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# Supplementary Information

## Chemical Constituents from Branches of *Maytenus gonoclada* (Celastraceae) and Evaluation of Antimicrobial Activity

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**Table S1.** Antimicrobial activities of hexane extract and compounds **1**, **3**, **5** and **6** (each concentration at 100 μg/mL)

| Samples | Inhibition zone diameter (mm) | | | |
|---|---|---|---|---|
| | *E. coli* | *C. freundii* | *B. cereus* | *C. albicans* |
| Hexane extract | ND | ND | ND | 8 |
| Compound **1** | ND | ND | ND | ND |
| Compound **3** | ND | ND | ND | ND |
| Compound **5** | ND | ND | ND | ND |
| Compound **6** | ND | ND | ND | ND |
| Chloroform[a] | ND | ND | ND | ND |
| Cloranfenicol[b] | 22 | 29 | 20 | - |
| Miconazole[c] | - | - | - | 17 |

[a]Negative control; [b]Positive control (bacteria); [c]Positive control (fungus); ND (Not Detected).

**Table S2.** Antimicrobial activities of hexane extract and compounds **3**

| Samples | Minimum Inhibitory Concentration (μg/mL) | | | |
|---|---|---|---|---|
| | *E. coli* | *C. freundii* | *B. cereus* | *C. albicans* |
| Hexane extract | ND | ND | ND | 512 |
| Compound **3** | ND | ND | ND | 512 |
| DMSO[a] | ND | ND | ND | ND |
| Cloranfenicol[b] | 8 | 4 | 8 | - |
| Miconazole[c] | - | - | - | 16 |

[a]Negative control; [b]Positive control (bacteria); [c]Positive control (fungus); ND (Not Detected).

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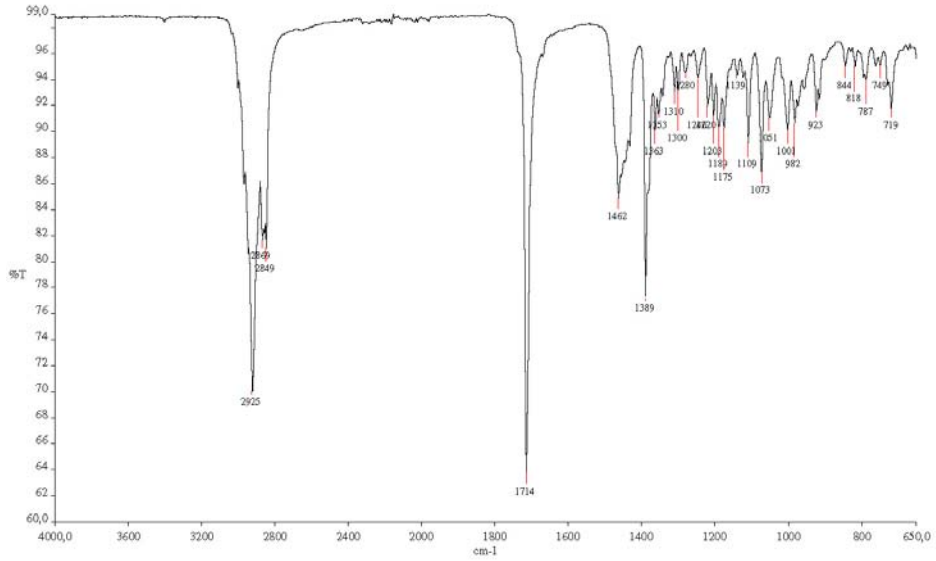


**Figure S1.** IR spectrum of compound **1** (ATR).

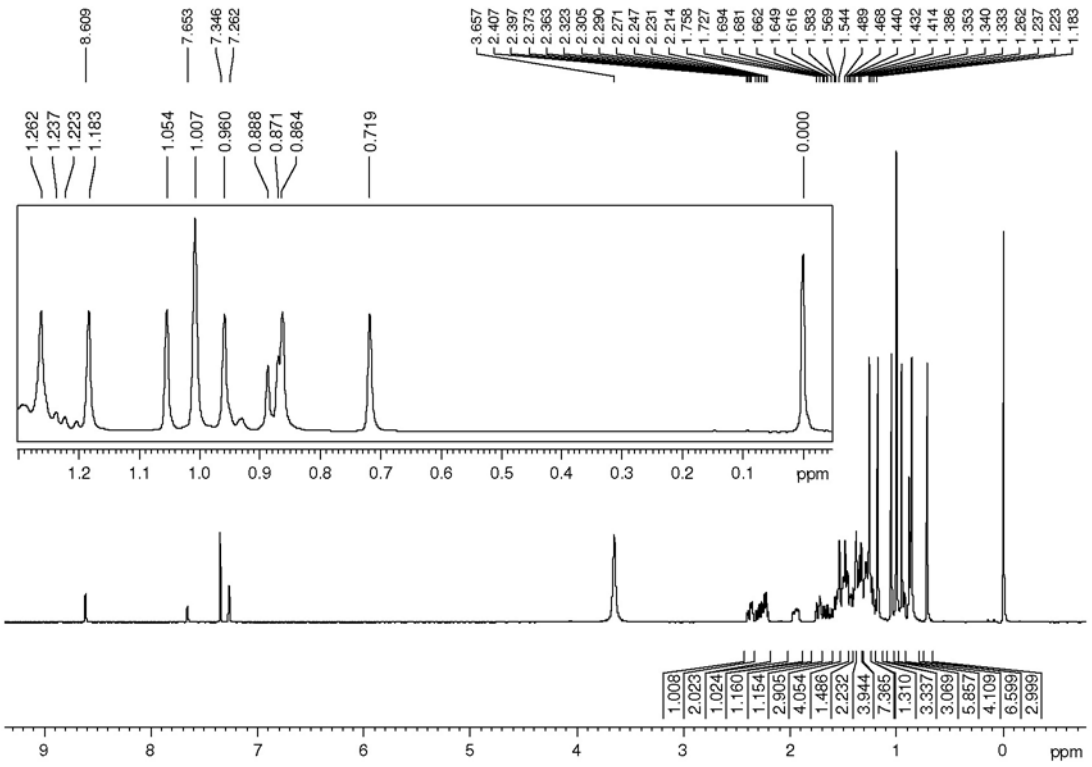


**Figure S2.** $^1$H NMR spectrum of compound **1** ($CDCl_3$ + pyridine-$d_5$, 400 MHz).

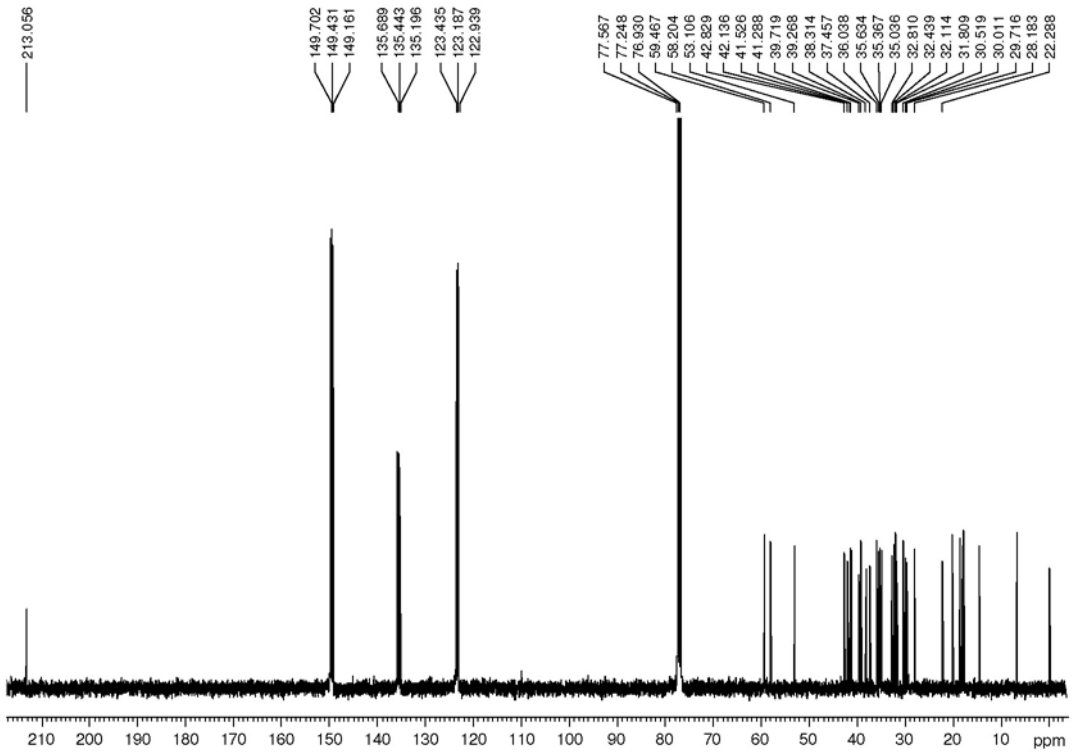


**Figure S3.** $^{13}C$ NMR spectrum of compound **1** ($CDCl_3$ + pyridine-$d_5$, 100 MHz).

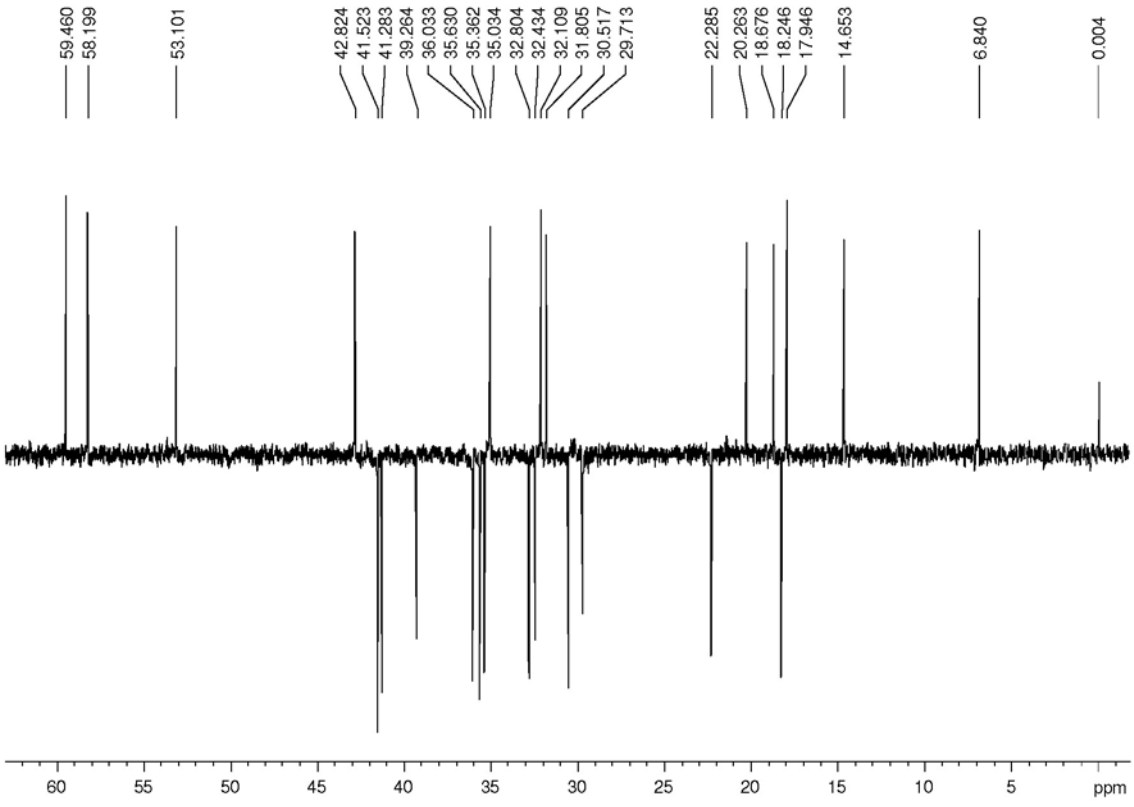


**Figure S4.** $^{13}C$ NMR-DEPT spectrum of compound **1** ($CDCl_3$ + pyridine-$d_5$, 100 MHz).

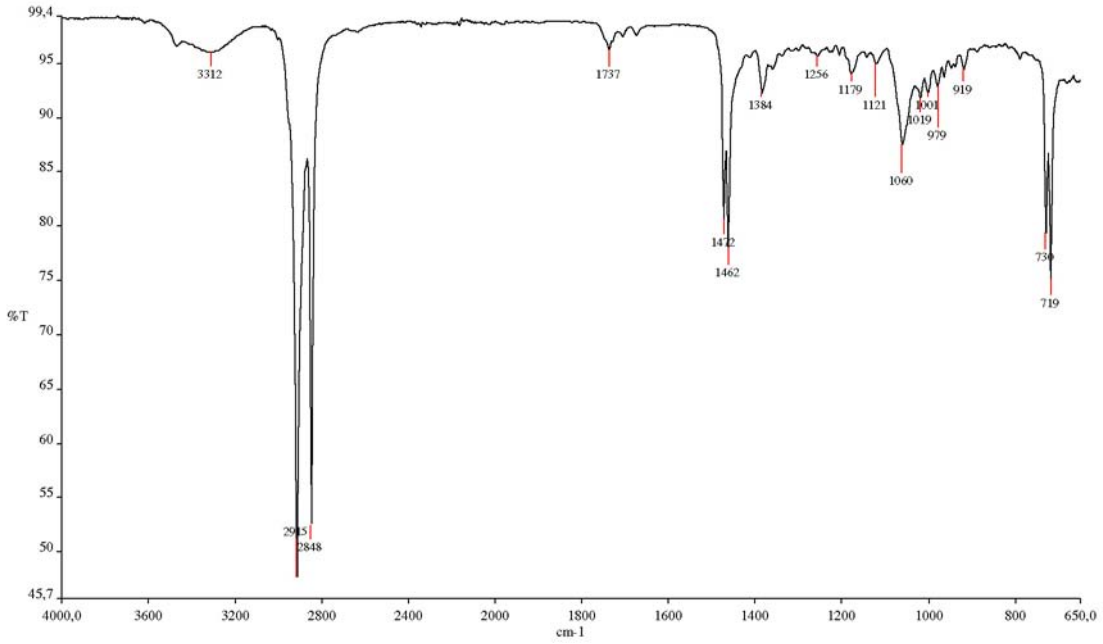


**Figure S5.** IR spectrum of compound **2** (ATR).

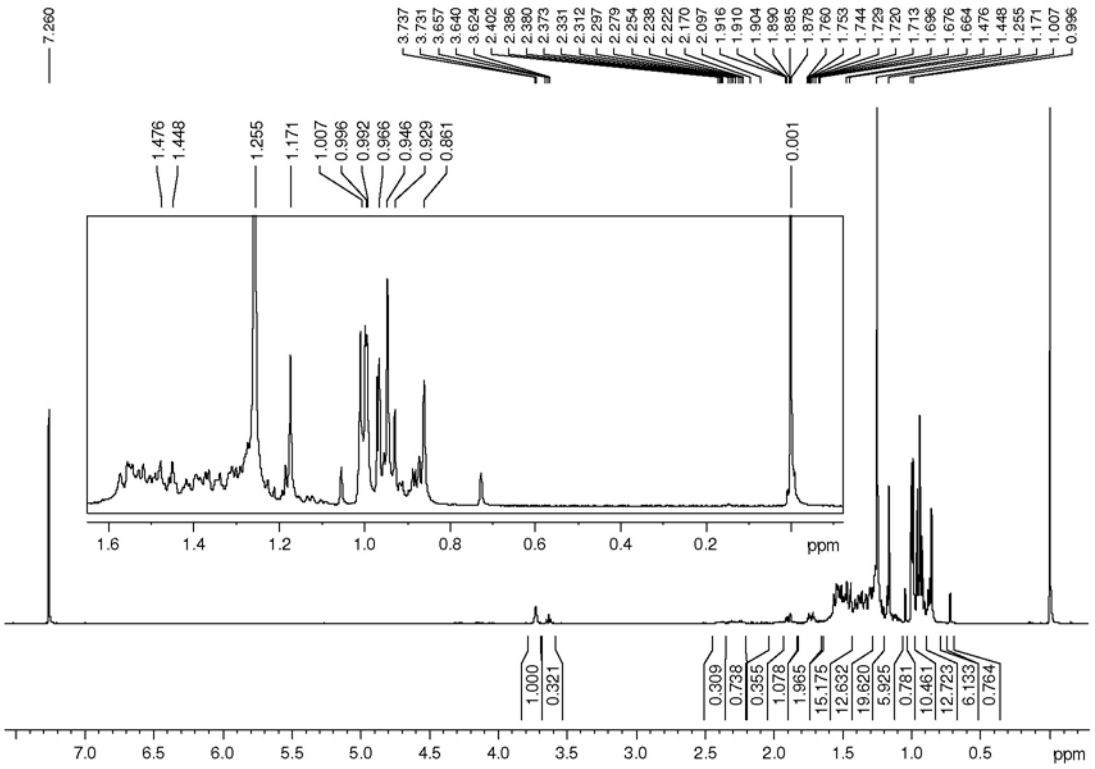


**Figure S6.** $^1$H NMR spectrum of compound **2** ($CDCl_3$, 400 MHz).

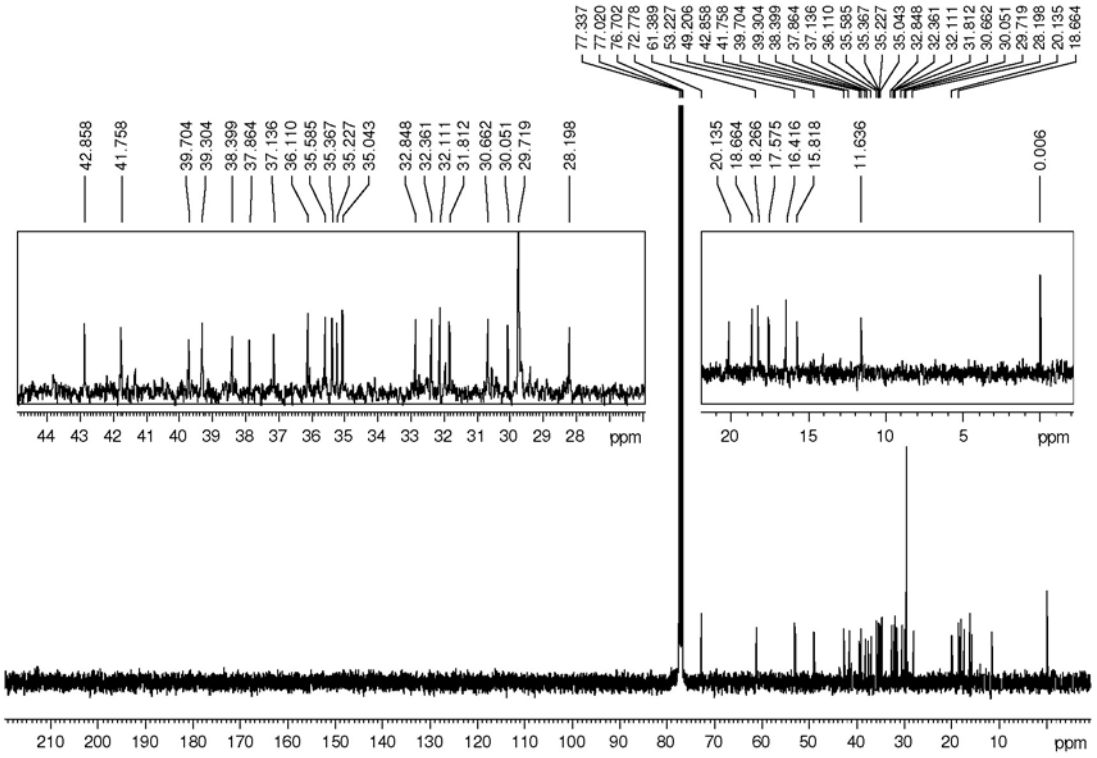


**Figure S7.** $^{13}C$ NMR spectrum of compound **2** ($CDCl_3$, 100 MHz).

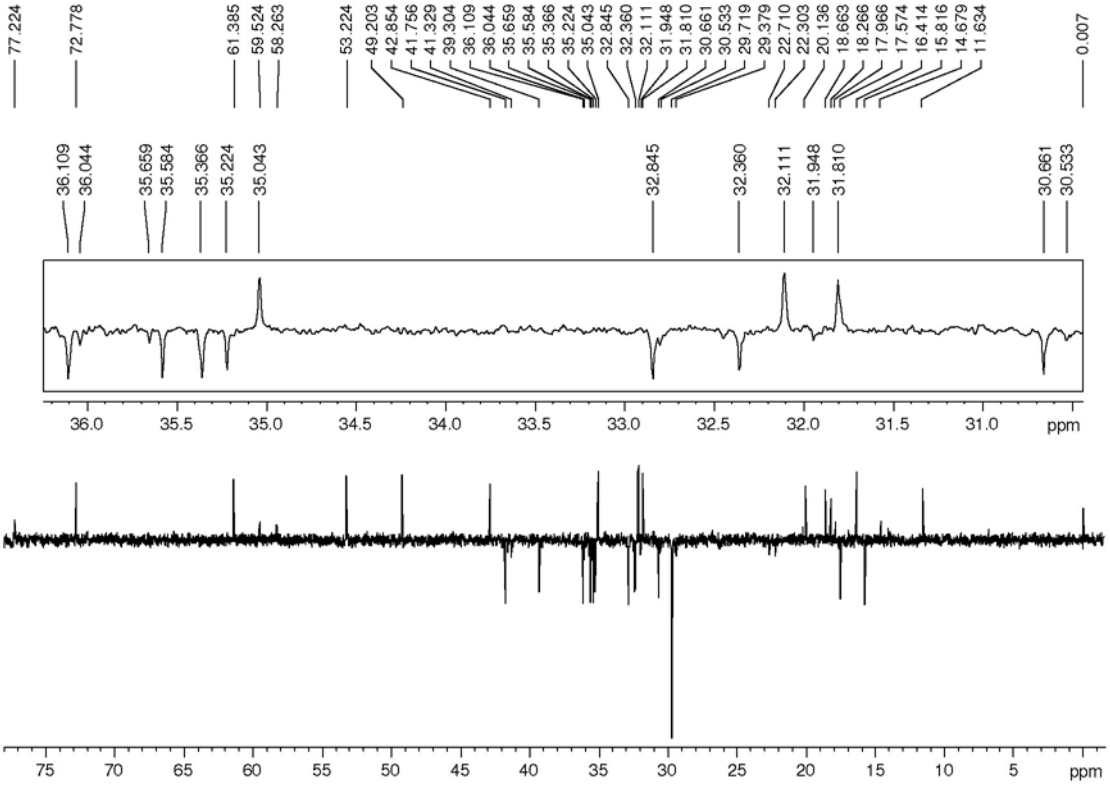


**Figure S8.** $^{13}C$ NMR-DEPT spectrum of compound **2** ($CDCl_3$, 100 MHz).

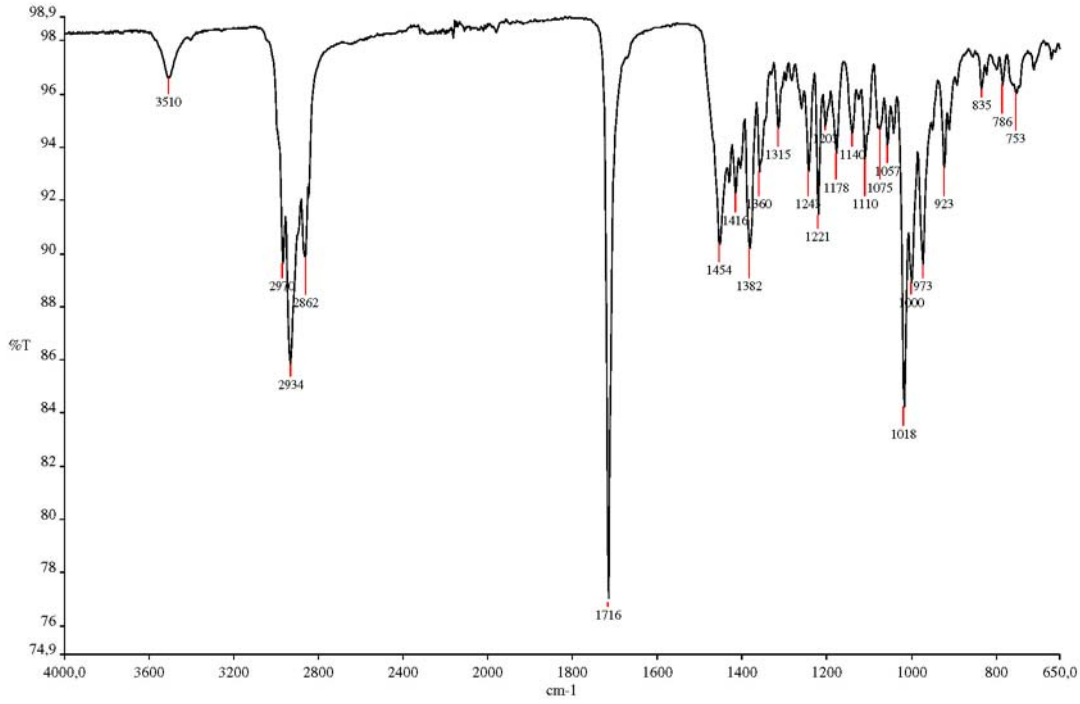


**Figure S9.** IR spectrum of compound **3** (ATR).

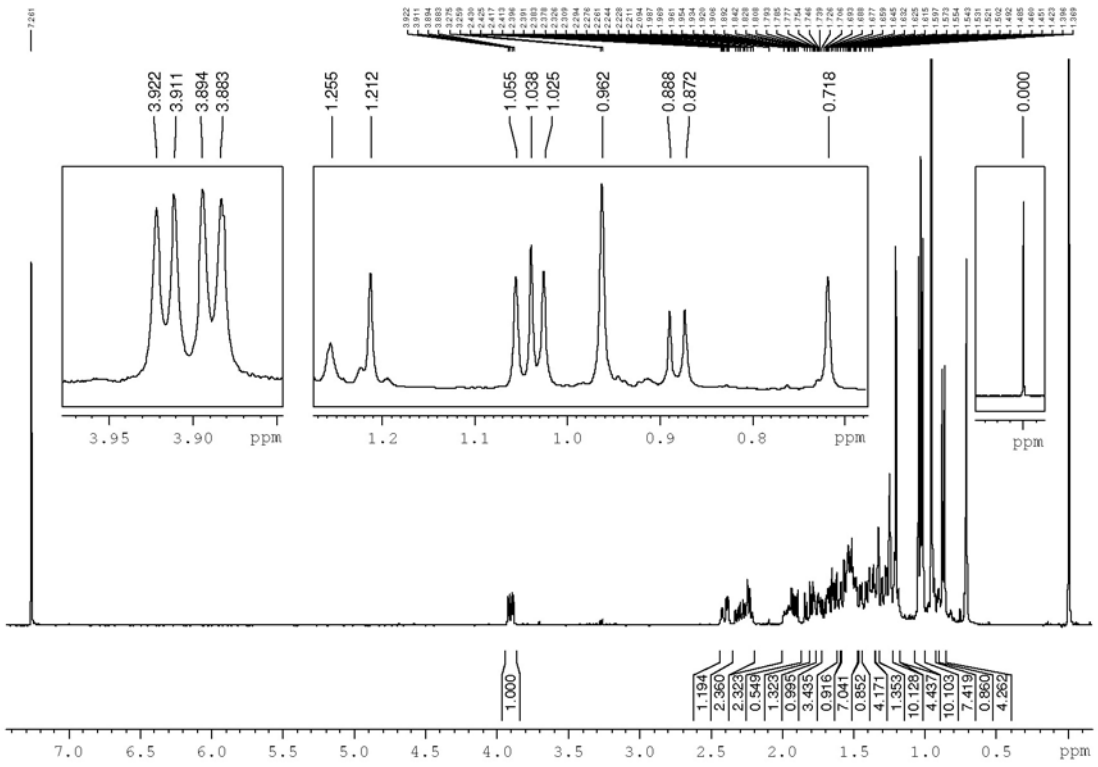


**Figure S10.** $^1$H NMR spectrum of compound **3** ($CDCl_3$, 400 MHz).

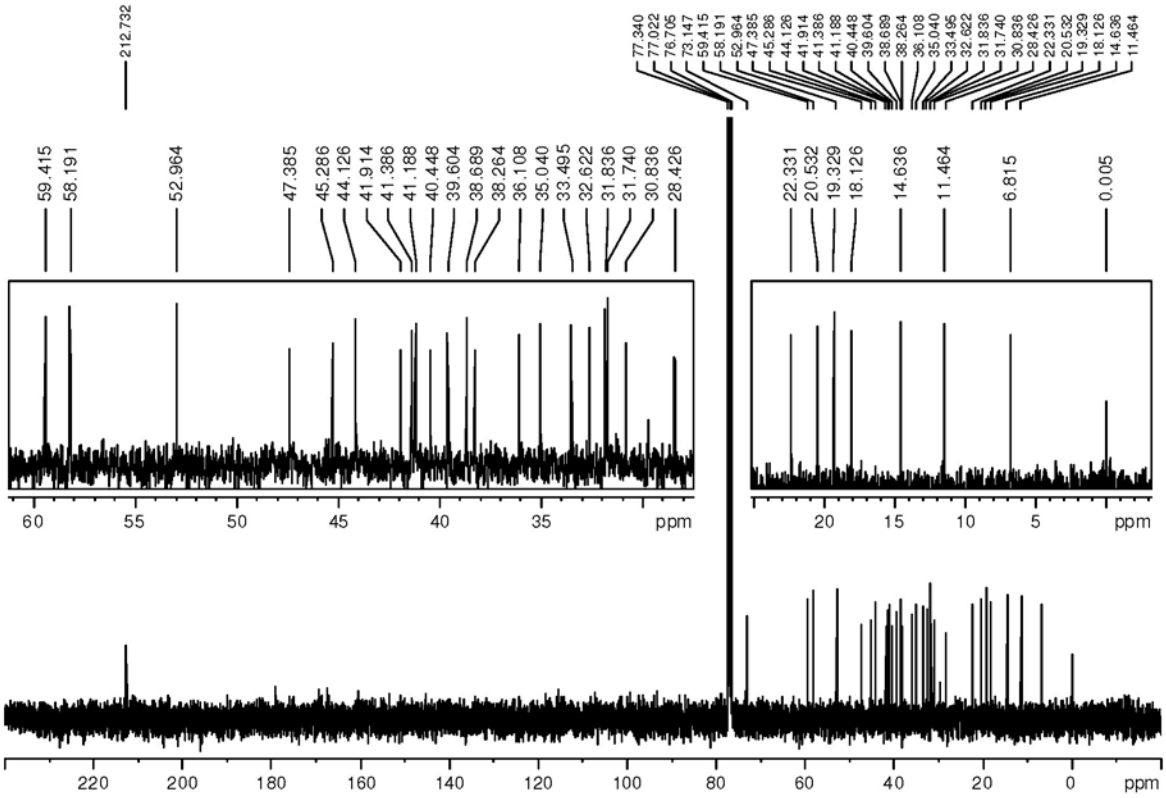


**Figure S11.** $^{13}C$ NMR spectrum of compound **3** ($CDCl_3$, 100 MHz).

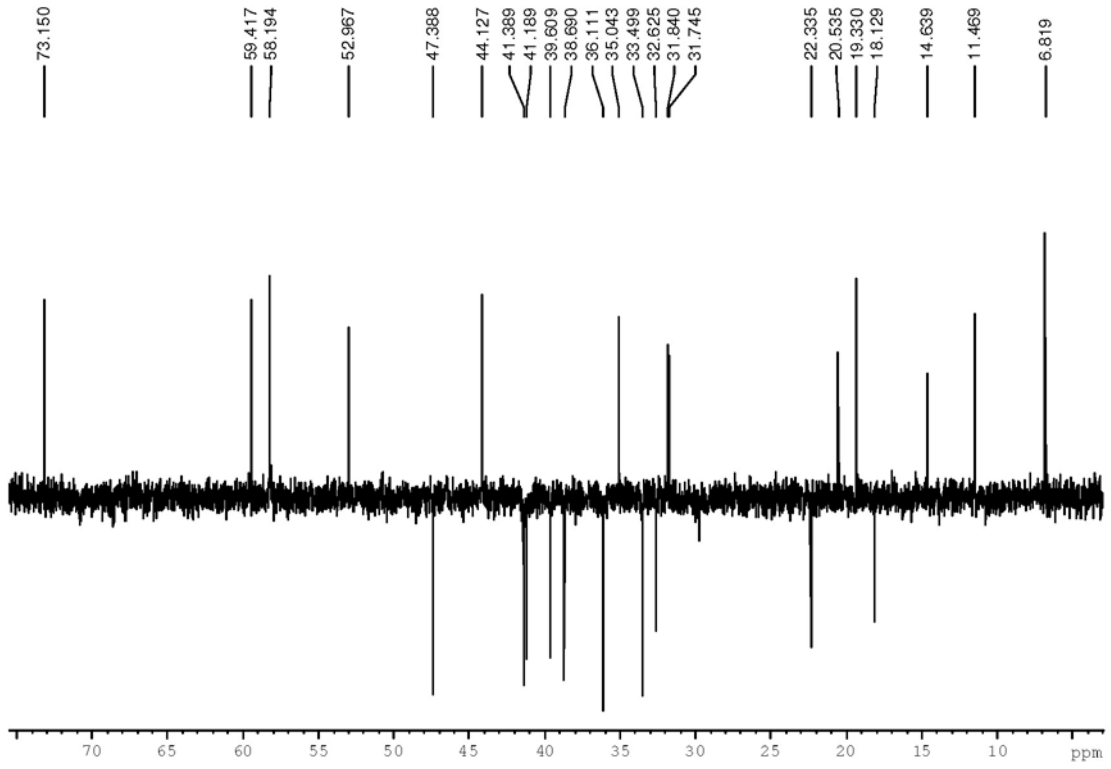


**Figure S12.** $^{13}C$ NMR-DEPT spectrum of compound **3** ($CDCl_3$, 100 MHz).

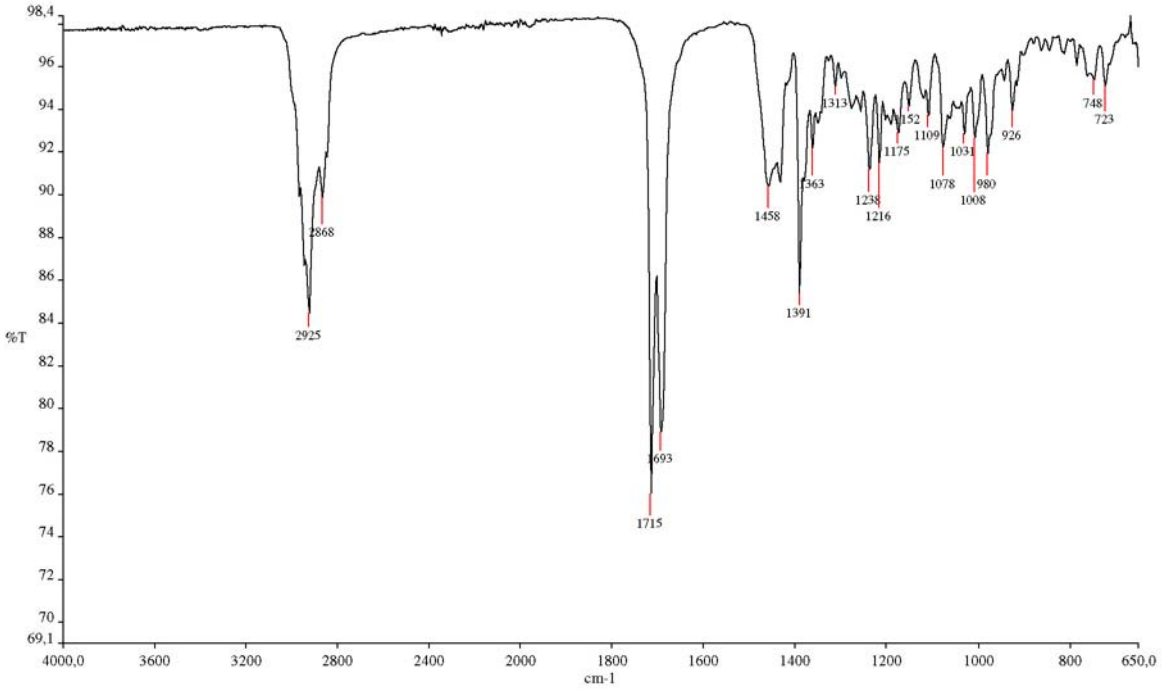


**Figure S13.** IR spectrum of compound **4** and **5** (ATR).

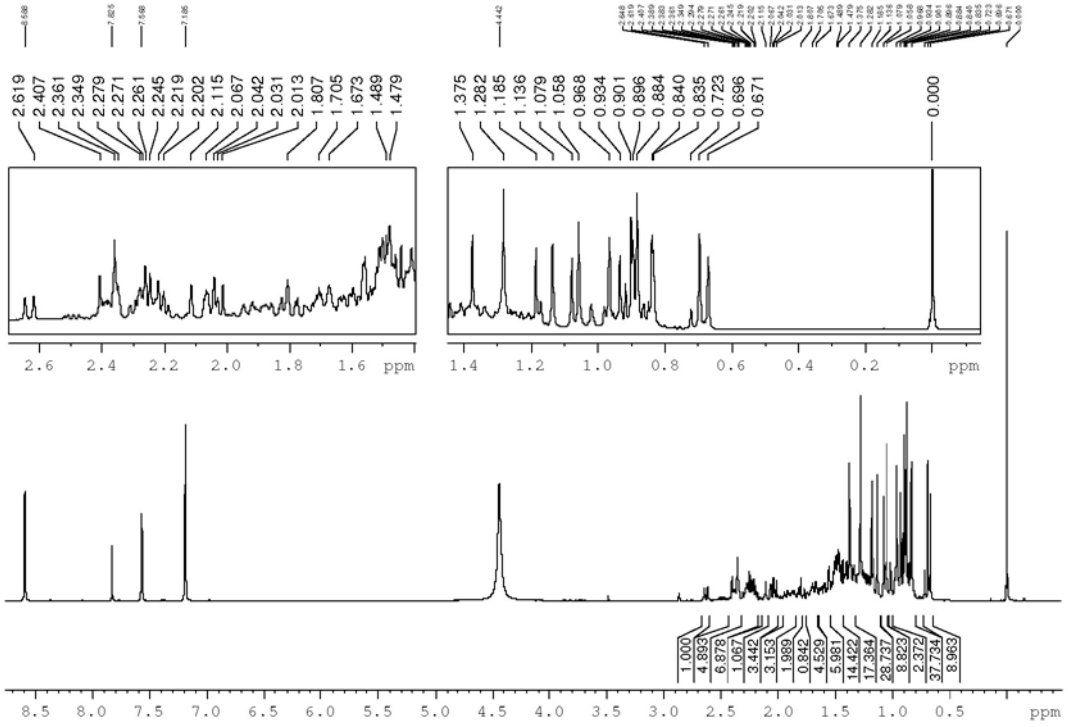


**Figure S14.** $^1$H NMR spectrum of compound **4** and **5** ($CDCl_3$ + pyridine-$d_5$, 400 MHz).

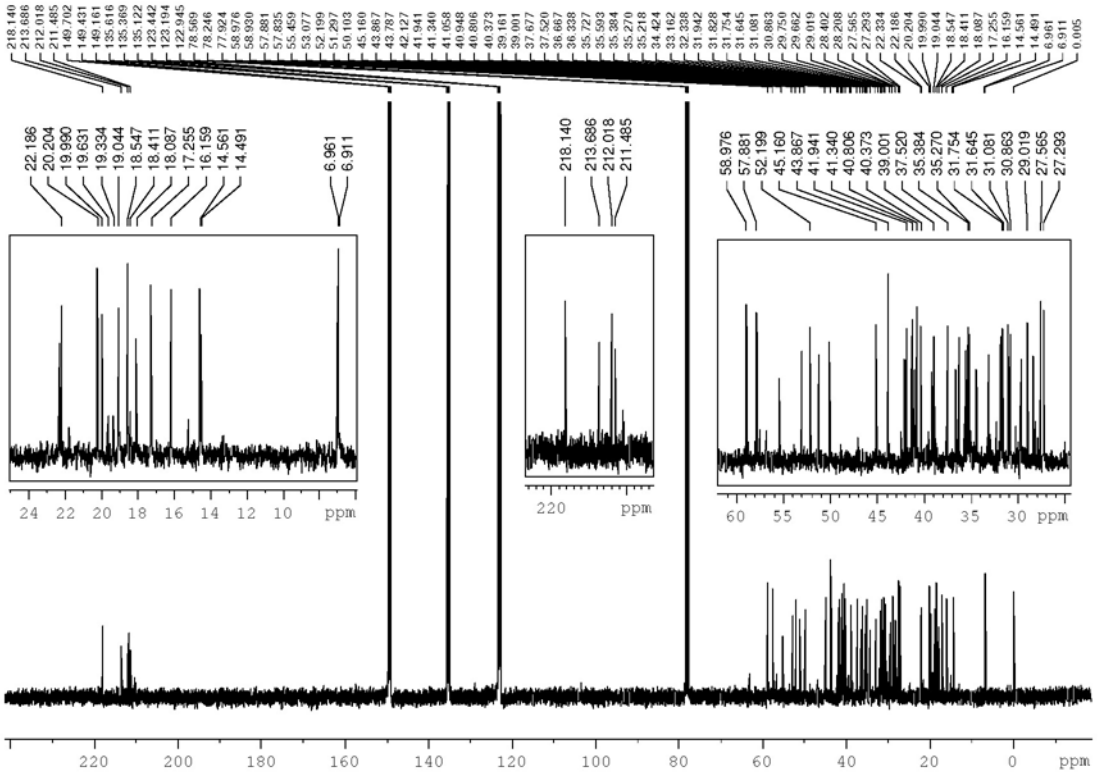

**Figure S15.** $^{13}C$ NMR spectrum of compound **4** and **5** ($CDCl_3$ + pyridine-$d_5$, 100 MHz).

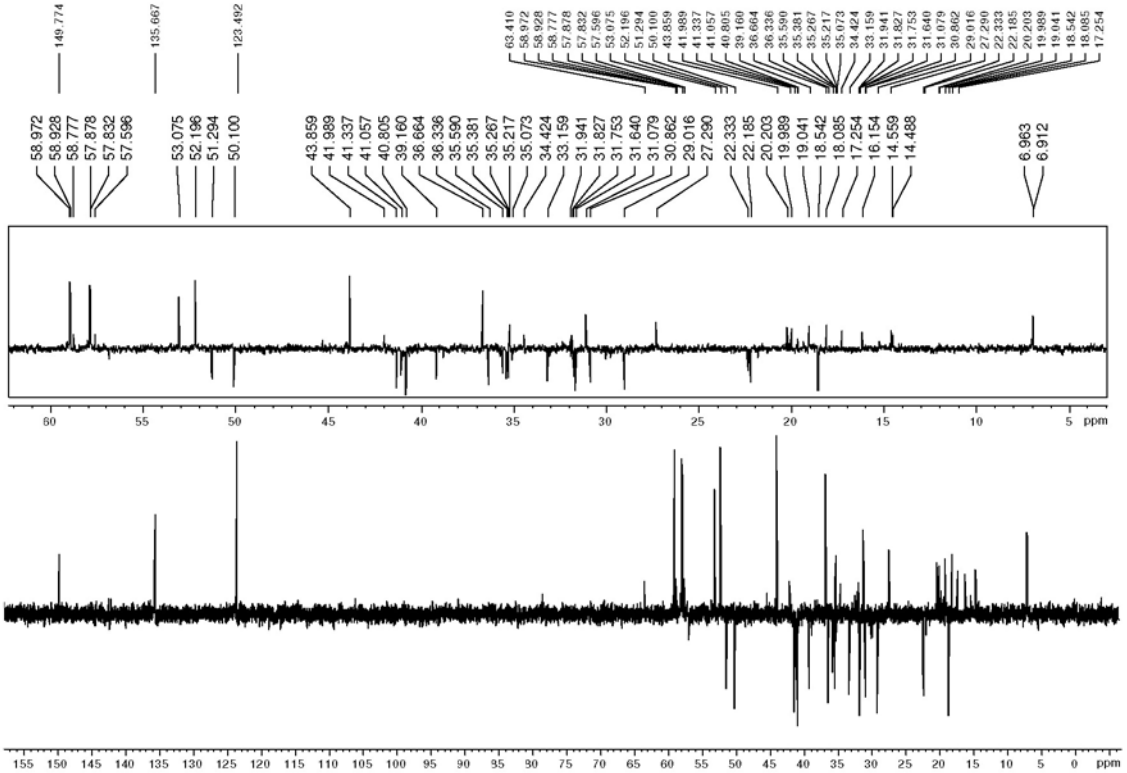

**Figure S16.** $^{13}C$ NMR-DEPT spectrum of compound **4** and **5** ($CDCl_3$ + pyridine-$d_5$, 100 MHz).

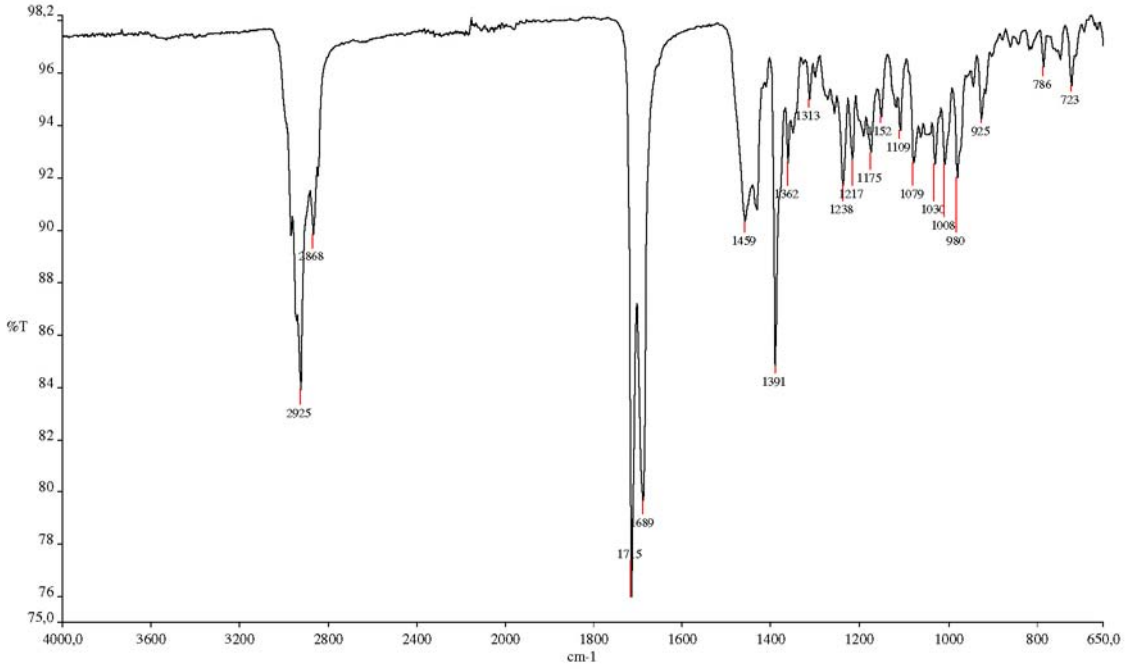


**Figure S17.** IR spectrum of compound **5** (ATR).

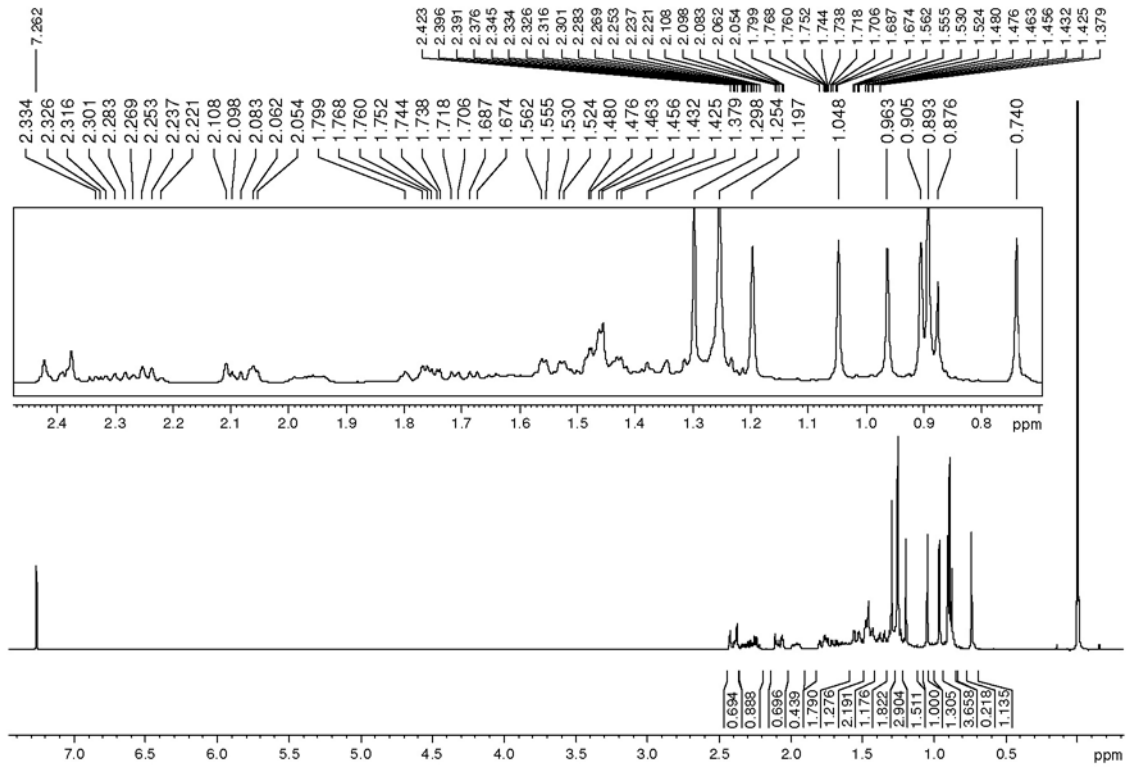


**Figure S18.** $^1$H NMR spectrum of compound **5** ($CDCl_3$, 400 MHz).

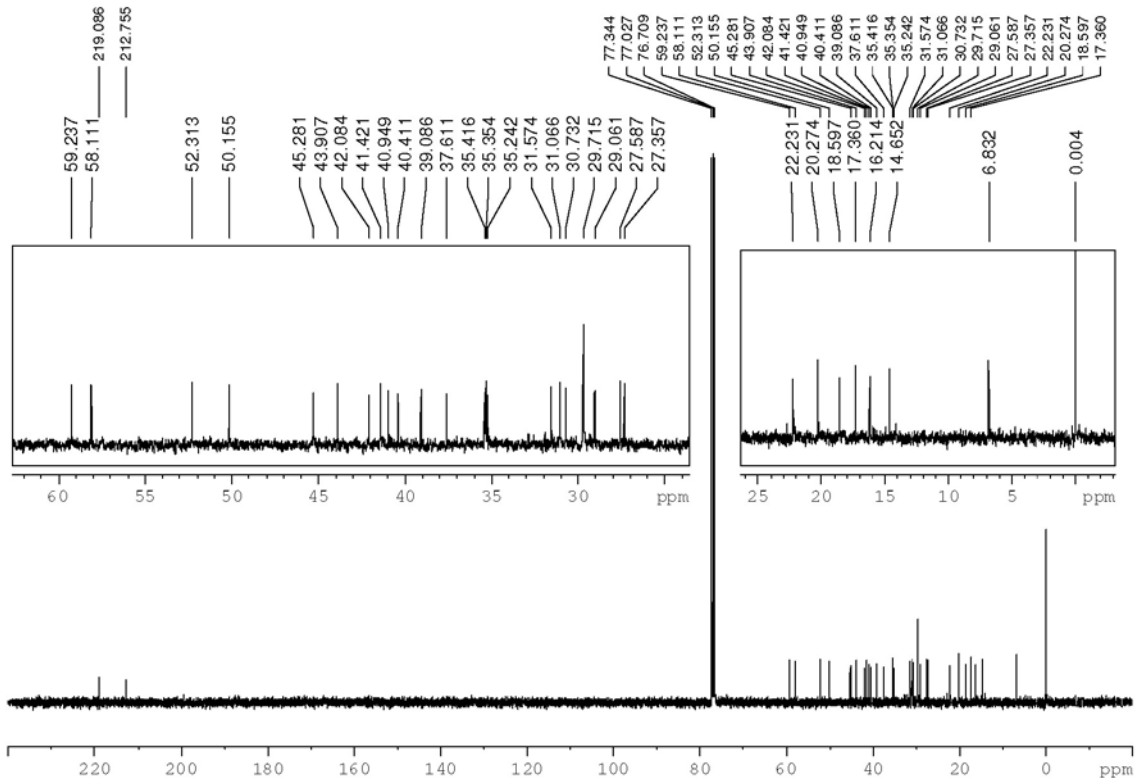


**Figure S19.** $^{13}C$ NMR spectrum of compound **5** ($CDCl_3$, 100 MHz).

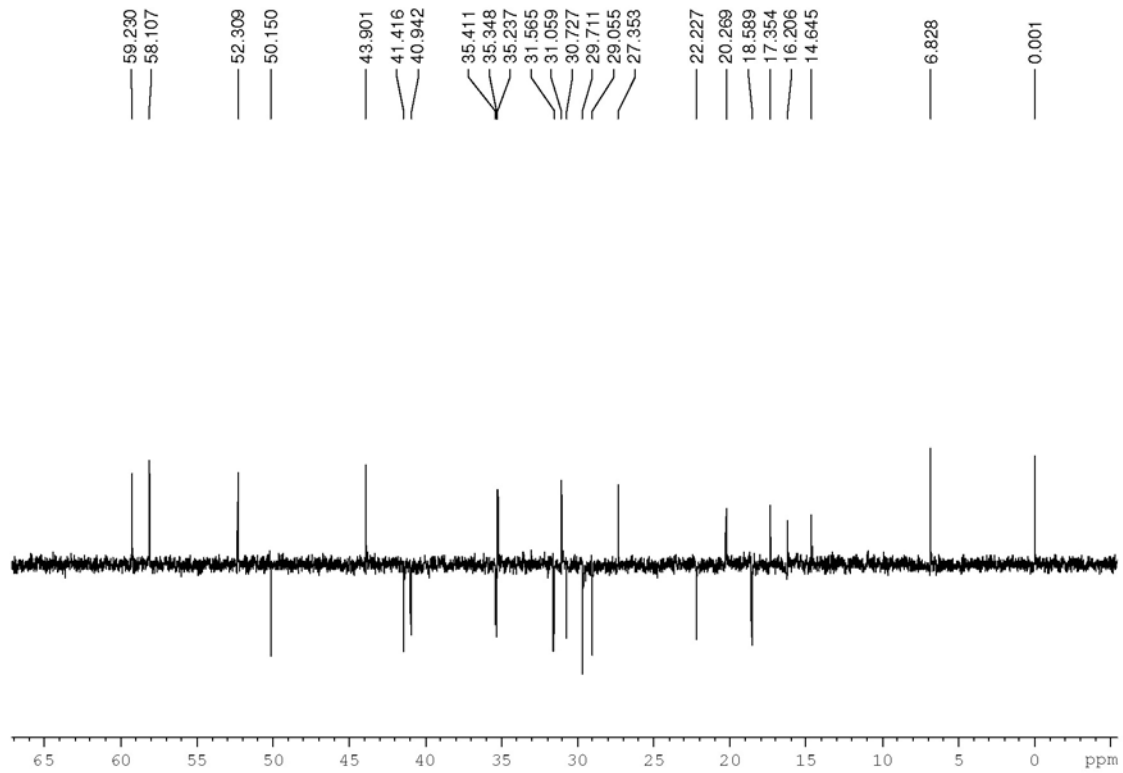


**Figure S20.** $^{13}C$ NMR-DEPT spectrum of compound **5** ($CDCl_3$, 100 MHz).

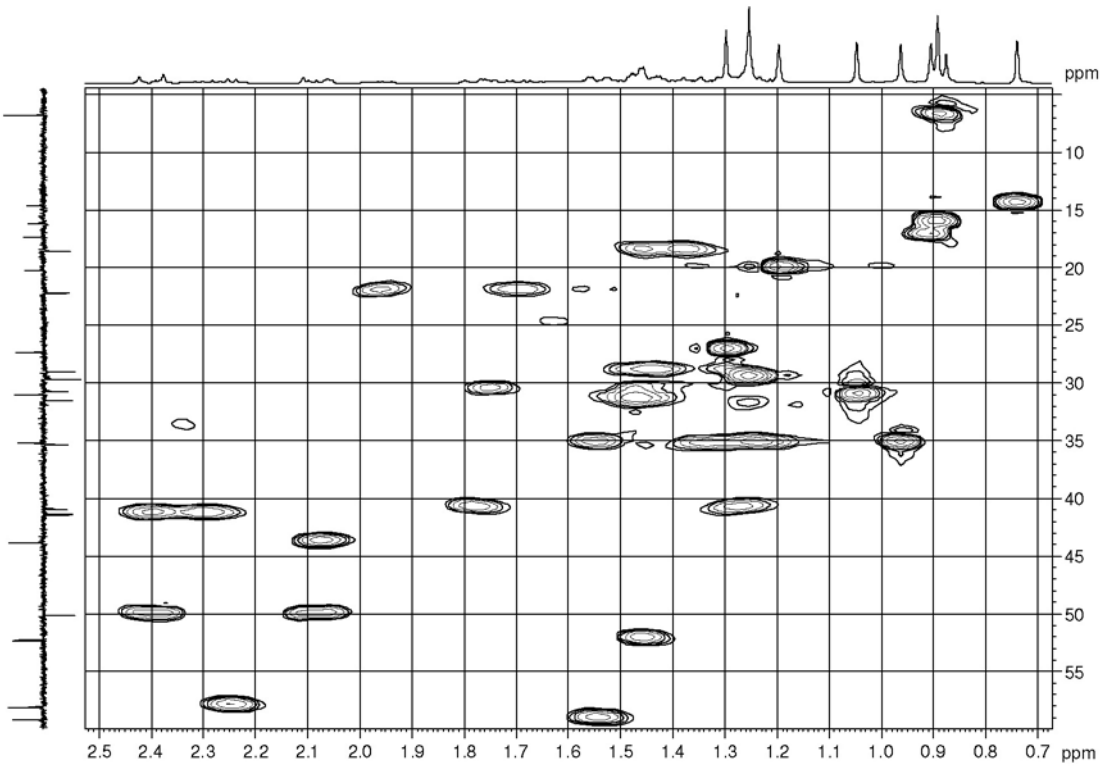


**Figure S21.** HSQC spectrum of compound **5** ($CDCl_3$, 400 MHz).

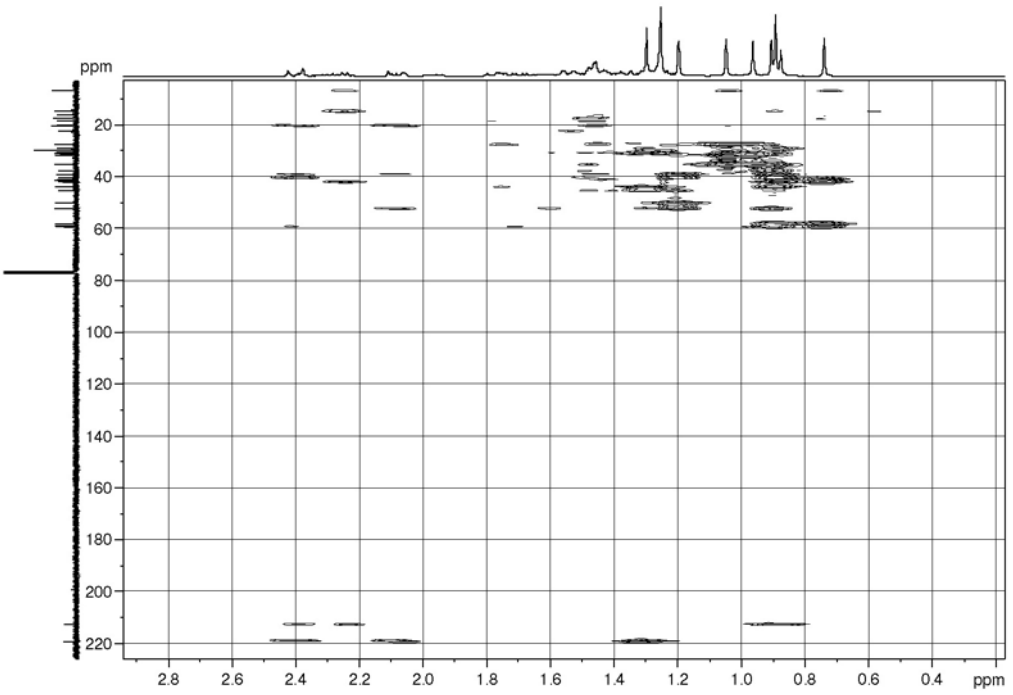


**Figure S22.** HMBC spectrum of compound **5** ($CDCl_3$, 400 MHz).

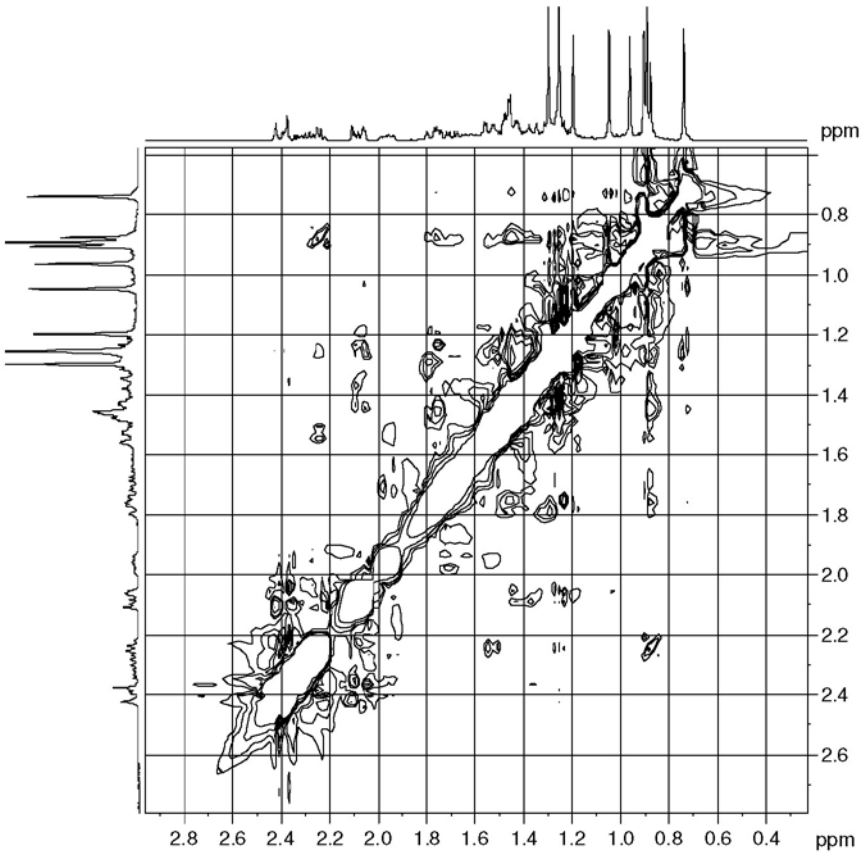


**Figure S23.** $^{1}H$, $^{1}H$ NOESY spectrum of compound **5** ($CDCl_3$, 400 MHz).

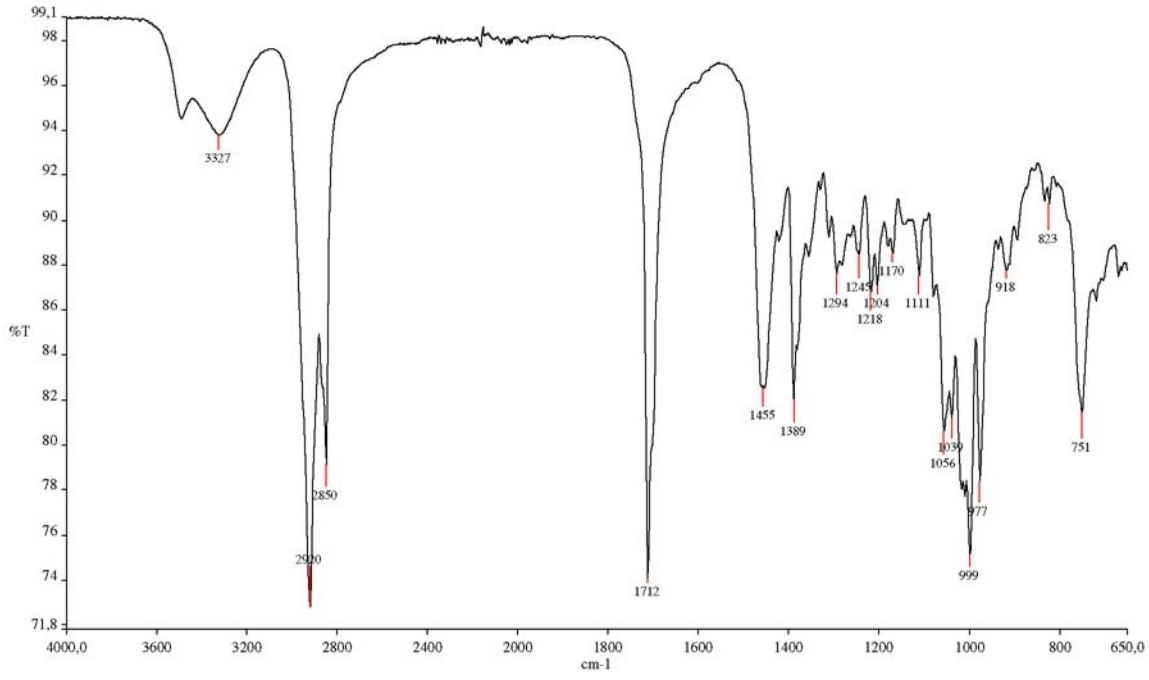


**Figure S24.** IR spectrum of compound **6** (ATR).

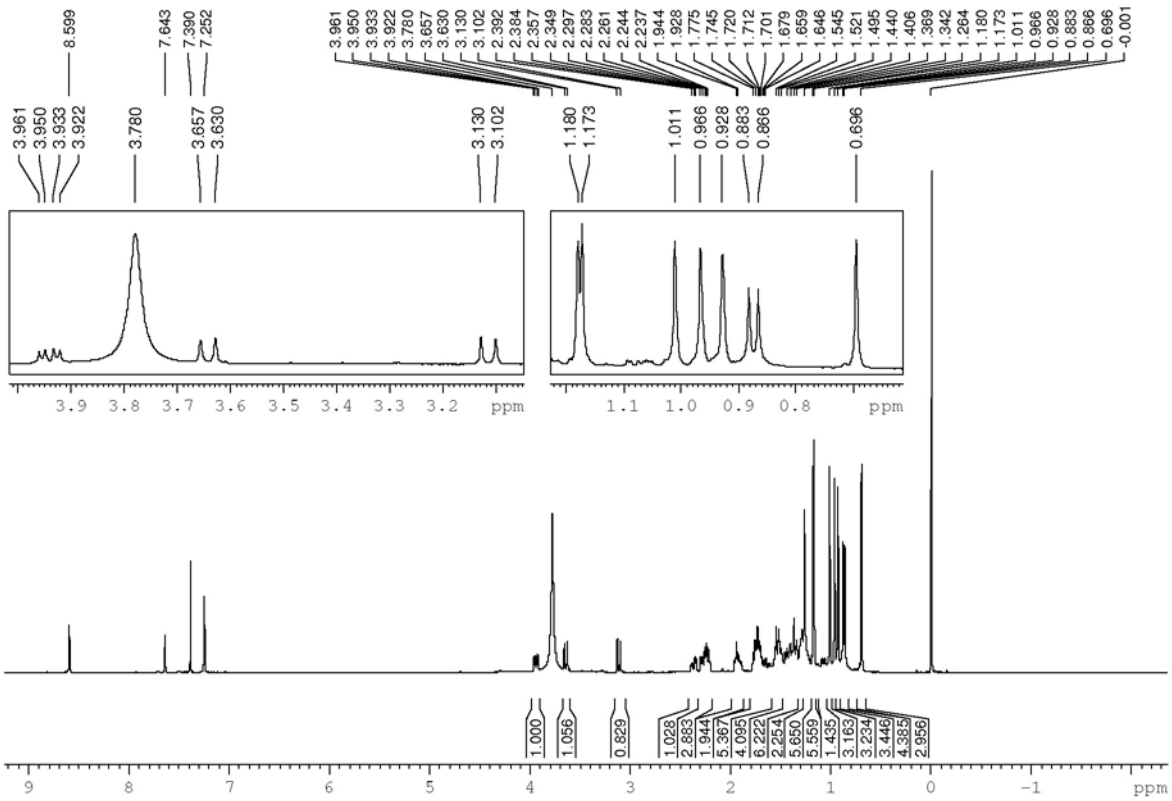

**Figure S25.** $^{1}$H NMR spectrum of compound **6** ($CDCl_3$ + pyridine-$d_5$, 400 MHz).

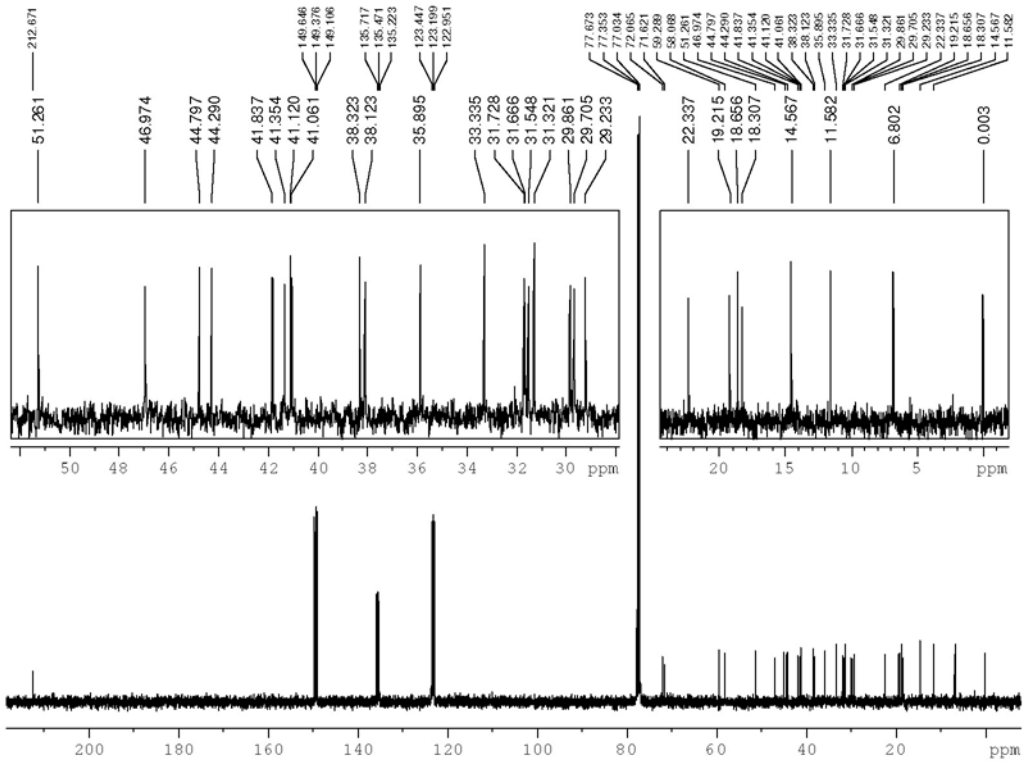

**Figure S26.** $^{13}$C NMR spectrum of compound **6** ($CDCl_3$ + pyridine-$d_5$, 100 MHz).

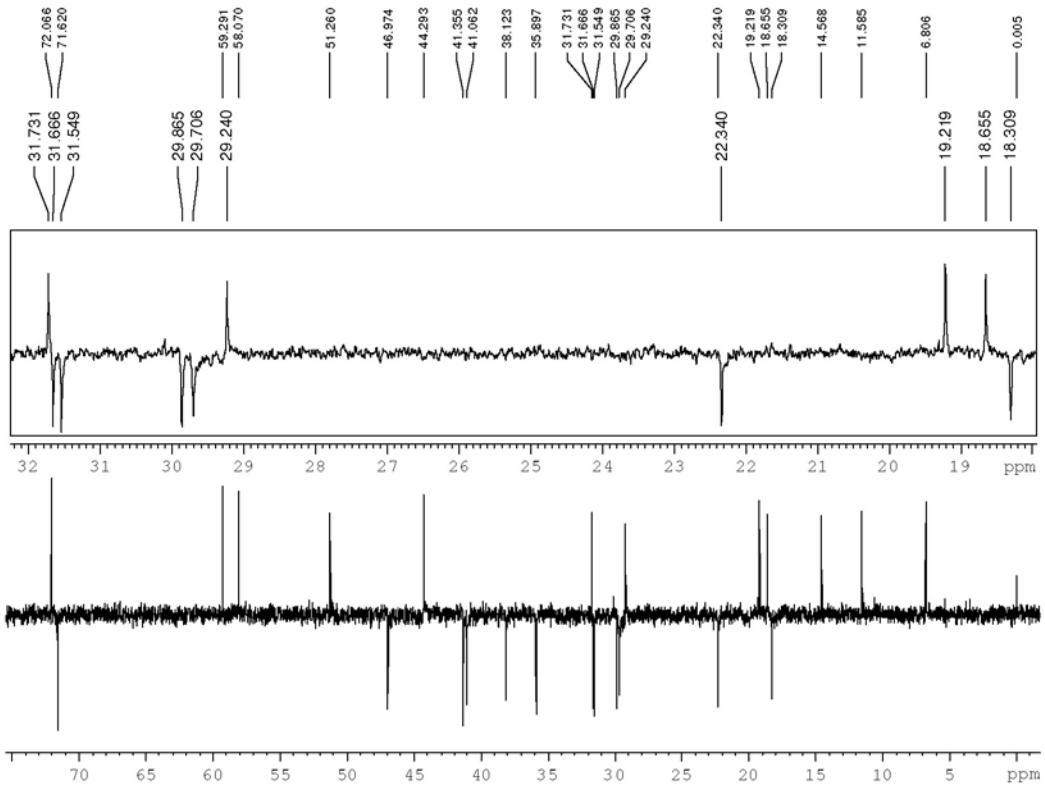


**Figure S27.** $^{13}C$ NMR-DEPT spectrum of compound **6** ($CDCl_3$ + pyridine-$d_5$, 100 MHz).

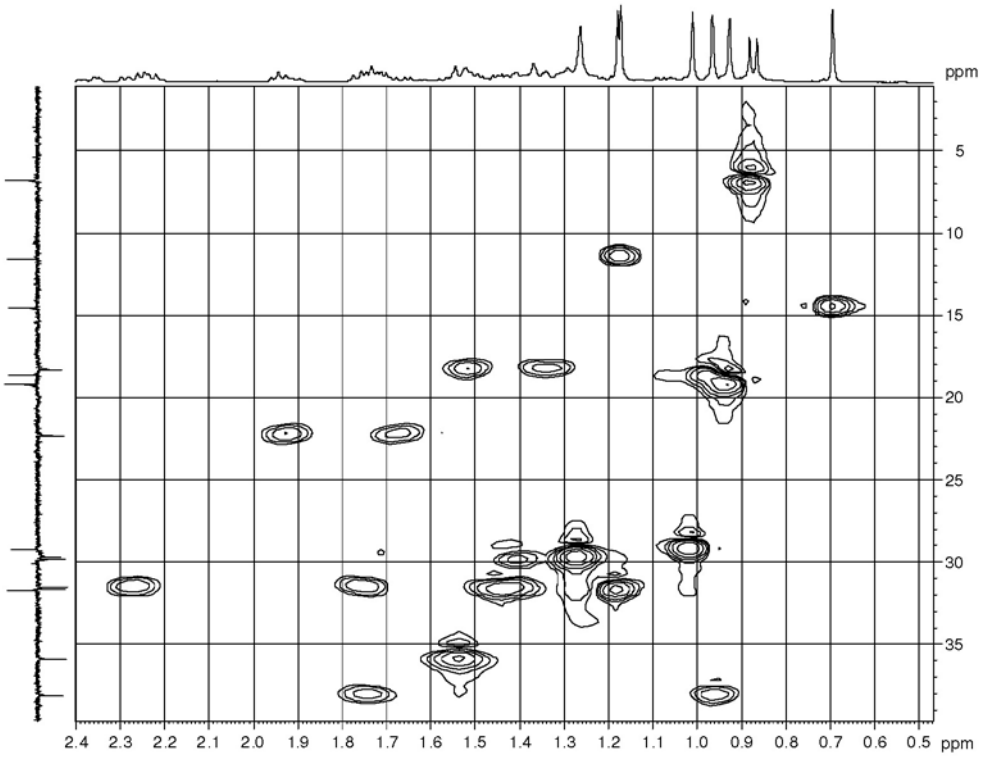


**Figure S28.** First expansion of HSQC spectrum of compound **6** ($CDCl_3$ + pyridine-$d_5$, 400 MHz).

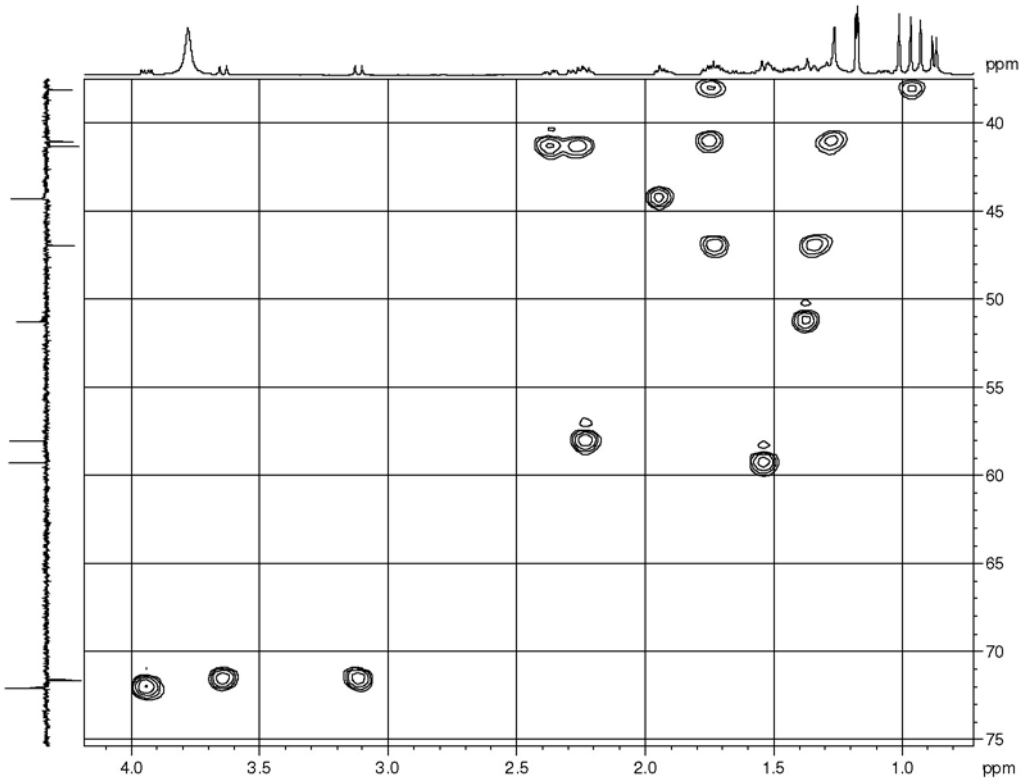


**Figure S29.** Second expansion of HSQC spectrum of compound **6** ($CDCl_3$ + pyridine-$d_5$, 400 MHz).

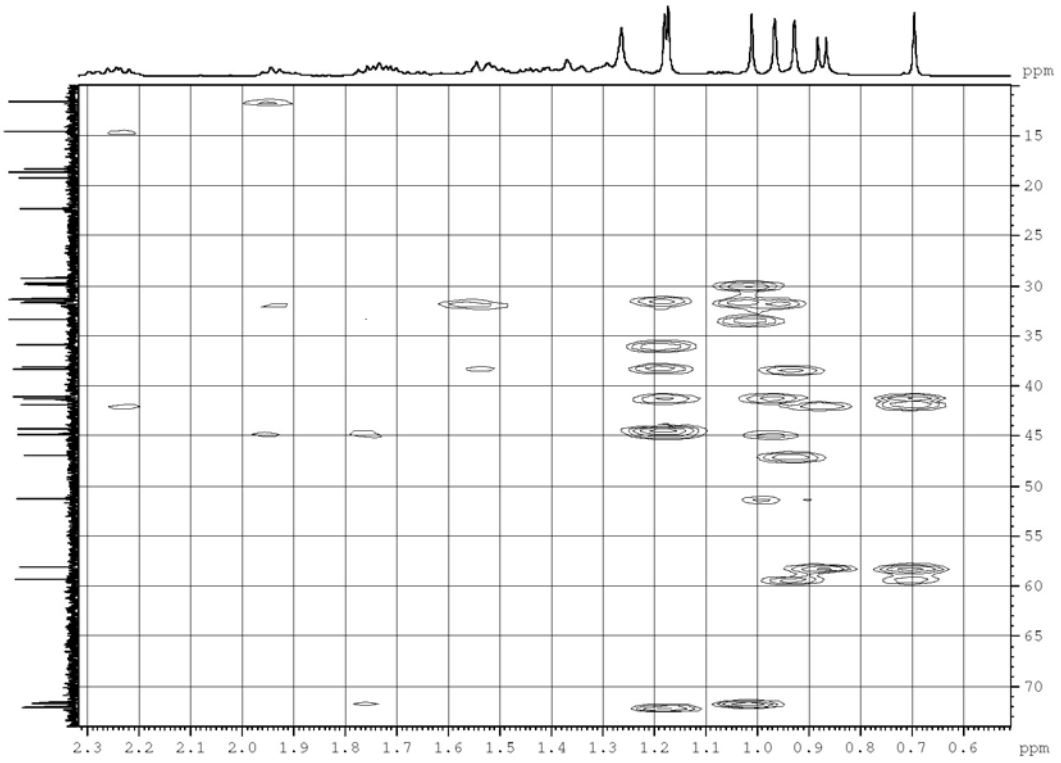


**Figure S30.** First expansion of HMBC spectrum of compound **6** ($CDCl_3$ + pyridine-$d_5$, 400 MHz).

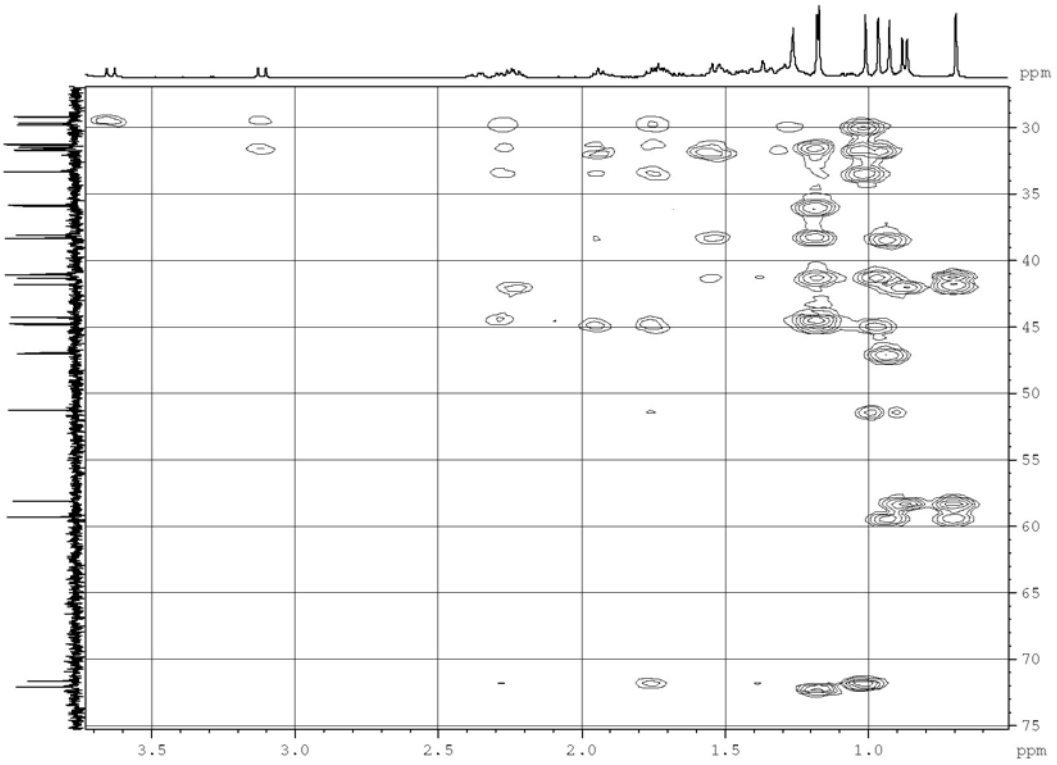


**Figure S31.** Second expansion of HMBC spectrum of compound **6** ($CDCl_3$ + pyridine-$d_5$, 400 MHz).

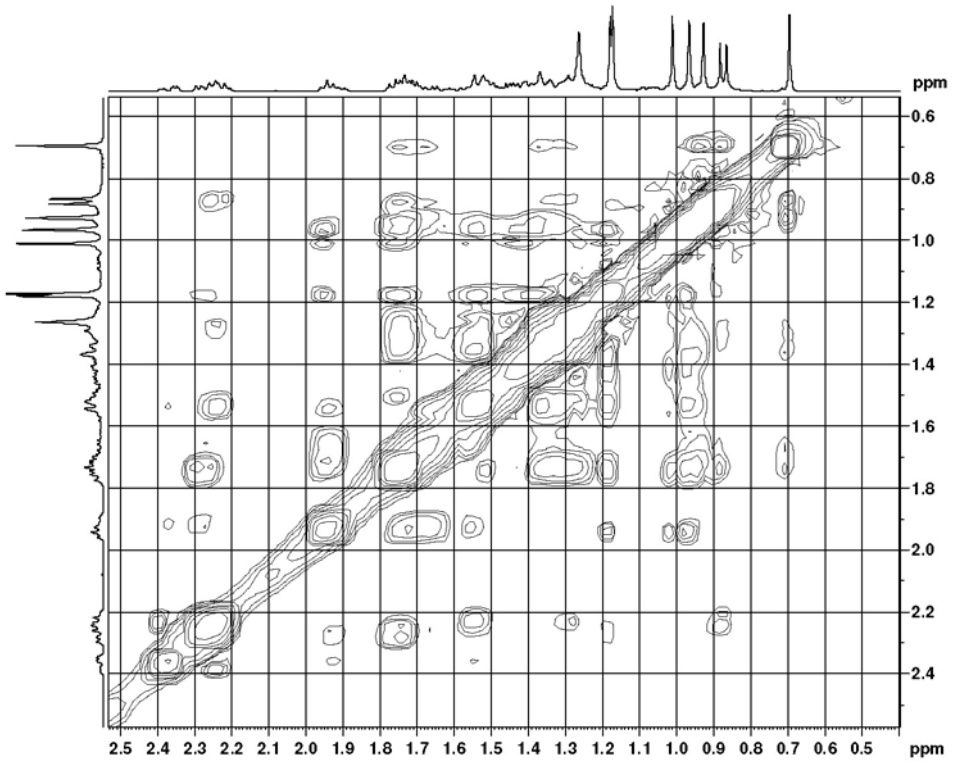


**Figure S32.** First expansion $^1H$, $^1H$ NOESY spectrum of compound **6** ($CDCl_3$ + pyridine-$d_5$, 400 MHz).

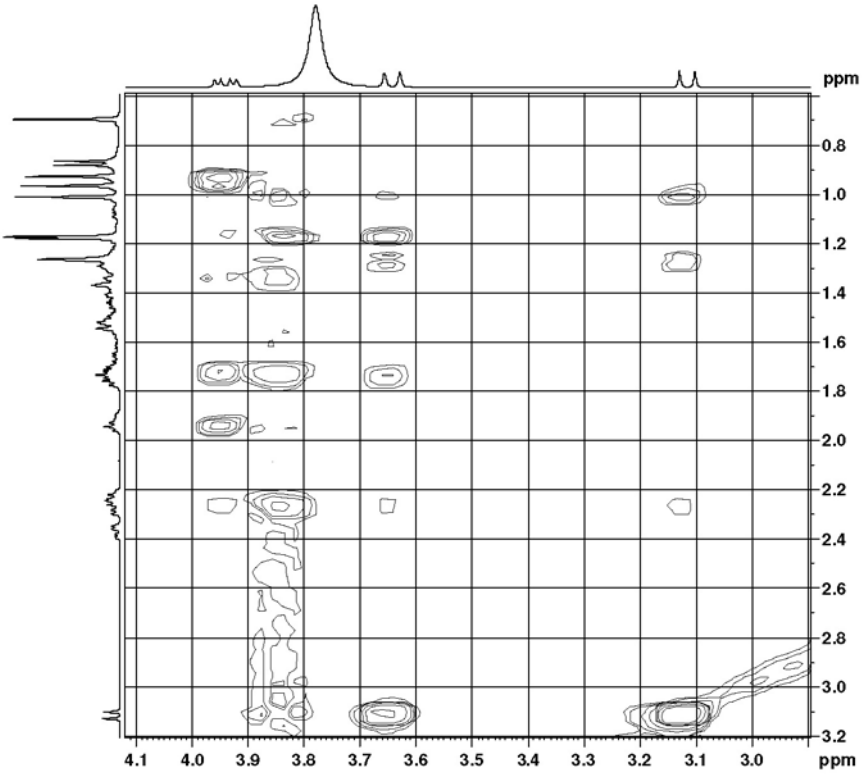


**Figure S33.** Second expansion $^{1}$H, $^{1}$H NOESY spectrum of compound **6** ($CDCl_3$ + pyridine-$d_5$, 400 MHz).

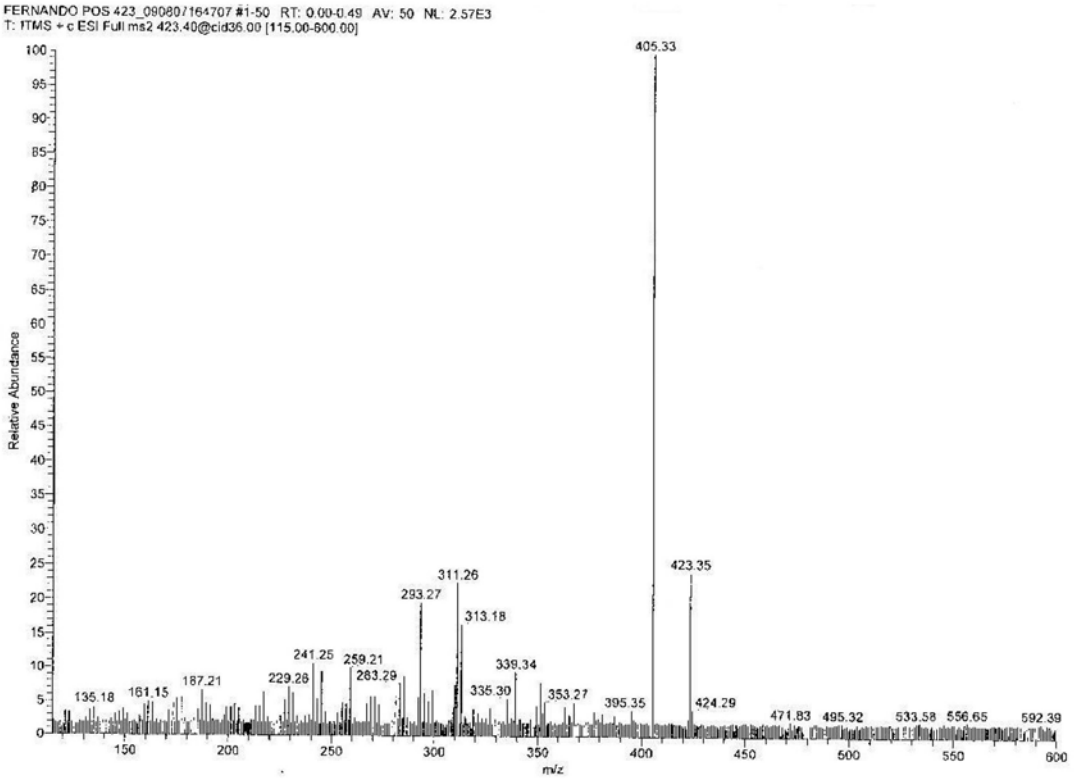


**Figure S34.** ESI-mass spectrum of compound **6**.