



## Supporting Information

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### **SAHAquines, Novel Hybrids Based on SAHA and Primaquine Motifs, as Potential Cytostatic and Antiplasmodial Agents**

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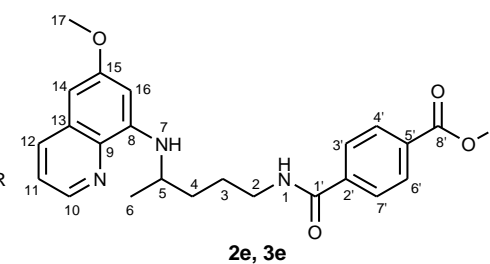
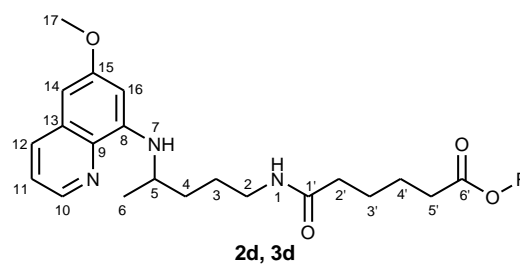
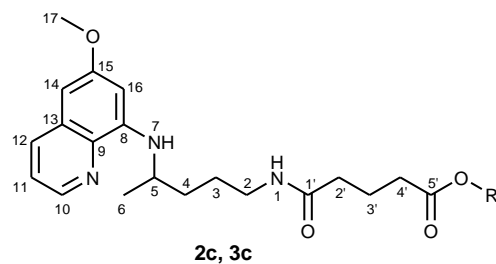
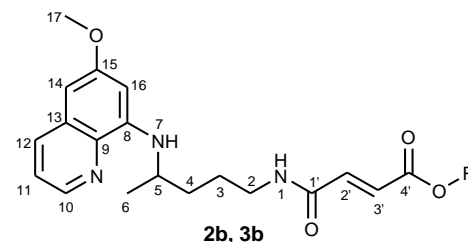
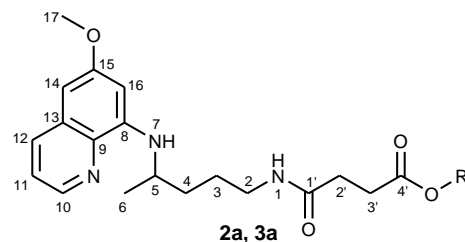
## Supporting Information

**SI Table 1.** Analytical and spectral data of compounds **2-6**

| Compd.    | Yield | m.p.<br>(°C) | IR (ATR): $\nu_{\text{max}}$<br>( $\text{cm}^{-1}$ )  | MS<br>( $m/z$ ) | Molecular<br>formula<br>( $M_r$ )  | CHN analysis        |      |       |
|-----------|-------|--------------|---|-----------------|--|---------------------|------|-------|
|           | (%)   |              |   |                 |  | calcd./found<br>(%) |      |       |
| <b>2a</b> | 88    | 71–73        | 2278, 3306, 3060, 2959, 2927, 2857, 1732, 1636, 1619, 1552, 1518, 1454, 1387,<br>1224, 1200, 1170, 1052, 1031, 825, 793, 679                                  | 374.2<br>(M+1)  | C <sub>20</sub> H <sub>27</sub> N <sub>3</sub> O <sub>4</sub><br>(373.453) | 64.32               | 7.21 | 11.25 |
|           |       |              |   |                 |  | 64.02               | 7.47 | 11.00 |
| <b>2b</b> | 70    | 71–73        | 3391, 3325, 3079, 2969, 2939, 1716, 1645, 1616, 1554, 1520, 1457, 1424, 1388,<br>1365, 1334, 1302, 1224, 1205, 1163, 1159, 1038, 999, 831, 819, 790, 681, 660 | 386.2<br>(M+1)  | C <sub>21</sub> H <sub>27</sub> N <sub>3</sub> O <sub>4</sub><br>(385.464) | 65.44               | 7.06 | 10.90 |
|           |       |              |   |                 |  | 65.25               | 7.09 | 10.70 |
| <b>2c</b> | 81    | oil          | 3376, 3246, 3086, 2993, 2961, 2927, 1736, 1632, 1612, 1574, 1520, 1458, 1423,<br>1386, 1219, 1203, 1172, 1161, 1052, 992, 817, 788, 751, 720, 676             | 388.3<br>(M+1)  | C <sub>21</sub> H <sub>29</sub> N <sub>3</sub> O <sub>4</sub><br>(387.418) | 65.09               | 7.54 | 10.84 |
|           |       |              |   |                 |  | 65.35               | 7.33 | 10.99 |
| <b>2d</b> | 86    | 56–58        | 3373, 3311, 2943, 2876, 1730, 1640, 1618, 1518, 1508, 1461, 1425, 1389, 1265,<br>1222, 1169, 1055, 821, 680, 625  | 402.3<br>(M+1)  | C <sub>22</sub> H <sub>31</sub> N <sub>3</sub> O <sub>4</sub><br>(401.507) | 65.81               | 7.78 | 10.47 |
|           |       |              |   |                 |  | 65.66               | 7.66 | 10.31 |
| <b>2e</b> | 83    | 112–113      | 3403, 3318, 3060, 2936, 1714, 1634, 1615, 1519, 1425, 1386, 1278, 1225, 1169,<br>1111, 820, 791, 736, 703   | 422.2<br>(M+1)  | C <sub>24</sub> H <sub>27</sub> N <sub>3</sub> O <sub>4</sub><br>(421.497) | 68.39               | 6.46 | 9.97  |
|           |       |              |   |                 |  | 68.25               | 6.76 | 10.08 |
| <b>3a</b> | 97    | 146–148      | 3454, 3268, 3094, 3009, 2962, 2928, 2863, 1713, 1649, 1615, 1584, 1562, 1524,<br>1452, 1386, 1346, 1227, 1203, 1156, 1161, 824, 785, 746, 674                 | 360.2<br>(M+1)  | C <sub>19</sub> H <sub>25</sub> N <sub>3</sub> O <sub>4</sub><br>(359.426) | 63.49               | 7.01 | 11.69 |

|           |    |         |   |                |  |                |              |                |      |       |
|-----------|----|---------|---|----------------|--|----------------|--------------|----------------|------|-------|
|           |    |         |   |                |  |                |              | 63.22          | 7.30 | 11.45 |
| <b>3b</b> | 83 | 147–149 | 3453, 3271, 3087, 2937, 1716, 1654, 1613, 1564, 1527, 1380, 1337, 1269, 1236, 1213, 1198, 1171, 981, 909, 820, 785, 767, 673              | 358.2<br>(M+1) | C <sub>19</sub> H <sub>23</sub> N <sub>3</sub> O <sub>4</sub><br>(357.410) | 63.85<br>63.77 | 6.49<br>6.72 | 11.76<br>11.99 |      |       |
| <b>3c</b> | 88 | 95–96   | 3453, 3324, 2933, 1720, 1643, 1613, 1580, 1524, 1386, 1227, 1204, 1161, 1139, 1058, 822, 786, 675   | 374.2<br>(M+1) | C <sub>20</sub> H <sub>27</sub> N <sub>3</sub> O <sub>4</sub><br>(373.453) | 64.32<br>64.21 | 7.29<br>7.15 | 11.25<br>11.48 |      |       |
| <b>3d</b> | 85 | 68–69   | 3453, 3370, 3294, 2943, 2863, 1731, 1609, 1562, 1519, 1455, 1424, 1385, 1224, 1203, 1166, 1156, 1133, 1053, 819, 790, 765, 677            | 388.2<br>(M+1) | C <sub>21</sub> H <sub>29</sub> N <sub>3</sub> O <sub>4</sub><br>(387.480) | 65.10<br>65.44 | 7.54<br>7.79 | 10.84<br>10.63 |      |       |
| <b>3e</b> | 86 | 142–144 | 3413, 3308, 2941, 2864 1727, 1691, 1636, 1613, 1575, 1519, 1454, 1422, 1385, 1276, 1220, 1201, 1156, 818, 786, 674                        | 408.2<br>(M+1) | C <sub>23</sub> H <sub>25</sub> N <sub>3</sub> O <sub>4</sub><br>(407.470) | 67.80<br>67.93 | 6.18<br>6.02 | 10.31<br>10.68 |      |       |
| <b>4a</b> | 40 | 121–123 | 3367, 3311, 3060, 2936, 2862, 1728, 1636, 1615, 1546, 1519, 1457, 1424, 1387, 1223, 1200, 1159, 1052, 820, 790, 679                       | 465.3<br>(M+1) | C <sub>26</sub> H <sub>32</sub> N <sub>4</sub> O <sub>4</sub><br>(464.566) | 67.22<br>67.46 | 6.94<br>6.69 | 12.06<br>12.31 |      |       |
| <b>4b</b> | 43 | 157–158 | 3383, 3283, 3213, 3008, 2936, 2865, 1738, 1626, 1575, 1556, 1518, 1454, 1386, 1337, 1219, 1203, 1157, 1051, 974, 818, 790, 738, 695, 675  | 463.1<br>(M+1) | C <sub>26</sub> H <sub>30</sub> N <sub>4</sub> O <sub>4</sub><br>(462.550) | 67.51<br>67.79 | 6.54<br>6.81 | 12.11<br>11.95 |      |       |
| <b>4c</b> | 50 | 84–85   | 3367, 3325, 3187, 2960, 2931, 2857, 1738, 1677, 1634, 1614, 1518, 1455, 1387, 1219, 1203, 1170, 1157, 1052, 1033, 821, 790, 740, 696, 676 | 479.3<br>(M+1) | C <sub>27</sub> H <sub>34</sub> N <sub>4</sub> O <sub>4</sub><br>(478.580) | 67.76<br>67.59 | 7.16<br>6.98 | 11.71<br>12.04 |      |       |
| <b>4d</b> | 51 | 102–105 | 3383, 3287, 2934, 2865, 1737, 1635, 1578, 1519, 1457, 1423, 1387, 1224, 1202, 1168, 1052, 820, 791, 743, 696                              | 493.3<br>(M+1) | C <sub>28</sub> H <sub>36</sub> N <sub>4</sub> O <sub>4</sub><br>(492.620) | 68.27<br>68.47 | 7.37<br>7.25 | 11.37<br>11.49 |      |       |
| <b>4e</b> | 61 | 183–184 | 3384, 3287, 2969, 2935, 1738, 1630, 1577, 1519, 1492, 1387, 1320, 1224, 1159, 1053, 863, 820, 790, 747, 718, 696                          | 513.3<br>(M+1) | C <sub>30</sub> H <sub>32</sub> N <sub>4</sub> O <sub>4</sub><br>(512.600) | 70.29          | 6.29         | 10.93          |      |       |

|           |    |         |   |                |  |                |              |                |      |       |
|-----------|----|---------|---|----------------|--|----------------|--------------|----------------|------|-------|
|           |    |         |   |                |  |                |              | 70.55          | 6.03 | 11.21 |
| <b>5a</b> | 76 | 109–110 | 3471, 3375, 3283, 3204, 3008, 2964, 2934, 1744, 1647, 1612, 1556, 1521, 1455, 1385, 1366, 1226, 1205, 1172, 1157, 1056, 821, 789, 677 | 375.2<br>(M+1) | C <sub>19</sub> H <sub>26</sub> N <sub>4</sub> O <sub>4</sub><br>(374.441) | 60.95<br>60.84 | 7.00<br>6.81 | 14.96<br>15.17 |      |       |
| <b>5b</b> | 73 | 99–102  | 3468, 3375, 3283, 3210, 3008, 2963, 2933, 1744, 1645, 1613, 1520, 1455, 1386, 1204, 1171, 1158, 1056, 821, 789, 677                   | 389.2<br>(M+1) | C <sub>20</sub> H <sub>28</sub> N <sub>4</sub> O <sub>4</sub><br>(388.468) | 61.84<br>61.69 | 7.27<br>7.03 | 14.42<br>14.77 |      |       |
| <b>5c</b> | 75 | 109–111 | 3428, 3283, 3191, 3088, 3044, 2943, 2923, 2856, 1738, 1621, 1578, 1556, 1523, 1385, 1367, 1204, 1170, 1160, 954, 822, 788, 676        | 403.3<br>(M+1) | C <sub>21</sub> H <sub>30</sub> N <sub>4</sub> O <sub>4</sub><br>(402.495) | 62.67<br>62.98 | 7.51<br>7.36 | 13.92<br>14.09 |      |       |
| <b>5d</b> | 42 | 156–158 | 3427, 3303, 3199, 2969, 2938, 1738, 1672, 1636, 1616, 1521, 1458, 1388, 1223, 1203, 1172, 1015, 898, 858, 821, 789, 677               | 423.1<br>(M+1) | C <sub>23</sub> H <sub>26</sub> N <sub>4</sub> O <sub>4</sub><br>(422.485) | 65.39<br>65.47 | 6.20<br>6.12 | 13.26<br>12.99 |      |       |
| <b>6a</b> | 71 | 121–122 | 3302, 3234, 3001, 2969, 2933, 1739, 1658, 1634, 1556, 1519, 1457, 1424, 1388, 1336, 1224, 1204, 1168, 1053, 820, 791, 679             | 389.2<br>(M+1) | C <sub>20</sub> H <sub>28</sub> N <sub>4</sub> O <sub>4</sub><br>(388.468) | 61.84<br>62.05 | 7.27<br>7.01 | 14.42<br>14.65 |      |       |
| <b>6b</b> | 49 | 177–179 | 3285, 3223, 3097, 3007, 2969, 2935, 1738, 1630, 1570, 1519, 1457, 1388, 1338, 1224, 1168, 1066, 1053, 991, 821, 792, 659              | 387.1<br>(M+1) | C <sub>20</sub> H <sub>26</sub> N <sub>4</sub> O <sub>4</sub><br>(386.452) | 62.16<br>61.94 | 6.78<br>6.55 | 14.50<br>14.87 |      |       |
| <b>6c</b> | 56 | 112–113 | 3396, 3285, 3162, 3097, 2969, 2936, 1737, 1670, 1630, 1564, 1521, 1456, 1424, 1388, 1227, 1206, 1170, 1161, 1030, 820, 790, 679       | 403.3<br>(M+1) | C <sub>21</sub> H <sub>30</sub> N <sub>4</sub> O <sub>4</sub><br>(402.495) | 62.67<br>62.46 | 7.51<br>7.31 | 13.92<br>13.95 |      |       |
| <b>6d</b> | 51 | 108–109 | 3395, 3287, 3166, 3090, 2927, 2861, 1739, 1674, 1631, 1577, 1563, 1521, 1457, 1423, 1388, 1227, 1206, 1170, 1161, 1053, 821, 790, 679 | 417.3<br>(M+1) | C <sub>22</sub> H <sub>32</sub> N <sub>4</sub> O <sub>4</sub><br>(416.522) | 63.44<br>63.26 | 7.74<br>7.53 | 13.45<br>13.71 |      |       |
| <b>6e</b> | 45 | 142–145 | 3394, 3309, 3176, 3060, 2970, 2937, 1738, 1670, 1624, 1557, 1520, 1456, 1389, 1221, 1205, 1161, 1039, 867, 821, 791, 678              | 437.3<br>(M+1) | C <sub>24</sub> H <sub>28</sub> N <sub>4</sub> O <sub>4</sub><br>(436.512) | 66.04          | 6.47         | 12.84          |      |       |

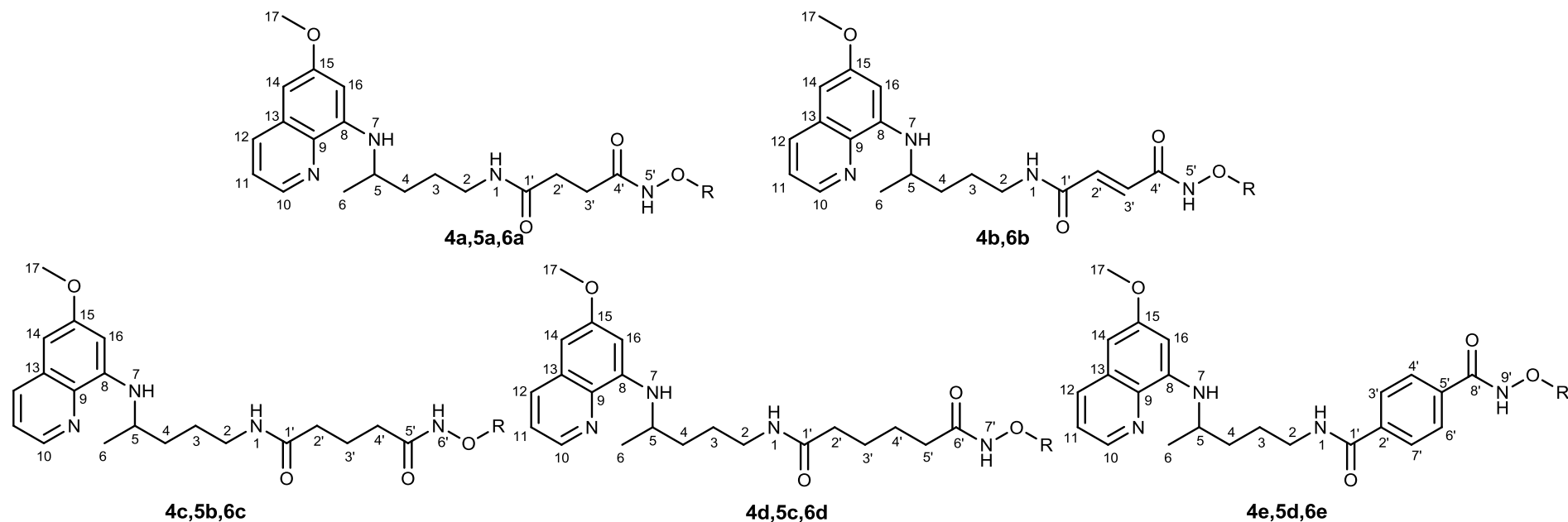
**SI Table 2.**  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of esters **2a-e** and acid derivatives **3a-e**

| Compd.    | R               | $^1\text{H}$ NMR<br>(DMSO- $d_6$ , $\delta$ ppm, J/Hz)  | $^{13}\text{C}$ NMR<br>(DMSO- $d_6$ , $\delta$ ppm, J/Hz)  |
|-----------|-----------------|---|--|
| <b>2a</b> | $^5\text{CH}_3$ | 8.55-8.53 (dd, 1H, 10, $J$ = 1.6, 4.2), 8.09-8.06 (dd, 1H, 12, $J$ = 1.5, 8.3), 7.86 (t, 1H, 1, $J$ = 5.3), 7.45-7.40 (m, 1H, 11), 6.47 (d, 1H, 16, $J$ = 2.4), 6.26 (d, 1H, 14, $J$ = 2.4), 6.12 (d, 1H, 7, $J$ = 8.7), 3.82 (s, 3H, 17), 3.66-3.57 (m, 1H, 5), 3.56 (s, 1H, 5'), 3.08-3.02 (m, 2H, 2), 2.48 (t, 2H, 2', $J$ = 6.6), 2.33 (t, 2H, 3', $J$ = 6.8), 1.70-1.58, 1.58-1.42 (2m, 4H, 3,4), 1.20 (d, 3H, 6, $J$ = 6.3) | 173.30 (4'), 170.87 (1'), 159.00 (15), 144.62 (8), 144.23 (10), 134.79 (12), 134.52 (9), 129.57 (13), 122.09 (11), 96.09 (16), 91.58 (14), 54.97 (17), 51.21 (5'), 46.97 (5), 38.46 (2), 33.37 (4), 29.82 (2'), 28.82 (3'), 25.95 (3), 20.19 (6) |

|           |   |   |  |
|-----------|---|---|--|
| <b>3a</b> | <sup>5</sup> H  | 12.06 (s, 1H, 5'), 8.55-8.53 (dd, 1H, 10, <i>J</i> = 4.2, 1.6), 8.09-8.06 (dd, 1H, 12, <i>J</i> = 8.3, 1.6), 7.85-7.82 (t, 1H, 1, <i>J</i> = 5.4), 7.45-7.41(m, 1H, 11), 6.48 (d, 1H, 16, <i>J</i> = 2.4), 6.26 (d, 1H, 14, <i>J</i> = 2.4), 6.12 (d, 1H, 7, <i>J</i> = 8.7), 3.82 (s, 3H, 17), 3.66-3.57(m, 1H, 5), 3.08-3.03 (m, 2H, 2), 2.41 (t, 2H, 2', <i>J</i> = 6.5), 2.29 (t, 2H, 3', <i>J</i> = 6.7), 1.70-1.58, 1.58-1.38 (2m, 4H, 3, 4), 1.2 (d, 3H, 6, <i>J</i> = 6.3)  | 173.87 (4'), 170.73 (1'), 159.00 (15), 144.63 (8), 144.24 (10), 134.80 (12), 134.52 (9), 129.58 (13), 122.10 (11), 96.10 (16), 91.59 (14), 54.97 (17), 46.99 (5), 38.48 (2), 33.38 (4), 30.04 (2'), 29.21 (3'), 25.96 (3), 20.19 (6)                           |
| <b>2b</b> | <sup>5</sup> CH <sub>2</sub> <sup>6</sup> CH <sub>3</sub> | 8.54-8.53 (dd, 1H, 10, <i>J</i> = 1.6, 4.2), 8.51 (t, 1H, 1, <i>J</i> = 5.5), 8.08-8.06 (dd, 1H, 12, <i>J</i> = 1.5, 8.3), 7.43-7.41 (m, 1H, 11), 6.98 (d, 1H, 2', <i>J</i> = 15.5), 6.55 (d, 1H, 3', <i>J</i> = 15.5), 6.47 (d, 1H, 16, <i>J</i> = 2.4), 6.27 (d, 1H, 14, <i>J</i> = 2.4), 6.13 (d, 1H, 7, <i>J</i> = 8.8), 4.20-4.16 (q, 2H, 5', <i>J</i> = 7.1), 3.82 (s, 3H, 17), 3.66-3.61 (m, 1H, 5), 3.20-3.17 (dd, 2H, 2, <i>J</i> = 6.4, 12.3), 1.71-1.65, 1.62-1.51 (2m, 4H, 3, 4), 1.23 (t, 3H, 6', <i>J</i> = 7.1), 1.22 (d, 3H, 6, <i>J</i> = 6.3) | 165.05 (4'), 162.63 (1'), 158.98 (15), 144.60 (8), 144.20 (10), 137.60 (3'), 134.76 (12), 134.51 (9), 129.55 (13), 128.08 (2'), 122.06 (11), 96.11 (16), 91.51 (14), 60.60 (5'), 54.94 (17), 46.93 (5), 38.81 (2), 33.36 (4), 25.63 (3), 20.18 (6), 13.97 (6') |
| <b>3b</b> | <sup>5</sup> H  | 12.83 (s, 1H, 5'), 8.55-8.53 (dd, 1H, 10, <i>J</i> = 1.6, 4.2), 8.49 (t, 1H, 1, <i>J</i> = 5.5), 8.09-8.06 (dd, 1H, 12, <i>J</i> = 1.5, 8.3), 7.45-7.40 (m, 1H, 11), 6.91 (d, 1H, 2', <i>J</i> = 15.5), 6.50 (d, 1H, 3', <i>J</i> = 15.5), 6.47 (d, 1H, 16, <i>J</i> = 2.4), 6.27 (d, 1H, 14, <i>J</i> = 2.4), 6.14 (d, 1H, 7, <i>J</i> = 8.7), 3.82 (s, 3H, 17), 3.68-3.58 (m, 1H, 5), 3.22-3.16 (m, 2H, 2), 1.71-1.49 (m, 4H, 3, 4), 1.21 (d, 3H, 6, <i>J</i> = 6.3)  | 166.49 (4'), 162.95 (1'), 159.00 (15), 144.62 (8), 144.22 (10), 137.11 (3'), 134.79 (12), 134.52 (9), 129.57 (13), 129.33 (2'), 122.09 (11), 96.13 (16), 91.62 (14), 54.96 (17), 46.96 (5), 38.80 (2), 33.40 (4), 25.71 (3), 20.19 (6)                         |
| <b>2c</b> | <sup>6</sup> CH <sub>3</sub>                              | 8.53(d, 1H, 10, <i>J</i> = 2.6), 8.07 (d, 1H, 12, <i>J</i> = 8.2), 7.78 (t, 1H, 1, <i>J</i> = 3), 7.43-7.41 (m, 1H, 11), 6.47 (d, 1H, 16, <i>J</i> = 2.2), 6.26 (d, 1H, 14, <i>J</i> = 2.2), 6.11 (d, 1H, 7, <i>J</i> = 8.8), 3.82 (s, 3H, 17), 3.64-3.60 (m, 1H, 5), 3.57 (s, 3H, 6'), 3.05 (t, 2H, 2, <i>J</i> = 6.0), 2.27 (t, 2H, 2', <i>J</i> = 3.0), 2.07 (t, 2H, 4', <i>J</i> = 7.3), 1.74-1.69 (m, 2H, 3'), 1.67-1.62, 1.54-1.44 (2m, 4H, 3, 4), 1.21(d, 3H, 6, <i>J</i> = 6.2)   | 173.00 (5'), 171.18 (1'), 158.98 (15), 144.60 (8), 144.20 (10), 134.76 (12), 134.50 (9), 129.55 (13), 122.05 (11), 96.08 (16), 91.59 (14), 54.95 (17), 51.14 (5'), 46.97 (5), 38.36 (2), 34.28 (4), 33.40 (2'), 32.64 (4'), 25.93 (3), 20.62 (3'), 20.17 (6)   |
| <b>3c</b> | <sup>6</sup> H  | 12.00 (s, 1H, 6'), 8.55-8.53 (d.d., 1H, 10, <i>J</i> = 4.2, 1.6), 8.10-8.07 (dd., 1H, 12, <i>J</i> = 8.3, 1.5), 7.80(t, 1H, 1, <i>J</i> = 5.4), 7.45-7.41 (m, 1H, 11), 6.48 (d, 1H, 16, <i>J</i> = 2.4), 6.27 (d, 1H, 14, <i>J</i> = 2.4), 6.13 (d, 1H, 7, <i>J</i> = 8.7), 3.83 (s, 3H, 17), 3.69-3.55 (m, 1H, 5), 3.09-3.05 (m, 2H, 2),   | 147.15 (5'), 171.36 (1'), 159.00 (15), 144.63 (8), 144.23 (10), 134.79 (12), 134.53 (9), 129.57 (13), 122.09 (11), 96.11 (16), 91.60 (14), 54.97 (17), 46.98 (5), 38.38 (2), 34.46 (4), 33.41 (2'),  |

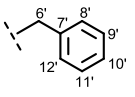
|           |                 |   |  |
|-----------|-----------------|---|--|
|           |                 | 2.20 (t, 2H, 2', $J = 7.4$ ), 2.08 (t, 2H, 4', $J = 7.4$ ), 1.75-1.43 (m, 6H, 3', 3, 4), 1.21 (d, 3H, 6, $J = 6.3$ )  | 33.04 (4'), 25.97 (3), 20.71 (3'), 20.19 (6)   |
| <b>2d</b> | $^7\text{CH}_3$ | 8.54-8.52 (dd, 1H, 10, $J = 4.2, 1.6$ ), 8.09-8.06 (dd, 1H, 12, $J = 8.3, 1.5$ ), 7.78 (t, 1H, 1, $J = 5.4$ ), 7.45-7.40 (m, 1H, 11), 6.48 (d, 1H, 16, $J = 2.4$ ), 6.26 (d, 1H, 14, $J = 2.4$ ), 6.12 (d, 1H, 7, $J = 8.8$ ), 3.82 (s, 3H, 17), 3.66-3.59 (m, 1H, 5), 3.57 (s, 3H, 7'), 3.08-3.04 (m, 2H, 2), 2.28 (t, 2H, 2', $J = 6.9$ ), 2.04 (t, 2H, 5', $J = 6.9$ ), 1.68-1.57, 1.57-1.42 (2m, 8H, 3, 4, 3', 4'), 1.20 (d, 3H, 6, $J = 6.3$ )         | 173.22 (6'), 171.60 (1'), 159.00 (15), 144.63 (8), 144.23 (10), 134.79 (12), 134.53 (9), 129.57 (13), 122.09 (11), 96.09 (16), 91.58 (14), 54.97 (17), 51.15 (7'), 46.98 (5), 38.36 (2), 35.00 (5'), 33.43 (4'), 32.98 (2'), 25.99 (3), 24.73 (3'), 24.03 (4'), 20.18 (6)            |
| <b>3d</b> | $^7\text{H}$    | 11.99 (s, 1H, 7'), 8.54 (d, 1H, 10; $J = 2.9$ ), 8.08 (d, 1H, 12, $J = 8.1$ ), 7.78 (t, 2H, 1, $J = 6.0$ ), 7.45-7.40 (m, 1H, 11), 6.48 (d, 1H, 16, $J = 3.0$ ), 6.26 (d, 1H, 14, $J = 3.0$ ), 6.12 (d, 1H, 7, $J = 8.6$ ), 3.82 (s, 3H, 17), 3.69-3.56 (m, 1H, 5), 3.09-3.0 (m, 2H, 2), 2.18 (t, 2H, 5', $J = 6.0$ ), 2.04 (t, 2H, 2', $J = 6.0$ ), 1.70-1.57, 1.57-1.42 (2m, 8H, 3, 4, 3', 4'), 1.20 (d, 3H, 6, $J = 6.2$ )                               | 174.37 (6'), 171.67 (1'), 159.00 (15), 144.63 (8), 144.23 (10), 134.79 (12), 134.52 (9), 129.57 (13), 122.09 (11), 96.10 (16), 91.59 (14), 54.97 (17), 46.98 (5), 38.36 (2), 35.11 (4), 33.38 (5'), 25.99 (3), 24.84 (3'), 24.13 (4'), 20.19 (6)                                     |
| <b>2e</b> | $^9\text{CH}_3$ | 8.65 (t, 1H, 1, $J = 5.5$ ), 8.54-8.52 (dd, 1H, 10, $J = 4.2, J = 1.6$ ), 8.08-8.06 (dd, 1H, 12, $J = 8.2, J = 1.1$ ), 8.01 (d, 2H, 3', 7', $J = 8.3$ ), 7.94 (d, 2H, 4', 6', $J = 8.3$ ), 7.43-7.41 (m, 1H, 11), 6.47 (d, 1H, 16, $J = 2.2$ ), 6.28 (d, 1H, 14, $J = 2.1$ ), 6.15 (d, 1H, 7, $J = 8.7$ ), 3.88 (s, 3H, 9'), 3.81 (s, 3H, 17), 3.69-3.65 (m, 1H, 5), 3.32-3.29 (m, 2H, 2), 1.76-1.65, 1.65-1.57 (2m, 4H, 3, 4), 1.23 (d, 3H, 6, $J = 6.3$ ) | 165.69 (8'), 165.24 (1'), 158.97 (15), 144.59 (8), 144.18 (10), 138.76 (2'), 134.73 (12), 134.51 (9), 131.54 (5'), 129.53 (13), 128.99 (4', 6'), 127.47 (3', 7'), 122.03 (11), 96.09 (16), 91.59 (14), 54.91 (17), 52.26 (9'), 47.00 (5), 39.27 (2), 33.39 (4), 25.79 (3), 20.15 (6) |
| <b>3e</b> | $^9\text{H}$    | 13.12 (s, 1H, 9'), 8.64 (t, 1H, 1, $J = 5.5$ ), 8.54-8.53 (dd, 1H, 10, $J = 4.2, J = 1.6$ ), 8.09-8.06 (dd, 1H, 12, $J = 8.3, J = 1.5$ ), 8.00 (d, 2H, 3', 7', $J = 8.4$ ), 7.92 (d, 2H, 4', 6', $J = 8.4$ ), 7.45-7.41 (m, 1H, 11), 6.47 (d, 1H, 16, $J = 2.4$ ), 6.28 (d, 1H, 14, $J = 2.4$ ), 6.16 (d, 1H, 7, $J = 8.4$ ), 3.81 (s, 3H, 17), 3.71-3.63 (m, 1H, 5), 3.34-3.28 (m, 2H, 2), 1.76-1.57 (m, 4H, 3, 4), 1.22 (d, 3H, 6, $J = 7.3$ )            | 166.80 (8'), 165.42 (1'), 159.00 (15), 144.61 (8), 144.22 (10), 138.45 (2'), 134.80 (12), 134.52 (9), 132.79 (5'), 129.58 (13), 129.16 (4', 6'), 127.36 (3', 7'), 122.09 (11), 96.14 (16), 91.59 (14), 54.96 (17), 47.02 (5), 39.28 (2), 33.40 (4), 25.86 (3), 20.19 (6)             |

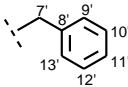
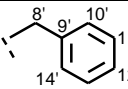
**SI Table 3.**  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of hydroxamic acid derivatives **4-6**

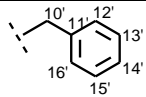


| Compd.    | R <sup>2</sup> | $^1\text{H}$ NMR<br>(DMSO- <i>d</i> <sub>6</sub> , $\delta$ ppm, J/Hz)  | $^{13}\text{C}$ NMR<br>(DMSO- <i>d</i> <sub>6</sub> , $\delta$ ppm, J/Hz)   |
|-----------|----------------|---|---|
| <b>4a</b> |                | 10.99 (s, 1H, 5'), 8.54 (d, 1H, 10, $J = 2.7$ ), 8.08 (d, 1H, 12, $J = 7.2$ ), 7.85 (s, 1H, 1), 7.44-7.35 (m, 6H, 11, 8'-12'), 6.47 (d, 1H, 16, $J = 2.2$ ), 6.26 (d, 1H, 14, $J = 2.0$ ), 6.12 (d, 1H, 7, $J = 8.6$ ), 4.76 (s, 2H, 6'), 3.82 (s, 3H, 17), 3.66-3.57 (m, 1H, 5), 3.08-3.02 (m, 2H, 2), 2.30 (t, 2H, 3', $J = 6.9$ ), 2.18 (t, 2H, 2', $J = 6.8$ ), | 170.71 (1'), 168.80 (4'), 159.00 (15), 144.62 (8), 144.23 (10), 136.06 (7'), 134.79 (12), 134.52 (9), 129.57 (13), 128.72 (8',12'), 128.26 (9', 10'), 128.16 (11'), 122.09 (11), 96.09 (16), 91.59 (14), 76.75 (6'), 54.97 (17), 46.99 (5), 38.49 (2), 33.39 (4), 30.37 |



|           |   |  |  |
|-----------|---|--|--|
|           |   | 1.70-1.57, 1.57-1.43 (2m, 4H, 3, 4), 1.20 (s, 3H, 6, $J = 6.2$ Hz)   | (2'), 27.91 (3'), 25.97 (3), 20.19 (6)   |
| <b>5a</b> | $^6\text{H}$  | 10.37 (s, 1H, 5'), 8.67 (s, 1H, 6'), 8.54-8.53 (dd, 1H, 10, $J = 4.2$ , 1.6), 8.09-8.06 (dd, 1H, 12, $J = 8.3$ , 1.5), 7.85 (t, 1H, 1, $J = 5.3$ ), 7.45-7.41 (m, 1H, 11), 6.47 (d, 1H, 16, $J = 2.4$ ), 6.26 (d, 1H, 14, $J = 2.4$ ), 6.12 (d, 1H, 7, $J = 8.7$ ), 3.82 (s, 3H, 17), 3.67-3.56 (m, 1H, 5), 3.09-3.00 (m, 2H, 2), 2.29 (t, 2H, 2', $J = 6.5$ Hz), 2.17 (t, 2H, 3', $J = 6.5$ Hz), 1.72-1.56, 1.56-1.39 (2m, 4H, 3, 4), 1.20 (d, 3H, 6, $J = 6.3$ ) | 170.84 (1'), 168.46 (4'), 159.00 (15), 144.63 (8), 144.24 (10), 134.80 (12), 134.52 (9), 129.58 (13), 122.11 (11), 96.10 (16), 91.60 (14), 54.98 (17), 47.00 (5), 38.49 (2), 33.42 (4), 30.64 (2'), 27.92 (3'), 25.97 (3), 20.20 (6)   |
| <b>6a</b> | $^6\text{CH}_3$   | 10.93 (s, 1H, 5'), 8.54-8.53 (dd, 1H, 10, $J = 3.0$ ) 8.06 (d, 1H, 12, $J = 8.2$ ), 7.82 (s, 1H, 1), 7.43-7.41 (m, 1H, 11), 6.47 (d, 1H, 16, $J = 2.2$ ), 6.26 (d, 1H, 14, $J = 2.1$ ), 6.11 (d, 1H, 7, $J = 8.7$ ), 3.83 (s, 3H, 17), 3.63-3.58 (m, 1H, 5), 3.54 (s, 3H, 6'), 3.08-3.02 (m, 2H, 2), 2.29 (t, 2H, 2', $J = 7.4$ ), 2.16 (t, 2H, 3', $J = 7.0$ ), 1.67-1.63, 1.55-1.45 (2m, 4H, 3, 4), 1.21 (d, 3H, 6, $J = 6.3$ )                                  | 170.64 (1'), 168.44 (4'), 158.96 (15), 144.59 (8), 144.17 (10), 134.71 (12), 134.48 (9), 129.52 (13), 122.01 (11), 96.04 (16), 91.60 (14), 62.97 (6'), 54.92 (17), 46.97 (5), 38.44 (2), 33.37 (4), 30.27 (2'), 27.84 (3'), 25.90 (3), 20.14 (6)   |
| <b>4b</b> |  | 11.52 (s, 1H, 5'), 8.55-8.53 (dd, 1H, 10, $J = 1.5$ , 4.2), 8.45 (t, 1H, 1, $J = 5.5$ ), 8.09-8.06 (dd, 1H, 12, $J = 1.4$ , 8.3), 7.45-7.37 (m, 1H, 11, 8'-12'), 6.90 (d, 1H, 2', $J = 15.1$ ), 6.62 (d, 1H, 3', $J = 15.2$ ), 6.47 (d, 1H, 16, $J = 2.4$ ), 6.27 (d, 1H, 14, $J = 2.3$ ), 6.15 (d, 1H, 7, $J = 8.7$ ), 4.86 (s, 2H, 6'), 3.82 (s, 3H, 17), 3.68-3.58 (m, 2H, 5), 3.20-3.15 (m, 2H, 2), 1.70-1.49 (m, 4H, 3,4), 1.21 (d, 3H, 6, $J = 6.2$ )        | 163.17 (1'), 161.22 (4'), 158.99 (15), 144.60 (8), 144.22 (10), 134.82 (12), 134.49 (9), 133.58 (3'), 129.58 (13), 129.07 (2'), 122.09 (11), 96.16 (16), 91.64 (14), 63.35 (6'), 54.97 (17), 46.97 (5), 38.95 (2), 33.42 (4), 25.76 (3), 20.19 (6)   |
| <b>6b</b> | $^6\text{CH}_3$   | 11.53 (s, 1H, 5'), 8.55-8.53 (dd, 1H, 10, $J = 1.6$ , 4.2), 8.44 (t, 1H, 1, $J = 5.5$ ), 8.09-8.06 (dd, 1H, 12, $J = 1.5$ , 8.3), 7.45-7.41 (m, 6H, 11), 6.89 (d, 1H, 2', $J = 15.1$ ), 6.60 (d, 1H, 3', $J = 15.1$ ), 6.47 (d, 1H, 16, $J = 2.2$ ), 6.27 (d, 1H, 14, $J = 2.2$ ), 6.14 (d, 1H, 7, $J = 8.7$ ), 3.82 (s, 3H, 17), 3.65 (s, 4H, 5, 6'), 3.20-3.14 (m, 2H, 2), 1.70-1.49 (m, 4H, 3, 4), 1.21 (d, 3H, 6, $J = 6.2$ )                                  | 163.16 (1'), 160.97 (4'), 159.00 (15), 144.60 (8), 144.22 (10), 135.72 (7'), 134.82 (12), 134.49 (9), 133.58 (3'), 129.58 (13), 129.12 (2'), 128.85 (8', 12'), 129.34 (9'-11'), 122.09 (11), 96.16 (16), 91.63 (14), 76.97 (6'), 54.97 (17), 46.97 (5), 38.77 (2), 33.42 (4), 25.77 (3), 20.19 (6) |

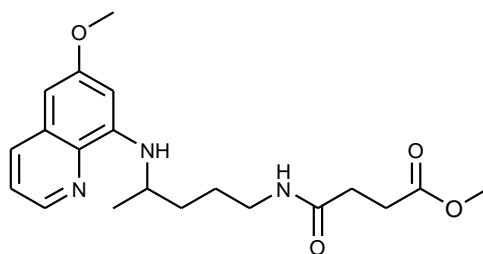
|           |   |  |  |
|-----------|---|--|--|
| <b>4c</b> |    | <p>10.95 (s, 1H, 6'), 8.54-8.53 (dd, 1H, 10, <math>J = 4.1, 1.5</math>), 8.09-8.06 (dd, 1H, 12, <math>J = 8.3, 1.4</math>), 7.78 (t, 1H, 1, <math>J = 5.4</math>), 7.44-7.33 (m, 6H, 11, 9'-13'), 6.47 (d, 1H, 16, <math>J = 2.4</math>), 6.26 (d, 1H, 14, <math>J = 2.3</math>), 6.13 (d, 1H, 7, <math>J = 8.8</math>), 4.77 (s, 2H, 7'), 3.82 (s, 3H, 17), 3.62-3.56 (m, 1H, 5), 3.08-3.04 (m, 2H, 2), 2.04 (t, 2H, 4', <math>J = 7.4</math>), 1.95 (t, 2H, 2', <math>J = 7.3</math>), 1.74-1.43 (m, 6H, 3', 3, 4), 1.20 (d, 3H, 6, <math>J = 6.2</math>)</p>                      | <p>171.32 (1'), 169.03 (5'), 159.00 (15), 144.62 (8), 144.23 (10), 136.09 (8'), 134.79 (12), 134.52 (9), 129.57 (13), 128.72 (9', 13'), 128.26 (10', 12'), 128.16 (11'), 122.09 (11), 96.10 (16), 91.59 (14), 76.77 (7'), 54.97 (17), 46.98 (5), 38.41 (2), 34.57 (4), 33.43 (2'), 31.70 (4'), 25.99 (3), 21.21 (3'), 20.19 (6)</p>                          |
| <b>5b</b> | <sup>7</sup> H  | <p>10.32 (s, 1H, 6'), 8.63 (s, 1H, 7'), 8.55-8.52 (dd, 1H, 12, <math>J = 4.2, 1.6</math>), 8.09-8.05 (dd, 1H, 12, <math>J = 8.3, 1.6</math>), 7.76 (t, 1H, 1, <math>J = 5.3</math>), 7.45-7.39 (m, 1H, 11), 6.47 (d, 1H, 16, <math>J = 2.4</math>), 6.26 (d, 1H, 14, <math>J = 2.4</math>), 6.11 (d, 1H, 7, <math>J = 8.7</math>), 3.82 (s, 3H, 17), 3.68-3.56 (m, 1H, 5), 3.05 (d, 2H, 2, <math>J = 5.6</math>), 2.04 (t, 2H, 2', <math>J = 7.4</math>), 1.94 (t, 2H, 4', <math>J = 7.4</math>), 1.76-1.57, 1.57-1.40 (2m, 6H, 3, 4, 3'), 1.21 (d, 3H, 6, <math>J = 6.3</math>)</p> | <p>171.37 (1'), 168.74 (5'), 158.98 (15), 144.60 (8), 144.20 (10), 134.75 (12), 134.50 (9), 129.54 (13), 122.05 (11), 96.08 (16), 91.61 (14), 54.95 (17), 46.98 (5), 38.39 (2), 34.73 (4), 33.43 (2'), 31.75 (4'), 25.95 (3), 21.42 (3'), 20.17 (6)</p>  |
| <b>6c</b> | <sup>7</sup> CH <sub>3</sub>  | <p>10.94 (s, 1H, 6'), 8.55-8.53 (dd, 1H, 10, <math>J = 4.2, 1.5</math>), 8.09-8.06 (dd, 1H, 12, <math>J = 8.3, 1.4</math>), 7.89 (t, 1H, 1, <math>J = 5.3</math>), 7.45-7.41 (m, 1H, 11), 6.48 (d, 1H, 16, <math>J = 2.4</math>), 6.26 (d, 1H, 14, <math>J = 2.3</math>), 6.12 (d, 1H, 7, <math>J = 8.7</math>), 3.82 (s, 3H, 17), 3.62 (m, 1H, 5), 3.56 (s, 3H, 7'), 3.06-3.04 (m, 2H, 2), 2.04 (t, 2H, 2', <math>J = 7.3</math>), 1.93 (t, 2H, 4', <math>J = 7.3</math>), 1.74-1.40 (m, 6H, 3', 3, 4'), 1.20 (d, 3H, 6, <math>J = 6.3</math>)</p>                                  | <p>171.31 (1'), 168.72 (5'), 159.00 (15), 144.62 (8), 144.23 (10), 134.79 (12), 134.52 (9), 129.57 (13), 122.10 (11), 96.10 (16), 91.59 (14), 63.10 (7'), 54.98 (17), 46.98 (5), 38.41 (2), 34.54 (4), 33.43 (2'), 31.68 (4'), 25.98 (3), 21.12 (3'), 20.19 (6)</p>  |
| <b>4d</b> |  | <p>10.91 (s, 1H, 7'), 8.53 (dd, 1H, 10, <math>J = 4.0, 1.4</math>), 8.06 (dd, 1H, 12, <math>J = 8.2</math>), 7.74 (s, 1H, 1), 7.43-7.41 (m, 1H, 11), 7.37-7.34 (m, 5H, 10'-14'), 6.47 (d, 1H, 16, <math>J = 2.3</math>), 6.26 (d, 1H, 14, <math>J = 2.2</math>), 6.11 (d, 1H, 7, <math>J = 8.7</math>), 4.77 (s, 2H, 8'), 3.82 (s, 3H, 17), 3.65-3.59 (m, 1H, 5), 3.08-3.02 (m, 2H, 2), 2.02 (s, 2H, 2'), 1.93 (s, 2H, 5'), 1.68-1.62, 1.56-1.41 (2m, 8H, 3, 4, 3', 4'), 1.20 (d, 3H, 6, <math>J = 6.3</math>)</p>   | <p>171.61 (1'), 169.19 (4'), 158.96 (15), 144.59 (8), 144.17 (10), 136.03 (9'), 134.72 (12), 134.48 (9), 129.52 (13), 128.66 (10', 14'), 128.19 (11', 13'), 129.09 (12'), 122.02 (11), 96.06 (16), 91.60 (14), 76.70 (8'), 54.93 (17), 53.57 (5'), 46.97 (5), 38.34 (2), 35.13 (5'), 33.42 (4), 32.04 (2'), 25.94 (3), 24.83 (3'), 24.62 (4'), 20.15 (6)</p> |
| <b>5c</b> | <sup>8</sup> H  | <p>10.34 (s, 1H, 7'), 8.66 (s, 1H, 8'), 8.55-8.52 (dd, 1H, 10, <math>J = 4.2, 1.5</math>), 8.10-8.05 (dd, 1H, 12, <math>J = 8.3, 1.4</math>), 7.77 (t, 1H, 1, <math>J = 5.3</math>),</p>   | <p>171.70 (1'), 168.95 (6'), 159.00 (15), 144.62 (8), 144.24 (10), 134.80 (12), 134.52 (9), 129.57 (13), 122.10 (11), 96.10 (16),</p>  |

|           |   |  |  |
|-----------|---|--|--|
|           |   | 7.45-7.40 (m, 1H, 11), 6.47 (d, 1H, 16, $J = 2.4$ ), 6.26 (d, 1H, 14, $J = 2.4$ ), 6.12 (d, 1H, 7, $J = 8.8$ ), 3.82 (s, 3H, 17), 3.67-3.57 (m, 1H, 5), 3.04 (d, 2H, 2, $J = 5.5$ ), 2.03 (s, 2H, 2'), 1.92 (s, 2H, 5'), 1.72-1.58, 1.58-1.41 (2m, 8H, 3, 4, 3', 4'), 1.20 (d, 3H, 6, $J = 6.3$ )  | 91.60 (14), 54.98 (17), 46.98 (5), 38.38 (2), 35.20 (4), 33.44 (2'), 32.11 (5'), 26.01 (3), 24.97 (3'), 24.87 (4'), 20.20 (6)  |
| <b>6d</b> | $^8\text{CH}_3$   | 10.91 (s, 1H, 7'), 8.55-8.52 (dd, 1H, 10, $J = 4.1, 1.6$ ), 8.09-8.06 (dd, 1H, 12, $J = 8.3, 1.5$ ), 7.75 (t, 1H, 1, $J = 5.4$ ), 7.44-7.41 (m, 1H, 11), 6.47 (d, 1H, 16, $J = 2.4$ ), 6.26 (d, 1H, 14, $J = 2.4$ ), 6.11 (d, 1H, 7, $J = 8.7$ ), 3.82 (s, 3H, 17), 3.65-3.55 (m, 4H, 5, 8'), 3.08-3.00 (m, 2H, 2), 2.03 (s, 2H, 2'), 1.92 (s, 2H, 5'), 1.55-1.49, 1.49-1.40 (m, 8H, 3, 4, 3', 4'), 1.20 (d, 3H, 6, $J = 6.3$ )  | 171.64 (1'), 168.91 (6'), 158.98 (15), 144.61 (8), 144.20 (10), 134.76 (12), 134.50 (9), 129.55 (13), 122.06 (11), 96.08 (16), 91.60 (14), 63.05 (8'), 54.95 (17), 46.97 (5), 38.36 (2), 35.15 (4), 33.43 (2'), 32.07 (5'), 25.97 (3), 24.86 (3'), 24.60 (4'), 20.17 (6)   |
| <b>4e</b> |  | 11.88 (s, 1H, 9'), 8.59 (t, 1H, 1, $J = 5.5$ ), 8.54-8.52 (dd, 1H, 10, $J = 4.2, J = 1.6$ ), 8.09-8.06 (dd, 1H, 12, $J = 8.3, J = 1.6$ ), 7.89 (d, 2H, 3', 7', $J = 8.4$ ), 7.80 (d, 2H, 4', 6', $J = 8.4$ ), 7.45-7.34 (m, 6H, 11, 12'-16'), 6.47 (d, 1H, 16, $J = 2.5$ ), 6.28 (d, 1H, 14, $J = 2.4$ ), 6.15 (d, 1H, 7, $J = 8.6$ ), 4.94 (s, 2H, 10'), 3.81 (s, 3H, 17), 3.71-3.63 (m, 1H, 5), 3.33-3.27 (m, 2H, 2), 1.75-1.58 (m, 4H, 3, 4), 1.23 (d, 3H, 6, $J = 6.3$ ) | 165.35 (1'), 163.70 (8'), 158.99 (15), 144.61 (8), 144.22 (10), 137.30 (2'), 135.82 (11'), 134.80 (12), 134.52 (9), 134.38 (5'), 129.57 (13), 128.93 (12', 16'), 128.32 (13'-15'), 127.32 (3', 7'), 127.02 (4', 6'), 122.09 (11), 96.13 (16), 91.59 (14), 77.03 (10'), 54.96 (17), 47.02 (5), 39.23 (2), 33.39 (4), 25.88 (3), 20.19 (6) |
| <b>5d</b> | $^{10}\text{H}$   | 11.32 (s, 1H, 9'), 9.12 (s, 1H, 10'), 8.57 (t, 1H, 1, $J = 5.5$ ), 8.54-8.53 (dd, 1H, 10, $J = 4.2, J = 1.6$ ), 8.09-8.06 (d, 1H, 12, $J = 8.3, J = 1.6$ ), 7.88 (d, 2H, 3', 7', $J = 8.3$ ), 7.80 (d, 2H, 4', 6', $J = 8.3$ ), 7.44-7.40 (m, 1H, 11), 6.47 (d, 1H, 16, $J = 2.2$ ), 6.28 (d, 1H, 14, $J = 2.1$ ), 6.15 (d, 1H, 7, $J = 8.7$ ), 3.81 (s, 3H, 17), 3.71-3.62 (m, 1H, 5), 3.33-3.27 (m, 2H, 2), 1.75-1.58 (m, 4H, 3, 4), 1.23 (d, 3H, 6, $J = 6.2$ )           | 165.44 (1'), 163.49 (8'), 159.00 (15), 144.62 (8), 144.20 (10), 136.91 (2'), 134.86 (5'), 134.79 (12), 134.53 (9), 129.57 (13), 127.17 (3',7'), 126.78 (4', 6'), 122.09 (11), 96.12 (16), 91.60 (14), 54.96 (17), 47.02 (5), 39.23 (2), 33.41 (4), 25.89 (3), 20.19 (6)  |
| <b>6e</b> | $^{10}\text{CH}_3$  | 11.84 (s, 1H, 9'), 8.58 (t, 1H, 1, $J = 5.56$ ), 8.54-8.53 (dd, 1H, 10, $J = 1.6, 4.2$ ), 8.08-8.06 (dd, 1H, 12, $J = 1.6, 8.3$ ), 7.89 (d, 2H, 3', 7', $J = 8.4$ ), 7.80 (2, 2H, 4', 6', $J = 8.4$ ), 7.43-7.41 (m, 1H, 11), 6.47 (d, 1H, 16, $J = 2.5$ ), 6.28 (d, 1H, 14, $J = 2.4$ ), 6.15   | 165.32 (1'), 163.36 (8'), 158.98 (15), 144.61 (8), 144.20 (10), 137.28 (2'), 134.76 (12), 134.52 (9), 134.31 (5'), 129.55 (13), 127.21 (3',7'), 126.93 (4', 6'), 122.06 (11), 96.10 (16), 91.60 (14), 63.26 (11'), 54.94 (17), 47.01 (5), 39.23 (2), 33.41 (4), 25.85 (3),   |

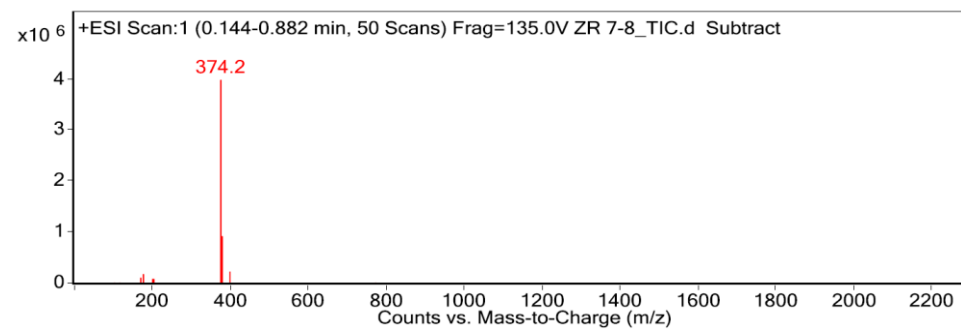
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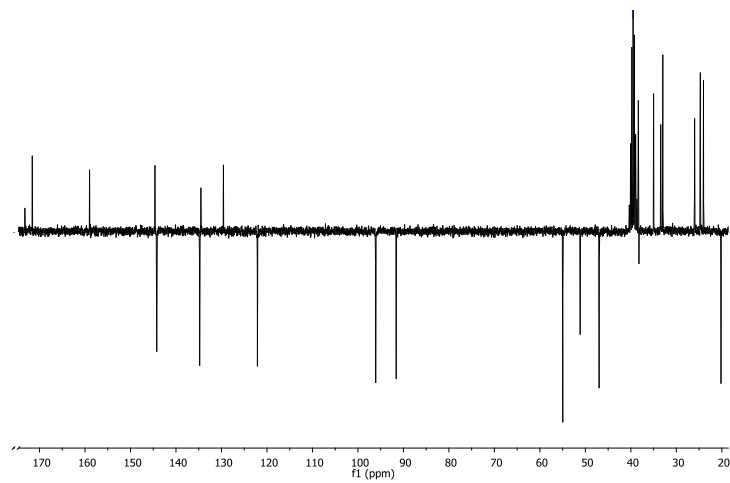
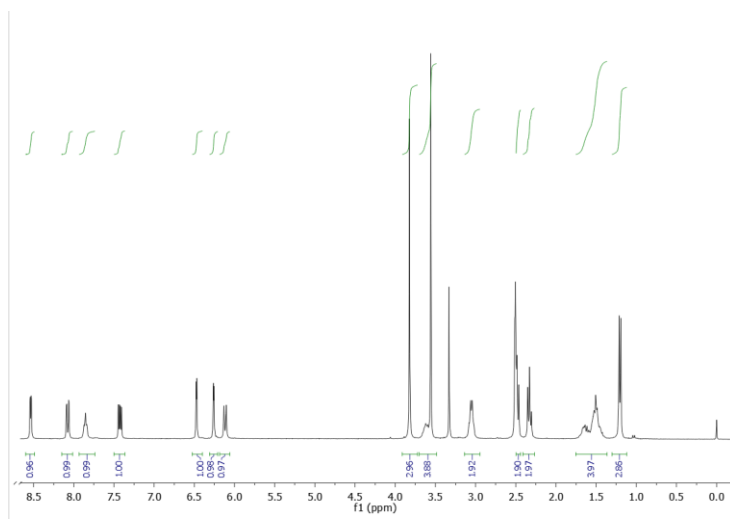
(d, 1H, 7,  $J = 8.8$ ), 3.82 (s, 3H, 17), 3.72 (s, 2H, 10'), 3.69-3.65 20.17 (6)  
(m, 1H, 5), 3.31-3.28 (m, 2H, 2), 1.76-1.66, 1.65-1.56 (m, 4H,  
3, 4), 1.23 (d, 3H, 6,  $J = 6.3$ )

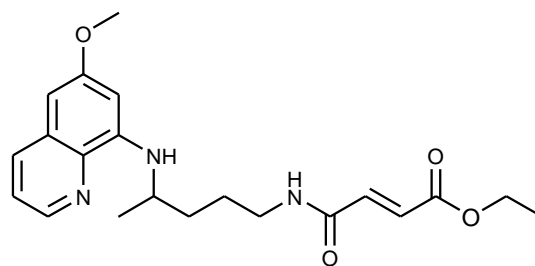
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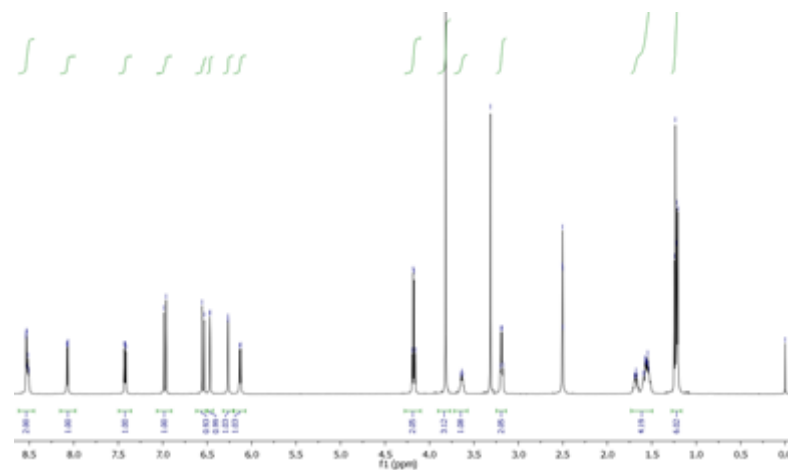
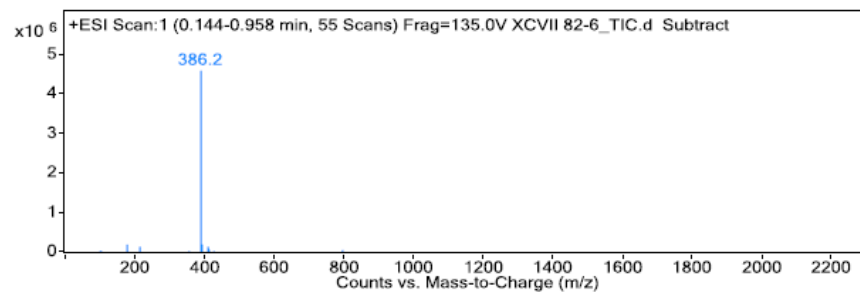
**2a**

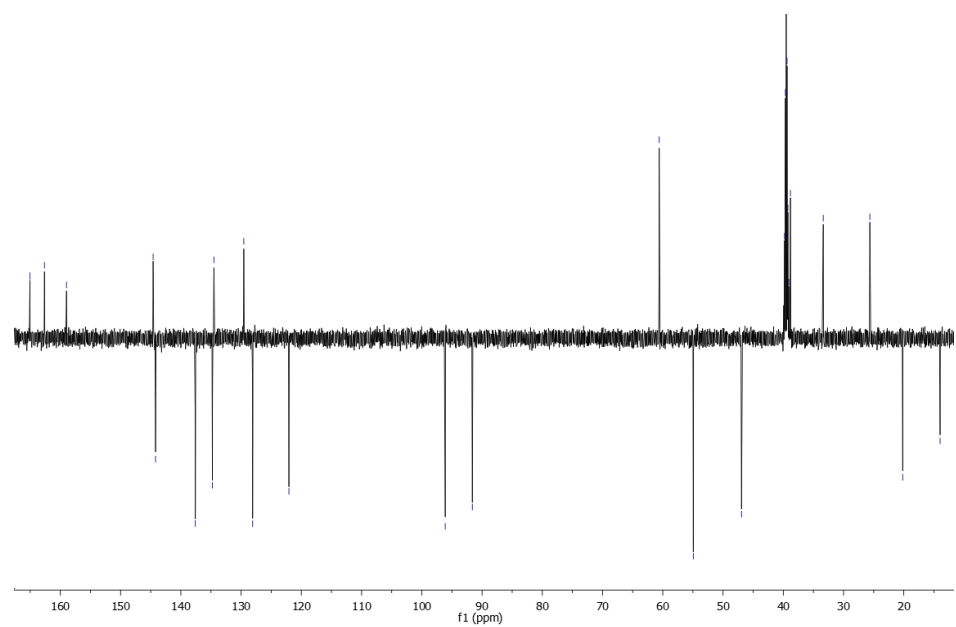




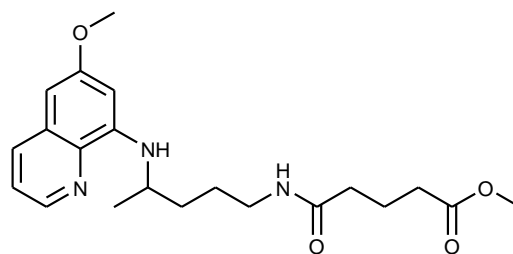


2b

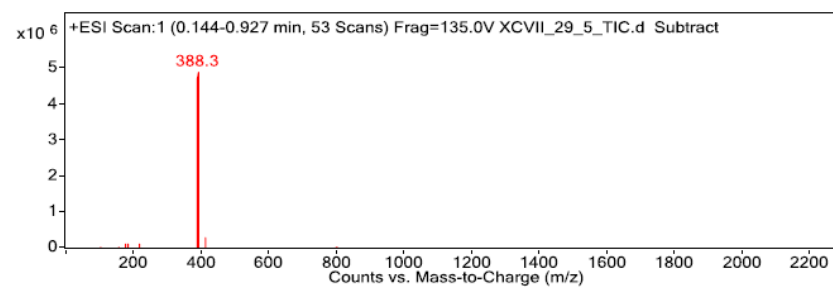


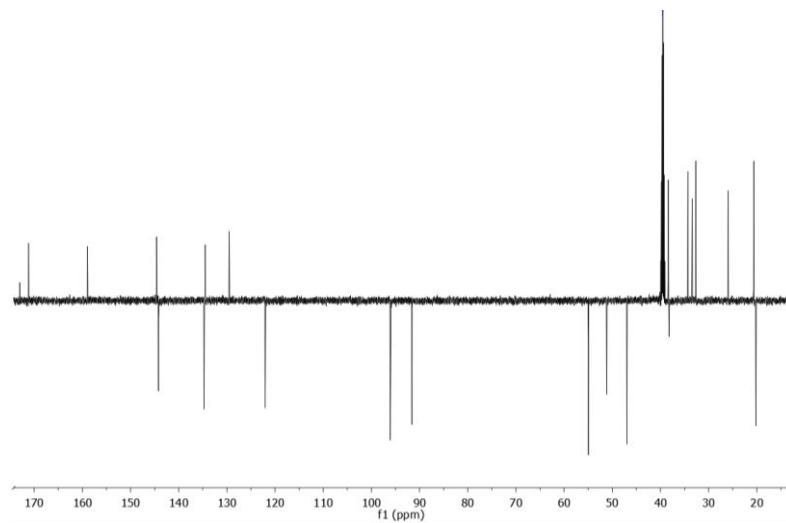
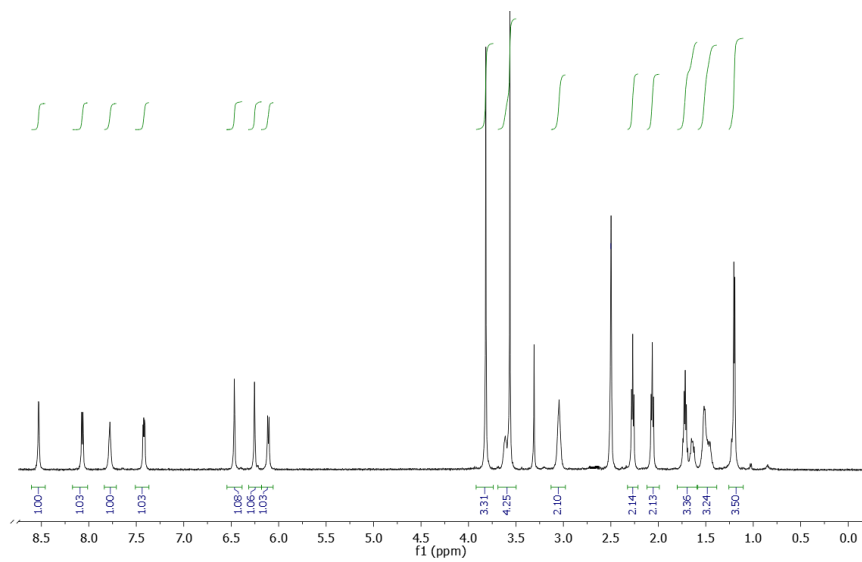


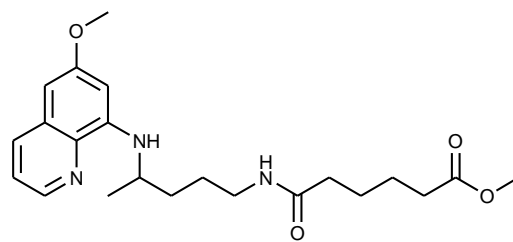




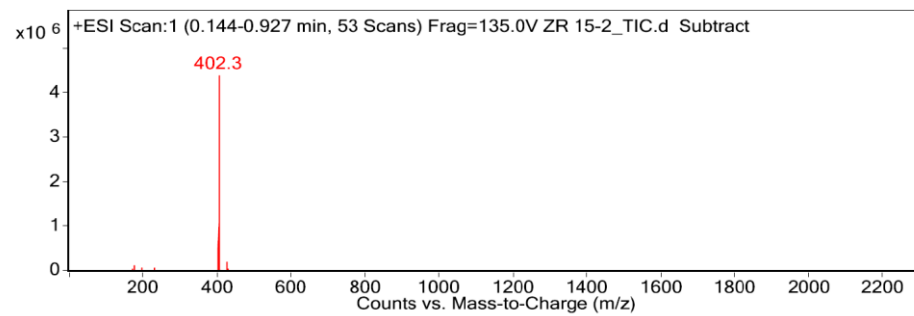
**2c**

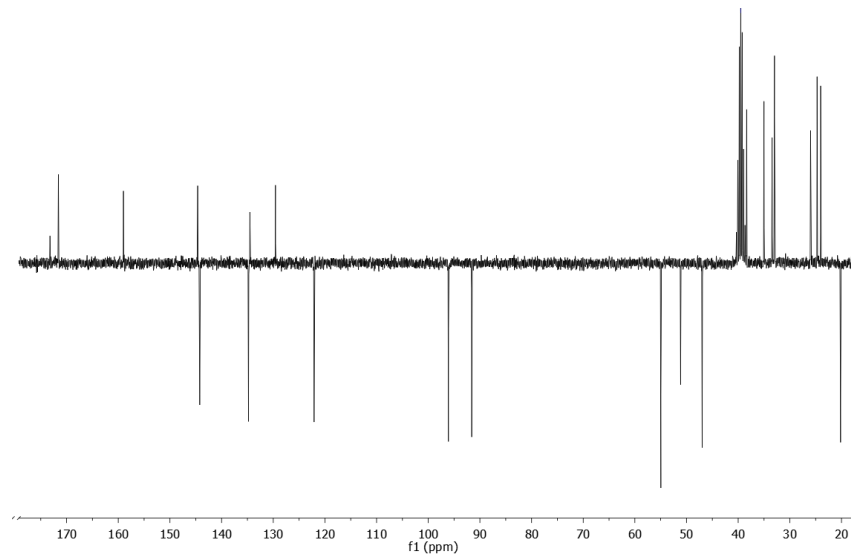
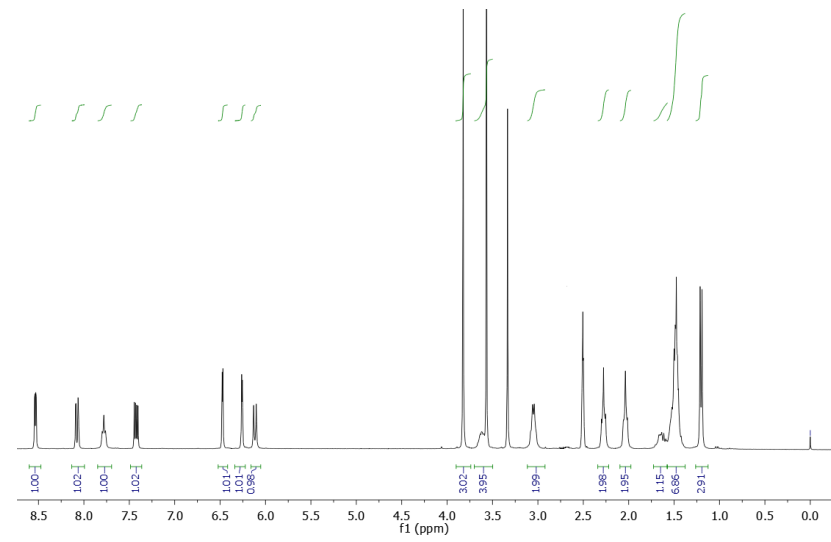


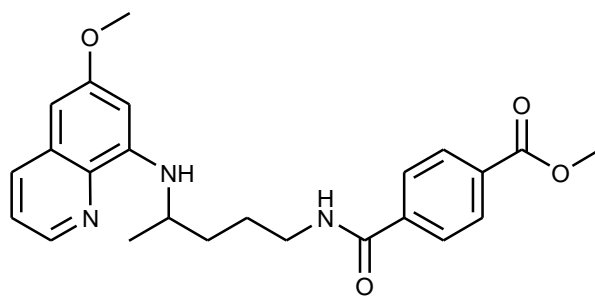




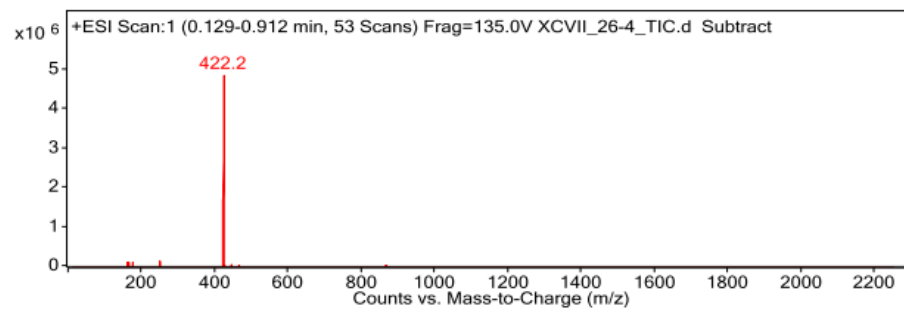
**2d**

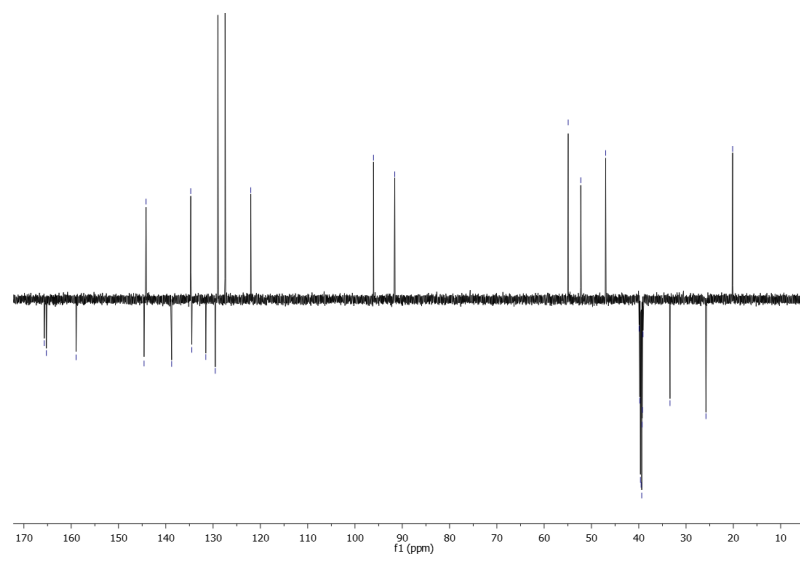
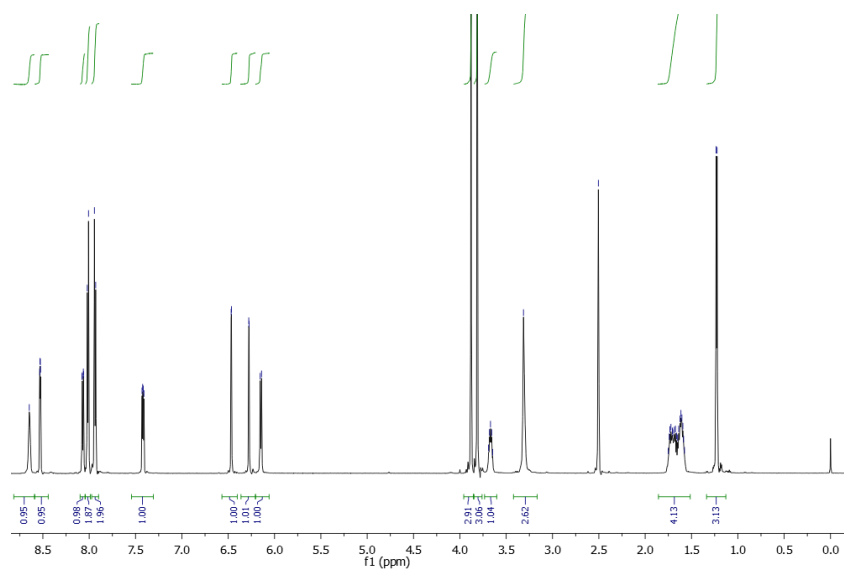


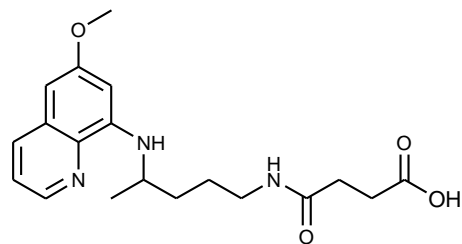




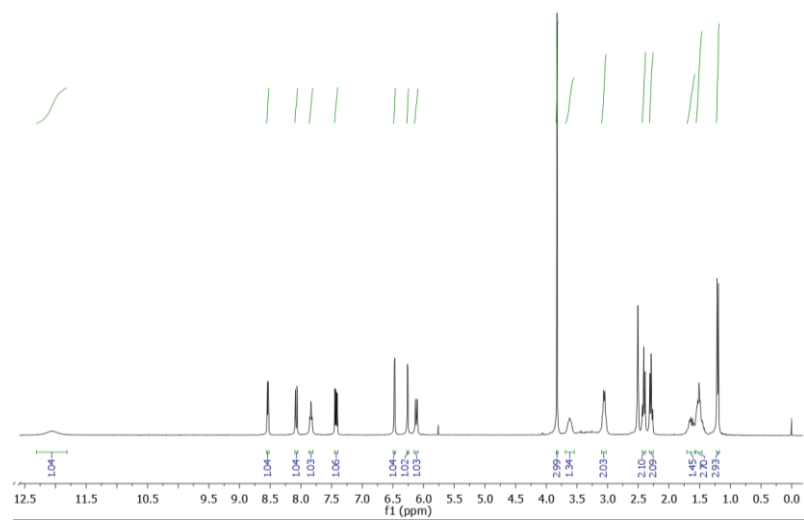
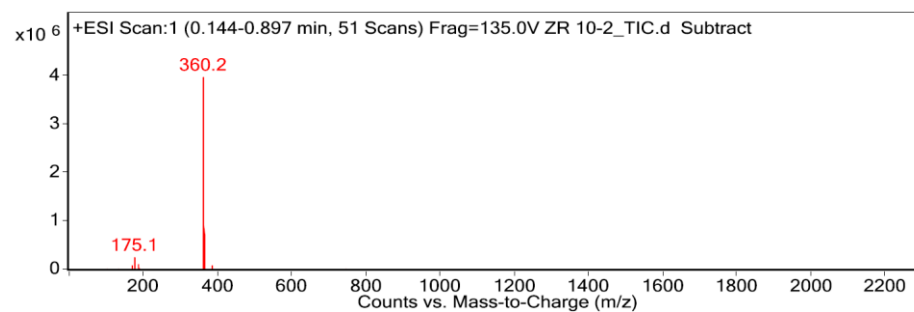
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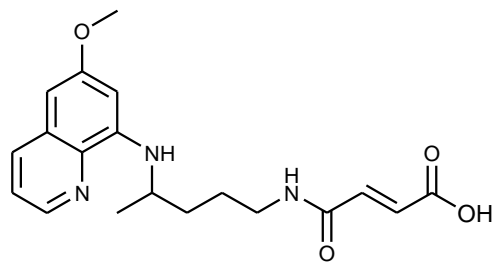
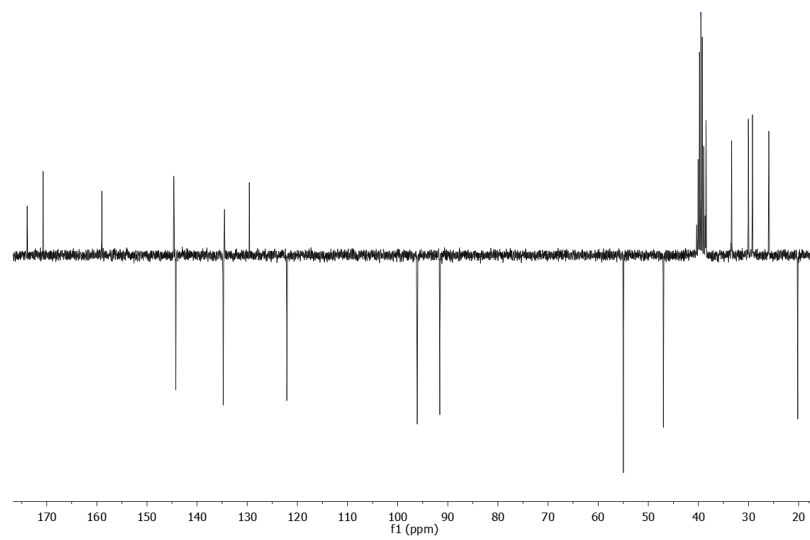






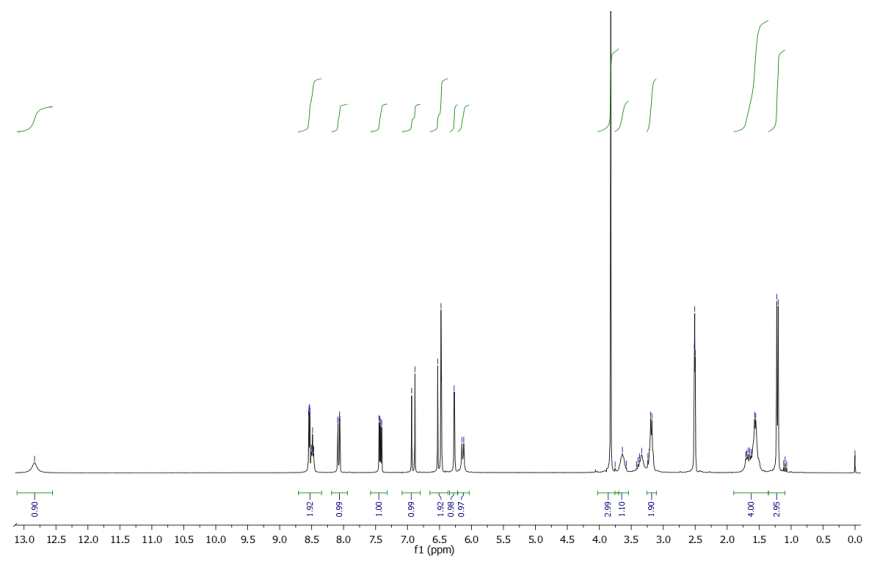
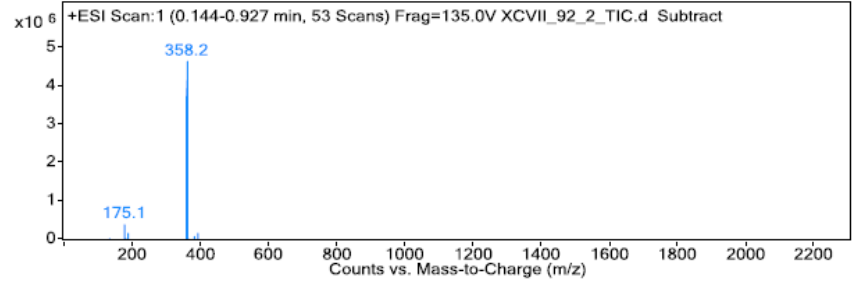
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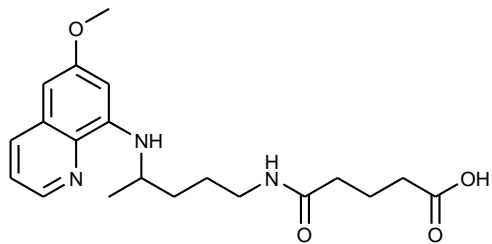
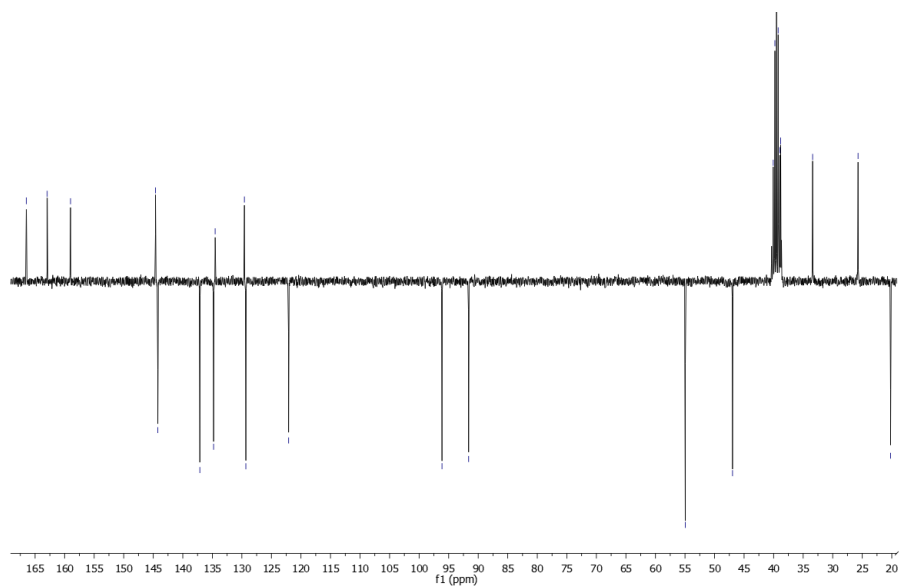




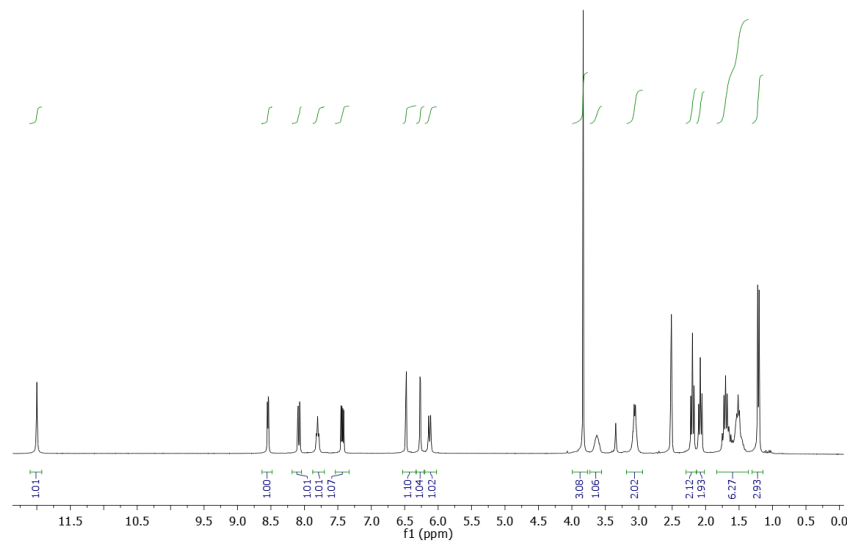
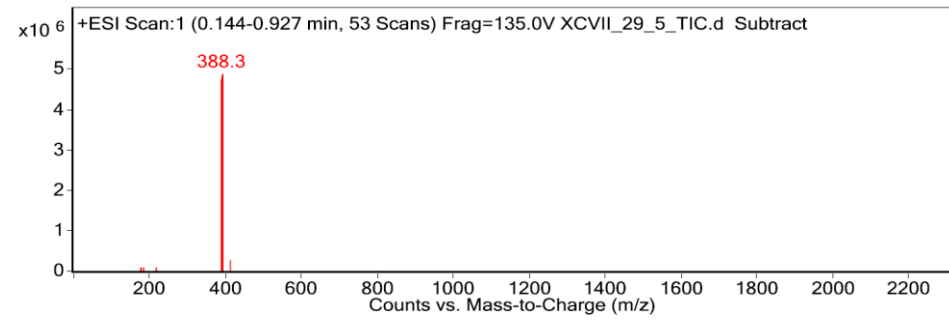
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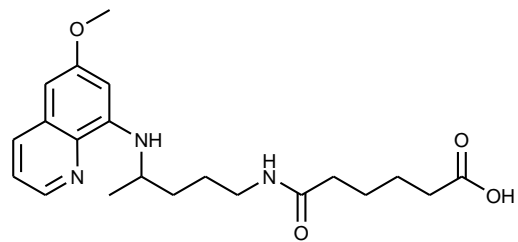
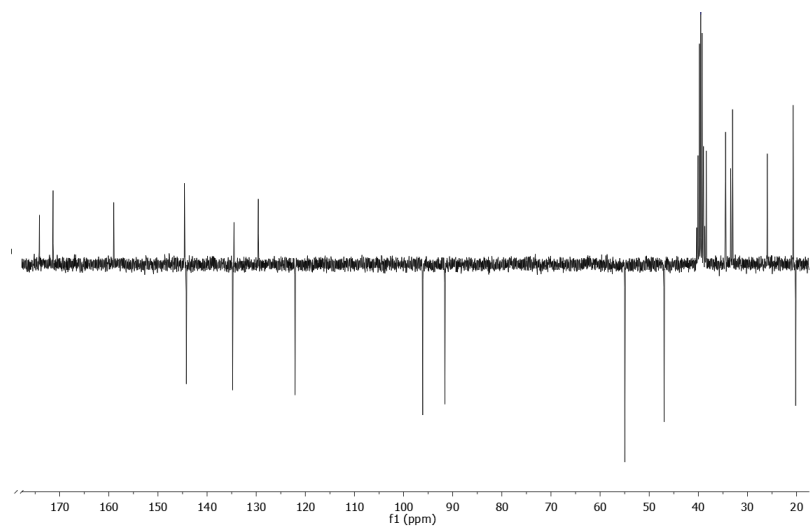




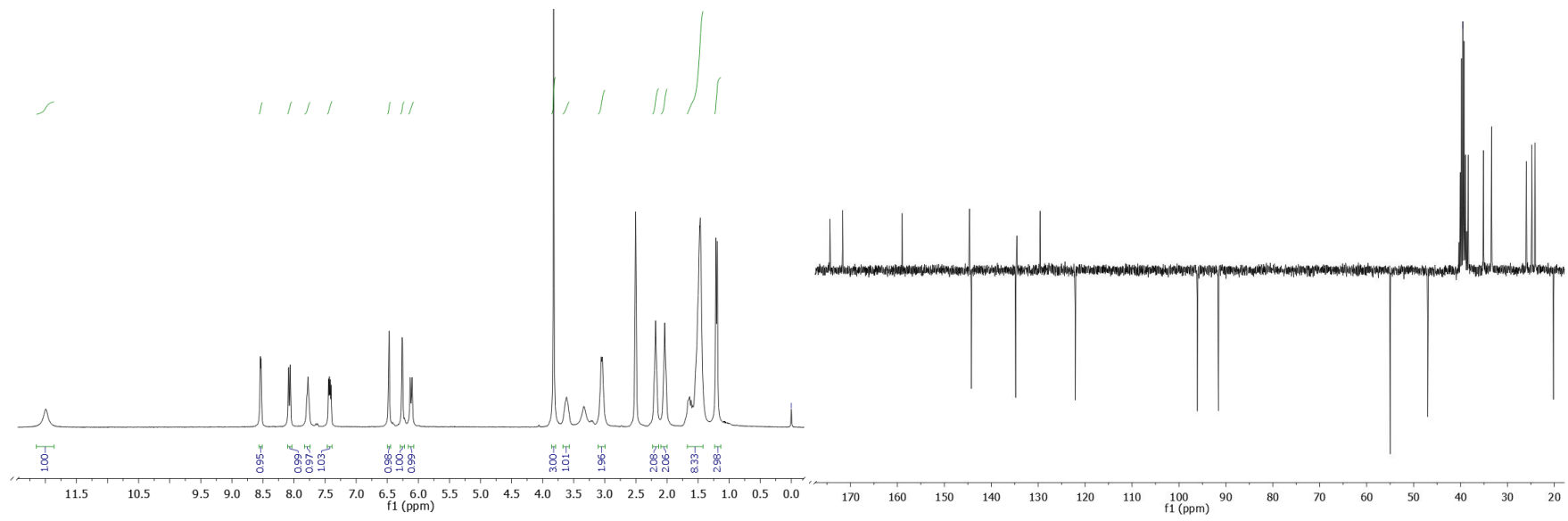
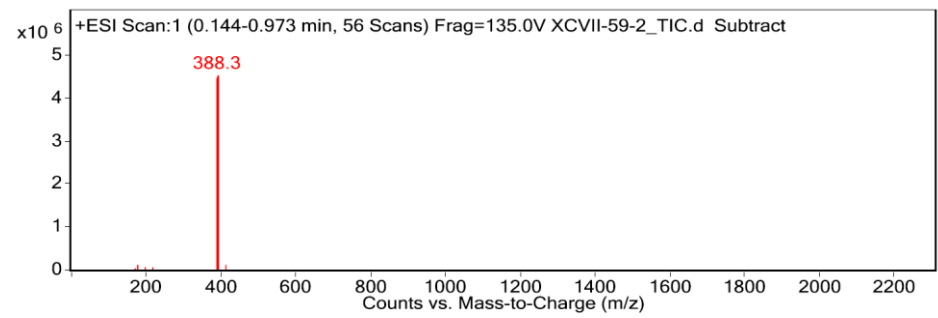


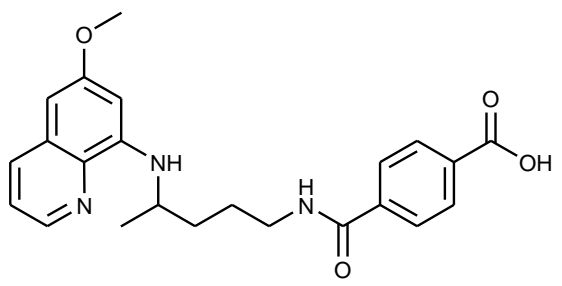
**3c**



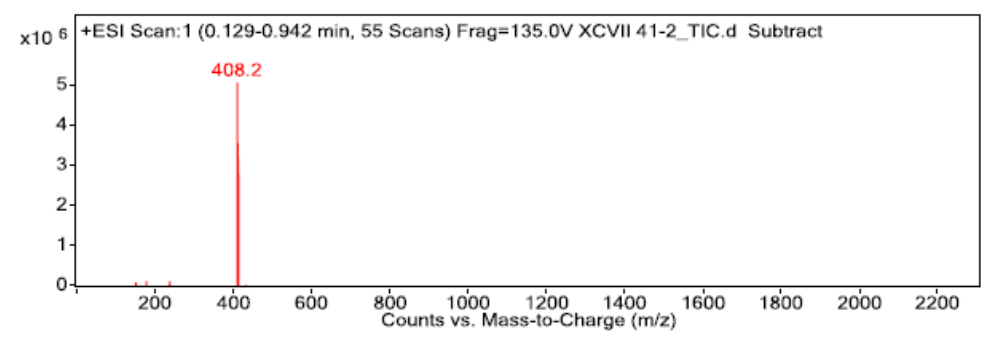


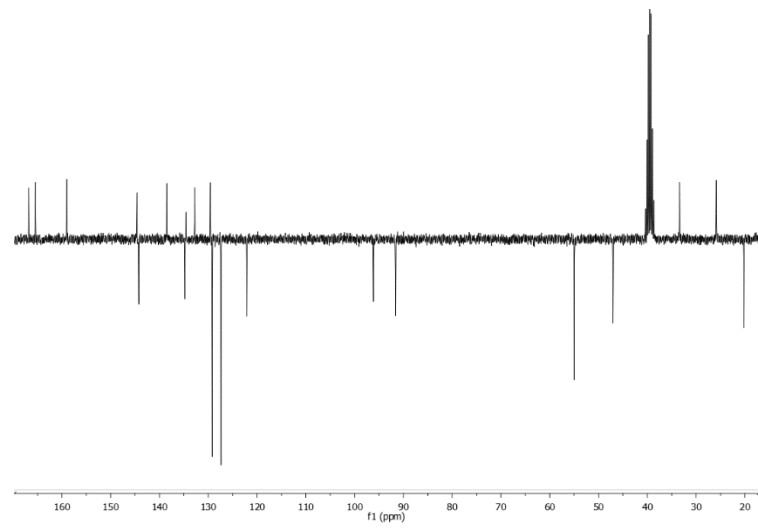
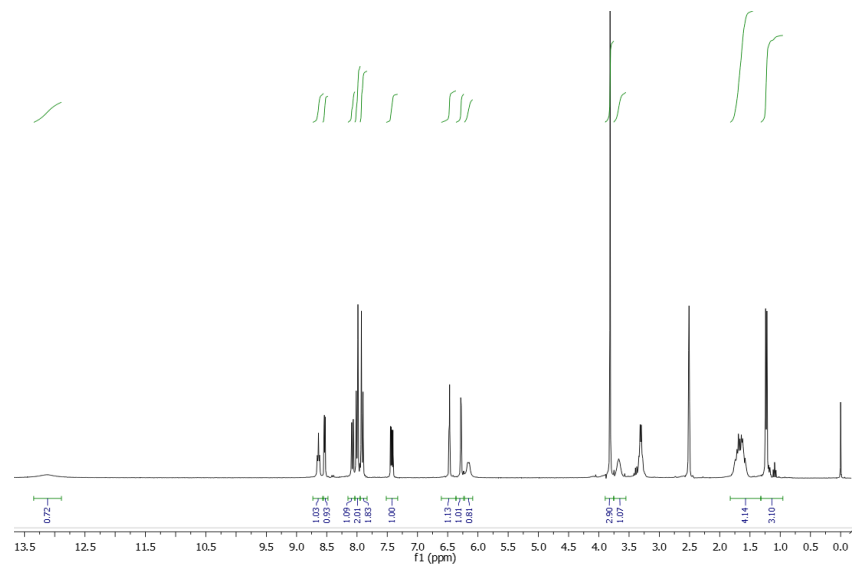
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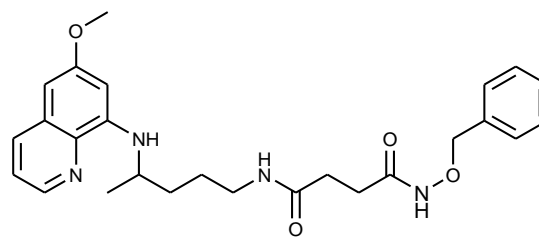




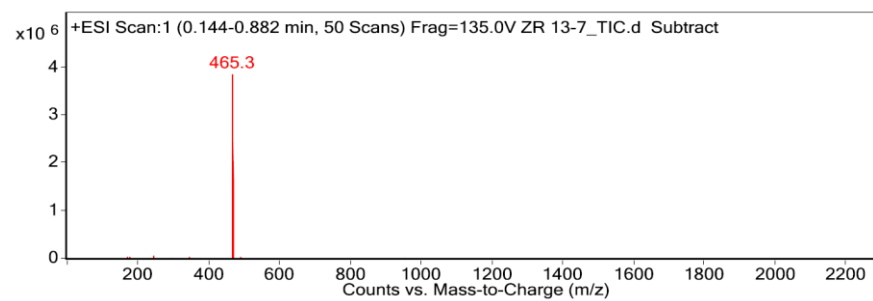
**3e**



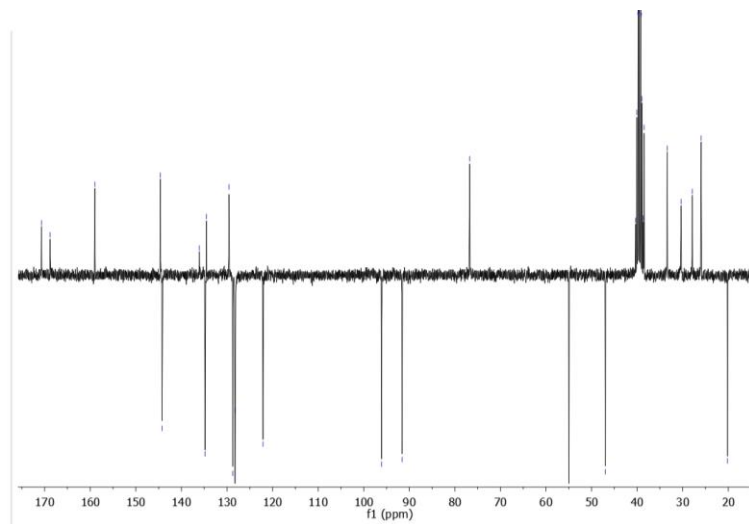
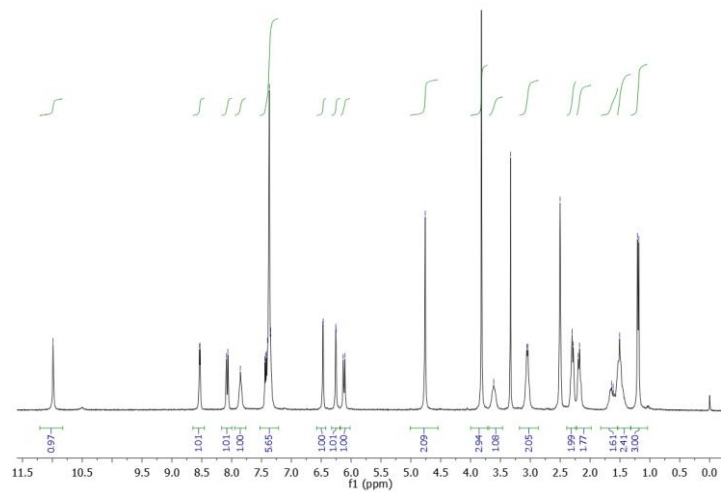


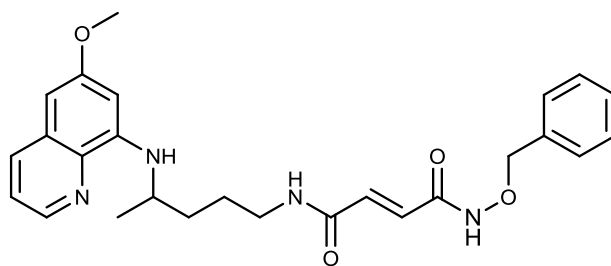


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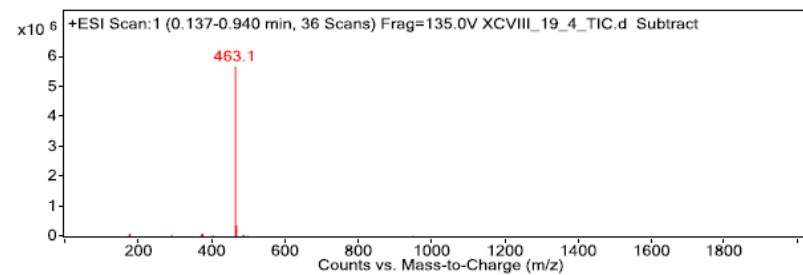


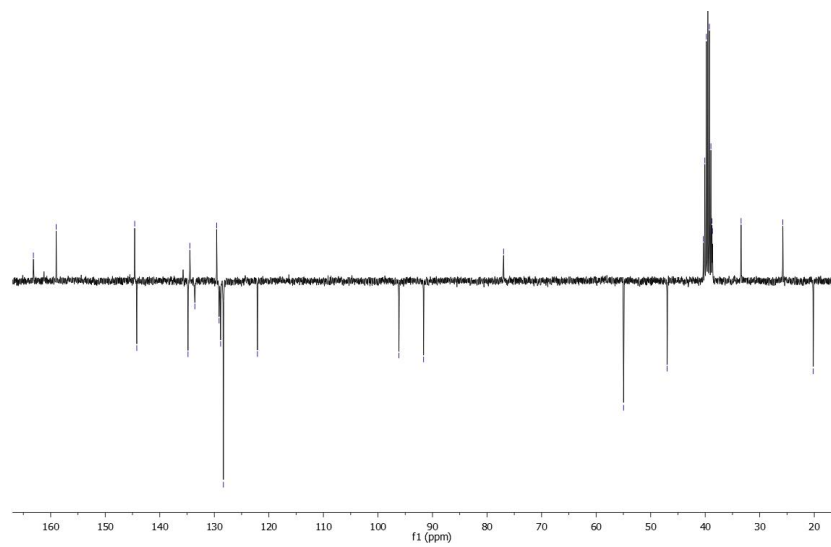
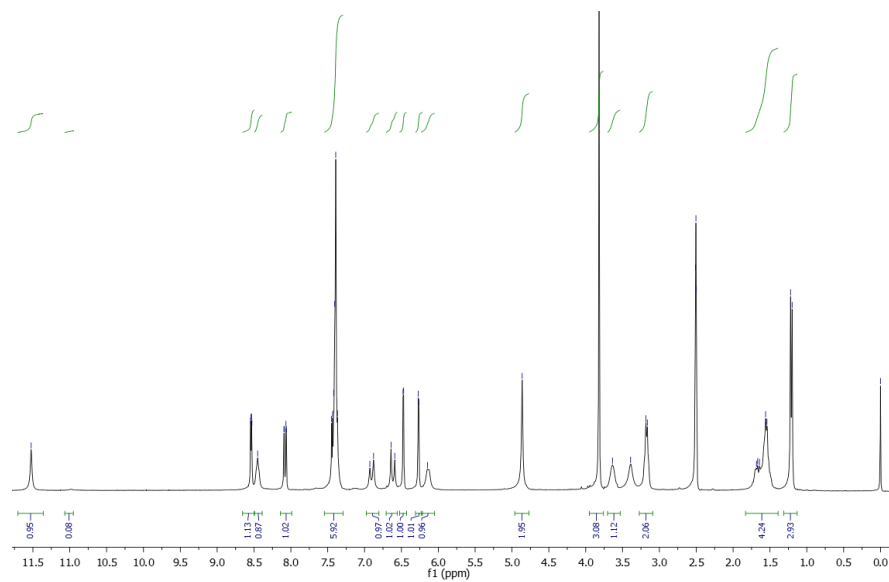


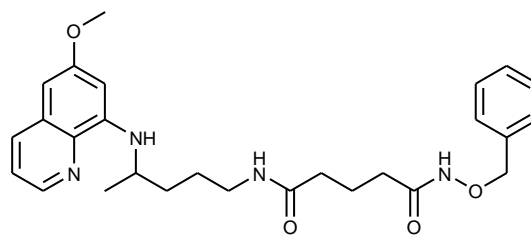




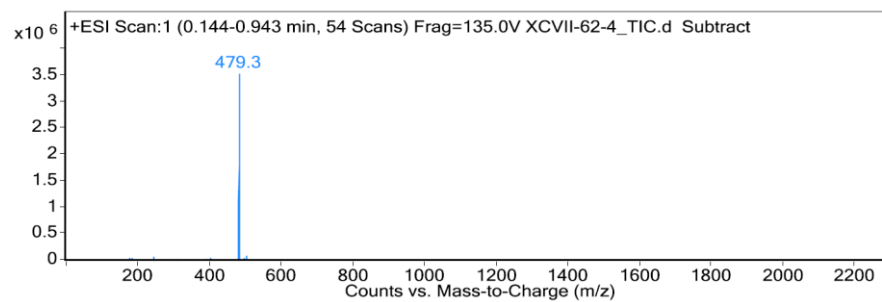
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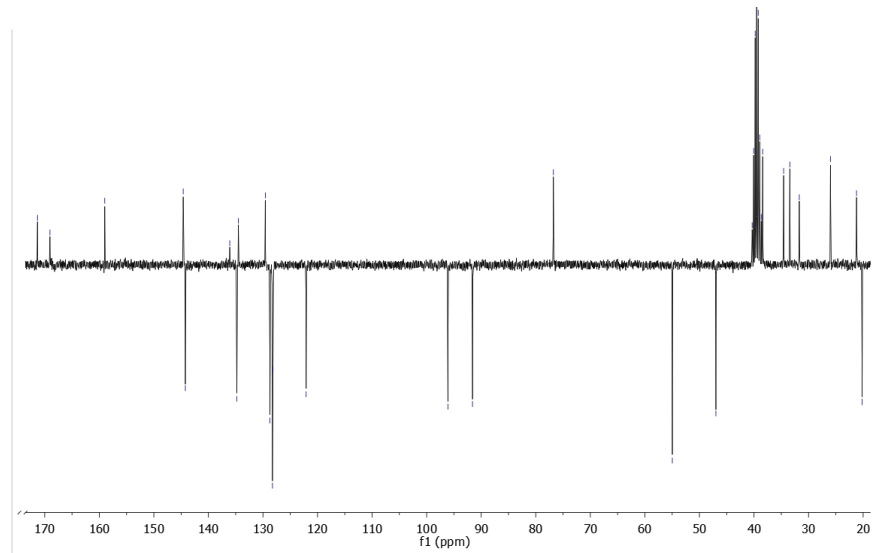
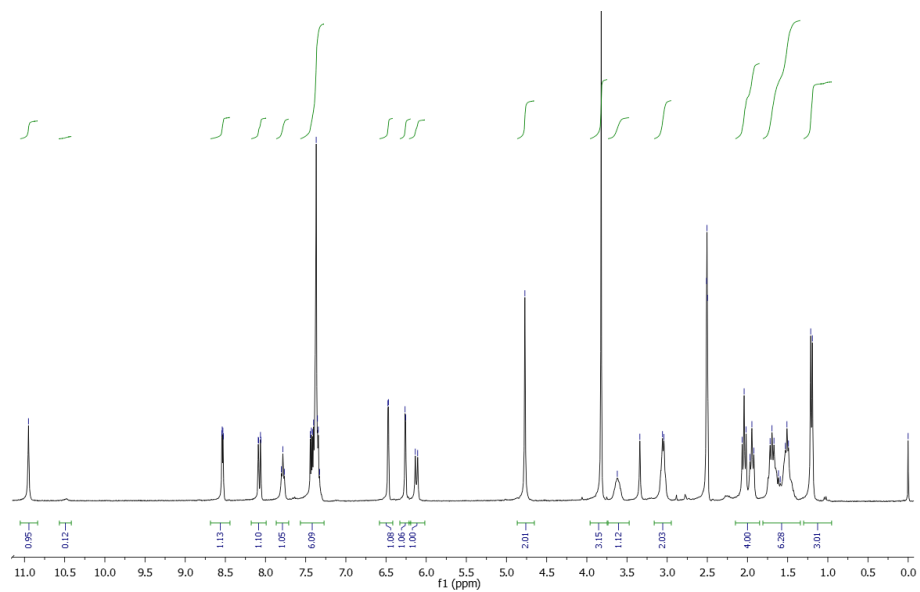


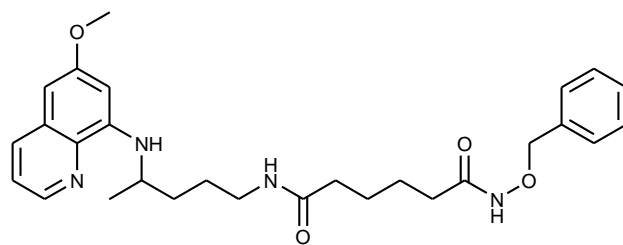




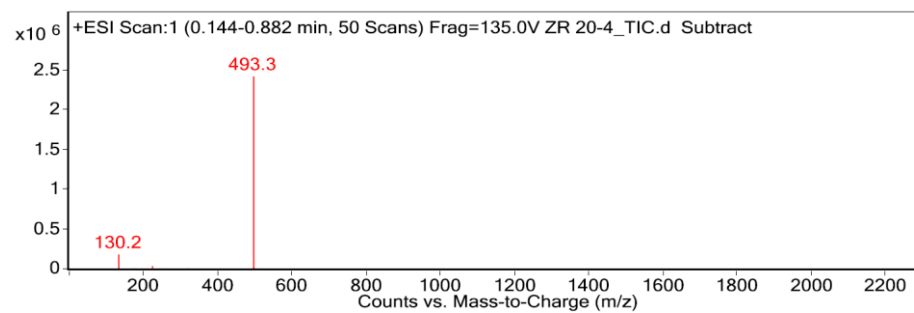
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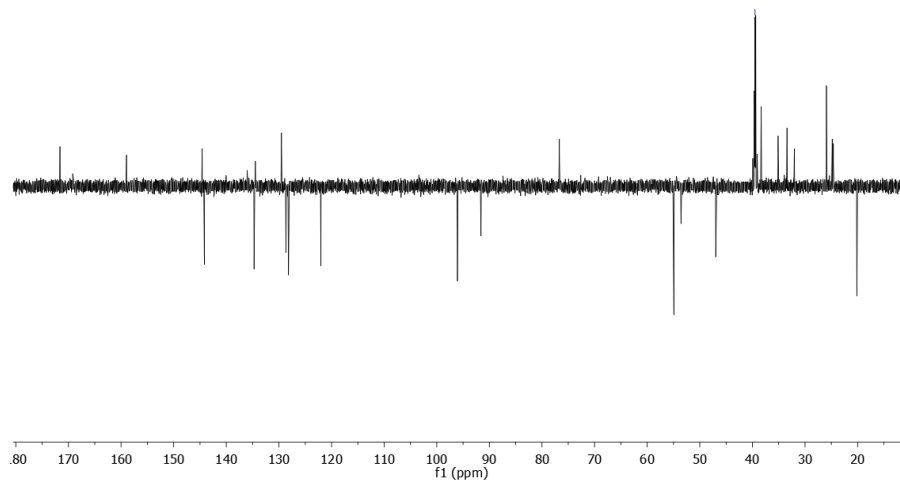
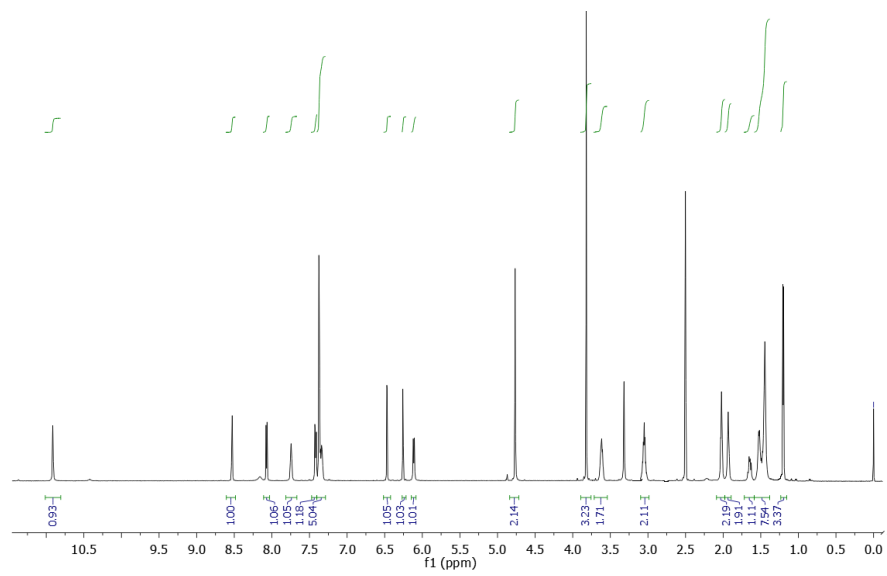


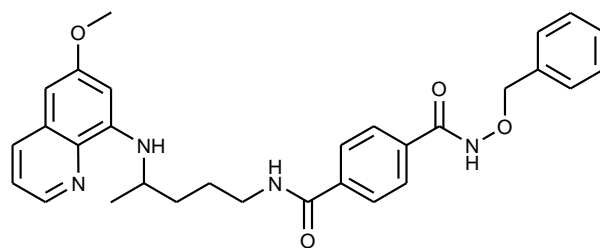




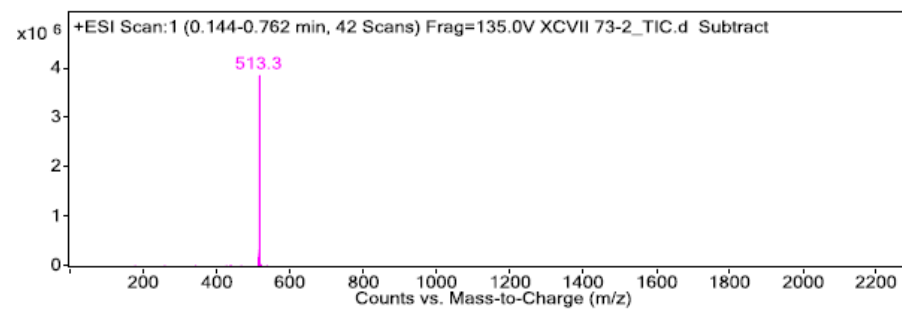
**4d**



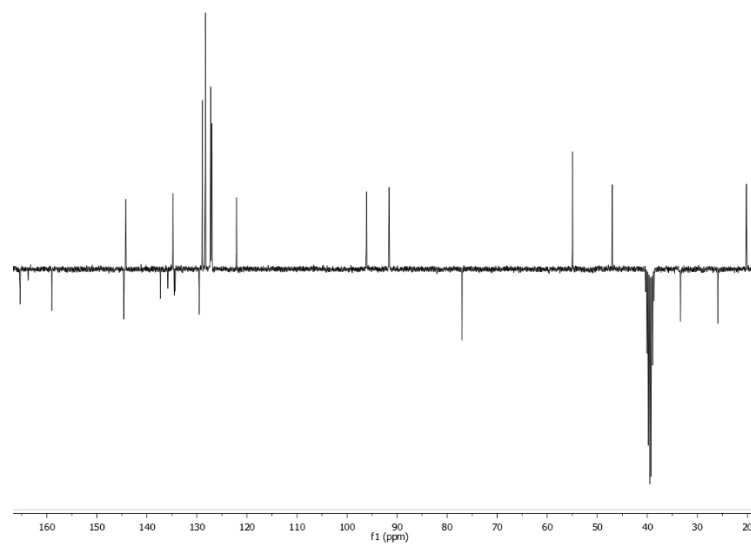
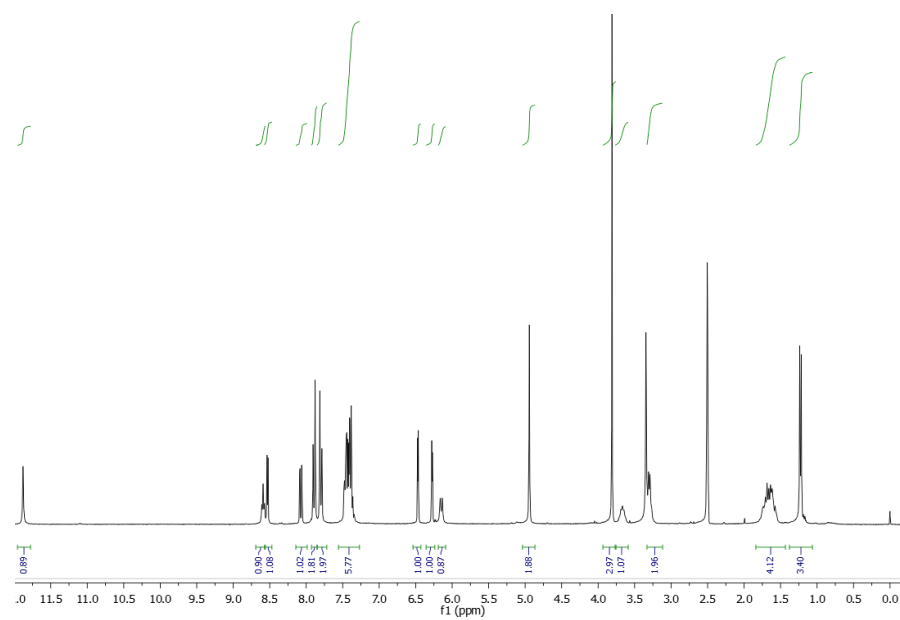


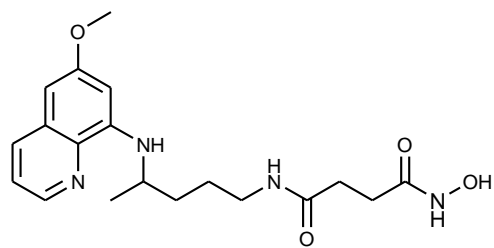


**4e**

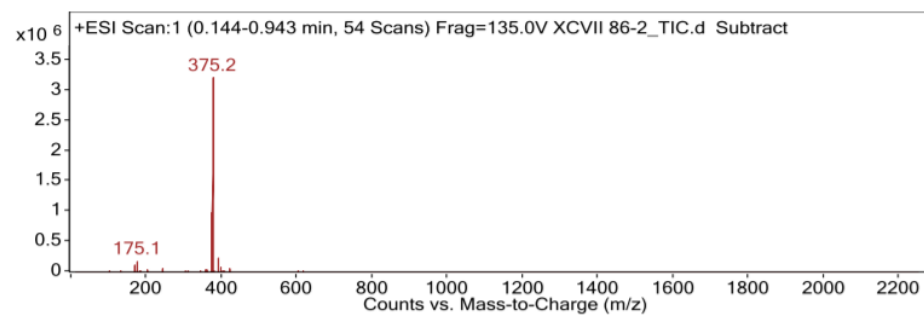


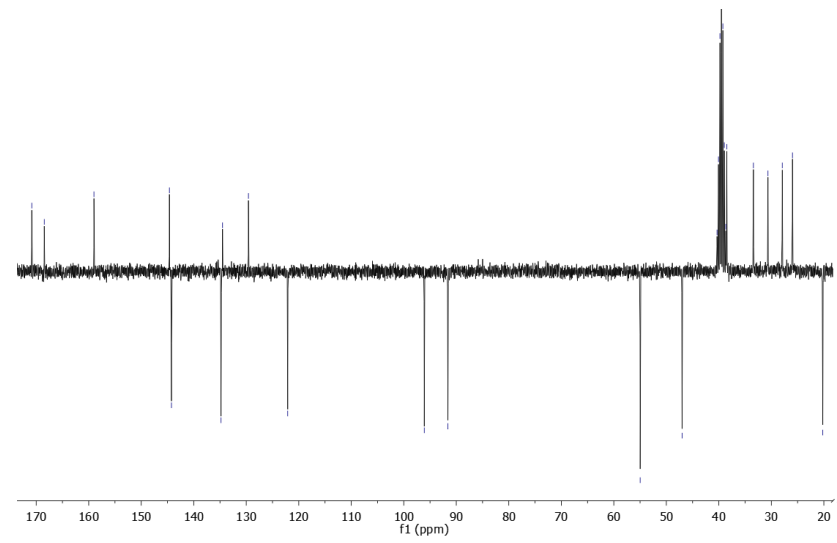
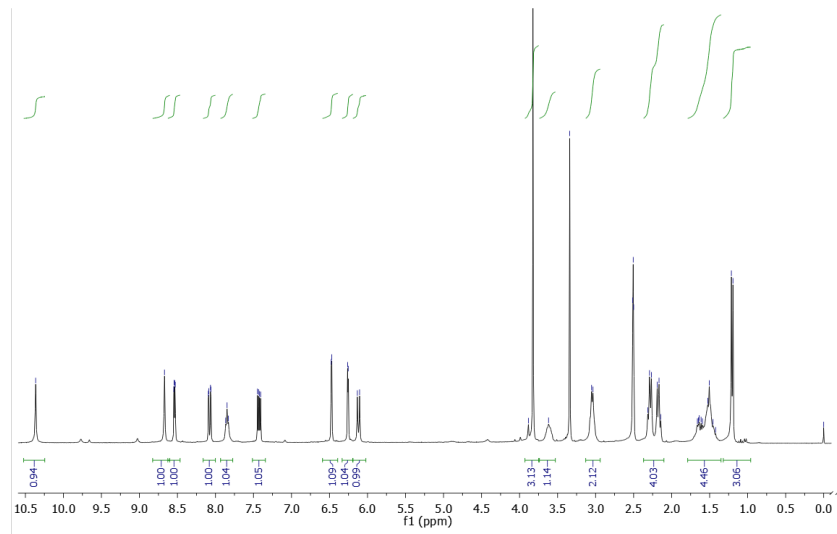


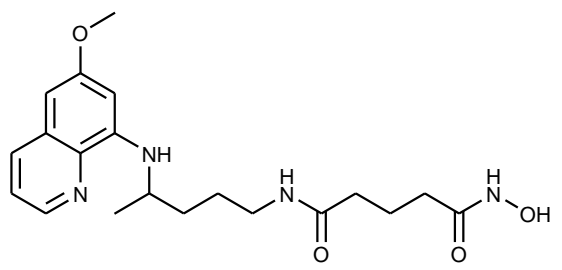




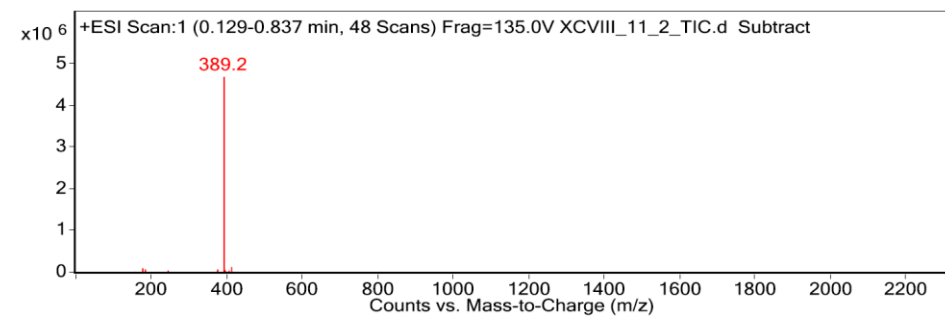
**5a**

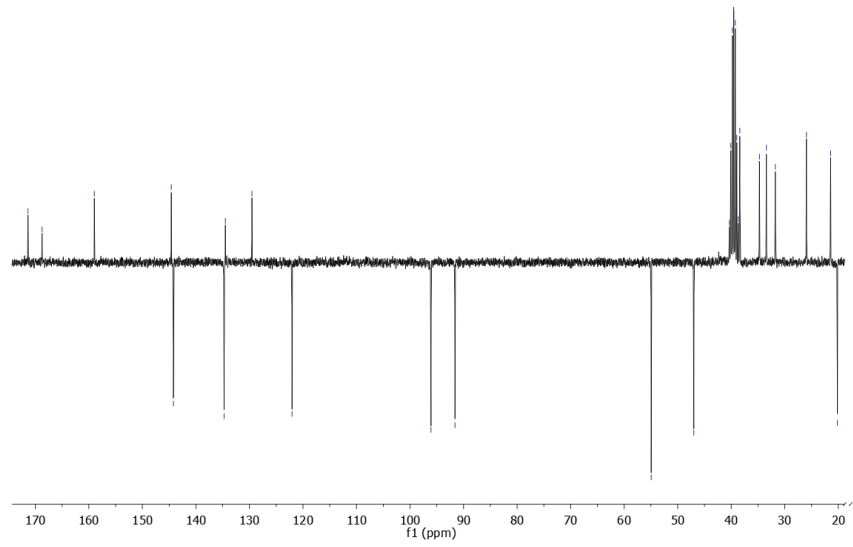
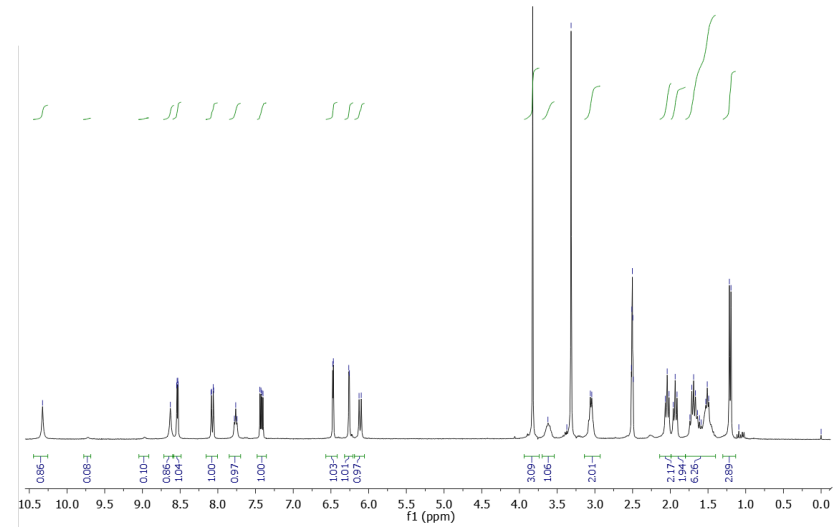


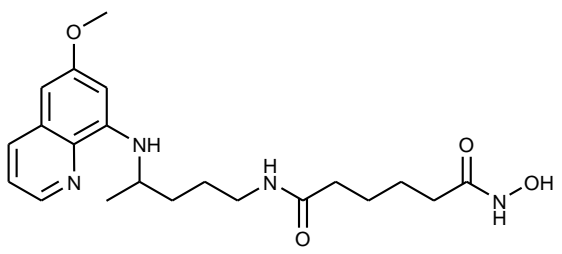




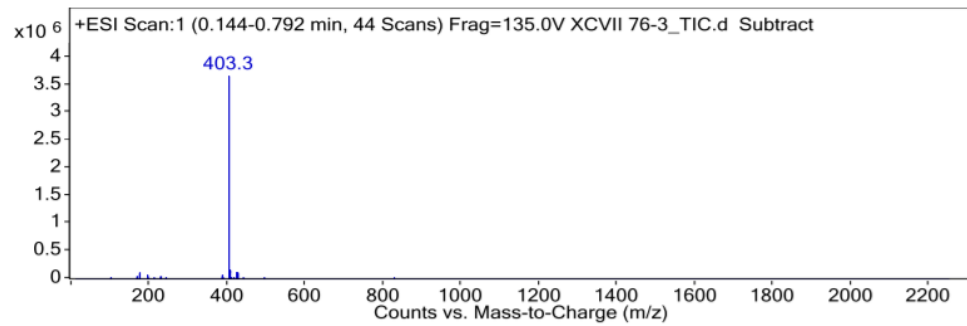
**5b**

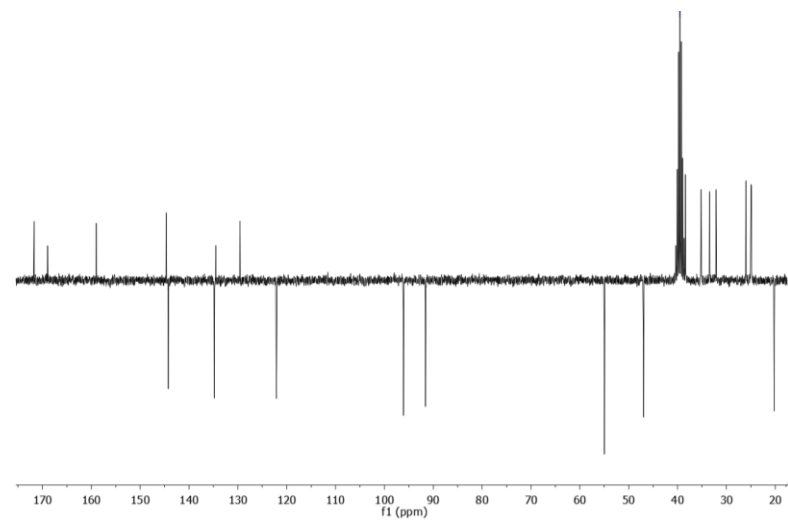
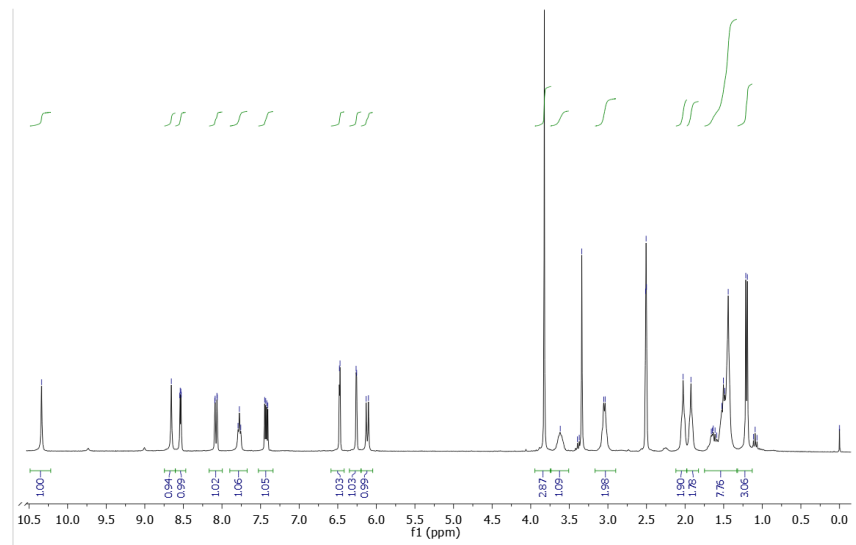


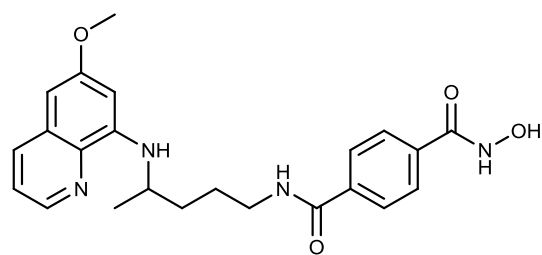




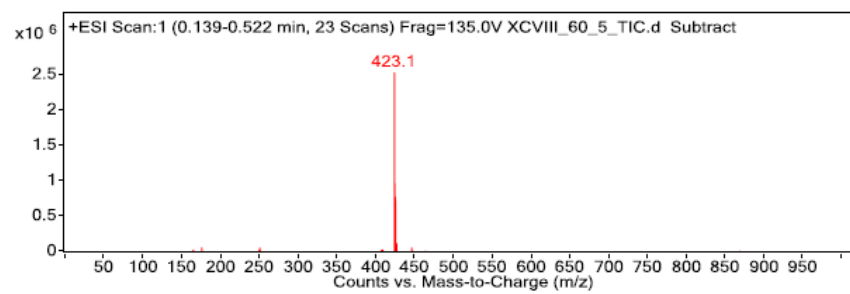
**5c**



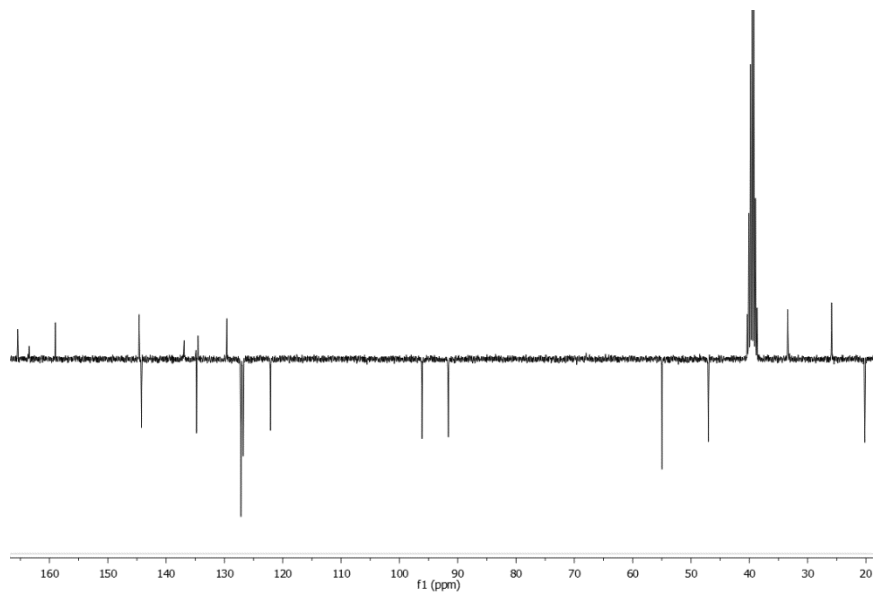
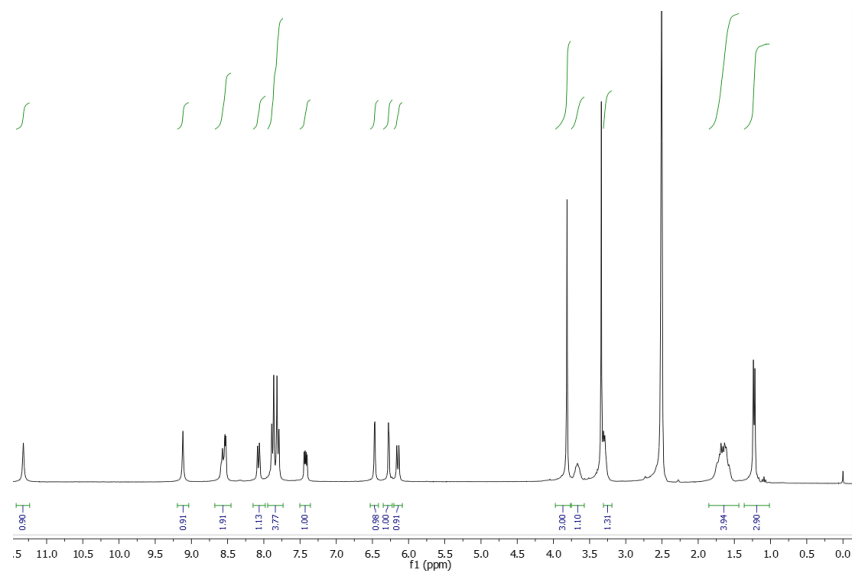


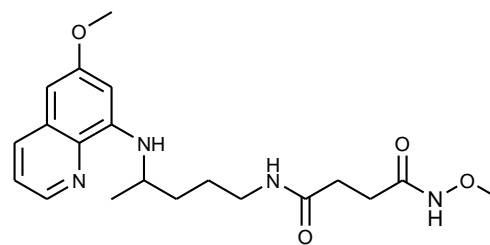


**5d**

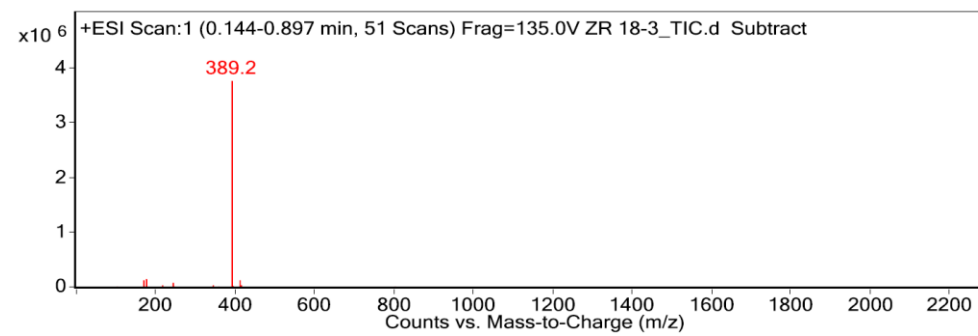


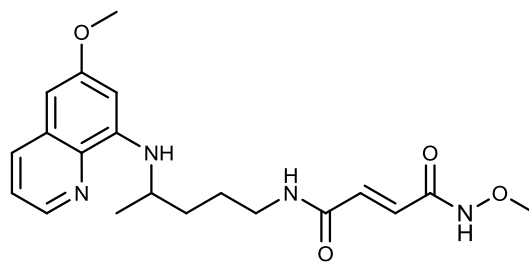
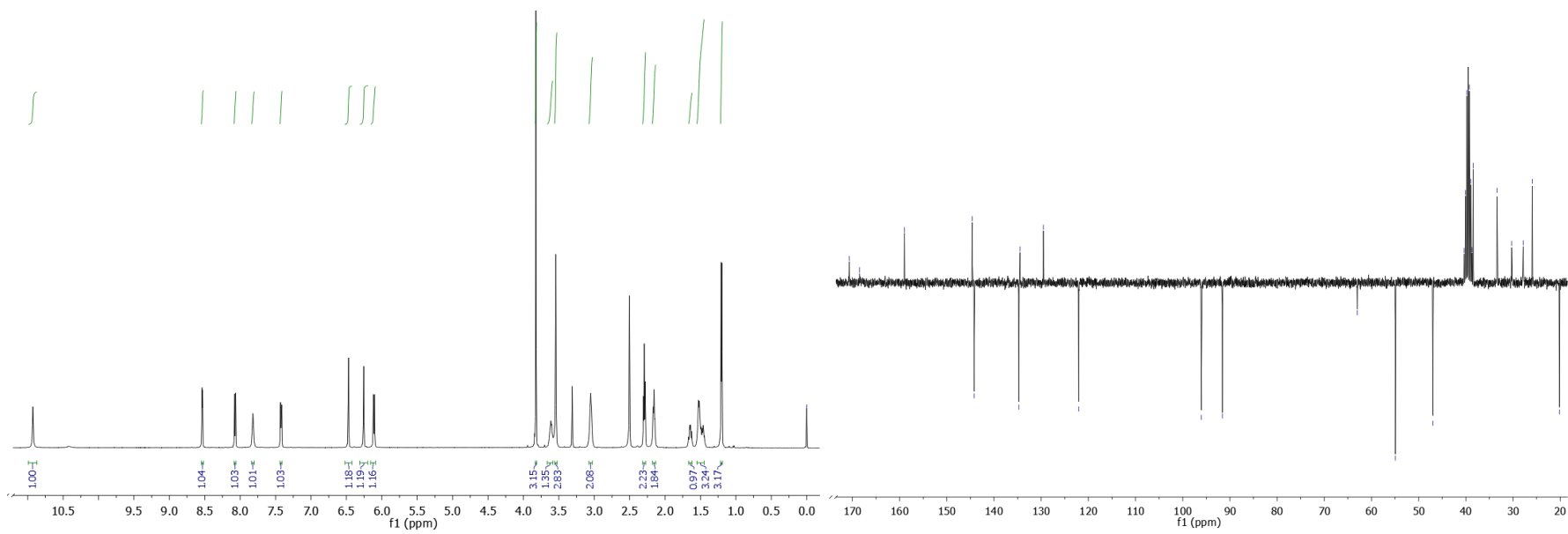




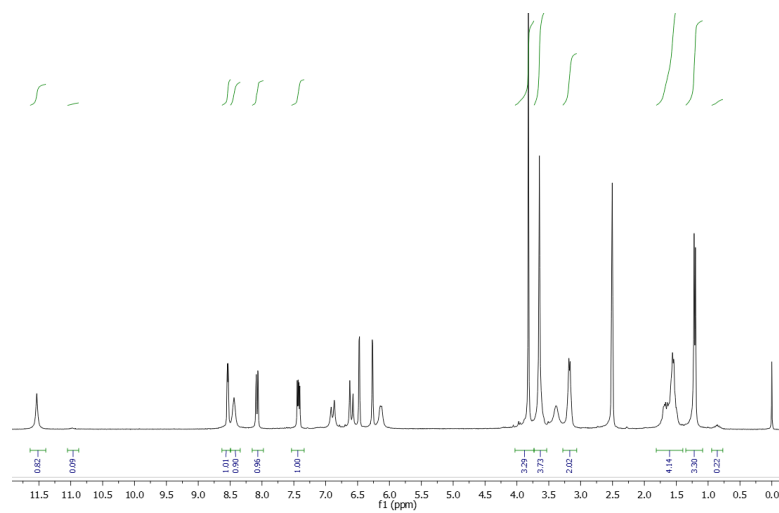
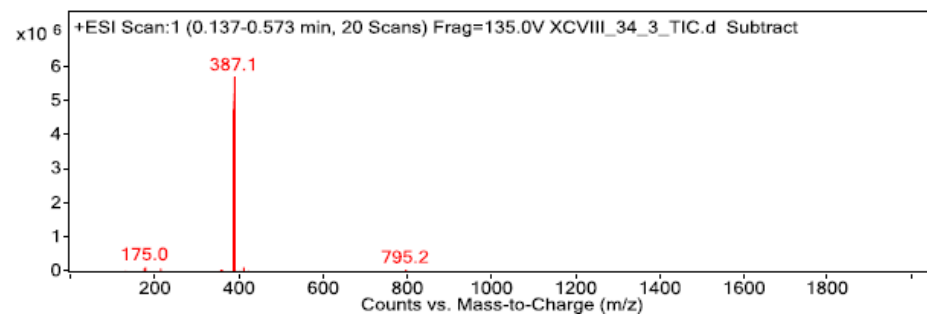


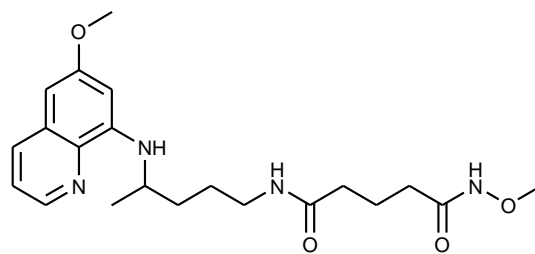
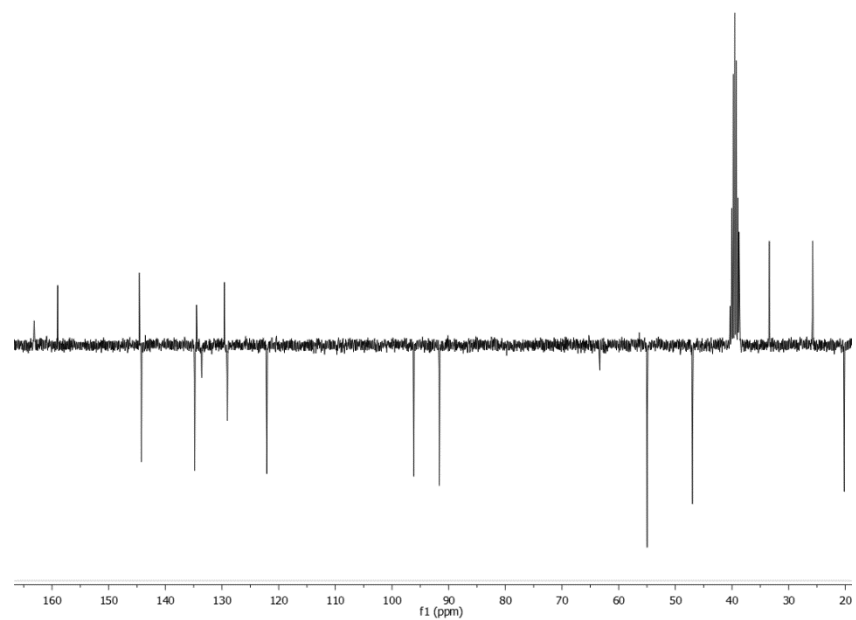
**6a**



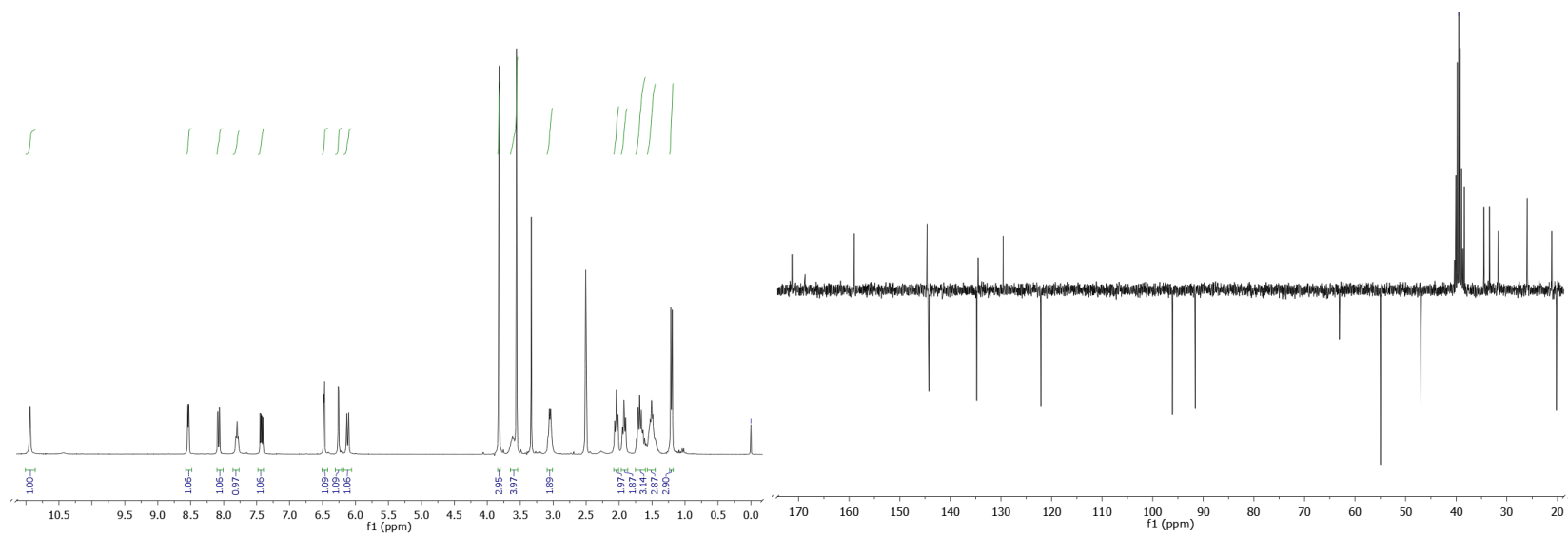
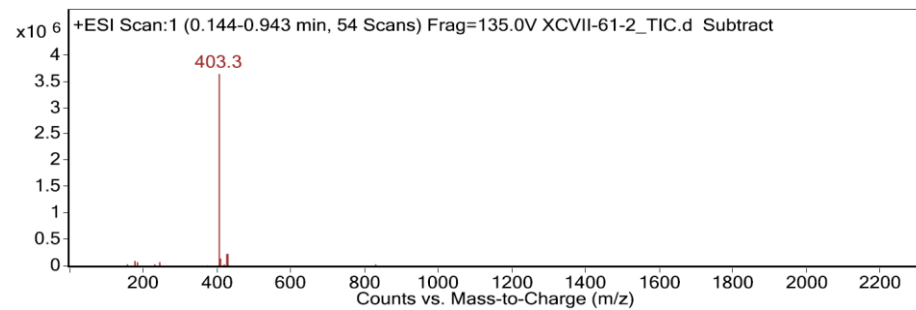


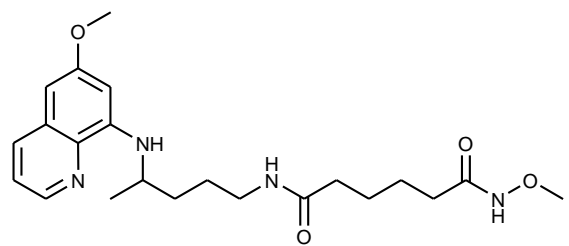
**6b**



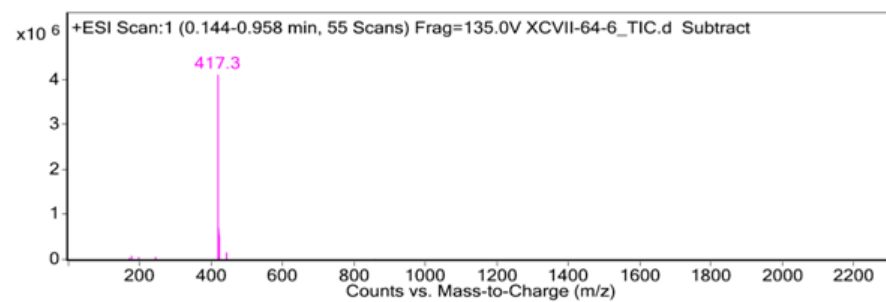


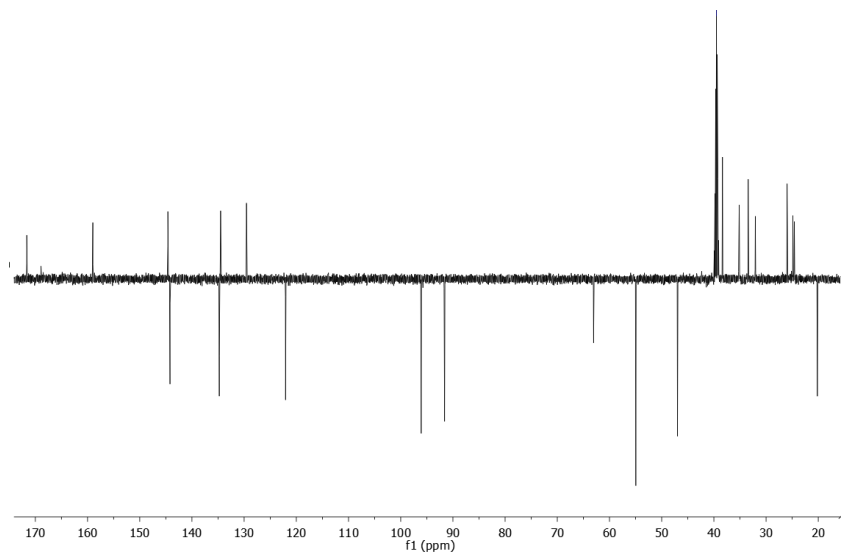
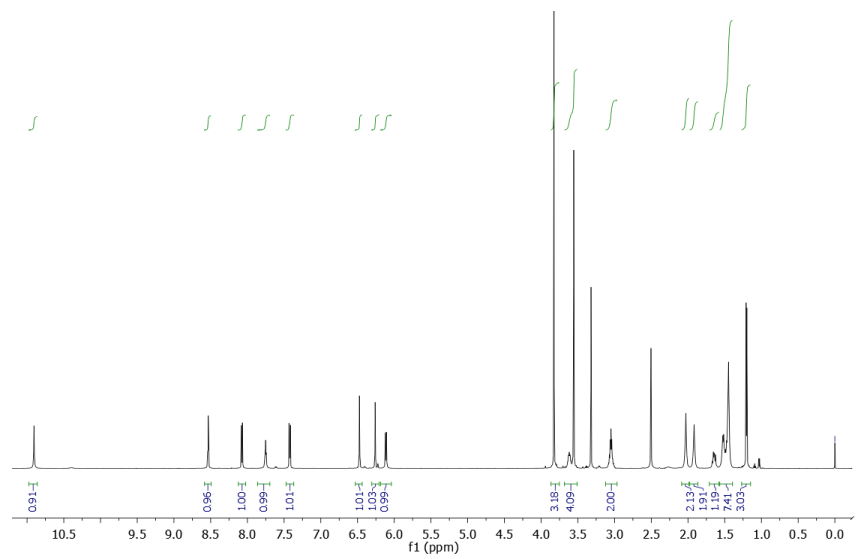
**6c**



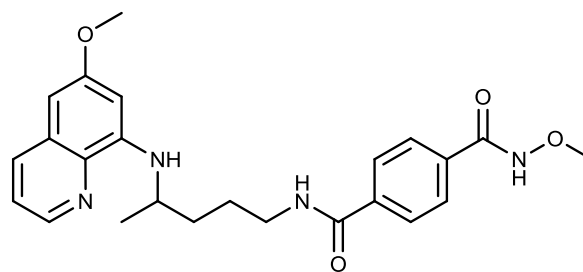


**6d**









6e

