

## SUPPORTING INFORMATION

# Efficient One-Pot Two-Step Microwave-Assisted Procedure for the Synthesis of Polysubstituted 2-Aminoimidazoles

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## General Experimental Methods.

Melting points were determined using a Reichert-Jung Thermovar apparatus or an Electrothermal 9200 digital melting point apparatus and are uncorrected.  $^1\text{H}$  NMR spectra were recorded on a Bruker Avance 300 instrument using  $\text{CDCl}_3$  as solvent unless otherwise stated. The  $^1\text{H}$  and  $^{13}\text{C}$  chemical shifts are reported in parts per million relative to tetramethylsilane using the residual solvent signal as an internal reference. Mass spectra were recorded by using a Kratos MS50TC and a Kratos Mach III system. The ion source temperature was 150–250°C, as required. High-resolution EI-mass spectra were performed with a resolution of 10 000. The low-resolution spectra were obtained with a HP5989A MS instrument. For thin-layer chromatography, analytical TLC plates (Alugram SIL G/UV<sub>254</sub> and 70–230 mesh silica gel (E. M. Merck) were used.

**Microwave Irradiation Experiments.** A multimode Milestone MicroSYNTH microwave reactor (Laboratory Microwave Systems) was used in the standard configuration as delivered, including proprietary software. All experiments were carried out in sealed microwave process vials (30 mL). Temperature was measured in each case with both IR-sensor and fiber-optic sensor. After completion of the reaction, the vial was cooled to 25 °C via air jet cooling before opening.

**1-Methyl-5-phenyl-1H-imidazol-2-ylamine (5{1}):** 96% yield, mp. 186–188°C.  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.34 (m, 5H), 6.74 (s, 1H), 4.02 (br, 2H), 3.45 (s, 3H).  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  149.5, 131.2, 130.4, 129.1 ( $\times 2$ ), 128.2 ( $\times 2$ ), 127.5, 123.6, 30.9. HR-MS (EI):  $\text{C}_{10}\text{H}_{11}\text{N}_3$  calcd 173.0953, found 173.0958.

**1-Ethyl-5-phenyl-1H-imidazol-2-ylamine (5{2}):** 75% yield, mp. 123–125°C.  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.30 (m, 5H), 6.67 (s, 1H), 4.76 (br, 2H), 3.80 (q,  $J = 7.3$  Hz, 2H), 1.22 (t,  $J = 7.3$  Hz, 3H).  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  149.8, 131.5, 129.4, 129.1 ( $\times 2$ ), 128.5 ( $\times 2$ ), 127.5, 123.6, 38.3, 15.4. HR-MS (EI):  $\text{C}_{11}\text{H}_{13}\text{N}_3$  calcd 187.1109, found 187.1110.

**1-Butyl-5-phenyl-1H-imidazol-2-ylamine (5{3}):** 73% yield, mp. 102–104°C.  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.33 (m, 5H), 6.67 (s, 1H), 4.54 (br, 2H), 3.75 (q,  $J = 8.2$  Hz, 2H), 1.55 (m, 2H), 1.21 (m, 2H), 0.81 (t,  $J = 7.3$  Hz, 3H). 149.8, 131.6, 129.7 ( $\times 2$ ), 129.0 ( $\times 2$ ), 128.6, 127.5, 123.6, 43.3, 32.1, 20.1, 13.9. HR-MS (EI):  $\text{C}_{13}\text{H}_{17}\text{N}_3$  calcd 215.1422, found 215.1417.

**1-Pentyl-5-phenyl-1H-imidazol-2-ylamine (5{4}):** 82% yield, mp. 120–122°C.  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.30 (m, 5H), 6.67 (s, 1H), 3.73 (t,  $J = 8.2$  Hz, 2H), 1.58 (m, 2H), 1.18 (m, 4H), 0.80 (t,  $J =$

6.4 Hz, 3H).  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  149.9, 131.7, 129.7, 129.0 ( $\times 2$ ), 128.6 ( $\times 2$ ), 127.5, 123.6, 43.5, 29.7, 29.0, 22.5, 14.2. HR-MS (EI):  $\text{C}_{14}\text{H}_{19}\text{N}_3$  calcd 229.1579, found 229.1578.

**1-Cyclopropyl-5-phenyl-1H-imidazol-2-ylamine (5{5})**: 38% yield, mp. 104-106°C.  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.30 (m, 4H), 7.22 (t,  $J = 7.3$  Hz, 1H), 6.67 (s, 1H), 5.02 (br, 2H), 3.01 (m, 1H), 0.92 (m, 2H), 0.65 (m, 2H).  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  151.9, 131.5, 129.7, 128.6 ( $\times 2$ ), 127.6 ( $\times 2$ ), 126.7, 123.3, 24.8, 9.1 ( $\times 2$ ). HR-MS (EI):  $\text{C}_{12}\text{H}_{13}\text{N}_3$  calcd 199.1109, found 199.1105.

**1-Cyclopentyl-5-phenyl-1H-imidazol-2-ylamine (5{6})**: 71% yield, mp. 148-150°C.  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.35 (m, 5H), 6.62 (s, 1H), 4.44 (m, 3H), 2.05 (m, 4H), 1.90 (m, 2H), 1.62 (m, 2H).  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  148.8, 131.8, 130.8, 129.3 ( $\times 2$ ), 129.0 ( $\times 2$ ), 127.6, 123.3, 55.5, 30.4 ( $\times 2$ ), 25.6 ( $\times 2$ ). HR-MS (EI):  $\text{C}_{14}\text{H}_{17}\text{N}_3$  calcd 227.1422, found 227.1423.

**1-Ethyl-5-(4-fluorophenyl)-1H-imidazol-2-ylamine (5{7})**: 77% yield, mp. 109-111°C.  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.30 (m, 2H), 7.10 (t,  $J = 9.2$  Hz, 2H), 6.65 (s, 1H), 4.09 (br, 2H), 3.78 (q,  $J = 7.3$  Hz, 2H), 1.24 (t,  $J = 7.3$  Hz, 3H).  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  161.4, 158.1, 146.9, 127.7, 127.6, 125.6, 124.8, 120.8, 113.4, 113.1, 35.5, 12.6. HR-MS (EI):  $\text{C}_{11}\text{H}_{12}\text{FN}_3$  calcd 205.1015, found 205.1017.

**1-Ethyl-5-(4-chlorophenyl)-1H-imidazol-2-ylamine (5{8})**: 72% yield, mp. 153-155°C.  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.33 (d,  $J = 8.2$  Hz, 2H), 6.67 (s, 1H), 4.57 (br, 2H), 3.77 (q,  $J = 7.3$  Hz, 2H), 1.21 (t,  $J = 7.3$  Hz, 3H).  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  149.9, 133.4, 130.0, 129.6 ( $\times 2$ ), 129.3 ( $\times 2$ ), 128.3, 124.1, 39.4, 15.4. HR-MS (EI):  $\text{C}_{11}\text{H}_{12}\text{ClN}_3$  calcd 221.0720, found 221.0709.

**1-Ethyl-5-(4-bromophenyl)-1H-imidazol-2-ylamine (5{9})**: 85% yield, mp. 119.121°C.  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.53 (d,  $J = 8.2$  Hz), 7.20 (d,  $J = 8.2$  Hz), 6.69 (s, 1H), 4.17 (br, 2H), 3.80 (q,  $J = 7.3$  Hz, 2H), 1.25 (t,  $J = 7.3$  Hz, 3H).  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  150.1, 132.2 ( $\times 2$ ), 130.4, 129.8 ( $\times 2$ ), 128.2, 124.1, 121.4, 38.4, 15.4. HR-MS (EI):  $\text{C}_{11}\text{H}_{12}\text{BrN}_3$  calcd 265.0215, found 265.0207.

**1-Ethyl-5-(4-iodophenyl)-1H-imidazol-2-ylamine (5{10})**: 88% yield, mp. 137-139°C.  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.71 (d,  $J = 8.2$  Hz, 2H), 7.07 (d,  $J = 8.2$  Hz, 2H), 6.67 (s, 1H), 3.79 (q,  $J = 7.3$  Hz, 2H), 1.21 (t,  $J = 7.3$  Hz, 3H).  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  149.8, 138.2, 130.9, 130.0 ( $\times 2$ ), 128.5, 124.1, 92.9. HR-MS (EI):  $\text{C}_{11}\text{H}_{12}\text{IN}_3$  calcd 313.0076, found 313.0063.

**1-Methyl-5-(4-methylsulfanylphenyl)-1H-imidazol-2-ylamine (5{11})**: 95% yield, mp. 212-214°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.29 (br, 4H), 6.54 (s, 1H), 5.51 (br, 2H), 3.33 (s, 3H), 2.48 (s, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 152.1, 136.7, 128.4, 128.1 (×2), 127.2 (×2), 123.3, 31.2, 15.7. HR-MS (EI): C<sub>11</sub>H<sub>13</sub>N<sub>3</sub>S calcd 219.0830, found 219.0835.

**1-Benzyl-5-phenyl-1H-imidazol-2-ylamine (5{12})**: 48% yield, mp. 165-167°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.30 (m, 8H), 7.14 (d, J = 7.3 Hz, 2H), 6.80 (s, 2H), 5.02 (s, 2H), 4.30 (br, 2H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 150.3, 136.9, 131.1, 130.4, 129.6 (×2), 129.2 (×2), 128.3 (×2), 128.2, 127.6, 126.4, 123.8, 47.0. HR-MS (EI): C<sub>16</sub>H<sub>15</sub>N<sub>3</sub> calcd 249.1266, found 249.1267.

**1-(4-Methoxybenzyl)-5-phenyl-1H-imidazol-2-ylamine (5{13})**: 54% yield, mp. 101-103°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.30 (m, 5H), 7.05 (d, J = 8.2 Hz, 2H), 6.88 (d, J = 8.2 Hz, 2H), 7.78 (s, 1H), 4.95 (s, 2H), 4.23 (br, 2H), 3.79 (s, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 159.6, 150.2, 131.1, 130.4, 129.2 (×2), 129.1, 128.7, 128.2 (×2), 127.6 (×2), 123.7, 115.0 (×2), 55.7, 46.5. HR-MS (EI): C<sub>17</sub>H<sub>17</sub>N<sub>3</sub>O calcd 279.1372, found 279.1361.

**1-Methyl-5-(3,4,5-trimethoxyphenyl)-1H-imidazol-2-ylamine (5{14})**: 77% yield, mp. 163-165°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 6.65 (s, 1H), 6.51 (s, 2H), 4.30 (br, 2H), 3.84 (s, 9H), 3.40 (s, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 153.7, 149.8, 137.8, 130.2, 126.8, 123.0, 105.8, 61.3, 56.6, 30.8. HR-MS (EI): C<sub>13</sub>H<sub>17</sub>N<sub>3</sub>O<sub>3</sub> calcd 263.1270, found 263.1270.

**5-(2,5-Dimethoxyphenyl)-1-methyl-1H-imidazol-2-ylamine (5{15})**: 91% yield, mp. 122-124°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 6.90 (m, 3H), 6.42 (s, 1H), 3.70 (s, 6H), 3.14 (s, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 153.9, 151.6, 151.4, 125.5, 124.0, 121.6, 117.6, 114.1, 113.1, 56.4, 56.2, 30.7. HR-MS (EI): C<sub>12</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub> calcd 233.1164, found 233.1165.

**4-Benzyl-1-methyl-1H-imidazol-2-ylamine (5{16})**: 88% yield, mp. 66-68°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.28 (m, 4H), 7.18 (m, 1H), 6.09 (s, 1H), 4.16 (br, 2H), 3.76 (s, 2H), 3.30 (s, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 148.1, 140.8, 137.4, 129.3 (×2), 128.7 (×2), 126.3, 113.3, 35.4, 31.6. HR-MS (EI): C<sub>11</sub>H<sub>13</sub>N<sub>3</sub> calcd 187.1109, found 187.1108.

**1,4-Dibenzyl-1H-imidazol-2-ylamine (5{17})**: 74% yield, mp. 124-125°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.30 (m, 7H), 7.15 (m, 3H), 6.19 (s, 1H), 4.80 (s, 2H), 4.19 (br, 2H), 3.80 (s, 2H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 148.4, 140.8, 137.5, 136.8, 129.4, 128.7, 128.3, 127.2, 126.3, 112.8, 48.8, 35.4.

DEPT NMR (75 MHz, CDCl<sub>3</sub>): δ 129.4 (×2), 129.3 (×2), 128.7 (×2), 128.4, 127.2 (×2), 126.3 – 48.9, - 35.4. HR-MS (EI): C<sub>17</sub>H<sub>17</sub>N<sub>3</sub> calcd 263.1422, found 263.1425.

**4-(4-Methoxyphenyl)-1-methyl-1H-imidazol-2-ylamine (5{18})**: 89% yield, mp. 143-145°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.58 (d, J = 9.1 Hz, 2H), 6.88 (d, J = 9.1 Hz, 2H), 6.70 (s, 1H), 4.15 (br, 2H), 3.82 (s, 3H), 3.45 (s, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 158.8, 148.4, 136.3, 127.1, 125.9 (×2), 114.4 (×2), 111.3, 55.7, 32.1. HR-MS (EI): C<sub>11</sub>H<sub>13</sub>N<sub>3</sub>O calcd 203.1059, found 203.1062.

**1-[2-(4-Methoxyphenyl)-ethyl]-4-methyl-5-phenyl-1H-imidazol-2-ylamine (5{19})**: 67% yield, mp. 123-125°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.35 (m, 3H), 7.25 (m, 2H), 6.87 (d, J = 7.5 Hz, 2H), 7.78 (d, J = 7.5 Hz, 2H), 3.84 (m, 7H), 2.68 (m, 2H), 2.09 (s, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 158.9, 147.7, 131.4, 130.5 (×2), 130.3, 130.2 (×2), 128.9, 127.8, 124.4, 114.6 (×4), 55.6, 45.4, 35.6, 13.2. HR-MS (EI): C<sub>20</sub>H<sub>23</sub>N<sub>3</sub> calcd 307.1685, found 307.1685.

**5-(4-Chlorophenyl)-1-phenyl-4-p-tolyl-1H-imidazol-2-ylamine (5{20})**: 65% yield, mp. 290-292°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.10 (m, 13H), 4.29 (br, 2H), 2.33 (s, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 148.5, 136.5, 135.8, 135.3, 133.4, 132.1, 132.0, 130.2, 129.9, 129.3, 129.0, 128.2, 127.5, 123.3, 21.6. HR-MS (EI): C<sub>22</sub>H<sub>18</sub>ClN<sub>3</sub> calcd 359.1189, found 359.1191.

**1-Cyclohexyl-4-methyl-5-phenyl-1H-imidazol-2-ylamine (5{21})**: 86% yield, mp. 144-146°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.35 (m, 5H), 4.17 (br, 2H), 3.70 (m, 1H), 2.05 (s, 3H), 1.85 (m, 6H), 1.64 (m, 1H), 1.18 (m, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 147.1, 132.0, 130.8, 128.8 (×4), 127.6, 125.2, 55.6, 31.8 (×2), 26.4 (×2), 25.6, 13.4. HR-MS (EI): C<sub>16</sub>H<sub>21</sub>N<sub>3</sub> calcd 255.1735, found 255.1734.

**5-(4-Fluorophenyl)-4-methyl-1-propyl-1H-imidazol-2-ylamine (5{22})**: 71% yield, mp. 139-141°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.12 (m, 4H), 4.98 (br, 2H), 3.57 (br, 2H), 2.03 (s, 3H), 1.49 (m, 2H), 0.75 (s, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 164.3, 161.0, 147.6, 132.3 (×2), 132.2, 129.0, 126.9, 123.3, 116.2, 115.9 (×2), 45.0, 23.1, 12.6, 11.3. HR-MS (EI): C<sub>13</sub>H<sub>16</sub>FN<sub>3</sub> calcd 233.1328, found 233.1317.

**1-Cyclohexyl-4,5-diphenyl-1H-imidazol-2-ylamine (5{23})**: 95% yield, mp. 253-254°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>): δ 7.30 (m, 6H), 7.10 (m, 3H), 4.07 (br, 2H), 3.61 (m, 1H), 1.82 (m, 6H), 1.63 (m, 1H), 1.15 (m, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>): δ 147.6, 135.4, 133.3, 132.5 (×2), 131.9, (×2), 129.2,

128.7 ( $\times 2$ ), 128.3, 126.7 ( $\times 2$ ), 126.0, 125.5. 55.4, 31.8 ( $\times 2$ ), 26.4 ( $\times 2$ ), 25.6. HR-MS (EI): C<sub>21</sub>H<sub>23</sub>N<sub>3</sub> calcd 317.1892, found 317.1890.

**1-[2-(4-Methoxyphenyl)-ethyl]-4,5-diphenyl-1H-imidazol-2-ylamine (5{24})**: 91% yield, mp. 175-177°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>):  $\delta$  7.30 (m, 8H), 7.12 (m, 3H), 6.89 (d, *J* = 7.8 Hz, 2H), 6.80 (d, *J* = 7.8 Hz, 2H), 3.80 (m, 5H), 3.56 (br, 2H), 2.70 (t, *J* = 7.3 Hz, 2H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>):  $\delta$  159.0, 148.3, 135.1, 133.3, 132.0, 131.7 ( $\times 2$ ), 130.3 ( $\times 2$ ), 130.2 ( $\times 2$ ), 129.4, 128.5 ( $\times 2$ ), 126.7 ( $\times 2$ ), 126.2, 124.9, 114.7 ( $\times 2$ ), 55.7, 45.2, 35.6. HR-MS (EI): C<sub>24</sub>H<sub>23</sub>N<sub>3</sub>O calcd 369.1841, found 369.1840.

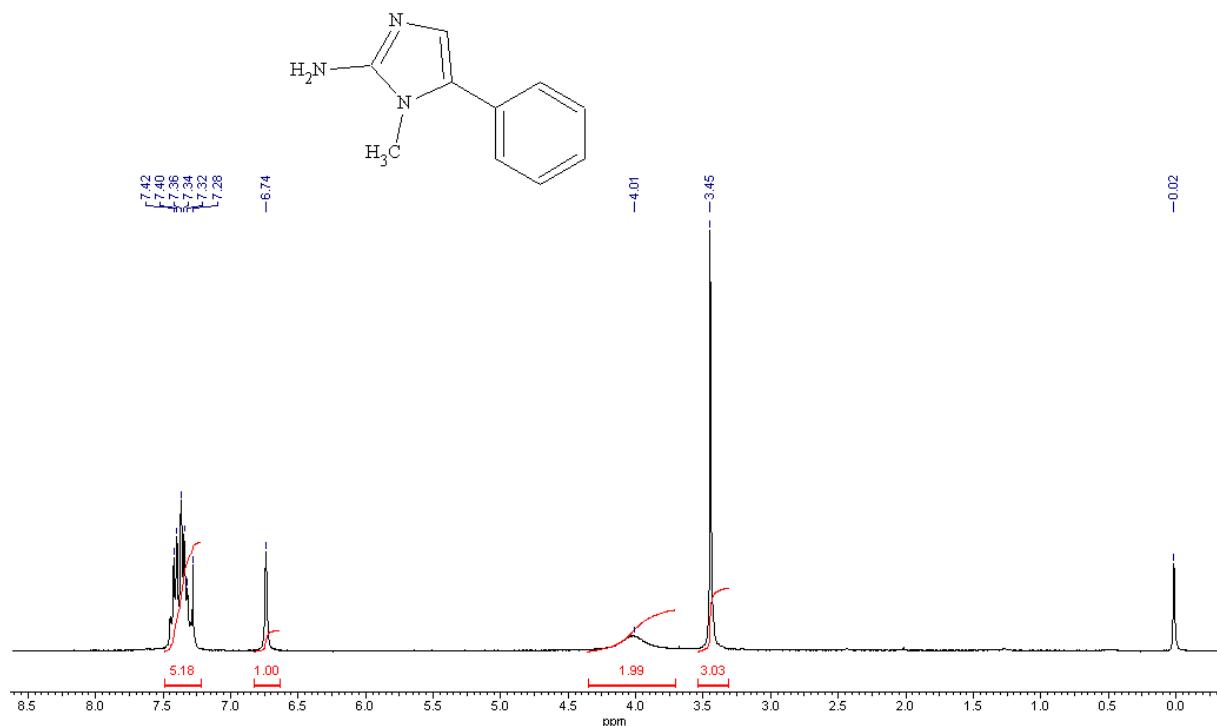
**5-(4-Bromophenyl)-1-(2-methoxyethyl)-4-methyl-1H-imidazol-2-ylamine (5{25})**: 77% yield, mp. 155-156°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>):  $\delta$  7.53 (d, *J* = 8.2 Hz, 2H), 7.09 (d, *J* = 8.2 Hz, 2H), 4.58 (br, 2H), 3.77 (m, 2H), 3.56 (m, 2H), 3.35 (s, 3H), 2.08 (s, 3H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>):  $\delta$  150.2, 132.2 ( $\times 2$ ), 131.9 ( $\times 2$ ), 131.7, 130.6, 123.2, 121.5, 74.2, 59.6, 44.1, 13.5. HR-MS (EI): C<sub>13</sub>H<sub>16</sub>BrN<sub>3</sub>O calcd 309.0477, found 309.0476.

**5-(4-Bromophenyl)-1-cyclopentyl-4-methyl-1H-imidazol-2-ylamine (5{26})**: 77% yield, mp. 176-178°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>):  $\delta$  7.57 (d, *J* = 8.2 Hz, 2H), 7.12 (d, *J* = 8.2 Hz, 2H), 4.23 (t, *J* = 8.3 Hz), 3.95 (br, 2H), 2.05 (s, 3H), 1.77 (m, 8H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>):  $\delta$  147.4, 132.1 ( $\times 2$ ), 132.0 ( $\times 2$ ), 131.1, 131.0, 124.2, 121.5, 55.7, 30.5 ( $\times 2$ ), 25.5 ( $\times 2$ ), 13.4. HR-MS (EI): C<sub>15</sub>H<sub>18</sub>BrN<sub>3</sub> calcd 319.0684, found 319.0678.

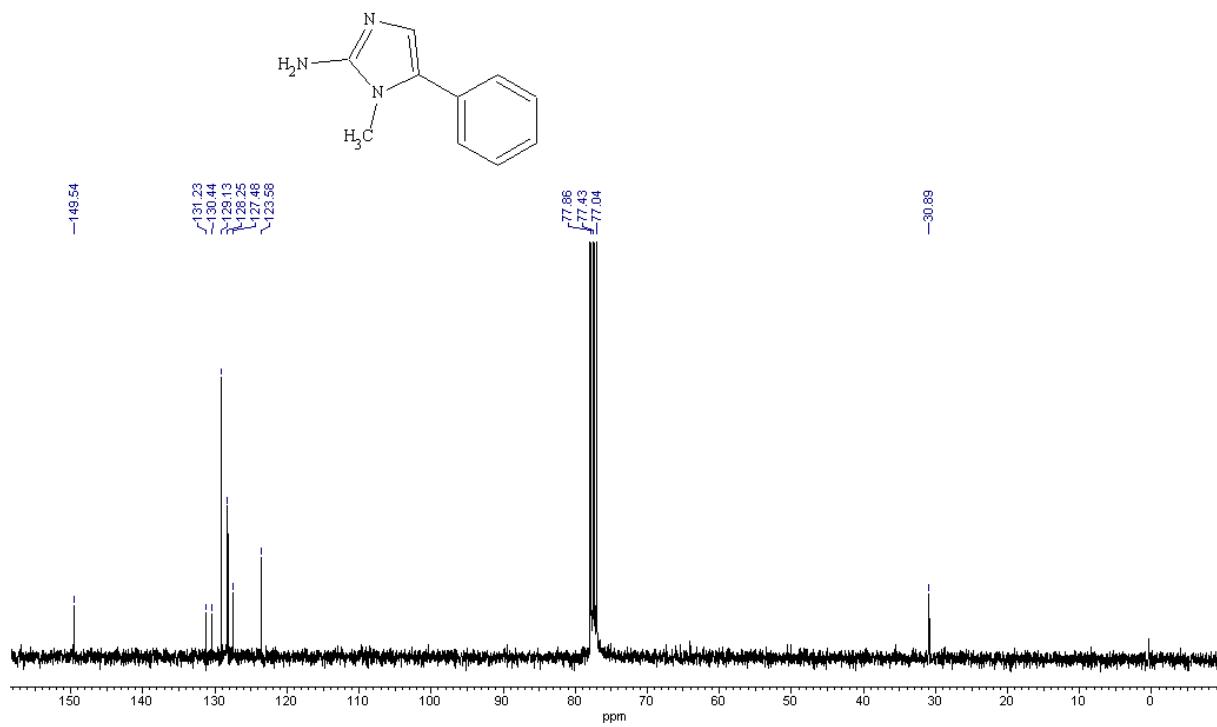
**5-(4-Chlorophenyl)-1-isobutyl-4-p-tolyl-1H-imidazol-2-ylamine (5{27})**: 89% yield, mp. 206-208°C. <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>):  $\delta$  7.40 (d, *J* = 9.1 Hz, 2H), 7.25 (m, 4H), 7.01 (d, *J* = 9.1 Hz, 2H), 4.01 (br, 2H), 3.43 (d, *J* = 8.2 Hz, 2H), 2.29 (s, 3H), 1.81 (m, 1H), 0.77 (d, *J* = 6.4 Hz, 6H). <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>):  $\delta$  148.8, 136.0, 134.4, 134.1, 133.0 ( $\times 2$ ), 132.2, 130.8, 129.6 ( $\times 2$ ), 129.2 ( $\times 2$ ), 126.9 ( $\times 2$ ), 123.2, 50.5, 28.9, 21.5, 20.3 ( $\times 2$ ). HR-MS (EI): C<sub>20</sub>H<sub>22</sub>ClN<sub>3</sub> calcd 339.1502, found 339.1501.

Compound 5{1}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

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File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_081DE-250\DE-250_0010000fid	Frequency (MHz)	300.13		
Nucleus	$^1\text{H}$	Number of Transients	16	Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03

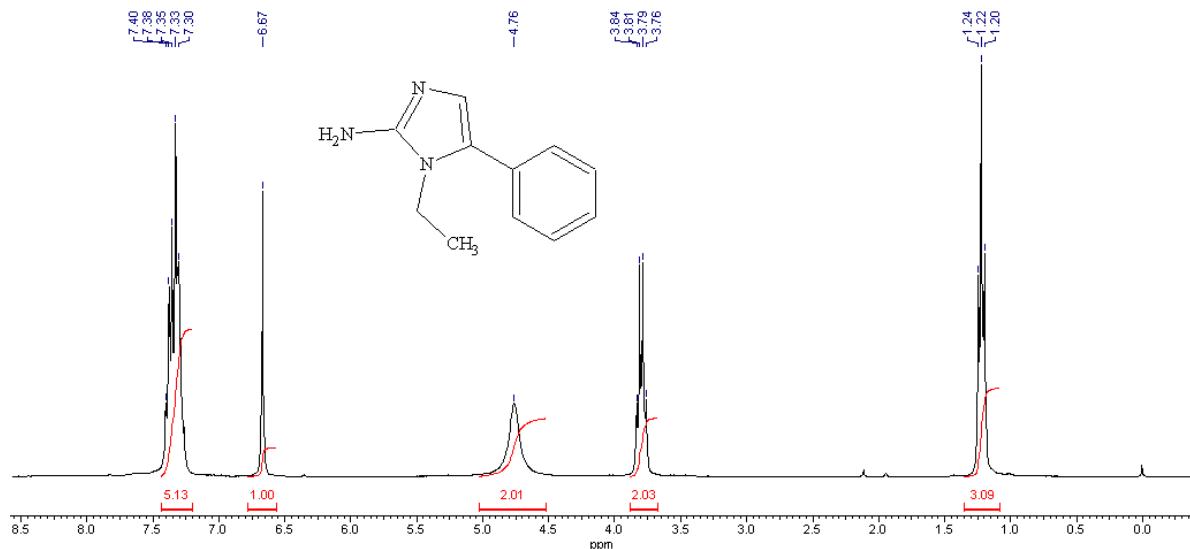


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zg30)	Date	31 Mar 2006 04:18:08
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_081DE-250\DE-250_0020000fid	Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$
Points Count	8192	Pulse Sequence	zg30	Number of Transients	11600
Temperature (Degree C)	27.000	Solvent	$\text{CDCl}_3$	Original Points Count	8192

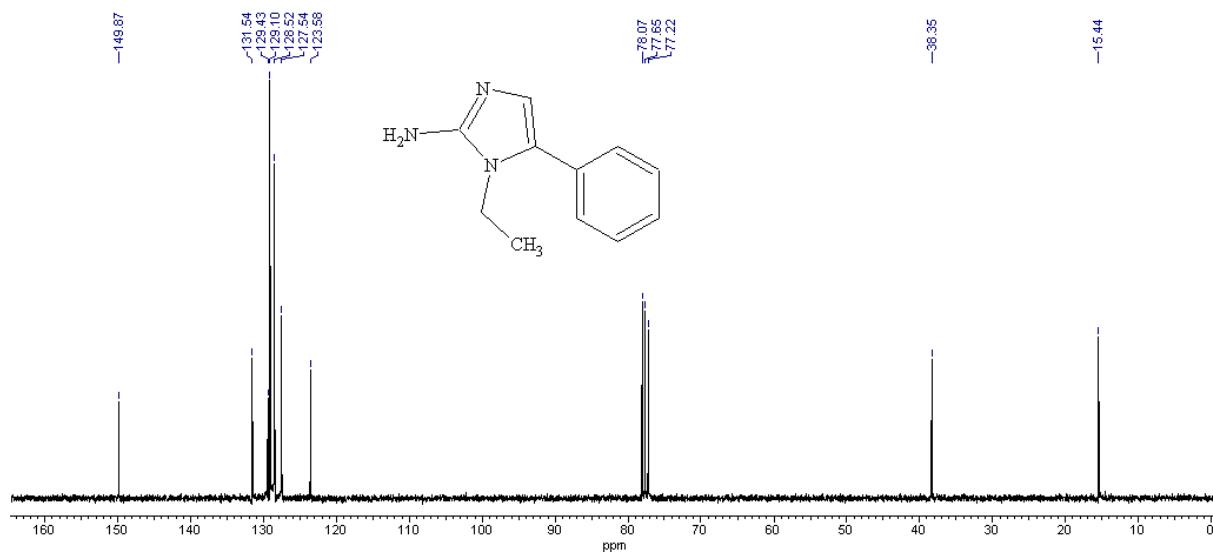


Compound 5{2}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

Acquisition Time (sec)	0.5472	Comment	1D proton, long sweepwidth	Date	28 Jun 2005 10:08:00
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_08\DE-267\DE-267_001000.fid	Frequency (MHz)	300.13		
Nucleus	$^1\text{H}$	Number of Transients	16	Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03
				Temperature (degree C)	27.000

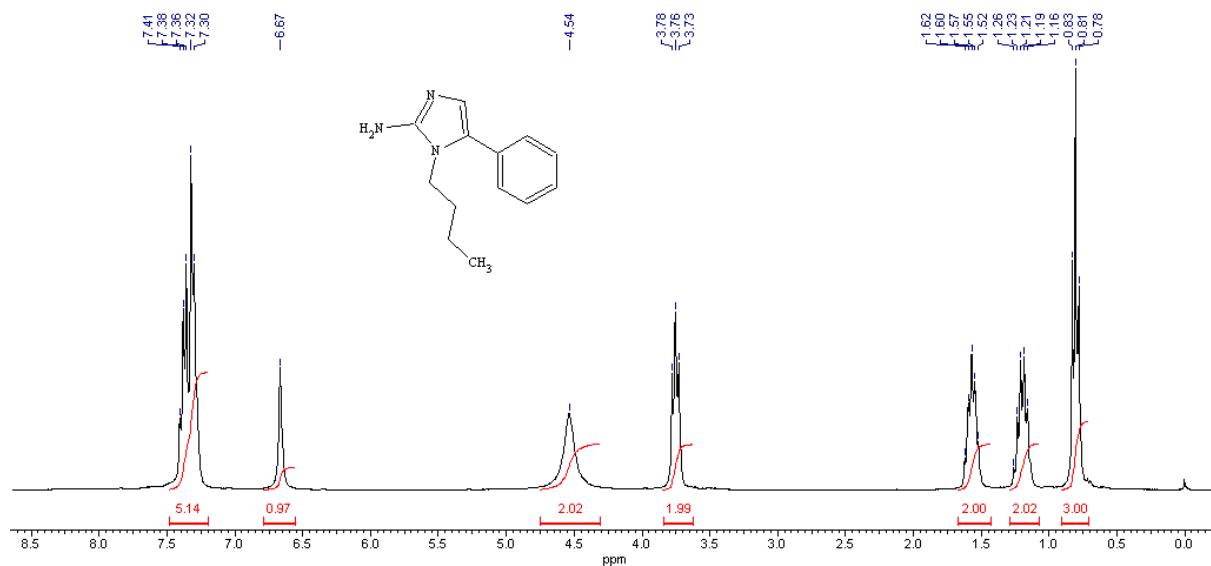


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zgpg30)	Date	28 Jun 2005 10:22:56
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_08\DE-267\DE-267_002000.fid	Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$
Points Count	8192	Pulse Sequence	zgpg30	Number of Transients	320
Temperature (degree C)	27.000	Solvent	$\text{CDCl}_3$	Original Points Count	8192
				Sweep Width (Hz)	18882.39

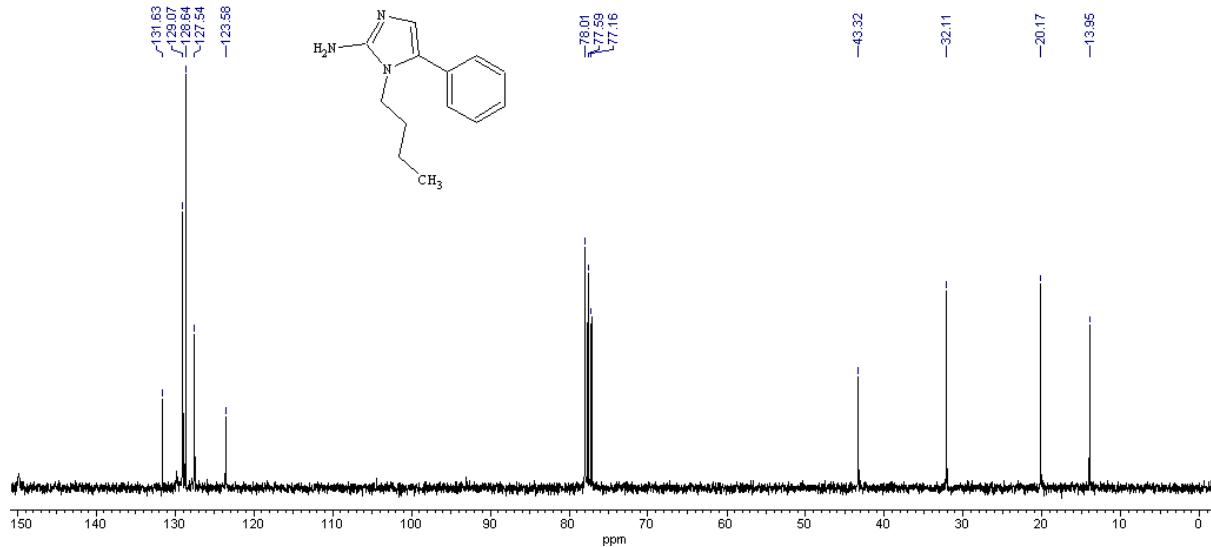


Compound 5{3}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

Acquisition Time (sec)	0.5472	Comment	1D proton, long sweepwidth	Date	30 Jun 2005 15:06:40
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_081DE-269\DE-269_00100001fd	Frequency (MHz)	300.13		
Nucleus	$^1\text{H}$	Number of Transients	16	Original Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03
				Points Count	8192
				Temperature (degree C)	27.000

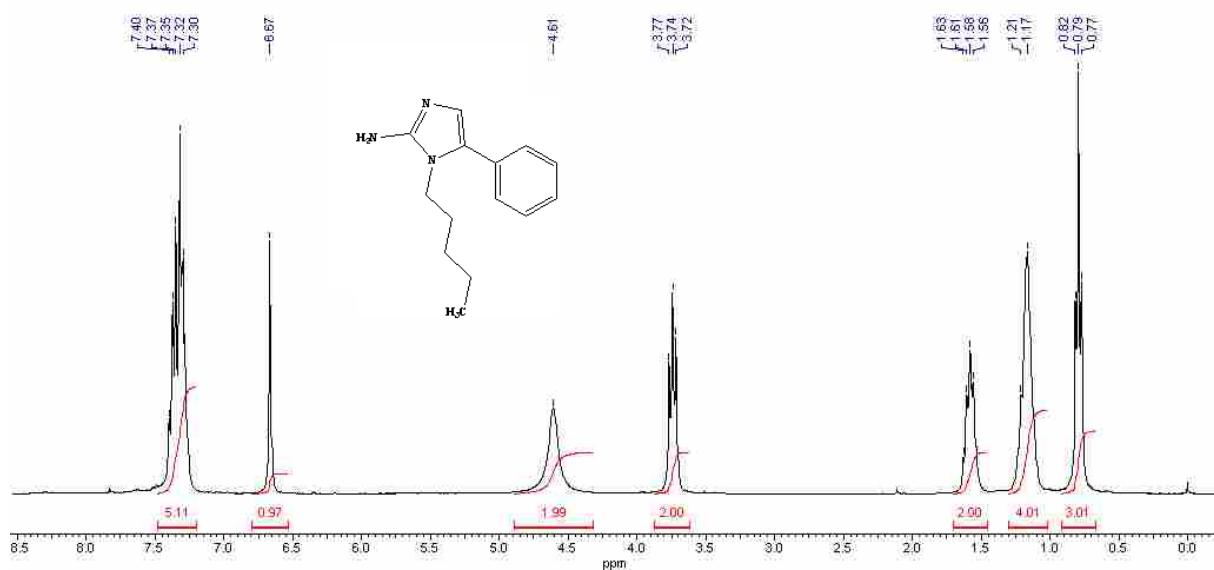


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zg30)	Date	30 Jun 2005 15:21:36
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_081DE-269\DE-269_00200001fd	Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$
Points Count	8192	Pulse Sequence	zg30	Number of Transients	354
Temperature (degree C)	27.000	Solvent	$\text{CDCl}_3$	Original Points Count	8192
				Sweep Width (Hz)	18832.39

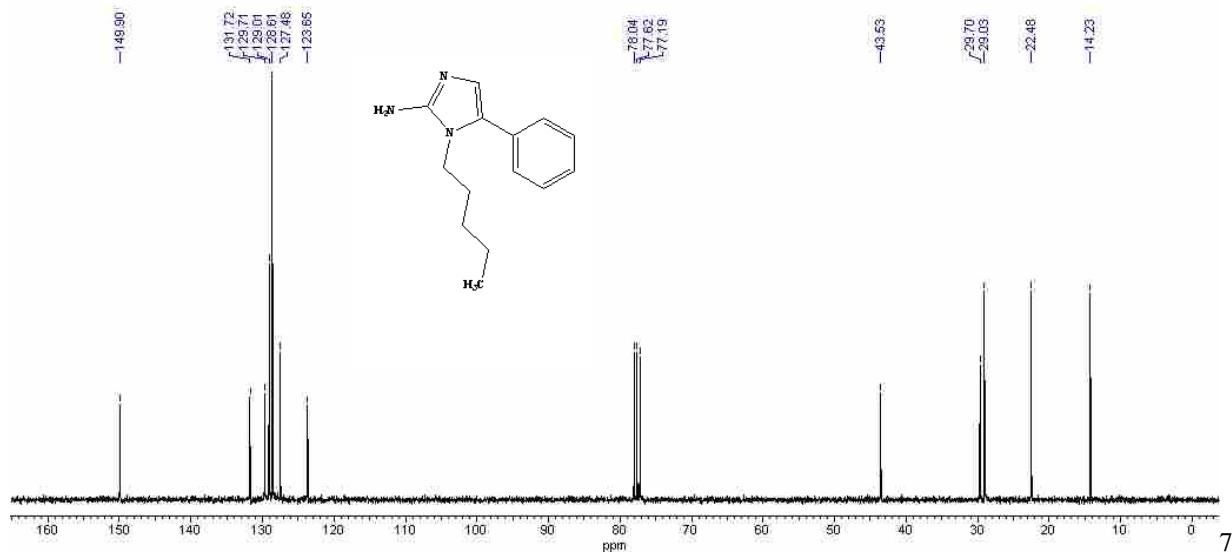


Compound 5{4}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

Acquisition Time (sec)	0.5472	Comment	1D proton, long sweepwidth	Date	01 Jul 2005 10:14:24		
File Name	C:\Documents and Settings\ERMOLATEV DENNIS\My Documents\MyPhD\PAPER_081DE-270DE-270_00100001d	Frequency (MHz)	300.13	Points Count	8192		
Nucleus	$^1\text{H}$	Number of Transients	16	Original Points Count	8192		
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03	Temperature (degree C)	27.000

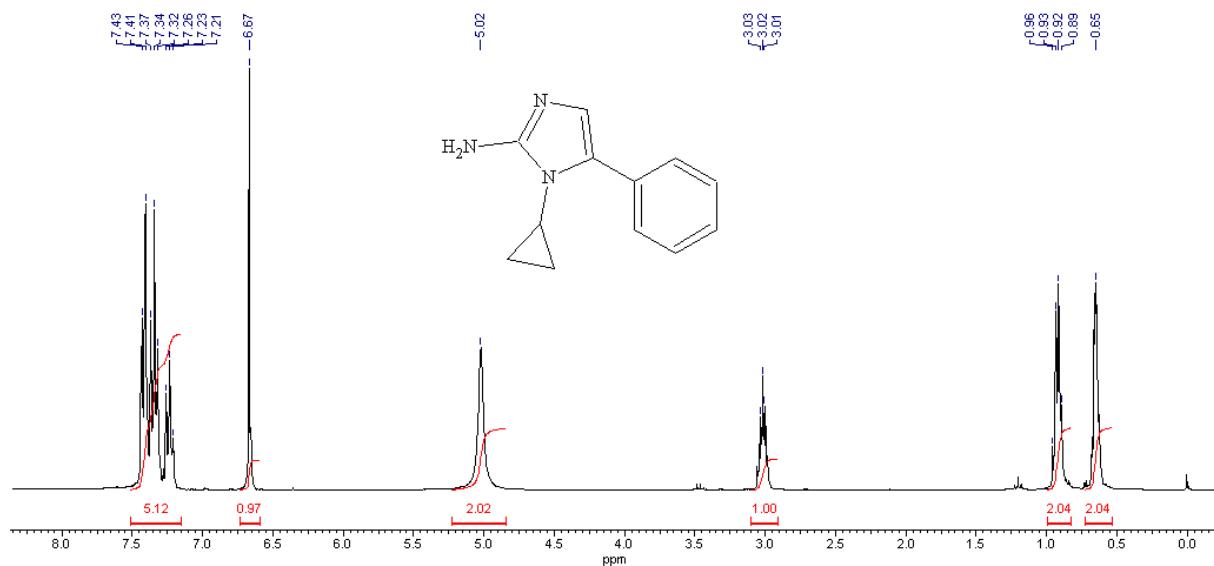


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zg30)	Date	01 Jul 2005 10:29:20
File Name	C:\Documents and Settings\ERMOLATEV DENNIS\My Documents\MyPhD\PAPER_081DE-270DE-270_00100001d	Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$
Points Count	8192	Pulse Sequence	zg30	Number of Transients	320
Temperature (degree C)	27.000	Solvent	$\text{CDCl}_3$	Original Points Count	8192
				Sweep Width (Hz)	18832.39

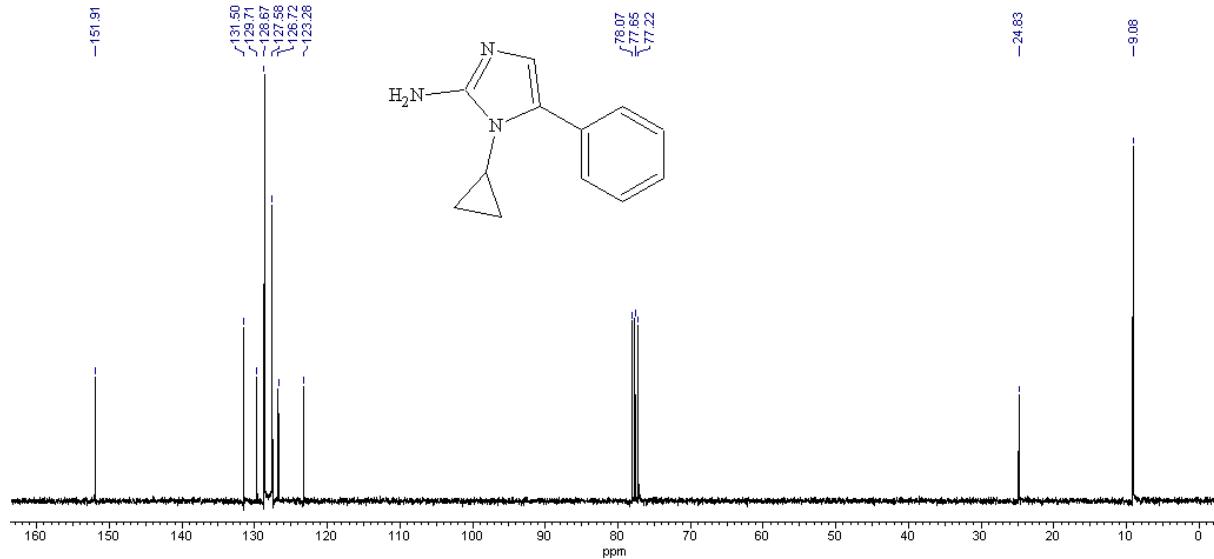


Compound 5{5}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

Acquisition Time (sec)	0.5472	Comment	1D proton, long sweepwidth	Date	23 Jun 2005 15:08:48
File Name	C:\Documents and Settings\ERMOLATEV DENNIS\My Documents\MyPhD\PAPER_08\DE-262\DE-262_001000fid			Frequency (MHz)	300.13
Nucleus	$^1\text{H}$	Number of Transients	16	Original Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03
				Points Count	8192
				Temperature (Degree C)	27.000

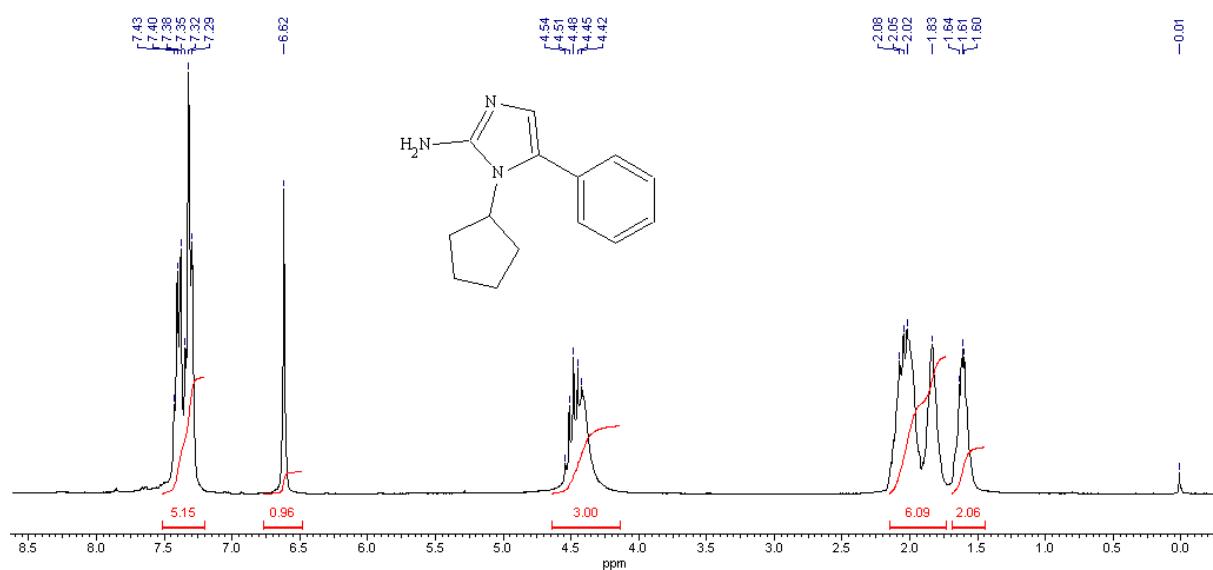


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zgpg30)	Date	23 Jun 2005 15:23:44
File Name	C:\Documents and Settings\ERMOLATEV DENNIS\My Documents\MyPhD\PAPER_08\DE-262\DE-262_002000fid			Frequency (MHz)	75.48
Nucleus	$^{13}\text{C}$	Number of Transients	320	Original Points Count	8192
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	18632.39
				Points Count	8192
				Temperature (Degree C)	27.000

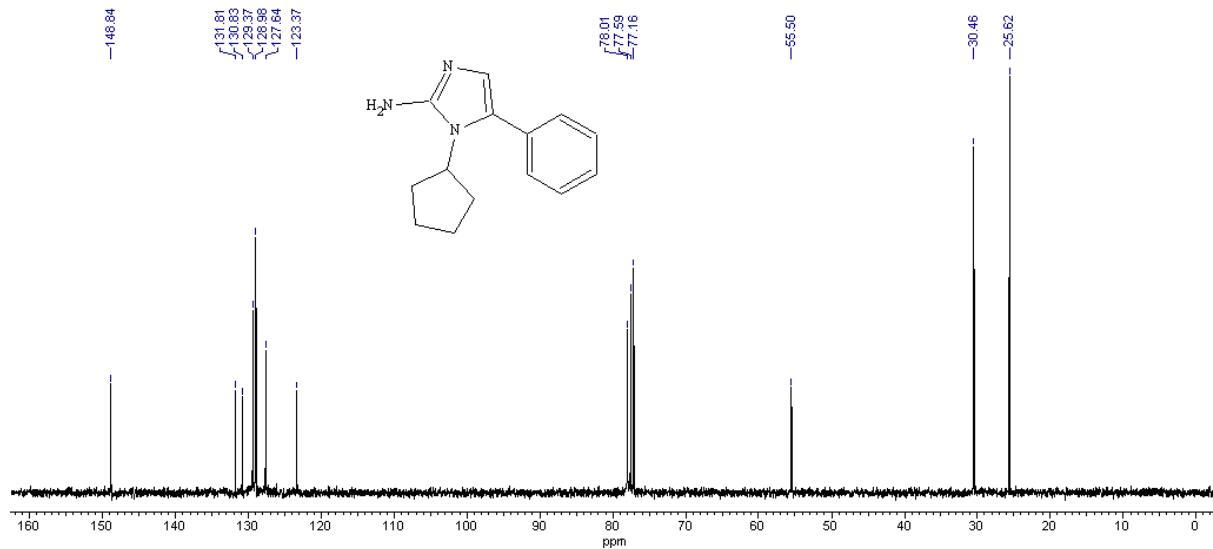


Compound 5{6}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

Acquisition Time (sec)	0.5472	Comment	1D proton, long sweepwidth	Date	24 Jun 2005 10:10:08
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_081DE-263\DE-263_00100001d	Frequency (MHz)	300.13		
Nucleus	$^1\text{H}$	Number of Transients	16	Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03
				Temperature (degree C)	27.000

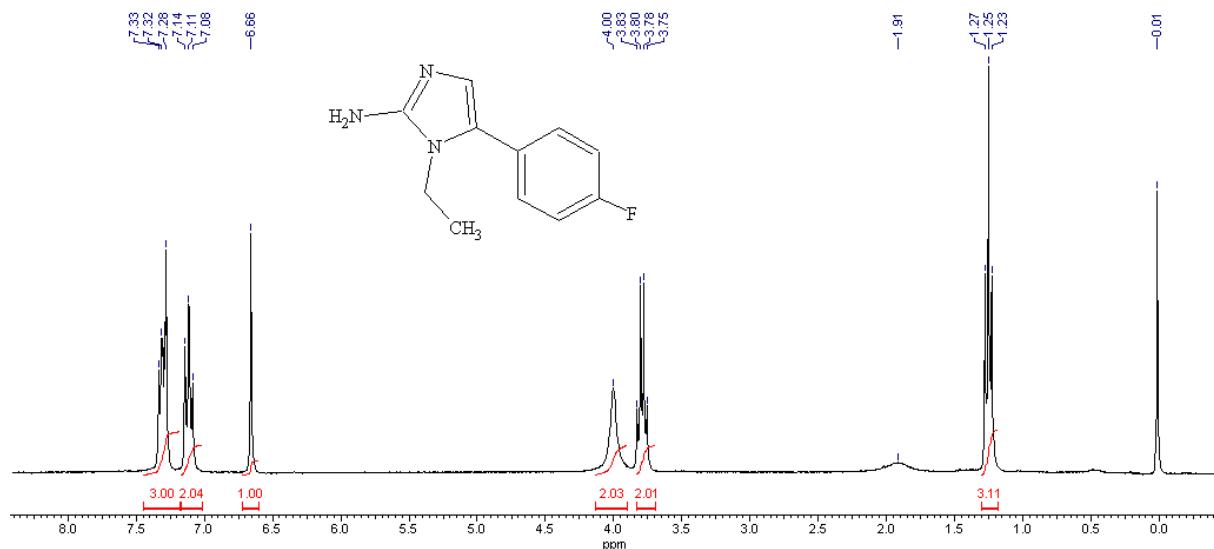


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zgpg30)	Date	24 Jun 2005 10:25:04
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_081DE-263\DE-263_00200001d	Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$
Points Count	8192	Pulse Sequence	zgpg30	Number of Transients	384
Temperature (degree C)	27.000	Solvent	$\text{CDCl}_3$	Original Points Count	8192
				Sweep Width (Hz)	18832.39

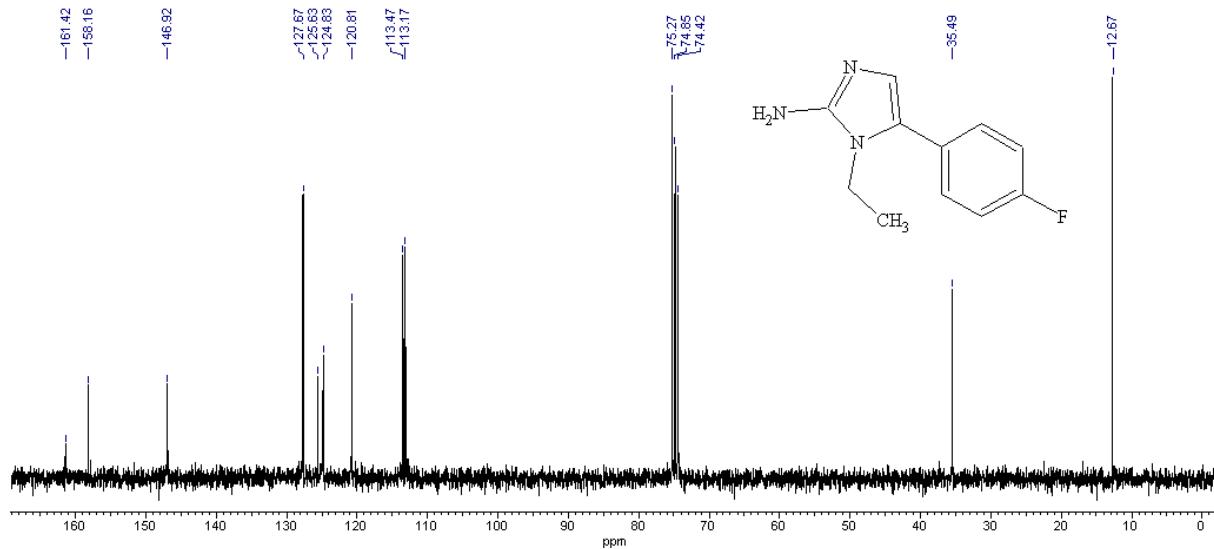


Compound 5{7}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

Acquisition Time (sec)	0.5472	Comment	1D proton, long sweep width	Date	11 Apr 2006 10:05:52
File Name	C:\Documents and Settings\ERMLATEV DENNIS\My Documents\MyPhD\PAPER_081DE-253HDE-253H_0020001d				
Frequency (MHz)	300.13	Nucleus	$^1\text{H}$	Number of Transients	64
Points Count	8192	Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$
Temperature (degree C)	27.000			Original Points Count	8192
				Sweep Width (Hz)	748503

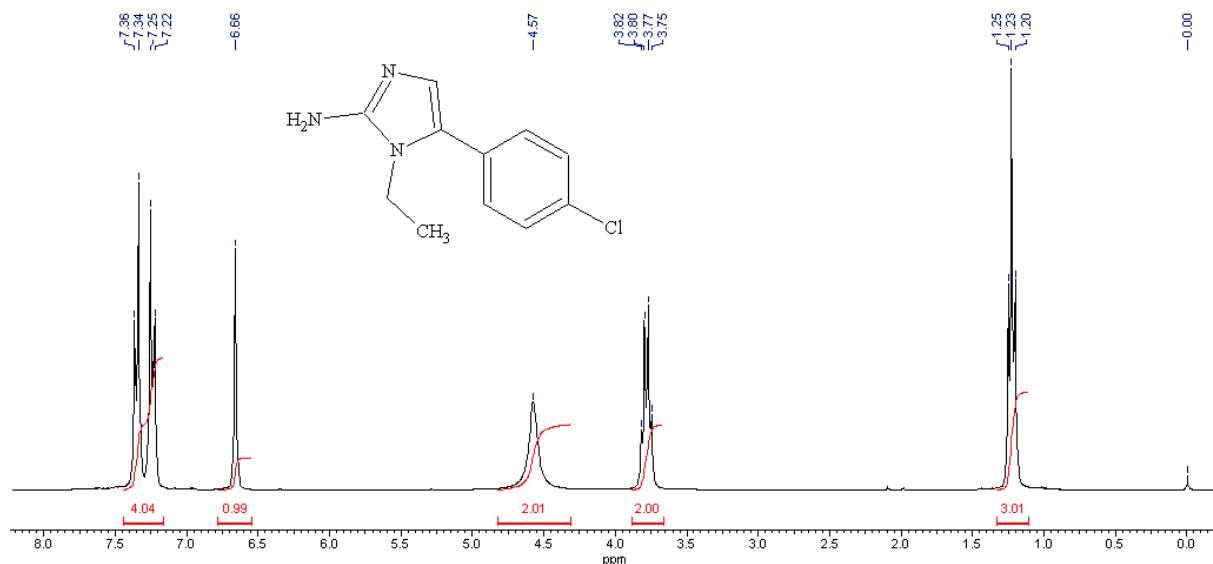


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zgpg30)	Date	10 Jun 2005 15:23:44
File Name	C:\Documents and Settings\ERMLATEV DENNIS\My Documents\MyPhD\PAPER_081DE-253HDE-253H_0020001d				
Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$	Number of Transients	228
Points Count	8192	Pulse Sequence	zgpg30	Solvent	$\text{CDCl}_3$
Temperature (degree C)	27.000			Original Points Count	8192
				Sweep Width (Hz)	18832.39

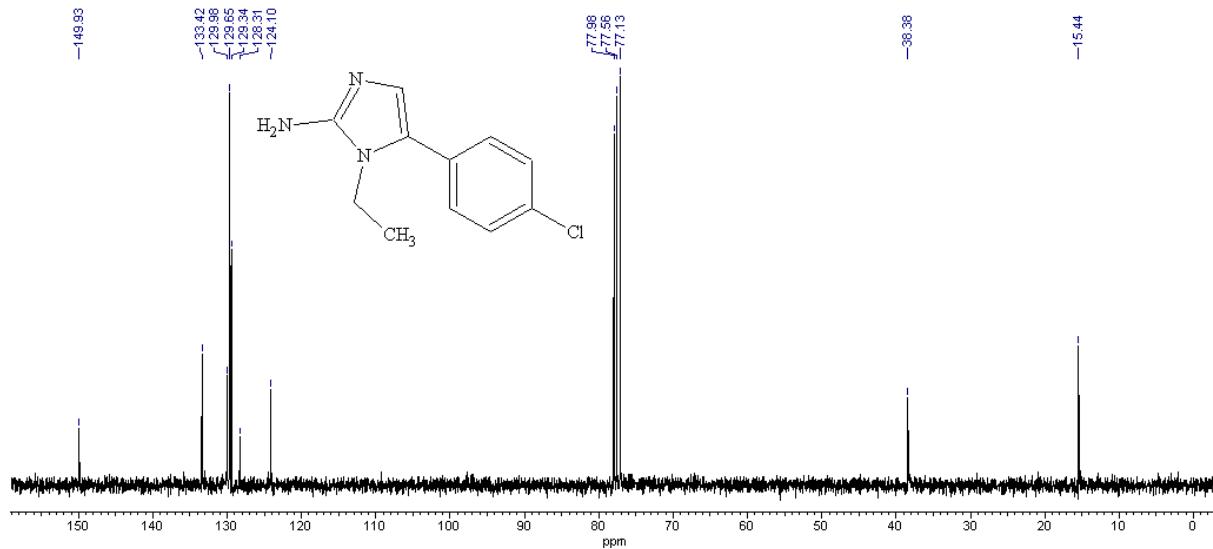


Compound 5{8}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

Acquisition Time (sec)	0.5472	Comment	1D proton, long sweepwidth	Date	14 Jun 2005 15:08:48
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_08\DE-254\DE-254_00100001.fid	Frequency (MHz)	300.13		
Nucleus	$^1\text{H}$	Number of Transients	16	Original Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03
				Temperature (degree C)	27.000

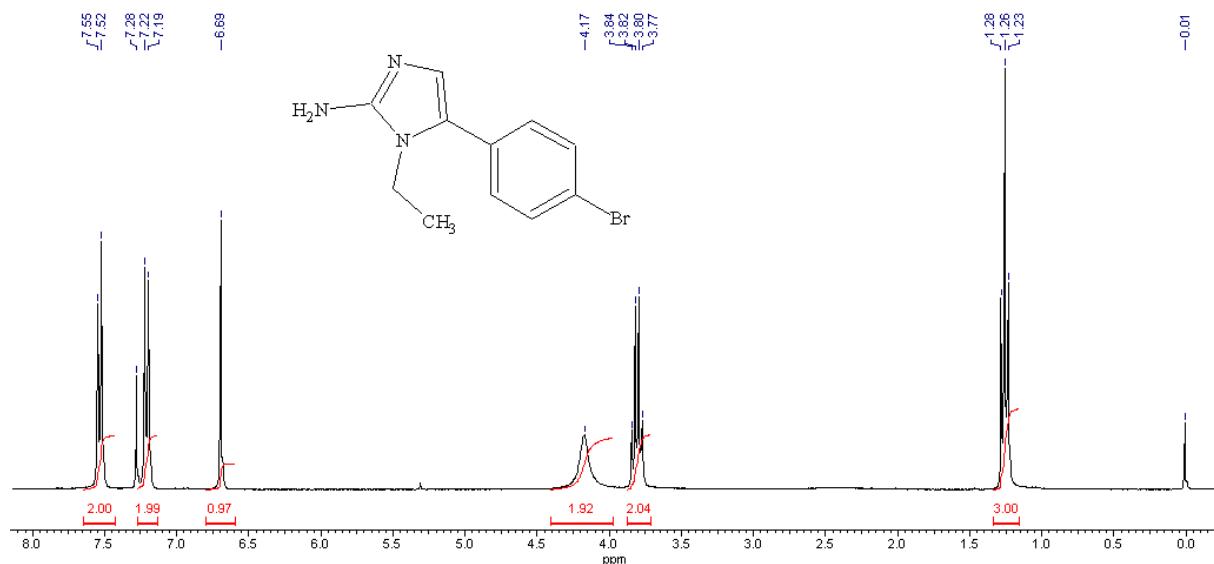


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zgpg30)	Date	14 Jun 2005 15:21:36
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_08\DE-254\DE-254_00200001.fid	Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$
Points Count	8192	Pulse Sequence	zgpg30	Number of Transients	256
Temperature (degree C)	27.000	Solvent	$\text{CDCl}_3$	Original Points Count	8192
				Sweep Width (Hz)	18832.39

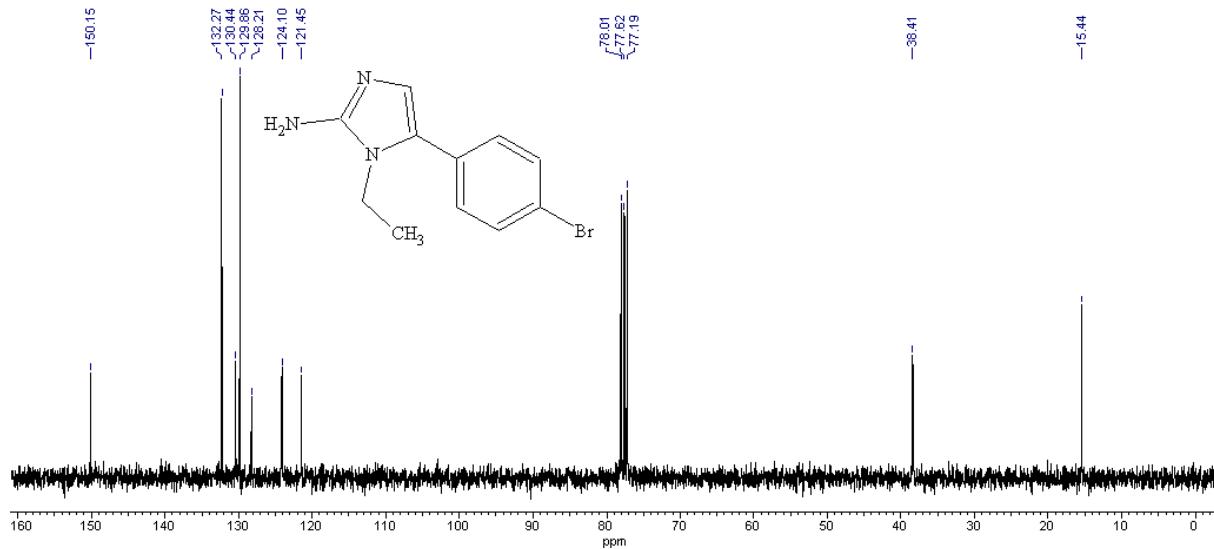


Compound 5{9}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

Acquisition Time (sec)	0.5472	Comment	1D proton, long sweepwidth	Date	15 Jun 2005 16:32:00		
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_08\DE-255\DE-255_00100001d	Frequency (MHz)	300.13				
Nucleus	$^1\text{H}$	Number of Transients	16	Points Count	8192		
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03	Temperature (degree C)	27.000

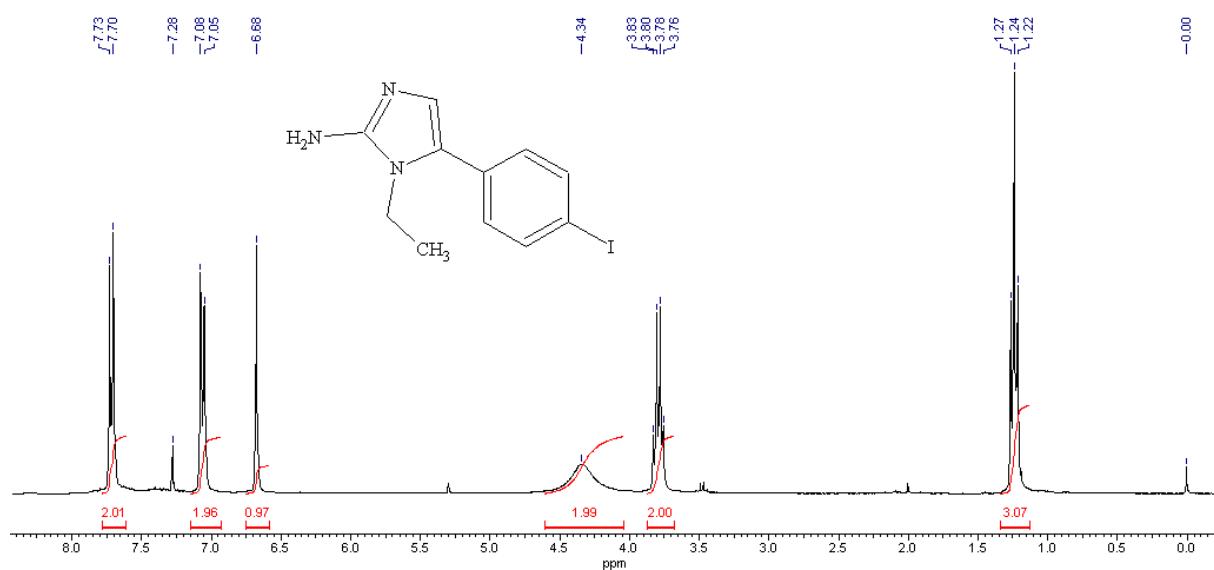


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zgpg30)	Date	15 Jun 2005 15:21:36
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_08\DE-255\DE-255_00200001d	Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$
Points Count	8192	Pulse Sequence	zgpg30	Number of Transients	256
Temperature (degree C)	27.000	Solvent	$\text{CDCl}_3$	Original Points Count	8192
				Sweep Width (Hz)	18832.39

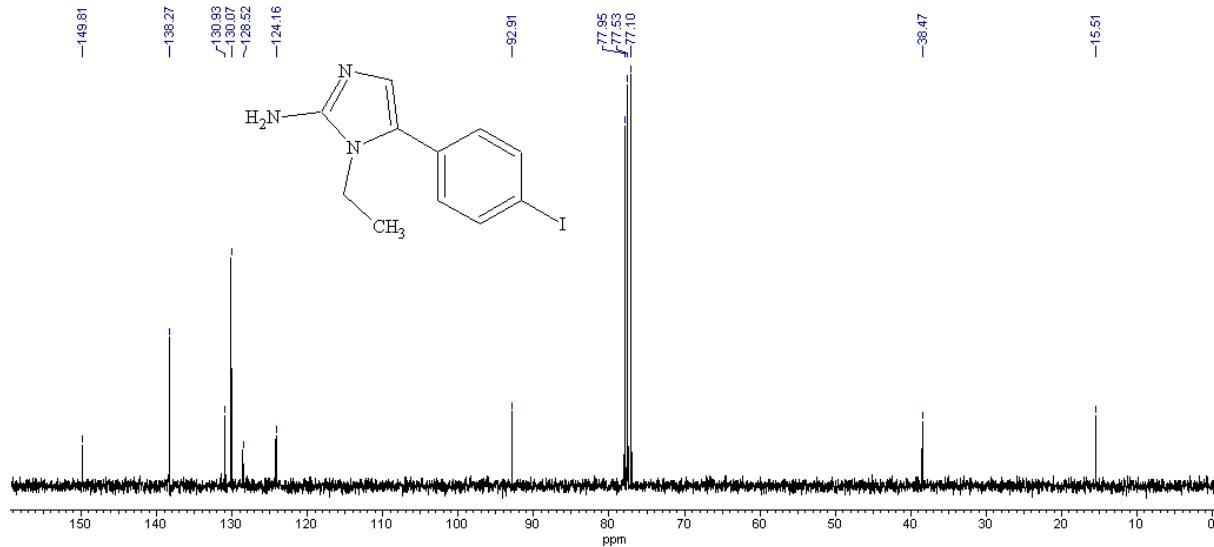


Compound 5{10}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

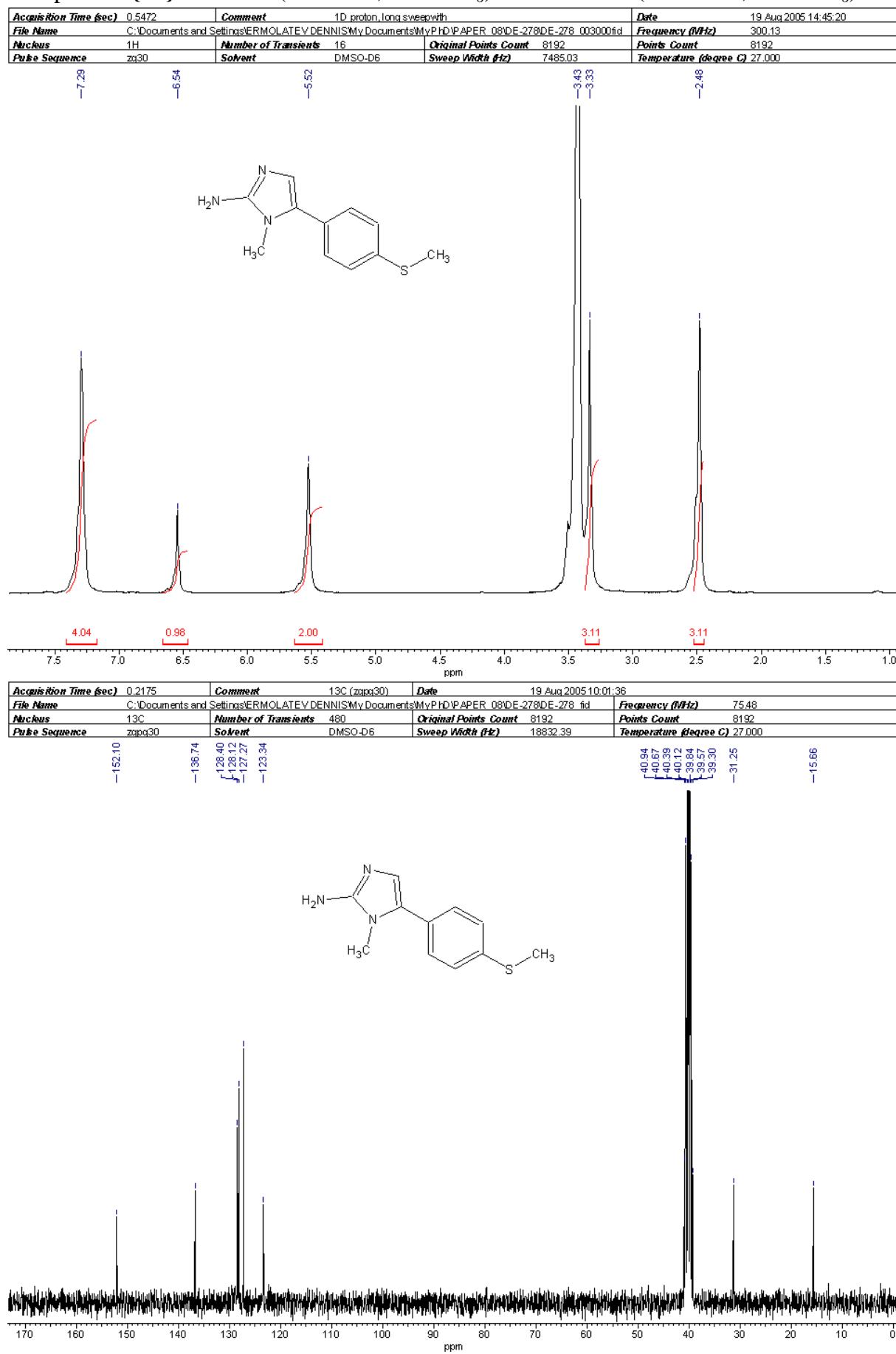
Acquisition Time (sec)	0.5472	Comment	1D proton, long sweepwidth	Date	16 Jun 2005 10:10:08
File Name	C:\Documents and Settings\ERMOLATEV DENNIS\My Documents\MyPhD\PAPER_081DE-256\DE-256_00100001d	Frequency (MHz)	300.13		
Nucleus	$^1\text{H}$	Number of Transients	16	Original Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03
				Points Count	8192
				Temperature (degree C)	27.000



Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zg30)	Date	16 Jun 2005 10:25:04
File Name	C:\Documents and Settings\ERMOLATEV DENNIS\My Documents\MyPhD\PAPER_081DE-256\DE-256_00200001d	Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$
Points Count	8192	Pulse Sequence	zg30	Number of Transients	320
Temperature (degree C)	27.000	Solvent	$\text{CDCl}_3$	Original Points Count	8192
				Sweep Width (Hz)	18832.39

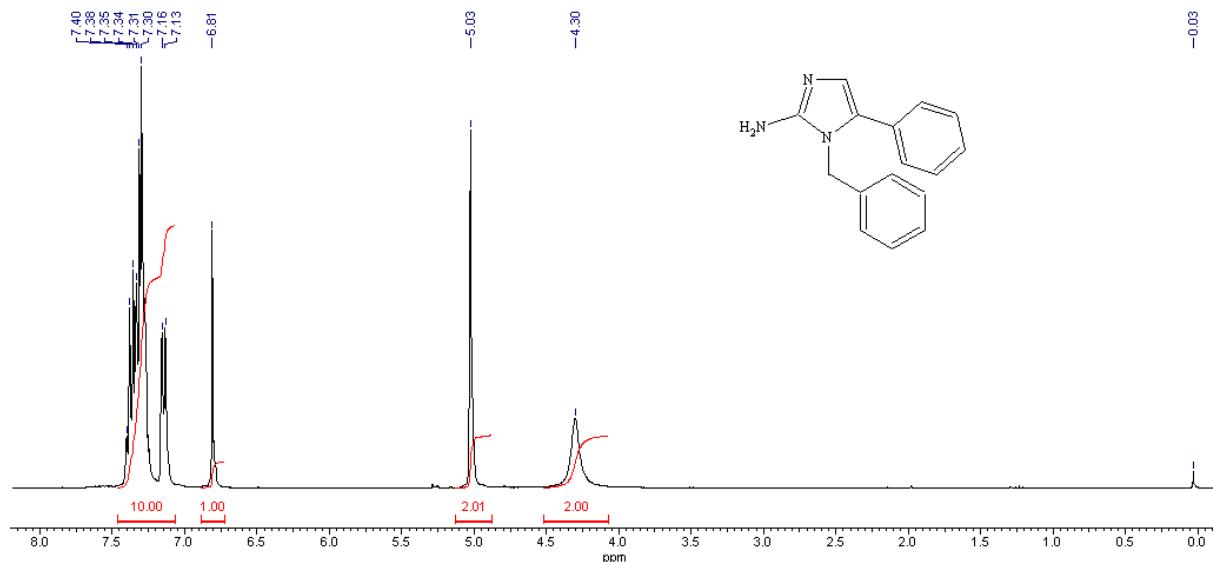


Compound 5{11}:  $^1\text{H}$  NMR (300 MHz, DMSO- $d_6$ ) and  $^{13}\text{C}$  NMR (75.5 MHz, DMSO- $d_6$ )

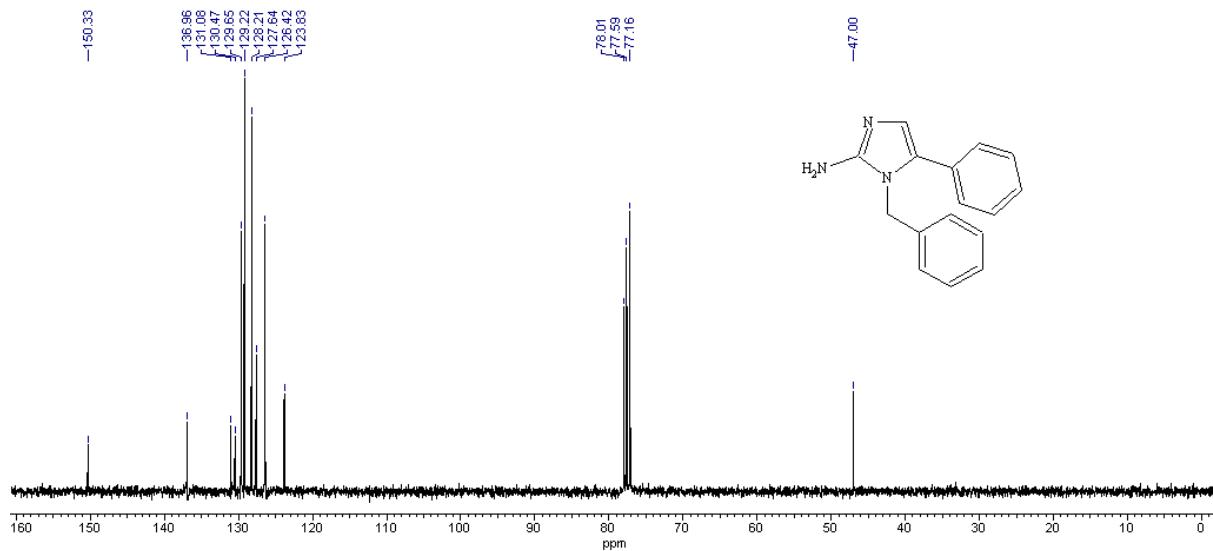


Compound 5{12}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

Acquisition Time (sec)	0.5472	Comment	1D proton, long sweepwidth	Date	20 Jun 2005 10:08:00
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_08\DE-258\DE-258_00100001fd	Frequency (MHz)	300.13		
Nucleus	$^1\text{H}$	Number of Transients	16	Original Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03
				Points Count	8192
				Temperature (degree C)	27.000

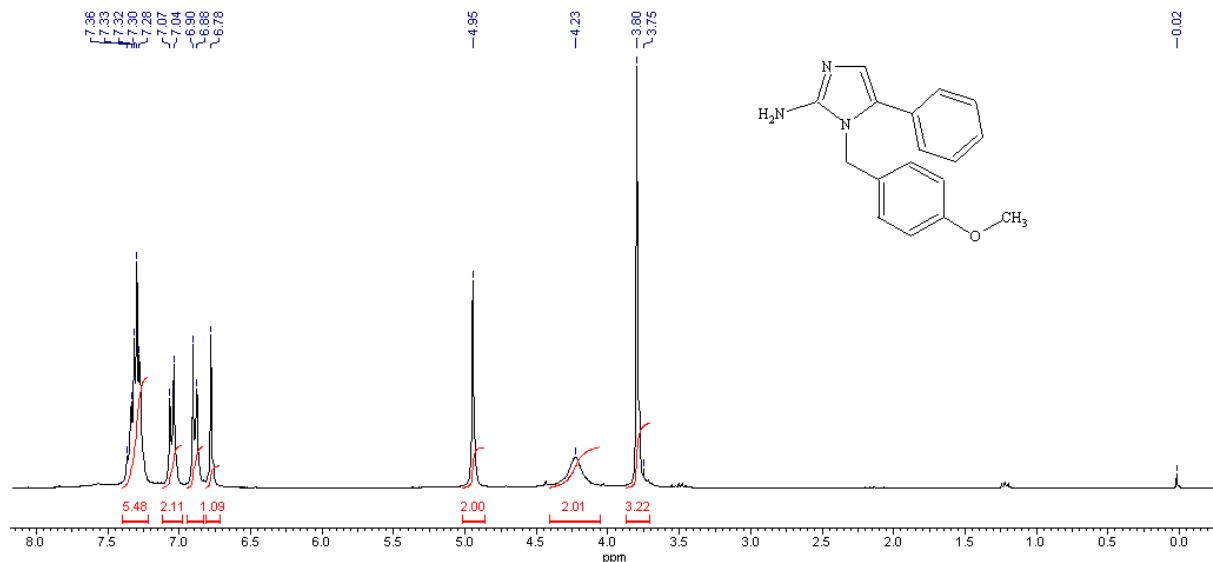


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zg30)	Date	20 Jun 2005 10:25:04
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_08\DE-258\DE-258_00200001fd	Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$
Points Count	8192	Pulse Sequence	zg30	Number of Transients	384
Temperature (degree C)	27.000	Solvent	$\text{CDCl}_3$	Original Points Count	8192
				Sweep Width (Hz)	18832.39

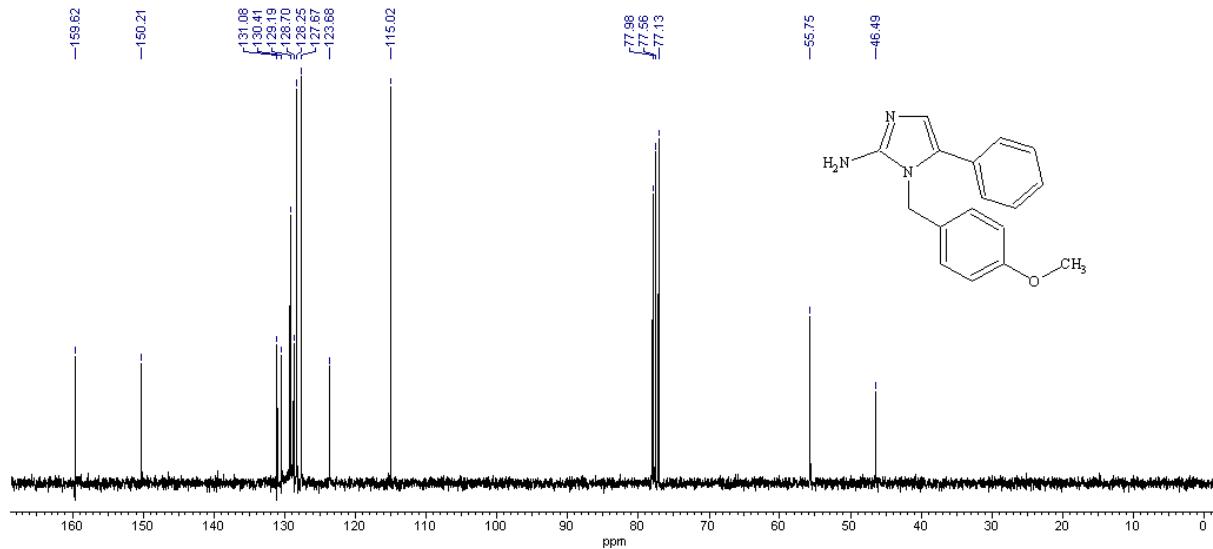


Compound 5{13}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

Acquisition Time (sec)	0.5472	Comment	1D proton, long sweepwidth	Date	21 Jun 2005 10:57:04
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_081DE-259\DE-259_00100001d	Frequency (MHz)	300.13		
Nucleus	$^1\text{H}$	Number of Transients	16	Original Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03
				Points Count	8192
				Temperature (degree C)	27.000

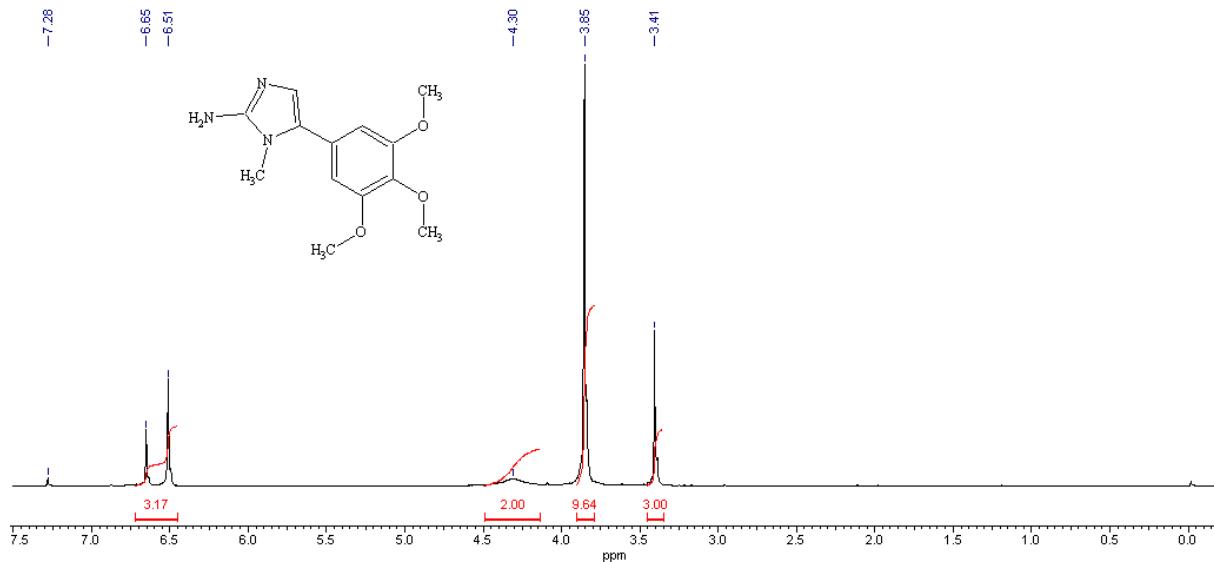


Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zgpg30)	Date	21 Jun 2005 15:21:36
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_081DE-259\DE-259_00200001d	Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$
Points Count	8192	Pulse Sequence	zgpg30	Number of Transients	384
Temperature (degree C)	27.000	Solvent	$\text{CDCl}_3$	Original Points Count	8192
				Sweep Width (Hz)	18832.39

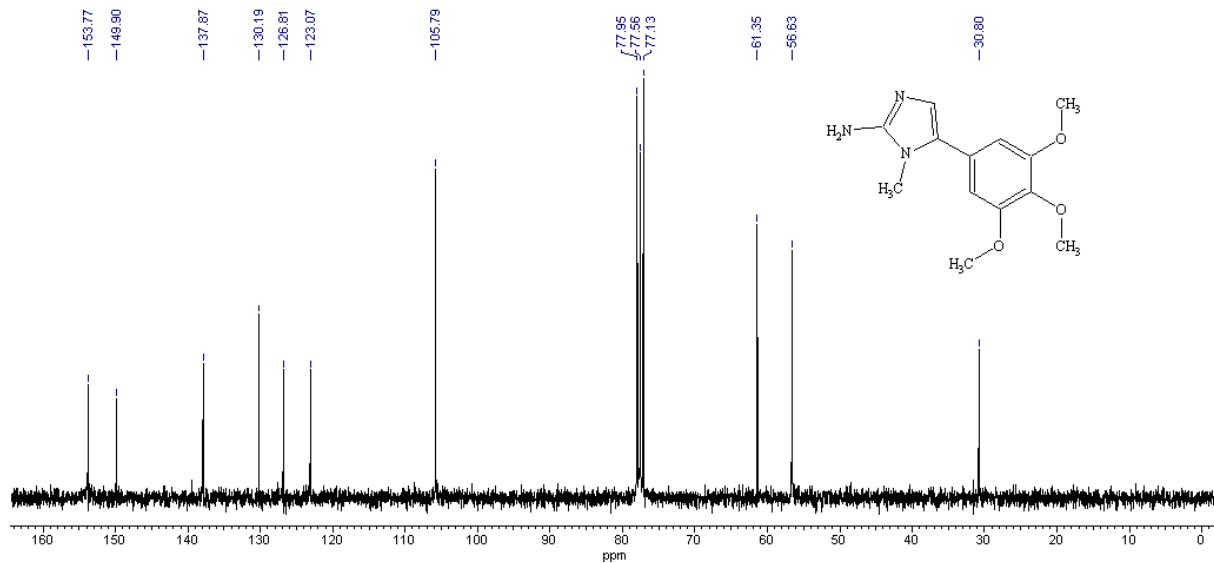


**Compound 5{14}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )**

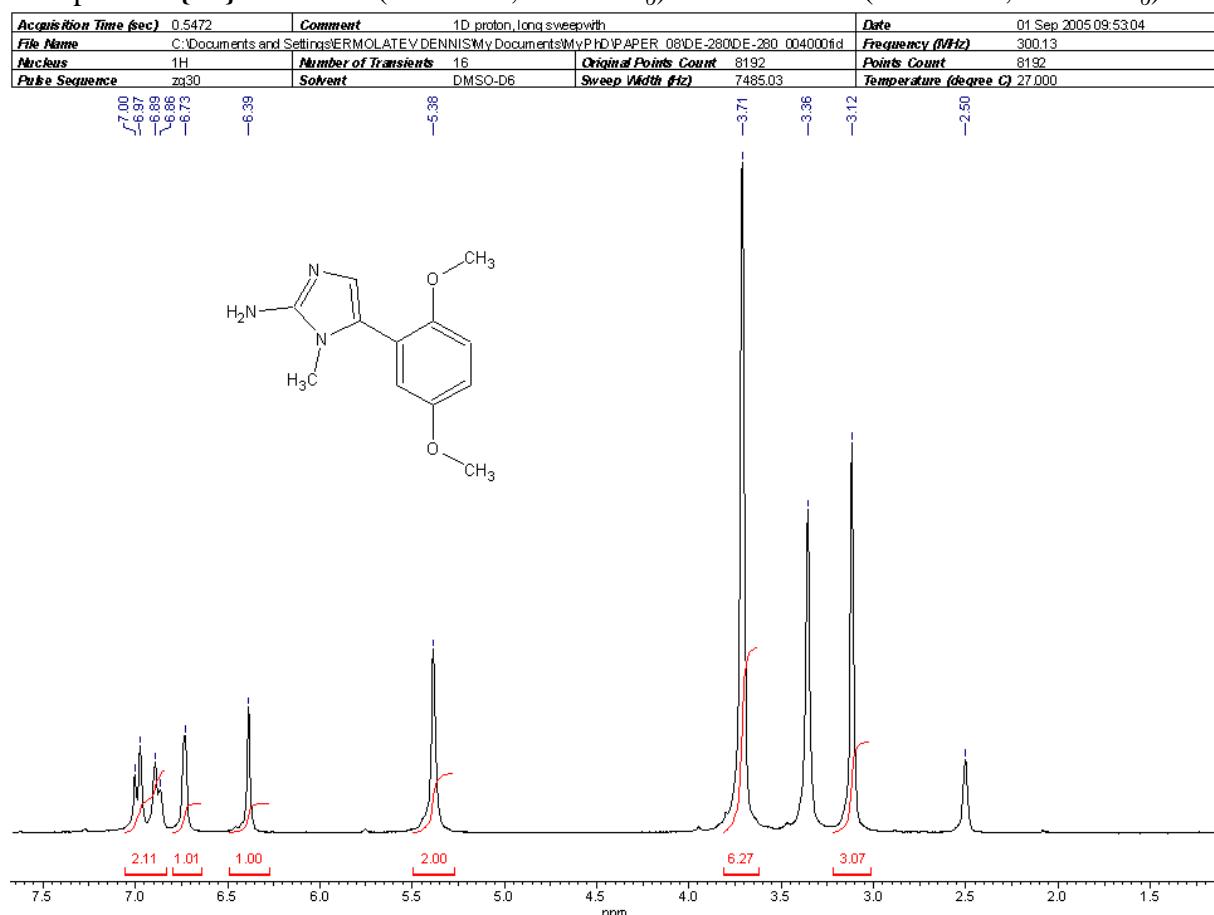
Acquisition Time (sec)	0.5472	Comment	1D proton, long sweep width	Date	10 Aug 2005 14:45:20
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_08\DE-272\DE-272_001000fid	Frequency (MHz)	300.13		
Nucleus	$^1\text{H}$	Number of Transients	16	Original Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03
				Points Count	8192
				Temperature (Degree C)	27.000



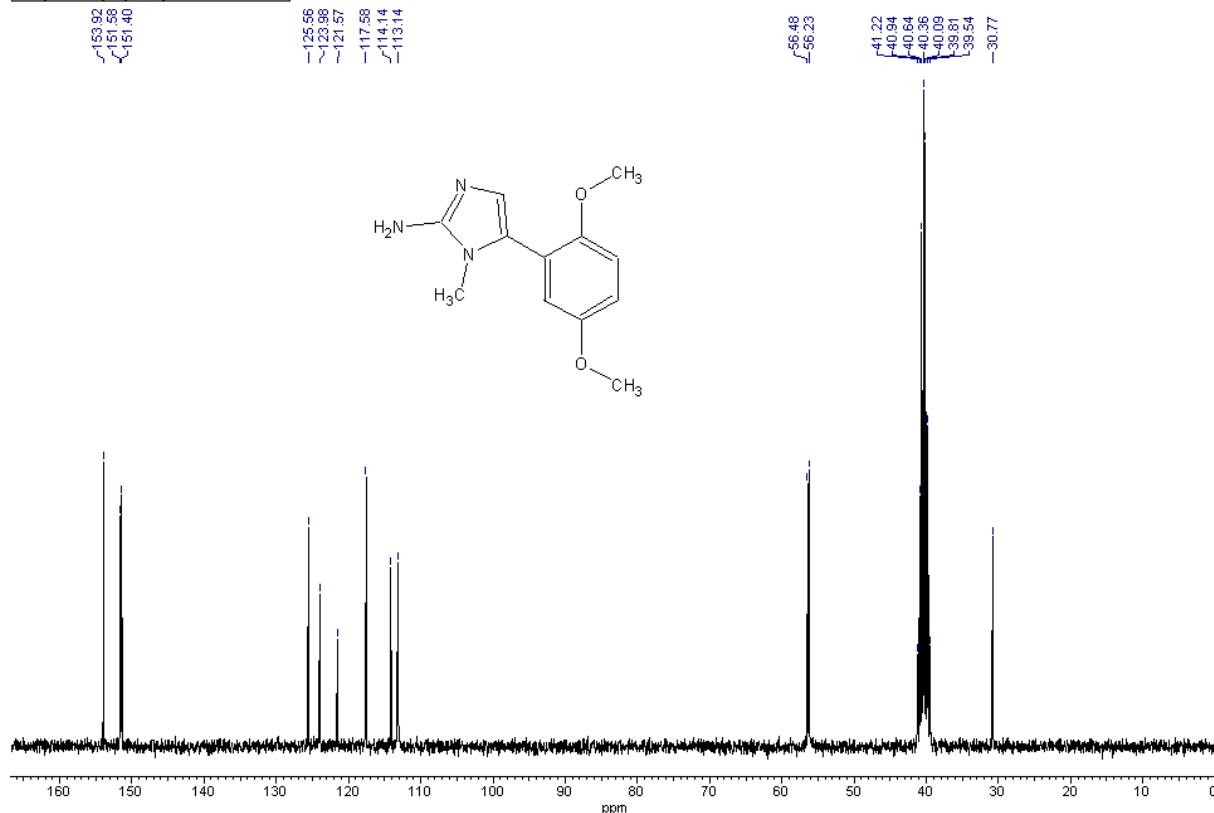
Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zgpg30)	Date	10 Aug 2005 15:06:40
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\MyPhD\PAPER_08\DE-272\DE-272_002000fid	Frequency (MHz)	75.48		
Nucleus	$^{13}\text{C}$	Number of Transients	480	Original Points Count	8192
Pulse Sequence	zgpg30	Solvent	CHLOROFORM-D	Sweep Width (Hz)	18832.39
				Points Count	8192
				Temperature (Degree C)	27.000



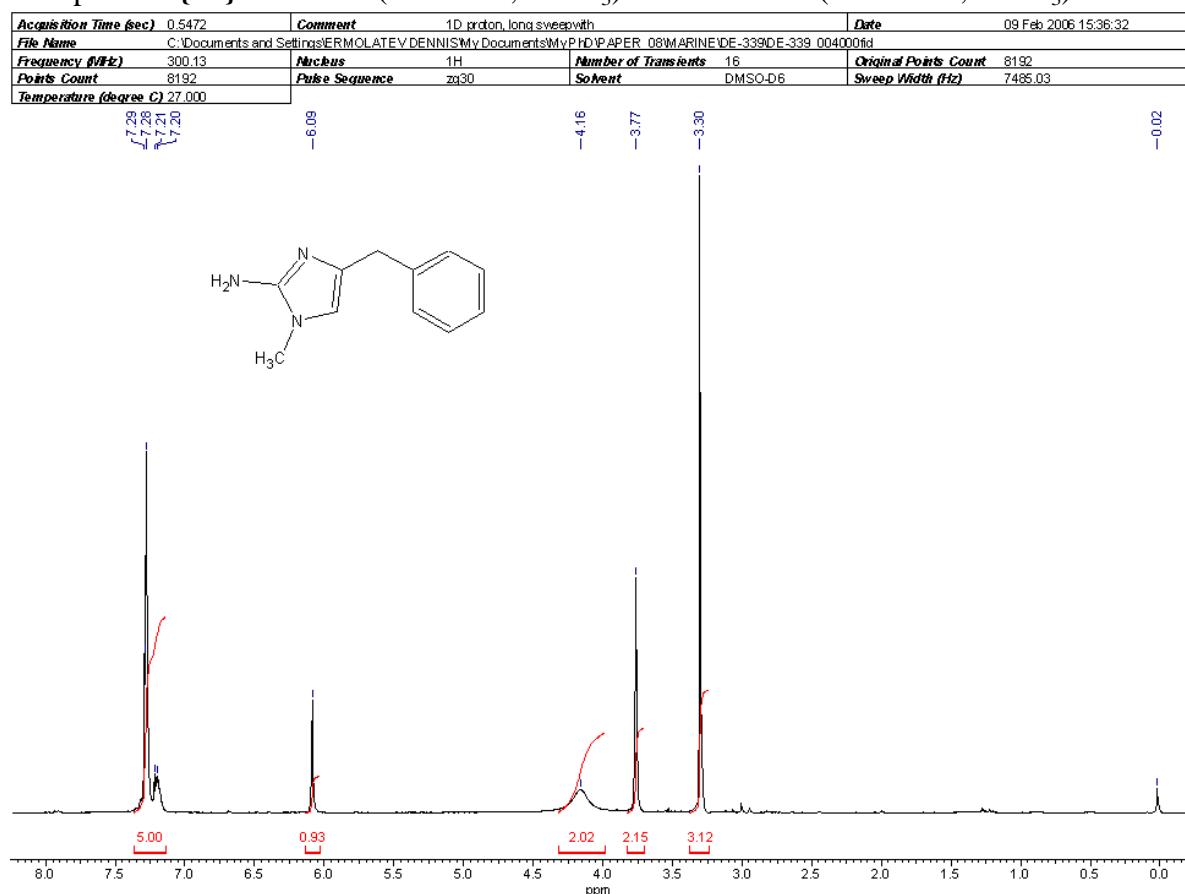
Compound 5{15}:  $^1\text{H}$  NMR (300 MHz, DMSO- $d_6$ ) and  $^{13}\text{C}$  NMR (75.5 MHz, DMSO- $d_6$ )



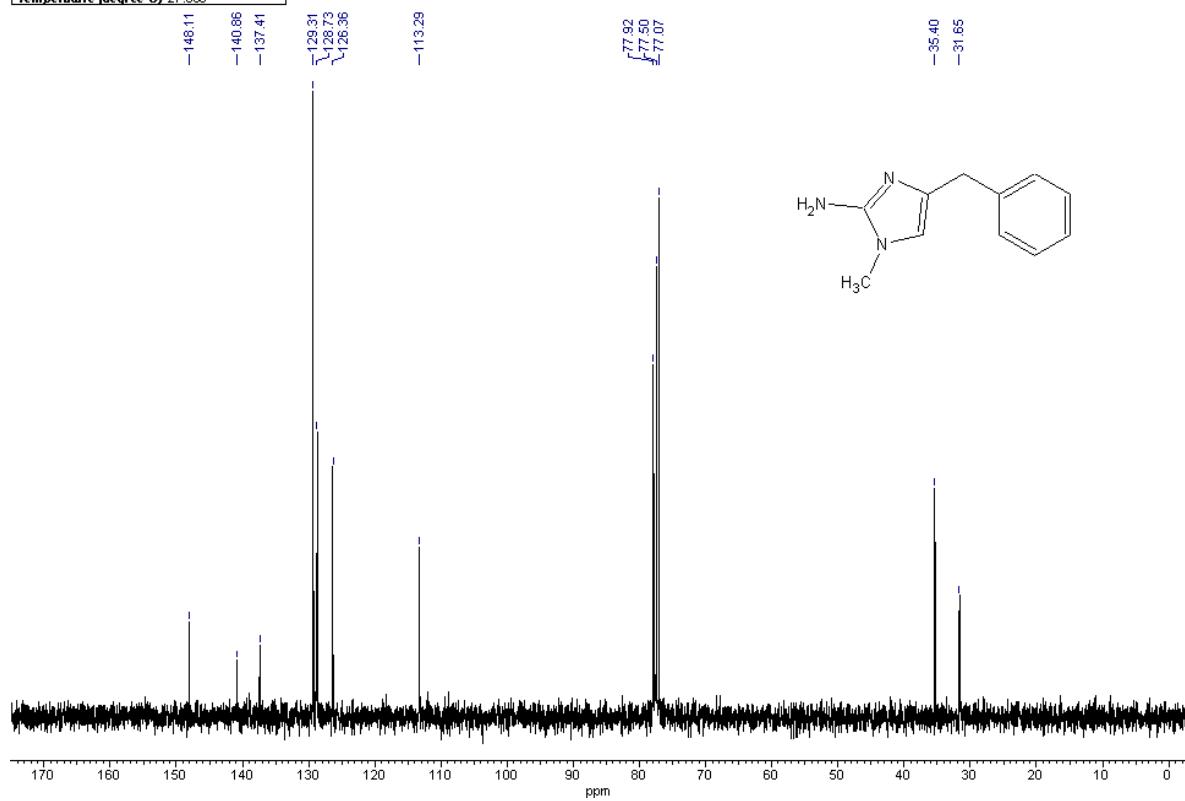
Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zpg30)	Date	31 Aug 2005 09:55:12
File Name	C:\Documents and Settings\ERMOLATEV\DENNIS\My Documents\My PAPER\08DE-280DE-280_002000fid				
Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$	Number of Transients	480
Points Count	8192	Pulse Sequence	zpg30	Solvent	DMSO-D6
Temperature (degree C)	27.000			Original Points Count	8192
				Sweep Width (Hz)	18832.39



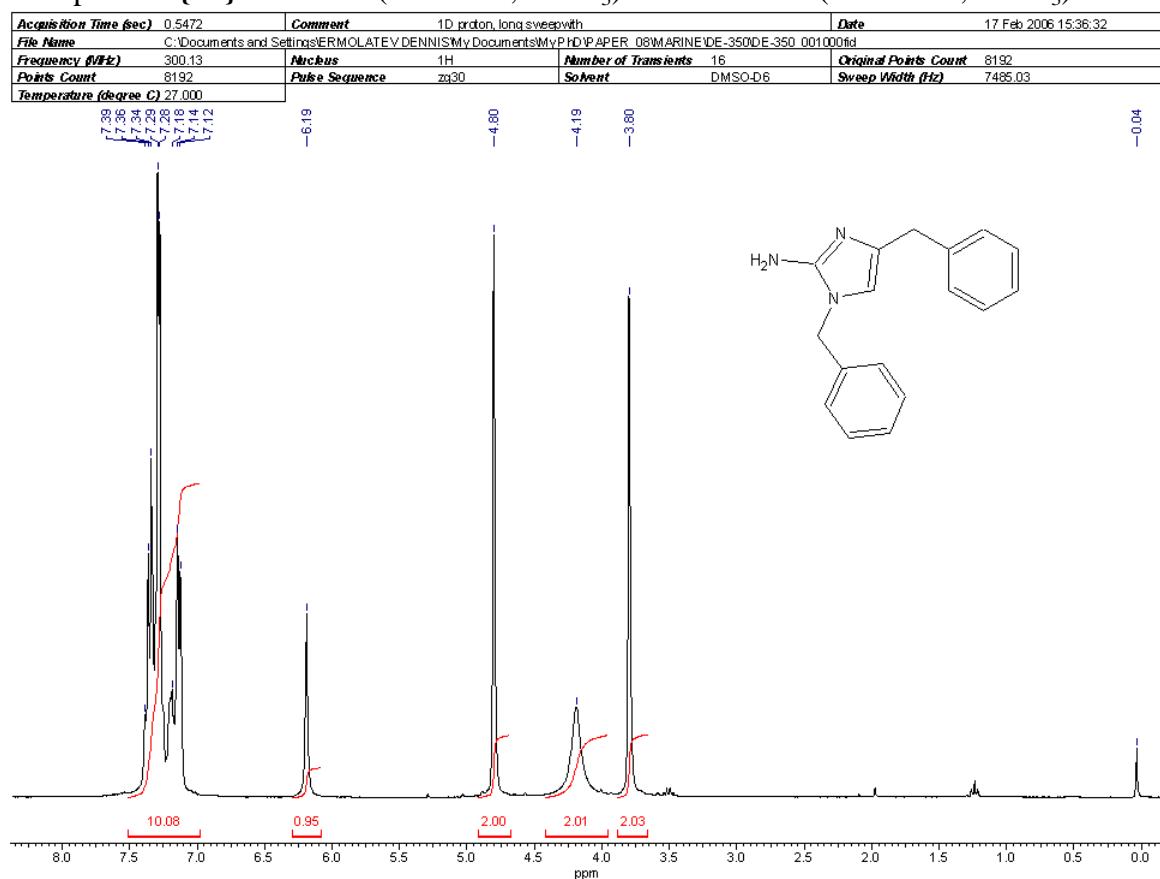
Compound 5{16}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )



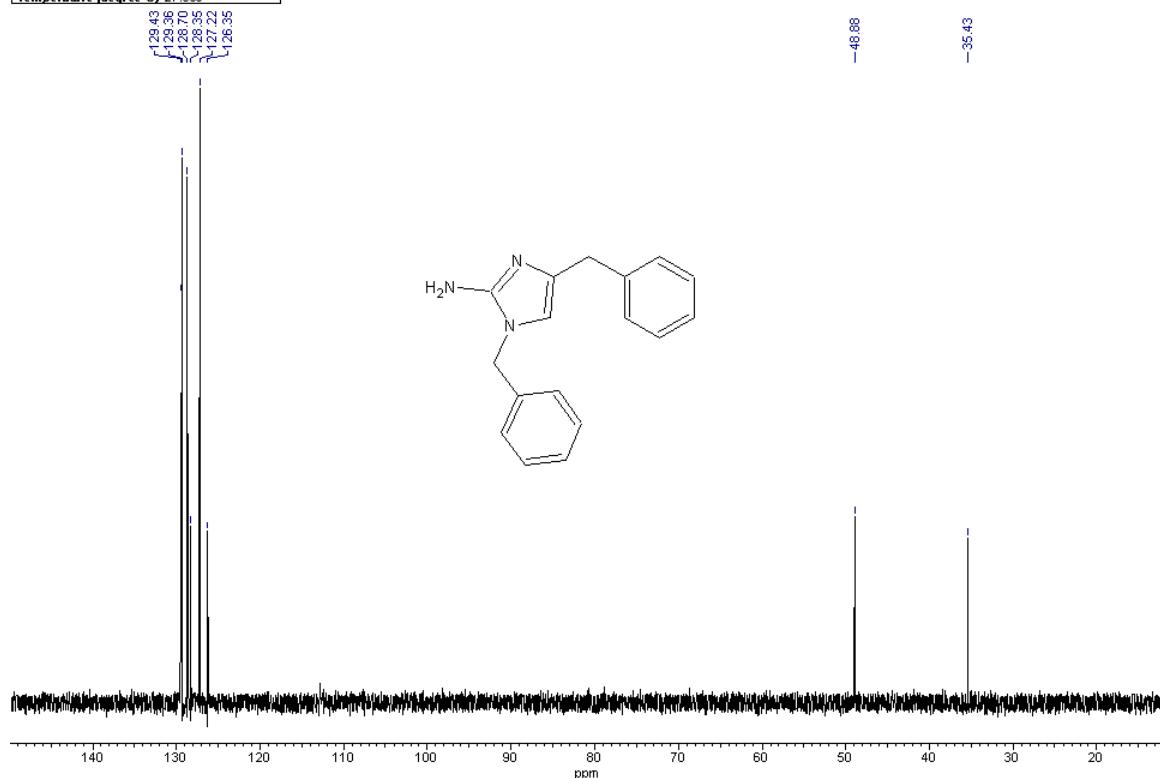
Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zg30)	Date	09 Feb 2006 12:01:04
File Name	C:\Documents and Settings\ERMOLATEV DENNIS\My Documents\My PHD\PAPER_08MARINE\DE-339DE-339_002000fid	Nucleus	$^{13}\text{C}$	Number of Transients	603
Frequency (MHz)	75.48	Pulse Sequence	zg30	Solvent	DMSO-D6
Points Count	8192			Original Points Count	8192
Temperature (degree C)	27.000			Sweep Width (Hz)	18832.39



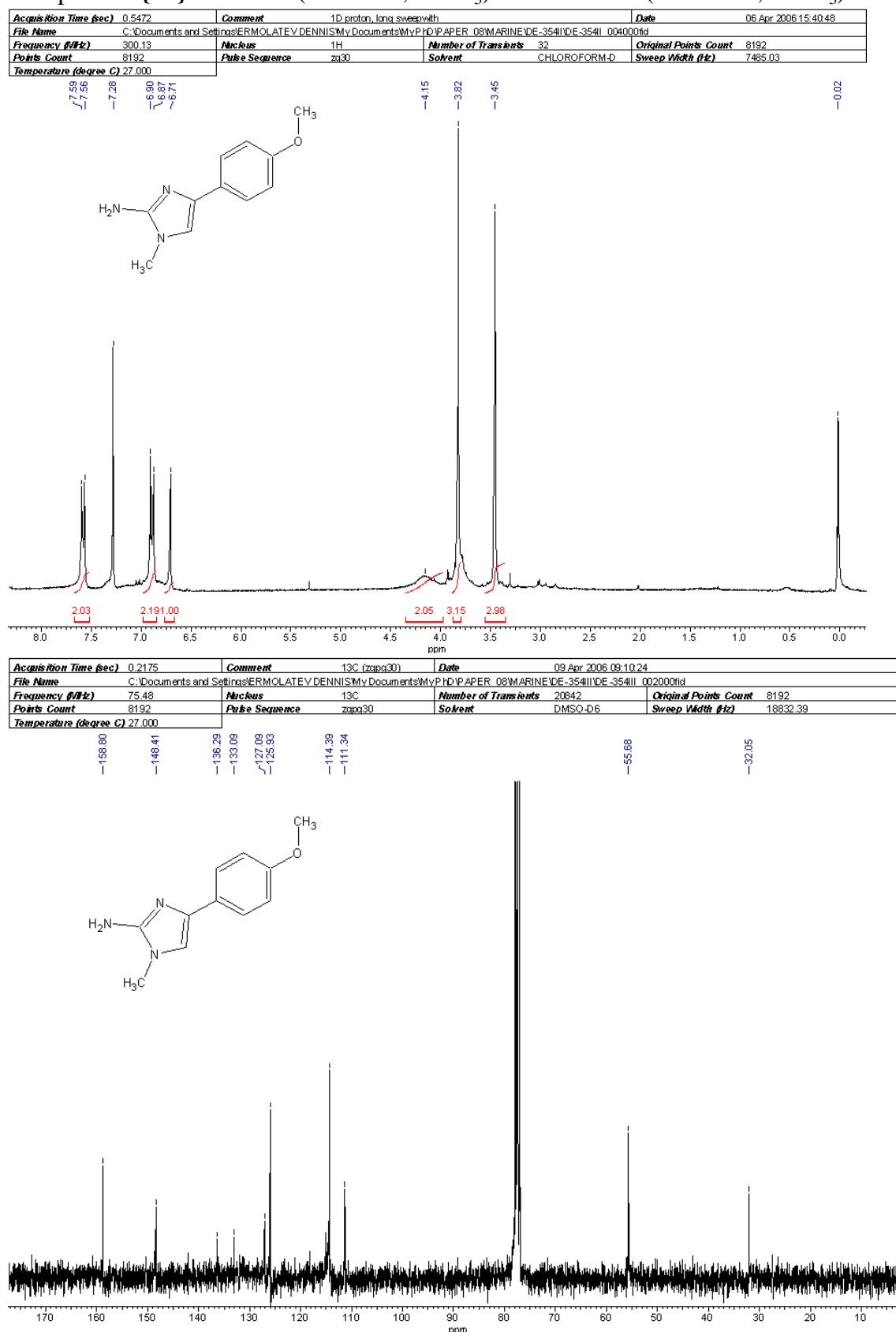
Compound 5{17}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )



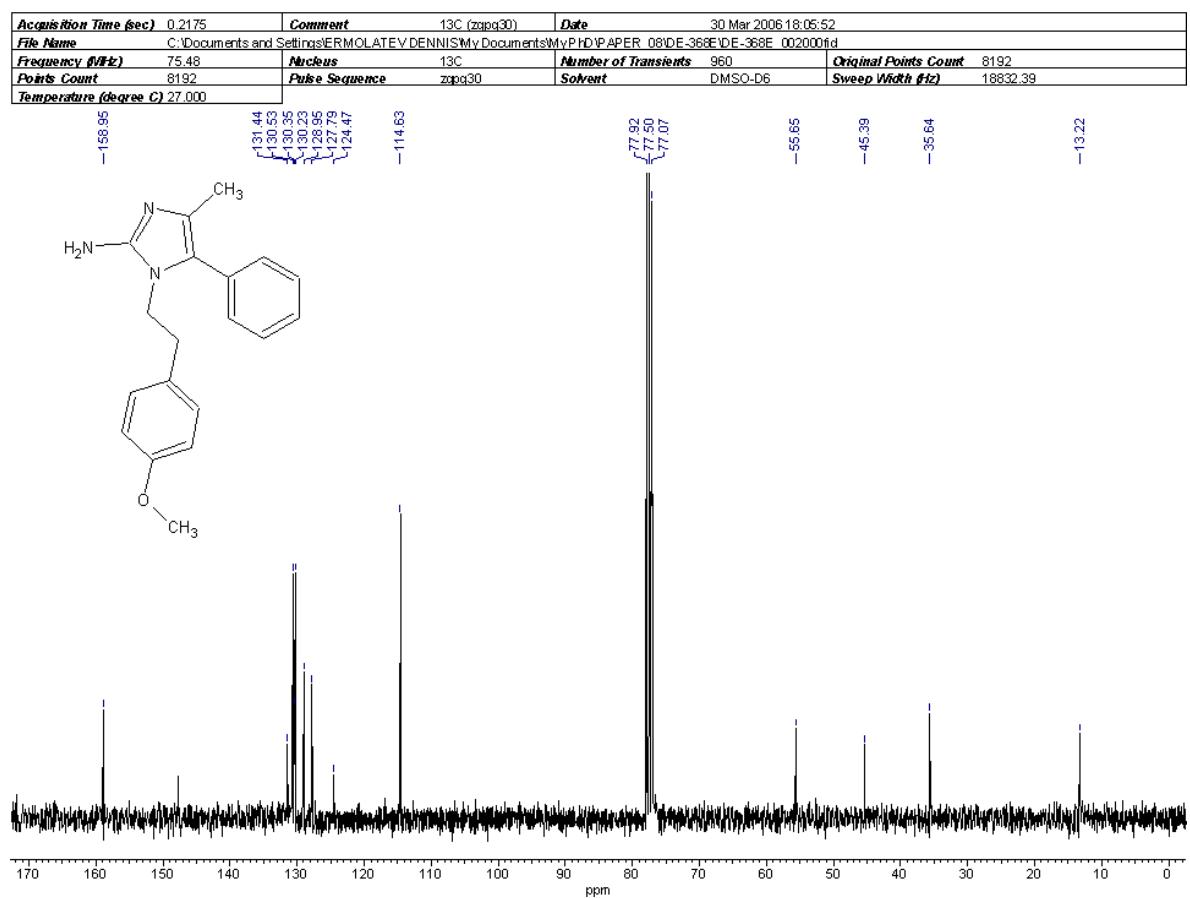
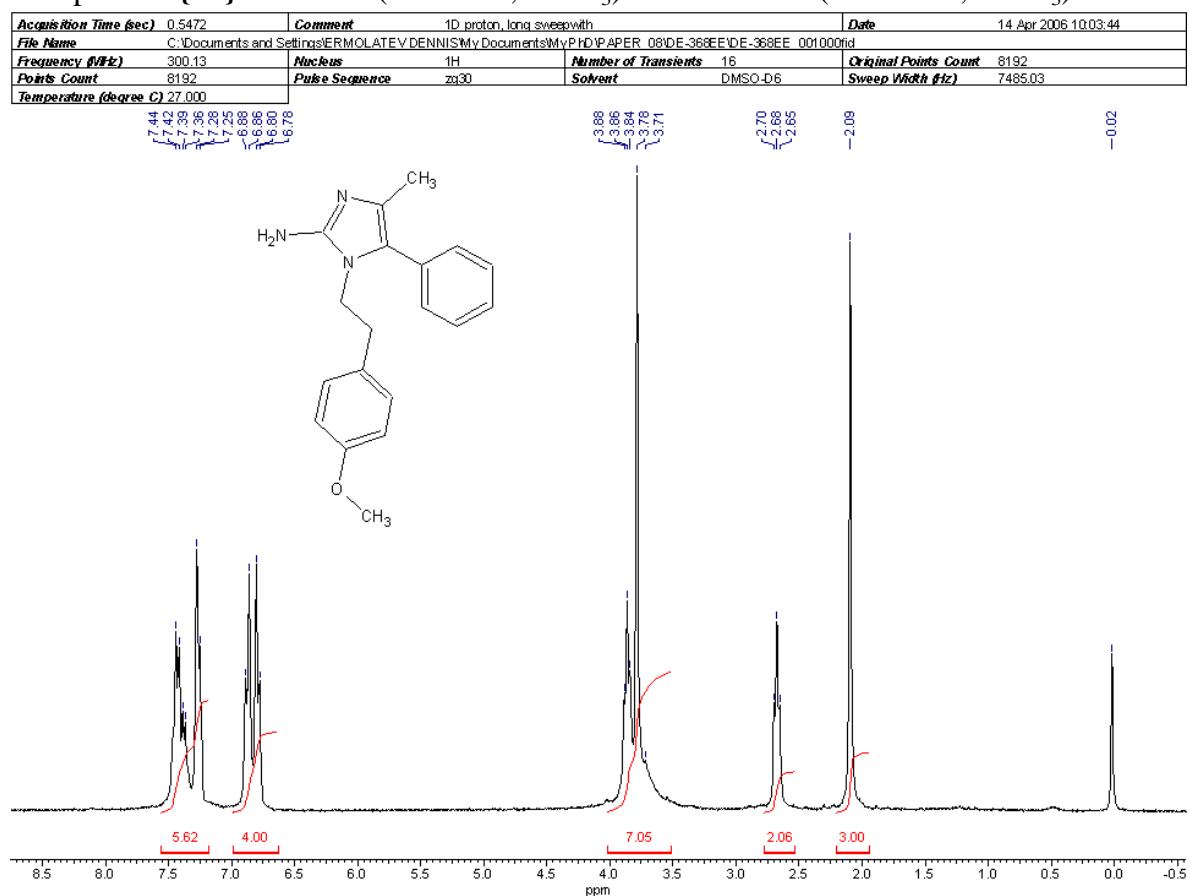
Acquisition Time (sec)	0.9896	Comment	dert-135	Date	17 Feb 2006 16:00:00
File Name	C:\Documents and Settings\ERMLATEV\DENNIS\My Documents\My PHD\PAPER_08\MARINE\DE-350\DE-350_002\000\fid				
Frequency (MHz)	75.47	Nucleus	$^{13}\text{C}$	Number of Transients	452
Points Count	32768	Pulse Sequence	dert135	Solvent	DMSO-D6
Temperature (degree C)	27.000			Original Points Count	32768
				Sweep Width (Hz)	16556.29



Compound 5{18}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

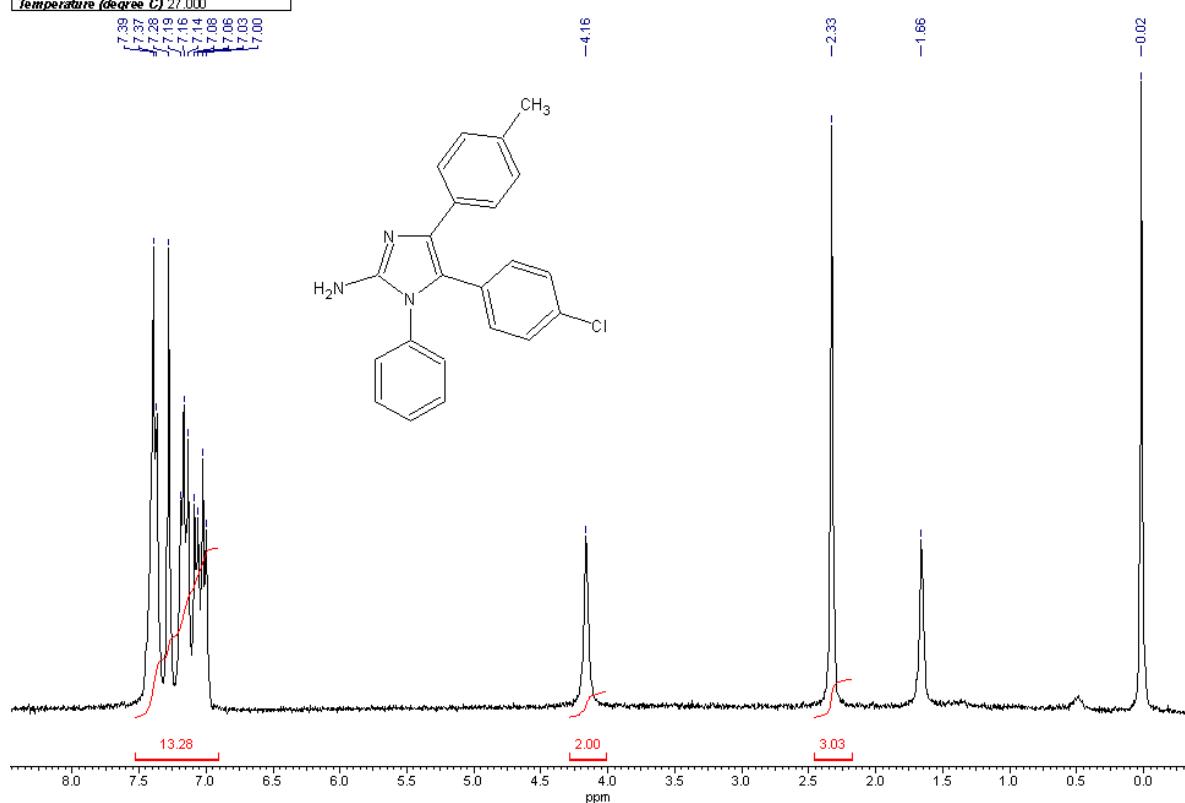


Compound 5{19}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

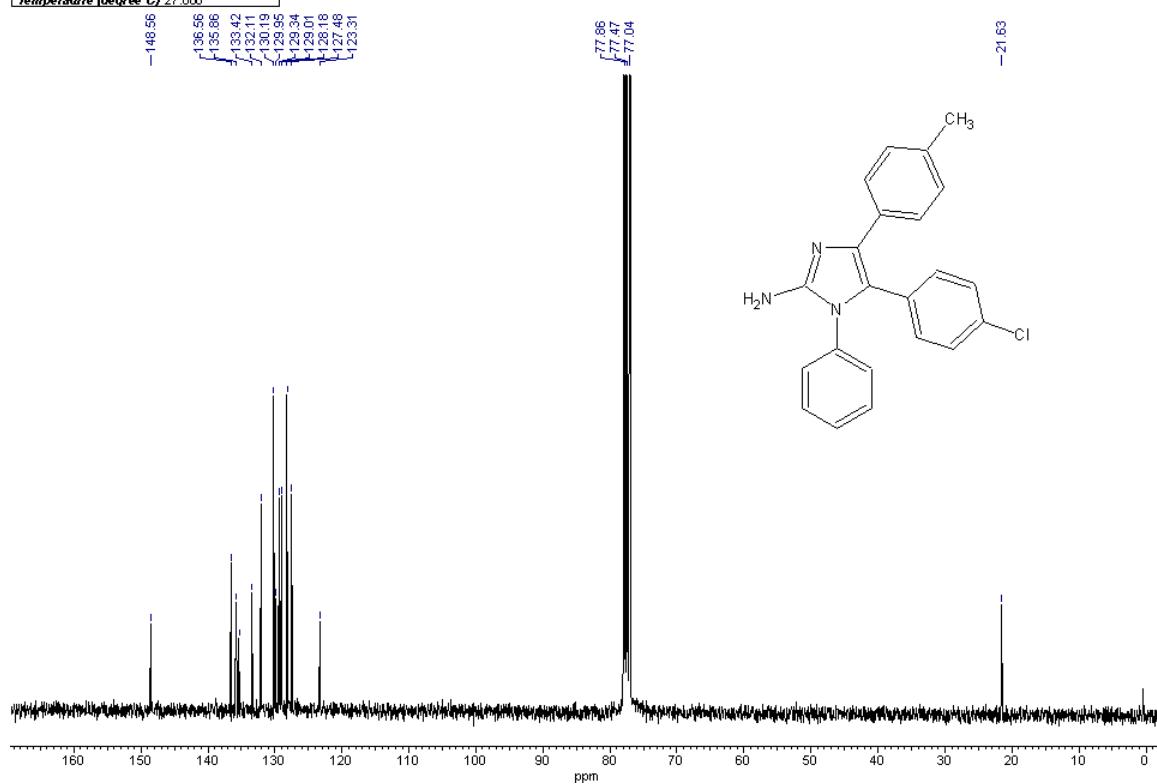


Compound 5{20}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

<b>Acquisition Time (sec)</b>	0.5472	<b>Comment</b>	1D proton, long sweepwidth	<b>Date</b>	04 May 2006 15:17:20
<b>File Name</b>	C:\Documents and Settings\ERROLATEV\DENNIS\My Documents\My P\HDP\APER_081DE-327CCHDE-327CCH_001000fid				
<b>Frequency (Hz)</b>	300.13	<b>Nucleus</b>	1H	<b>Number of Transients</b>	32
<b>Points Count</b>	8192	<b>Pulse Sequence</b>	zg30	<b>Original Points Count</b>	8192
<b>Temperature (degrees C)</b>	37.000	<b>Solvent</b>	CDC13	<b>Sweep Width (Hz)</b>	7485.03

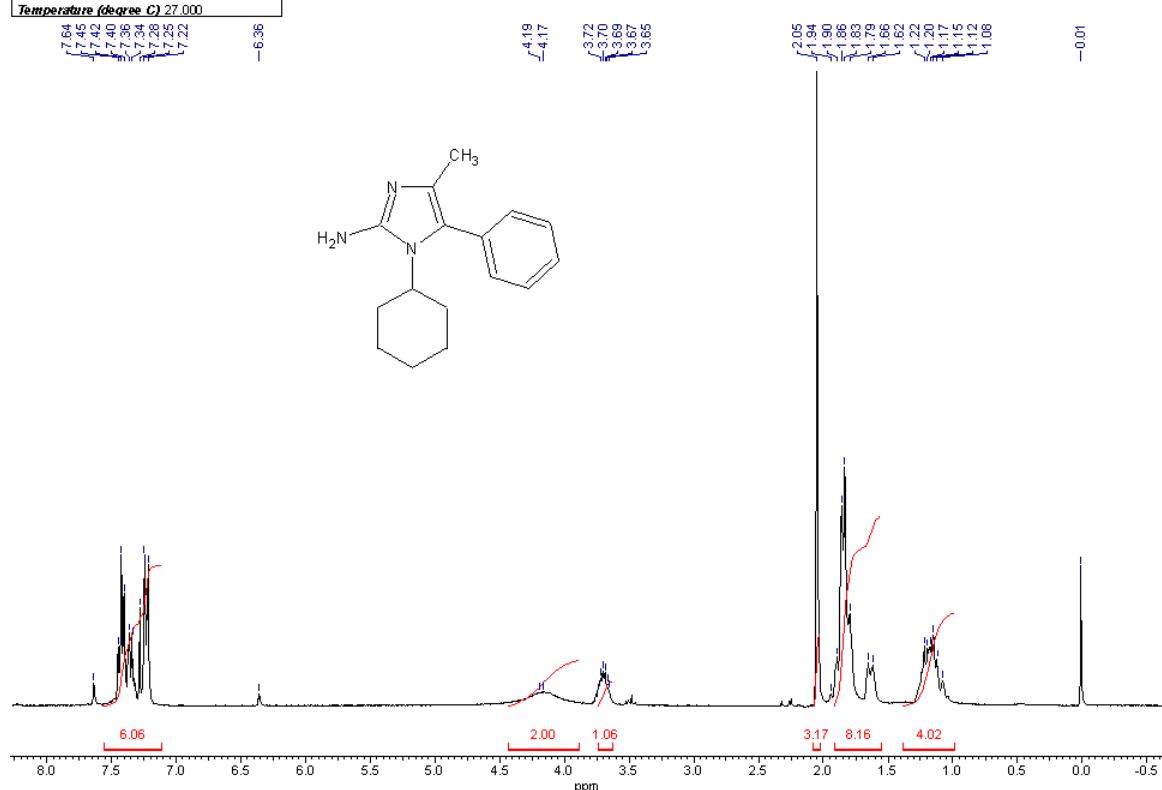
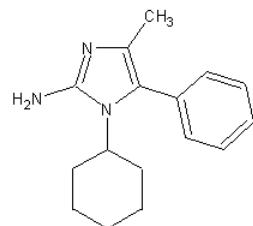


<b>Acquisition Time (sec)</b>	0.2175	<b>Comment</b>	13C (zppq30)	<b>Date</b>	01 Apr 2006 10:29:20
<b>File Name</b>	C:\Documents and Settings\ERMOLEV\DENNIS\My Documents\My HDPAPER_08DE-32TCDE-32TC_002000fid				
<b>Frequency (MHz)</b>	75.48	<b>Nucleus</b>	13C	<b>Number of Transients</b>	24000
<b>Points Count</b>	8192	<b>Pulse Sequence</b>	zppq30	<b>Solvent</b>	CDCl3
<b>Temperature (degrees C)</b>	27.000			<b>Original Points Count</b>	8192
				<b>Sweep Width (#s)</b>	18832.39

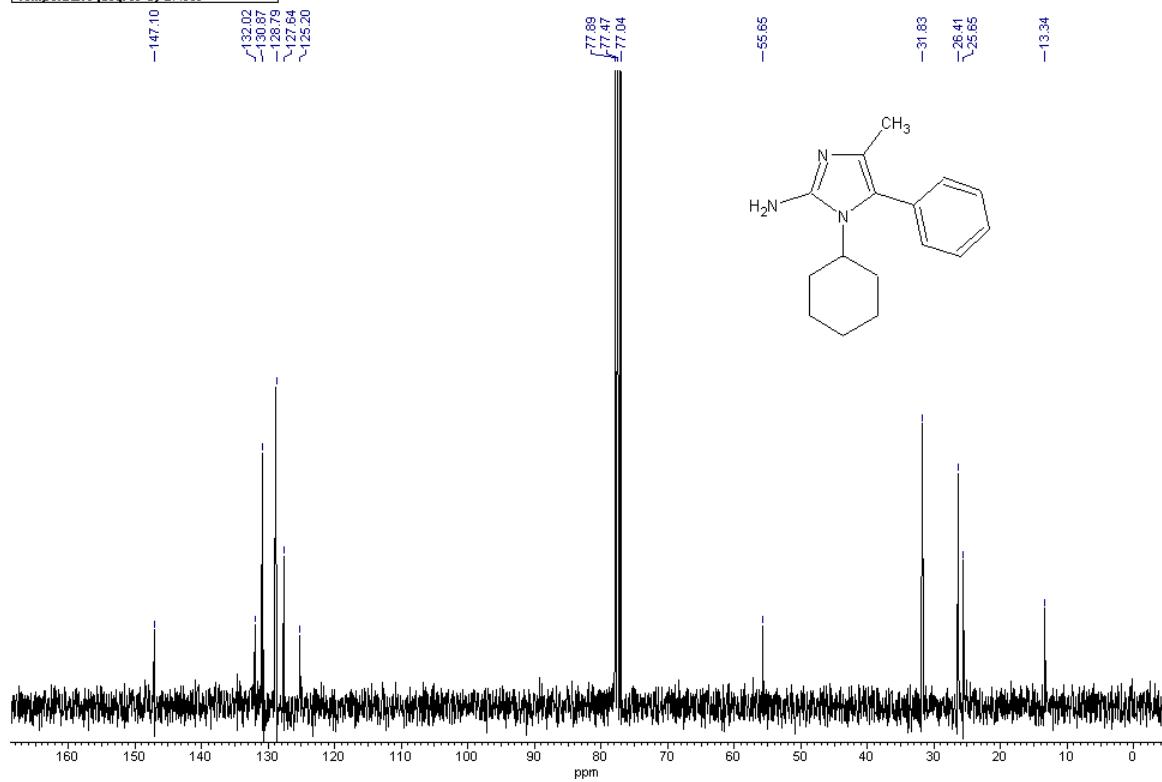
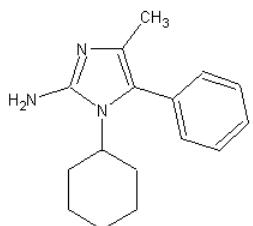


Compound 5{21}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

<b>Acquisition Time (sec)</b>	0.5472	<b>Comment</b>	1D proton, long sweepwidth	<b>Date</b>	31 Mar 2006 09:53:04
<b>File Name</b>	C:\Documents and Settings\ERMOLATE\DENNIS\My Documents\My P-HD\IPAPER_08\DE-368G\DE-368G_001000fid				
<b>Frequency (MHz)</b>	300.13	<b>Nucleus</b>	1H	<b>Number of Transients</b>	16
<b>Points Count</b>	8192	<b>Pulse Sequence</b>	zg30	<b>Solvent</b>	DMSO-D6
				<b>Original Points Count</b>	8192
				<b>Sweep Width (Hz)</b>	7485.03

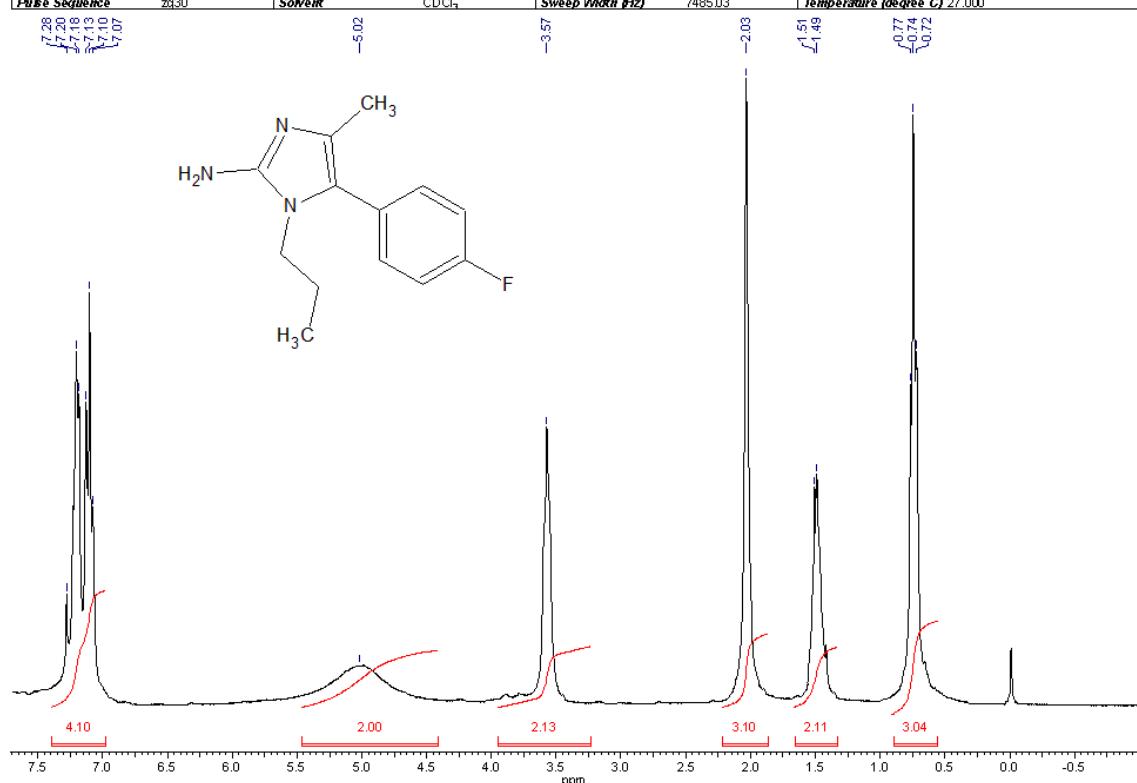


<b>Acquisition Time (sec)</b>	0.2175	<b>Comment</b>	13C (zpo30)	<b>Date</b>	31 Mar 2006 16:40:32
<b>File Name</b>	C:\Documents and Settings\ERMIOLATE\DENNIS\My Documents\My PHD\PAPER_081DE-3683DE-368G_0020001d				
<b>Frequency (MHz)</b>	75.48	<b>Nucleus</b>	13C	<b>Number of Transients</b>	704
<b>Points Count</b>	8192	<b>Pulse Sequence</b>	zpo30	<b>Original Points Count</b>	8192
<b>Temperature (degrees C)</b>	27.000	<b>Solvent</b>	DMSO-D6	<b>Sweep Width (Hz)</b>	18832.39

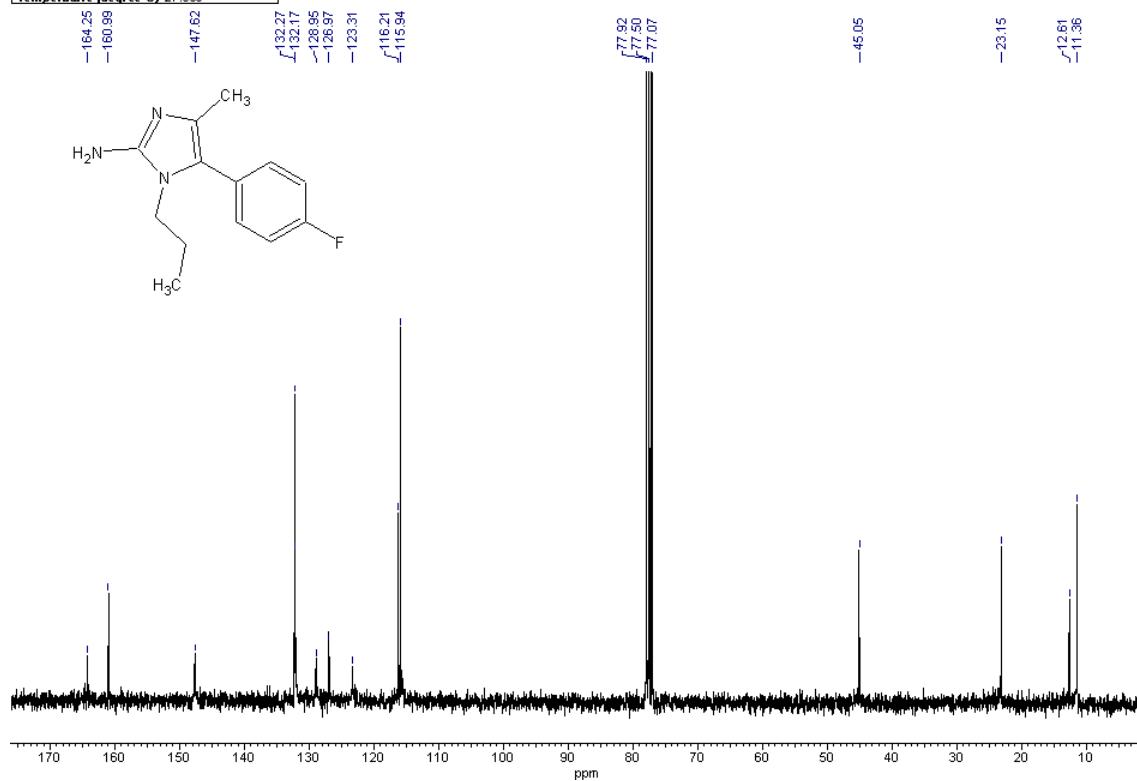


Compound 5{22}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )

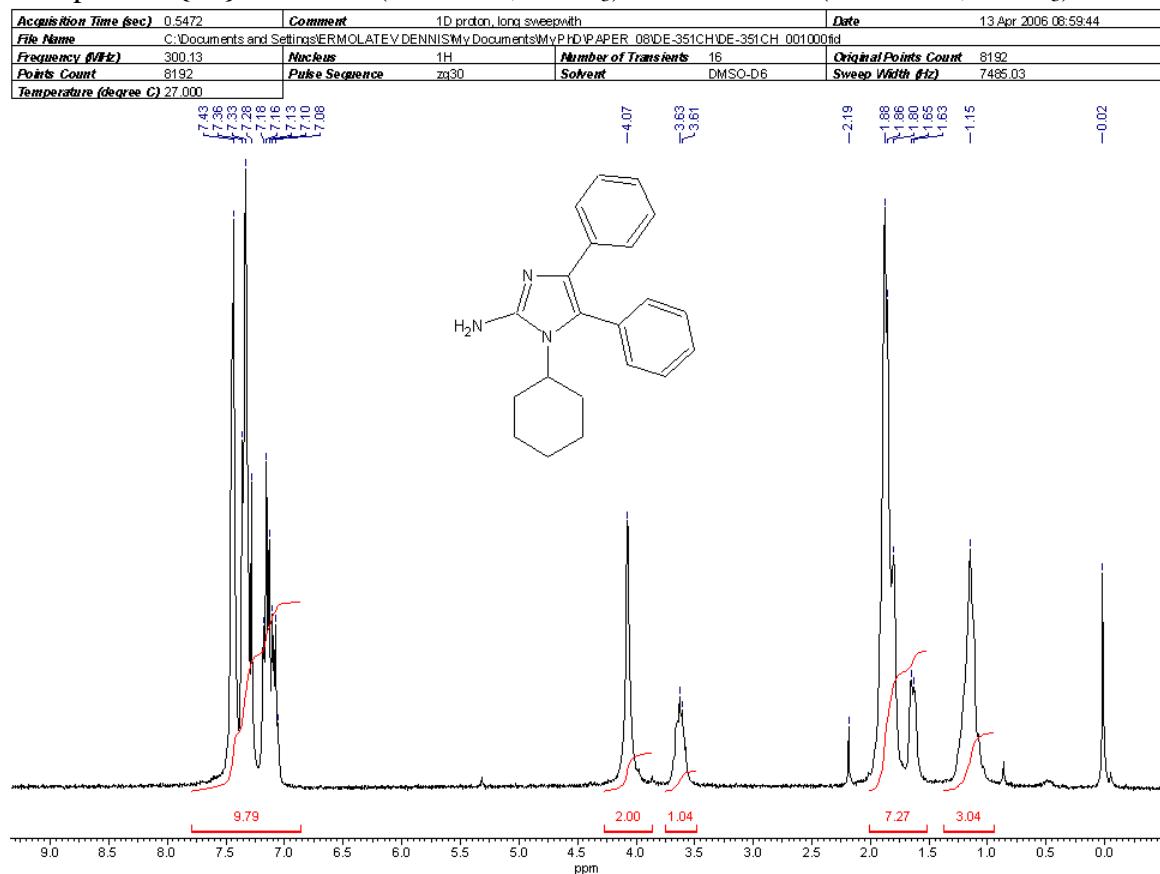
Acquisition Time (sec)	0.5472	Comment	1D proton, long sweep width	Date	31 Mar 2006 10:10:08
File Name	C:\Documents and Settings\ERMLATEV\DENNIS\My Documents\My PhD\Pro_08\DE-368F\DE-368F_001000fd			Frequency (MHz)	300.13
Nucleus	$^1\text{H}$	Number of Transients	16	Original Points Count	8192
Pulse Sequence	zg30	Solvent	$\text{CDCl}_3$	Sweep Width (Hz)	7485.03



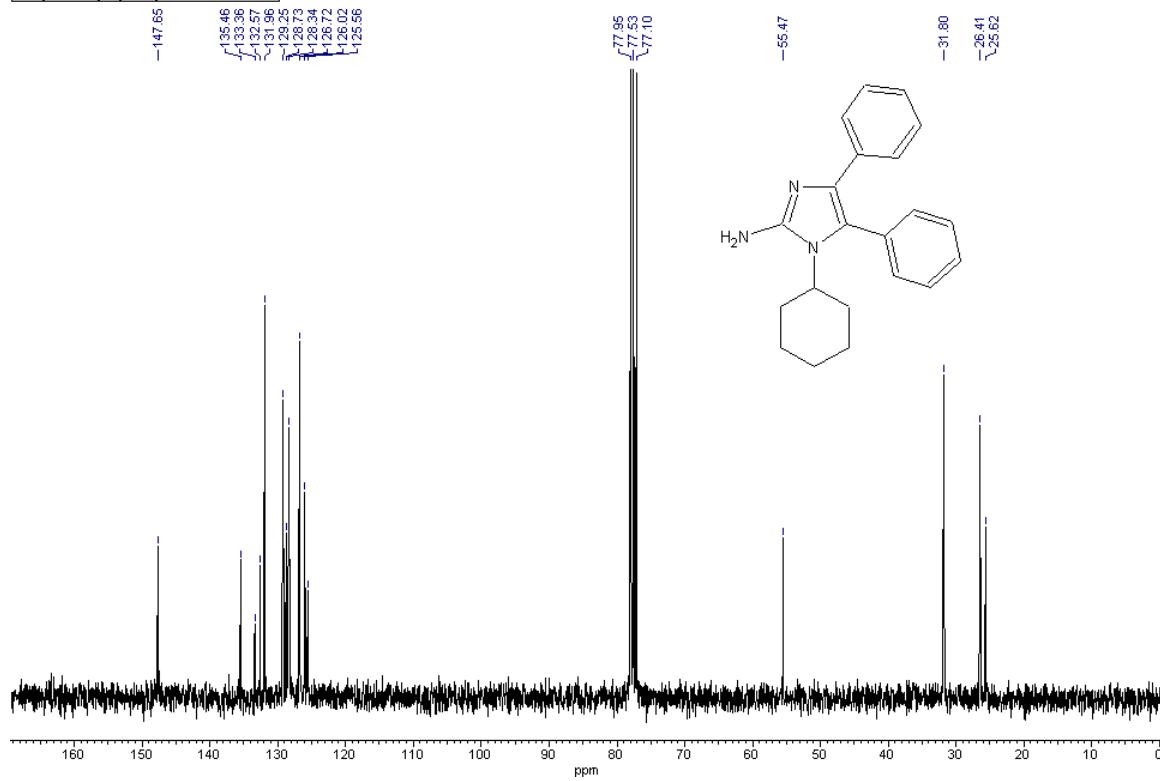
Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zgpg30)	Date	01 Apr 2006 15:45:04
File Name	C:\Documents and Settings\ERMLATEV\DENNIS\My Documents\My PhD\PAPER_08\DE-368F\DE-368F_002000fd				
Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$	Number of Transients	4394
Points Count	8192	Pulse Sequence	zgpg30	Solvent	$\text{CDCl}_3$



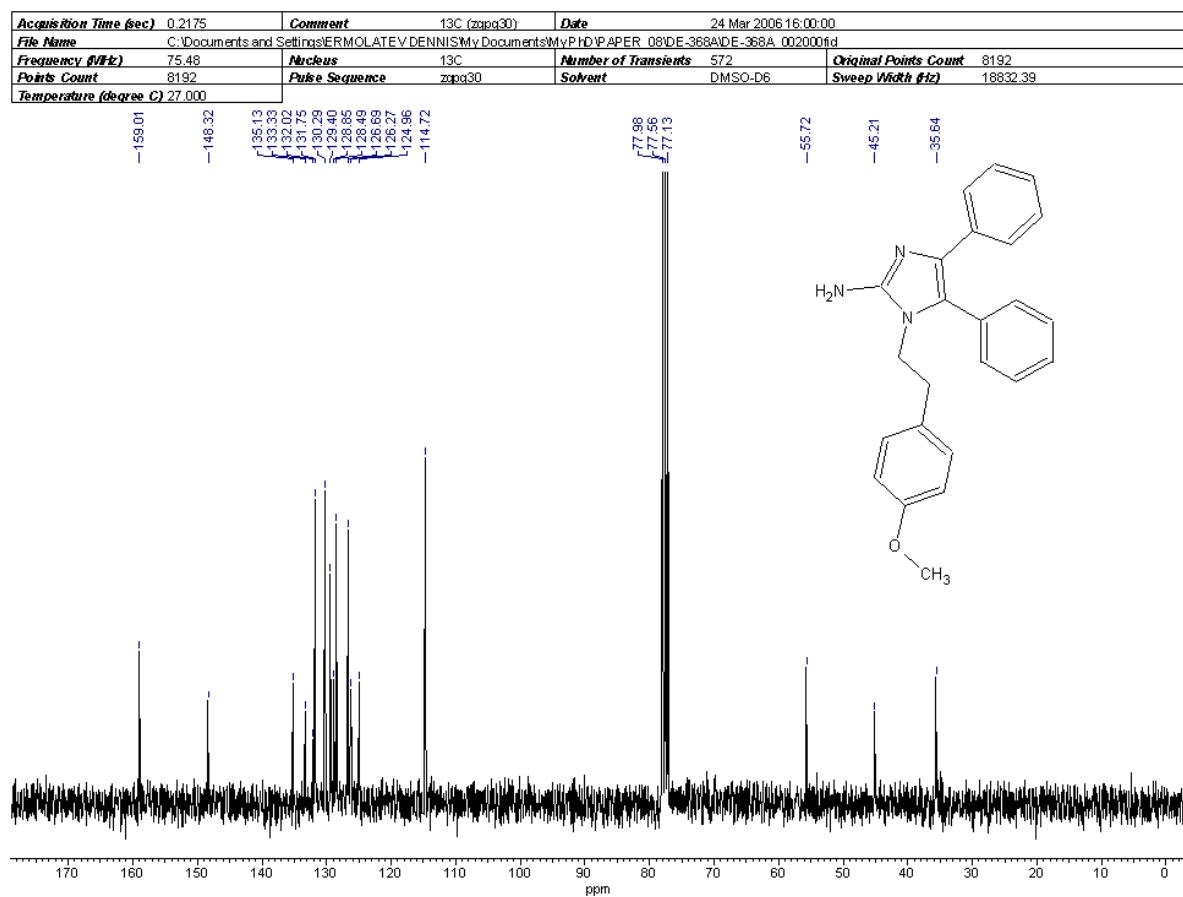
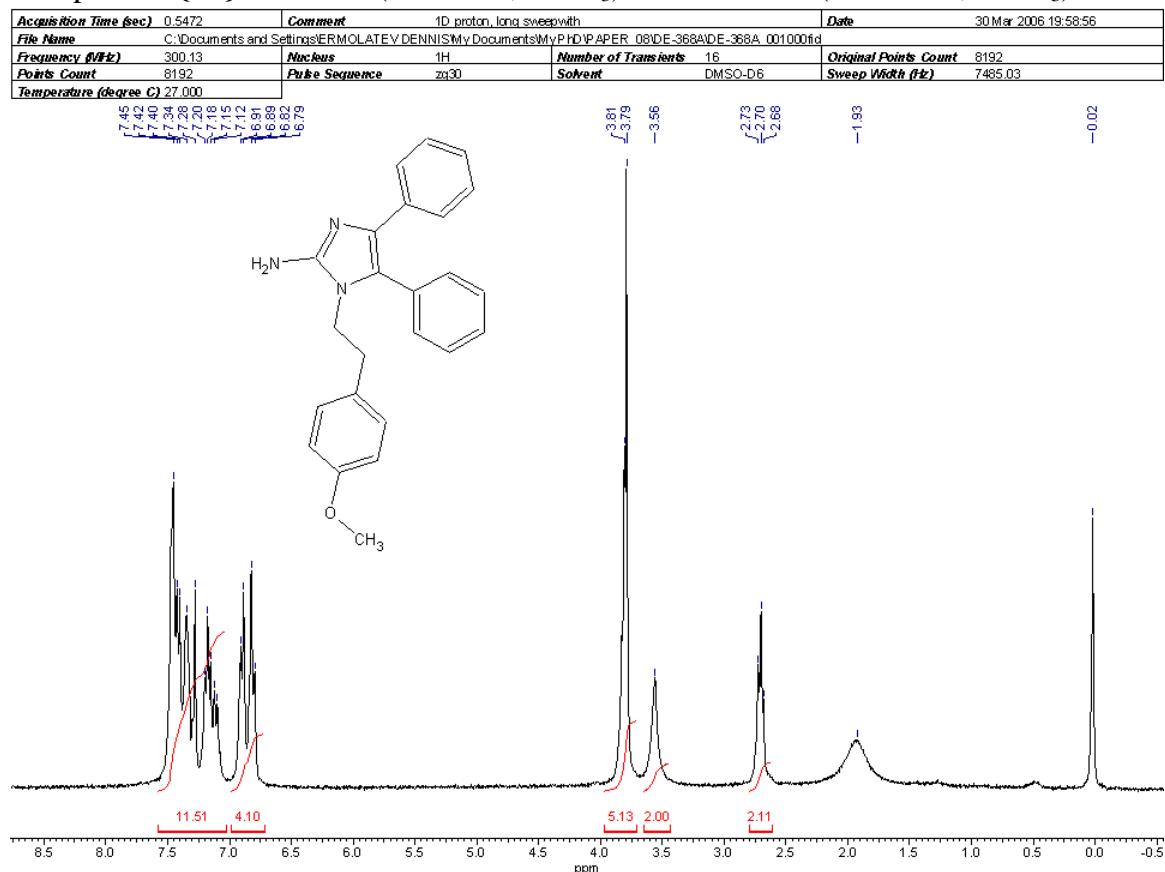
Compound 5{23}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )



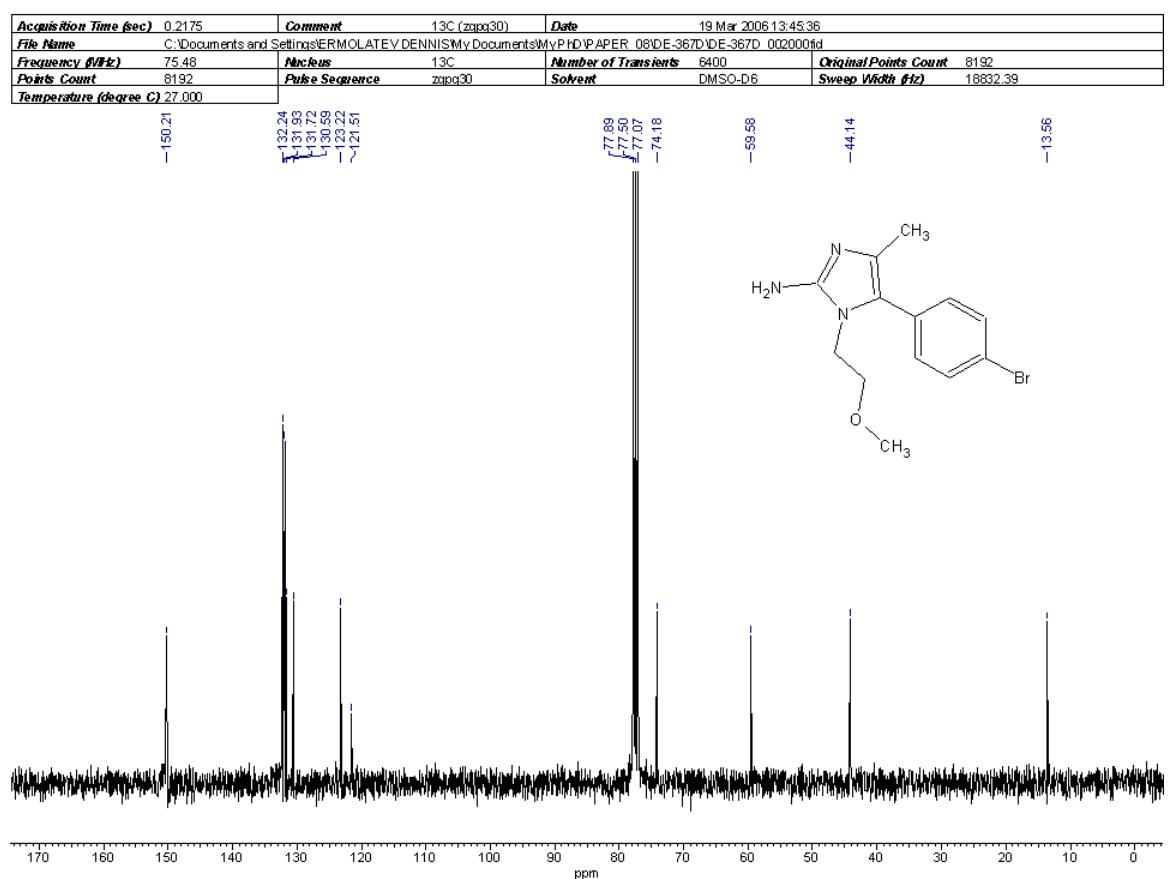
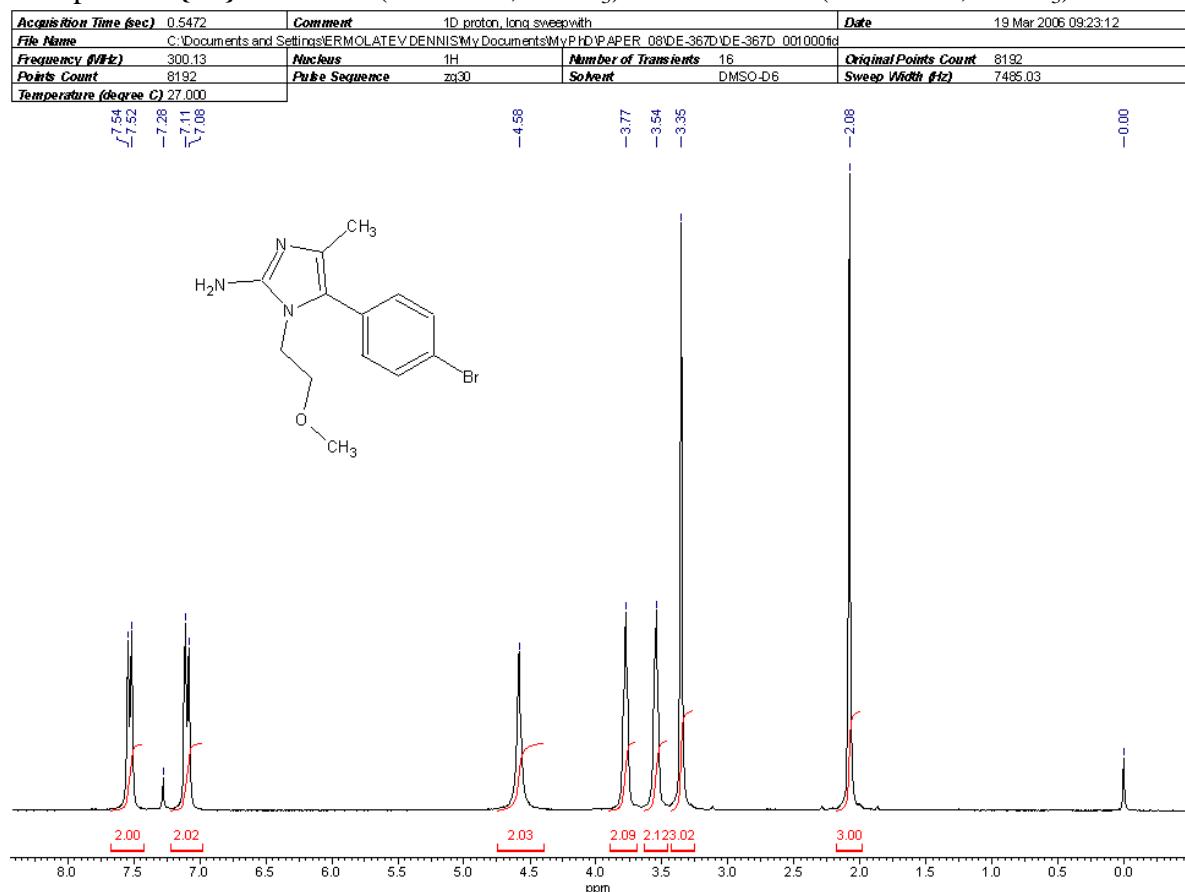
Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zg30)	Date	16 Mar 2006 11:12:00
File Name	C:\Documents and Settings\IERMOLATEV.DENNIS\My Documents\My PAPER\08DE-351CC\DE-351CC_002000fid	Nucleus	$^{13}\text{C}$	Number of Transients	640
Frequency (MHz)	75.48	Pulse Sequence	zg30	Original Points Count	8192
Points Count	8192	Solvent	DMSO-D6	Sweep Width (Hz)	18832.39
Temperature (degree C)	27.000				



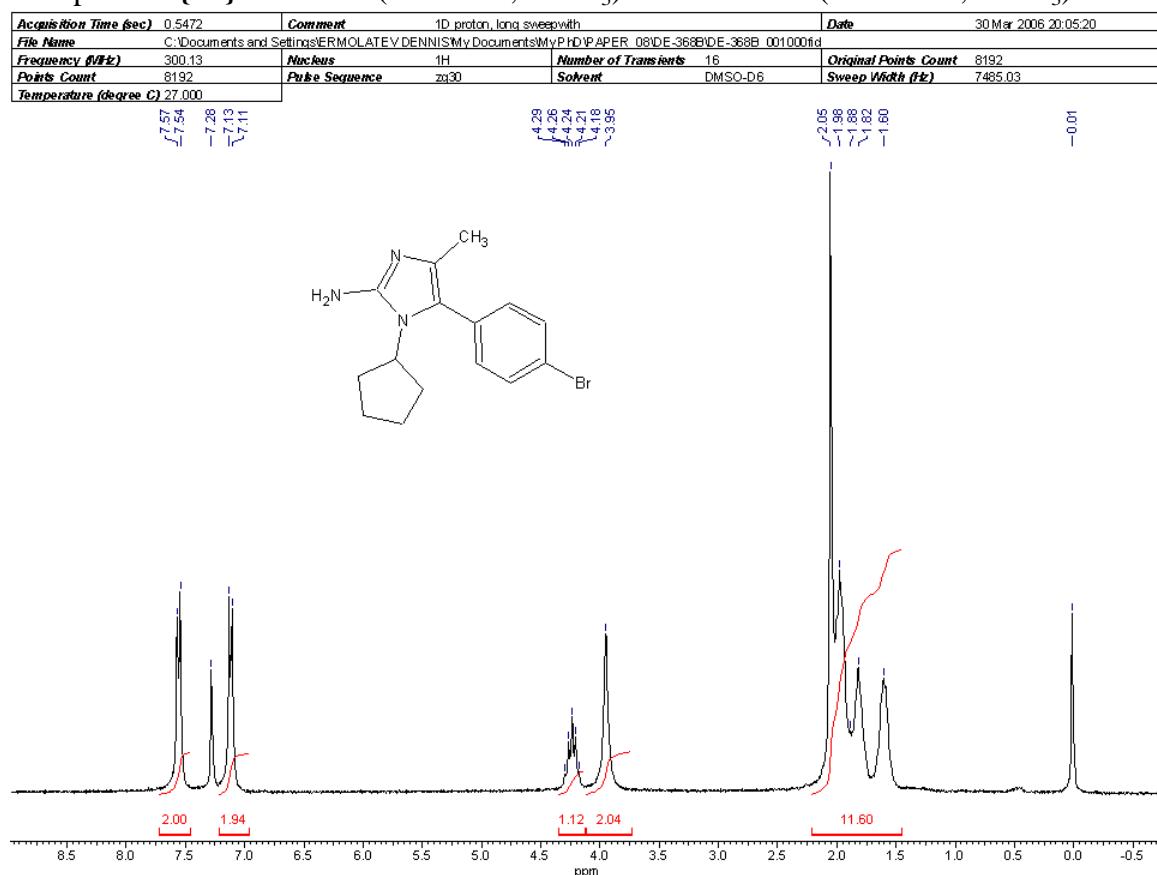
Compound 5{24}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )



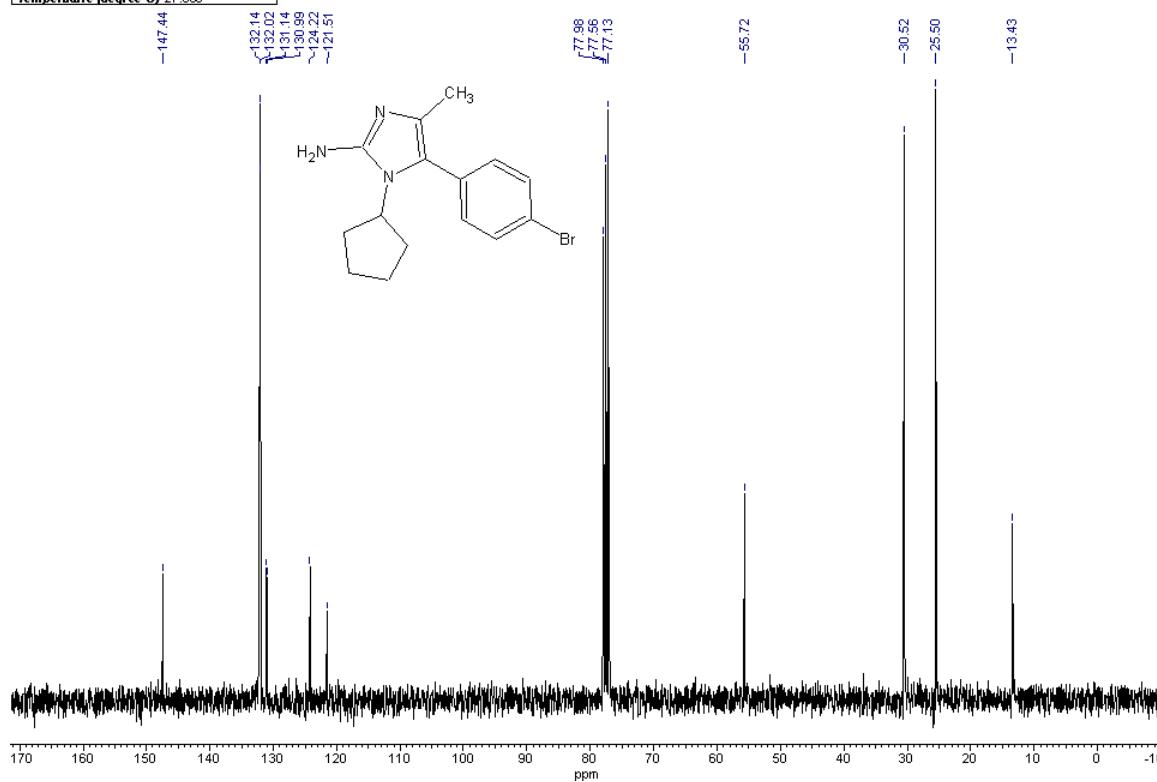
Compound 5{25}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )



Compound 5{26}:  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ )



Acquisition Time (sec)	0.2175	Comment	$^{13}\text{C}$ (zgpg30)	Date	30 Mar 2006 19:54:40
File Name	C:\Documents and Settings\ERMLATEV\DENNIS\My Documents\MyHD\PAPER_08DE-368B\DE-368B_002000fd				
Frequency (MHz)	75.48	Nucleus	$^{13}\text{C}$	Number of Transients	804
Points Count	8192	Pulse Sequence	zgpg30	Solvent	DMSO-D6
Temperature (degree C)	27.000			Original Points Count	8192
				Sweep Width (Hz)	18832.39



Compound 5{27}:  $^1\text{H}$  NMR (300 MHz,  $\text{DMSO}-d_6$ ) and  $^{13}\text{C}$  NMR (75.5 MHz,  $\text{DMSO}-d_6$ )

