

Supplementary materials of the article

Phenolic compounds from *Diarthron iranica*: Enzymatic and In Silico Insights into α -amylase Inhibitory Activity

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Compound **1**, H-NMR, DMSO

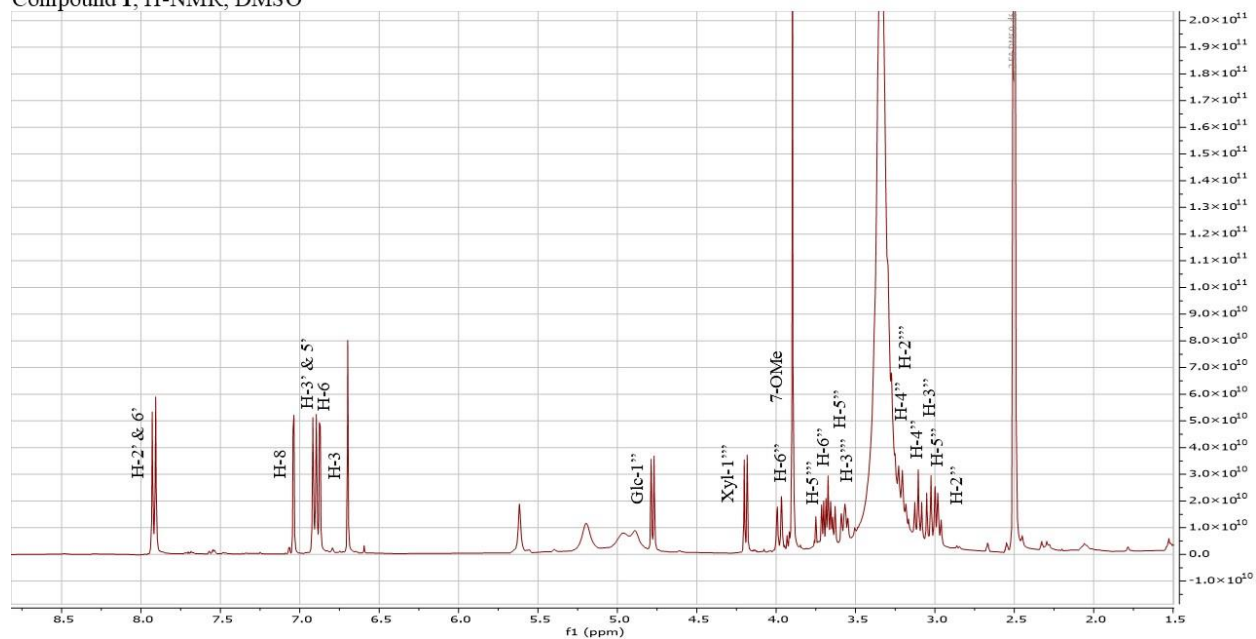


Fig.S 1. ^1H NMR (400.15 MHz) spectrum of compound **1**

Compound **1**, C-NMR, DMSO

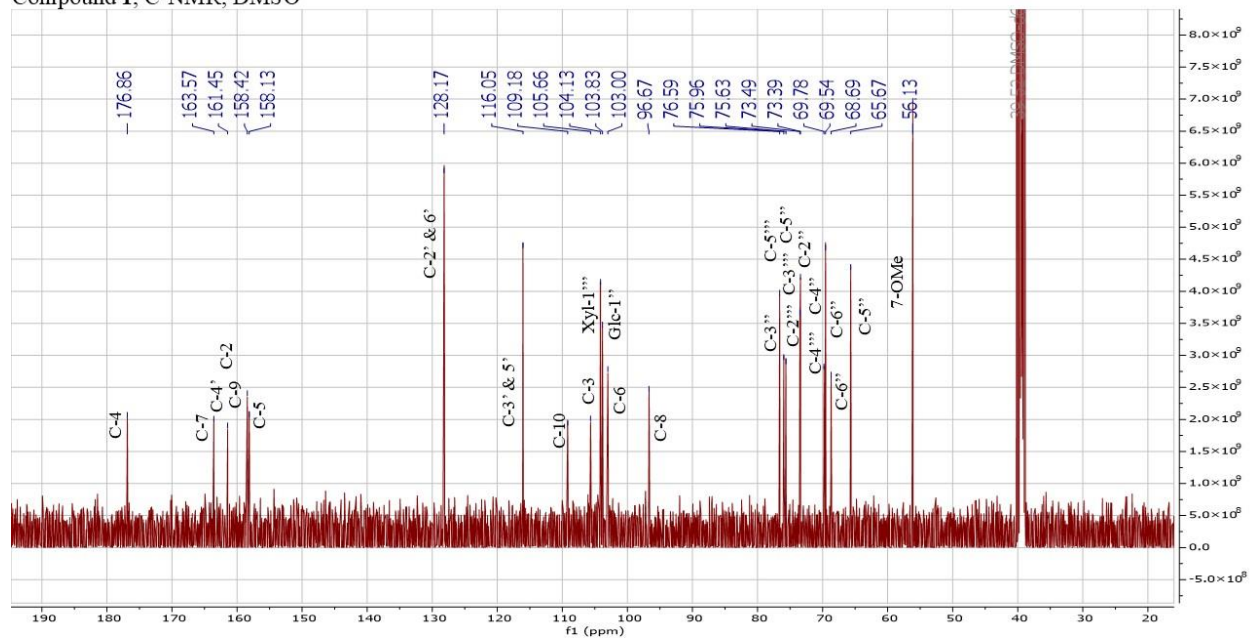


Fig.S 2. ^{13}C NMR (100.6 MHz) spectrum of compound **1**

Compound **1**, DEPT-135, DMSO

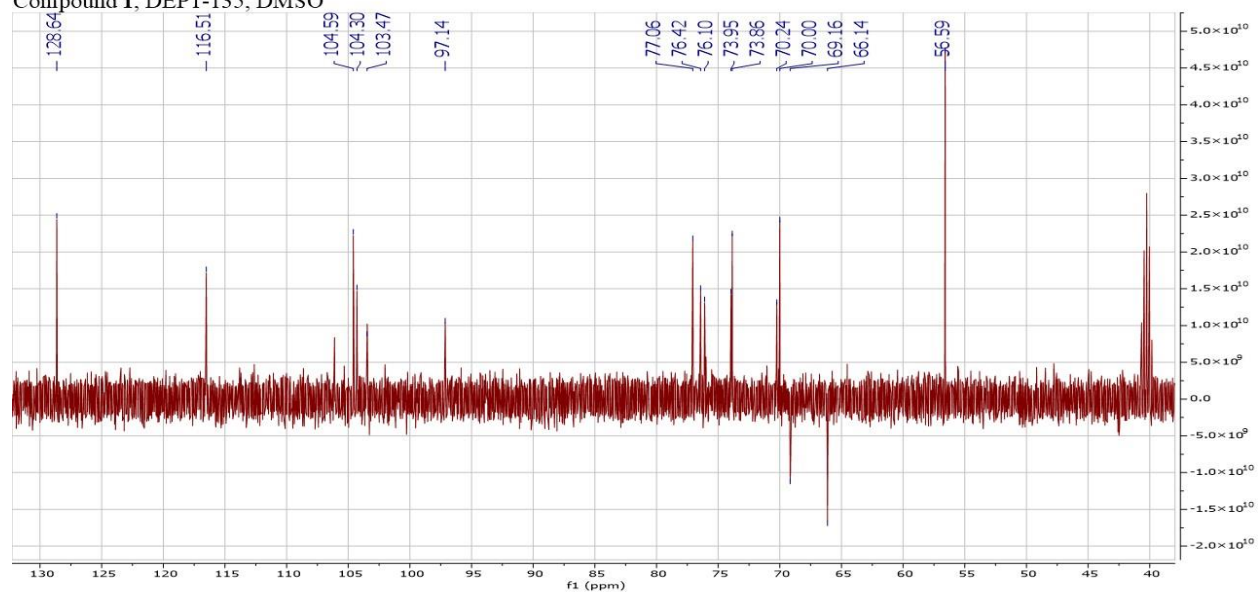


Fig.S 3. DEPT-135 spectrum of compound **1**

Compound **1**, HSQC, DMSO

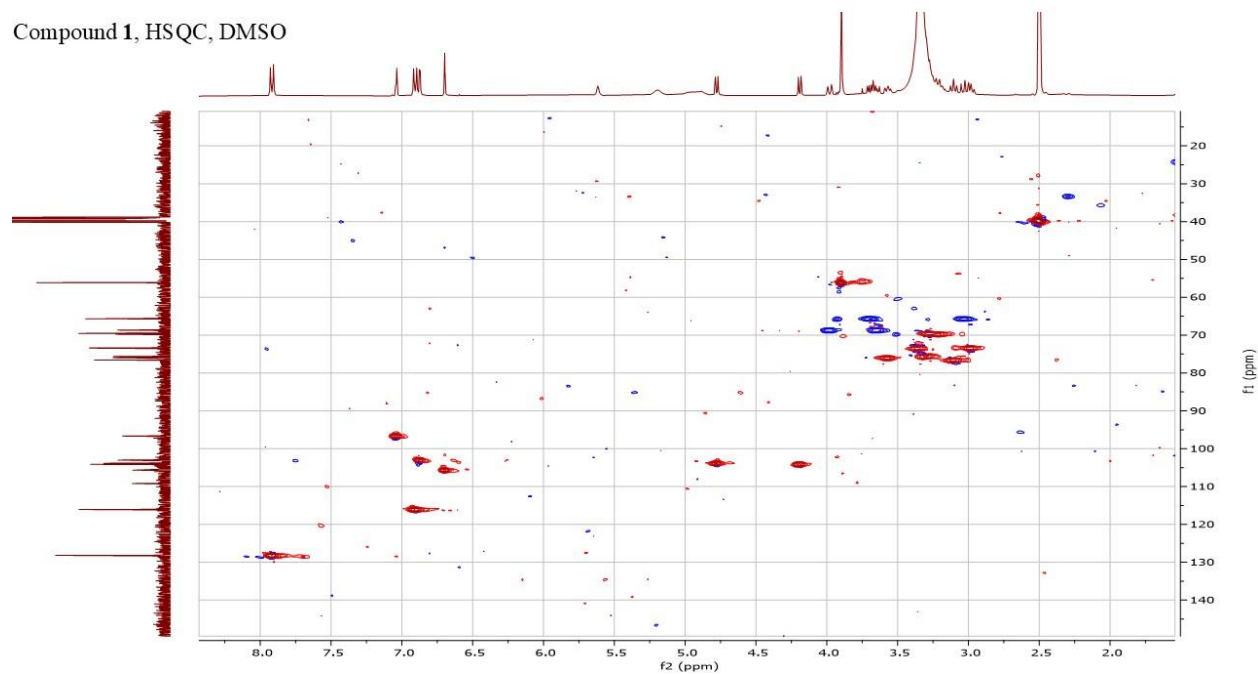


Fig.S 4. HSQC spectrum of compound **1**

Compound **1**, HMBC, DMSO

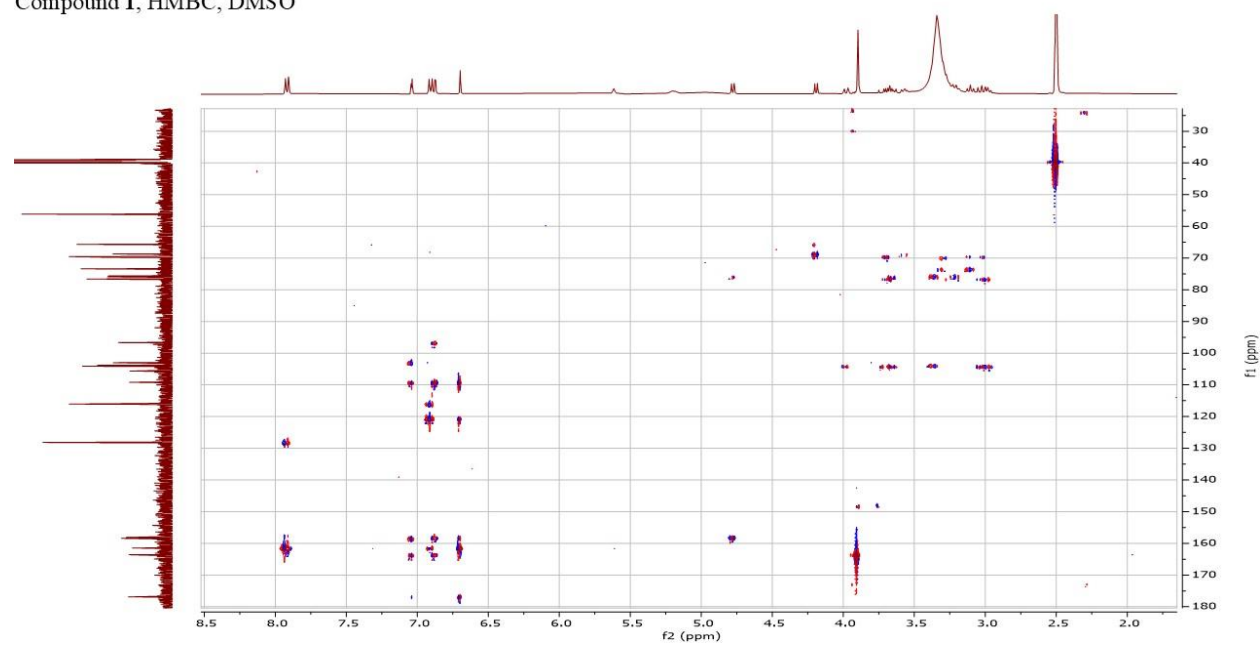


Fig.S 5. HMBC spectrum of compound **1**

Compound **1**, HH-TOCSY, DMSO

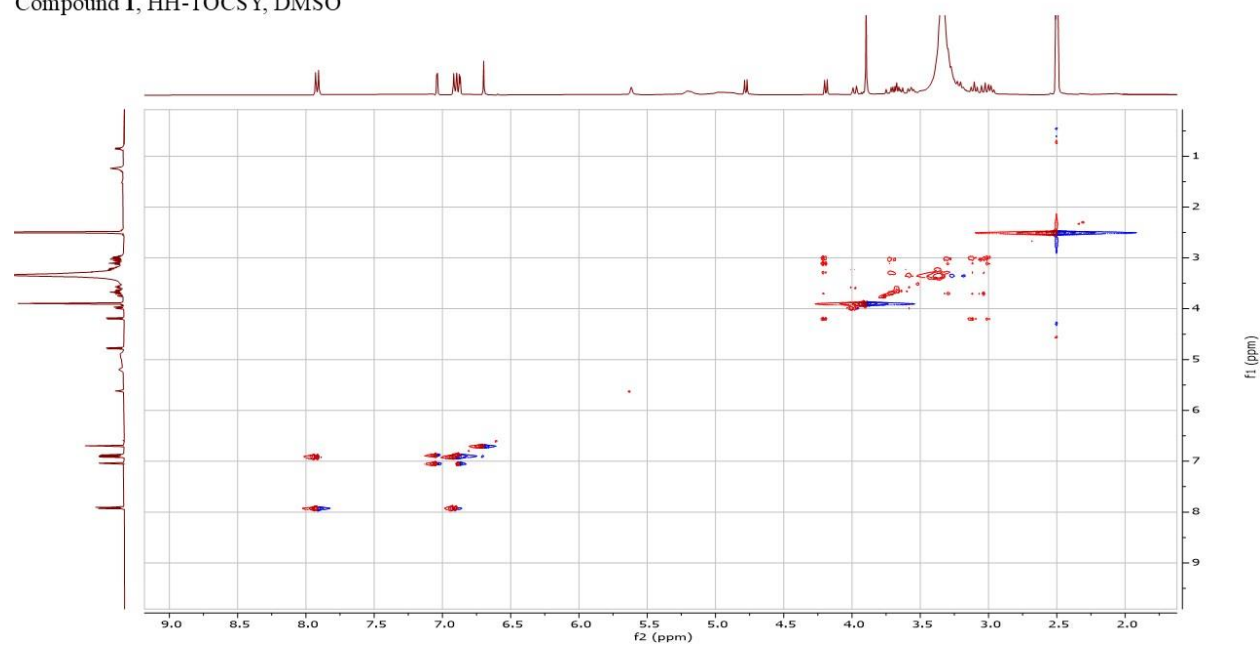


Fig.S 6.H-H TOCSY spectrum of compound **1**

Compound **1**, HSQC-TOCSY, DMSO

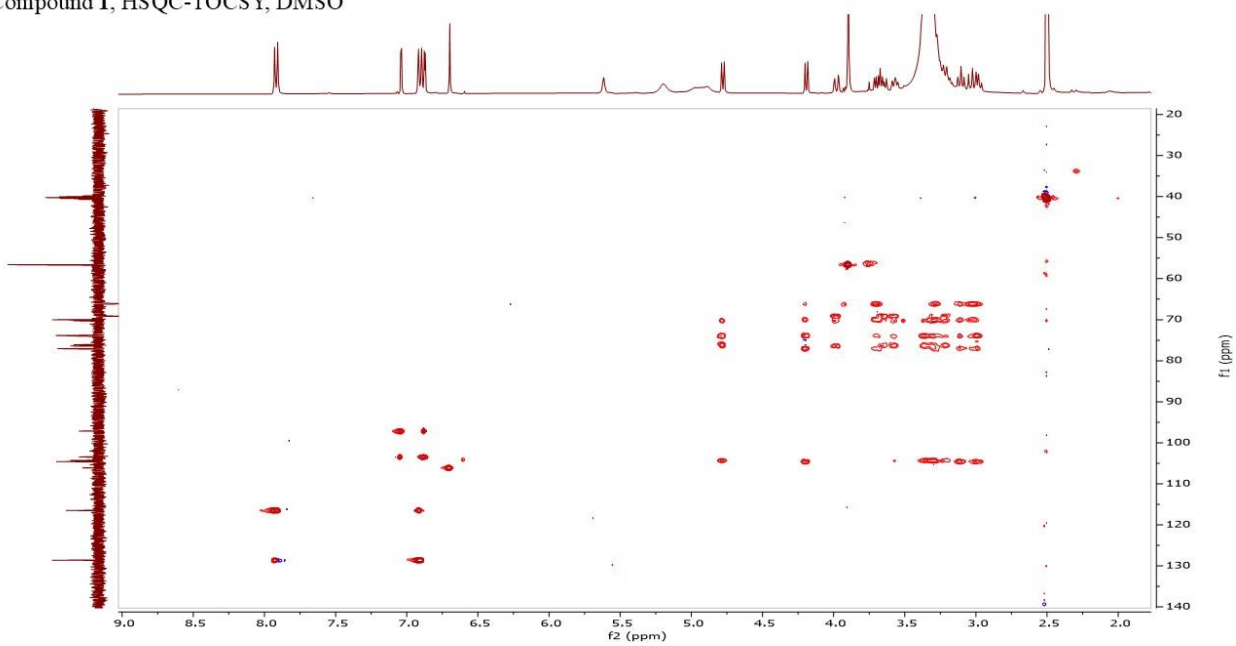


Fig.S 7. HSQC-TOCSY spectrum of compound **1**

Compound **1**, DQF-COSY, DMSO

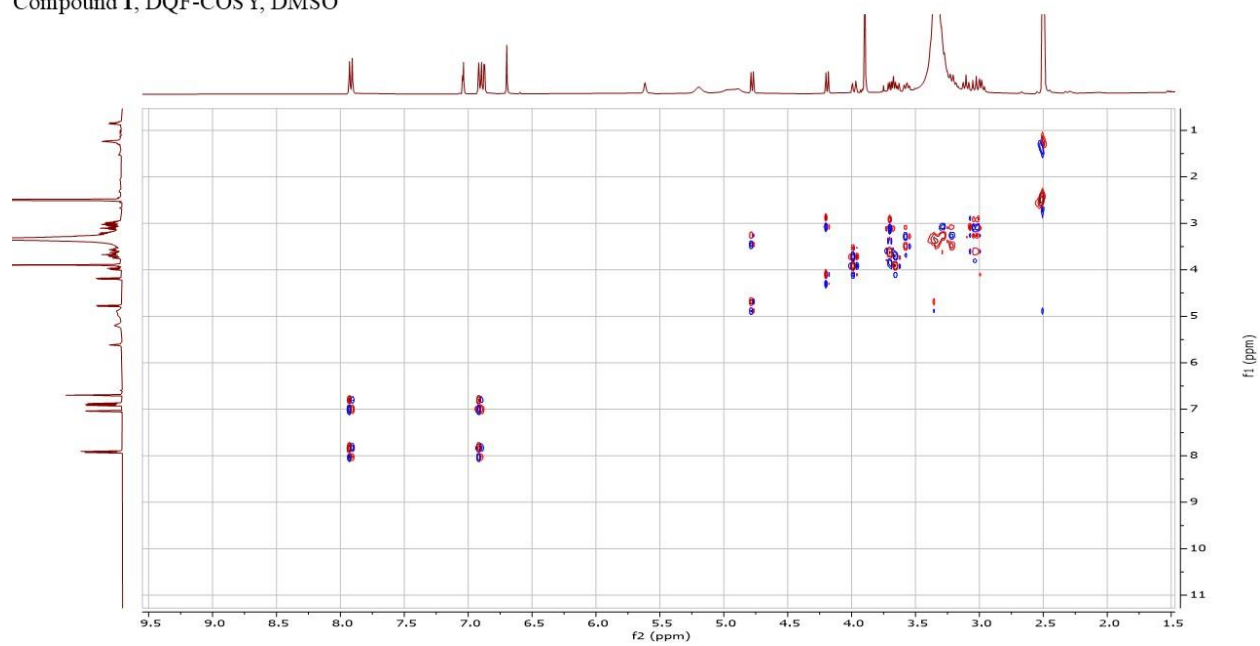


Fig.S 8. DQF-COSY spectrum of compound **1**

Compound **1**, exact MS spectrum

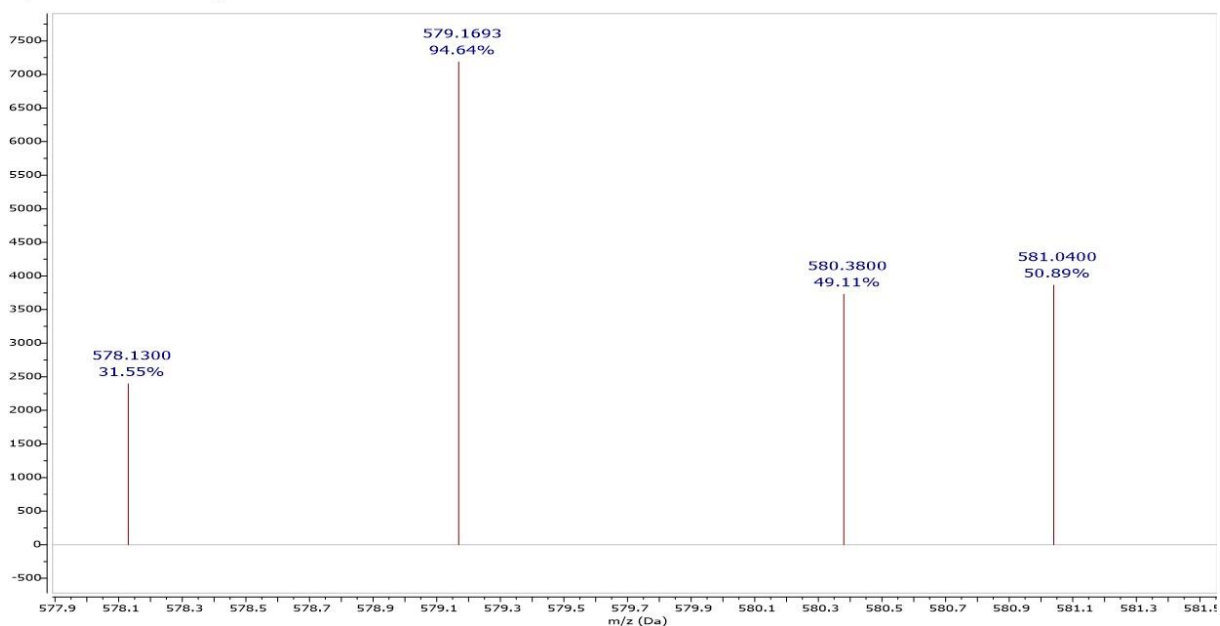


Fig.S 9. ESIMS spectrum of compound **1** m/z 579.1693[M - H]⁻.

Compound **2**, H-NMR, DMSO

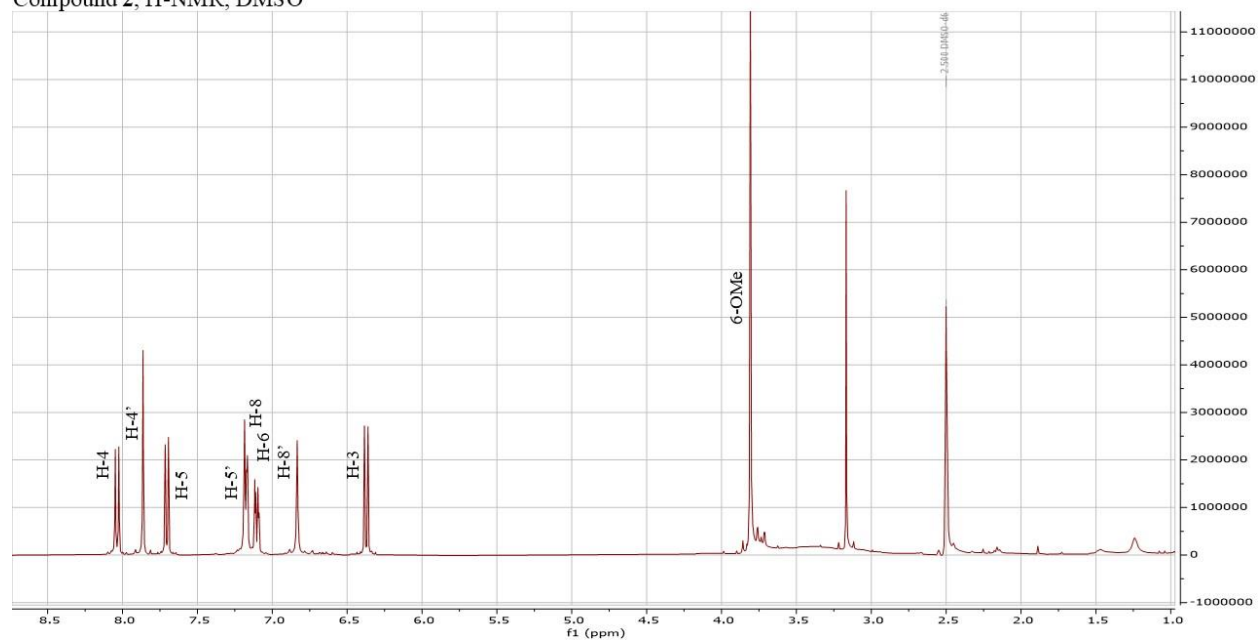


Fig.S 10.¹H NMR (400.15 MHz) spectrum of compound **2**

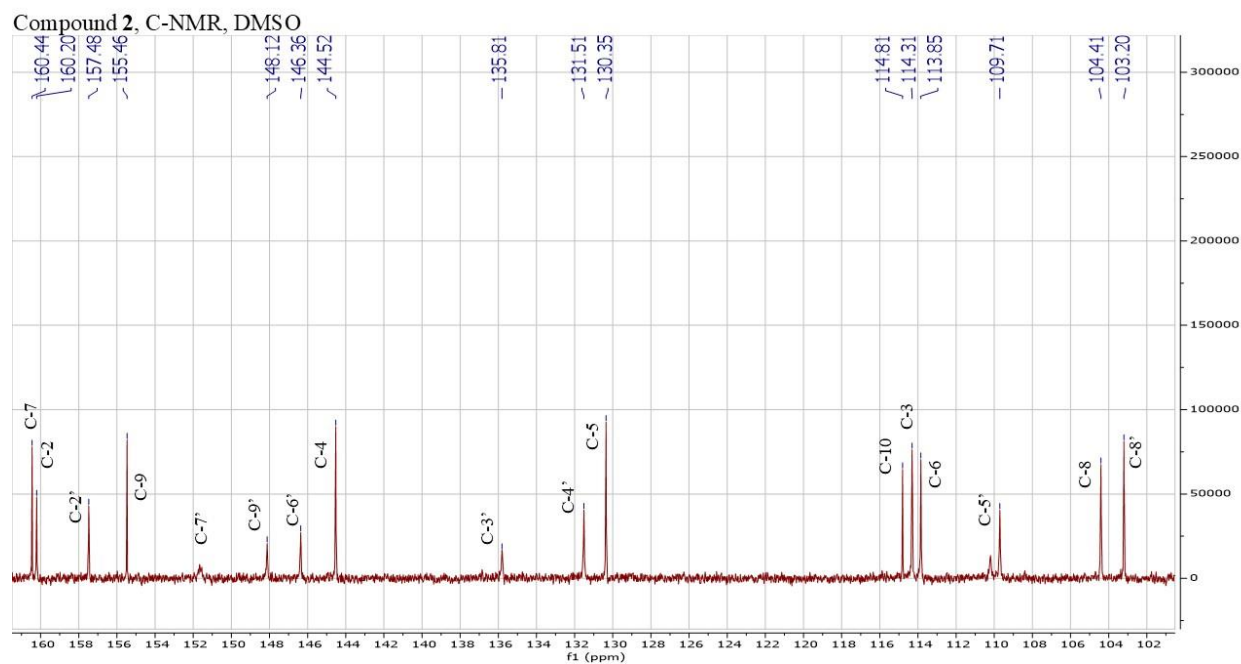


Fig.S 11.¹³C NMR (100.6 MHz) spectrum of compound **2**

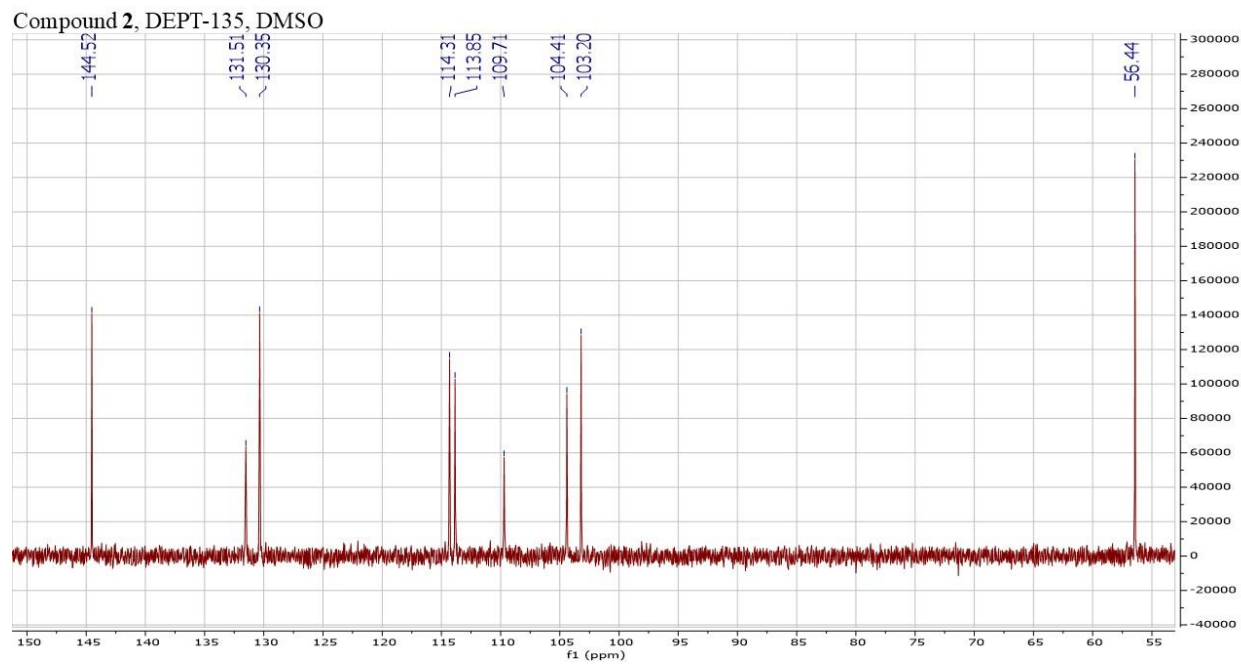


Fig.S 12. DEPT-135 spectrum of compound **2**

Compound **2**, HSQC, DMSO

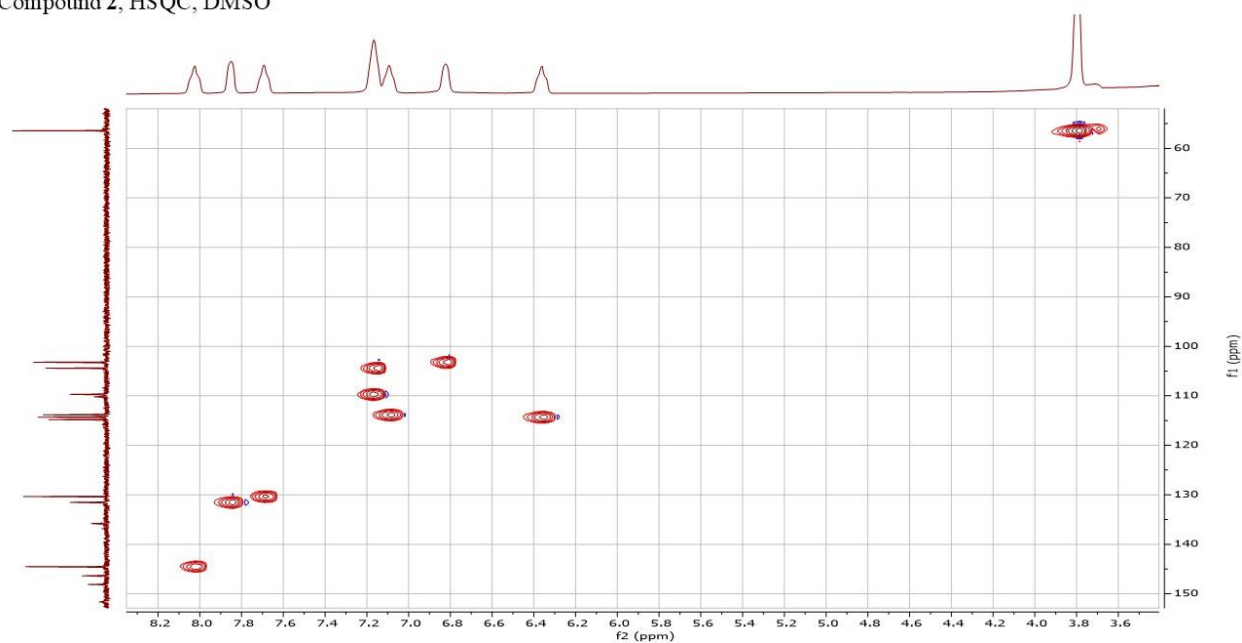


Fig.S 23.HSQC spectrum of compound **2**

Compound **2**, HMBC, DMSO

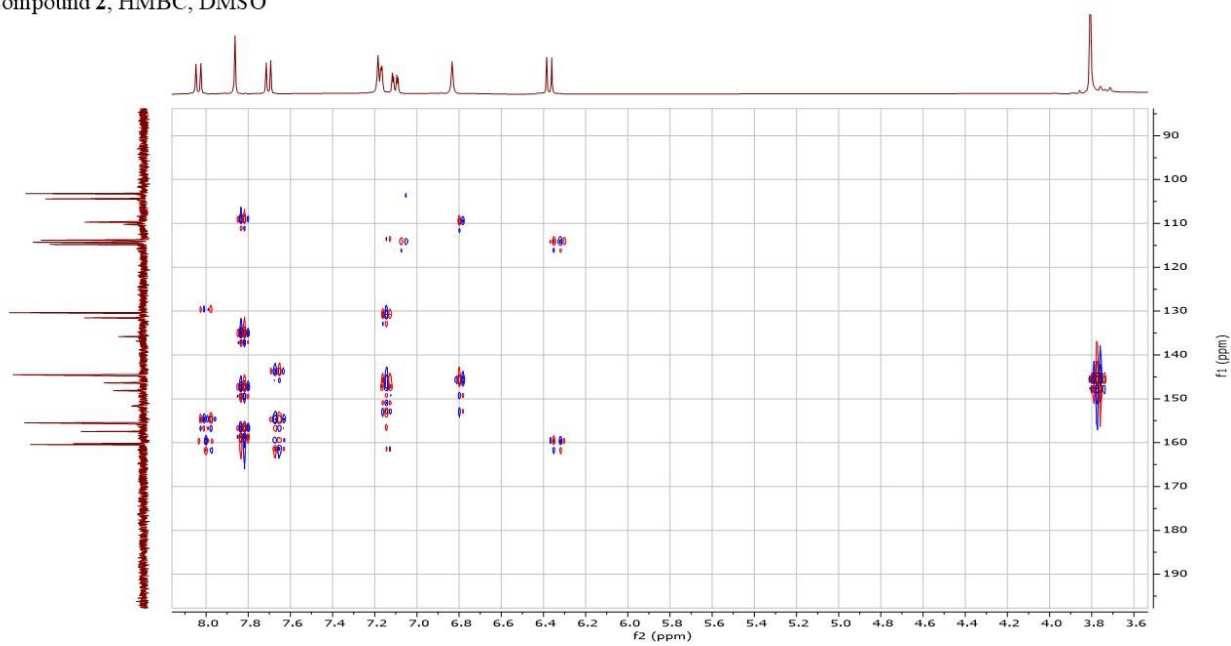


Fig.S 34.HMBC spectrum of compound **2**

Compound **2**, exact MS spectrum

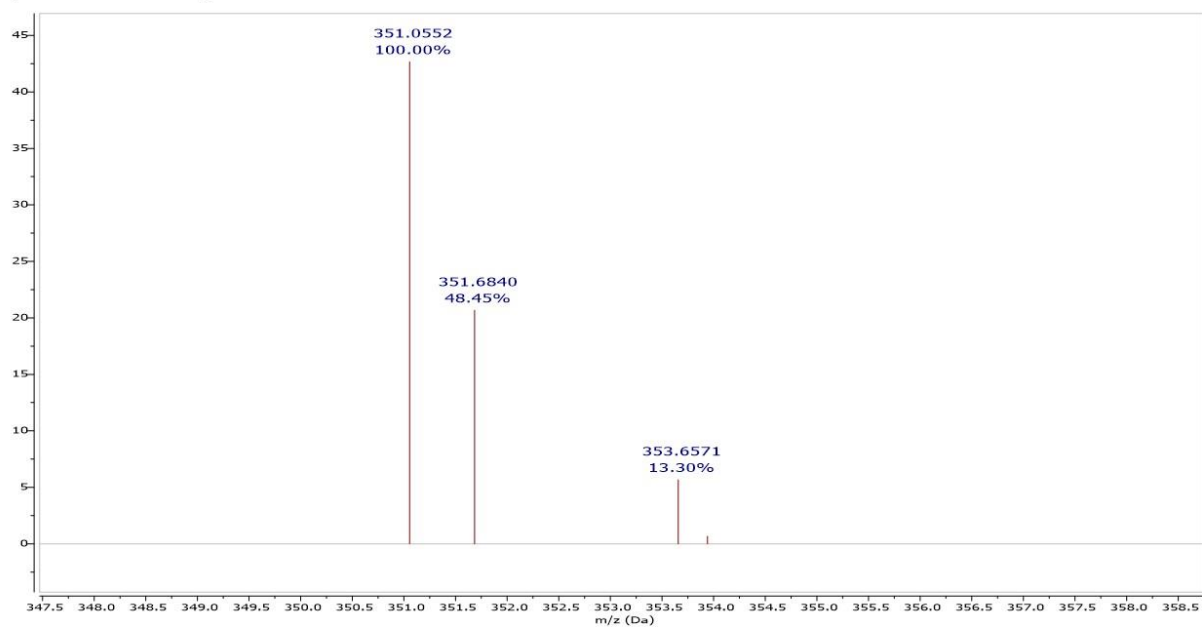


Fig.S 15. ESIMS spectrum of compound **2** m/z 351.0552 $[M - H]^-$.

Compound **3**, 1H -NMR, $CDCl_3$

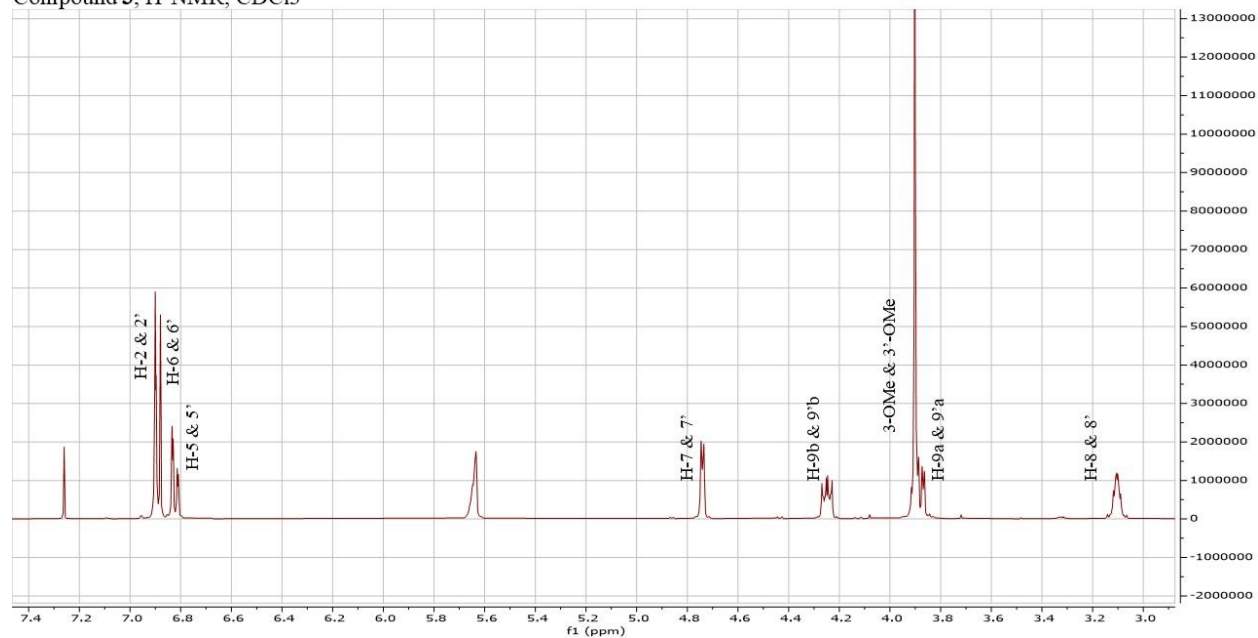


Fig.S 46. 1H NMR (400.15 MHz) spectrum of compound **3**

Compound **3**, C-NMR, CDCl₃

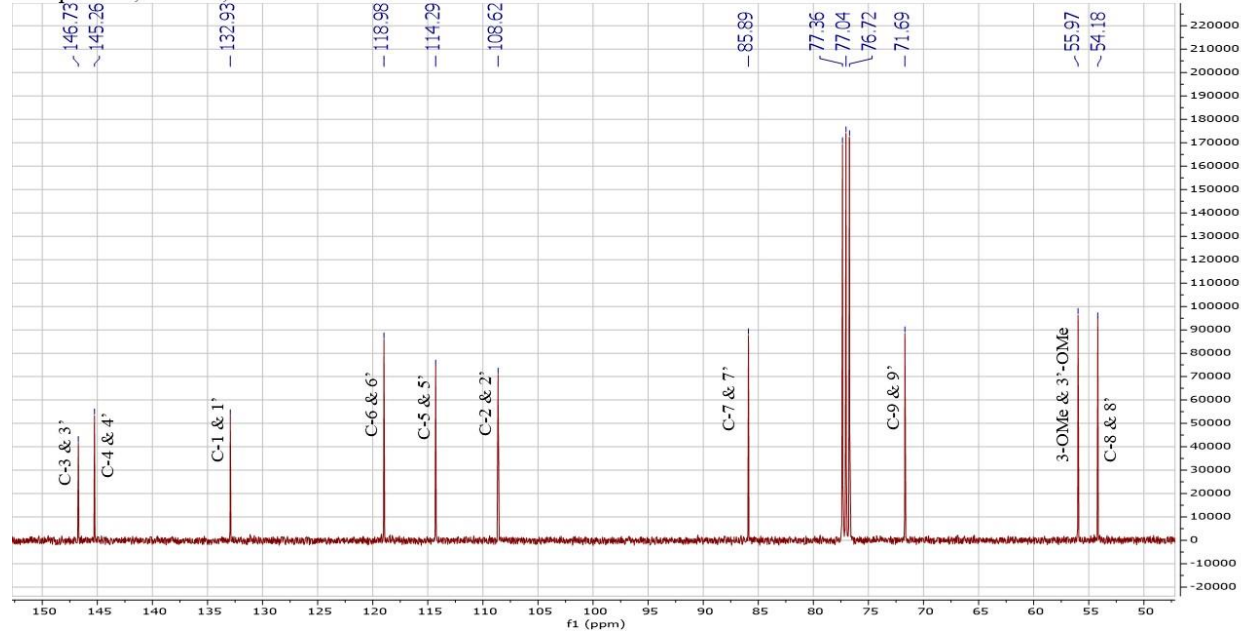


Fig.S 17. ¹³C NMR (100.6 MHz) spectrum of compound **3**

Compound **3**, DEPT-135, CDCl₃

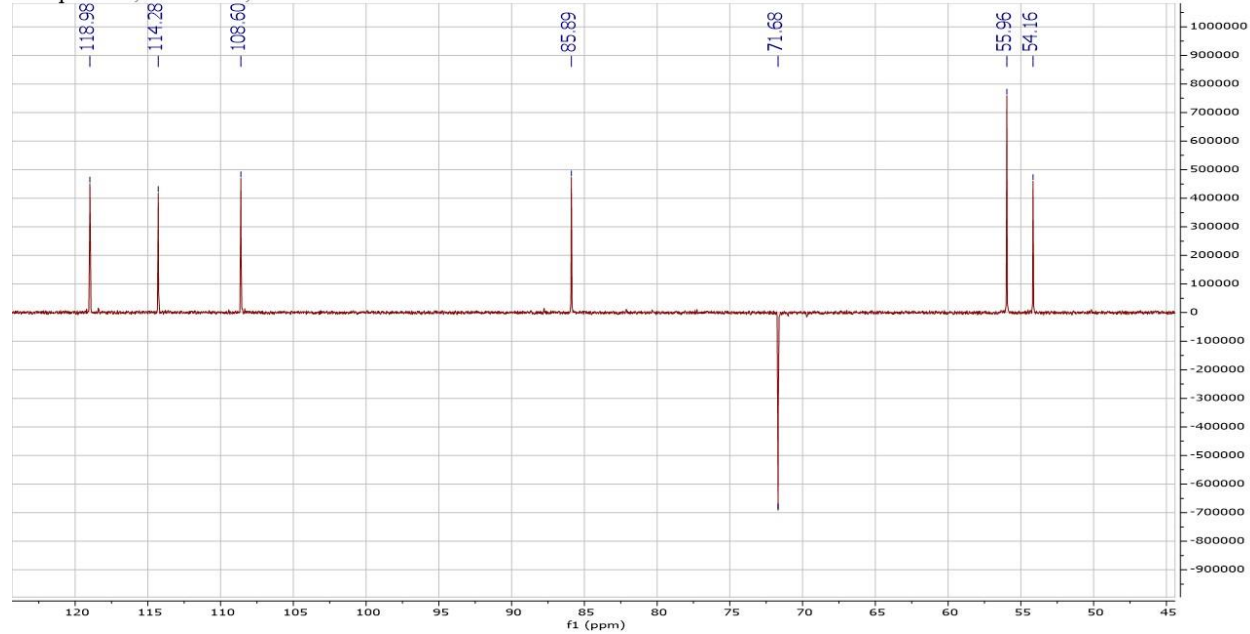


Fig.S 58.DEPT-135 spectrum of compound **3**

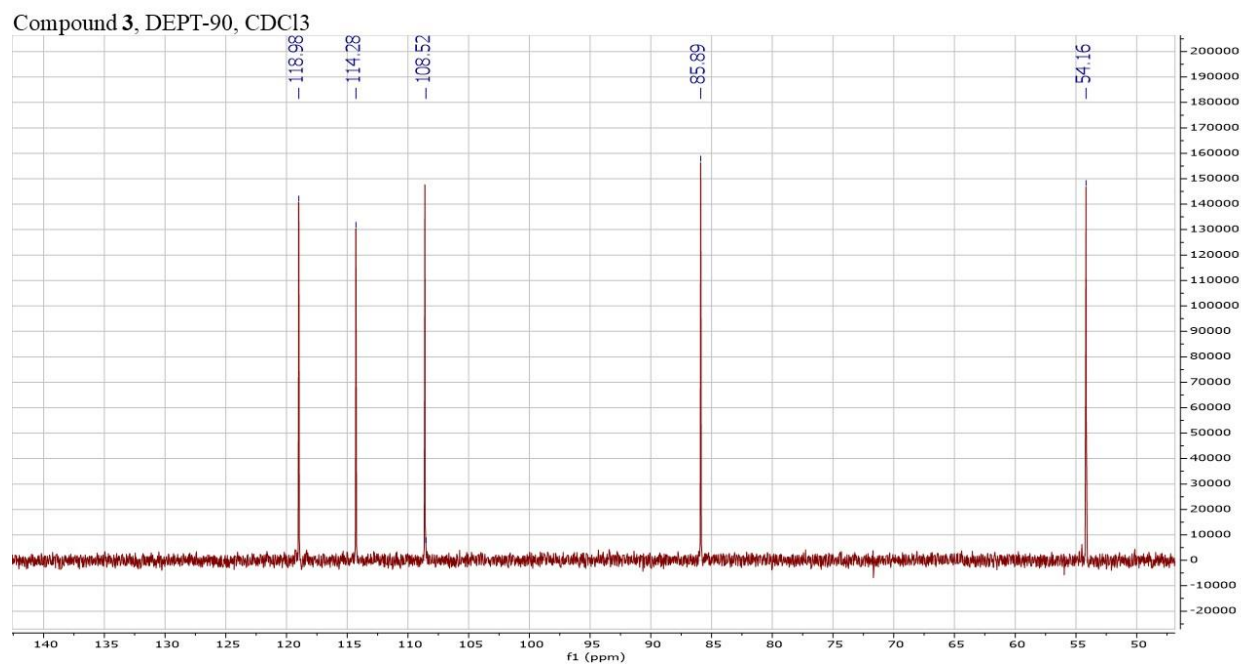


Fig.S 19. DEPT-90 spectrum of compound **3**

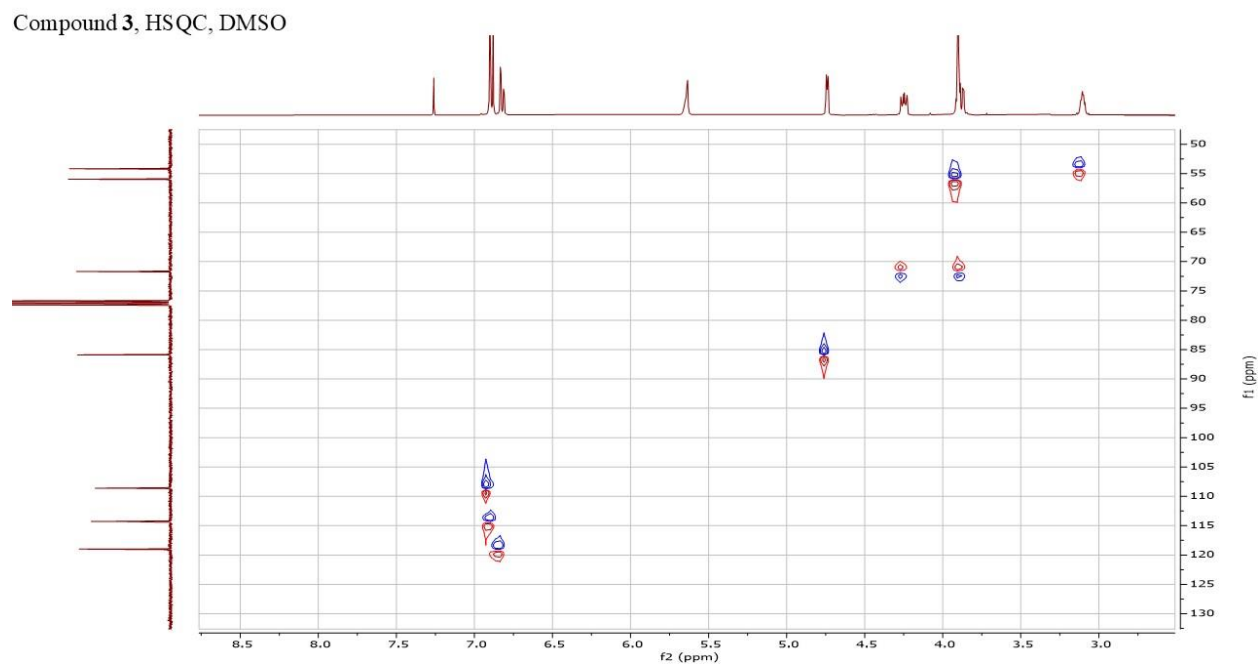


Fig.S 20. HSQC spectrum of compound **3**

Compound **3**, exact MS spectrum

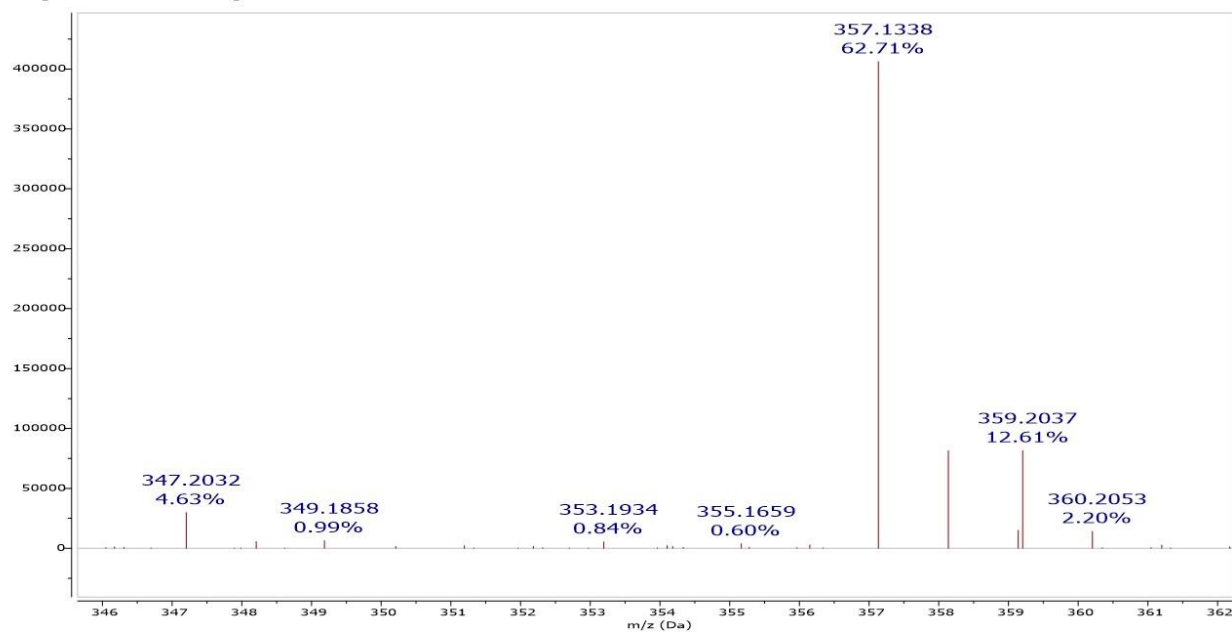


Fig.S 21. ESIMS spectrum of compound **3** m/z 357.1338[M - H]⁻.