

## Supplemental Material:

### NMR and Elemental Composition Data for the 4-, 5-, 6-, and 7- Chloro- Substituted 3-(1-naphthoyl)-1-pentylindoles

#### 4-chloro-3-(1-naphthoyl)-1-pentylindole.

The product was obtained as a solid. <sup>1</sup>H NMR (400 MHz, Chloroform-d) δ 8.52 – 8.45 (m, 1H), 7.94 (d, *J* = 8.2 Hz, 1H), 7.91 – 7.85 (m, 1H), 7.72 – 7.67 (m, 1H), 7.50 (dt, *J* = 6.4 Hz, 3.4 Hz, 2H), 7.43 (dd, *J* = 8.2 Hz, 7.1 Hz, 1H), 7.32 (s, 1H), 7.27 (dd, *J* = 7.8 Hz, 1.6 Hz, 2H), 7.23 – 7.18 (m, 1H), 4.00 (t, *J* = 7.2 Hz, 2H), 1.74 (p, *J* = 7.3 Hz, 2H), 1.31-1.15 (m, 4H), 0.83 (t, *J* = 7.0 Hz, 3H). <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) δ 190.6, 138.8, 138.6, 137.8, 133.8, 131.3, 128.5, 128.2, 127.7, 127.1, 126.3, 126.1, 125.7, 124.5, 124.3, 123.9, 123.7, 118.6, 108.7, 47.2, 29.3, 28.8, 22.1, 13.9.

Anal. Calcd. for C<sub>24</sub>H<sub>22</sub>NOCl: C, 76.69; H, 5.90; N, 3.73. Found: C, 76.65; H, 5.94; N, 3.75.

#### 5-chloro-3-(1-naphthoyl)-1-pentylindole.

The product was obtained as a solid. <sup>1</sup>H NMR (400 MHz, Chloroform-d) δ 8.59 (t, *J* = 1.3 Hz, 1H), 8.22 – 8.15 (m, 1H), 7.94 (dt, *J* = 8.3 Hz, 1.0 Hz, 1H), 7.91 – 7.86 (m, 1H), 7.62 (dd, *J* = 7.0 Hz, 1.2 Hz, 1H), 7.54 – 7.41 (m, 3H), 7.32 (s, 1H), 7.26 (d, *J* = 1.3 Hz, 2H), 3.98 (t, *J* = 7.2 Hz, 2H), 1.73 (p, *J* = 7.4 Hz, 2H), 1.32 – 1.14 (m, 4H), 0.84 (t, *J* = 7.1 Hz, 3H). <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) δ 191.7, 138.7, 138.6, 135.4, 133.8, 130.7, 130.2, 128.8, 128.4, 128.0, 126.8, 126.3, 125.9, 125.8, 124.5, 123.9, 122.4, 117.0, 111.1, 47.3, 29.4, 28.8, 22.1, 13.9.

Anal. Calcd. for C<sub>24</sub>H<sub>22</sub>NOCl: C, 76.69; H, 5.90; N, 3.73. Found: C, 76.39; H, 5.89; N, 3.60.

#### 6-chloro-3-(1-naphthoyl)-1-pentylindole.

The product was obtained as a solid. <sup>1</sup>H NMR (400 MHz, Chloroform-d) δ 8.39 (d, *J* = 8.5 Hz, 1H), 8.16 (dd, *J* = 8.6 Hz, 1.3 Hz, 1H), 7.96 (dt, *J* = 8.3 Hz, 1.0 Hz, 1H), 7.90 (dd, *J* = 7.9 Hz, 1.5 Hz, 1H), 7.63 (dd, *J* = 6.9 Hz, 1.2 Hz, 1H), 7.53-7.44 (m, 3H), 7.36 (d, *J* = 1.8 Hz, 1H), 7.31 (d, *J* = 6.7 Hz, 2H), 4.00 (t, *J* = 7.3 Hz, 2H), 1.77 (p, *J* = 7.4 Hz, 2H), 1.30-1.20 (m, 4H), 0.85 (t, *J* = 7.0 Hz, 3H). <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) δ 191.8, 138.6, 138.2, 137.5, 133.7, 130.7, 130.2, 129.6, 128.2, 126.8, 126.3, 125.9, 125.8, 125.5, 124.5, 123.9, 123.4, 117.5, 110.0, 47.2, 29.4, 28.8, 22.1, 13.8.

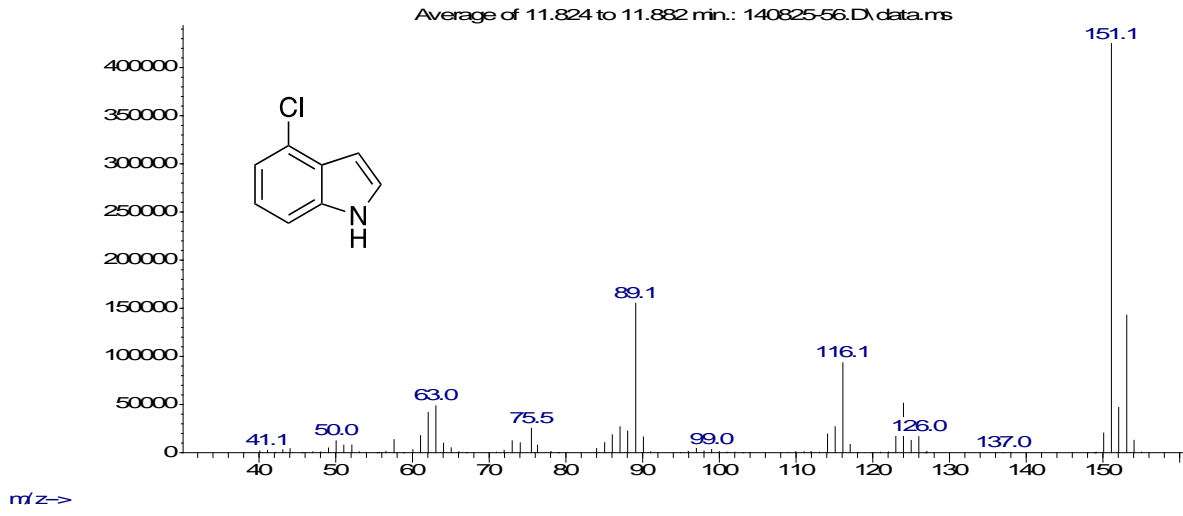
Anal. Calcd. for C<sub>24</sub>H<sub>22</sub>NOCl: C, 76.69; H, 5.90; N, 3.73. Found: C, 76.43; H, 5.86; N, 3.68.

#### 7-chloro-3-(1-naphthoyl)-1-pentylindole.

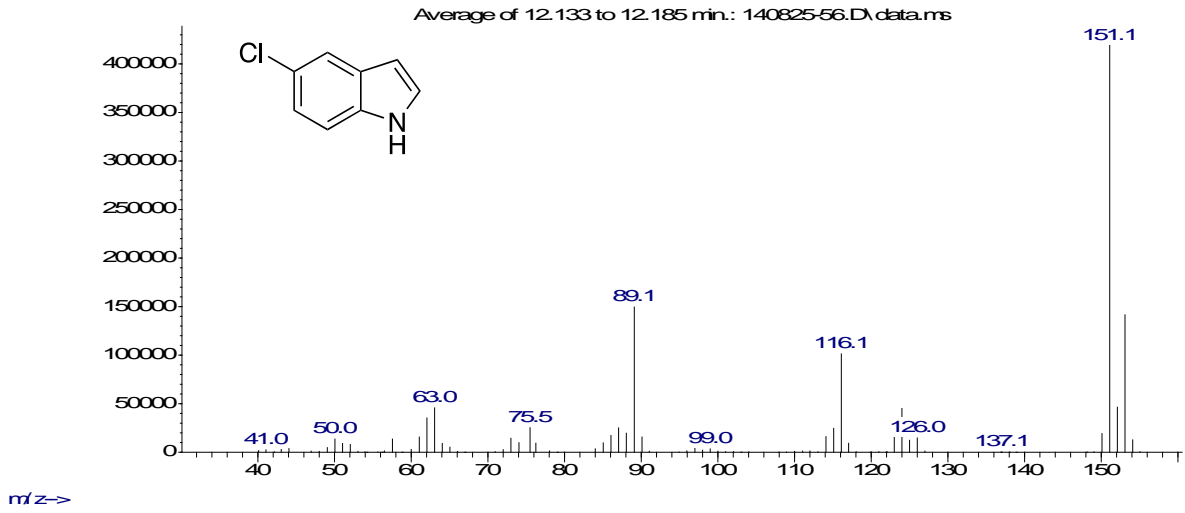
The product was obtained as a solid. <sup>1</sup>H NMR (400 MHz, Chloroform-d) δ 8.52 (dt, *J* = 7.8 Hz, 1.3 Hz, 1H), 8.18 (d, *J* = 8.2 Hz, 1H), 7.97 (d, *J* = 8.3 Hz, 1H), 7.90 (d, *J* = 8.3 Hz, 1H), 7.67 – 7.62 (m, 1H), 7.51 (ddt, *J* = 17.3 Hz, 7.9 Hz, 1.4 Hz, 3H), 7.35 – 7.24 (m, 3H), 4.38 (t, *J* = 7.5 Hz, 2H), 1.82 (p, *J* = 7.4 Hz, 2H), 1.32 – 1.19 (m, 4H), 0.85 (t, *J* = 7.1 Hz, 3H). <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) δ 191.8, 140.5, 138.7, 133.7, 132.3, 130.7, 130.2, 130.1, 128.2, 126.8, 126.4, 126.0, 125.8, 125.5, 124.5, 123.6, 121.6, 117.2, 117.0, 49.9, 31.7, 28.6, 22.2, 13.9.

Anal. Calcd. for C<sub>24</sub>H<sub>22</sub>NOCl: C, 76.69; H, 5.90; N, 3.73. Found: C, 76.59; H, 5.82; N, 3.49.

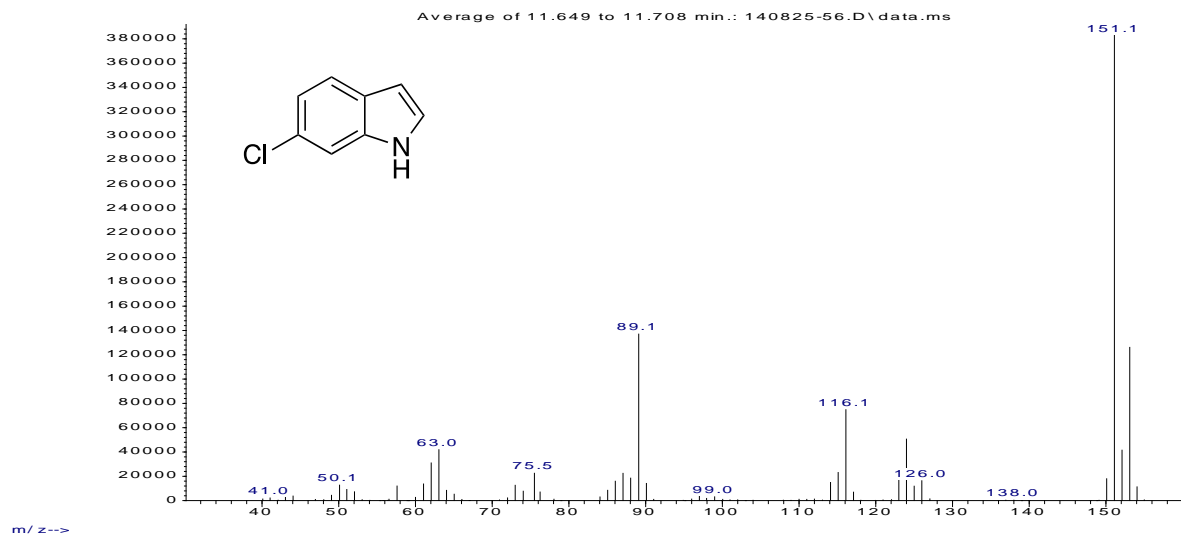
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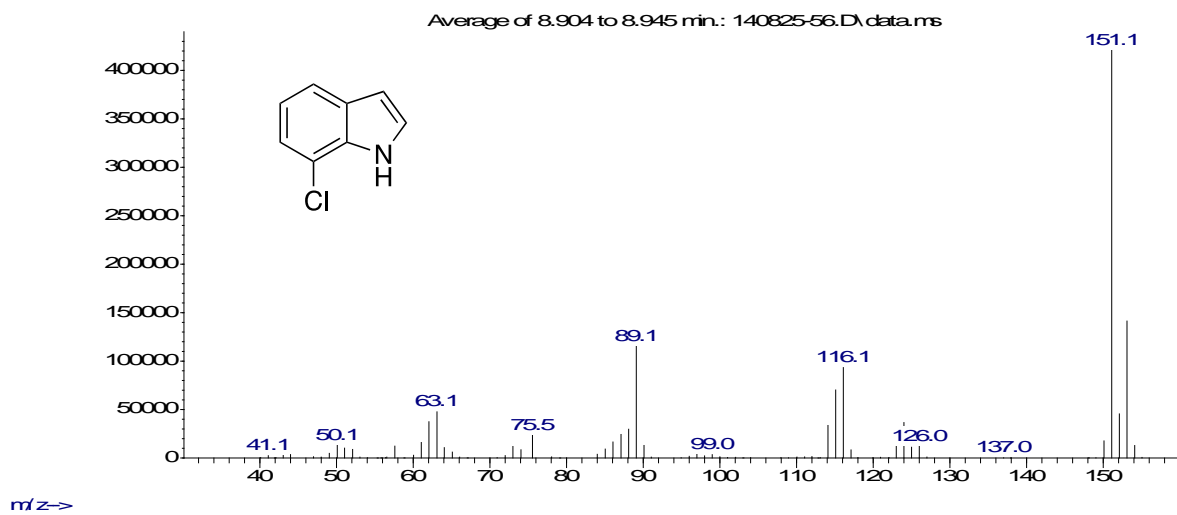
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EI mass spectra of the four precursor regioisomeric chloroindoles