

Three new dihydrophenanthrene derivatives from *Cymbidium ensifolium* and their cytotoxicity against cancer cells

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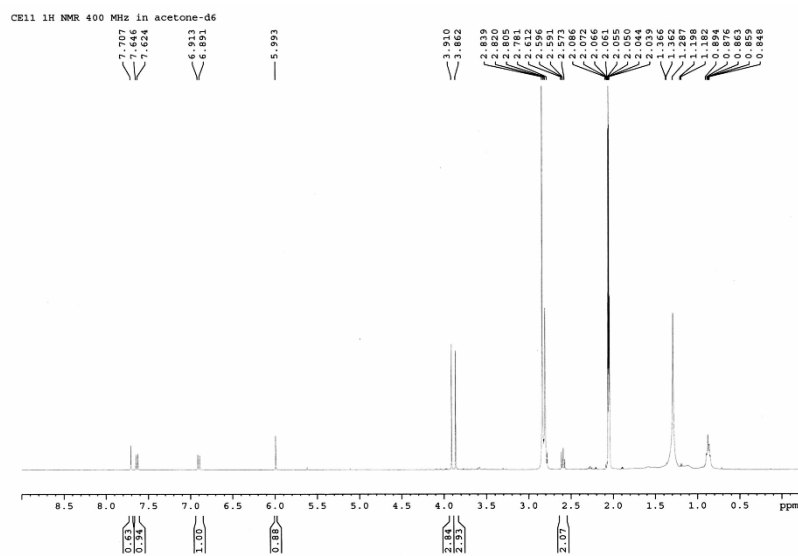


Figure S1. ^1H NMR spectrum of **1** (400 MHz) in acetone- d_6 .

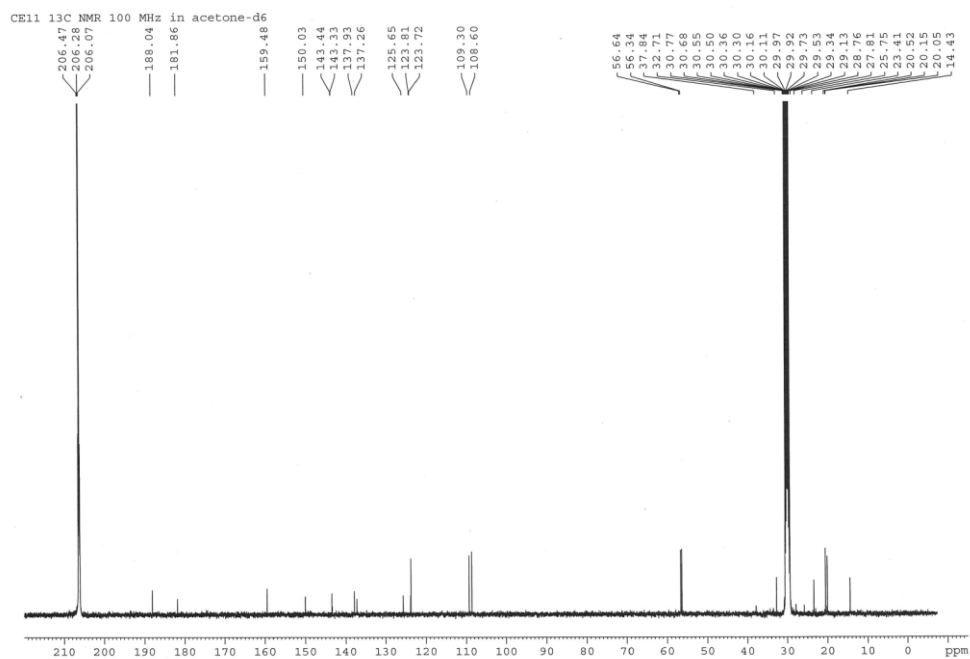


Figure S2. ^{13}C NMR spectrum of **1** (100 MHz) in acetone- d_6 .

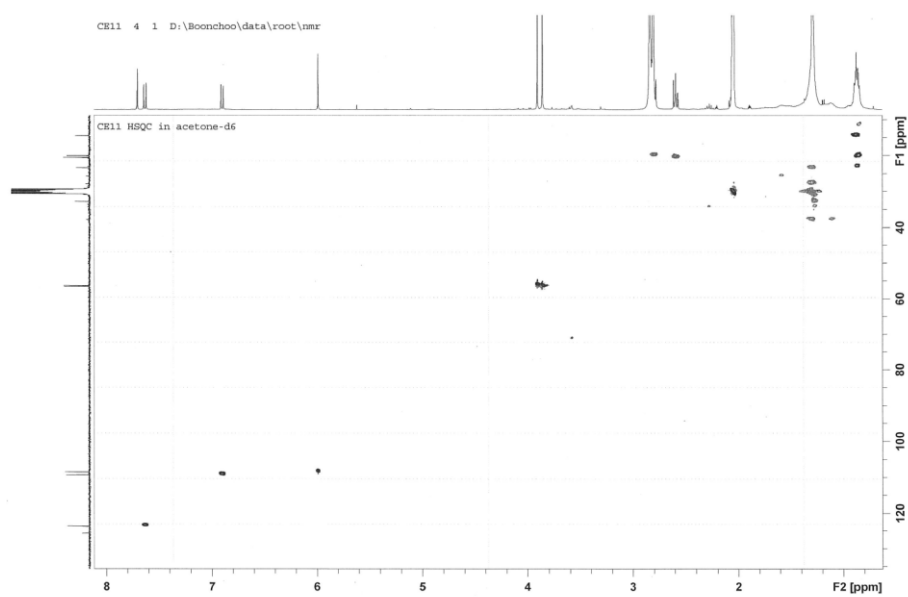


Figure S3. HSQC spectrum of **1** in acetone- d_6 .

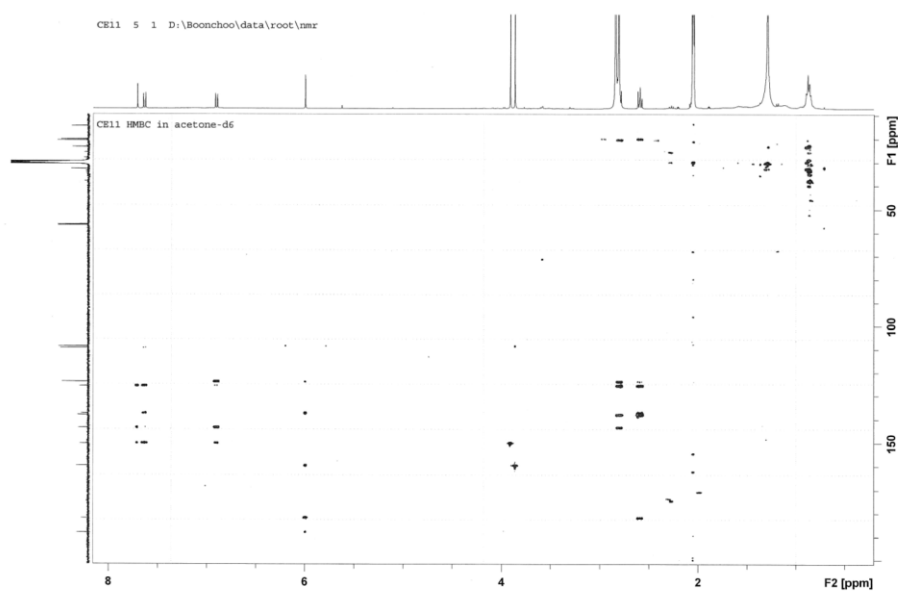


Figure S4. HMBC spectrum of **1** in acetone- d_6 .

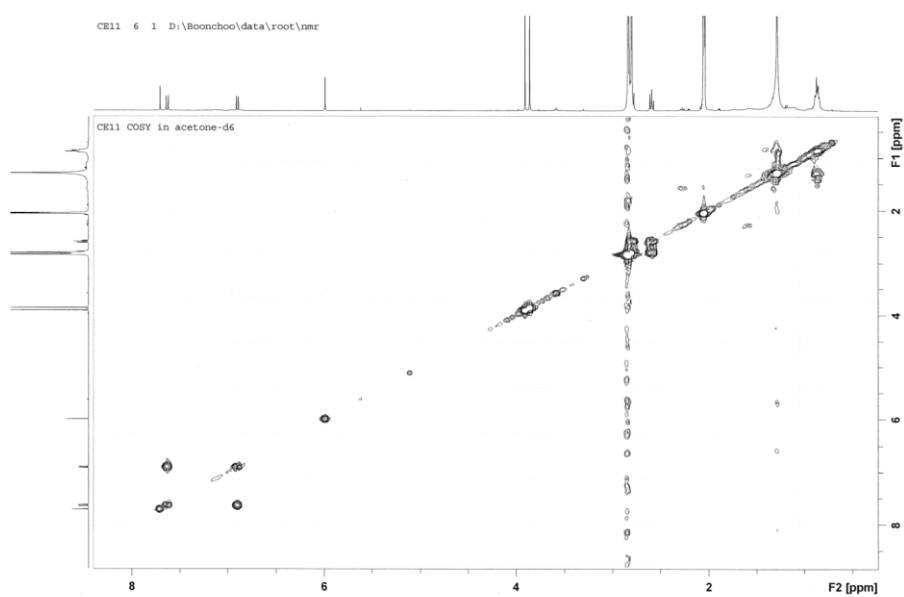


Figure S5. COSY spectrum of **1** in acetone- d_6 .

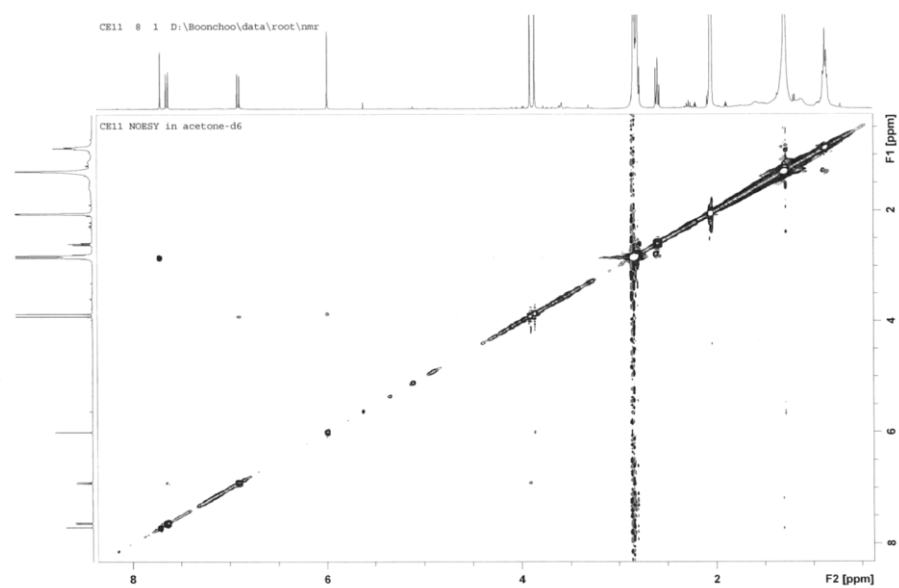


Figure S6. NOESY spectrum of **1** in acetone- d_6 .

| Acquisition Parameter | | | | Set Corrector Fill | 75 V |
|-----------------------|----------|----------------|----------|--------------------|--------|
| Source Type | ESI | Ion Polarity | Negative | Set Pulsar Pull | 372 V |
| Scan Range | n/a | Capillary Exit | -130.0 V | Set Pulsar Push | 372 V |
| Scan Begin | 50 m/z | Hexapole RF | 90.0 V | Set Reflector | 1300 V |
| Scan End | 3000 m/z | Skimmer 1 | -50.0 V | Set Flight Tube | 9000 V |
| | | Hexapole 1 | -25.0 V | Set Detector TOF | 2295 V |

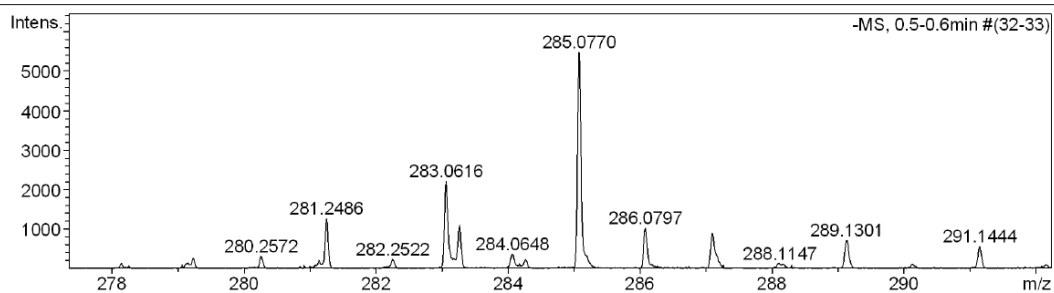


Figure S7. HRESIMS spectrum of **1**.

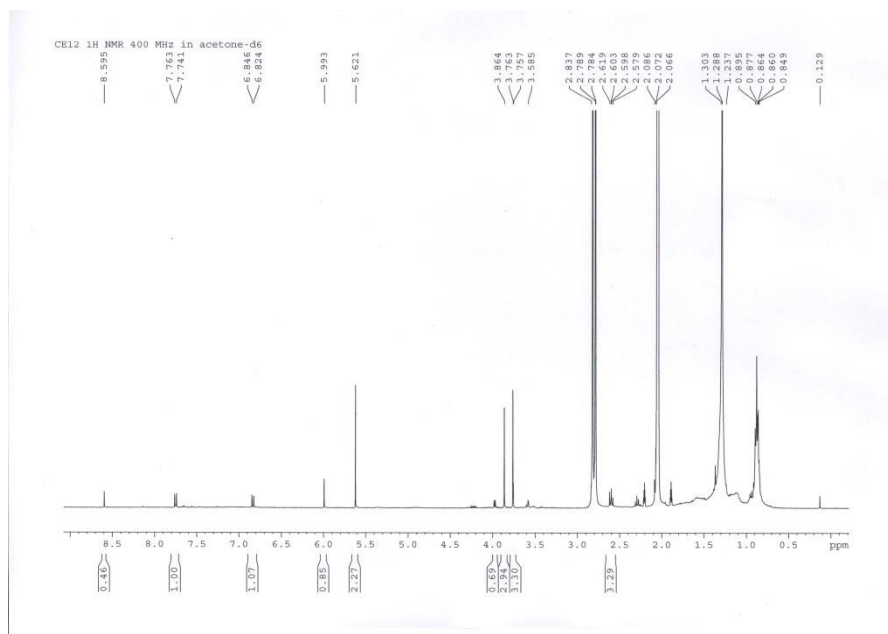


Figure S8. ¹H NMR spectrum of **2** (400 MHz) in acetone-*d*₆.

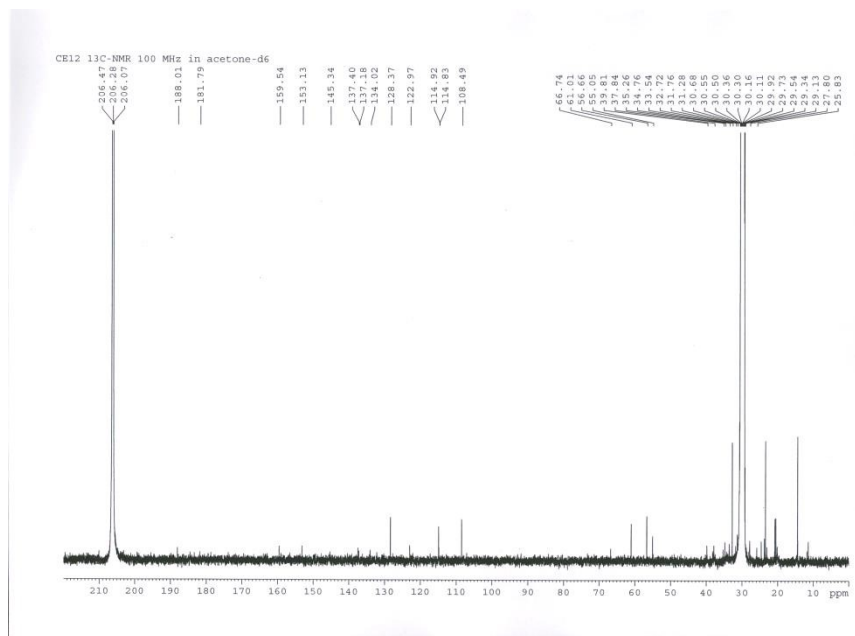


Figure S9. ^{13}C NMR spectrum of **2** (100 MHz) in acetone- d_6 .

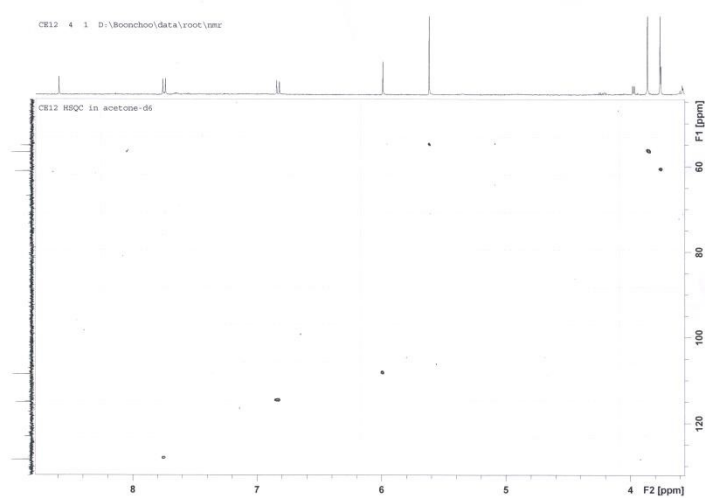


Figure S10. HSQC spectrum of **2** in acetone- d_6 .

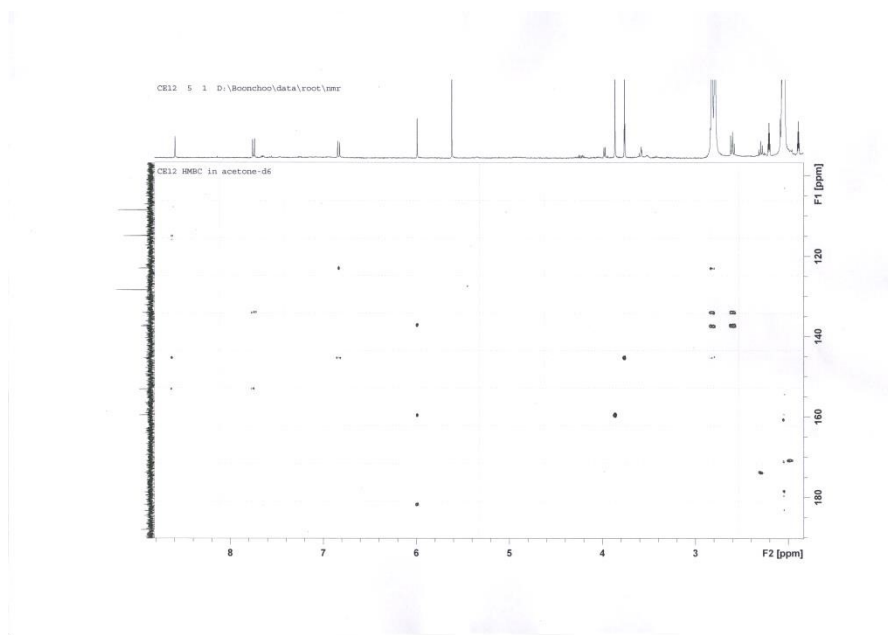


Figure S11. HMBC spectrum of **2** in acetone-*d*₆.

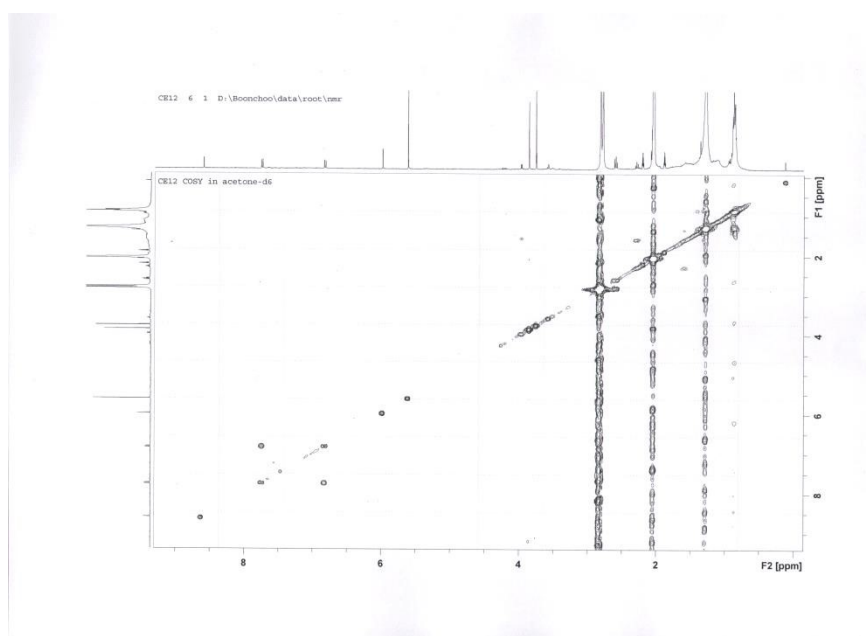


Figure S12. COSY spectrum of **2** in acetone-*d*₆.

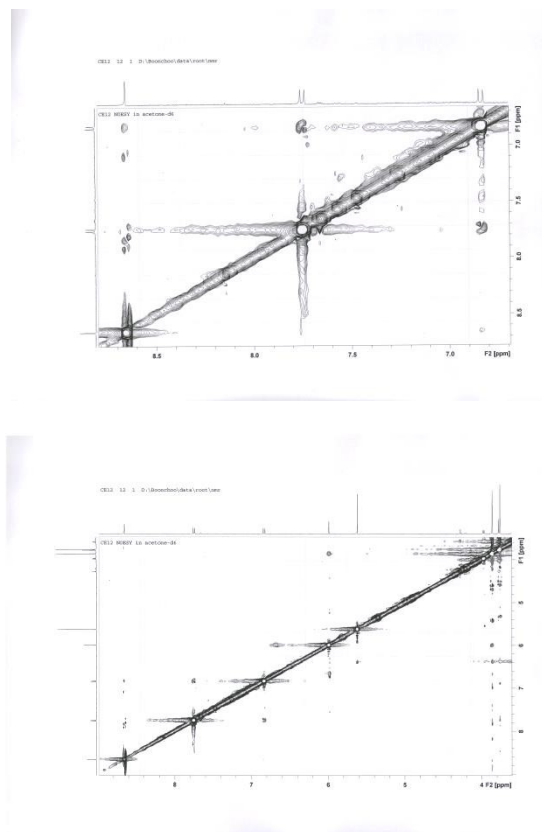


Figure S13. NOESY spectrum of **2** in acetone- d_6 .

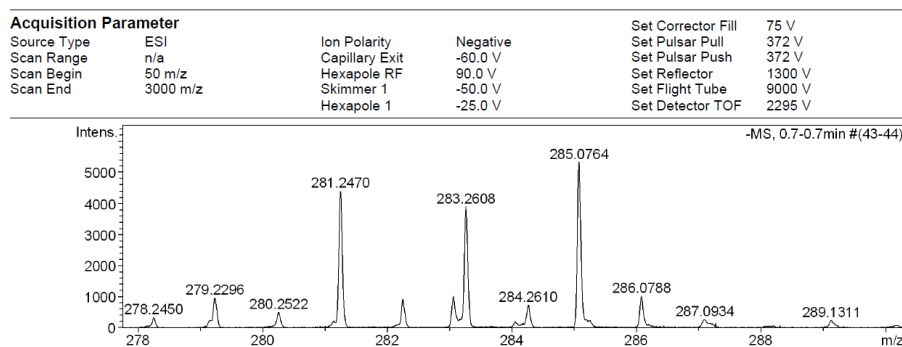


Figure S14. HRESIMS spectrum of **2**.

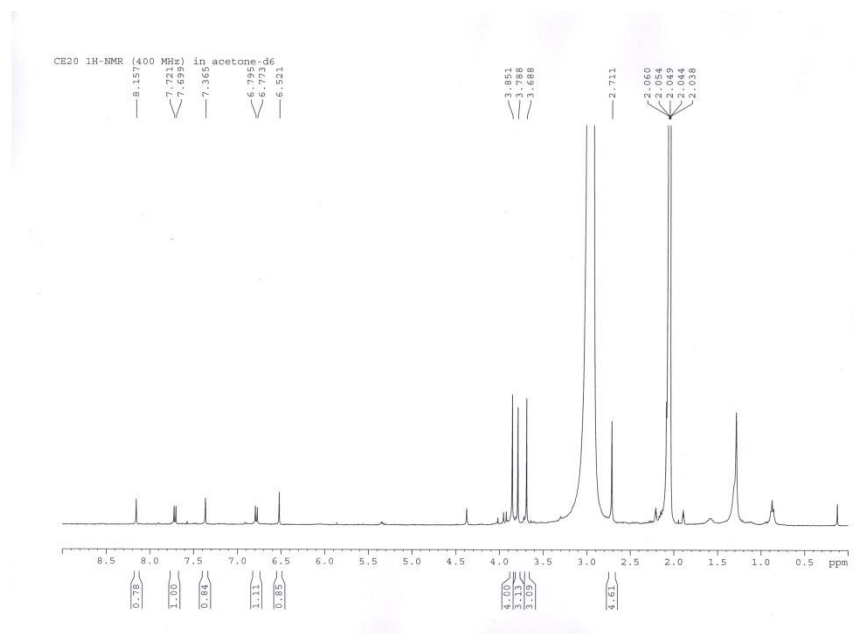


Figure S15. ¹H NMR spectrum of **3** (400 MHz) in acetone-*d*₆.

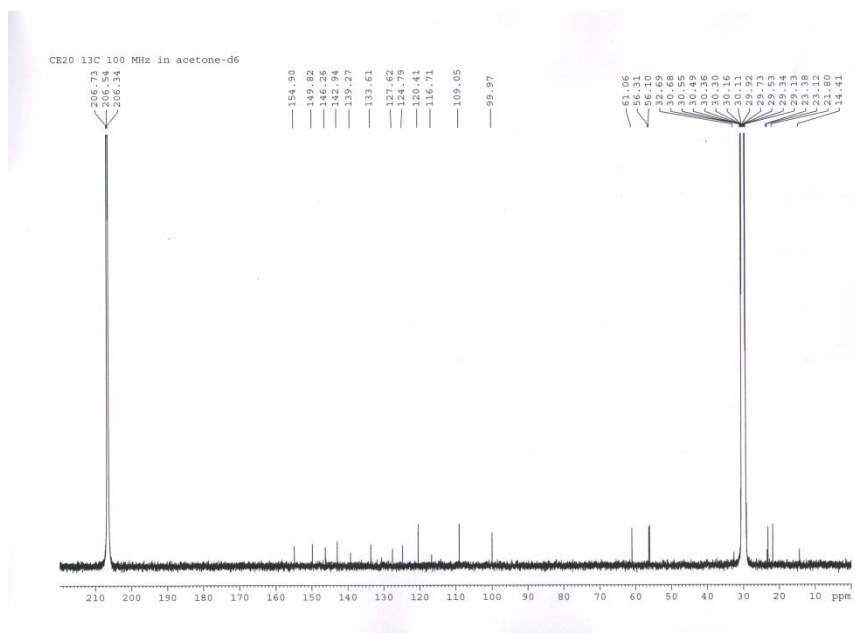


Figure S16. ¹³C NMR spectrum of **3** (100 MHz) in acetone-*d*₆.

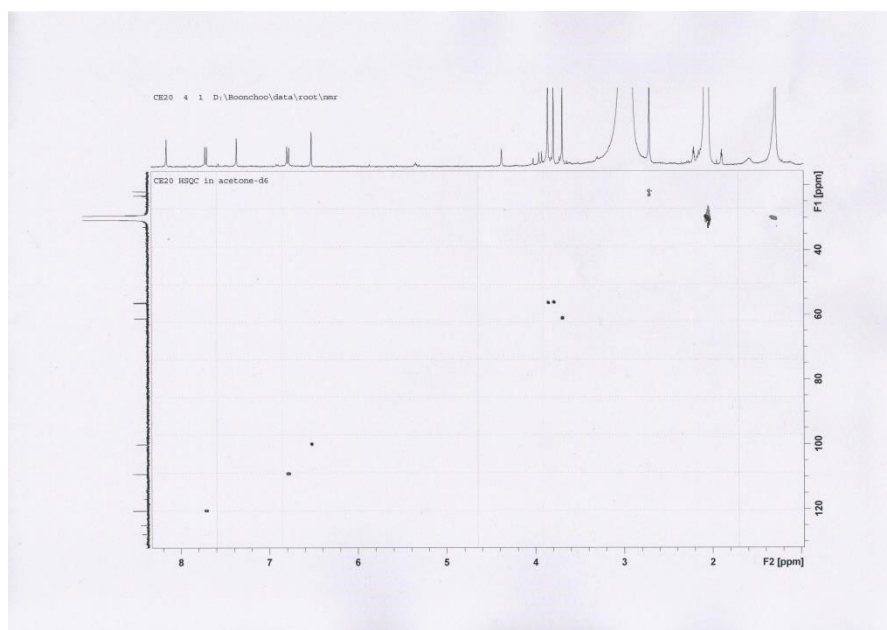


Figure S17. HSQC spectrum of **3** in acetone- d_6 .

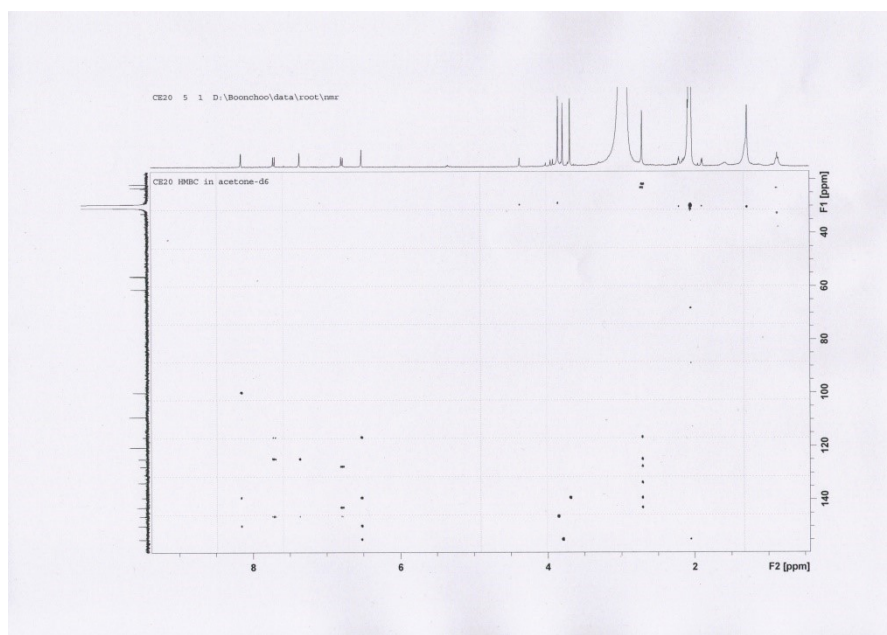


Figure S18. HMBC spectrum of **3** in acetone- d_6 .

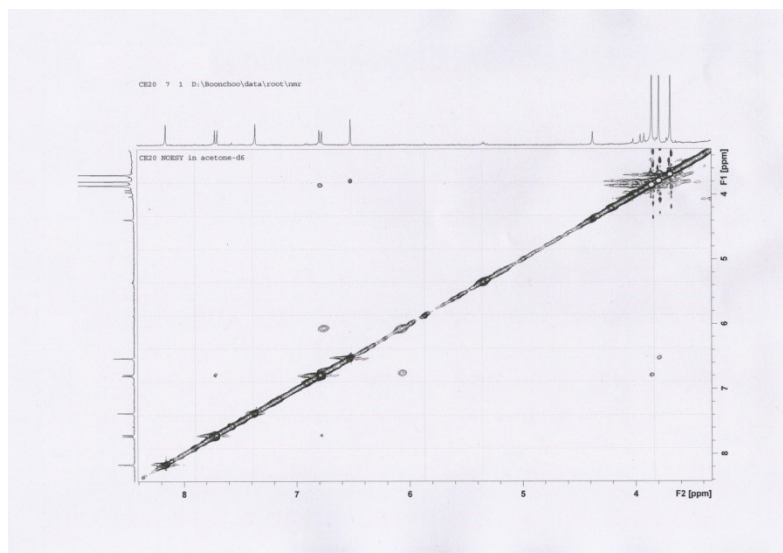


Figure S19. NOESY spectrum of **3** in acetone- d_6 .

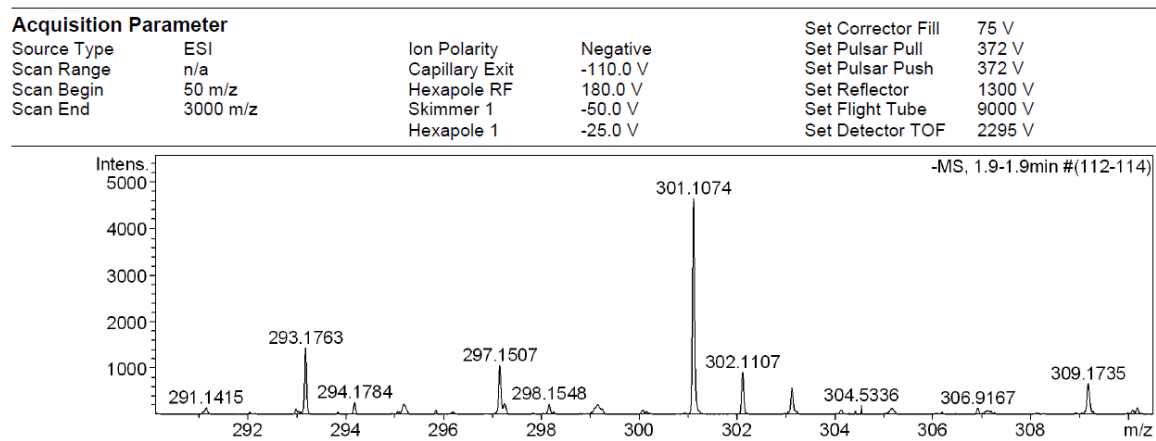


Figure S20. HRESIMS spectrum of **3**.