

# Supplementary Information

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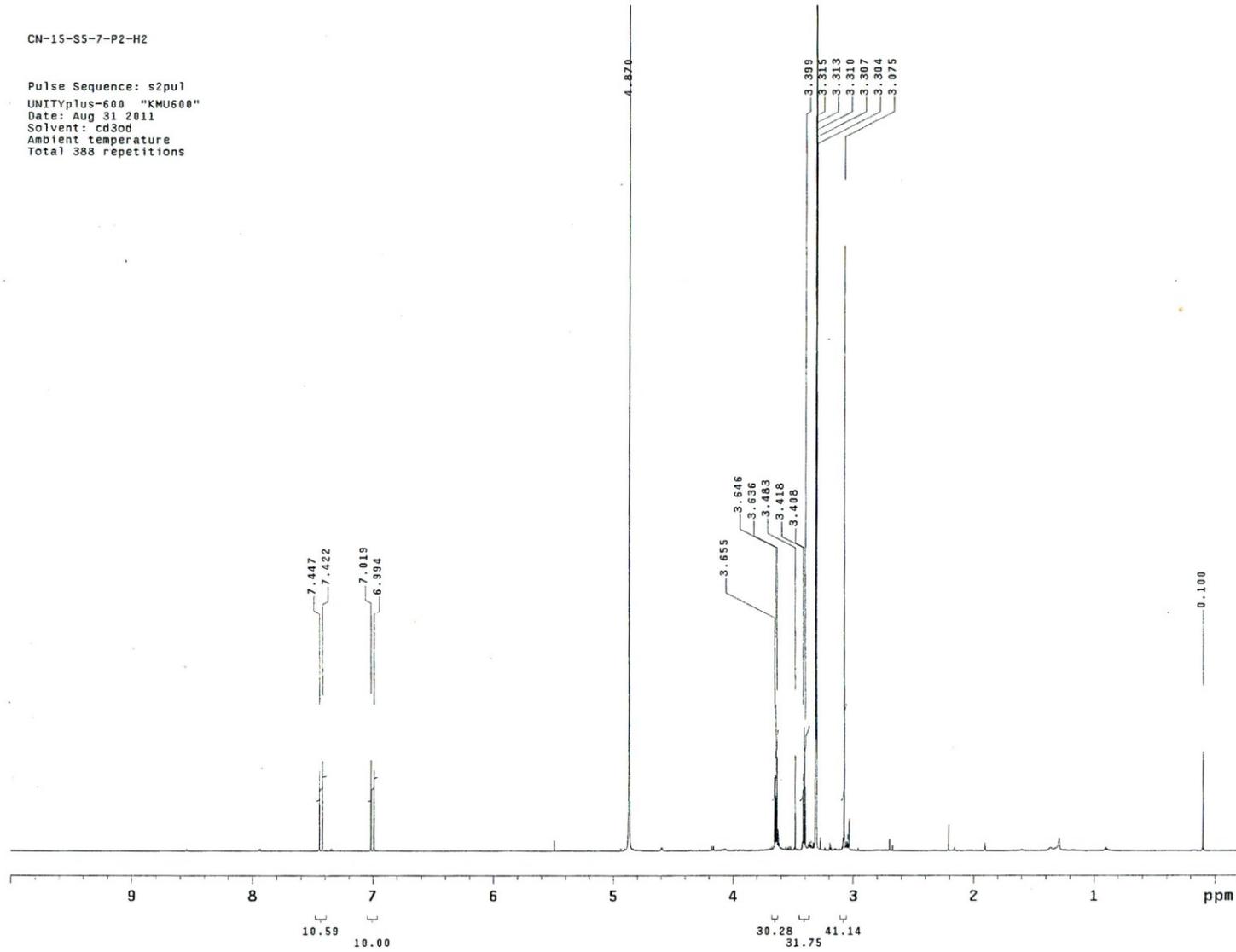
Figure S1.  $^1\text{H}$ -NMR Spectrum of **1** in  $\text{CD}_3\text{OD}$ .

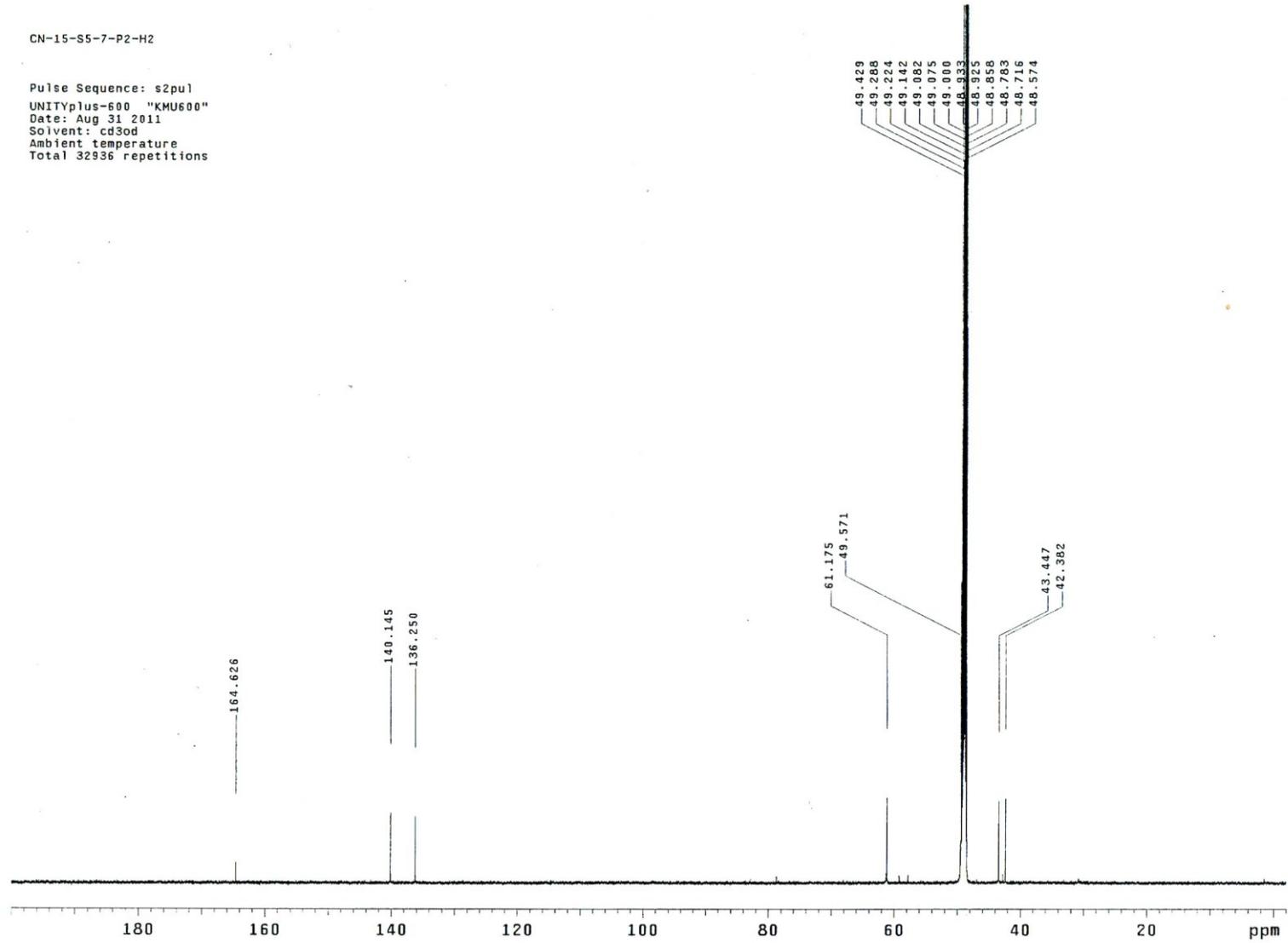
Figure S2.  $^{13}\text{C}$ -NMR Spectrum of **1** in  $\text{CD}_3\text{OD}$ .

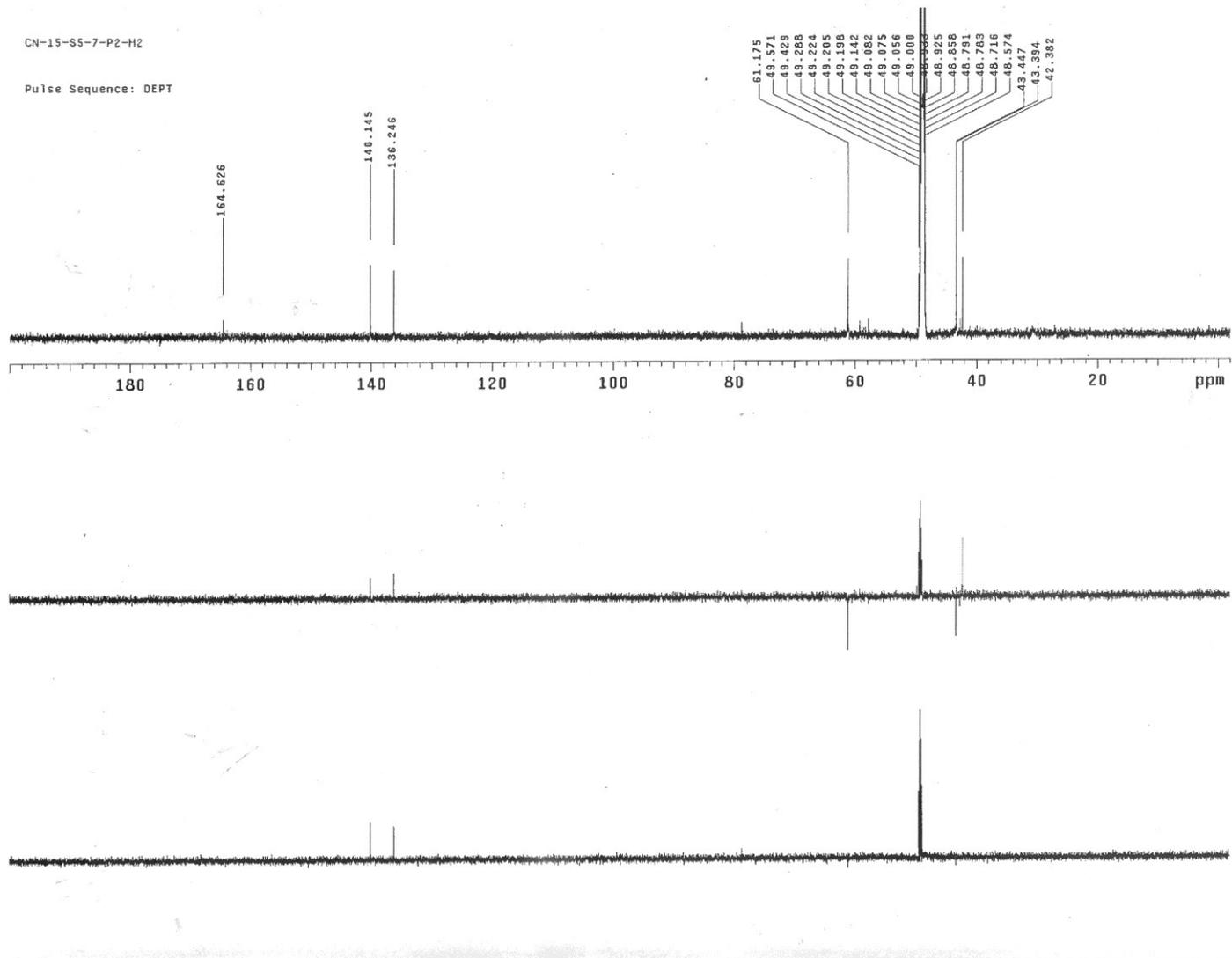
Figure S3. DEPT Spectrum of **1** in CD<sub>3</sub>OD.

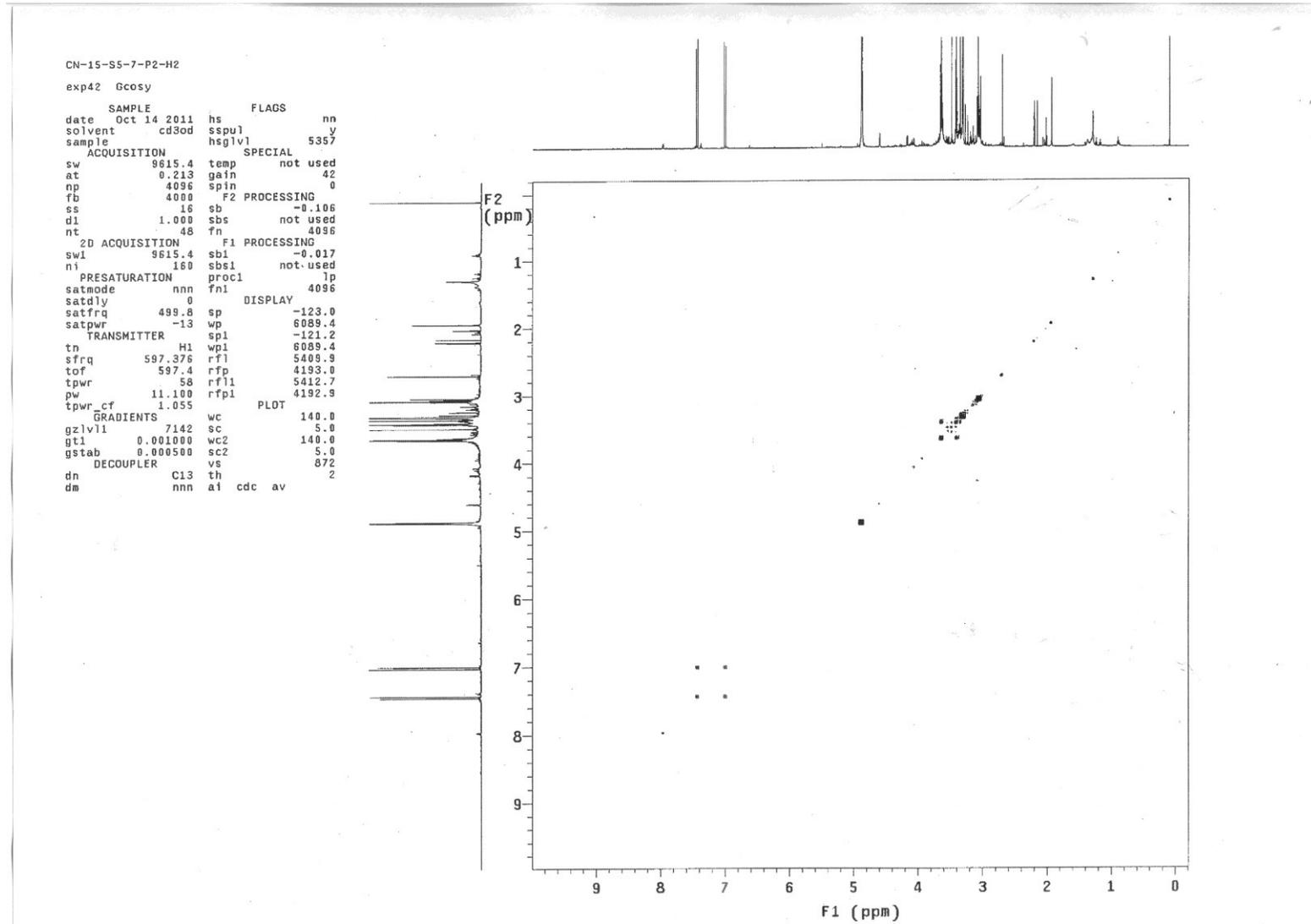
Figure S4. COSY Spectrum of 1 in CD<sub>3</sub>OD.

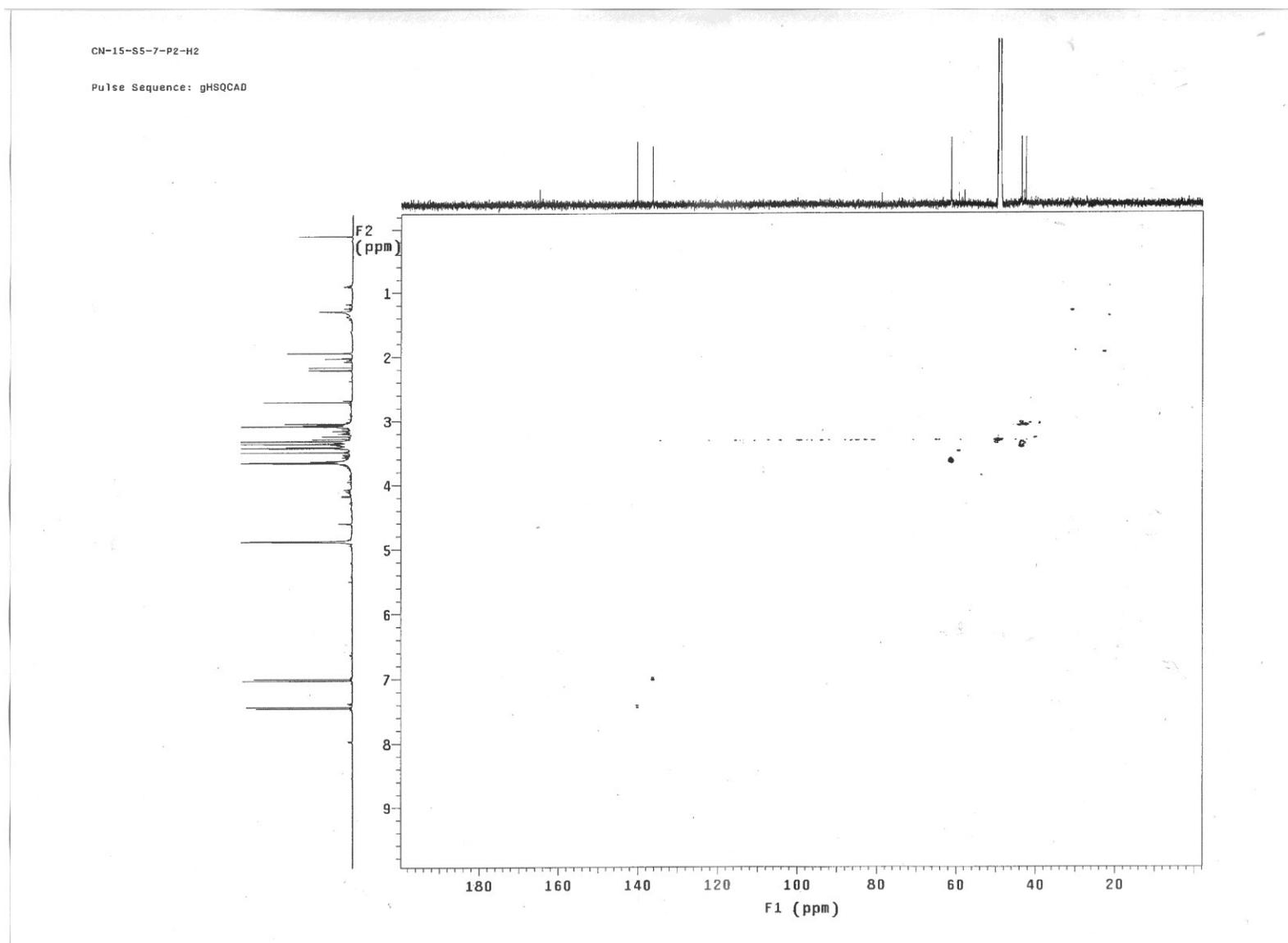
Figure S5. HMQC Spectrum of **1** in CD<sub>3</sub>OD.

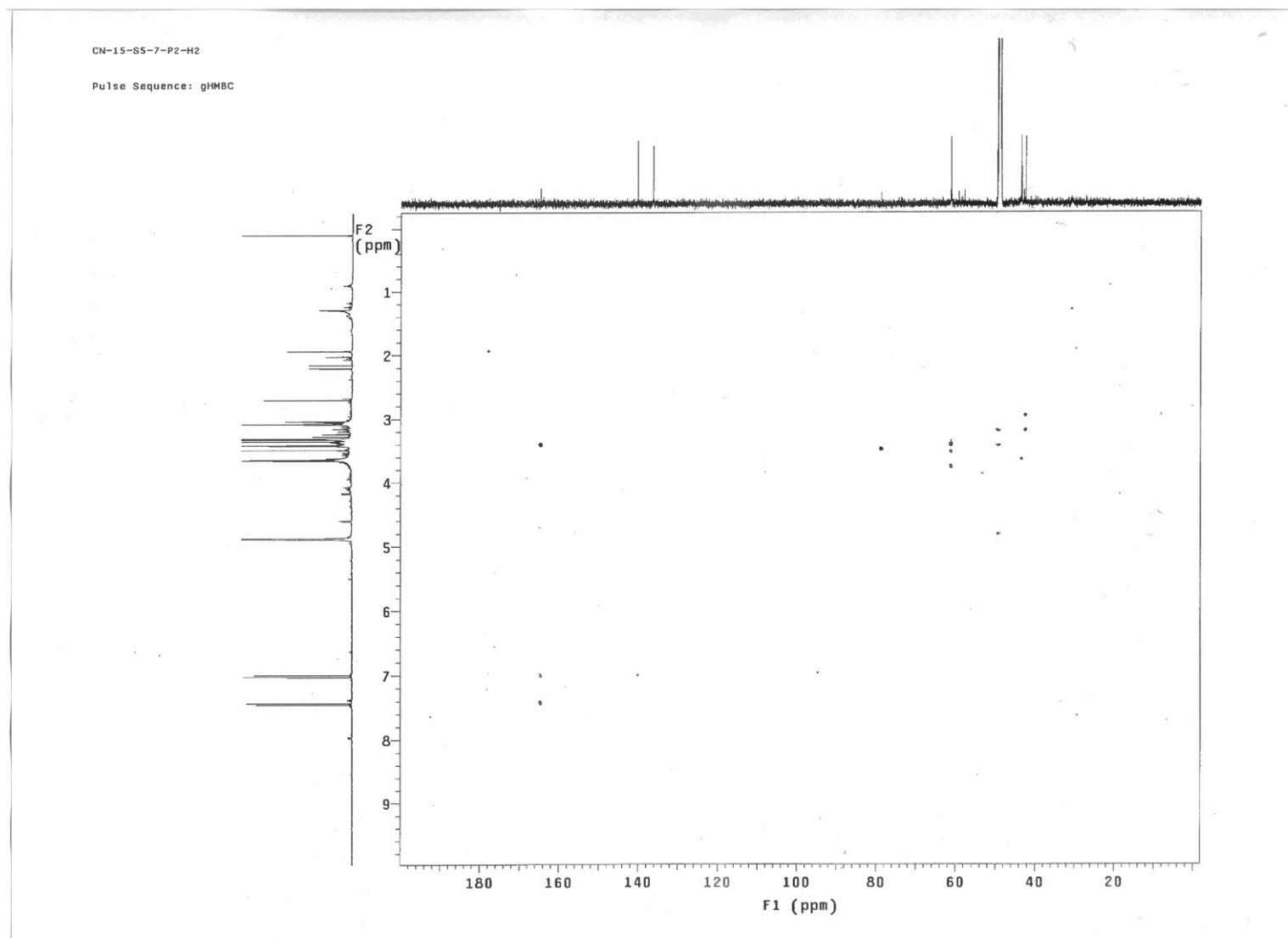
Figure S6. HMBC Spectrum of **1** in CD<sub>3</sub>OD.

Figure S7. NOESY Spectrum of **1** in CD<sub>3</sub>OD.

CN-15-S5-7-P2-H2

Pulse Sequence: NOESY

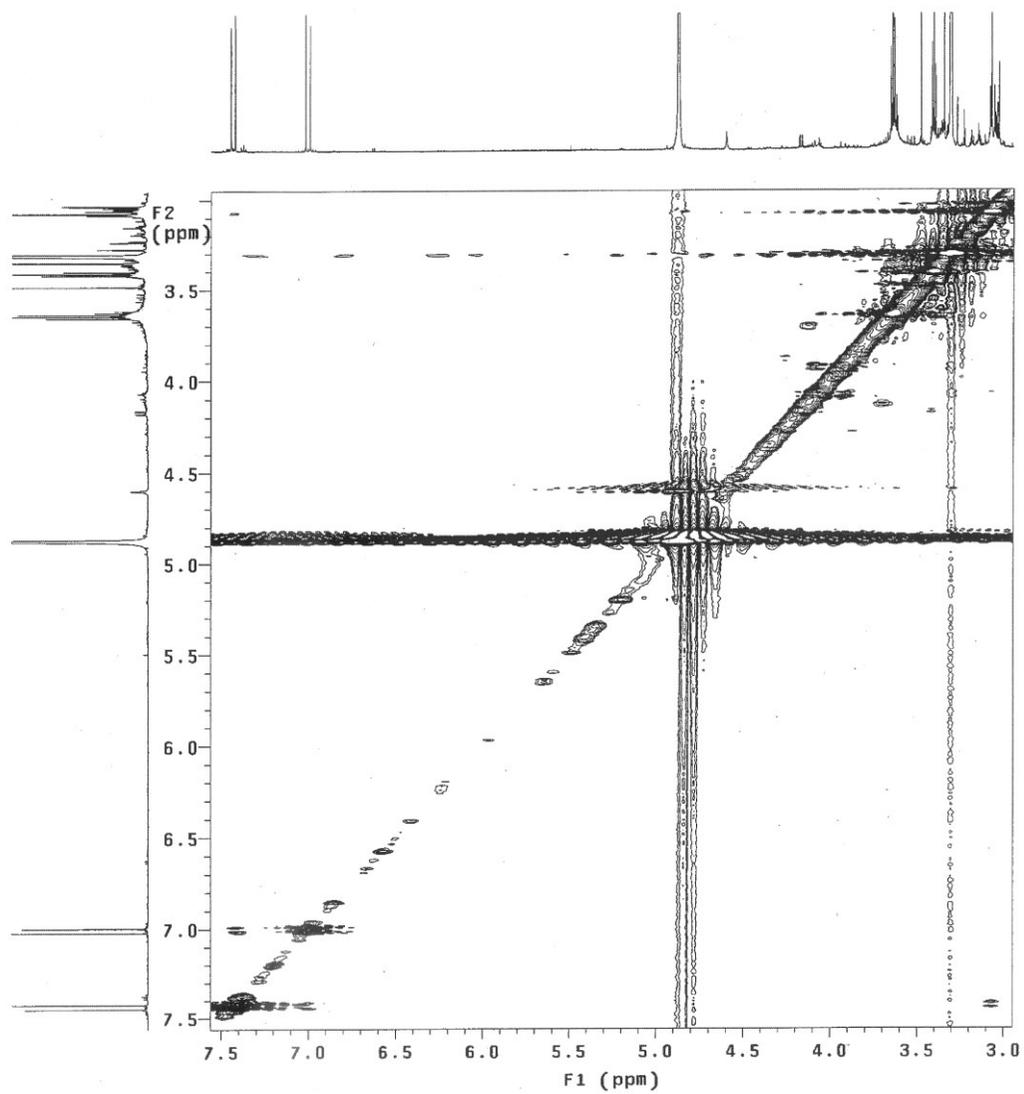


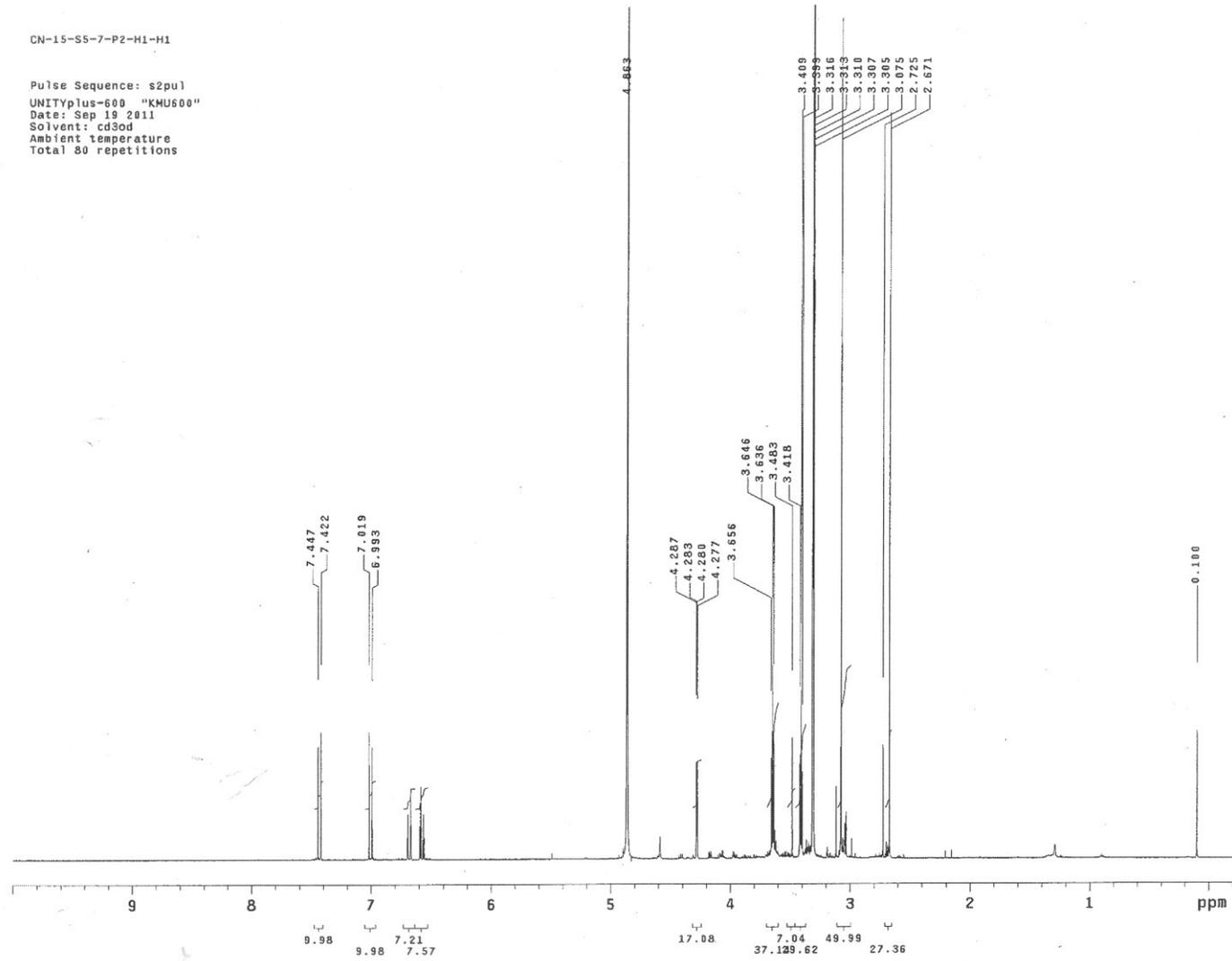
Figure S8.  $^1\text{H-NMR}$  Spectrum of **2** in  $\text{CD}_3\text{OD}$ .

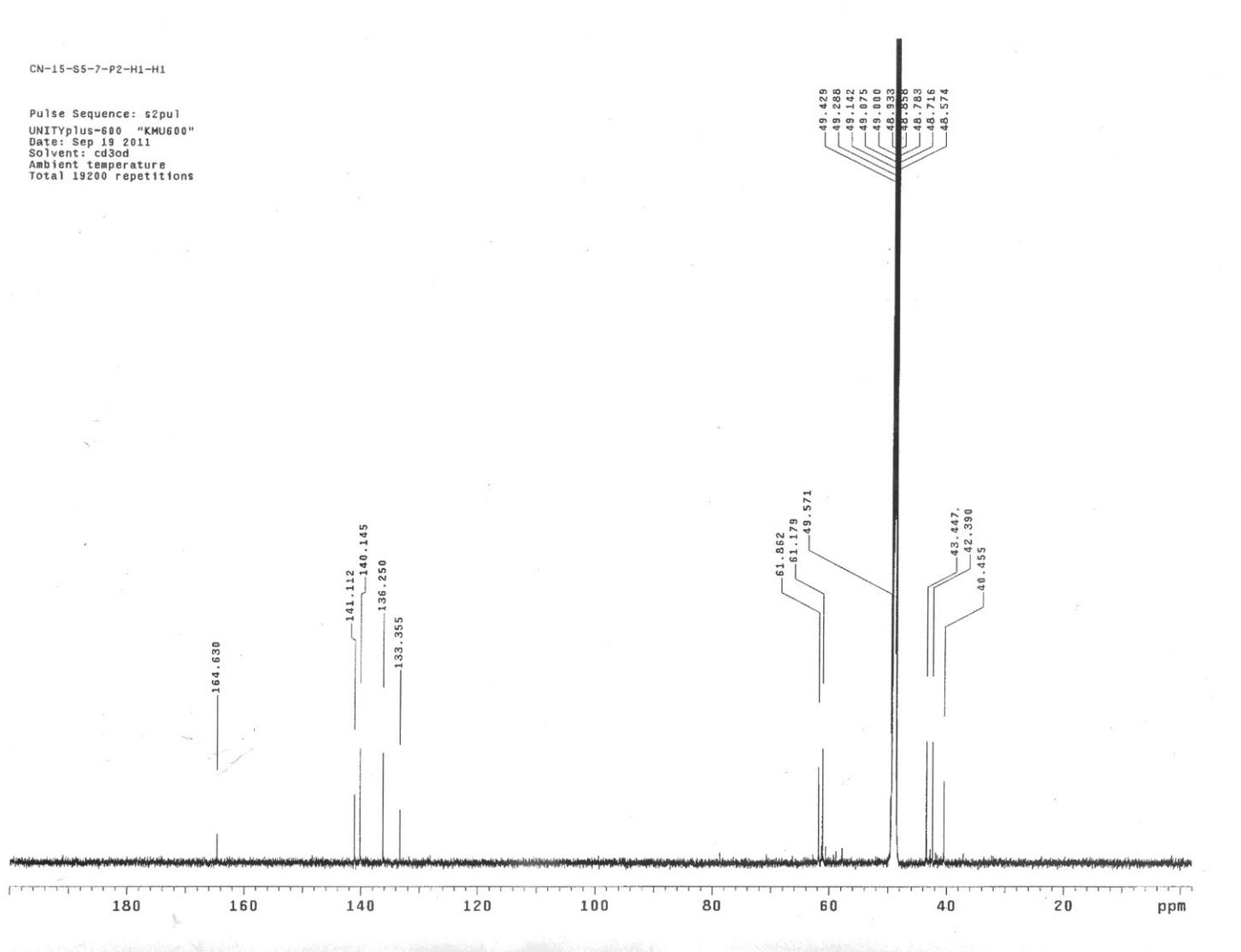
Figure S9.  $^{13}\text{C}$ -NMR Spectrum of **2** in  $\text{CD}_3\text{OD}$ .

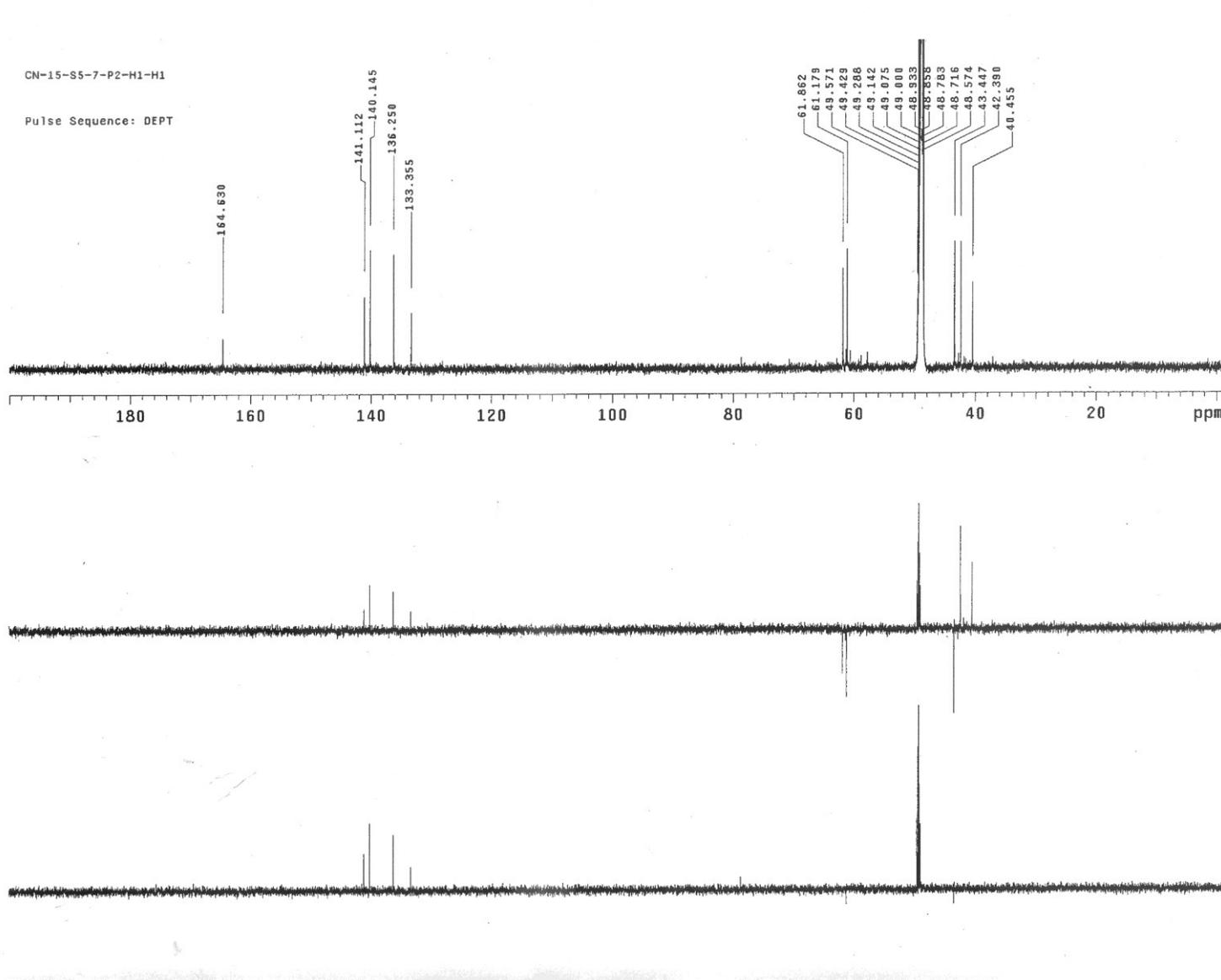
Figure S10. DEPT Spectrum of **2** in CD<sub>3</sub>OD.

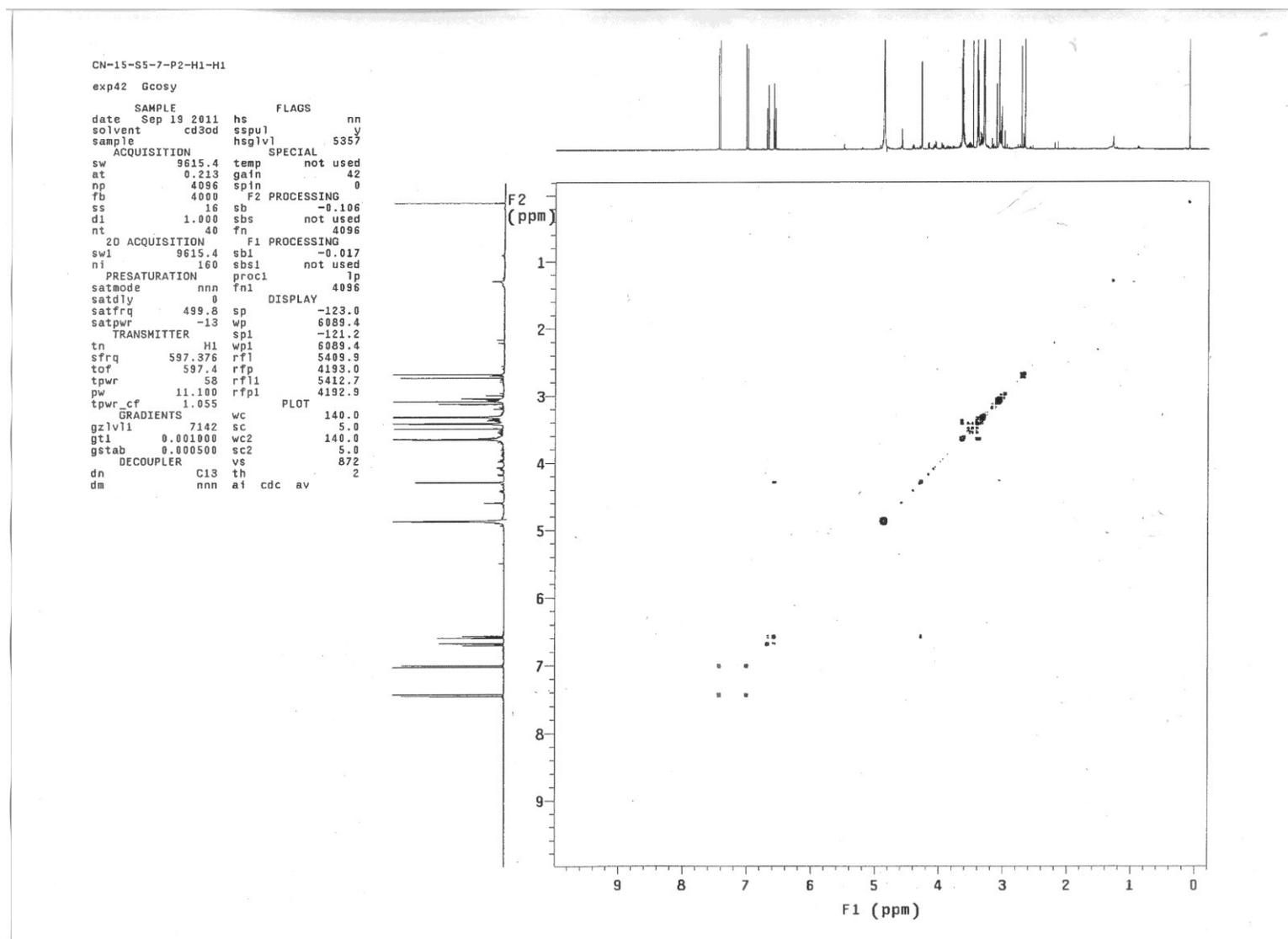
Figure S11. COSY Spectrum of **2** in CD<sub>3</sub>OD.

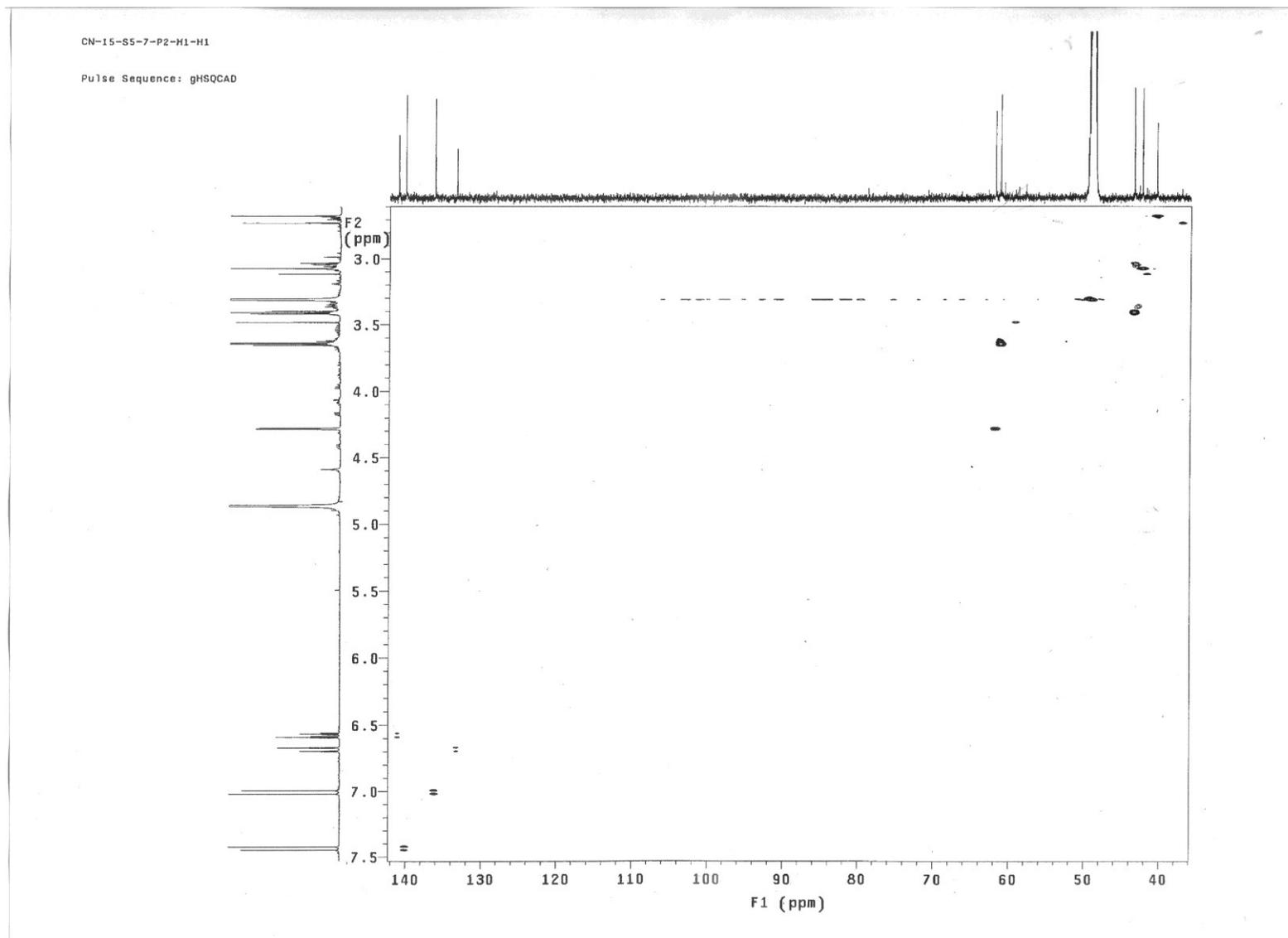
Figure S12. HMQC Spectrum of **2** in CD<sub>3</sub>OD.

Figure S13. HMBC Spectrum of **2** in CD<sub>3</sub>OD.

CN-15-S5-7-P2-H1-H1

Pulse Sequence: gHMBC

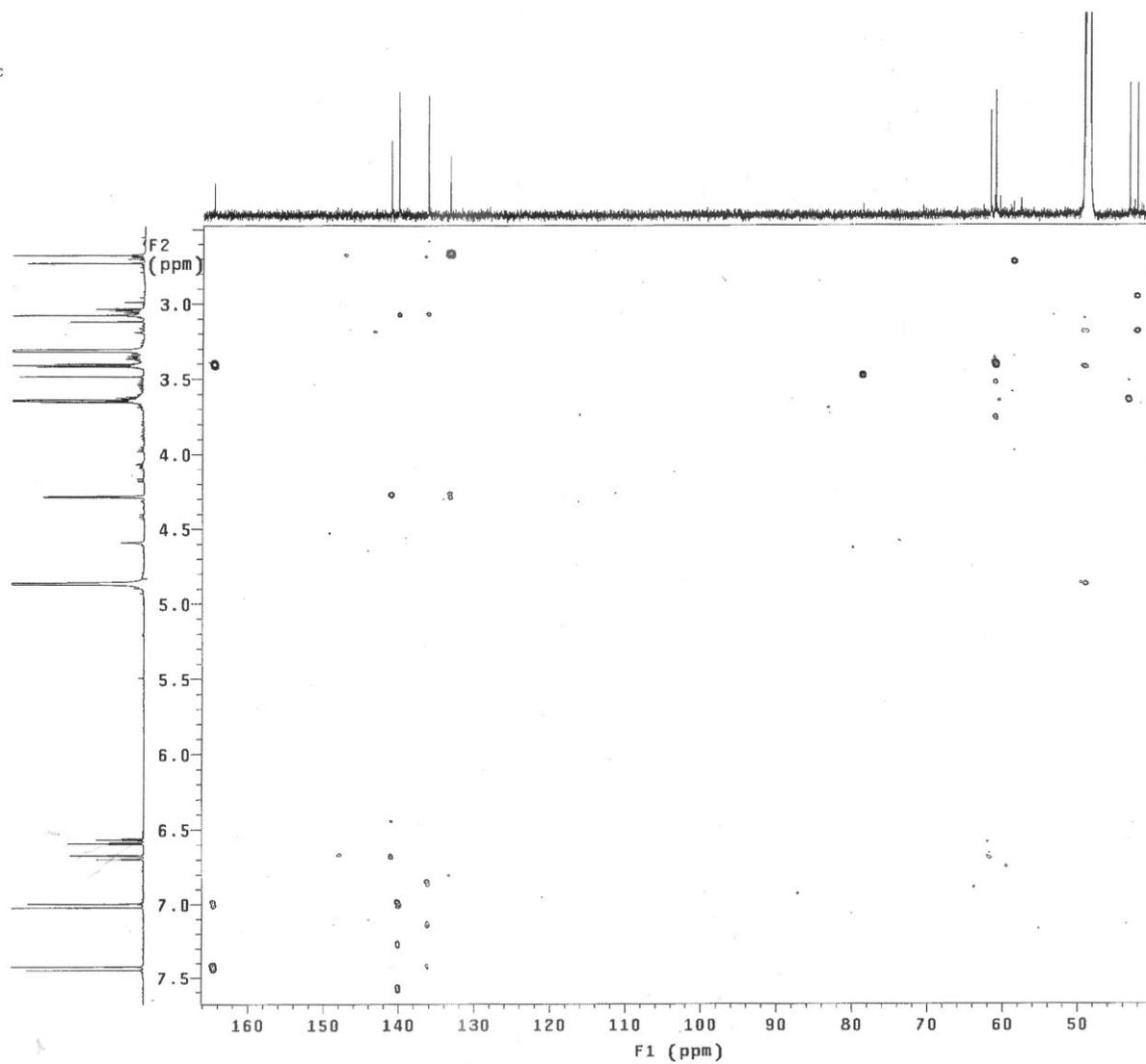


Figure S14. NOESY Spectrum of **2** in CD<sub>3</sub>OD.

CN-15-S5-7-P2-H1-H1

Pulse Sequence: NOESY

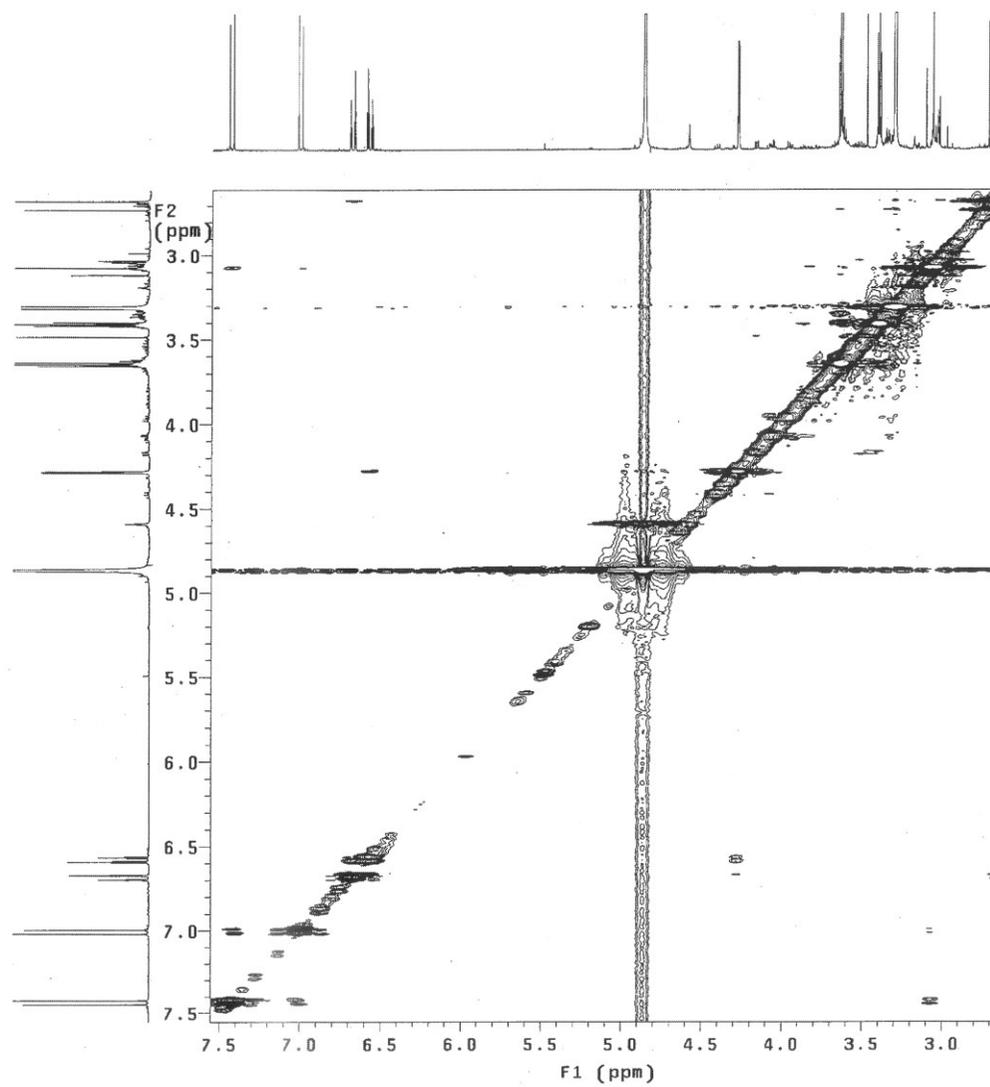


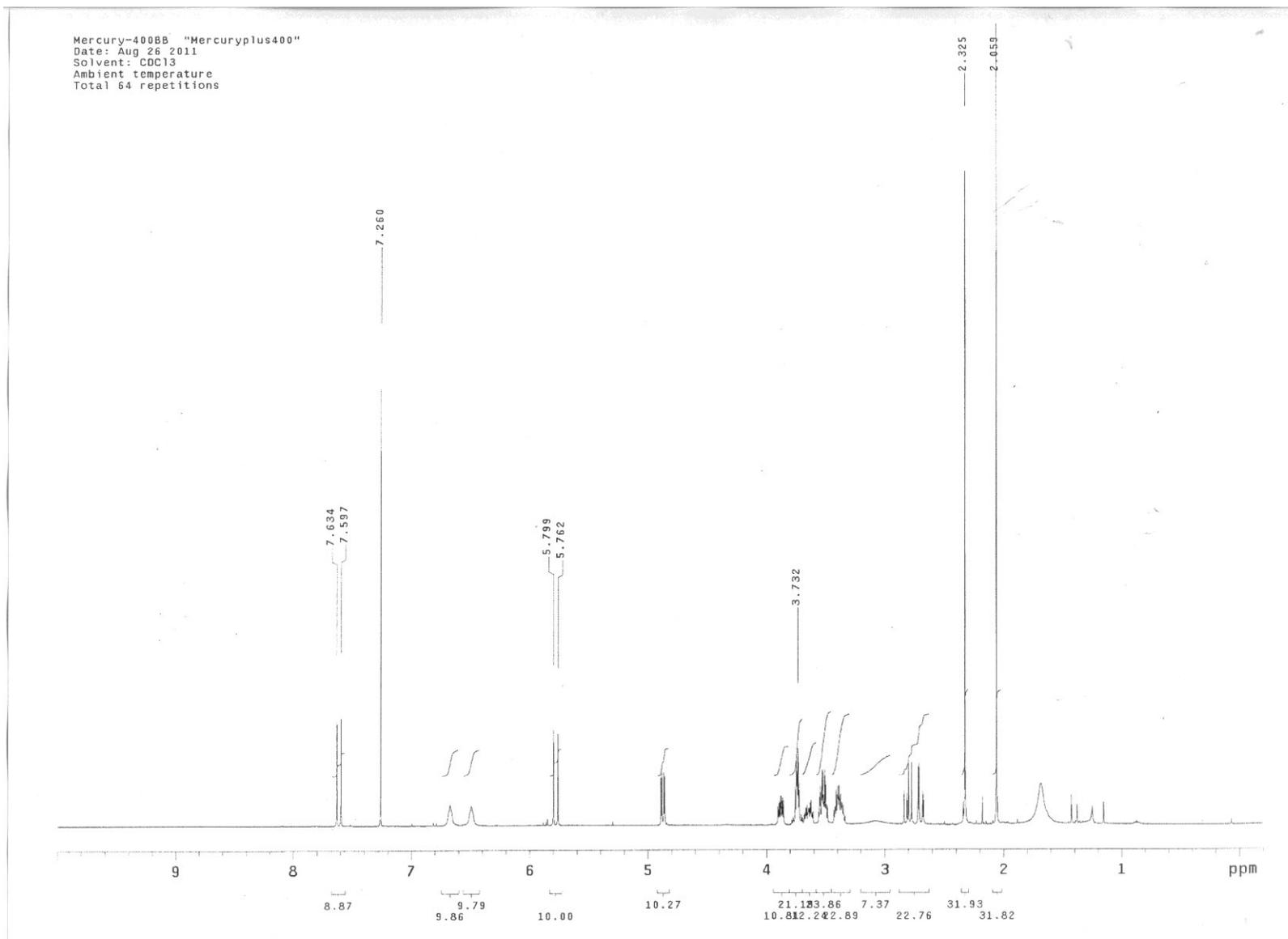
Figure S15.  $^1\text{H-NMR}$  Spectrum of **3** in  $\text{CDCl}_3$ .

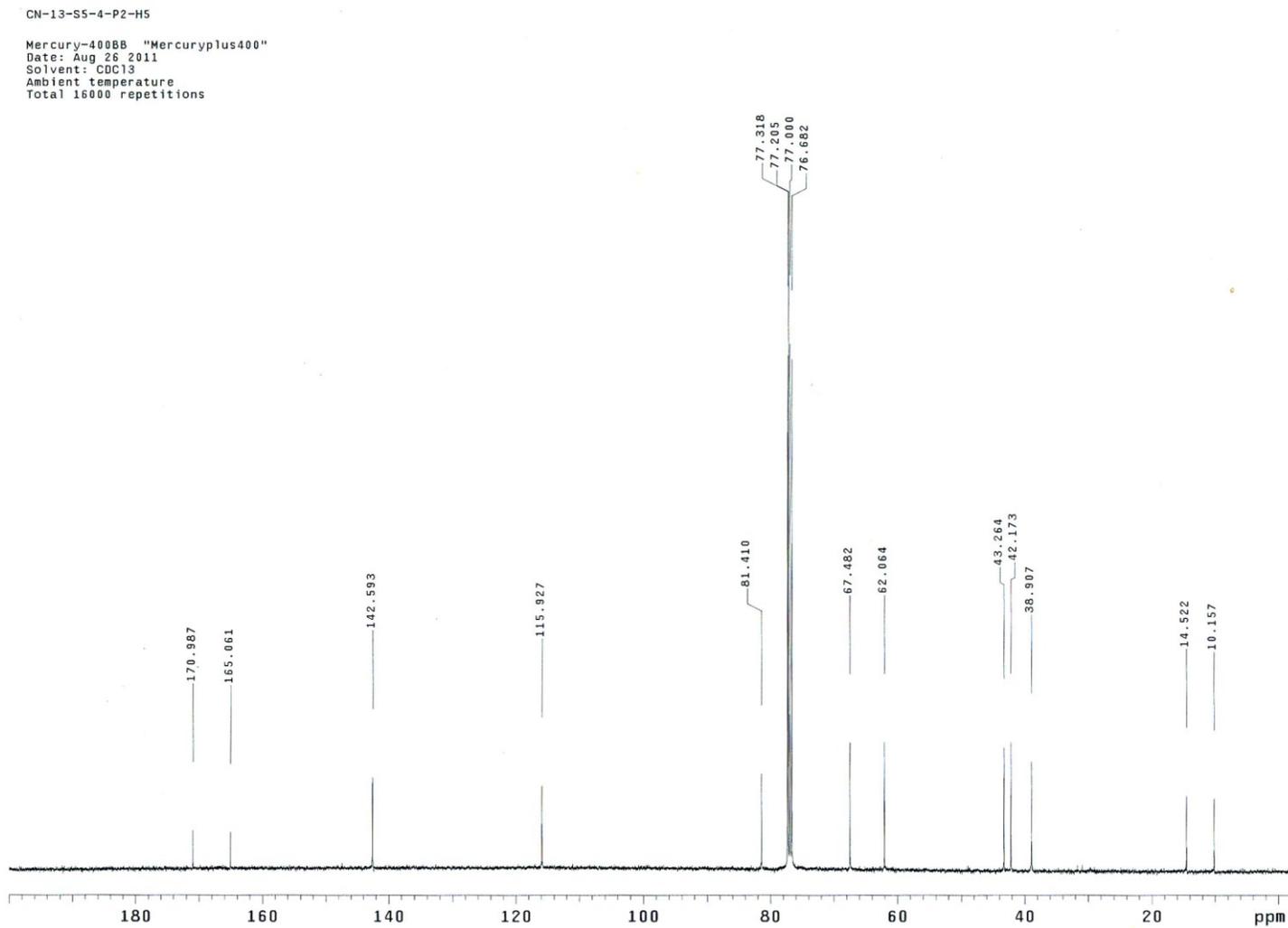
Figure S16.  $^{13}\text{C}$ -NMR Spectrum of **3** in  $\text{CDCl}_3$ .

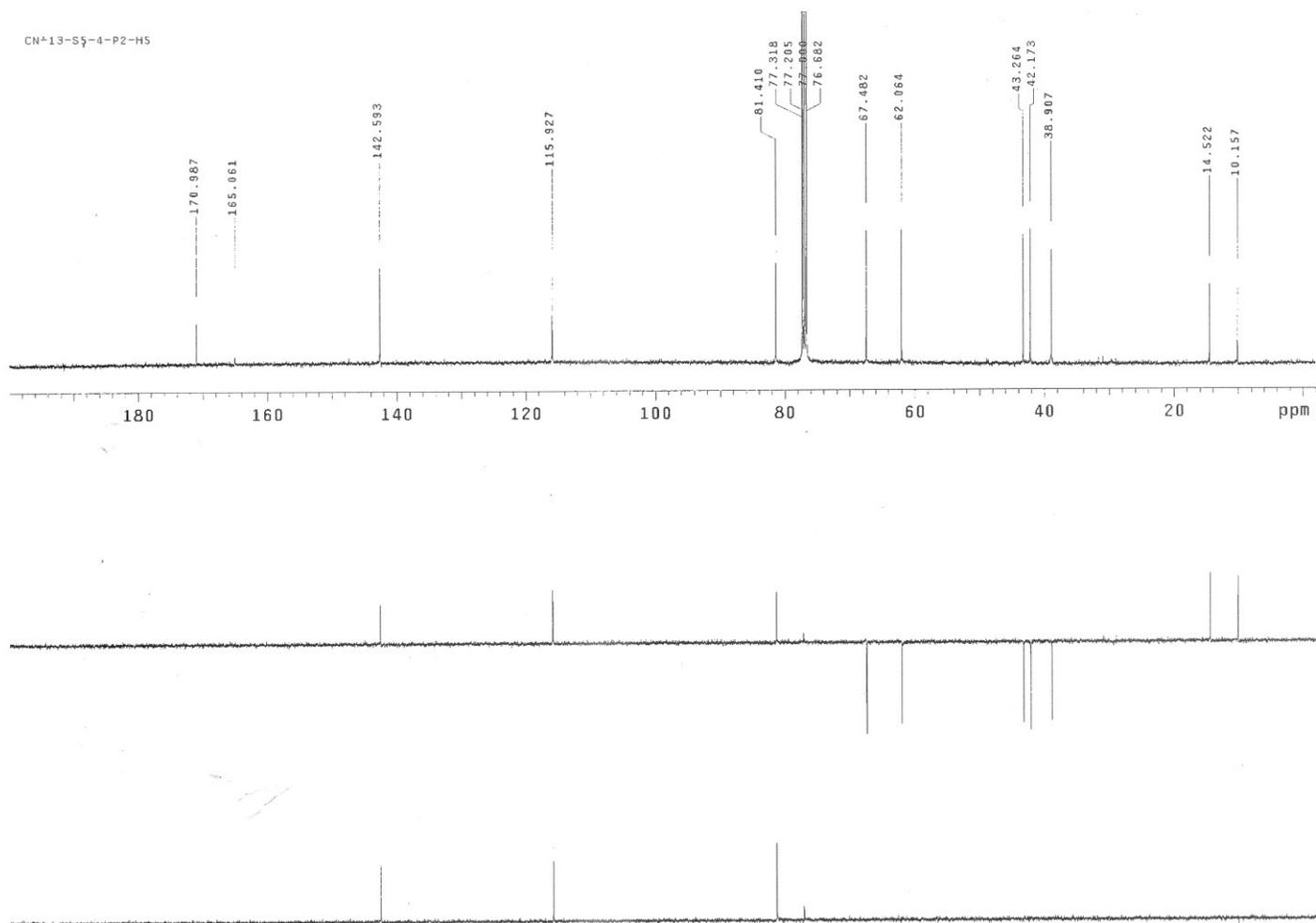
Figure S17. DEPT Spectrum of **3** in CDCl<sub>3</sub>.

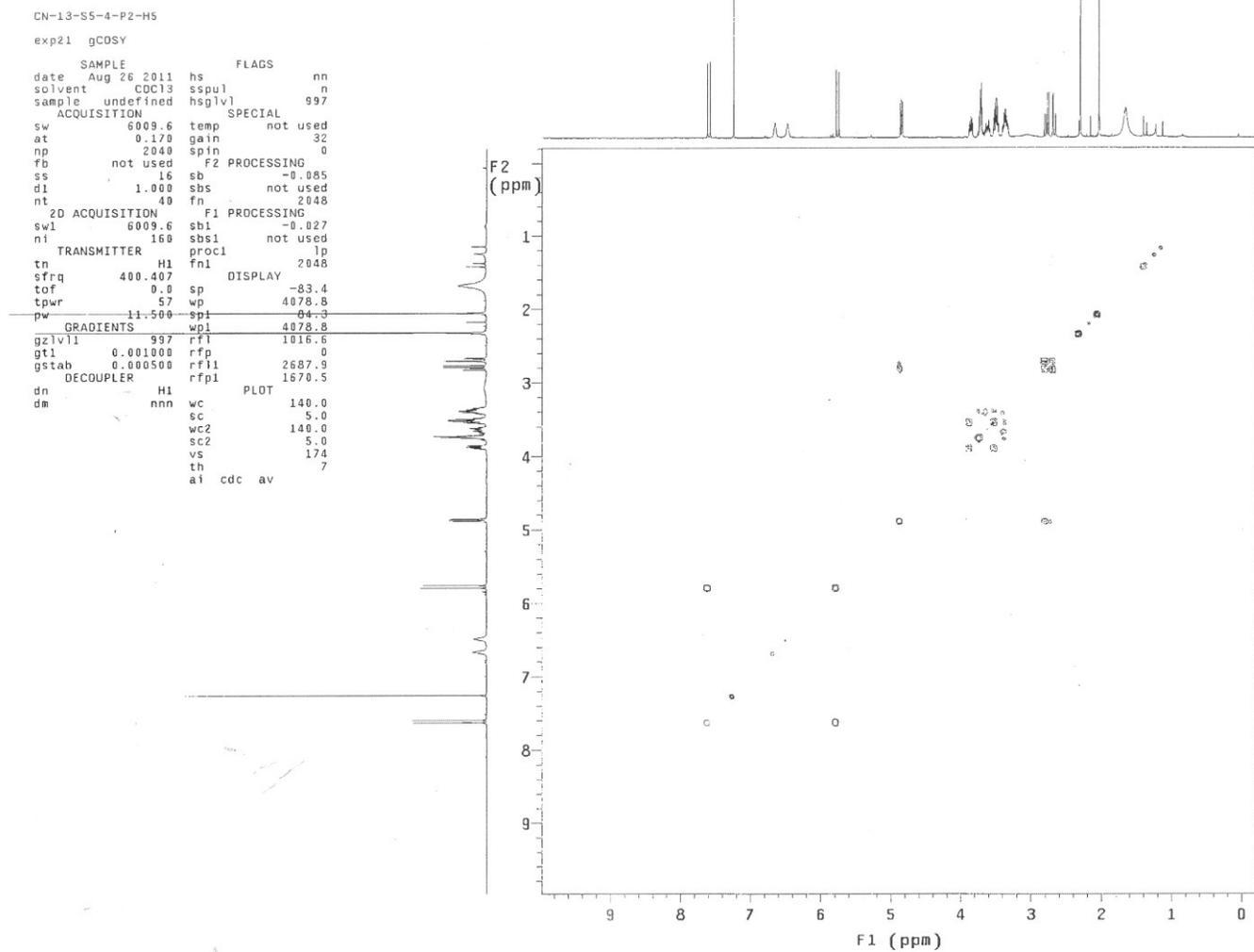
Figure S18. COSY Spectrum of **3** in CDCl<sub>3</sub>.

Figure S19. HMQC Spectrum of **3** in CDCl<sub>3</sub>.

CN-13-S5-4-P2-H5

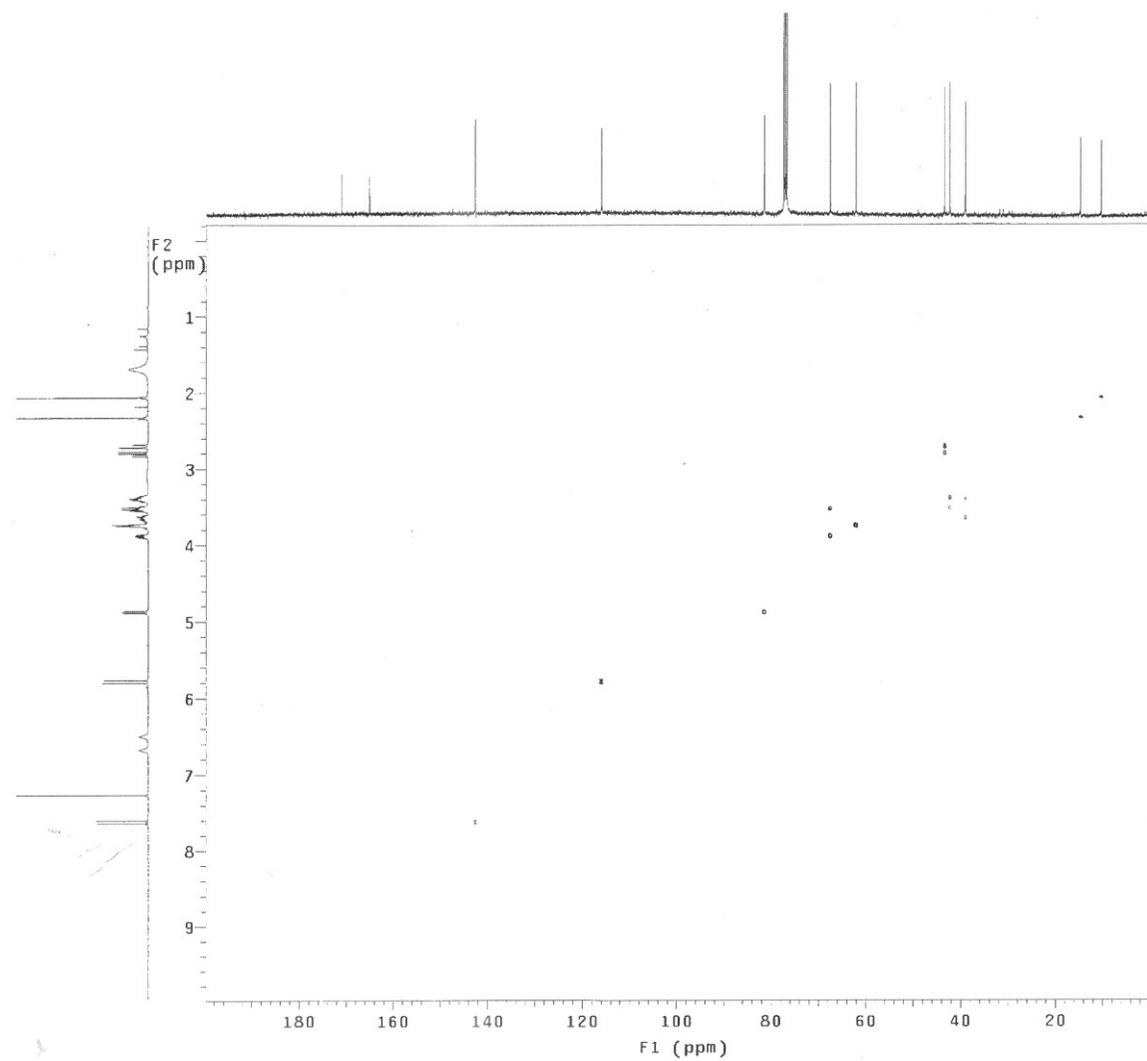


Figure S20. HMBC Spectrum of **3** in CDCl<sub>3</sub>.

GN-13-S5-4-P2-H5

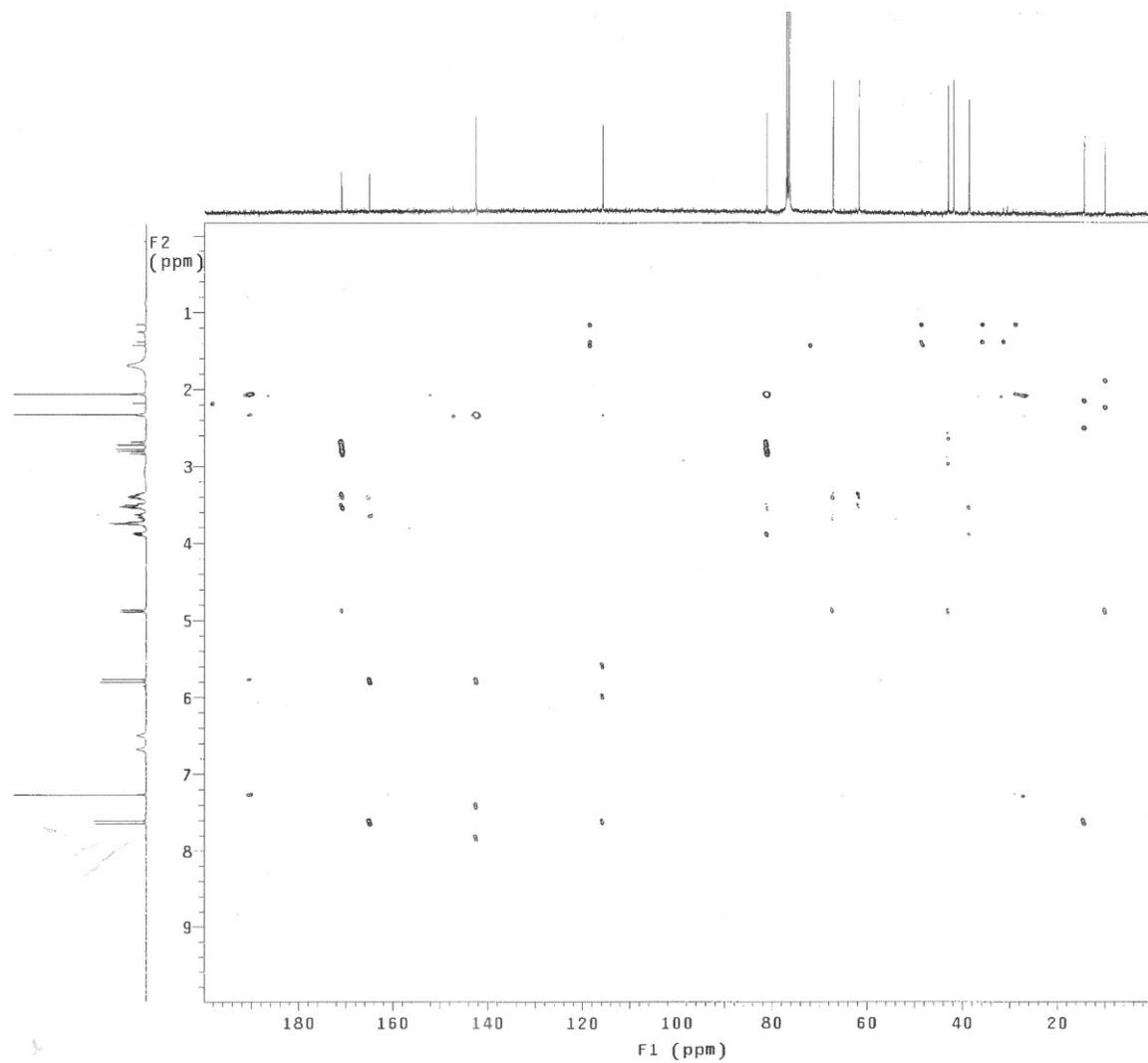


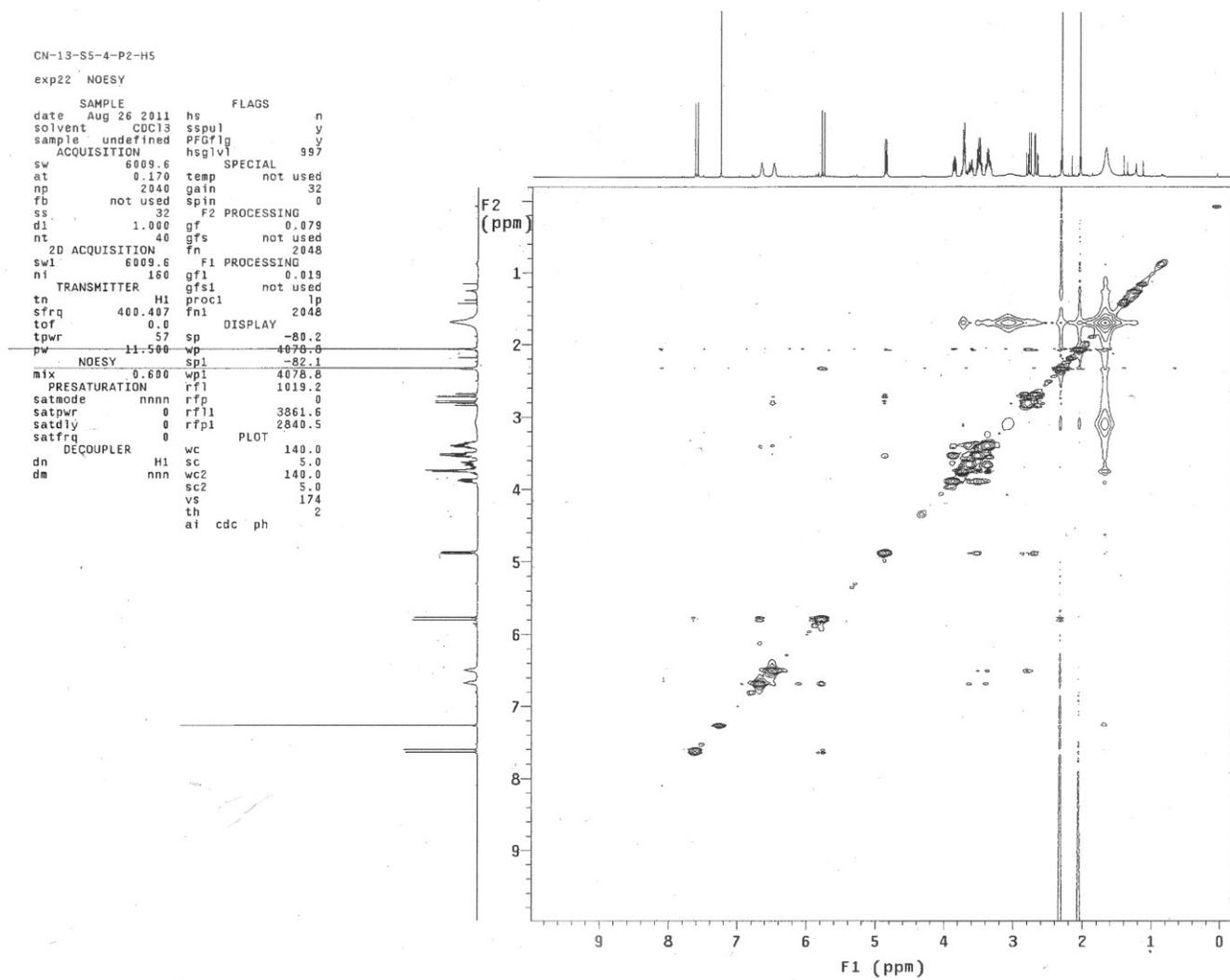
Figure S21. NOESY Spectrum of **3** in CDCl<sub>3</sub>.

Figure S22.  $^1\text{H-NMR}$  Spectrum of **4** in  $\text{CDCl}_3$ .

CN-13-S5-4-P3-H1-H1  
Solvent:  $\text{CDCl}_3$   
Ambient temperature  
GEMINI-200 "oxford200"

Pulse 45.0 degrees  
Acq. time 3.002 sec  
Width 3000.3 Hz  
336 repetitions  
OBSERVE H1, 199.9678374 MHz  
DATA PROCESSING  
FT size 32768  
Total time 2 hr, 50 min, 36 sec

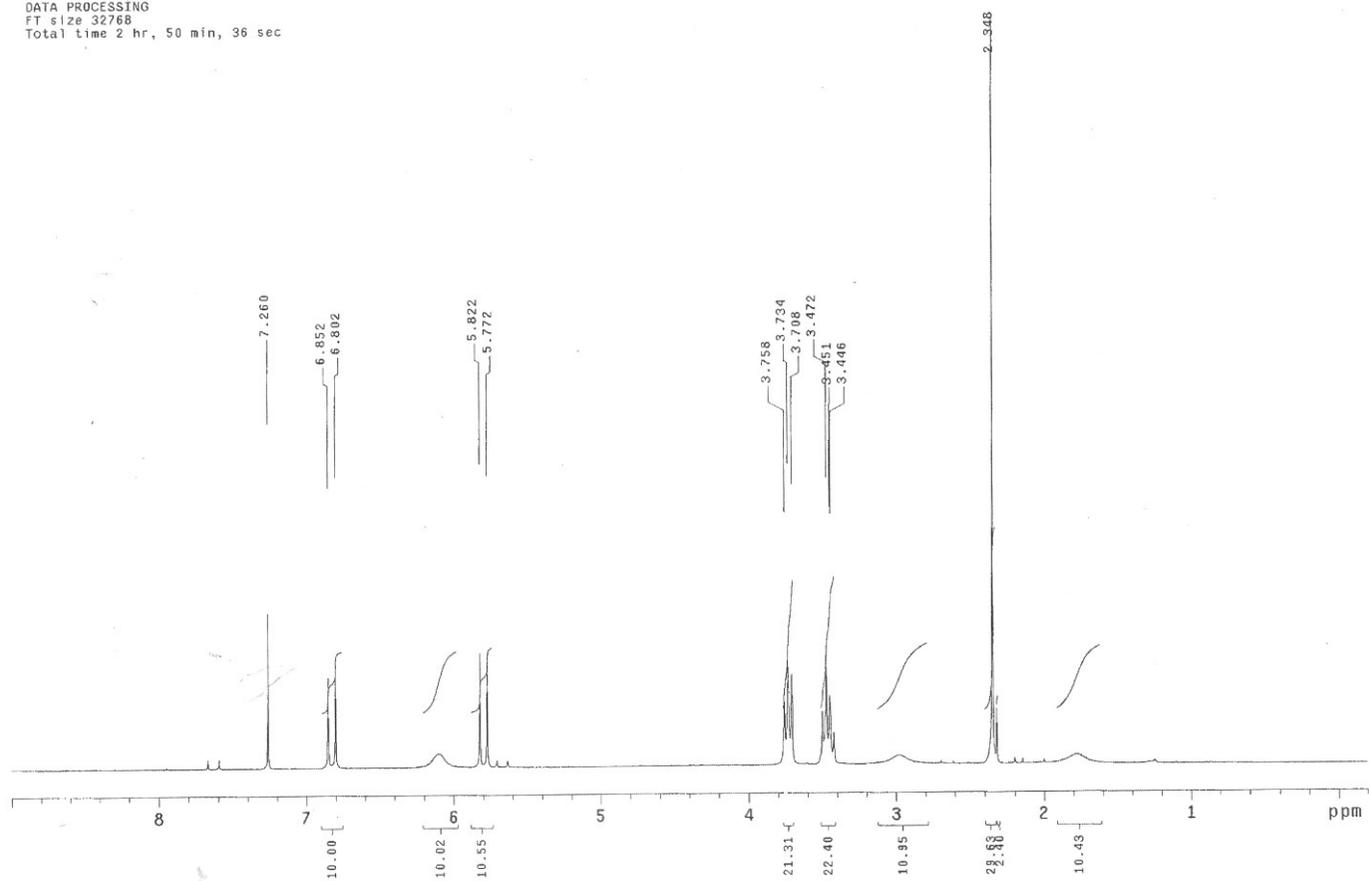
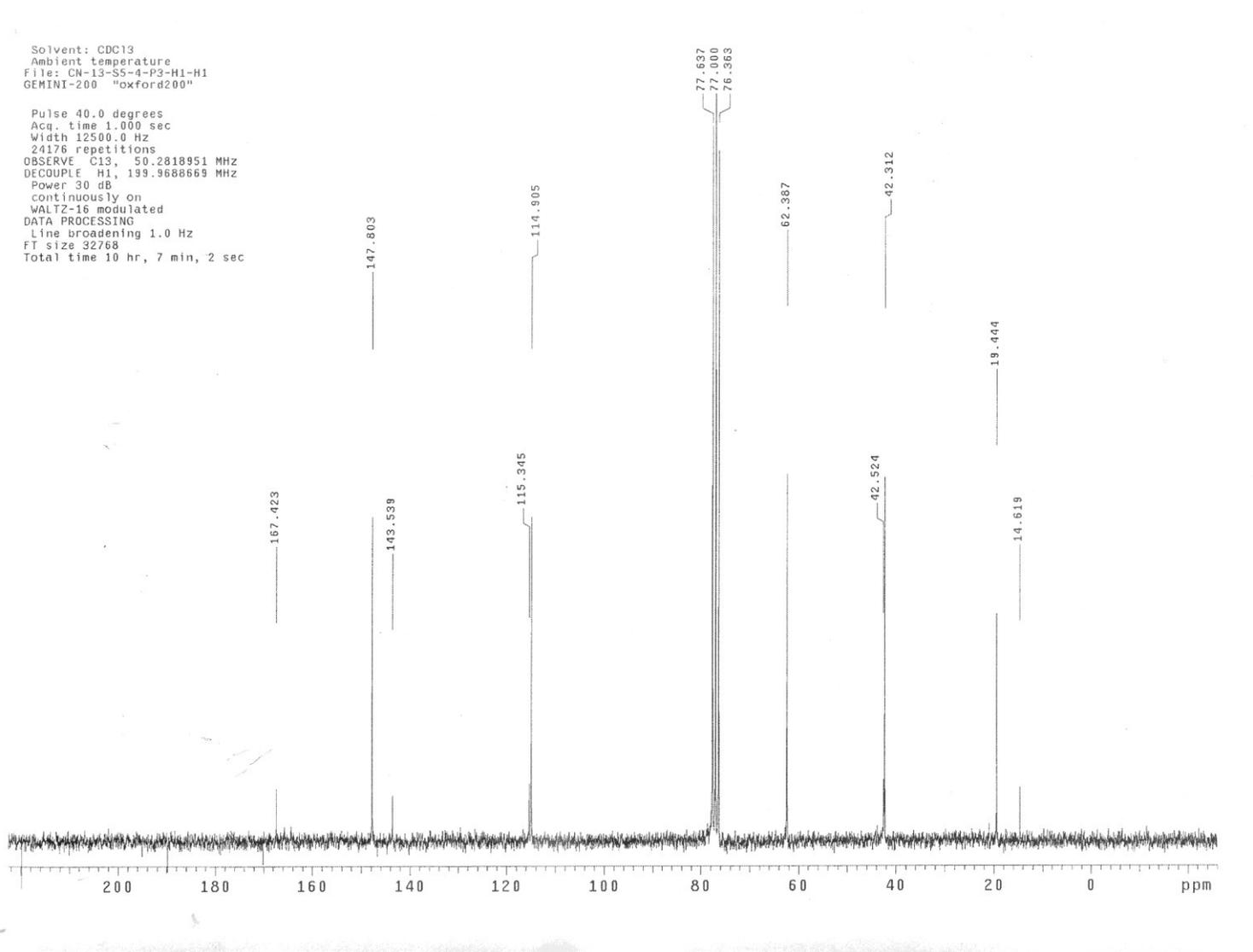


Figure S23.  $^{13}\text{C}$ -NMR Spectrum of **4** in  $\text{CDCl}_3$ .

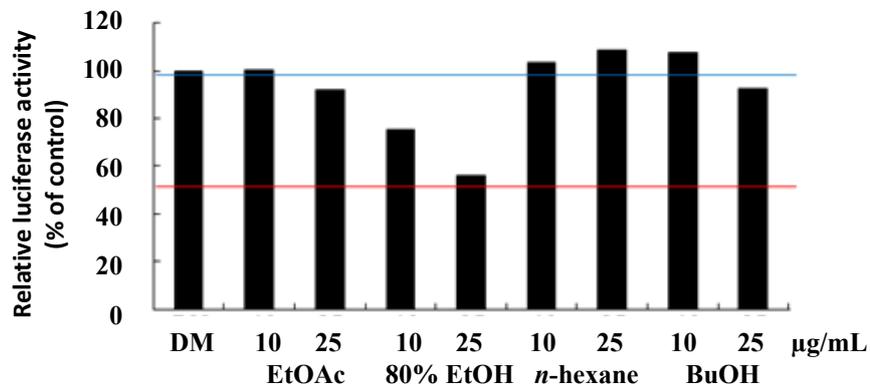
**Table S1.** Anti-inflammatory effects of ethanol extraction of *C. nutans* on superoxide anion generation and elastase release by human neutrophils in response to FMLP/CB.

Partition Layer	Superoxide Anion	Elastase Release
	(Inh %)	(Inh %)
EtOAc	(8.58 ± 0.33) **	(60.53 ± 9.06) *
80% EtOH	(28.52 ± 2.55) **	(68.33 ± 5.49) **
<i>n</i> -hexane	(13.40 ± 0.29) ***	(17.71 ± 7.54)

Percentage of inhibition (Inh %) at 10 µg/mL concentration. Results are presented as mean ± S.E.M. (*n* = 2).

\* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001 compared with the control value.

**Figure S24.** Anti-dengue virus 2 result of ethanol extraction of *C. nutans*.



**Figure S25.** Immune-modulating result of 80% EtOH layer.

