

## Supporting information

### Structural modification of the 3,4,5-trimethoxyphenyl moiety in the tubulin inhibitor VERU-111 leads to improved antiproliferative activities

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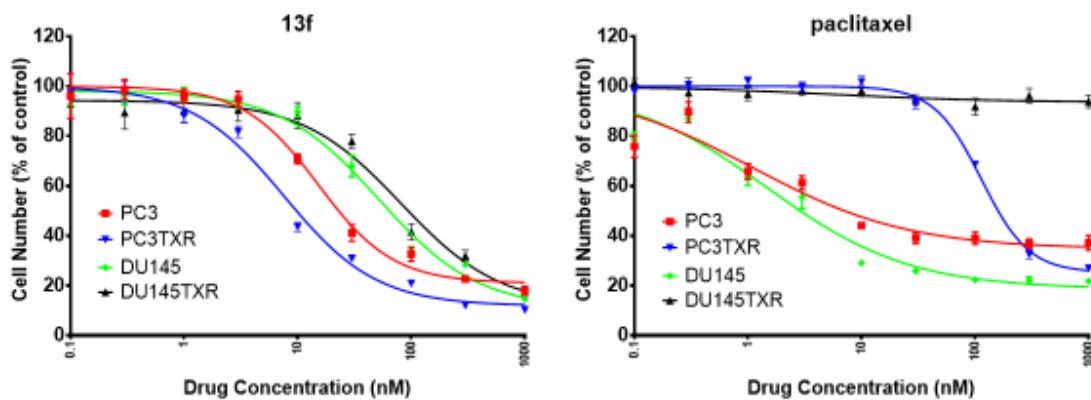
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Corresponding author: *wli@uthsc.edu*

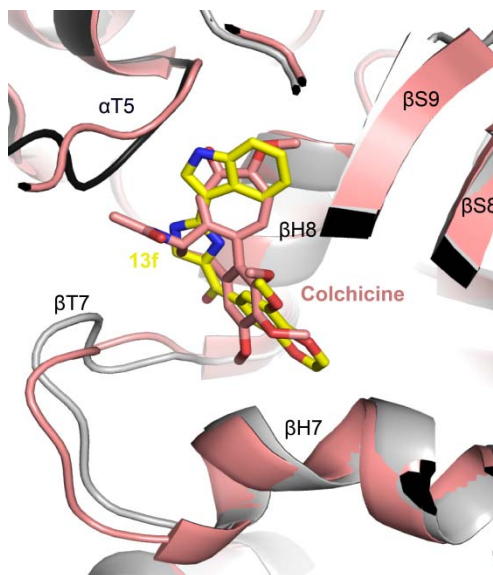
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## Supplementary figures

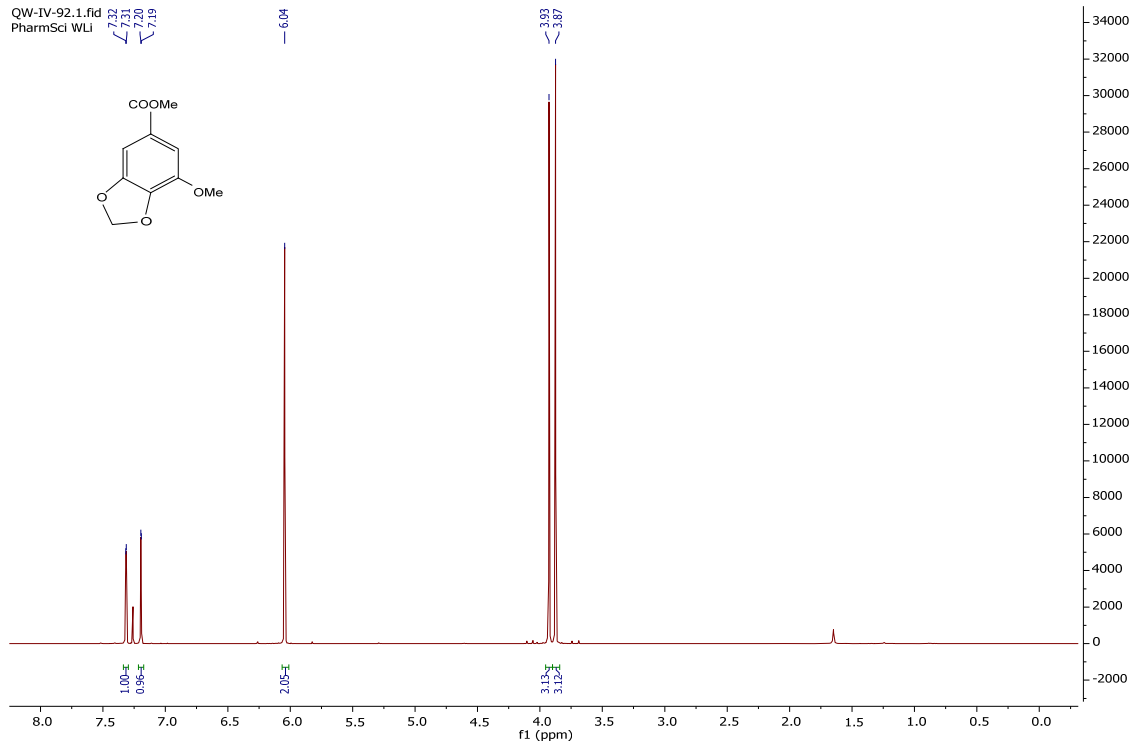


**Figure S1.** Effect of **13f** and paclitaxel on taxane-sensitive or taxane-resistant prostate cancer cell lines.

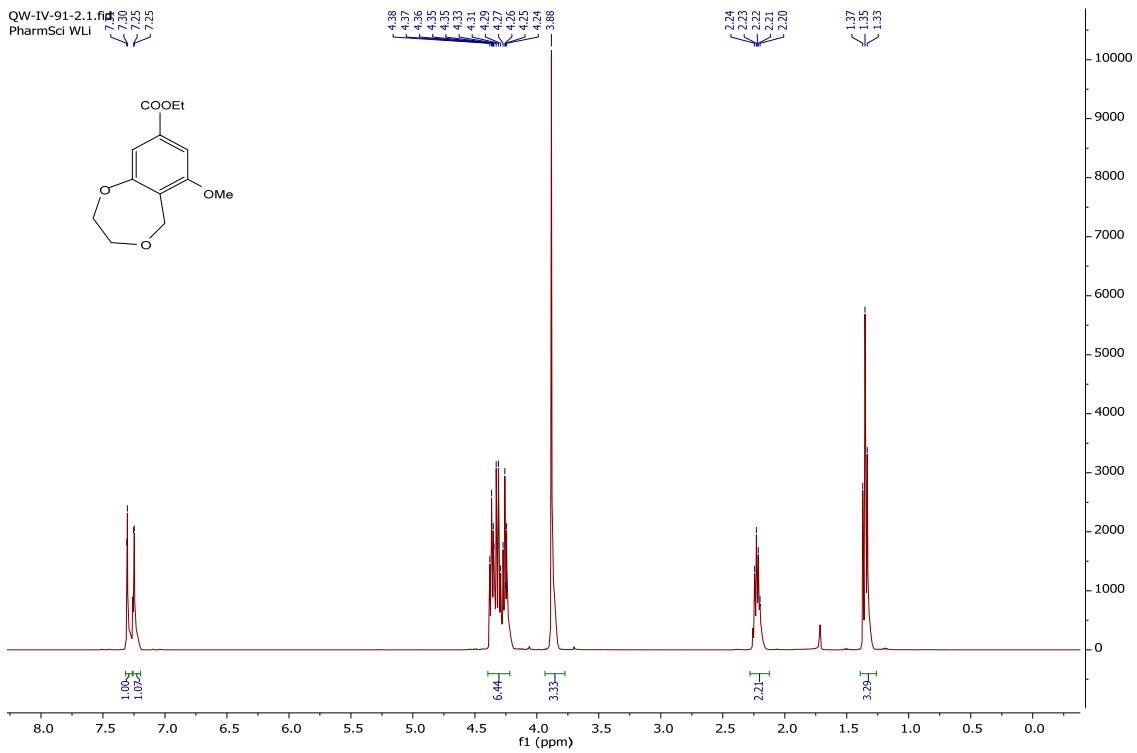


**Figure S2.** A Close up view of the conformational changes at the colchicine-binding sites between colchicine (PDB: 4O2B), and **13f** (PDB code: 6D88). Superimposition of tubulin bound with **13f** bound (shown in yellow) and with colchicine bound (shown in salmon).

# Spectral data for synthetic intermediates and VERU-111 analogues

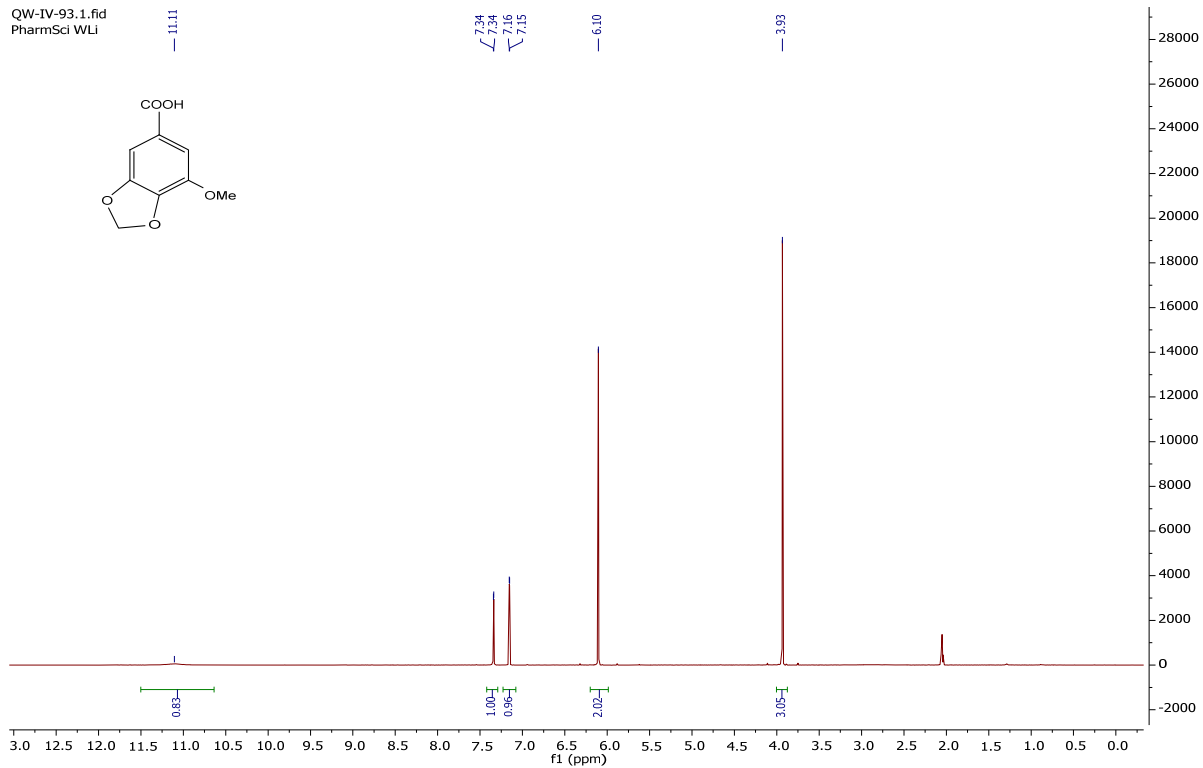
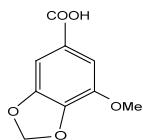


<sup>1</sup>H-NMR of 1a



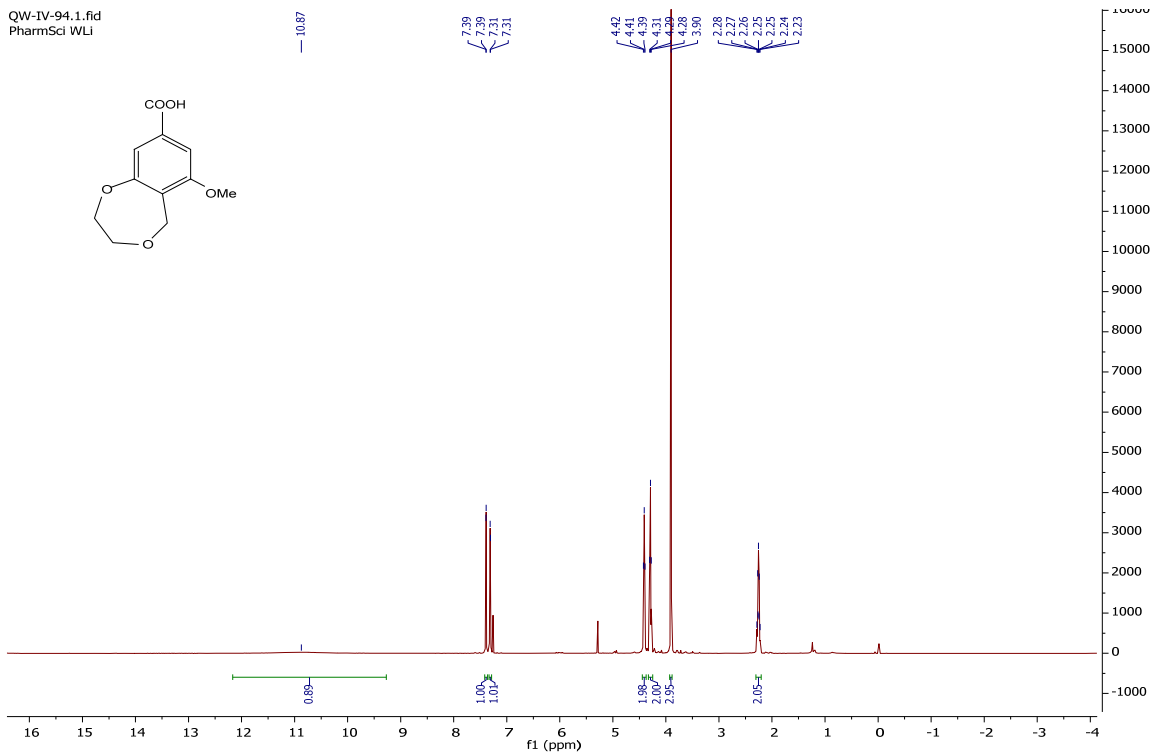
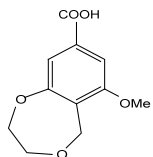
<sup>1</sup>H-NMR of 1b

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PharmSci WLi

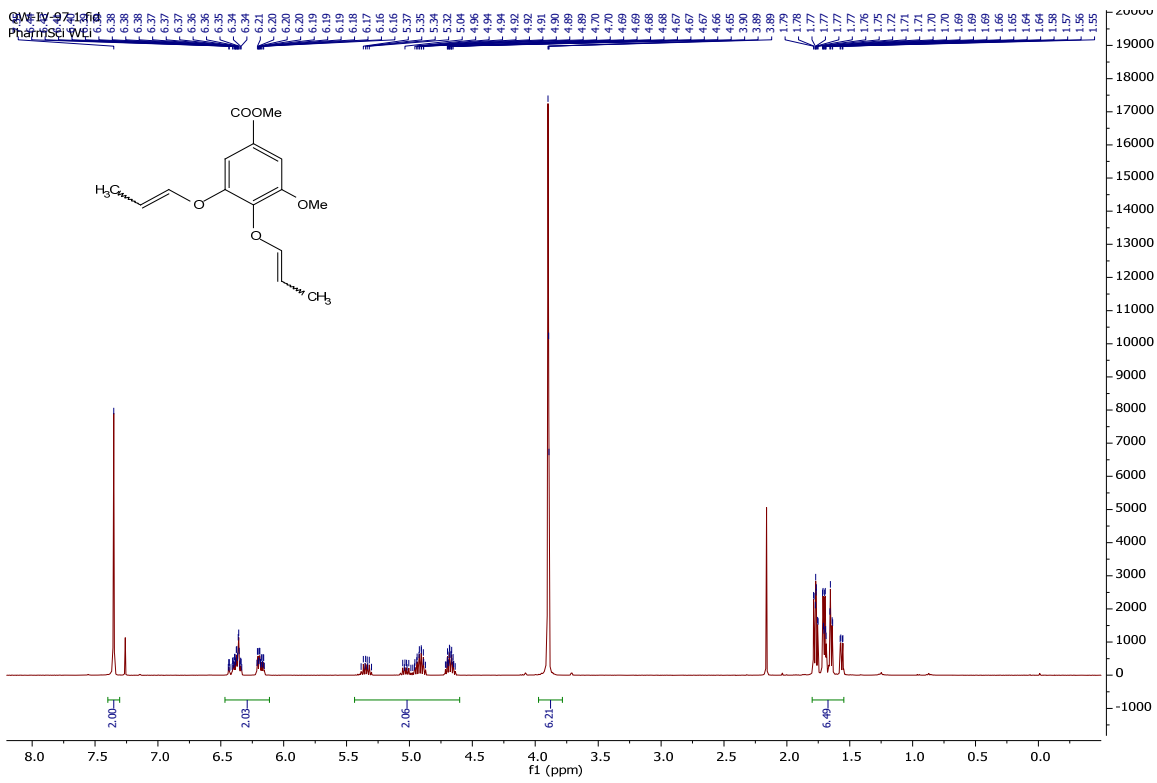
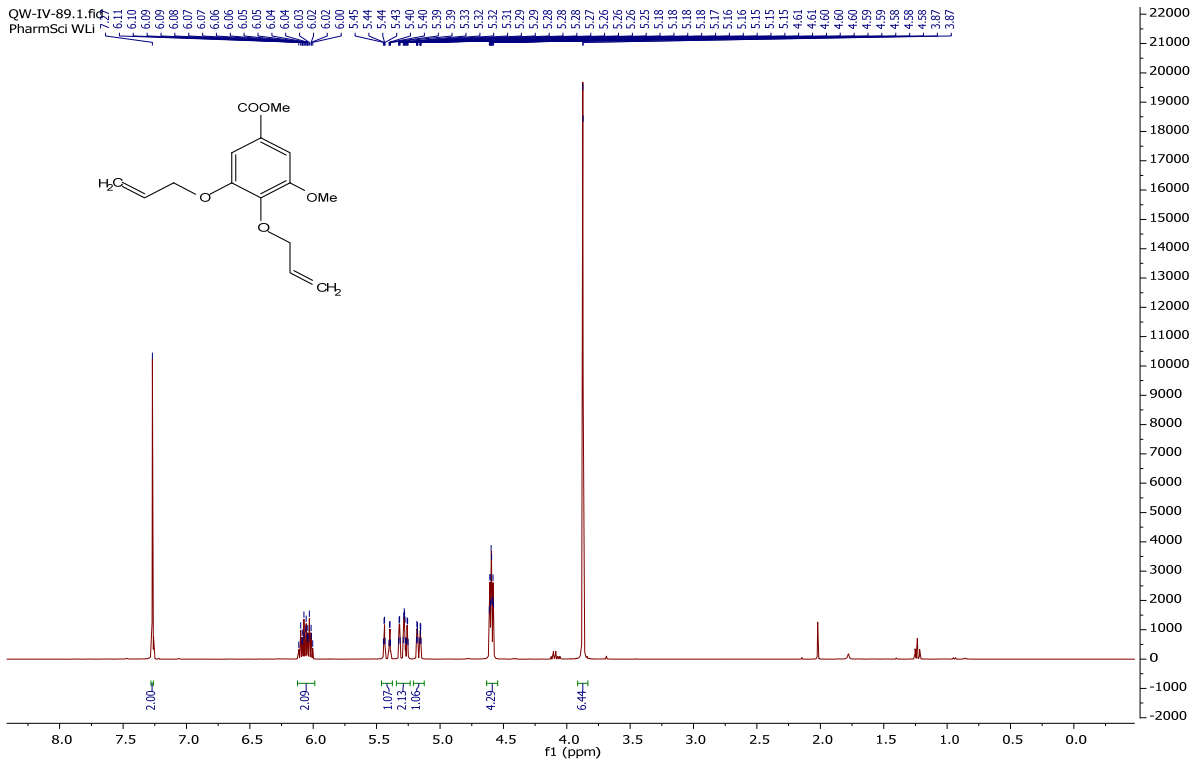


<sup>1</sup>H-NMR of 2a

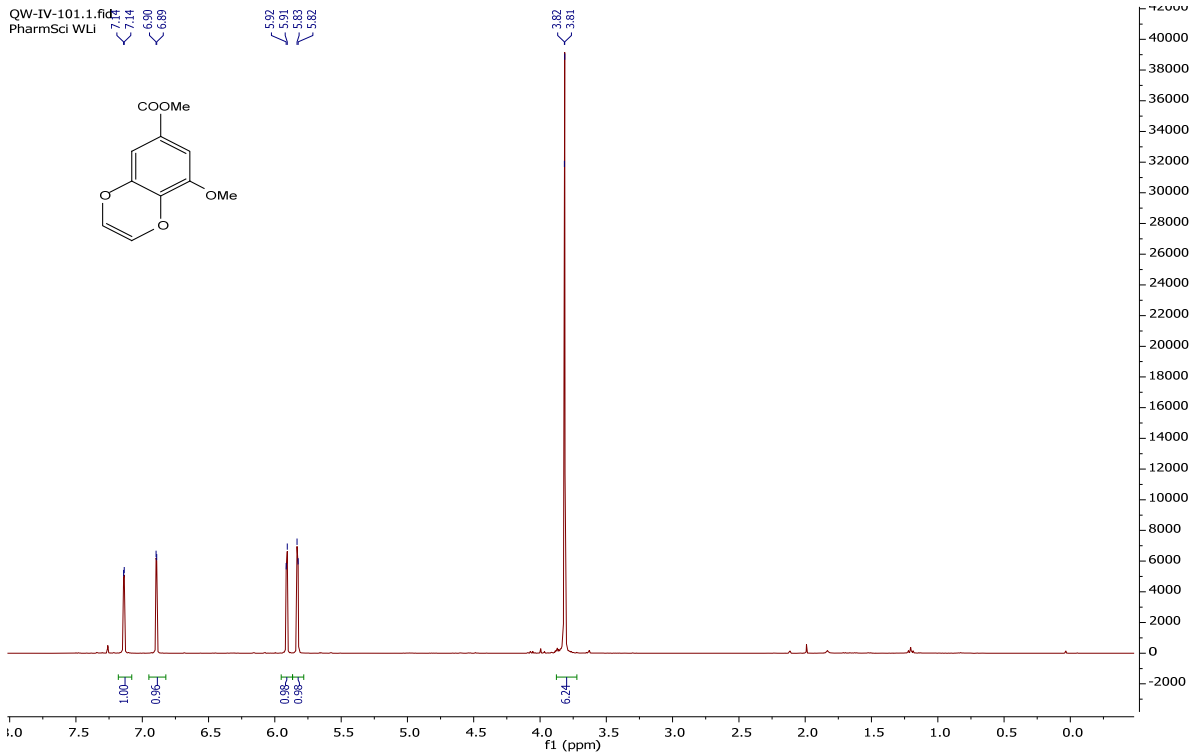
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PharmSci WLi



<sup>1</sup>H-NMR of 2b

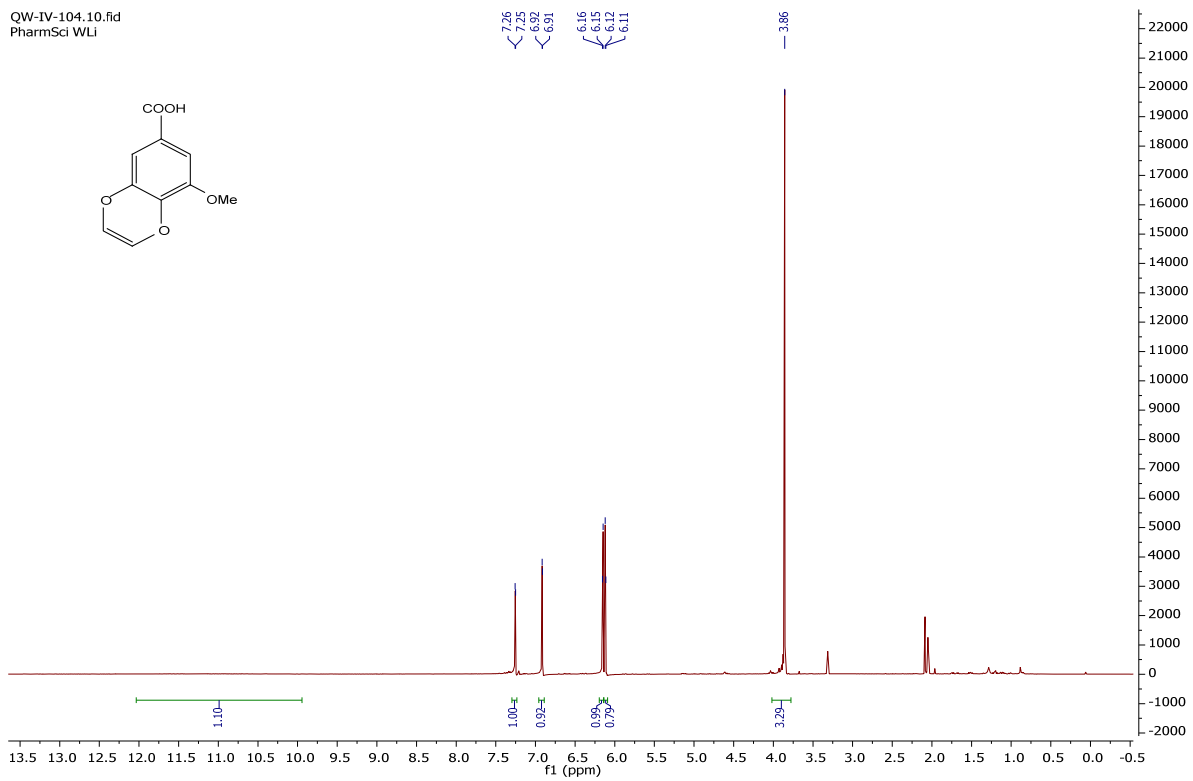


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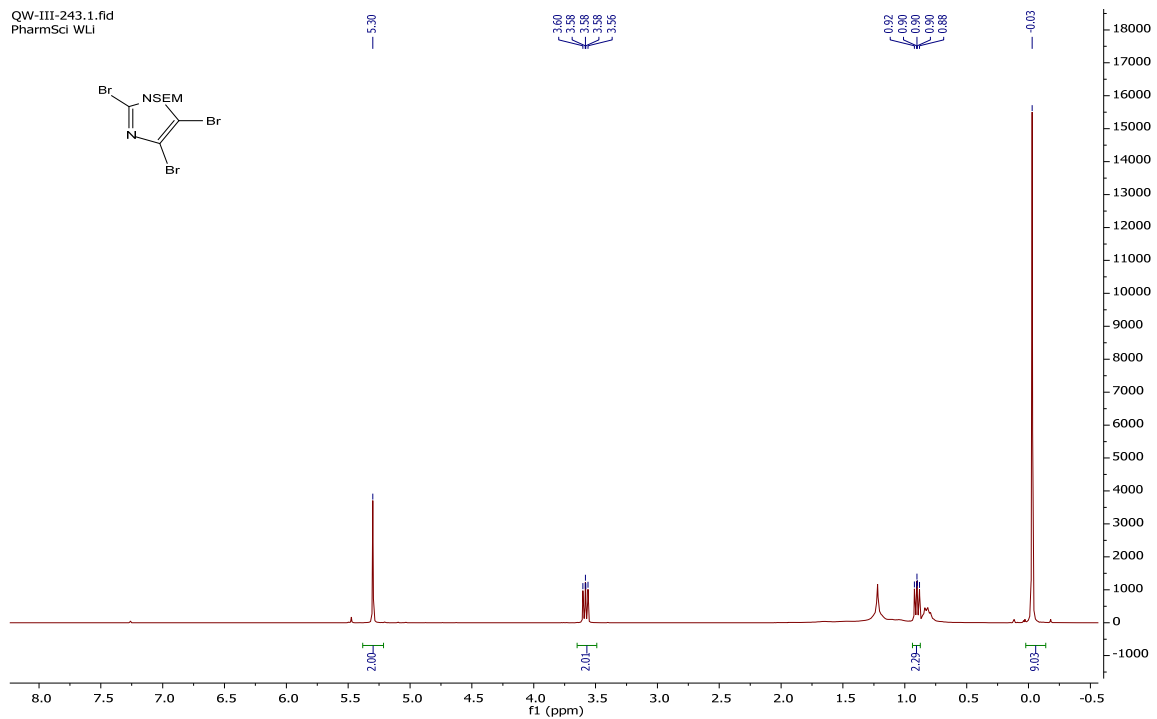
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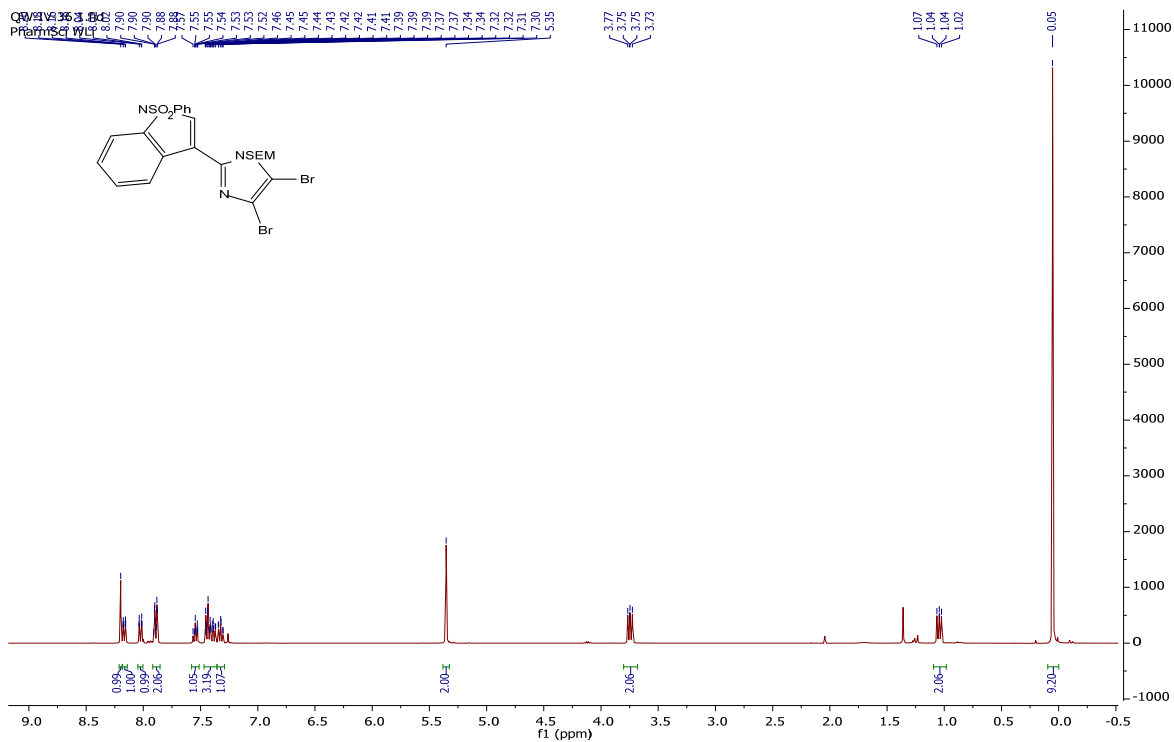


<sup>1</sup>H-NMR of 7

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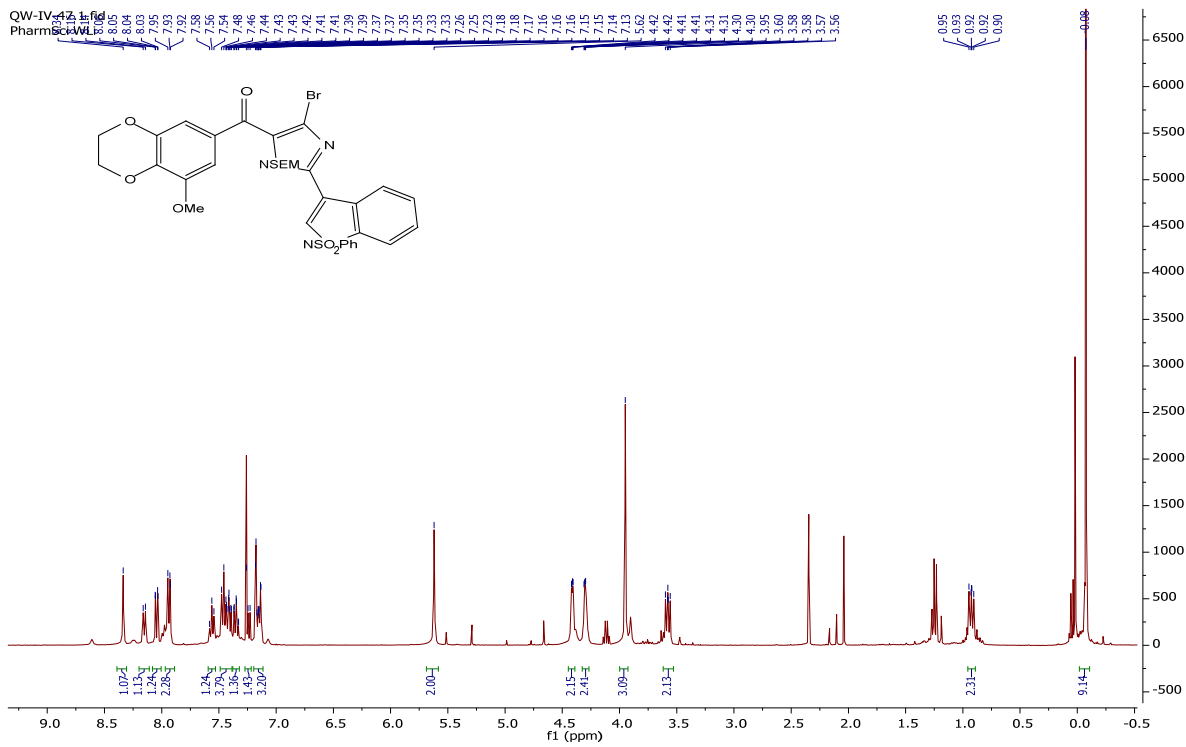
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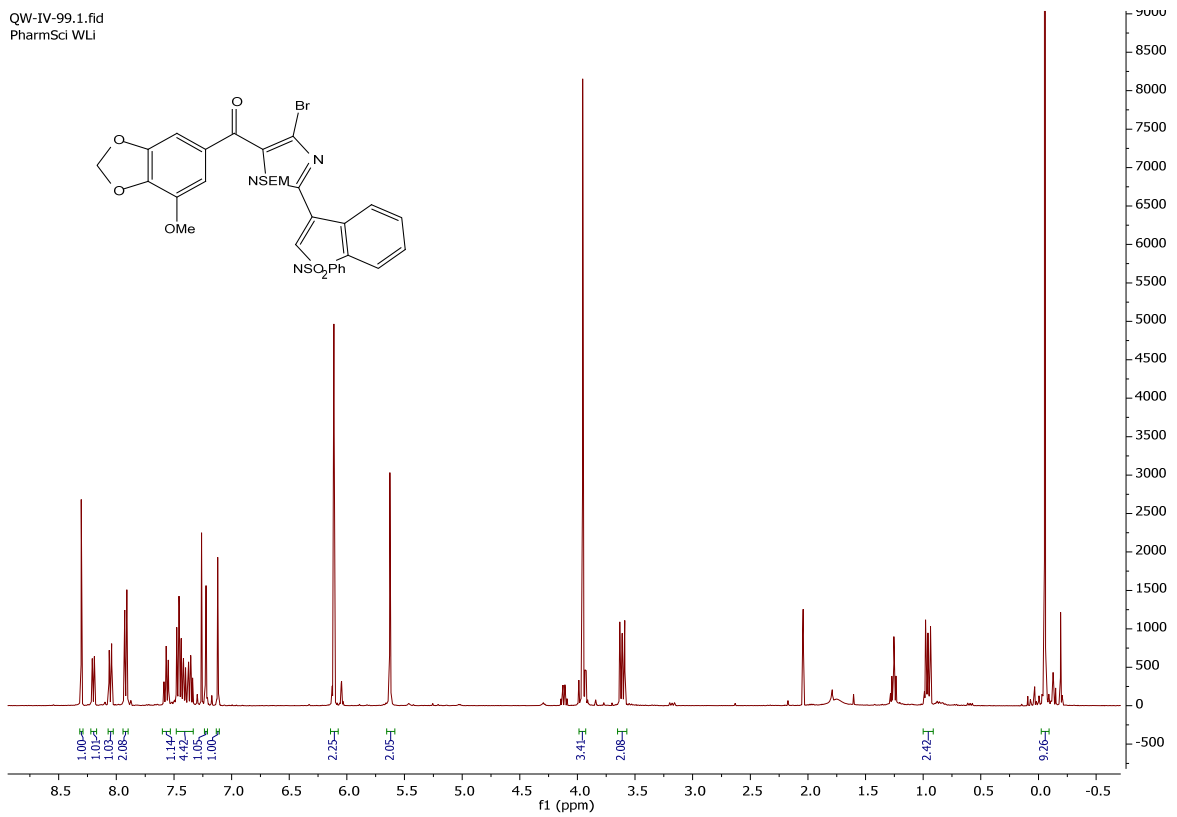
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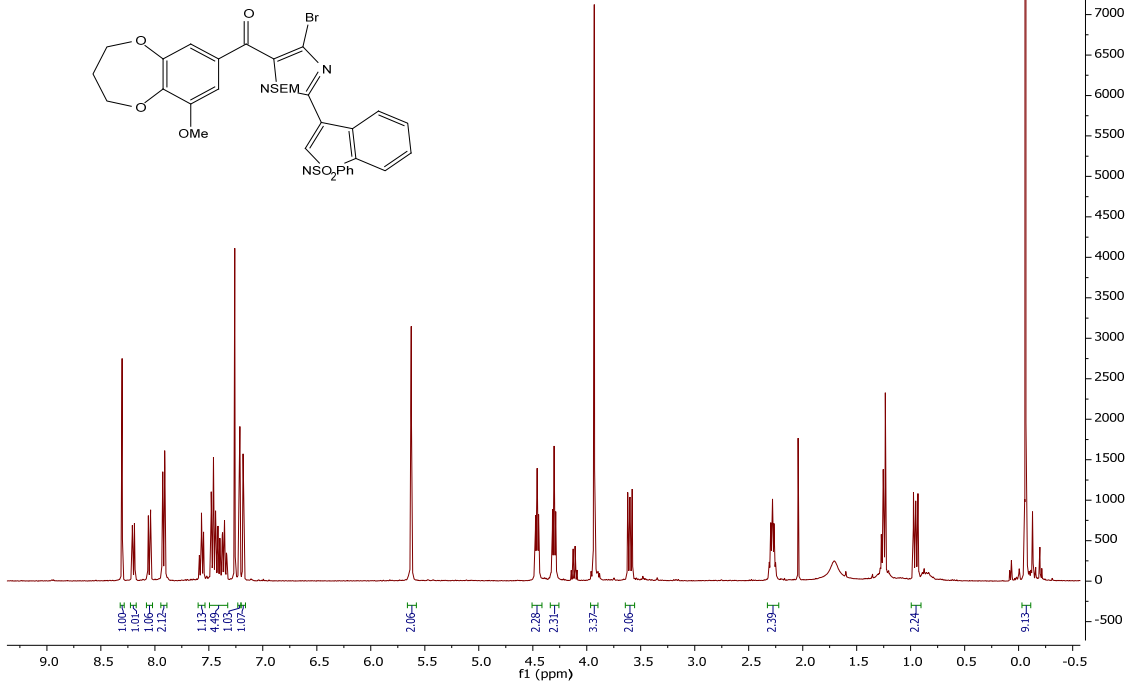


<sup>1</sup>H-NMR of 11c



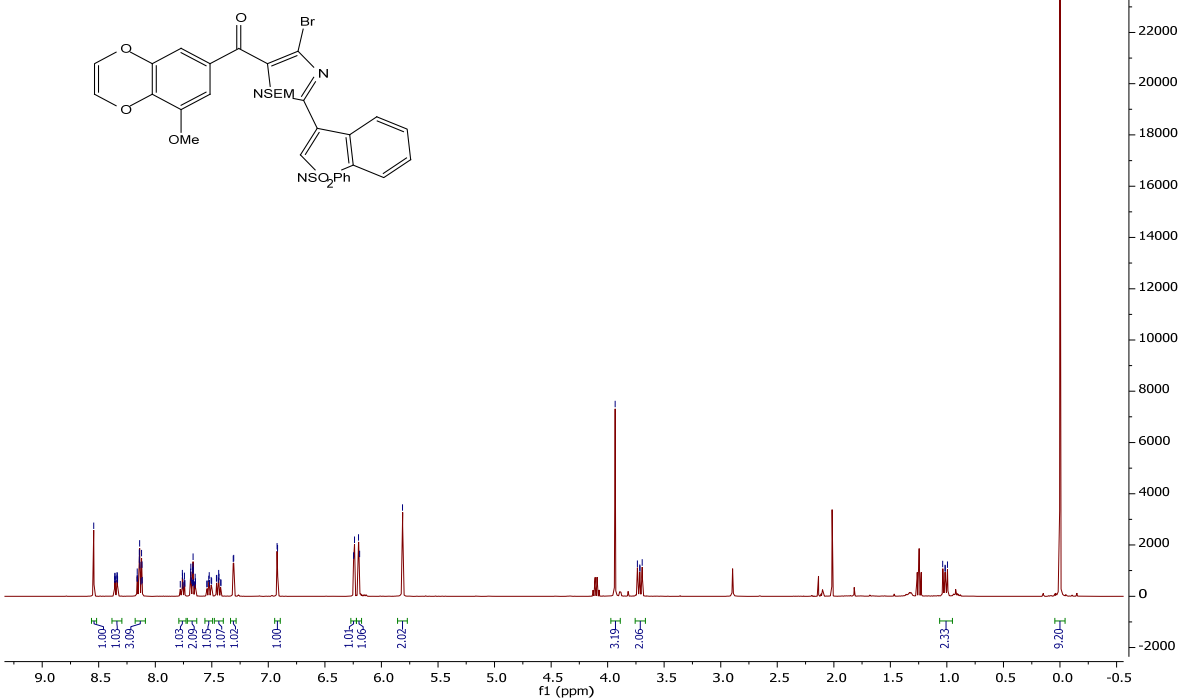
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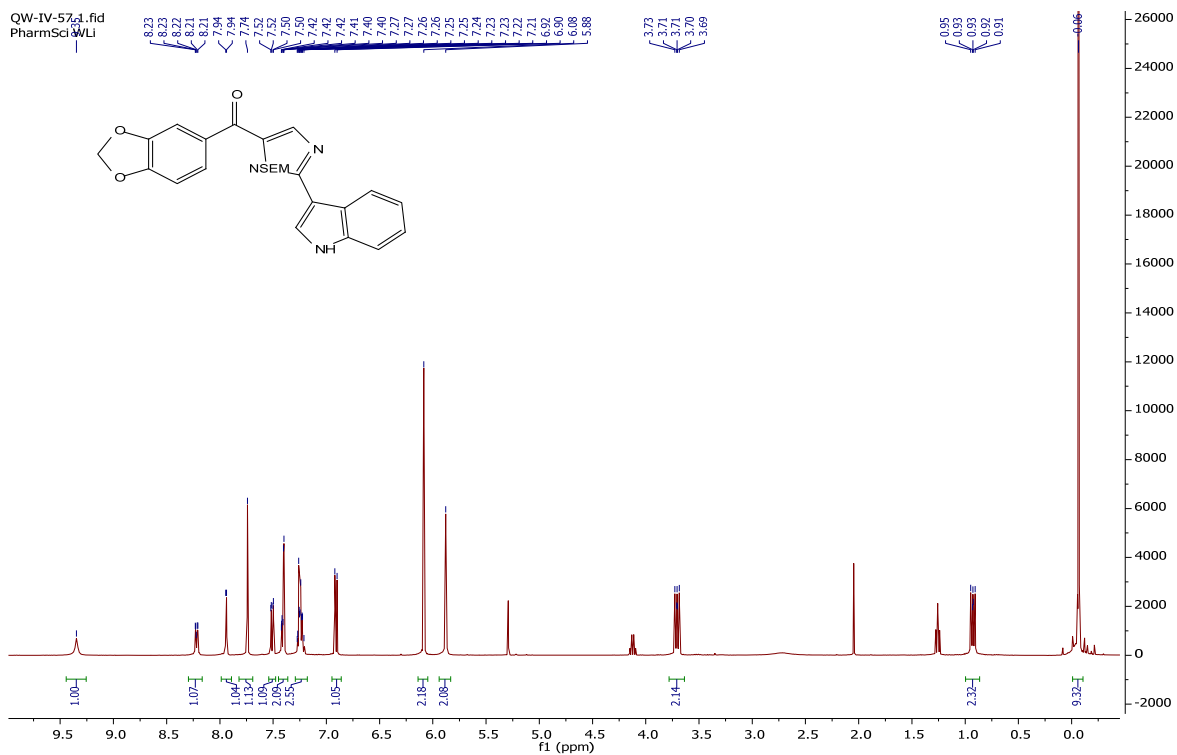


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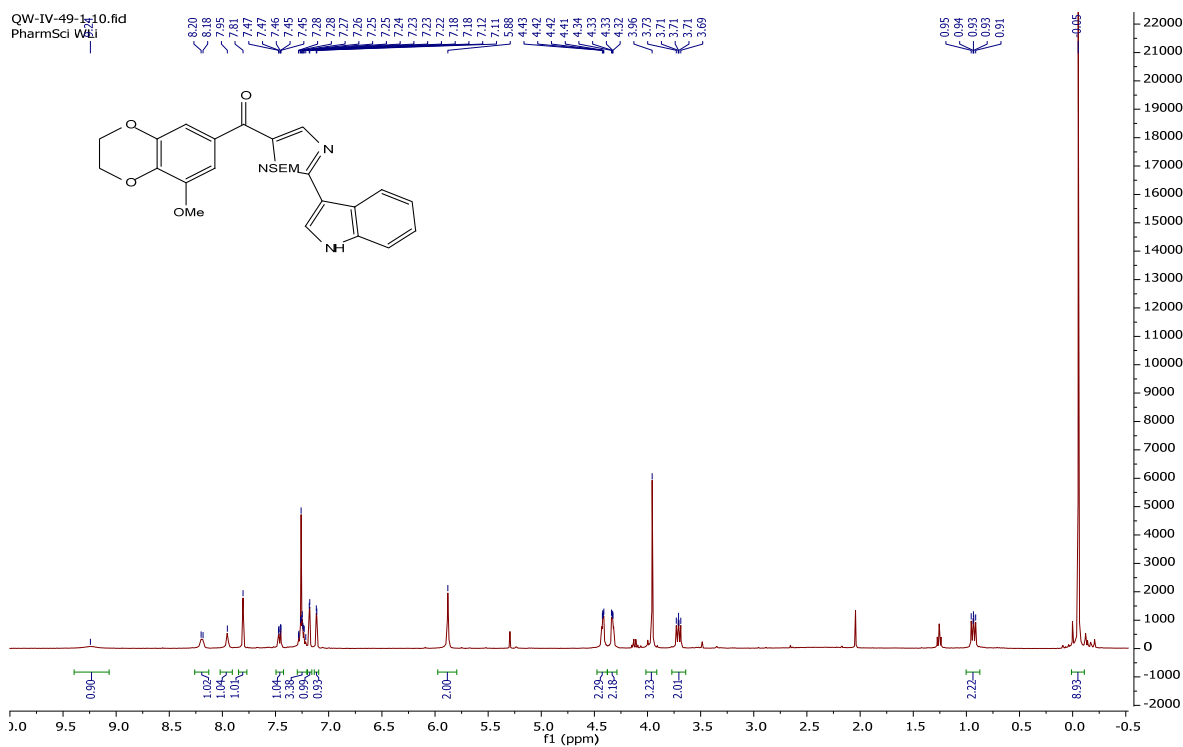
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<sup>1</sup>H-NMR of 11f



<sup>1</sup>H-NMR of 12b

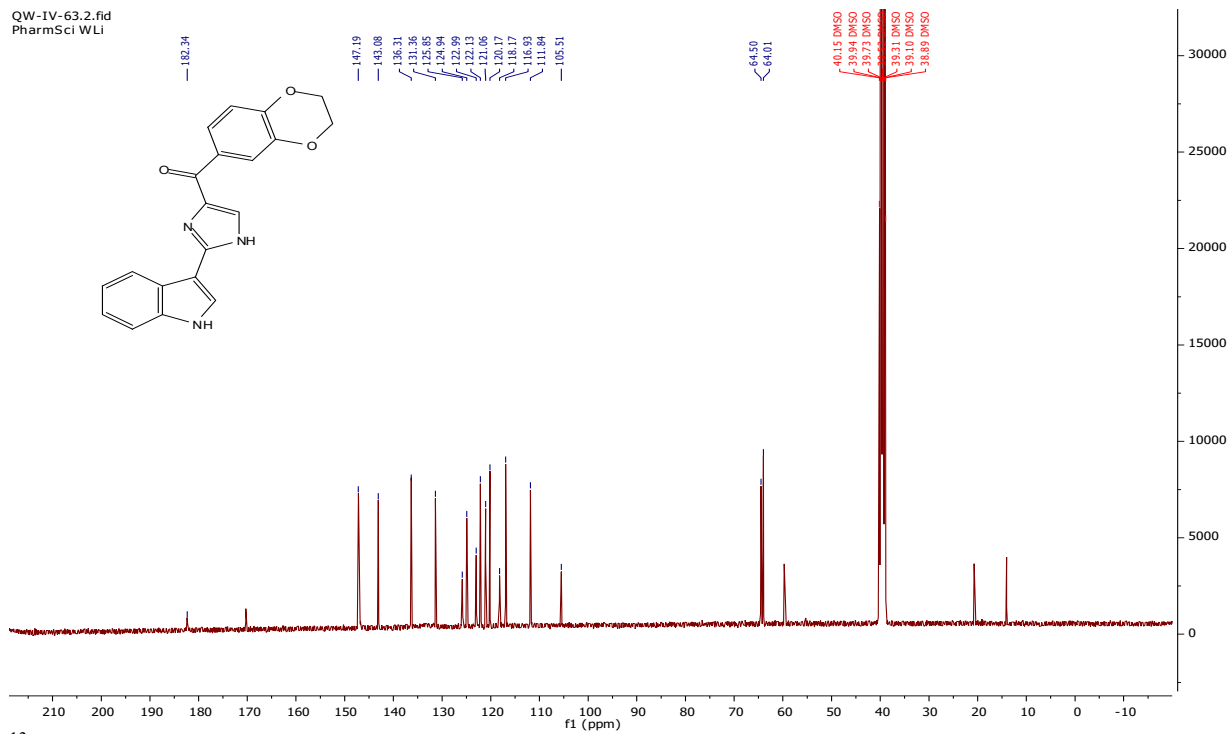


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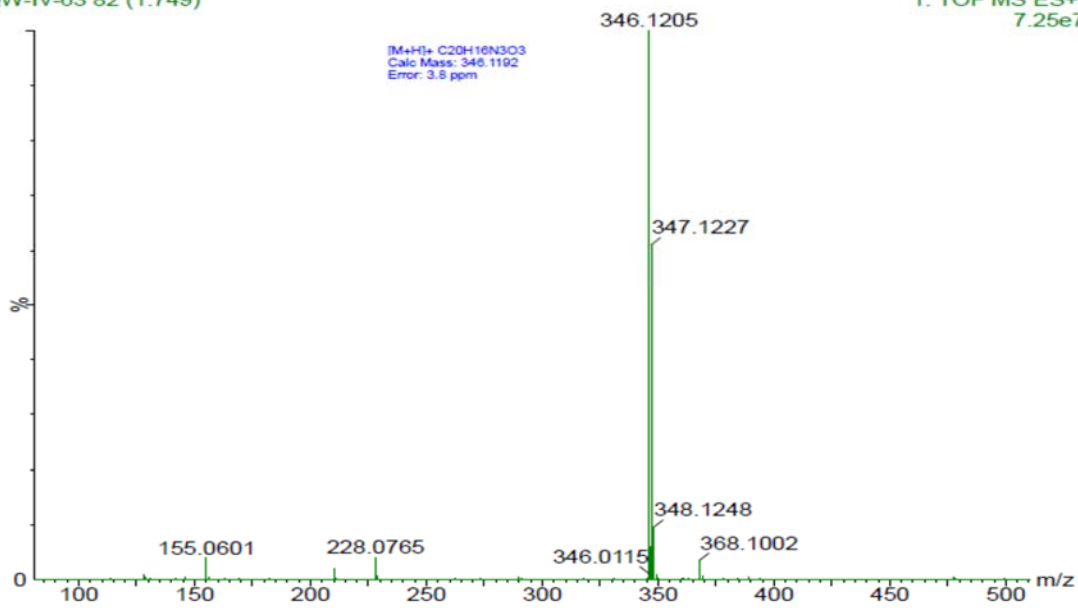


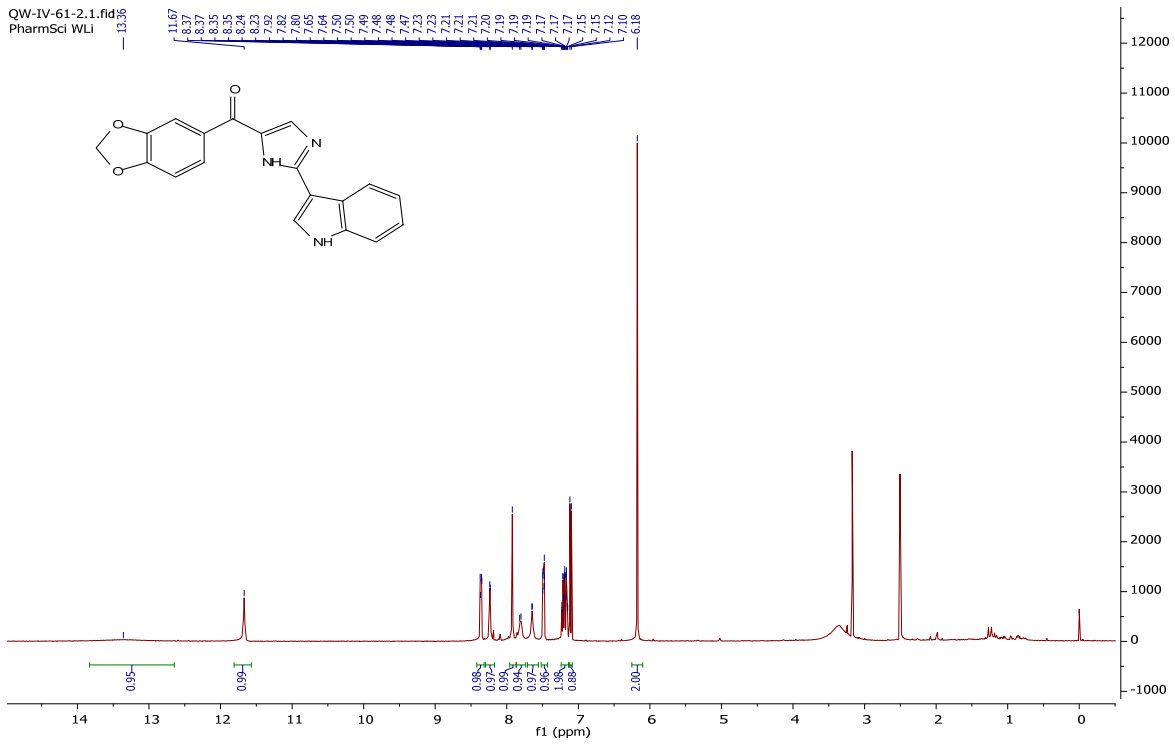


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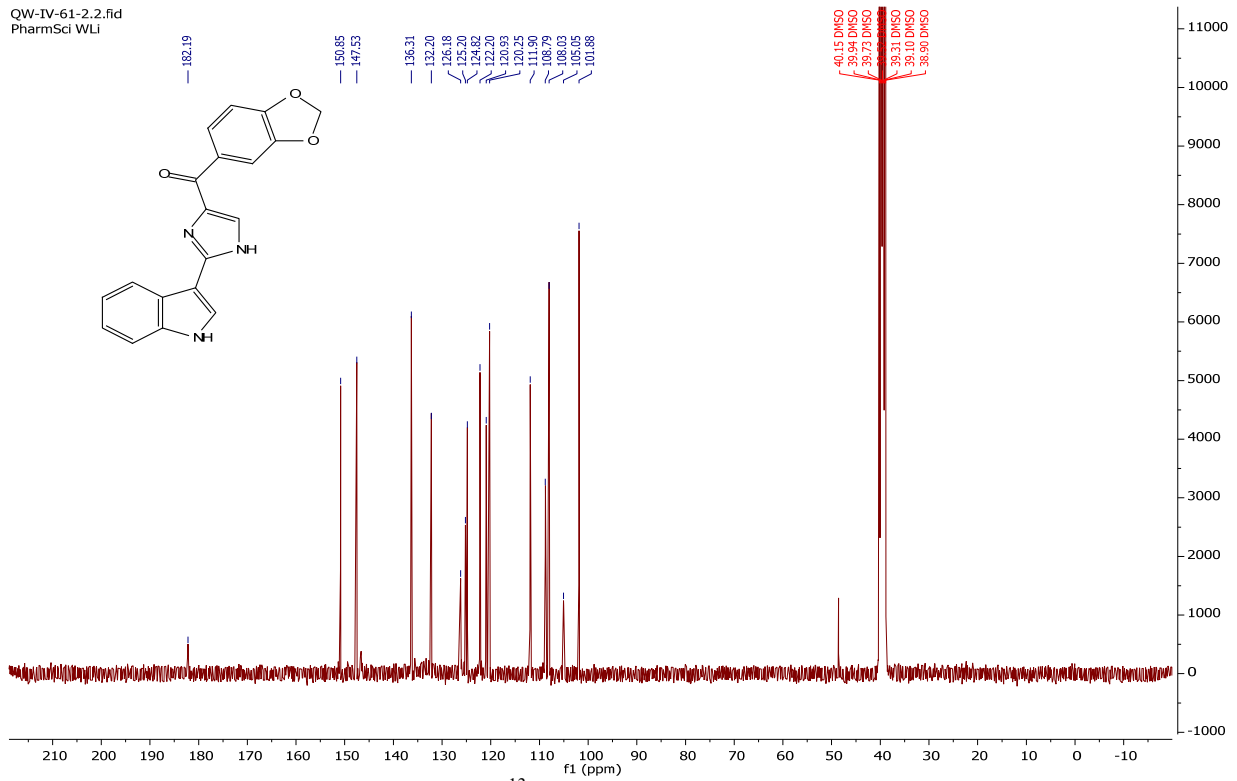


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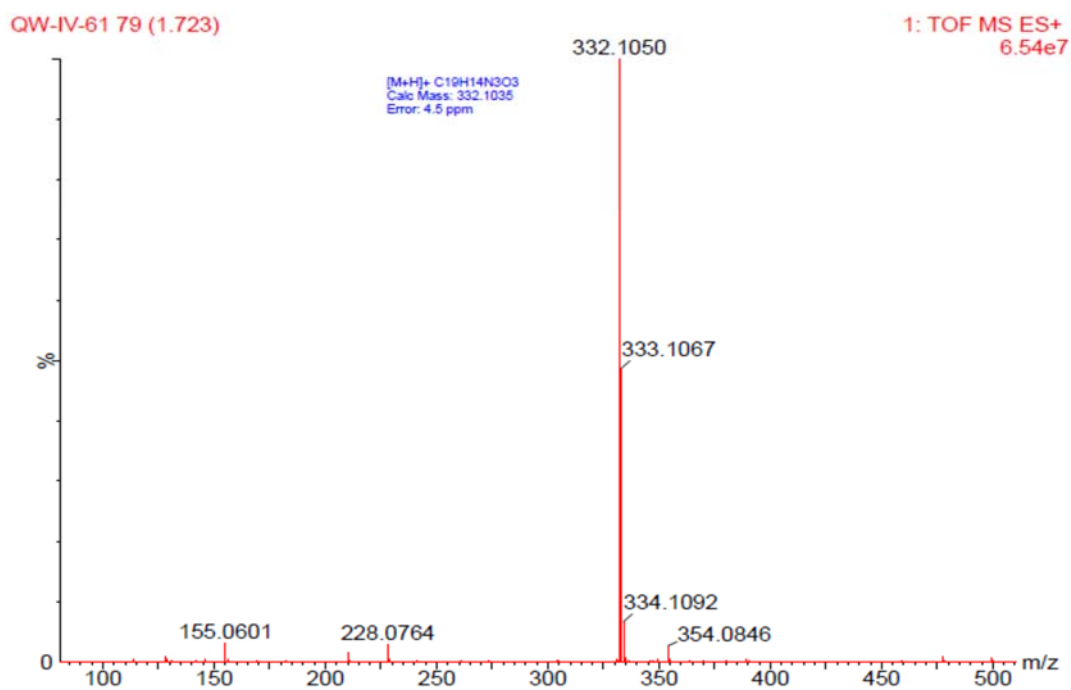




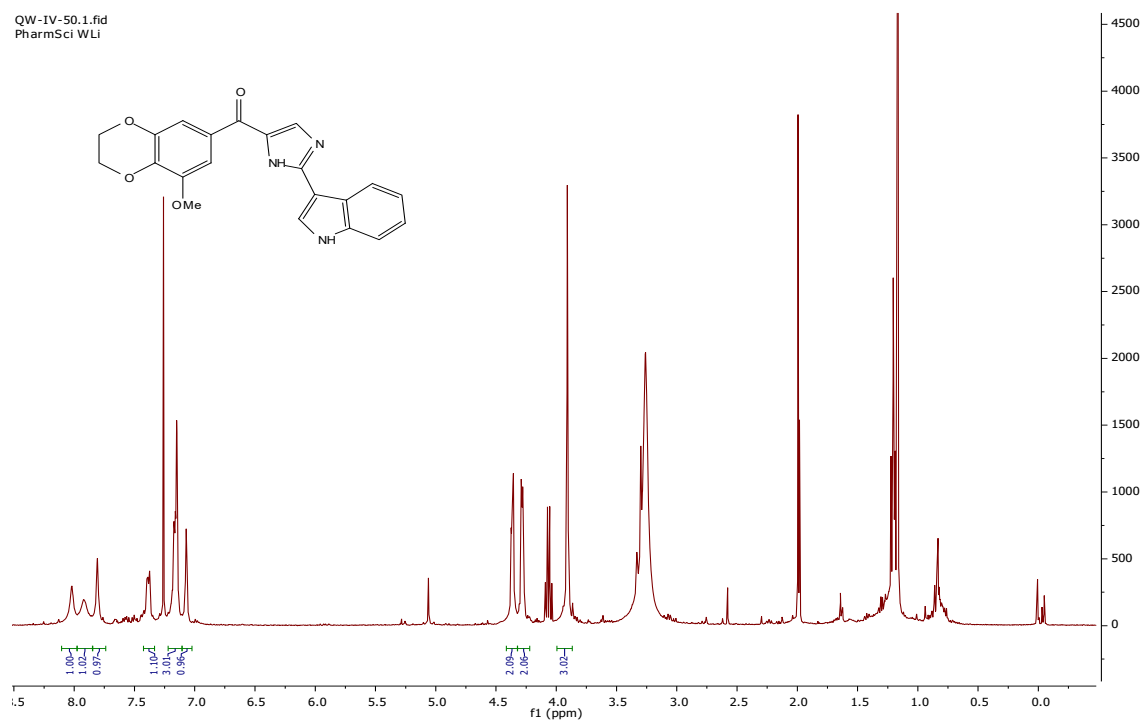
<sup>1</sup>H-NMR of 13b



<sup>13</sup>C-NMR of 13b



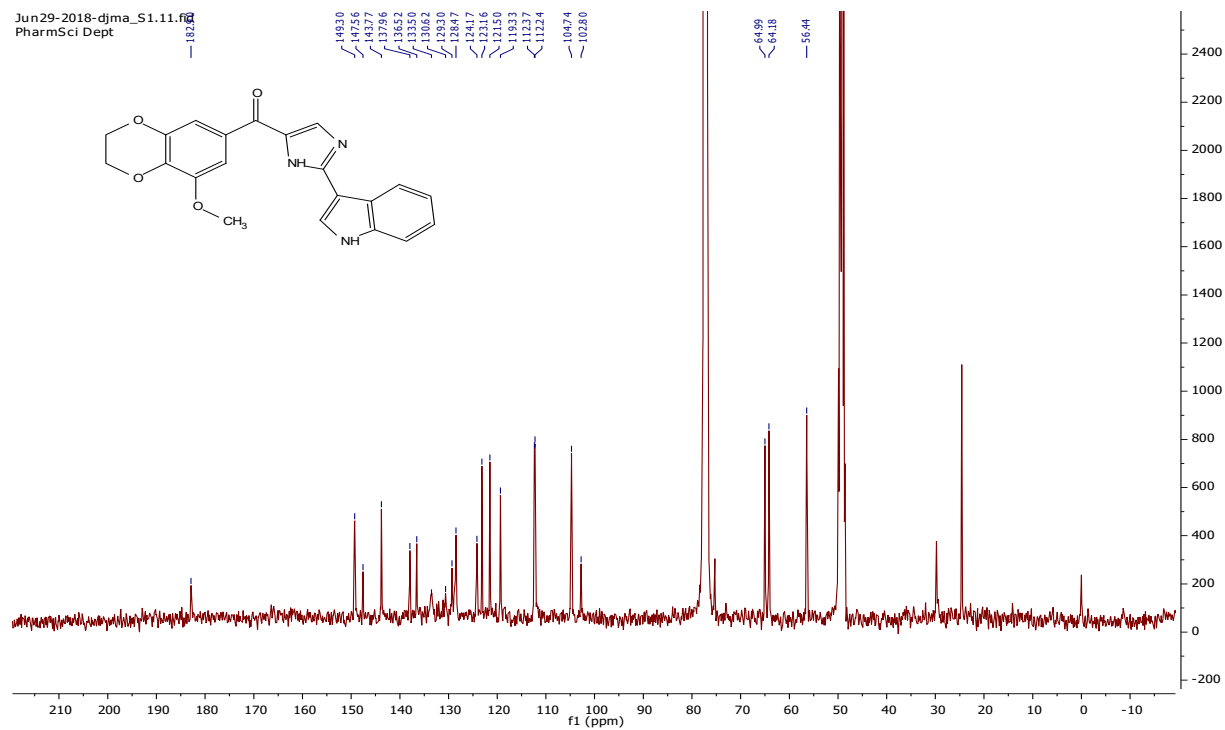
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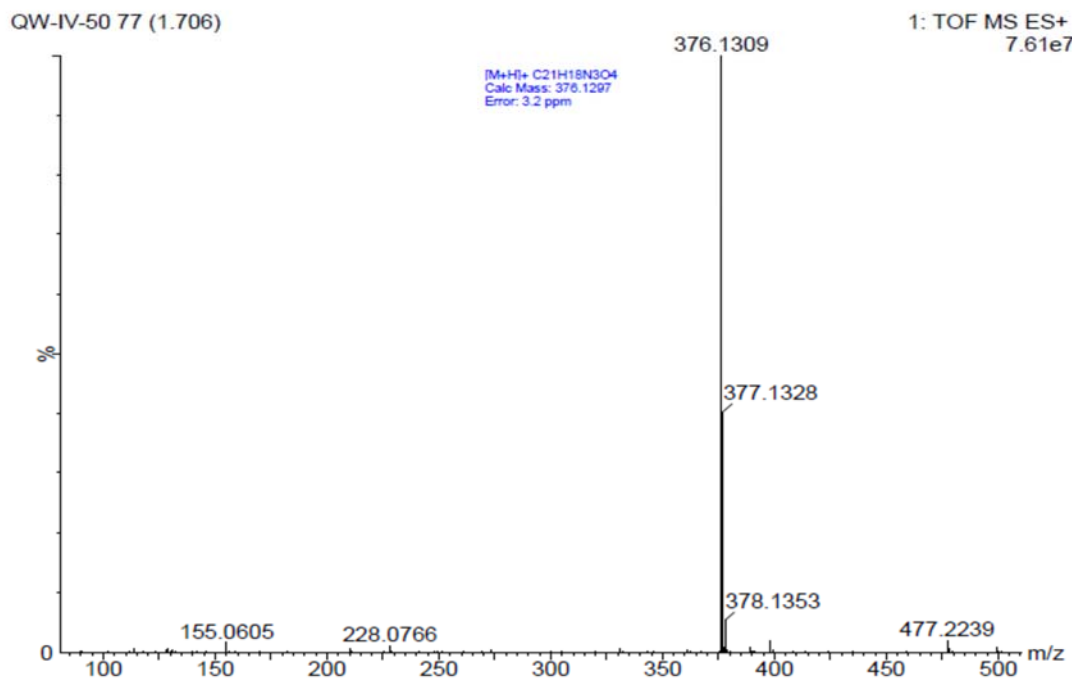
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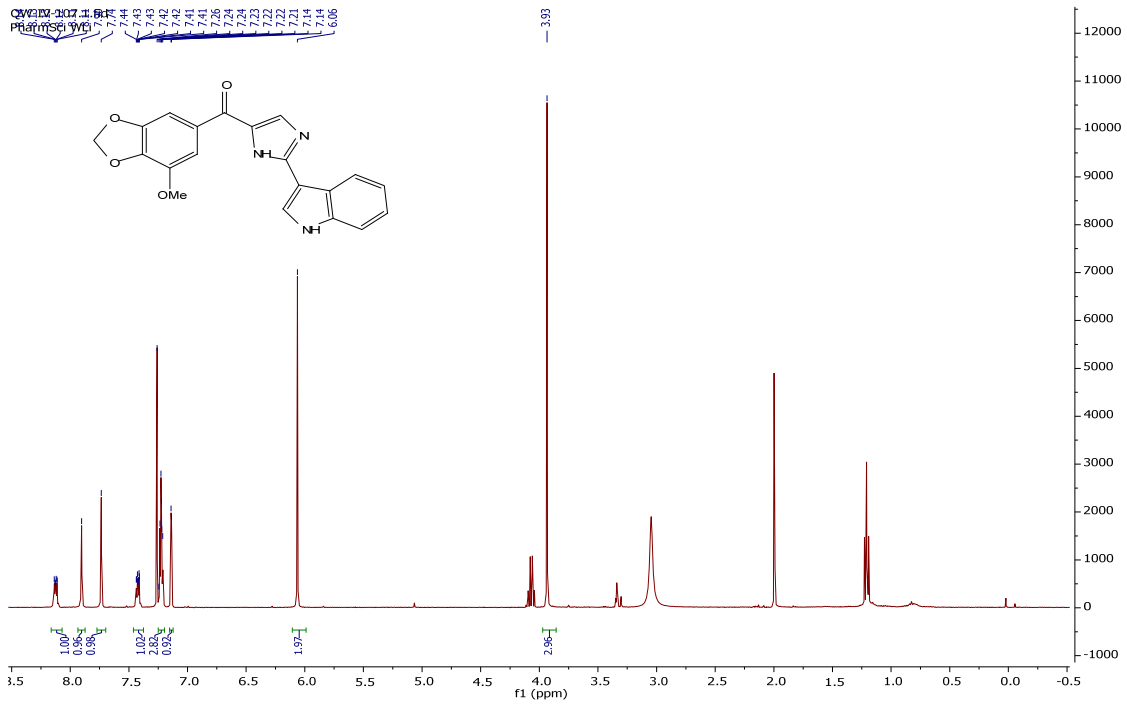
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PharmSci Dept



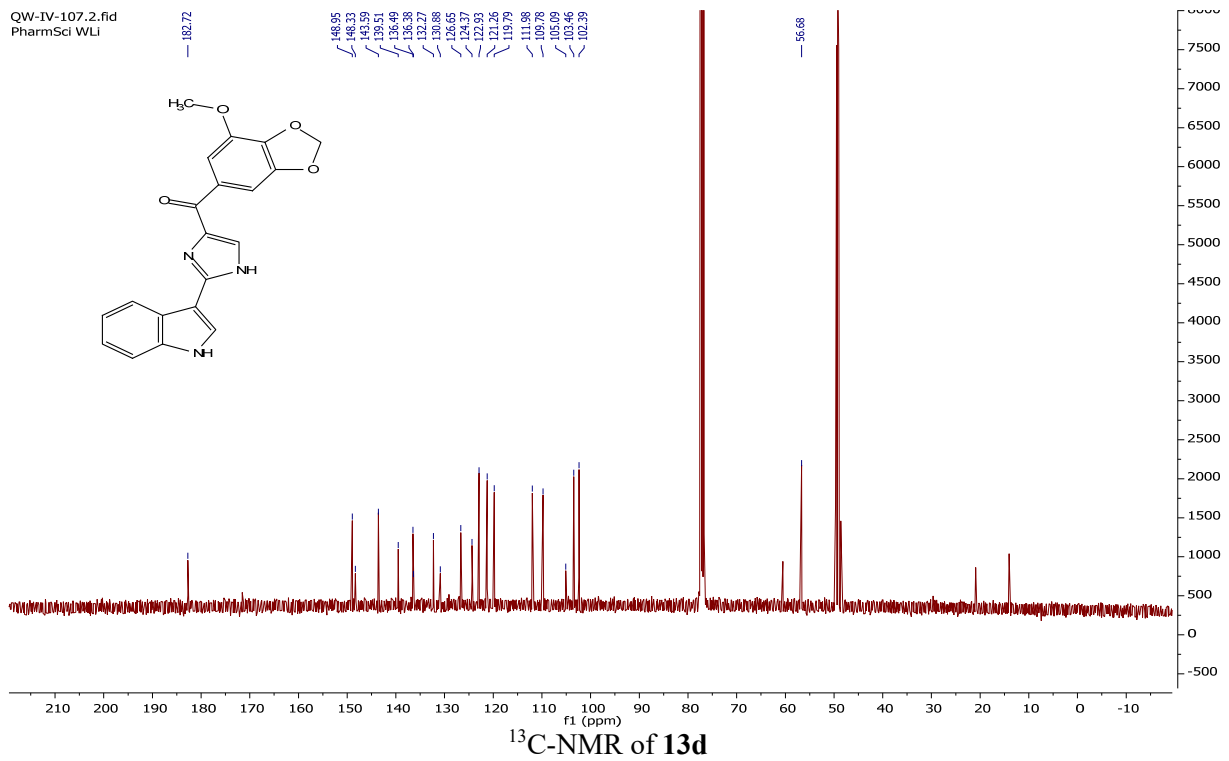
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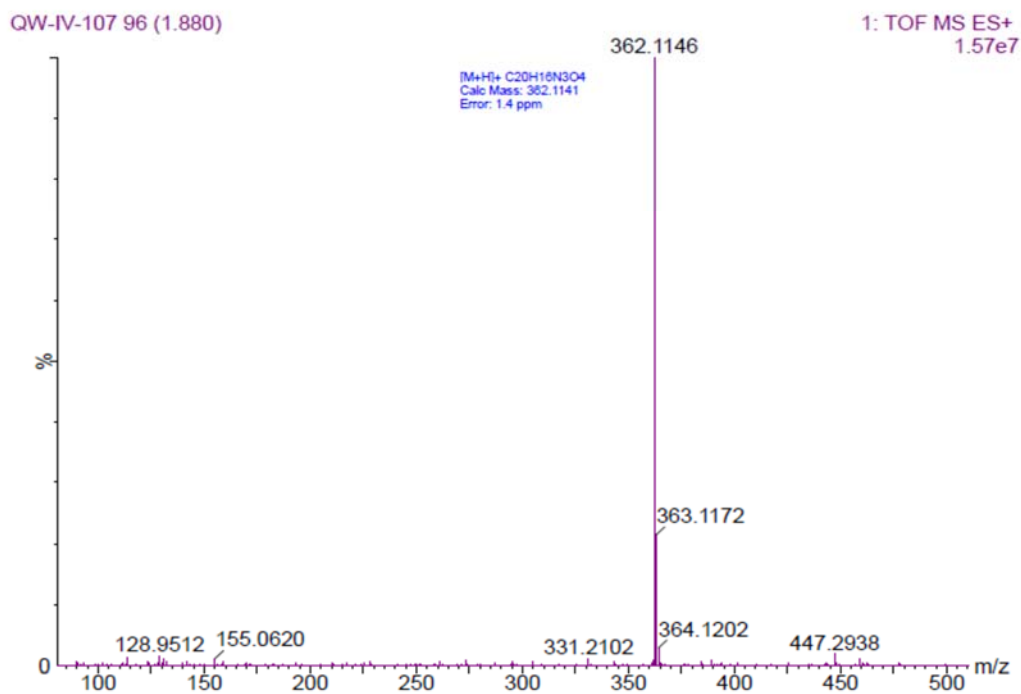
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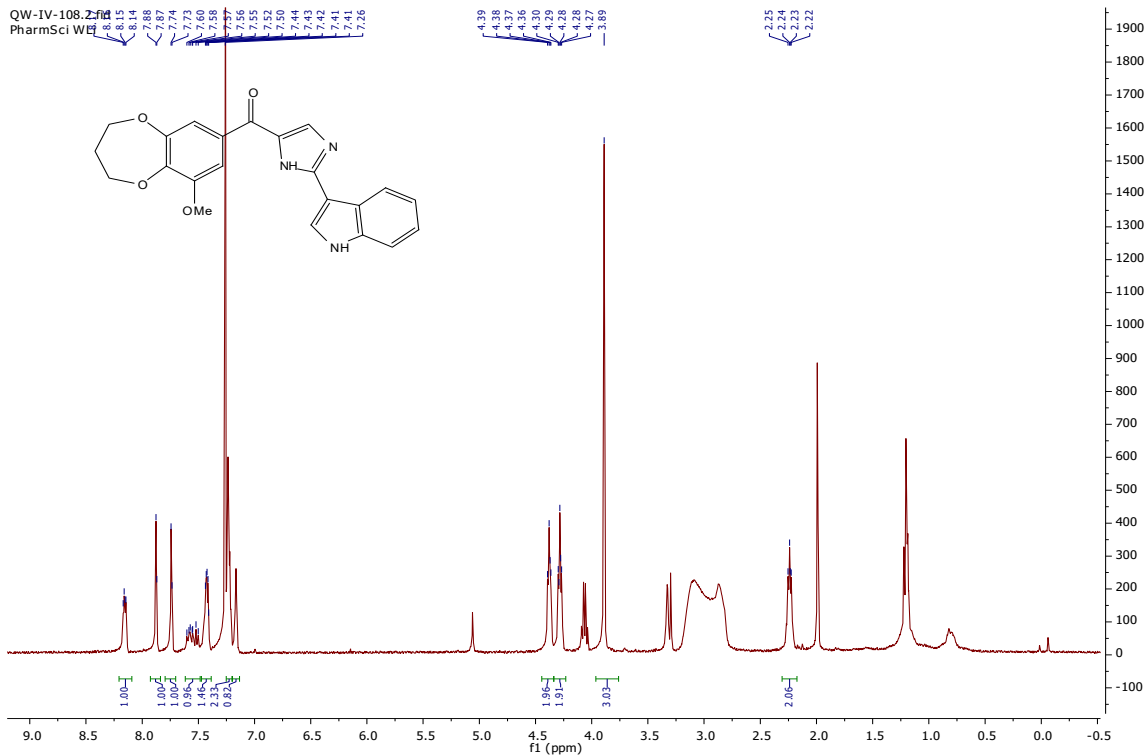
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<sup>13</sup>C-NMR of 13d

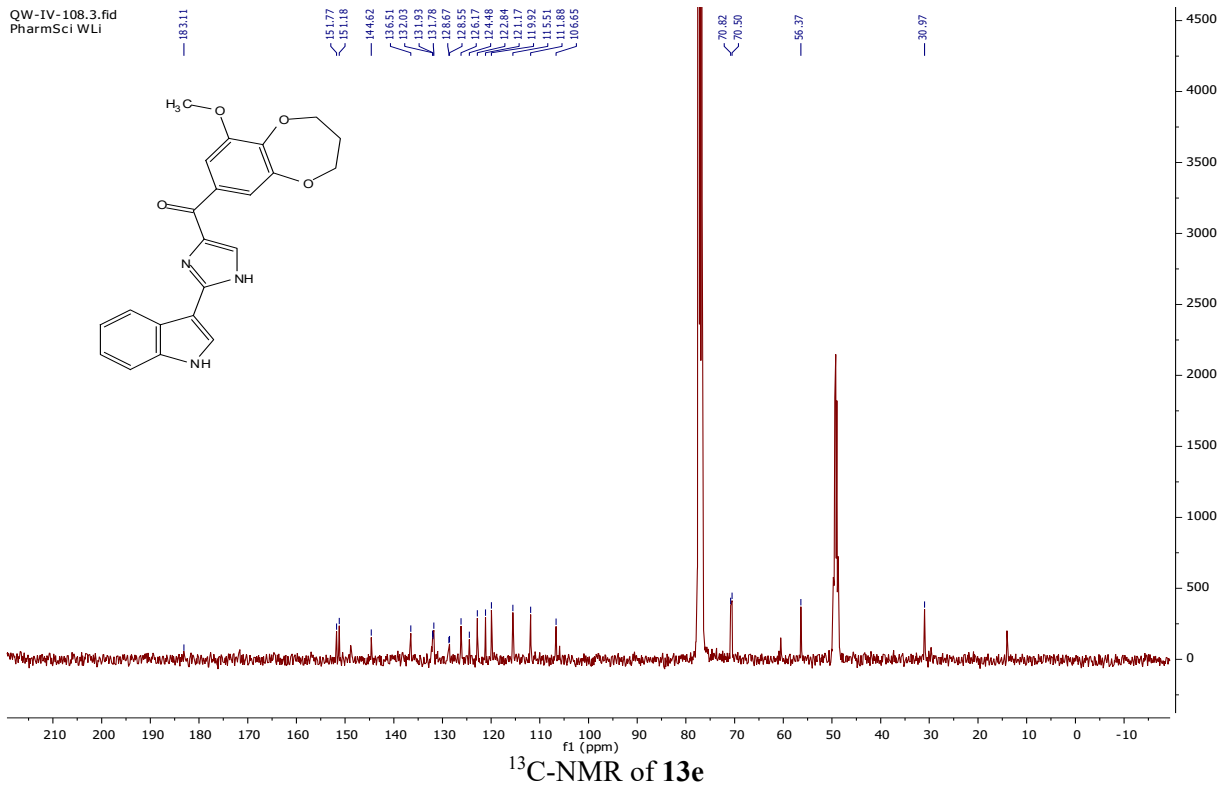


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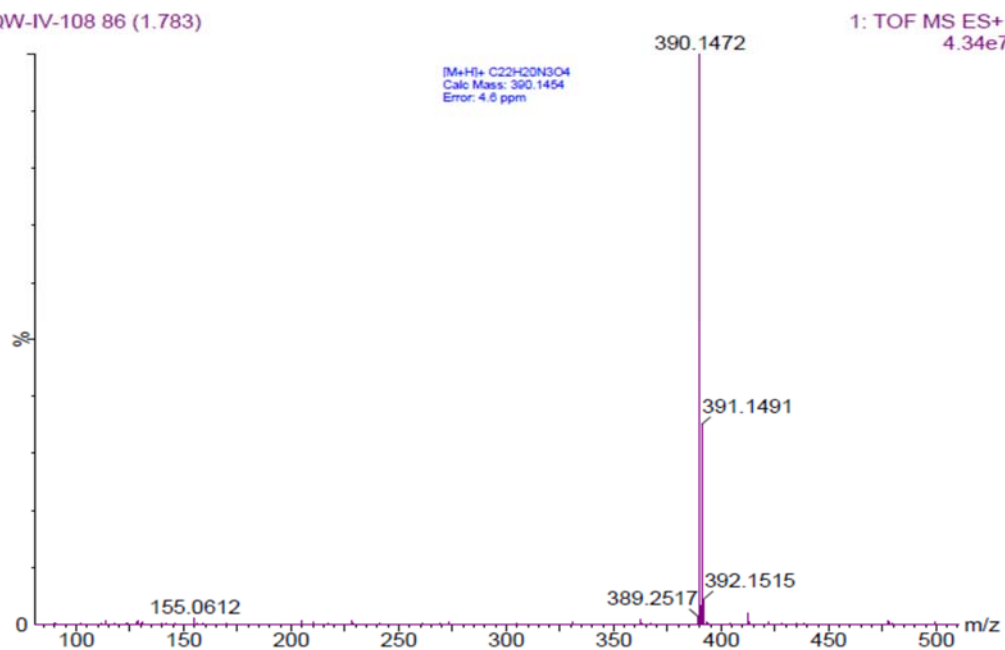


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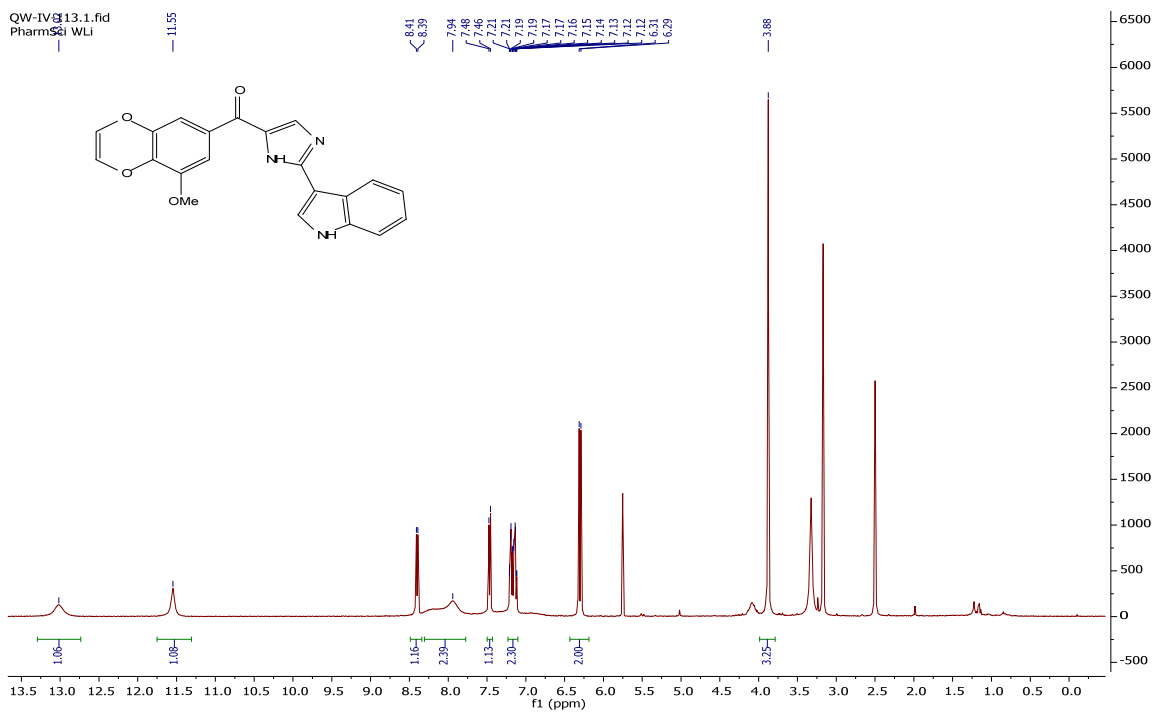
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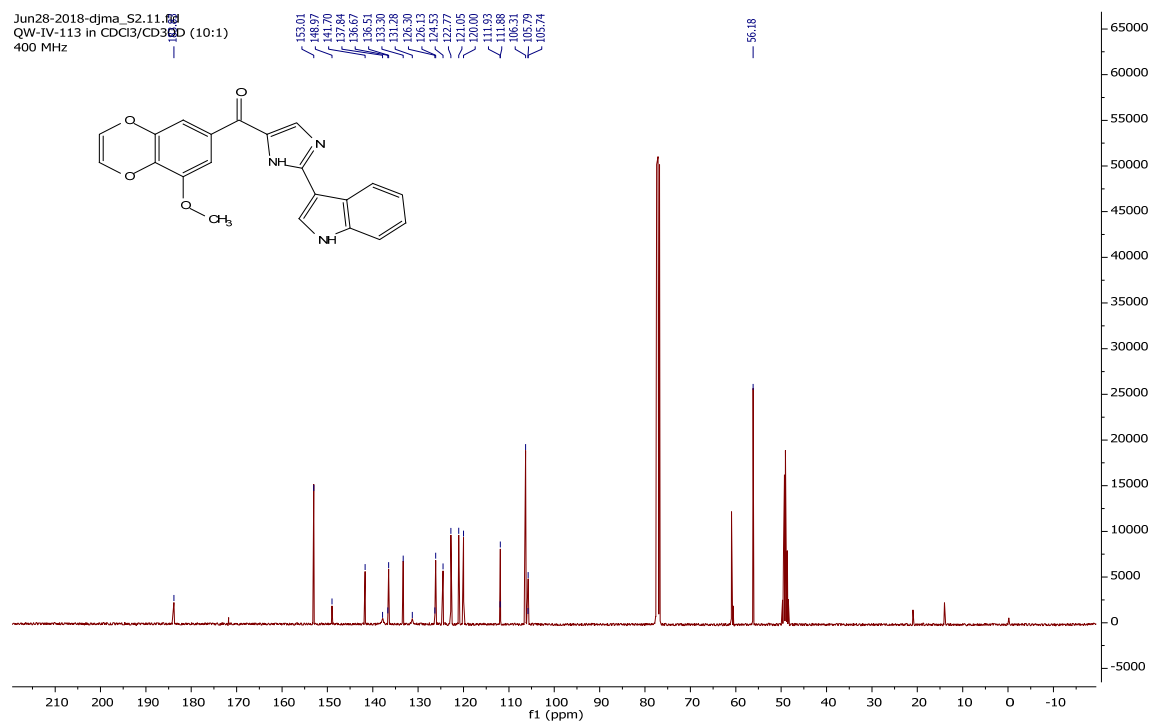
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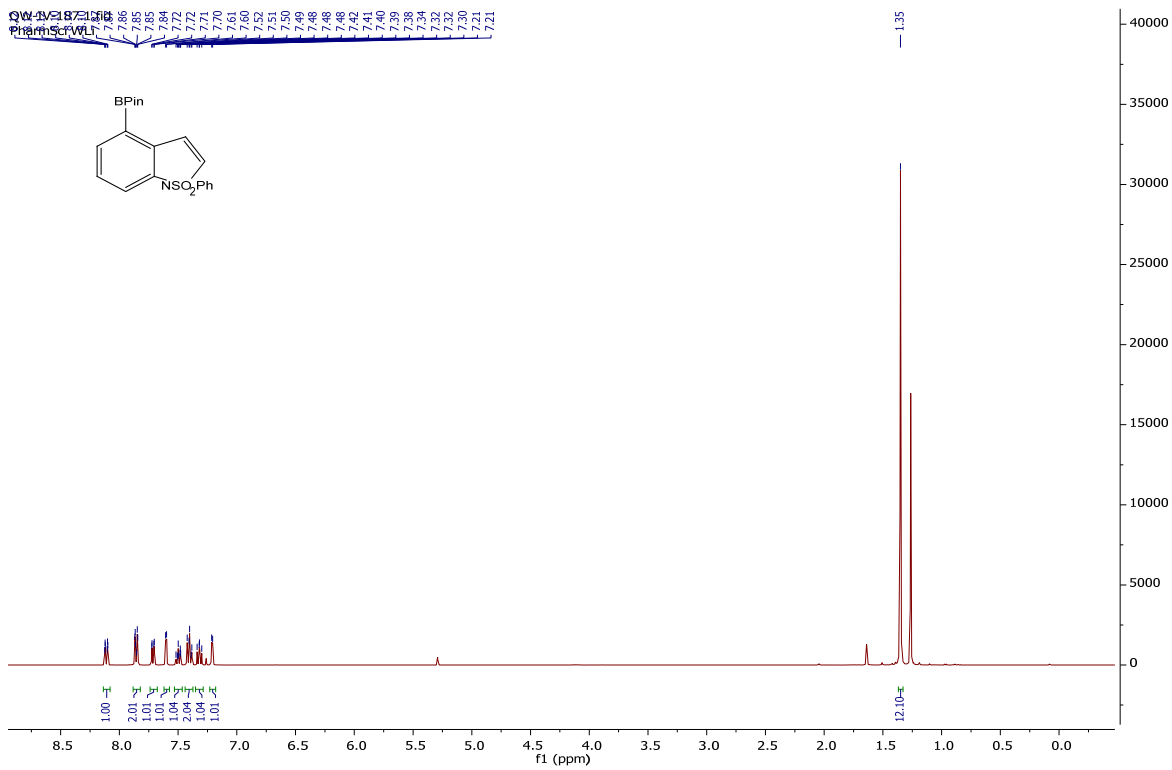


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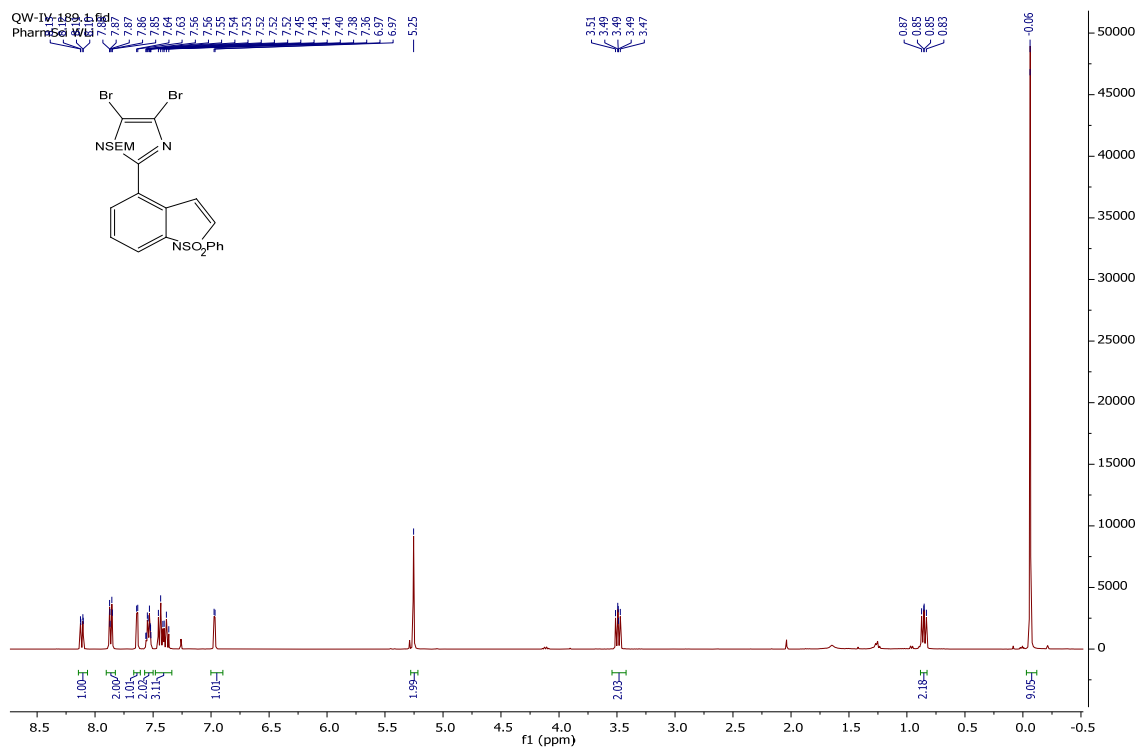


<sup>13</sup>C-NMR of 13f





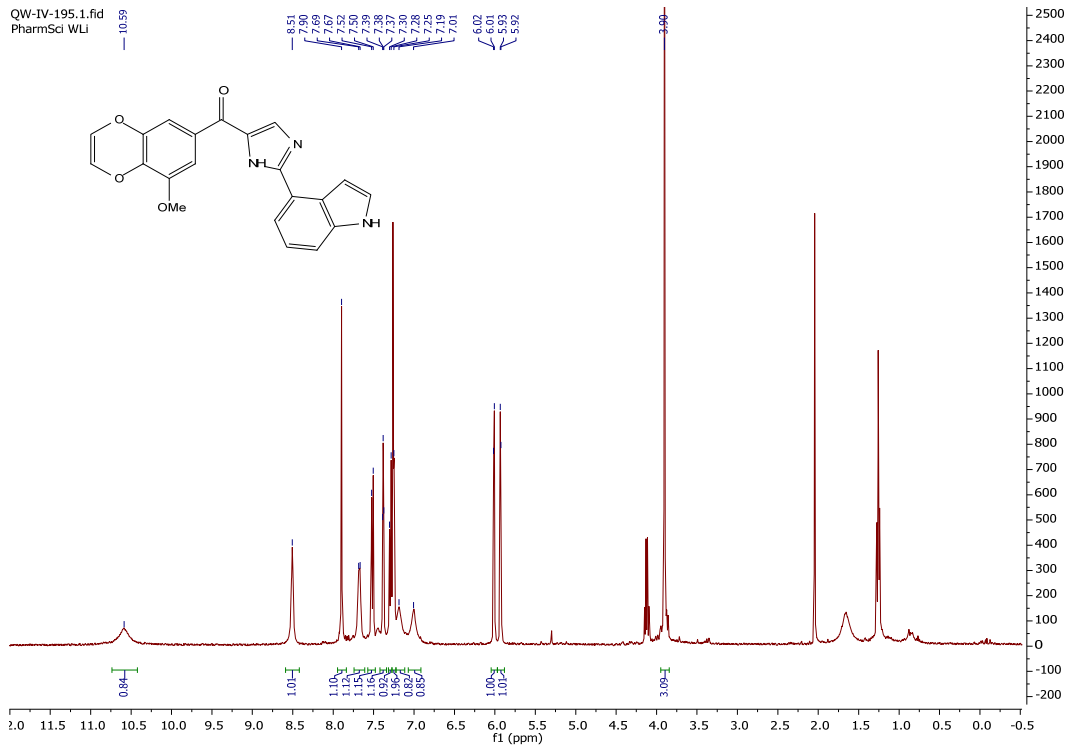
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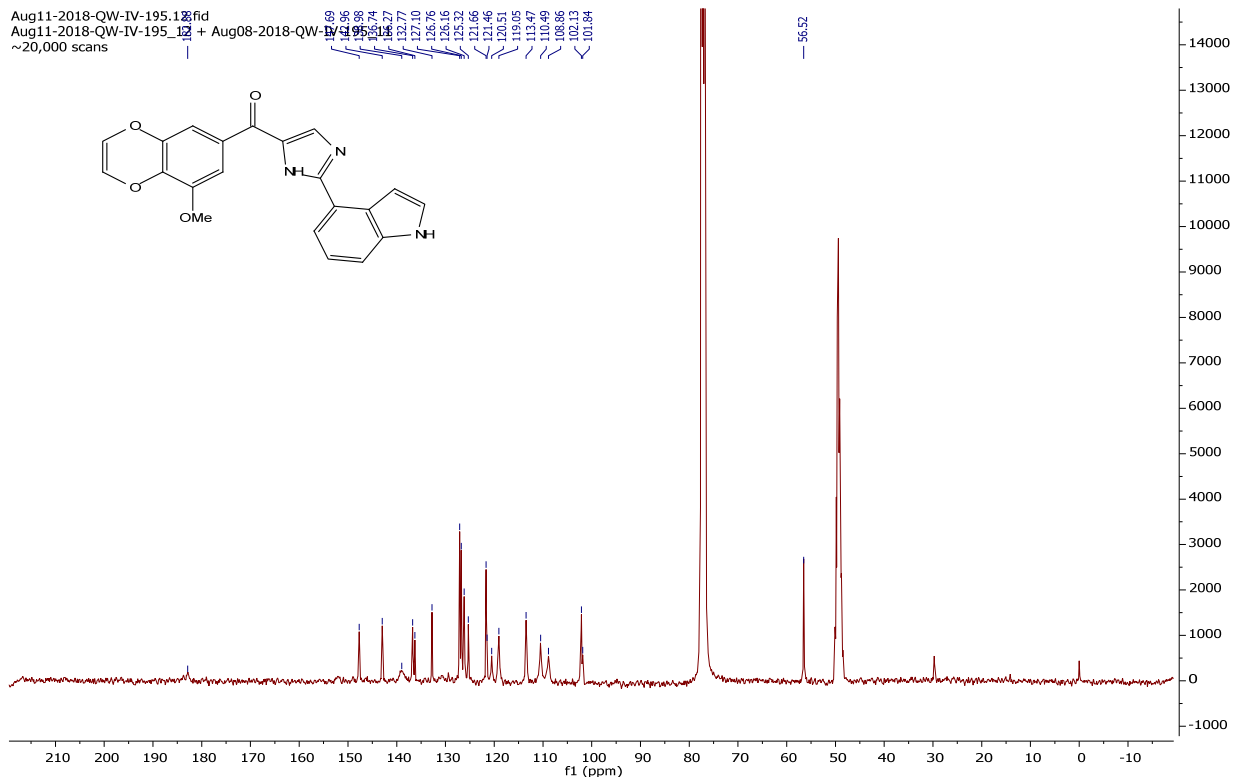
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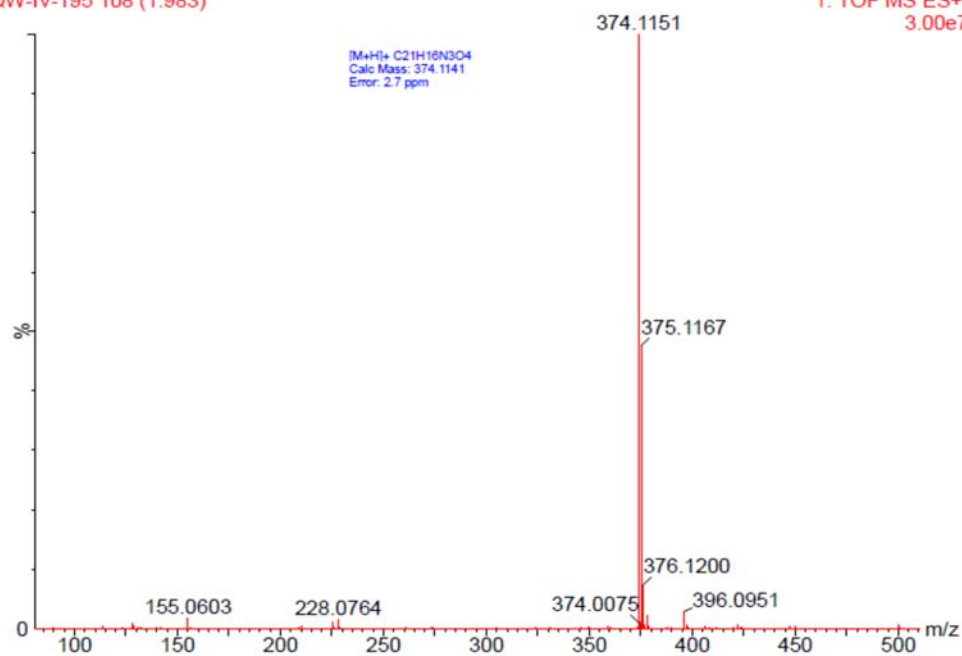
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<sup>13</sup>C-NMR of 19

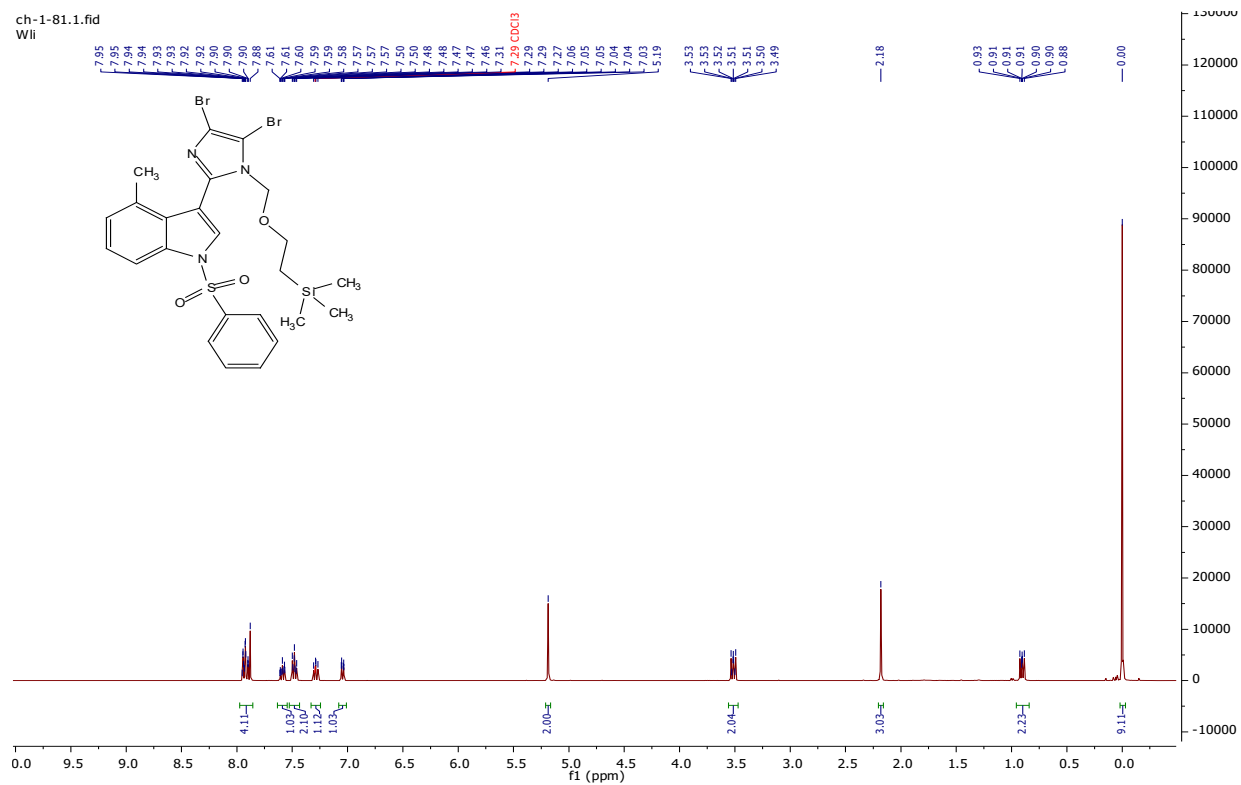
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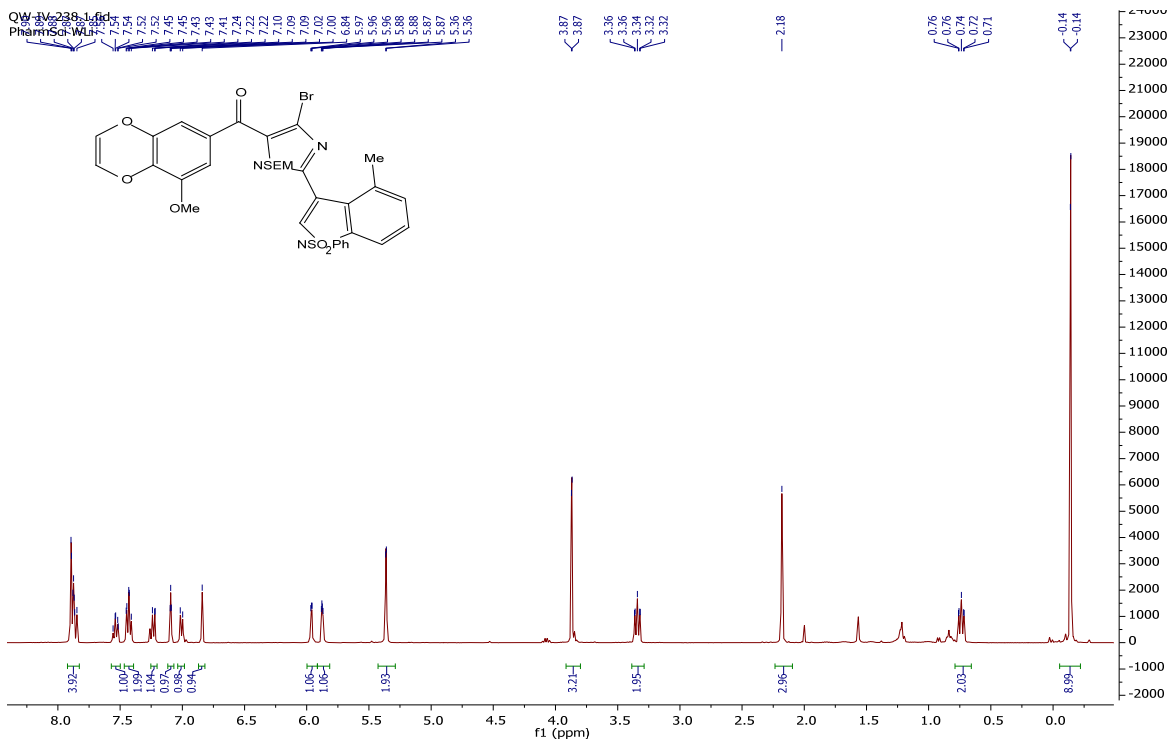


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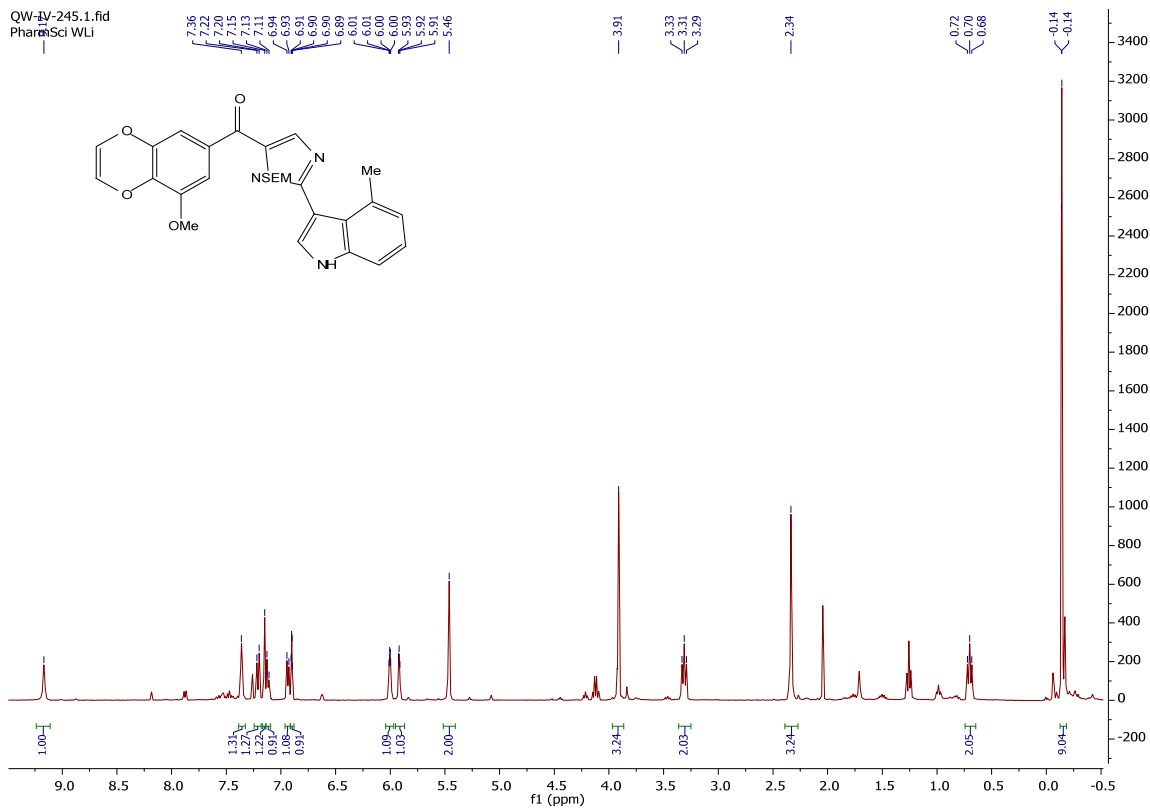
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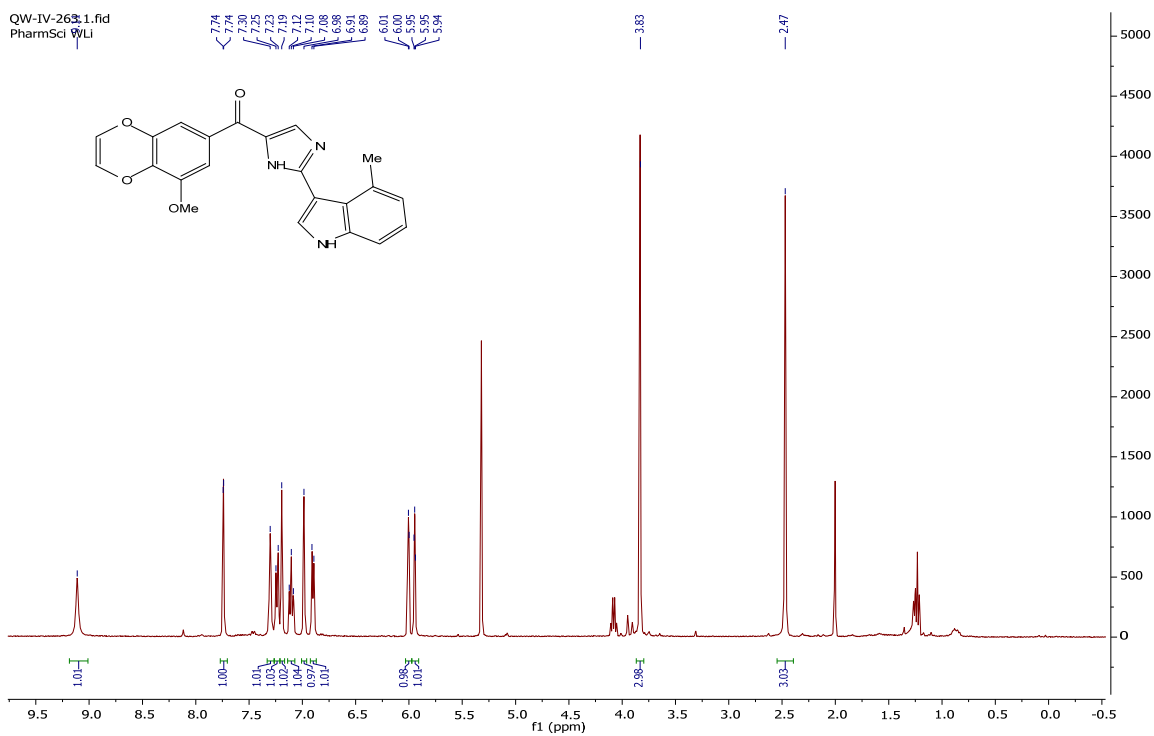
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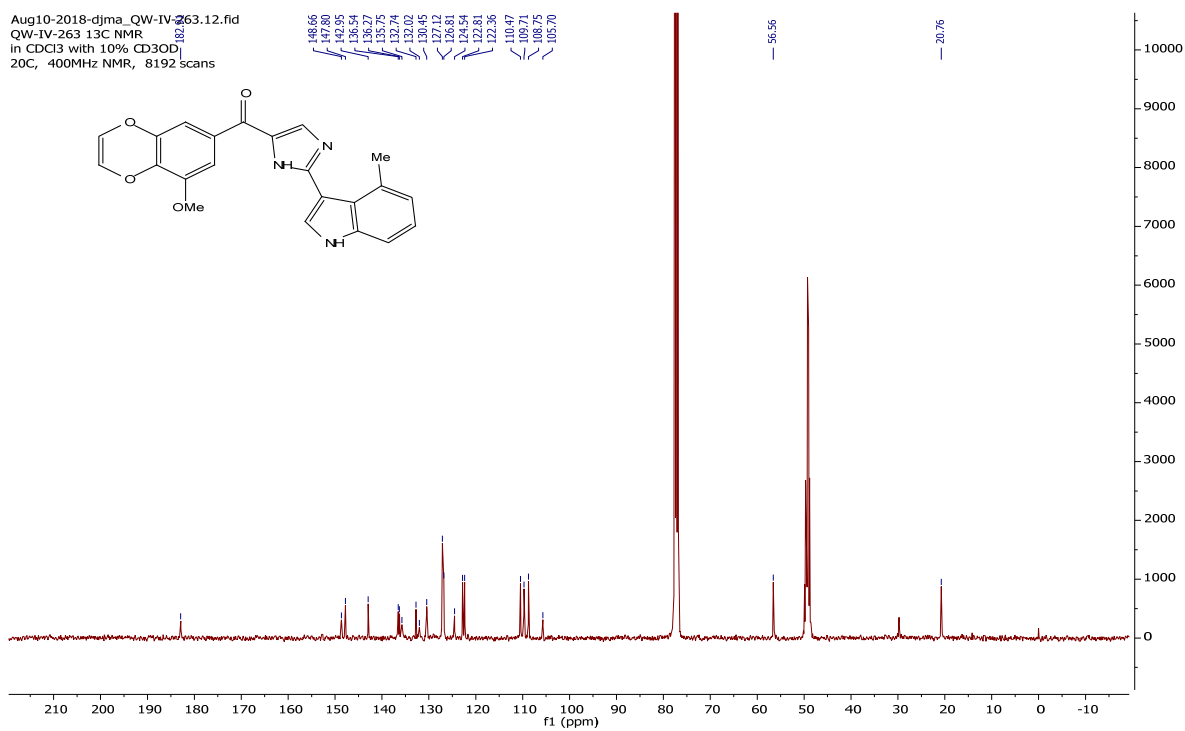
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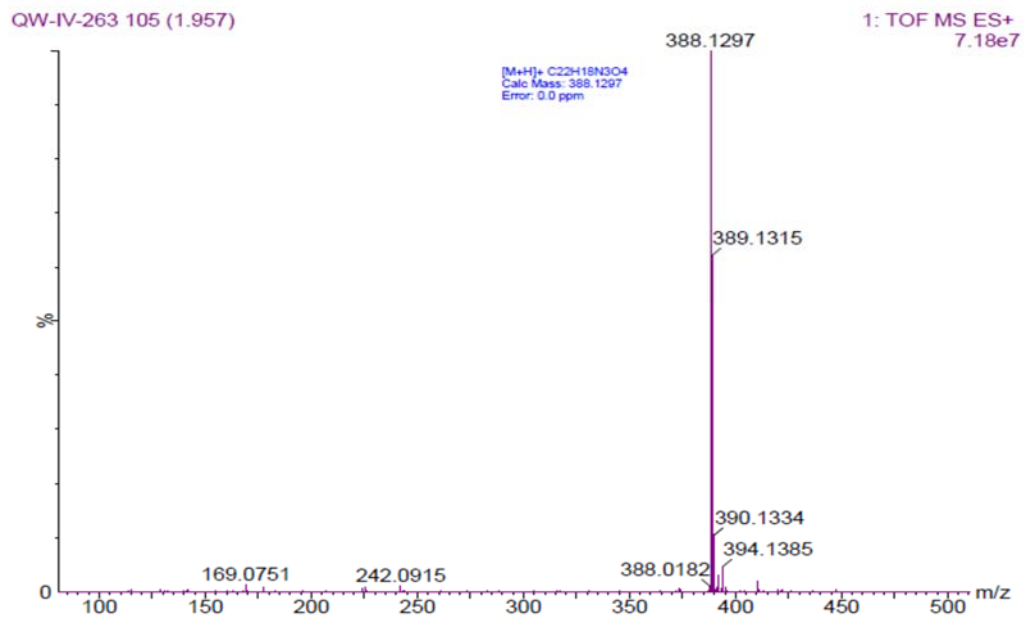
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### <sup>13</sup>C-NMR of 25



### <sup>13</sup>C-NMR of 25



HR-MS of **25**