

Supplementary Materials

Figure S1. $^1\text{H-NMR}$ (500 MHz, CDCl_3) spectrum of the new compound 1.

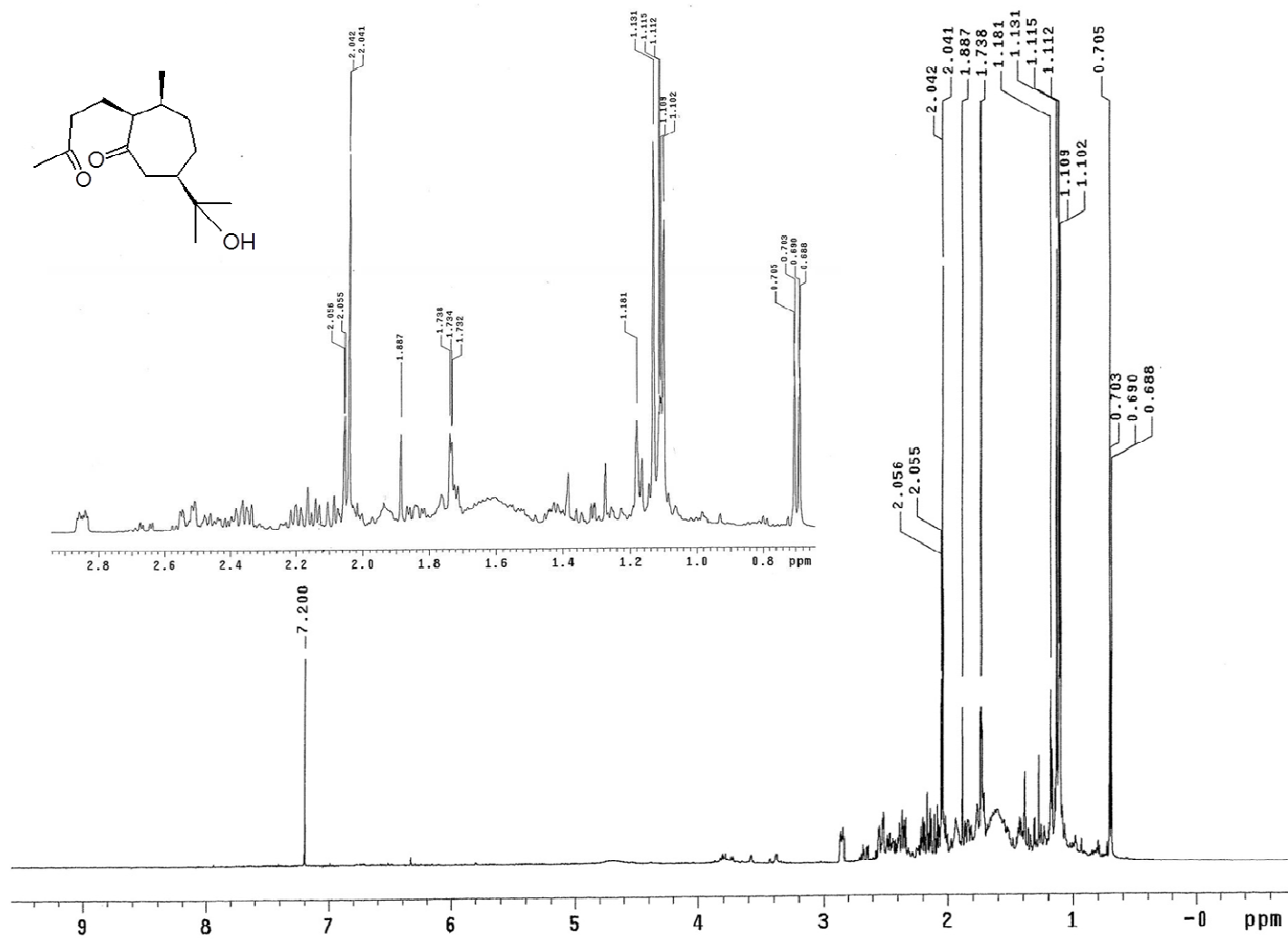


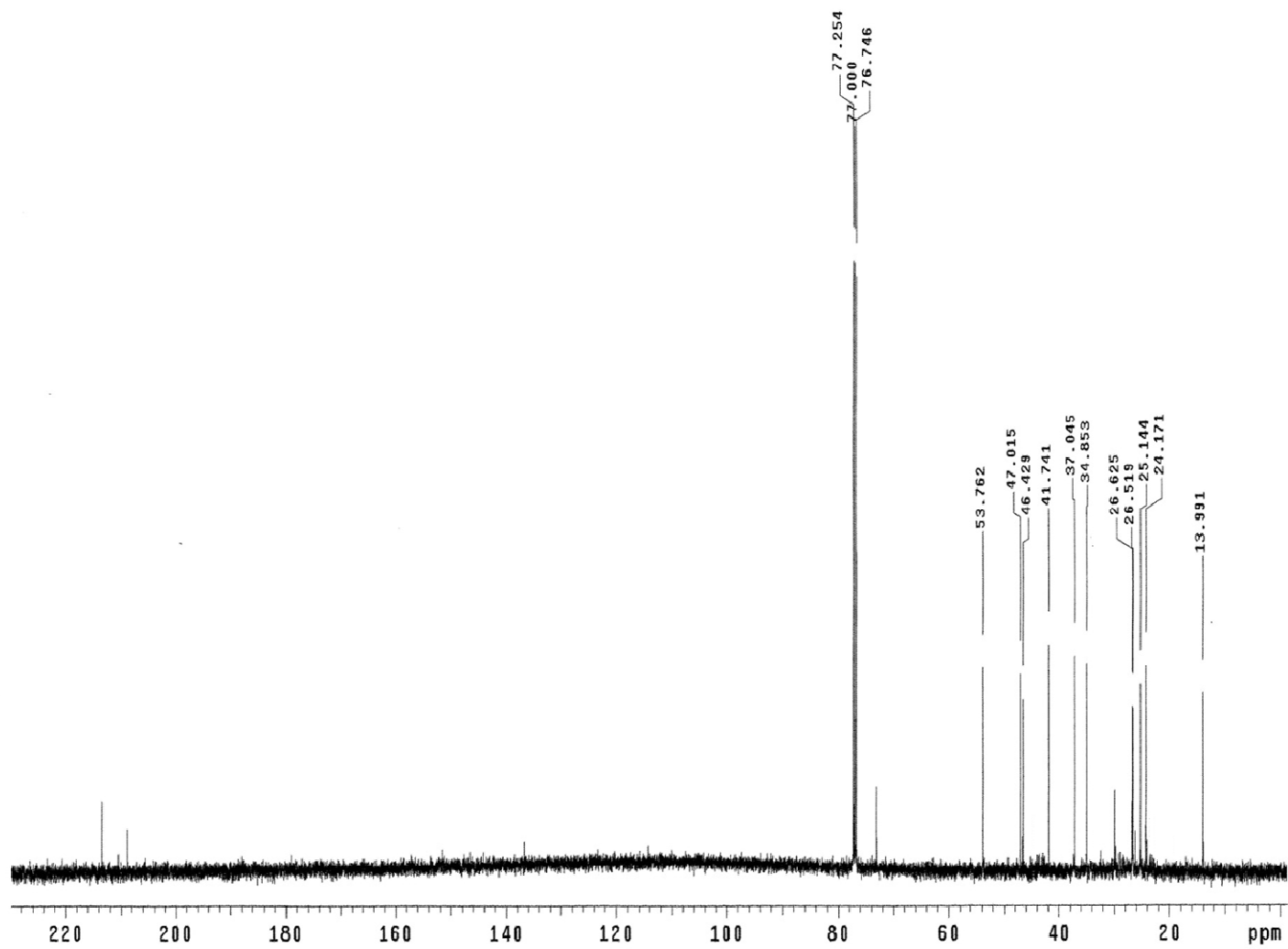
Figure S2. ^{13}C -NMR (126 MHz, CDCl_3) spectrum of the new compound 1.

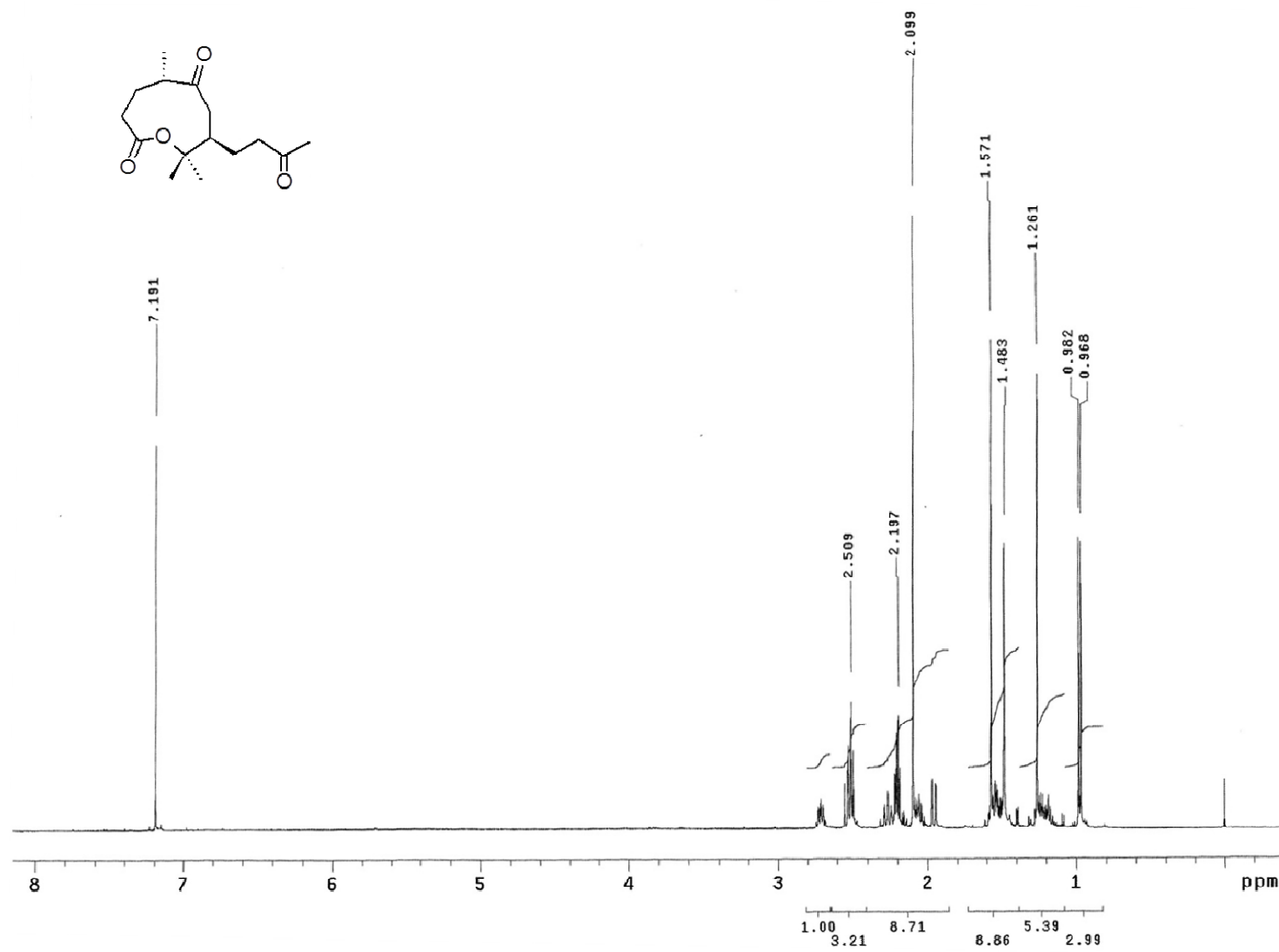
Figure S3. $^1\text{H-NMR}$ (500 MHz, CDCl_3) spectrum of the new compound **2**.

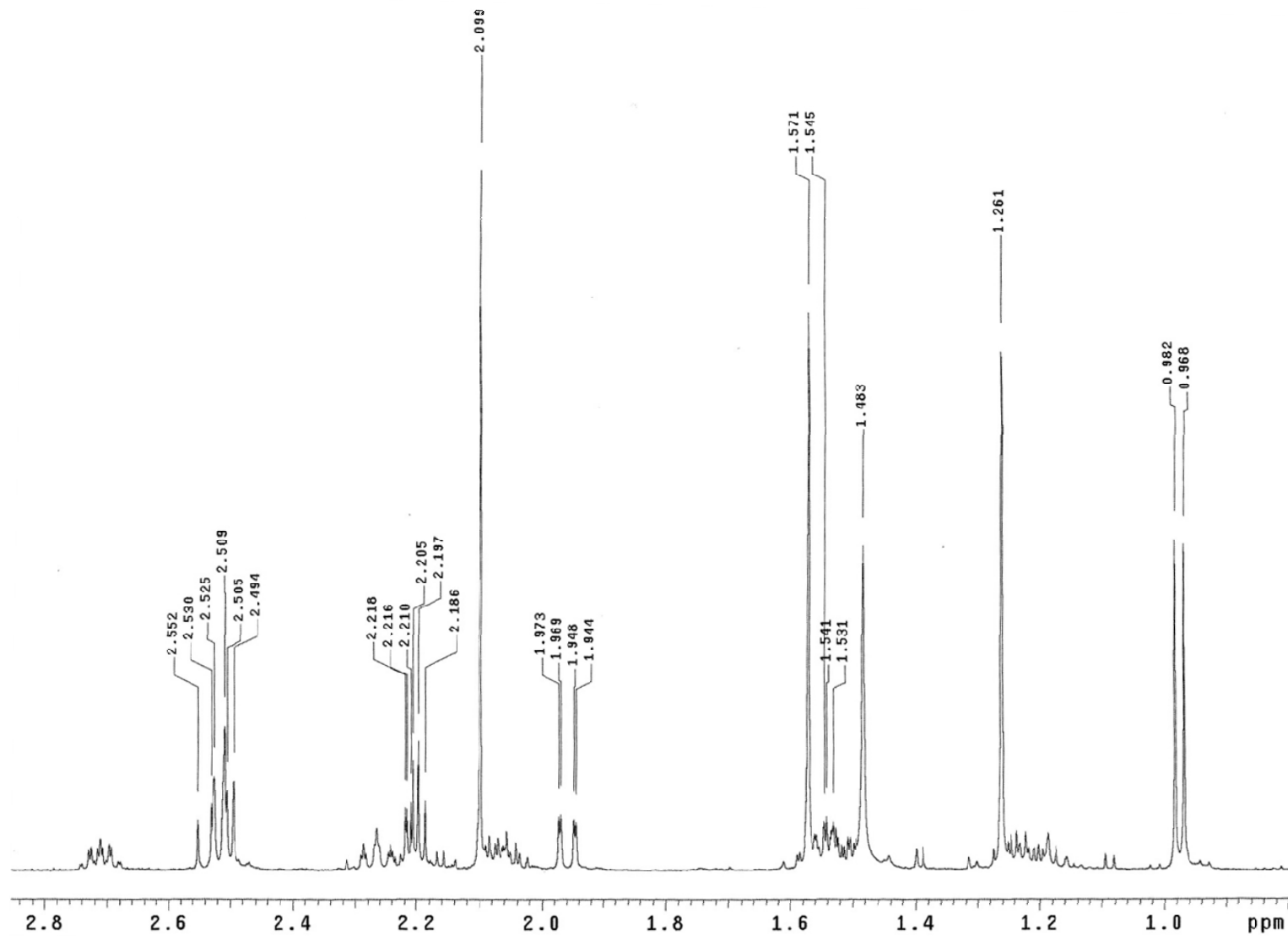
Figure S4. Amplified $^1\text{H-NMR}$ (500 MHz, CDCl_3) spectrum of the new compound 2.

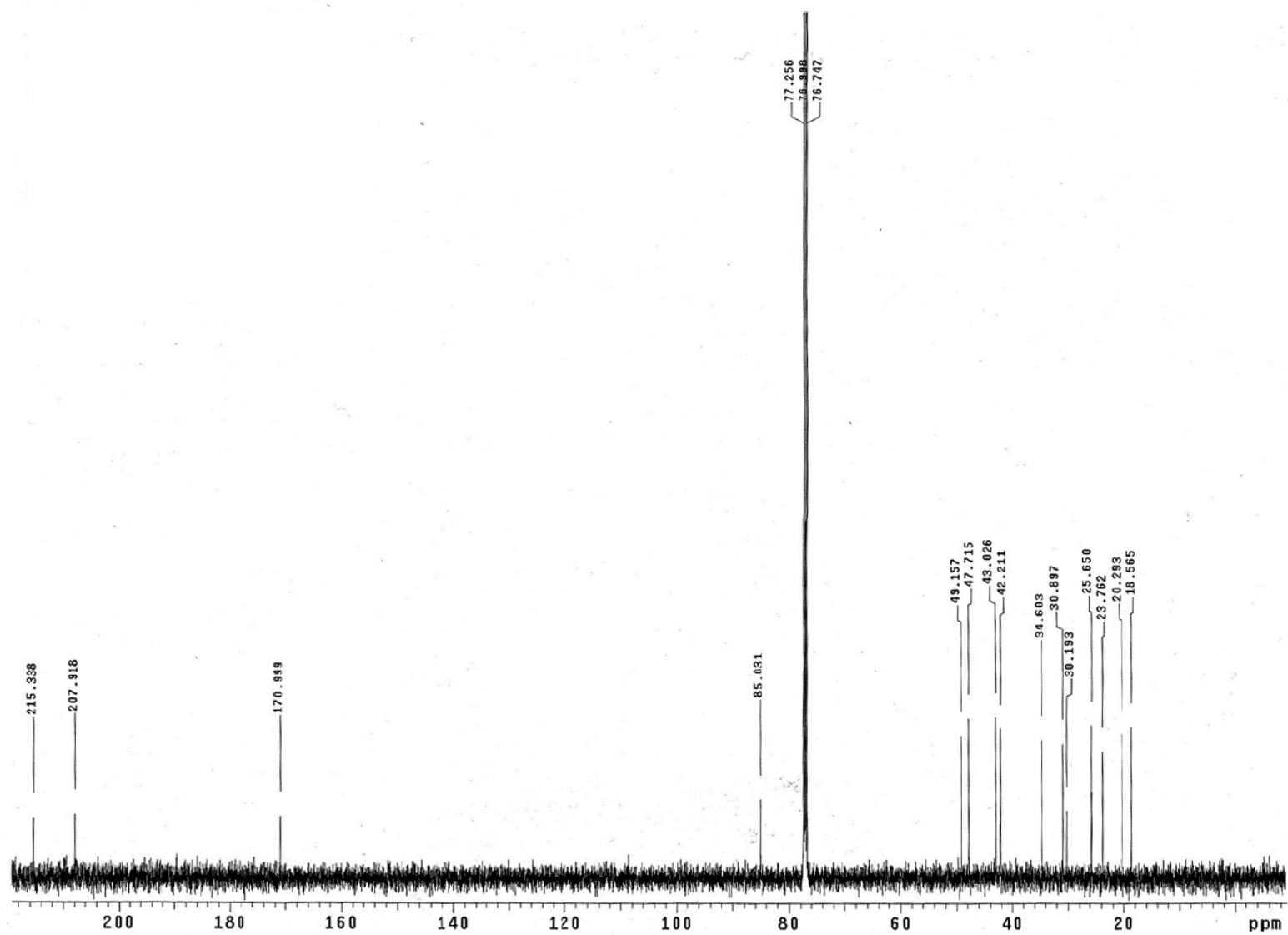
Figure S5. ^{13}C -NMR (126 MHz, CDCl_3) spectrum of the new compound **2**.

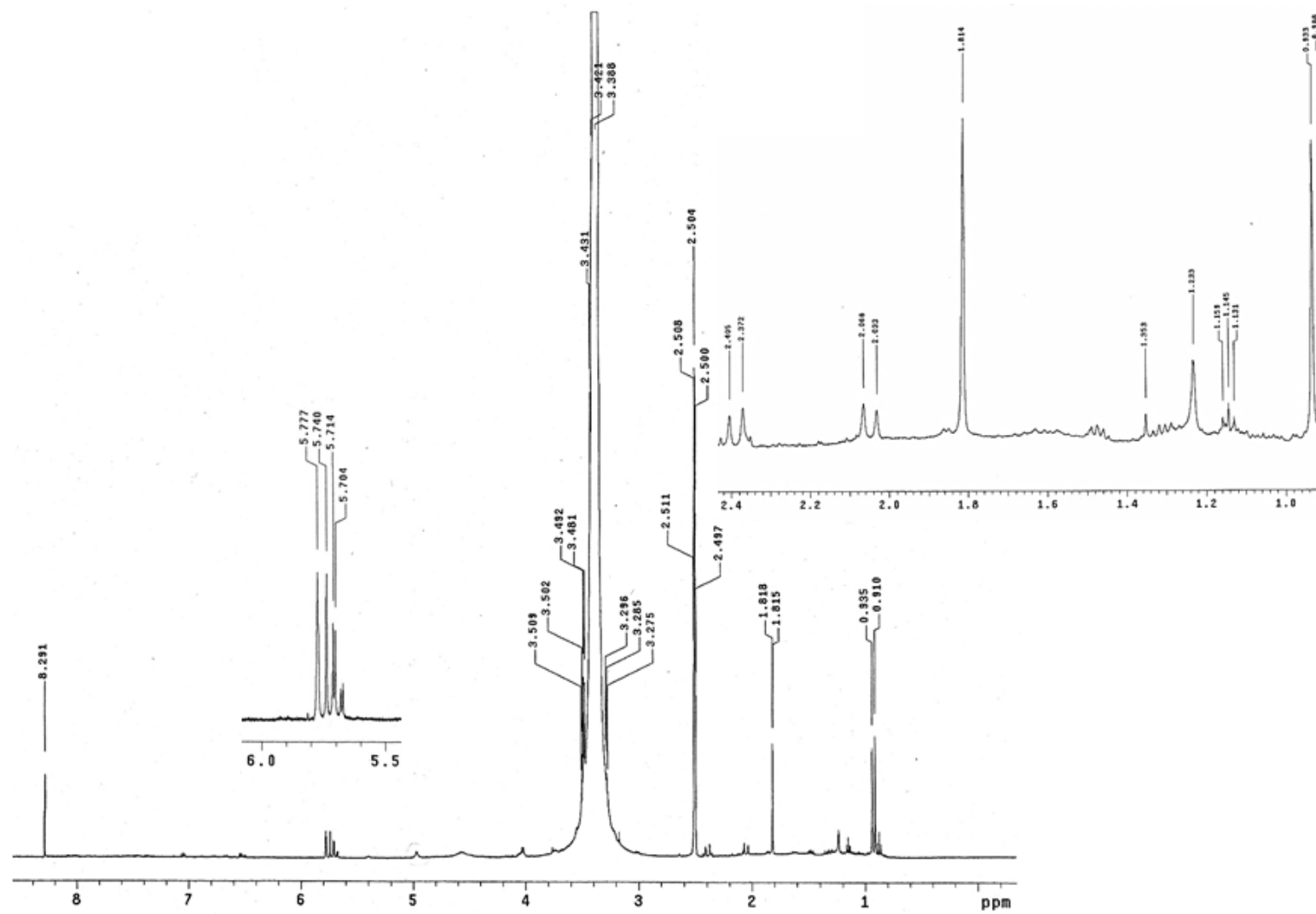
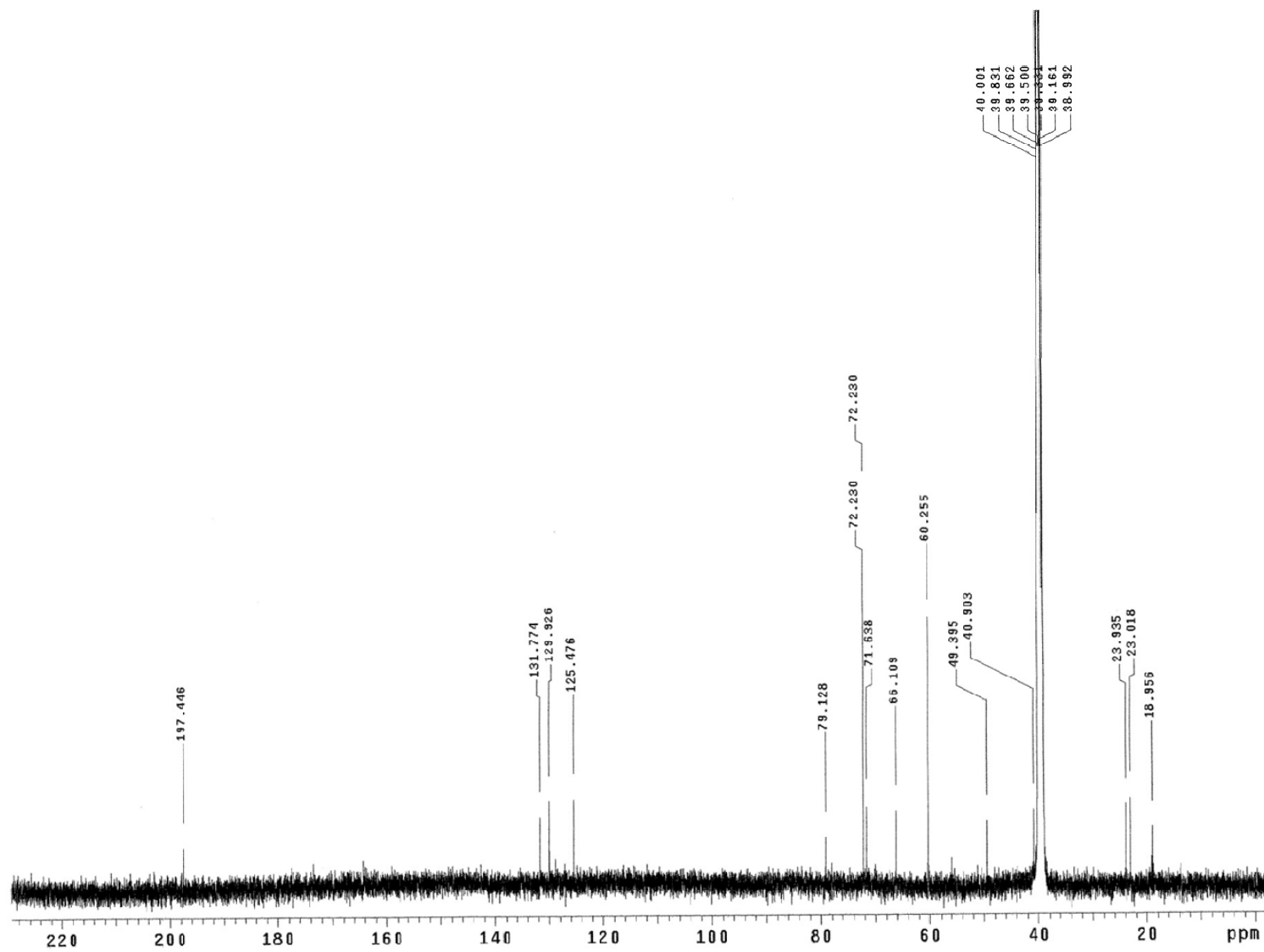
Figure S6. $^1\text{H-NMR}$ (500 MHz, $\text{DMSO-}d_6$) spectrum of the new compound 3.

Figure S7. ^{13}C -NMR (126 MHz, $\text{DMSO-}d_6$) spectrum of the new compound **3**.

Computational Details

Calculations have been carried out using PC GAMESS package at the B3LYP/STO-3G** level and wxMacMolPlt software for structure visualization [1–6]. Optimization algorithm was based on the Quadratic Approximation (QA) and the threshold gradient value was 10^{-5} a.u. [7]. Vibrational analysis showed all real frequencies asserting the stationary points as minima [7]. The NBO donor-acceptor pairs were checked and steric energies were calculated [8–12].

Figure S8. Conformations found in the Cambridge Structural Database.

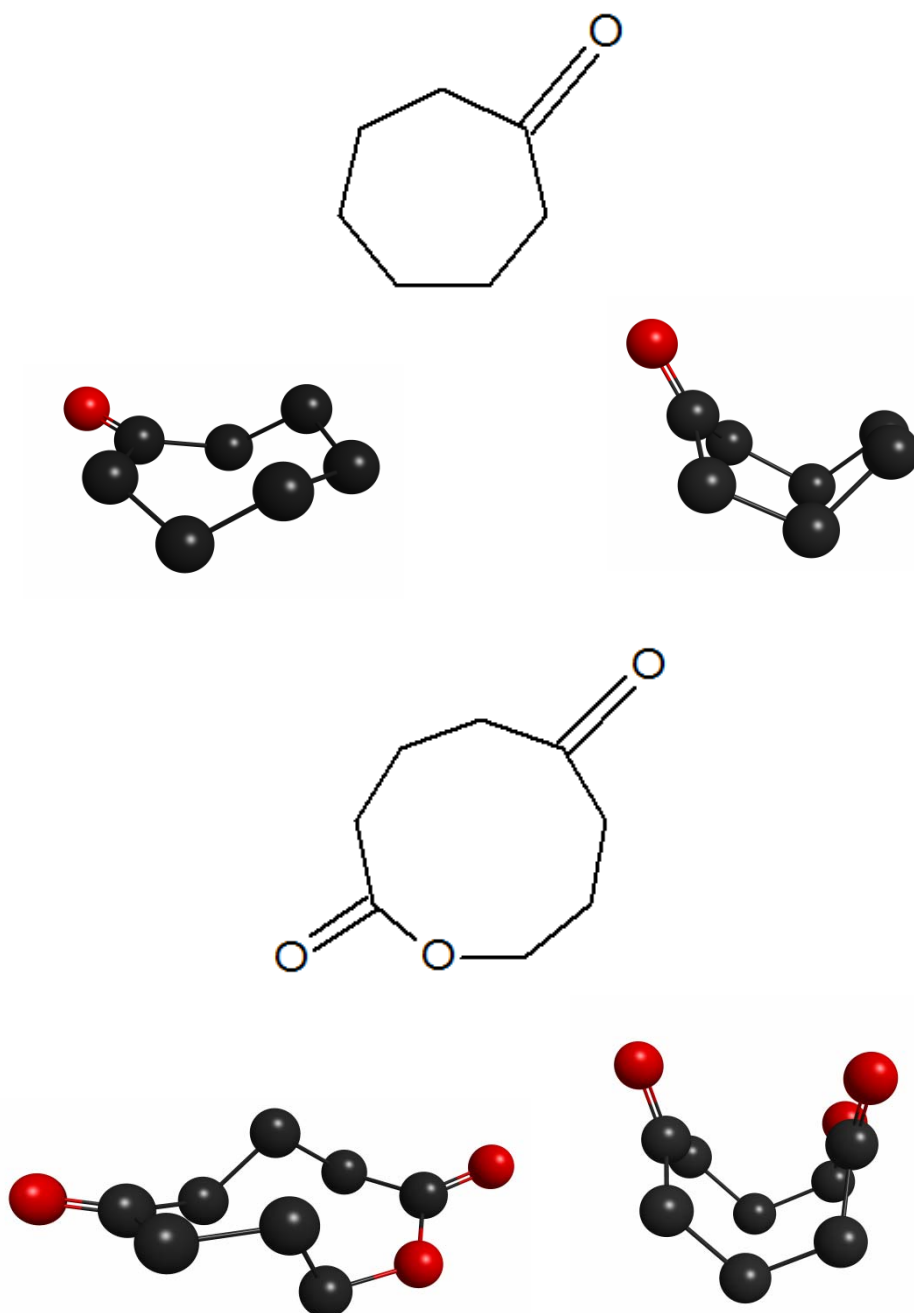


Table S1. Relative Energies (kcal.mol⁻¹)—Conformation.

7-membered ring			
Conformer	ΔG° (298.15 K)	ΔE_{ZPE}	ΔE
71	0.0	0.0	0.0
72	0.0	0.2	0.7
73	0.4	1.2	2.0
74	-0.6	1.1	2.4

9-membered ring			
Conformer	ΔG° (298.15 K)	ΔE_{ZPE}	ΔE
91	0.0	0.0	0.0
92	4.3	4.0	3.7
93	14.4	15.3	15.9
94	22.6	22.3	22.0

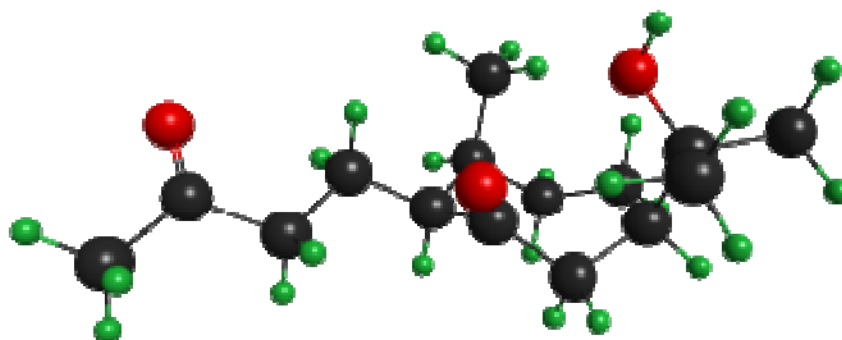
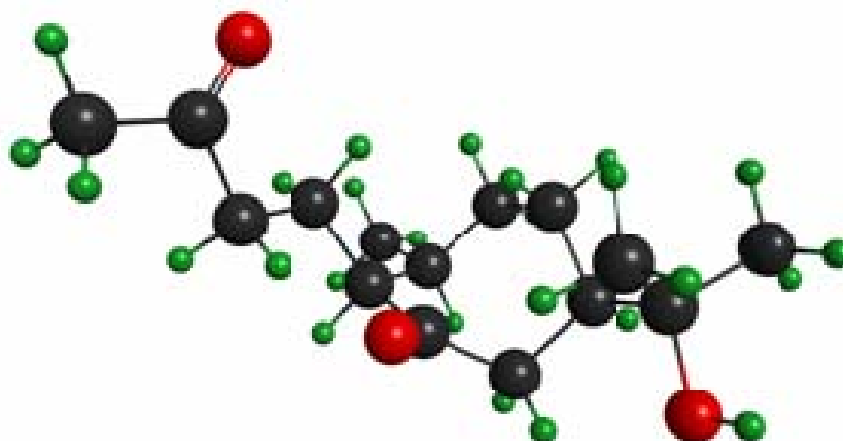
Figure S9. Optimized structures for the 7-membered ring compound.**71****72**

Figure S9. Cont.

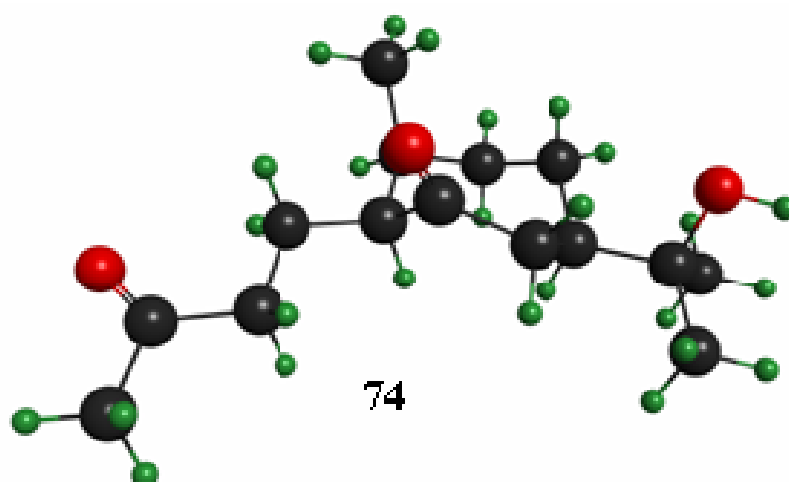
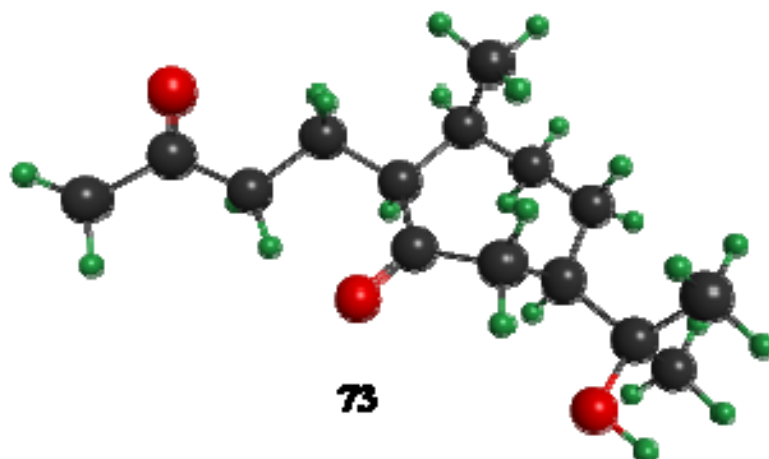


Figure S10. Optimized structures for the 9-membered ring compound.

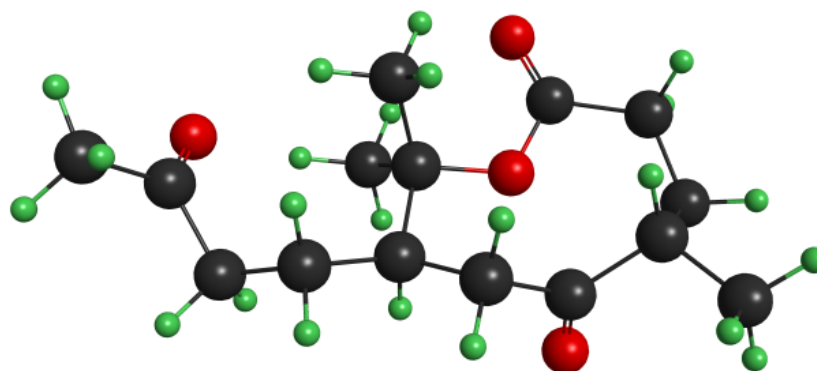
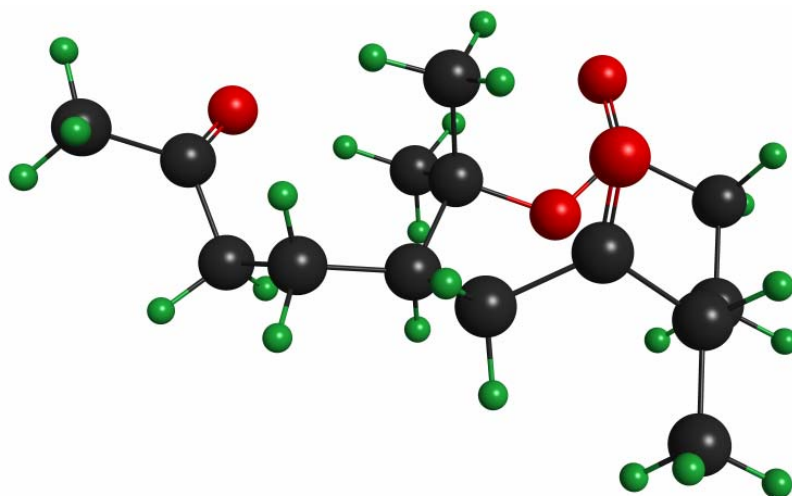
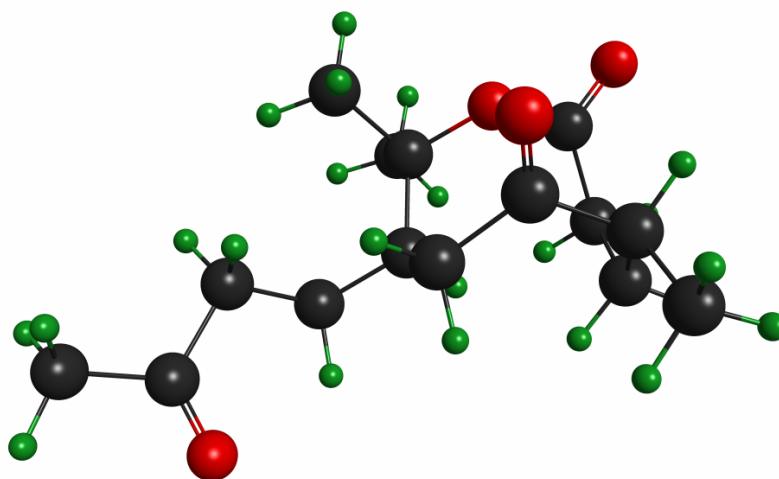


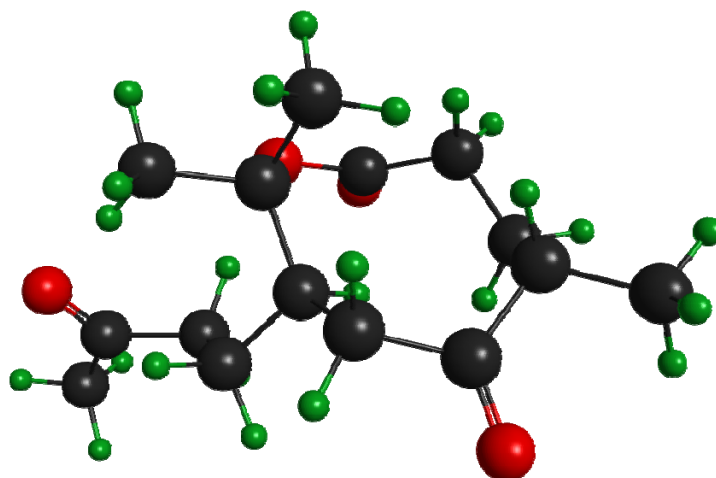
Figure S10. Cont.



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References

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