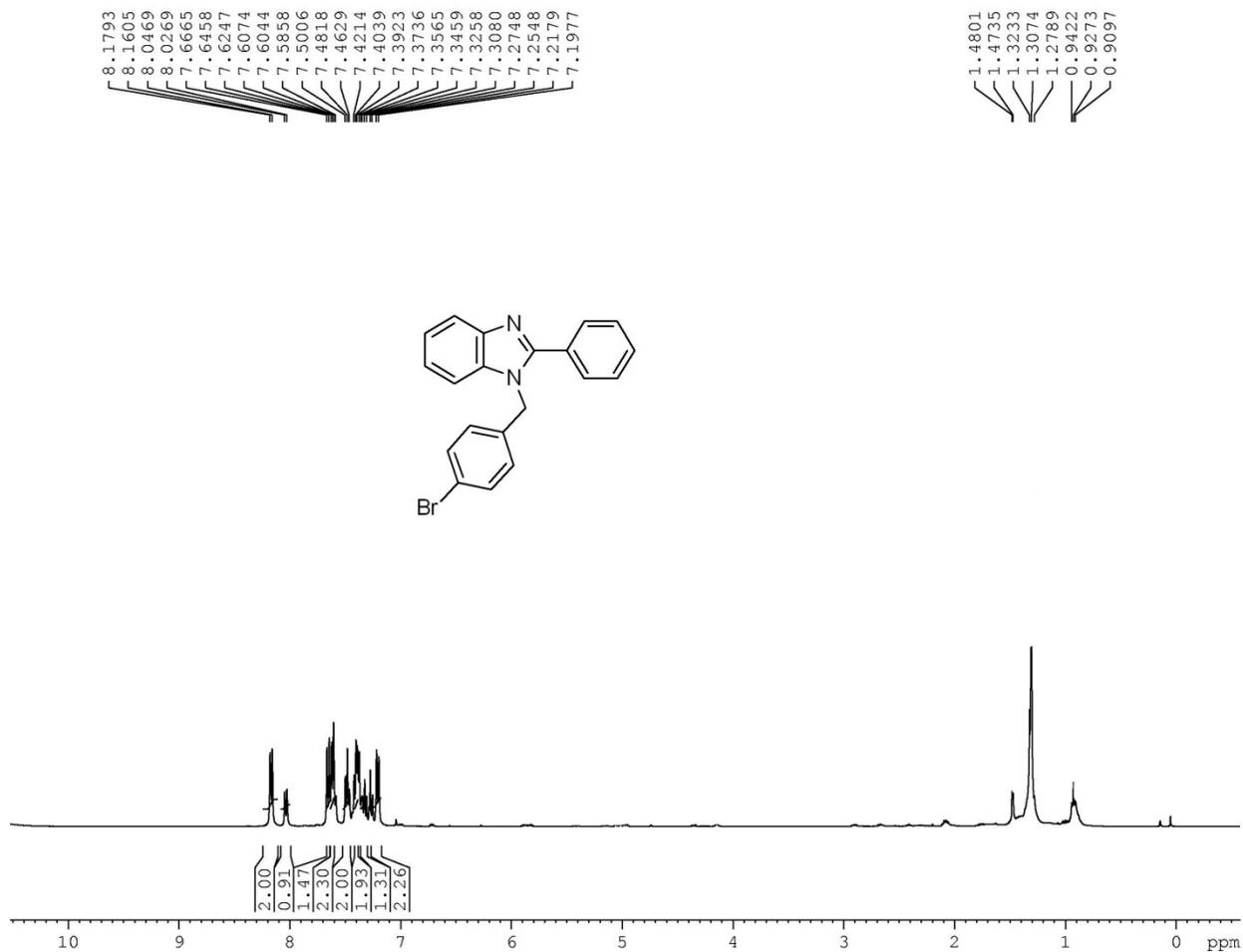


Table 6, Entry 20: ^{13}C NMR

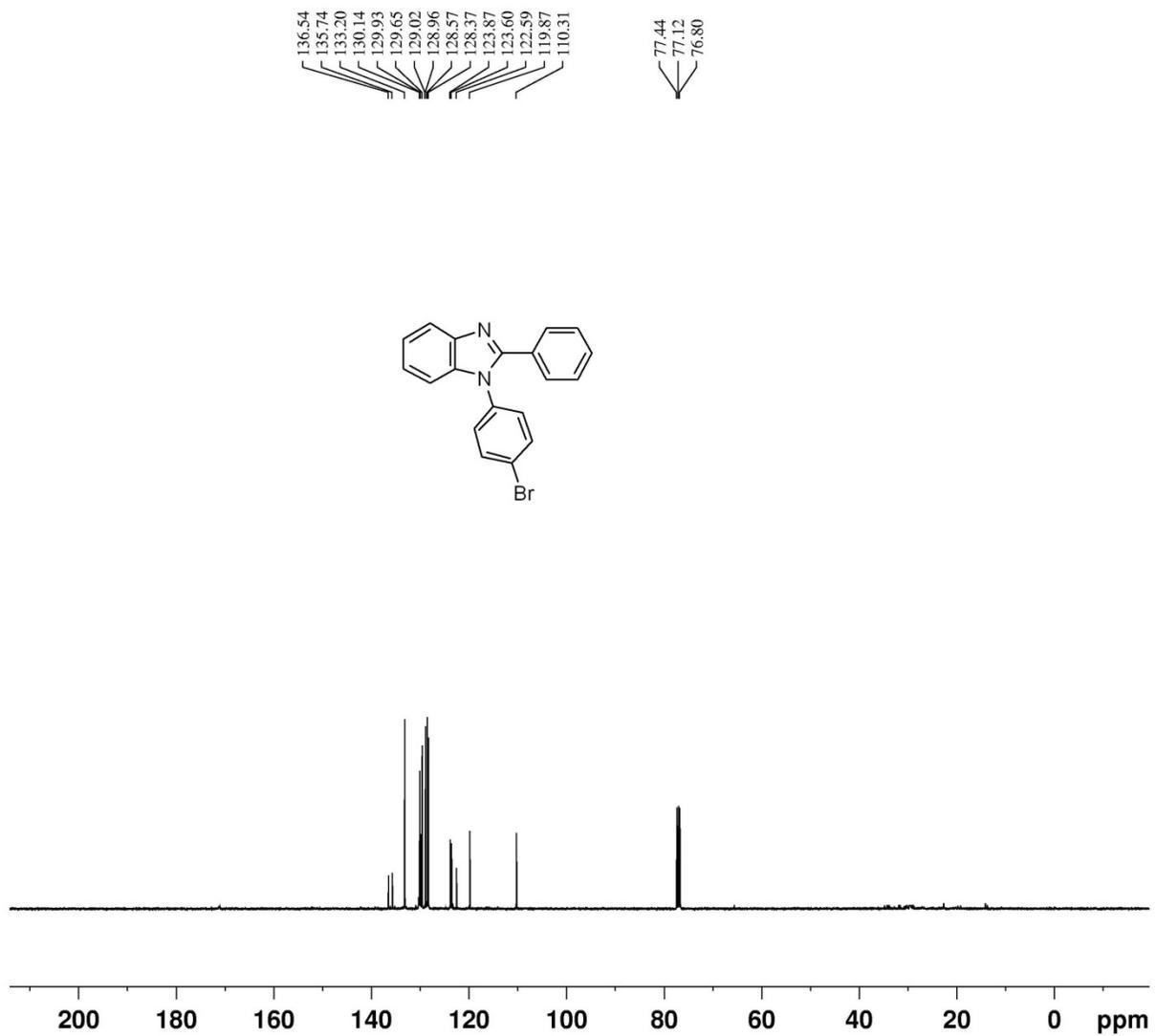


Table 6, Entry 21: ^1H NMR

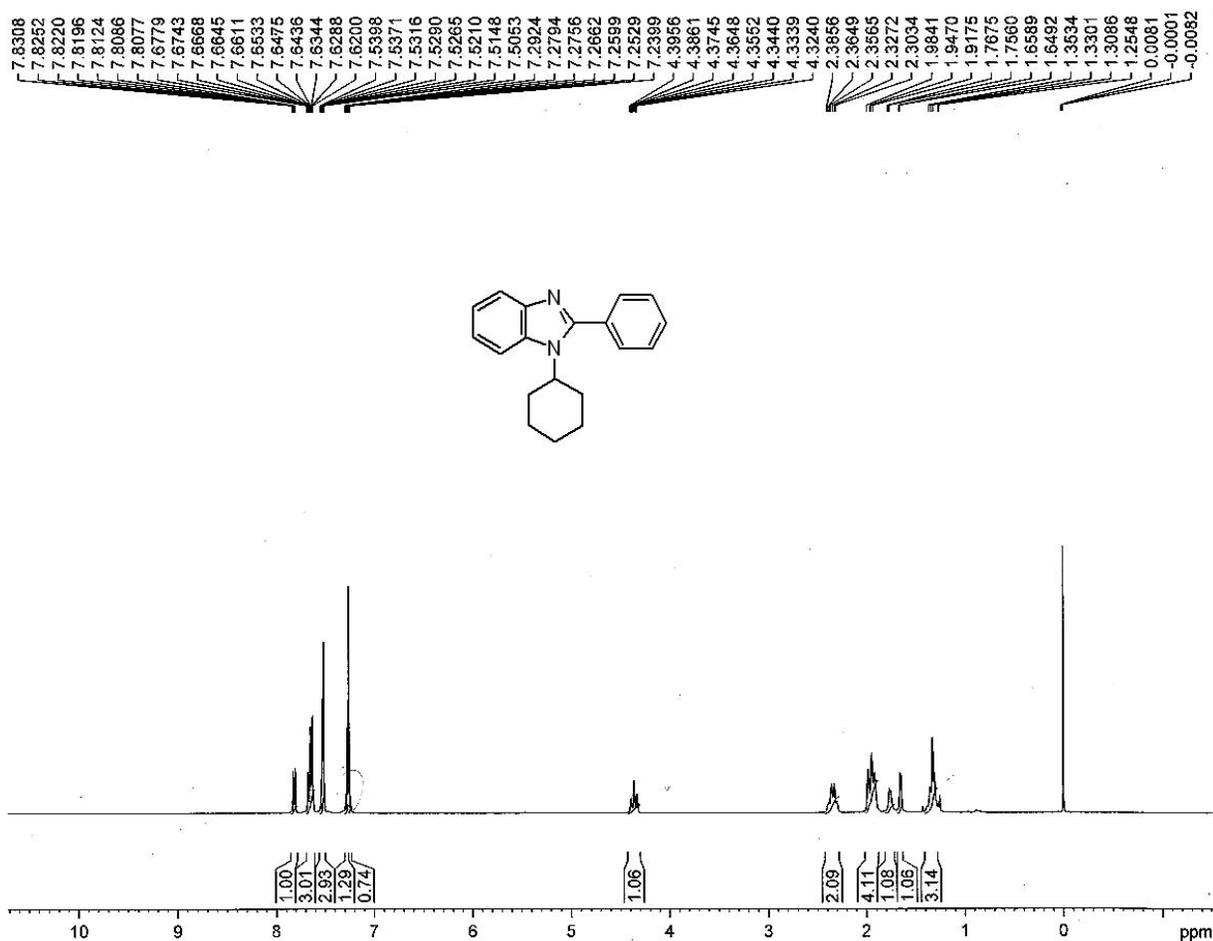


Table 6, Entry 22: ^1H NMR

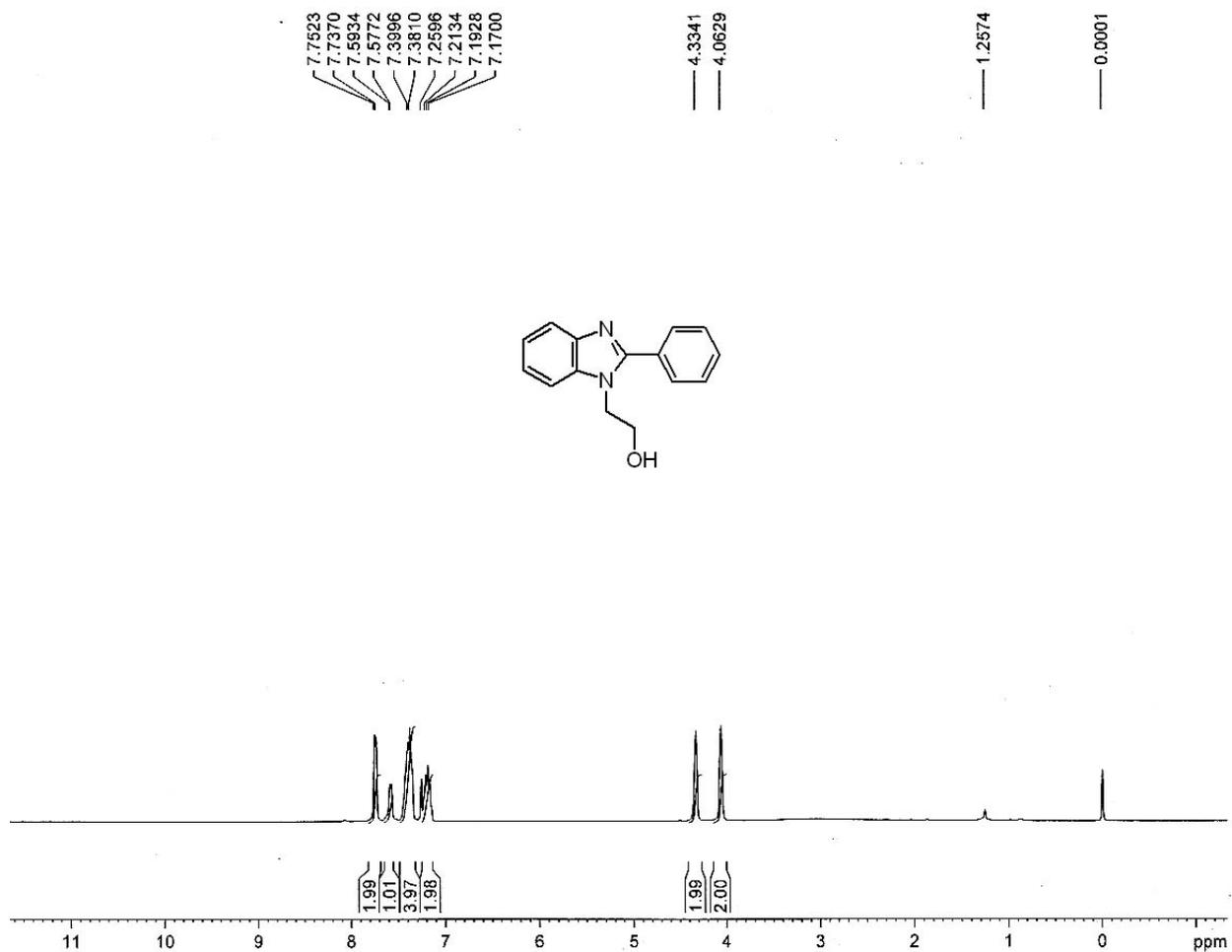


Table 6, Entry 22: ^{13}C NMR

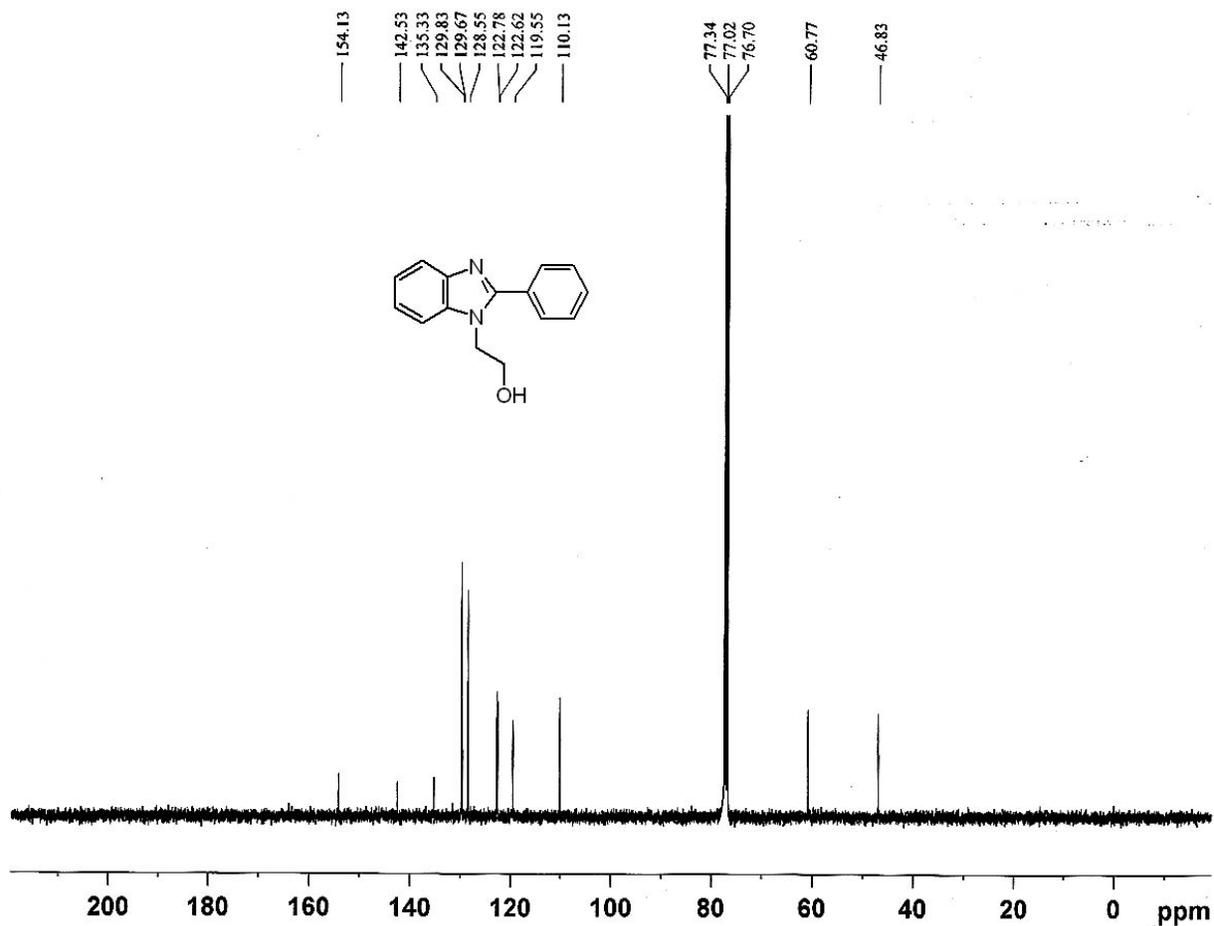


Table 6, Entry 23: ^1H NMR

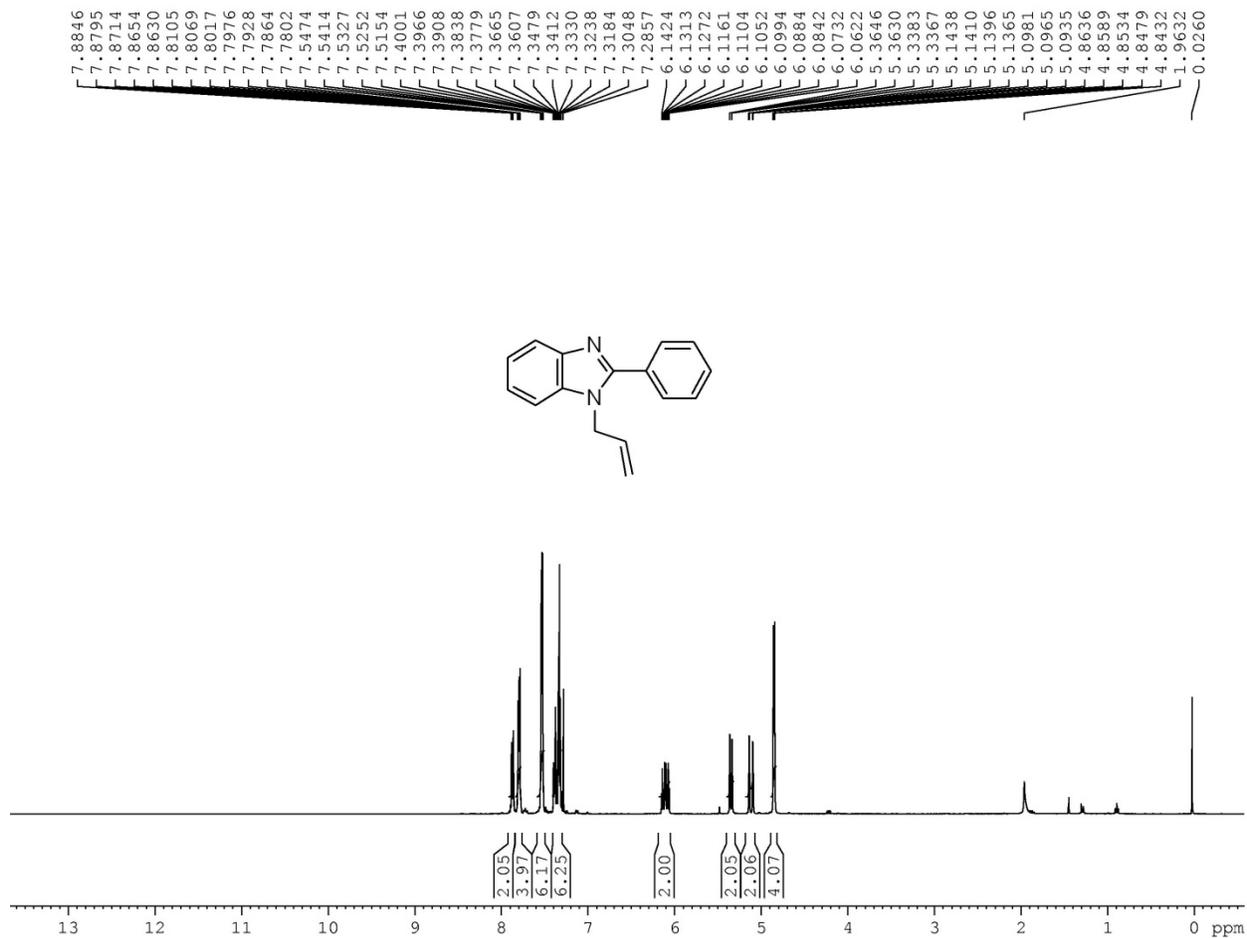


Table 6, Entry 24: ^1H NMR

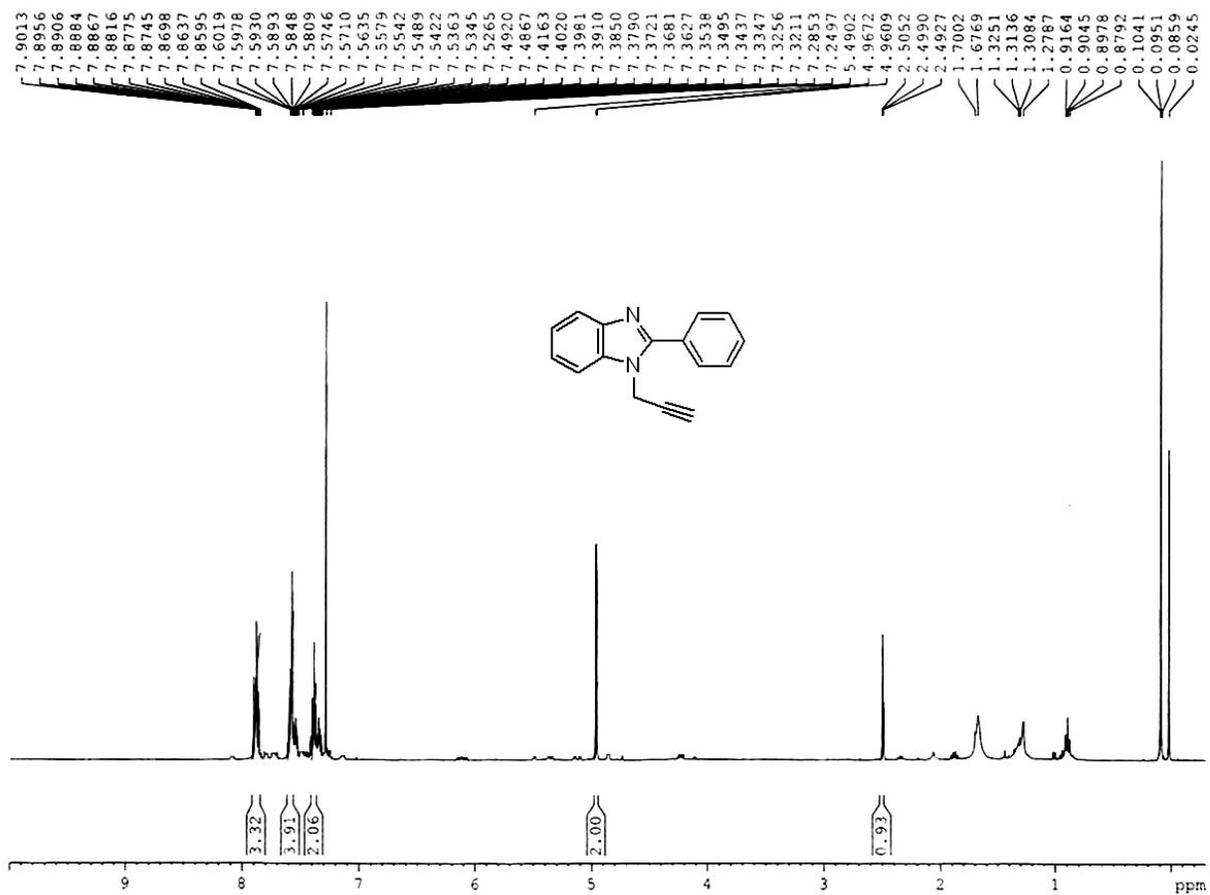


Table 6, Entry 25: ^1H NMR

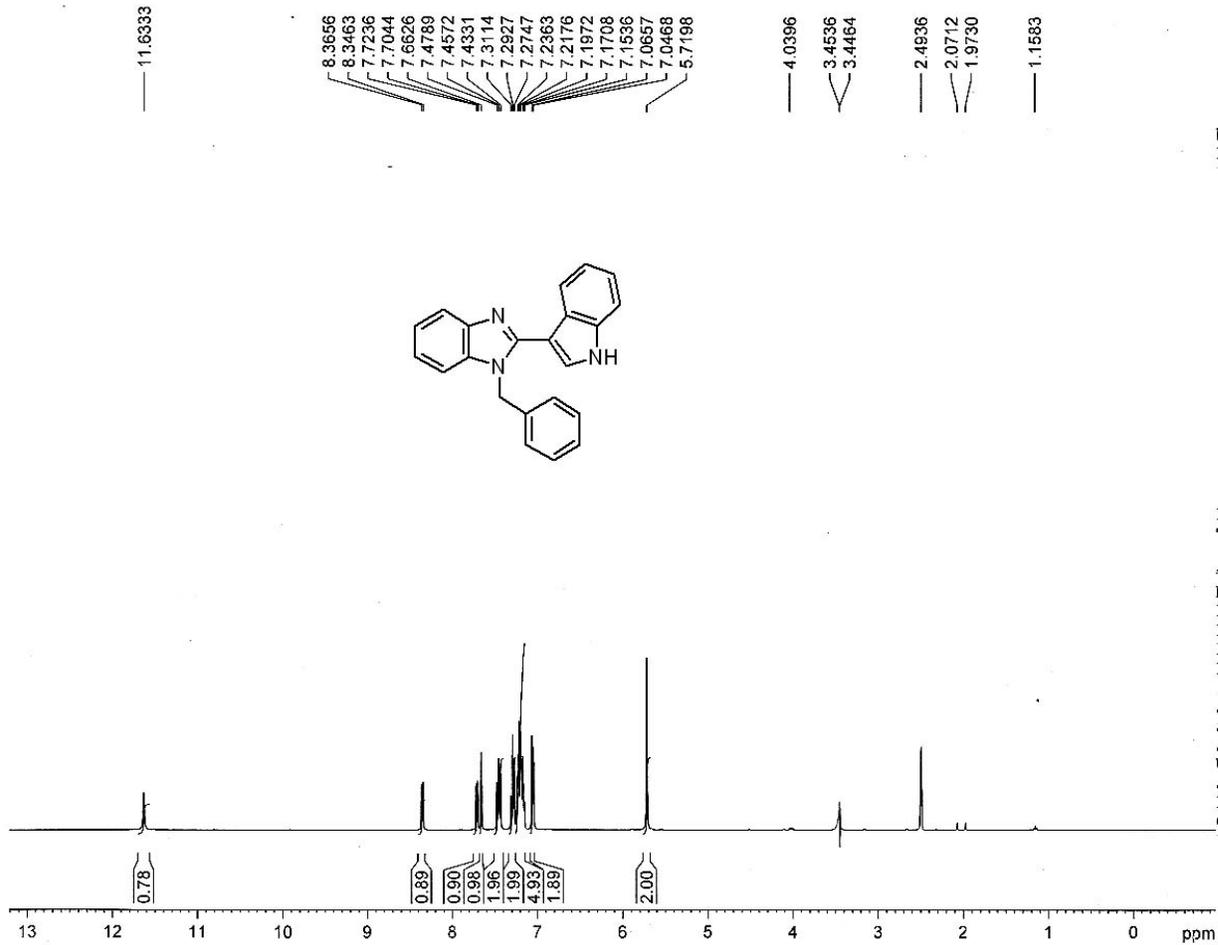


Table 6, Entry 25: ^{13}C NMR

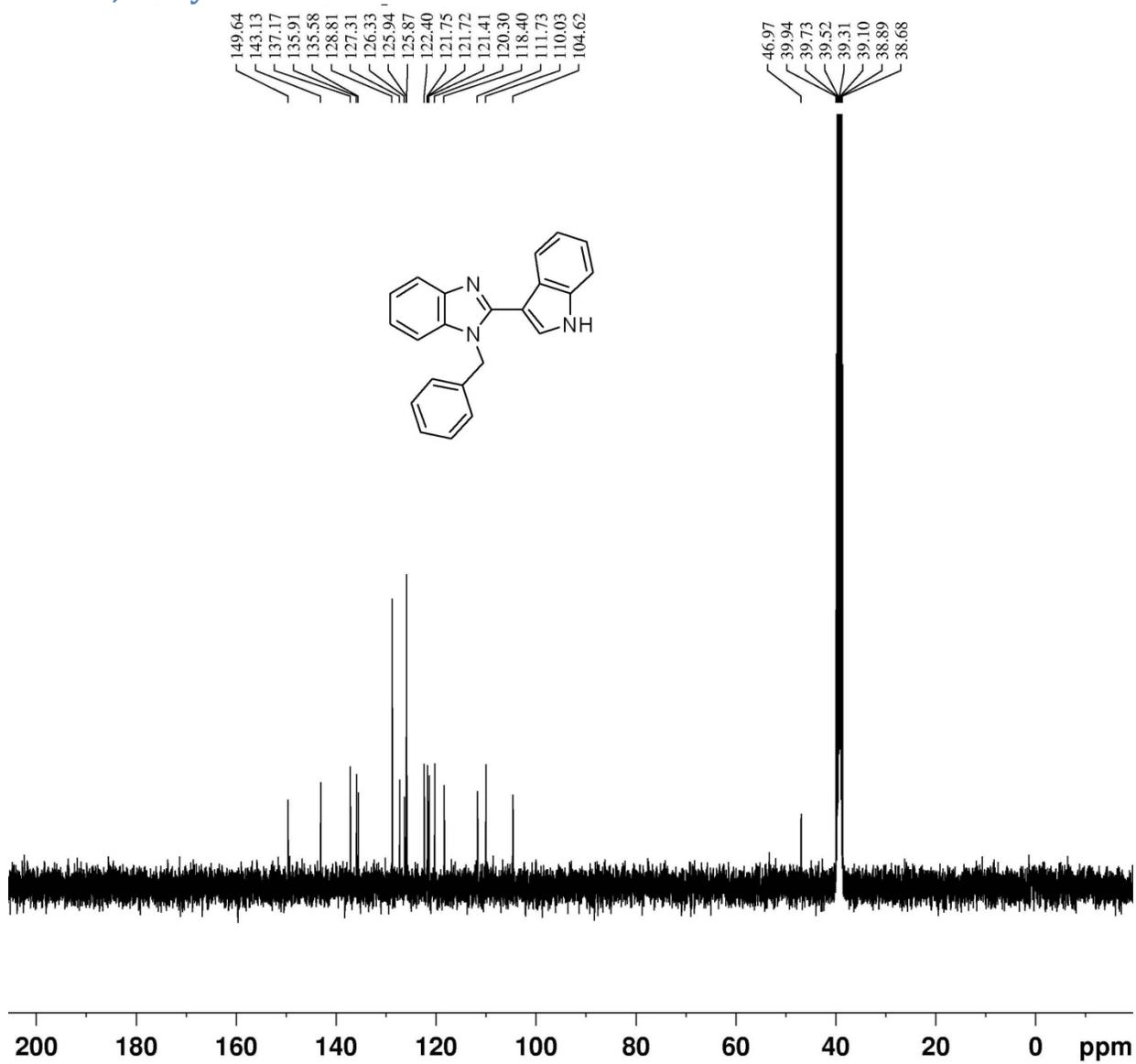


Table 6, Entry 26: ^1H NMR

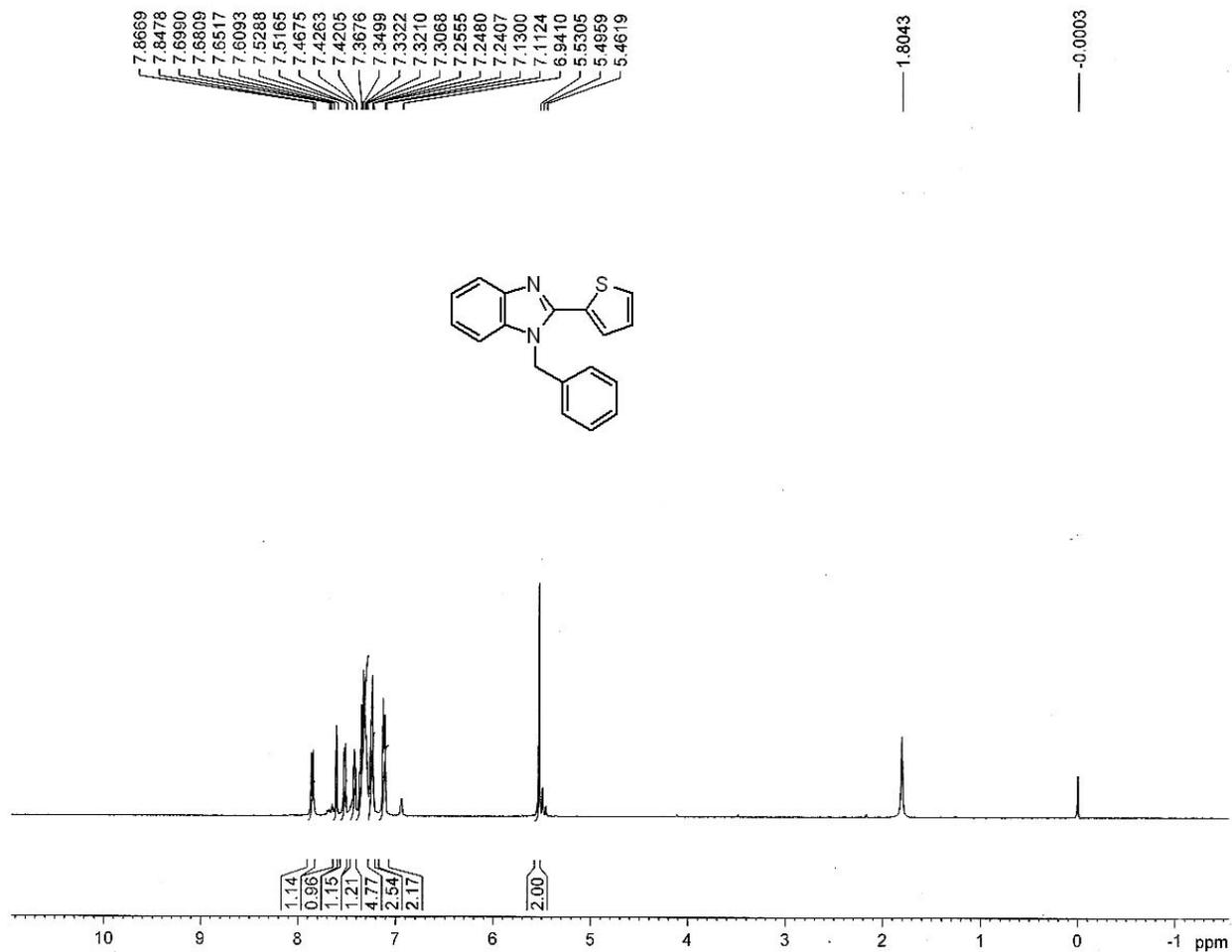


Table3, Entry 26: ^{13}C NMR

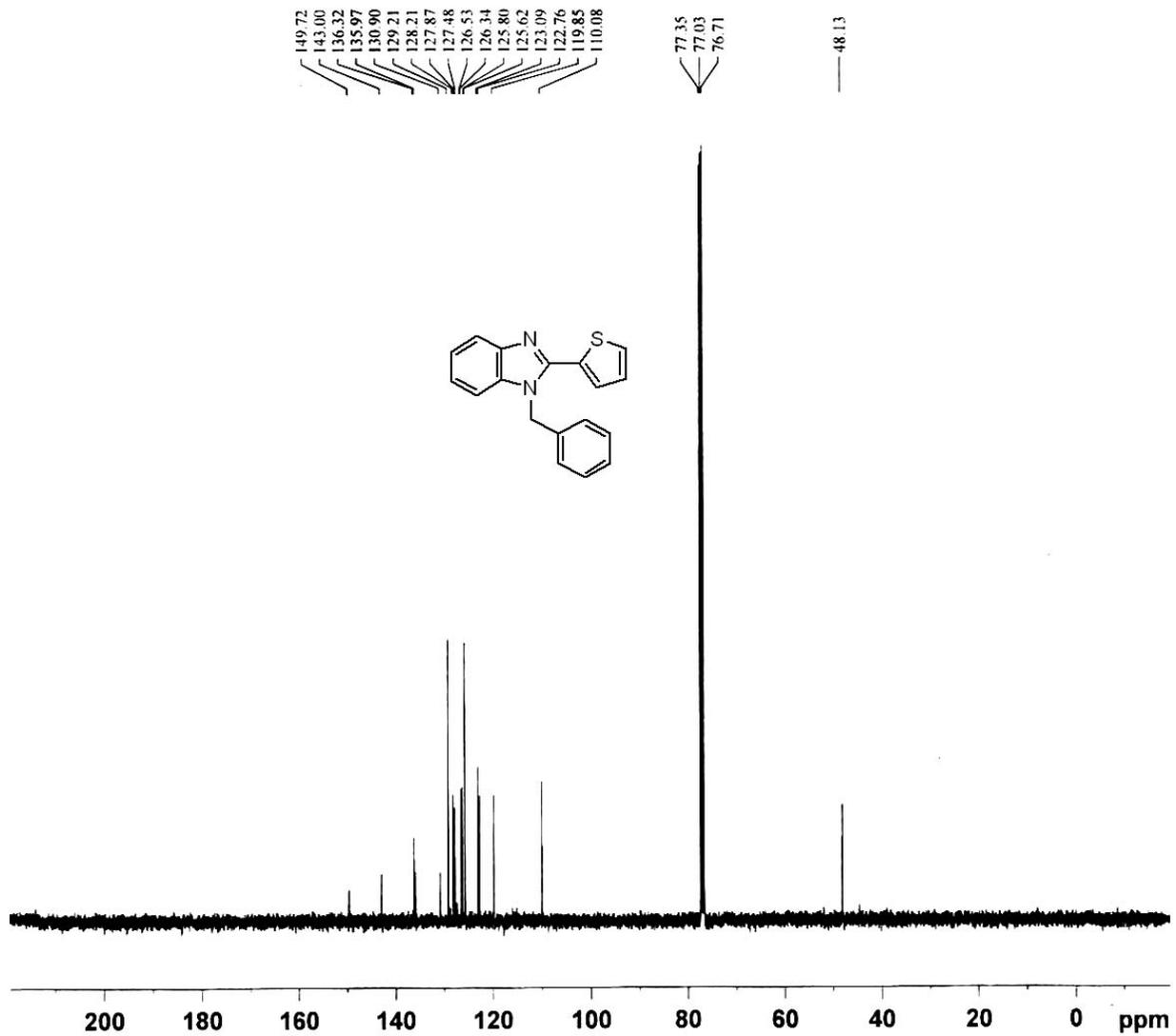


Table 6, Entry 27: ^1H NMR

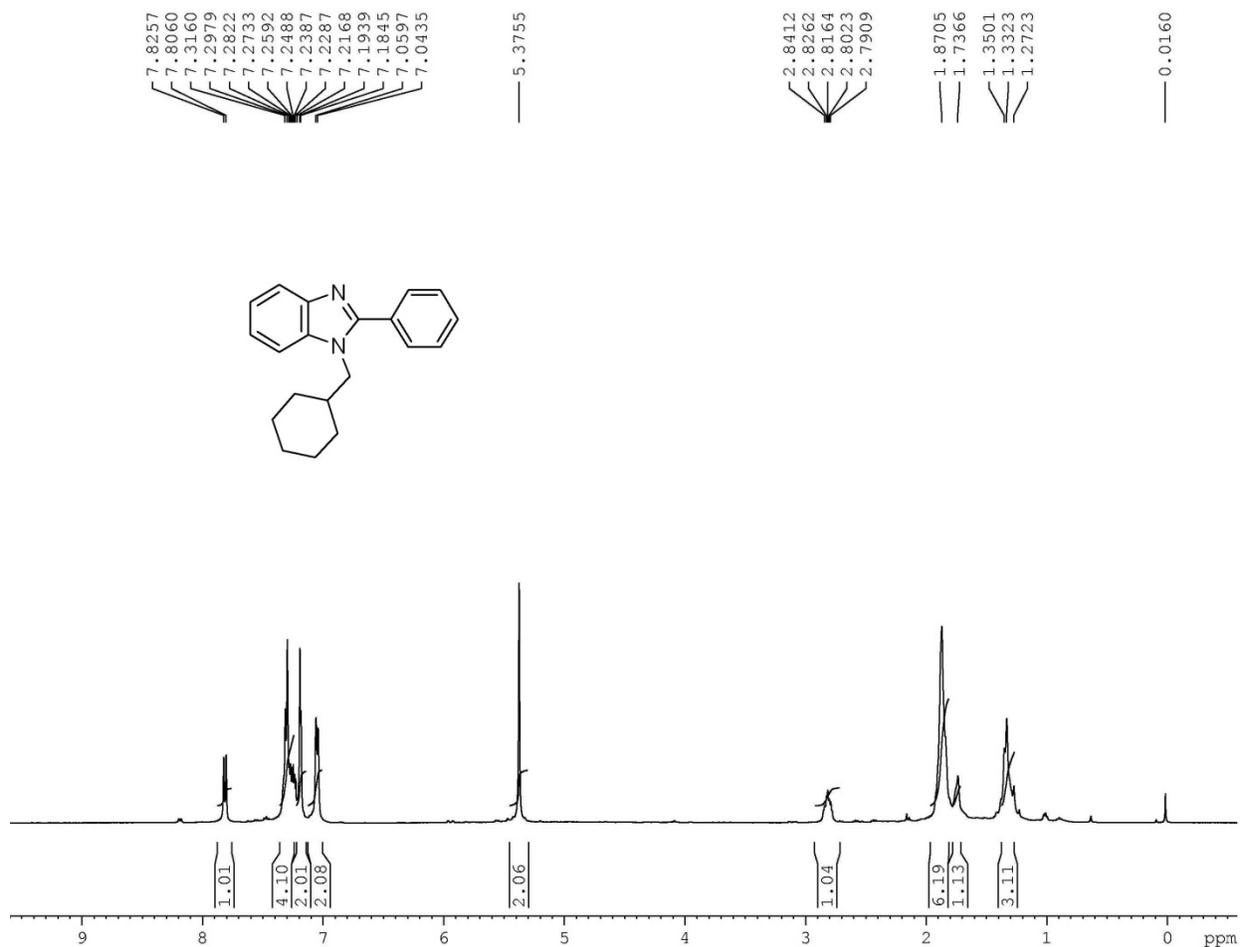


Table 6, Entry 27: ^{13}C NMR

