

Supporting information

Synthesis and biological evaluation of indole-based UC-112 analogs as potent and selective survivin inhibitors

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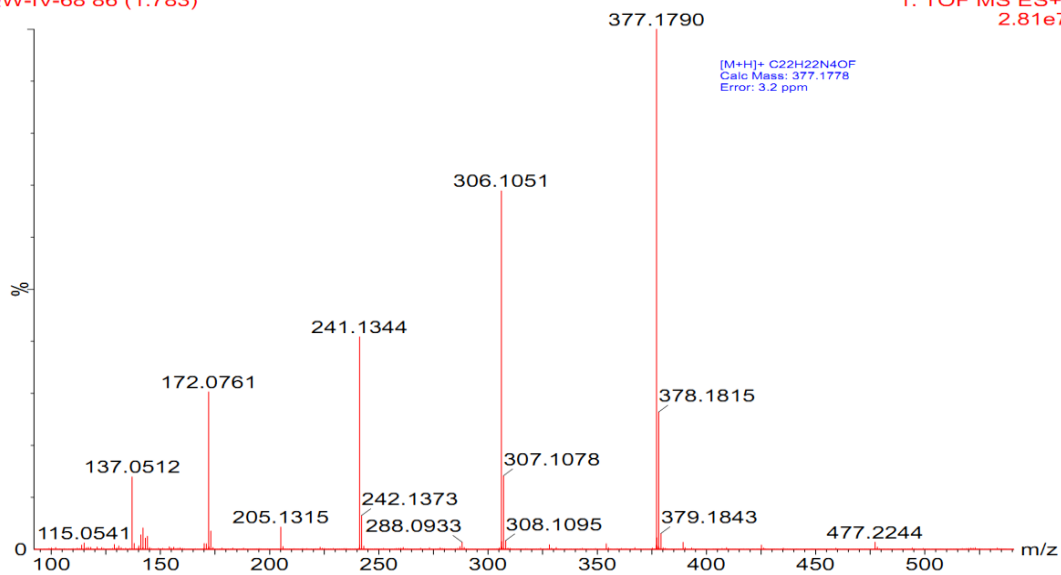
Table of contents:

| | |
|--|---------|
| 1. Spectral data for compound 2a-2d | S3-S8 |
| 2. Spectral data for compound 6a-6f | S9-S17 |
| 3. Spectral data for compound 8 | S18-S19 |
| 4. Spectral data for compound 10a-10v | S19-S52 |
| 5. Spectral data for compound 3 | S52 |

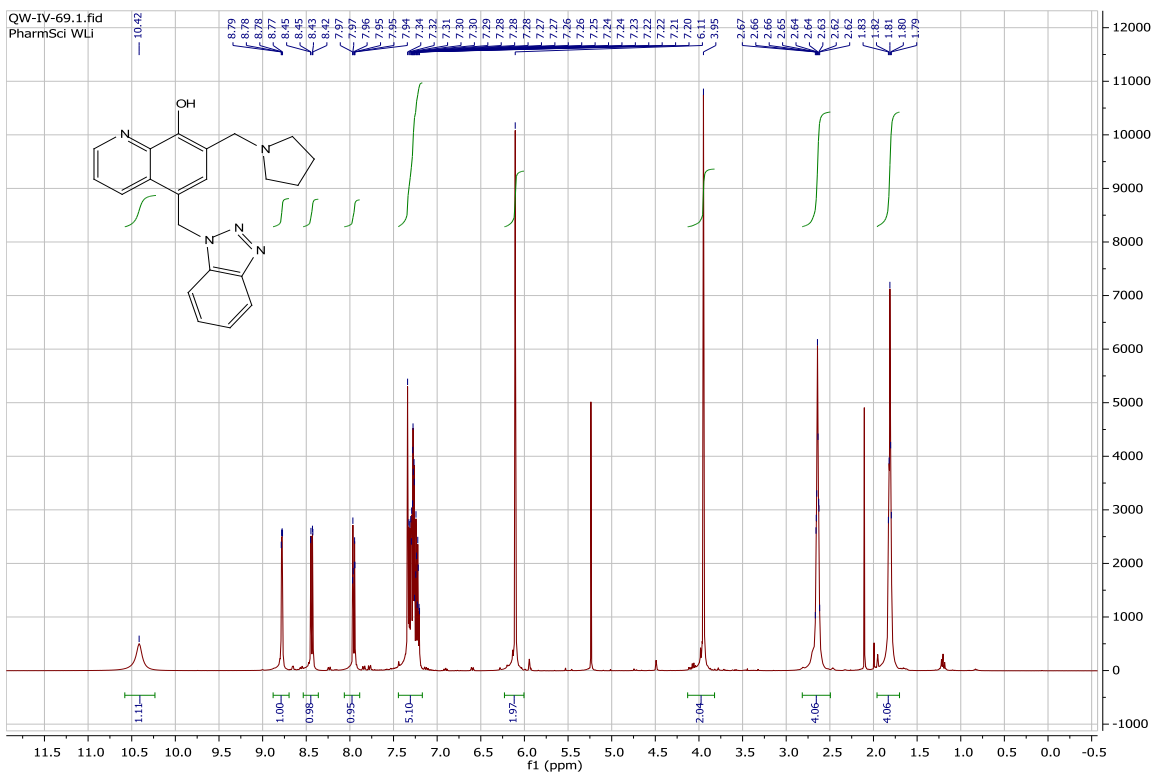
| | |
|---|-----|
| 6. Spectral data for compound 4 | S53 |
| 7. Surface representation of 10f binding in survivin protein | S54 |

QW-IV-68 86 (1.783)

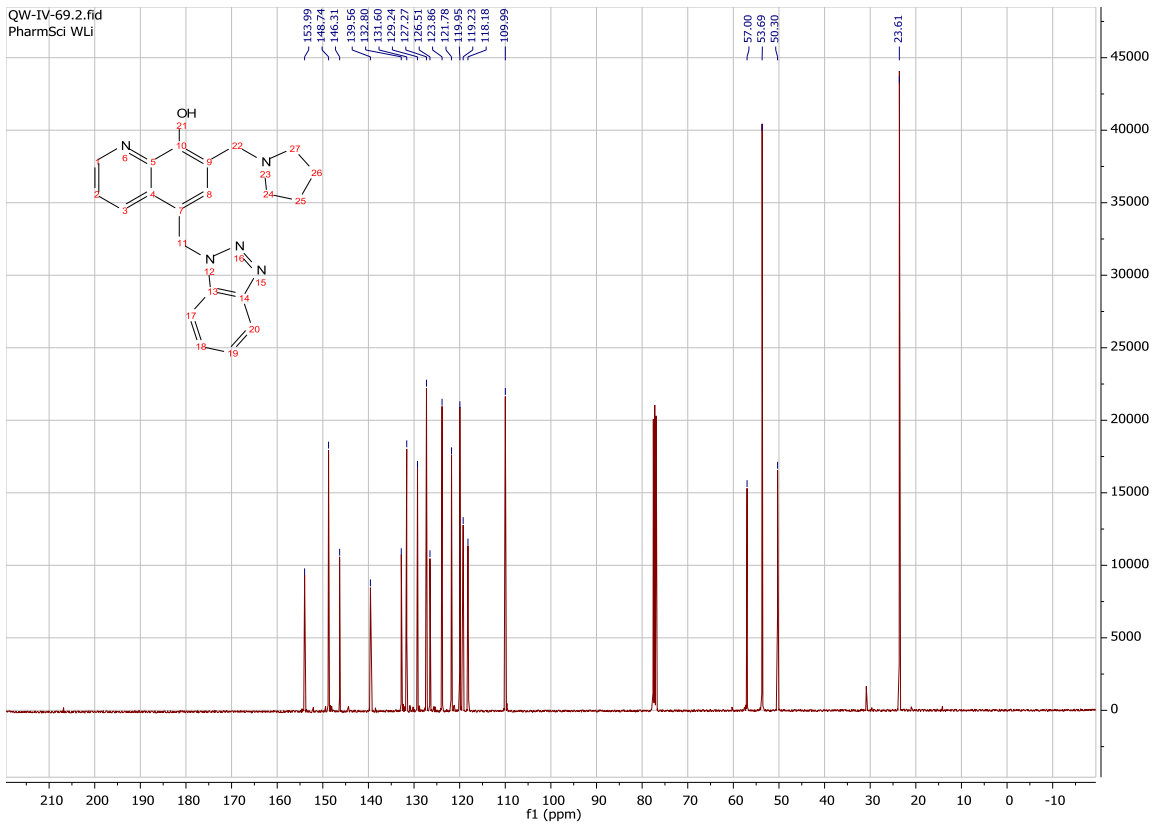
1: TOF MS ES+
2.81e7



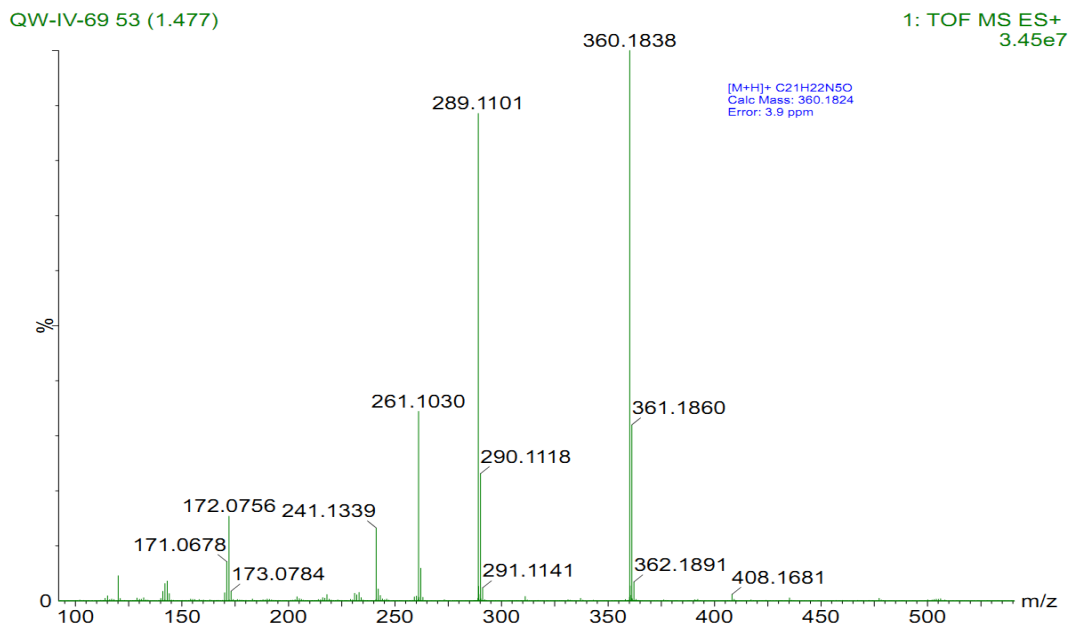
HR-MS of 2a



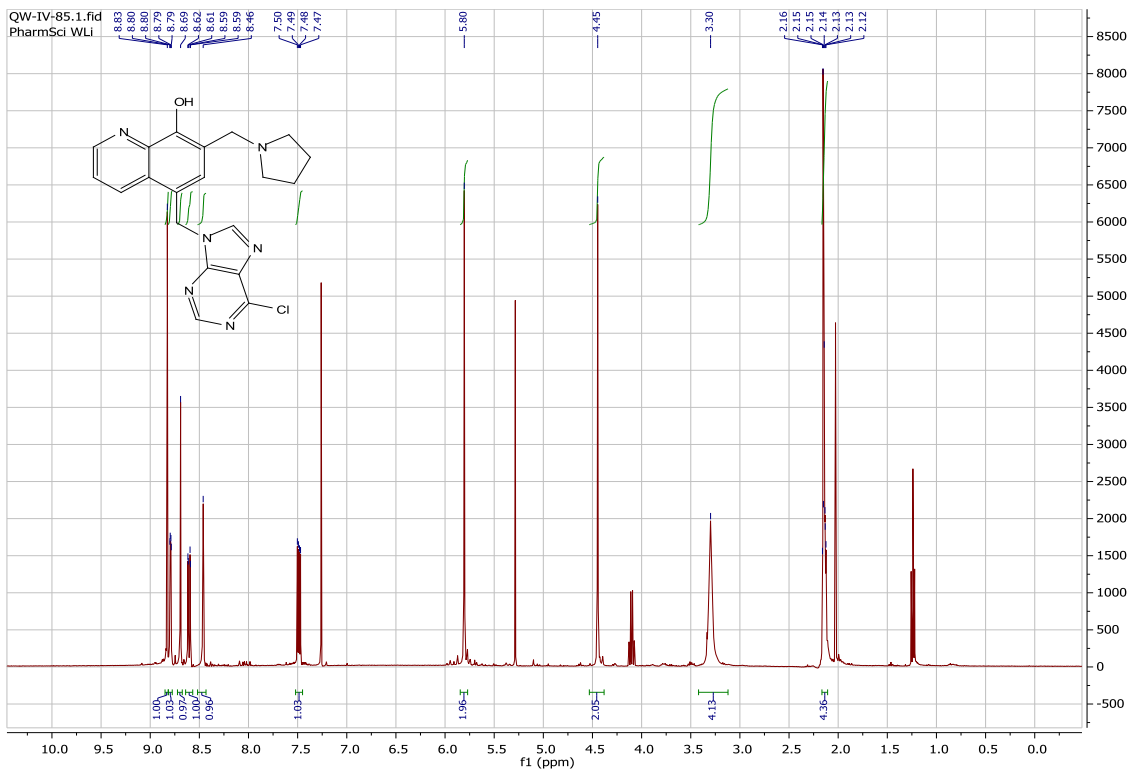
¹H-NMR of 2b



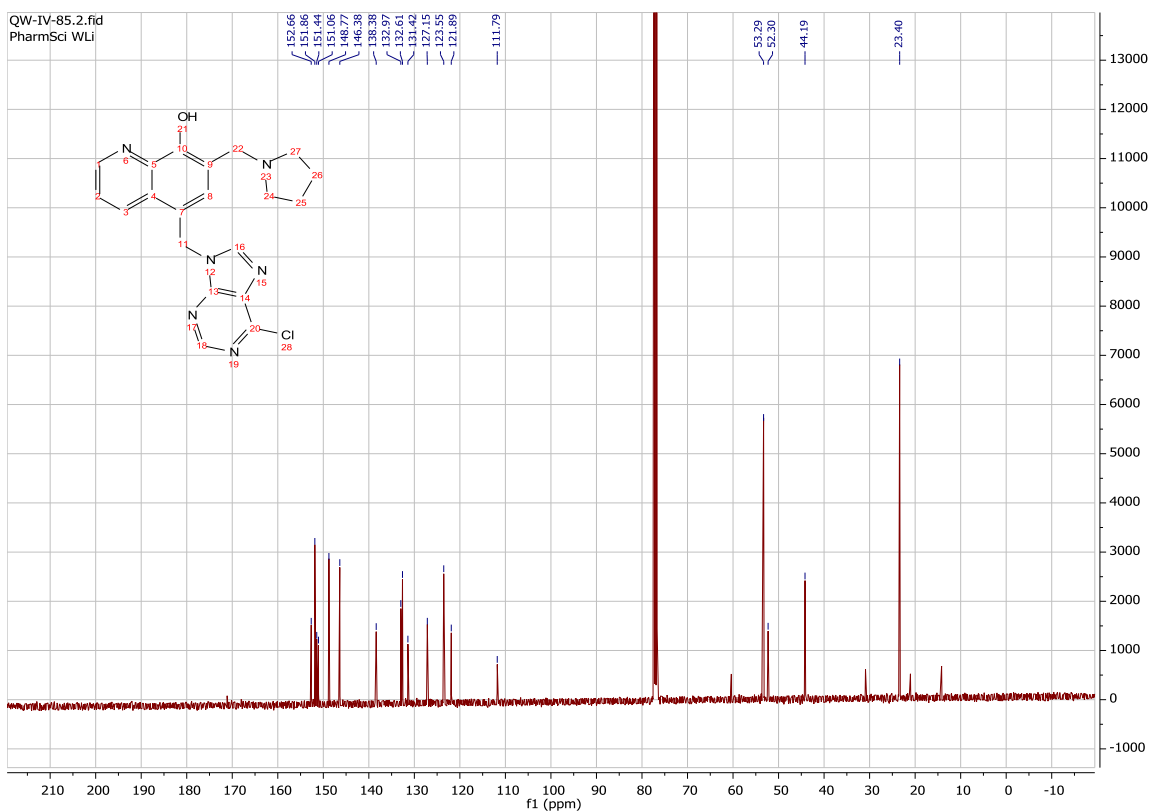
^{13}C -NMR of **2b**



HR-MS of **2b**



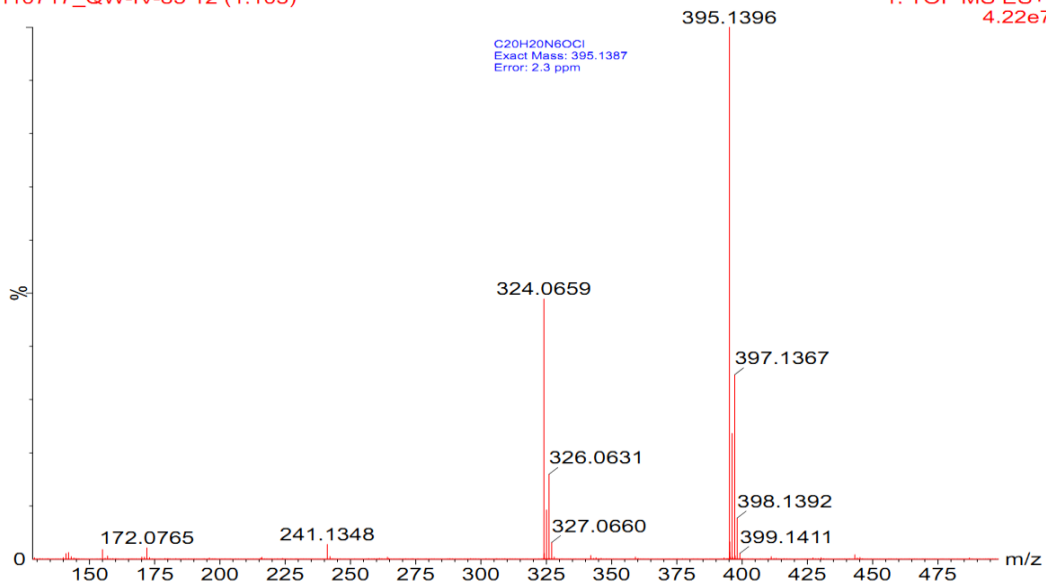
$^1\text{H-NMR}$ of **2c**



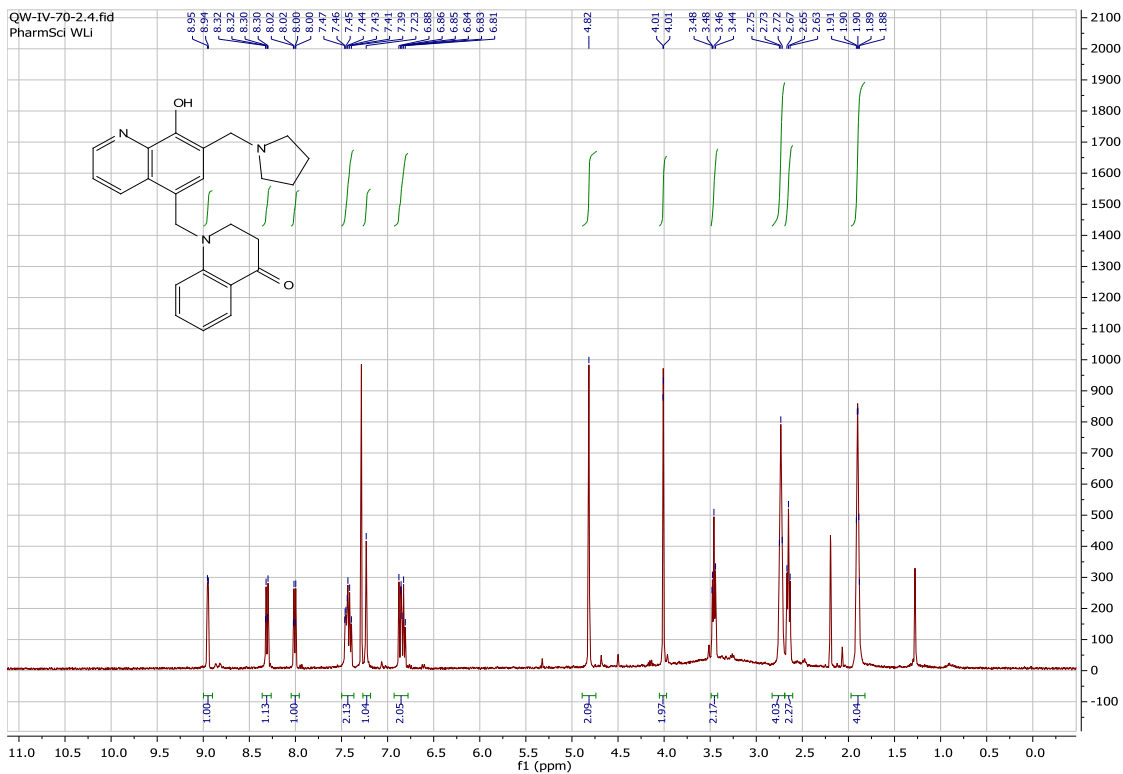
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S110717_QW-IV-85 12 (1.103)

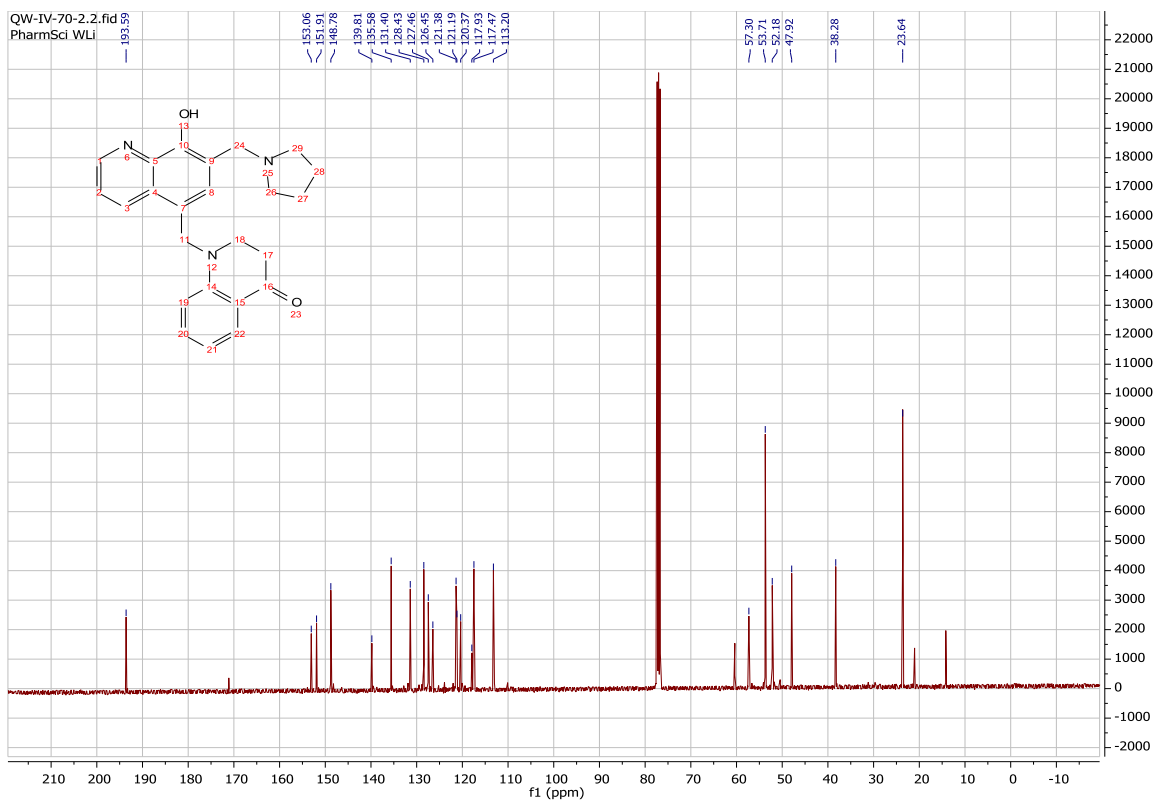
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4.22e7



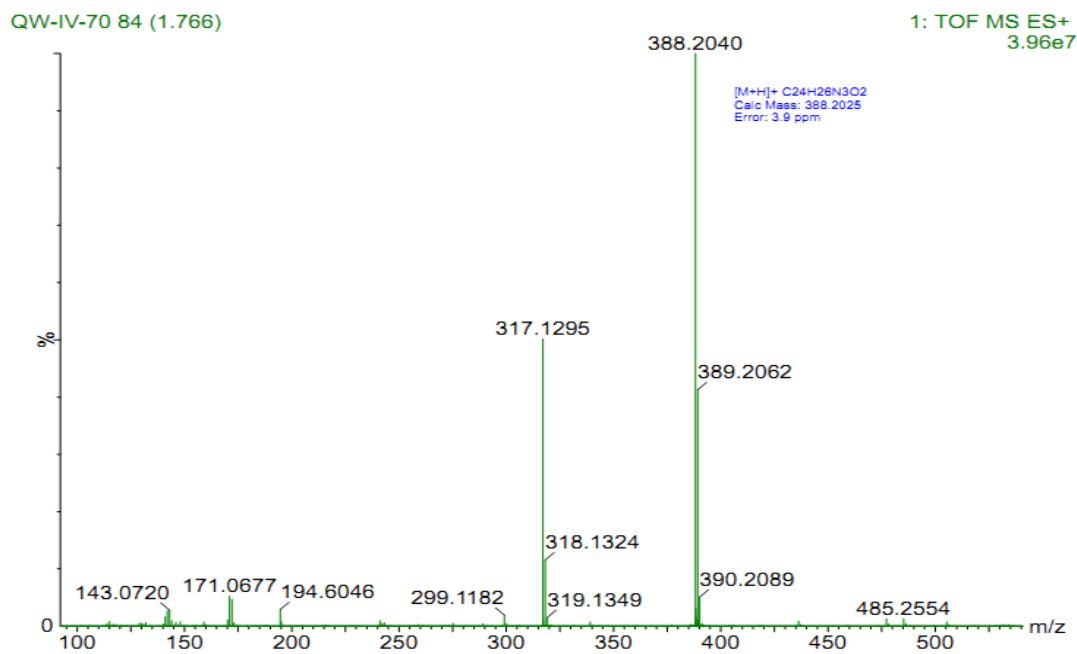
HR-MS of 2c



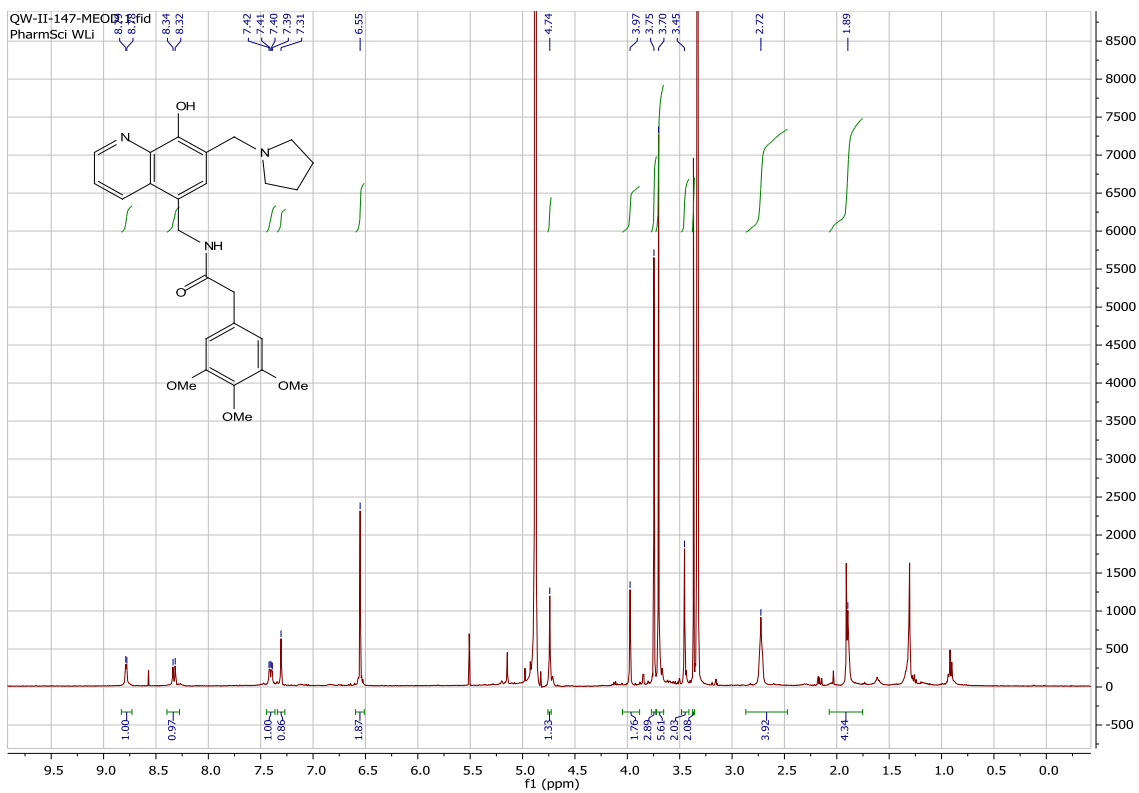
¹H-NMR of 2d



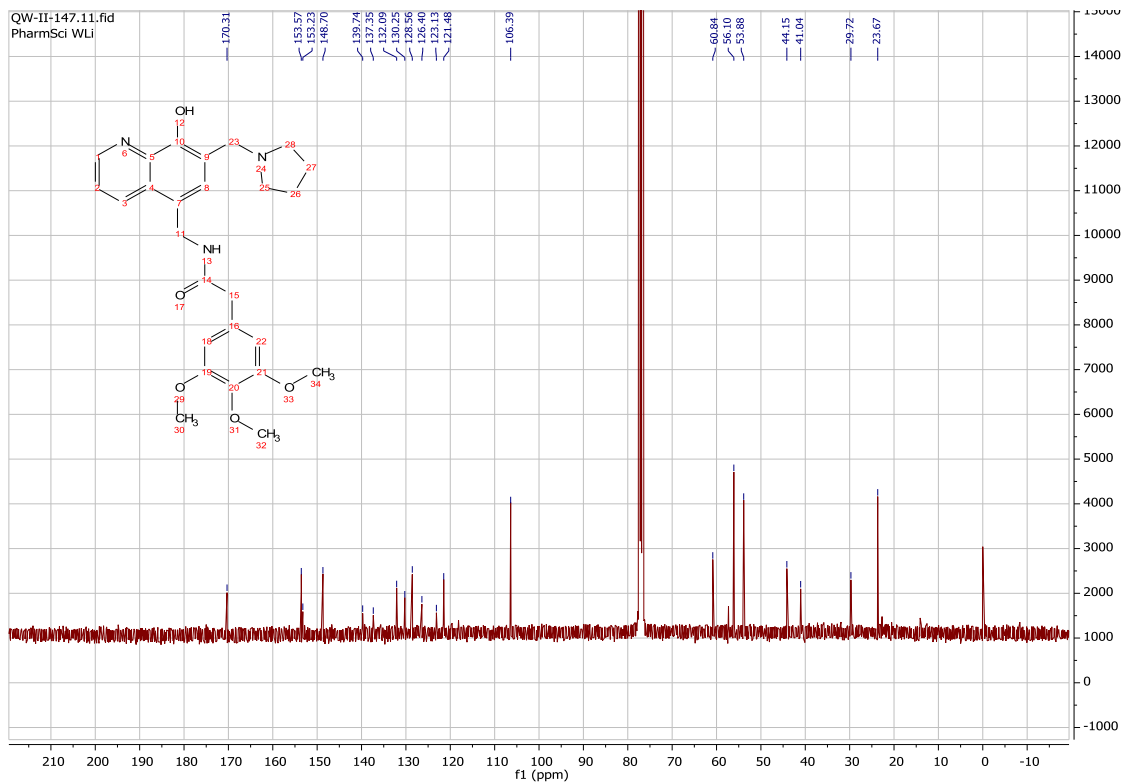
$^{13}\text{C-NMR}$ of **2d**



HR-MS of **2d**



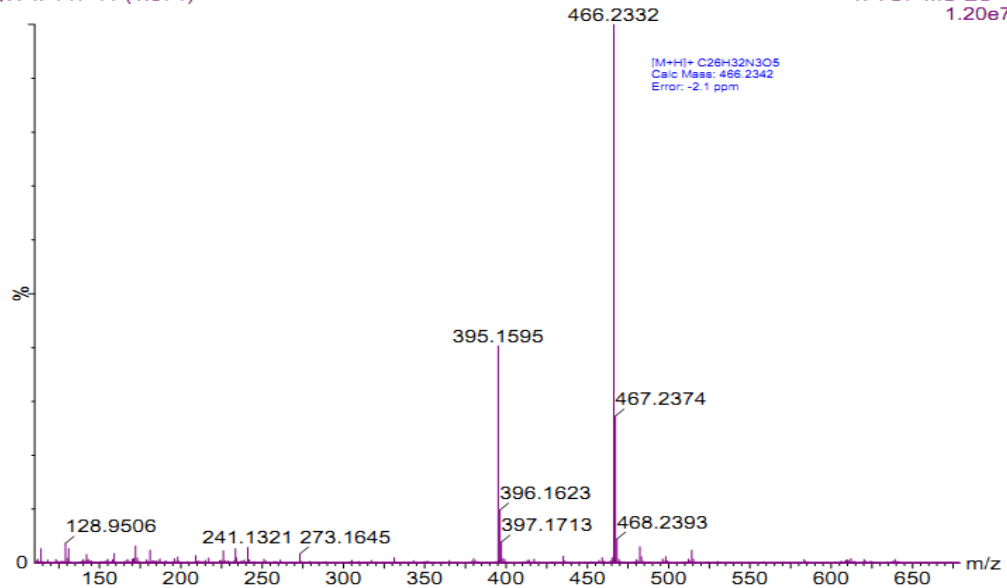
$^1\text{H-NMR}$ of **6a**



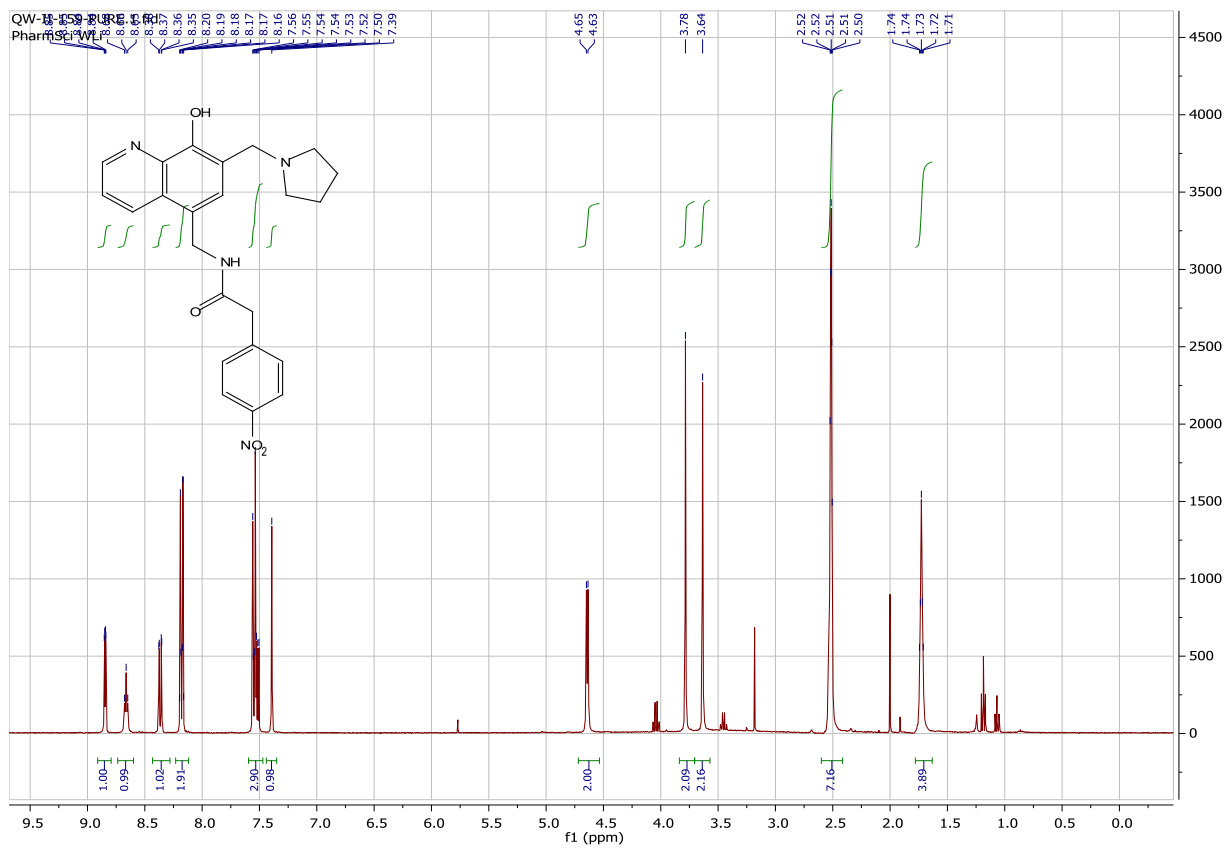
$^{13}\text{C-NMR}$ of **6a**

QW-II-147 41 (1.374)

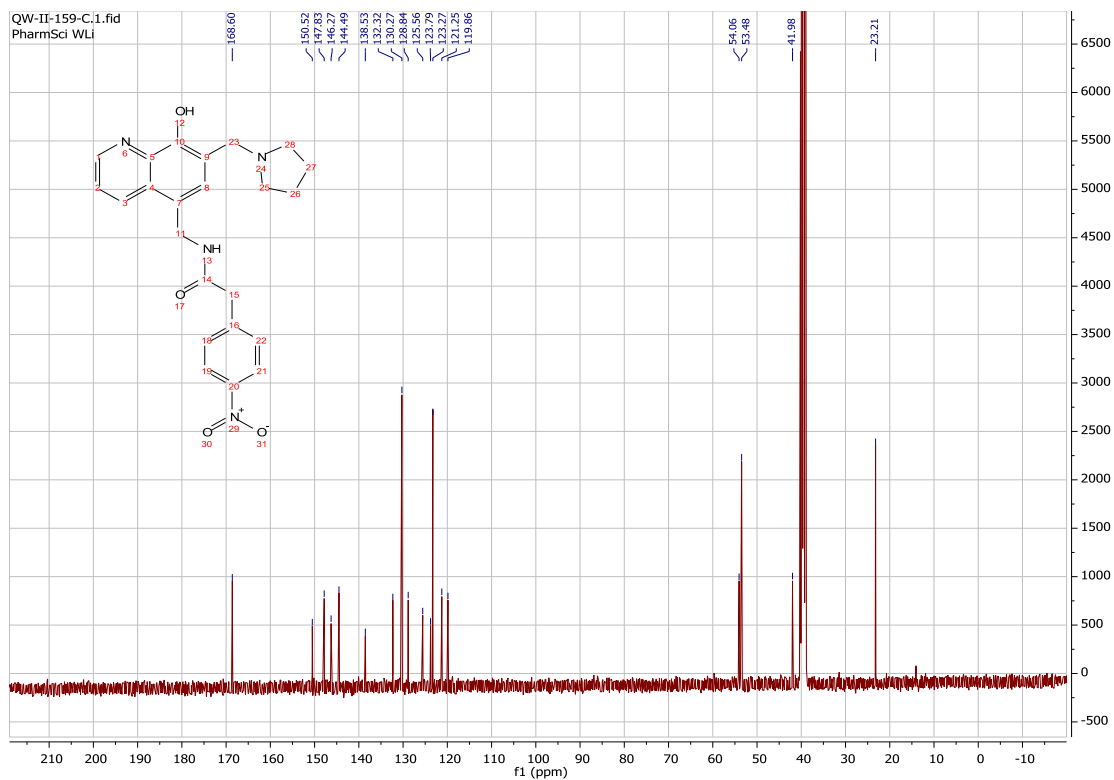
1: TOF MS ES+
1.20e7



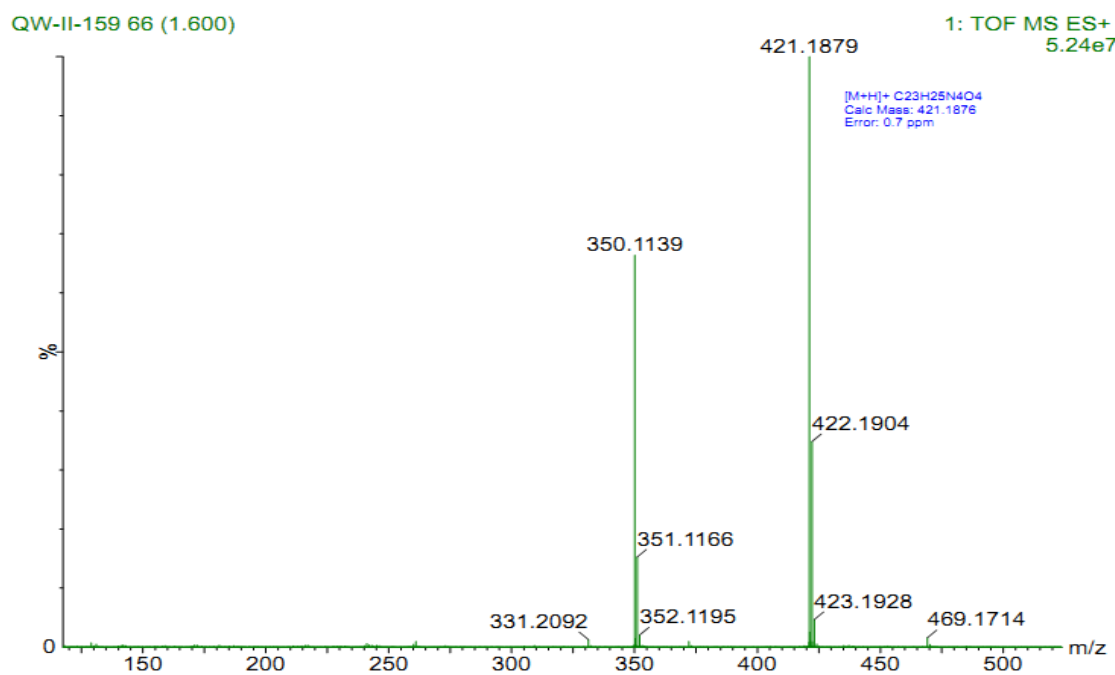
HR-MS of 6a



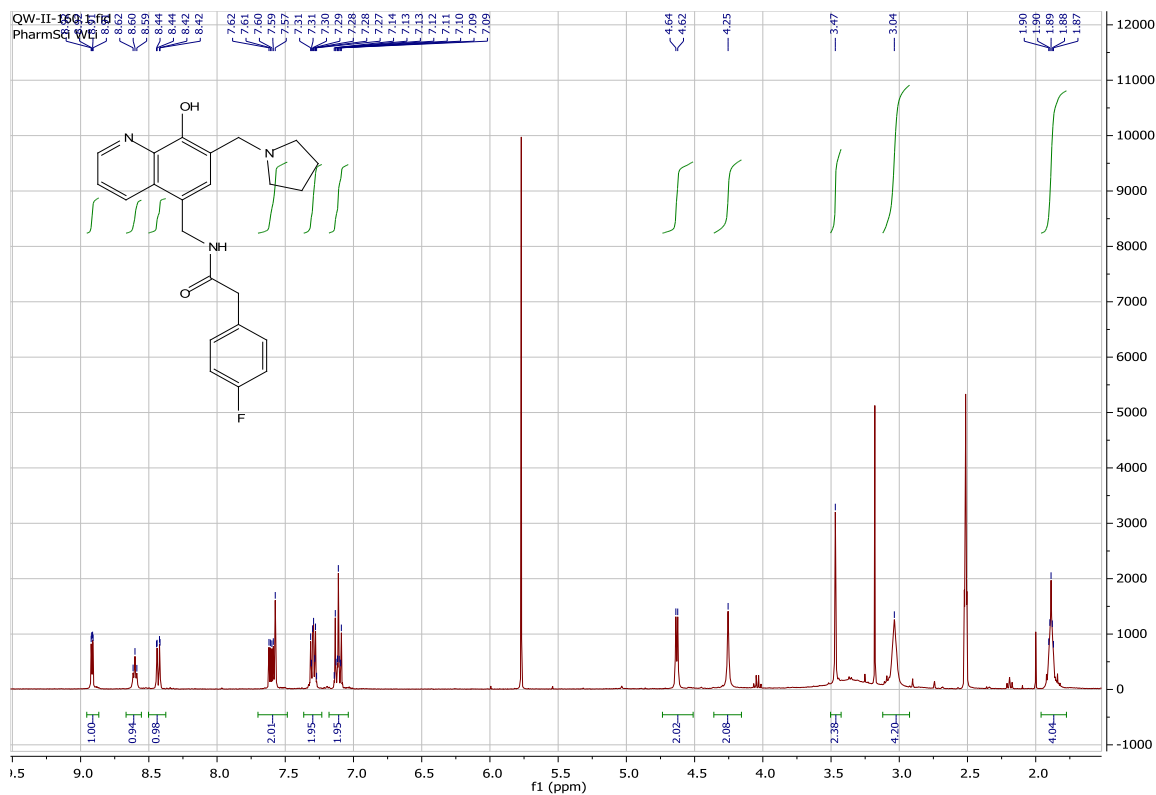
¹H-NMR of 6b



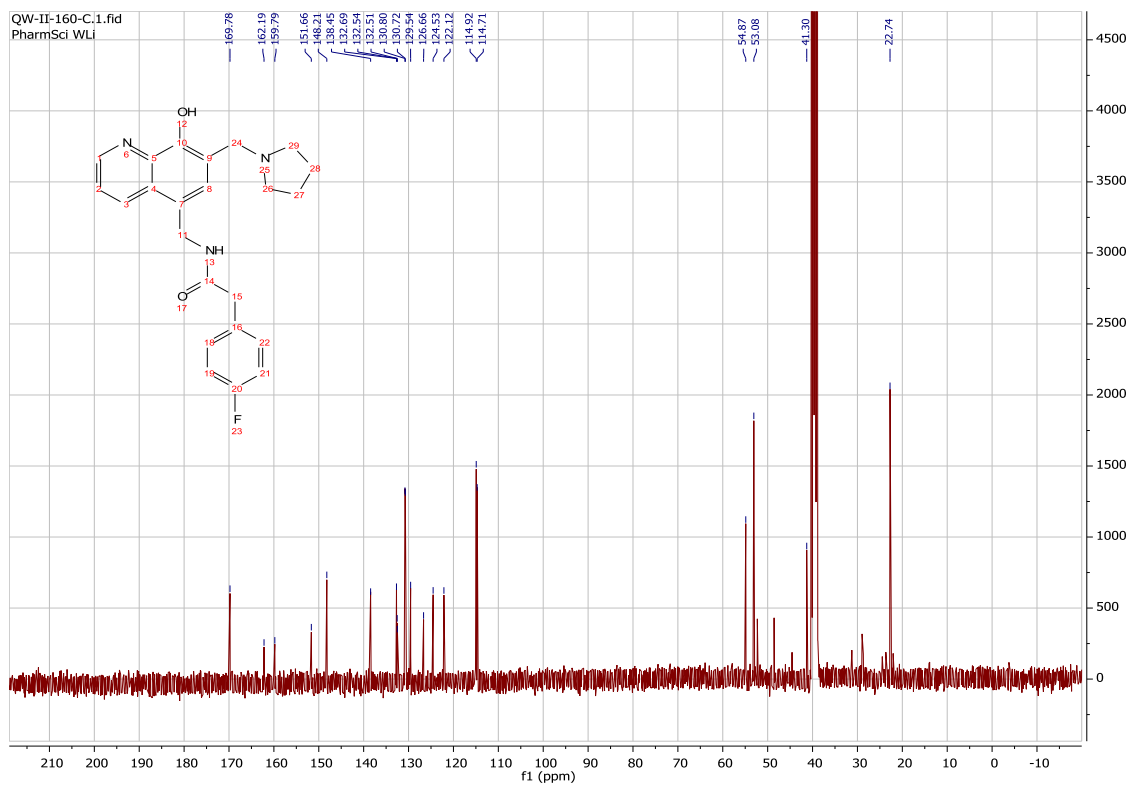
^{13}C -NMR of **6b**



HR-MS of **6b**



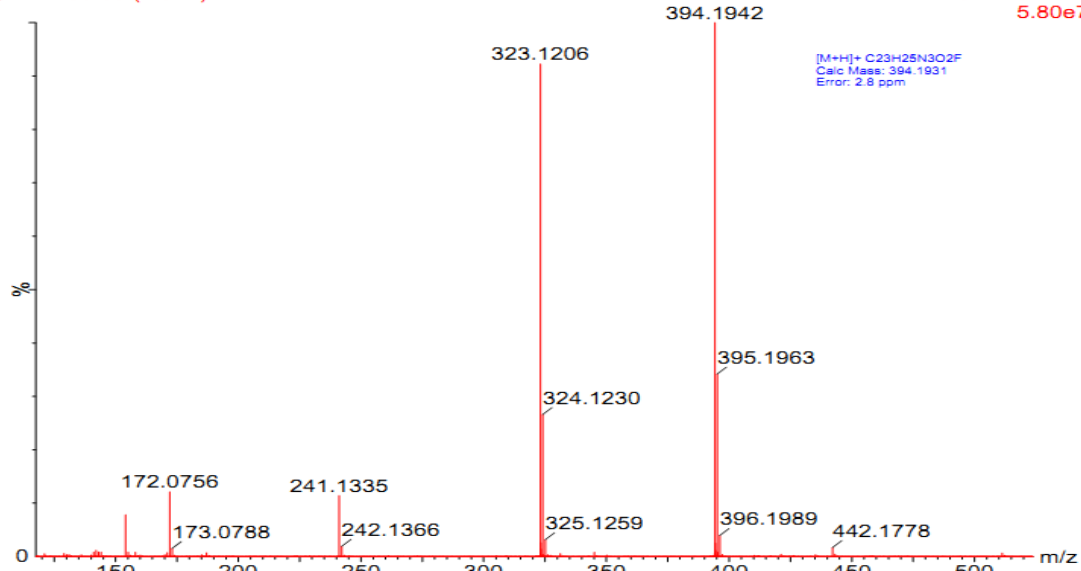
$^1\text{H-NMR}$ of **6c**



$^{13}\text{C-NMR}$ of **6c**

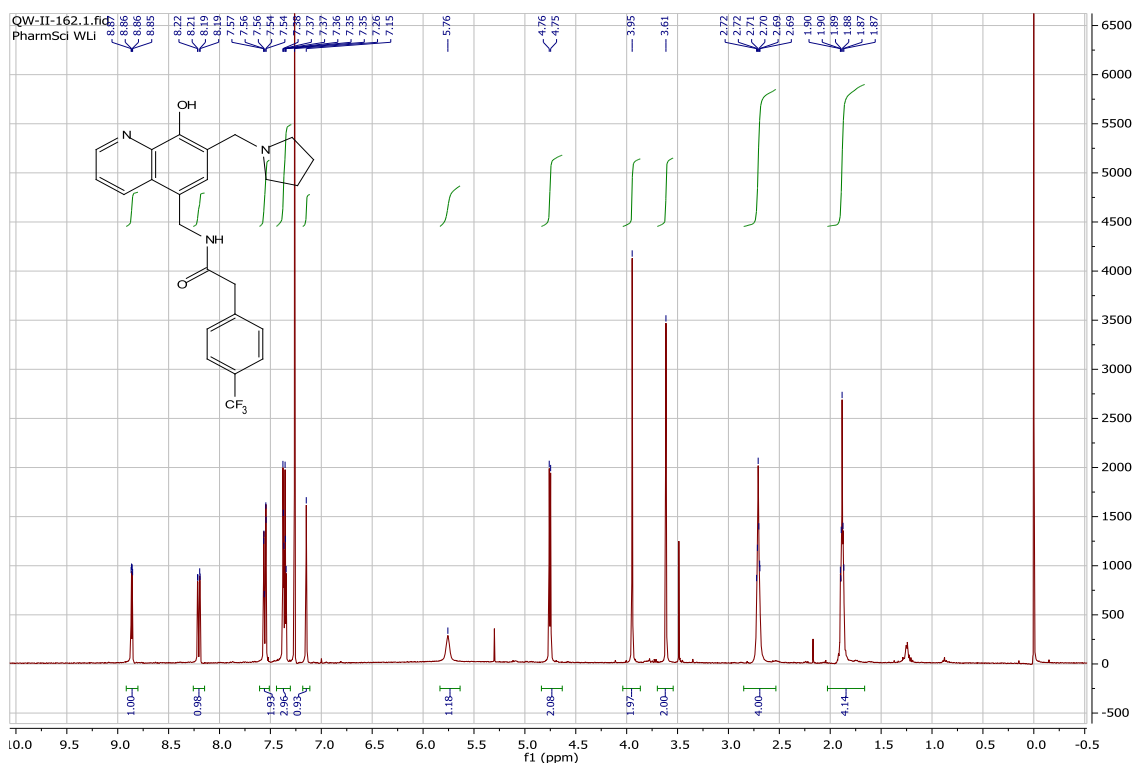
QW-II-160 63 (1.574)

1: TOF MS ES+
5.80e7

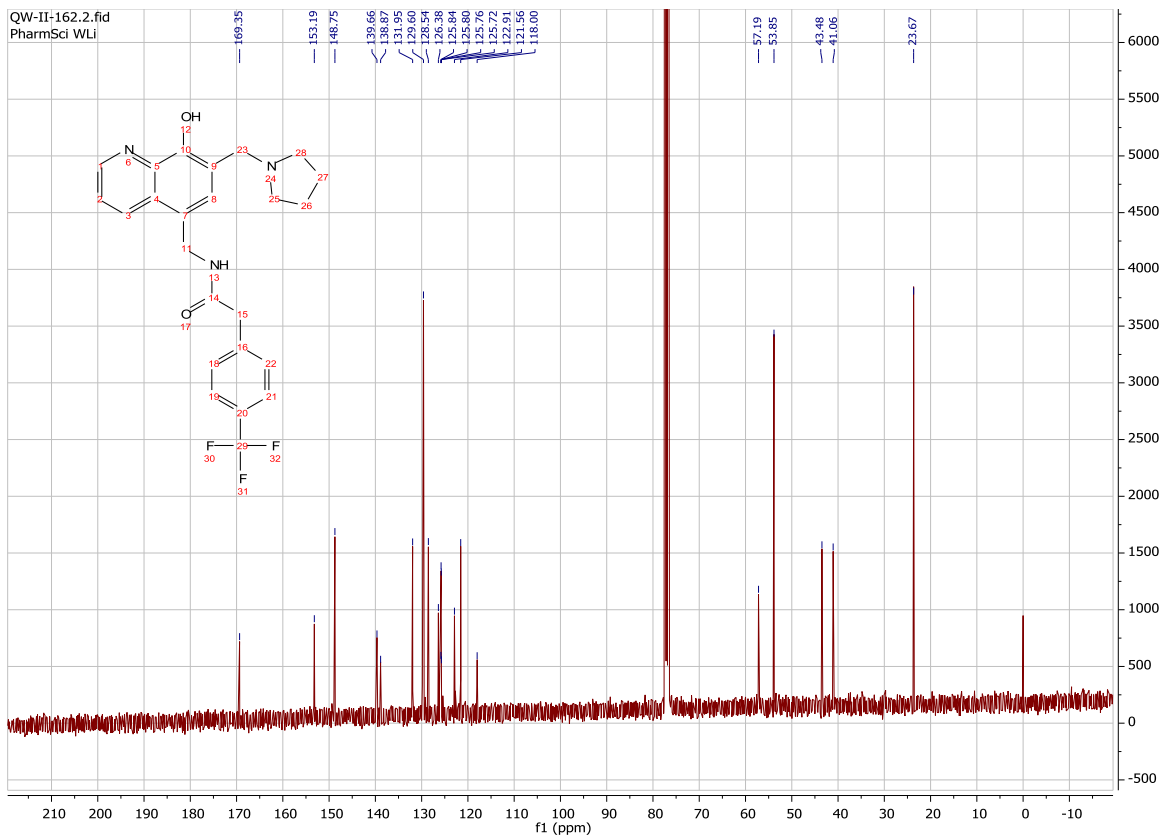


[M+H]⁺ C₂₃H₂₅N₃O₂F
Calc Mass: 394.1931
Error: 2.8 ppm

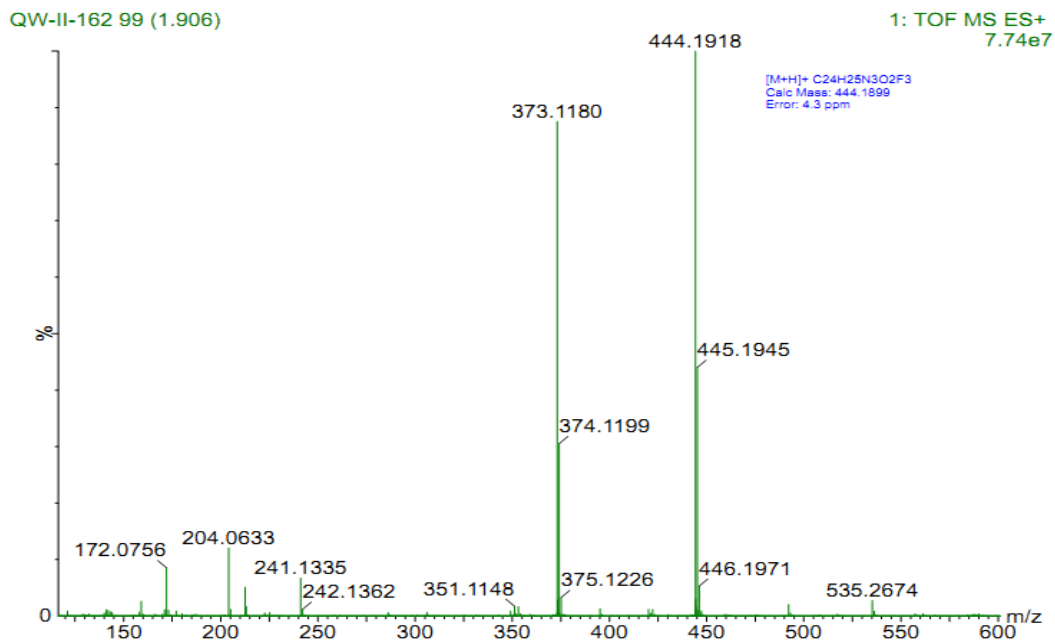
HR-MS of 6c



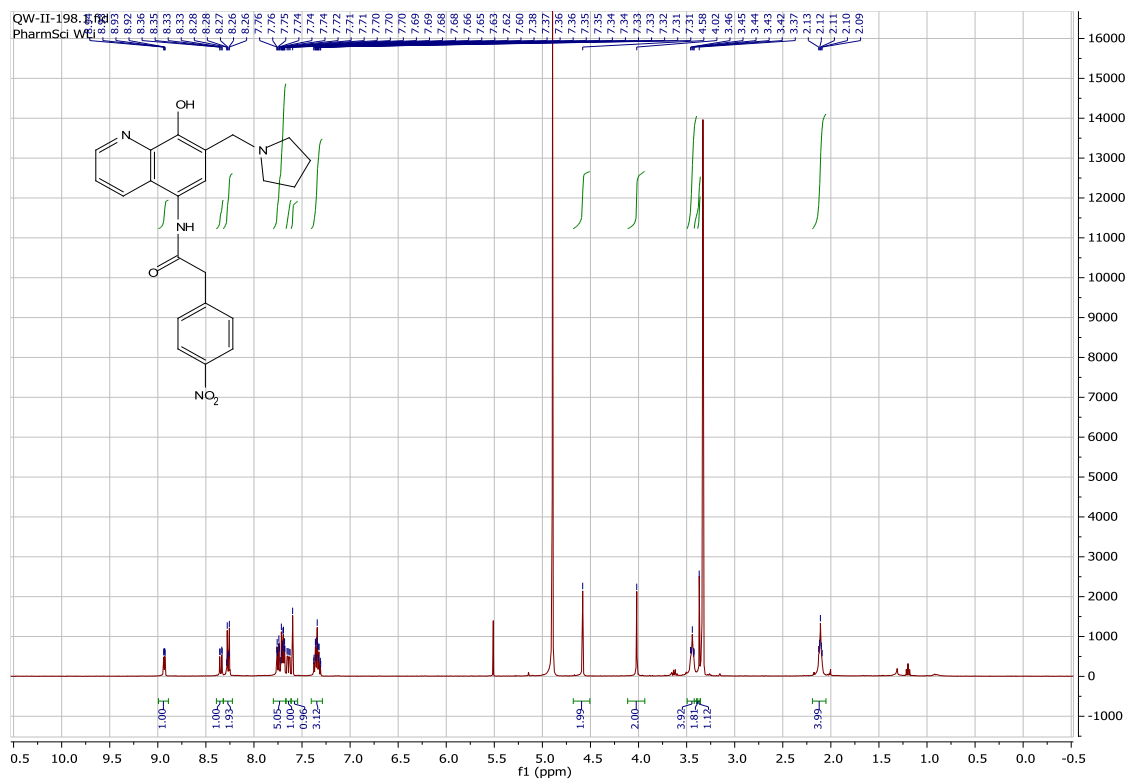
¹H-NMR of 6d



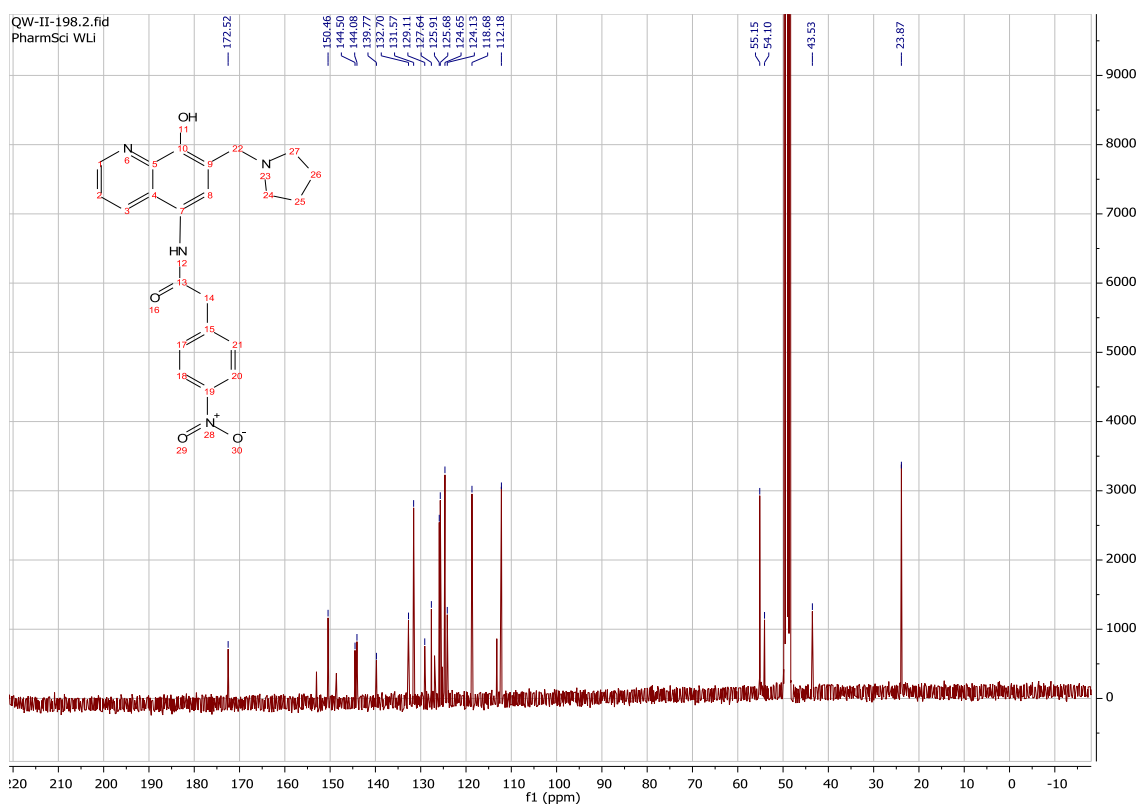
$^{13}\text{C-NMR}$ of 6d



HR-MS of 6d



$^1\text{H-NMR}$ of **6e**



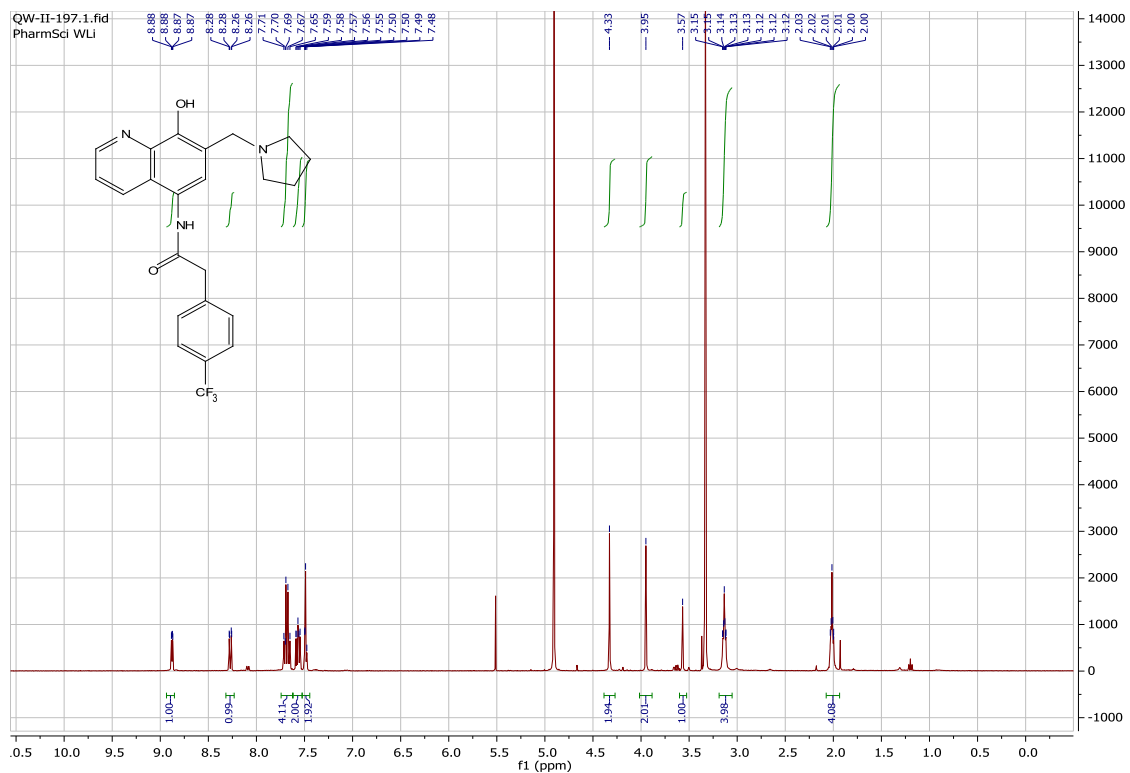
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S110717_QW-II-198 62 (1.566)

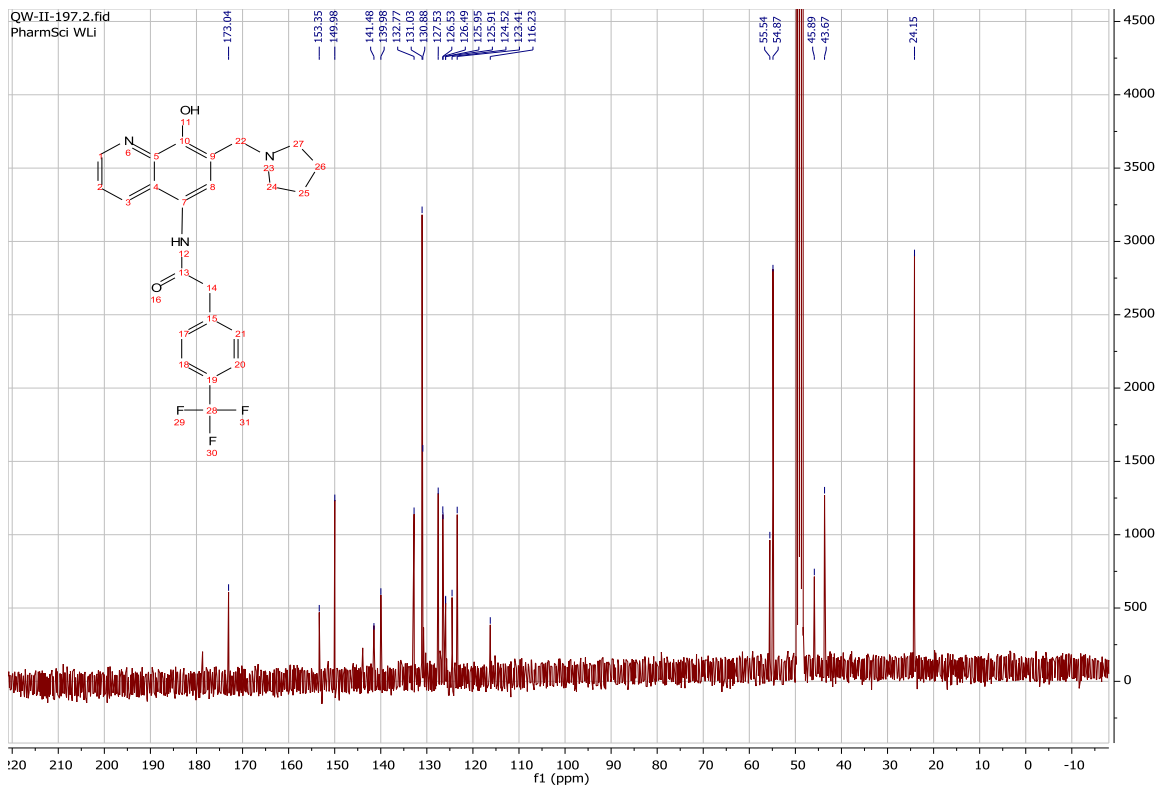
1: TOF MS ES+
3.13e7



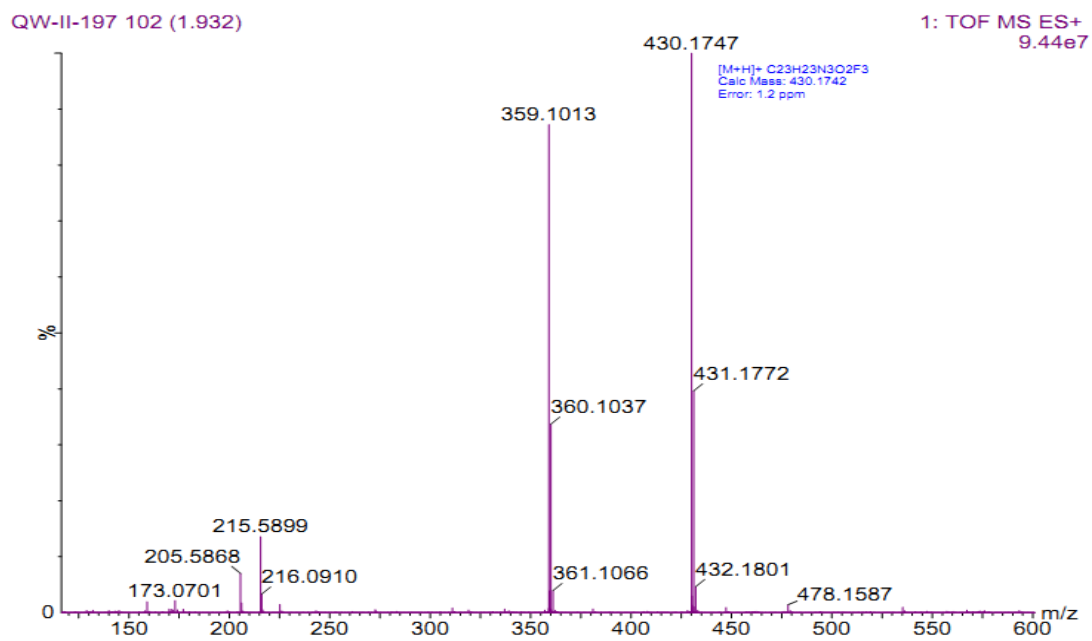
HR-MS of 6e



¹H-NMR of 6f

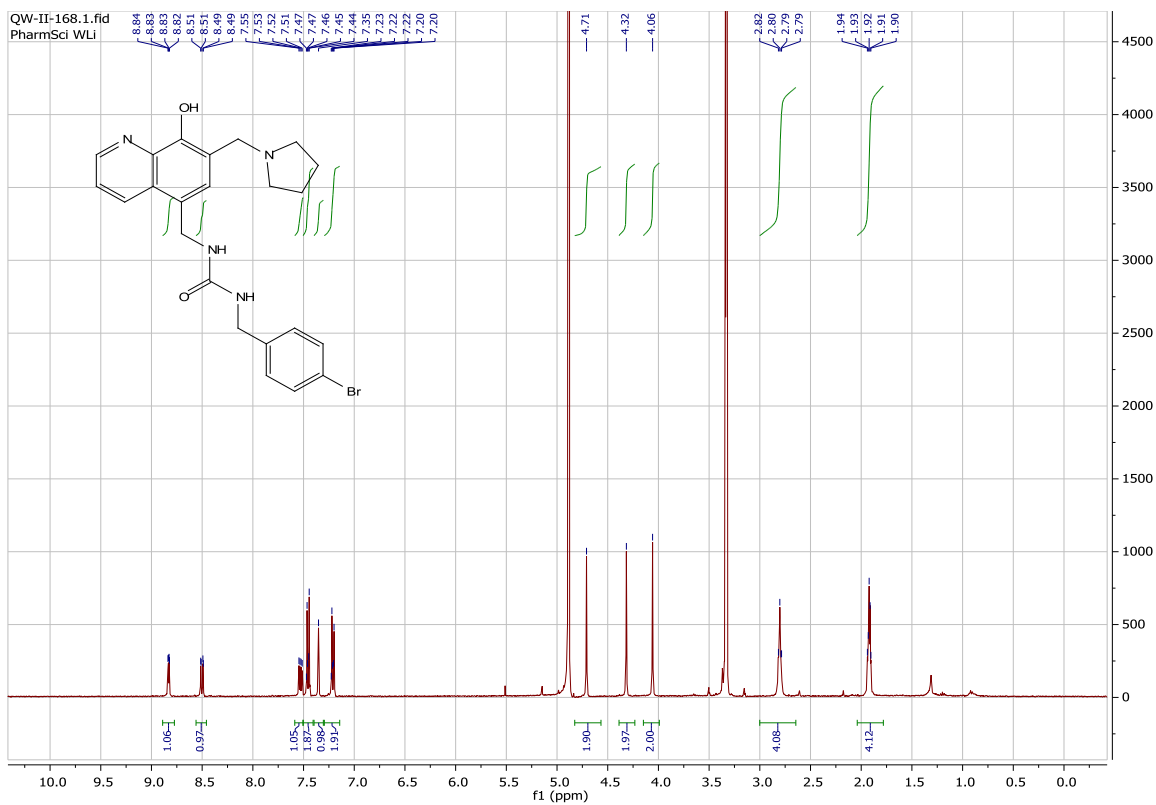


$^{13}\text{C-NMR}$ of **6f**

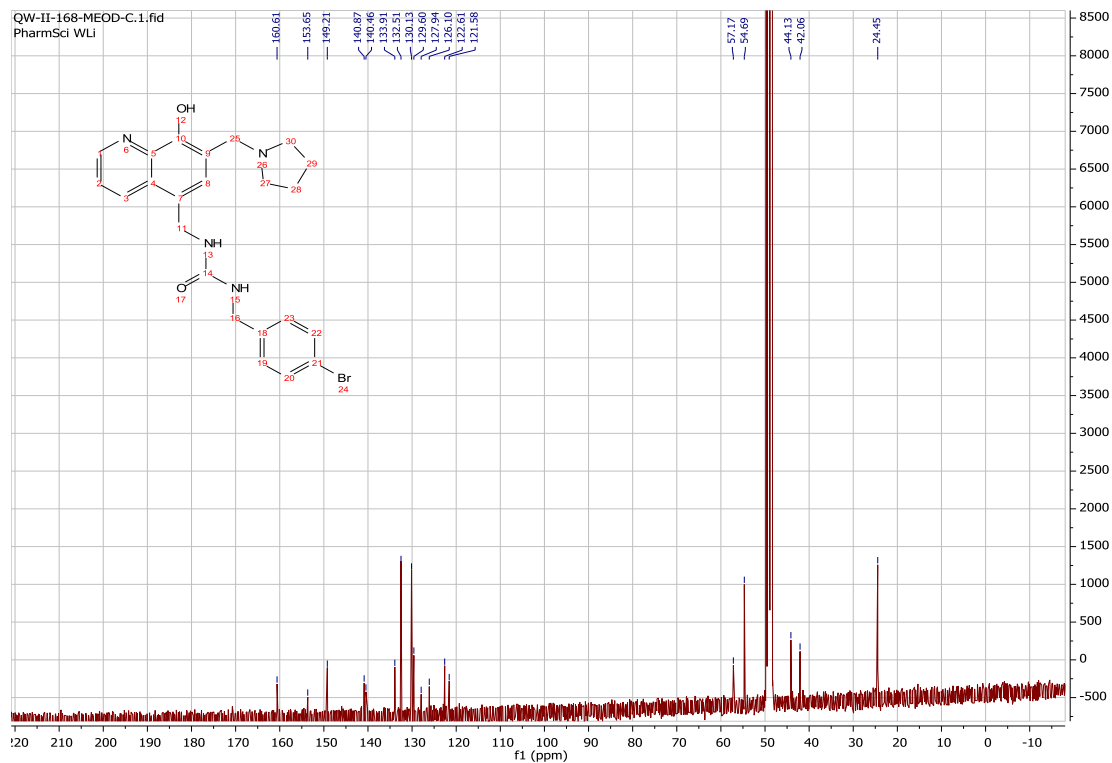


MS of **6f**

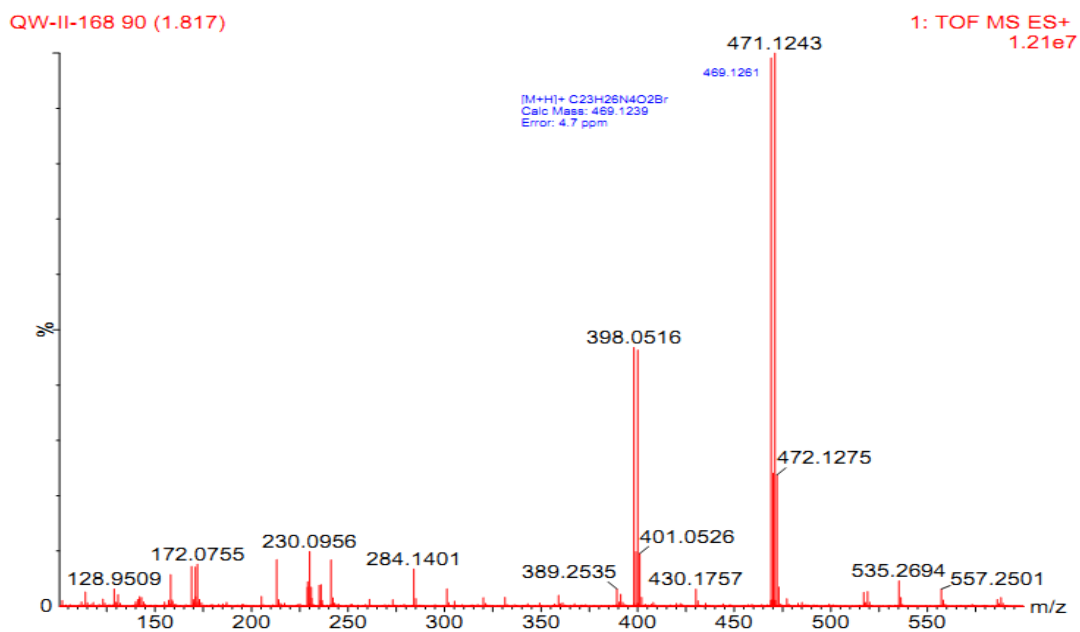
HR-



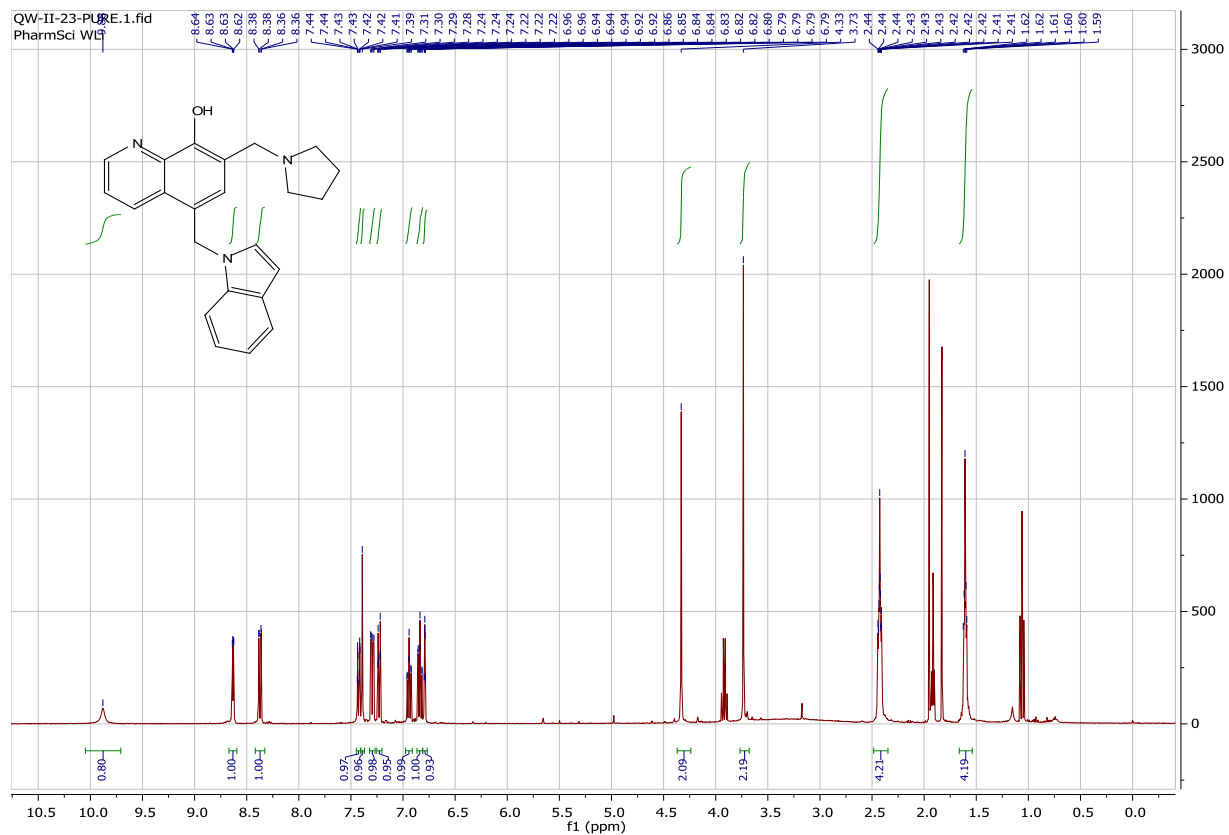
$^1\text{H-NMR}$ of 8



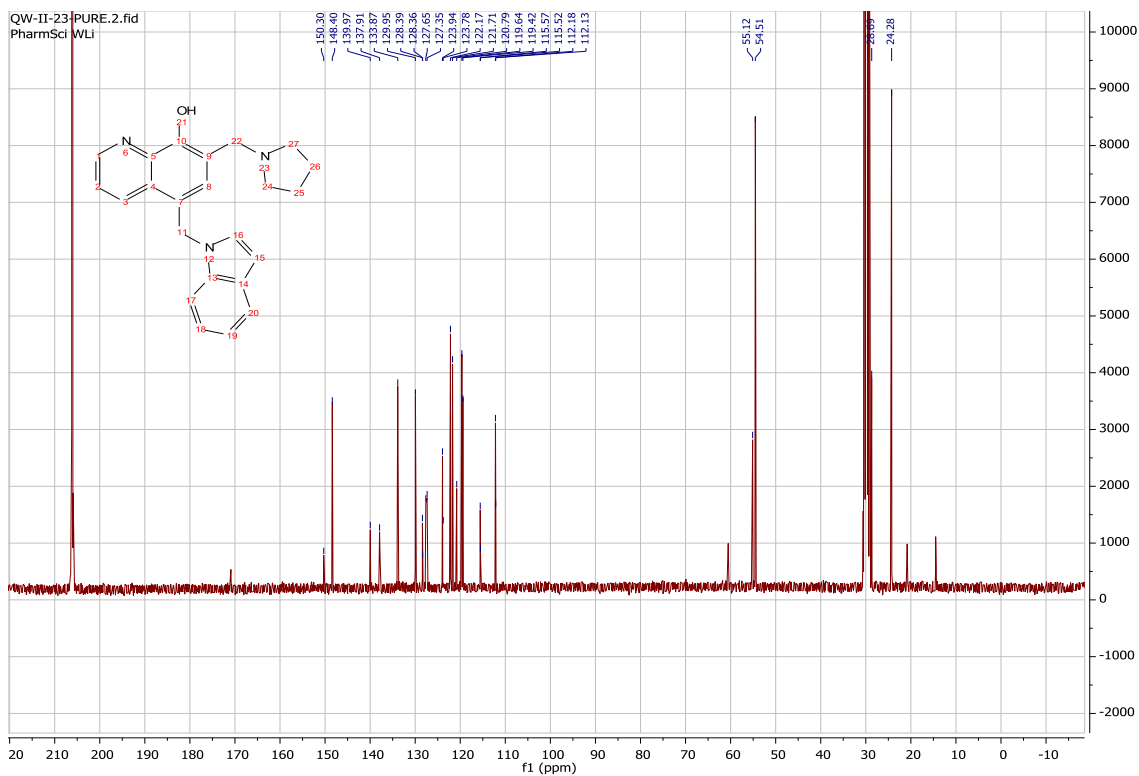
$^{13}\text{C-NMR}$ of 8



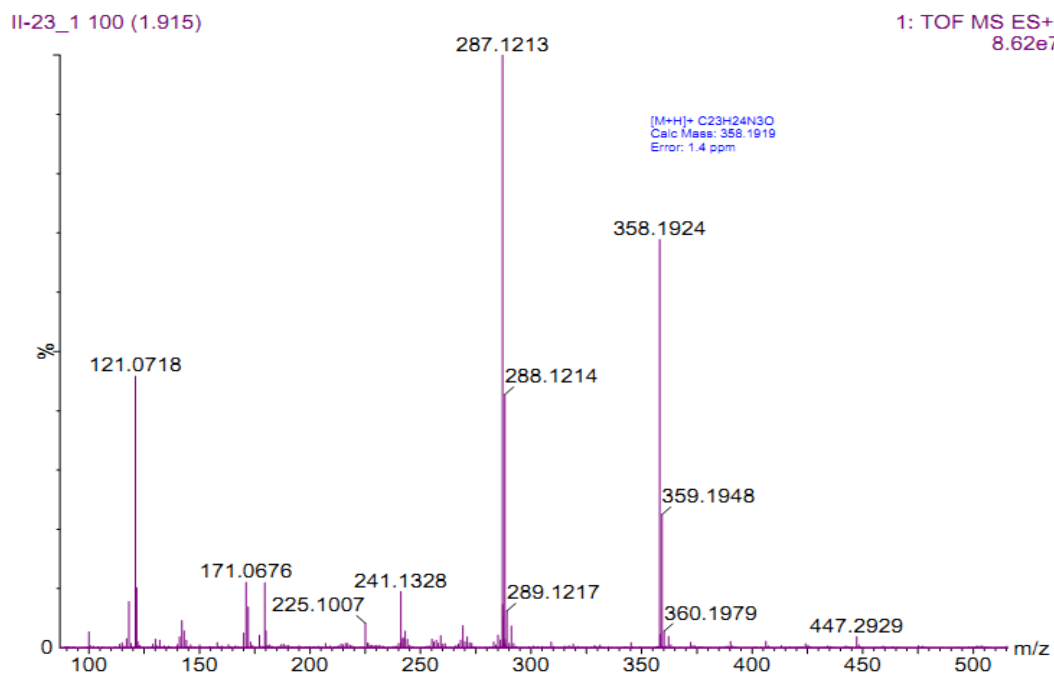
HR-MS of 8



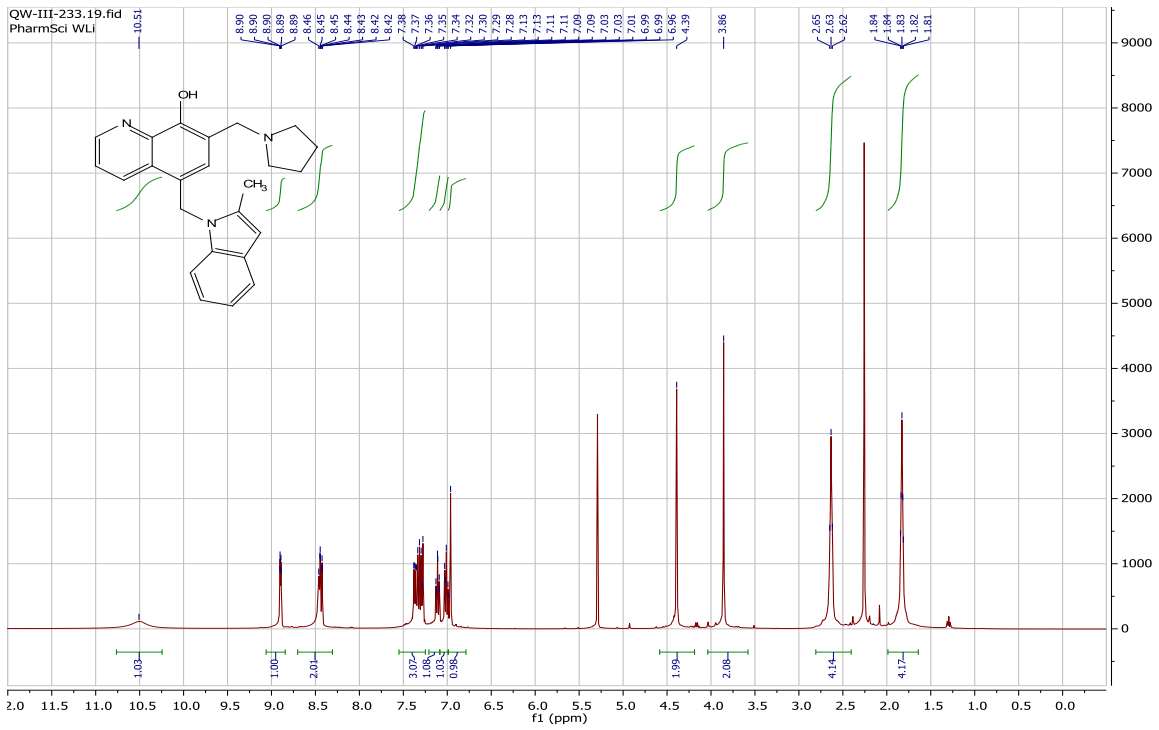
¹H-NMR of 10a



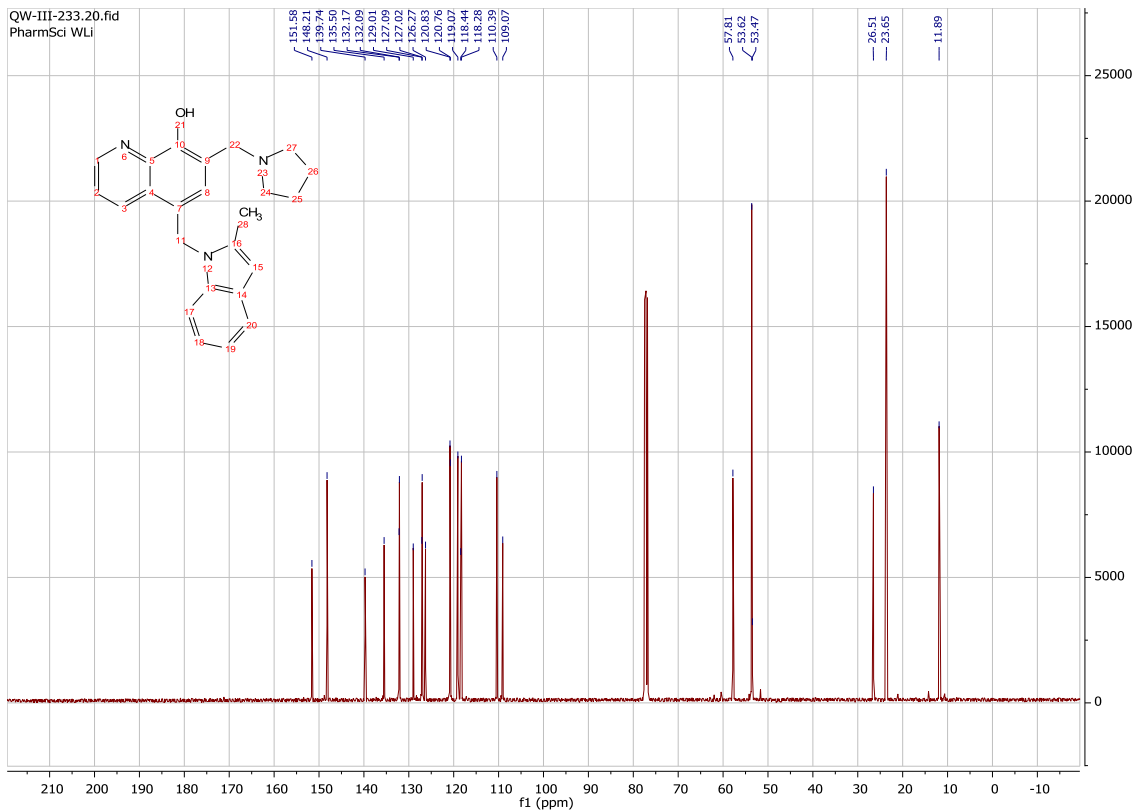
$^{13}\text{C-NMR}$ of **10a**



HR-MS of **10a**



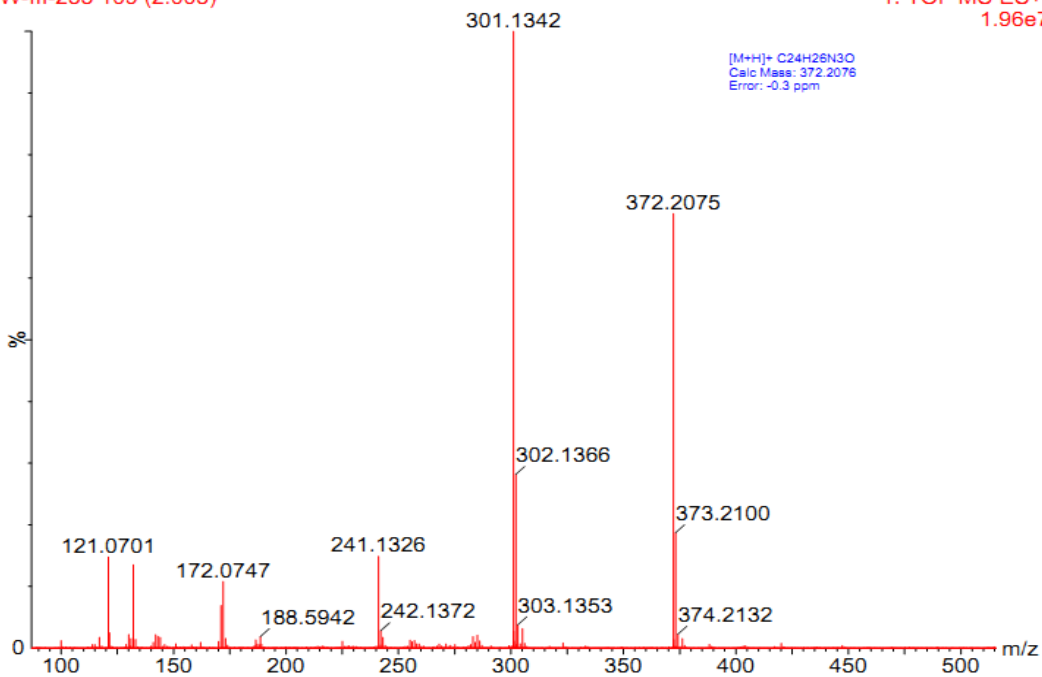
¹H-NMR of 10b



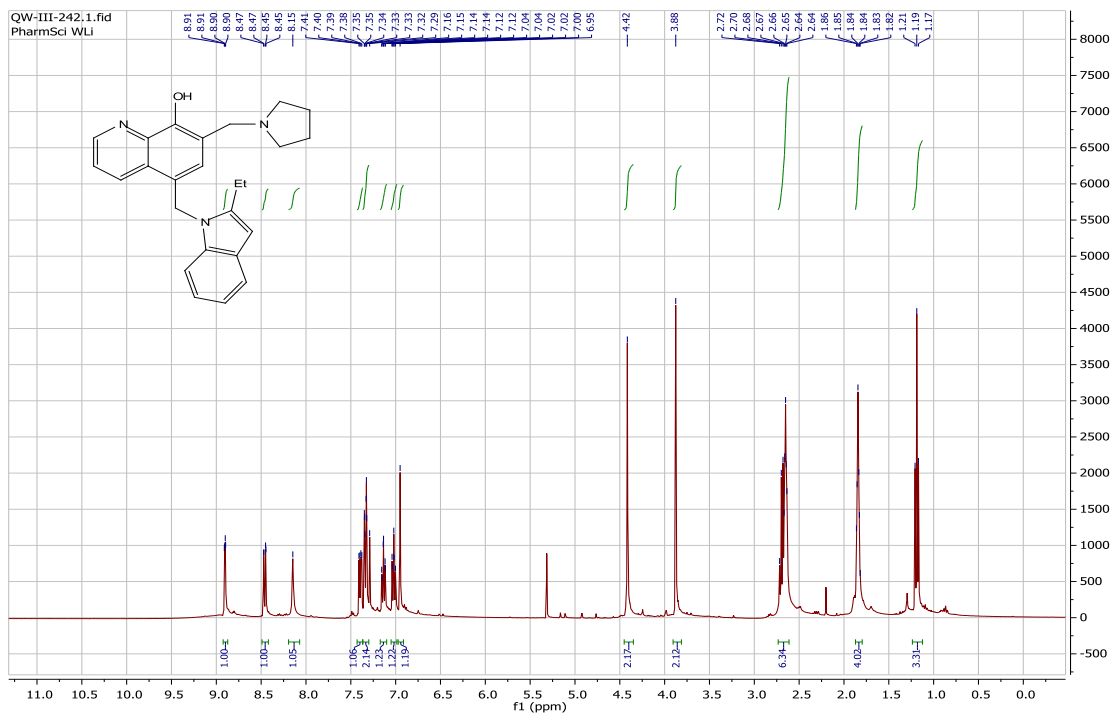
¹³C-NMR of 10b

QW-III-233 109 (2.003)

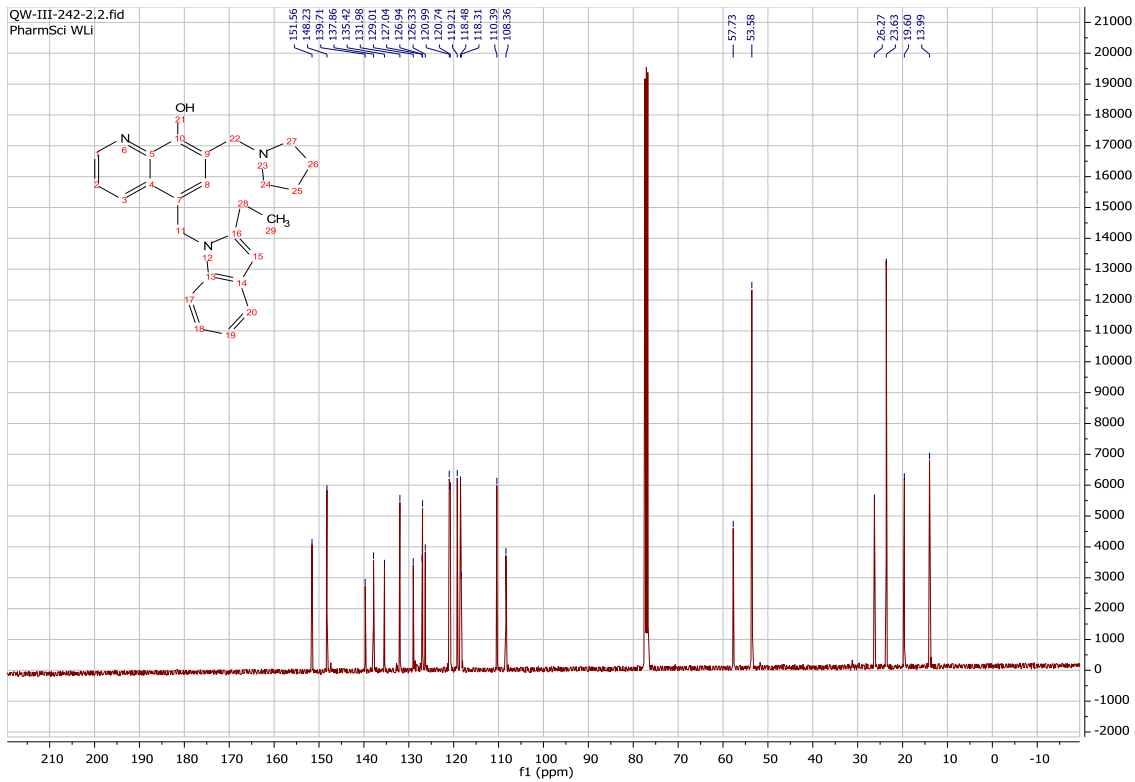
1: TOF MS ES+
1.96e7



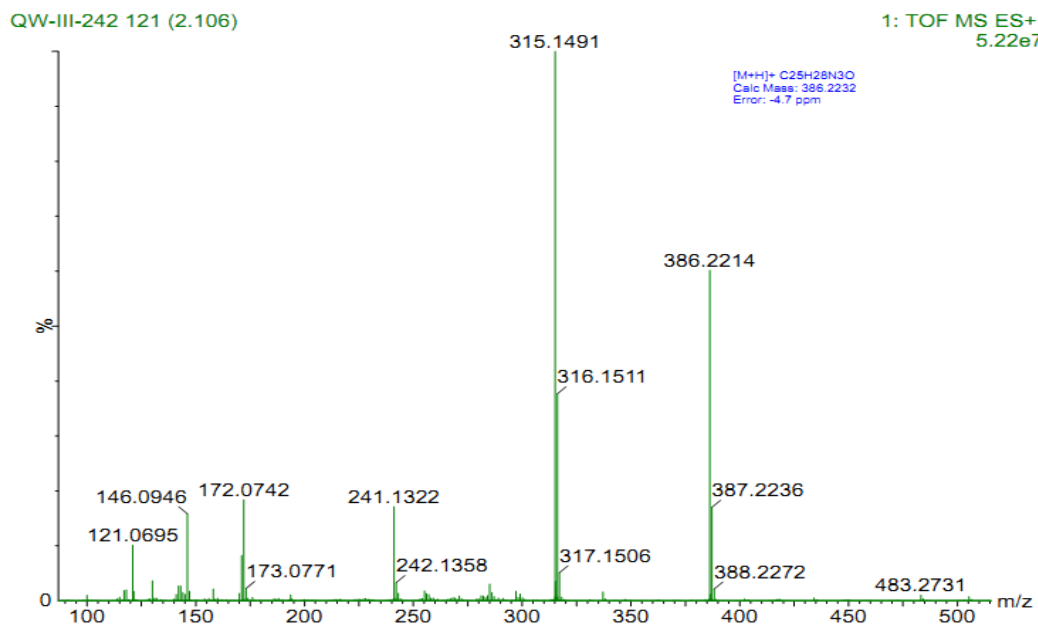
HR-MS of 10b



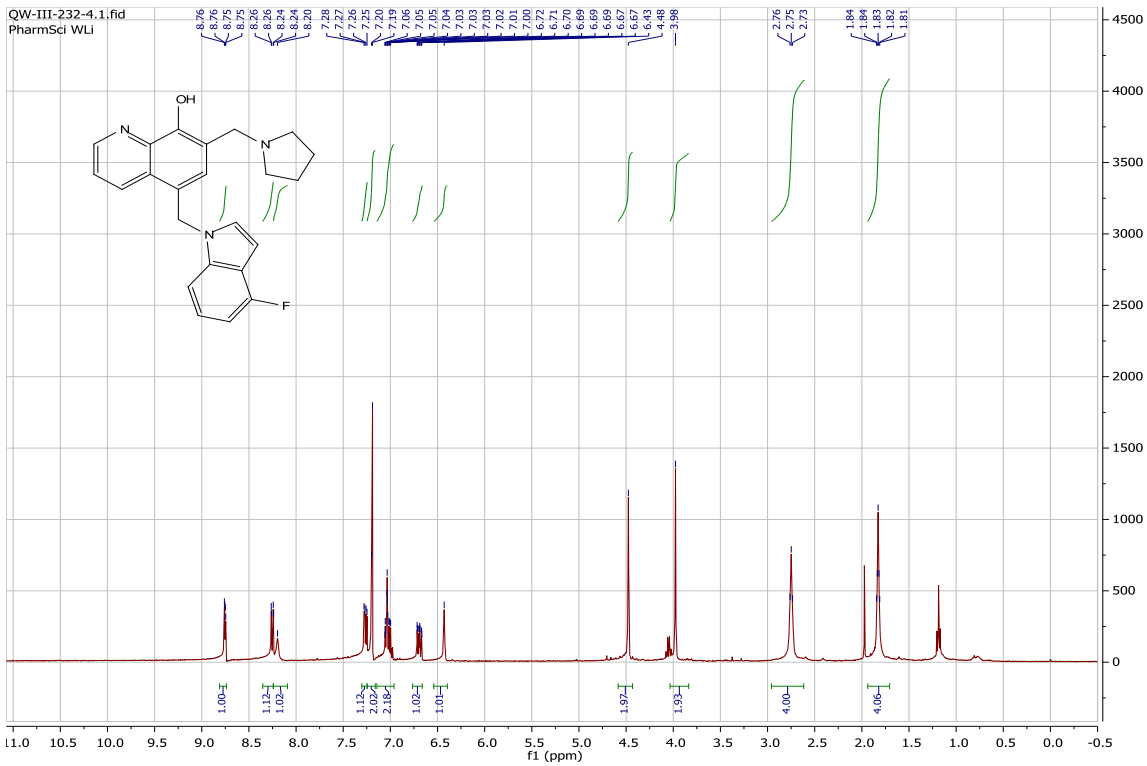
¹H-NMR of 10c



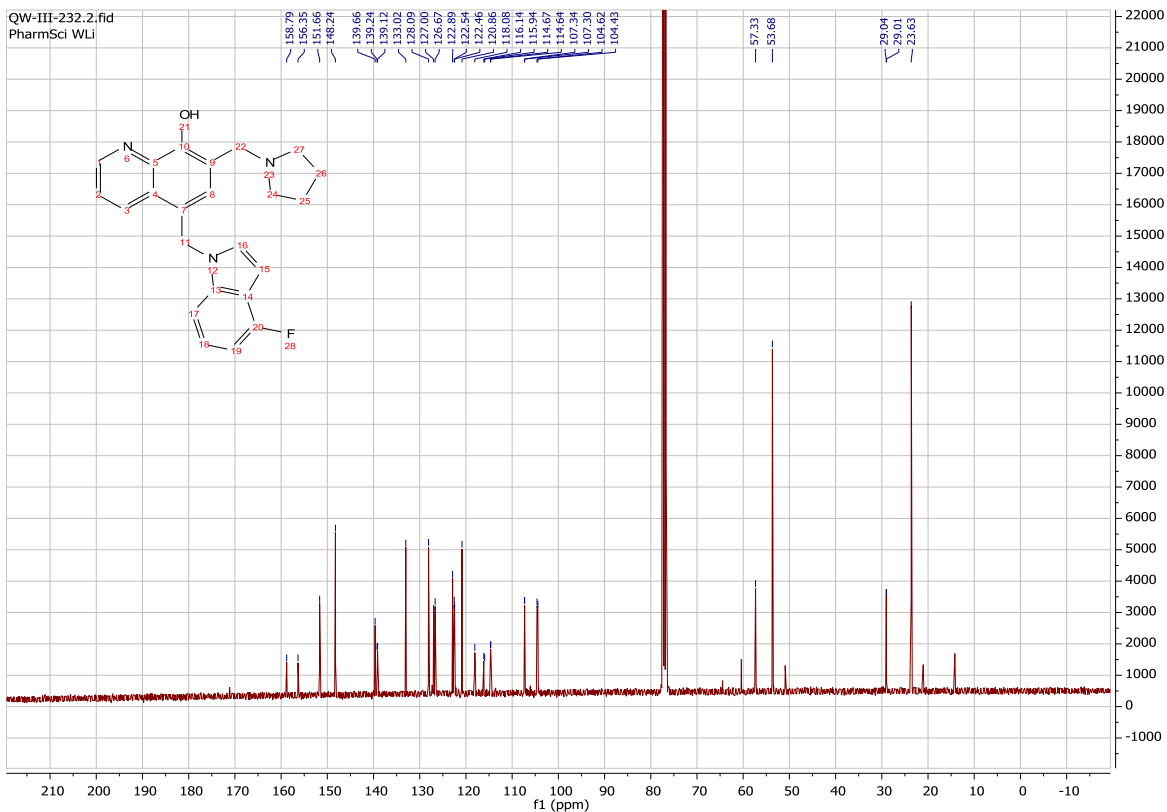
¹³C-NMR of 10c



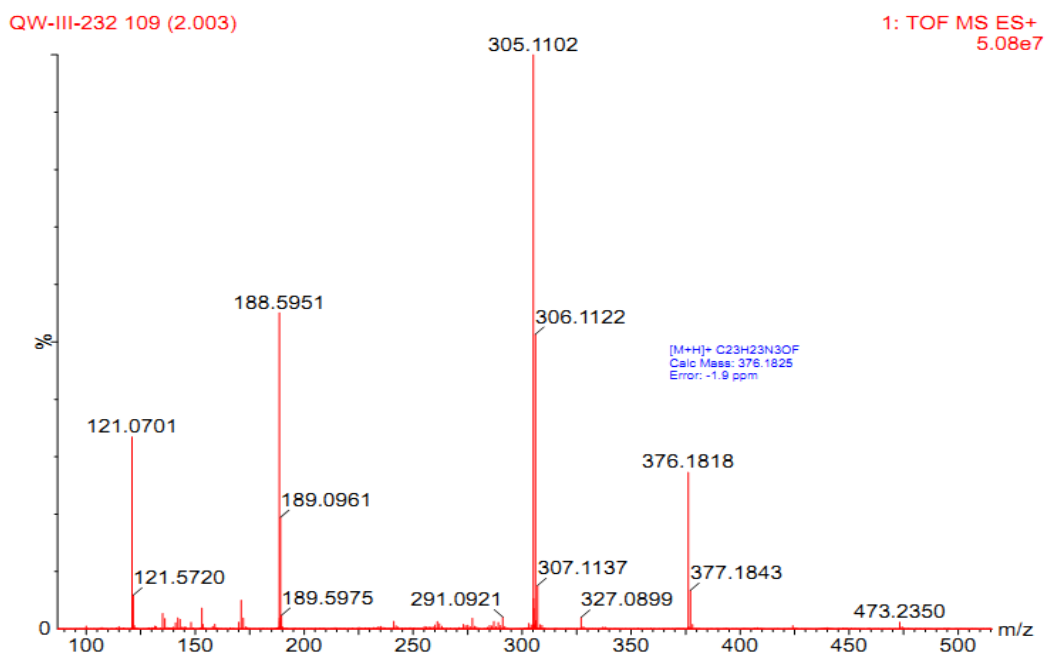
HR-MS of 10c



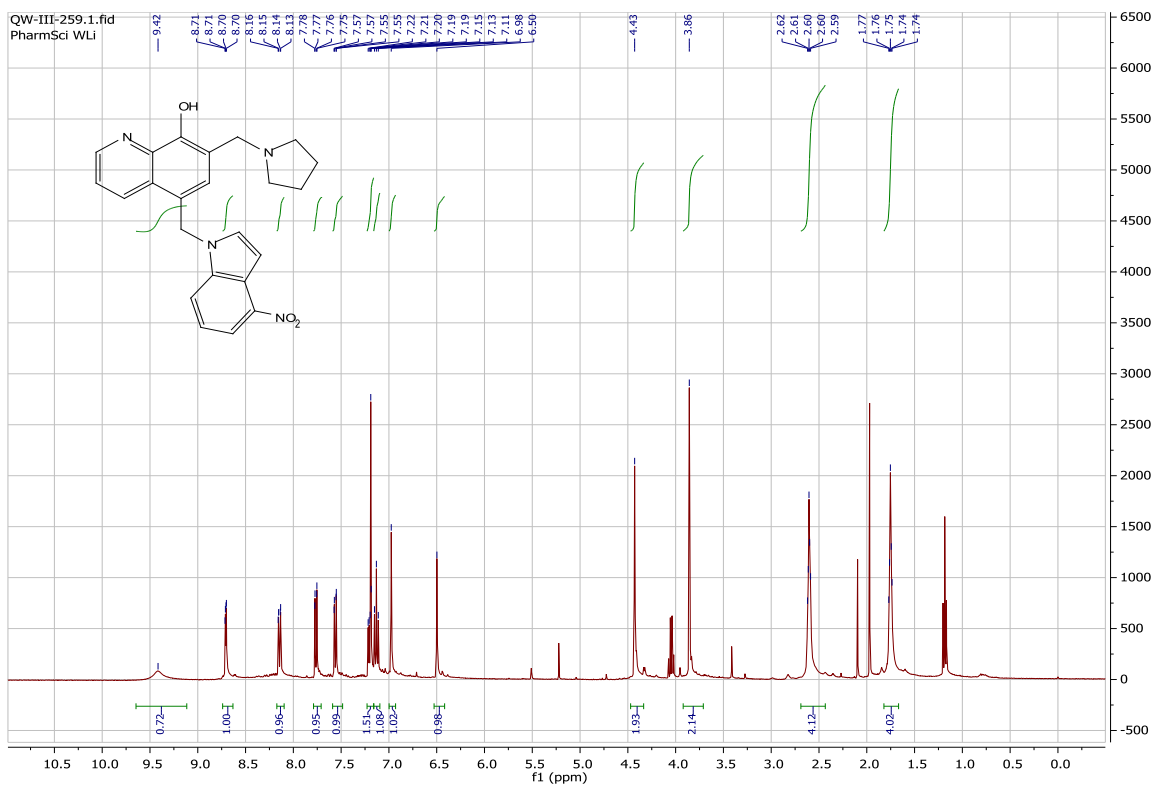
¹H-NMR of 10d



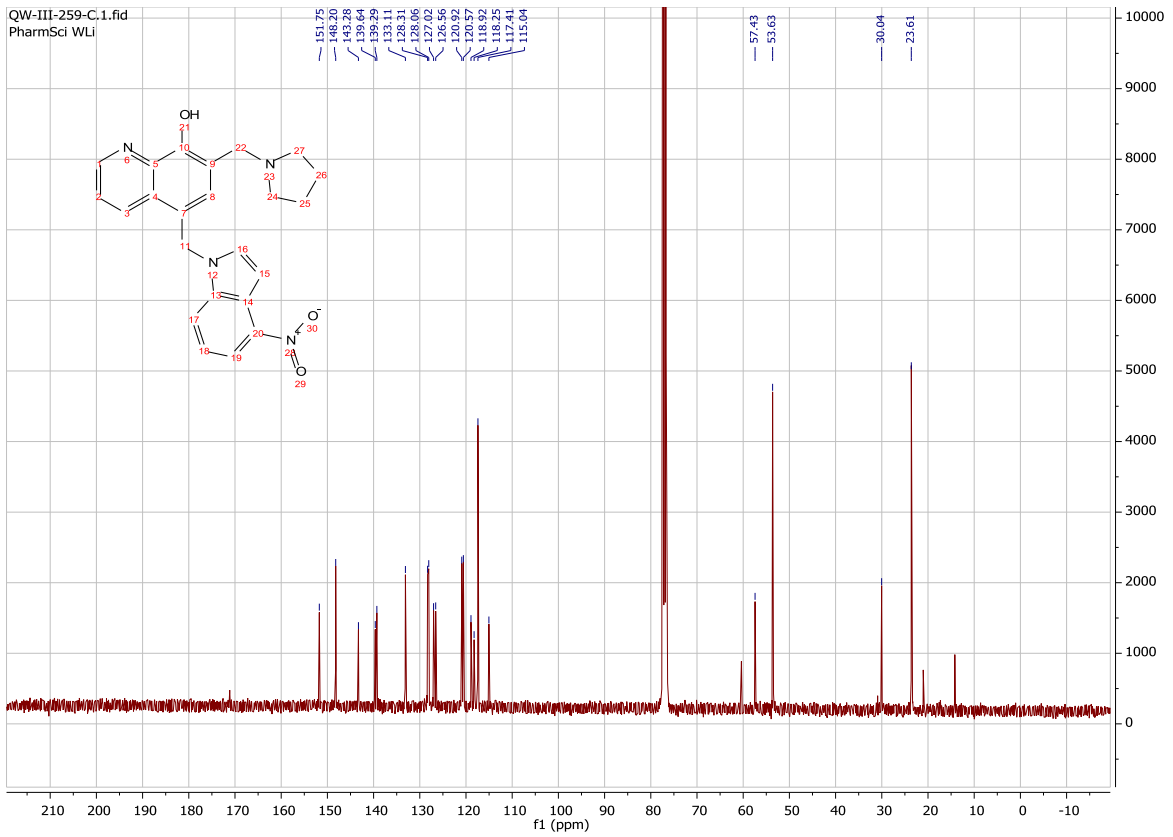
¹³C-NMR of 10d



HR-MS of 10d

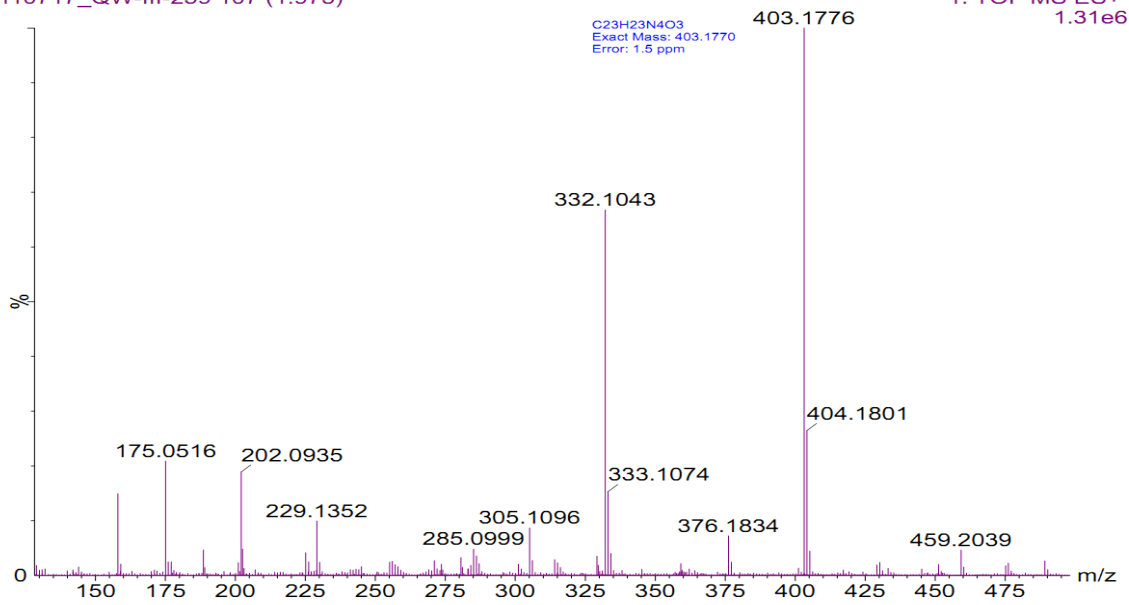


¹H-NMR of 10e

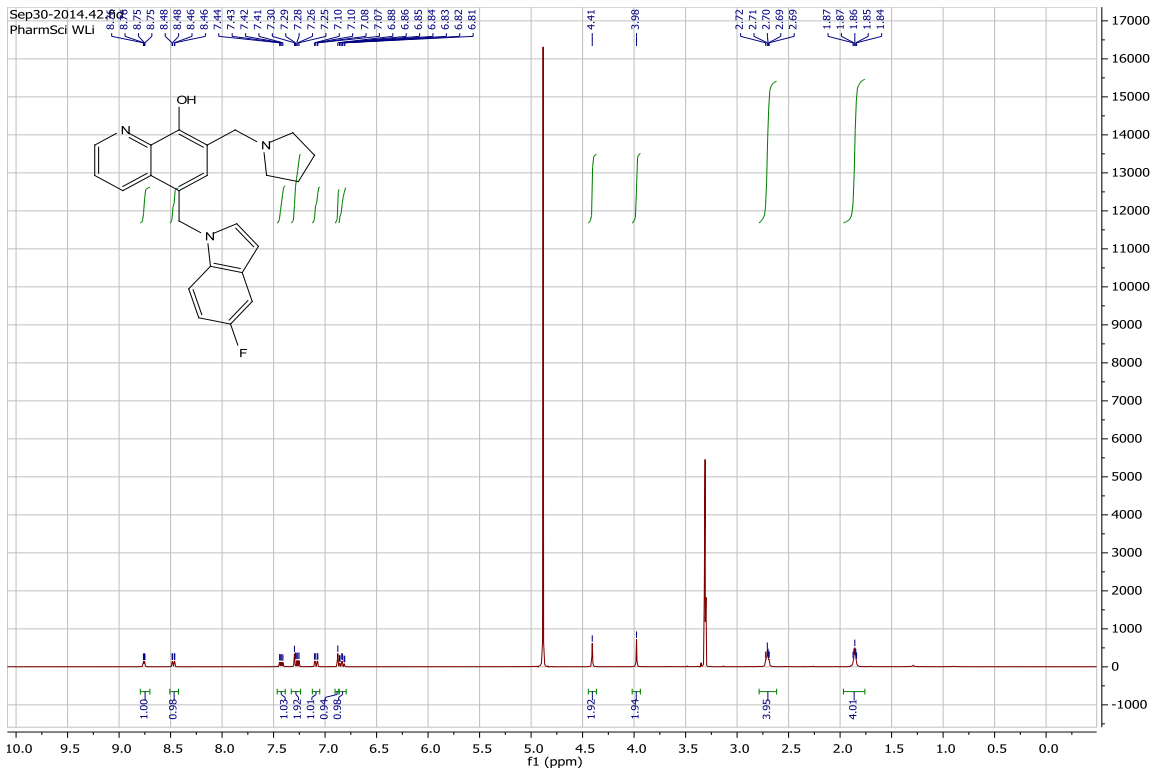


^{13}C -NMR of 10e

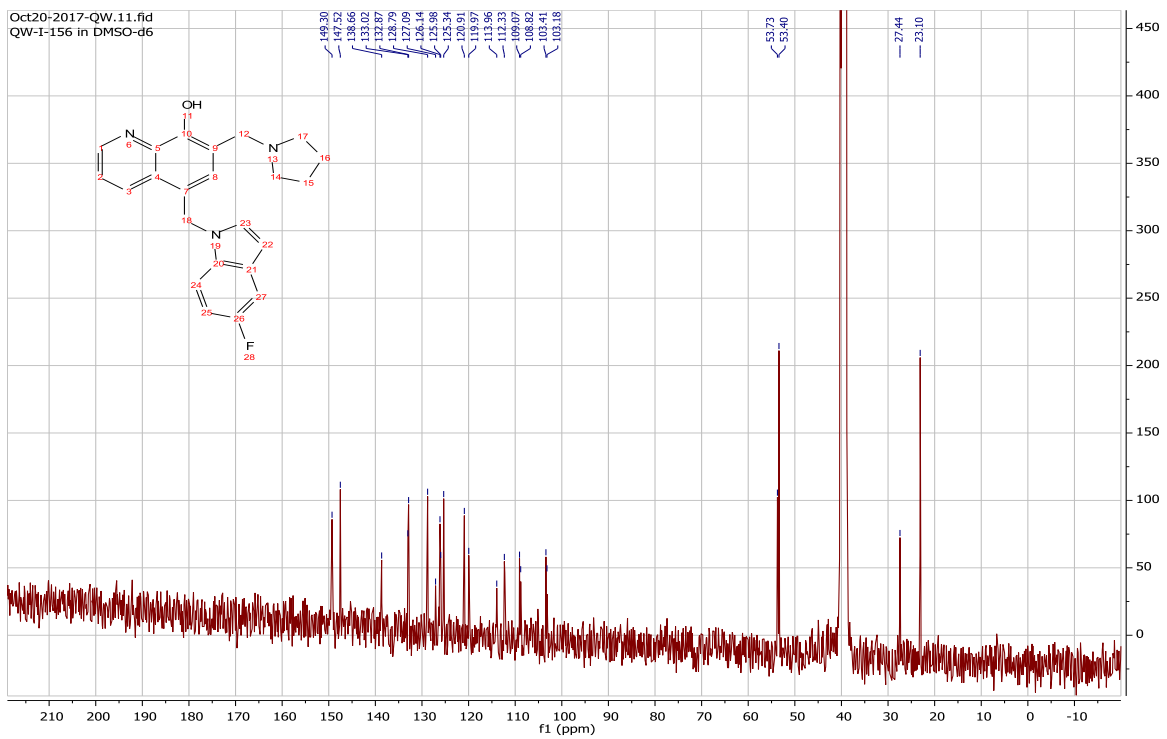
S110717_QW-III-259 107 (1.975)



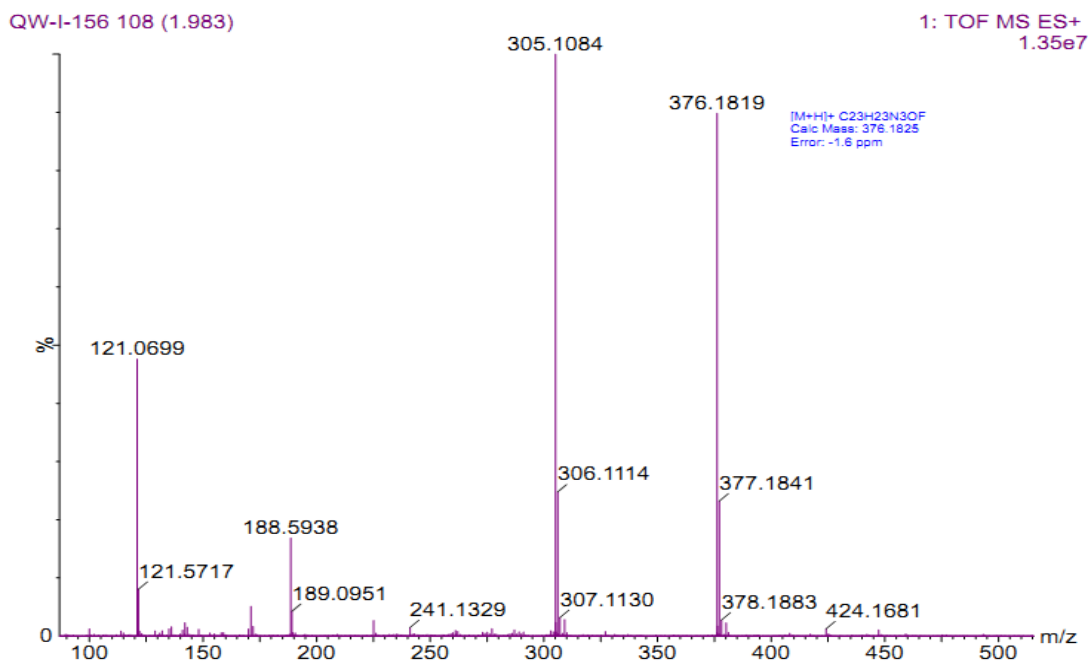
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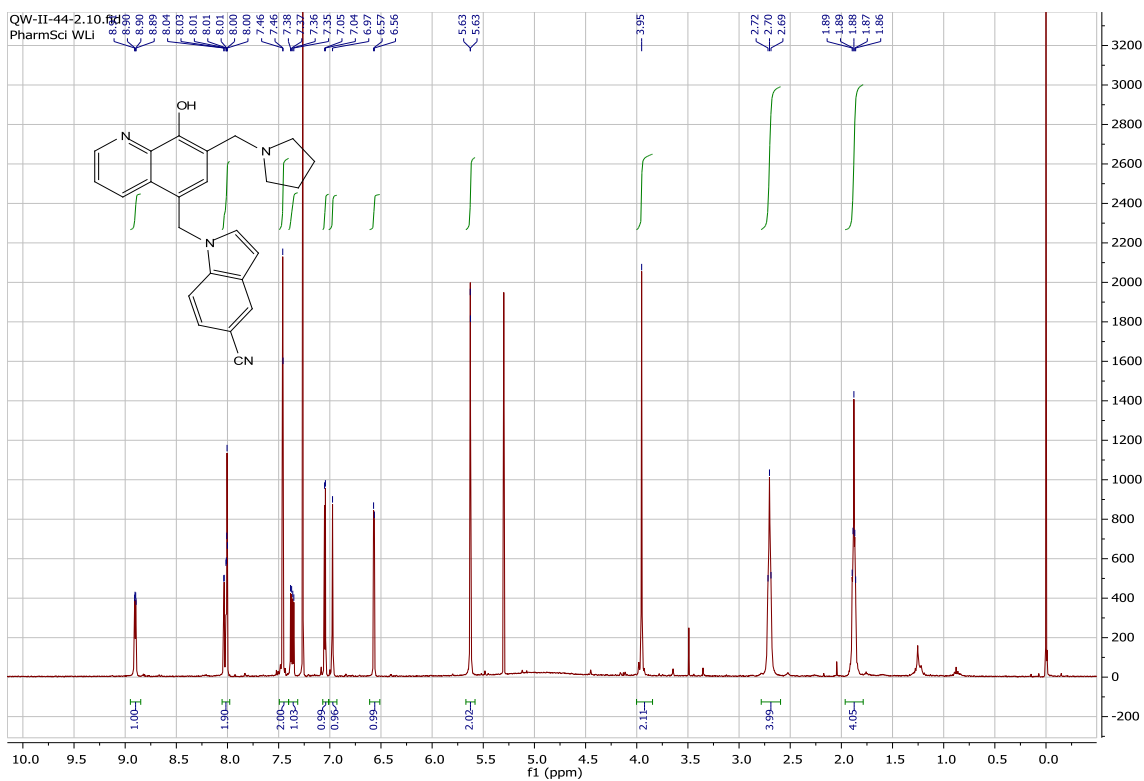
¹H-NMR of 10f



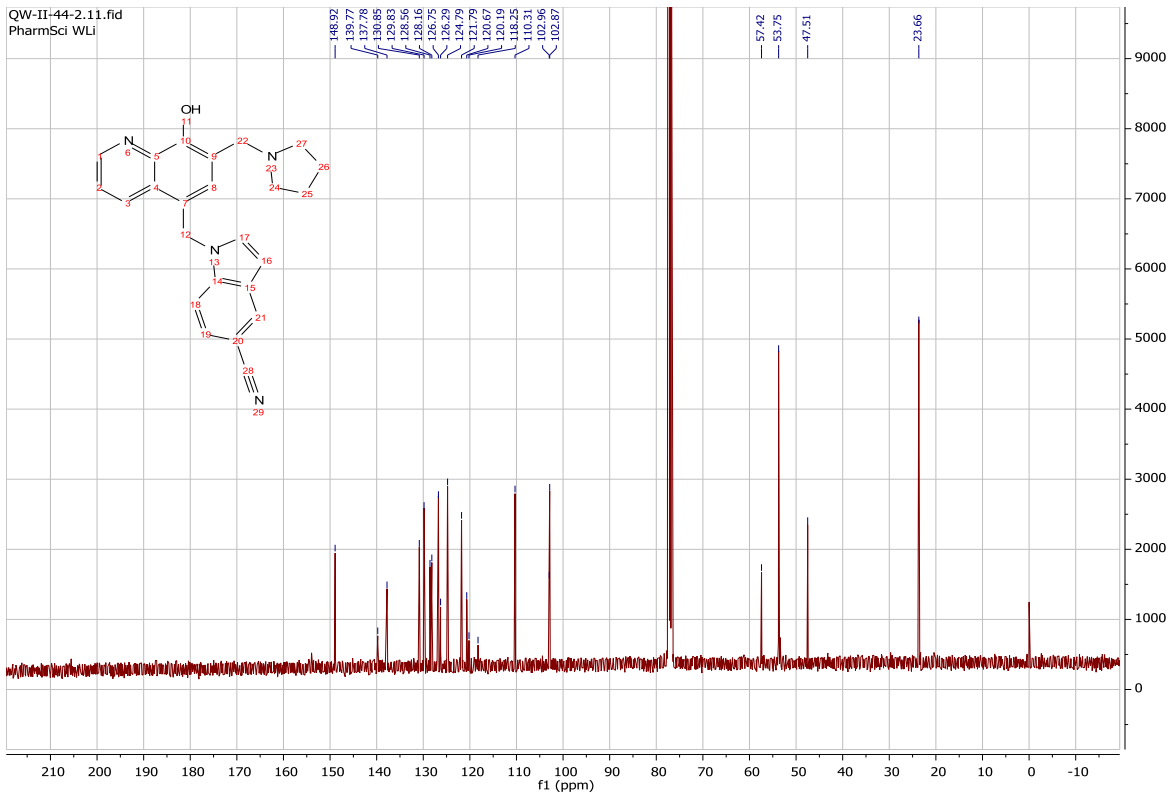
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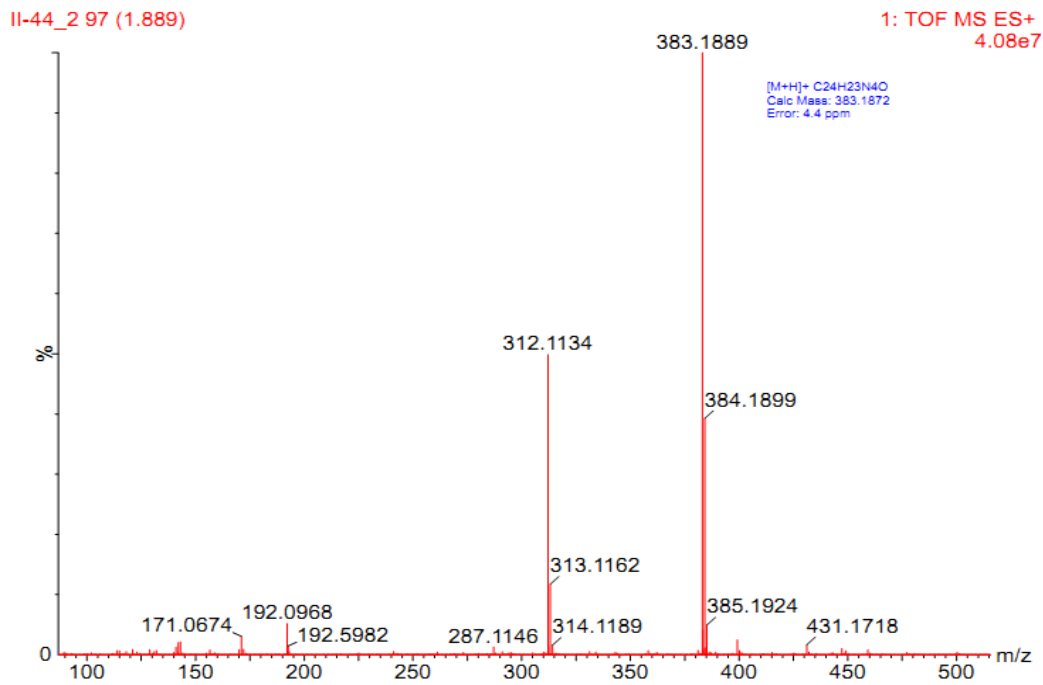
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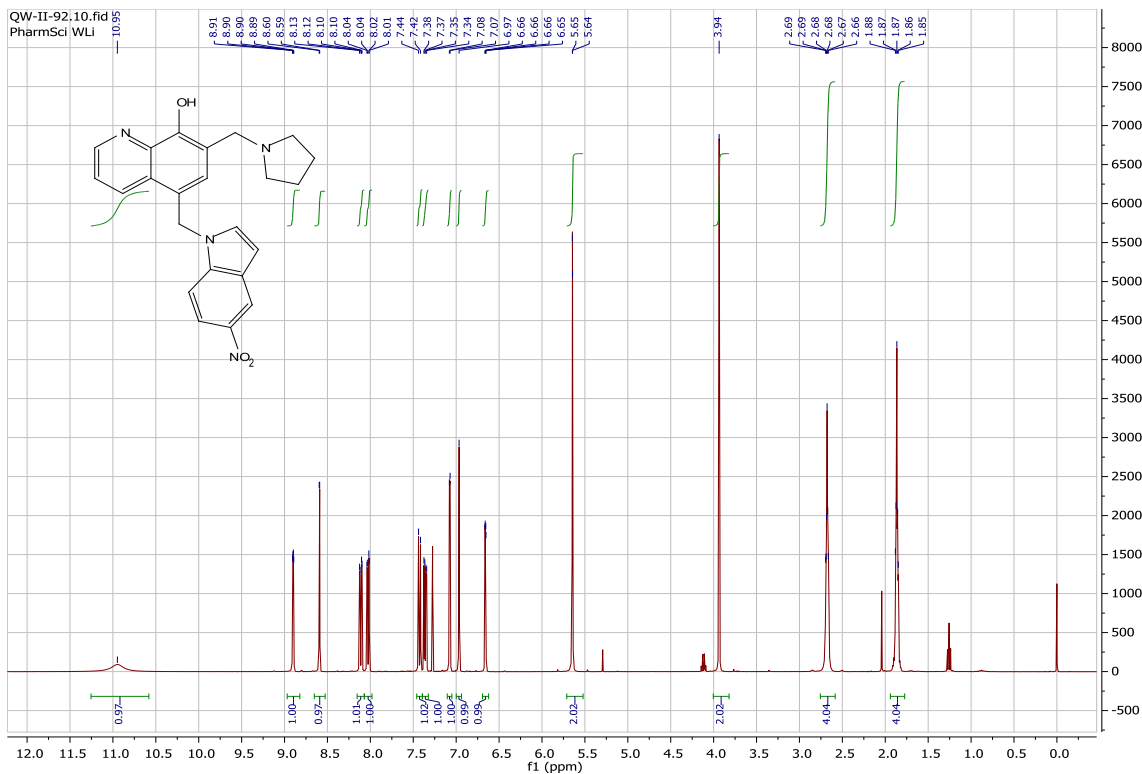
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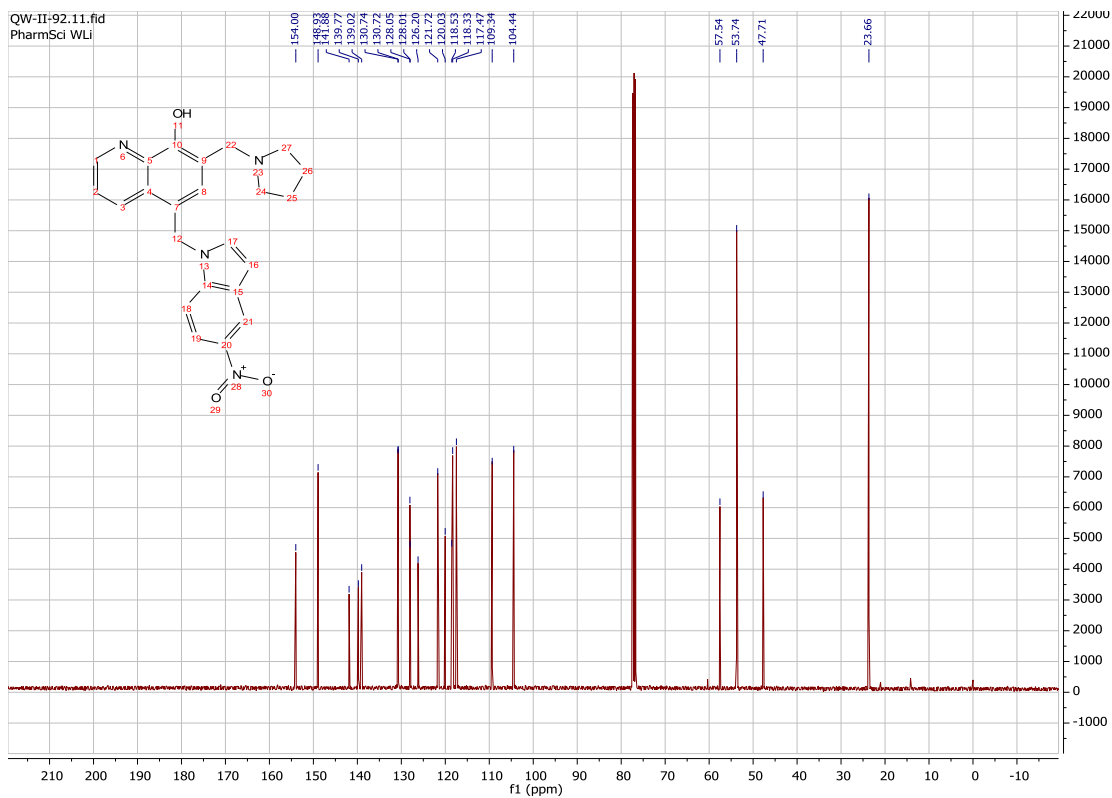
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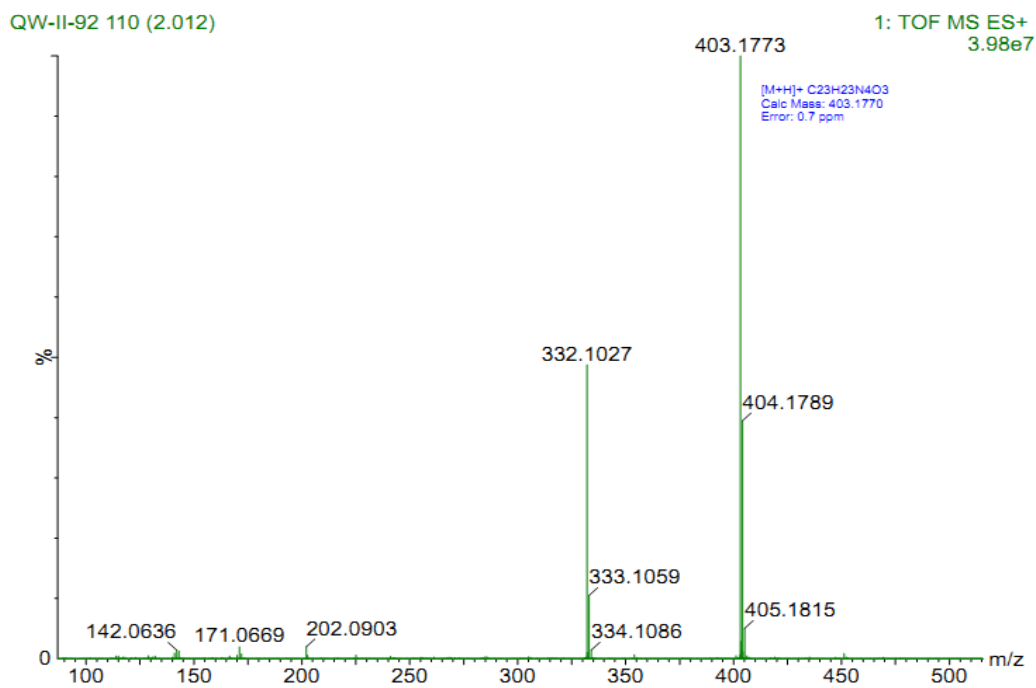
HR-MS of 10g



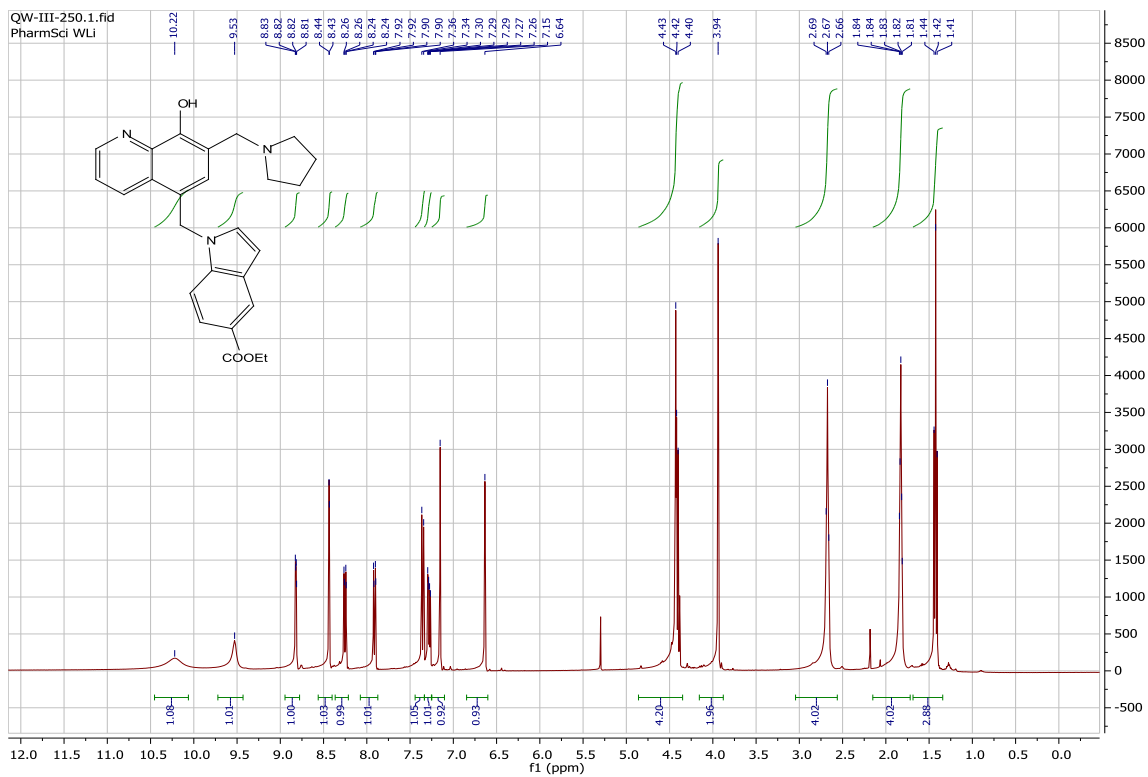
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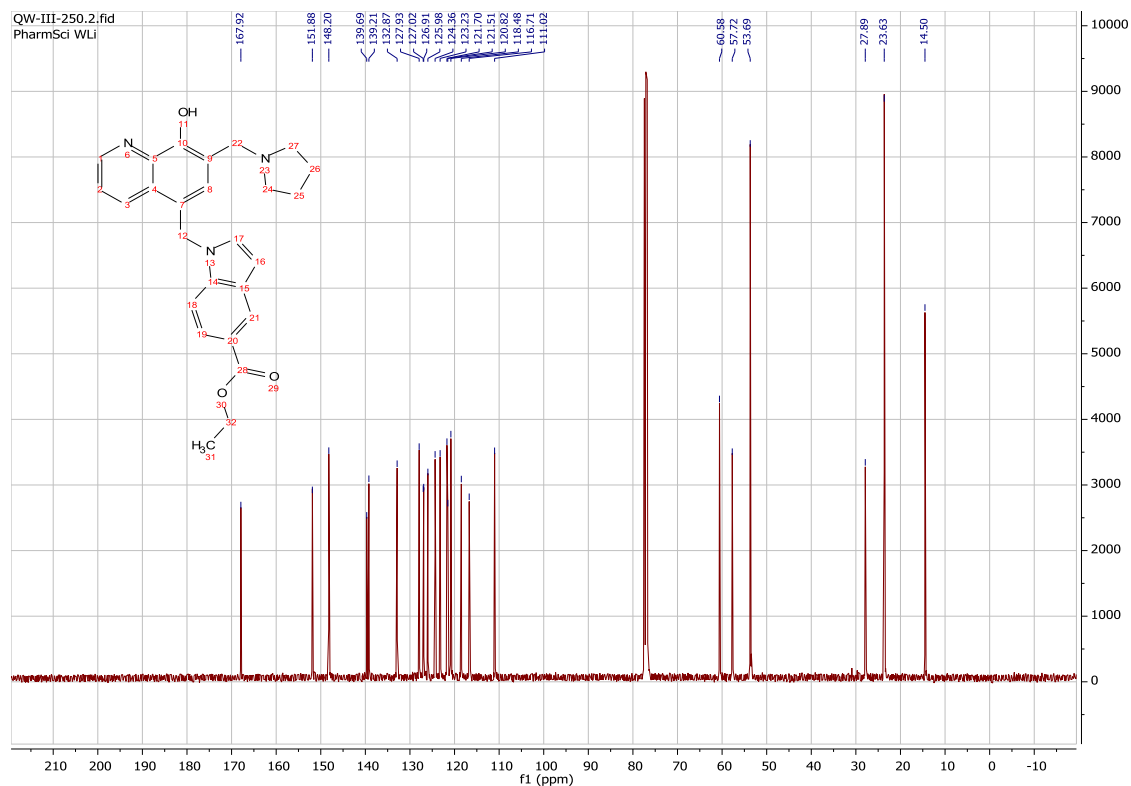
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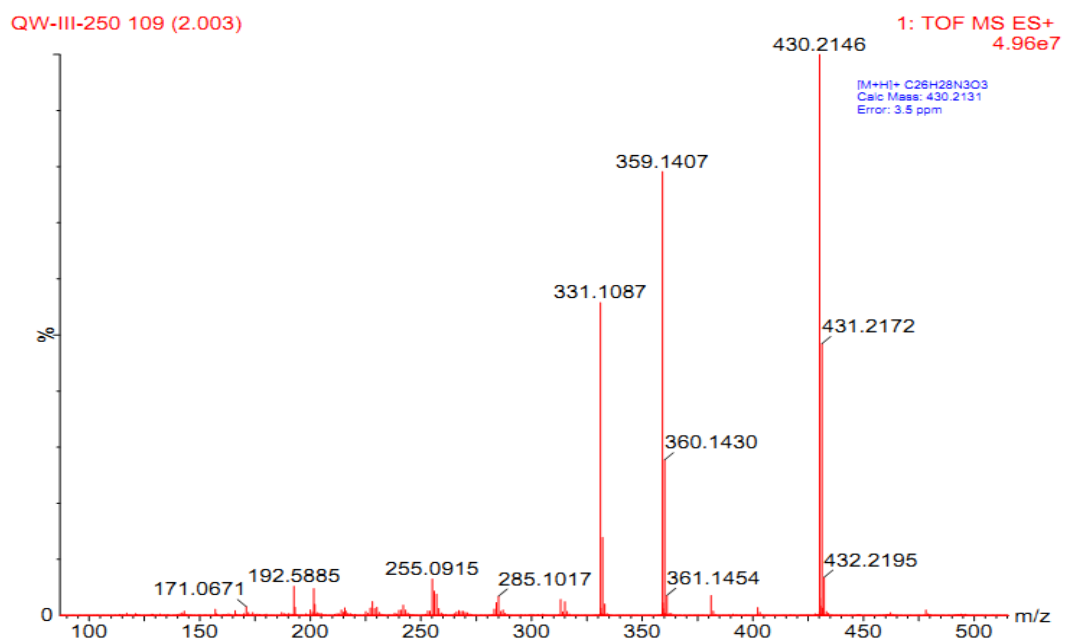
HR-MS of 10h



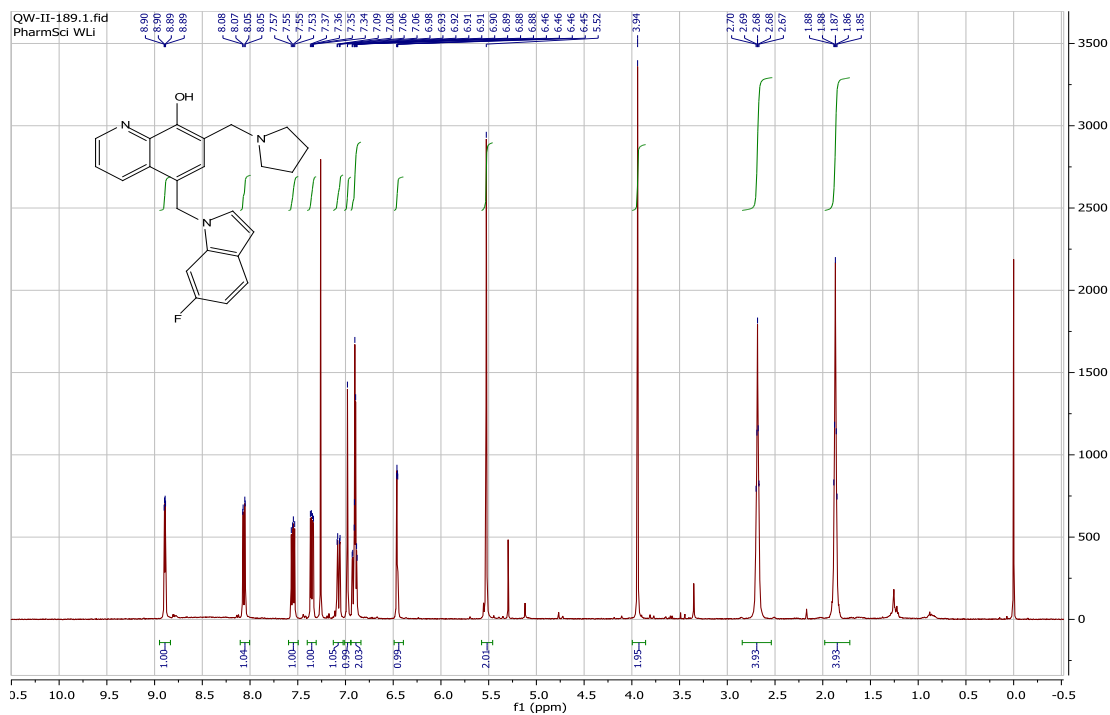
¹H-NMR of 10i



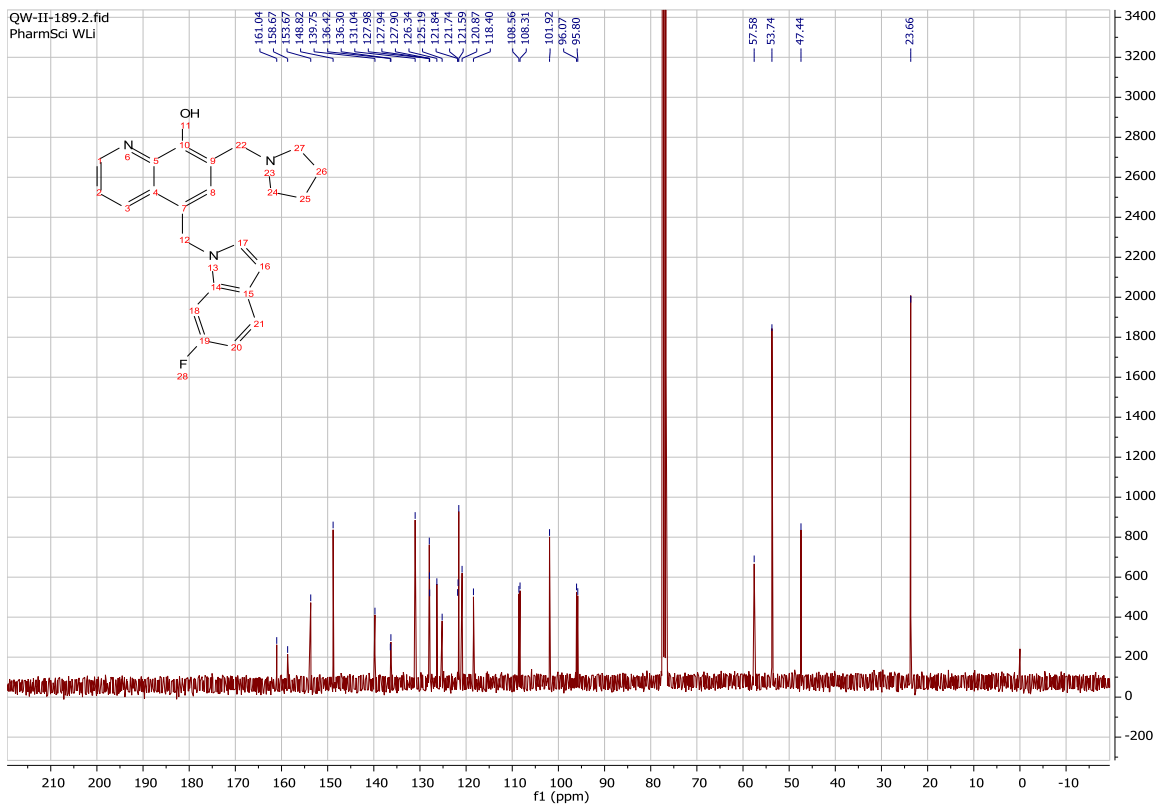
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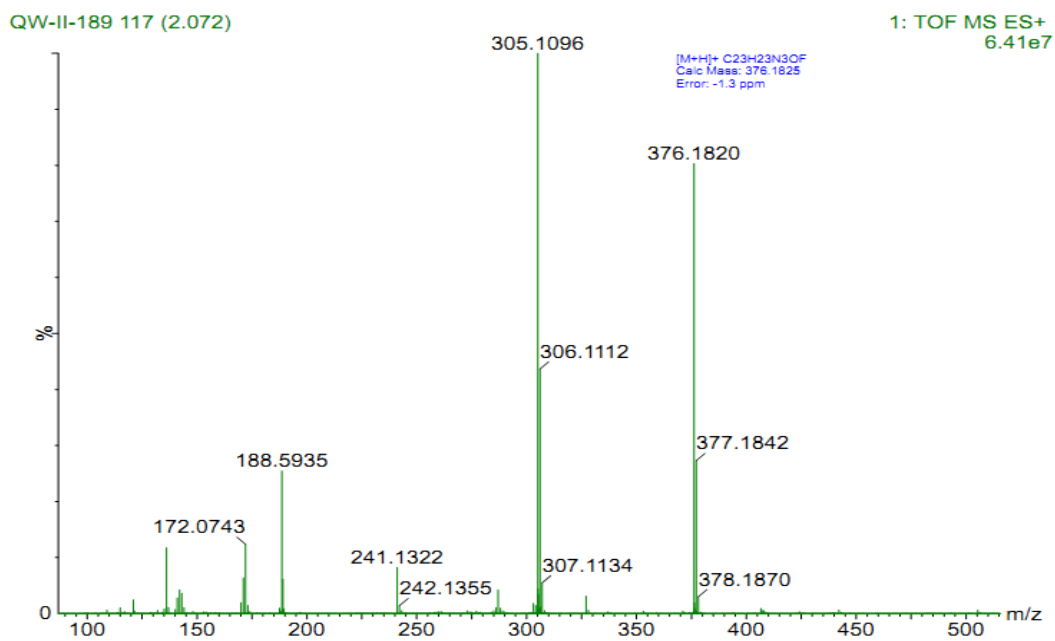
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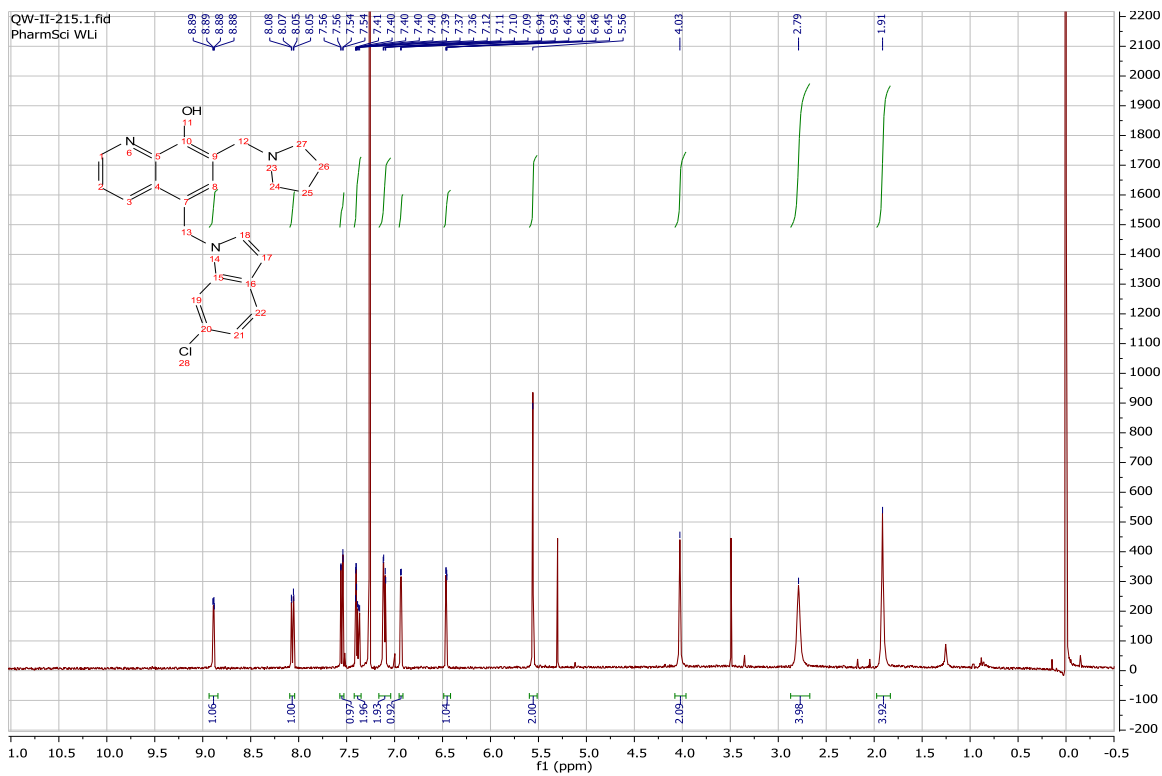
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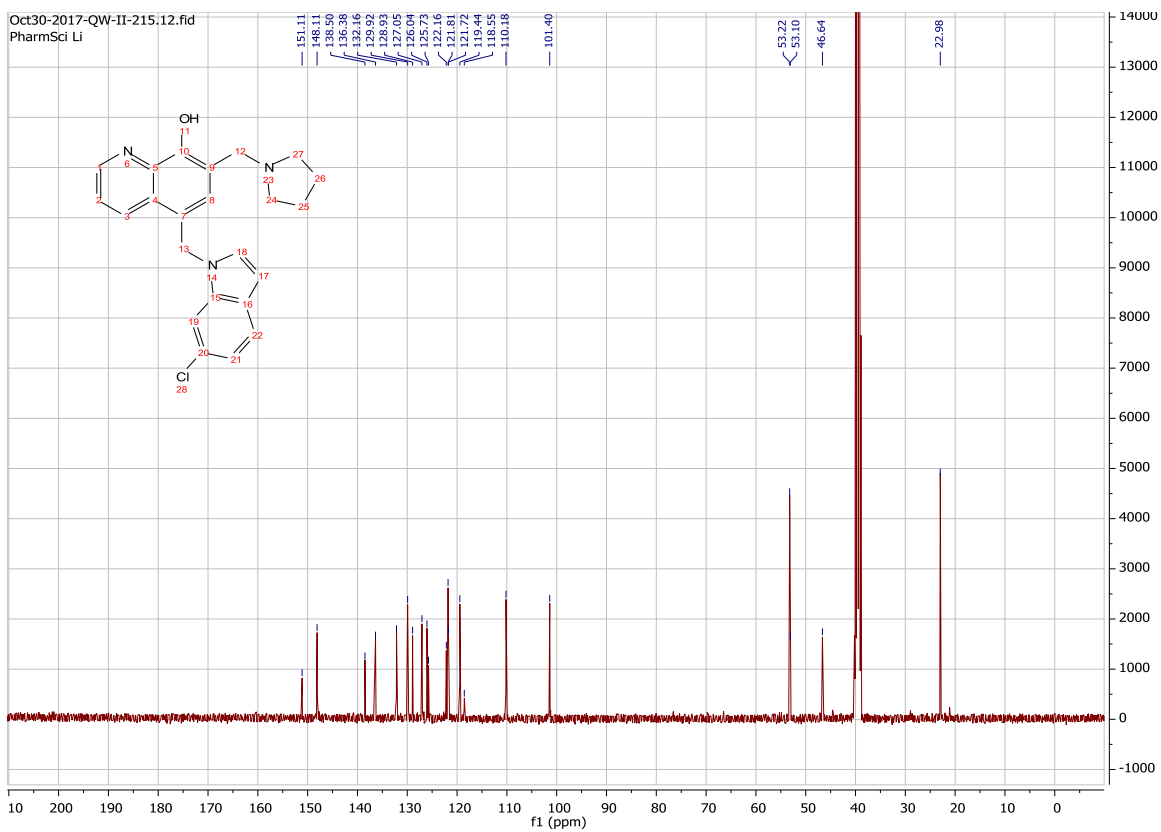
¹³C-NMR of 10j



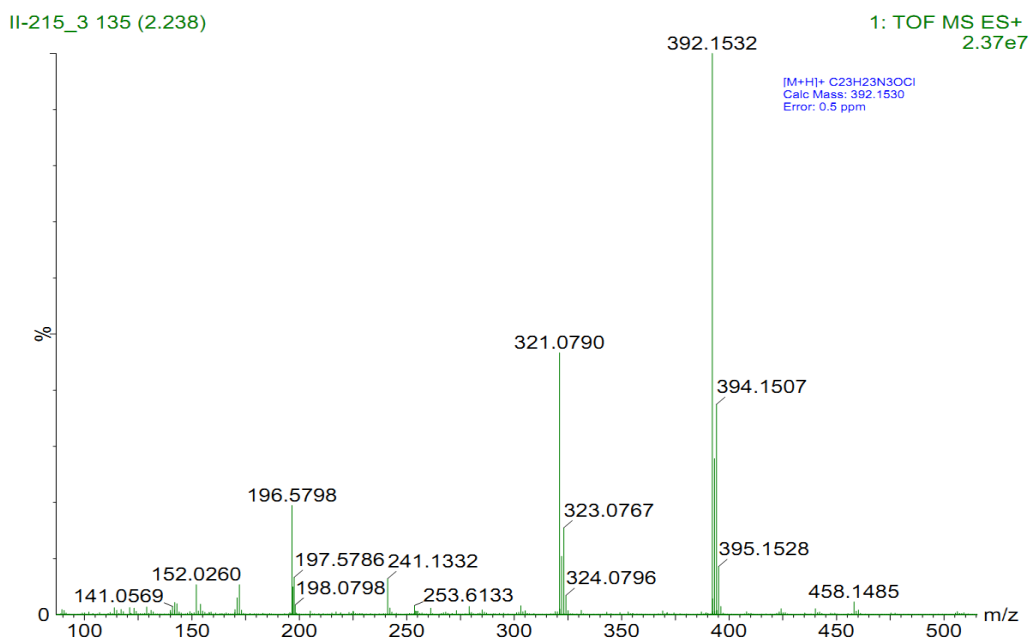
HR-MS of 10j



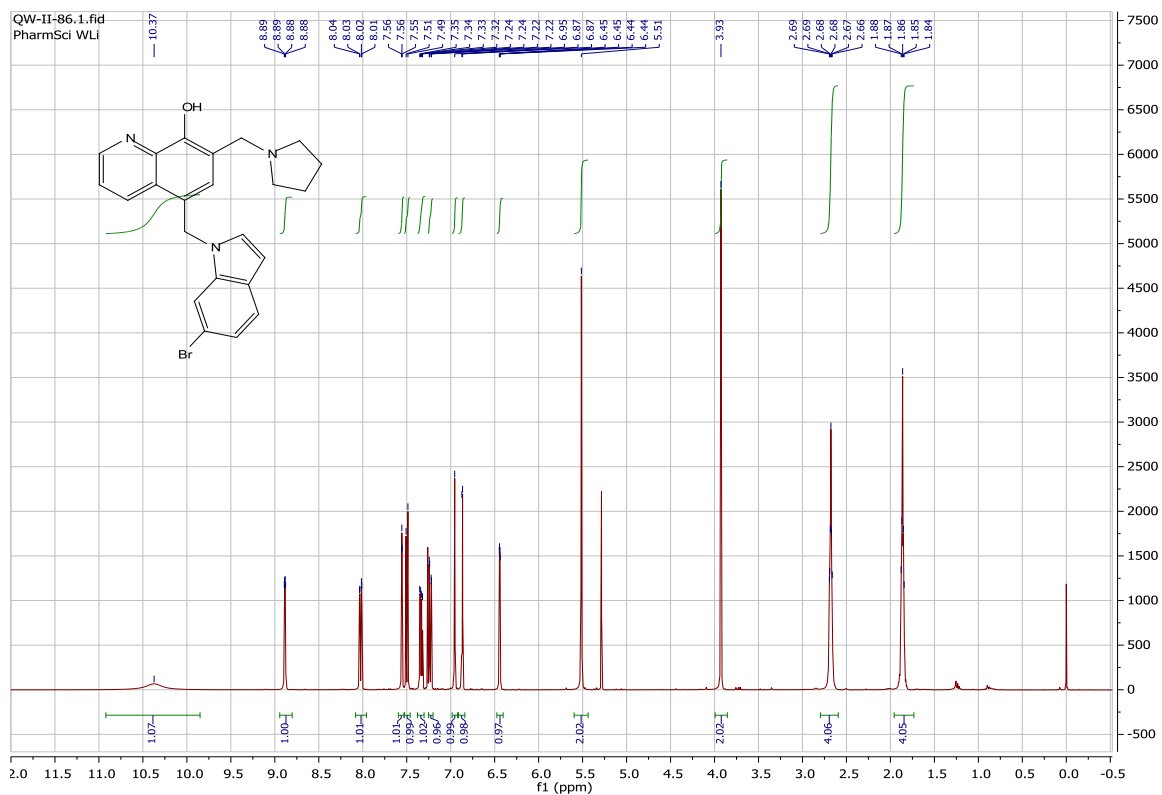
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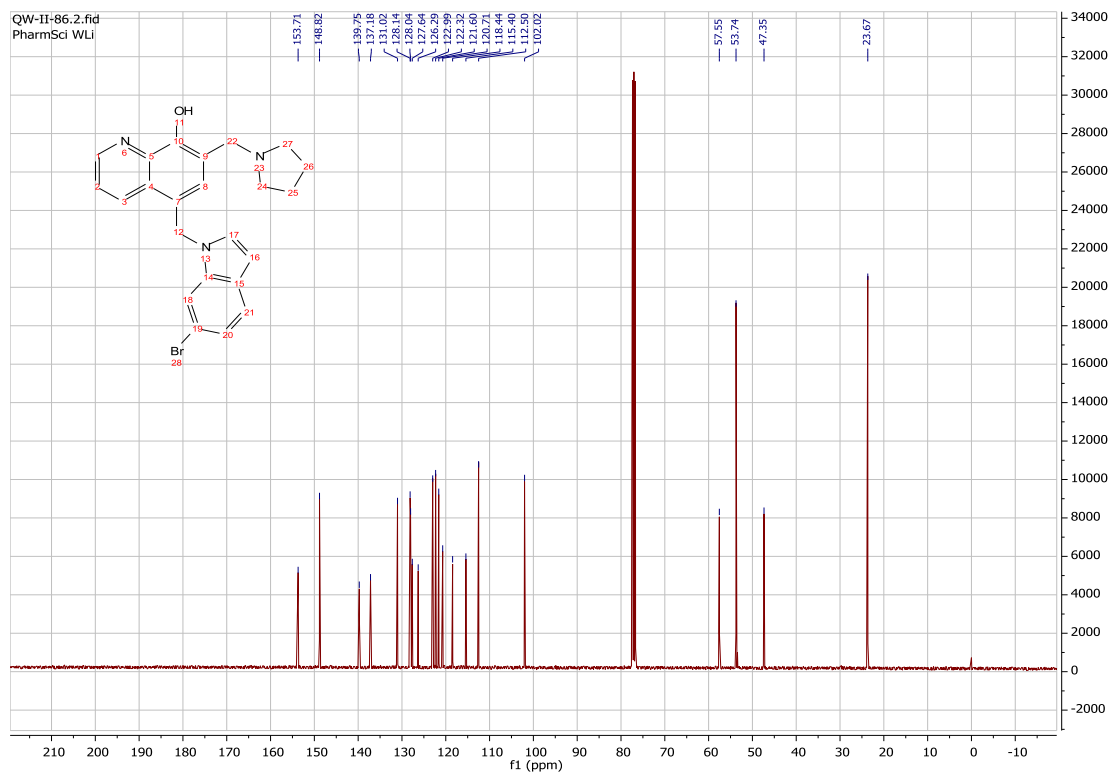
^{13}C -NMR of 10k



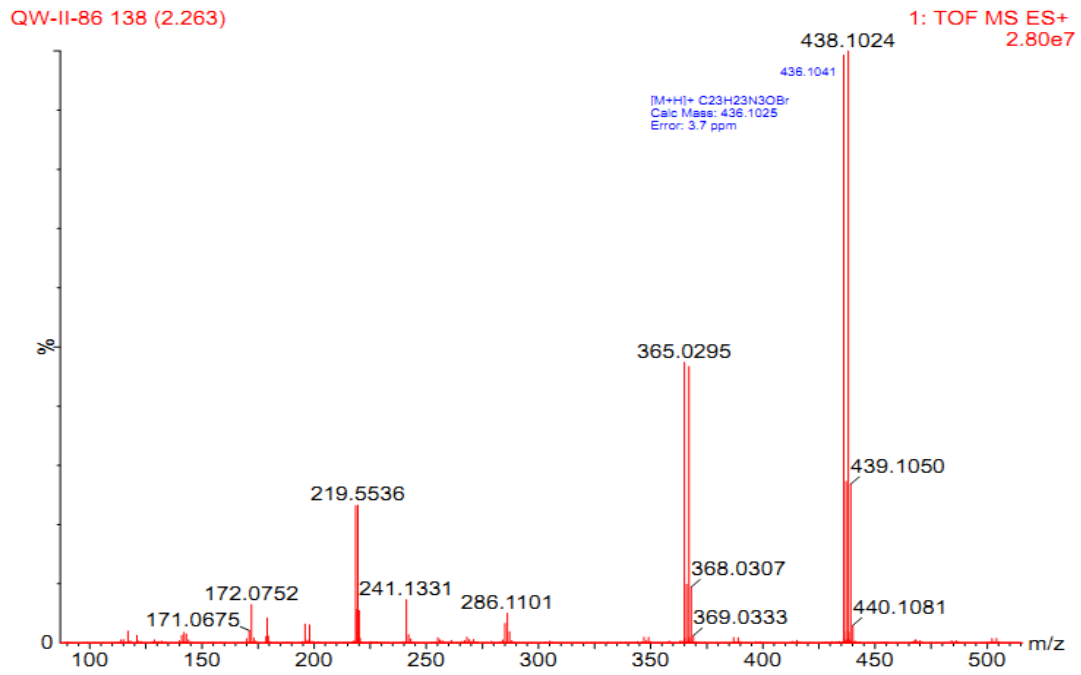
HR-MS of 10k



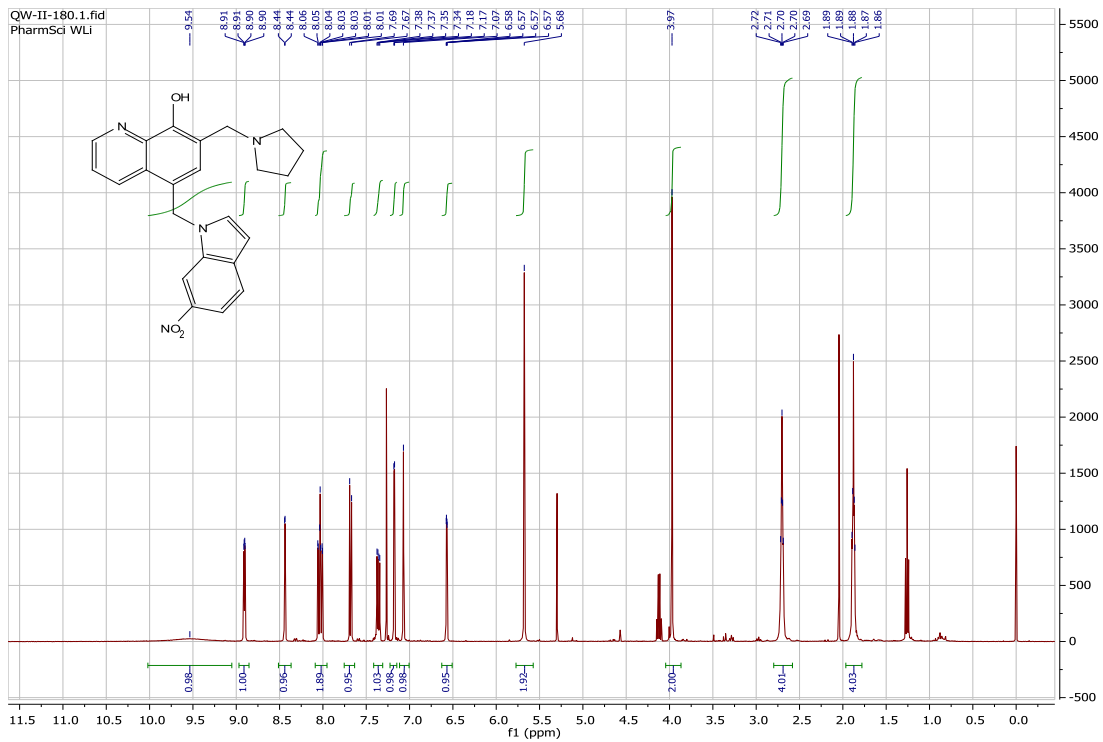
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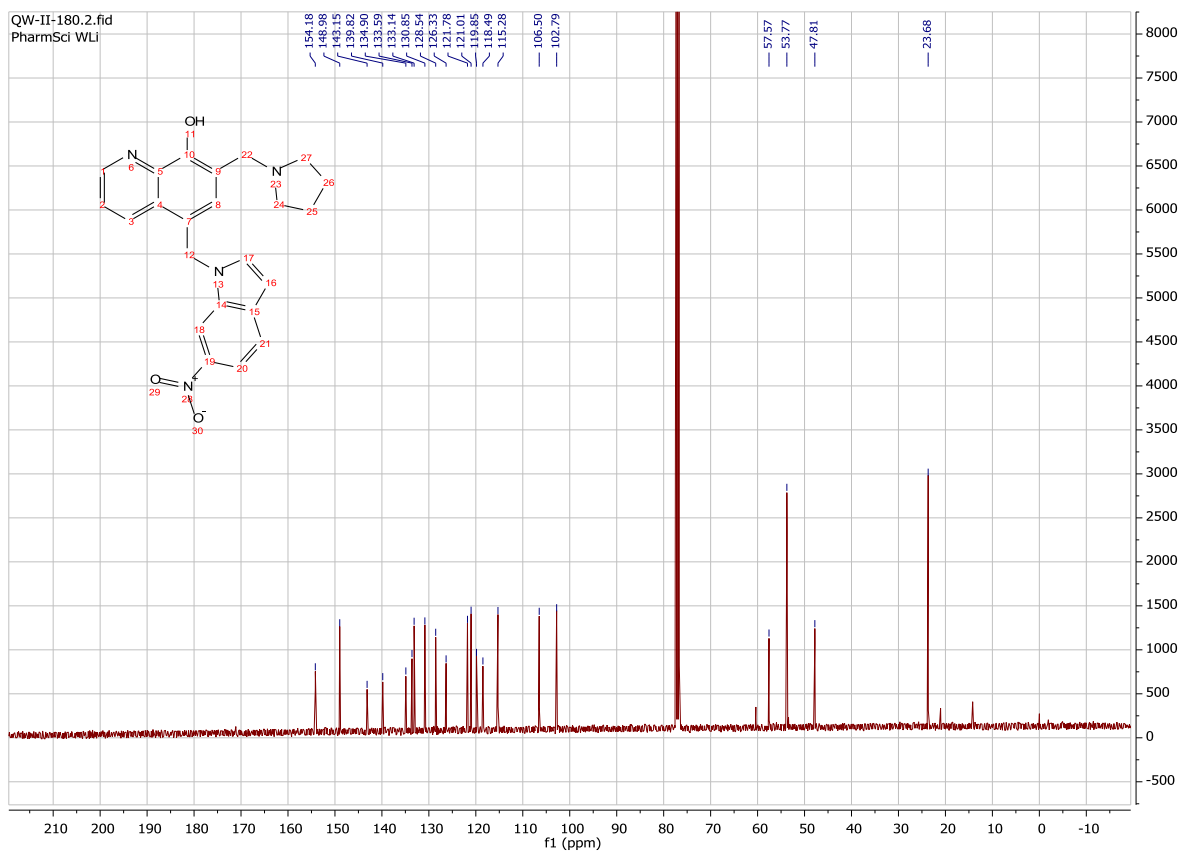
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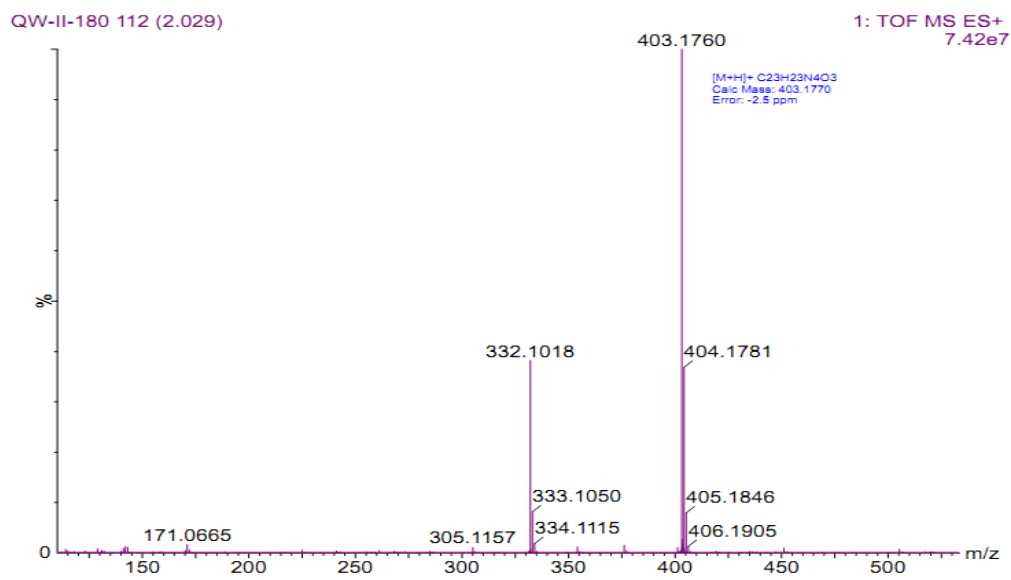
HR-MS of 10l



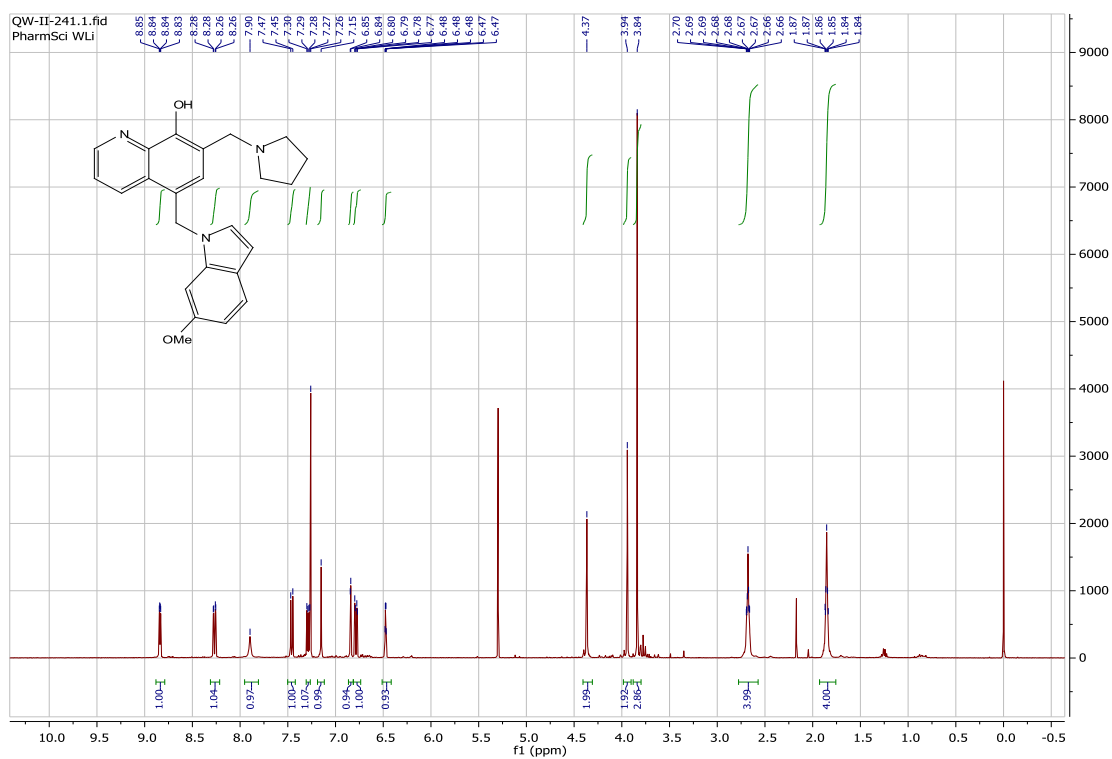
¹H-NMR of 10m



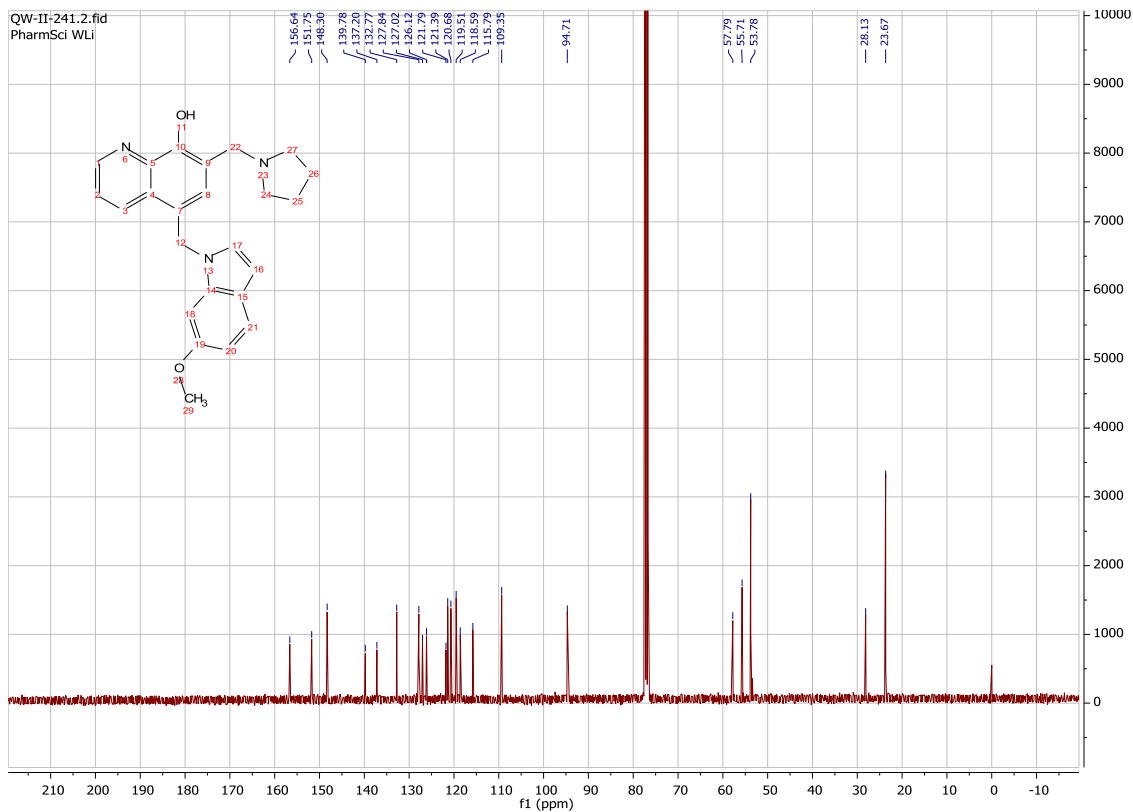
$^{13}\text{C-NMR}$ of 10m



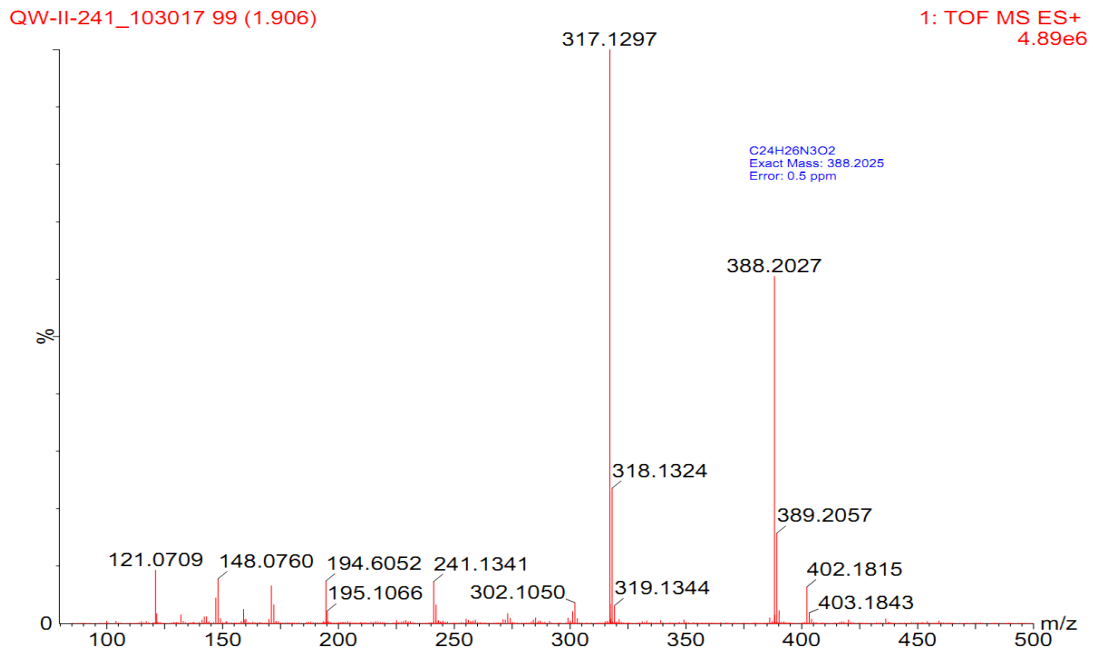
HR-MS of 10m



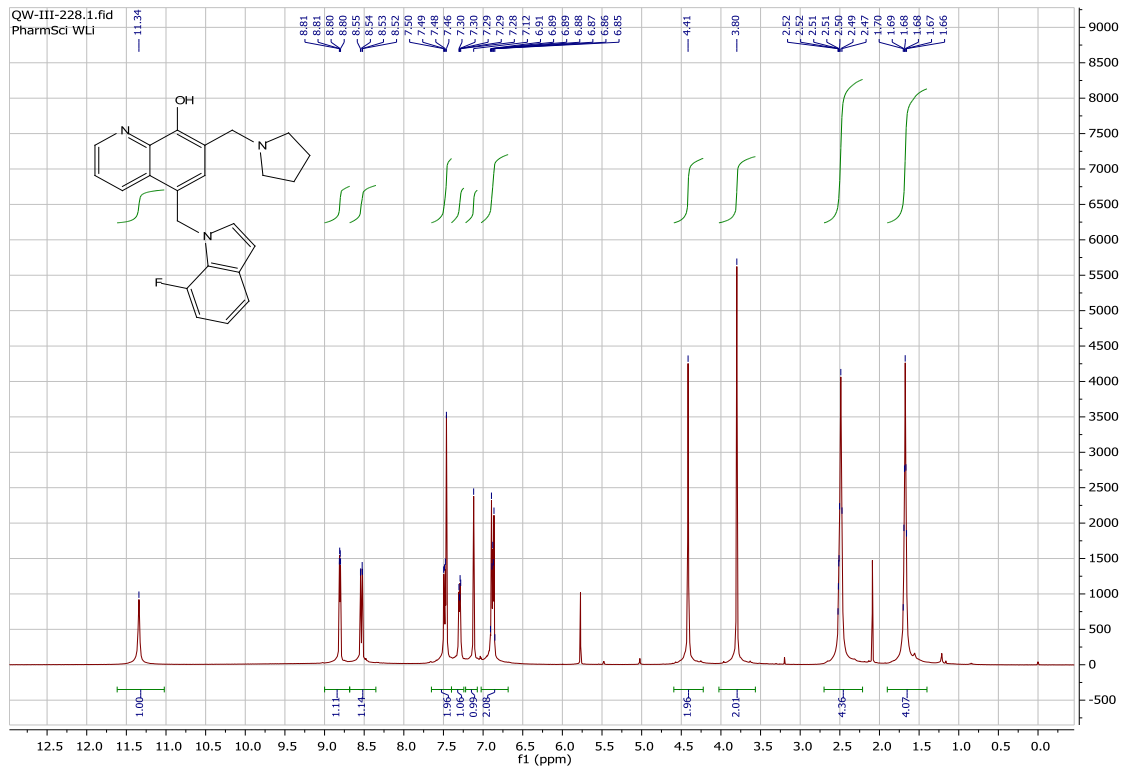
¹H-NMR of 10n



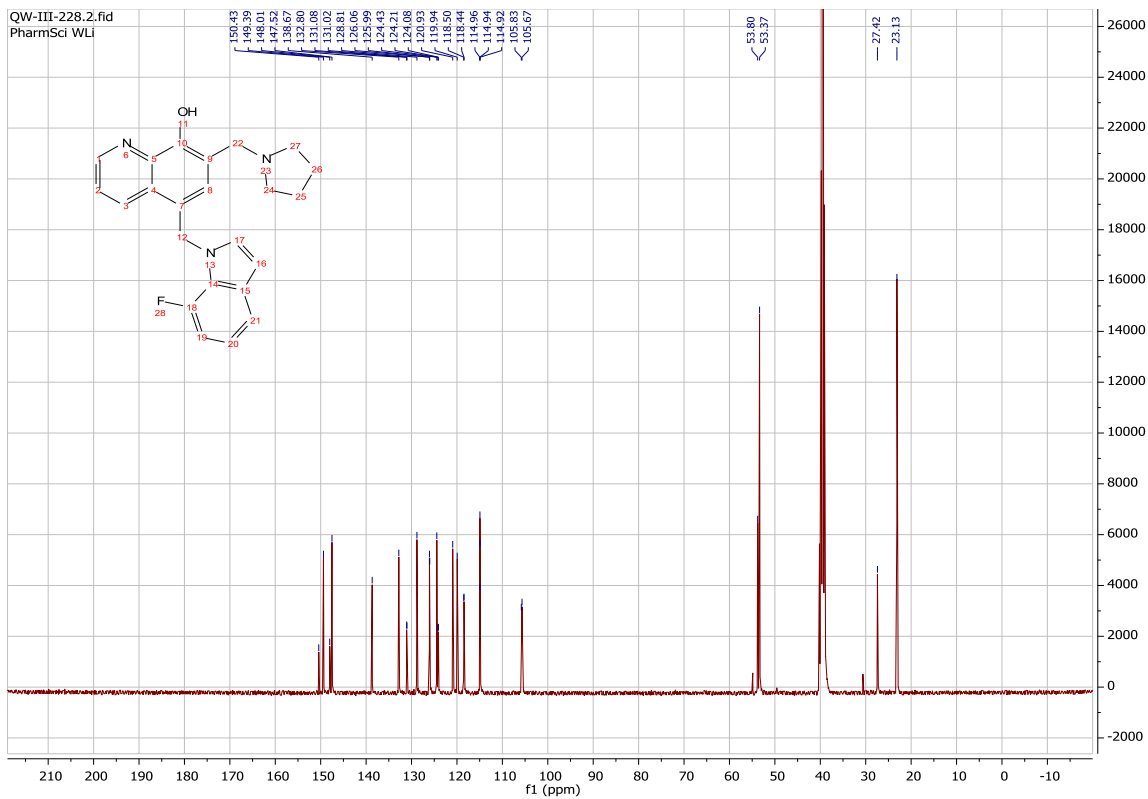
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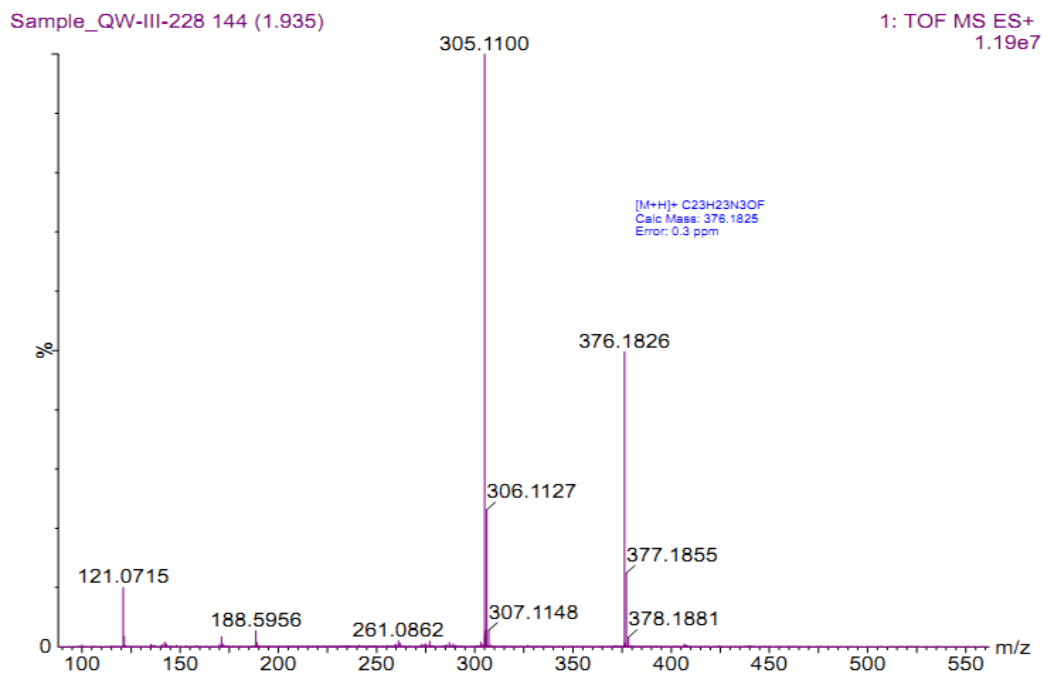
HR-MS of 10n



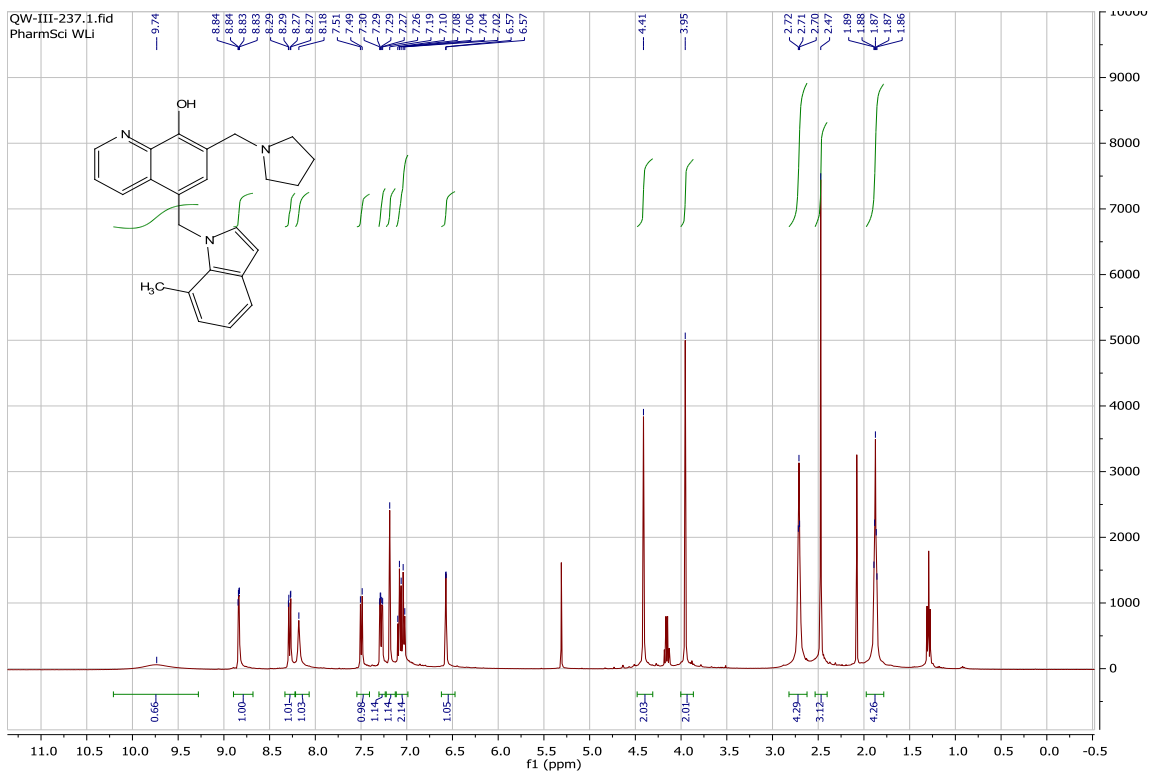
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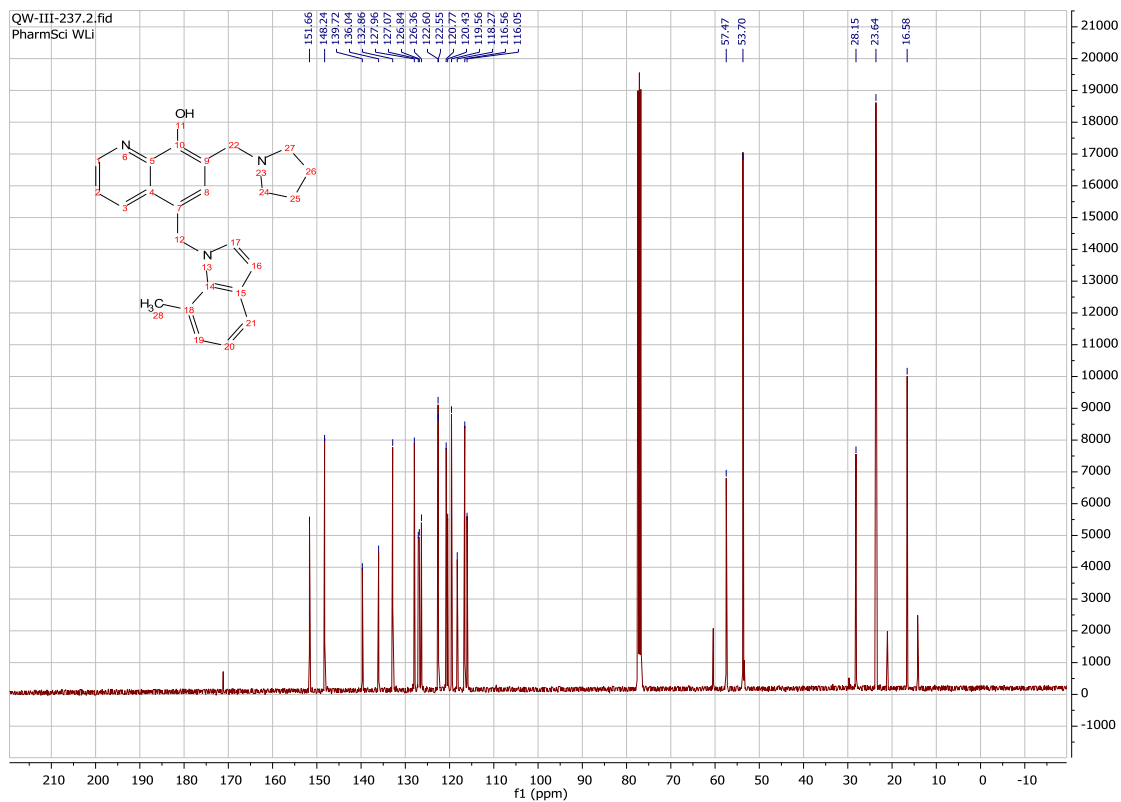
$^{13}\text{C-NMR}$ of **10o**



HR-MS of **10o**



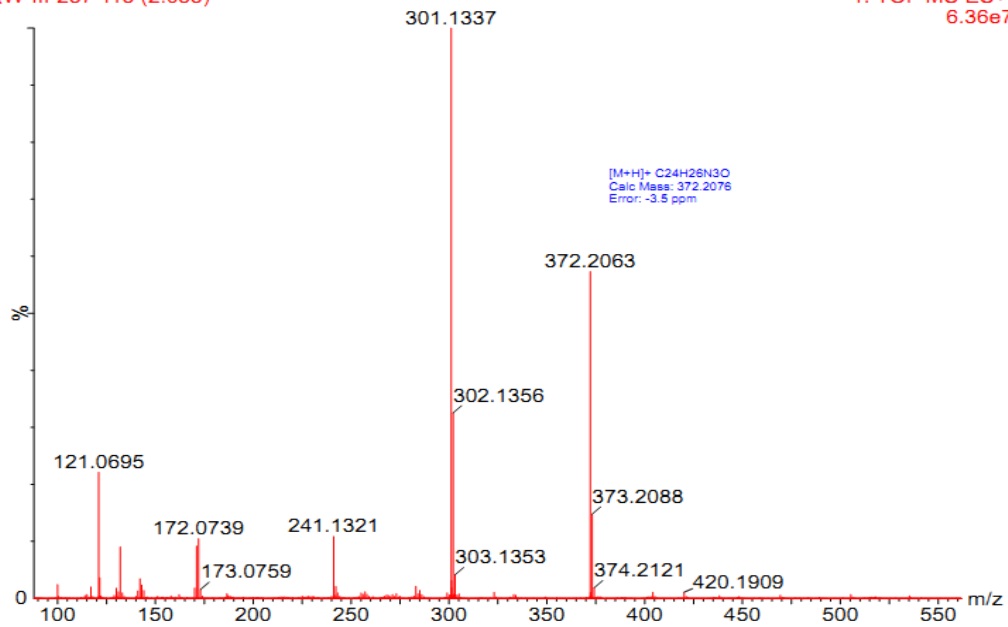
¹H-NMR of 10p



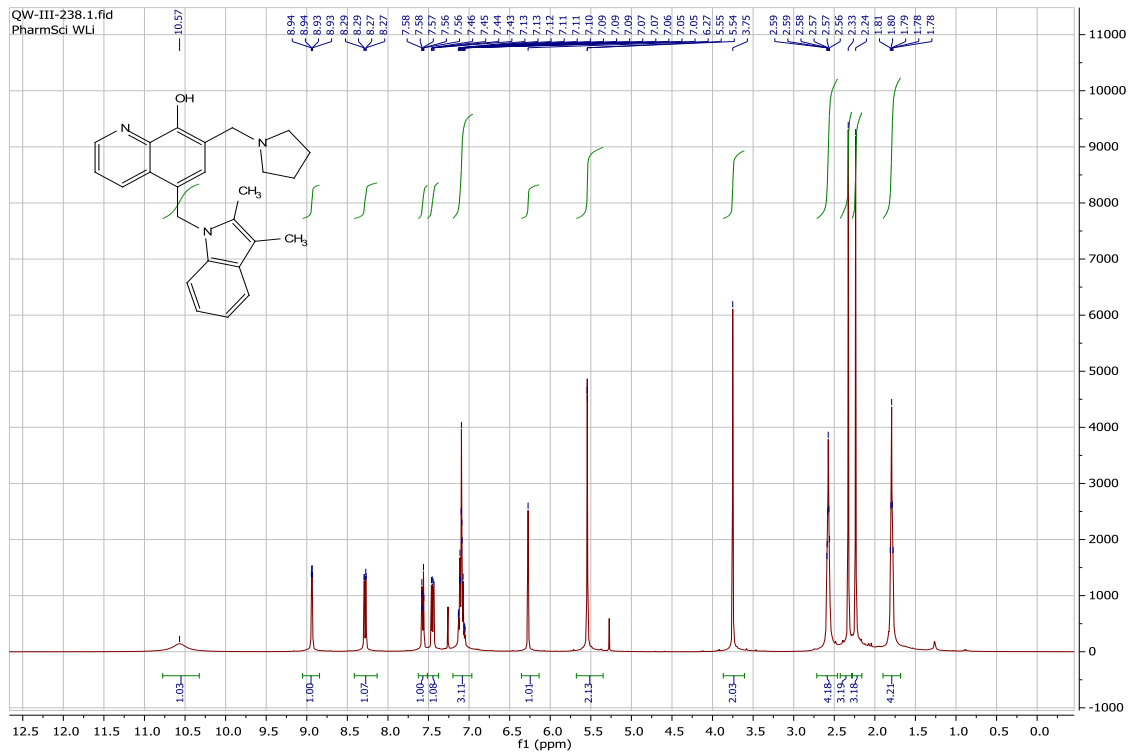
¹³C-NMR of 10p

QW-III-237 115 (2.055)

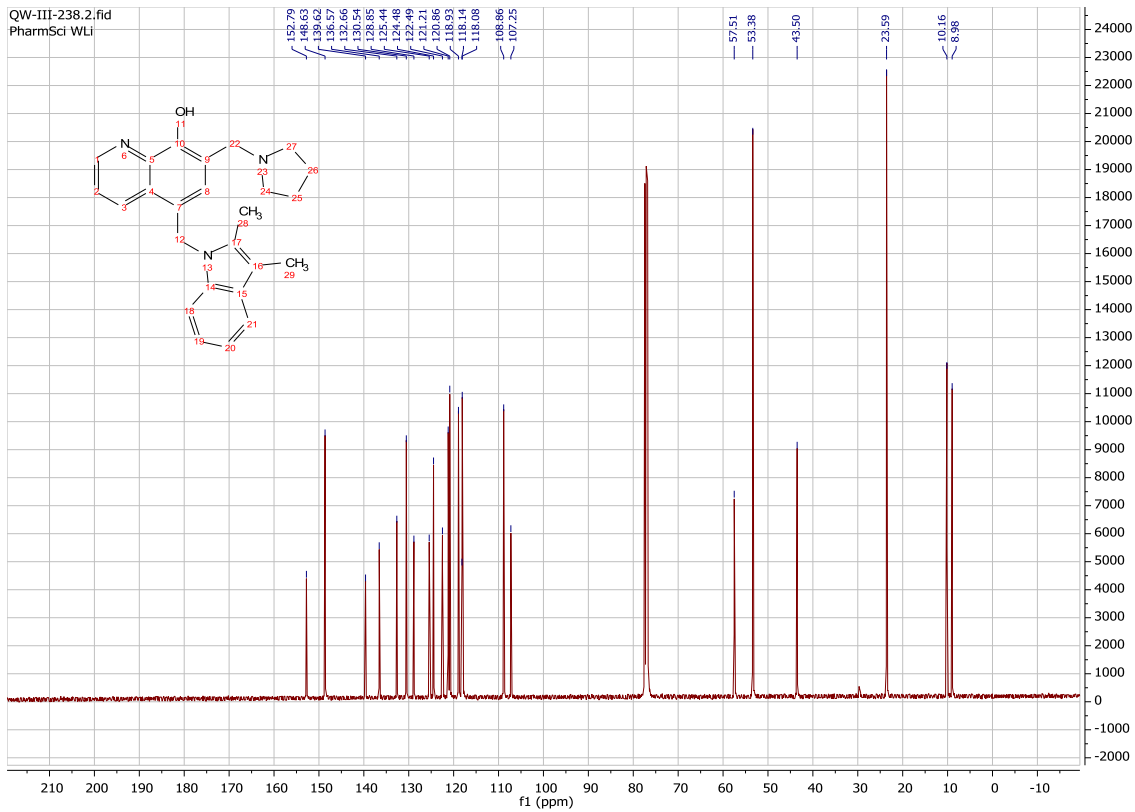
1: TOF MS ES+
6.36e7



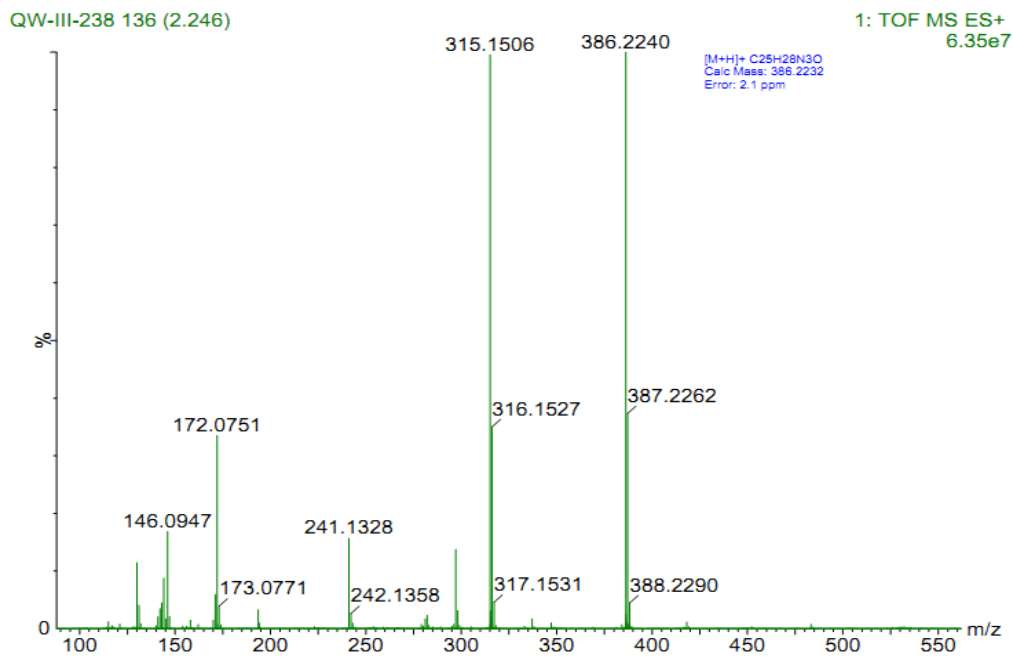
HR-MS of 10p



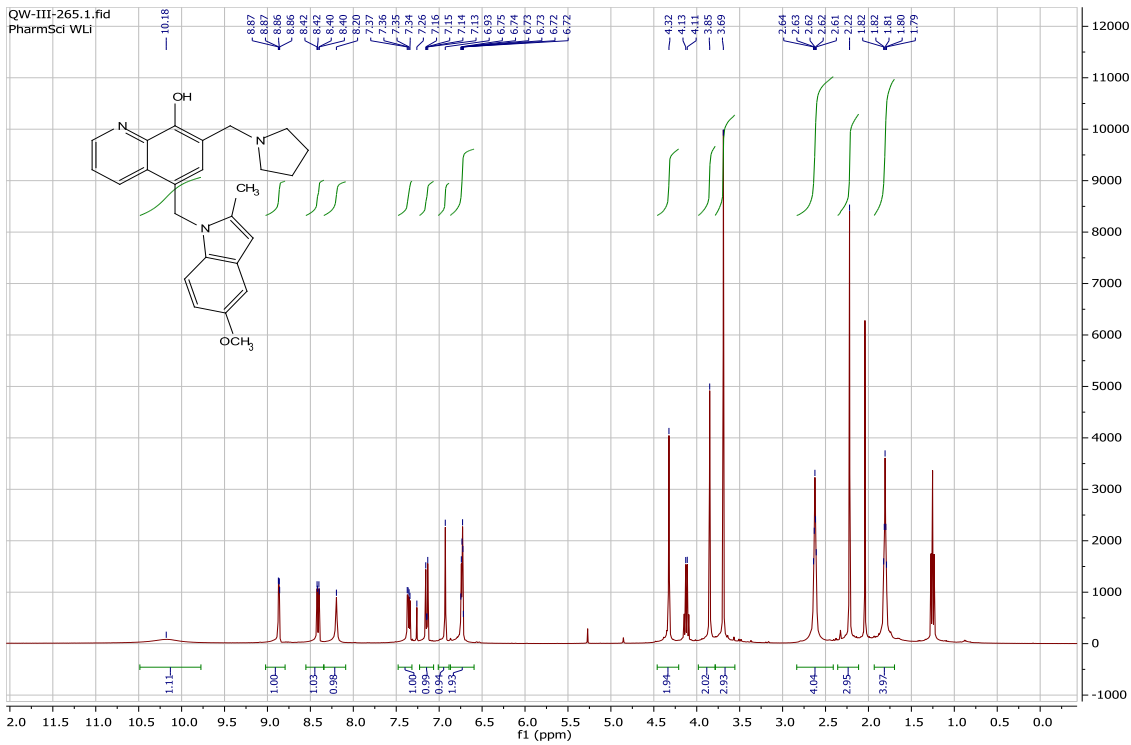
¹H-NMR of 10q



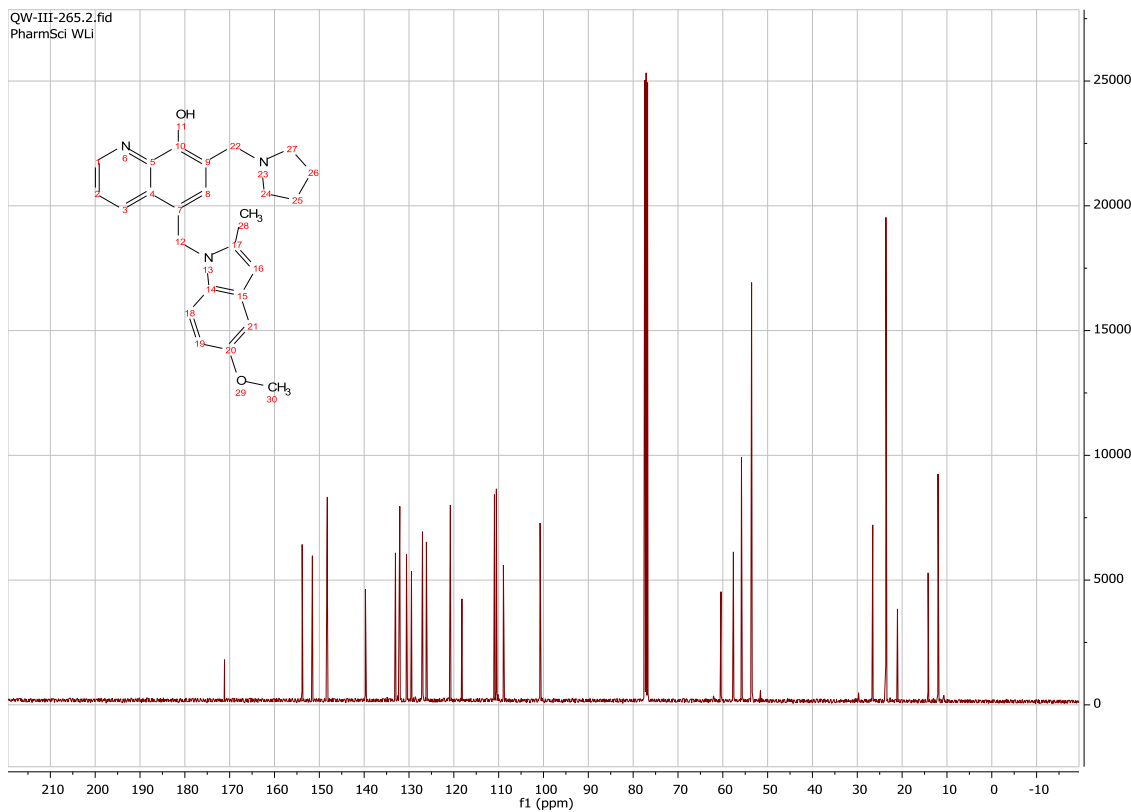
$^{13}\text{C-NMR}$ of **10q**



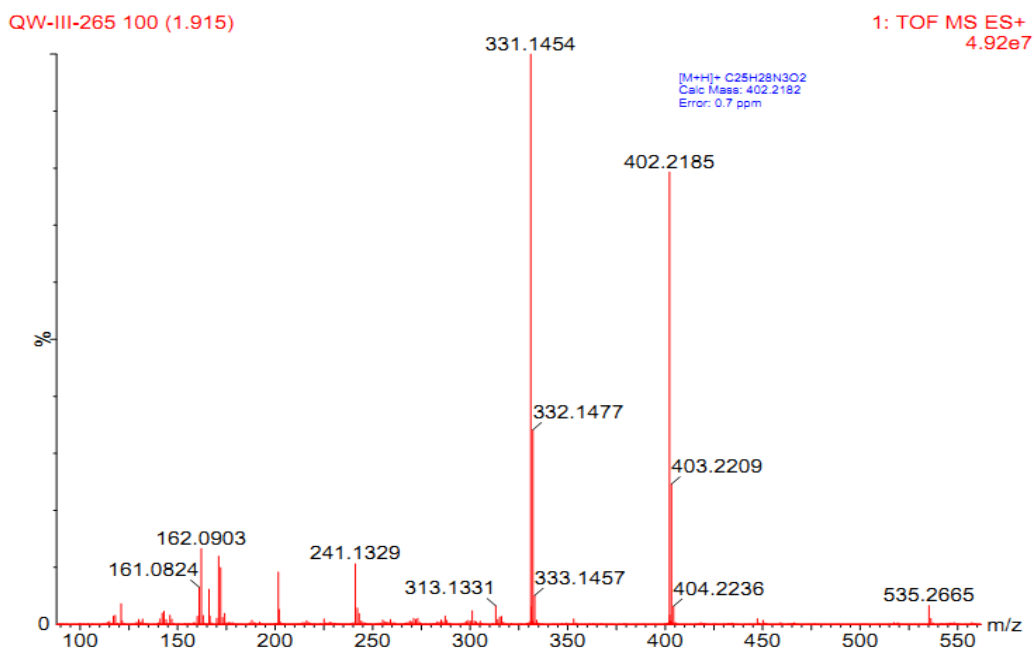
HR-MS of **10q**



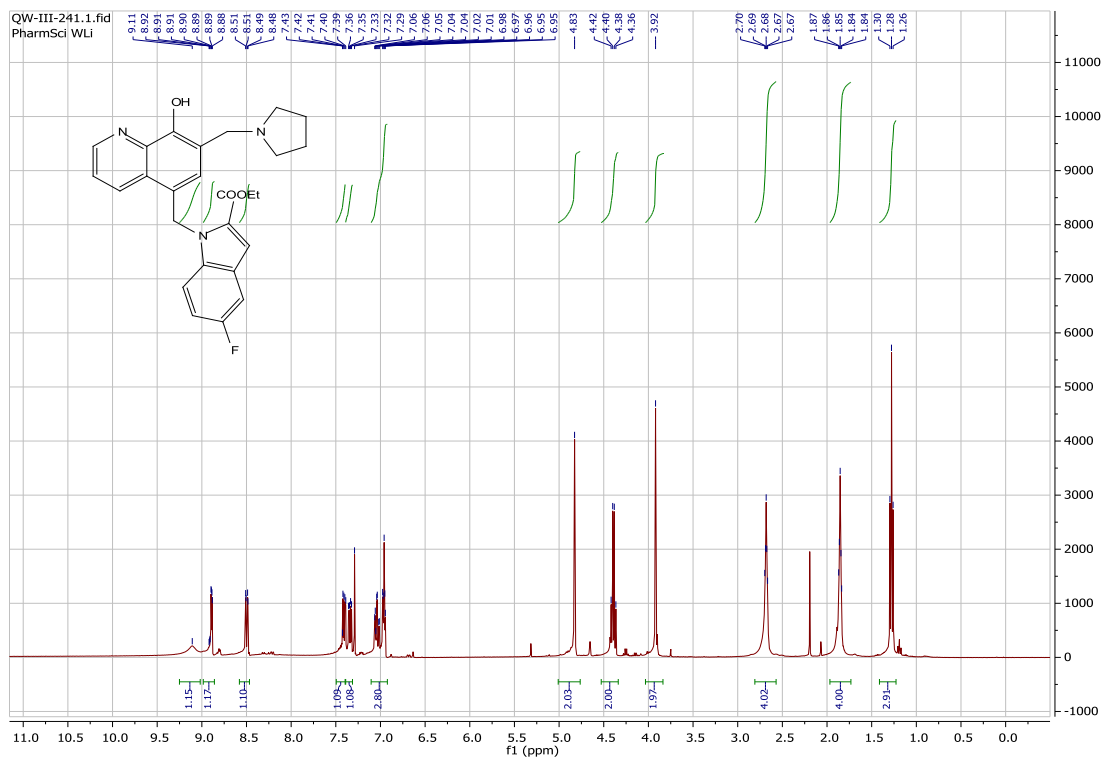
¹H-NMR of 10r



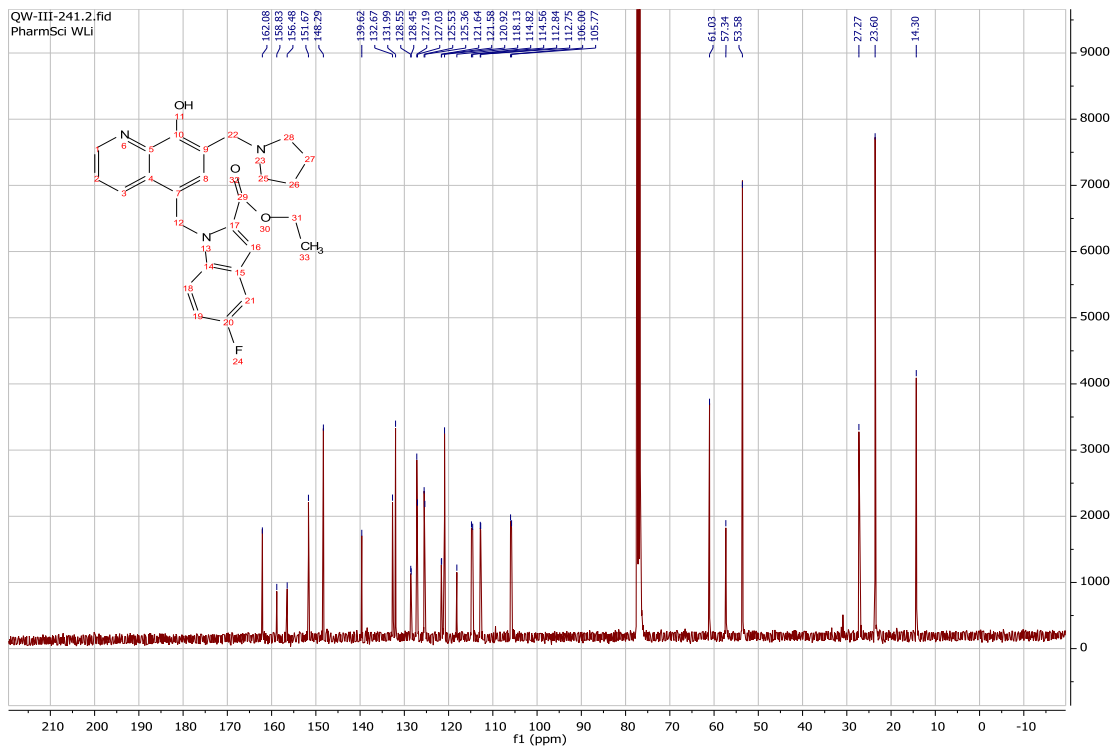
¹³C-NMR of 10r



HR-MS of 10r



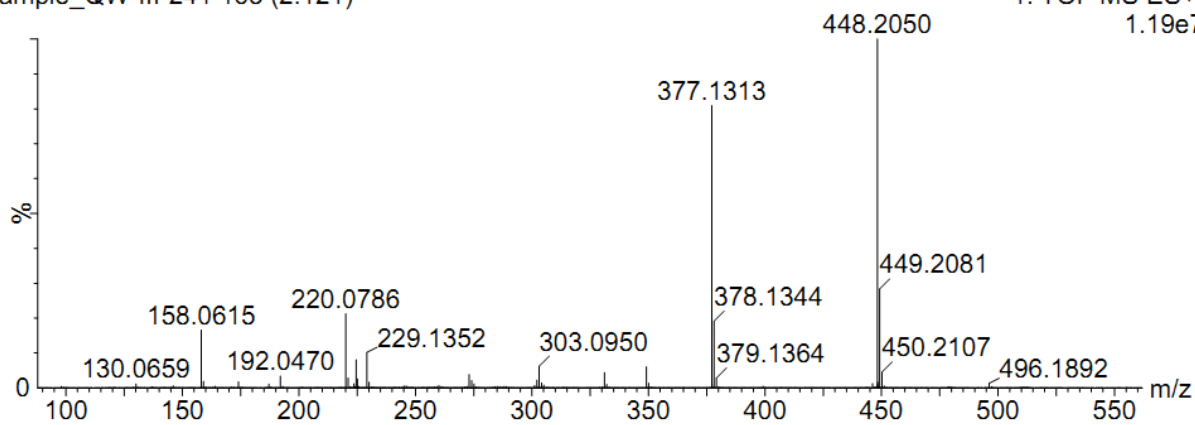
¹H-NMR of 10s



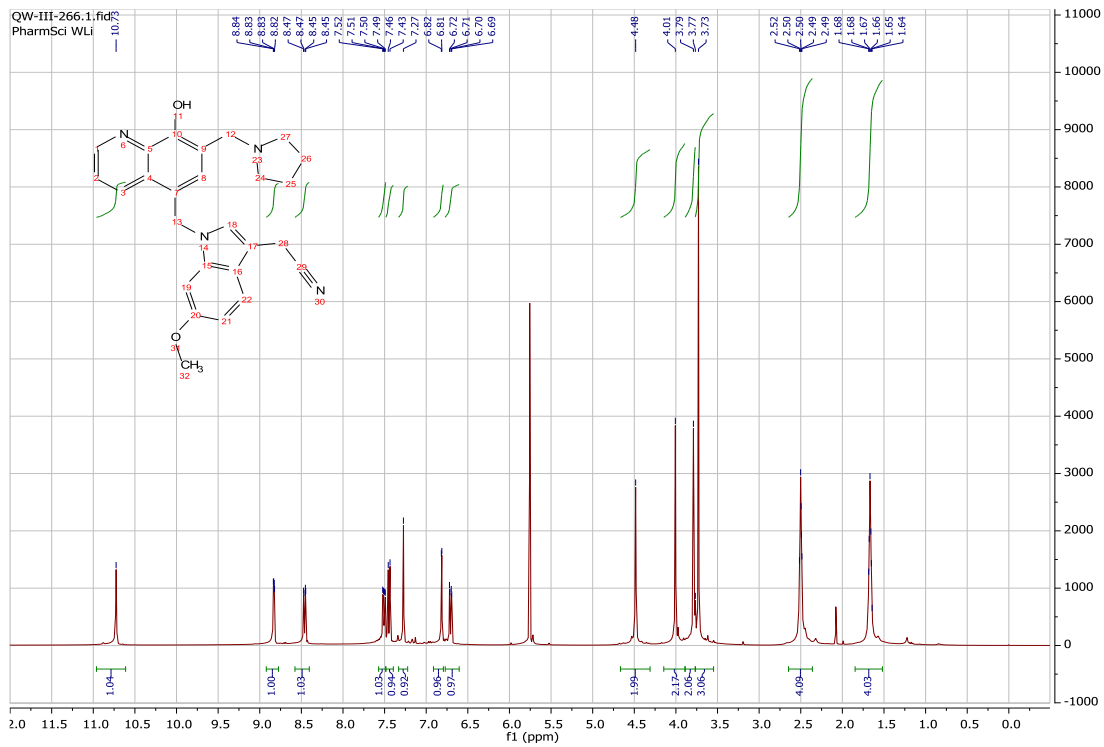
$^{13}\text{C-NMR}$ of 10s

Sample_QW-III-241 163 (2.121)

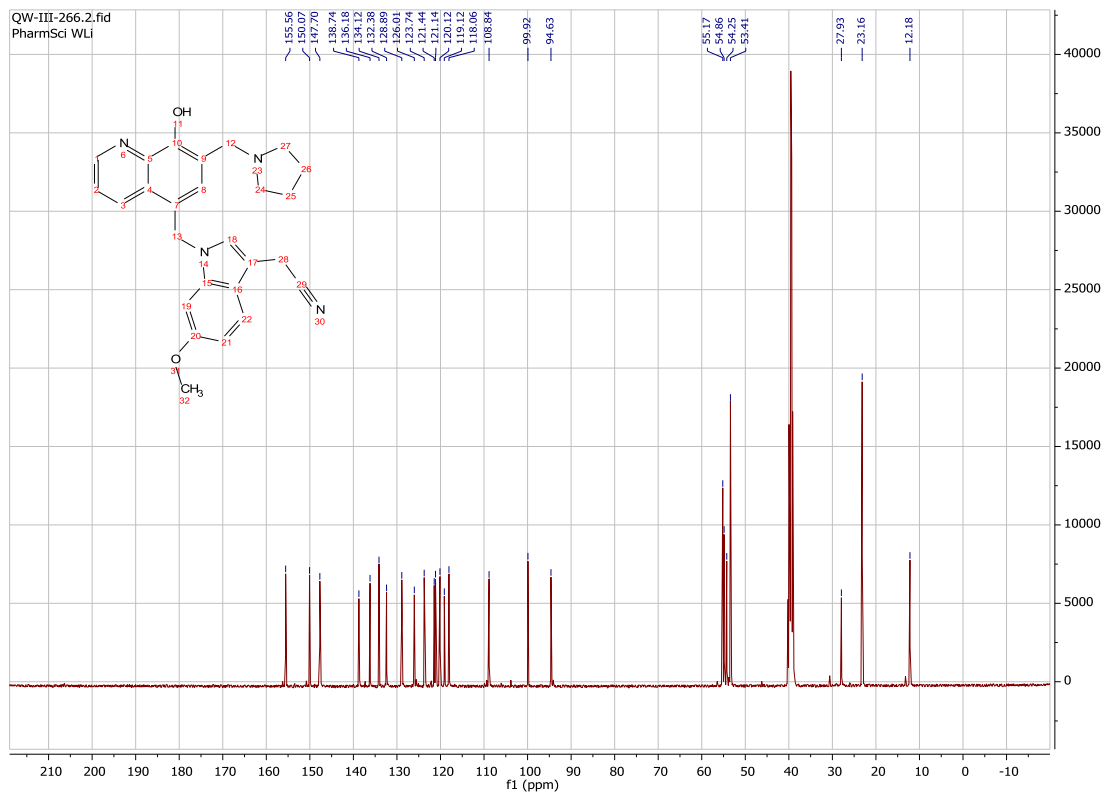
1: TOF MS ES+
1.19e7



HR-MS of 10s

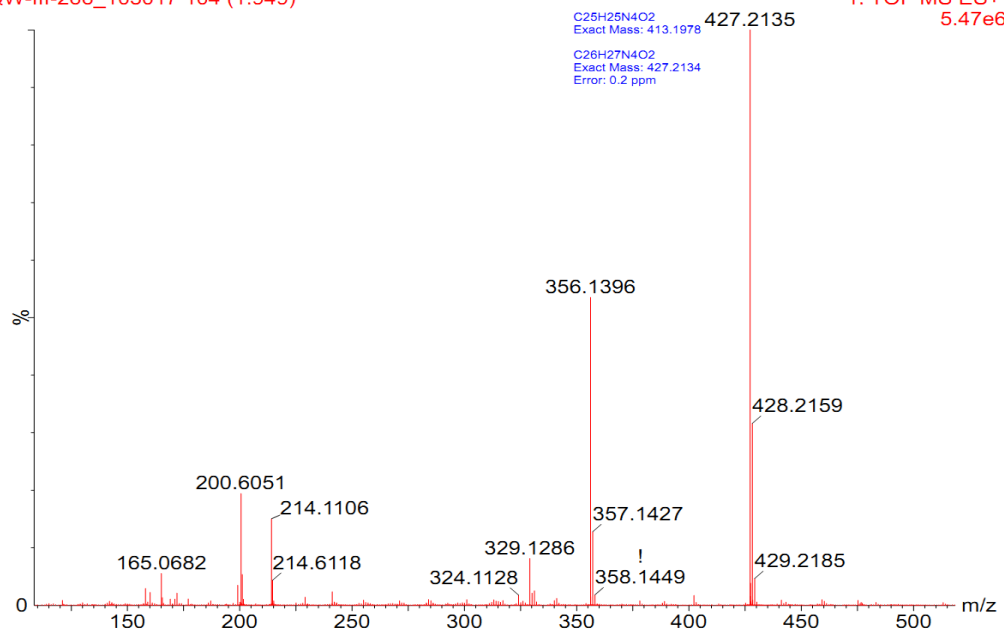


¹H-NMR of 10t



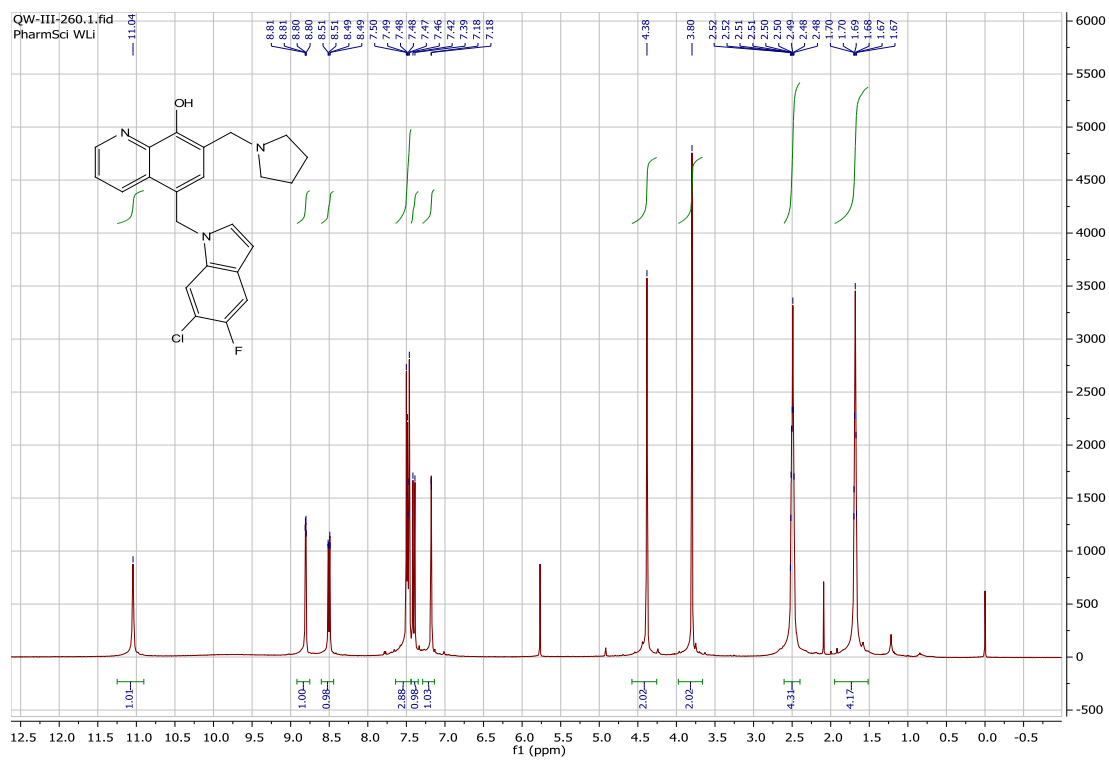
¹³C-NMR of 10t

QW-III-266_103017 104 (1.949)

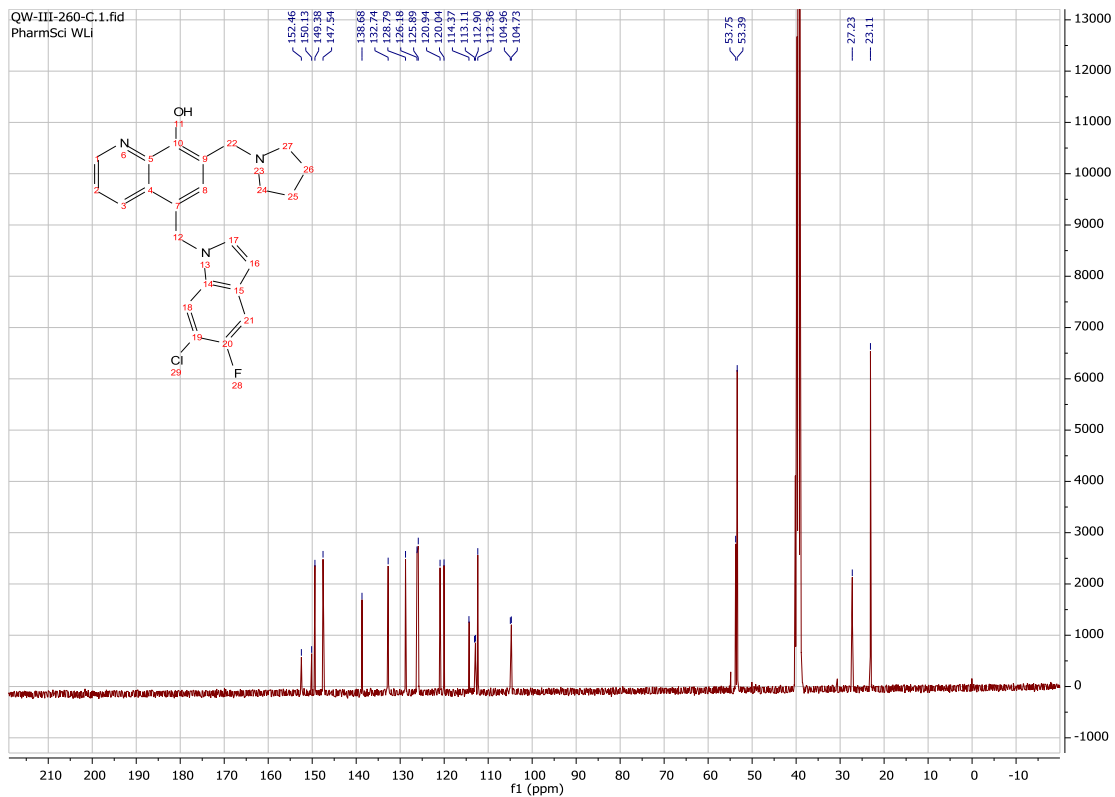


1: TOF MS ES+
5.47e6

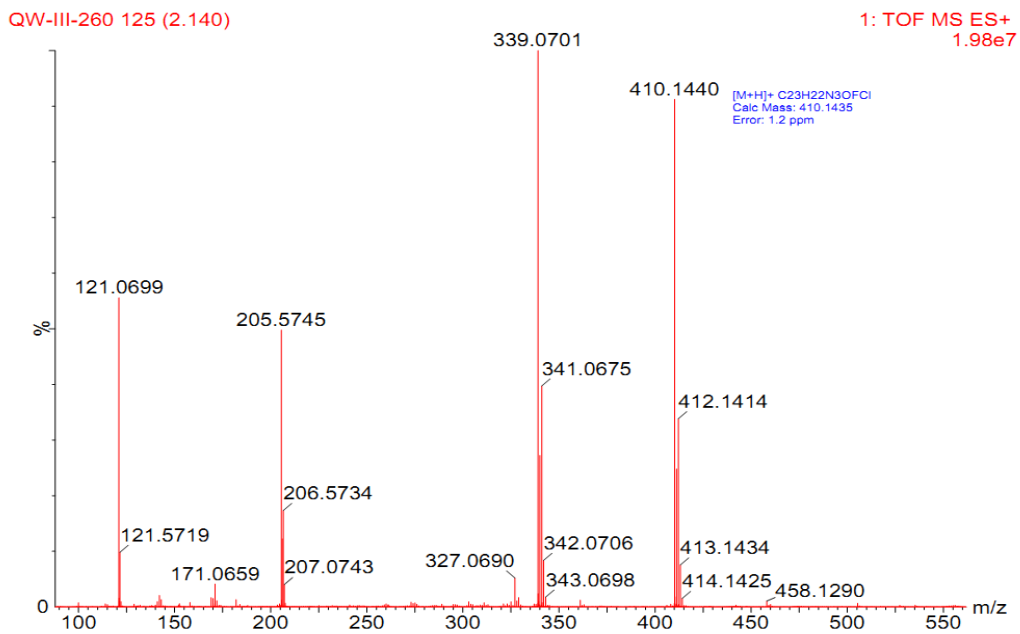
HR-MS of 10t



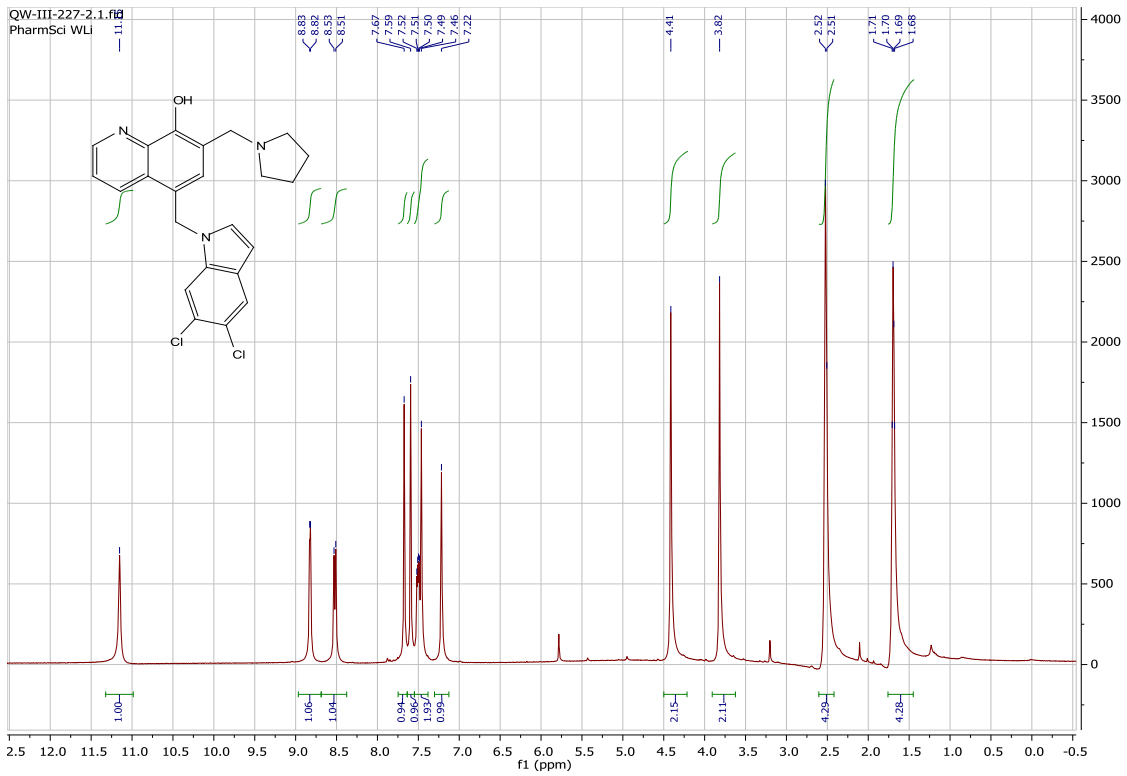
¹H-NMR of 10u



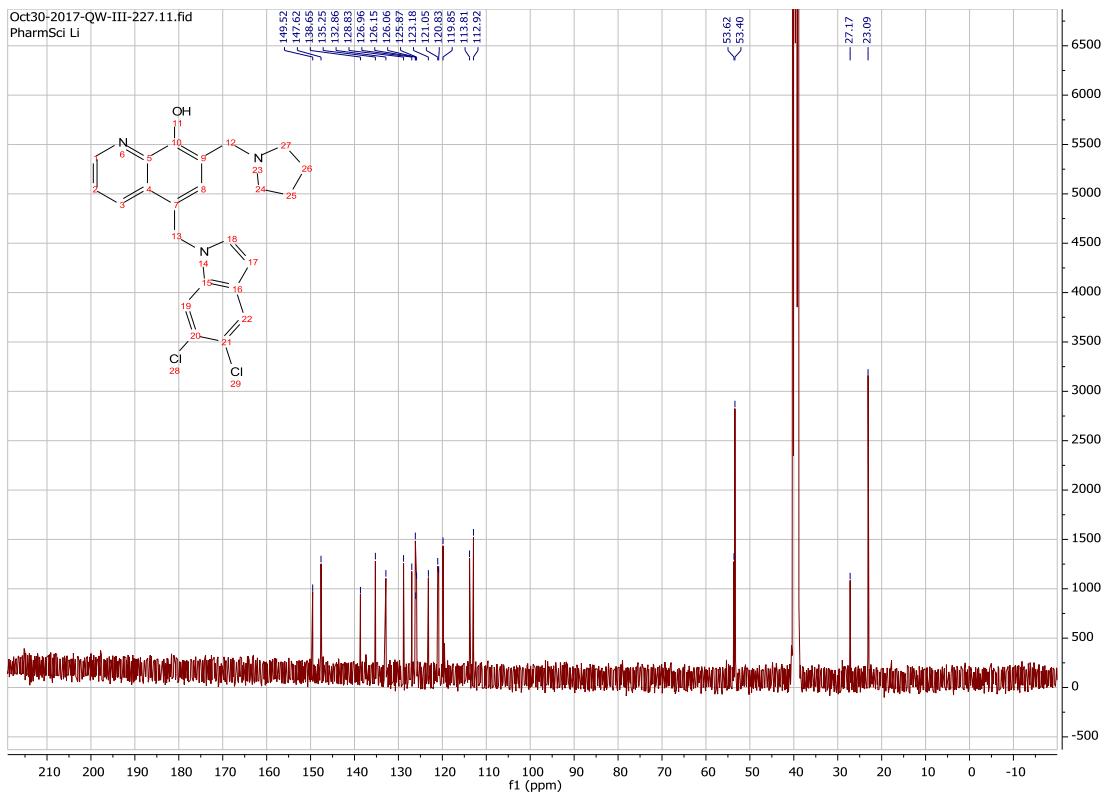
$^{13}\text{C-NMR}$ of **10u**



HR-MS of **10u**



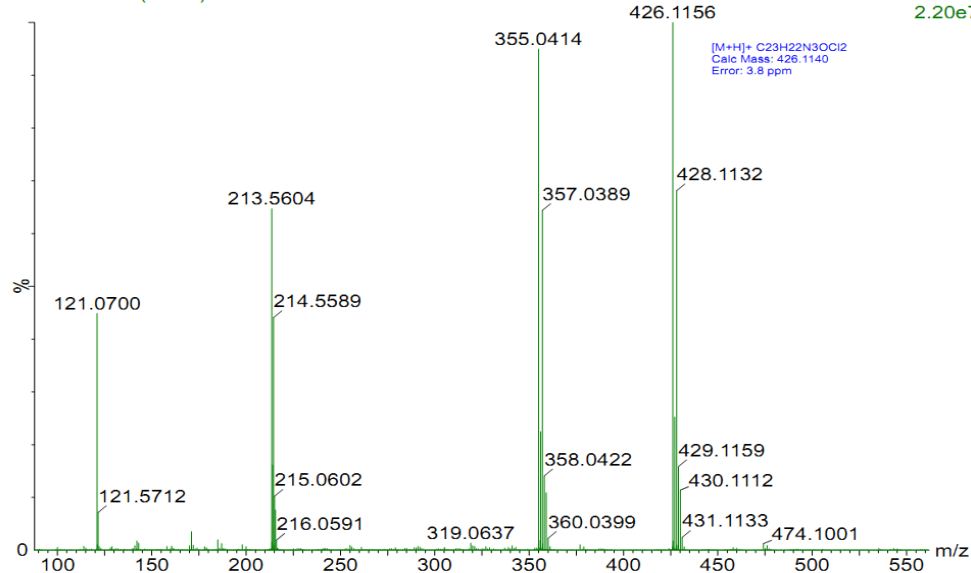
¹H-NMR of 10v



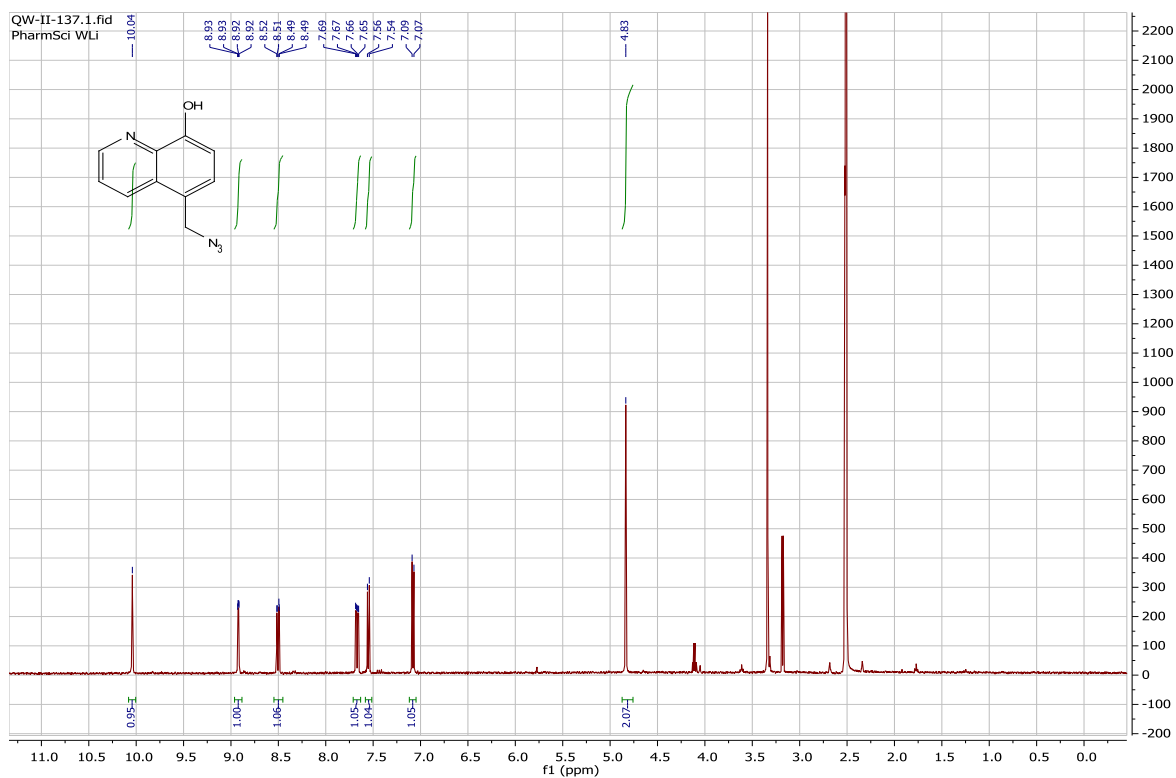
¹³C-NMR of 10v

QW-III-227 137 (2.255)

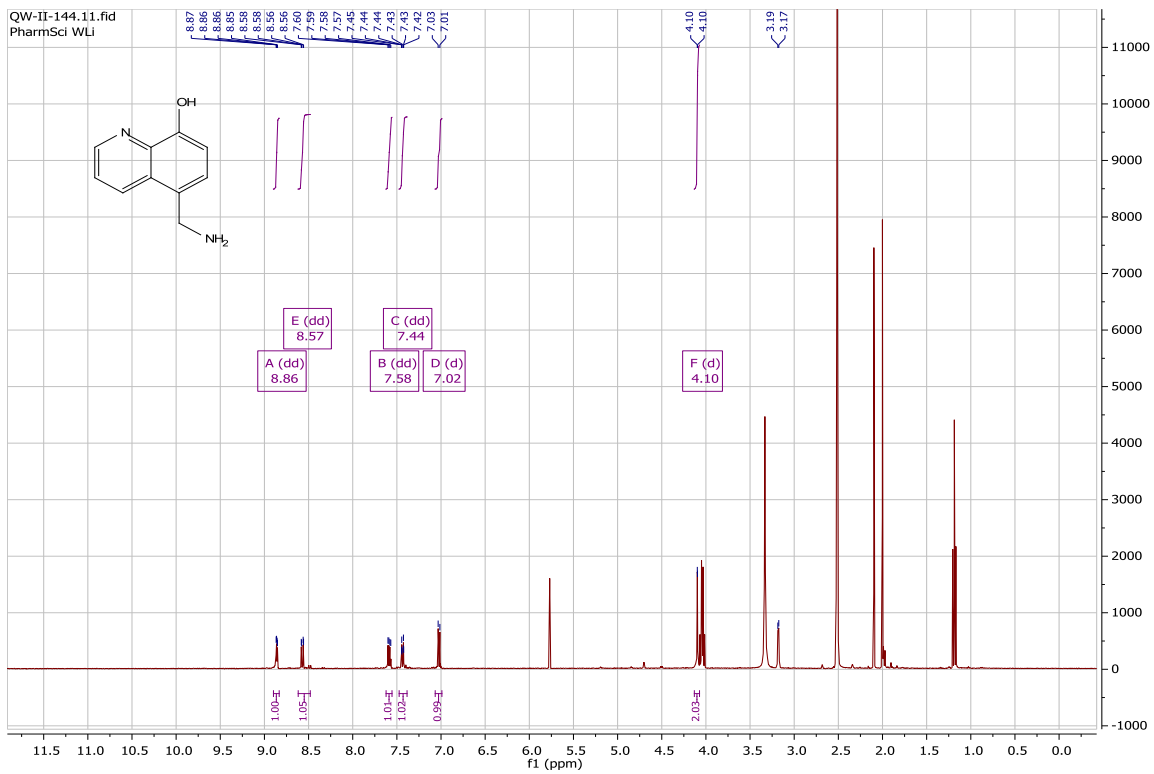
1: TOF MS ES+
2.20e7



HR-MS of 10v



1H -NMR of 3



¹H-NMR of 4

Figure S1. Surface representation of 10f binding in survivin protein. The right picture is obtained by rotating the left picture by 90 degrees to show the close latching of **10f** to survivin.