

Supporting Information

Heptamethine Cyanine Dyes with Robust C-C Bond at the Central Position of Chromophore

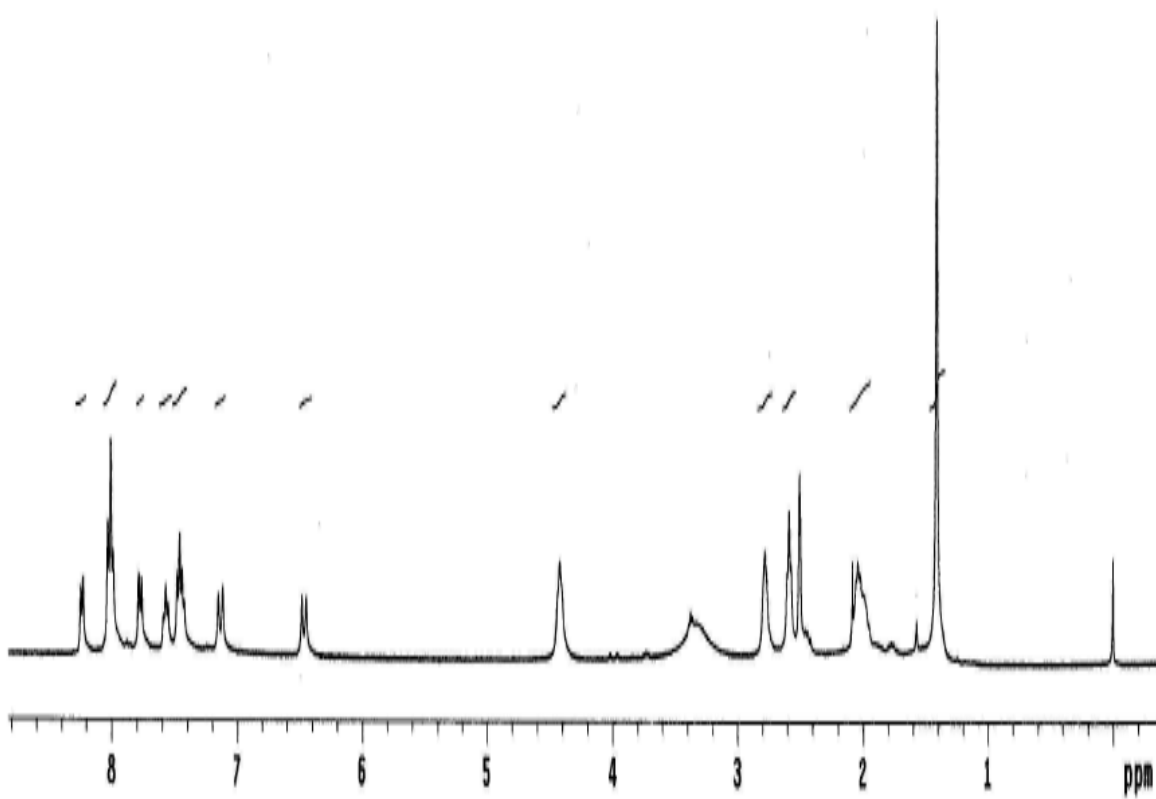
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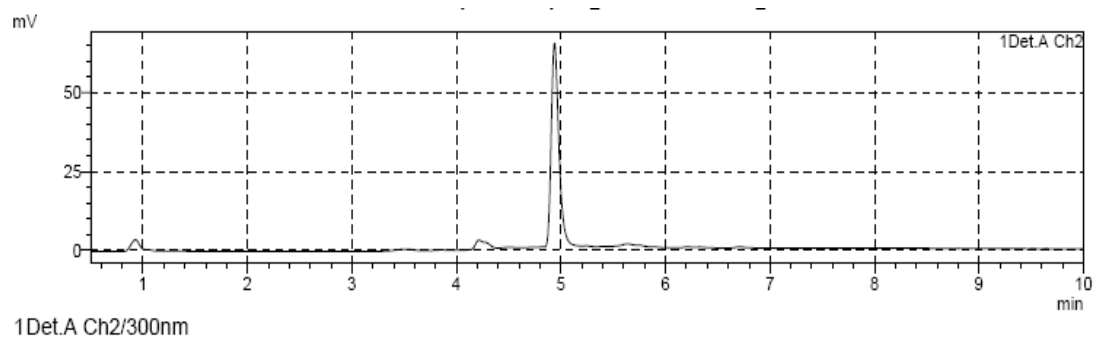
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General Considerations. All chemicals were purchased from commercial sources and were used without further purification. ^1H NMR data were recorded on a 300 MHz at ambient temperature in $\text{DMSO}-d_6$ and referenced to tetramethylsilane (TMS) as an internal standard. The absorption and emission spectra were determined using a spectrophotometer and fluorometer, respectively.

^1H NMR spectrum of compound **2a**

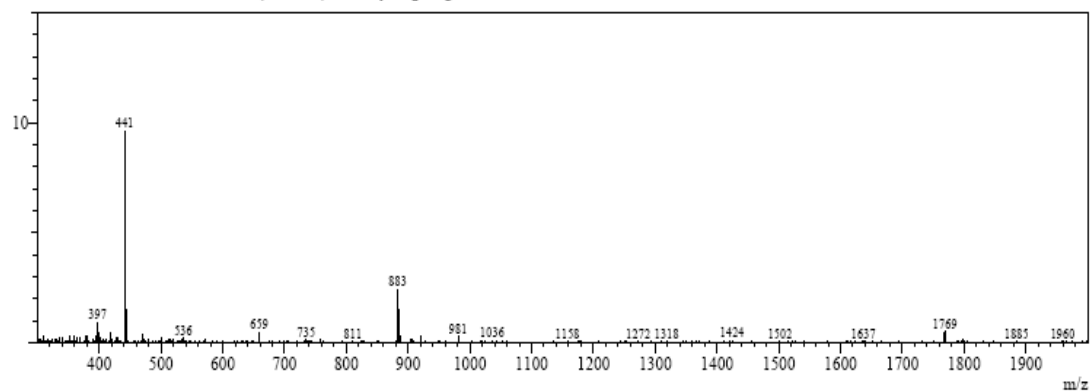


LC-MS spectrum of compound **2a**

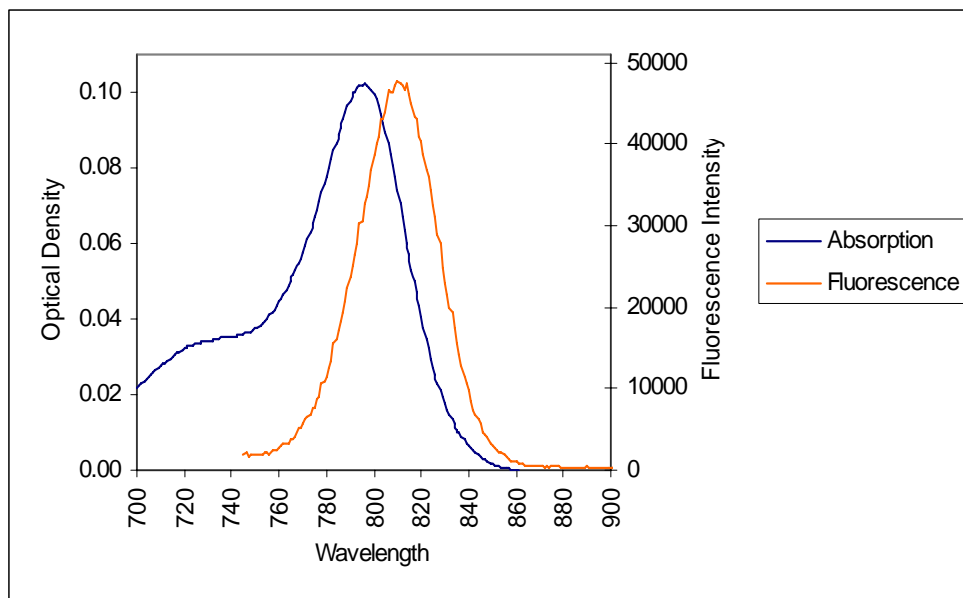


MS Spectrum Graph

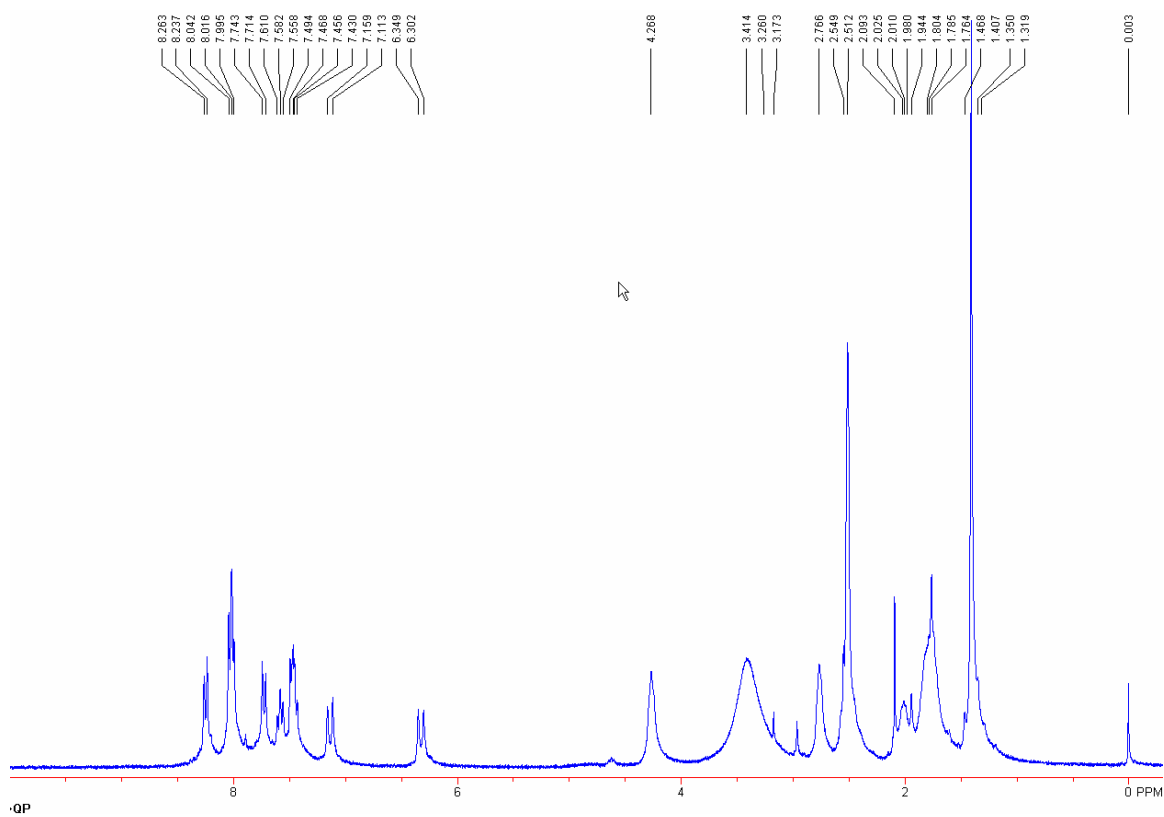
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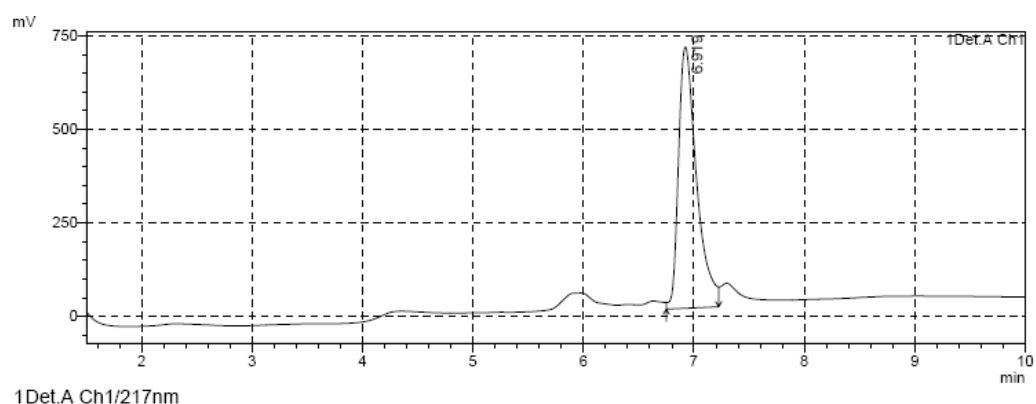
Normalized UV-Vis and Emission Spectra of Compound **2a,b** in 20% aqueous DMSO solution.



^1H NMR spectrum of compound **2b**

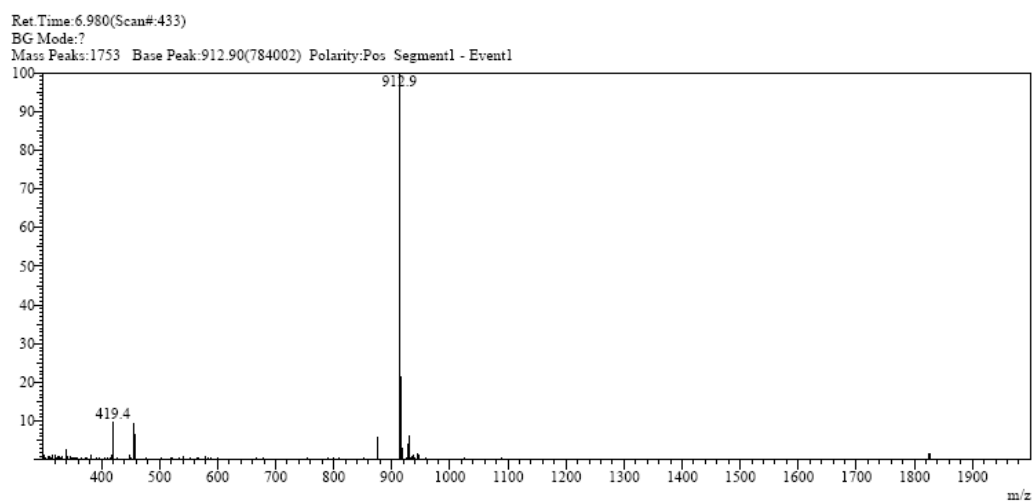


LC-MS spectrum of compound **2b**

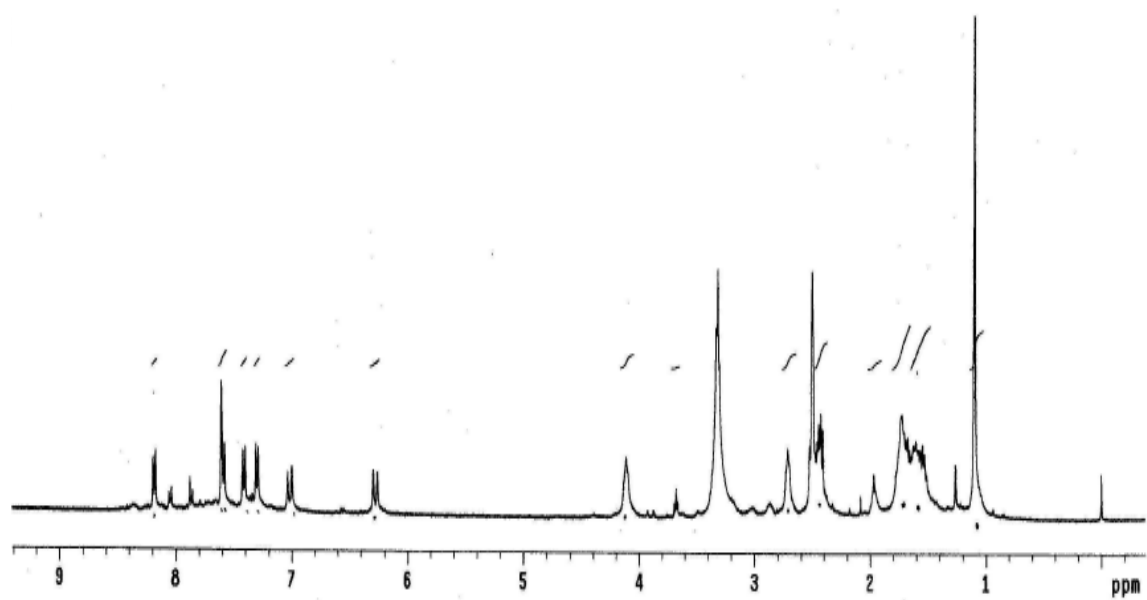


1Det.A Ch1/217nm

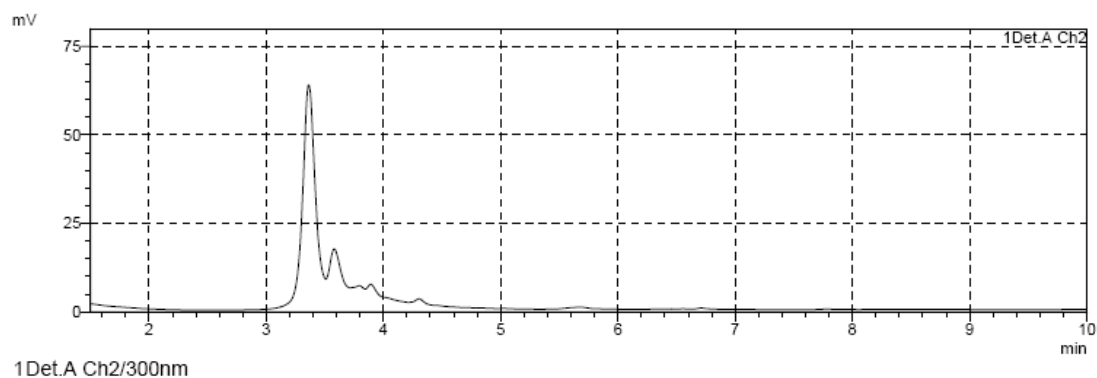
MS Spectrum Graph



^1H NMR spectrum of compound **2c**



LC-MS spectrum of compound **2c**

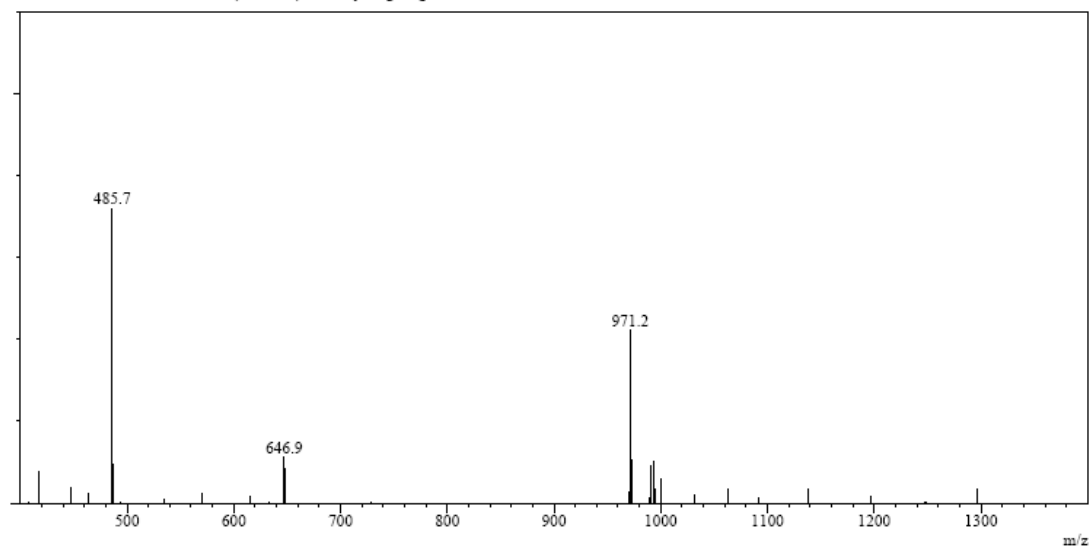


MS Spectrum Graph

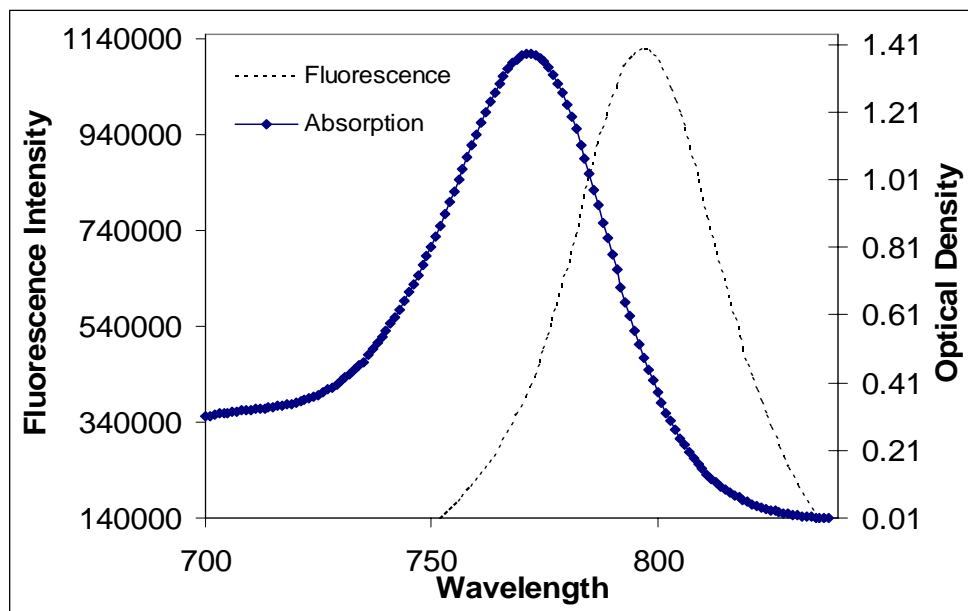
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BG Mode:?

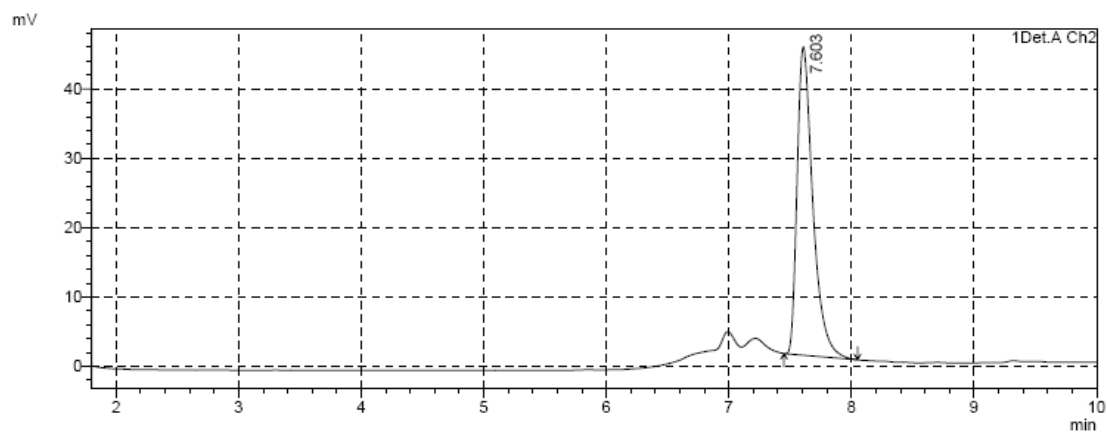
Mass Peaks:86 Base Peak:226.85(2690884) Polarity:Neg Segment1 -Event1



Normalized UV-Vis and Emission Spectra of Compound **2c** in 20% aqueous DMSO solution.



LC-MS spectrum of compound **3**.



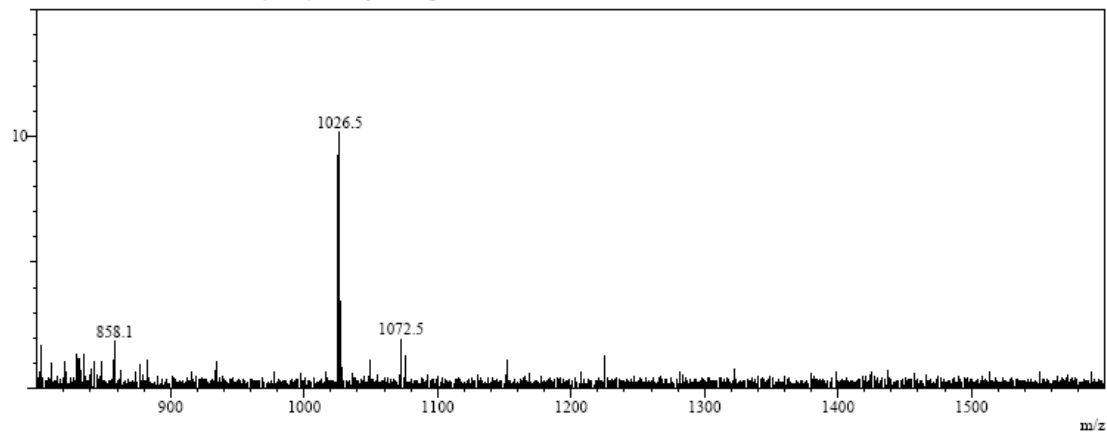
1Det.A Ch2/300nm

MS Spectrum Graph

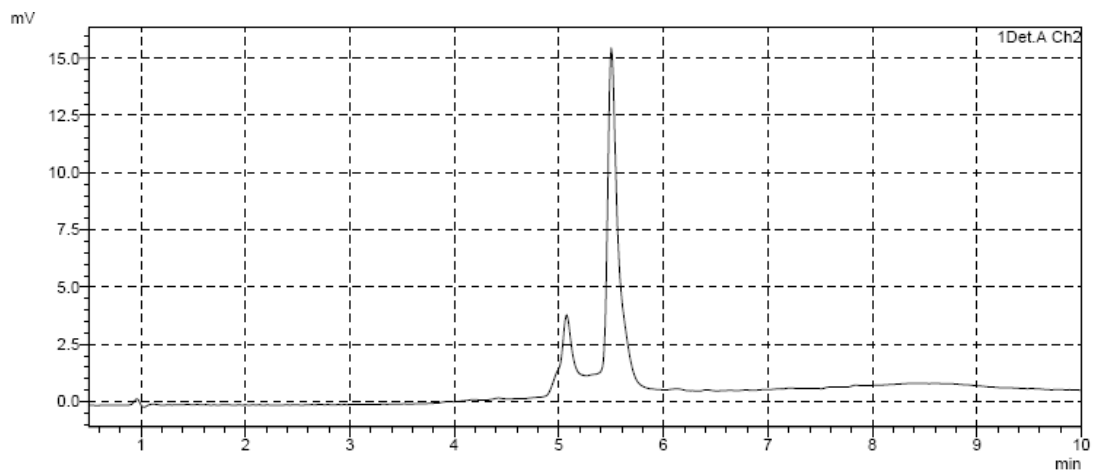
Ret.Time:7.670(Scan#:479)

BG Mode:?

Mass Peaks:1429 Base Peak:574.80(87752) Polarity:Pos Segment1 - Event1



LC-MS spectrum of compound **5**.



1Det.A Ch2/300nm

