

Supplementary Material

Novel bivalent securinine mimetics as topoisomerase I inhibitors

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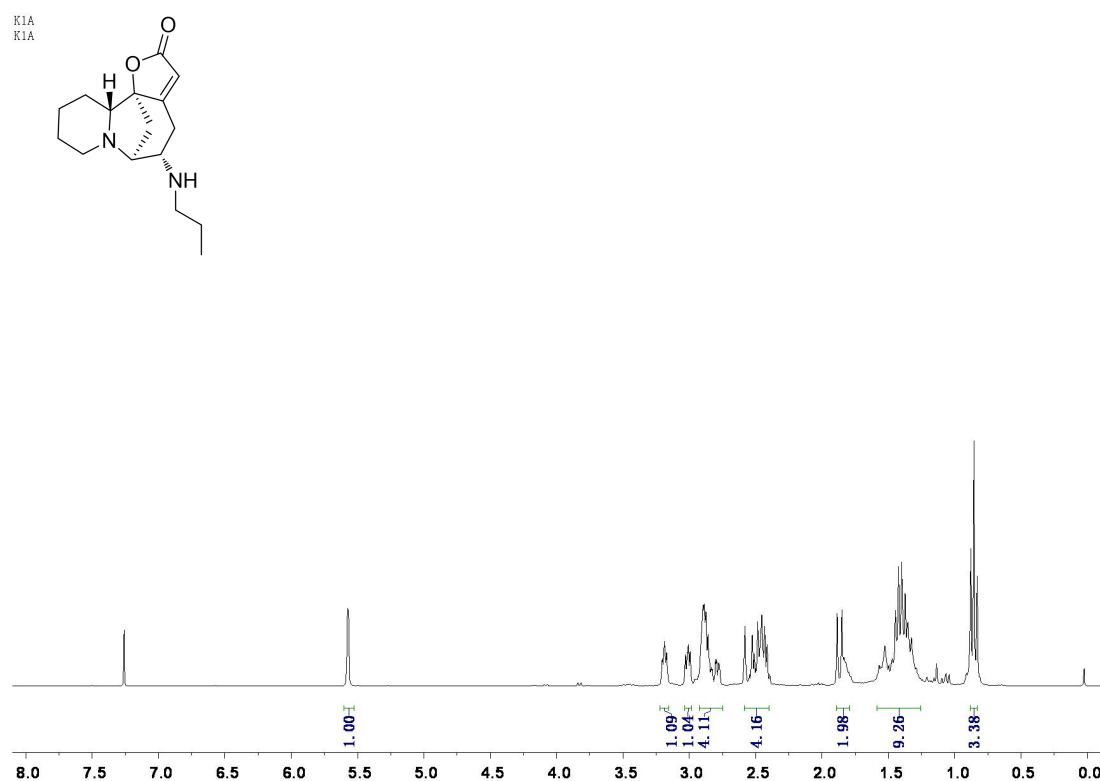
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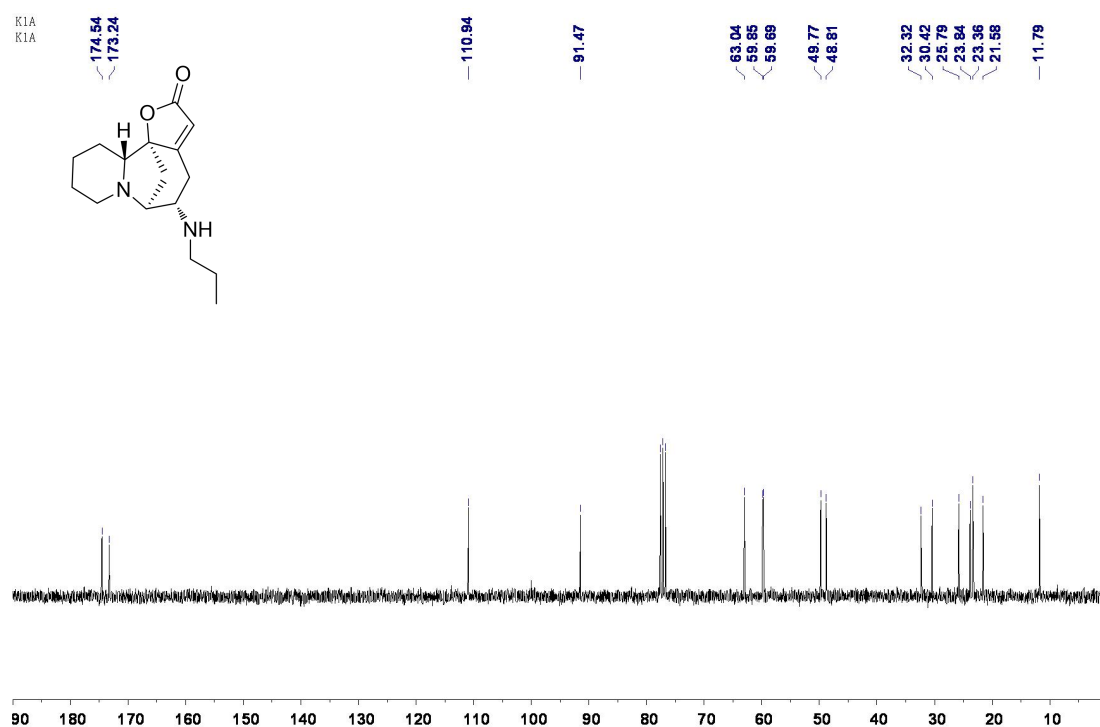
Supplementary Material Contents:

¹H NMR-Spectra, ¹³C NMR-spectra, LRMS or HRMS of target compounds

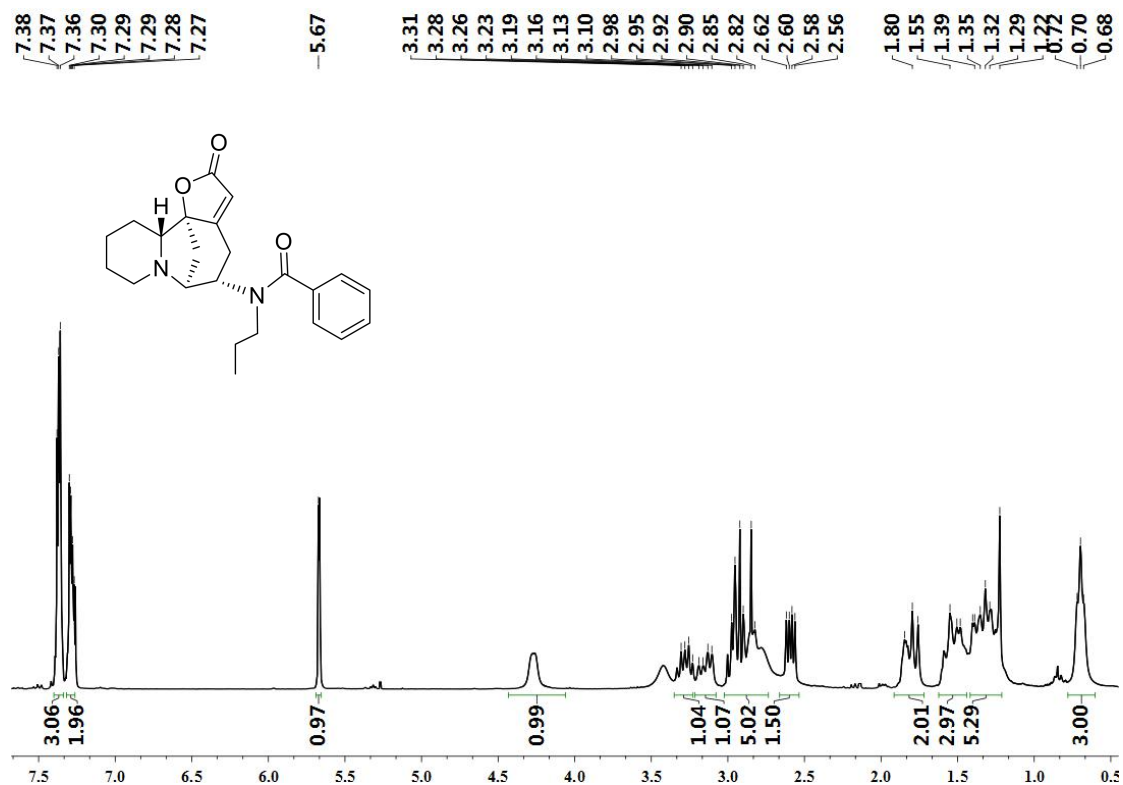
^1H NMR spectrum of **KA** (300 MHz, CDCl_3)



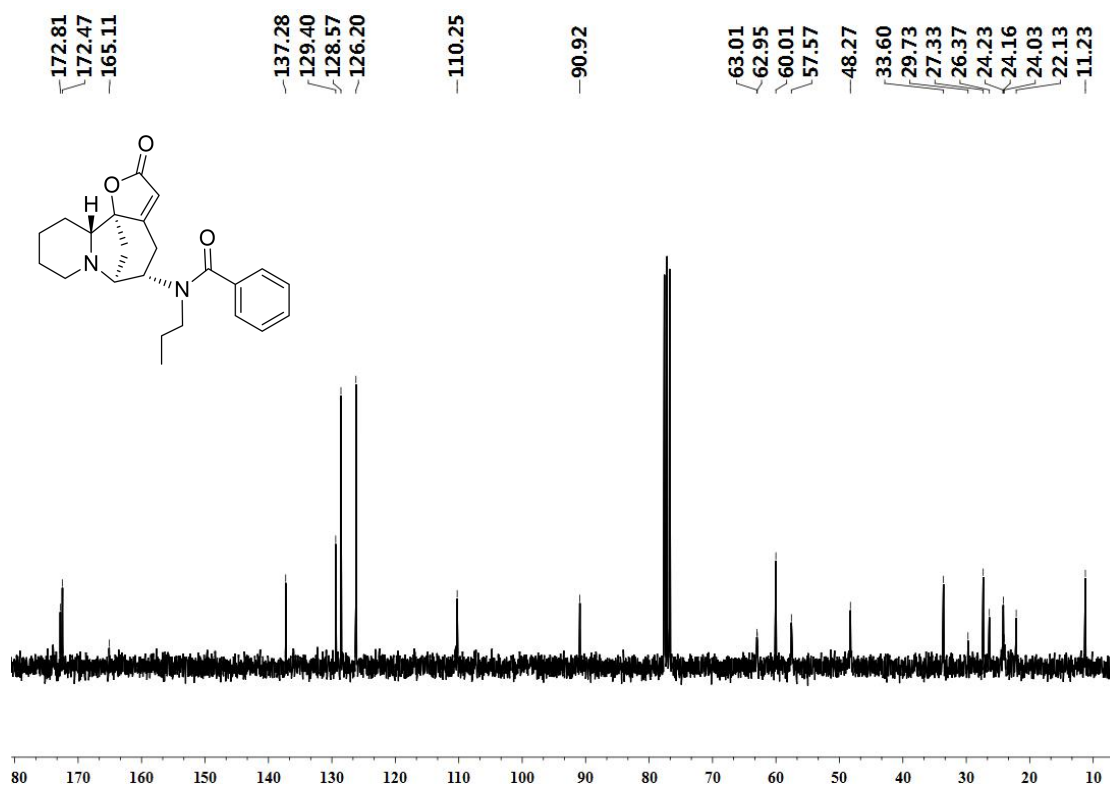
^{13}C NMR spectrum of **KA** (75 MHz, CDCl_3)



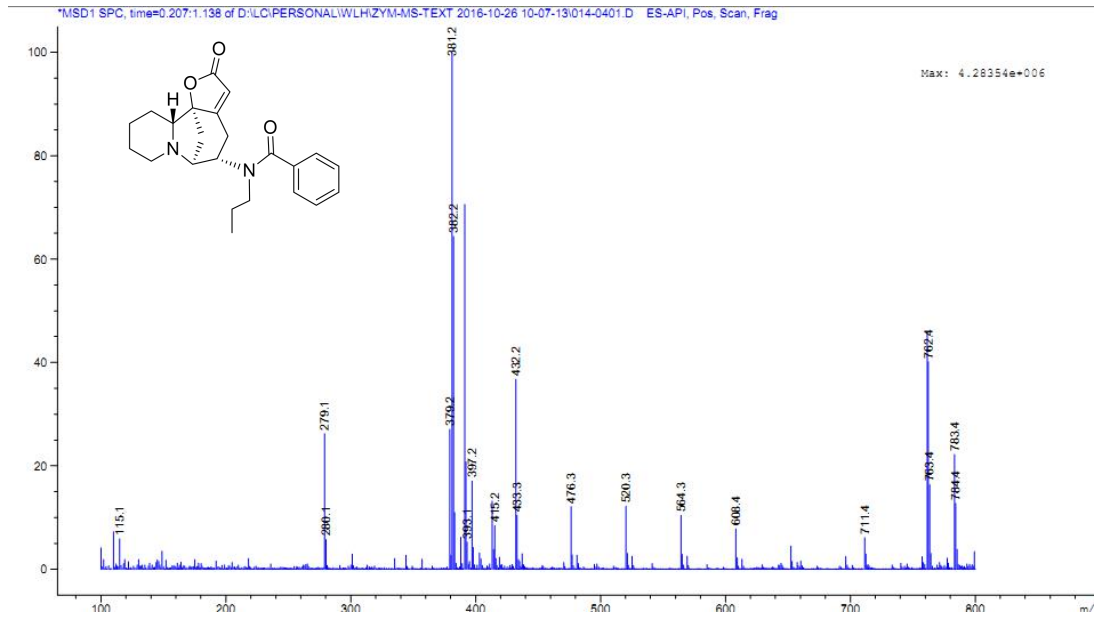
^1H NMR spectrum of **M2** (300 MHz, CDCl_3)



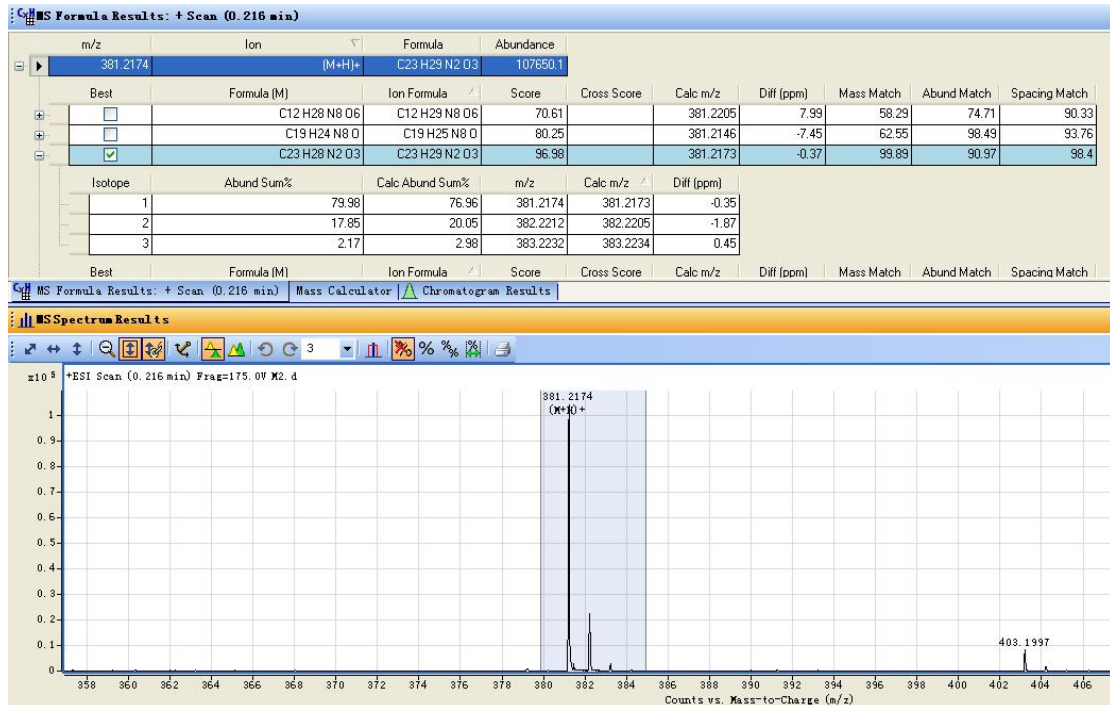
^{13}C NMR spectrum of **M2** (75 MHz, CDCl_3)



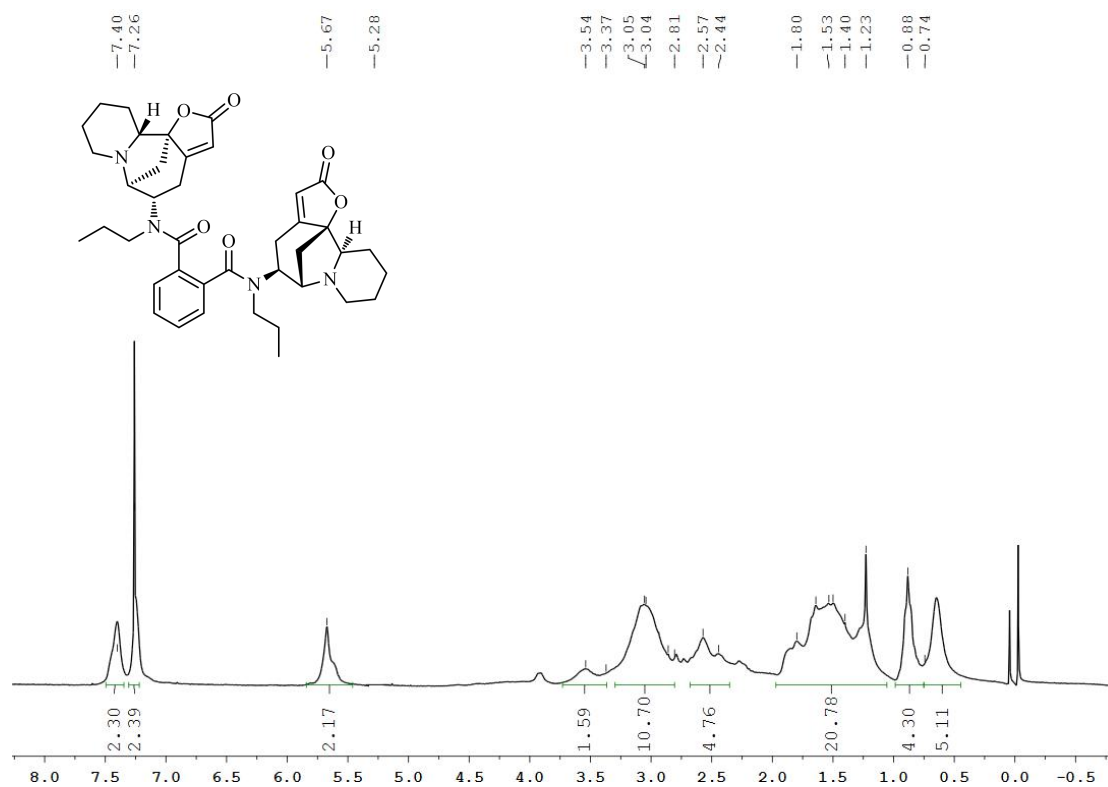
ESI-MS of compound M2



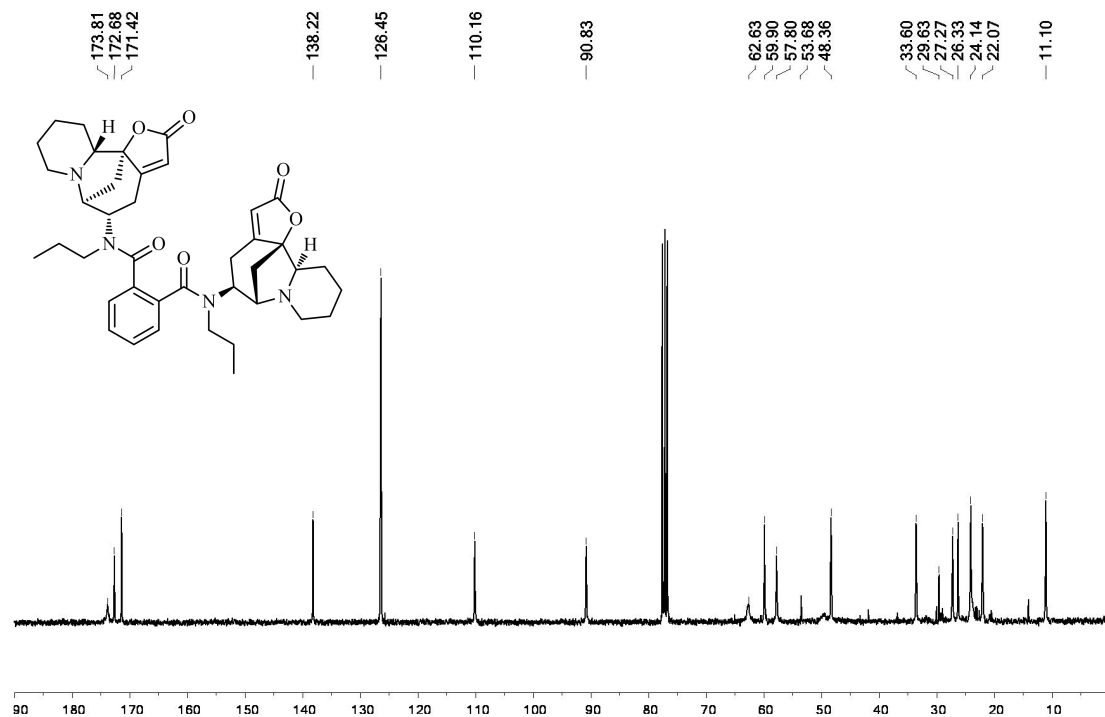
HRMS of compound M2



^1H NMR spectrum of **R1** (300 MHz, CDCl_3)

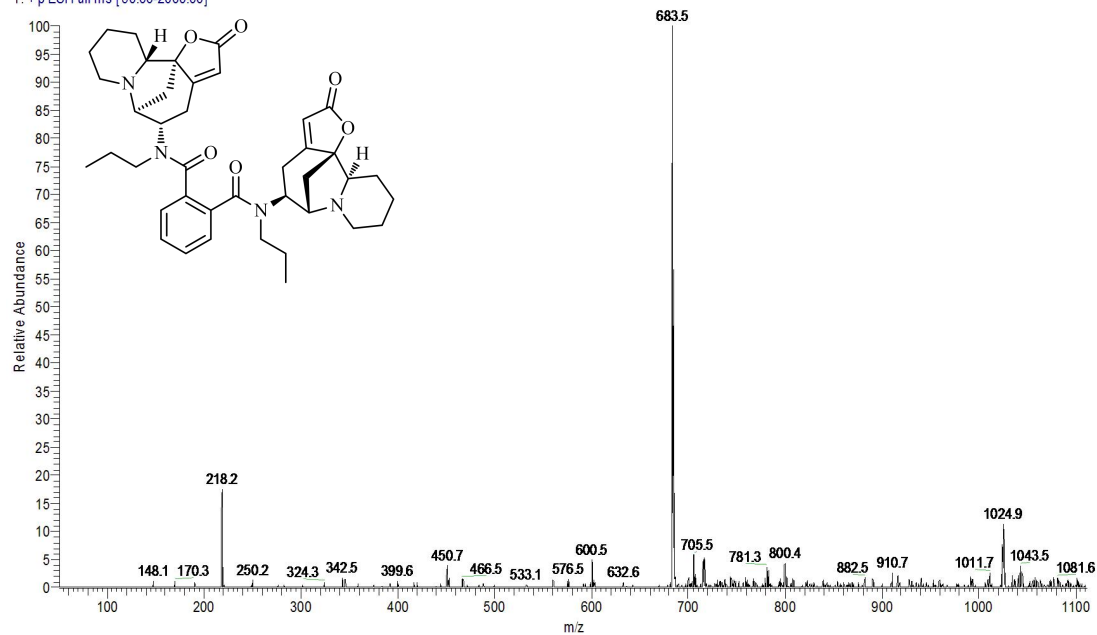


^{13}C NMR spectrum of **R1** (75 MHz, CDCl_3)

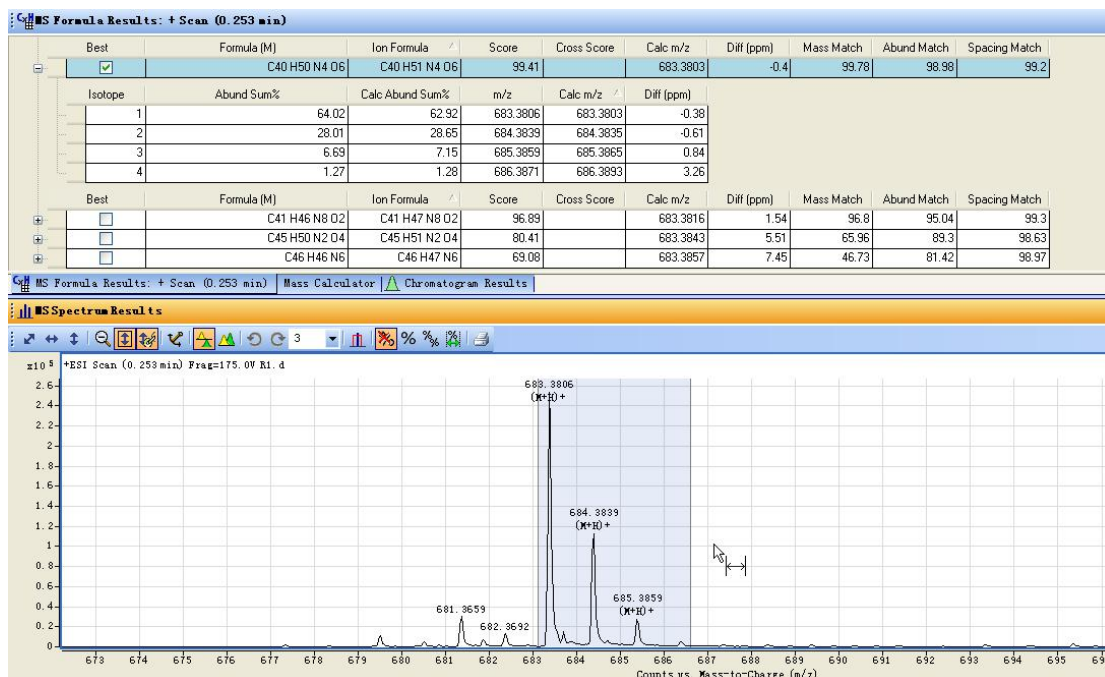


ESI-MS spectrum of R1

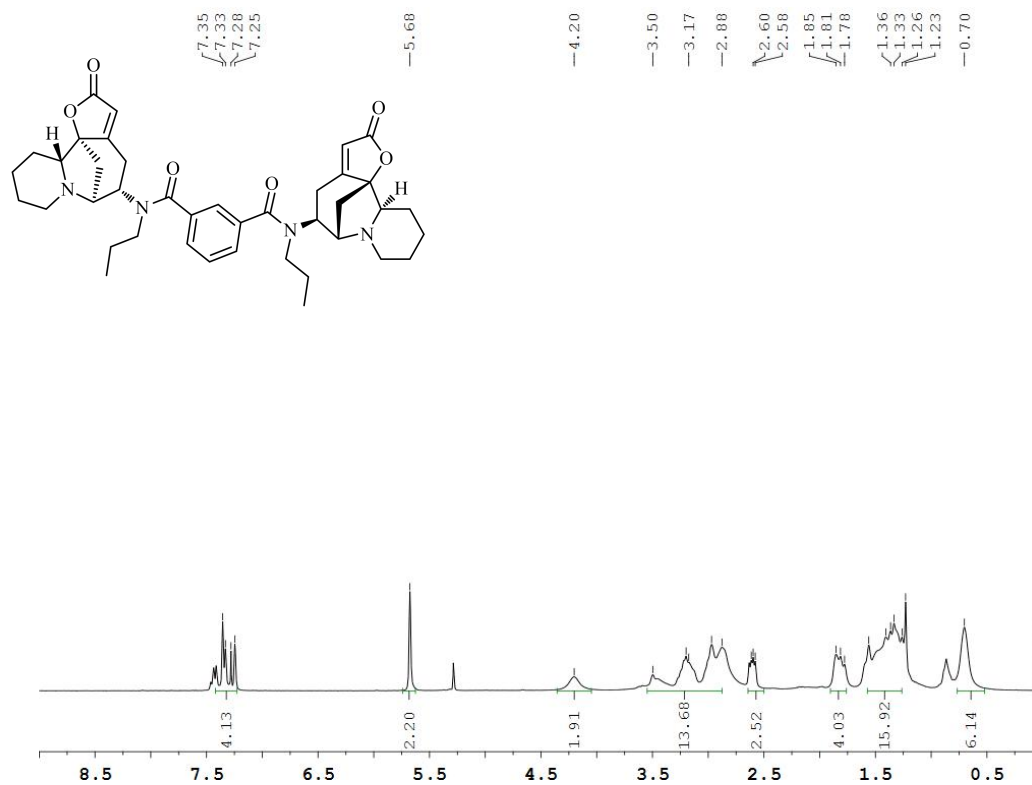
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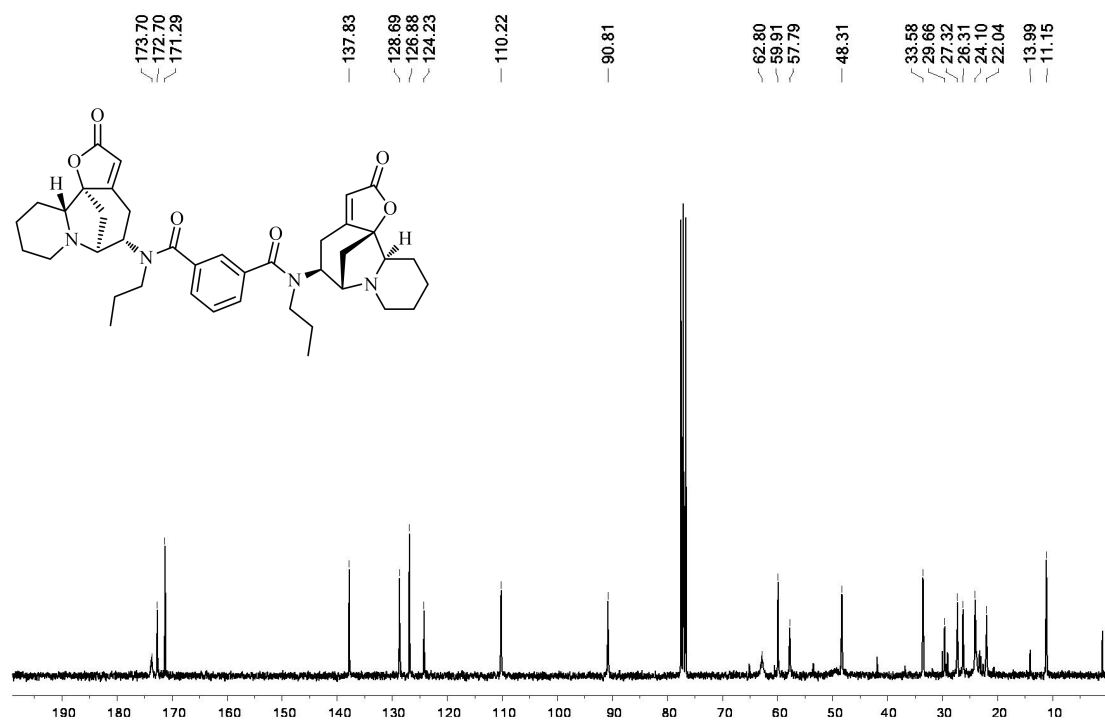
HRMS of compound R1



¹H NMR spectrum of **R2** (300 MHz, CDCl₃)

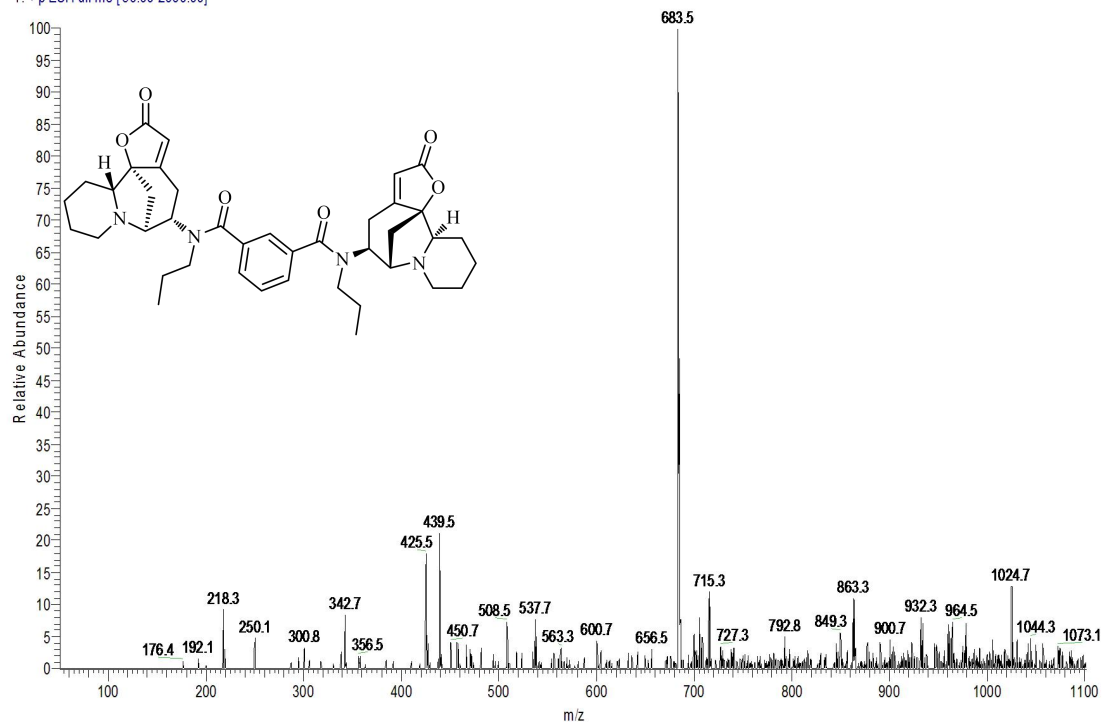
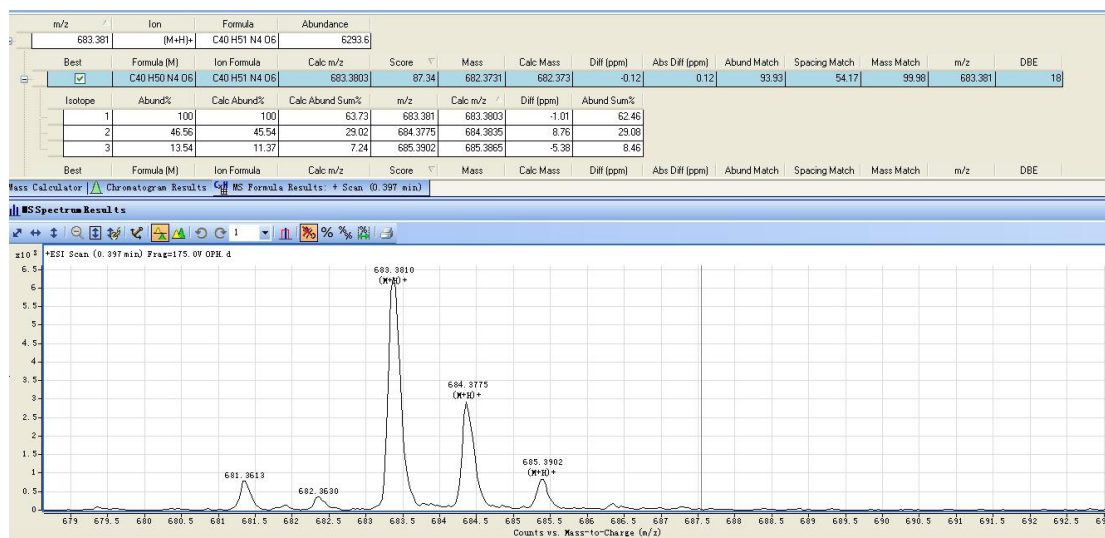


¹³C NMR spectrum of **R2** (75 MHz, CDCl₃)

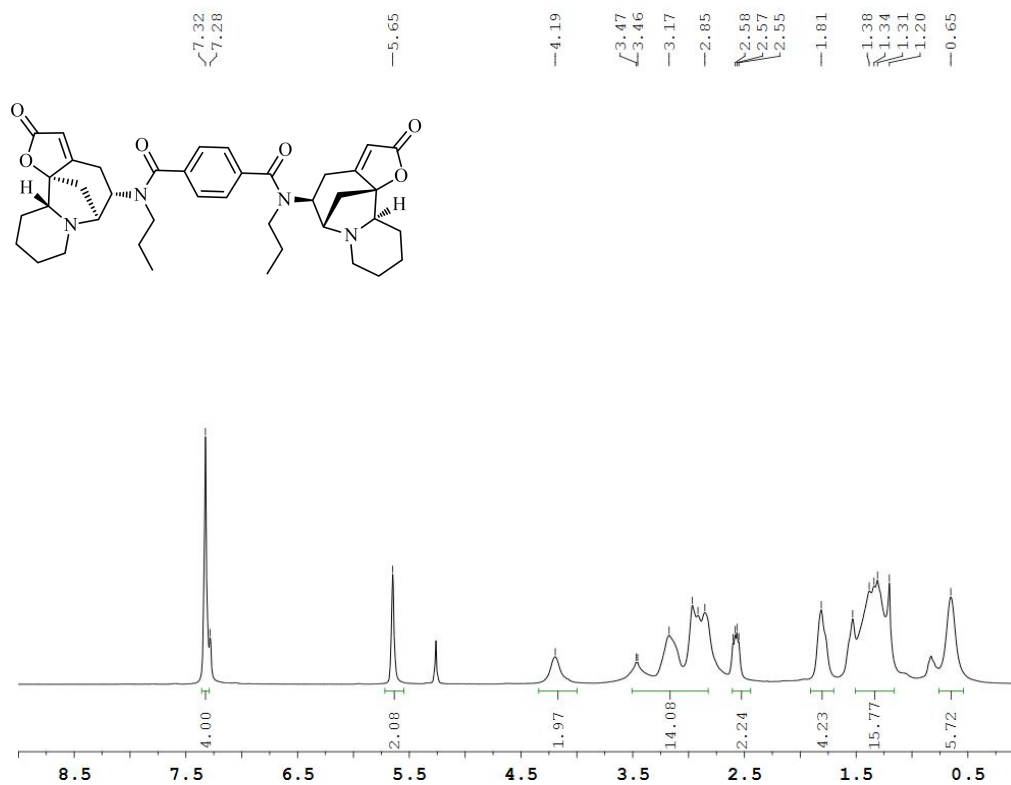


ESI-MS spectrum of **R2**

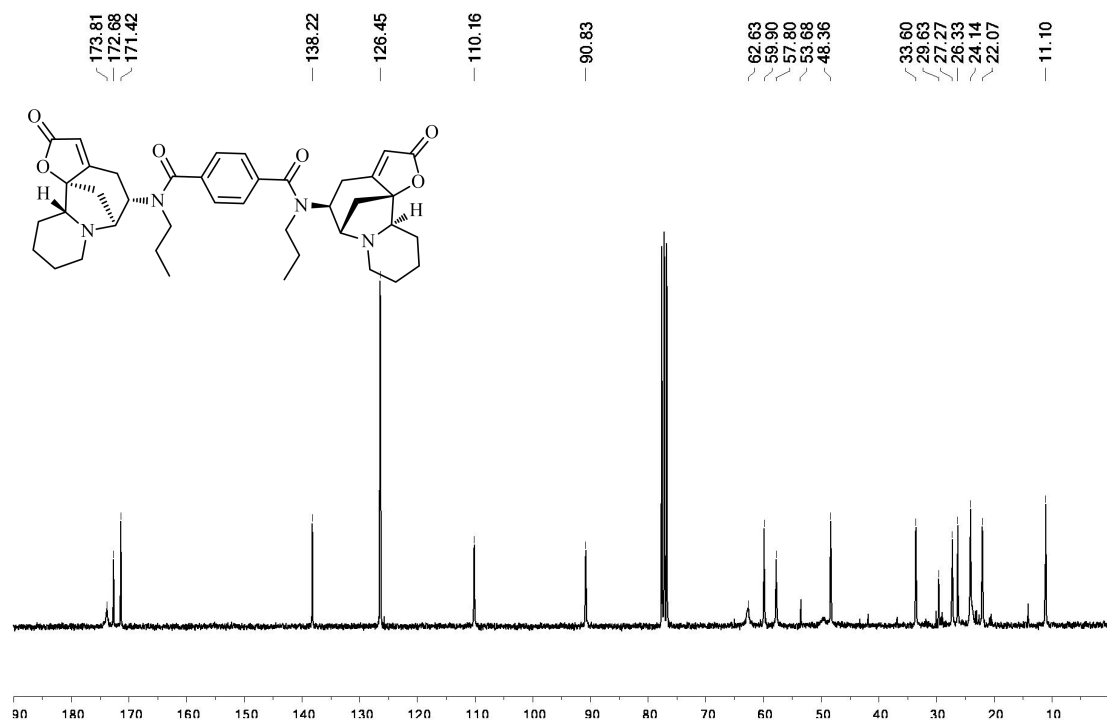
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HRMS of compound **R2**

^1H NMR spectrum of **R3** (300 MHz, CDCl_3)

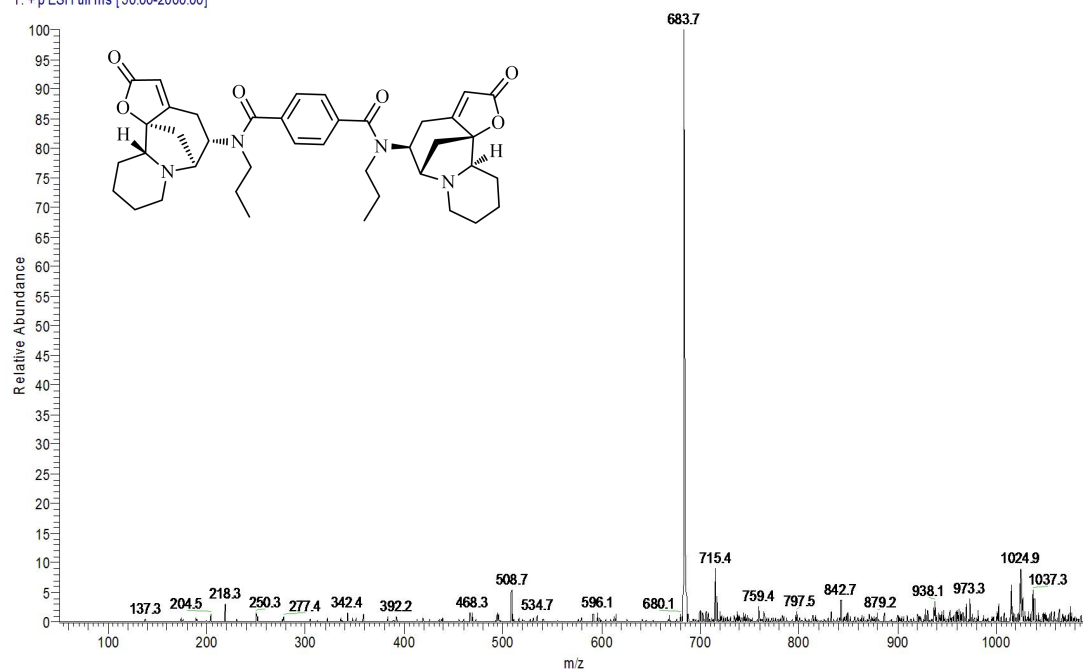


^{13}C NMR spectrum of **R3** (75 MHz, CDCl_3)

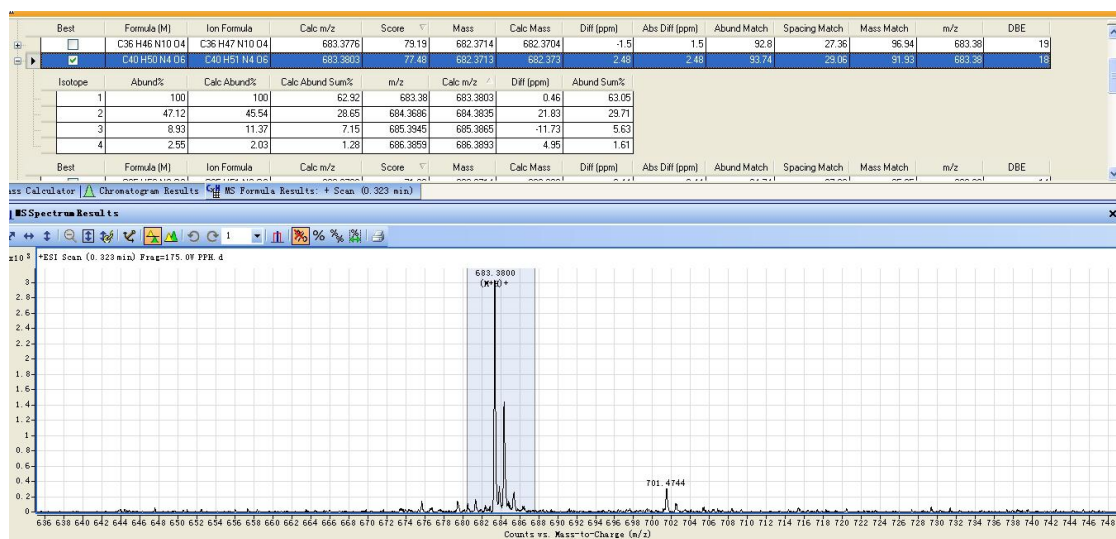


ESI-MS spectrum of **R3**

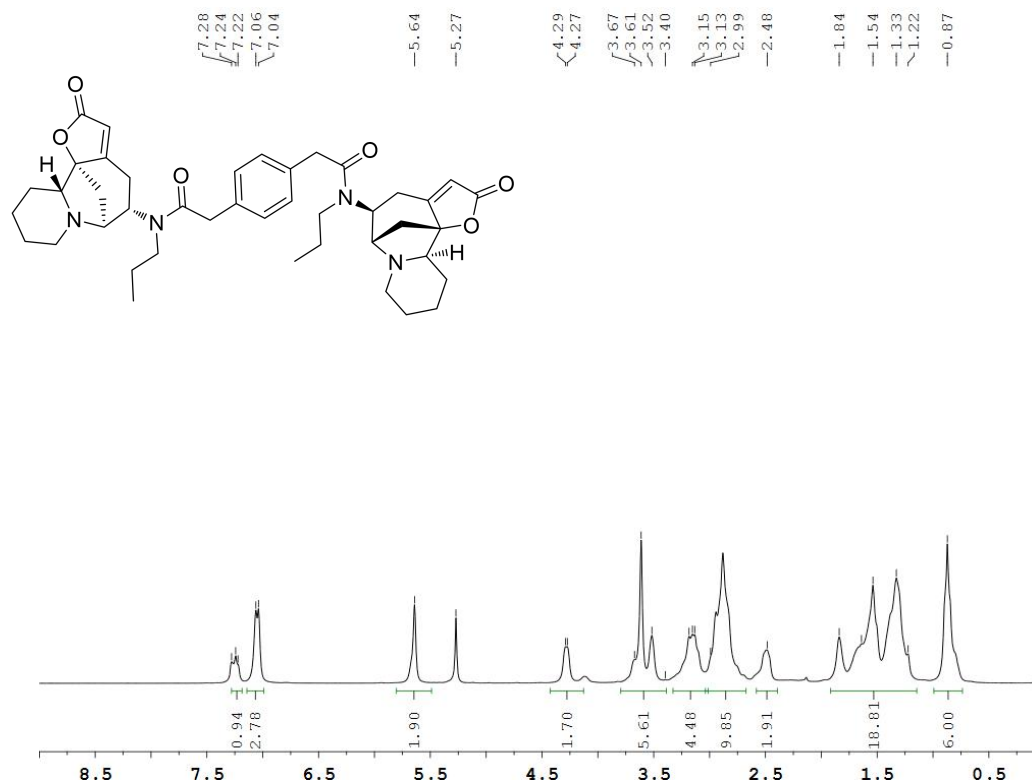
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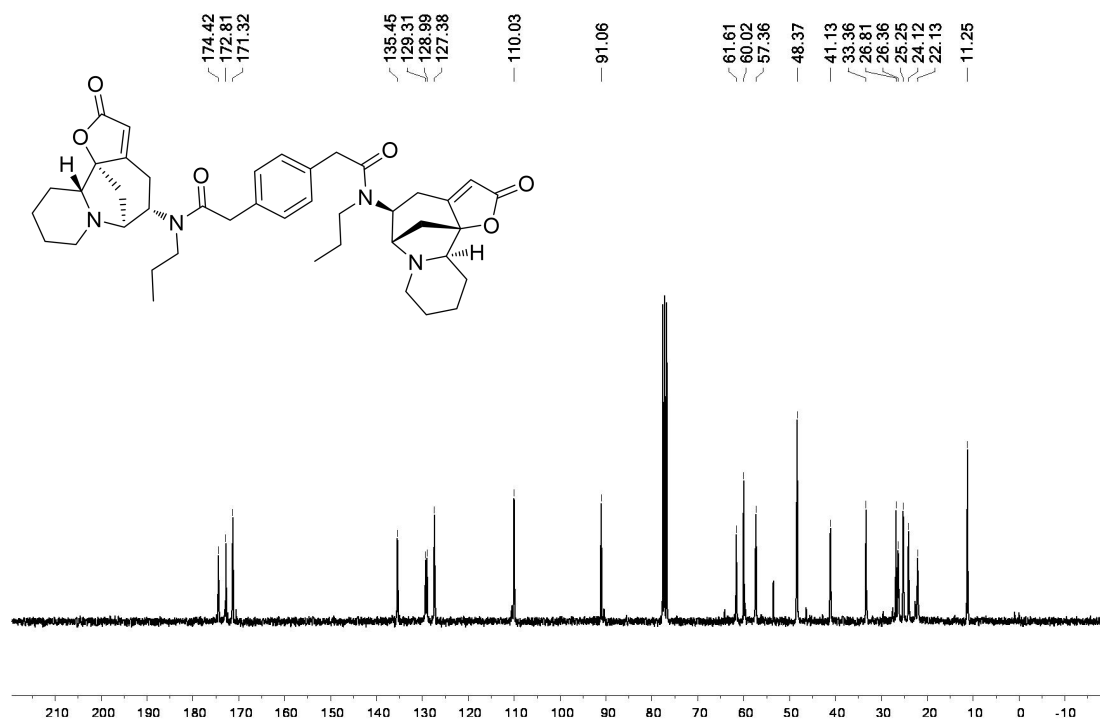
HRMS of compound **R3**



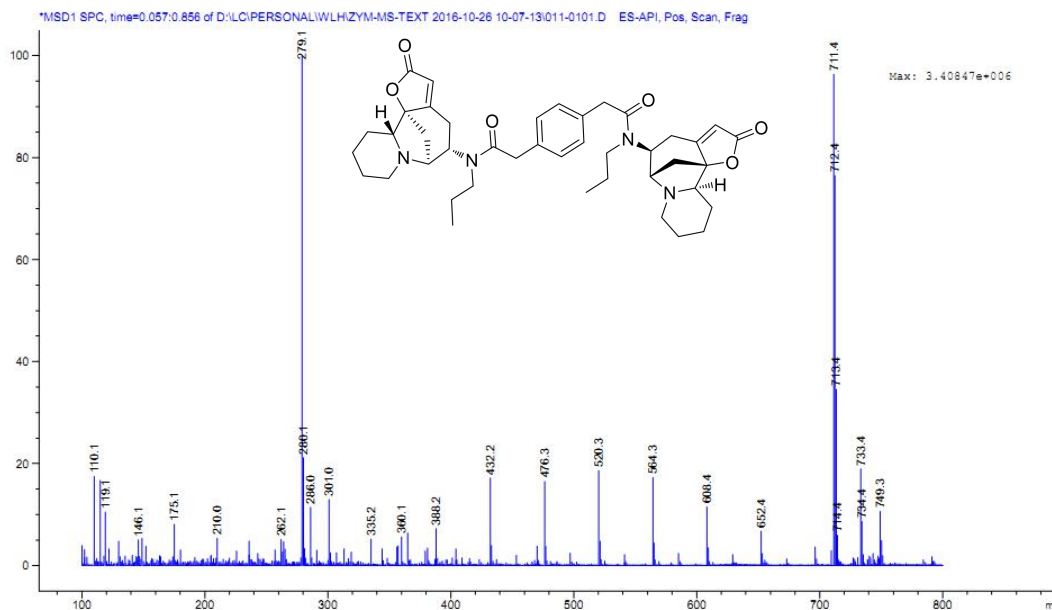
^1H NMR spectrum of **R4** (300 MHz, CDCl_3)



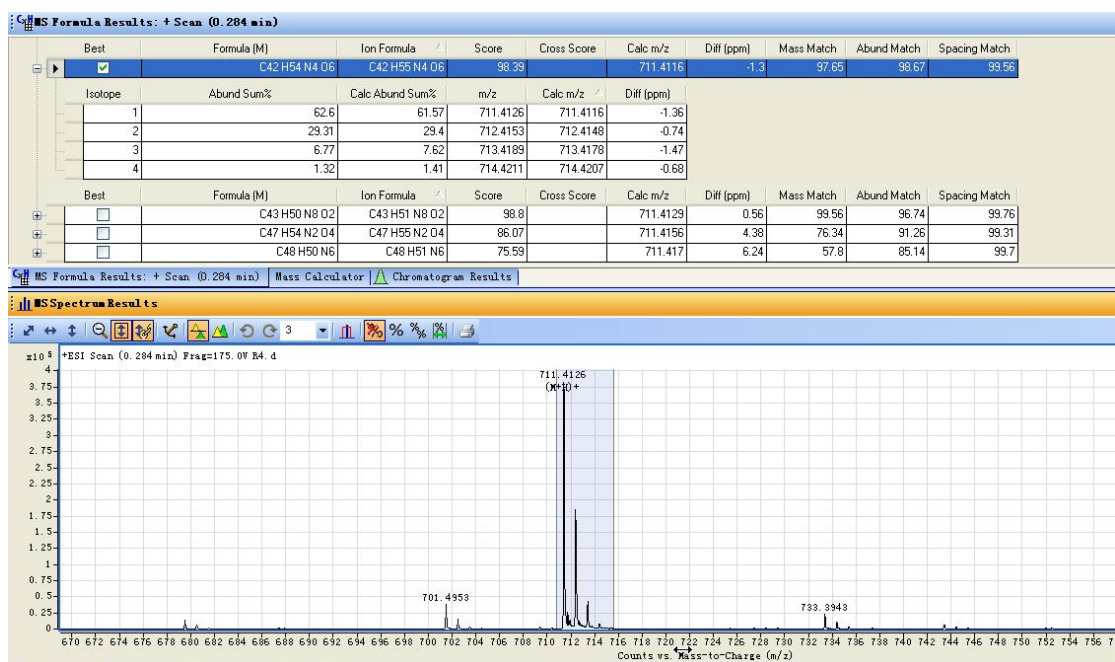
^{13}C NMR spectrum of **R4** (75 MHz, CDCl_3)



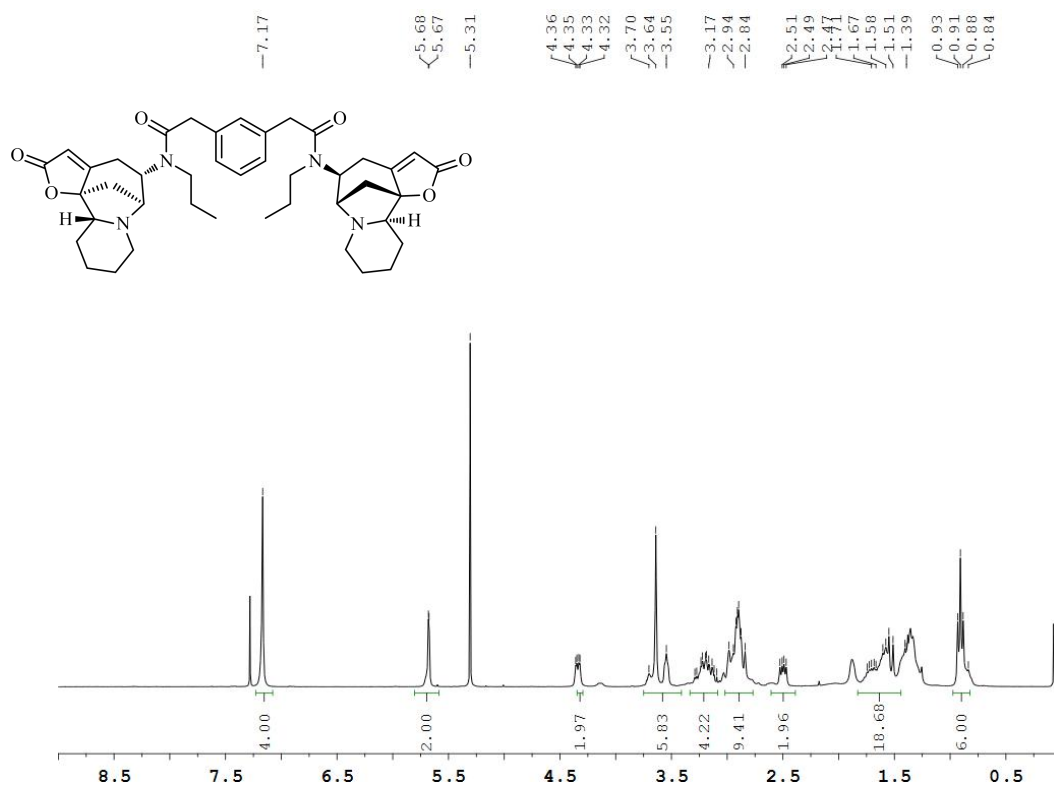
ESI-MS spectrum of R4



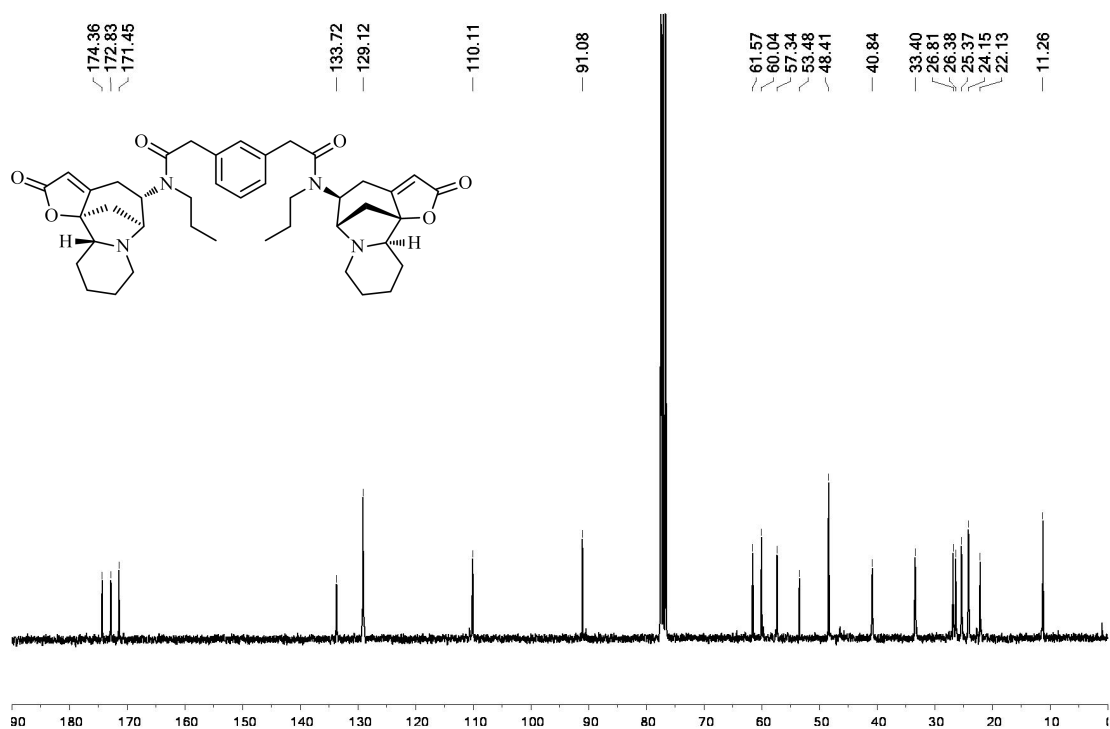
HRMS of compound R4



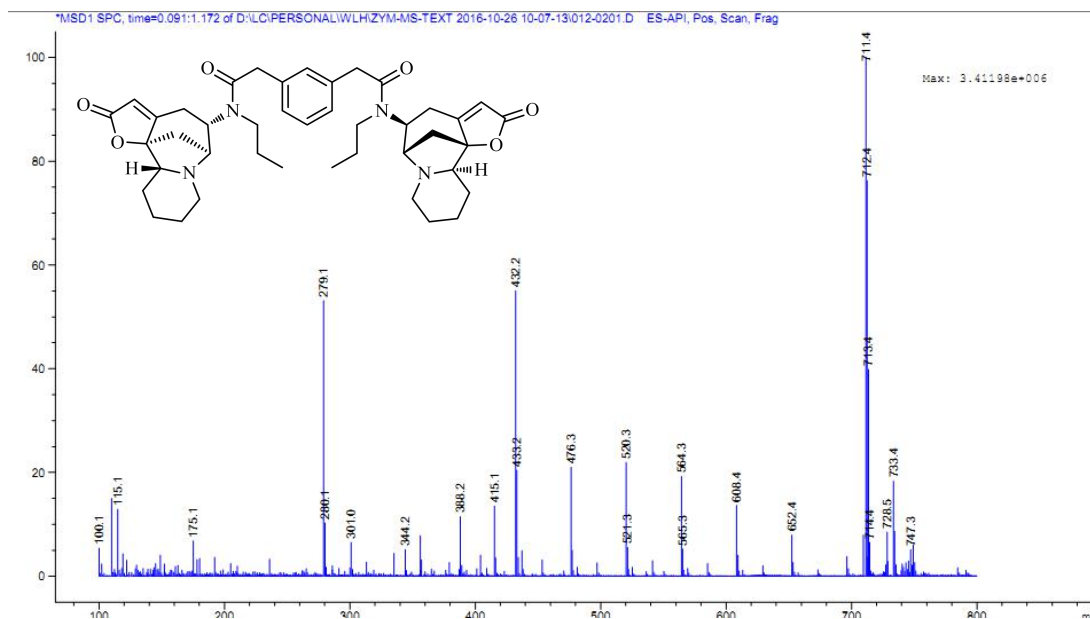
^1H NMR spectrum of **R5** (300 MHz, CDCl_3)



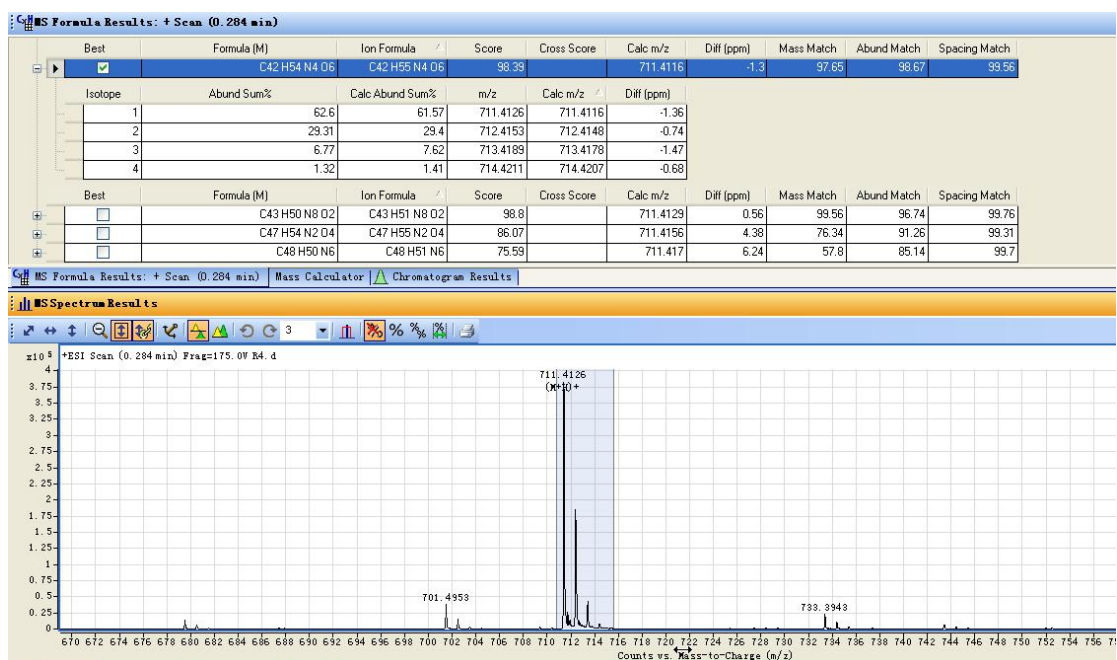
^{13}C NMR spectrum of **R5** (75 MHz, CDCl_3)



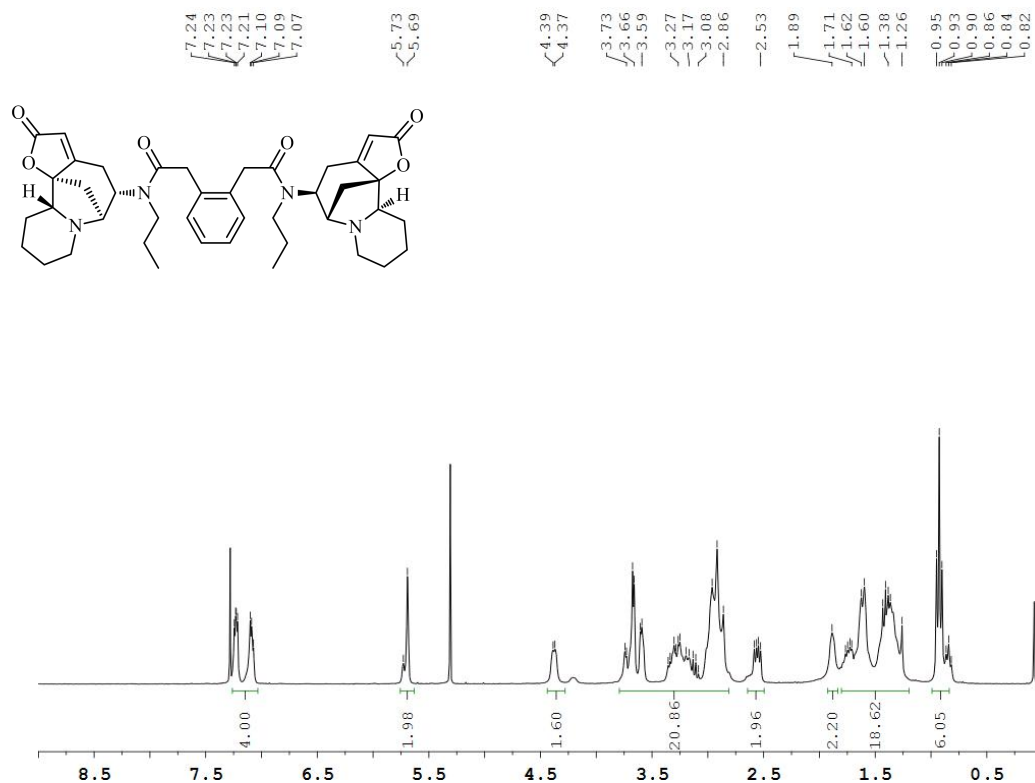
ESI-MS spectrum of R5



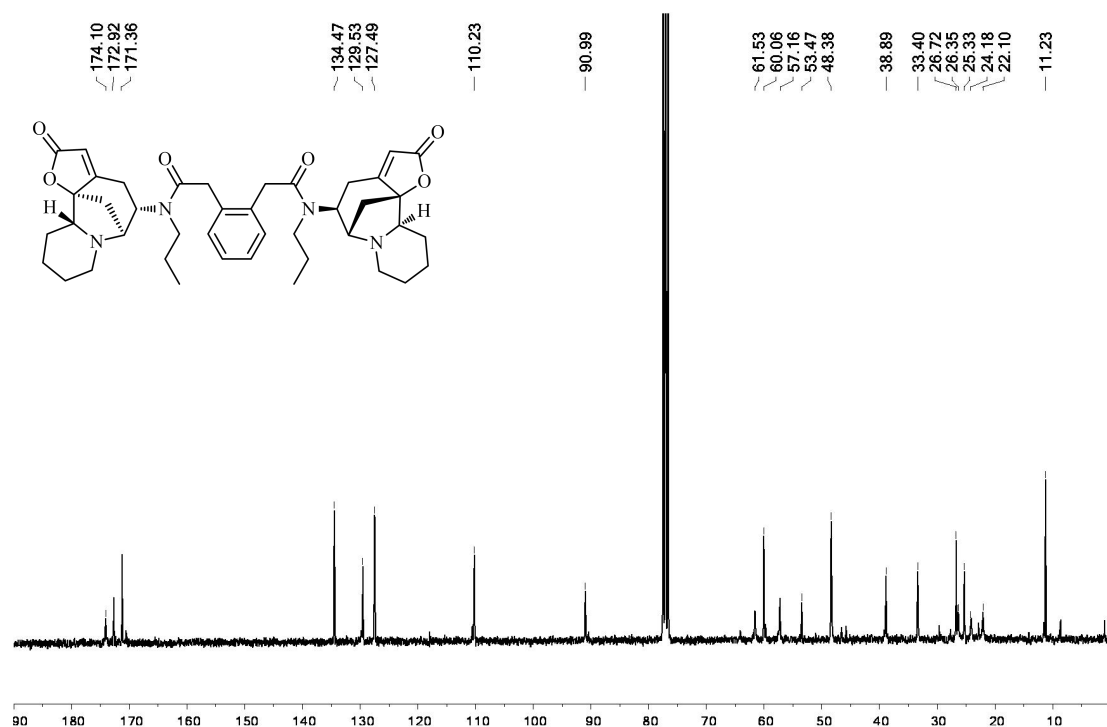
HRMS of compound R5

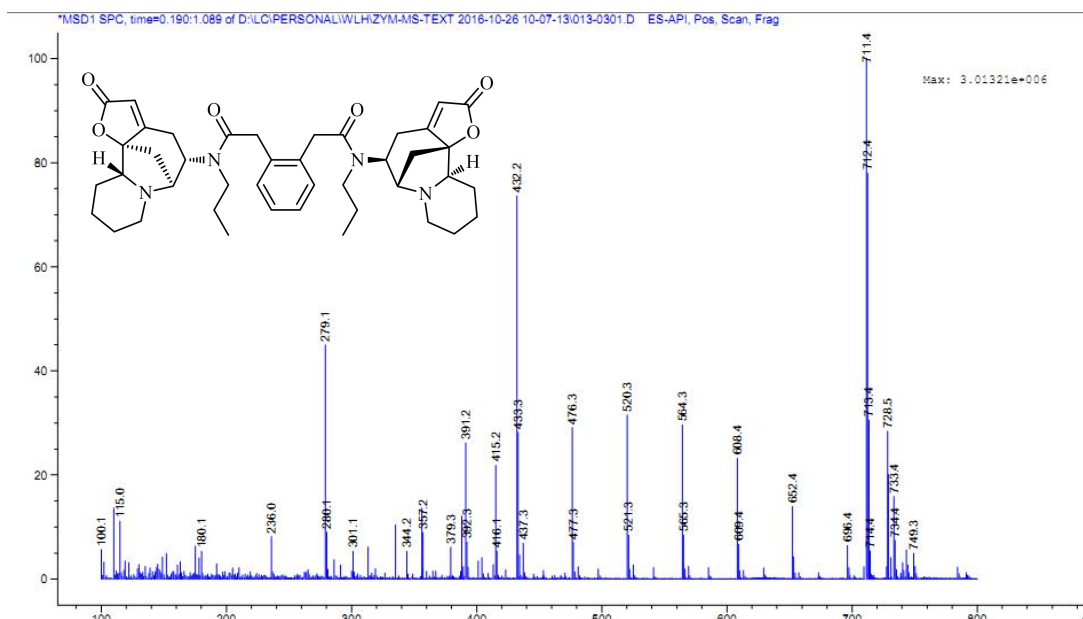
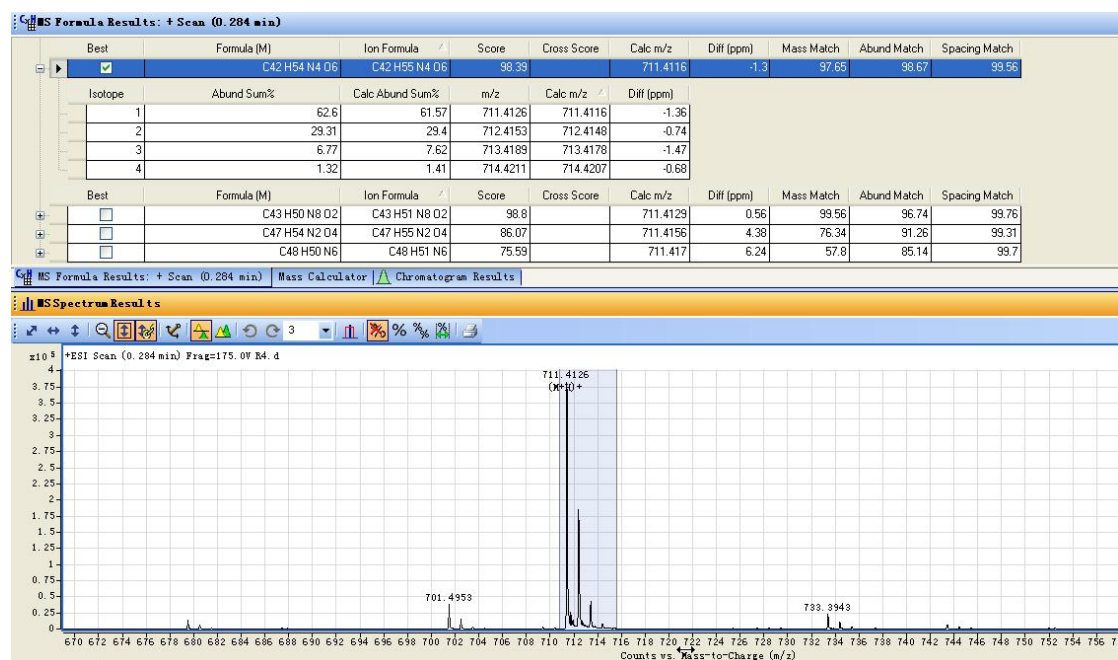


^1H NMR spectrum of **R6** (300 MHz, CDCl_3)

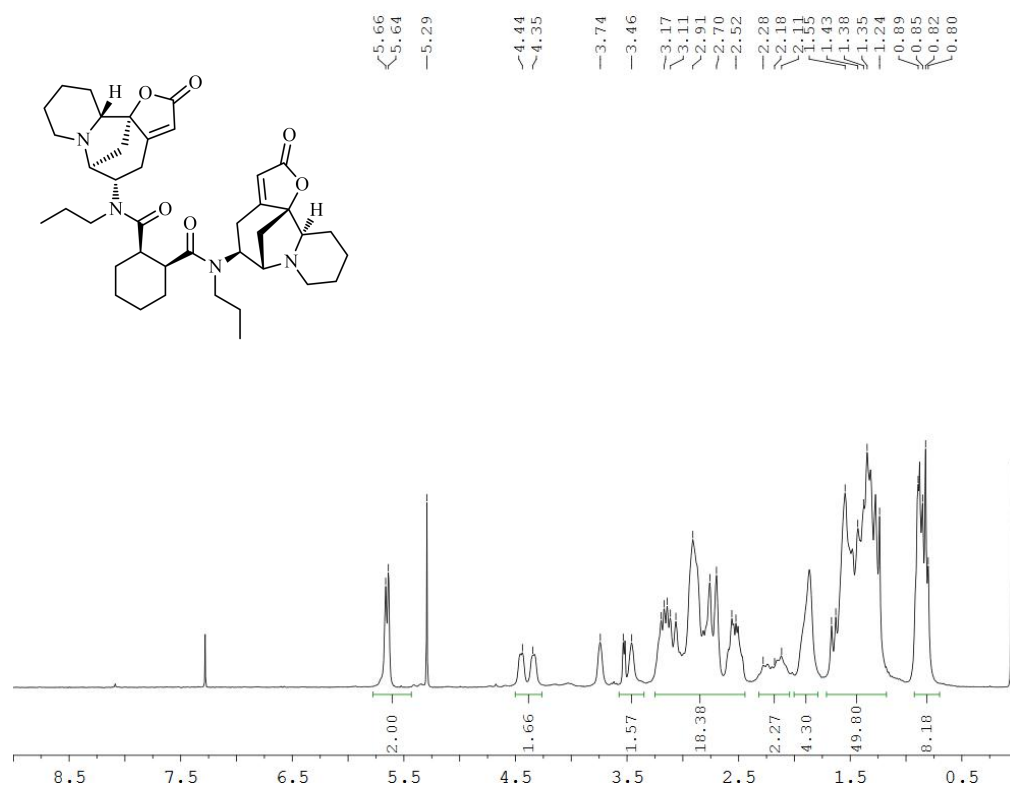


^{13}C NMR spectrum of **R6** (75 MHz, CDCl_3)

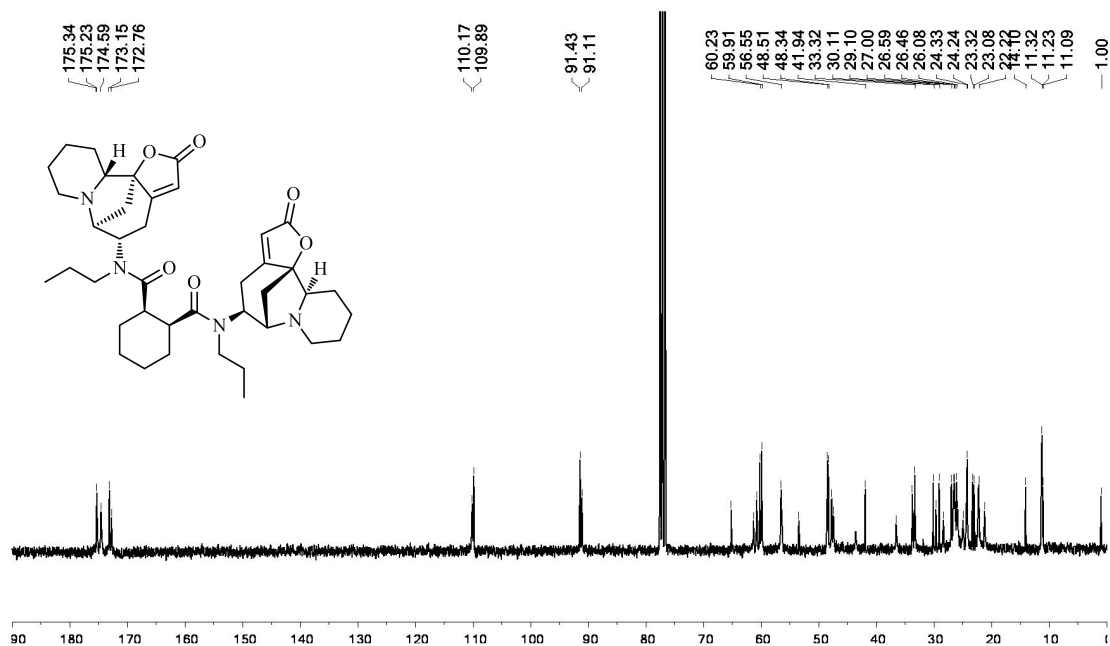


ESI-MS spectrum of **R6**HRMS of compound **R6**

^1H NMR spectrum of **HR1** (300 MHz, CDCl_3)

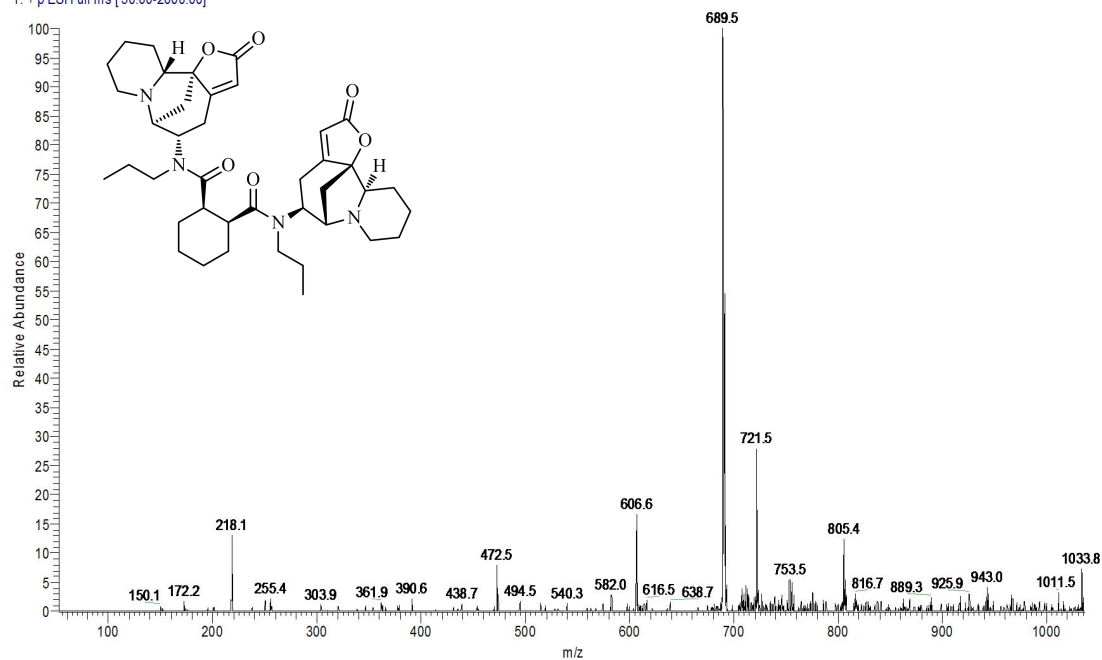


^{13}C NMR spectrum of **HR1** (75 MHz, CDCl_3)

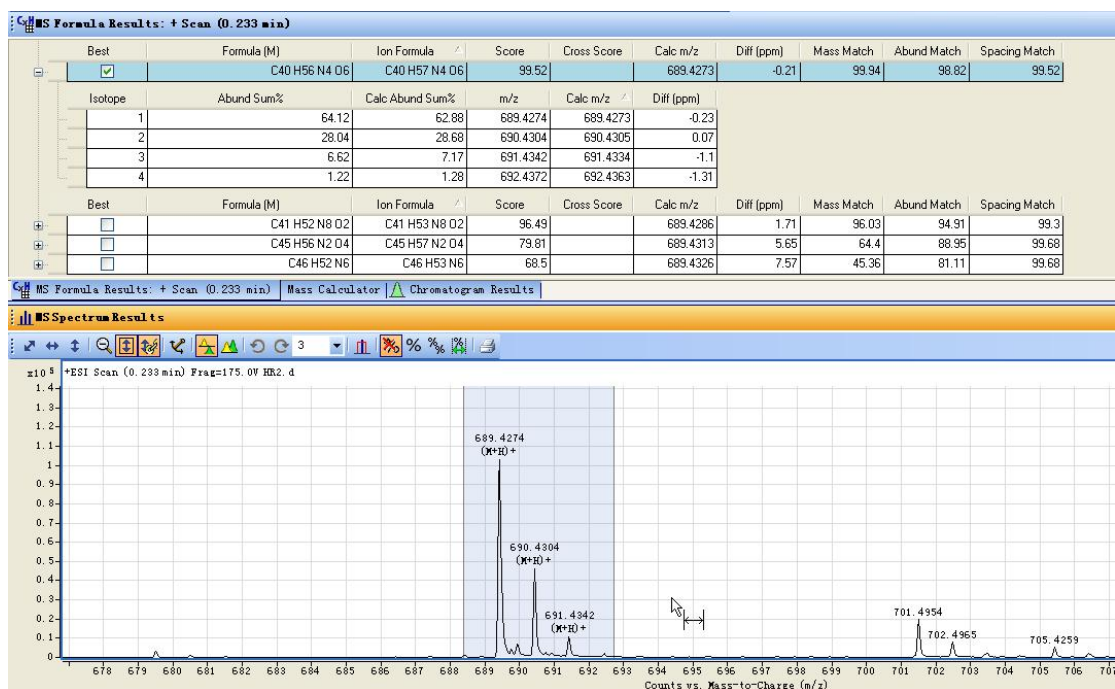


ESI-MS spectrum of HR1

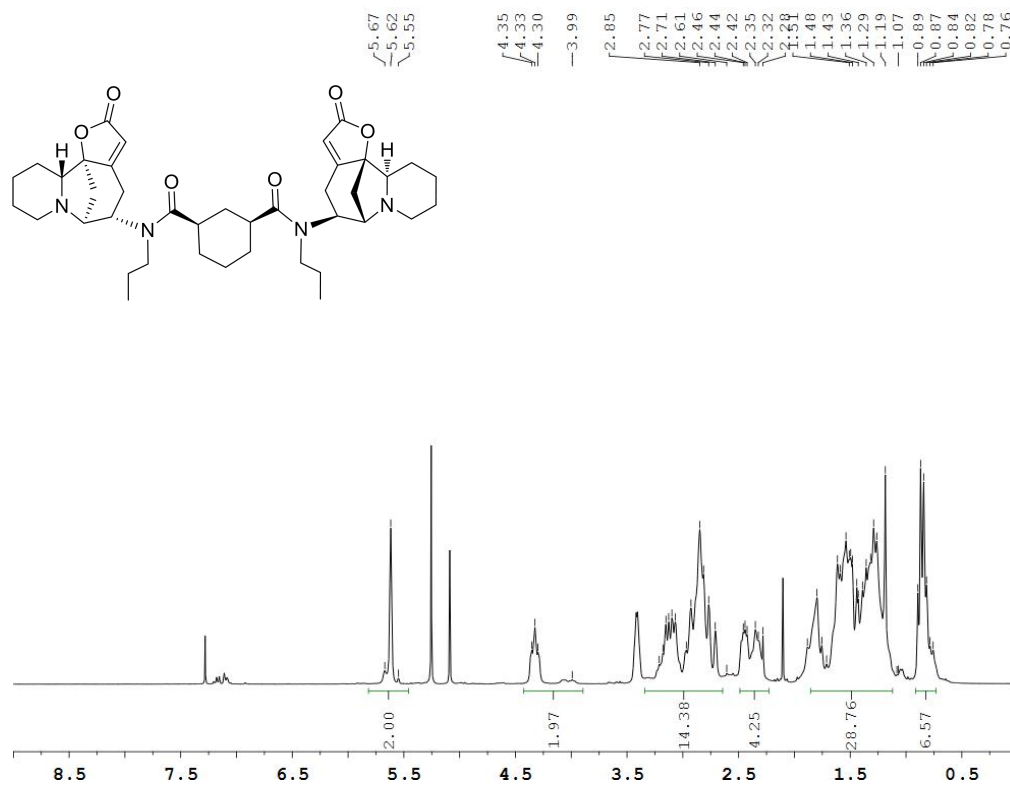
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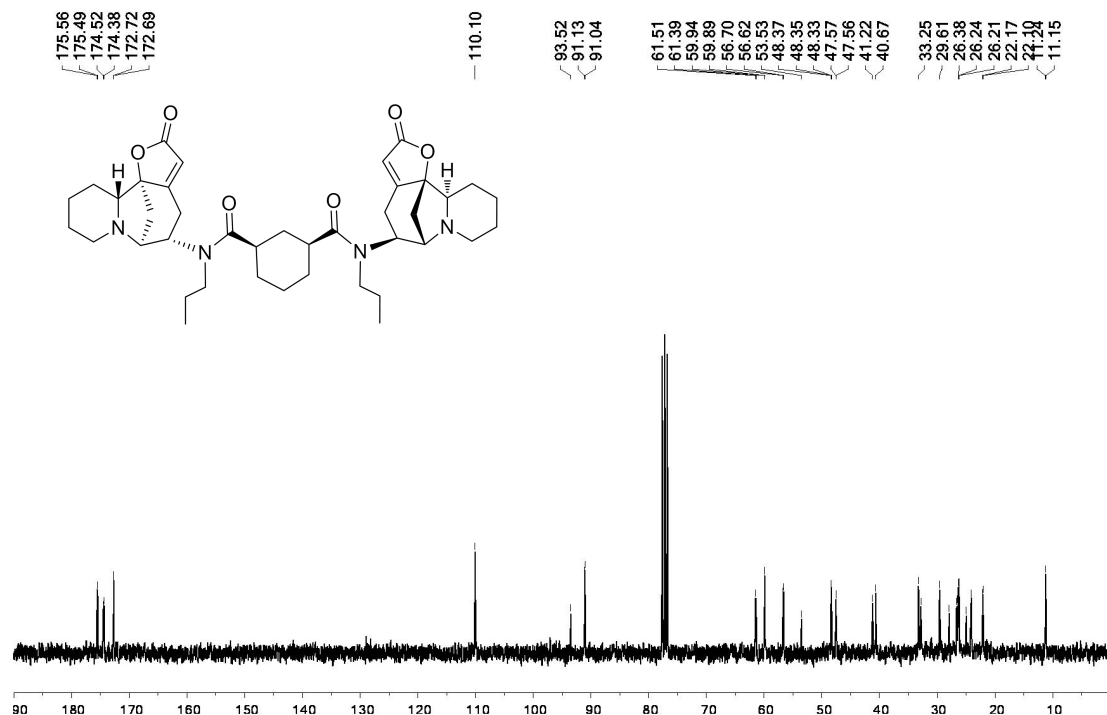
HRMS of compound HR1



^1H NMR spectrum of **HR2** (300 MHz, CDCl_3)

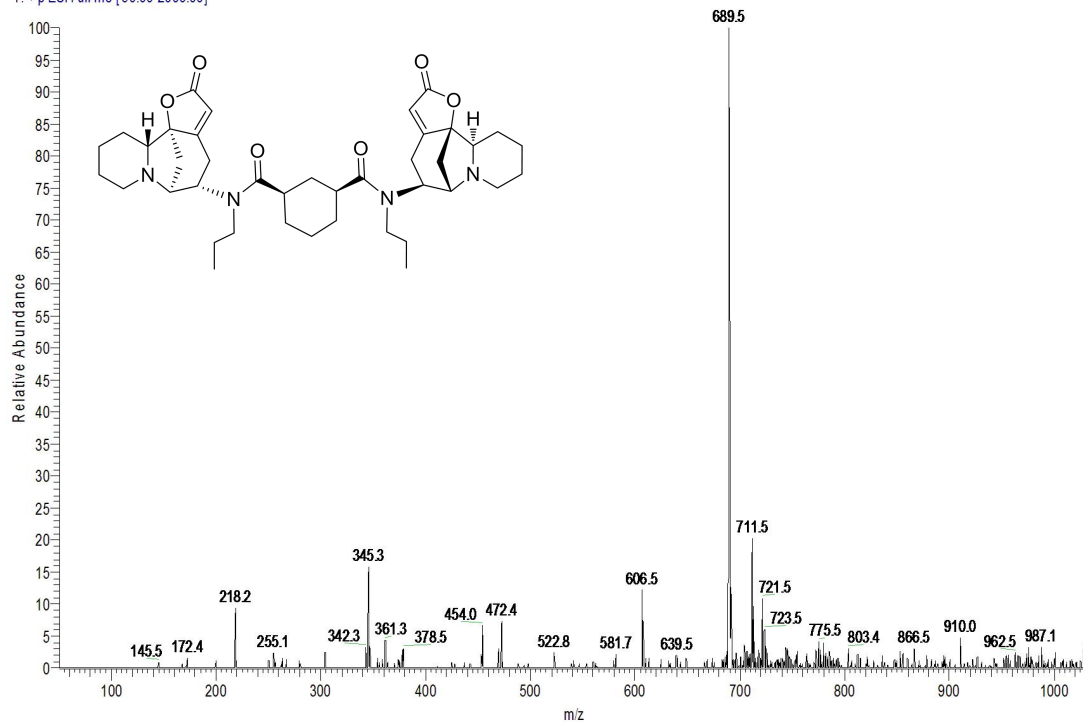


^{13}C NMR spectrum of **HR2** (75 MHz, CDCl_3)

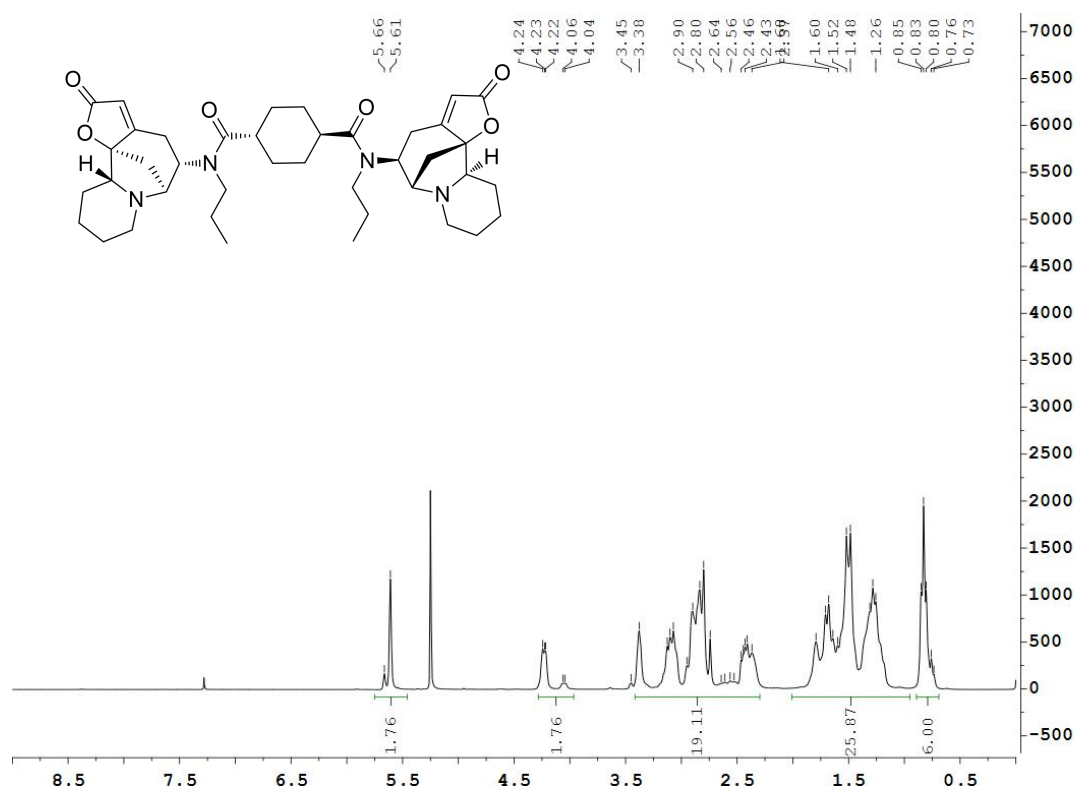


ESI-MS spectrum of HR2

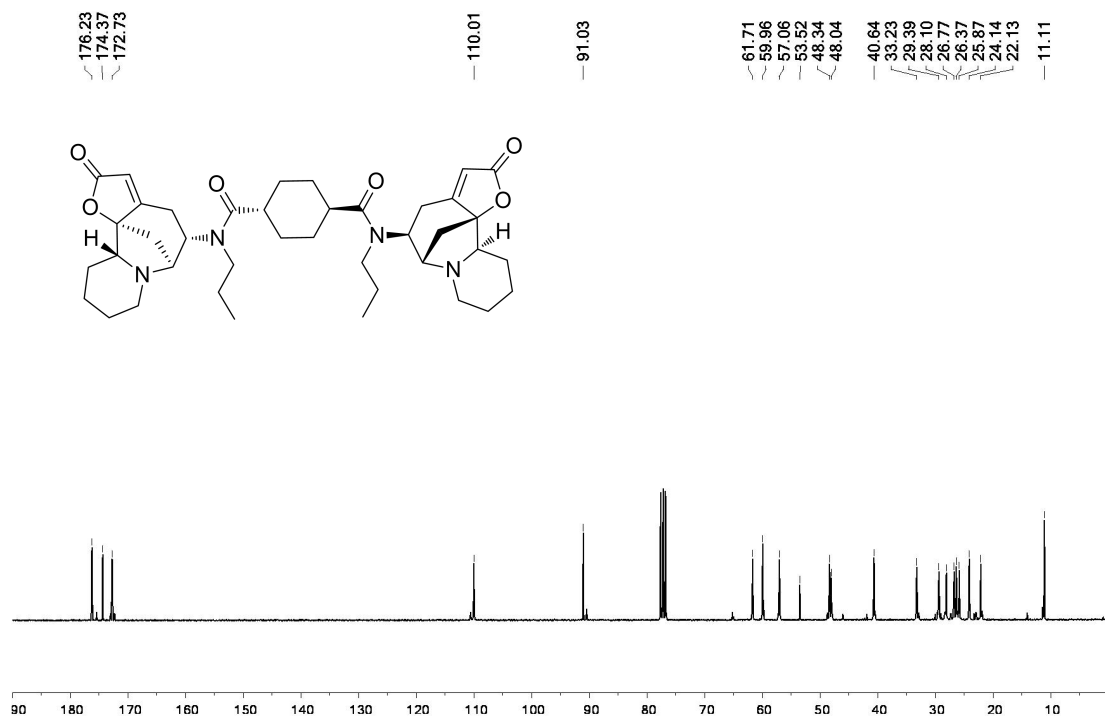
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^1H NMR spectrum of **HR3** (300 MHz, CDCl_3)

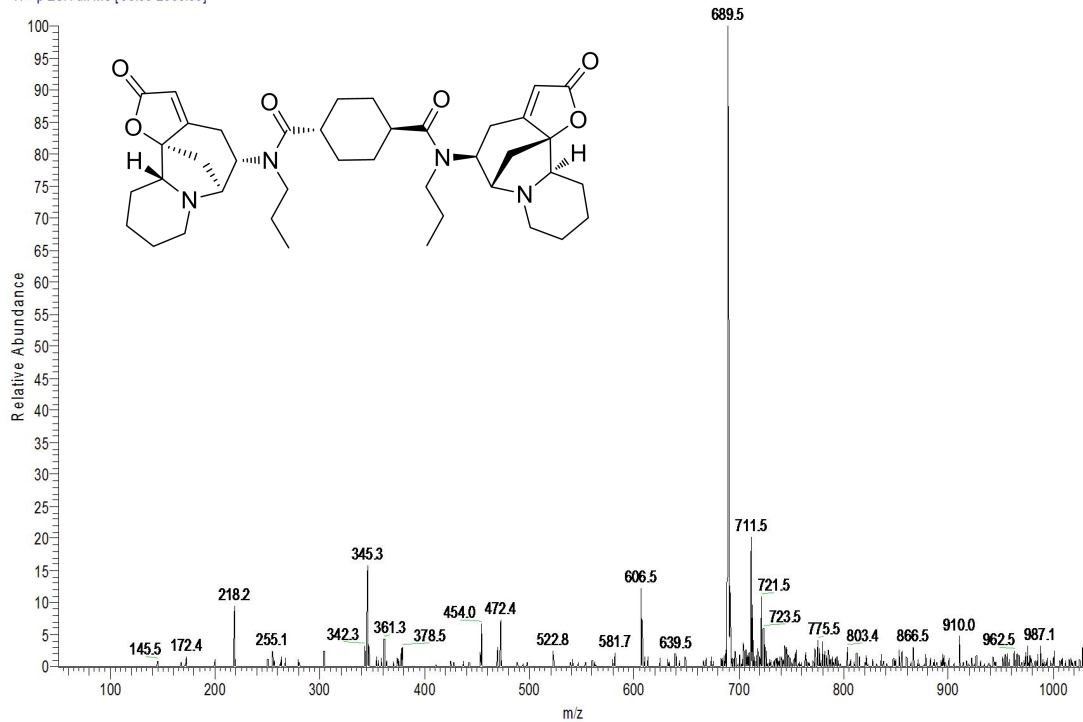


^{13}C NMR spectrum of **HR3** (75 MHz, CDCl_3)



ESI-MS spectrum of **HR3**

CIS-14#15 RT: 0.75 AV: 1 NL: 1.50E6
T: +p ESI Full ms [50.00-2000.00]

HRMS of compound **HR3**