

Supporting Information

Design, Synthesis and Pharmacological Evaluations of Pyrrolo[1,2-*a*]quinoxaline-based Derivatives as Potent and Selective Sirt6 Activators

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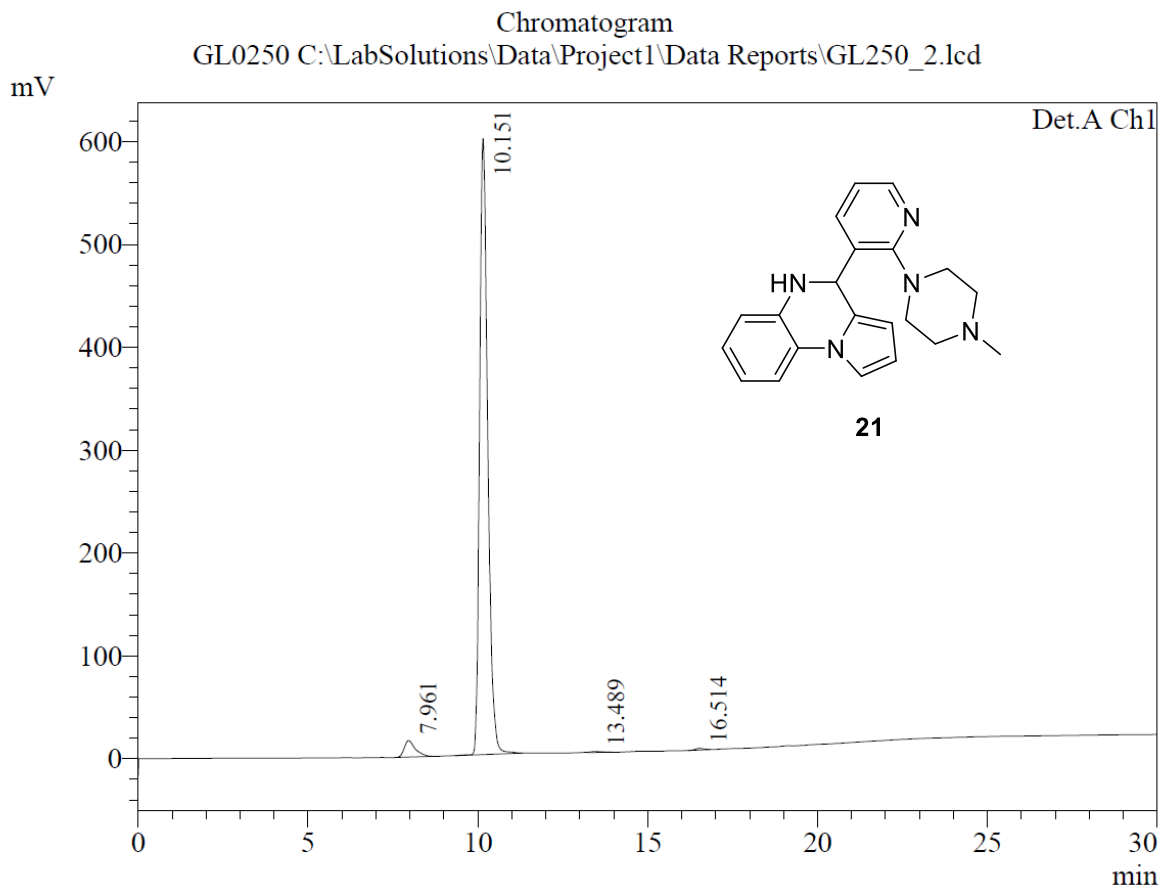
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¹These authors contribute equally to this work.

Table of Contents

| | |
|--|---------|
| Copies of representative HPLC | S2-S16 |
| Copies of NMR spectra for all final compounds..... | S17-S66 |

Copies of representative HPLC

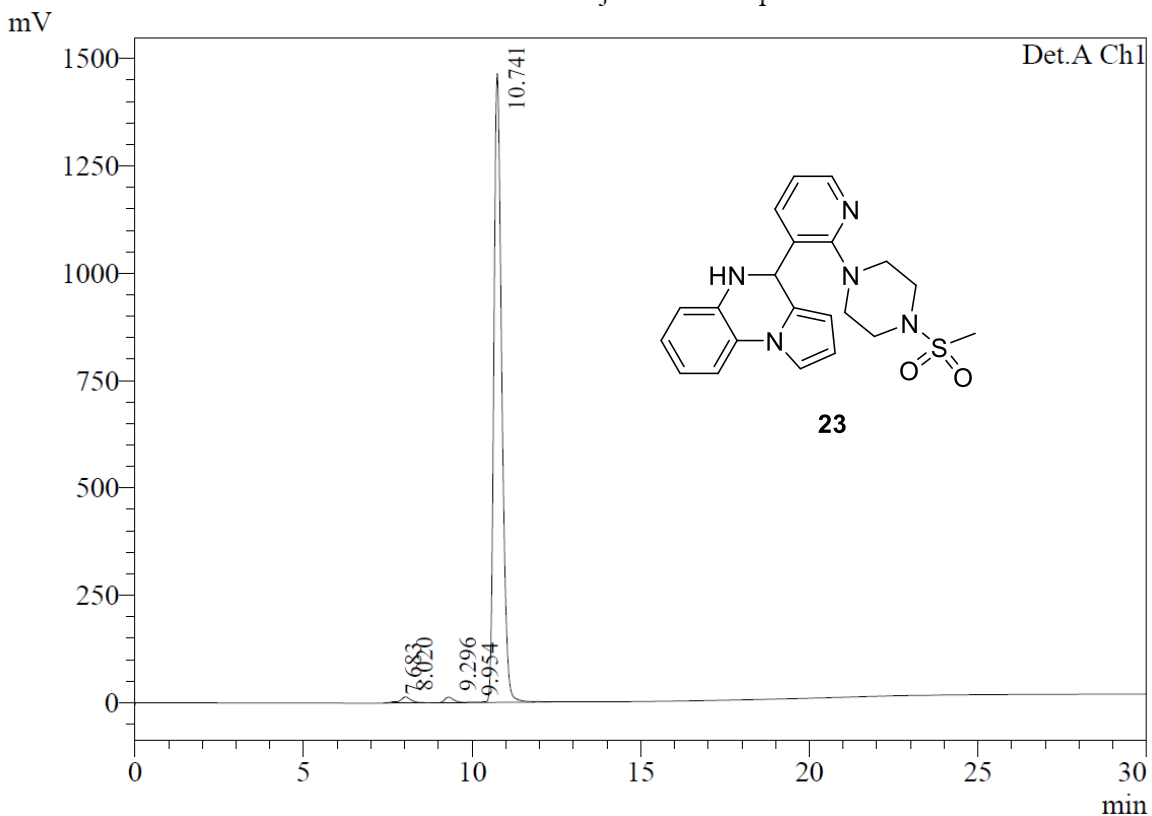


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 7.961 | 364671 | 3.519 | 2.593 |
| 2 | 10.151 | 9946742 | 95.994 | 96.994 |
| 3 | 13.489 | 23915 | 0.231 | 0.153 |
| 4 | 16.514 | 26550 | 0.256 | 0.260 |
| Total | | 10361878 | 100.000 | 100.000 |

Chromatogram
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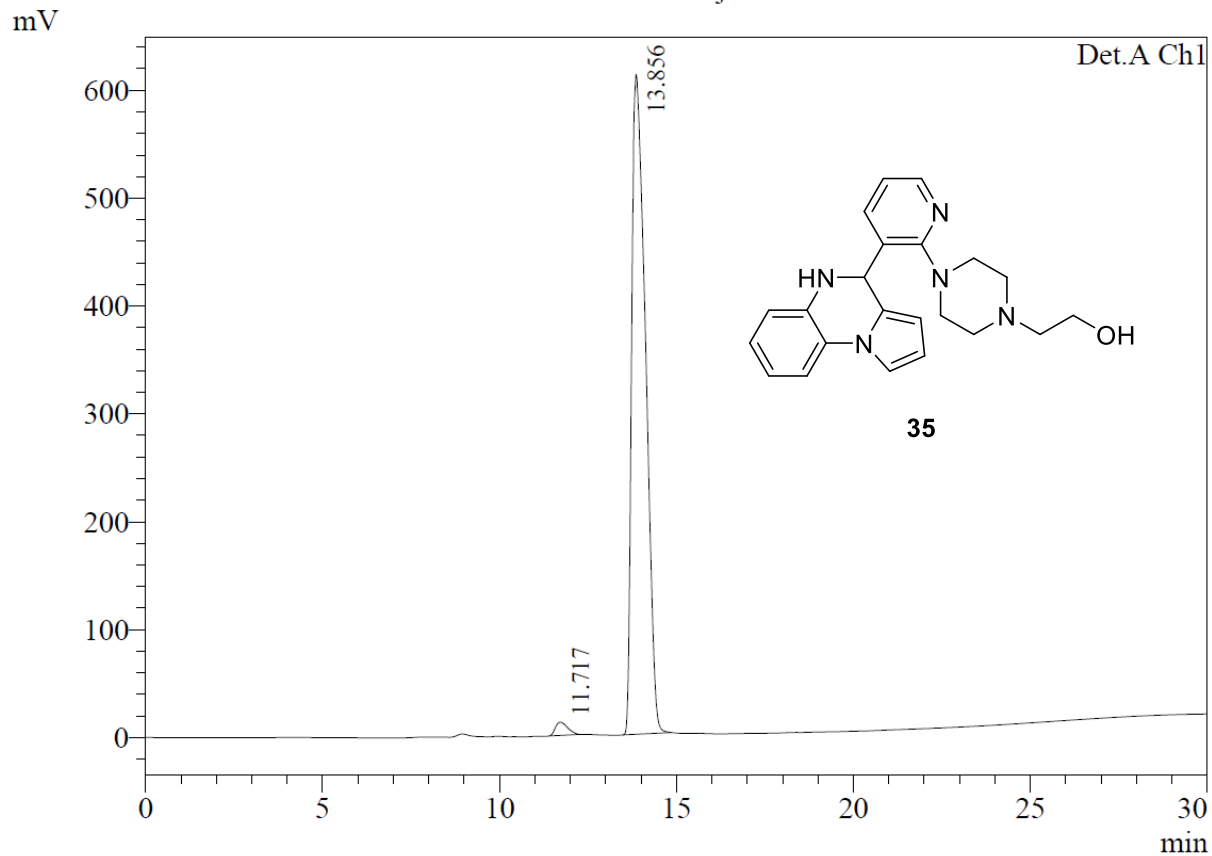


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 7.683 | 34328 | 0.140 | 0.183 |
| 2 | 8.020 | 274940 | 1.120 | 0.929 |
| 3 | 9.296 | 244484 | 0.996 | 0.879 |
| 4 | 9.954 | 16582 | 0.068 | 0.064 |
| 5 | 10.741 | 23986098 | 97.677 | 97.946 |
| Total | | 24556432 | 100.000 | 100.000 |

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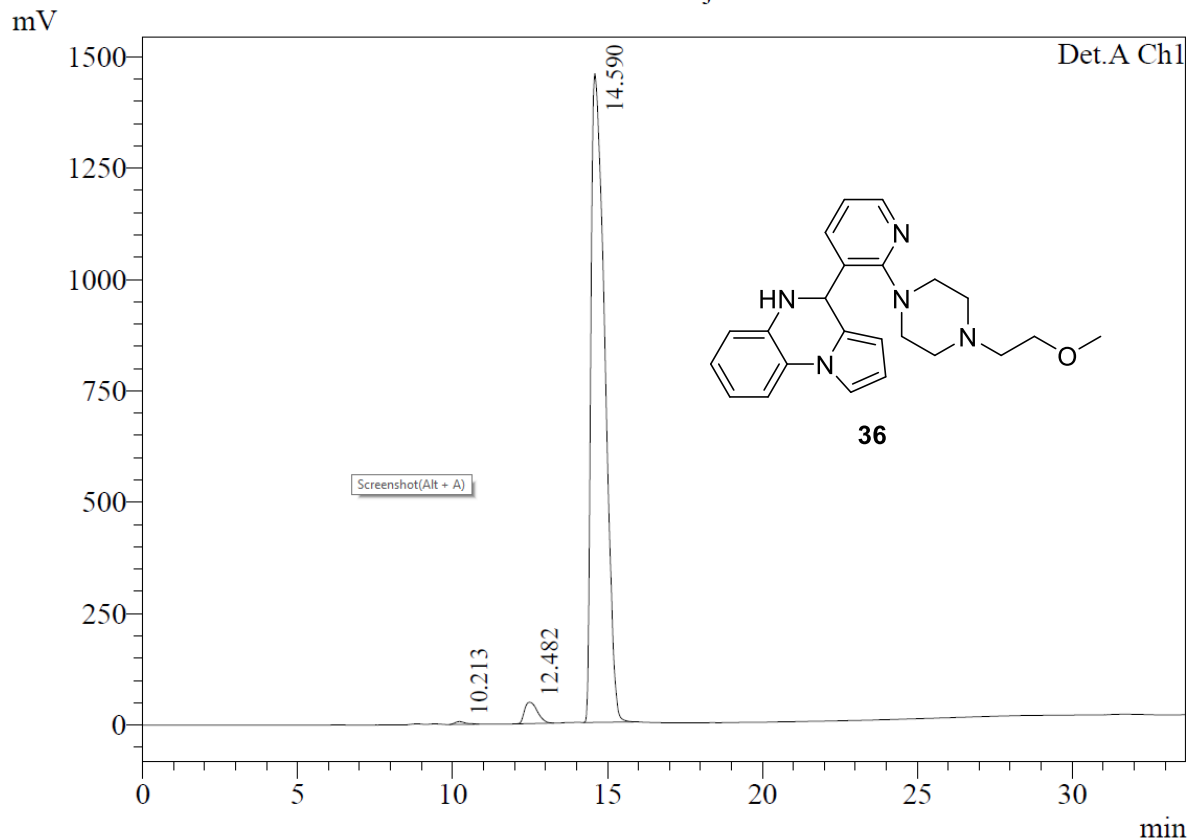


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 11.717 | 295977 | 1.743 | 1.962 |
| 2 | 13.856 | 16682491 | 98.257 | 98.038 |
| Total | | 16978468 | 100.000 | 100.000 |

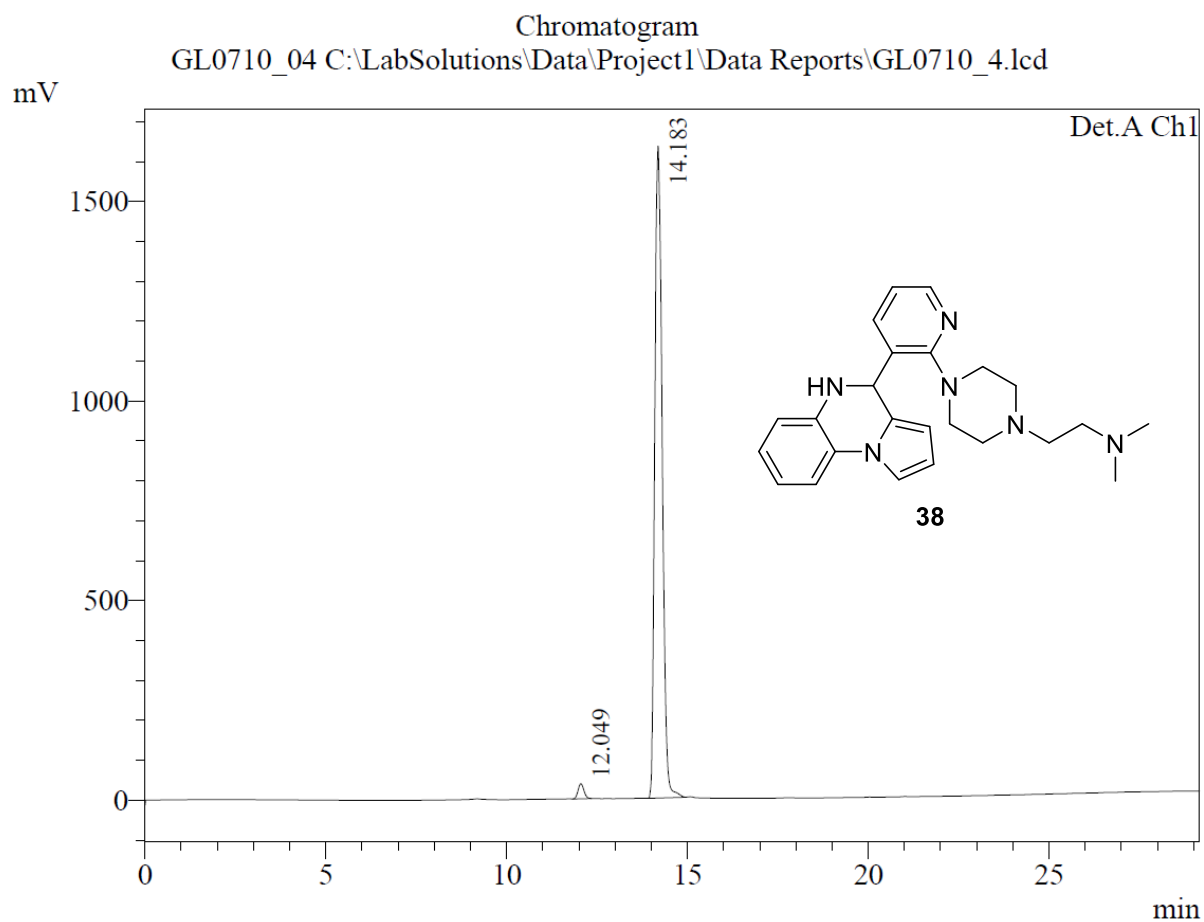
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PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 10.213 | 144902 | 0.312 | 0.410 |
| 2 | 12.482 | 1388254 | 2.988 | 3.171 |
| 3 | 14.590 | 44928503 | 96.700 | 96.419 |
| Total | | 46461659 | 100.000 | 100.000 |

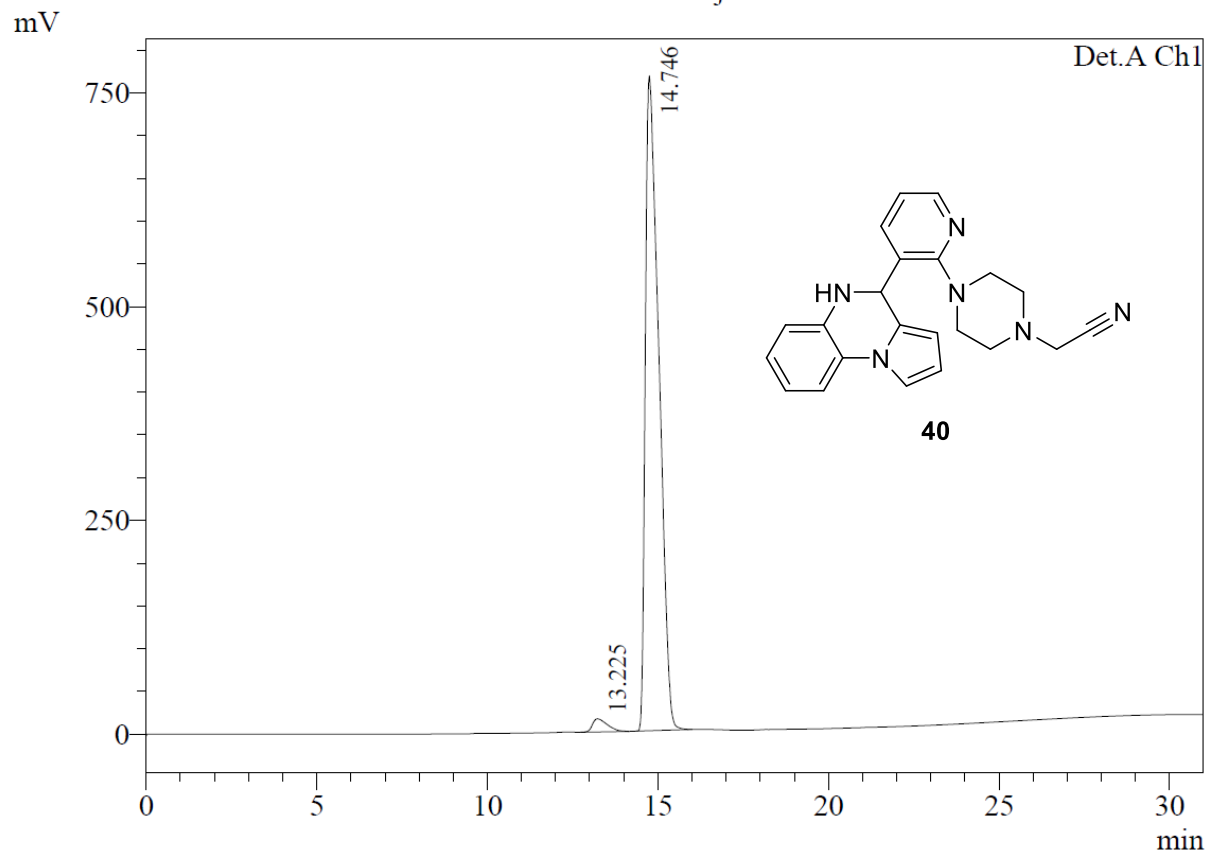


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 12.049 | 426221 | 1.789 | 2.262 |
| 2 | 14.183 | 23391900 | 98.211 | 97.738 |
| Total | | 23818121 | 100.000 | 100.000 |

Chromatogram
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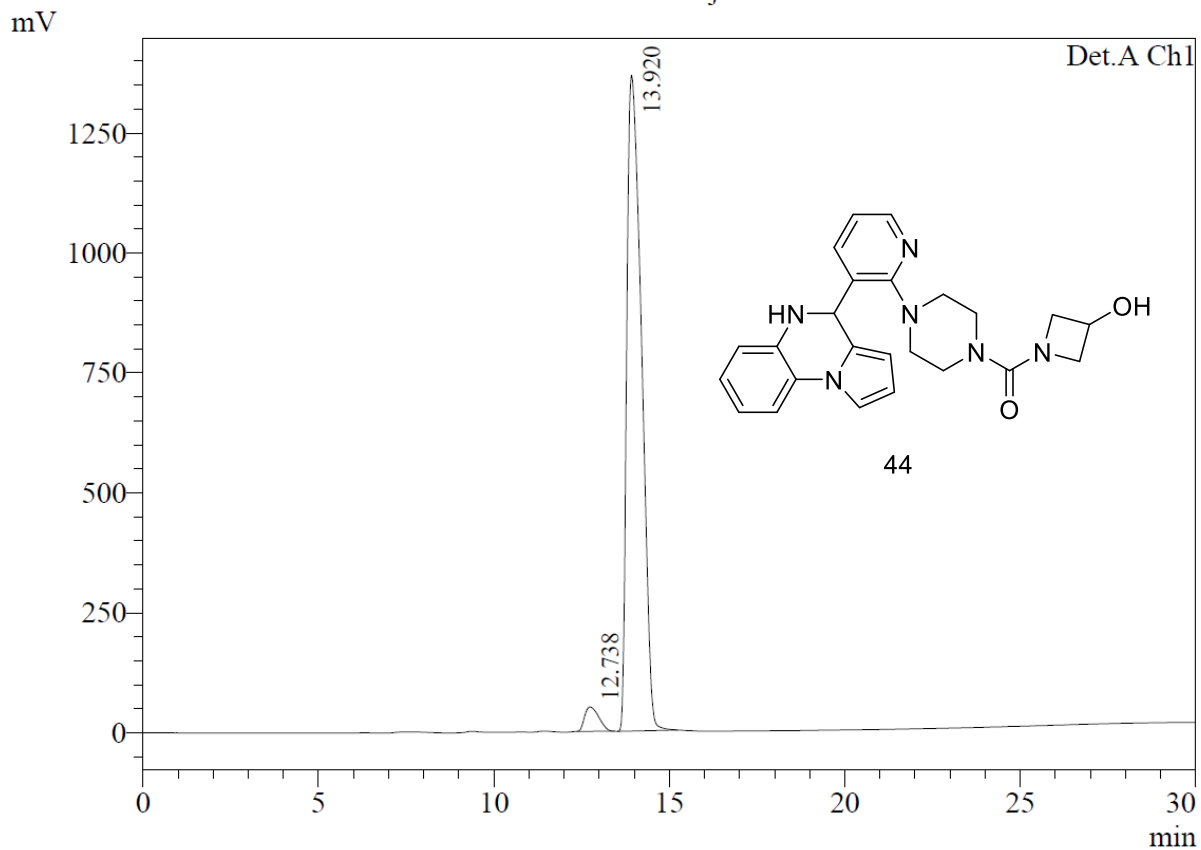


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 13.225 | 465046 | 2.165 | 1.979 |
| 2 | 14.746 | 21018376 | 97.835 | 98.021 |
| Total | | 21483422 | 100.000 | 100.000 |

Chromatogram
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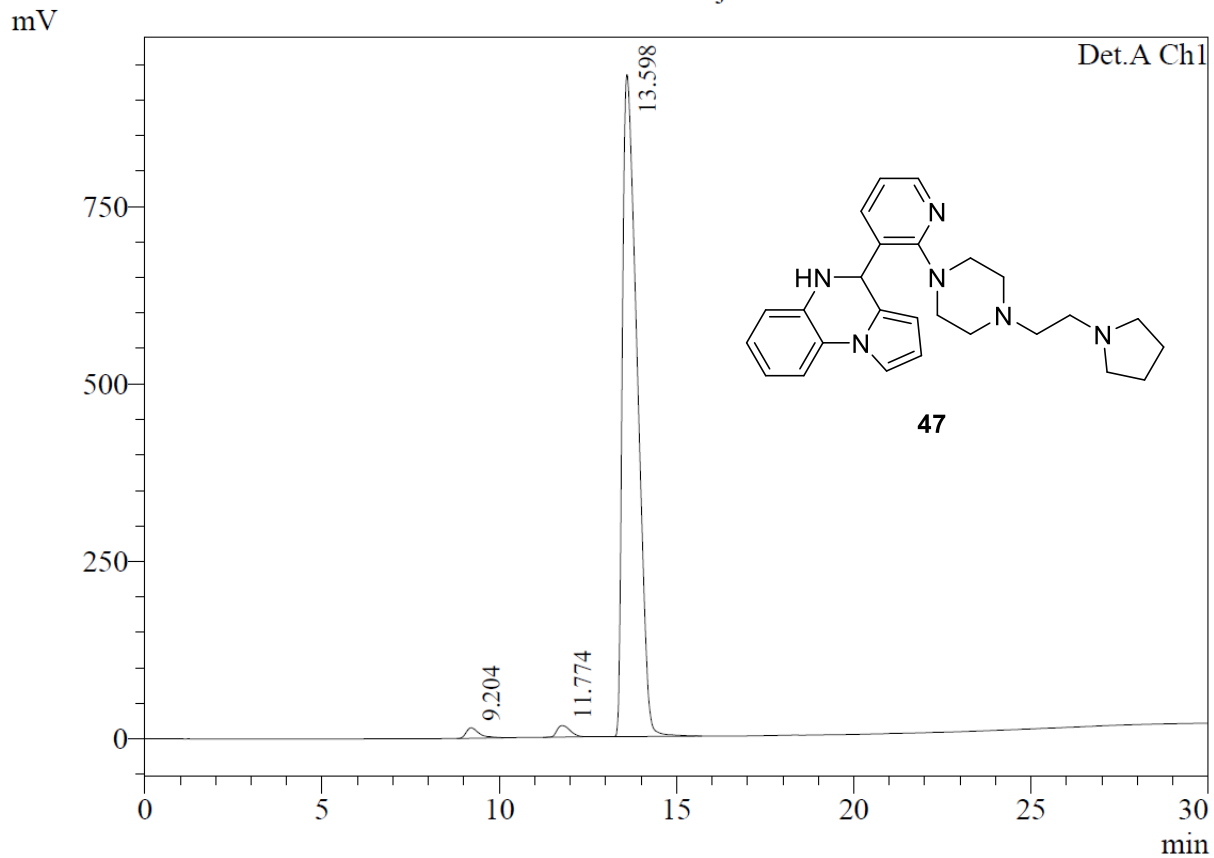


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 12.738 | 1425876 | 3.463 | 3.576 |
| 2 | 13.920 | 39745283 | 96.537 | 96.424 |
| Total | | 41171159 | 100.000 | 100.000 |

Chromatogram
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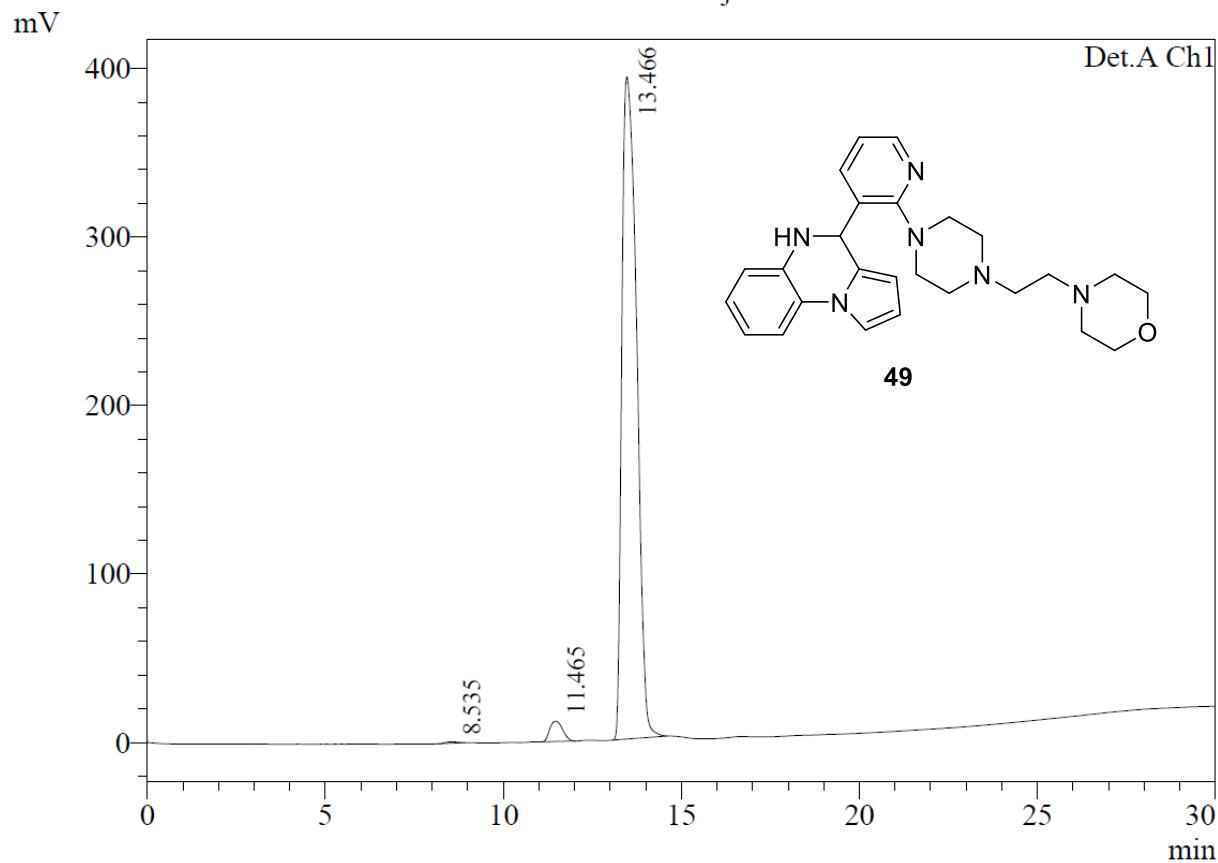


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 9.204 | 383111 | 1.385 | 1.532 |
| 2 | 11.774 | 418190 | 1.511 | 1.671 |
| 3 | 13.598 | 26868955 | 97.104 | 96.797 |
| Total | | 27670256 | 100.000 | 100.000 |

Chromatogram
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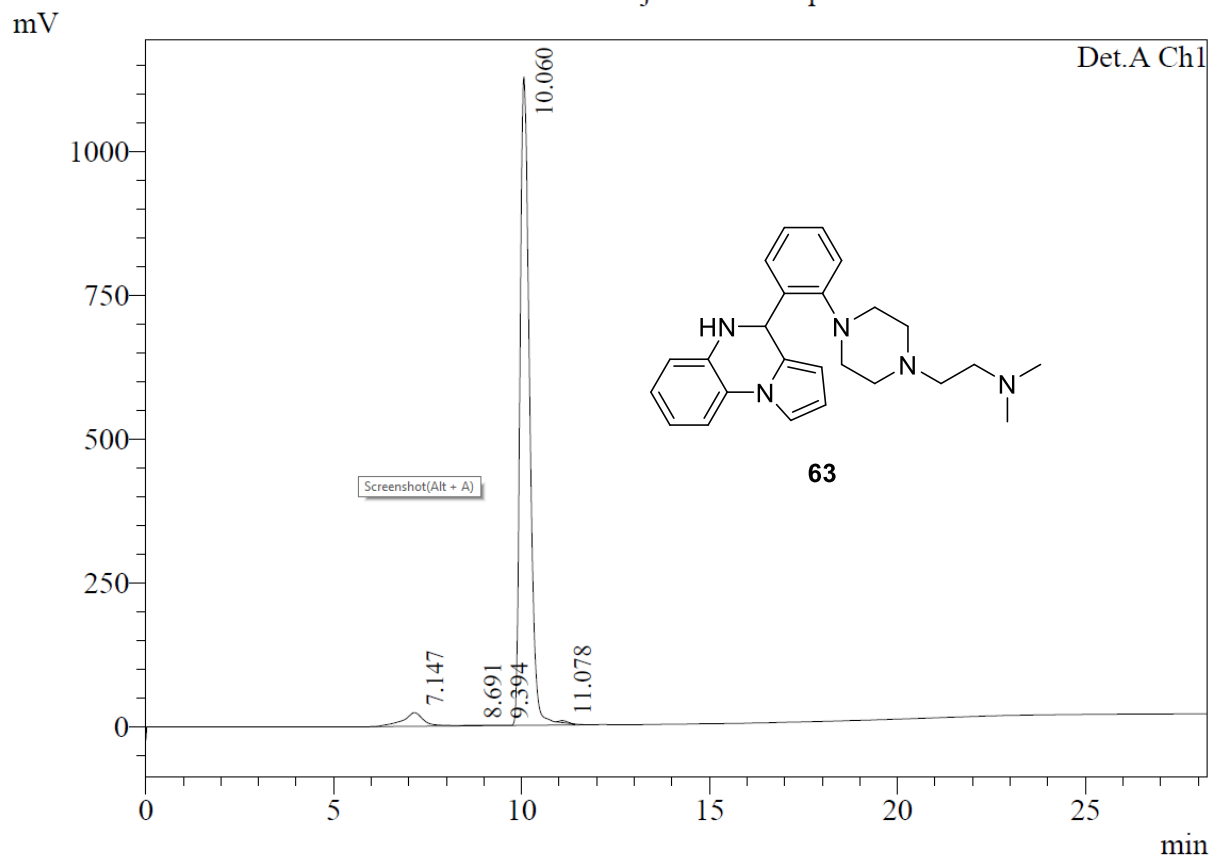


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 8.535 | 21487 | 0.184 | 0.223 |
| 2 | 11.465 | 302967 | 2.600 | 2.966 |
| 3 | 13.466 | 11326243 | 97.215 | 96.810 |
| Total | | 11650697 | 100.000 | 100.000 |

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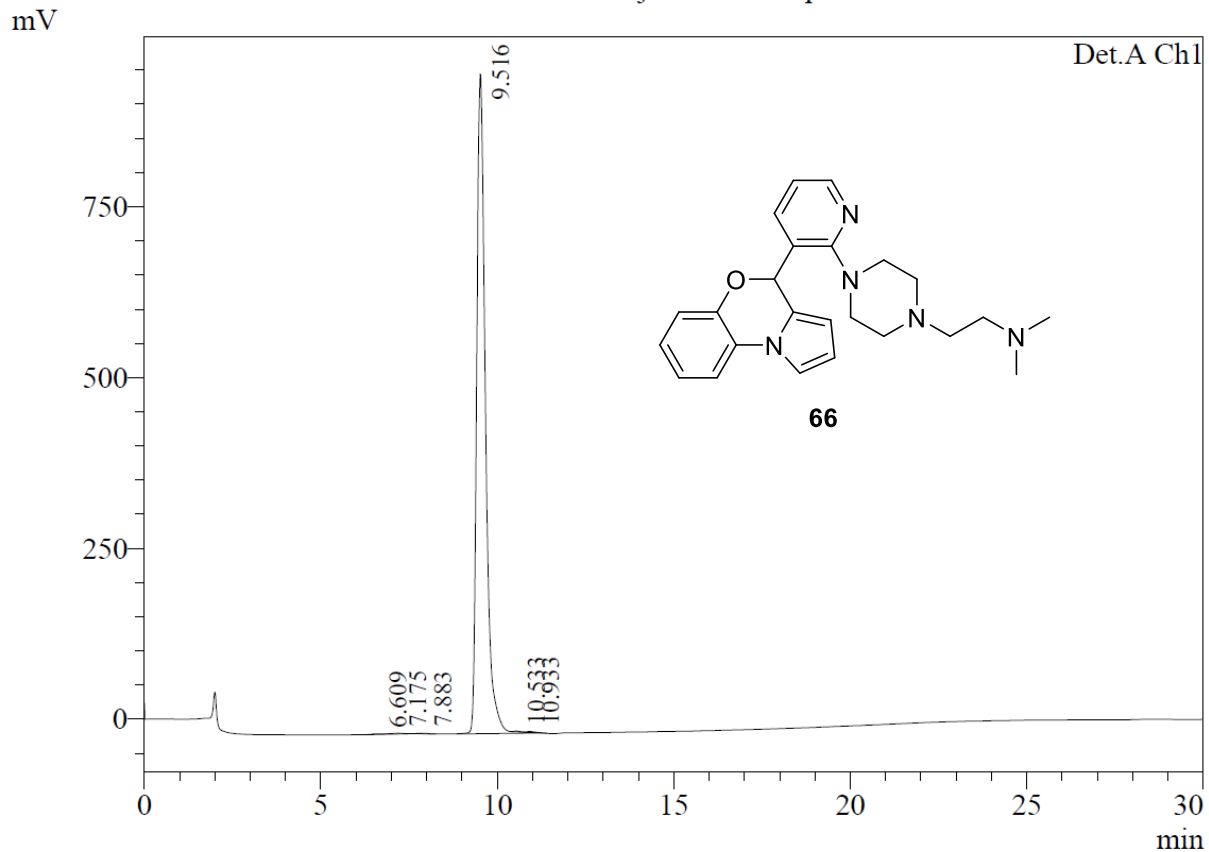


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 7.147 | 929817 | 4.458 | 2.057 |
| 2 | 8.691 | 40083 | 0.192 | 0.107 |
| 3 | 9.394 | 19511 | 0.094 | 0.073 |
| 4 | 10.060 | 19815793 | 95.002 | 97.469 |
| 5 | 11.078 | 53022 | 0.254 | 0.293 |
| Total | | 20858225 | 100.000 | 100.000 |

Chromatogram
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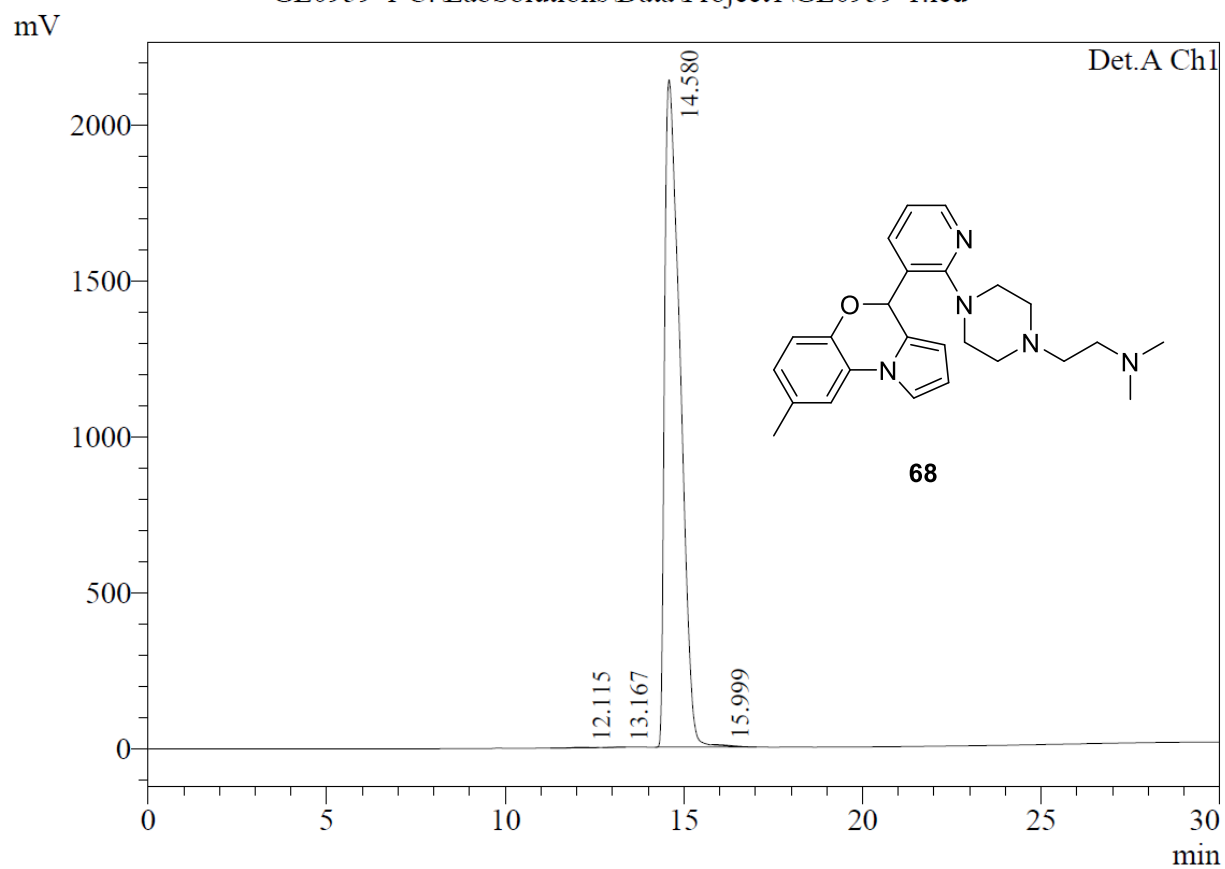


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 6.609 | 20782 | 0.124 | 0.108 |
| 2 | 7.175 | 28352 | 0.169 | 0.119 |
| 3 | 7.883 | 11248 | 0.067 | 0.073 |
| 4 | 9.516 | 16703045 | 99.450 | 99.448 |
| 5 | 10.533 | 11928 | 0.071 | 0.114 |
| 6 | 10.933 | 19980 | 0.119 | 0.138 |
| Total | | 16795335 | 100.000 | 100.000 |

Chromatogram
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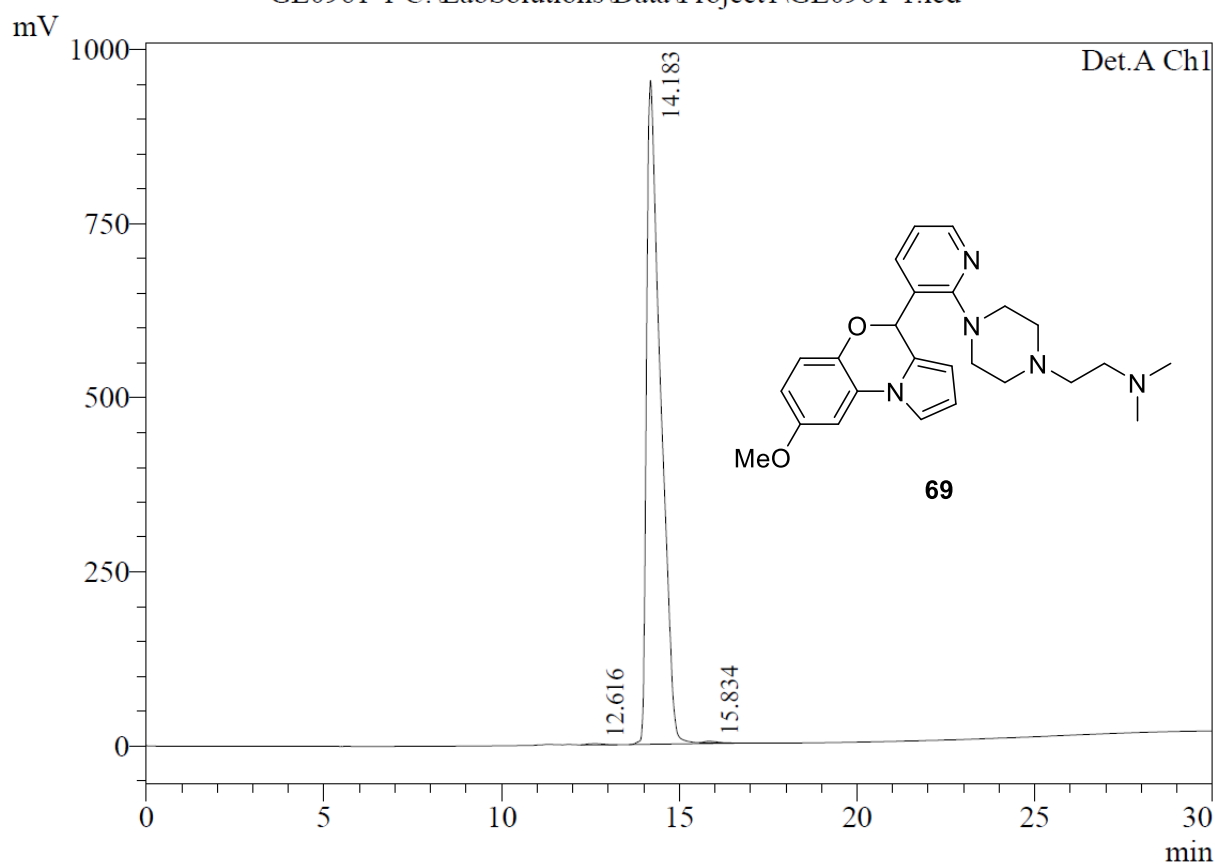


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 12.115 | 72612 | 0.112 | 0.112 |
| 2 | 13.167 | 19841 | 0.030 | 0.039 |
| 3 | 14.580 | 64922240 | 99.770 | 99.741 |
| 4 | 15.999 | 56921 | 0.087 | 0.108 |
| Total | | 65071615 | 100.000 | 100.000 |

Chromatogram
 GL0961-1 C:\LabSolutions\Data\Project1\GL0961-1.lcd

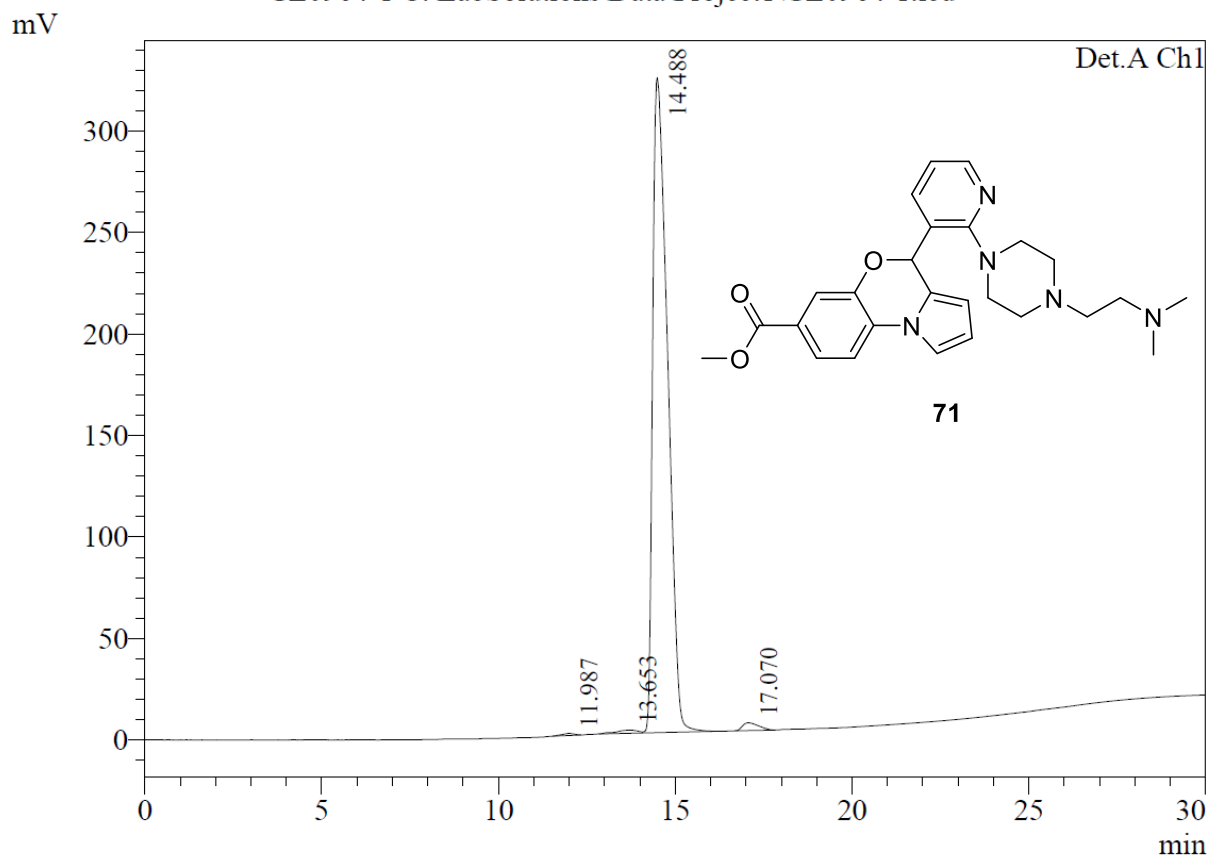


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 12.616 | 52695 | 0.201 | 0.179 |
| 2 | 14.183 | 26165136 | 99.574 | 99.568 |
| 3 | 15.834 | 59332 | 0.226 | 0.253 |
| Total | | 26277163 | 100.000 | 100.000 |

Chromatogram
 GL0964-1 C:\LabSolutions\Data\Project1\GL0964-1.lcd

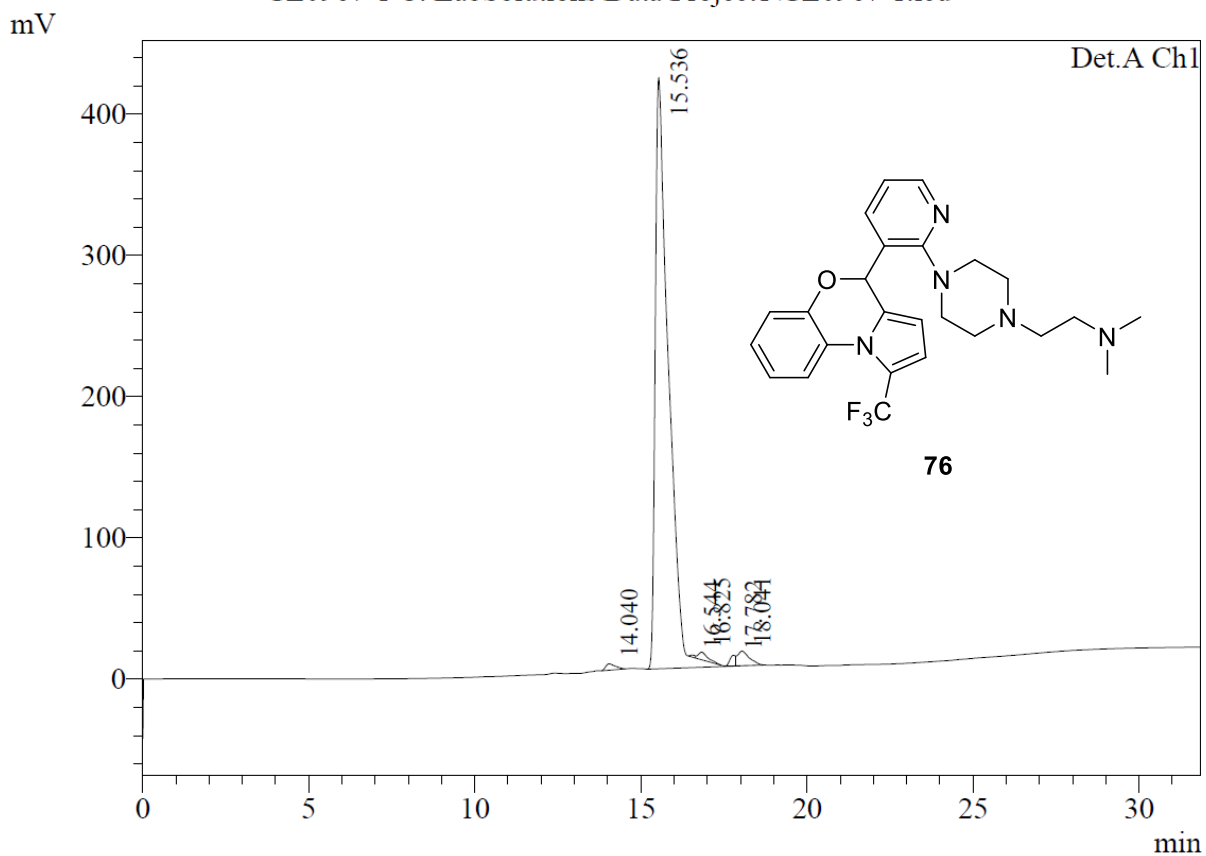


PeakTable

Detector A Ch1 254nm

| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|---------|---------|----------|
| 1 | 11.987 | 24640 | 0.254 | 0.298 |
| 2 | 13.653 | 66258 | 0.683 | 0.470 |
| 3 | 14.488 | 9483415 | 97.809 | 98.059 |
| 4 | 17.070 | 121561 | 1.254 | 1.174 |
| Total | | 9695875 | 100.000 | 100.000 |

Chromatogram
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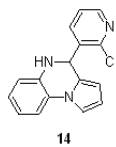
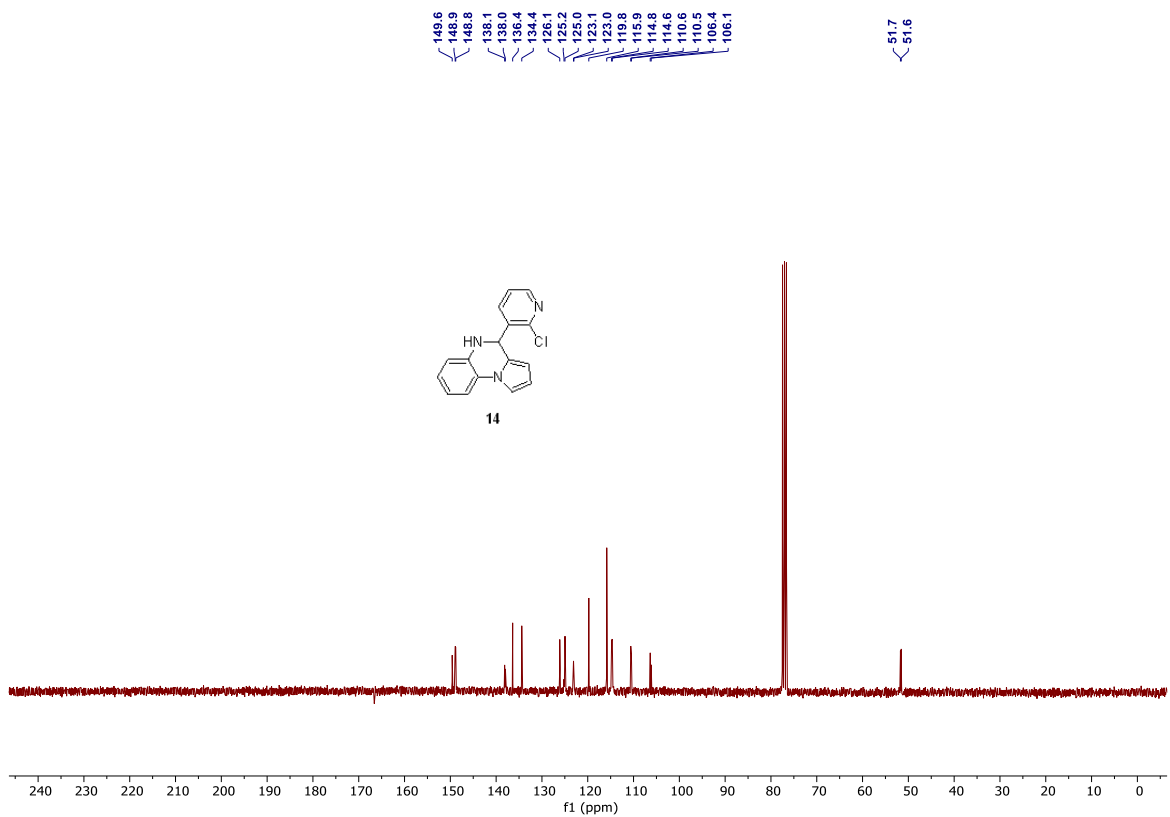
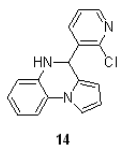
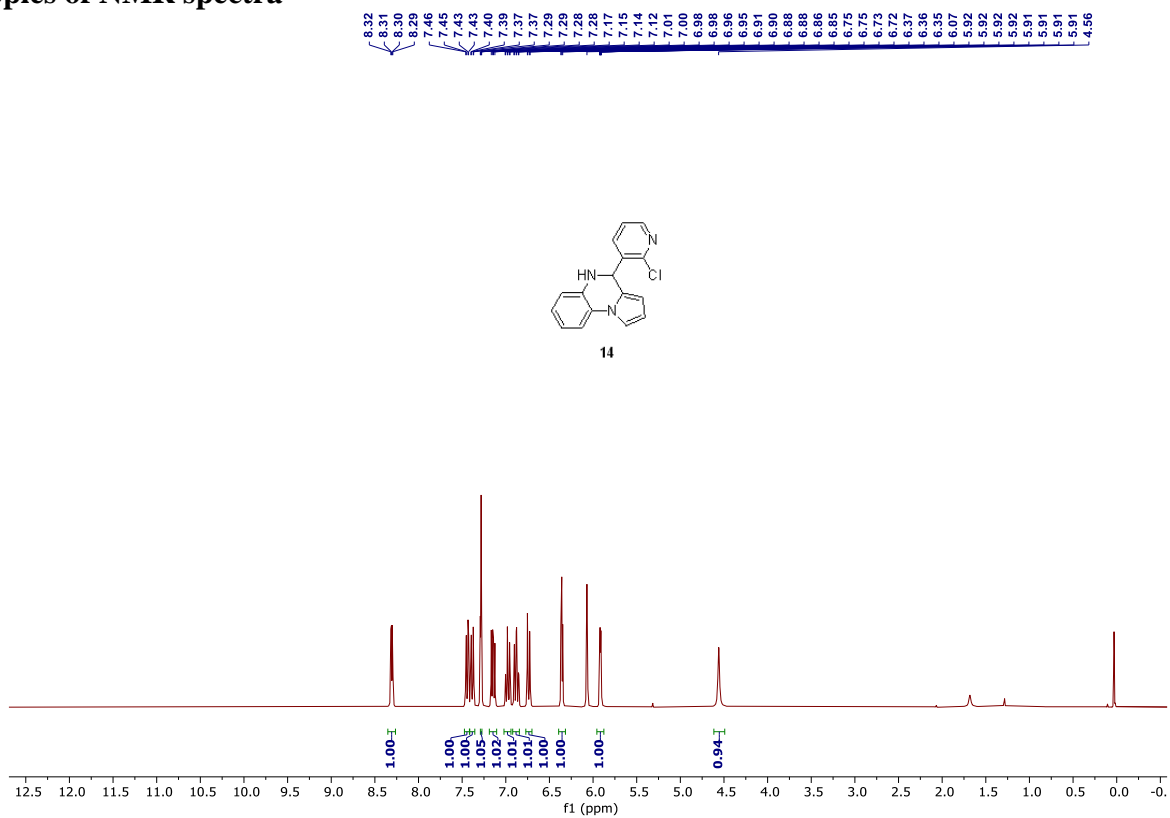


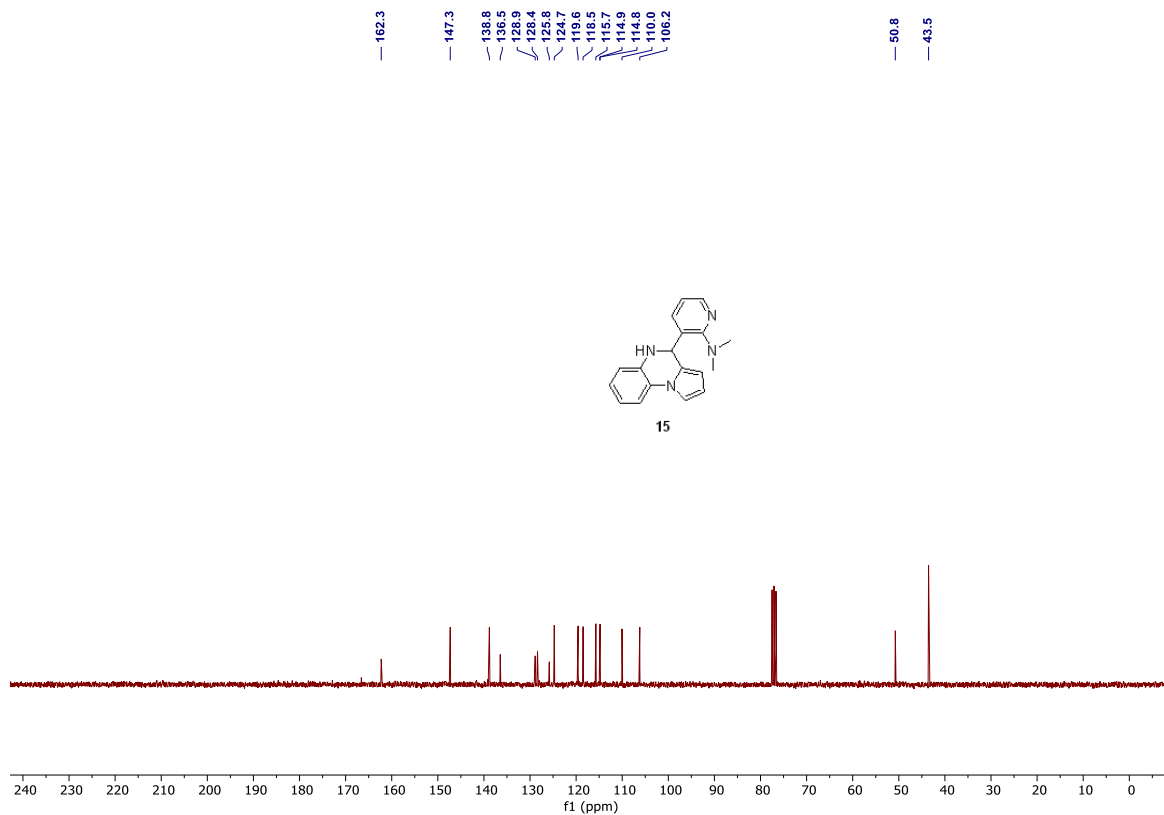
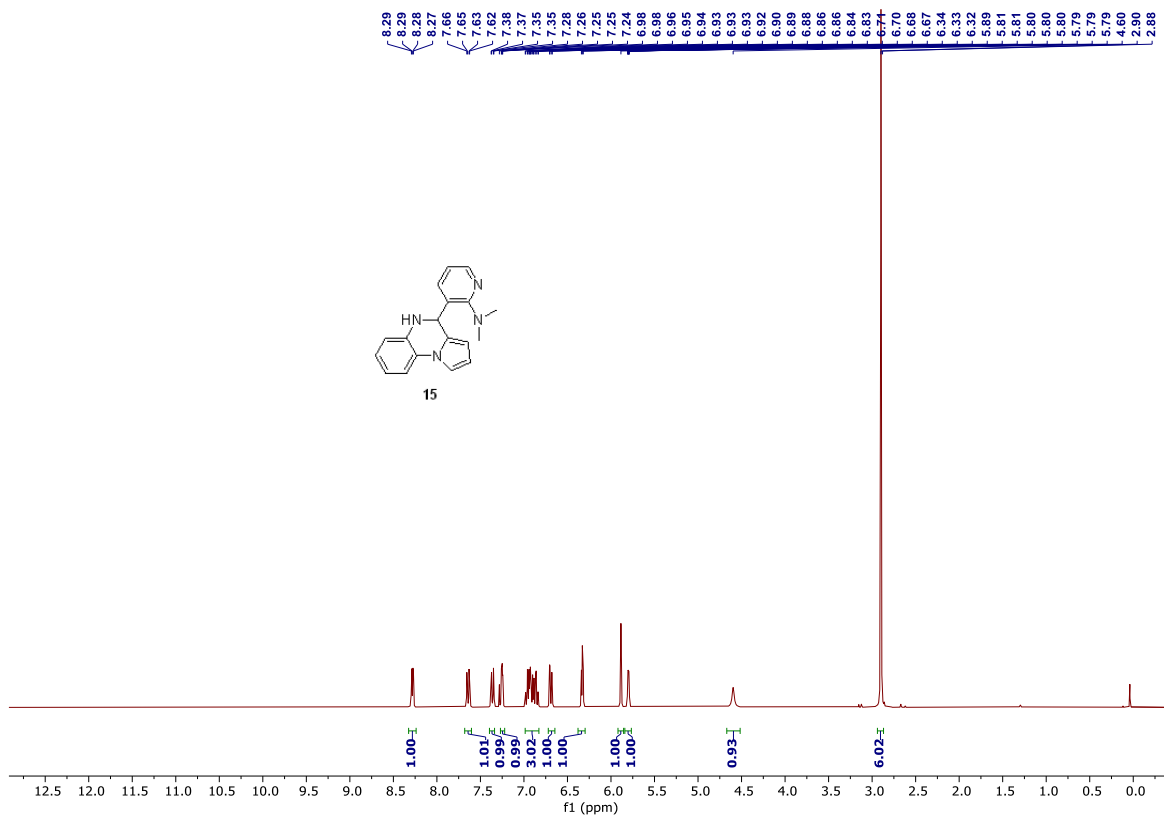
PeakTable

Detector A Ch1 254nm

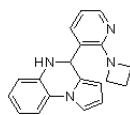
| Peak# | Ret. Time | Area | Area % | Height % |
|-------|-----------|----------|---------|----------|
| 1 | 14.040 | 91786 | 0.752 | 1.000 |
| 2 | 15.536 | 11655759 | 95.435 | 93.527 |
| 3 | 16.544 | 15090 | 0.124 | 0.326 |
| 4 | 16.825 | 108463 | 0.888 | 1.198 |
| 5 | 17.782 | 83258 | 0.682 | 1.658 |
| 6 | 18.041 | 258891 | 2.120 | 2.289 |
| Total | | 12213247 | 100.000 | 100.000 |

Copies of NMR spectra

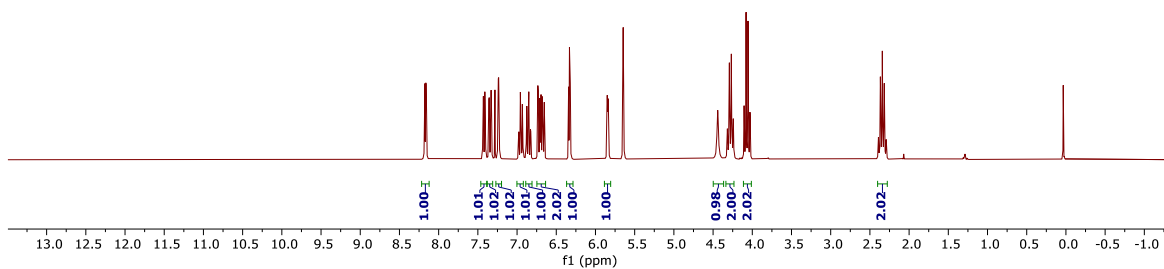




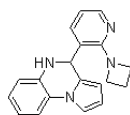
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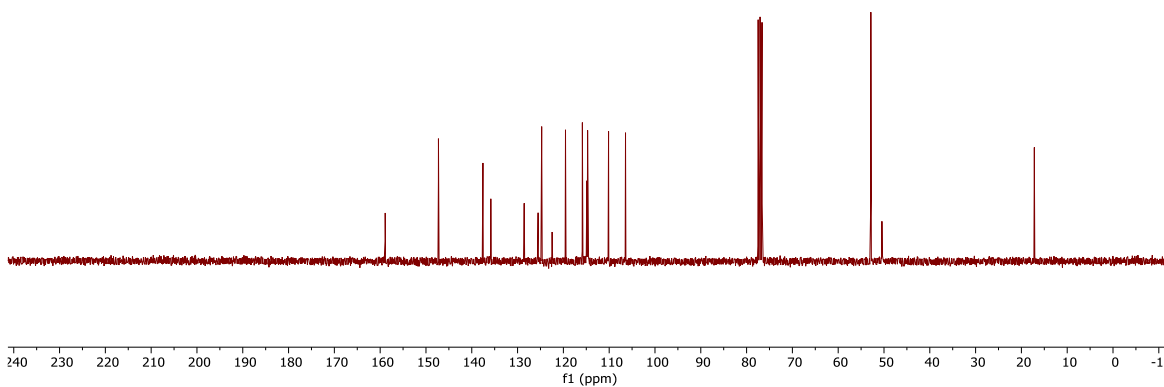
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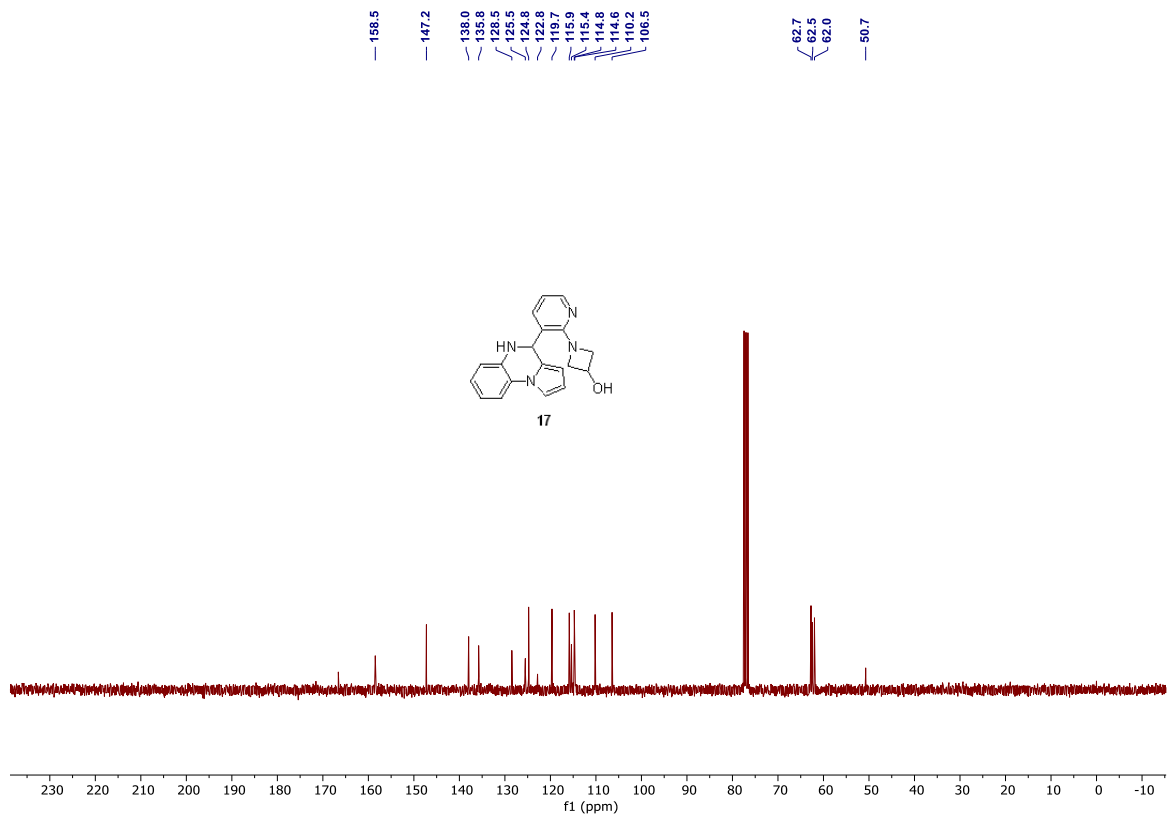
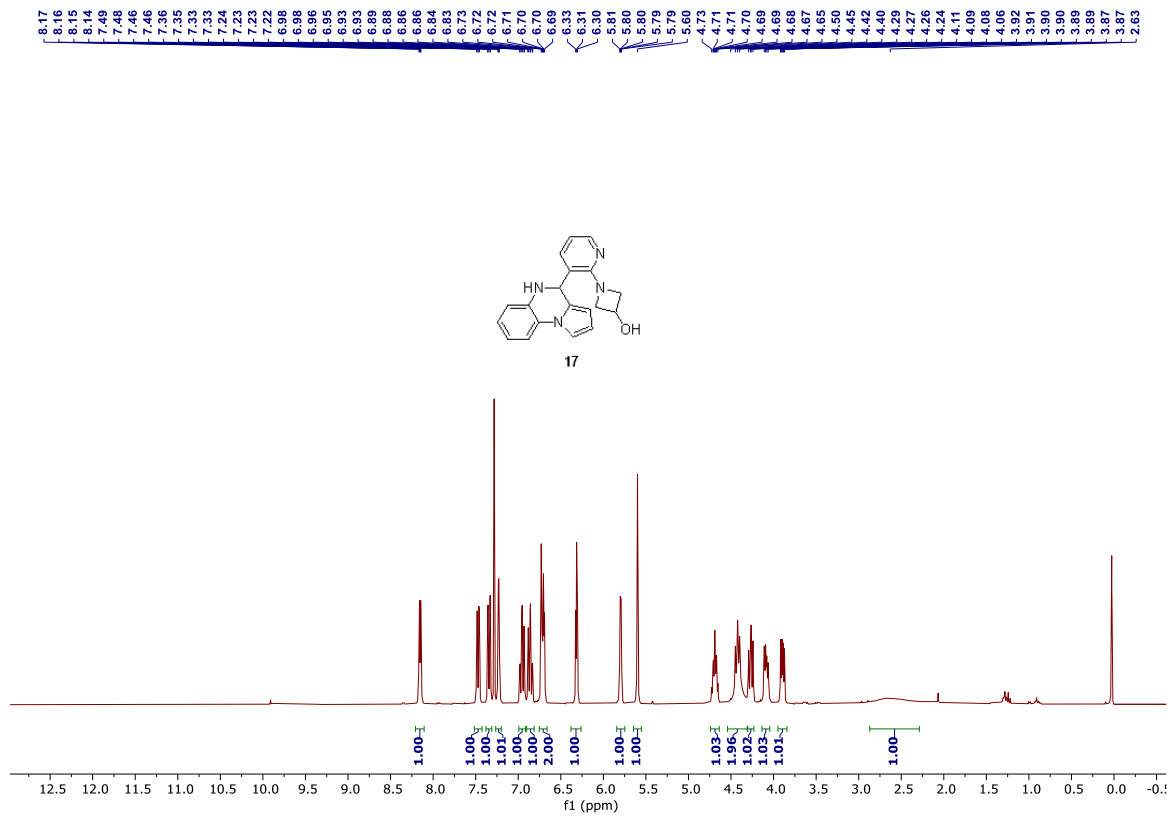


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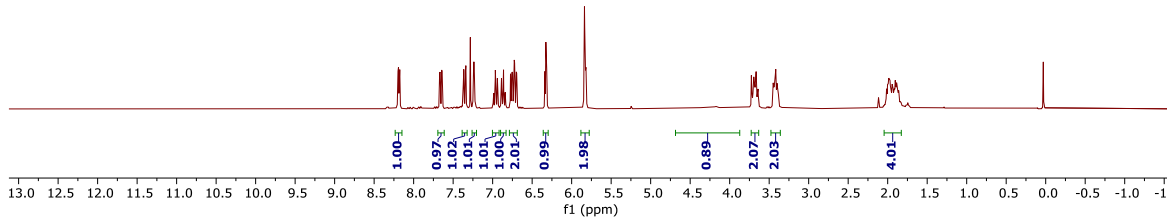
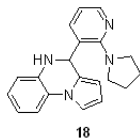


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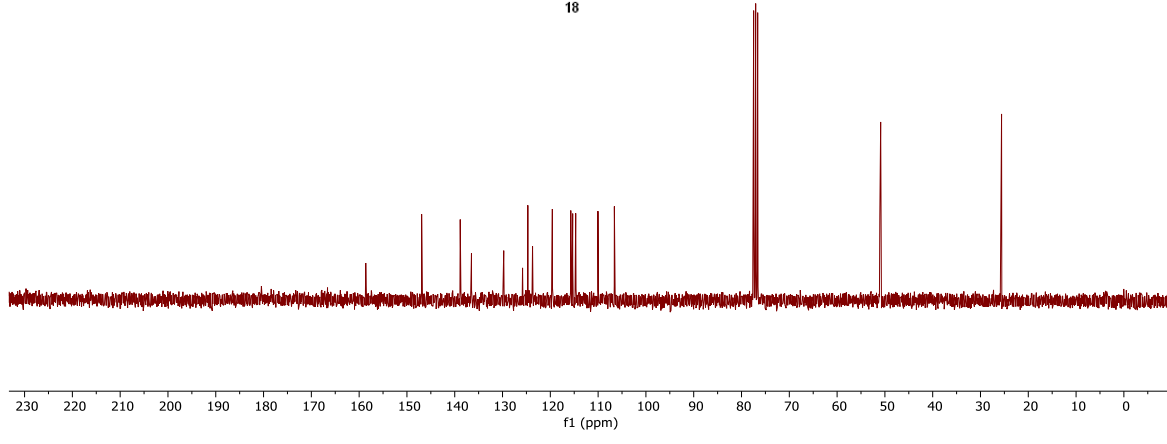
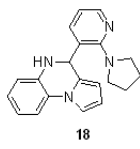




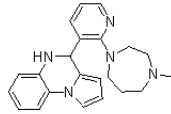
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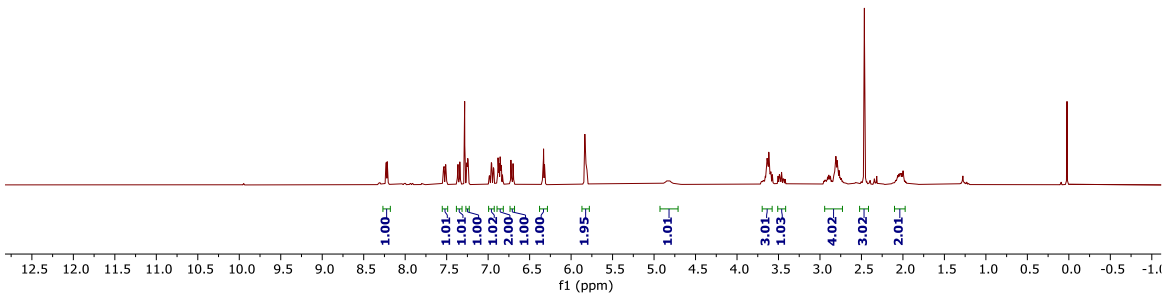
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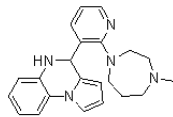
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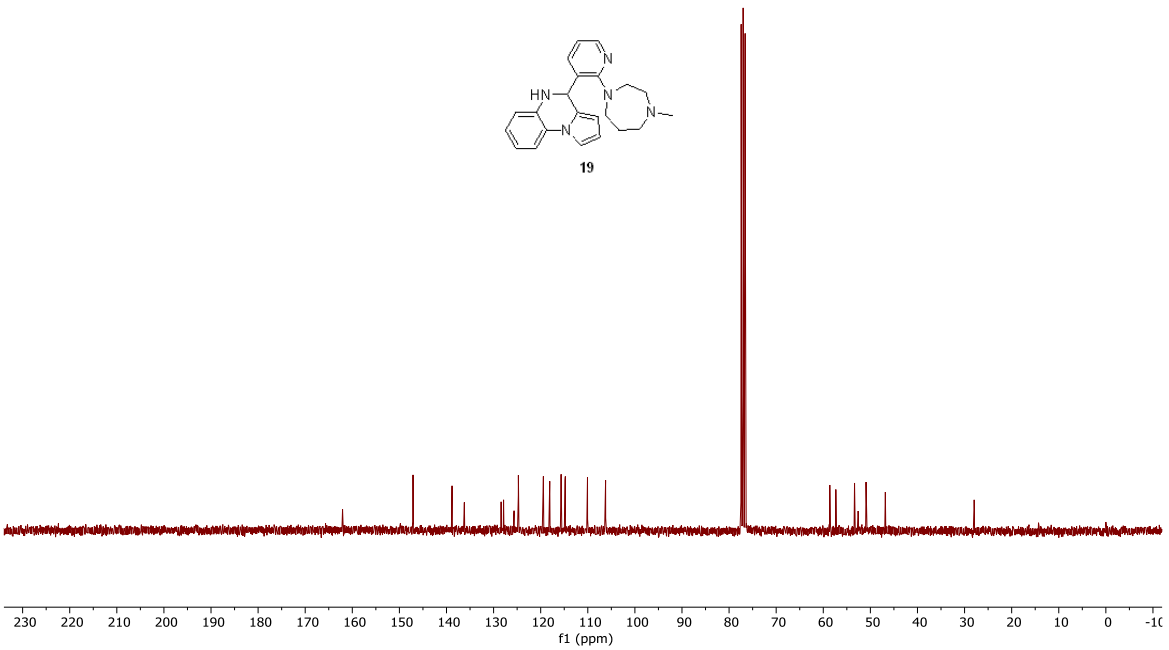
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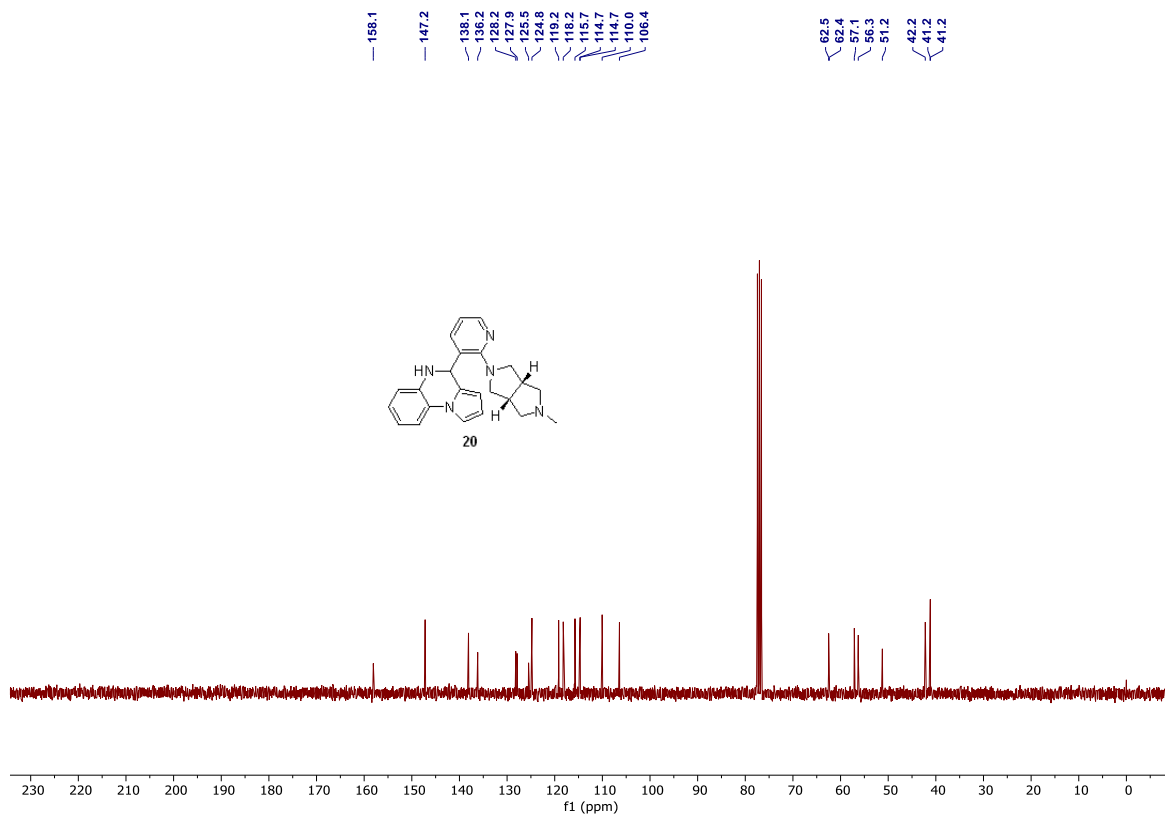
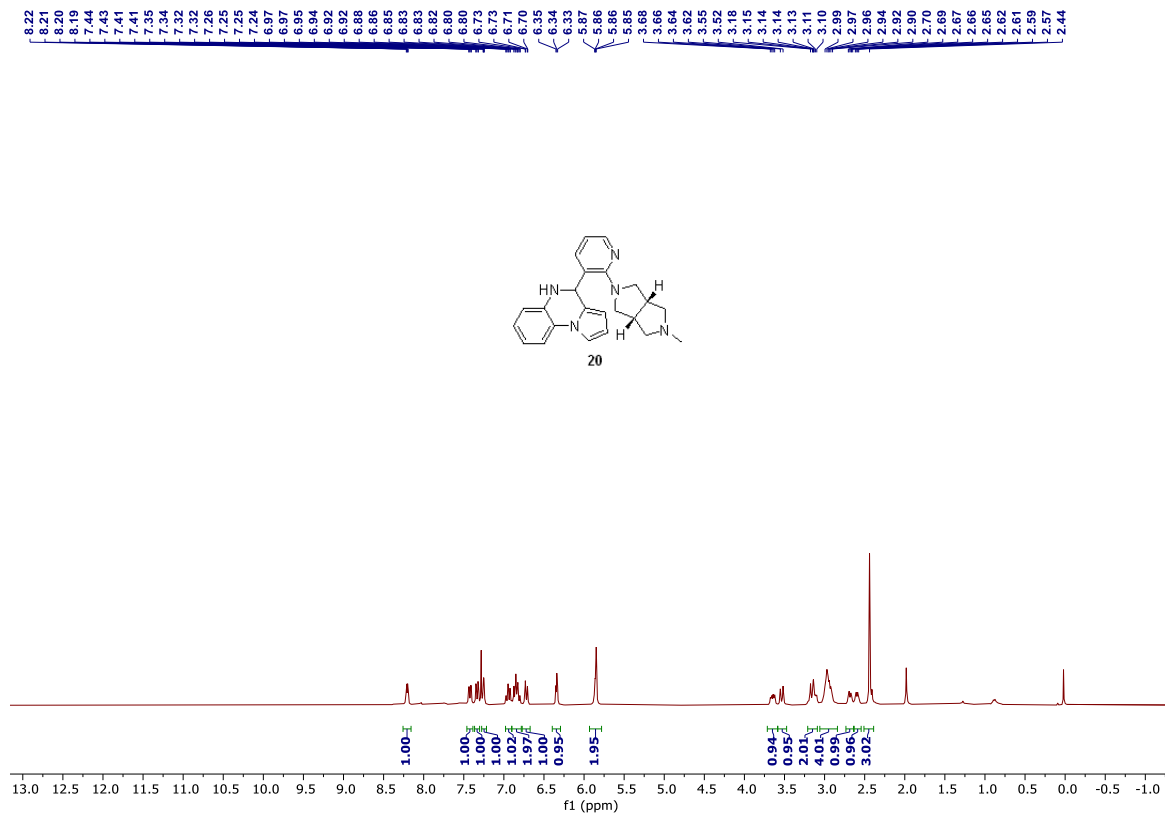


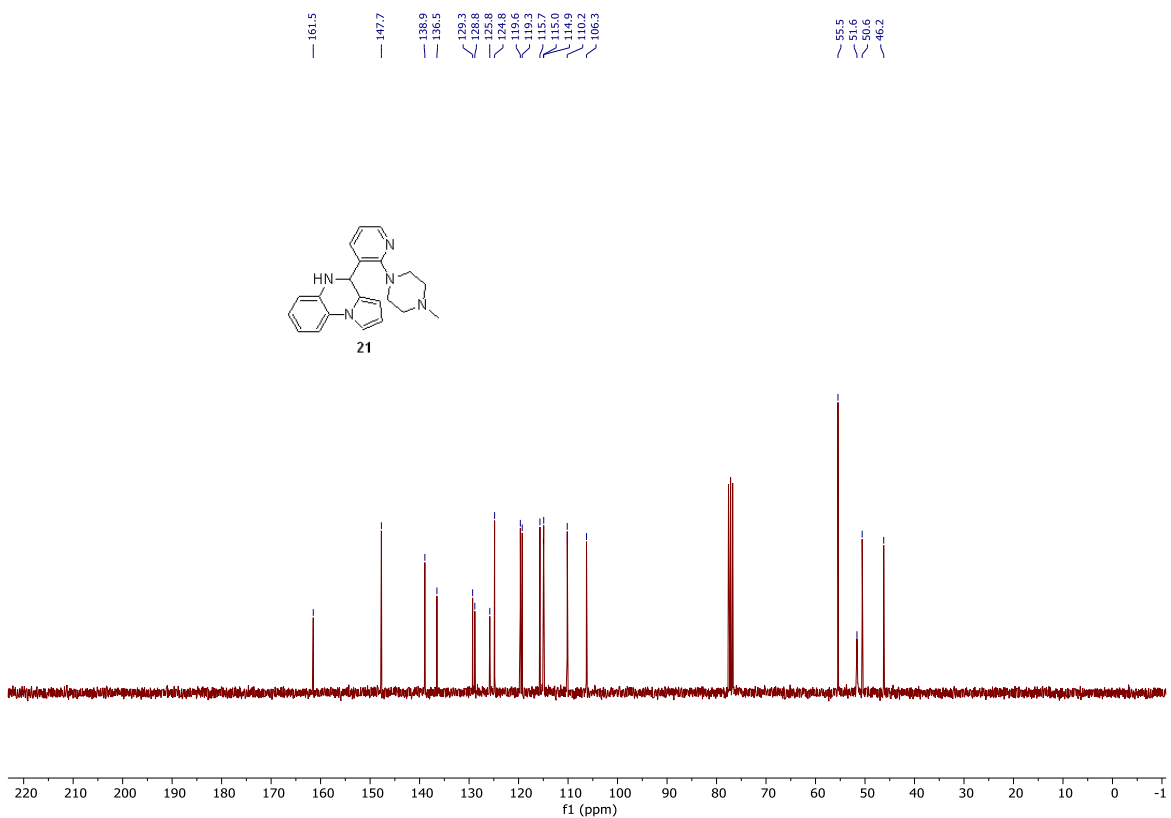
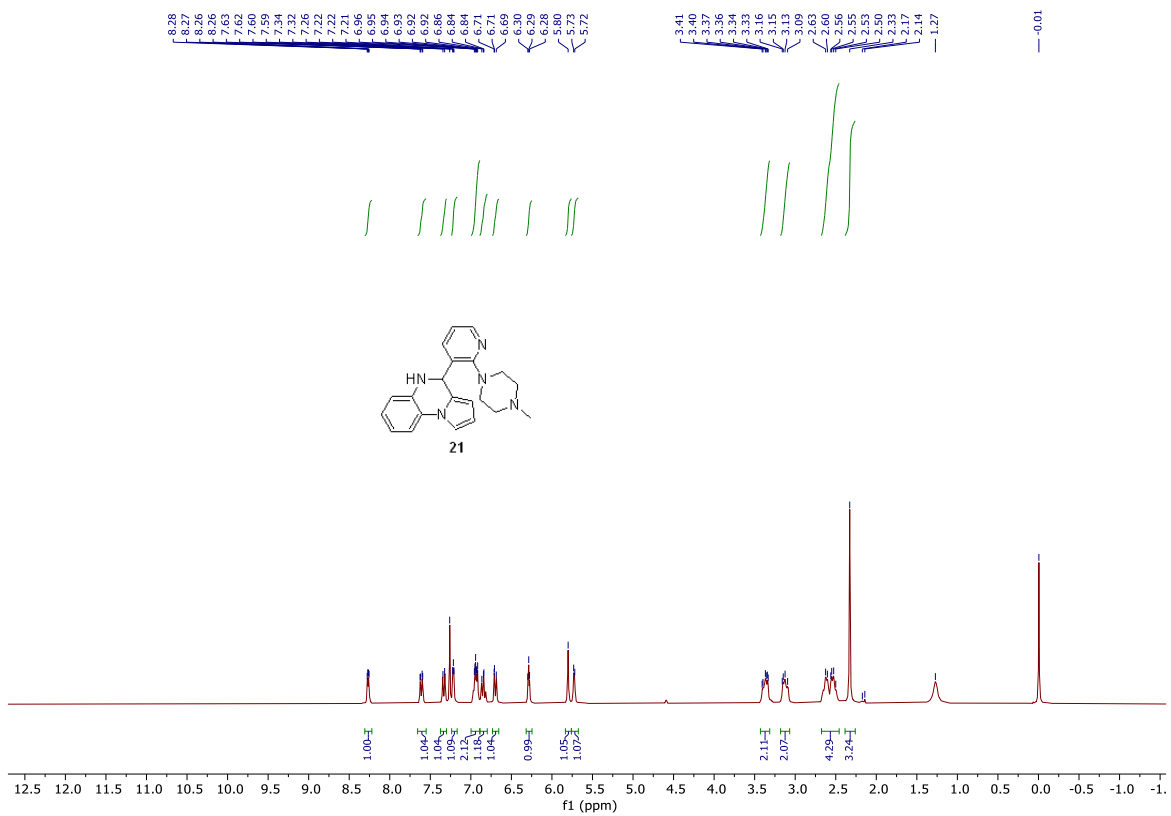
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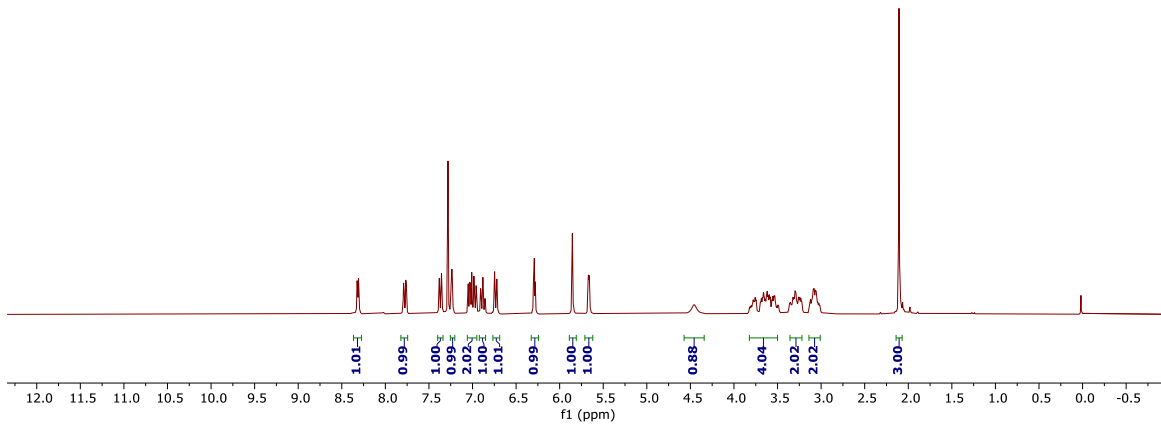
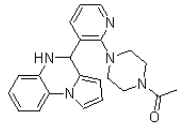
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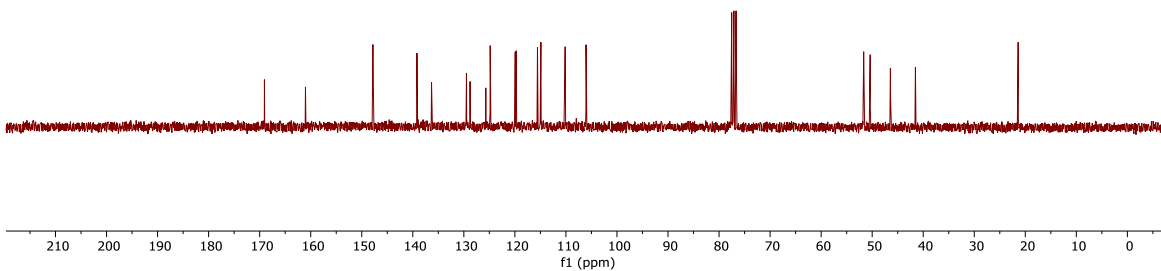
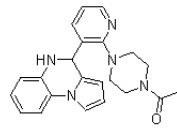


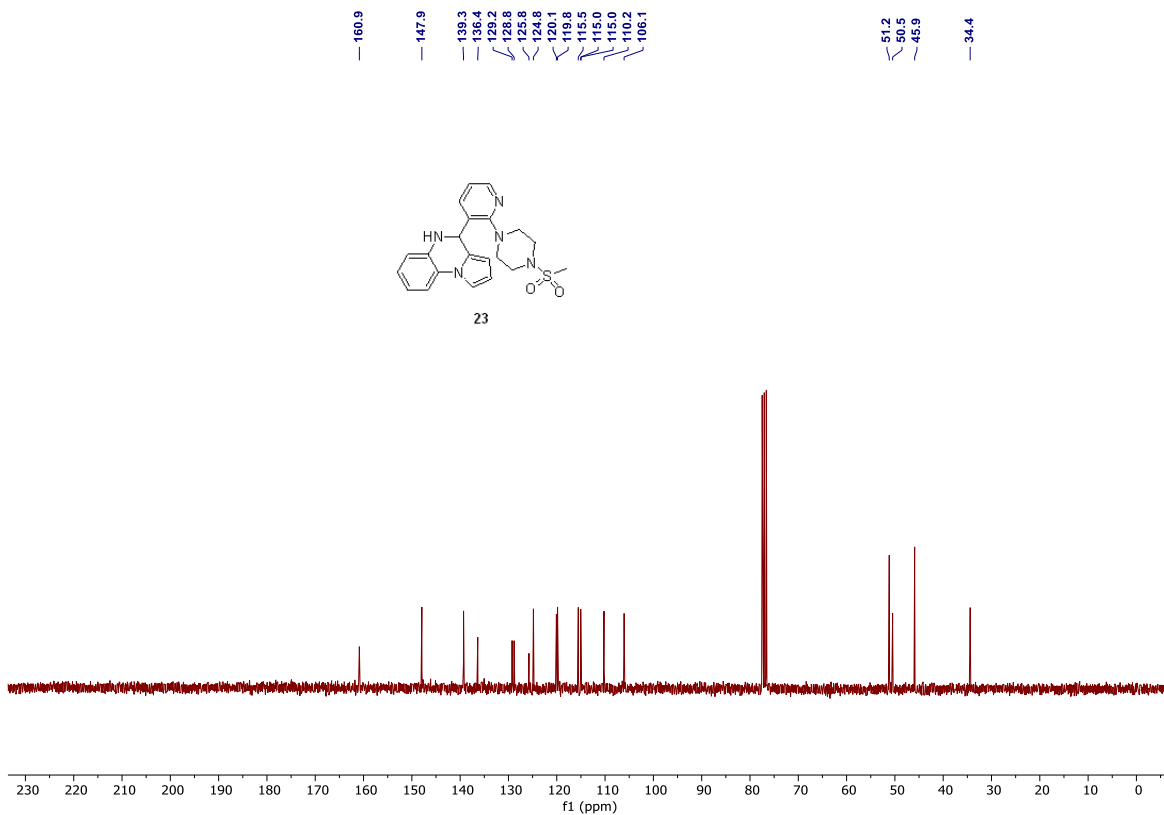
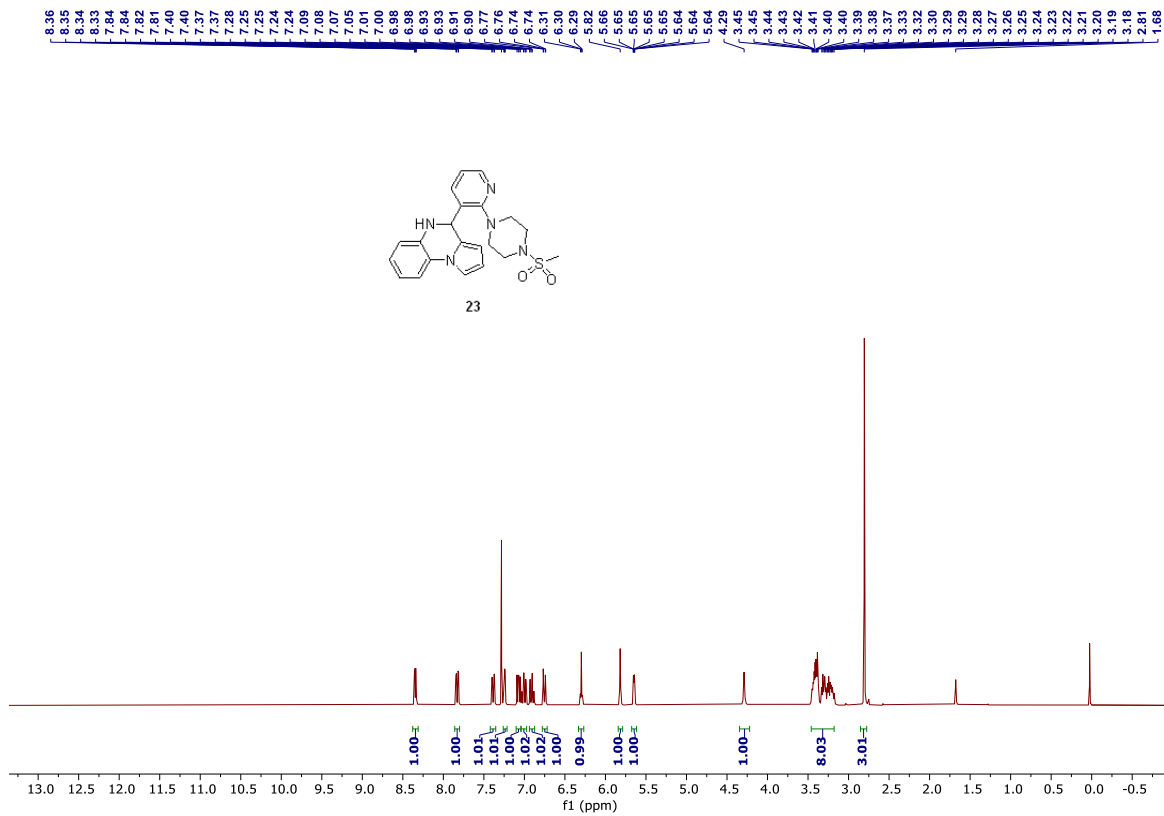


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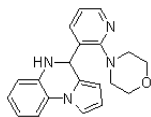


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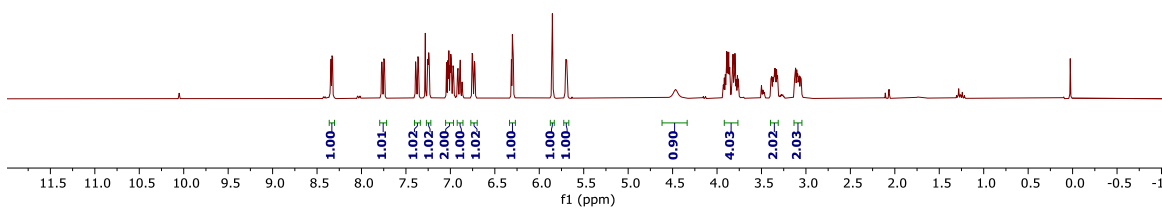




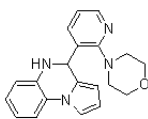
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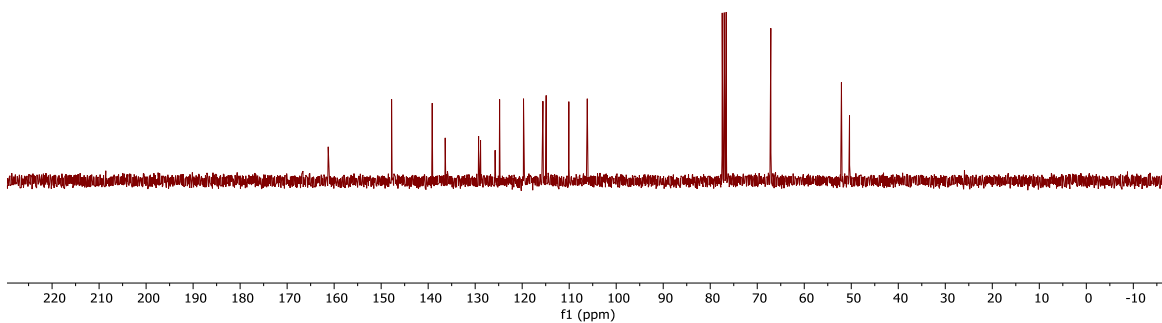
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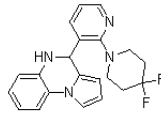
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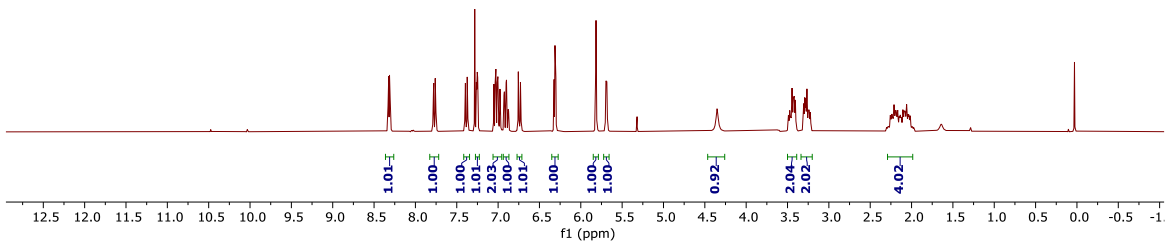
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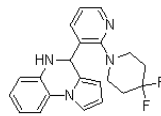
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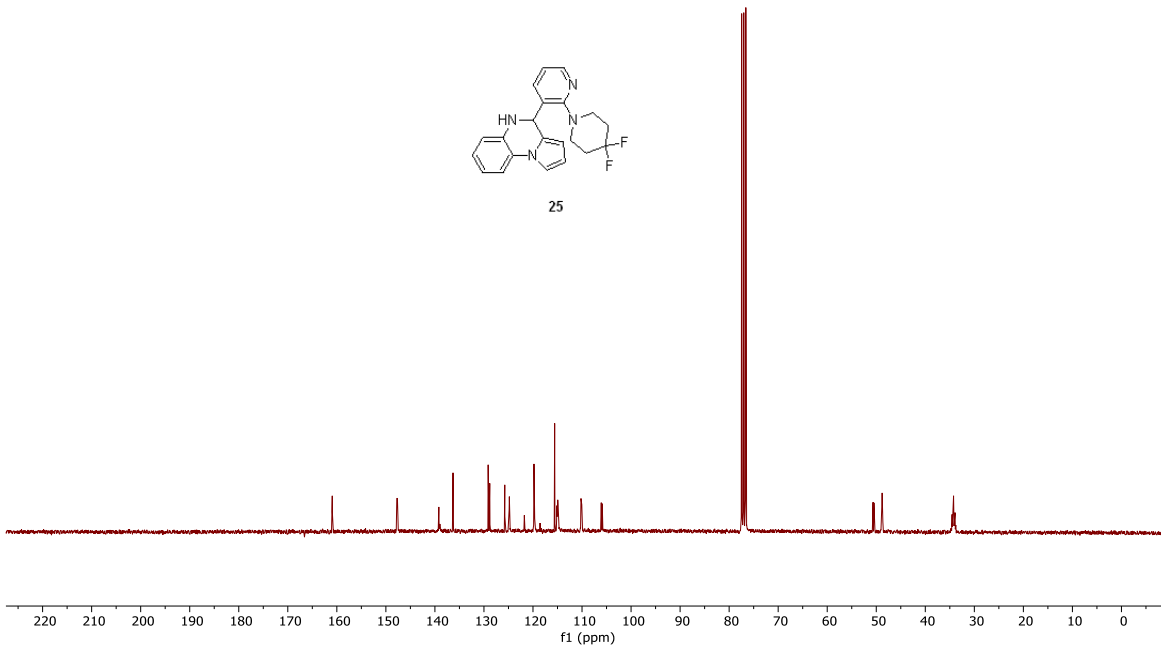
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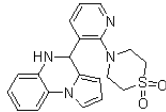
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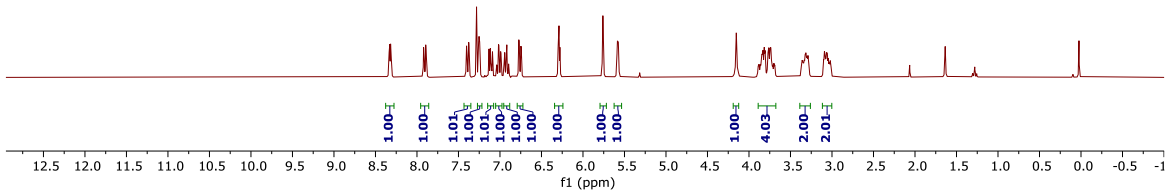
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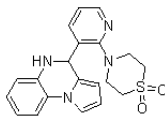
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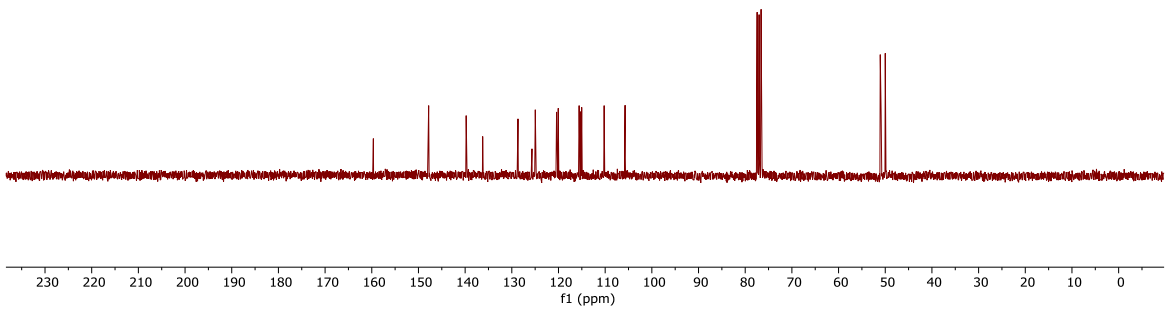
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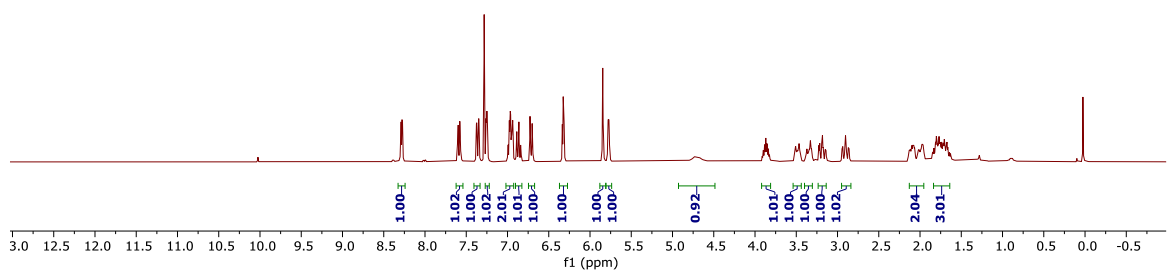
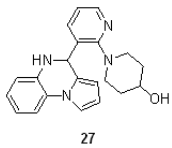
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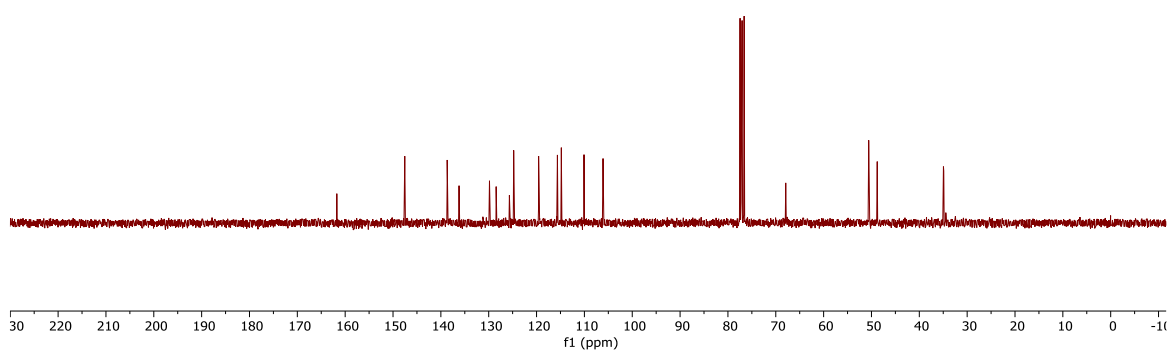
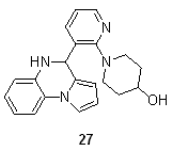
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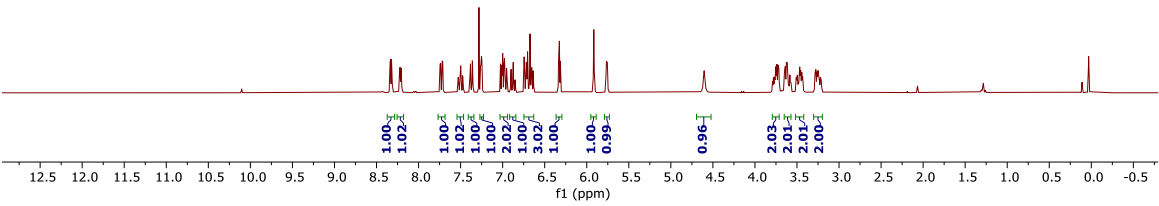
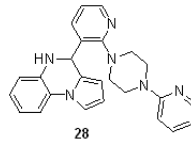
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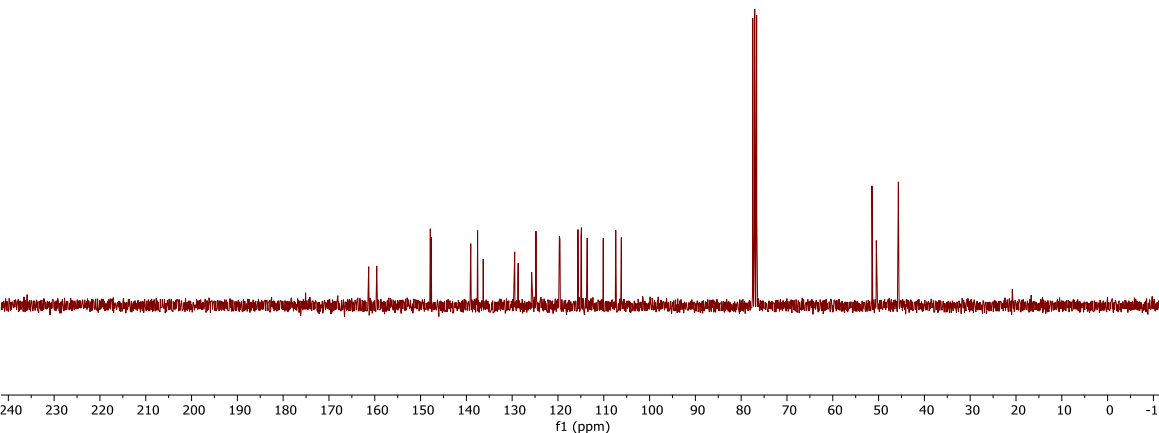
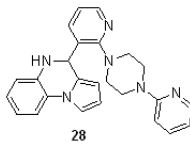
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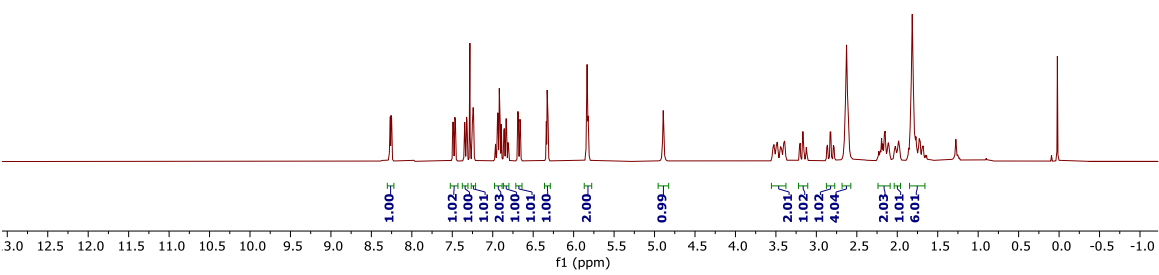
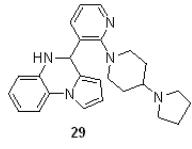
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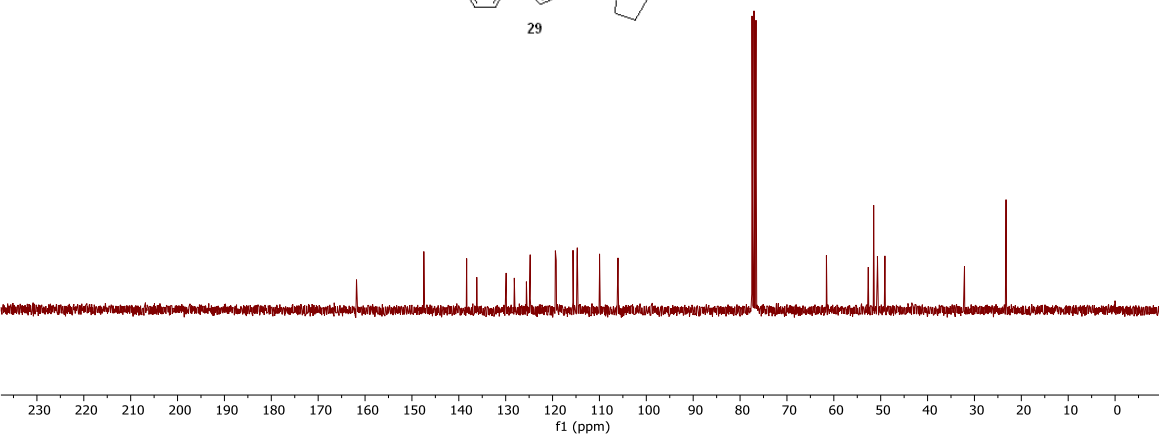
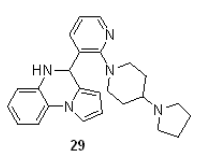
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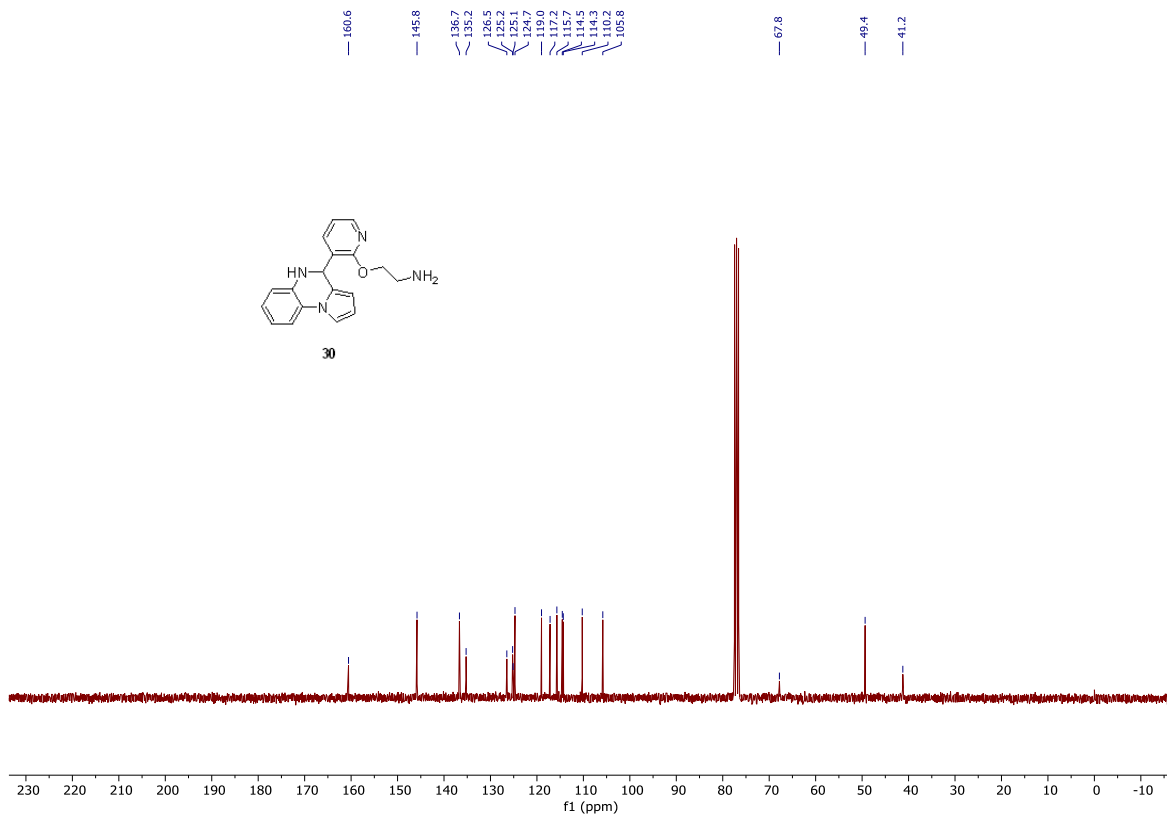
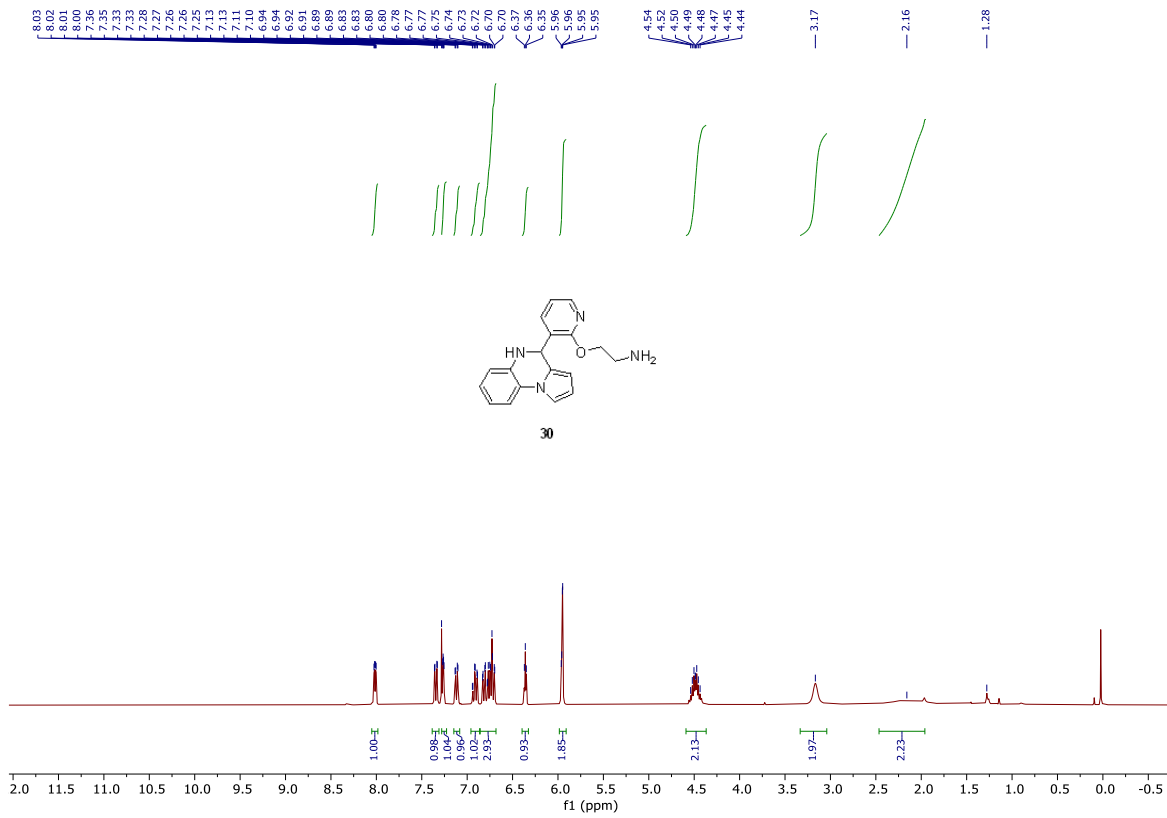


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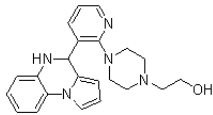


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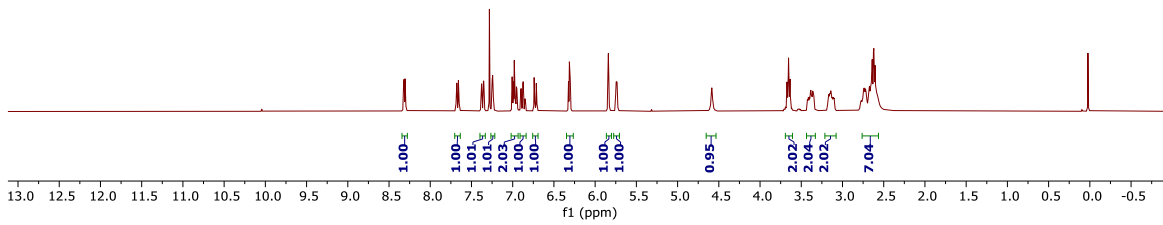




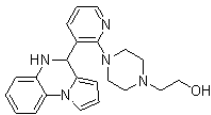
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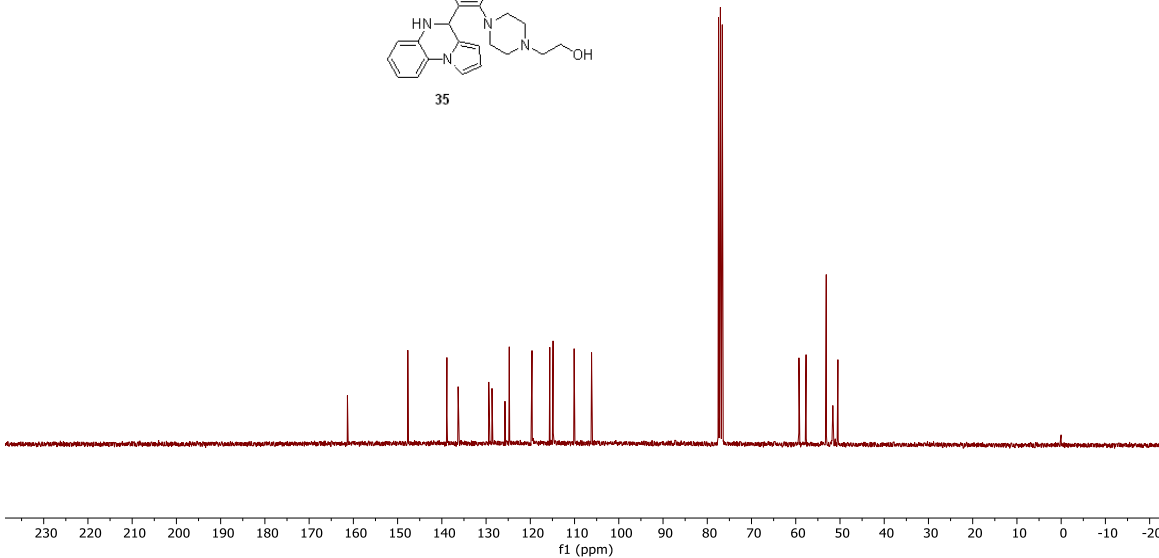
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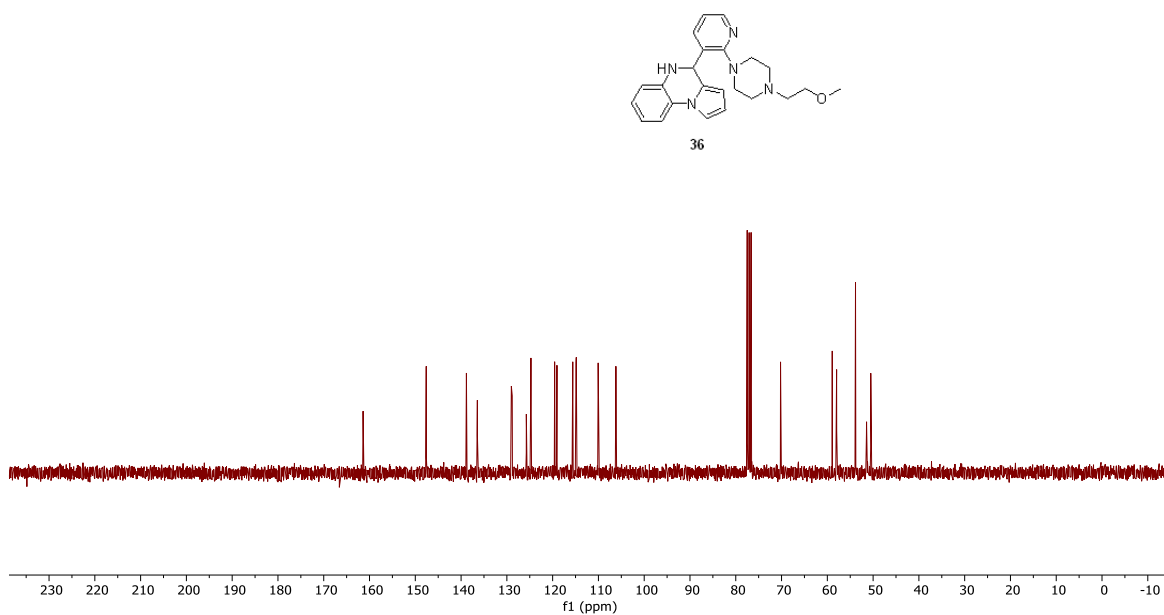
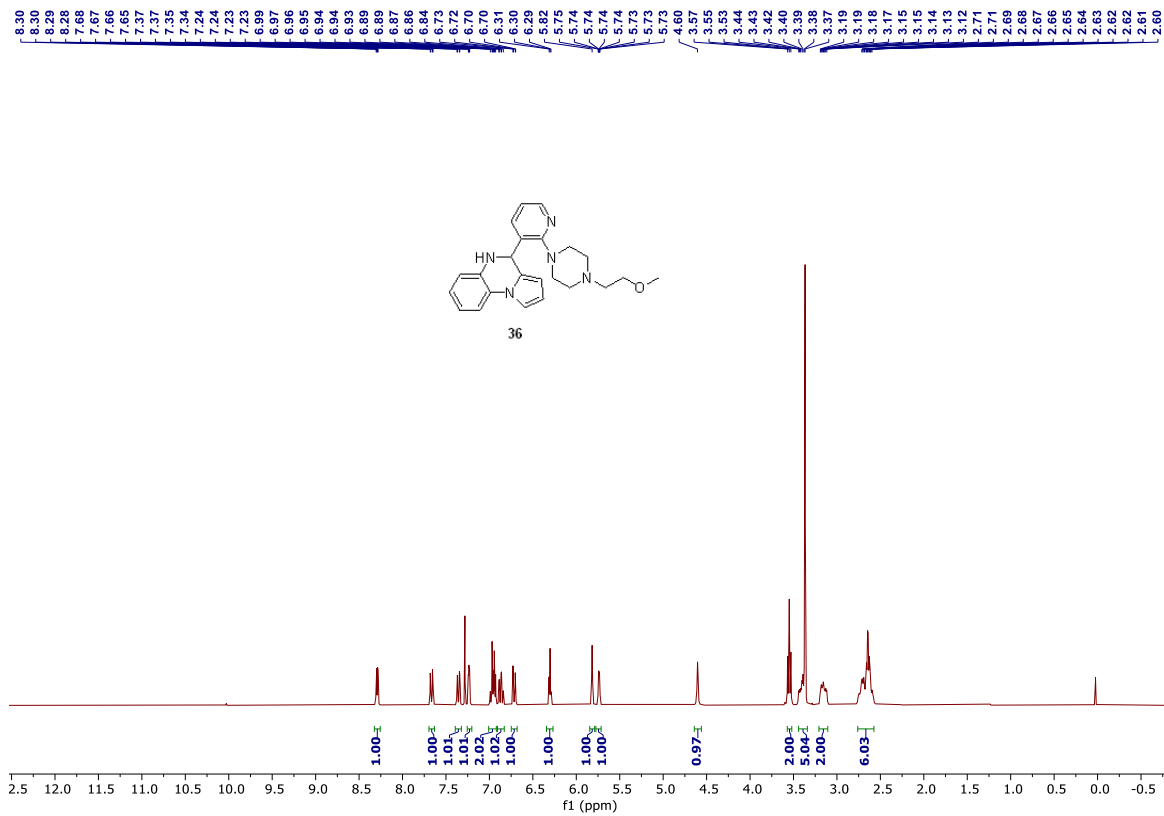


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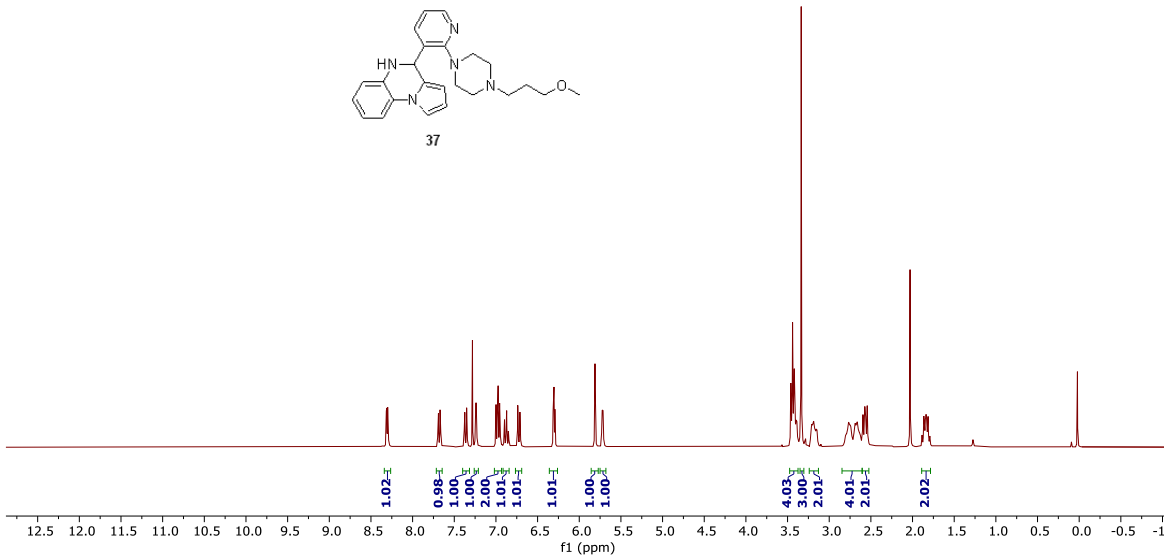
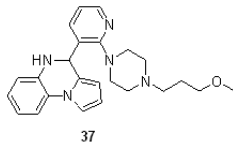


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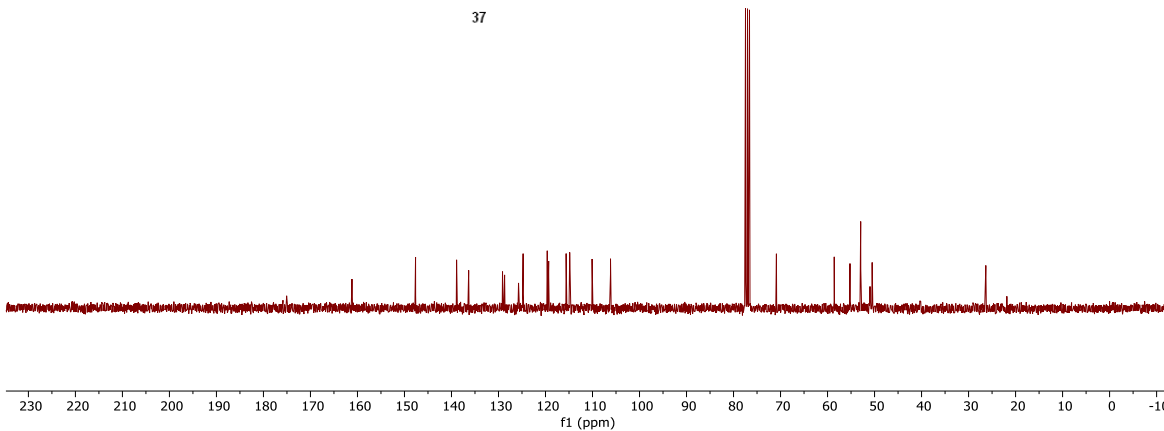
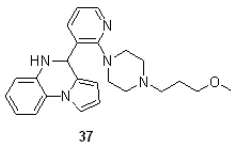


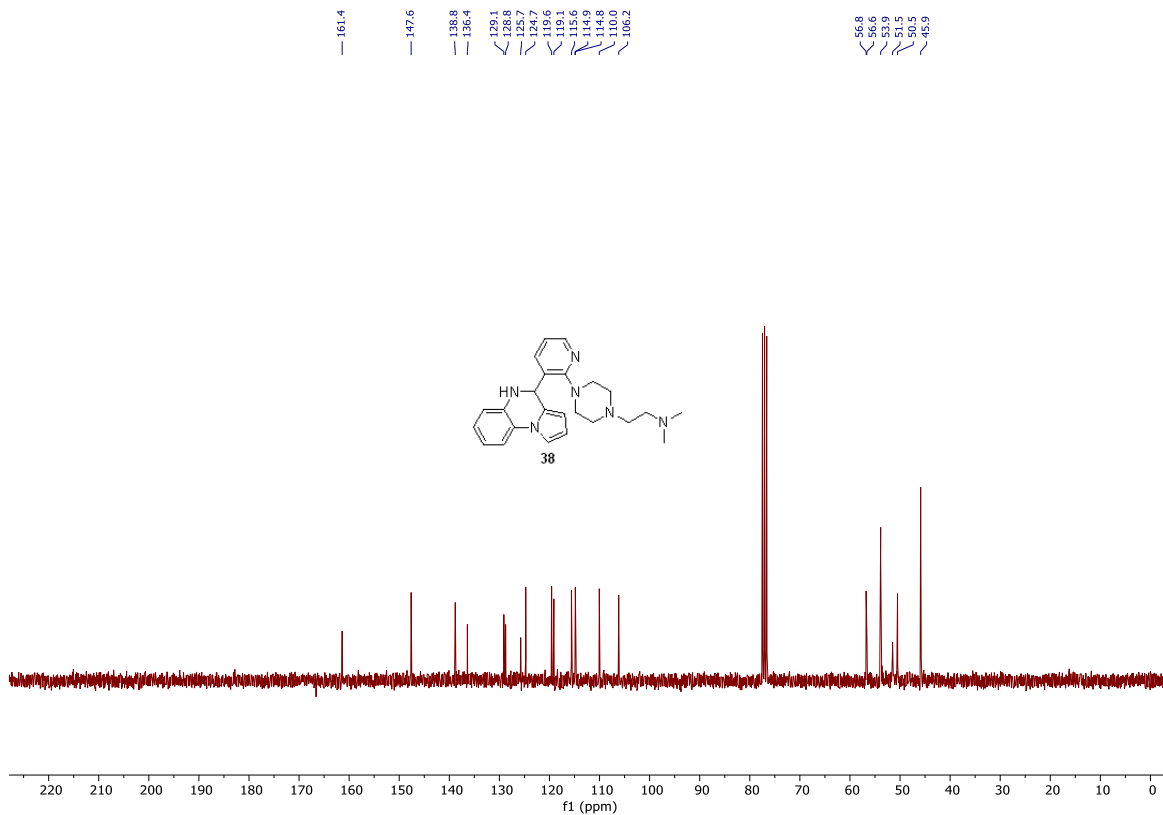
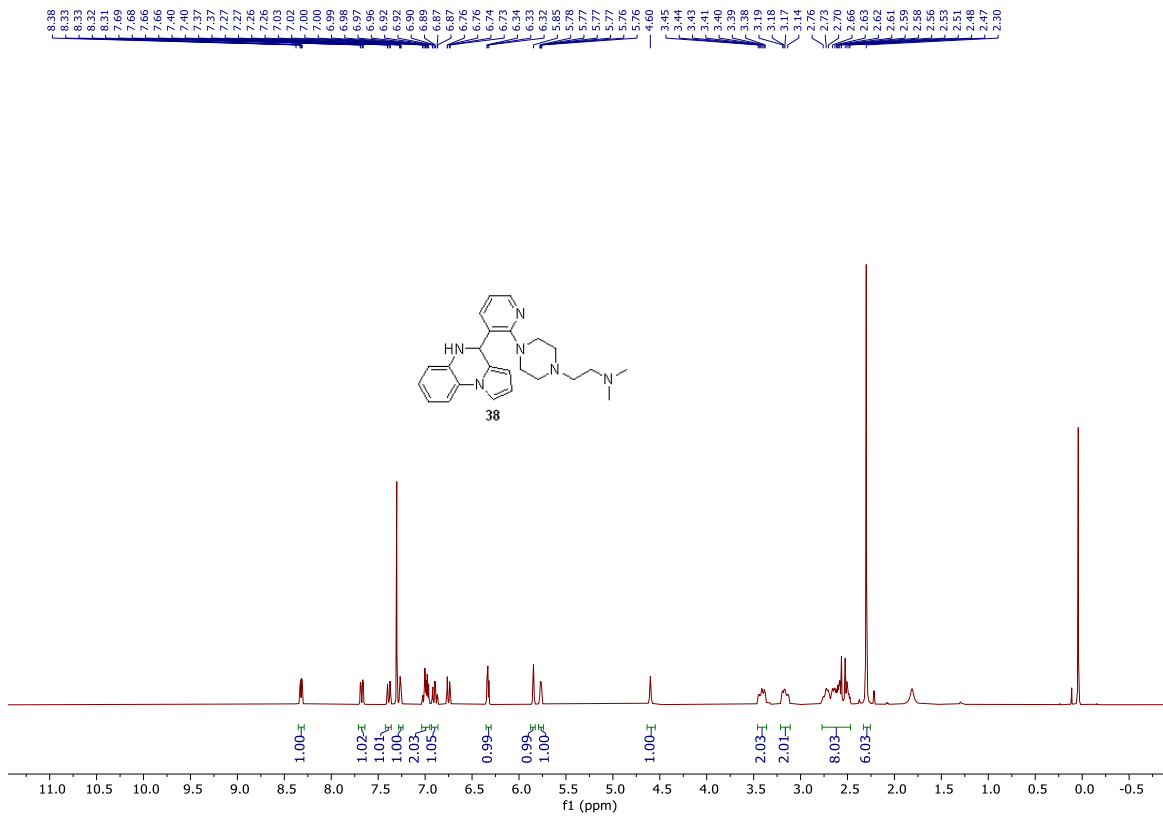


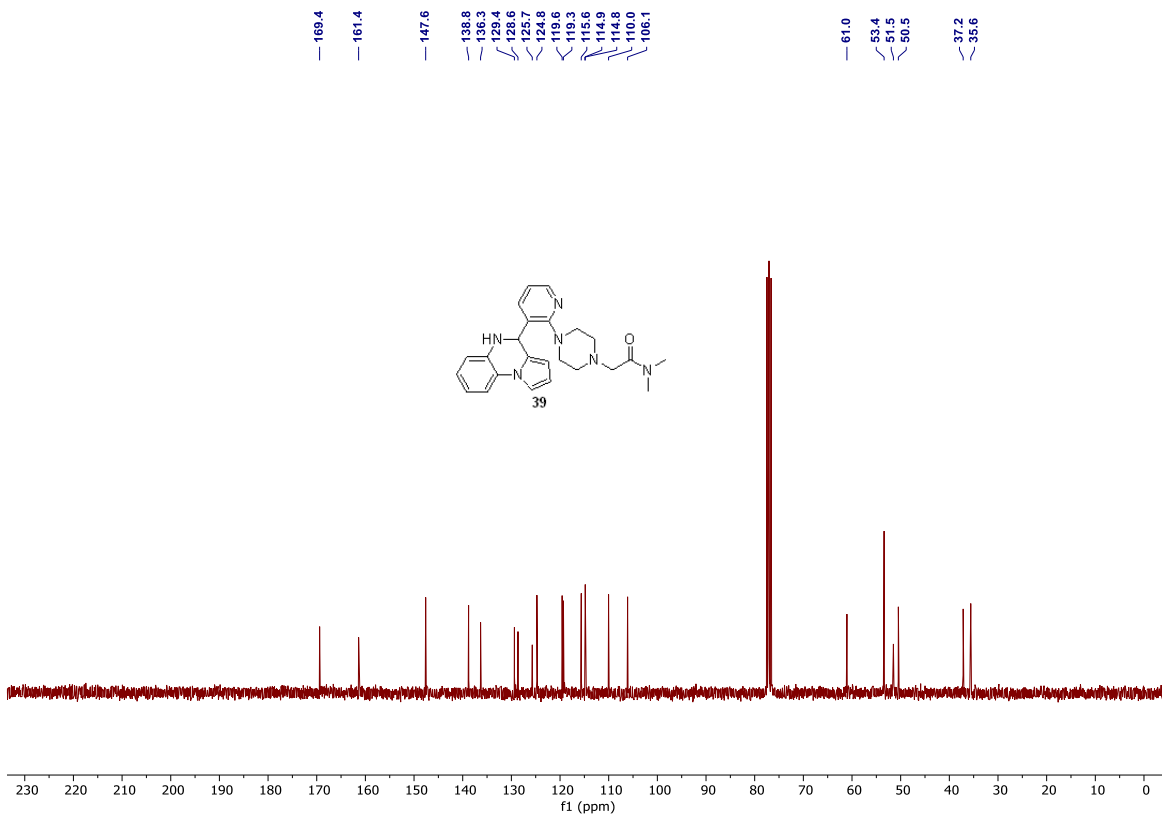
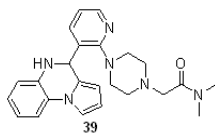
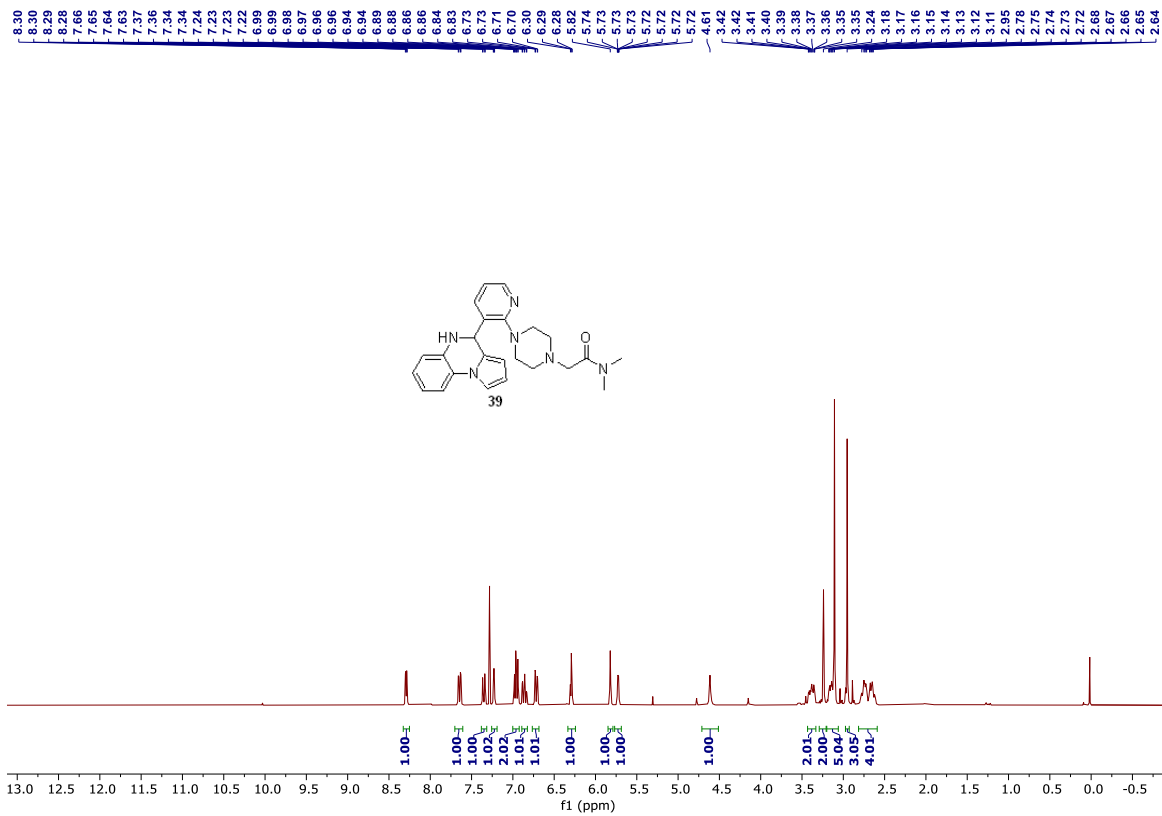
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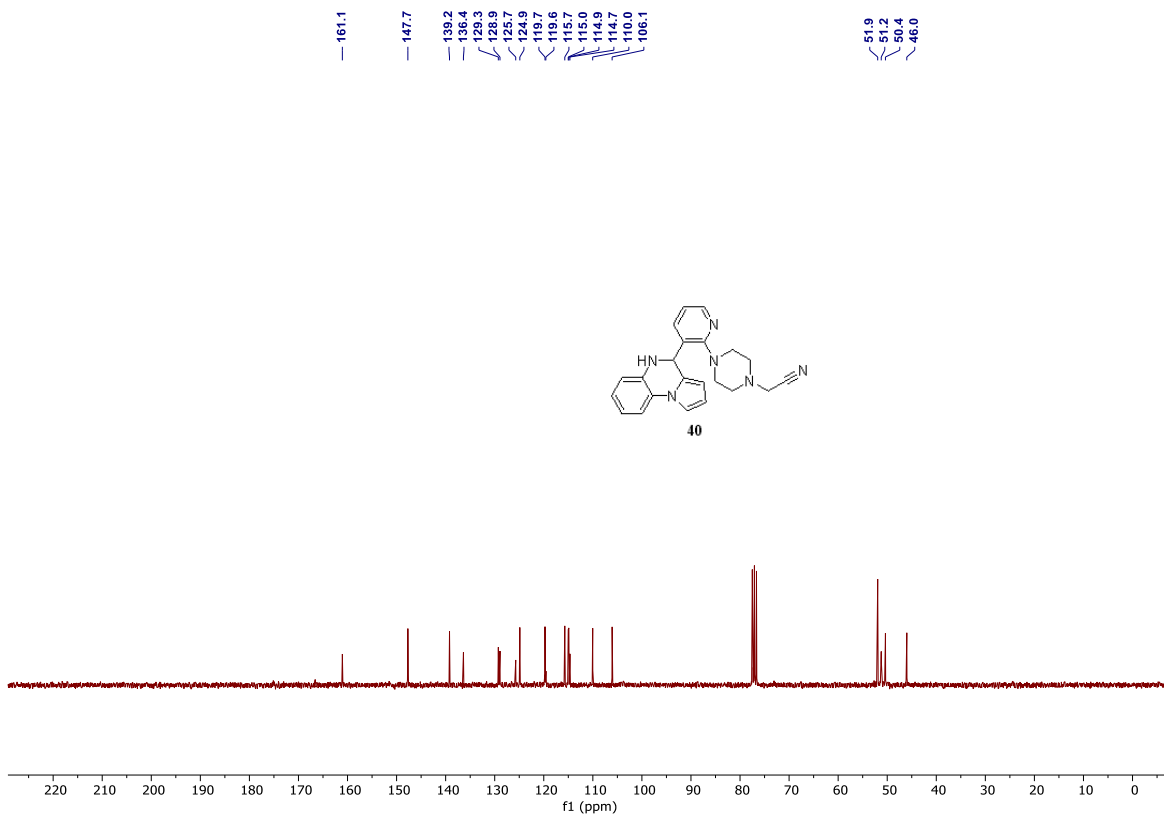
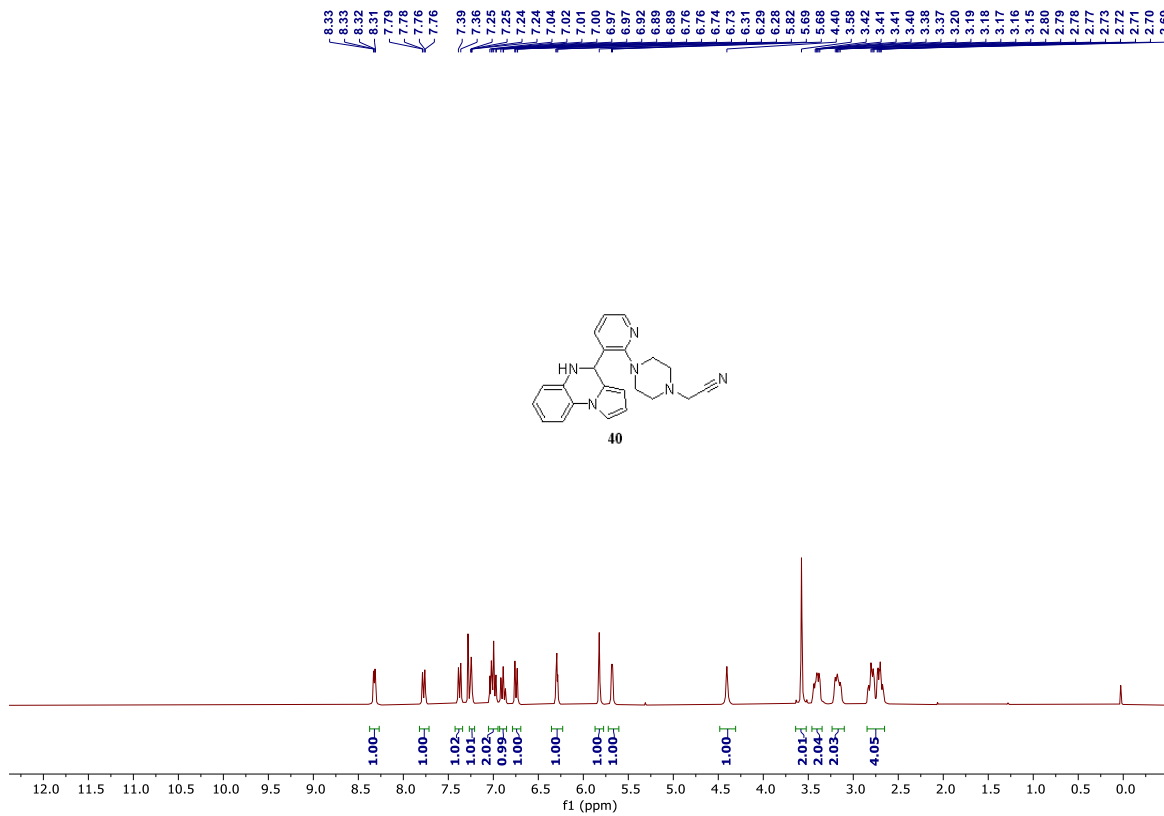


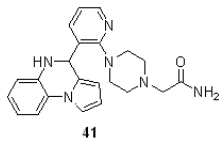
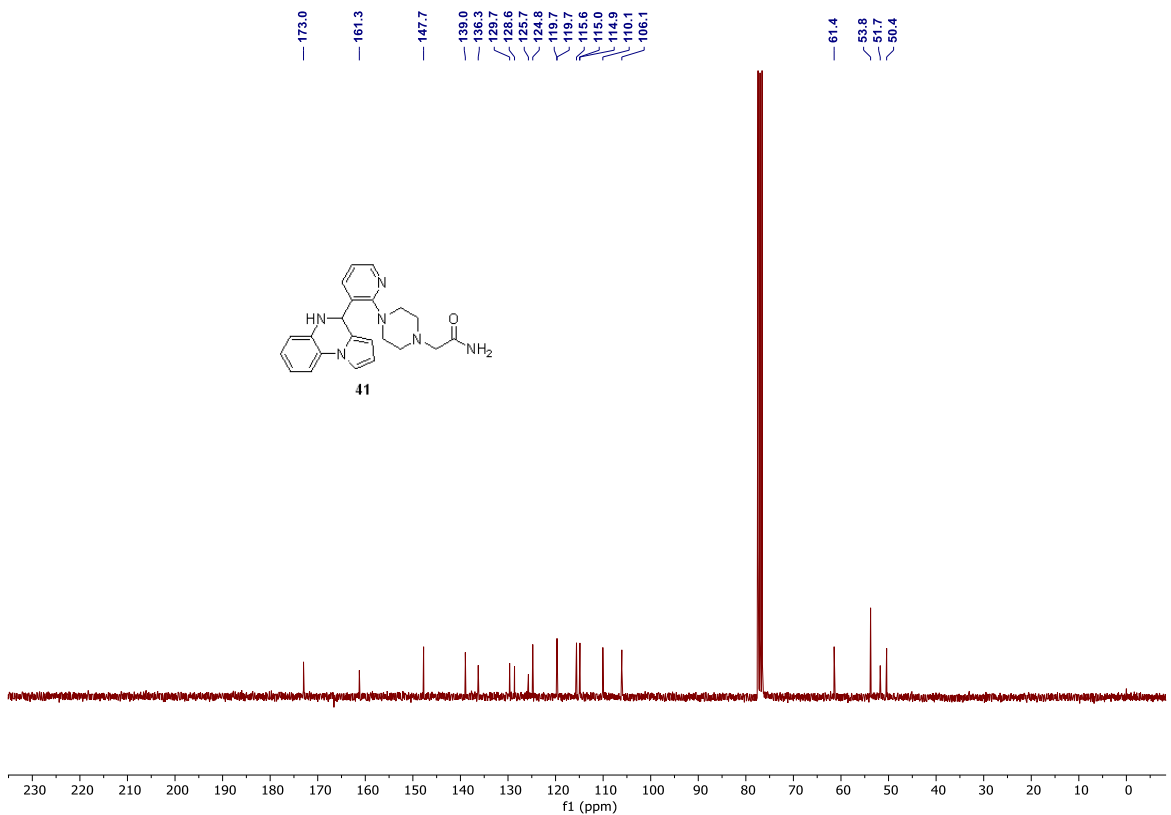
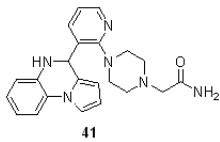
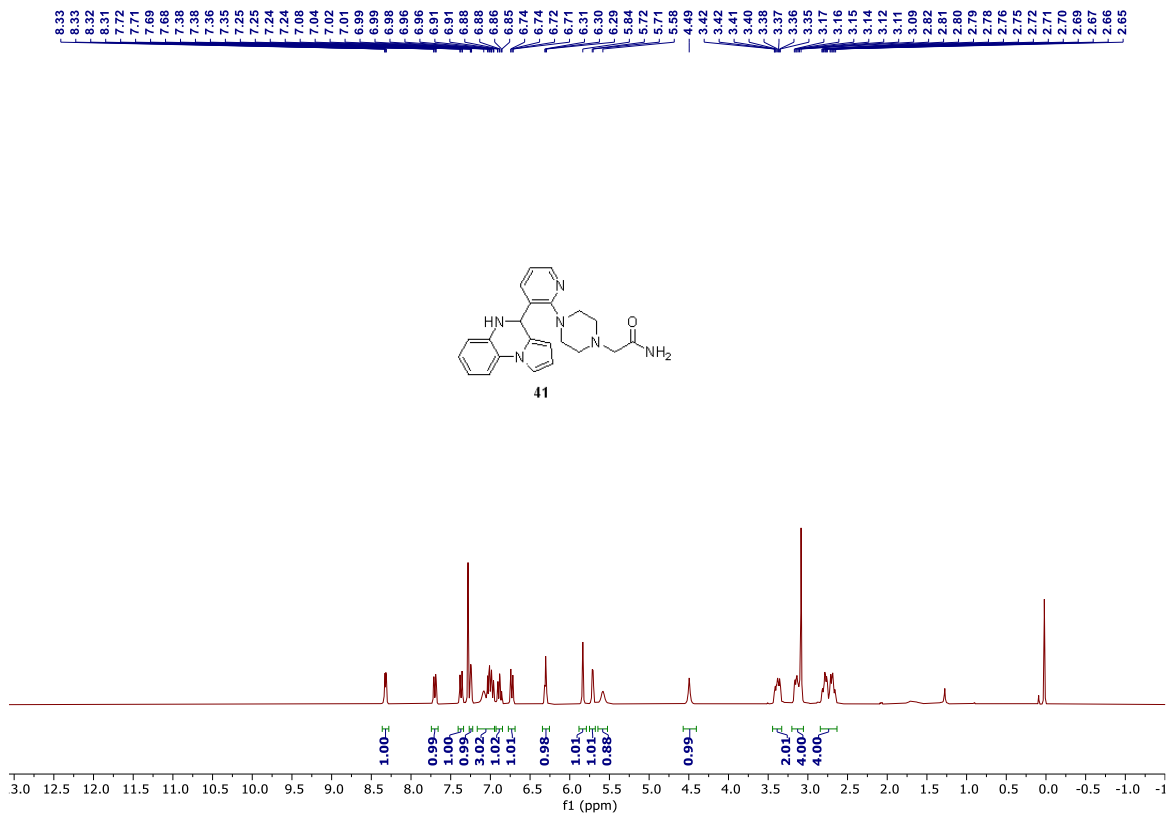
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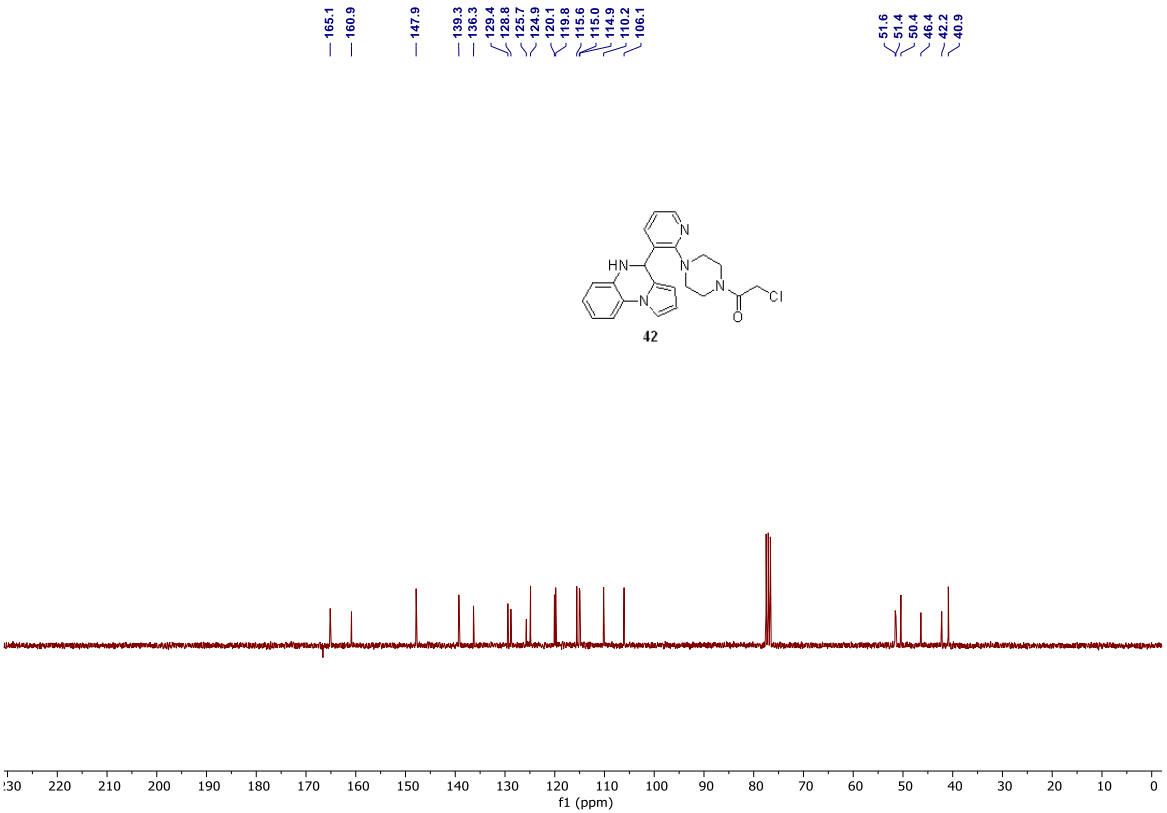
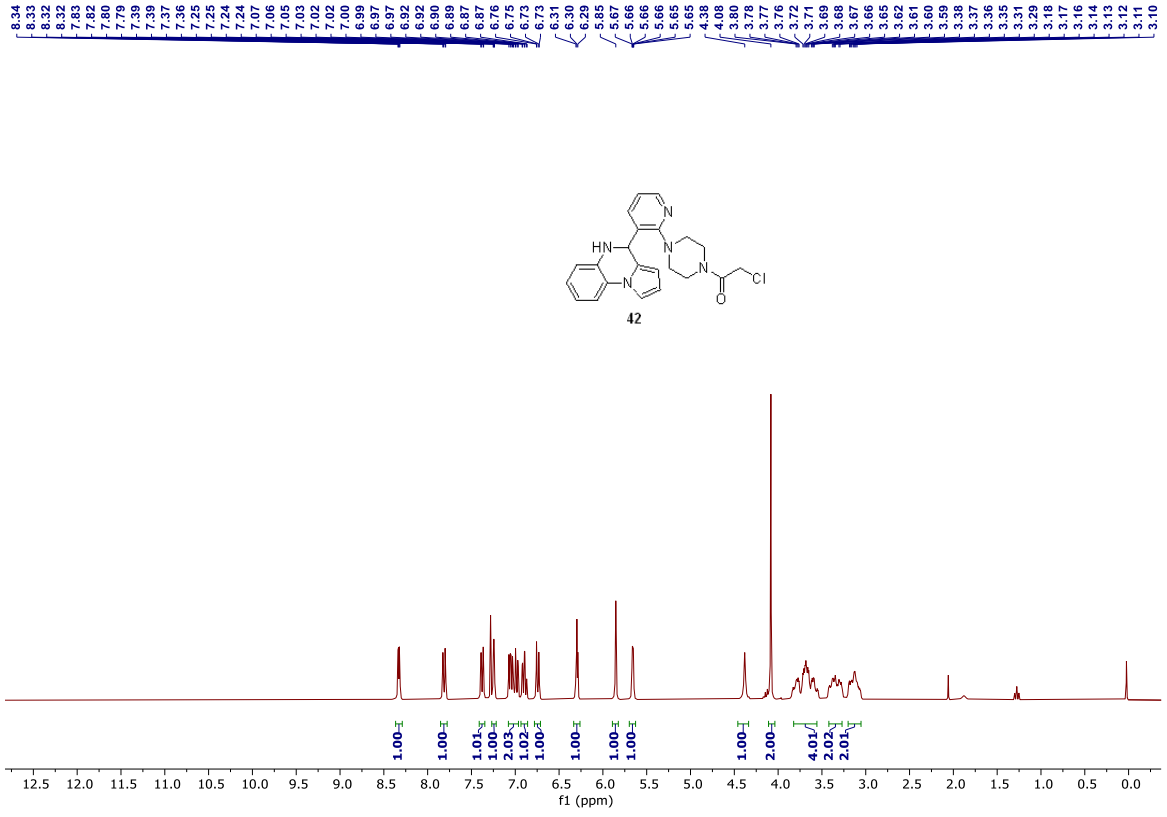


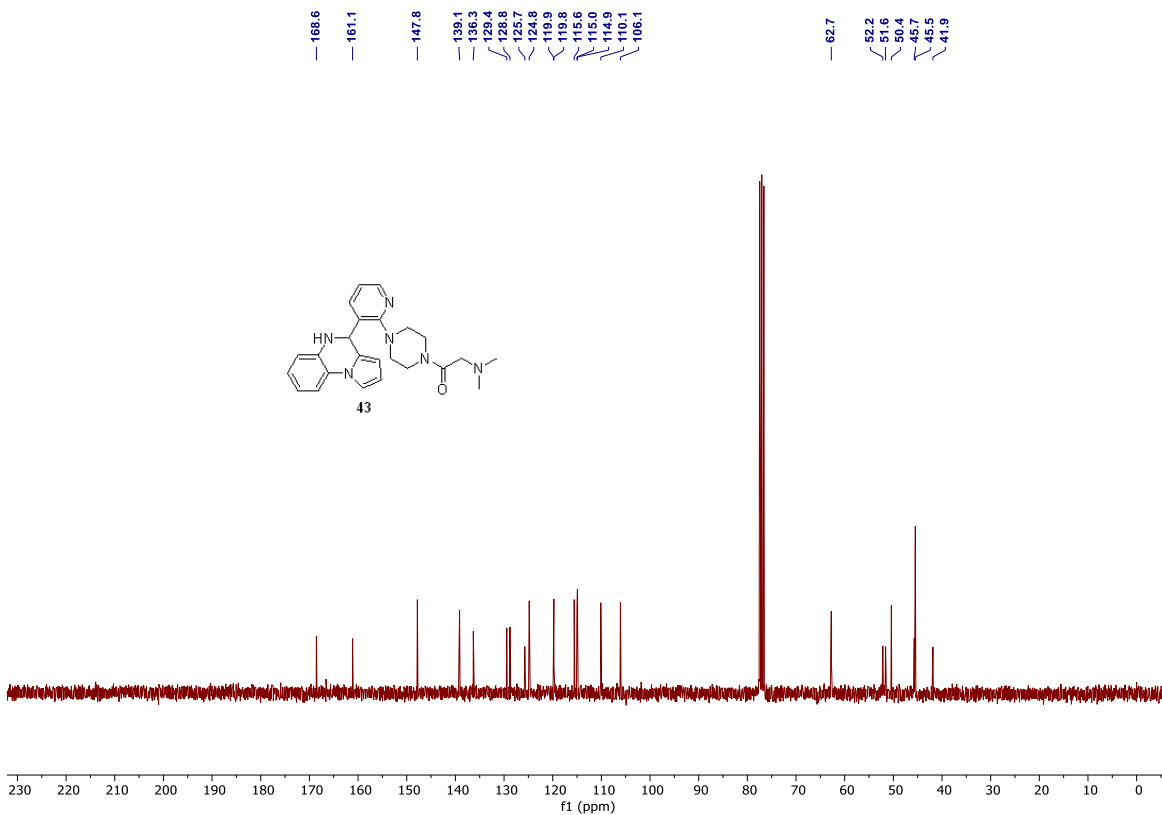
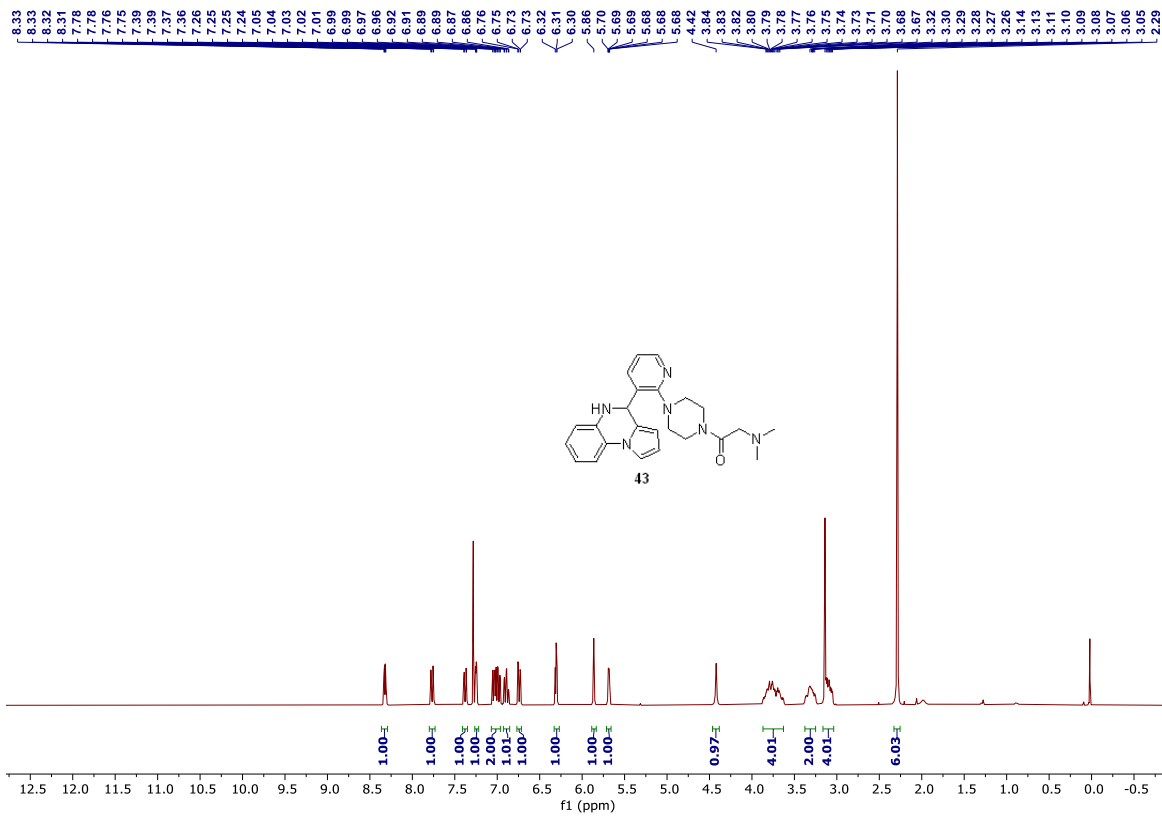




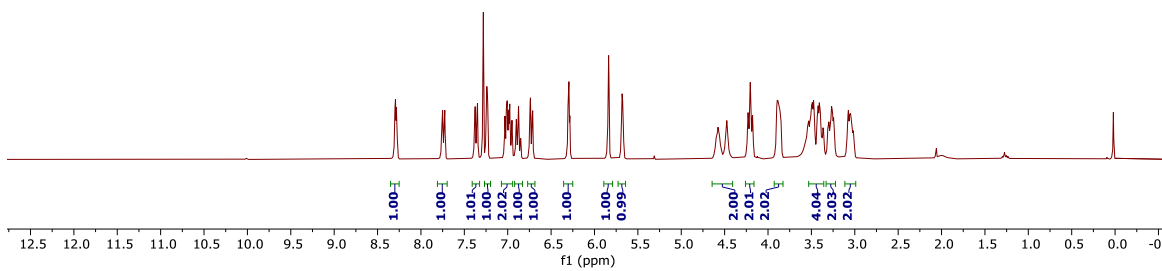
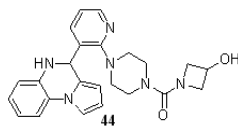




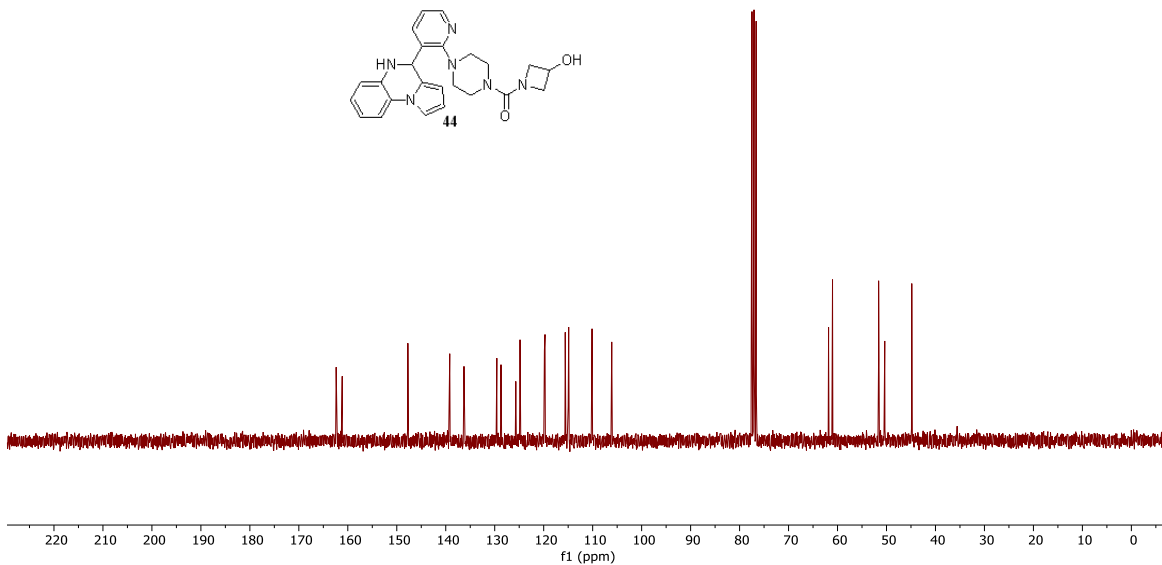
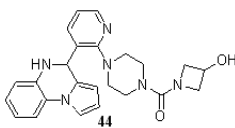




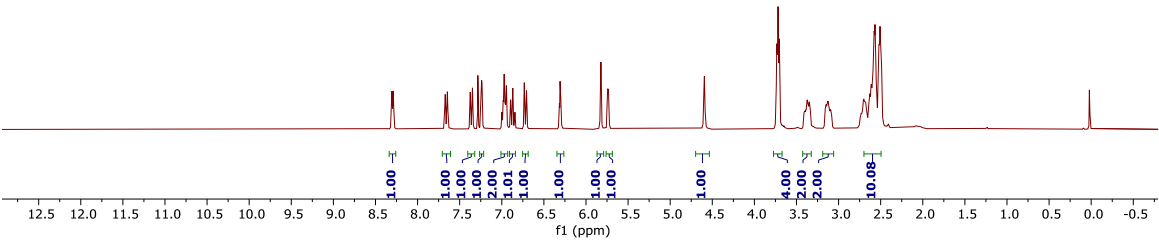
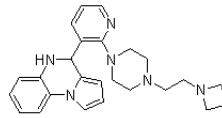
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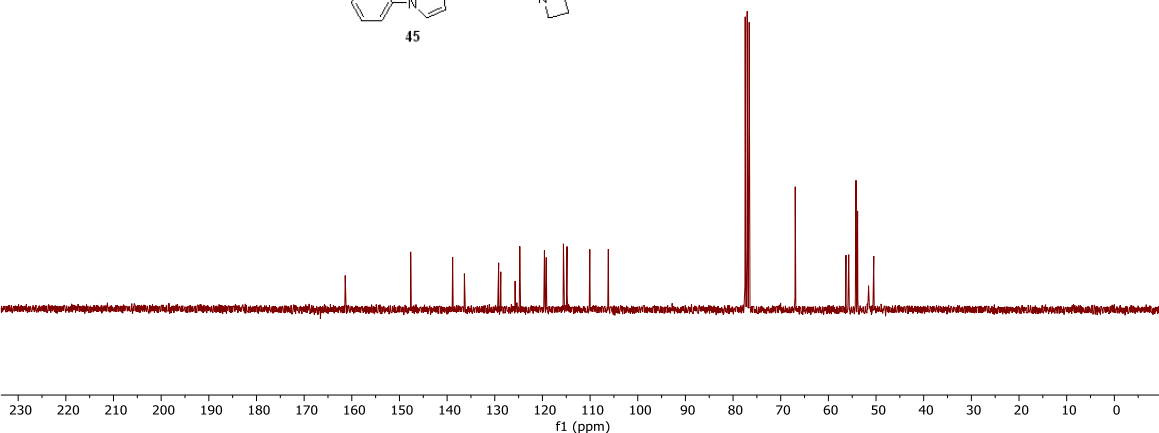
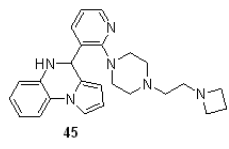
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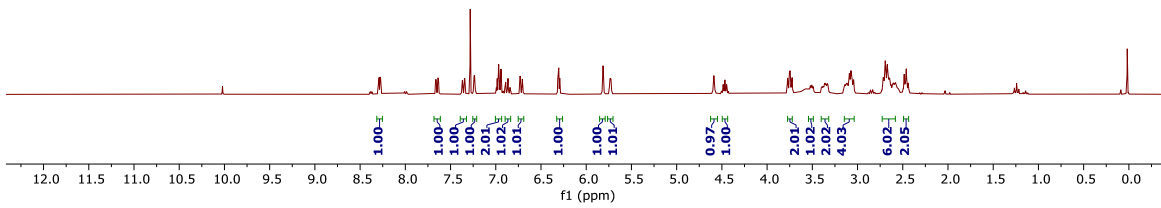
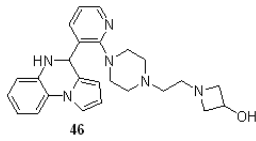
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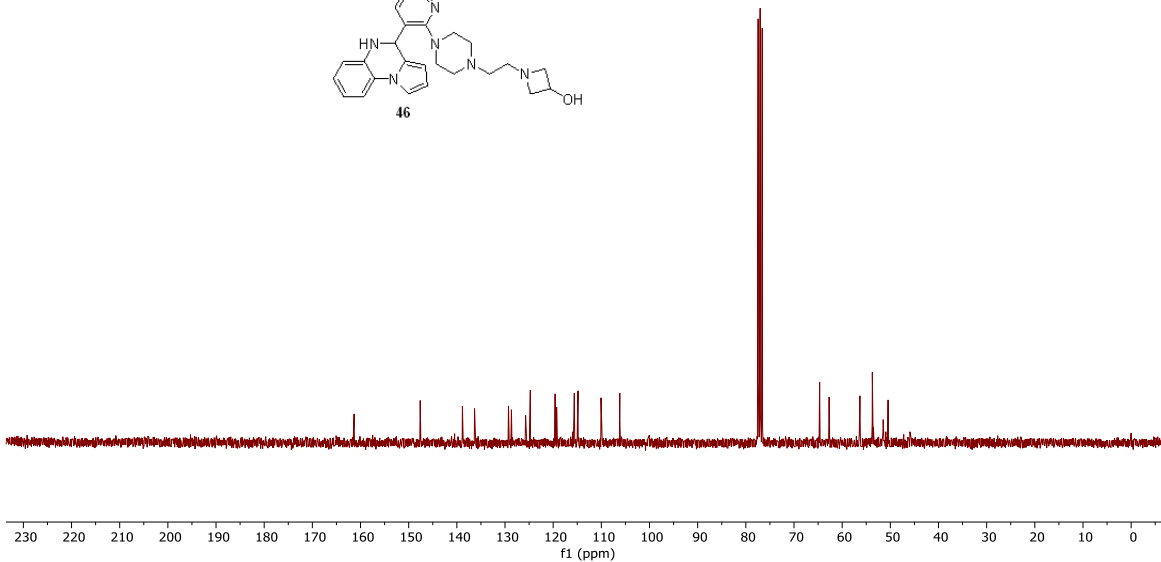
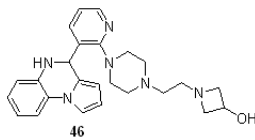
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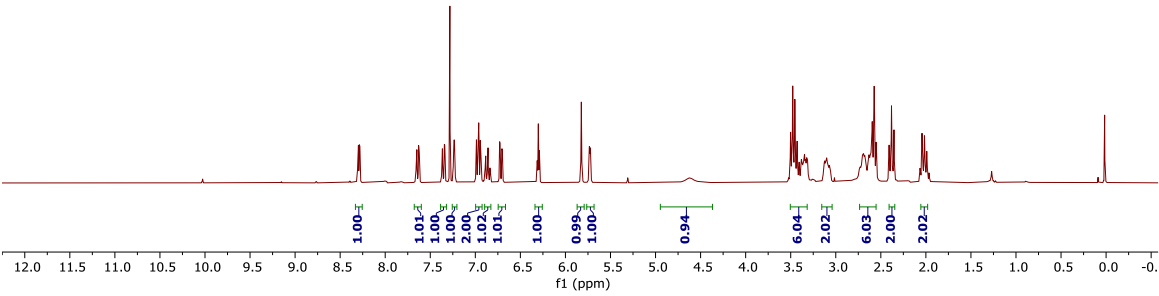
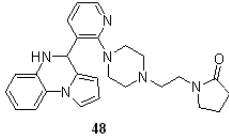
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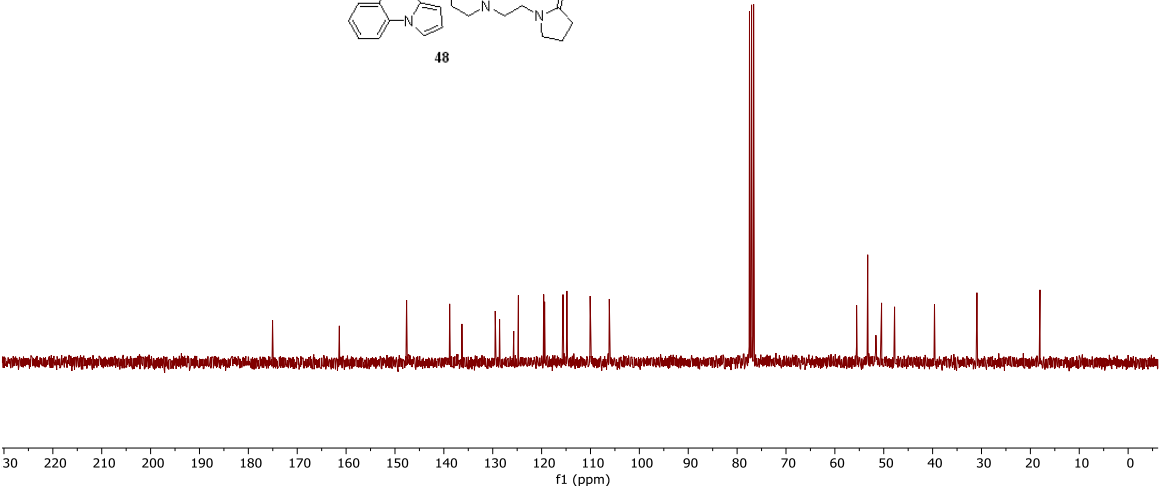
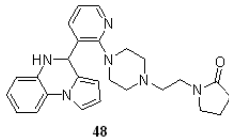
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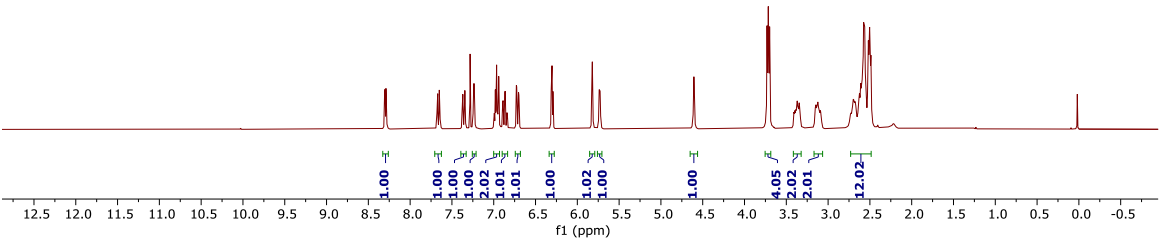
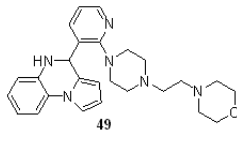
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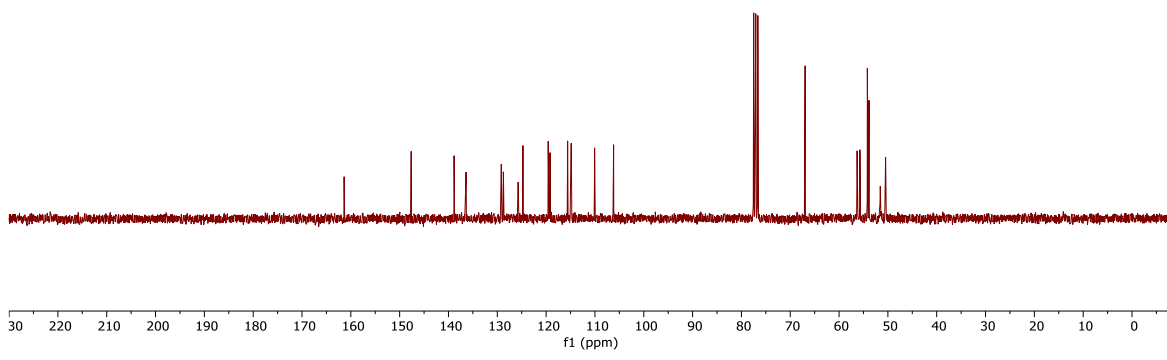
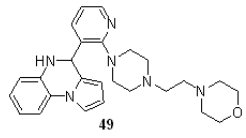
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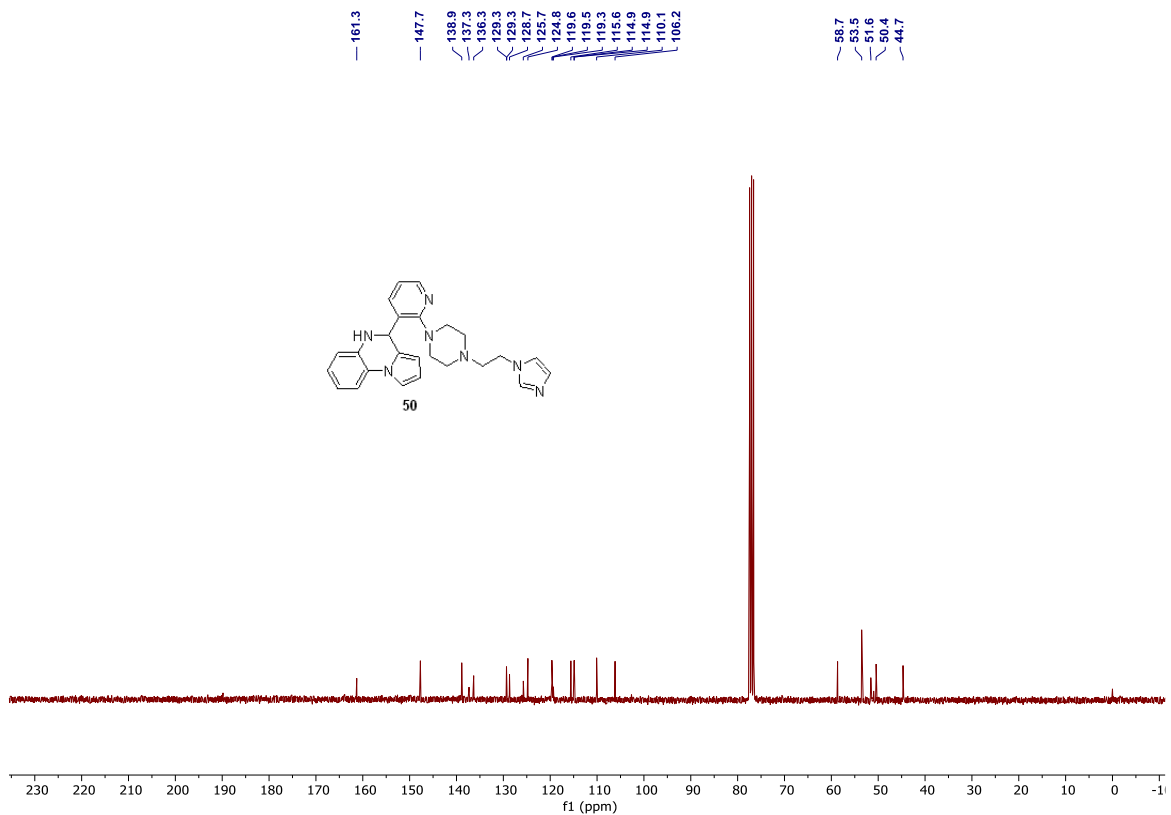
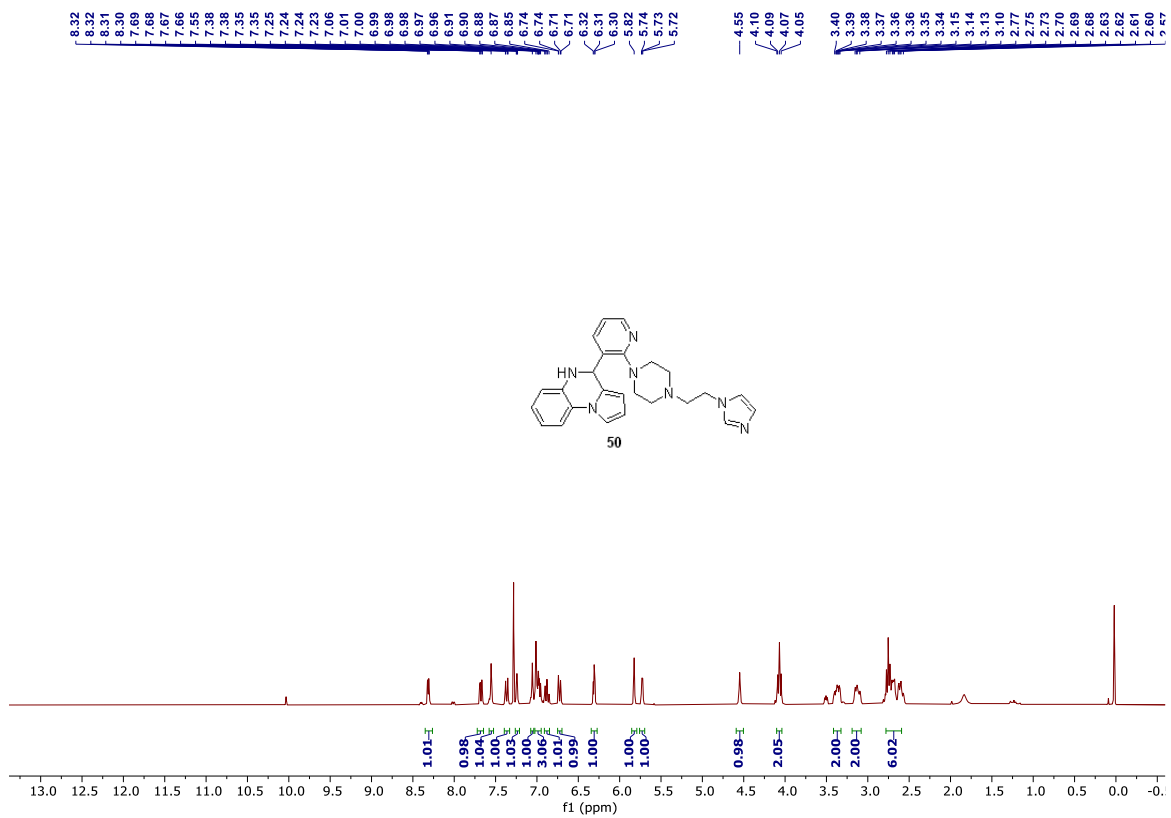


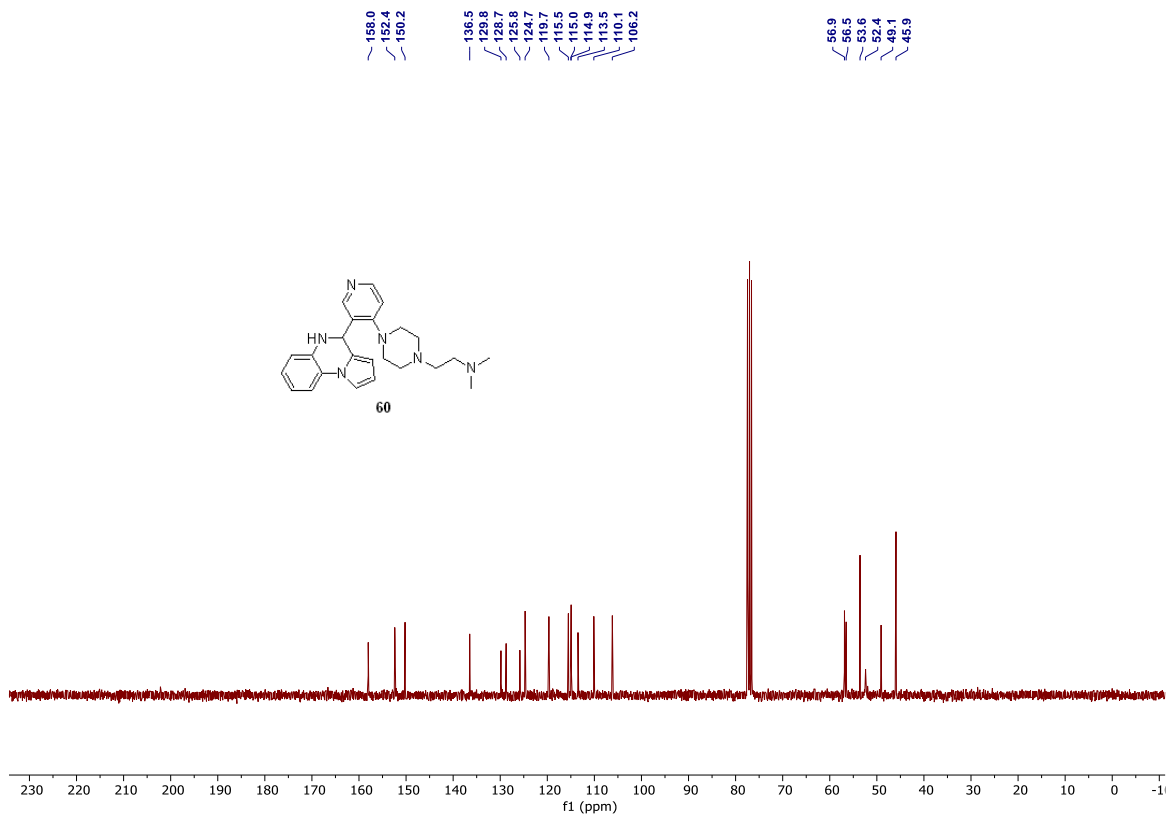
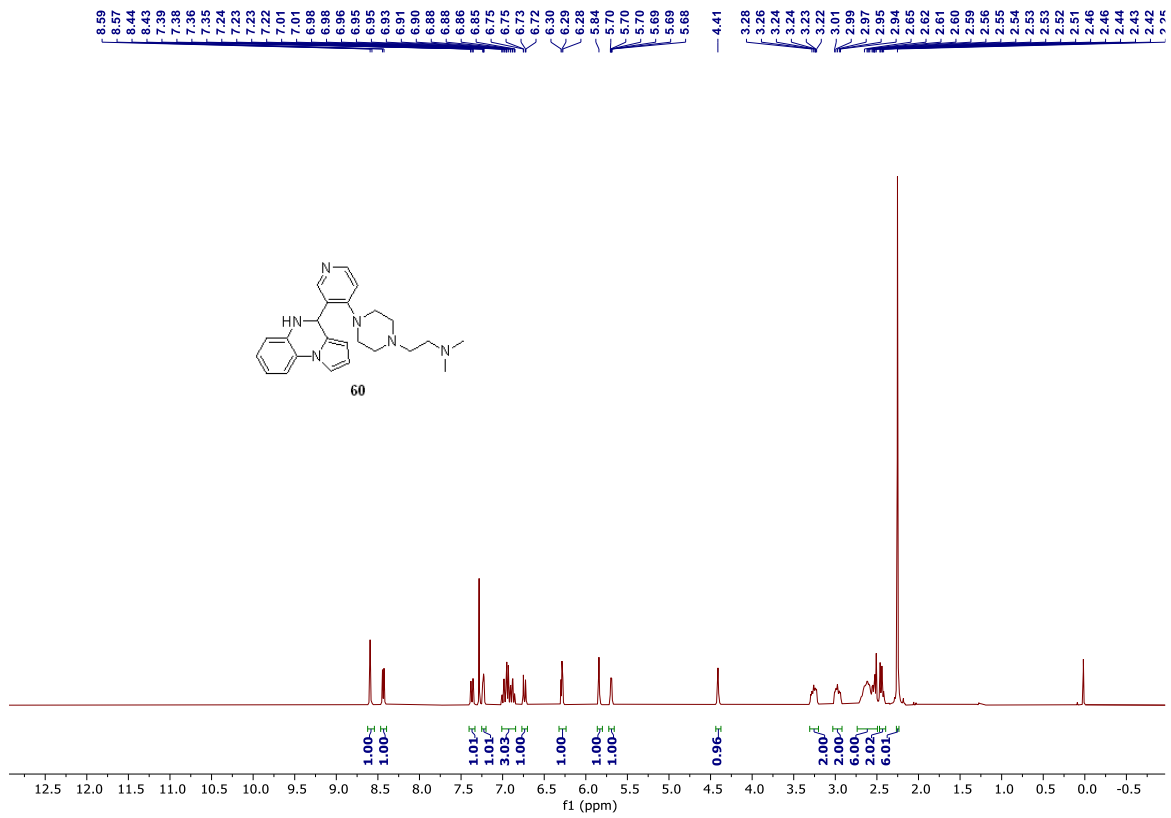
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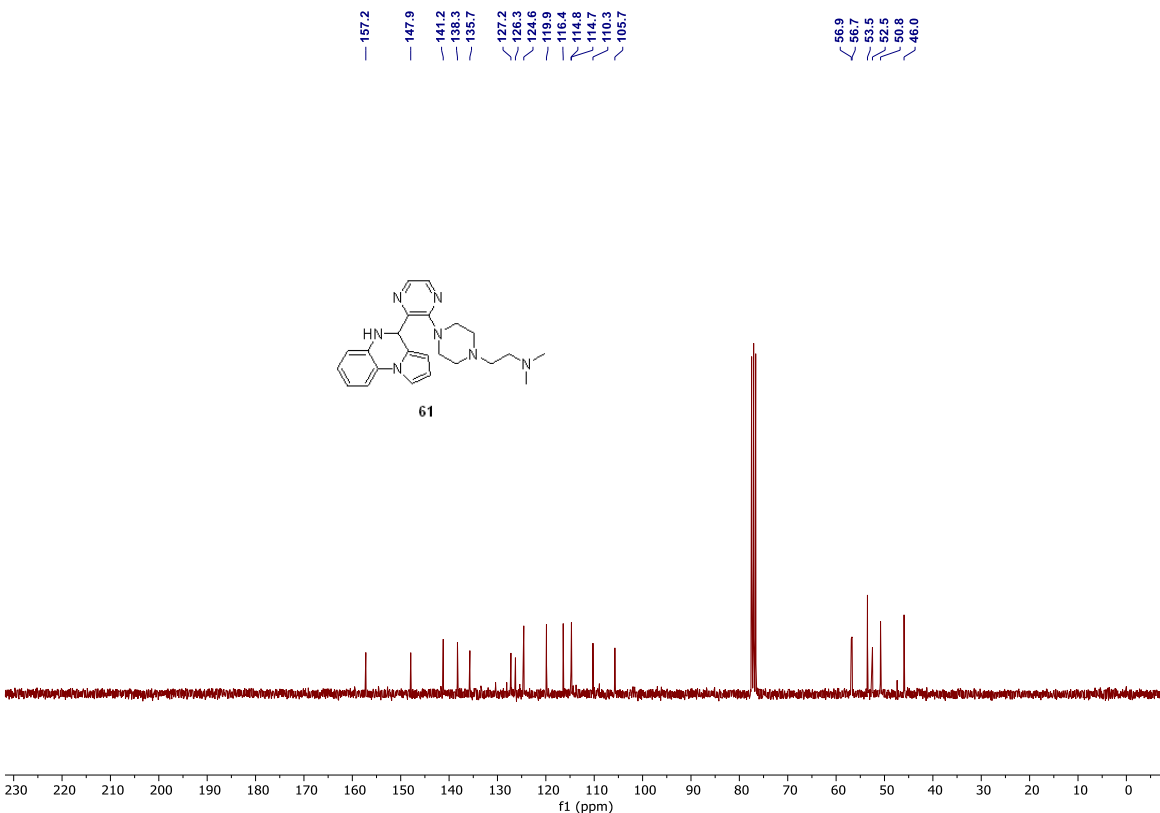
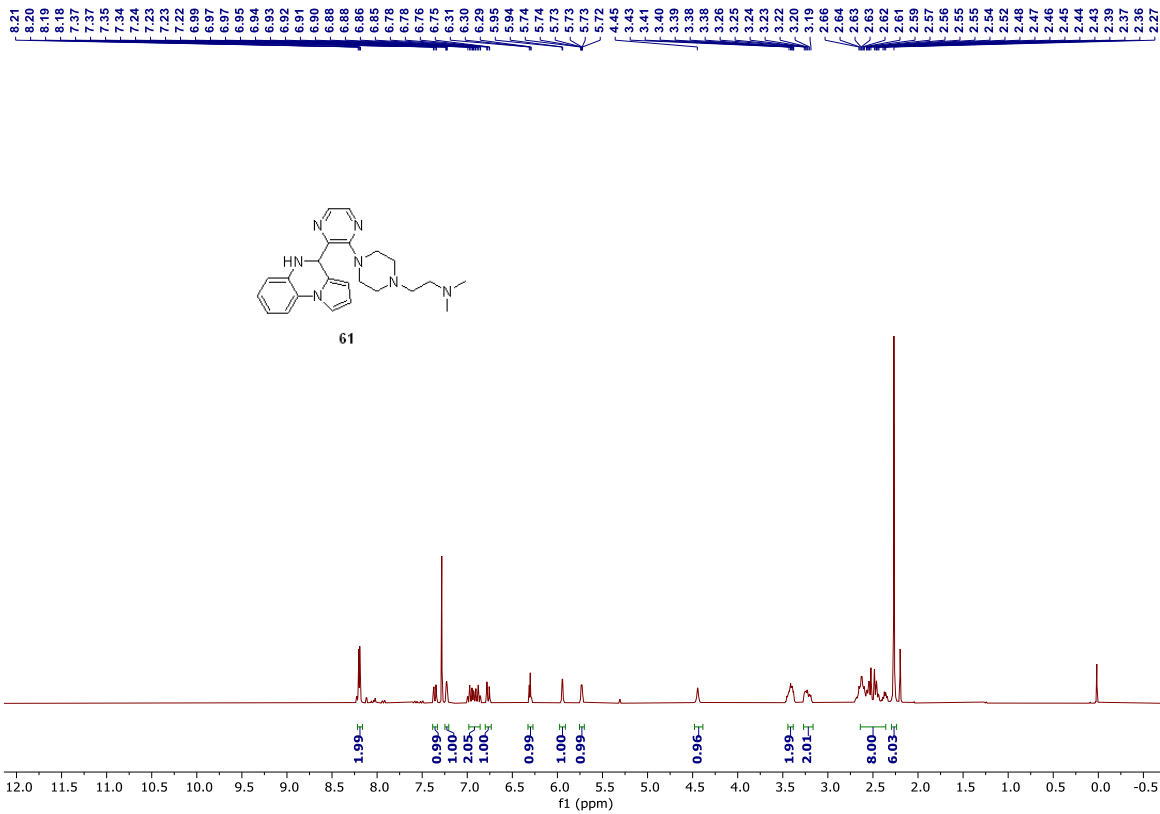


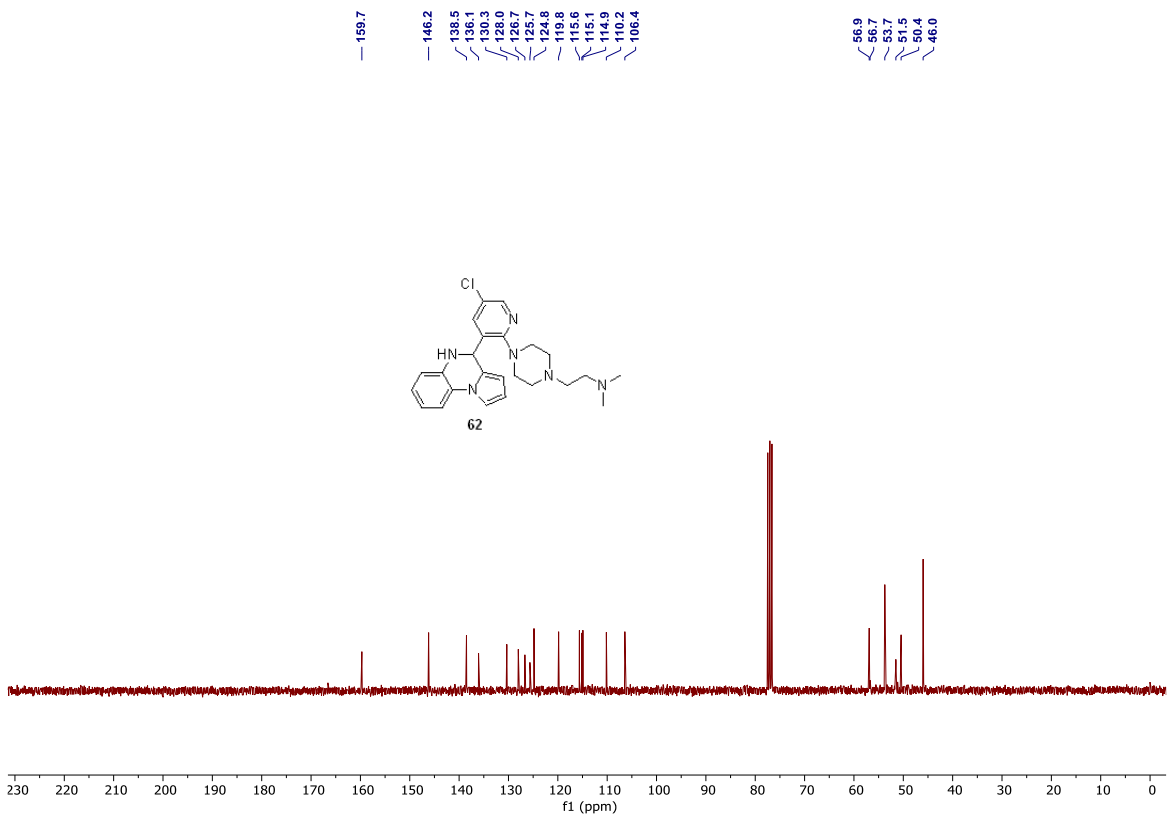
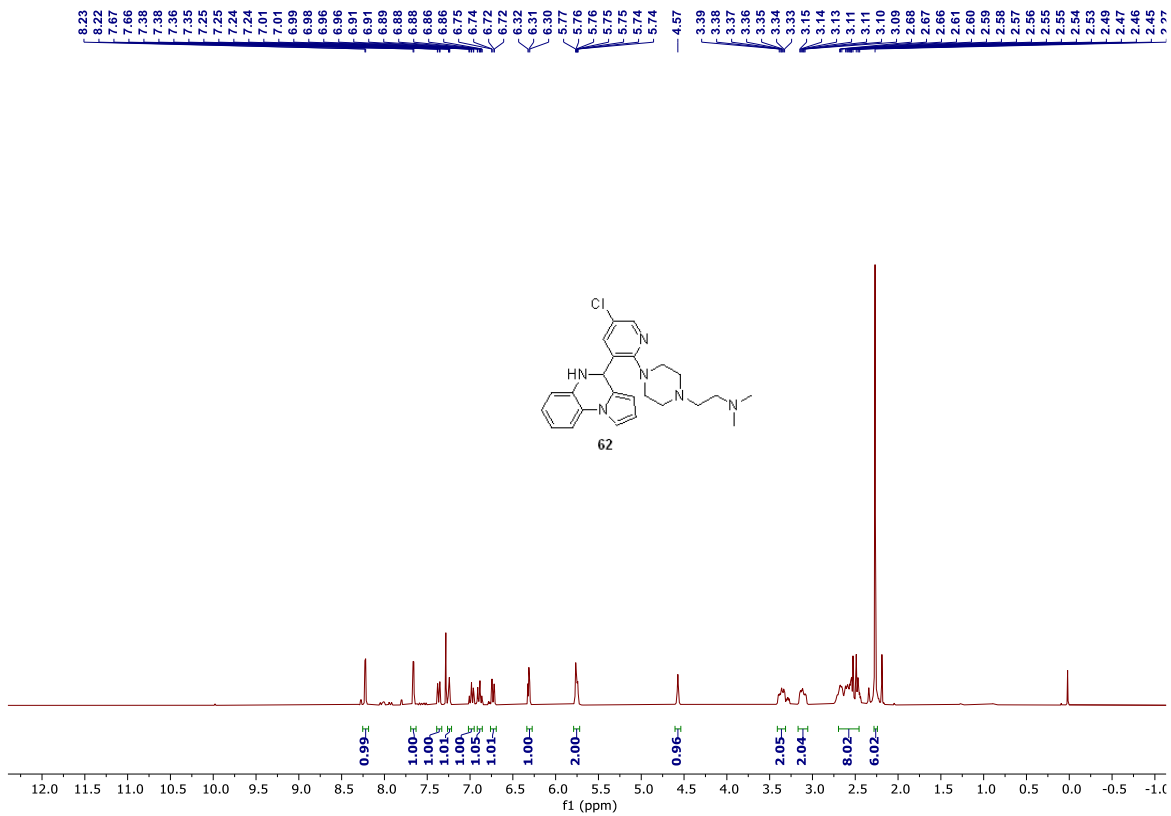
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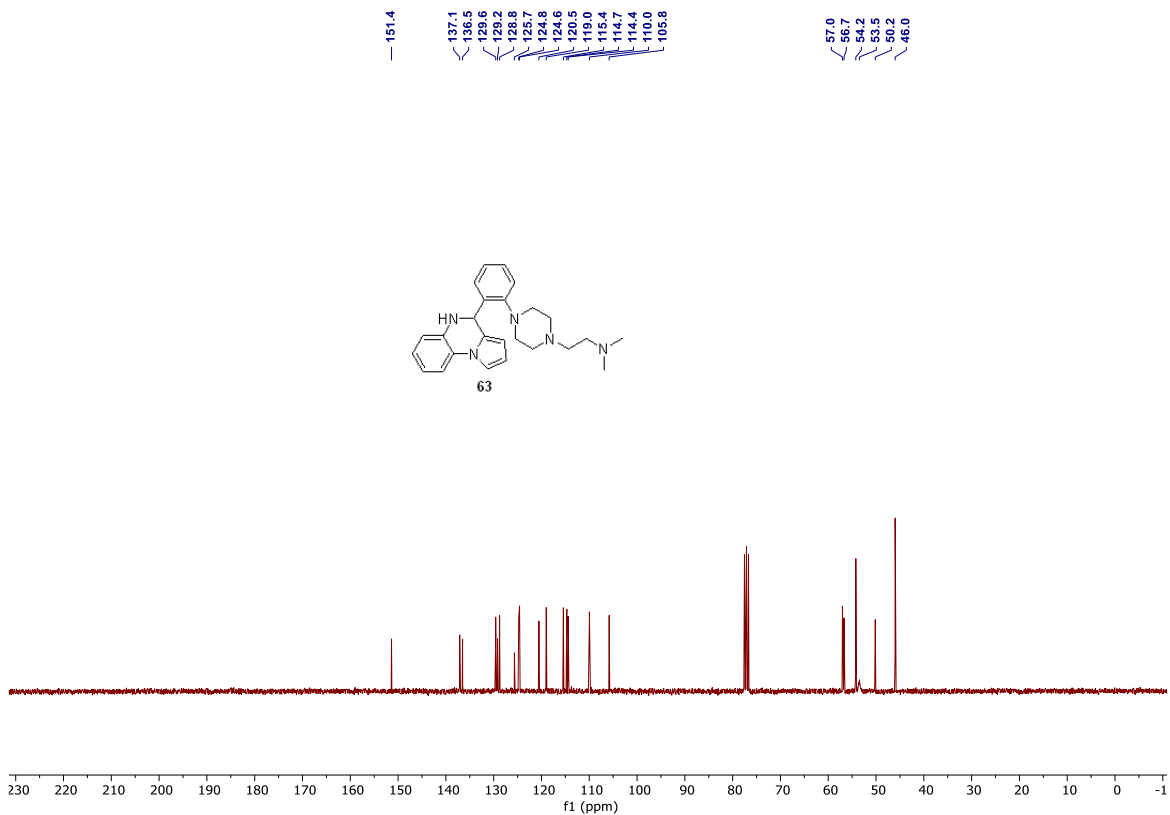
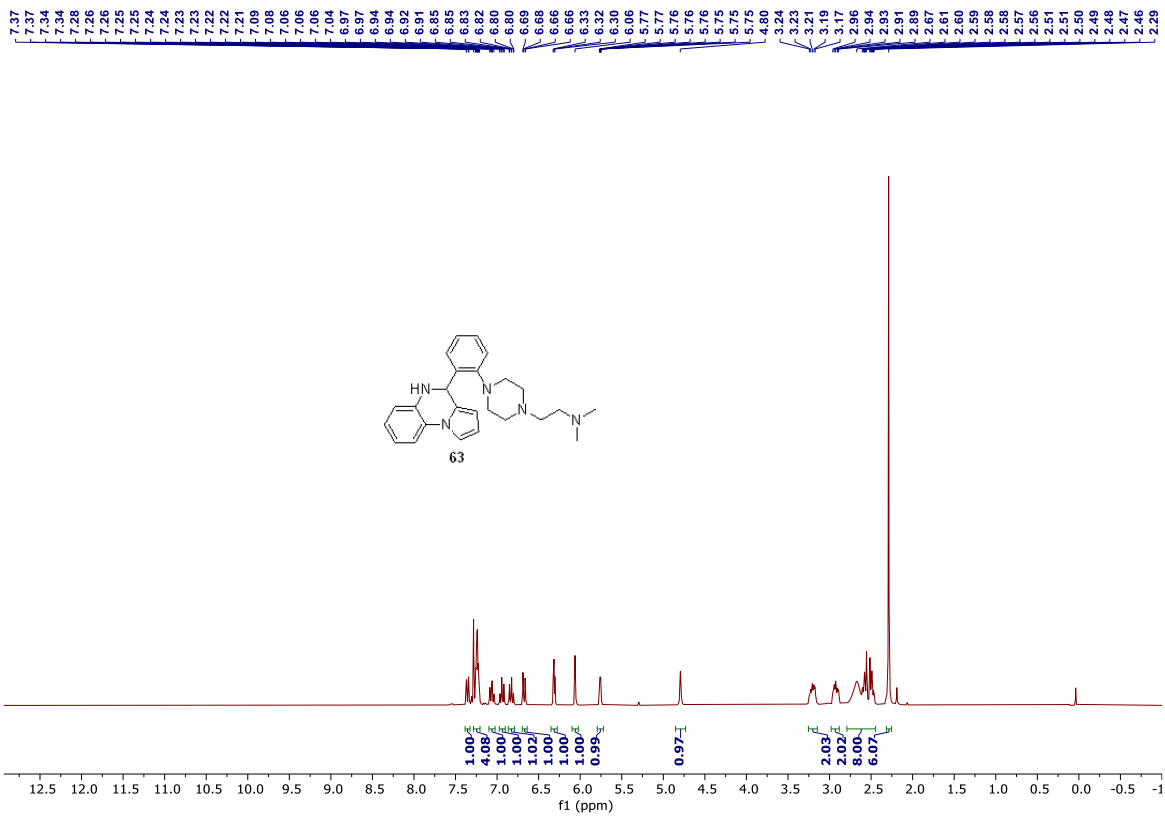


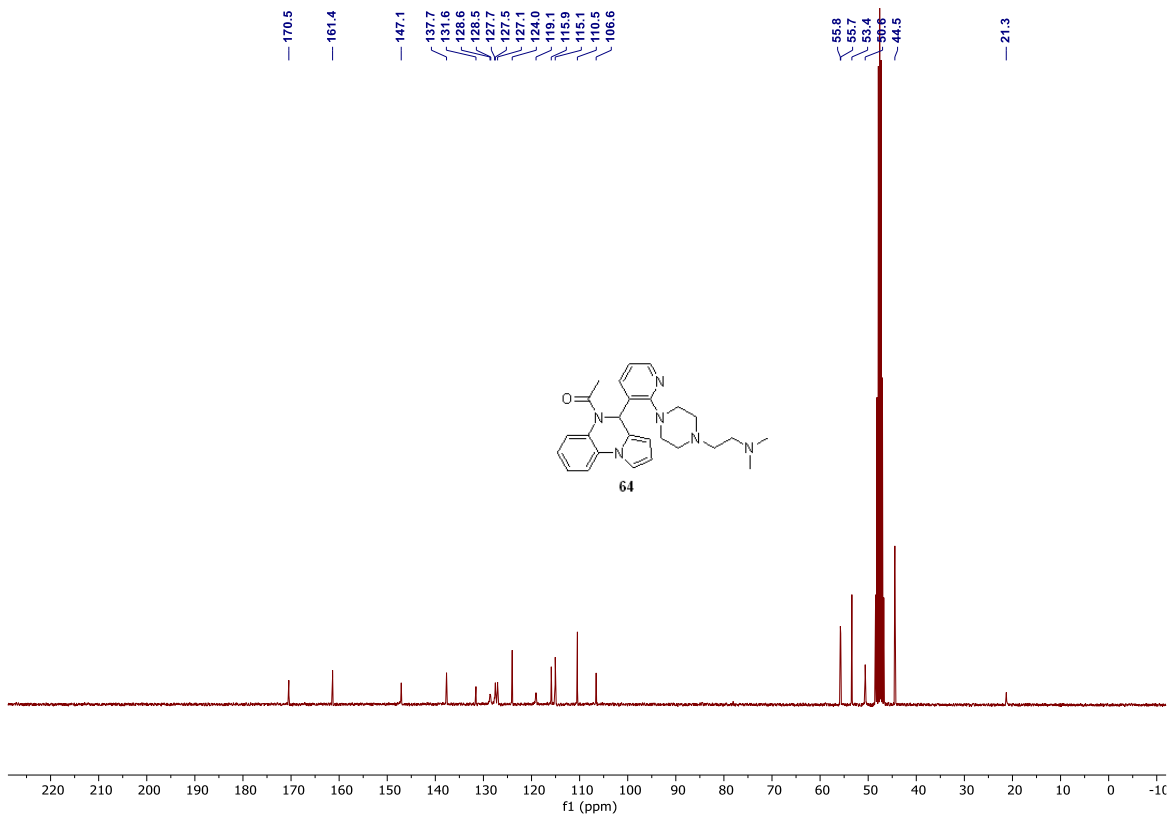
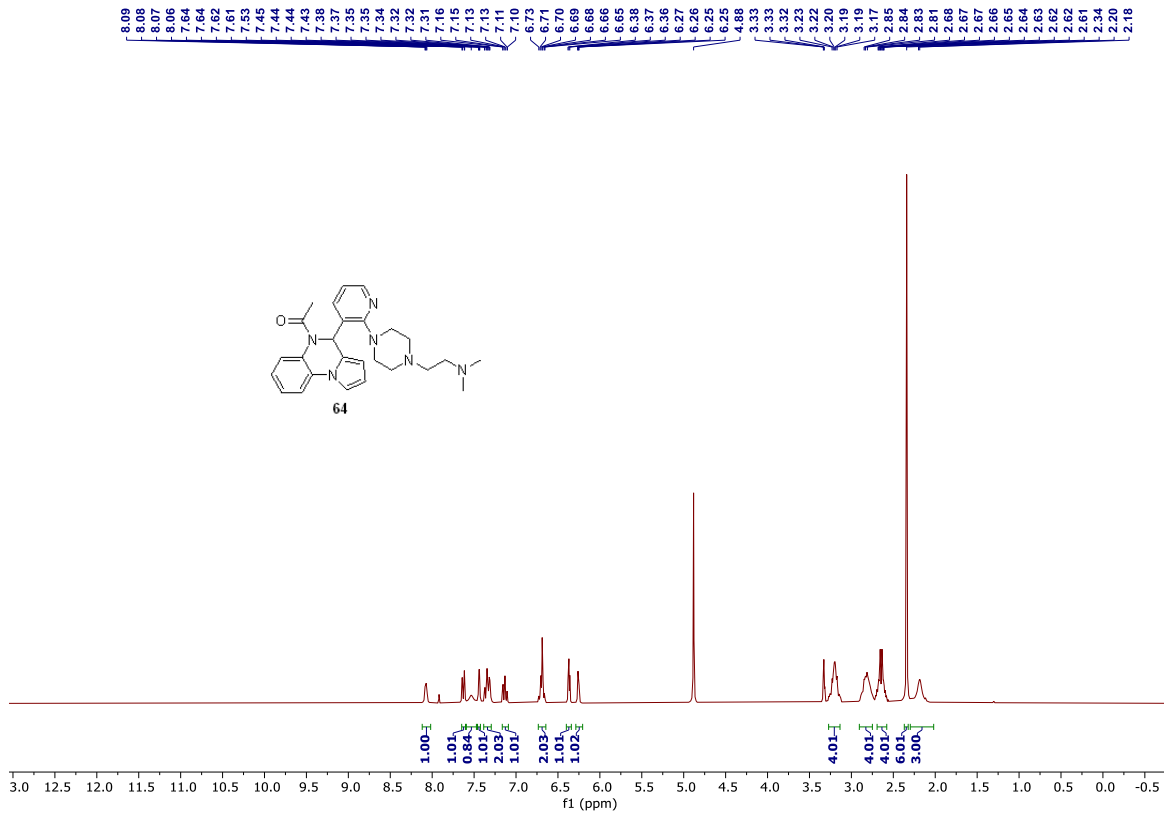


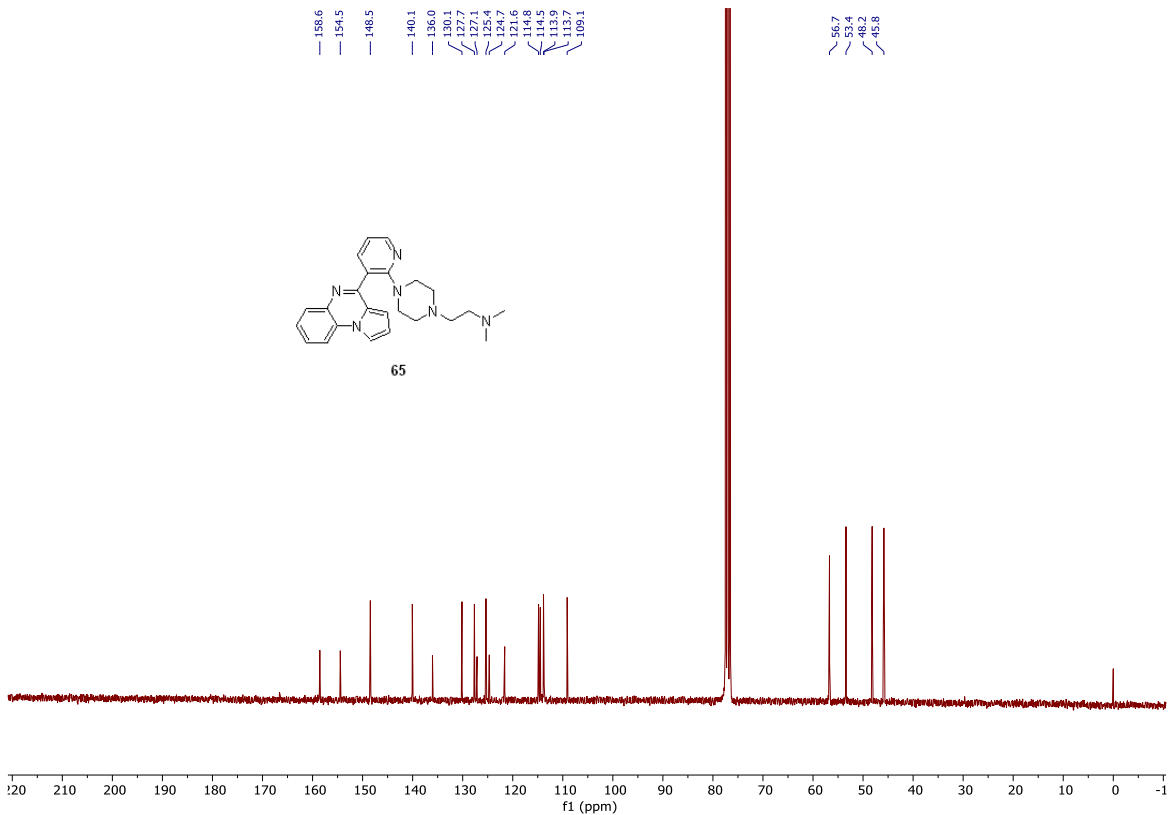
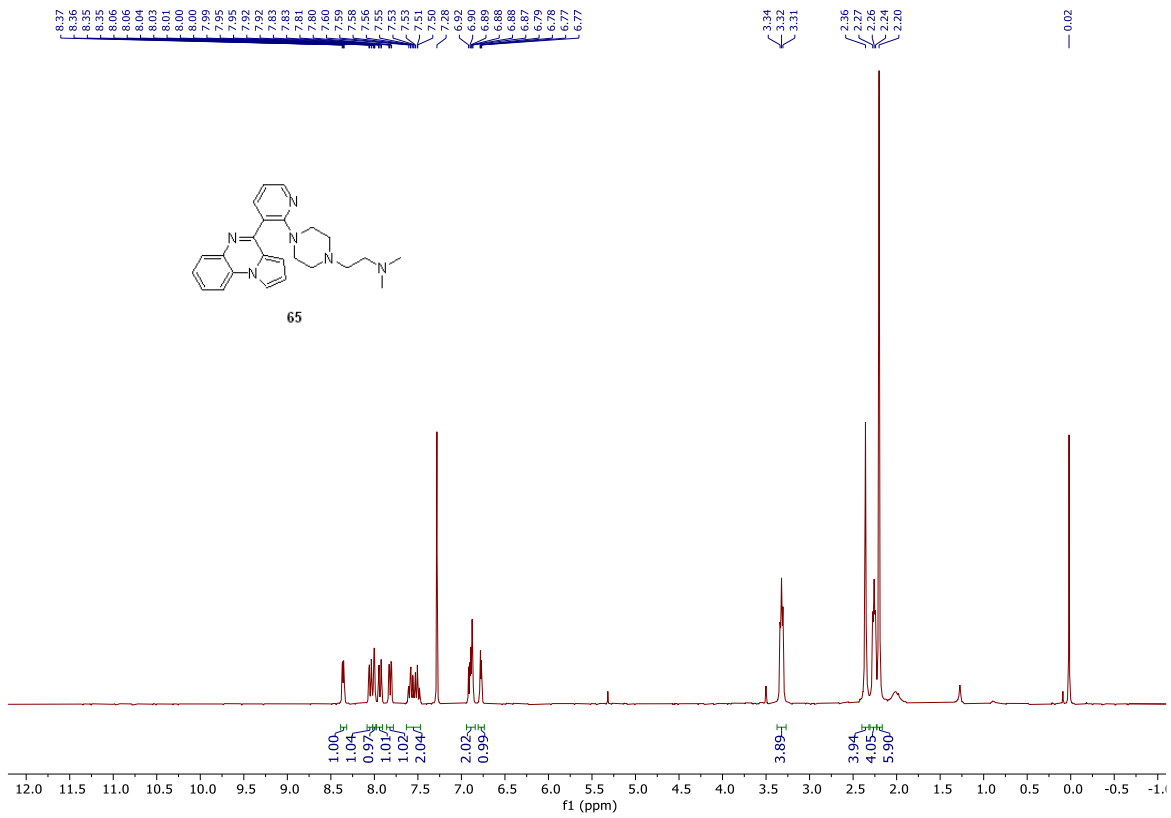


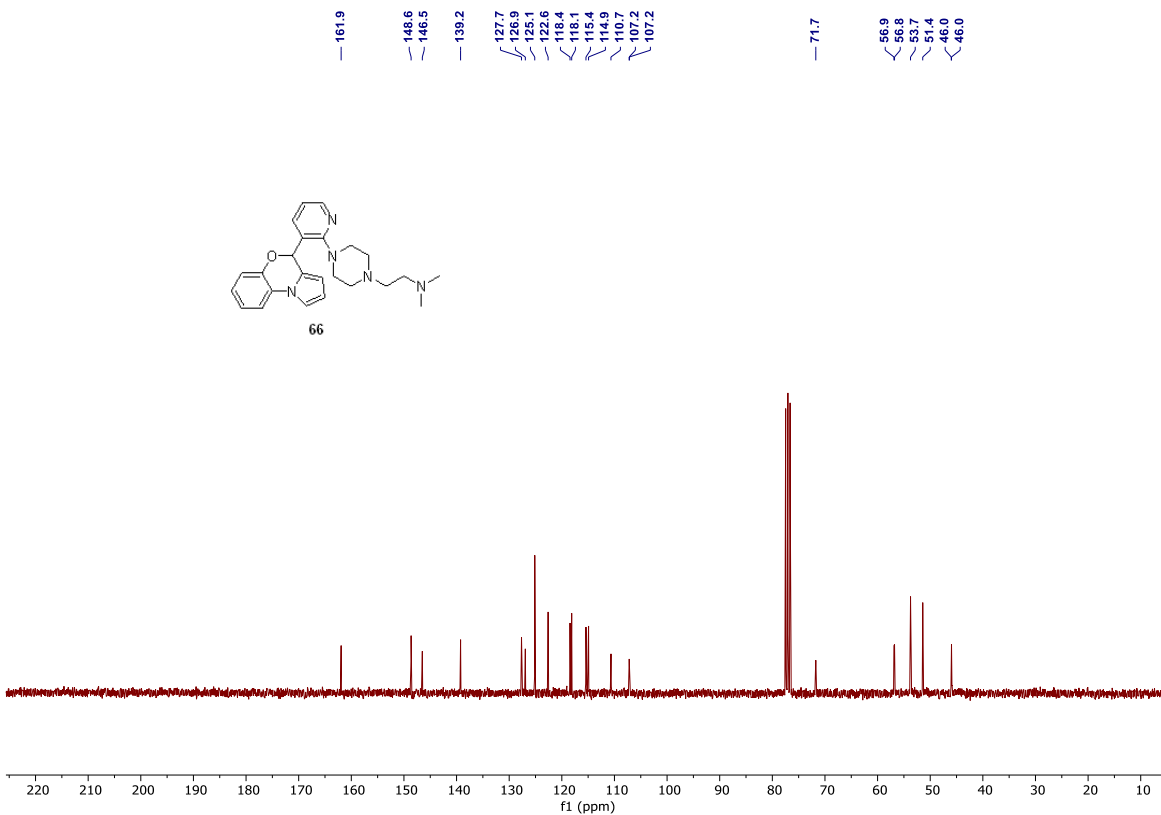
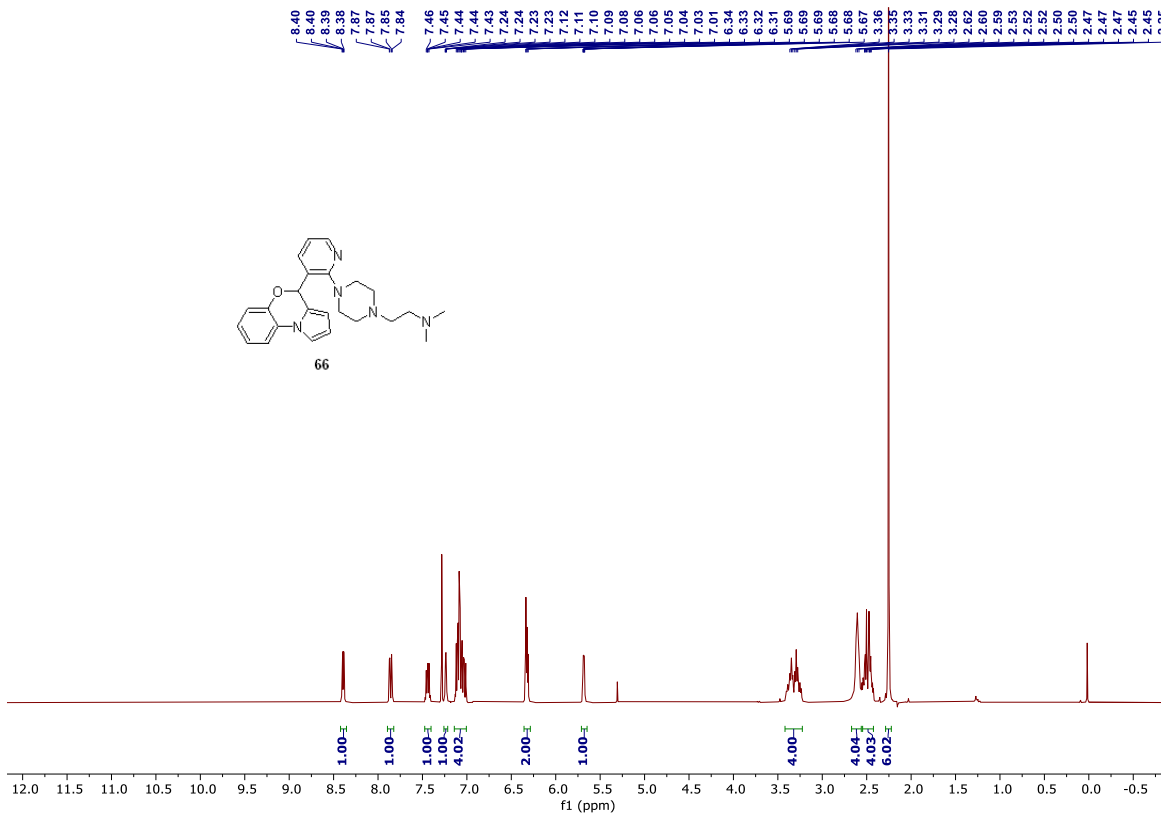


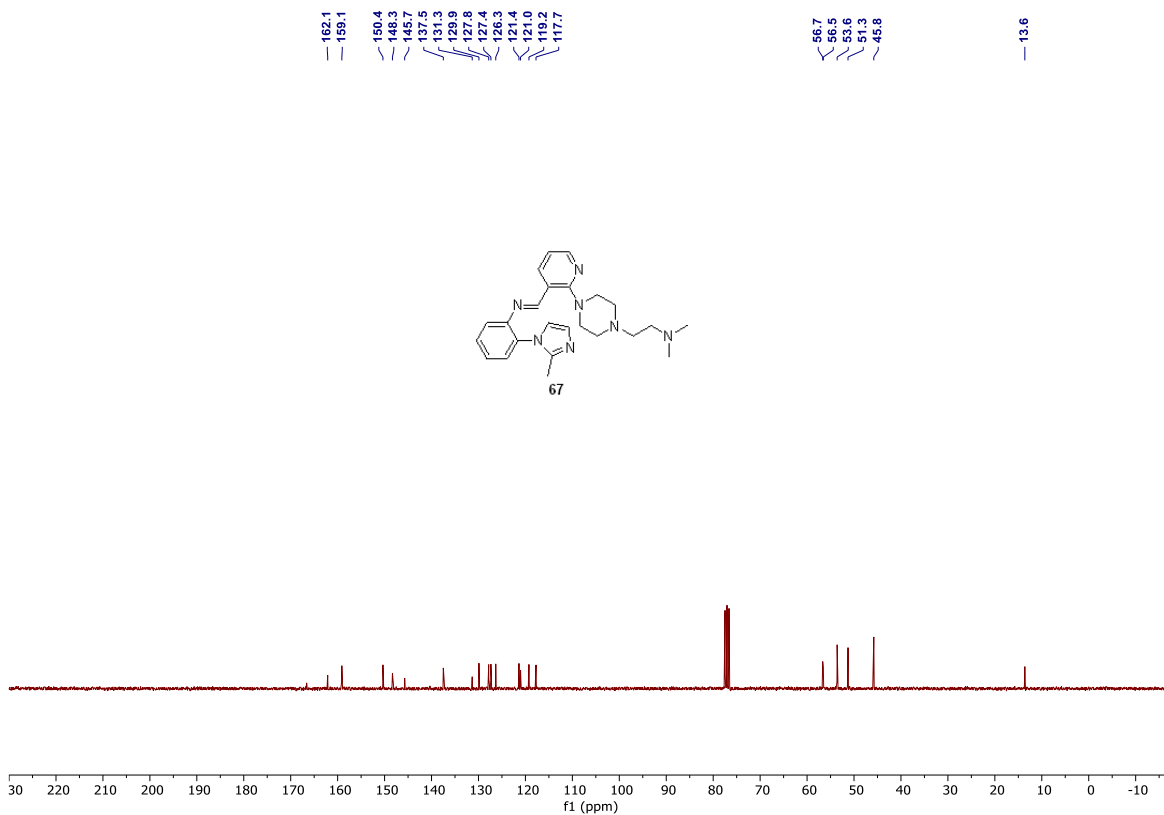
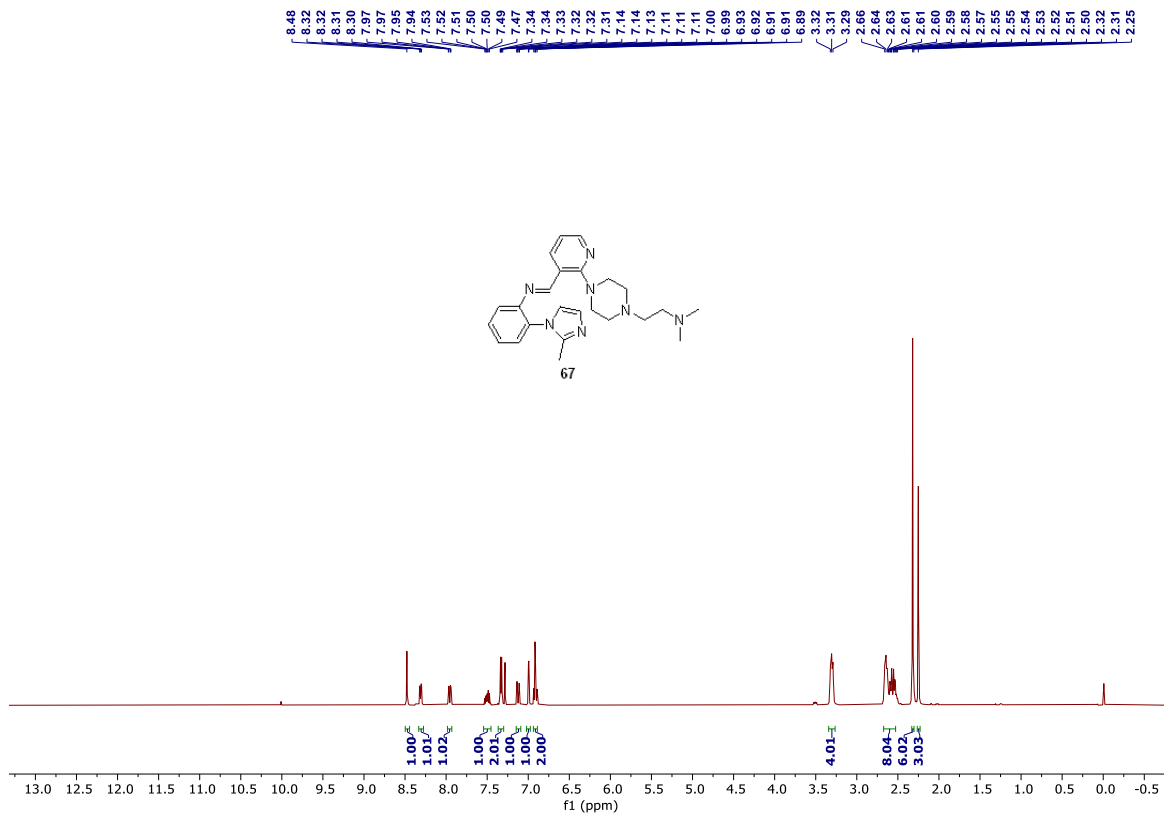


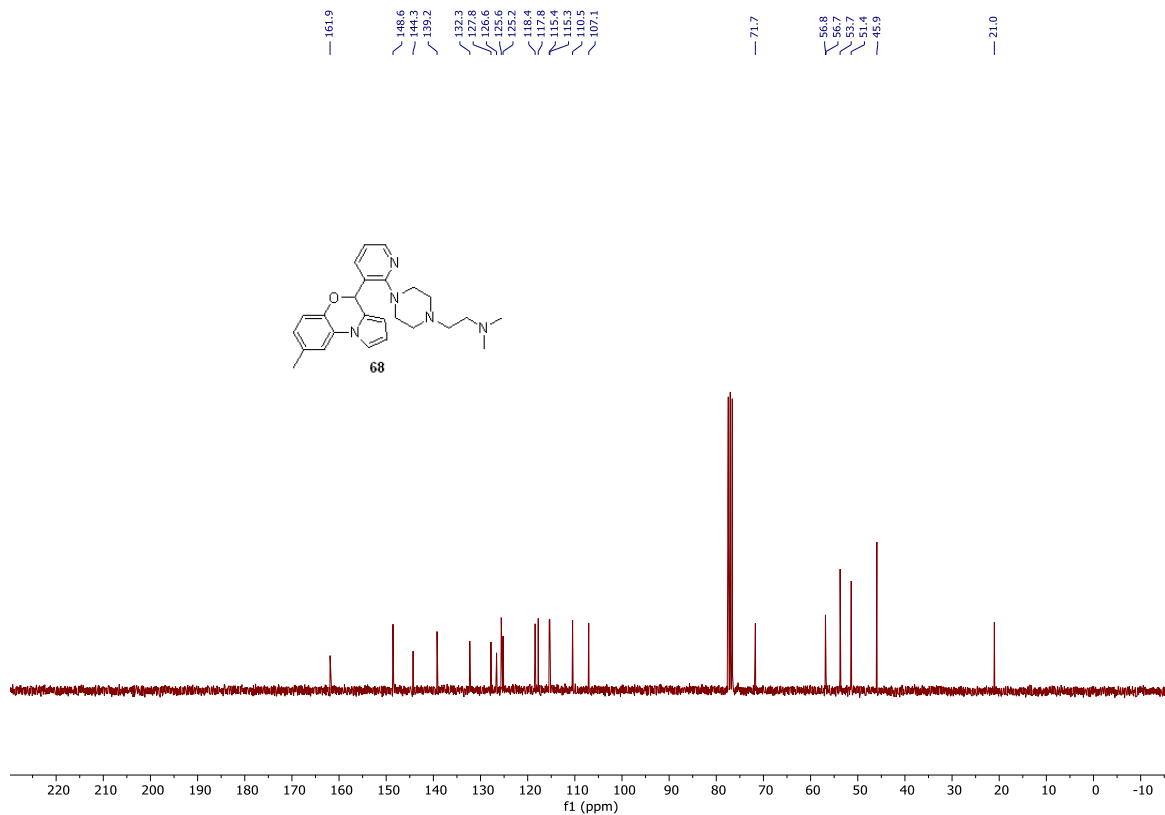
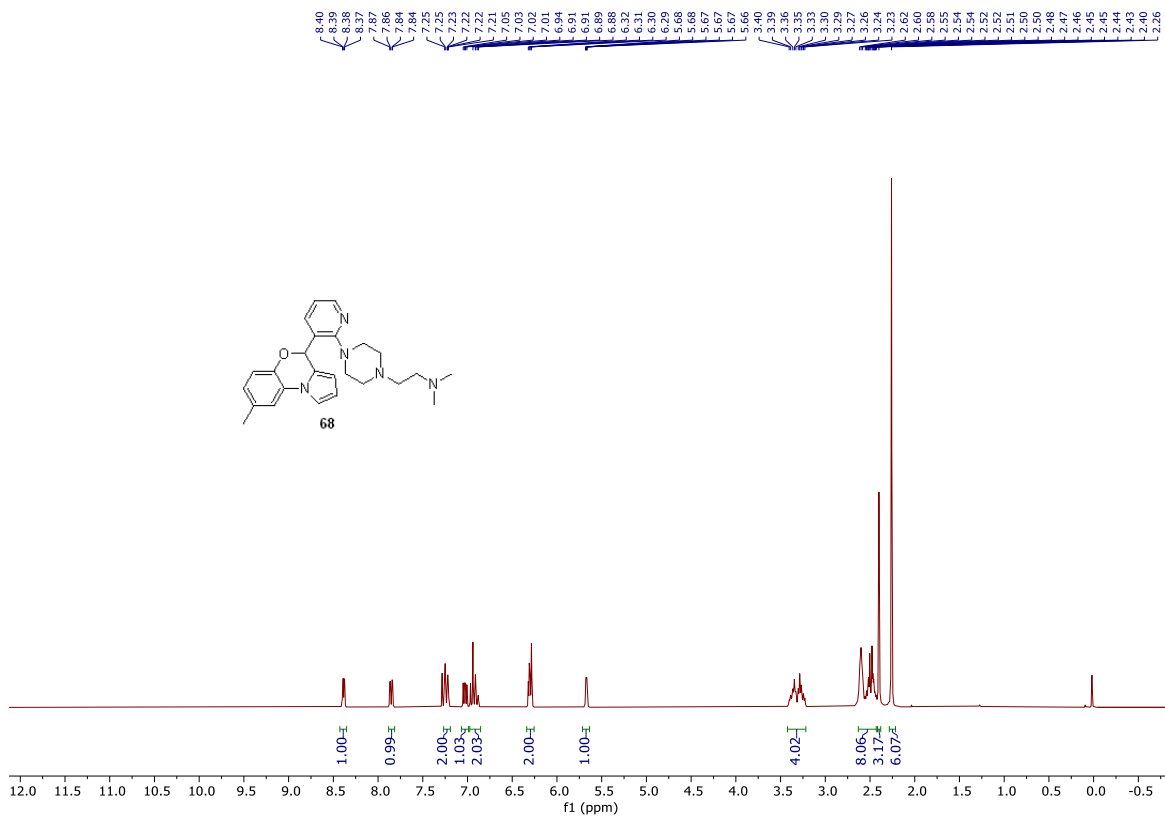


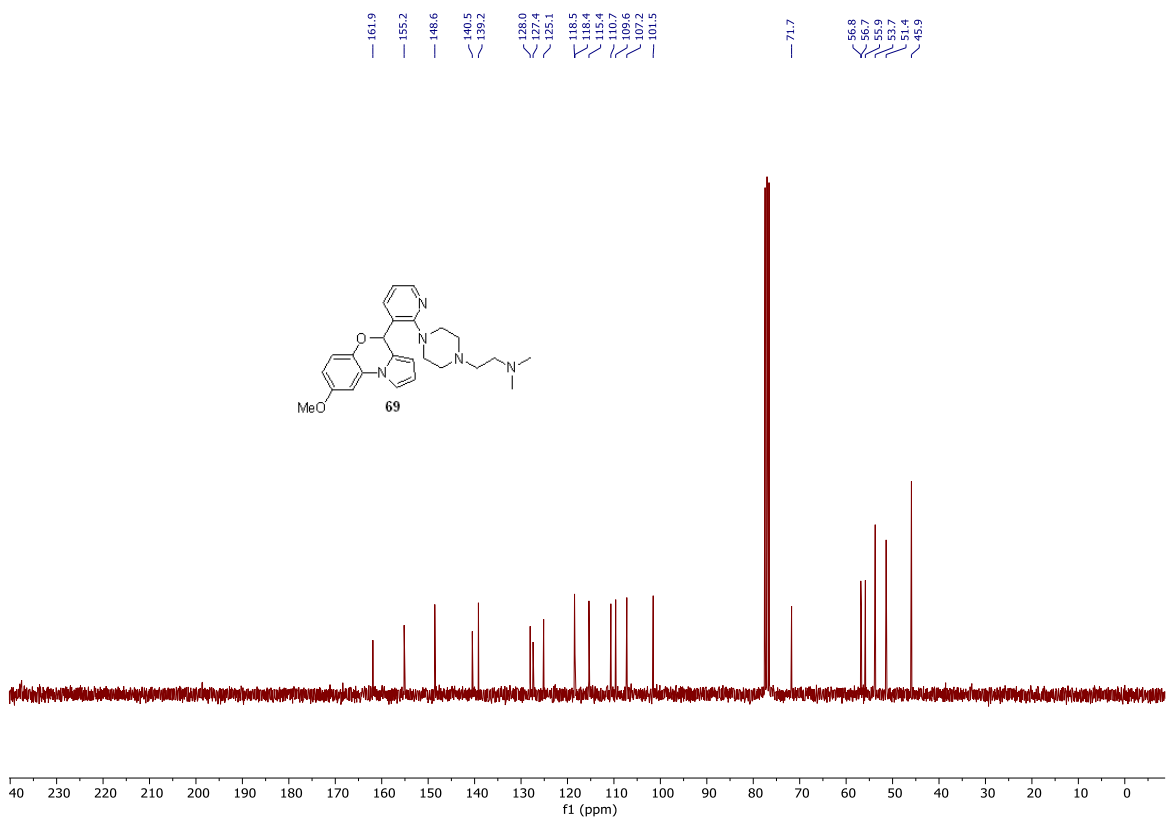
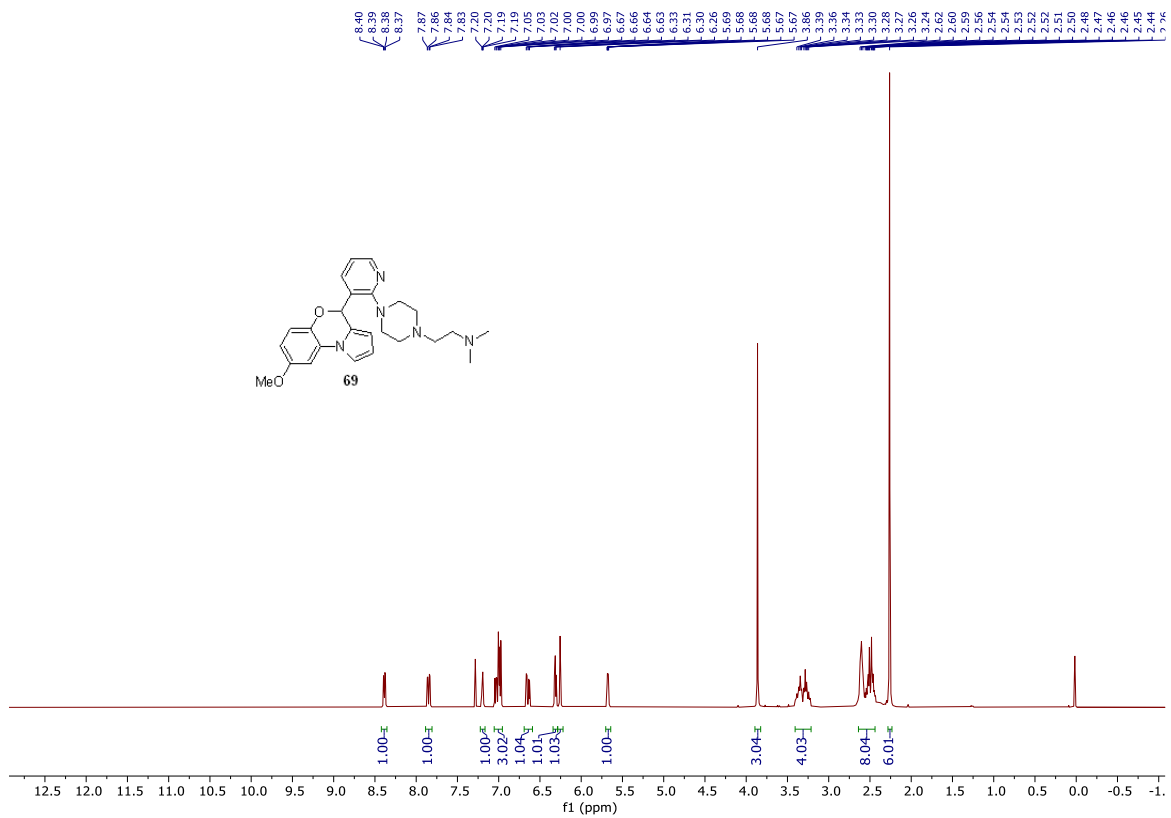


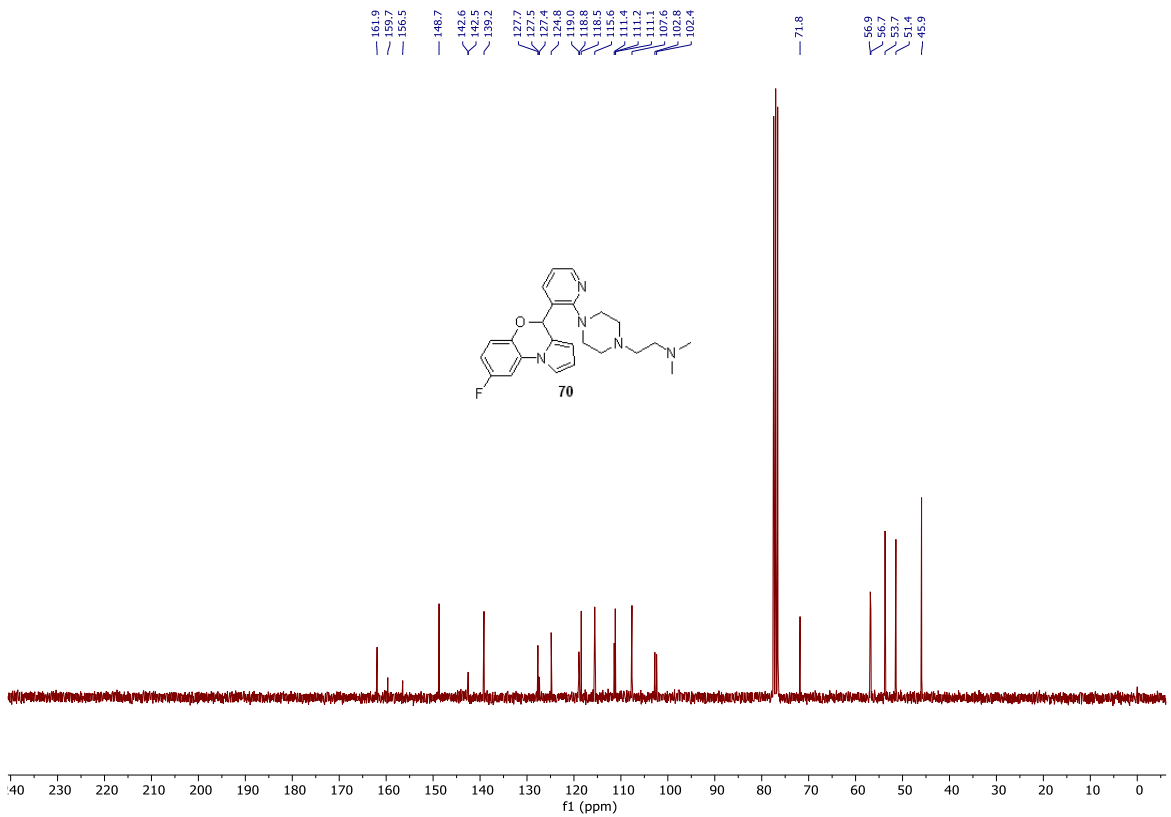
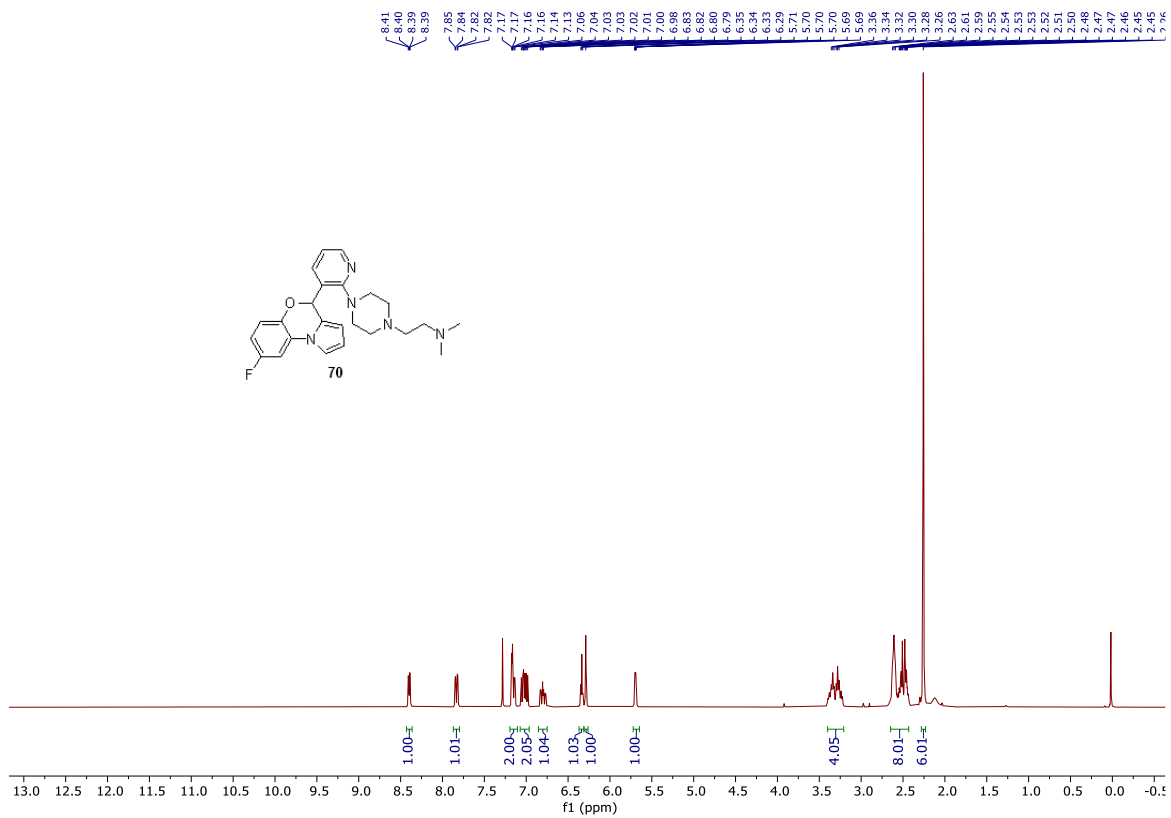


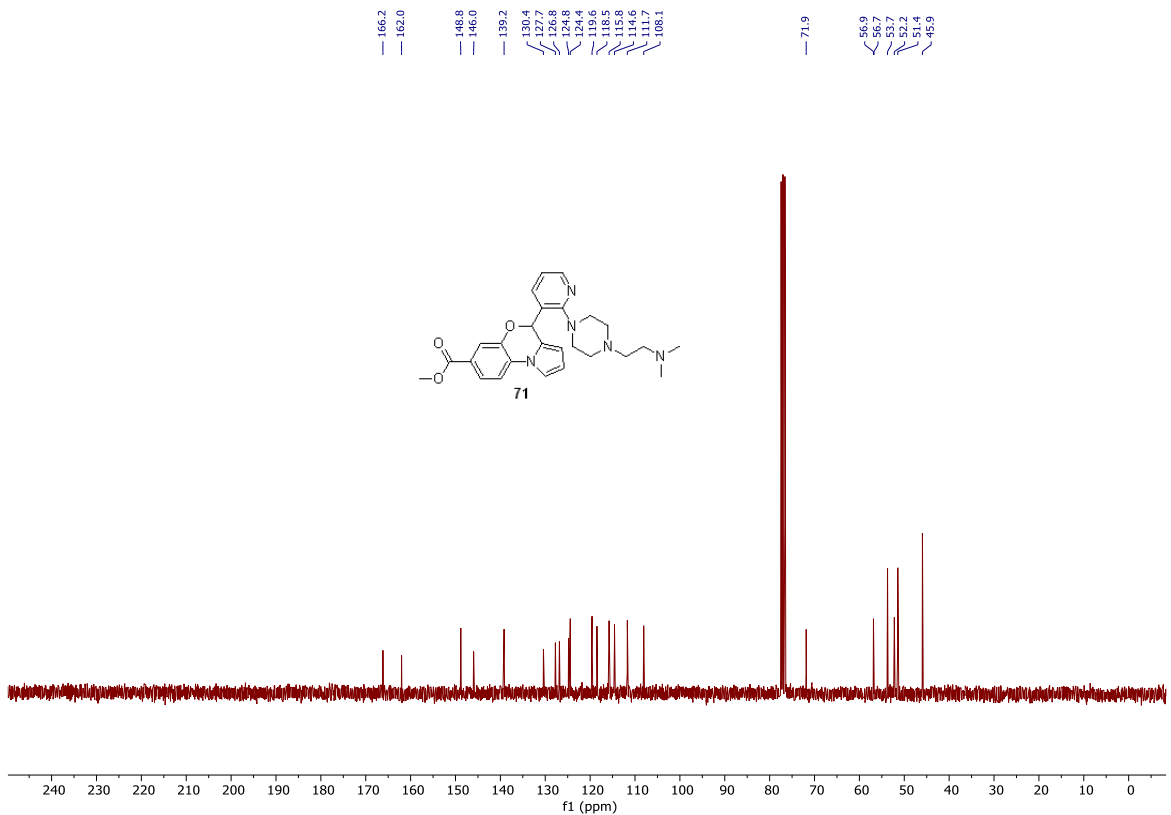
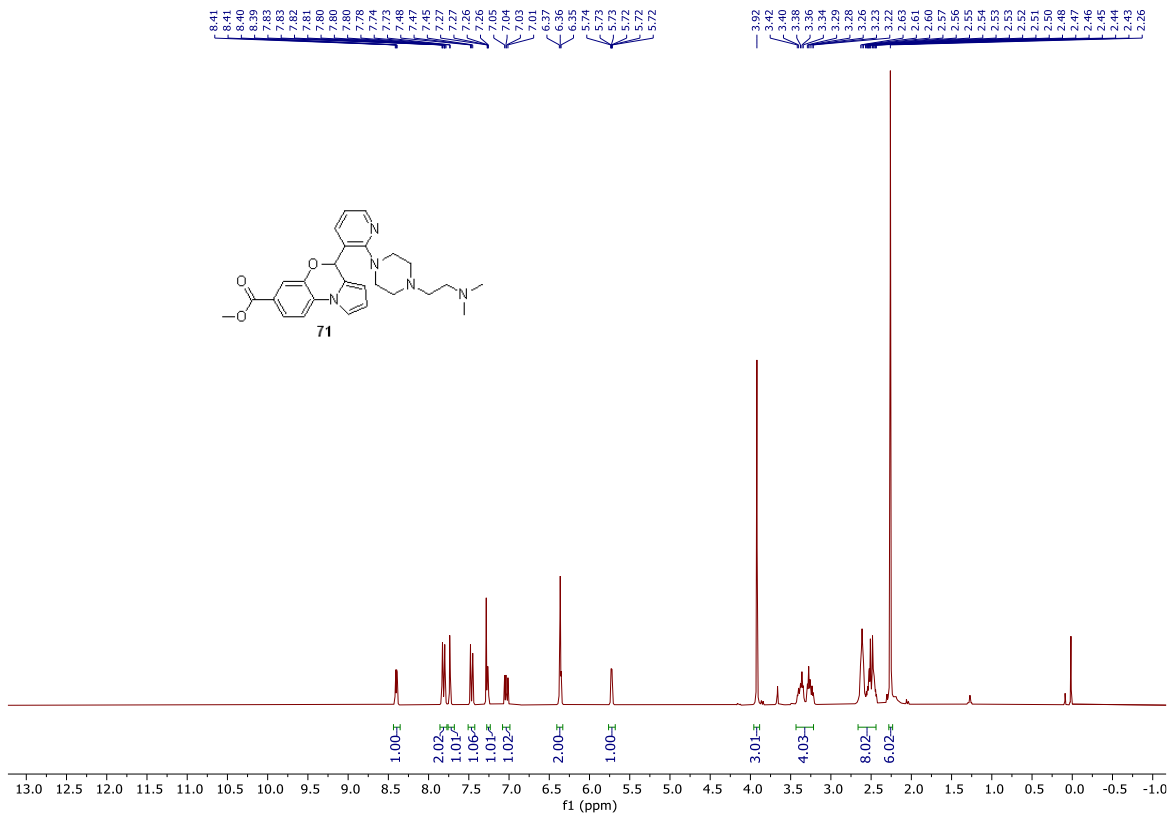


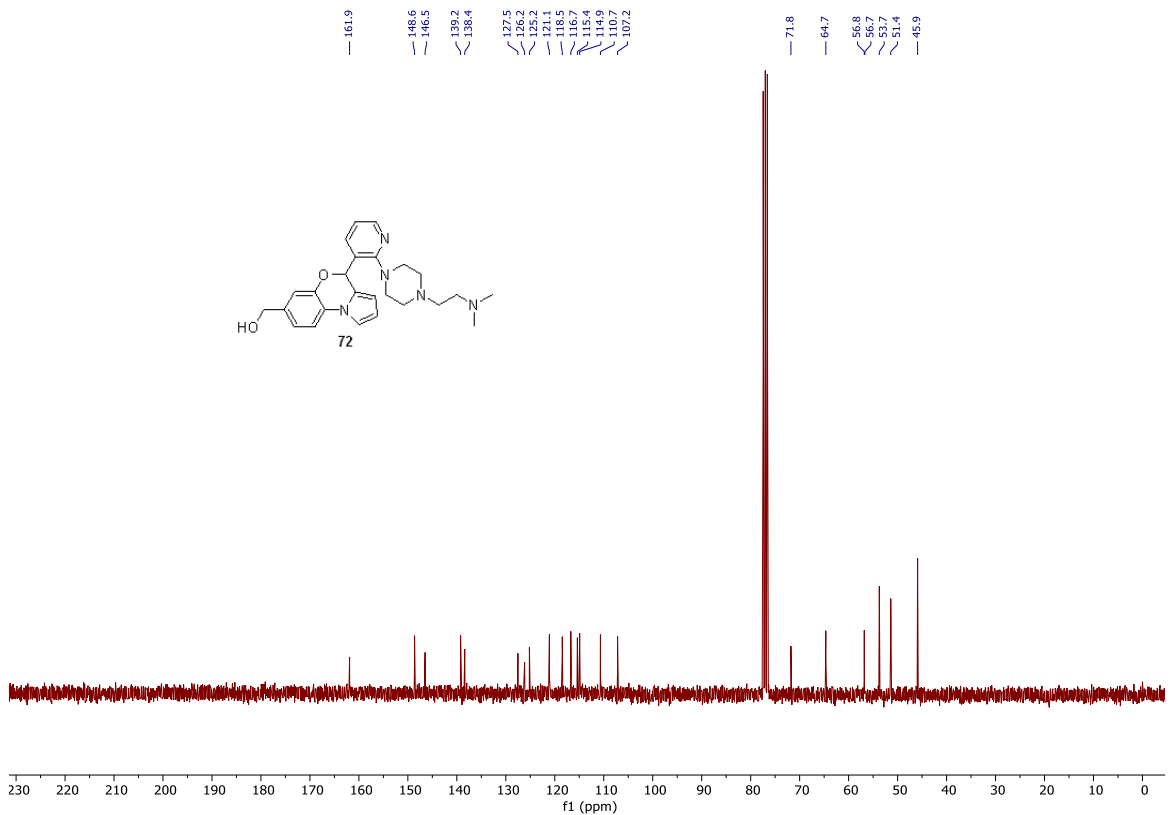
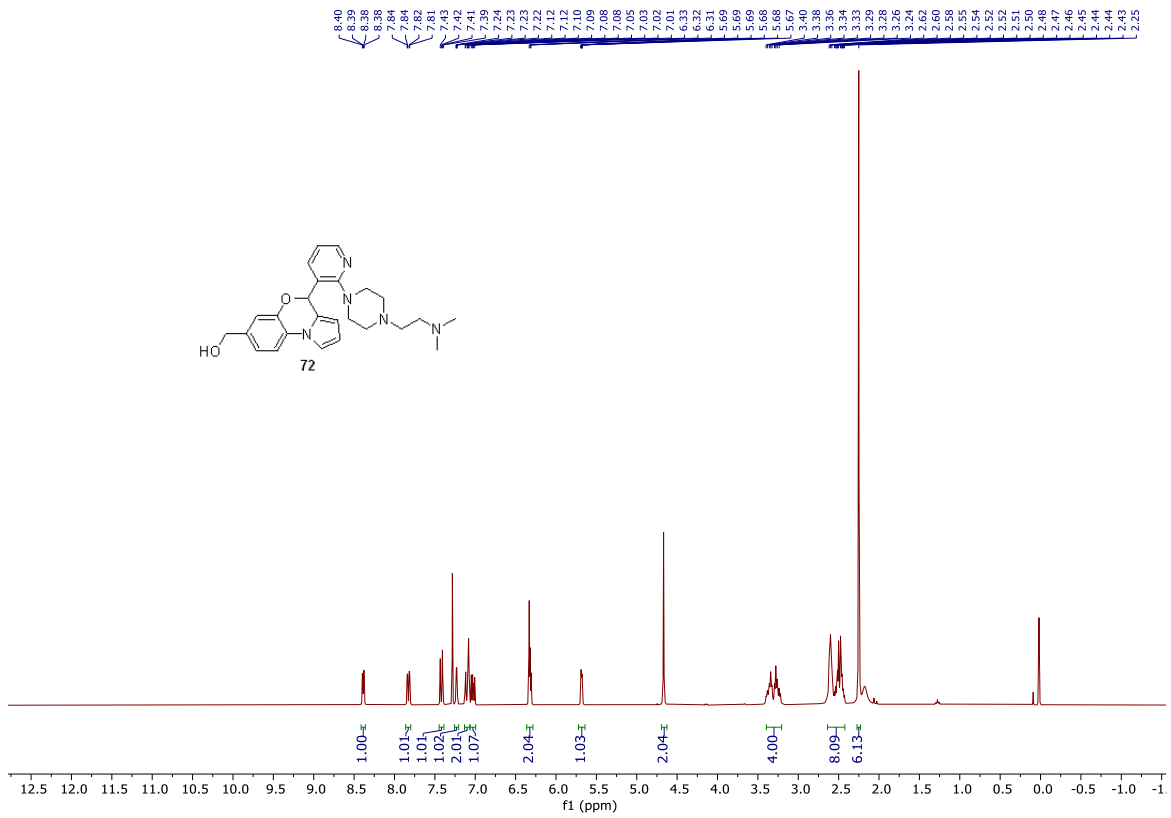


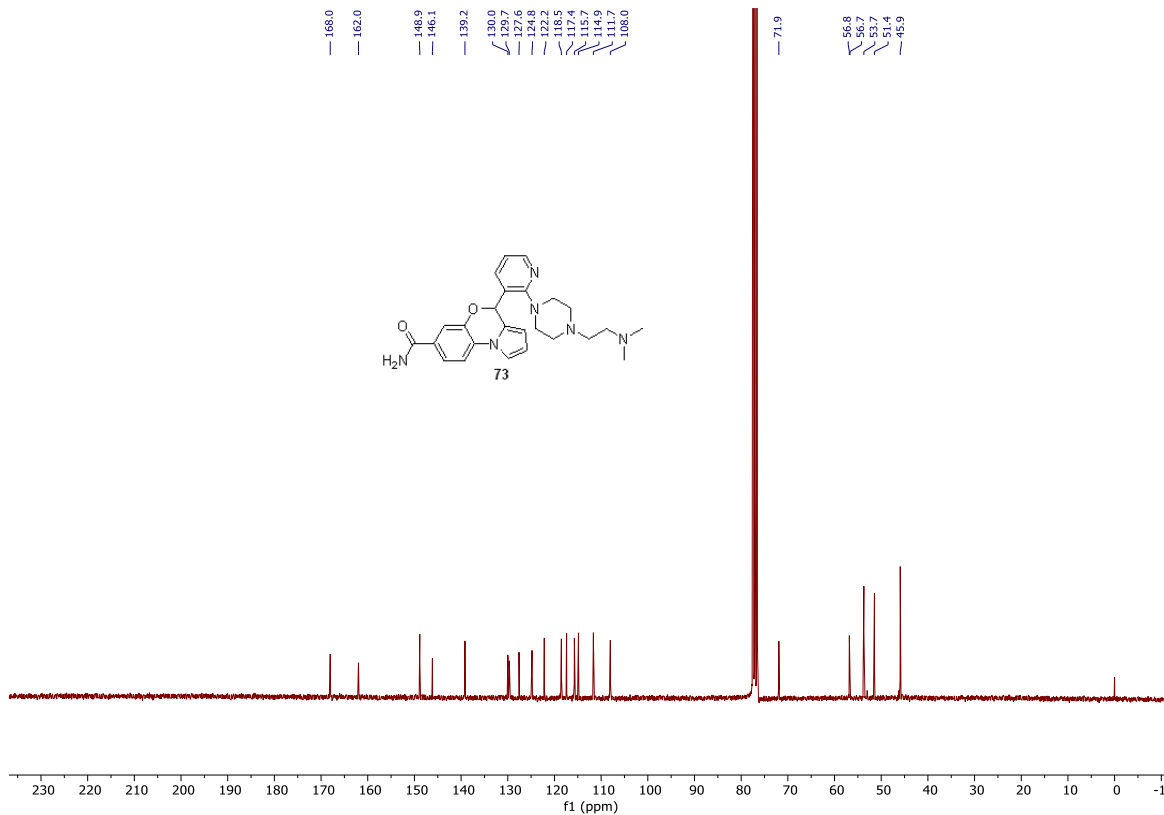
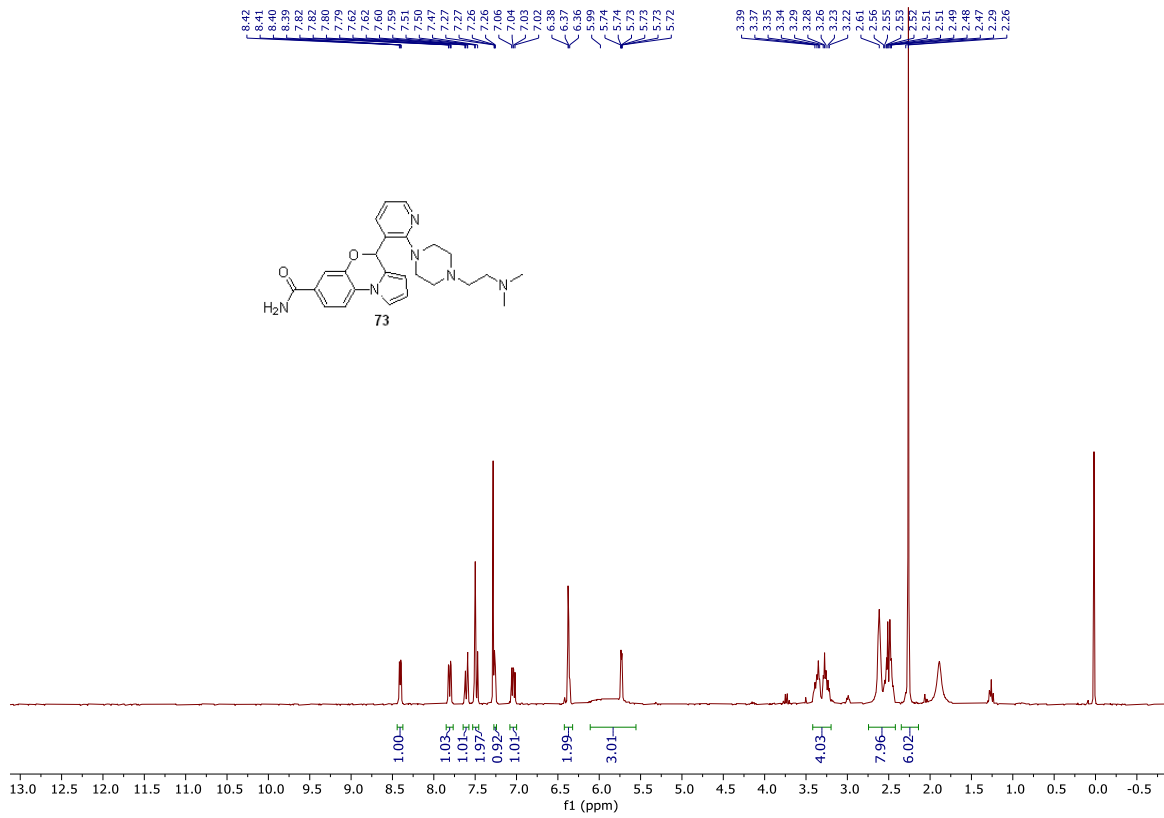


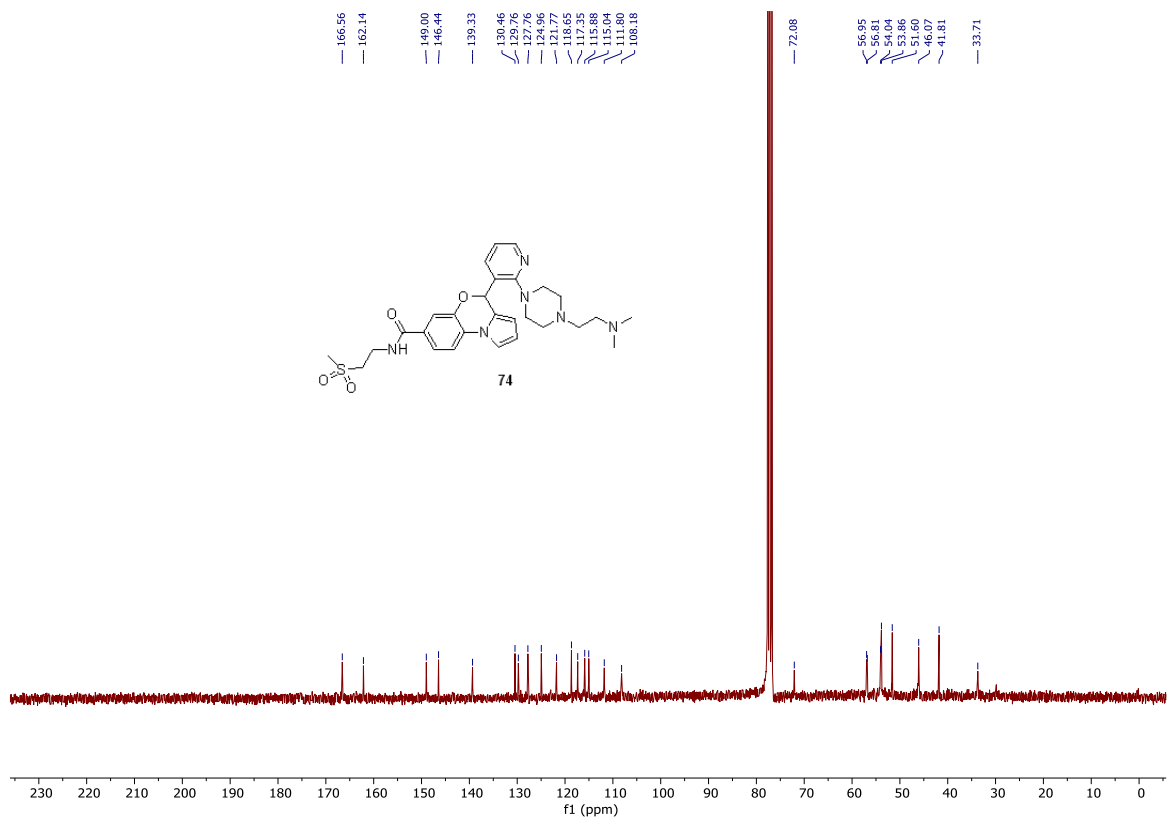
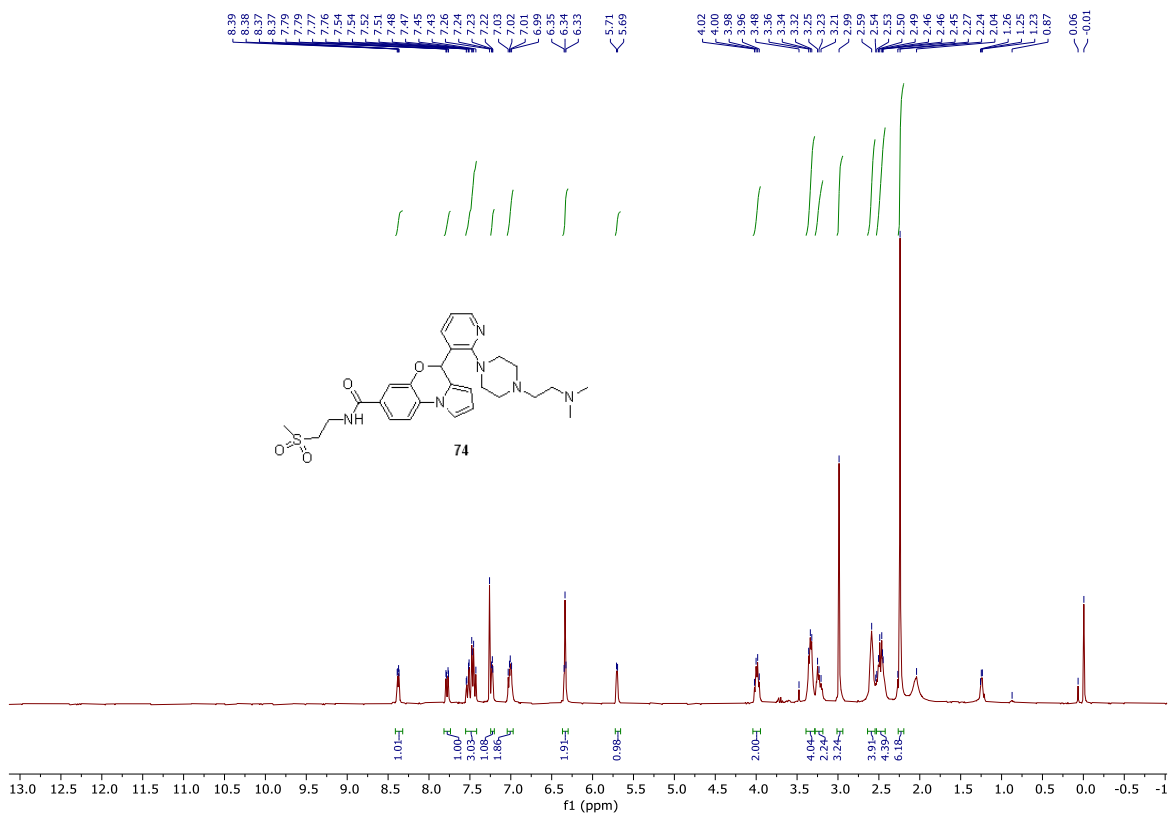


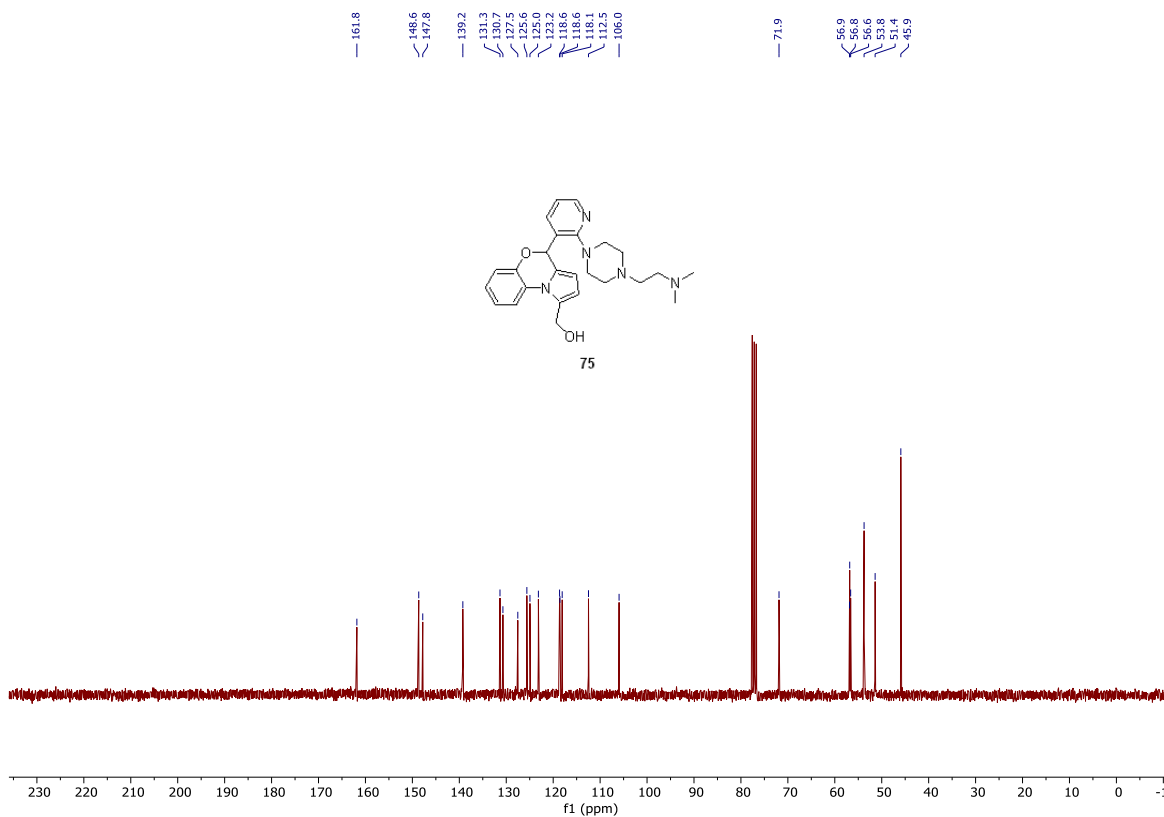
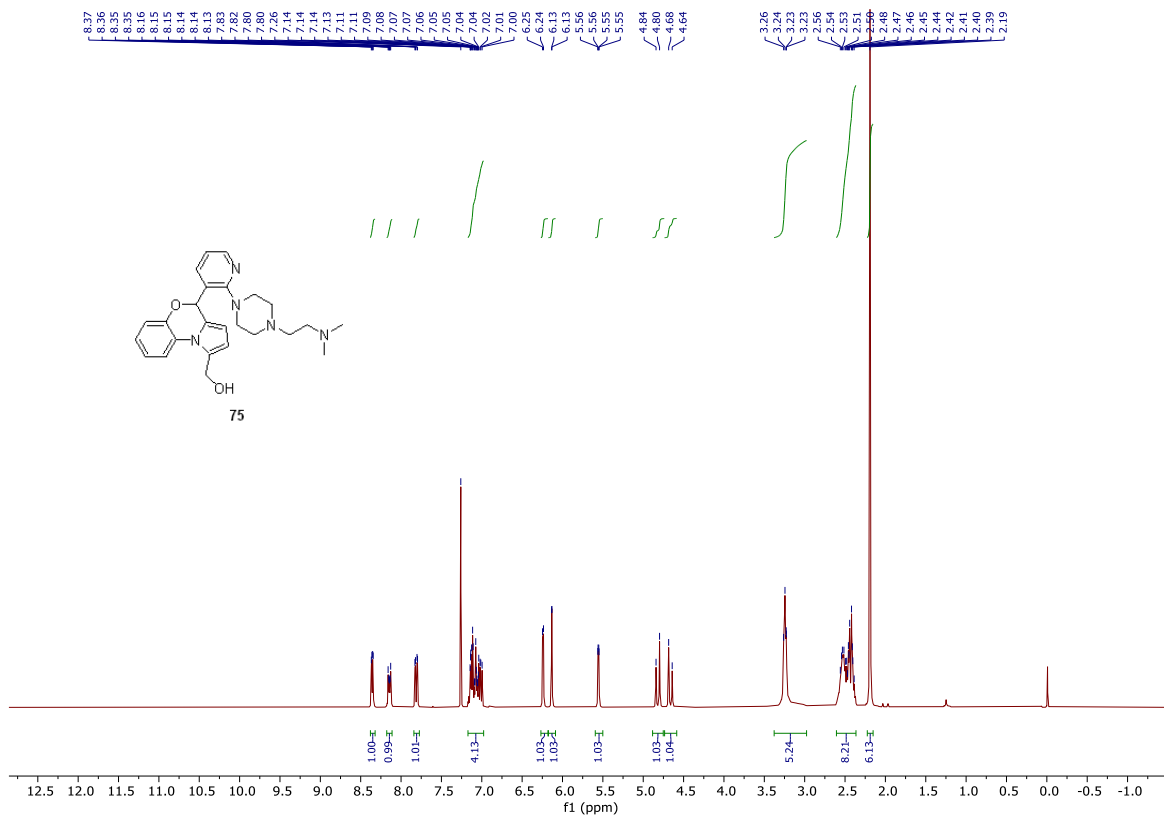




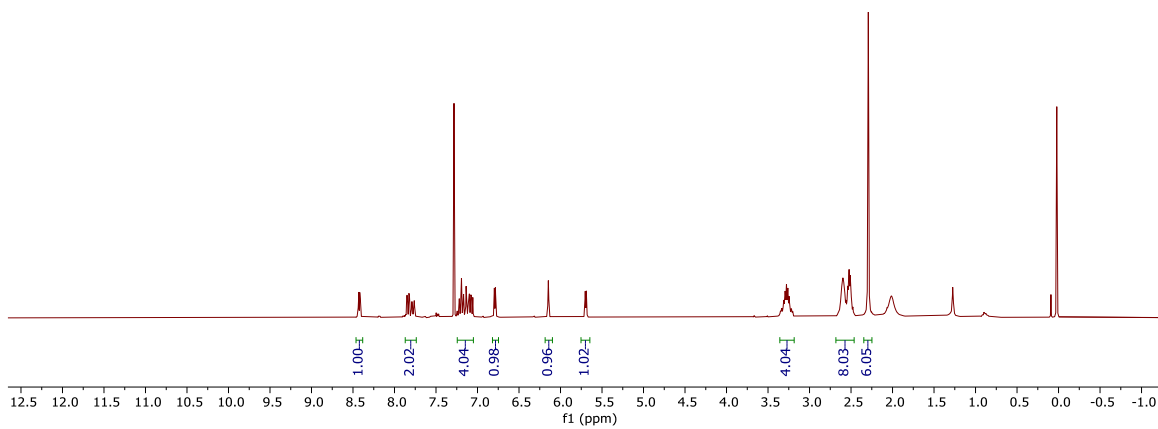
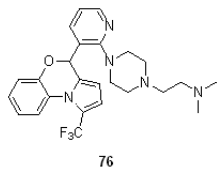




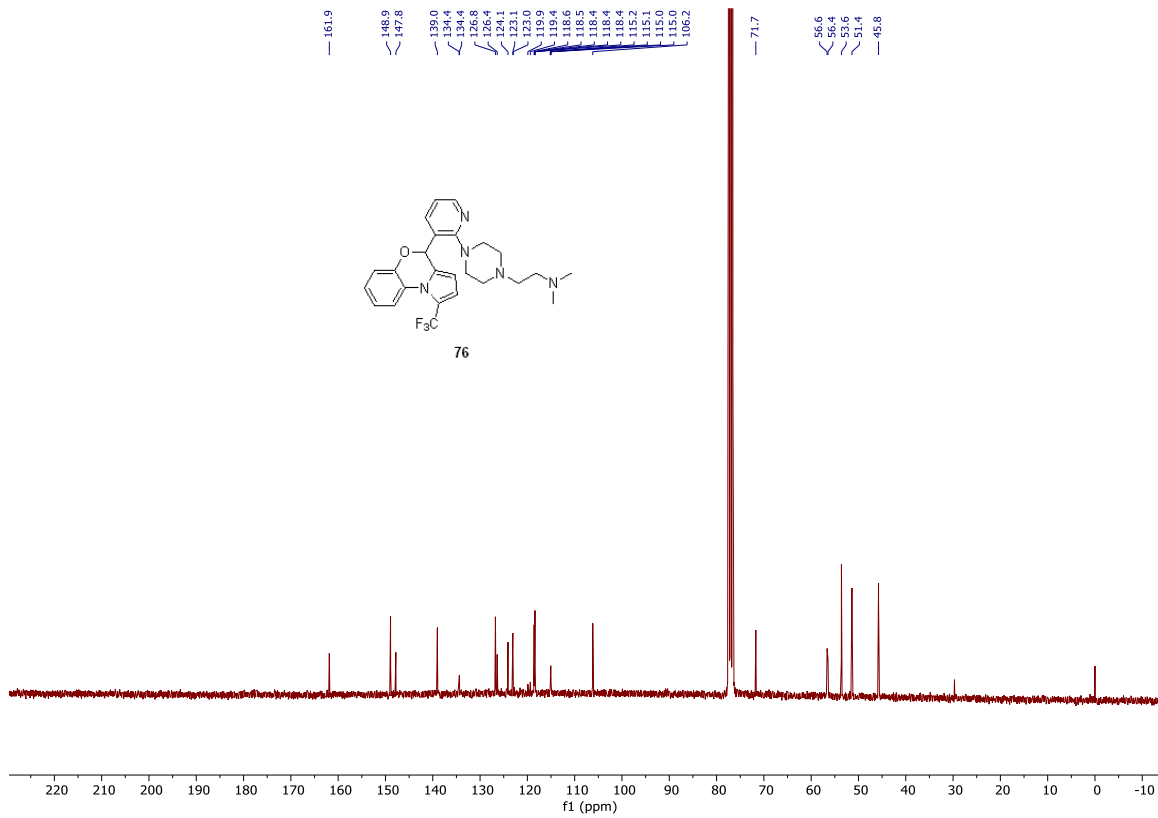
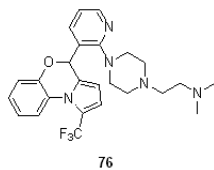




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8.41
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7.82
7.79
7.76
7.75
7.74
7.73
7.22
7.20
7.19
7.17
7.15
7.14
7.13
7.11
7.11
7.10
7.08
7.07
7.06
6.98
6.98
6.15
5.70
5.69
3.38
3.34
3.31
3.29
3.28
3.26
3.24
3.20
2.60
2.57
2.56
2.54
2.52
2.48
2.29



161.9
148.9
147.8
139.0
134.4
134.4
126.8
126.4
124.1
122.1
122.0
121.9
119.4
118.6
118.5
118.4
118.4
118.4
115.2
115.1
115.0
115.0
106.2
71.7
56.6
56.4
53.6
51.4
45.8



Copy of ^{19}F NMR spectrum

