

**Synthesis of *N*- $\omega$ -phenylalkyl-4-(*p*-chlorophenyl)-piperidin-4-ol analogues with potent antiproliferative activities against HCT-116 cells**

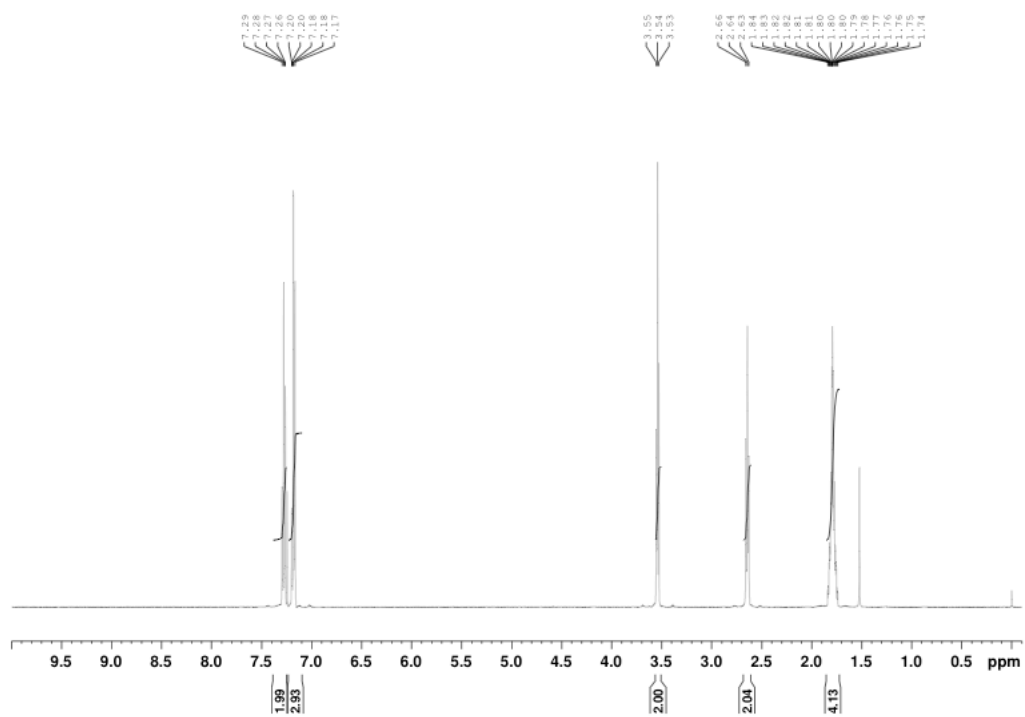
Noriyuki Hatae<sup>a\*</sup>, Eiko Kujime<sup>b</sup>, Keigo Yano<sup>b</sup>, Mami Kizuka<sup>a</sup>, Rina Ashida<sup>a</sup>, Tominari Choshi<sup>c</sup>, Takashi Nishiyama<sup>c</sup>, Chiaki Okada<sup>a</sup>, Tatsunori Iwamura<sup>b</sup>, and Teruki Yoshimura<sup>a\*</sup>

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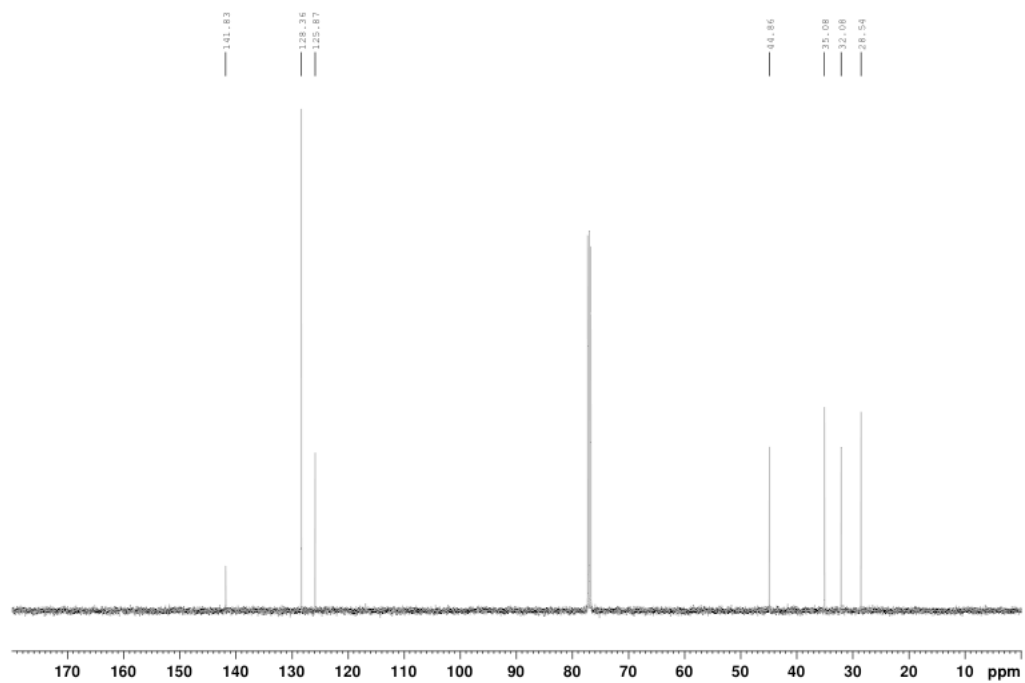
**Supporting Information**

**Spectral data for *N*- $\omega$ -phenylalkyl-4-(*p*-chlorophenyl)-piperidin-4-ol analogues S2-S15**

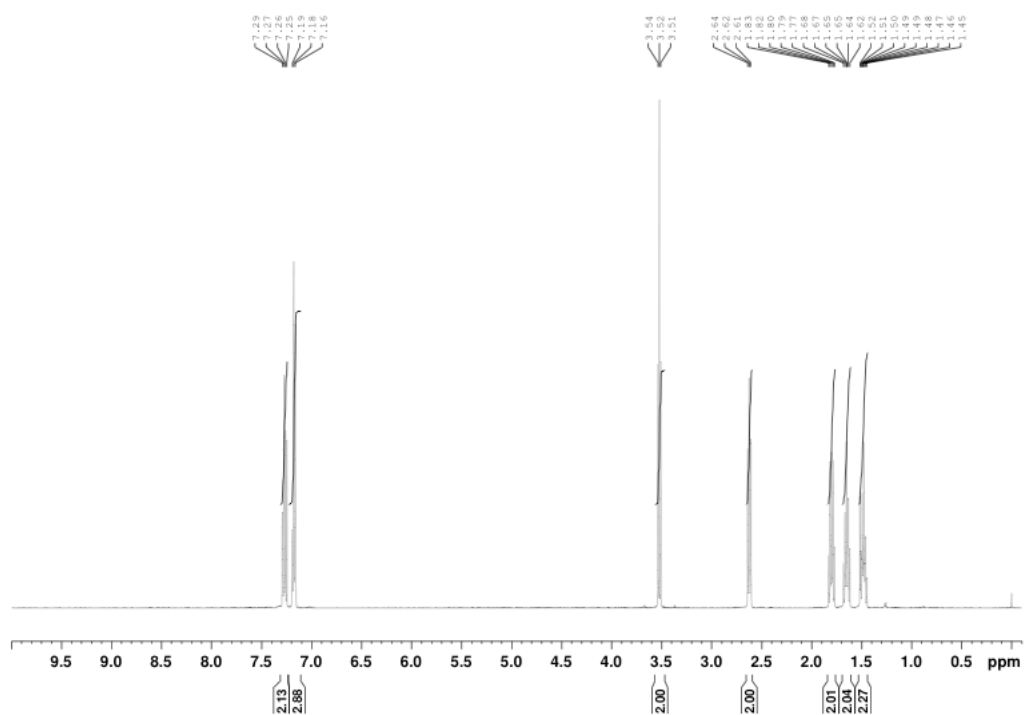
### <sup>1</sup>H NMR for (4-chlorobutyl)benzene (5d)



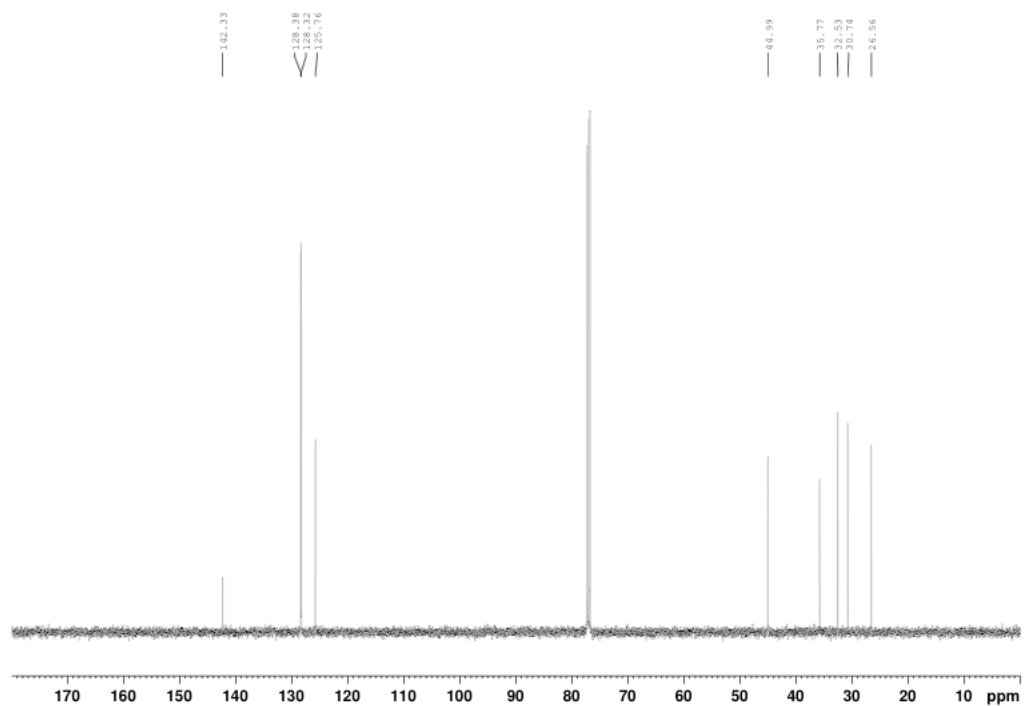
### <sup>13</sup>C NMR for (4-chlorobutyl)benzene (5d)



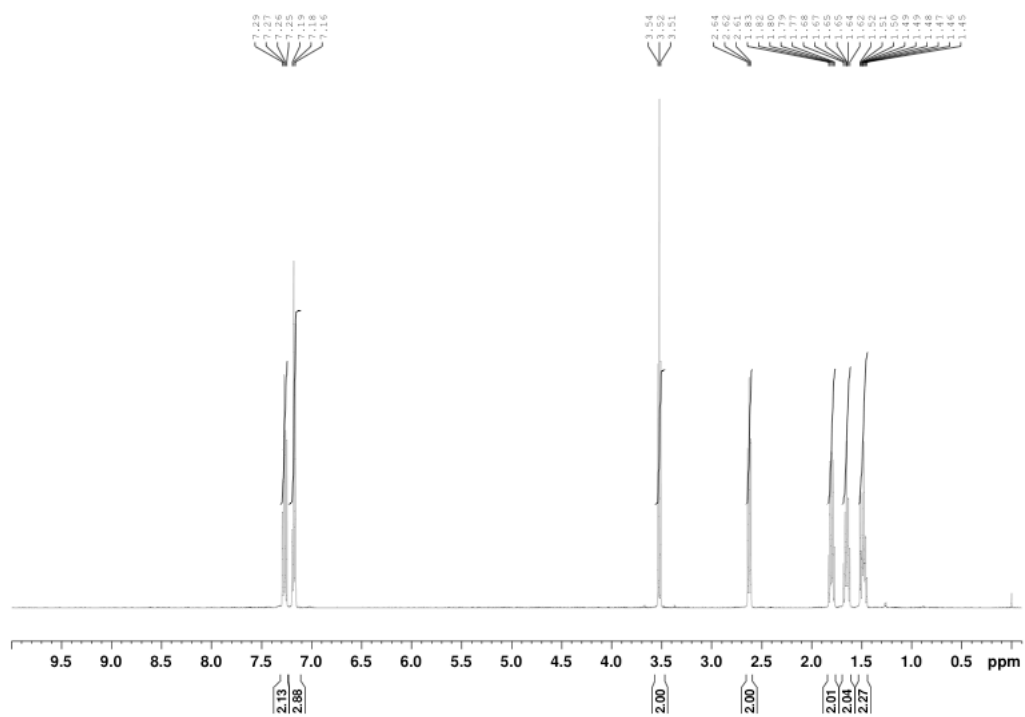
### $^1\text{H}$ NMR for (5-Chloropentyl)benzene (5e)



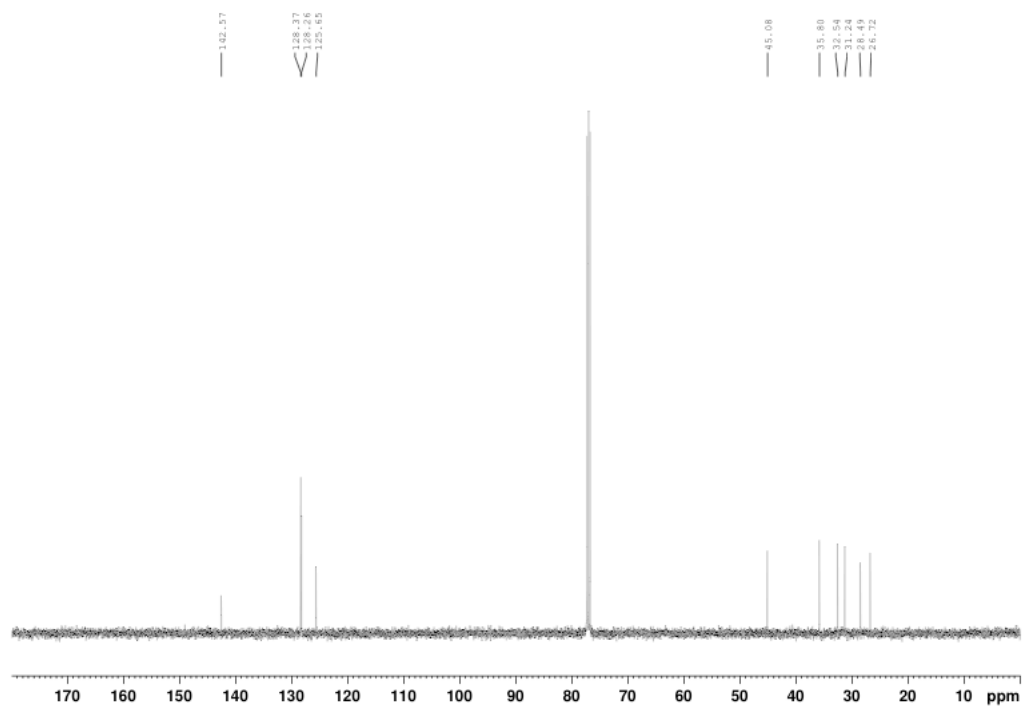
### $^{13}\text{C}$ NMR for (5-Chloropentyl)benzene (5e)



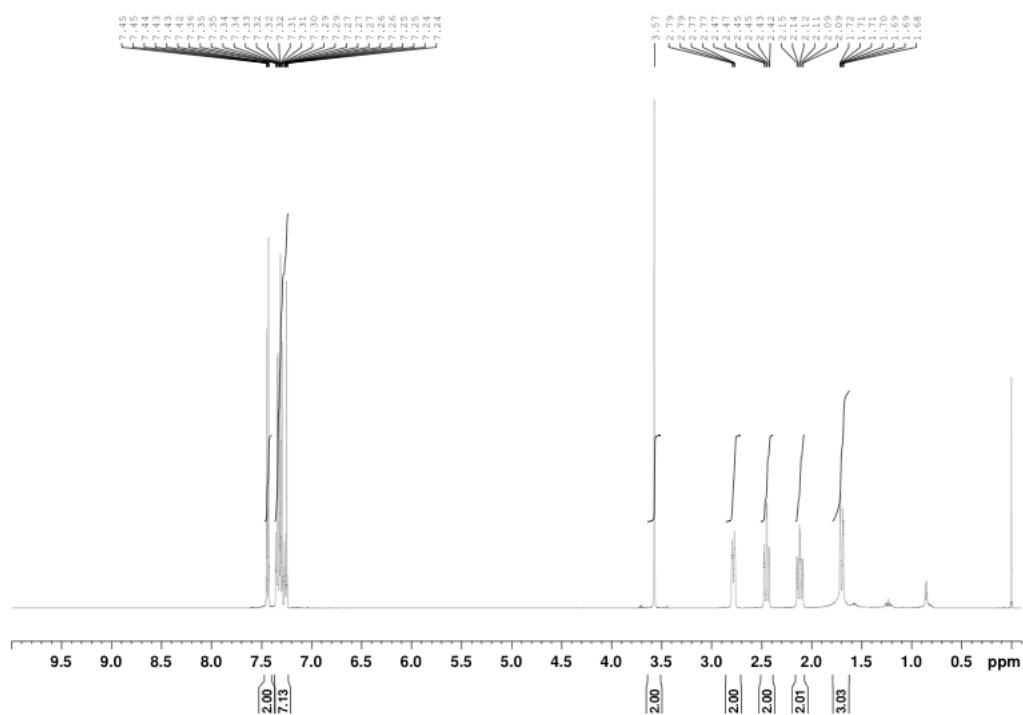
### <sup>1</sup>H NMR for (6-Chlorohexyl)benzene (5f)



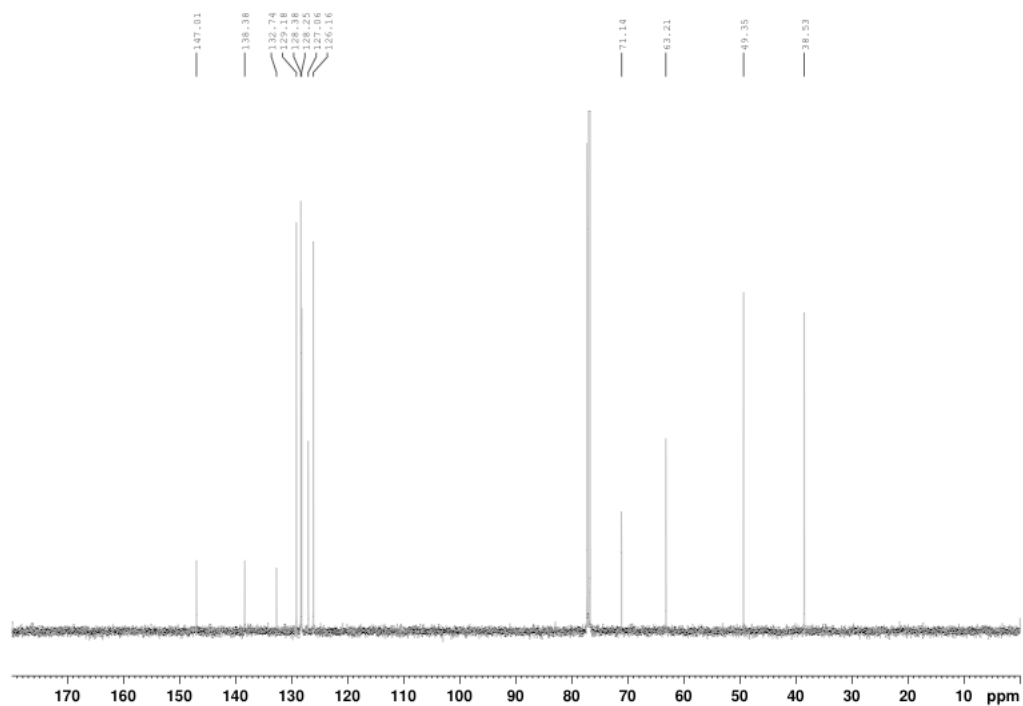
### <sup>13</sup>C NMR for (6-Chlorohexyl)benzene (5f)



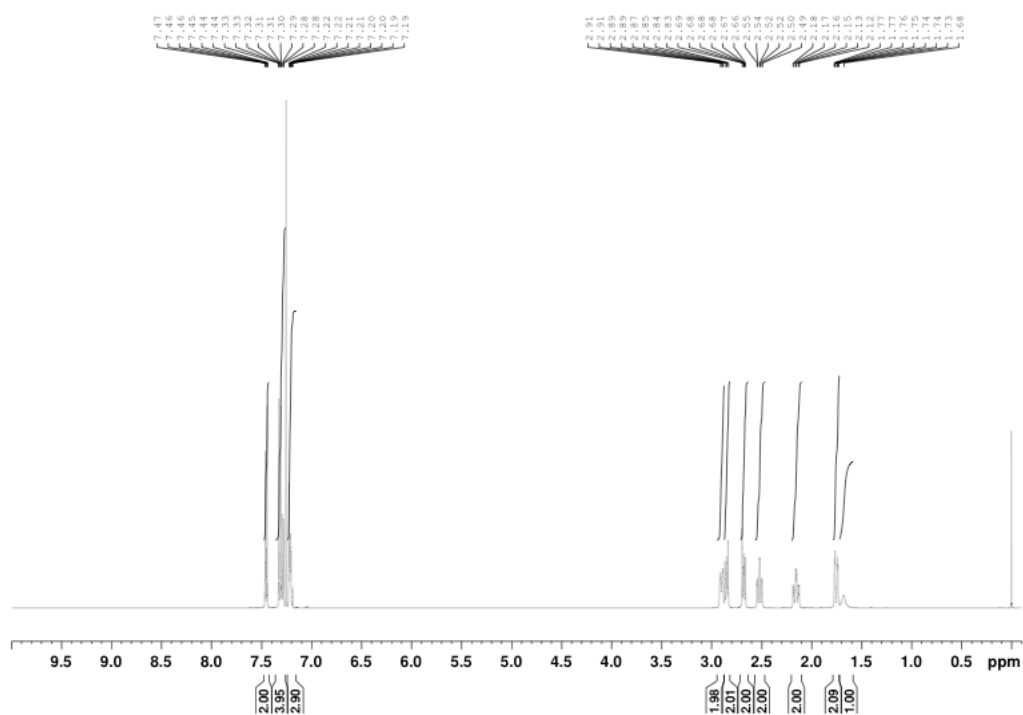
**<sup>1</sup>H NMR for *N*-benzyl-4-(*p*-chlorophenyl)piperidin-4-ol (7a)**



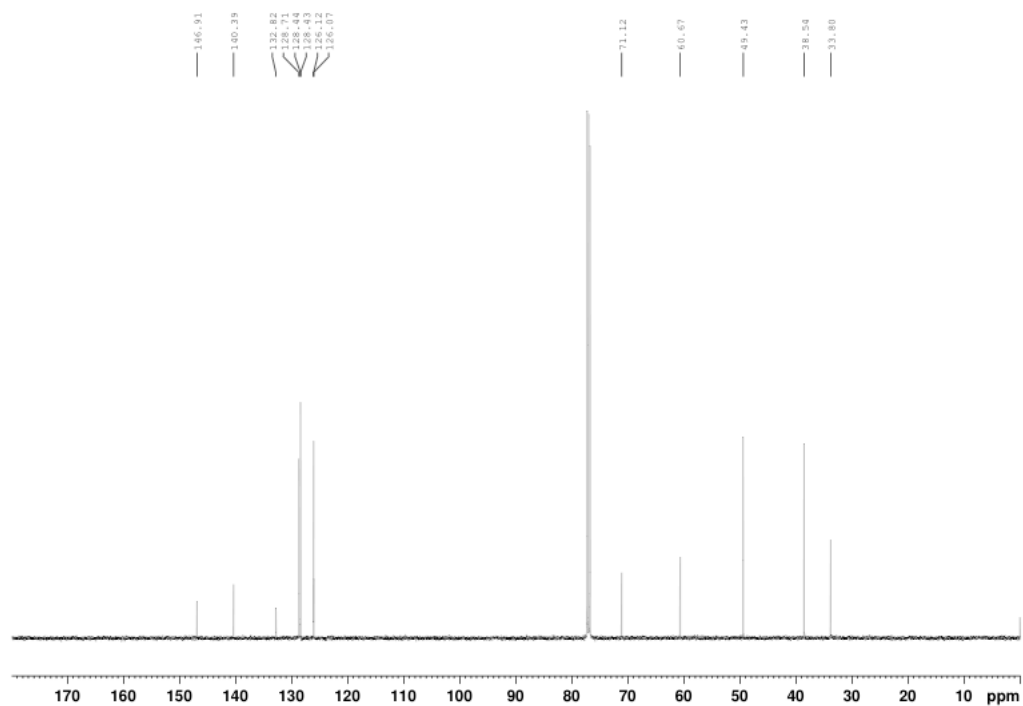
**<sup>13</sup>C NMR for *N*-benzyl-4-(*p*-chlorophenyl)piperidin-4-ol (7a)**



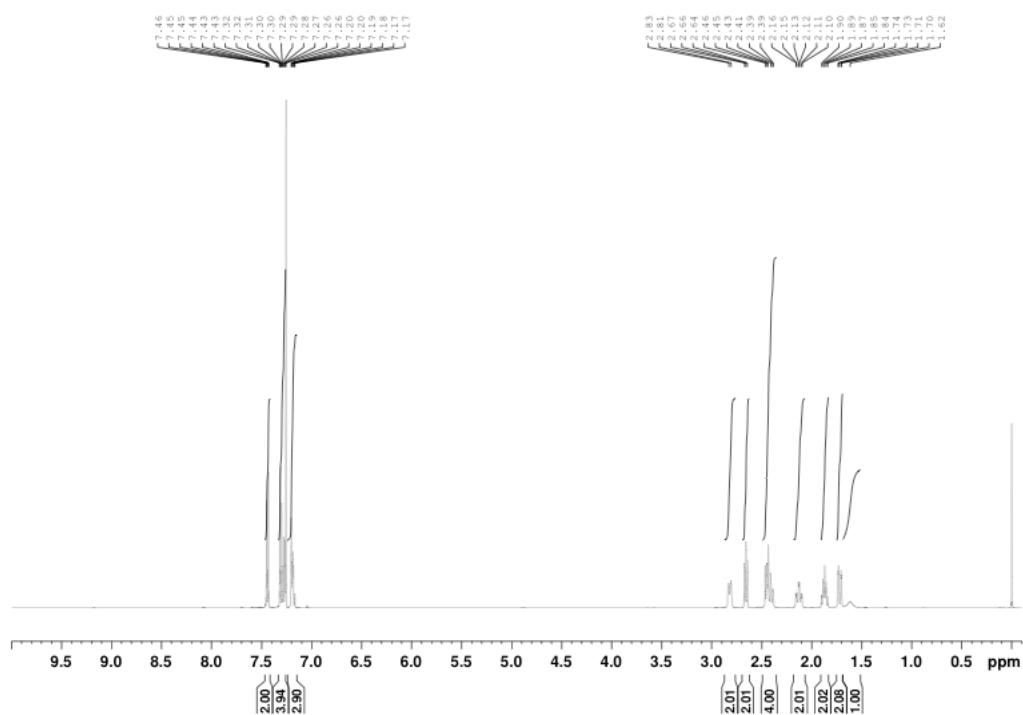
### <sup>1</sup>H NMR for 4-(*p*-Chlorophenyl)-1-phenethylpiperidin-4-ol (7b)



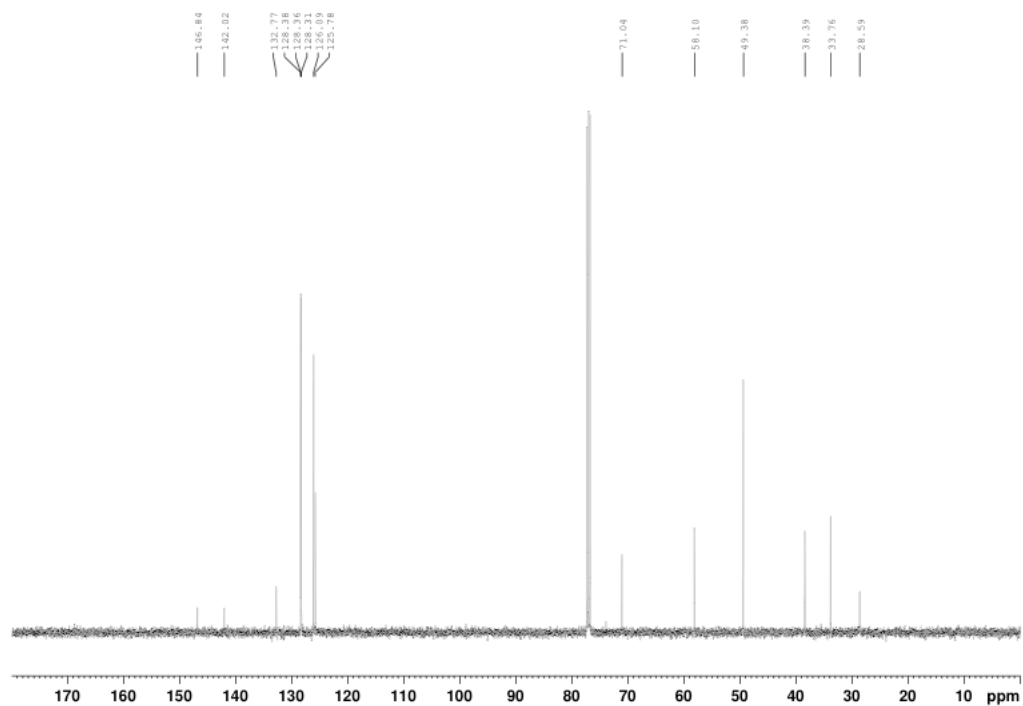
### <sup>13</sup>C NMR for 4-(*p*-Chlorophenyl)-1-phenethylpiperidin-4-ol (7b)



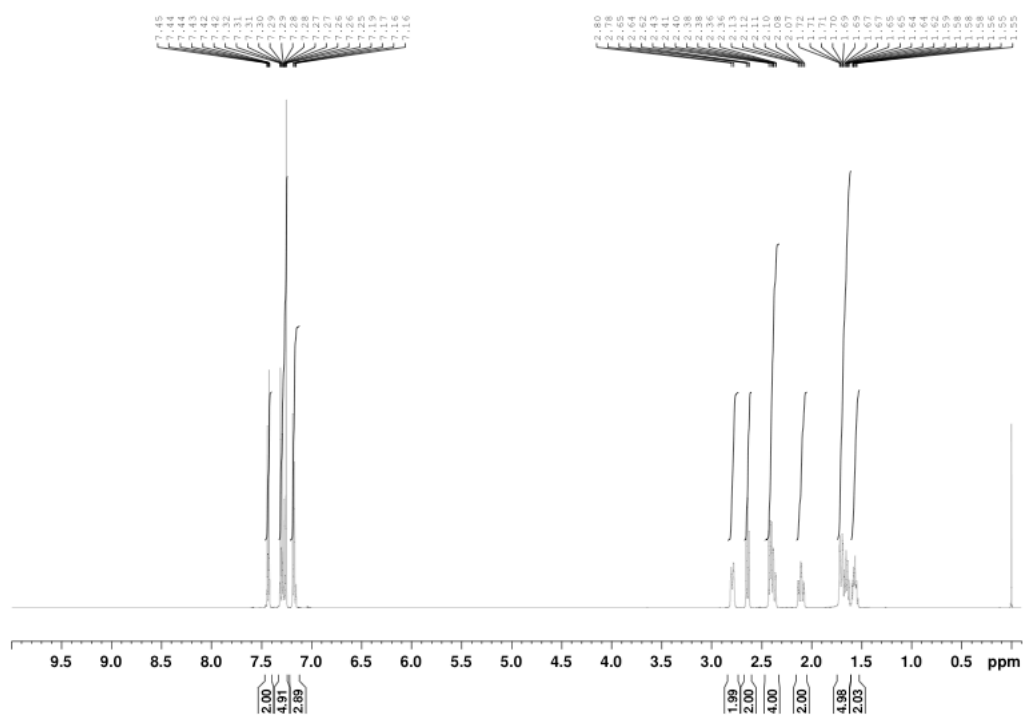
### <sup>1</sup>H NMR for 4-(*p*-Chlorophenyl)-1-(3-phenylpropyl)piperidin-4-ol (7c)



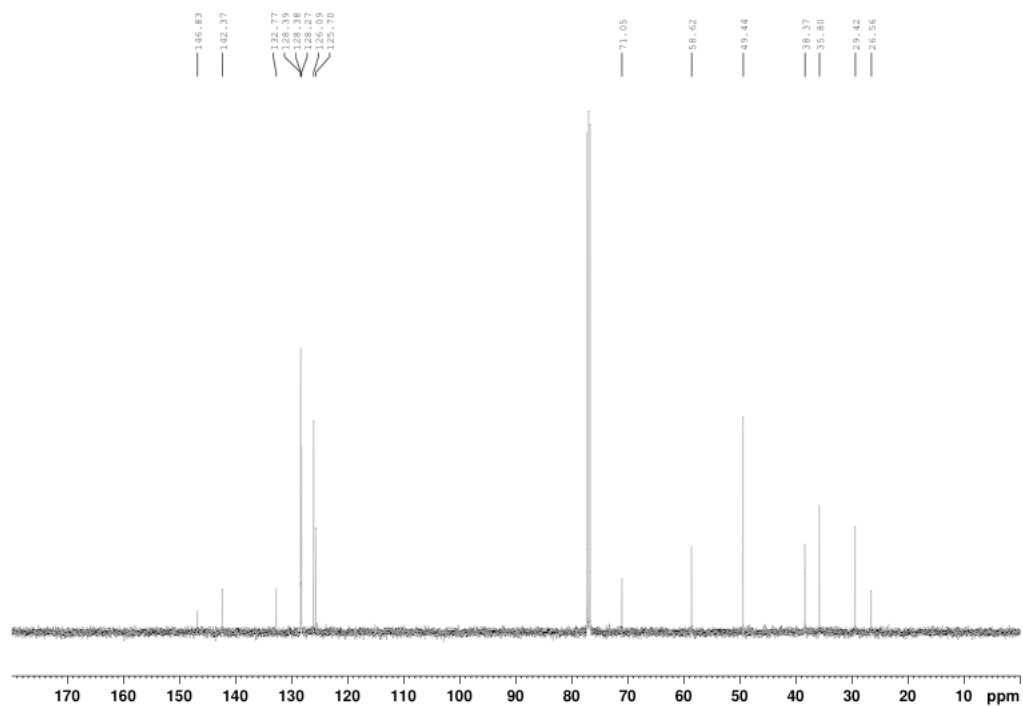
### <sup>13</sup>C NMR for 4-(*p*-Chlorophenyl)-1-(3-phenylpropyl)piperidin-4-ol (7c)



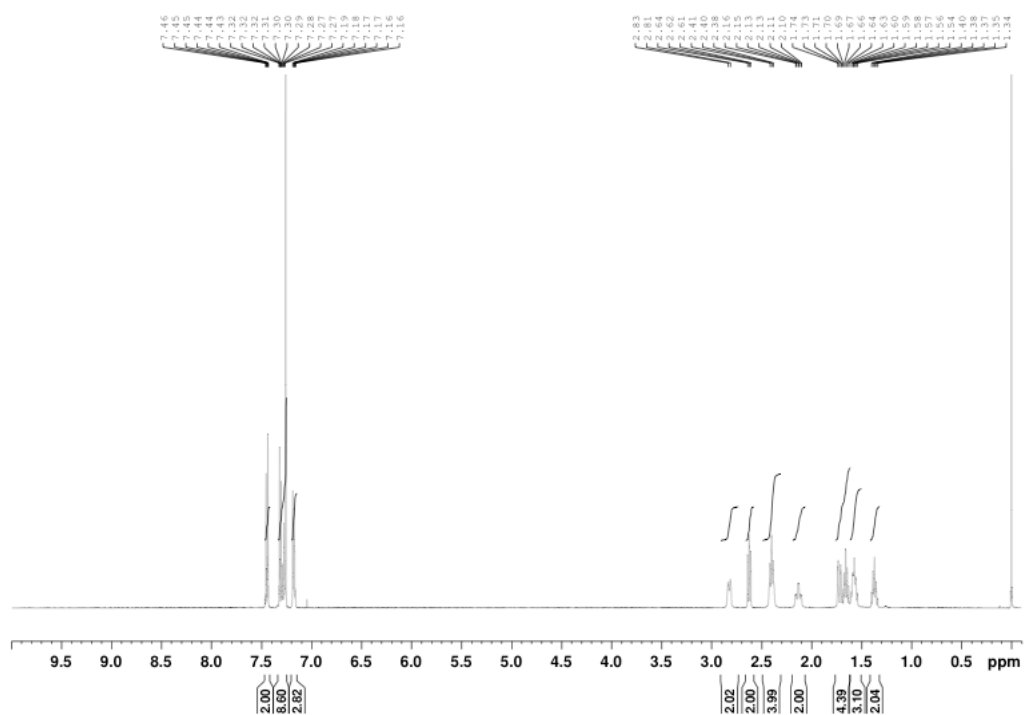
### <sup>1</sup>H NMR for 4-(*p*-Chlorophenyl)-1-(4-phenylbutyl)piperidin-4-ol (7d)



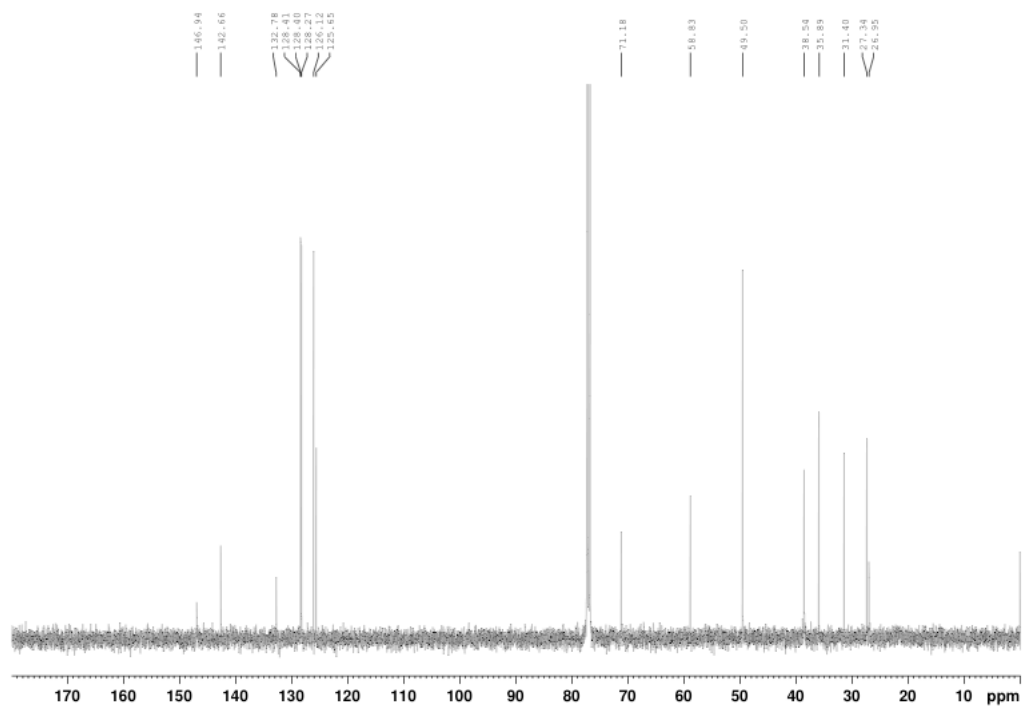
### <sup>13</sup>C NMR for 4-(*p*-Chlorophenyl)-1-(4-phenylbutyl)piperidin-4-ol (7d)



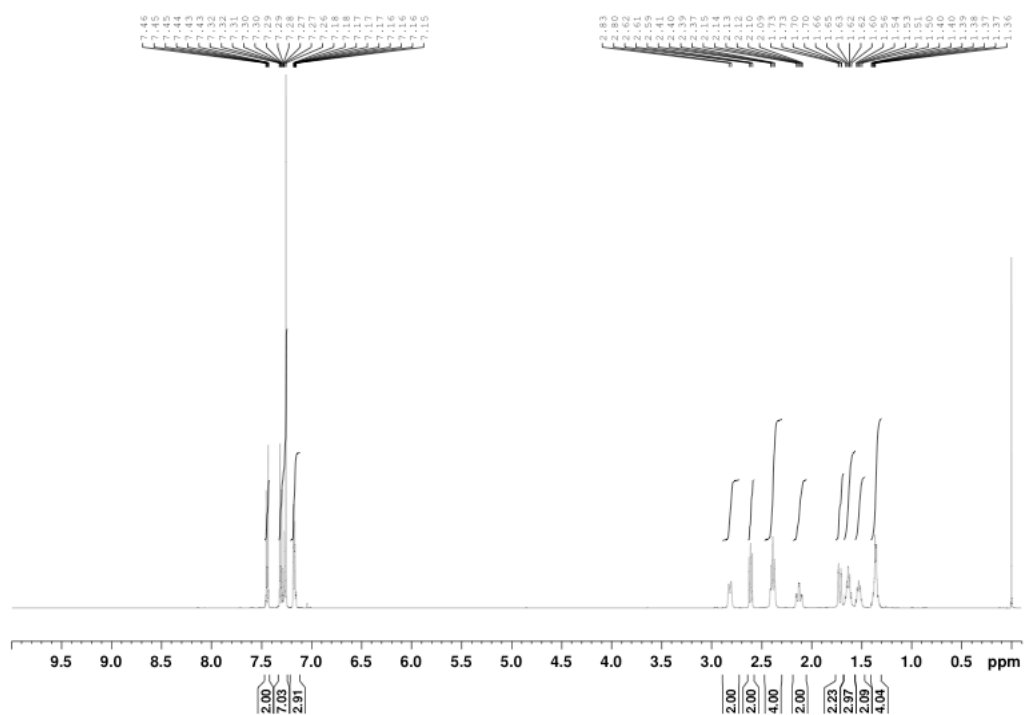
**<sup>1</sup>H NMR for 4-(*p*-Chlorophenyl)-1-(5-phenylpentyl)piperidin-4-ol (7e)**



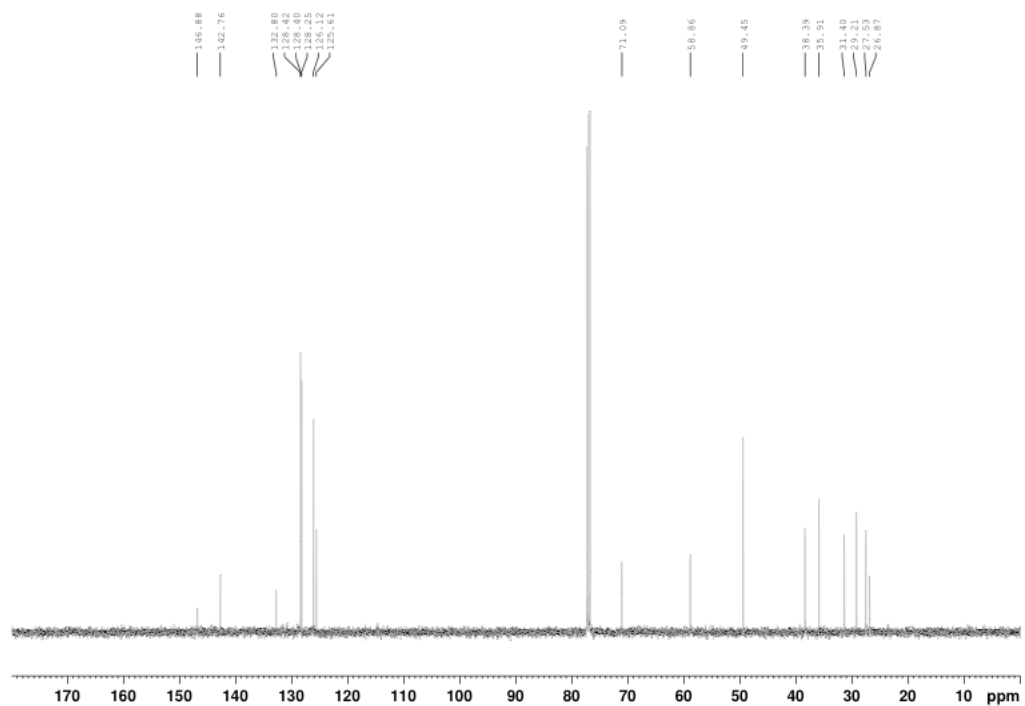
**<sup>13</sup>C NMR for 4-(*p*-Chlorophenyl)-1-(5-phenylpentyl)piperidin-4-ol (7e)**



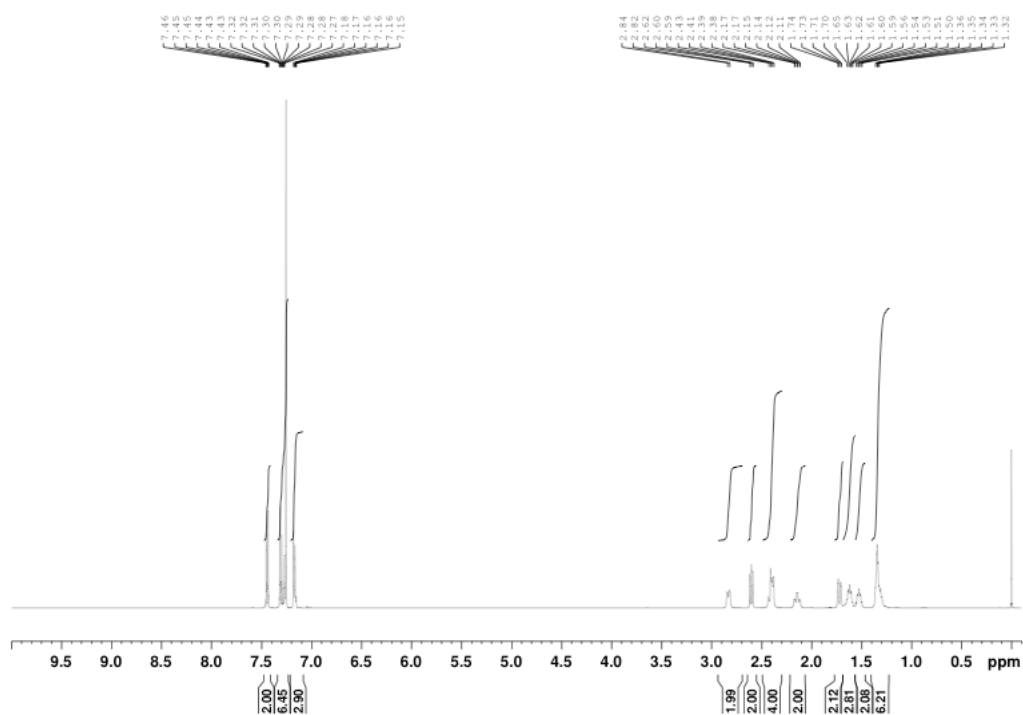
**<sup>1</sup>H NMR for 4-(*p*-Chlorophenyl)-1-(6-phenylhexyl)piperidin-4-ol (7f)**



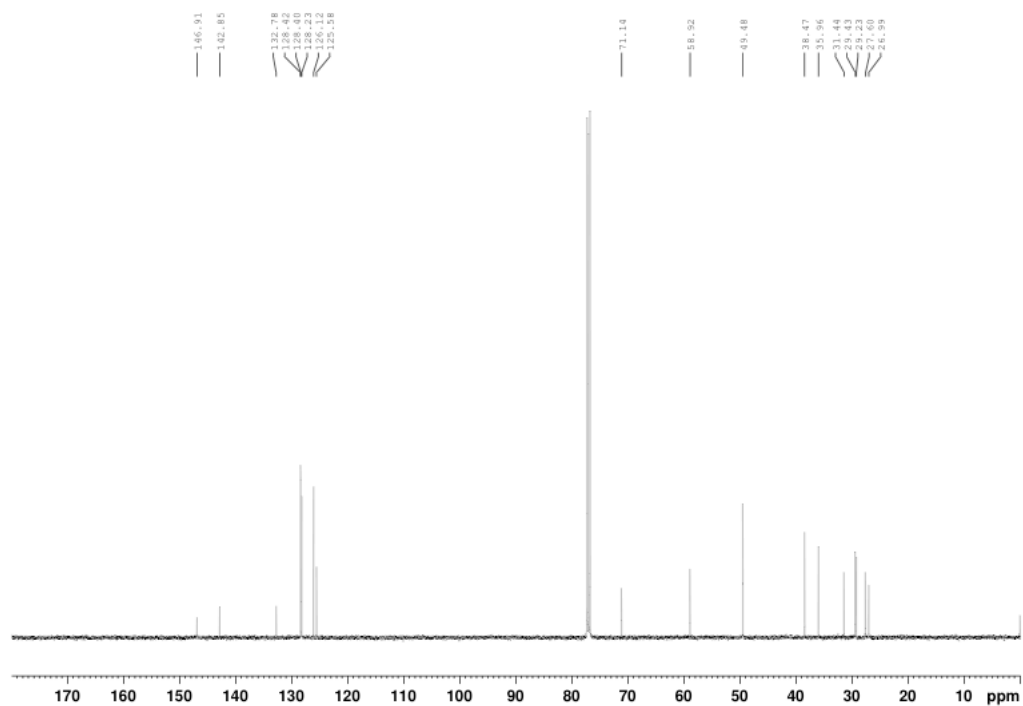
**<sup>13</sup>C NMR for 4-(*p*-Chlorophenyl)-1-(6-phenylhexyl)piperidin-4-ol (7f)**



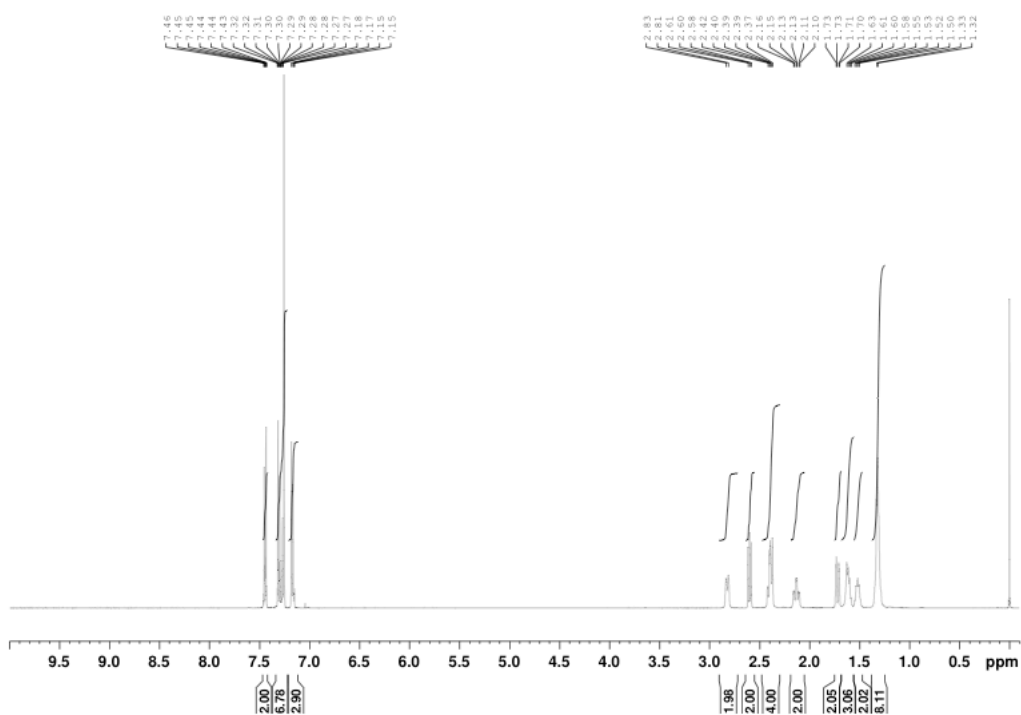
**<sup>1</sup>H NMR for 4-(*p*-Chlorophenyl)-1-(7-phenylheptyl)piperidin-4-ol (7g)**



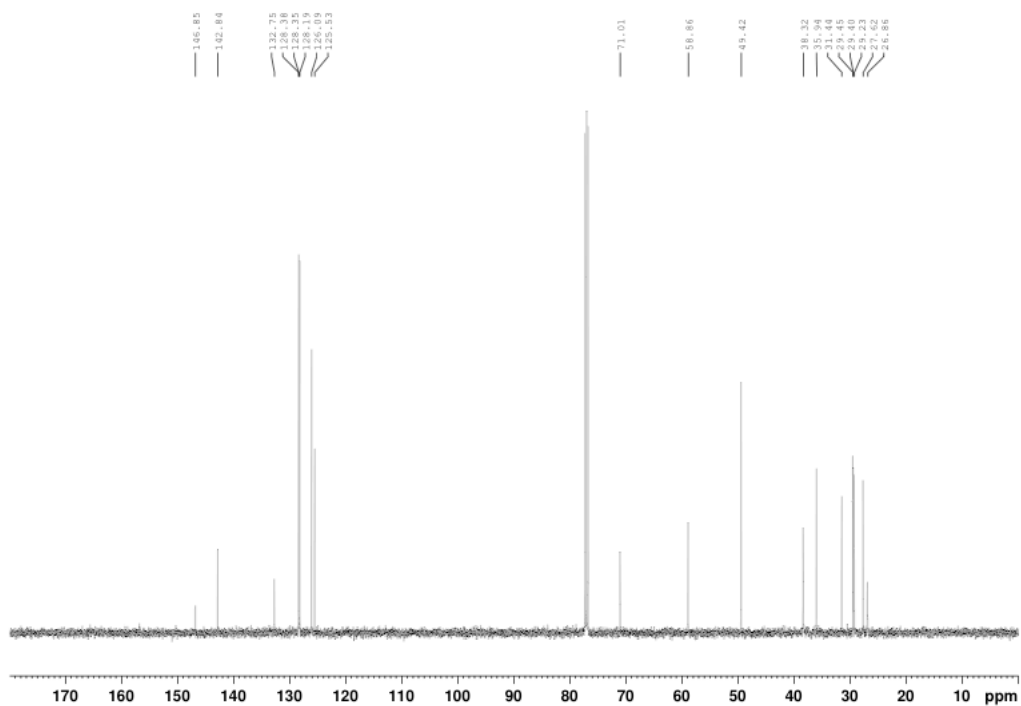
**<sup>13</sup>C NMR for 4-(*p*-Chlorophenyl)-1-(7-phenylheptyl)piperidin-4-ol (7g)**



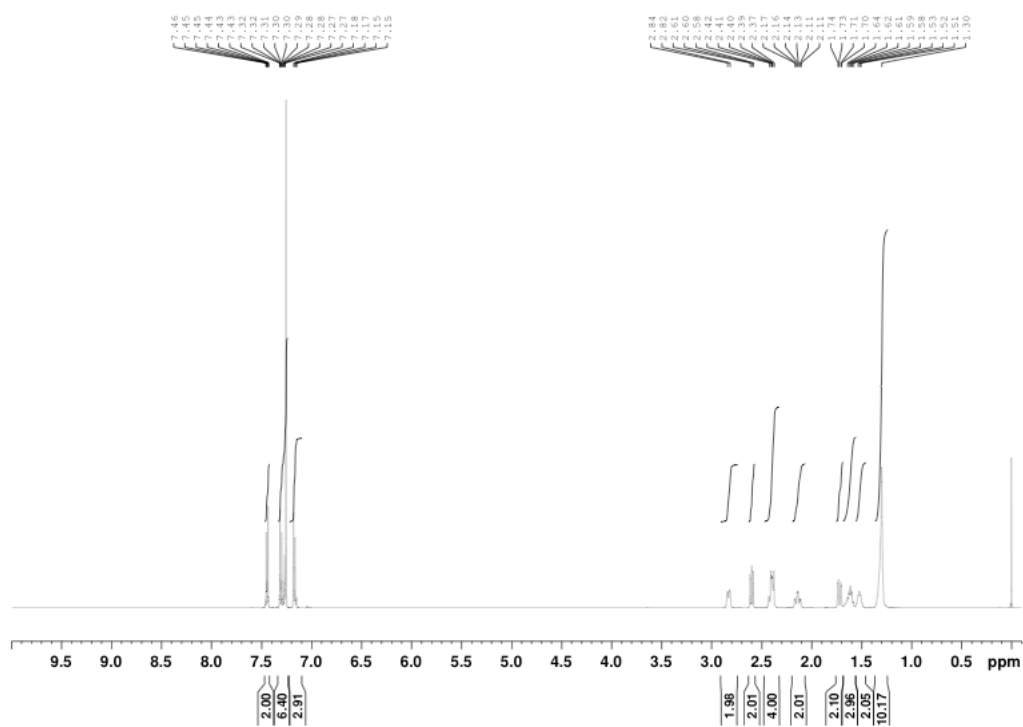
**<sup>1</sup>H NMR for 4-(*p*-Chlorophenyl)-1-(8-phenyloctyl)piperidin-4-ol (7h)**



**<sup>13</sup>C NMR for 4-(*p*-Chlorophenyl)-1-(8-phenyloctyl)piperidin-4-ol (7h)**

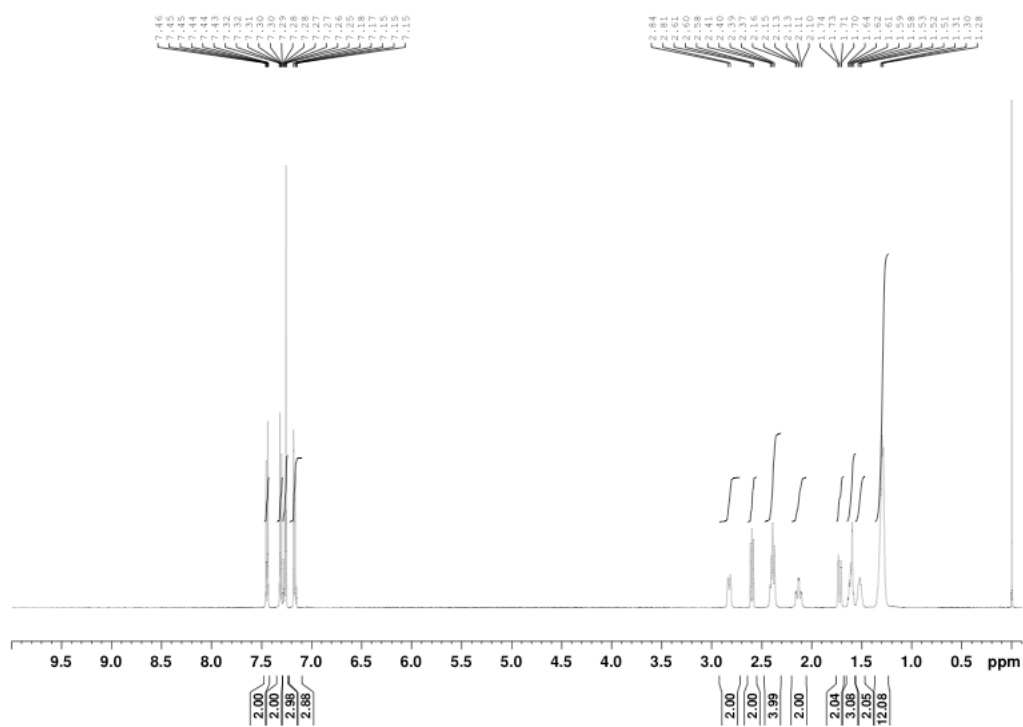


**<sup>1</sup>H NMR for 4-(*p*-Chlorophenyl)-1-(9-phenylnonyl)piperidin-4-ol (7i)**

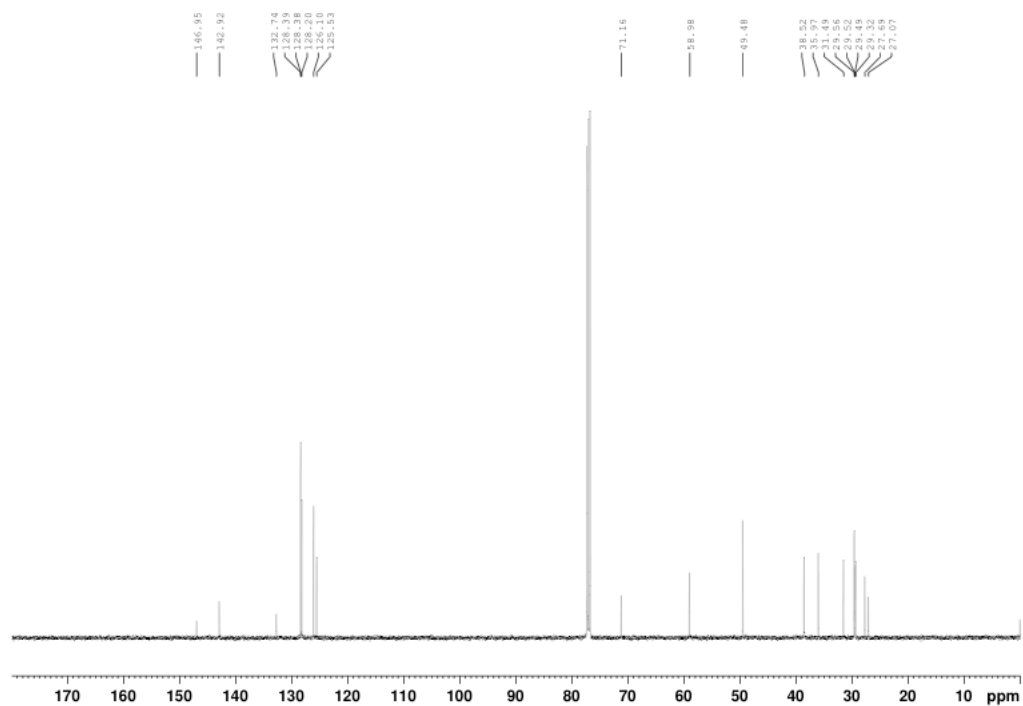


**<sup>13</sup>C NMR for 4-(*p*-Chlorophenyl)-1-(9-phenylnonyl)piperidin-4-ol (7i)**

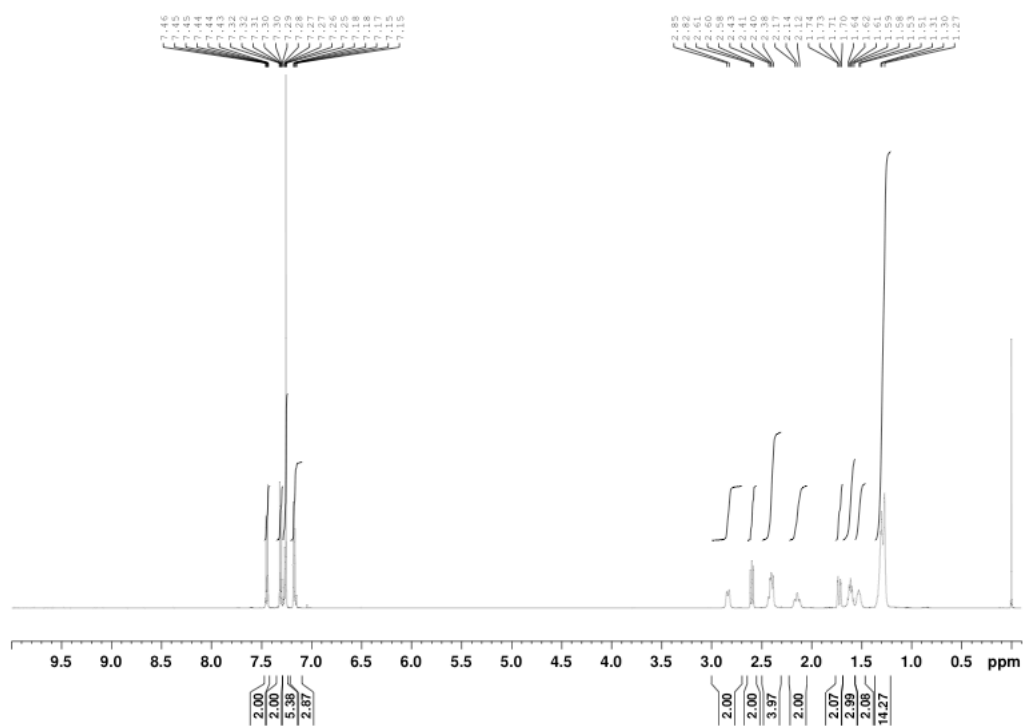
**<sup>1</sup>H NMR for 4-(*p*-Chlorophenyl)-1-(10-phenyldecyl)piperidin-4-ol (7j)**



**<sup>13</sup>C NMR for 4-(*p*-Chlorophenyl)-1-(10-phenyldecyl)piperidin-4-ol (7j)**



**<sup>1</sup>H NMR for 4-(*p*-Chlorophenyl)-1-(11-phenylundecyl)piperidin-4-ol (7k)**



**<sup>13</sup>C NMR for 4-(*p*-Chlorophenyl)-1-(11-phenylundecyl)piperidin-4-ol (7k)**

