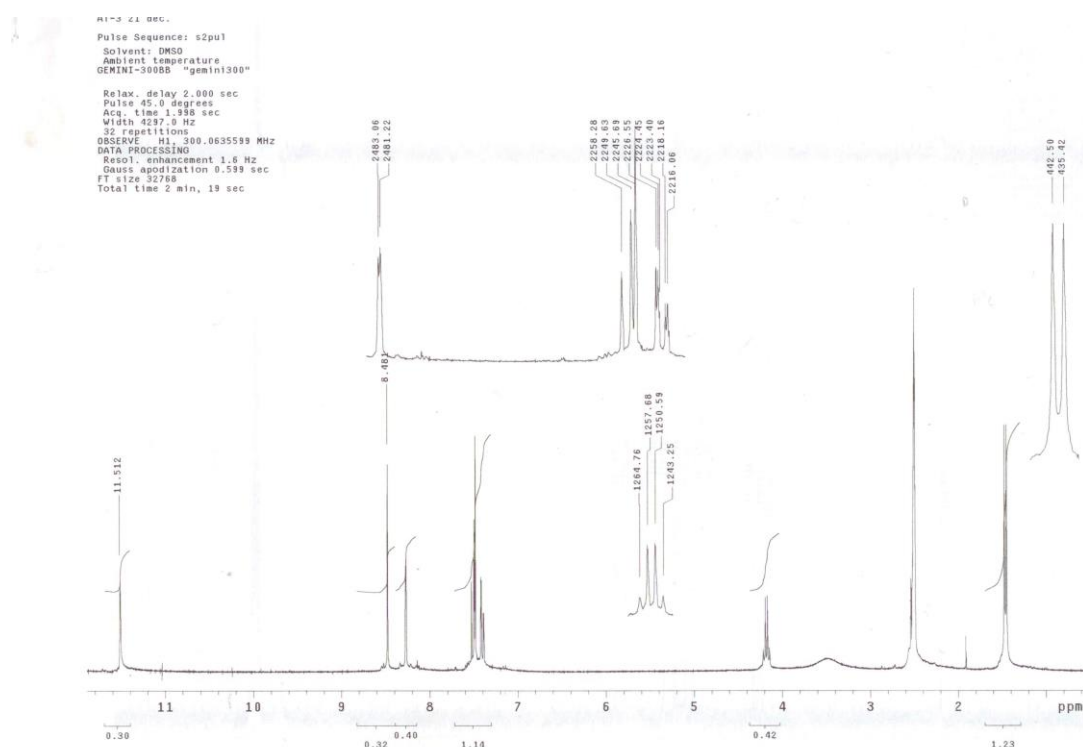


## Supplementary Materials

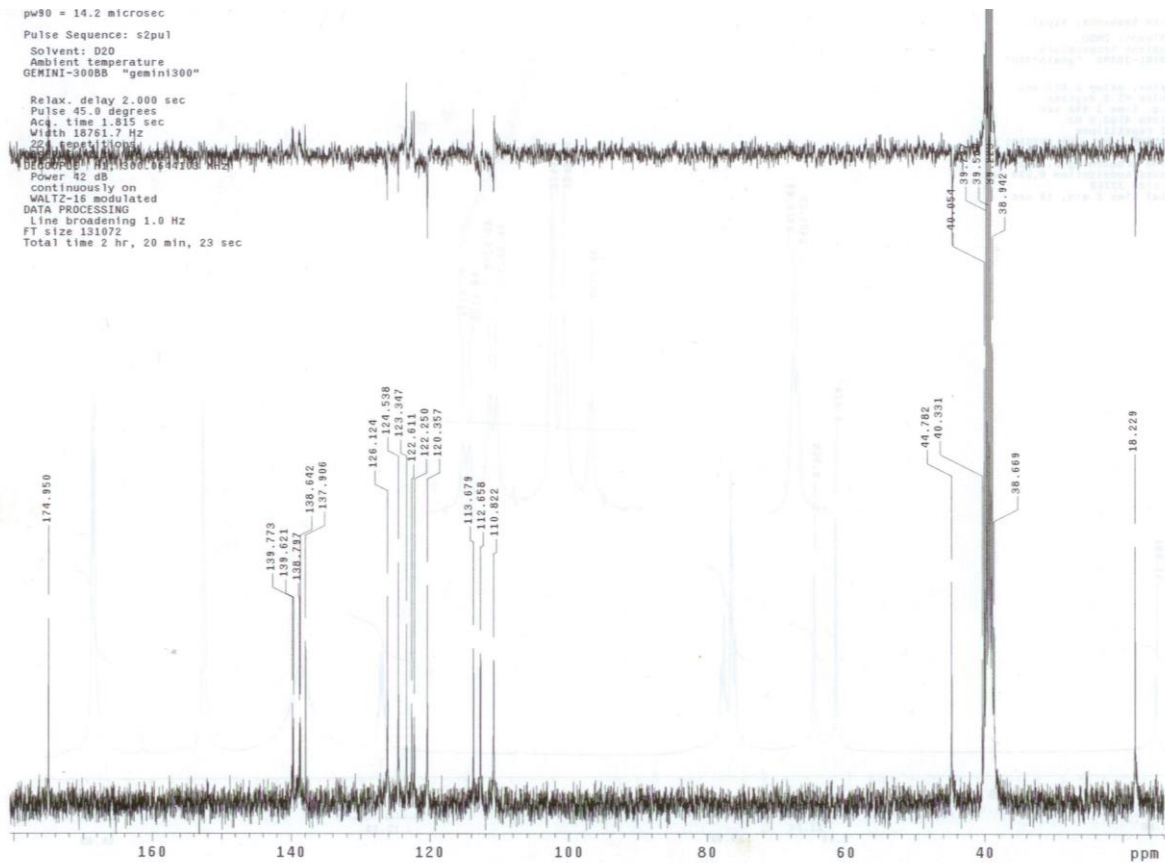
# In Silico and Experimental Investigation of the Biological Potential of Some Recently Developed Carprofen Derivatives

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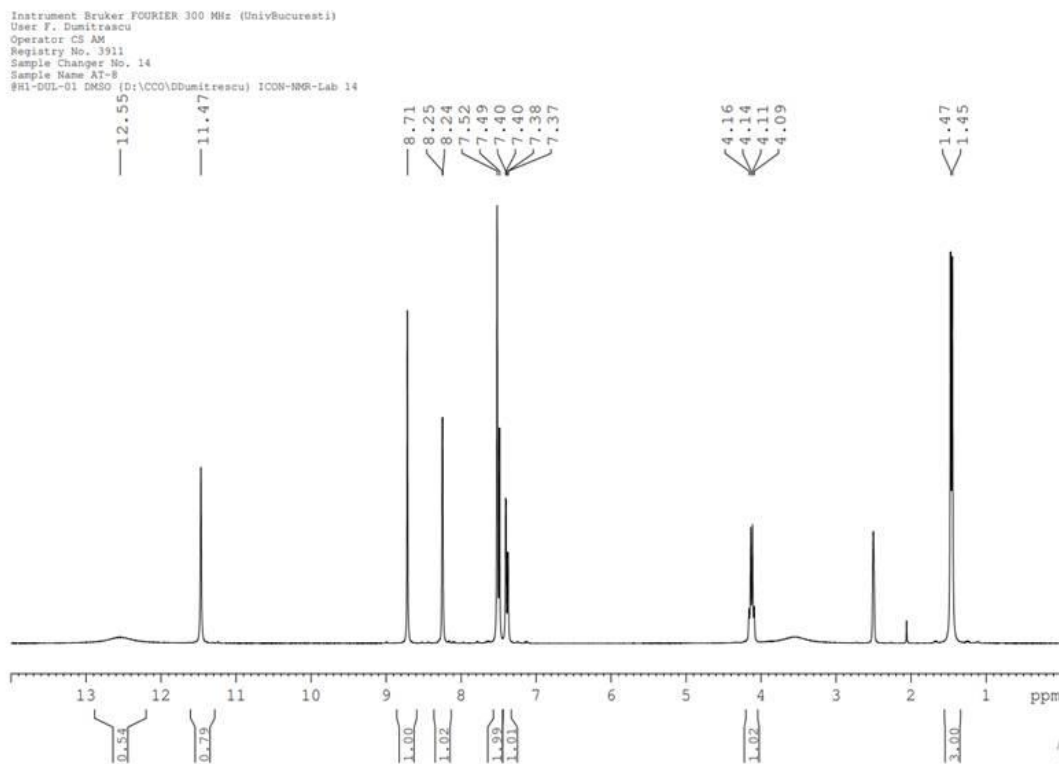
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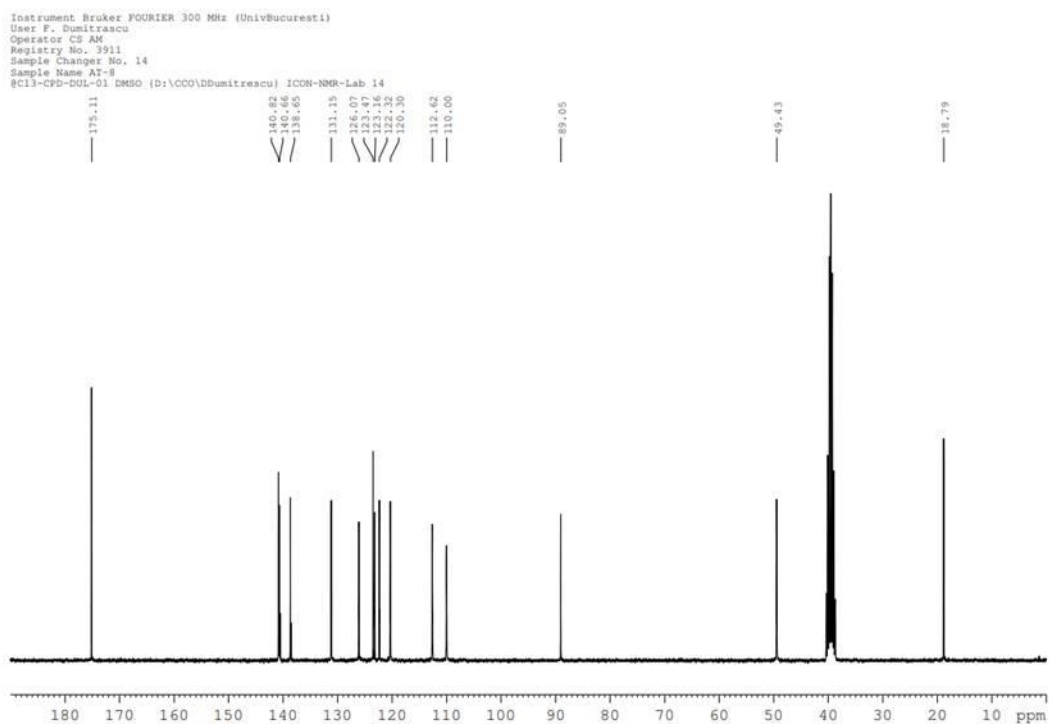
**Figure S1a.** The  $^1\text{H}$ -NMR spectrum of 2-(3-Bromo-6-chloro-9H-carbazol-2-yl)propanoic acid (**2**).



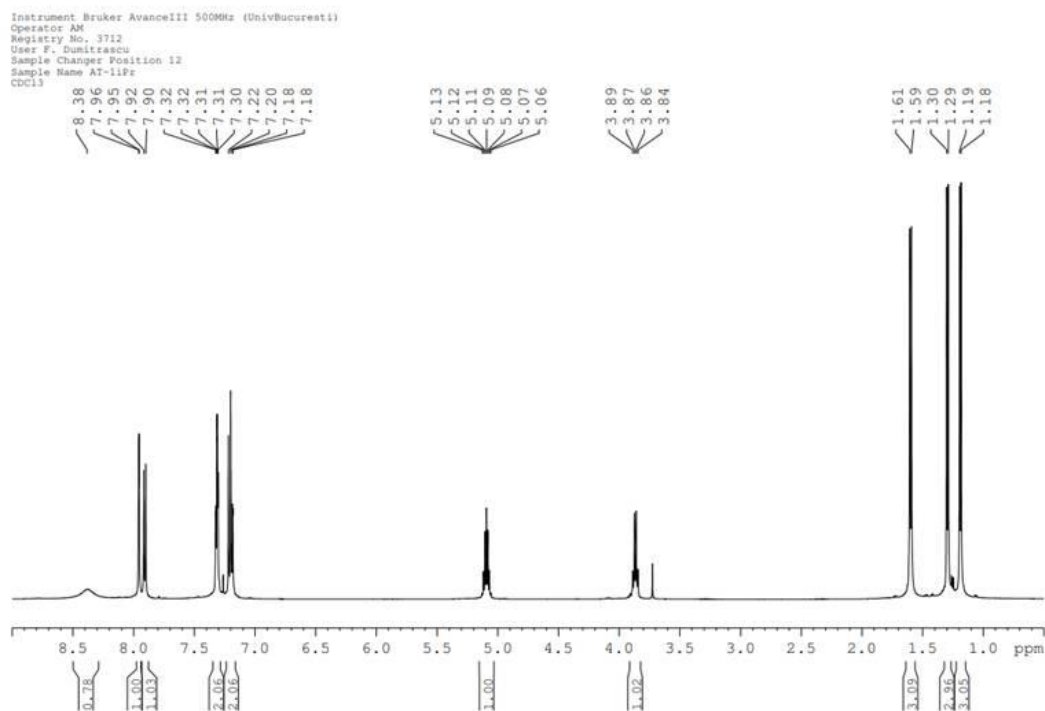
**Figure S1b.** The  $^{13}\text{C}$ -NMR spectrum of 2-(3-Bromo-6-chloro-9H-carbazol-2-yl)propanoic acid (**2**).



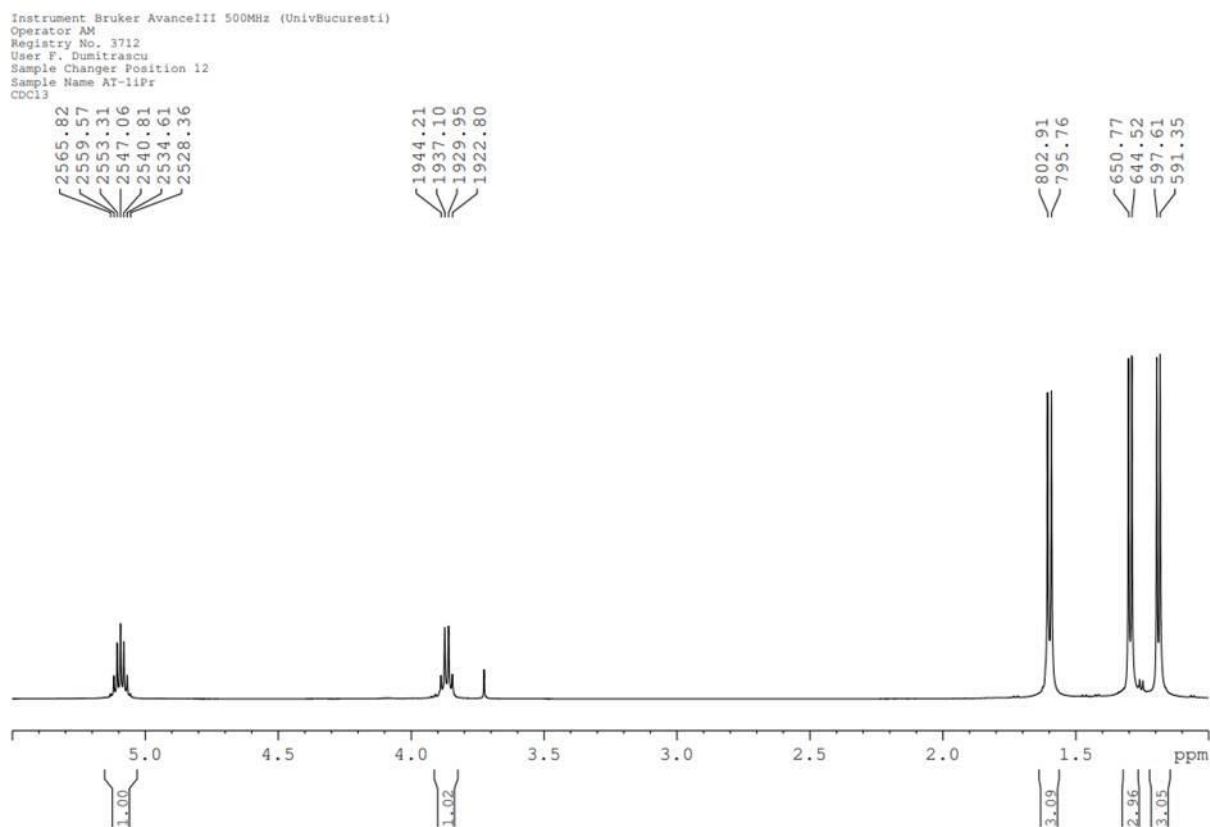
**Figure S2a.** The  $^1\text{H}$ -NMR spectrum of 2-(3-Iodo-6-chloro-9H-carbazol-2-yl)propanoic acid (**3**).



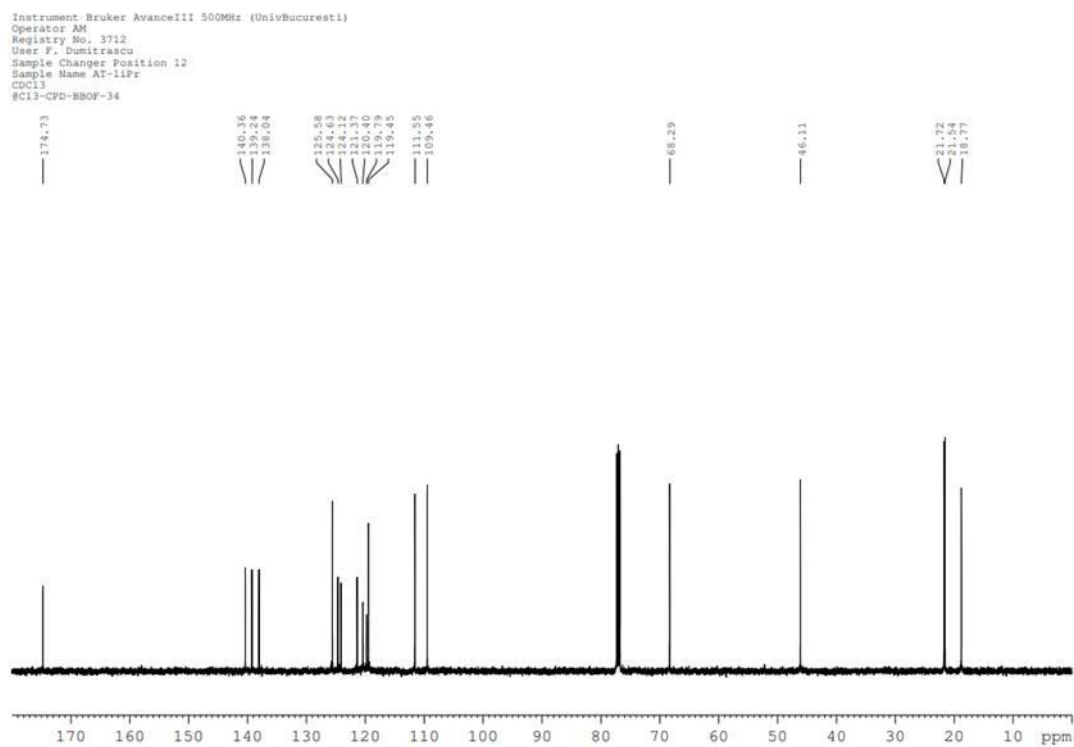
**Figure S2b.** The  $^{13}\text{C}$ -NMR spectrum of 2-(3-Iodo-6-chloro-9H-carbazol-2-yl)propanoic acid (**3**).



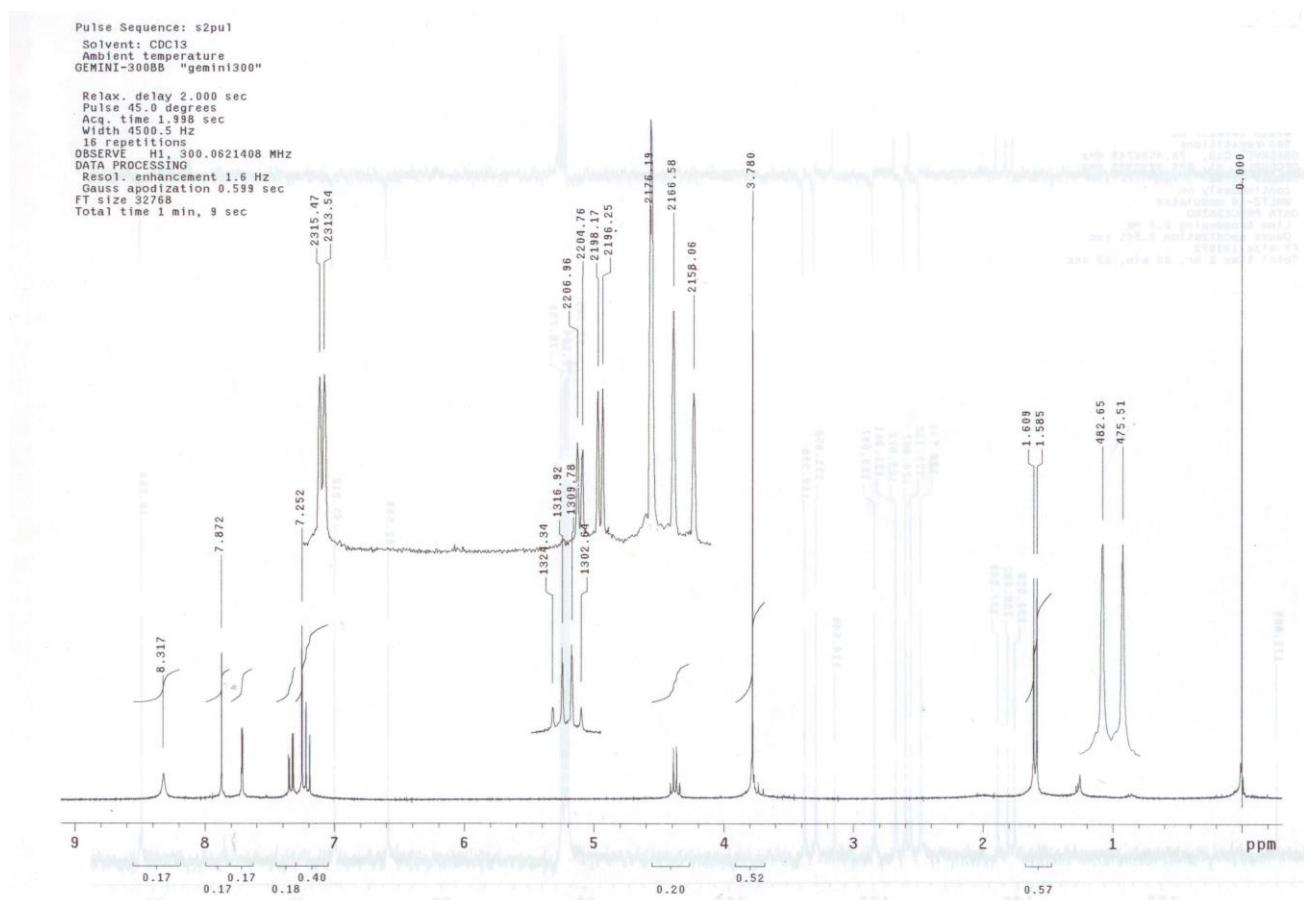
**Figure S3a.** The <sup>1</sup>H-NMR spectrum of Isopropyl 2-(6-chloro-9H-carbazol-2-yl)propanoate (**4**).



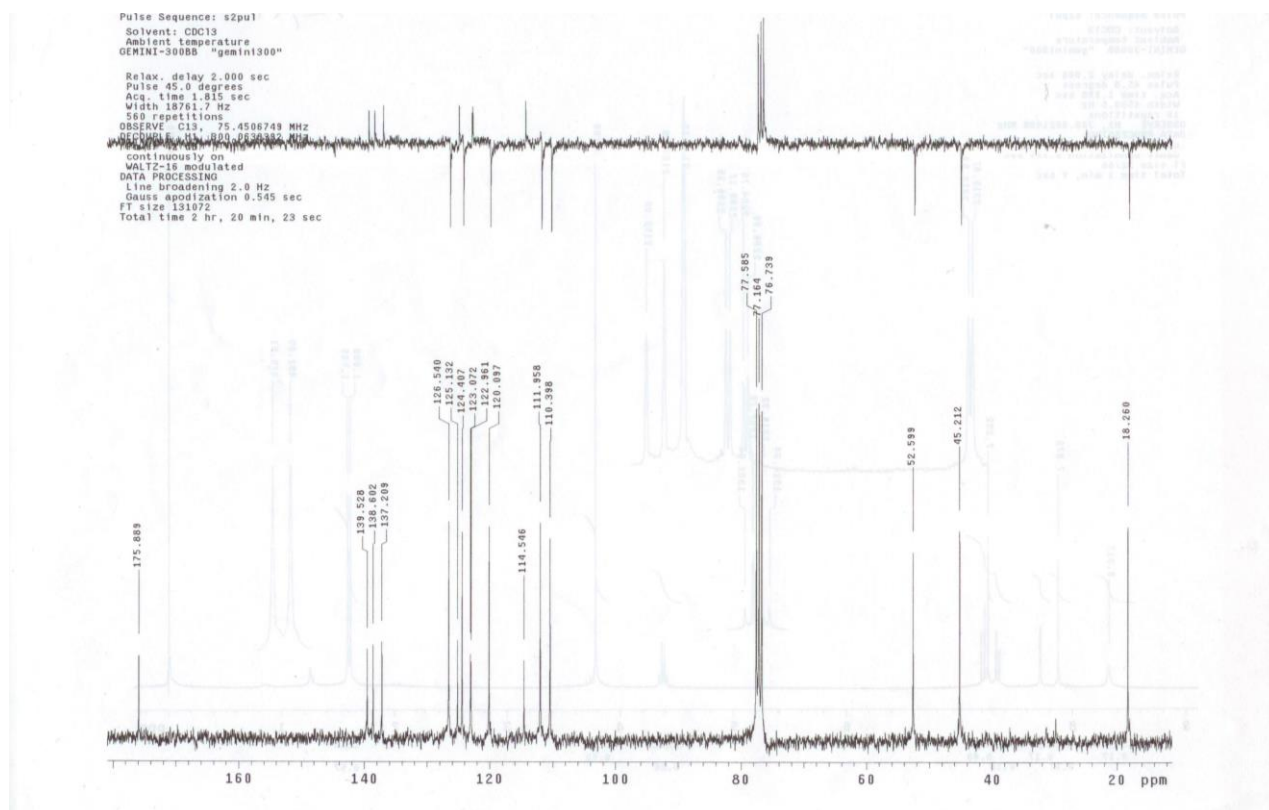
**Figure S3b.** The <sup>1</sup>H-NMR spectrum (details) of Isopropyl 2-(6-chloro-9H-carbazol-2-yl)propanoate (**4**).



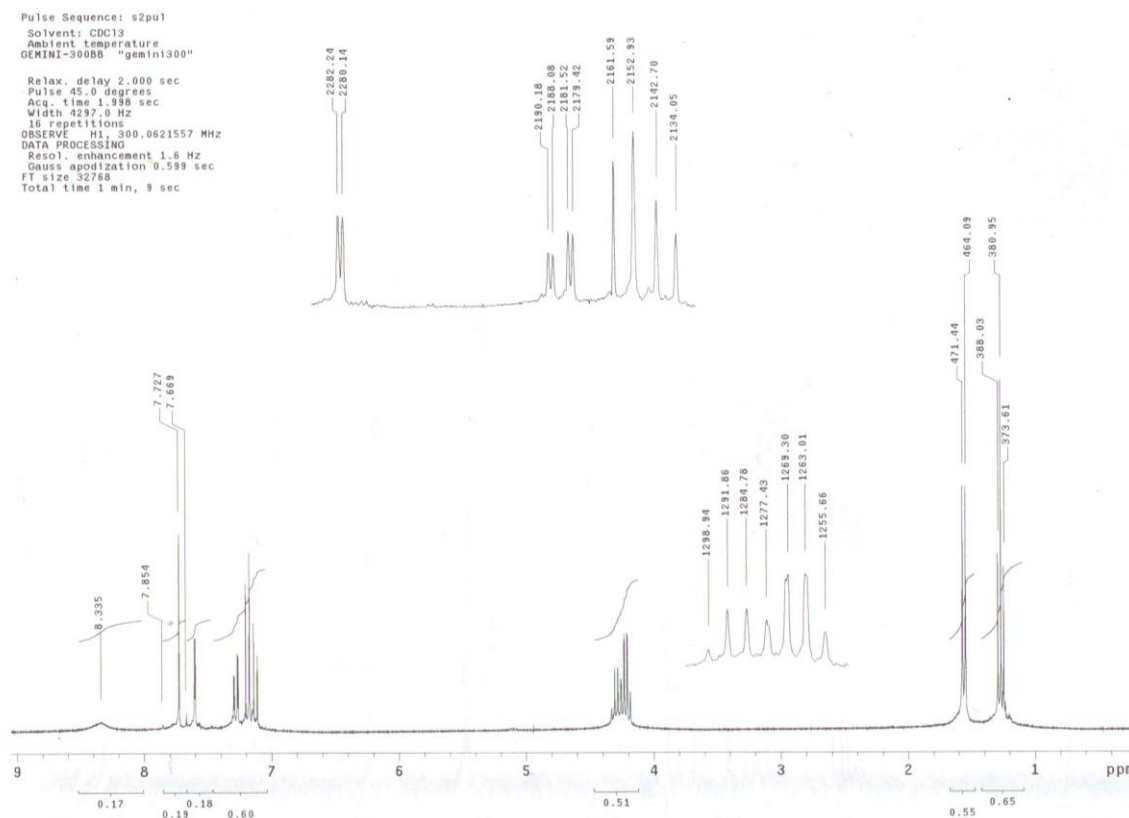
**Figure S3c.** The  $^{13}\text{C}$ -NMR spectrum of Isopropyl 2-(6-chloro-9H-carbazol-2-yl)propanoate (**4**).



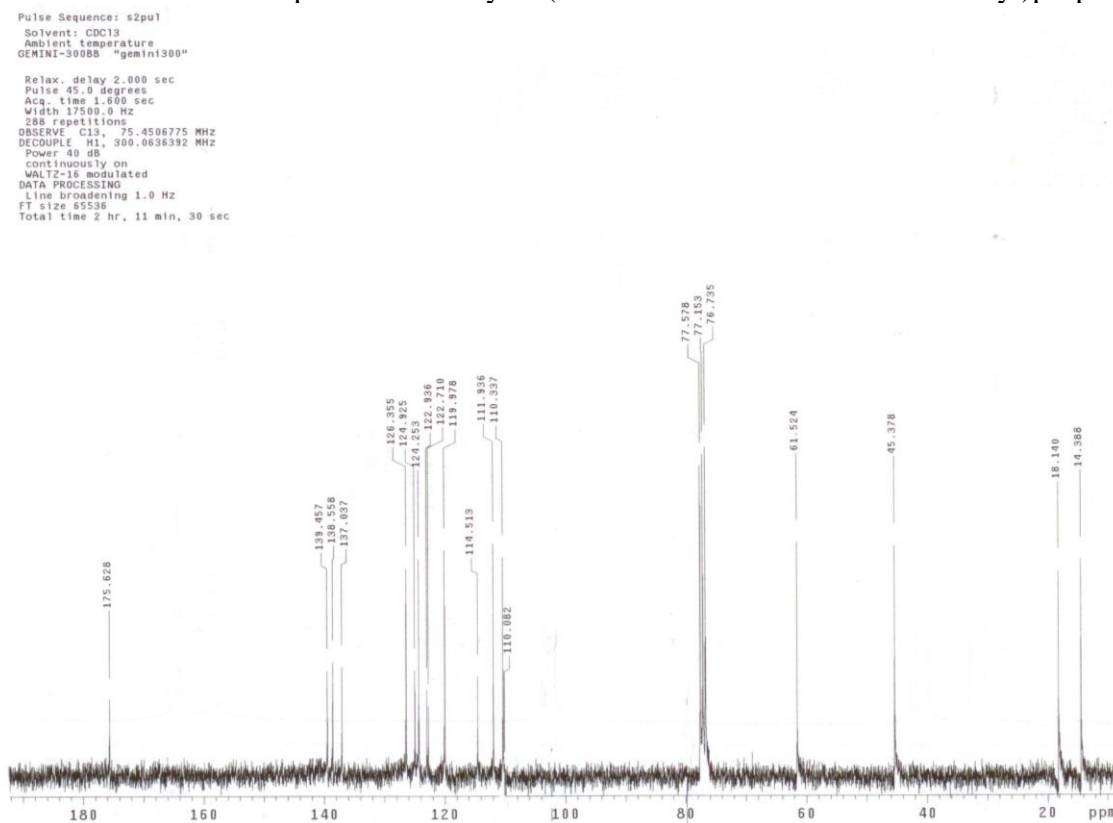
**Figure S4a.** The <sup>1</sup>H-NMR spectrum of Methyl 2-(3-Bromo-6-chloro-9H-carbazol-2-yl)propanoate (**5**).



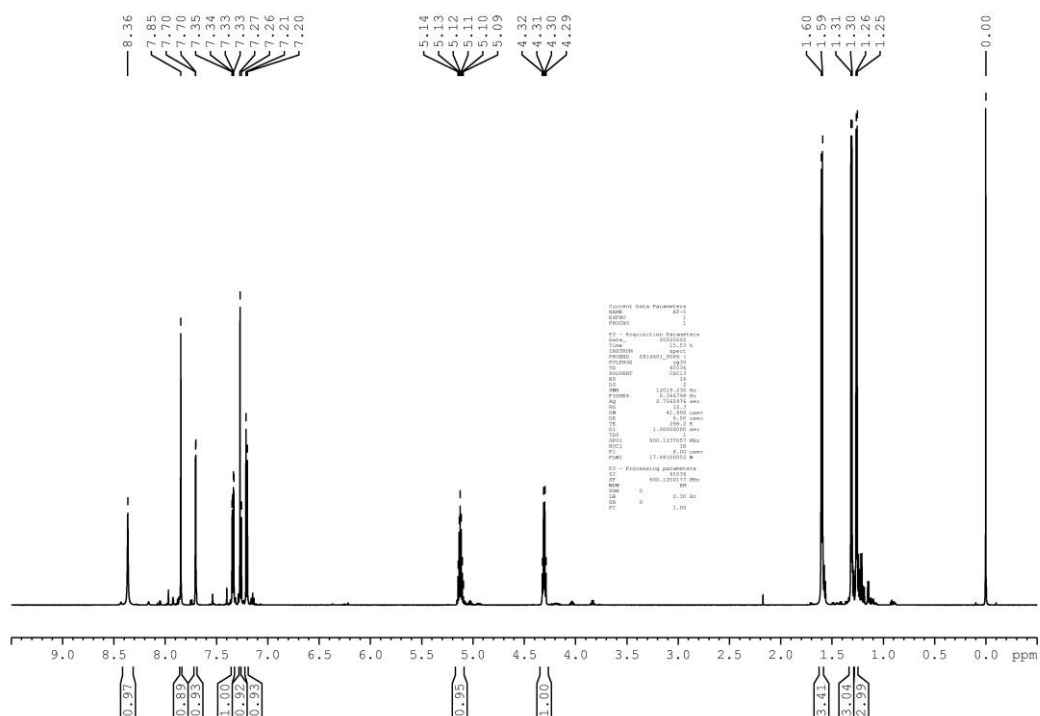
**Figure S4b.** The <sup>13</sup>C-NMR spectrum of Methyl 2-(3-Bromo-6-chloro-9H-carbazol-2-yl)propanoate (**5**).



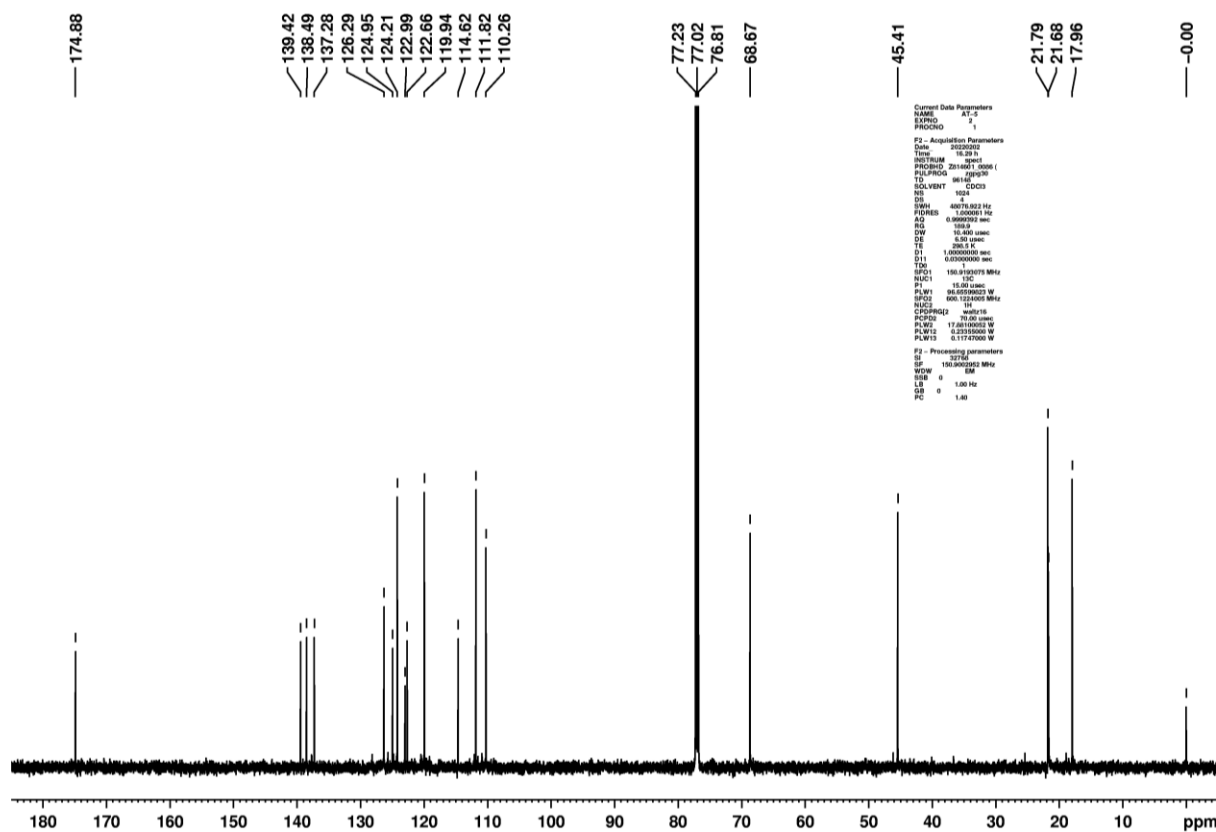
**Figure S5a.** The <sup>1</sup>H-NMR spectrum of Ethyl 2-(3-Bromo-6-chloro-9H-carbazol-2-yl)propanoate (**6**).



**Figure S5b.** The <sup>13</sup>C-NMR spectrum of Ethyl 2-(3-Bromo-6-chloro-9H-carbazol-2-yl)propanoate (**6**).

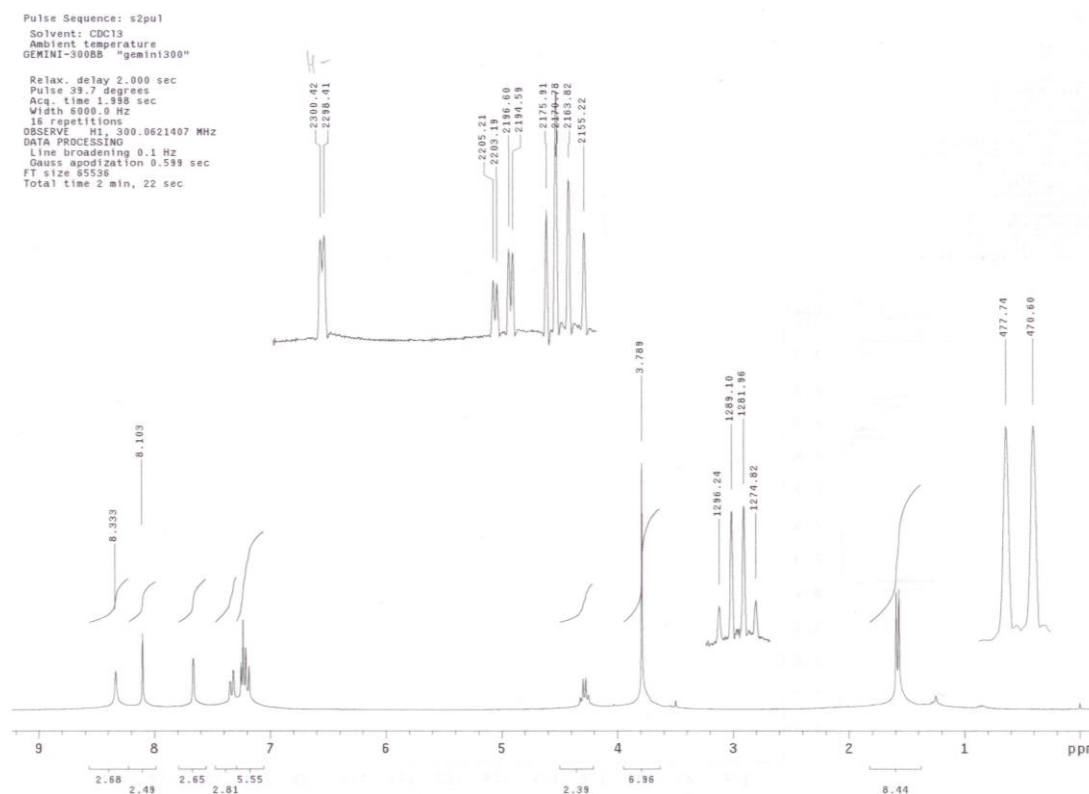


**Figure S6a.** The  $^1\text{H}$ -NMR spectrum of Isopropyl 2-(3-Bromo-6-chloro-9H-carbazol-2-yl)propanoate (**7**).

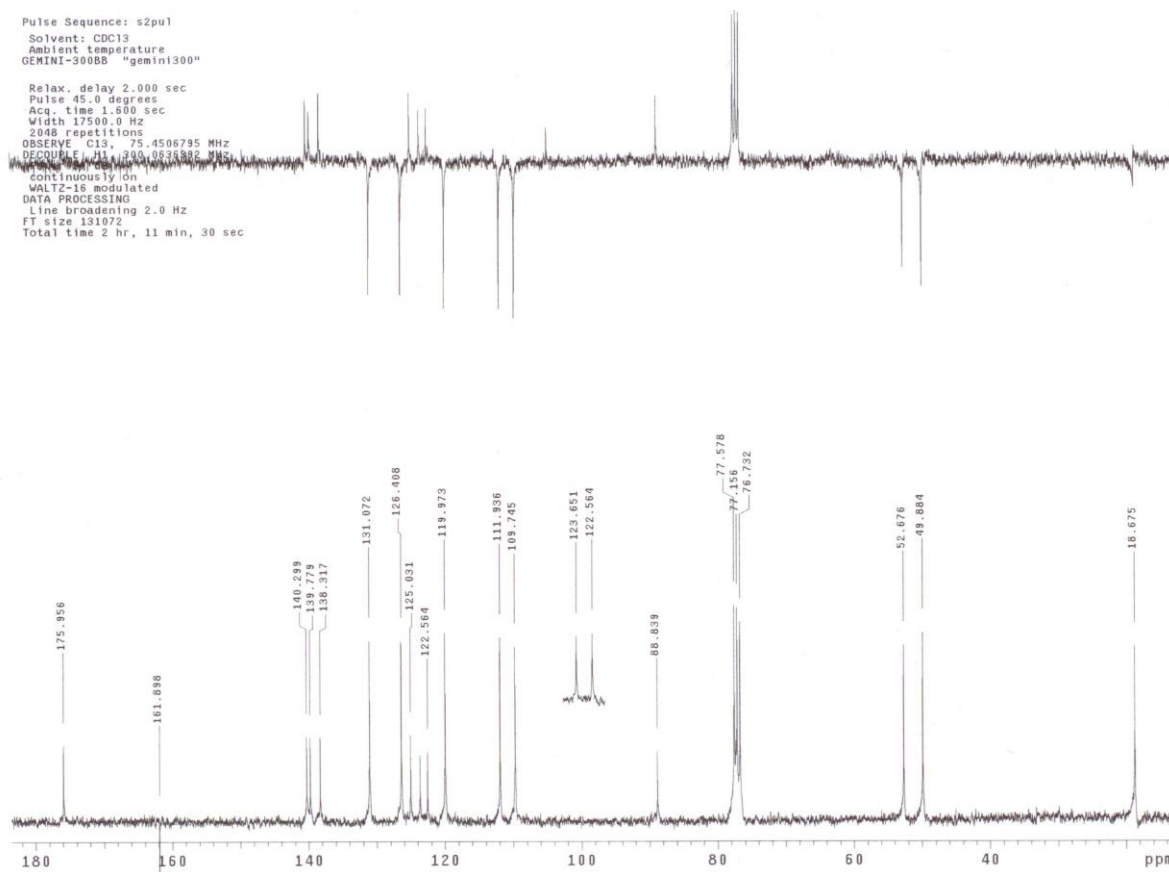


**Figure S6b.** The  $^{13}\text{C}$ -NMR spectrum of Isopropyl 2-(3-Bromo-6-chloro-9H-carbazol-2-yl)propanoate (**7**).

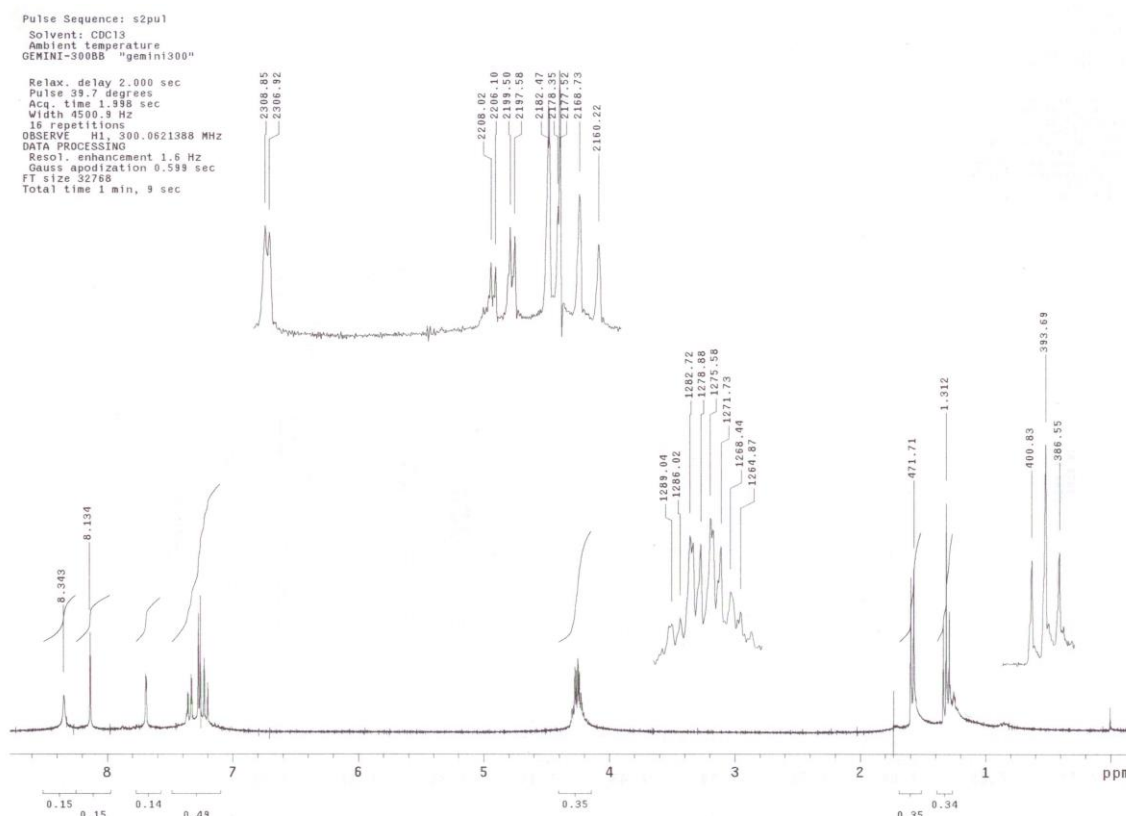




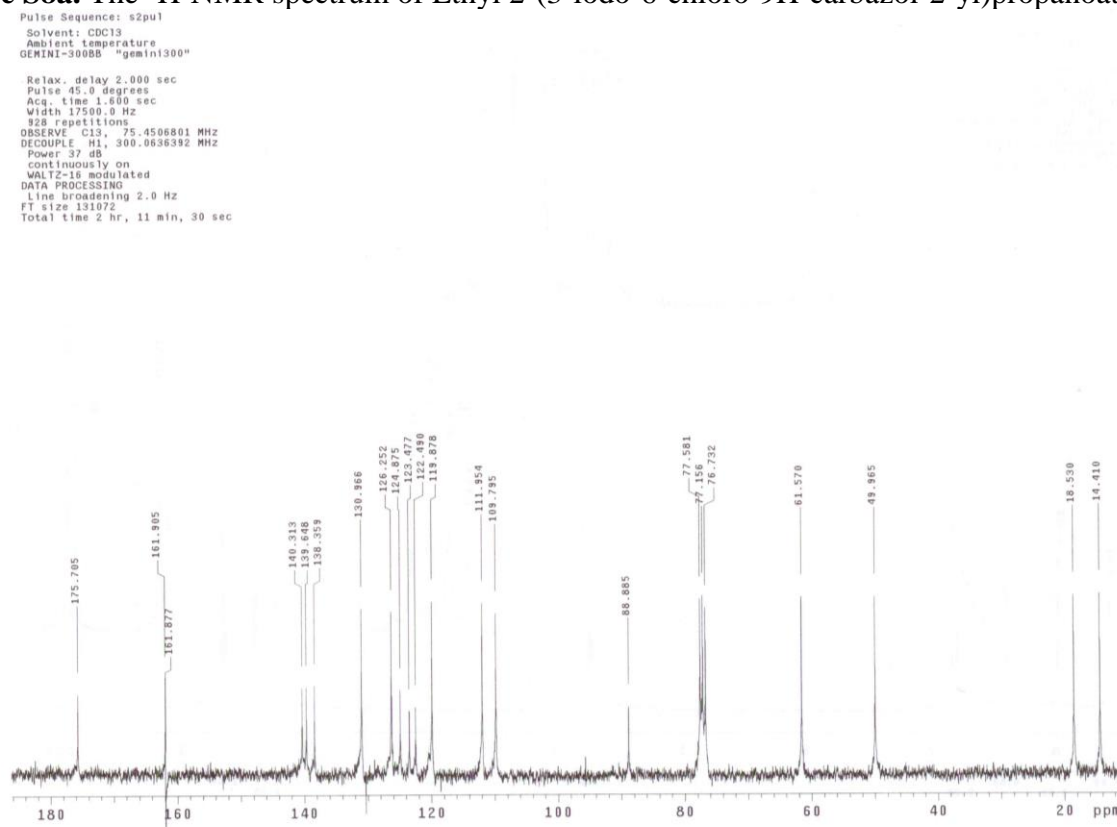
**Figure S7a.** The <sup>1</sup>H-NMR spectrum of Methyl 2-(3-iodo-6-chloro-9H-carbazol-2-yl)propanoate (**8**).



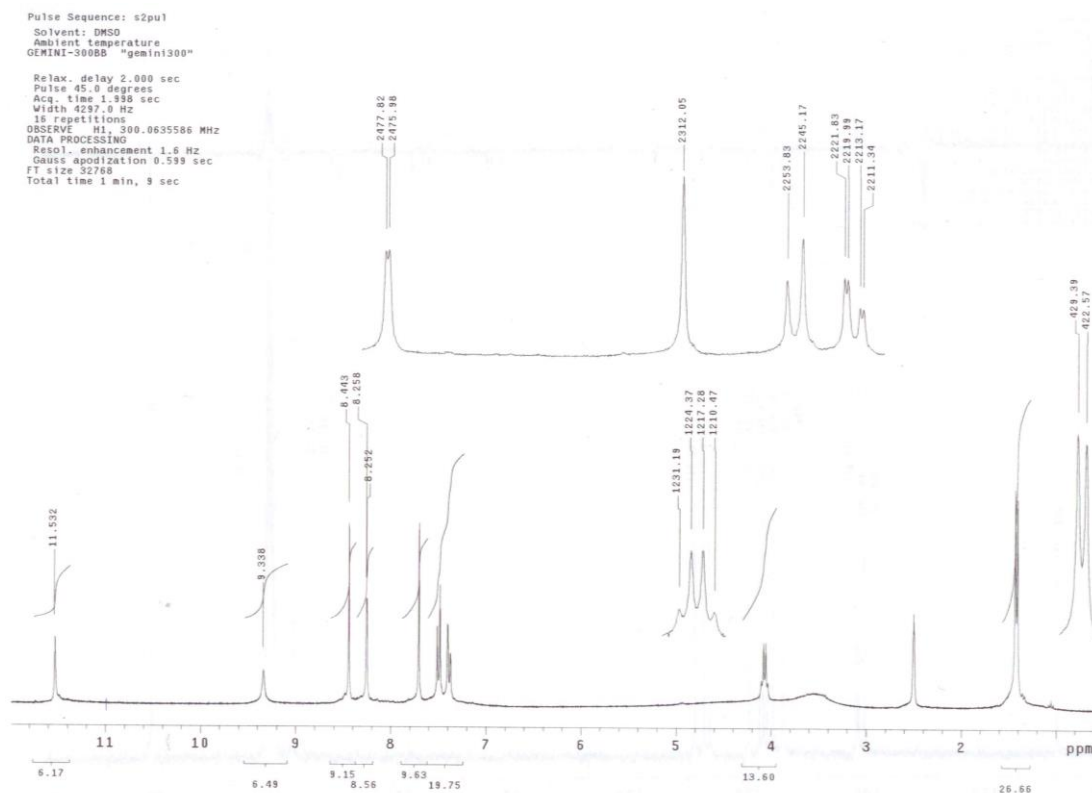
**Figure S7b.** The <sup>13</sup>C-NMR spectrum of Methyl 2-(3-iodo-6-chloro-9H-carbazol-2-yl)propanoate (**8**).



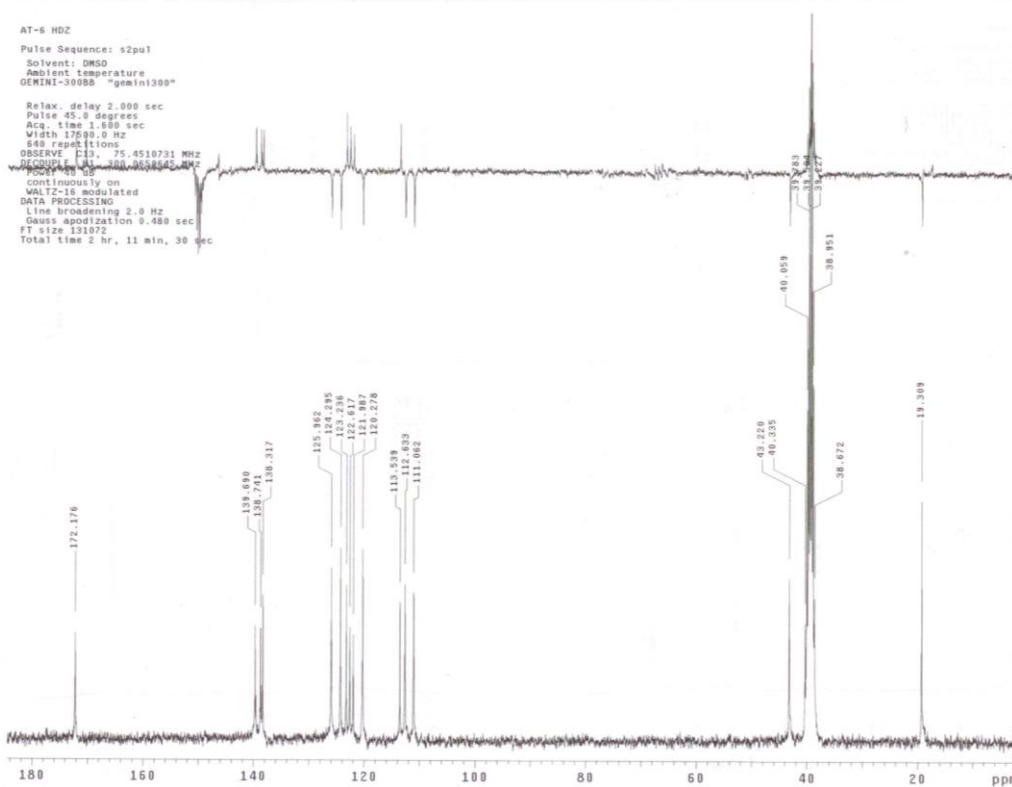
**Figure S8a.** The <sup>1</sup>H-NMR spectrum of Ethyl 2-(3-iodo-6-chloro-9H-carbazol-2-yl)propanoate (**9**).



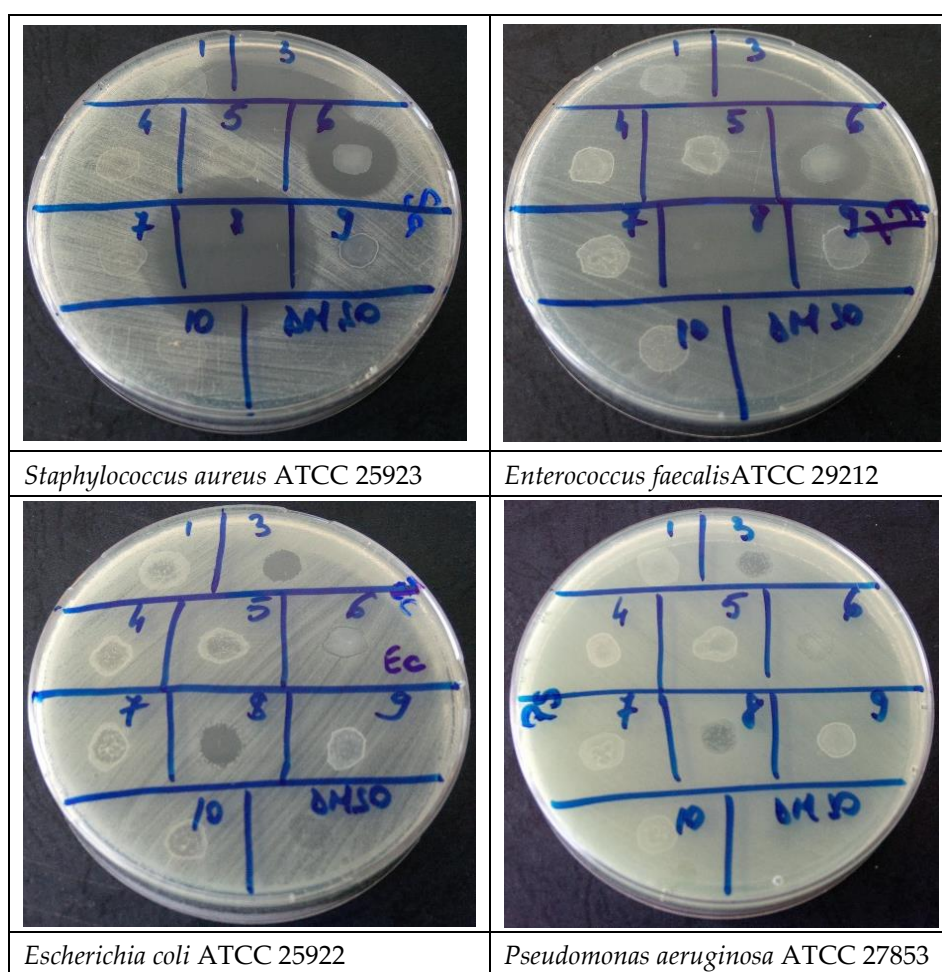
**Figure S8b.** The <sup>13</sup>C-NMR spectrum of Ethyl 2-(3-iodo-6-chloro-9H-carbazol-2-yl)propanoate (**9**).



**Figure S9a.** The  $^1\text{H}$ -NMR spectrum of Hydrazide of 2-(3-Bromo-6-chloro-9H-carbazol-2-yl)propanoic acid (10).



**Figure S9b.** The  $^{13}\text{C}$ -NMR spectrum of Hydrazide of 2-(3-Bromo-6-chloro-9H-carbazol-2-yl)propanoic acid (10).



**Figure S10.** The Qualitative screening of the antimicrobial activity of the tested compounds (1- compound 4; 3- compound 2; 4- compound 5; 5- compound 7; 6- compound 10; 7- compound 6; 8- compound 3; 9- compound 8; 10- compound 9).