

# Synthesis of 2-alkyl substituted benzimidazoles under microwave irradiation: Anti-proliferative effect of some representative compounds on human histiocytic lymphoma cell U937

Chhanda Mukhopadhyay,\*<sup>a</sup> Sabari Ghosh,<sup>a</sup> Sumita Sengupta (Bandyopadhyay)<sup>b</sup> and Soumasree De<sup>b</sup>

<sup>a</sup>Department of Chemistry, University of Calcutta, 92 APC Road, Kolkata-700009, India; Tel: +91 9433019610; E-mail: cmukhop@yahoo.co.in

<sup>b</sup> Department of Biophysics, Molecular Biology and Bioinformatics, University of Calcutta, 92 APC Road, Kolkata-700009, India

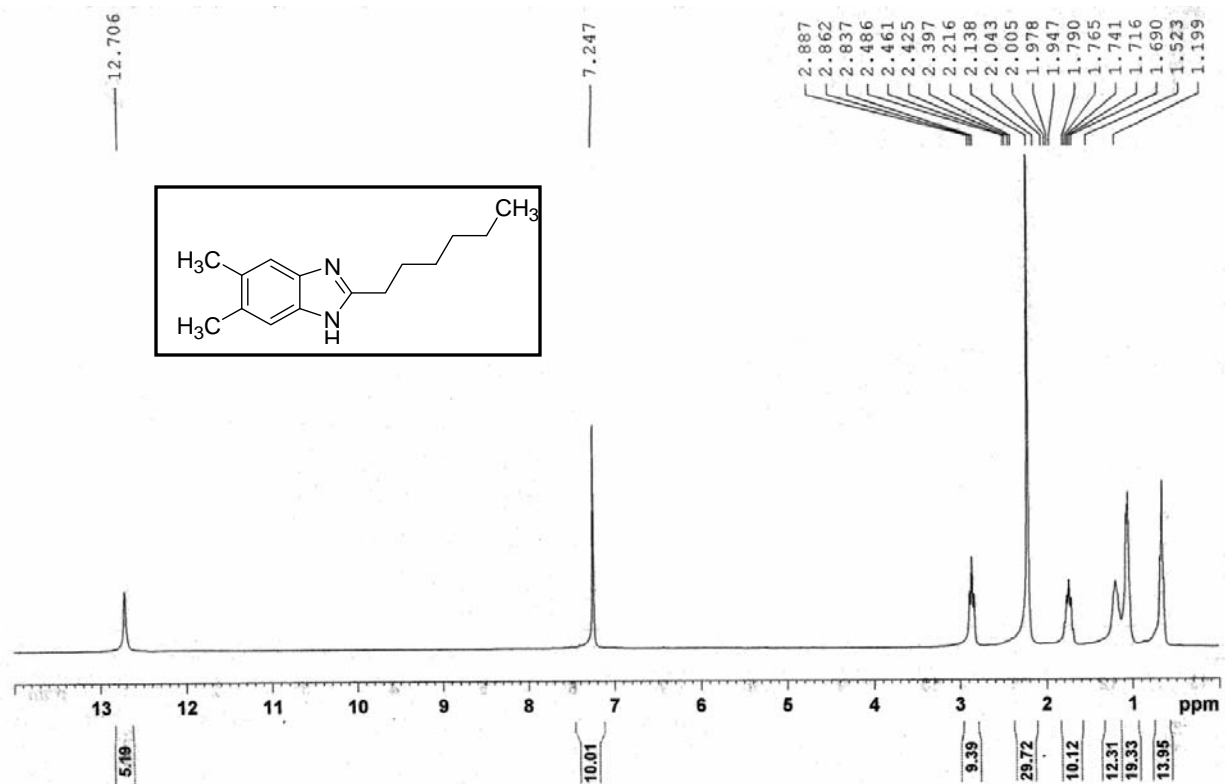
## Supplementary Information

### Part 4

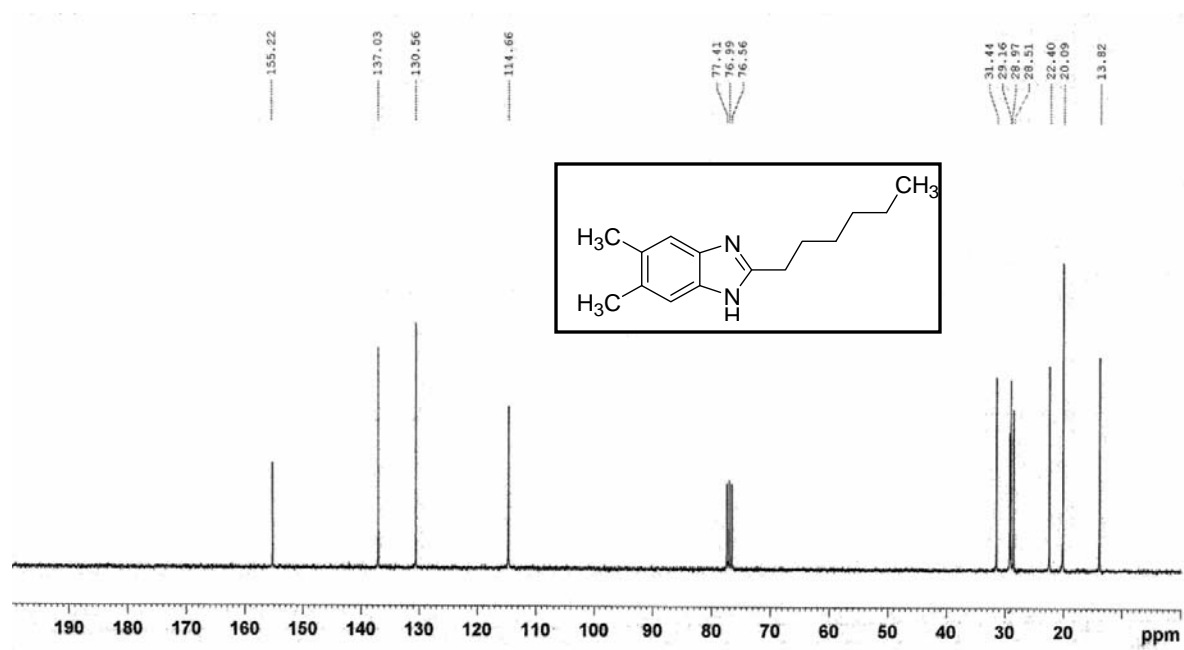
#### Copy of NMR spectra for compounds 3a – 3i.

##### Compound 3a

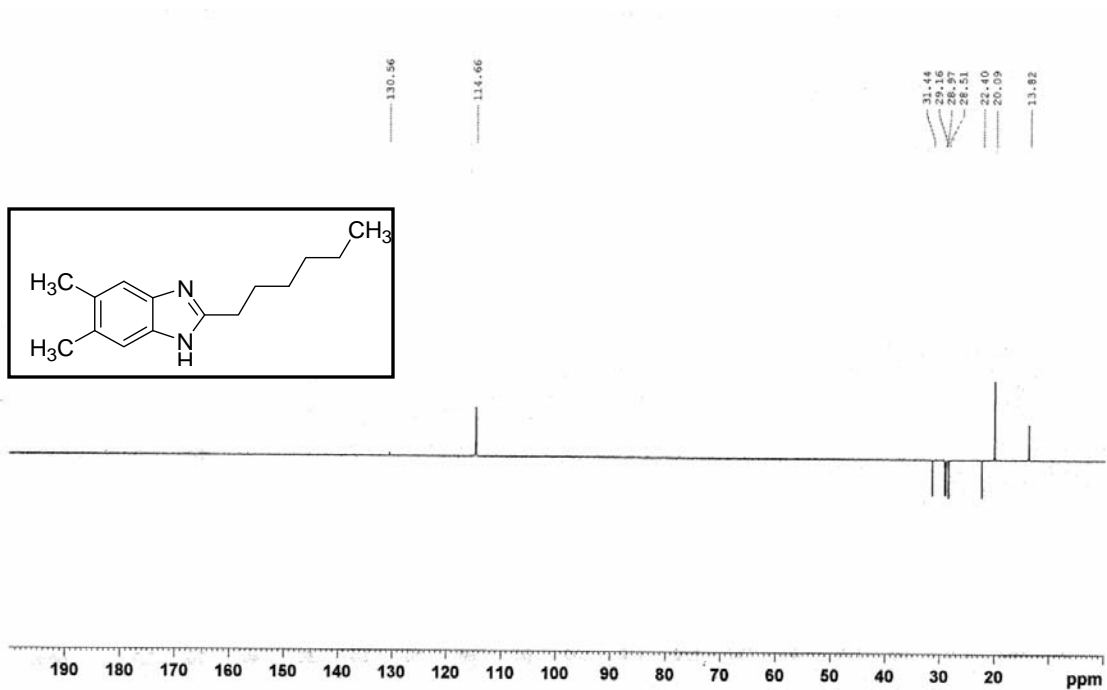
##### <sup>1</sup>H-NMR



<sup>13</sup>C-NMR (Compound **3a**)

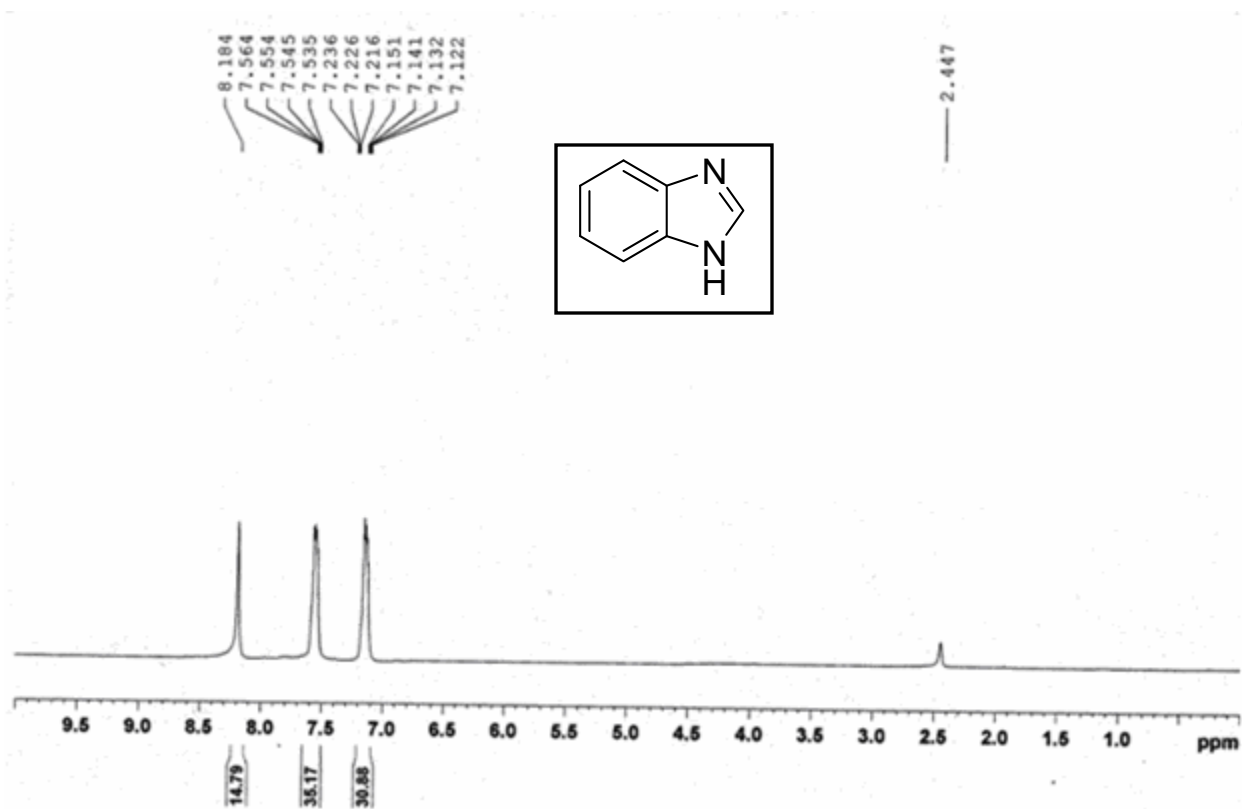


DEPT-135 (Compound **3a**)

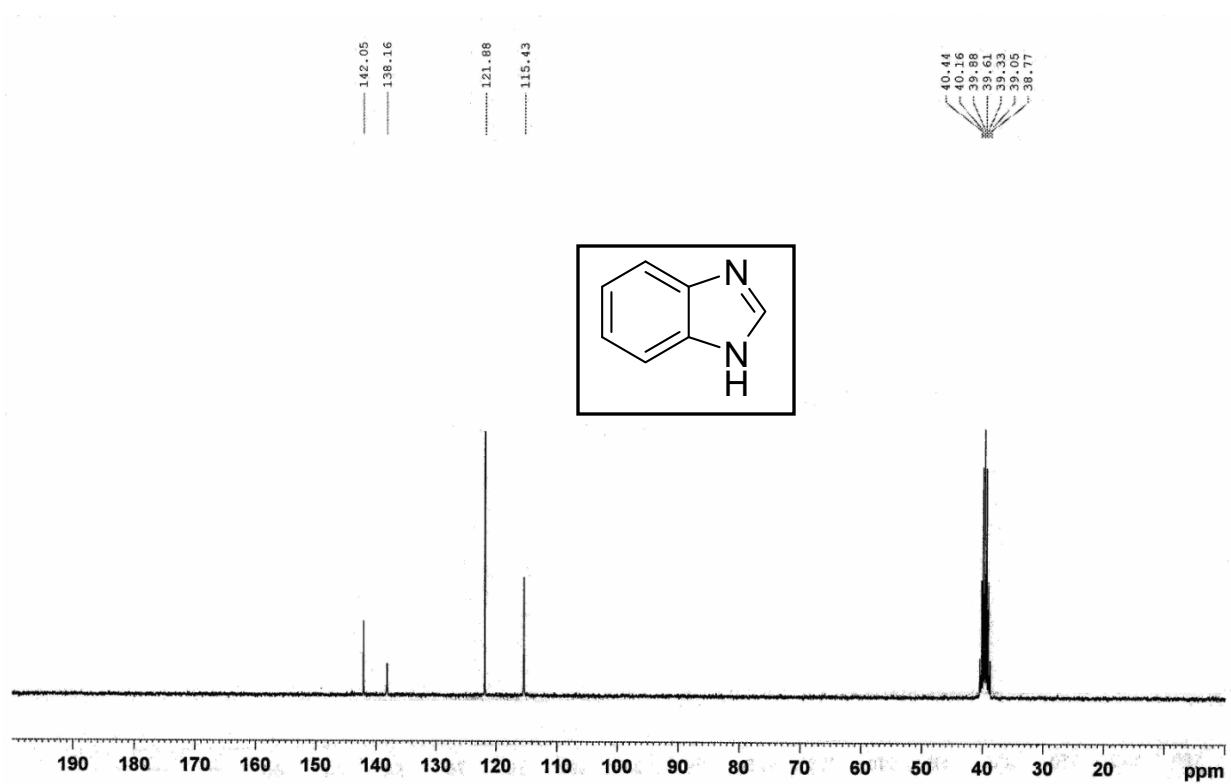


Compound 3b

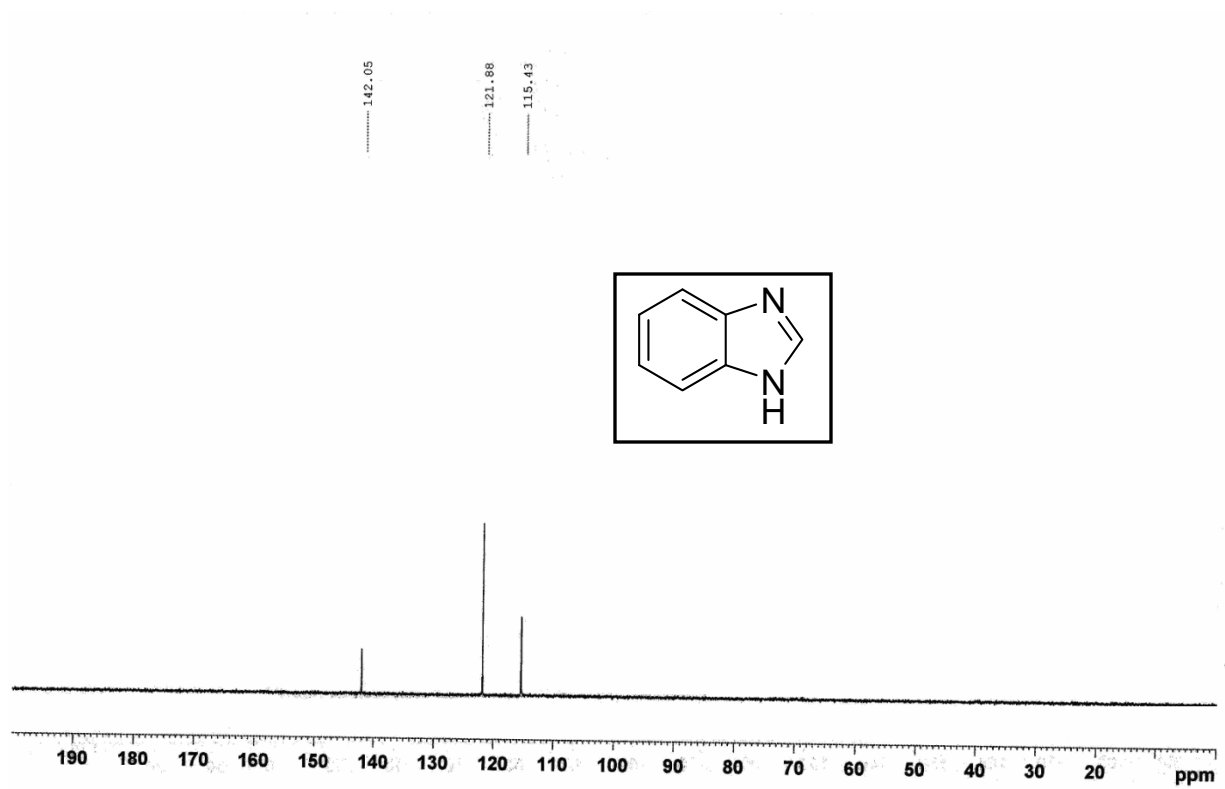
<sup>1</sup>H-NMR



$^{13}\text{C}$ -NMR (Compound **3b**)

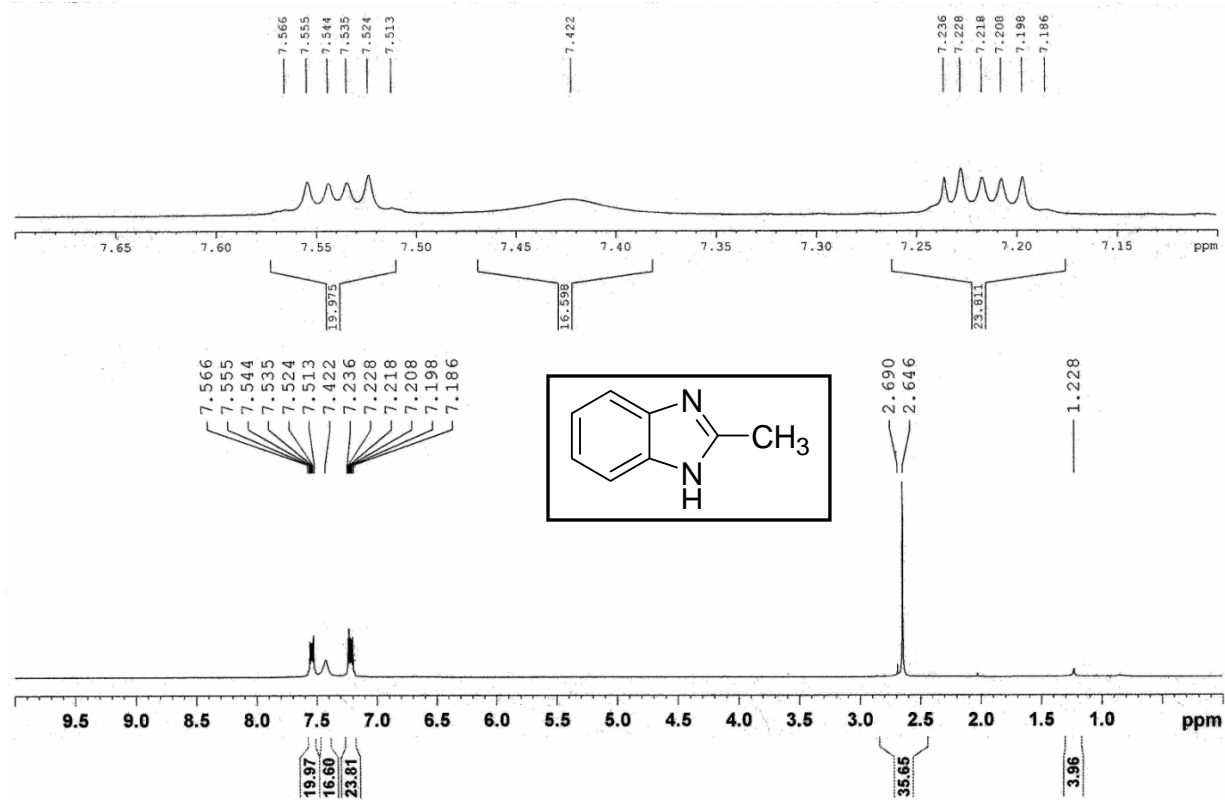


DEPT-135 (Compound **3b**)

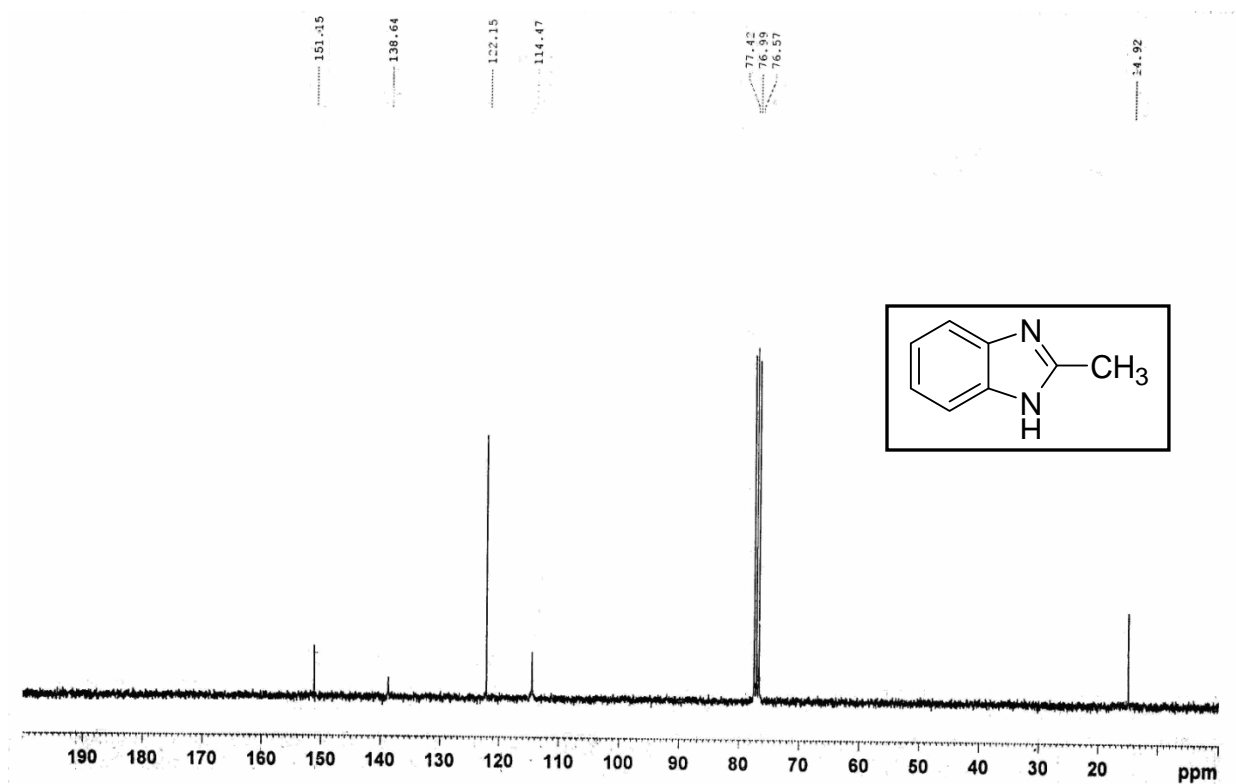


**Compound 3c**

**<sup>1</sup>H-NMR**

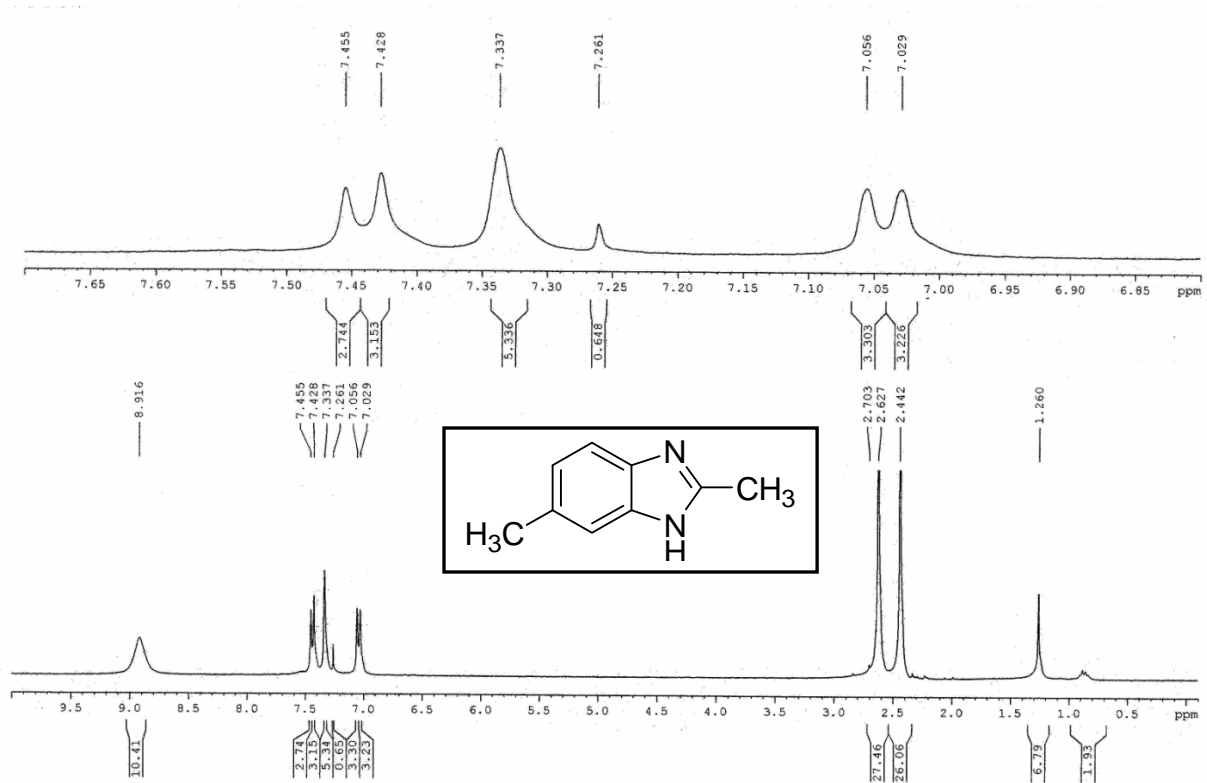


$^{13}\text{C}$ -NMR (Compound **3c**)



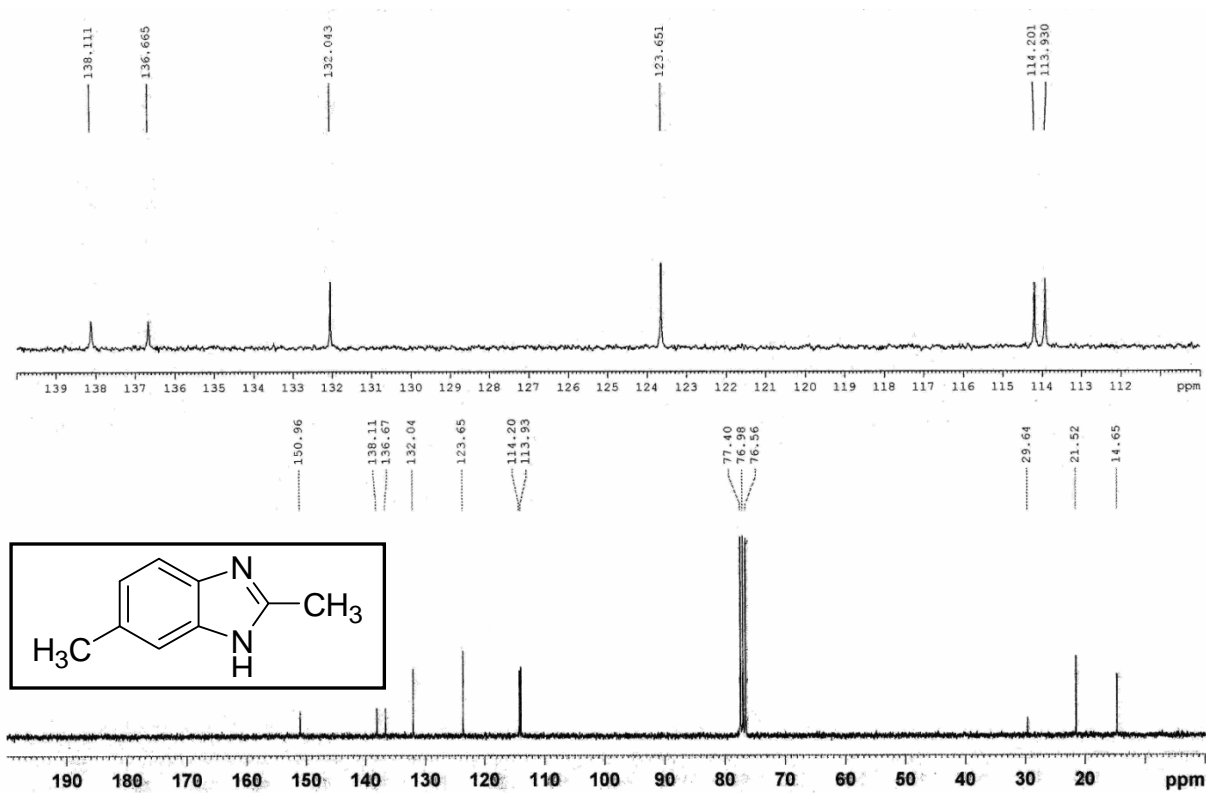
**Compound 3d**

**<sup>1</sup>H-NMR**

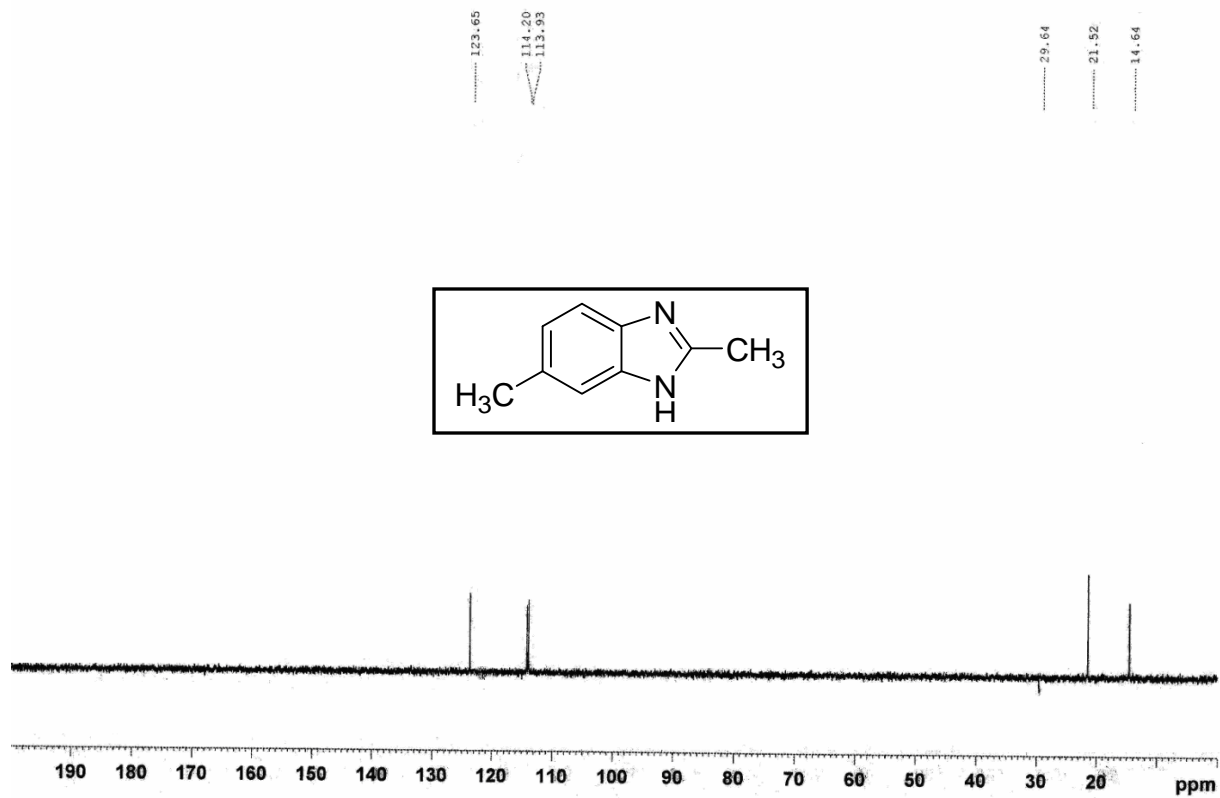




$^{13}\text{C}$ -NMR (Compound **3d**)

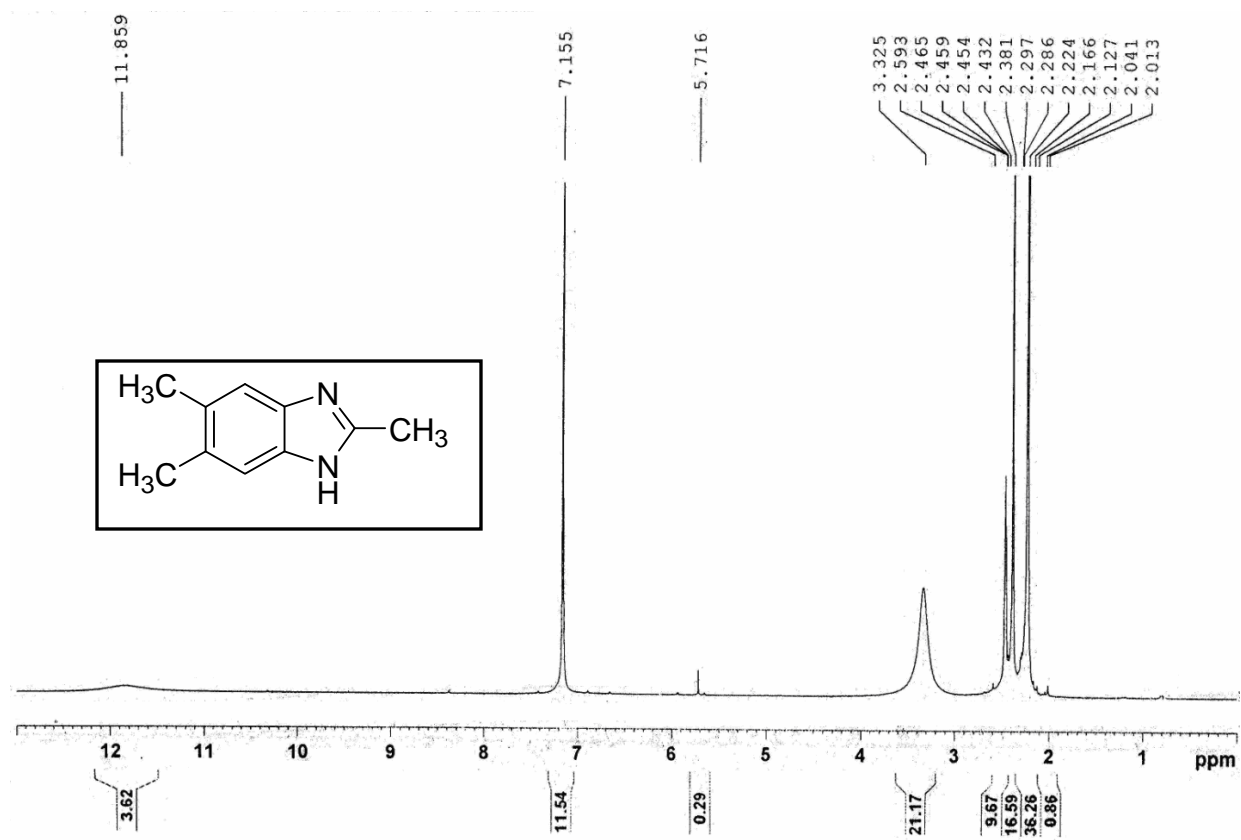


DEPT-135 (Compound **3d**)

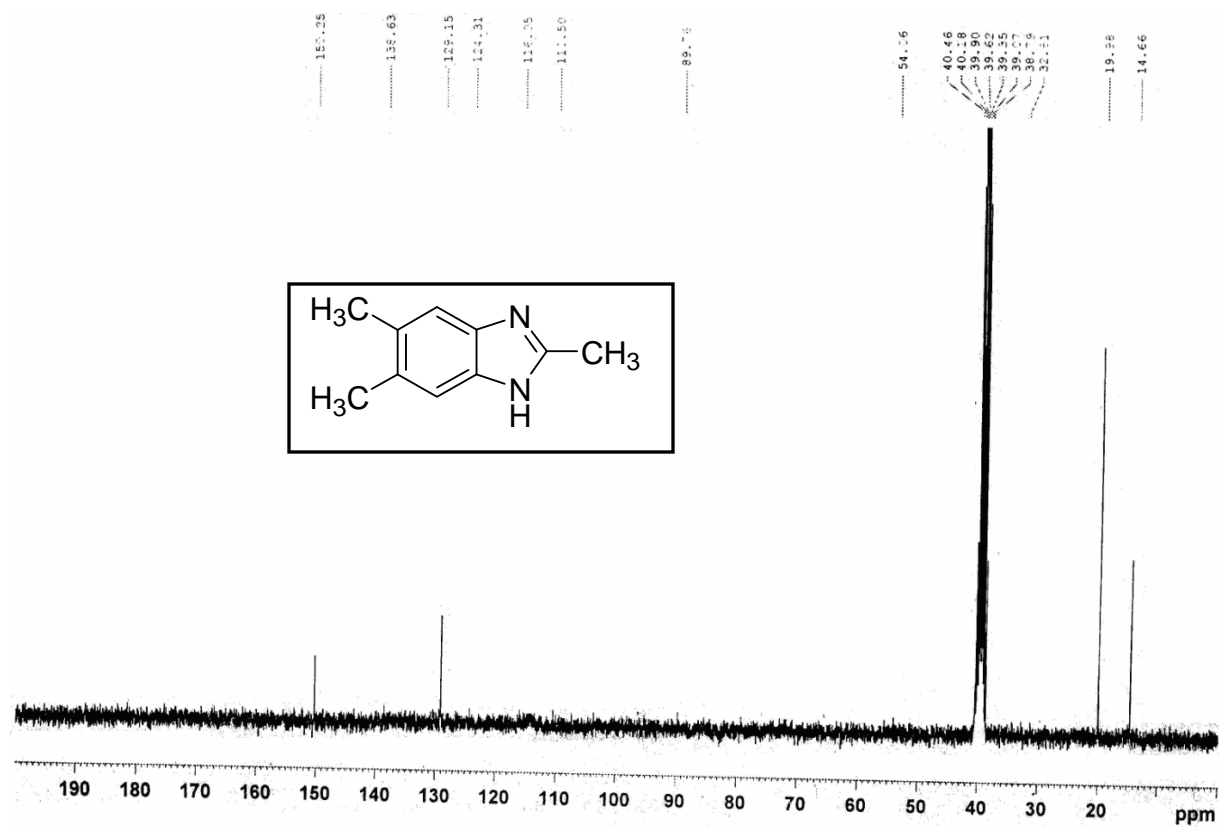


**Compound 3e**

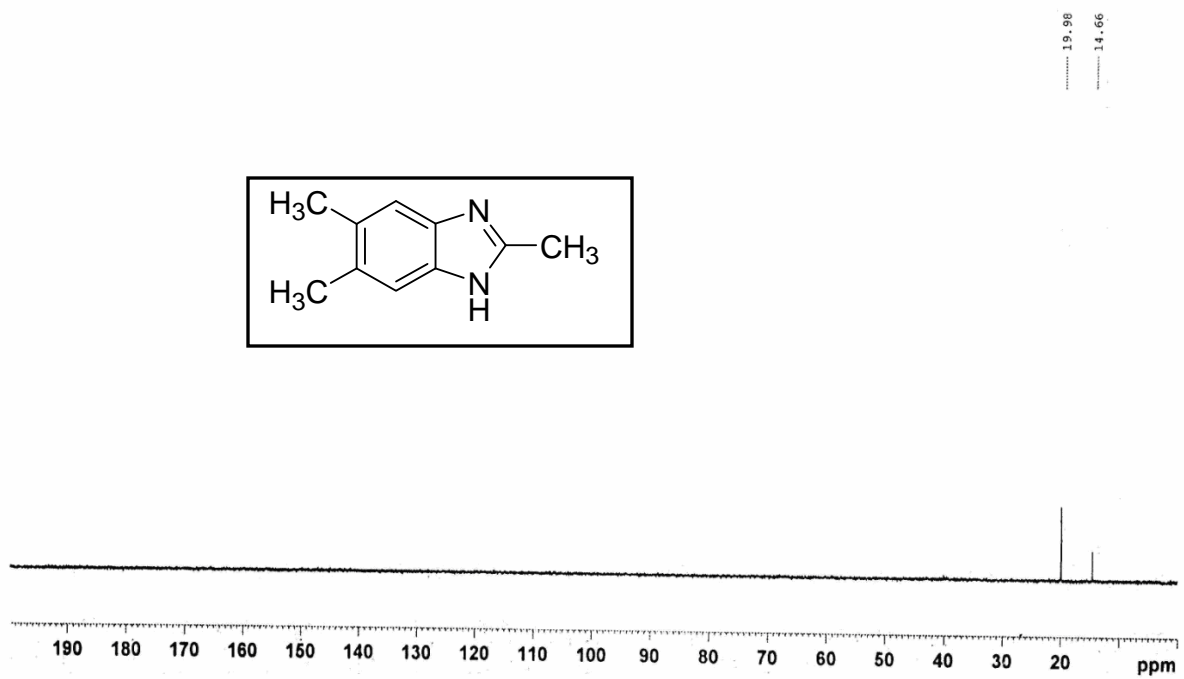
<sup>1</sup>H-NMR



<sup>13</sup>C-NMR (Compound **3e**)

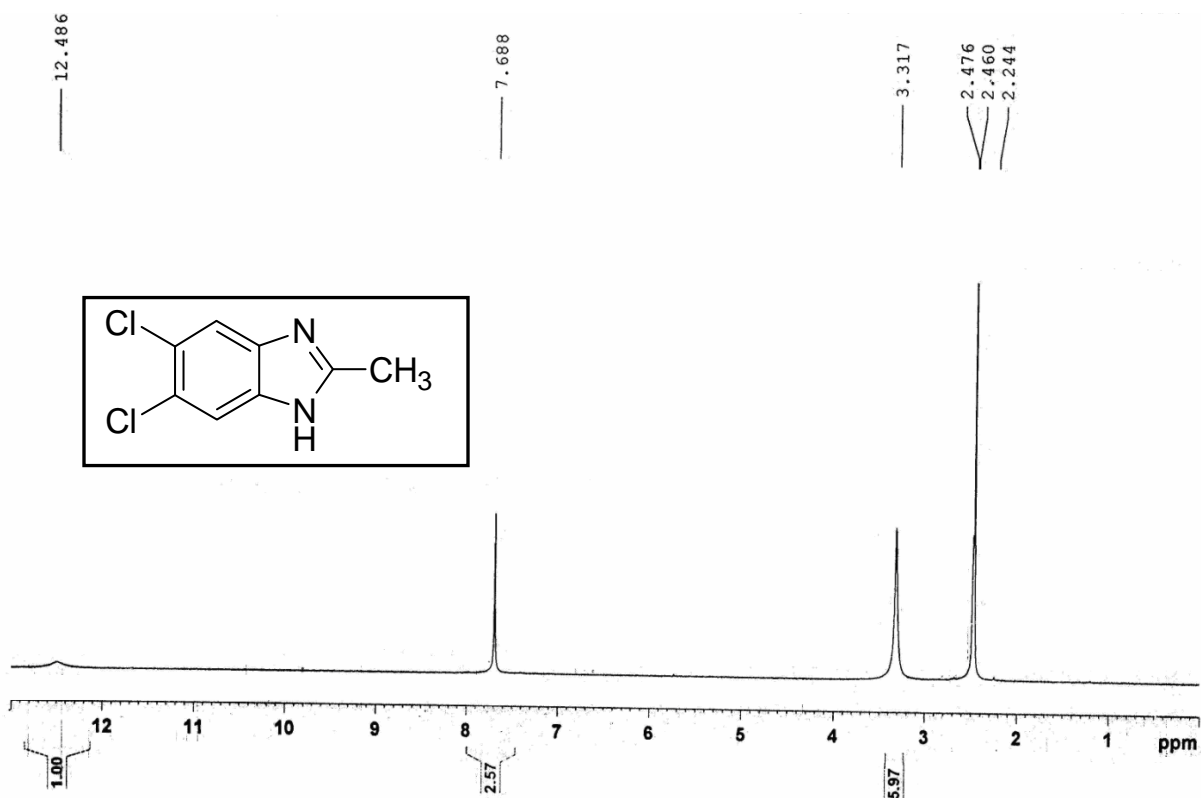


DEPT-135 (Compound **3e**)

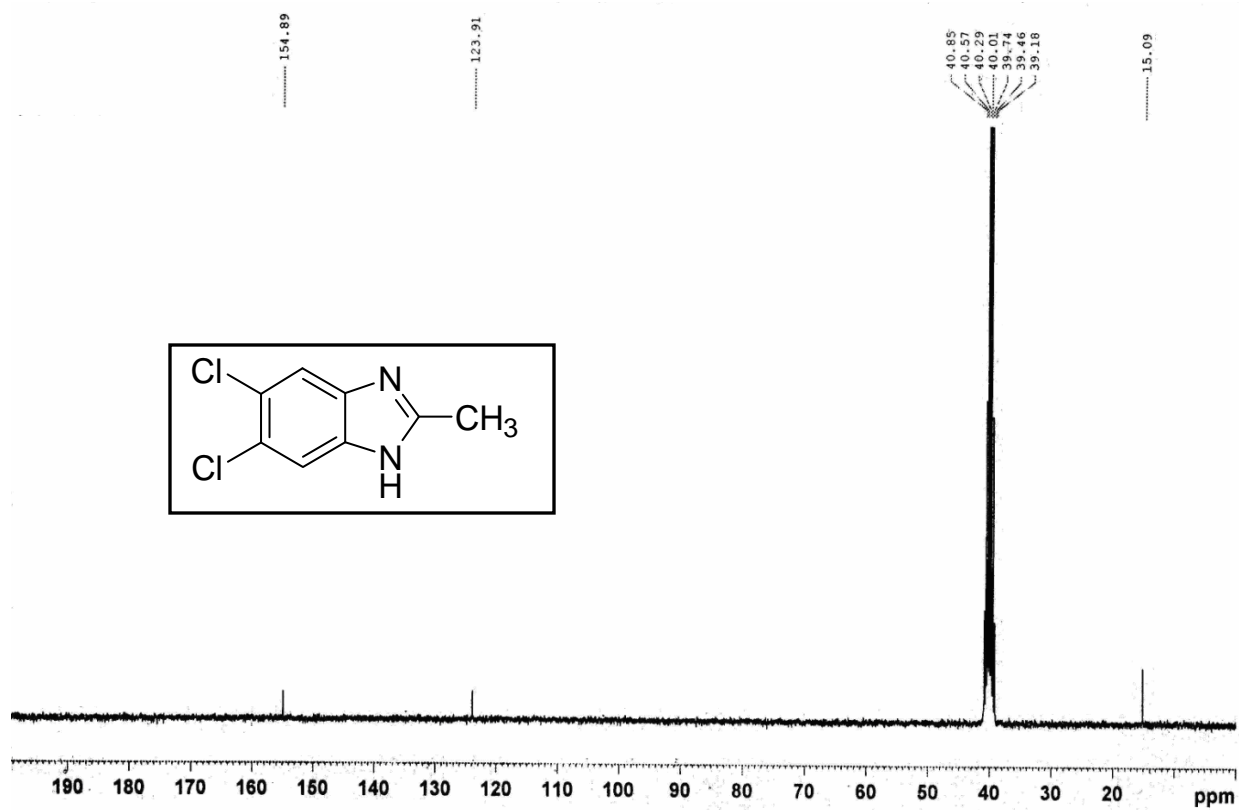


**Compound 3f**

<sup>1</sup>H-NMR

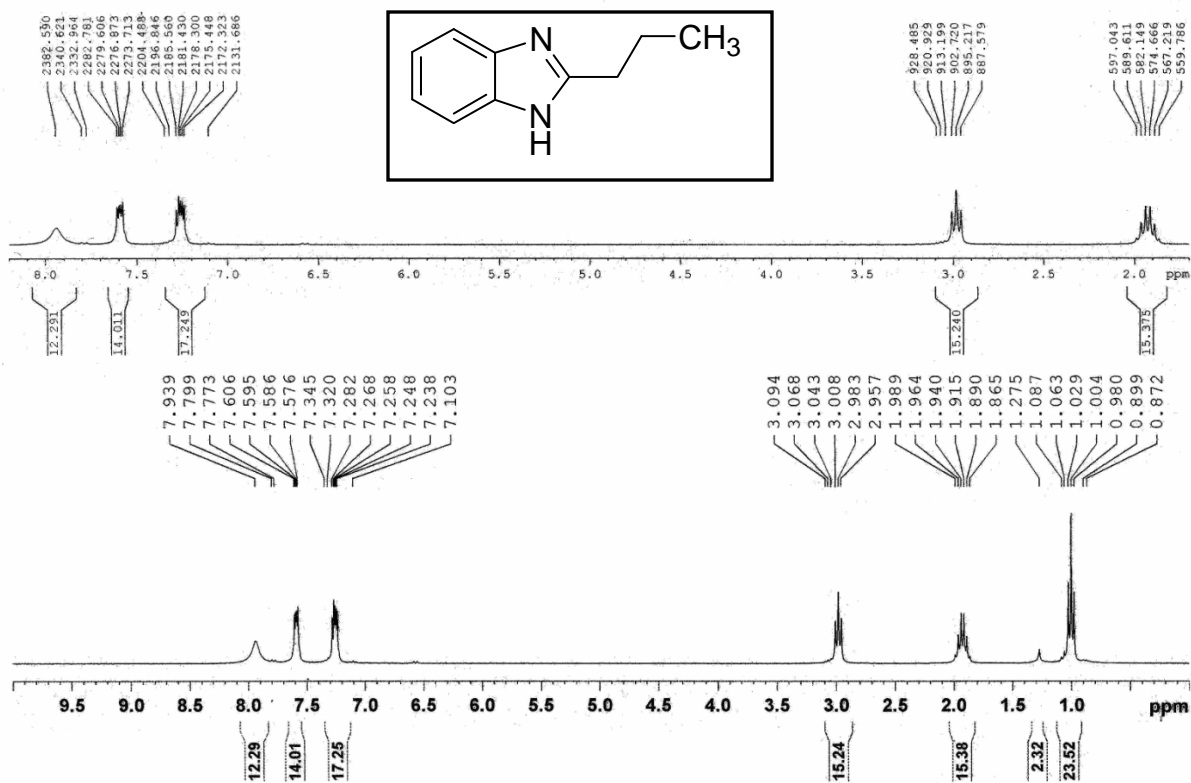


$^{13}\text{C}$ -NMR (Compound **3f**)



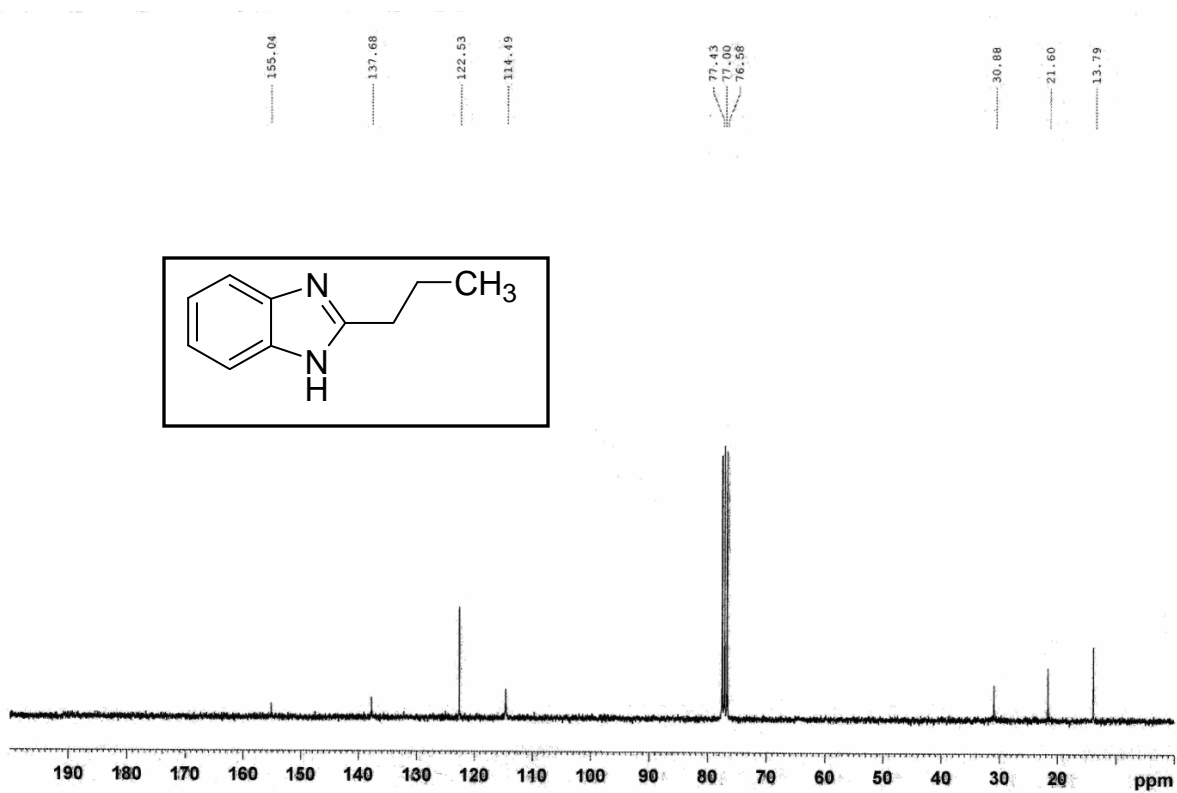
### Compound **3g**

### <sup>1</sup>H-NMR

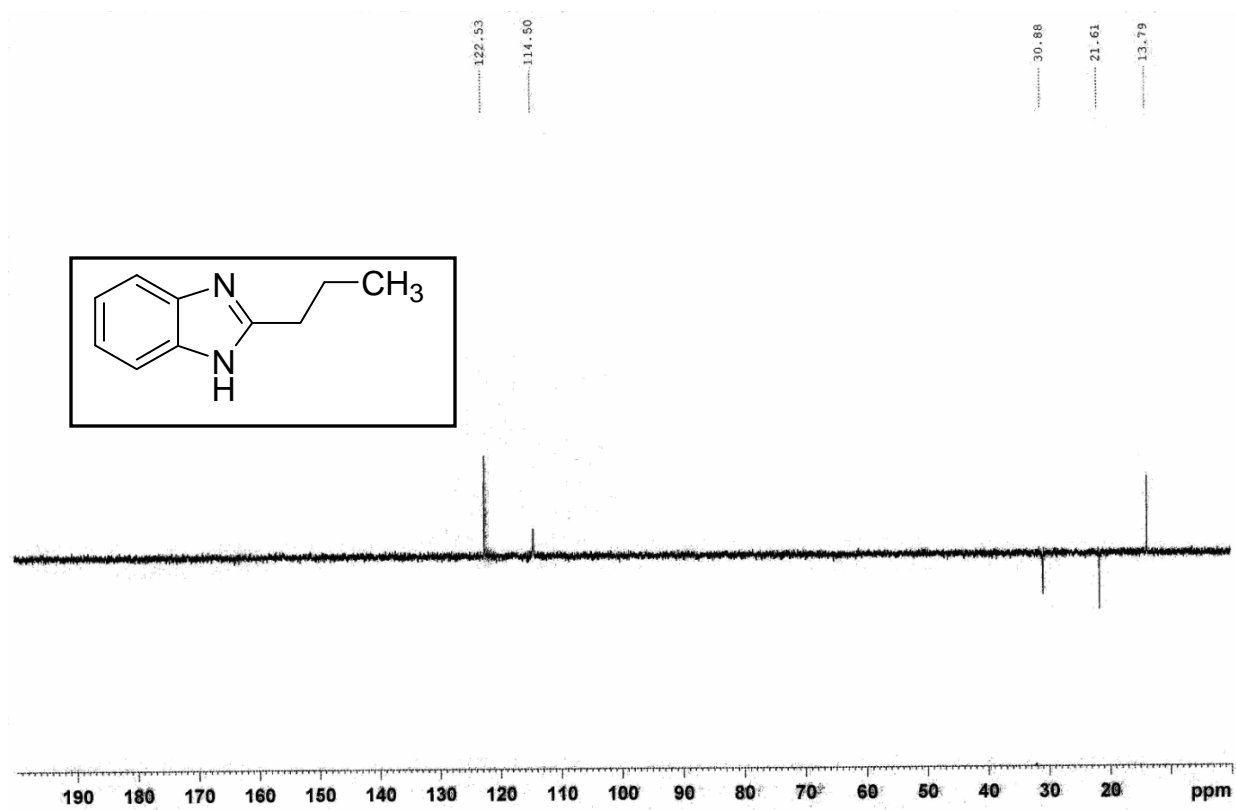




$^{13}\text{C}$ -NMR (Compound **3g**)

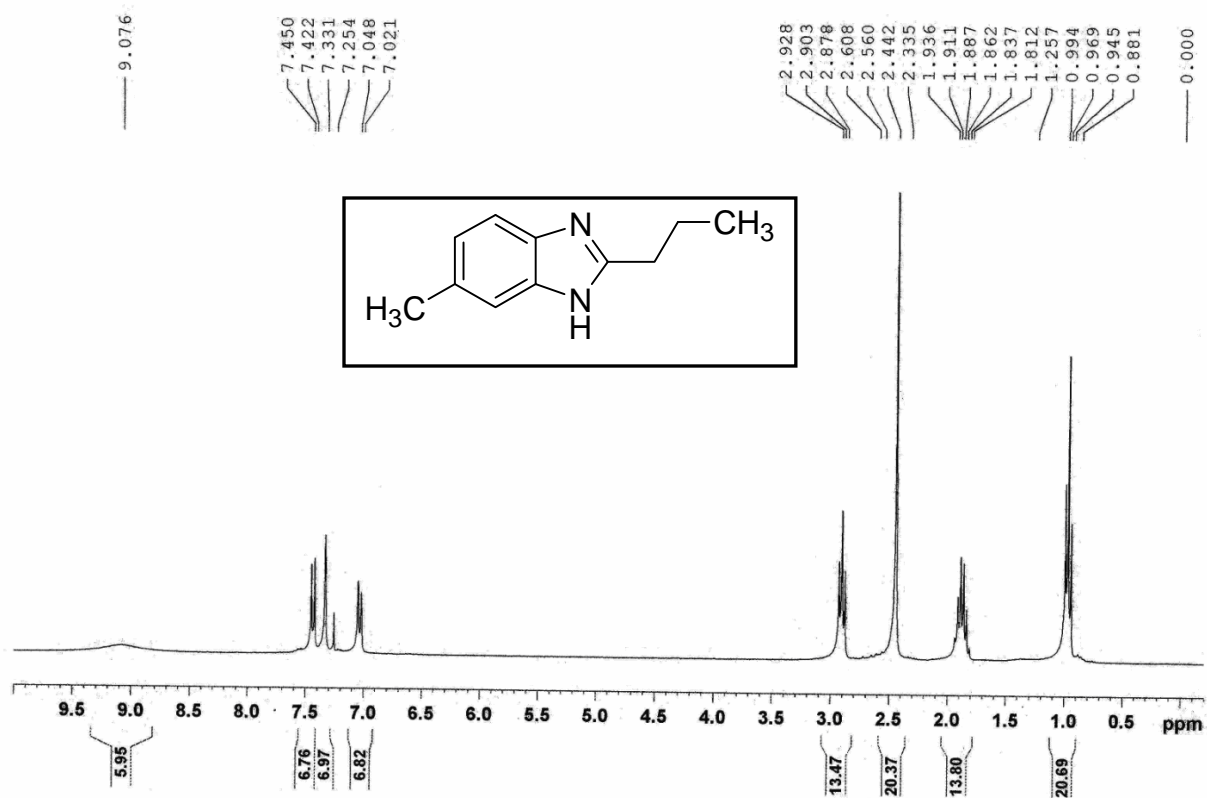


DEPT-135 (Compound **3g**)

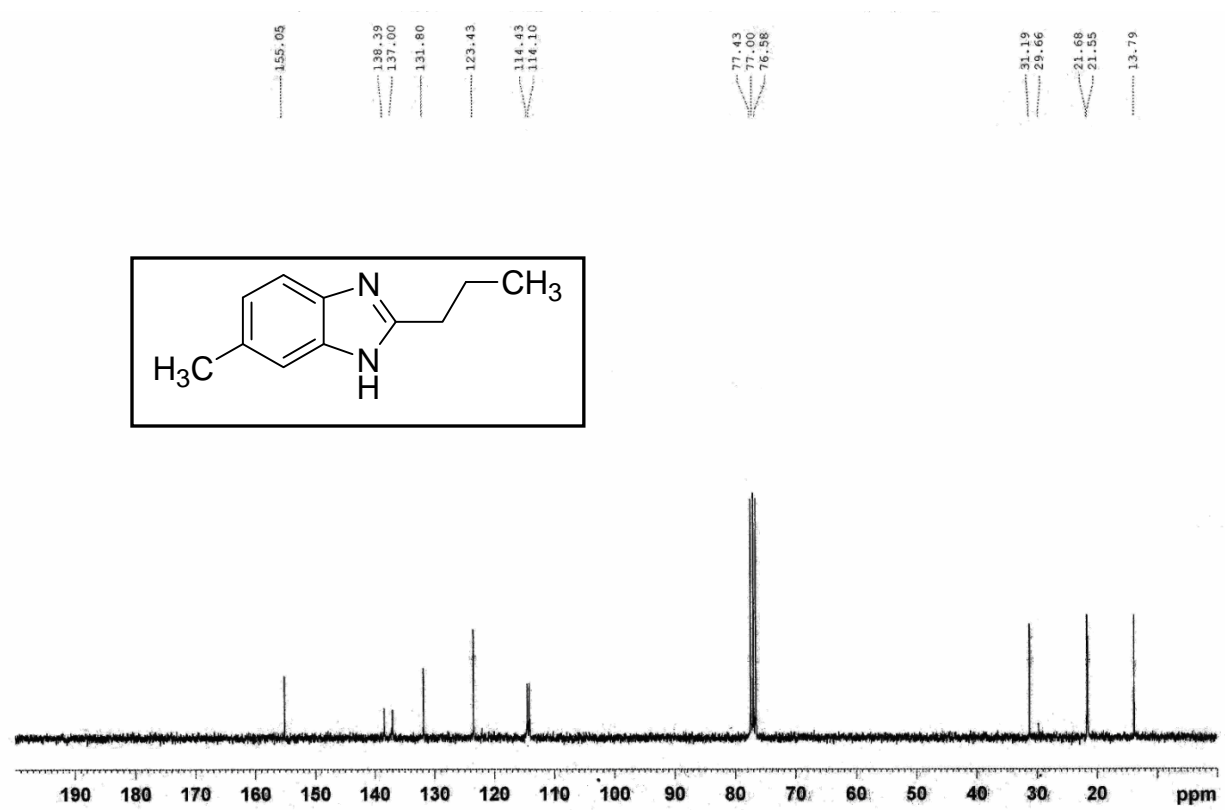


### Compound 3h

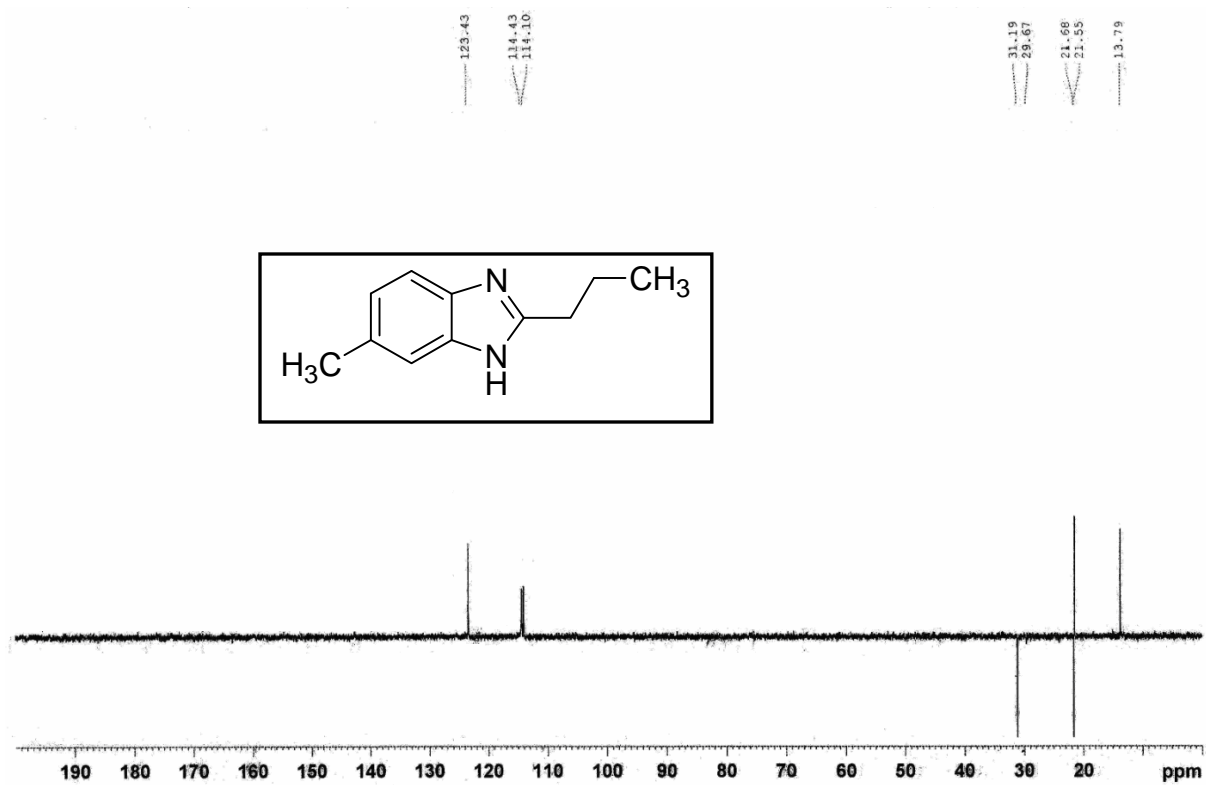
### <sup>1</sup>H-NMR



$^{13}\text{C}$ -NMR (Compound **3h**)

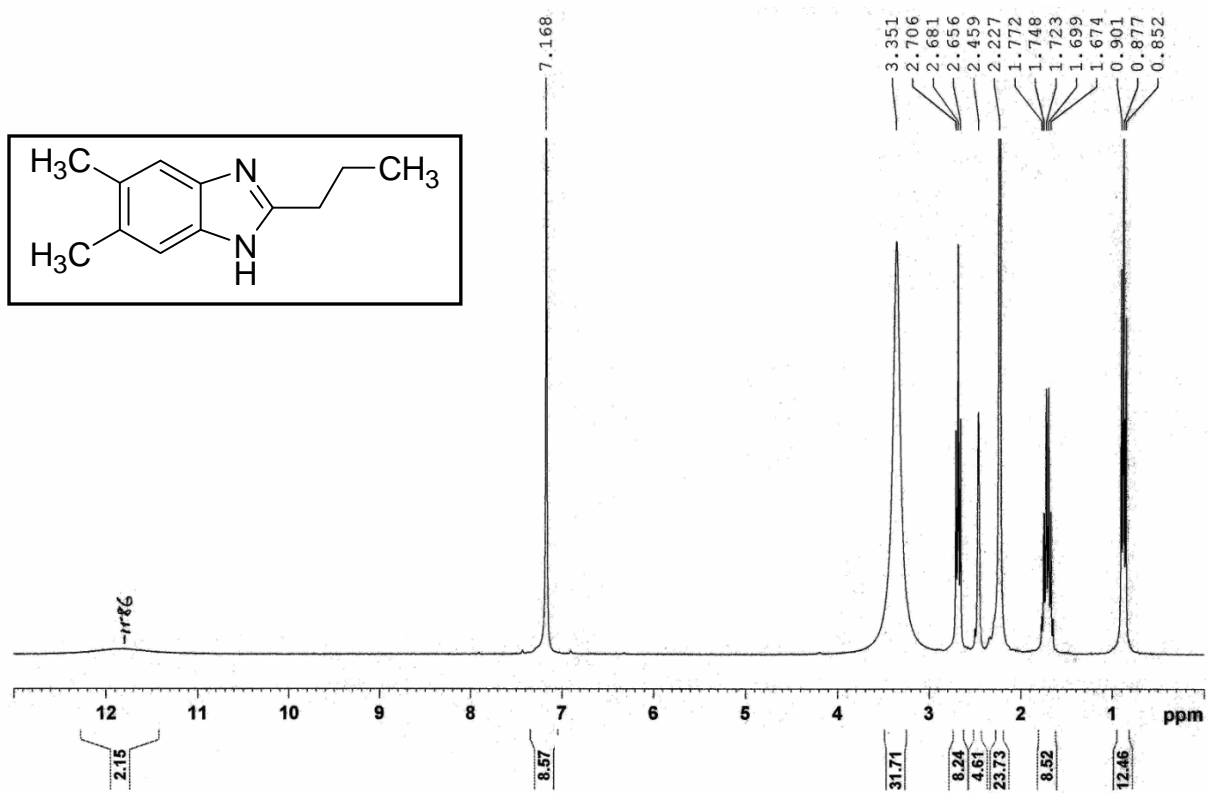


DEPT-135 (Compound **3h**)

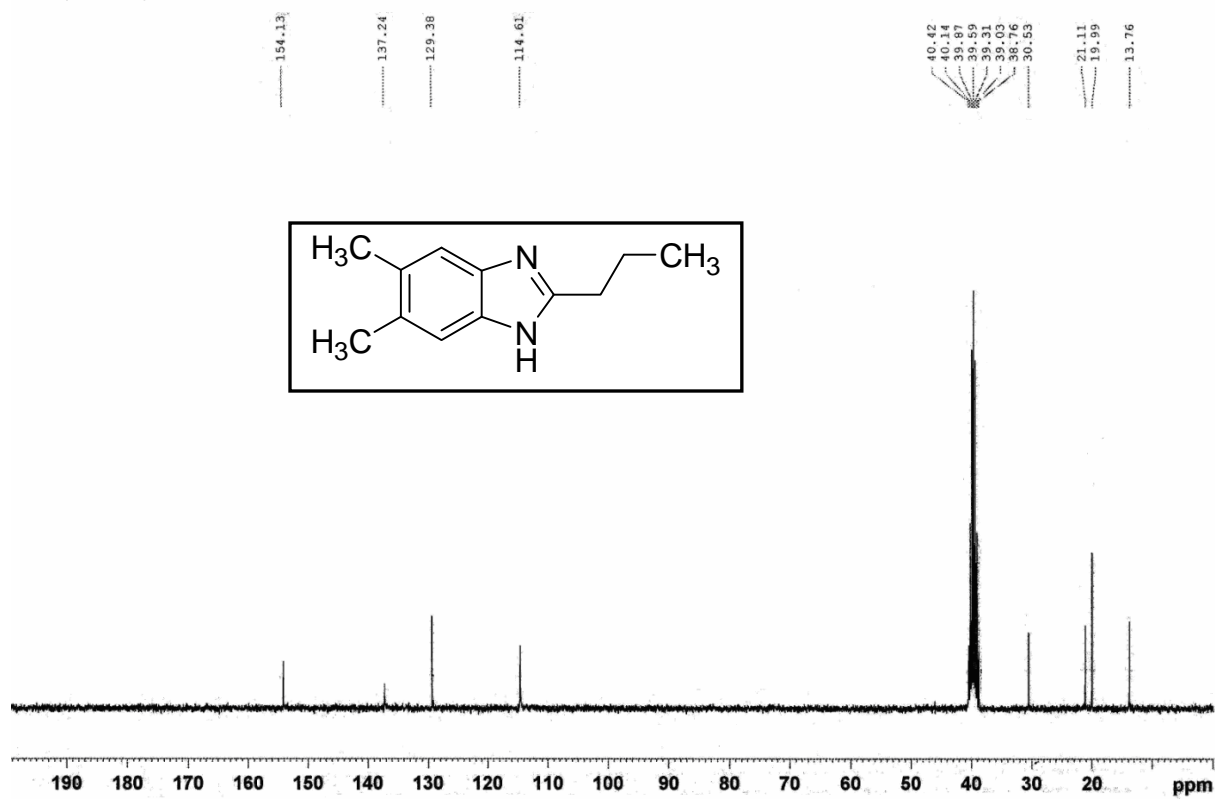


**Compound 3i**

<sup>1</sup>H-NMR



$^{13}\text{C}$ -NMR (Compound **3i**)



DEPT-135 (Compound **3i**)

