

Supplementary Material

Article

Abietane Diterpenoids Isolated from *Clerodendrum Bracteatum* and Their Antioxidant and Cytotoxic Activities

Pingting Li, Lingling Li, Qin Zhu * and Mingfeng Xu *

College of Life and Environmental Sciences, Hangzhou Normal University, Hangzhou 311121, China;
2018210313055@stu.hznu.edu.cn (P.L.); 2018210313054@stu.hznu.edu.cn (L.L.)

* Correspondence: zhuqin@hznu.edu.cn (Q.Z.); zjxmf@163.com (M.X.); Tel.: +86-571-2886-1007 (M.X.)

Abstract: Two new abietane diterpenoids (**1,2**), along with five known diterpenoids (**3–7**), were first isolated and purified from the stems of *Clerodendrum bracteatum*. The structures of the new compounds were established by extensive analysis of mass spectrometric and 1-D, 2-D NMR spectroscopic data. Their antioxidant activities were determined on DPPH radical scavenging and ABTS. The in vitro cytotoxic activities of the compounds were evaluated against the HL-60 and A549 cell lines by the MTT method.

Keywords: *Clerodendrum bracteatum*; abietane diterpene; antioxidant activity; cytotoxic activity

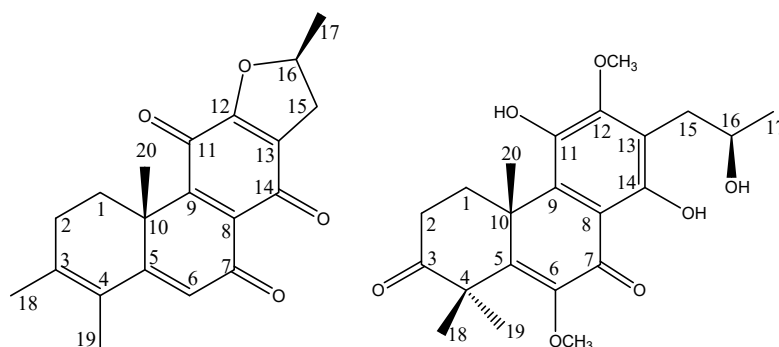


Figure S1. Chemical structure of compounds **1** and **2**.

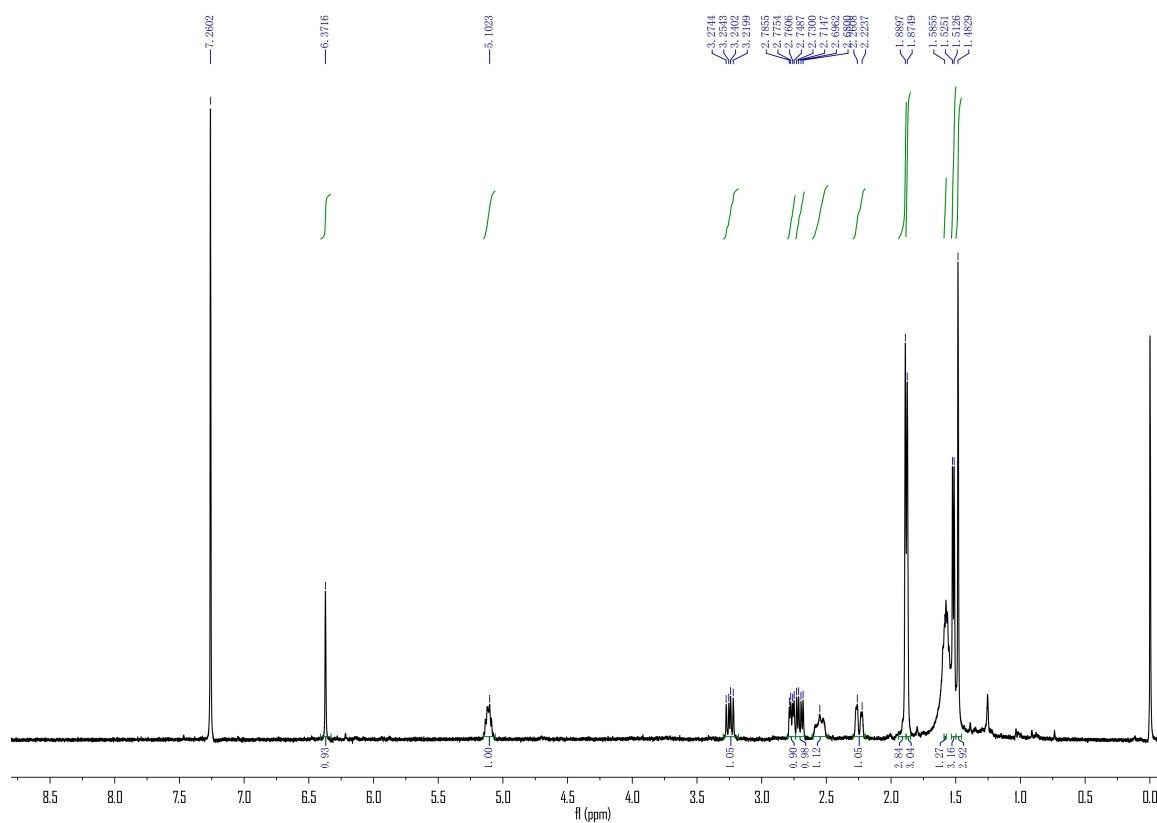


Figure S2. ¹H NMR of compound 1.

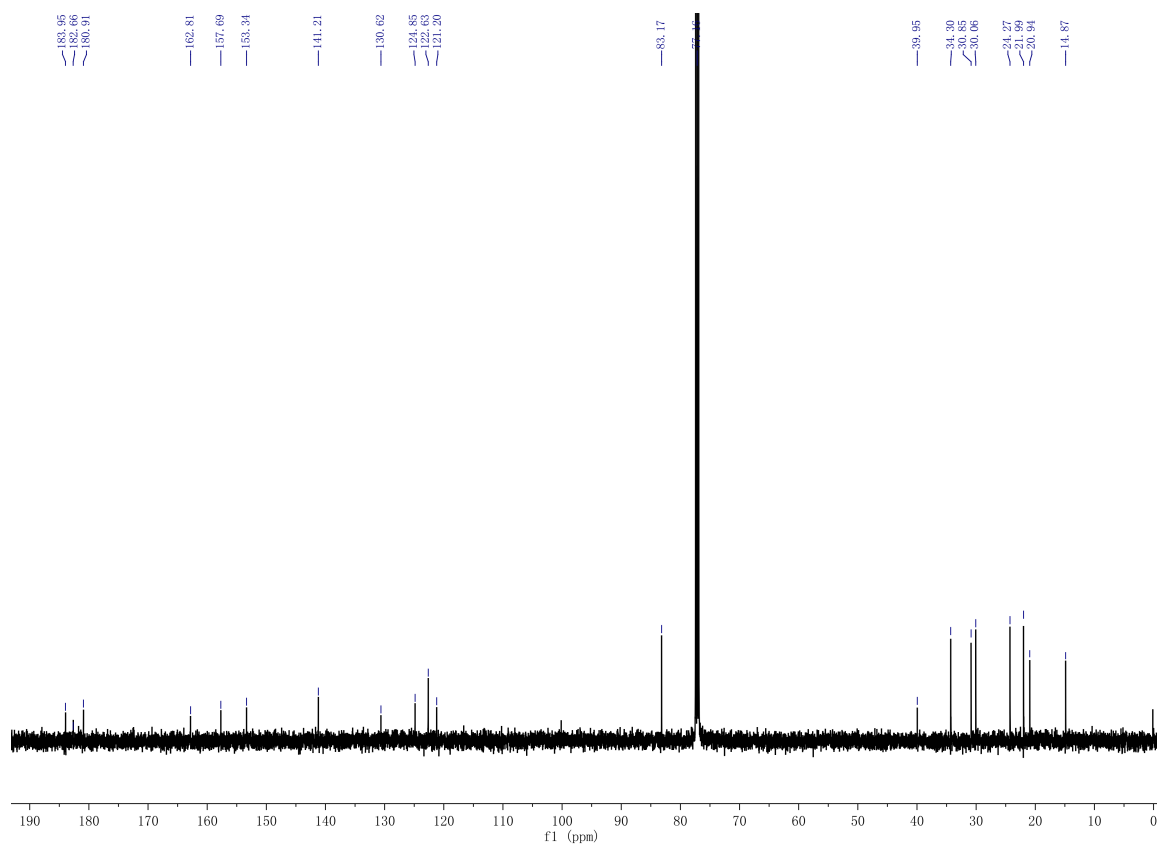


Figure S3. ¹³C NMR of compound 1.

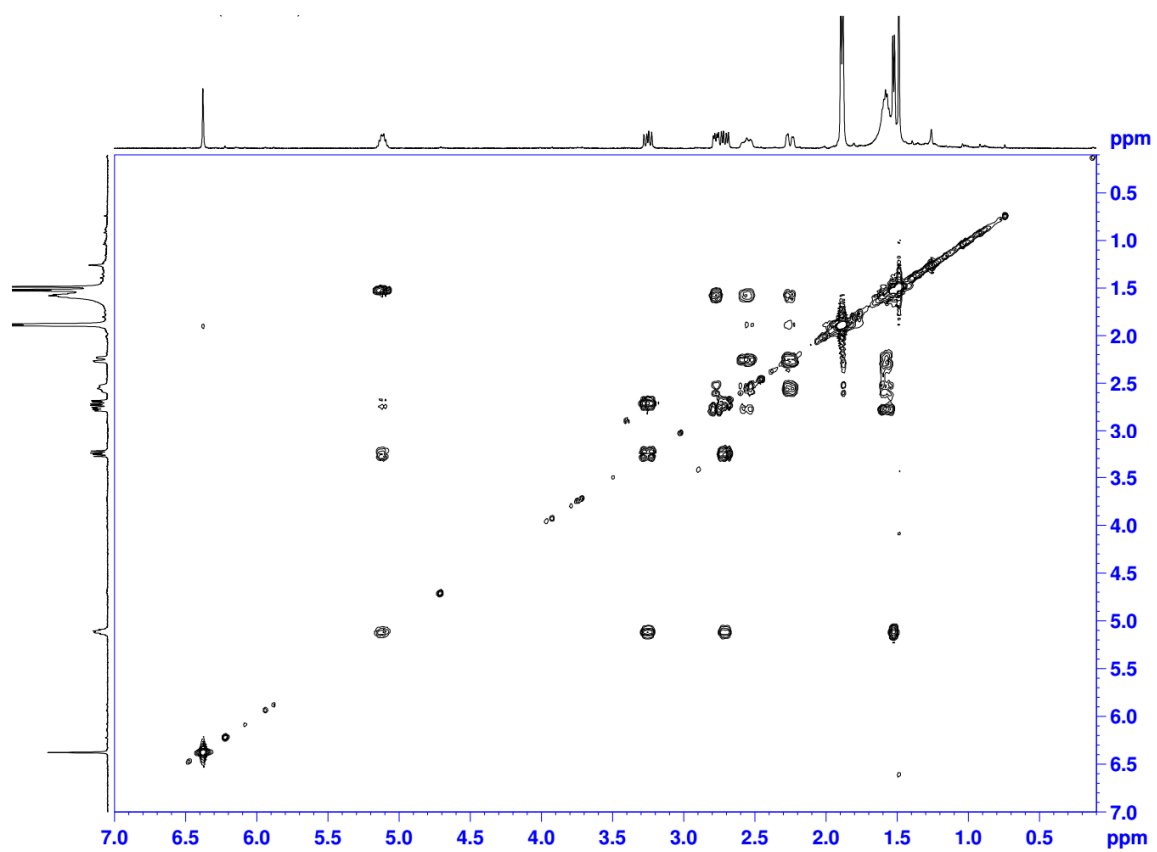


Figure S4. H-H COSY of compound 1.

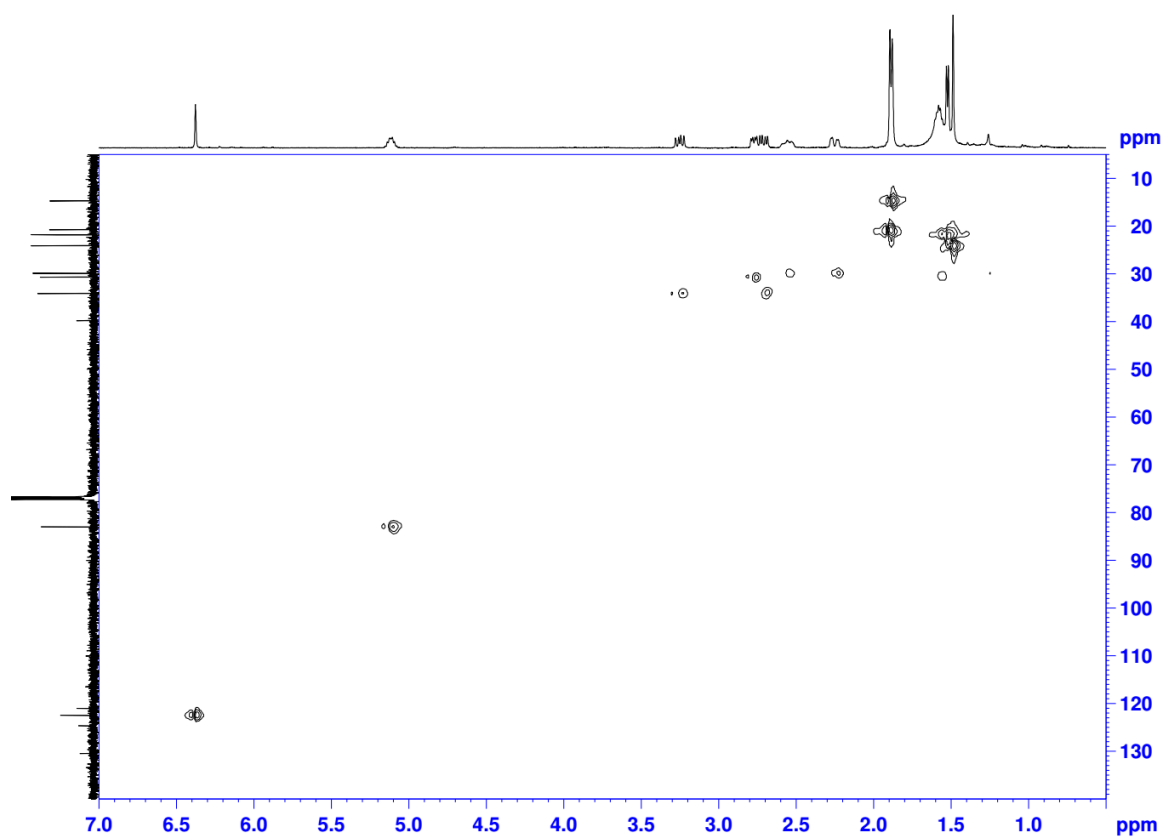


Figure S5. HSQC of compound 1.

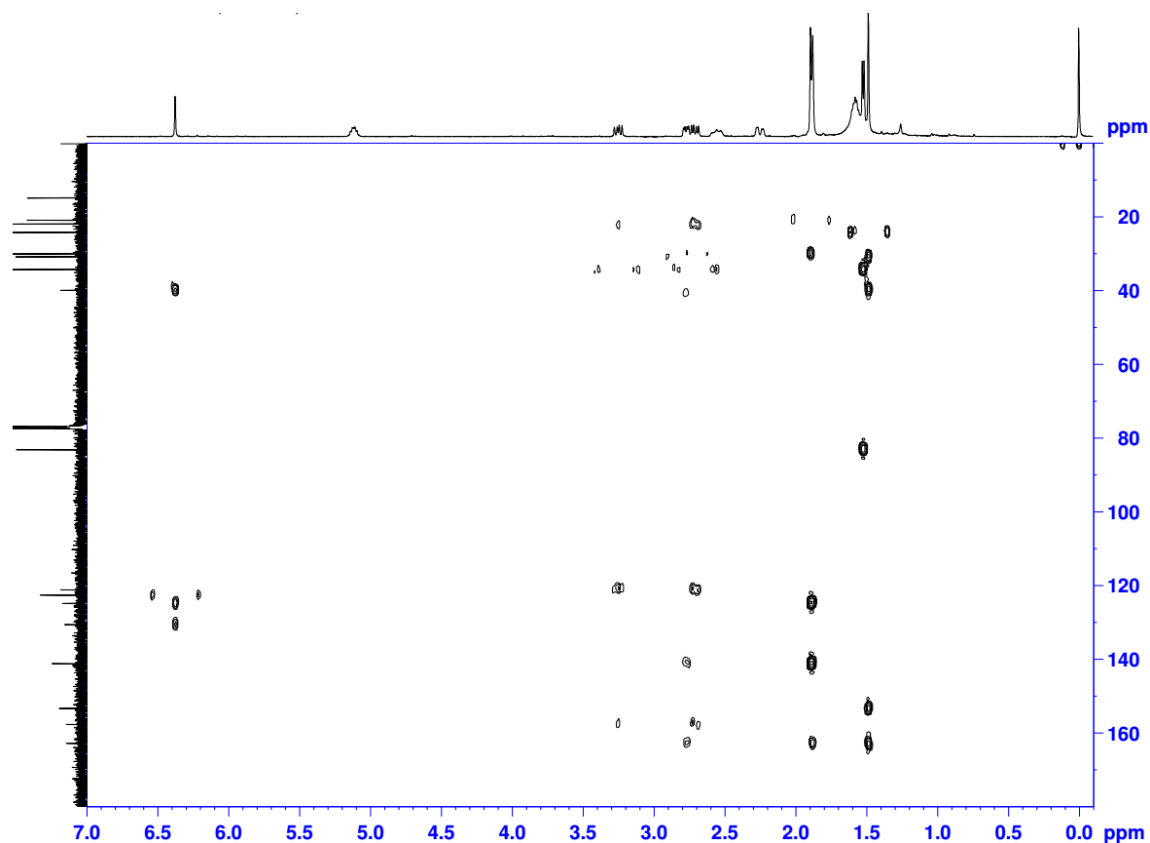


Figure S6. HMBC of compound 1.

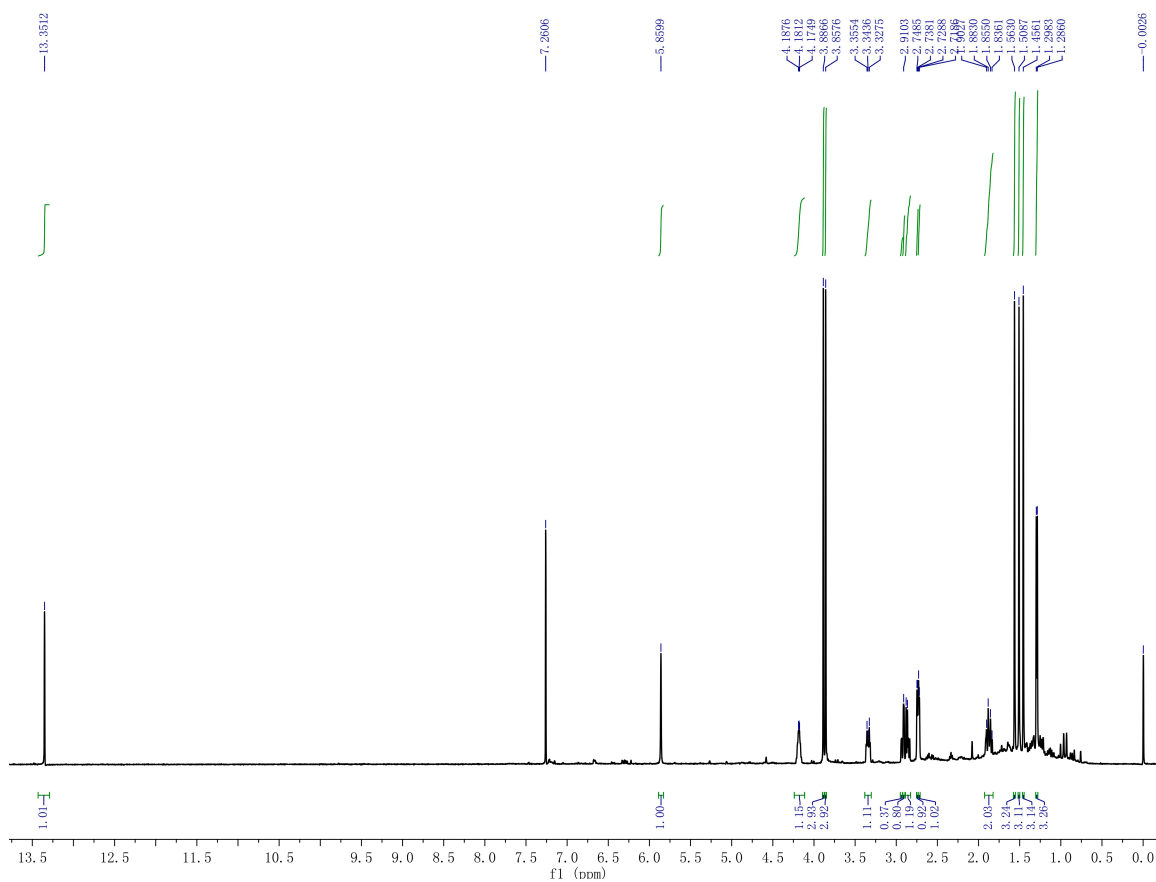


Figure S7. ^1H NMR of compound 2.

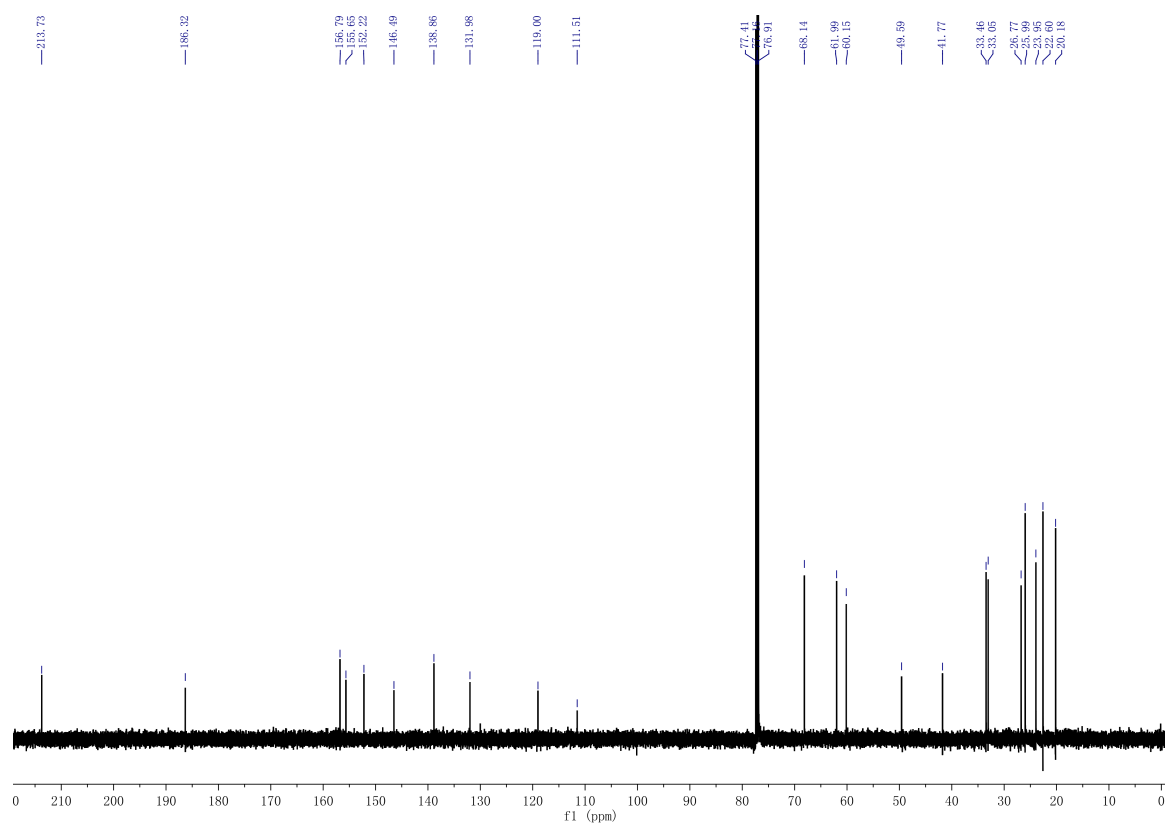


Figure S8. ^{13}C NMR of compound 2.

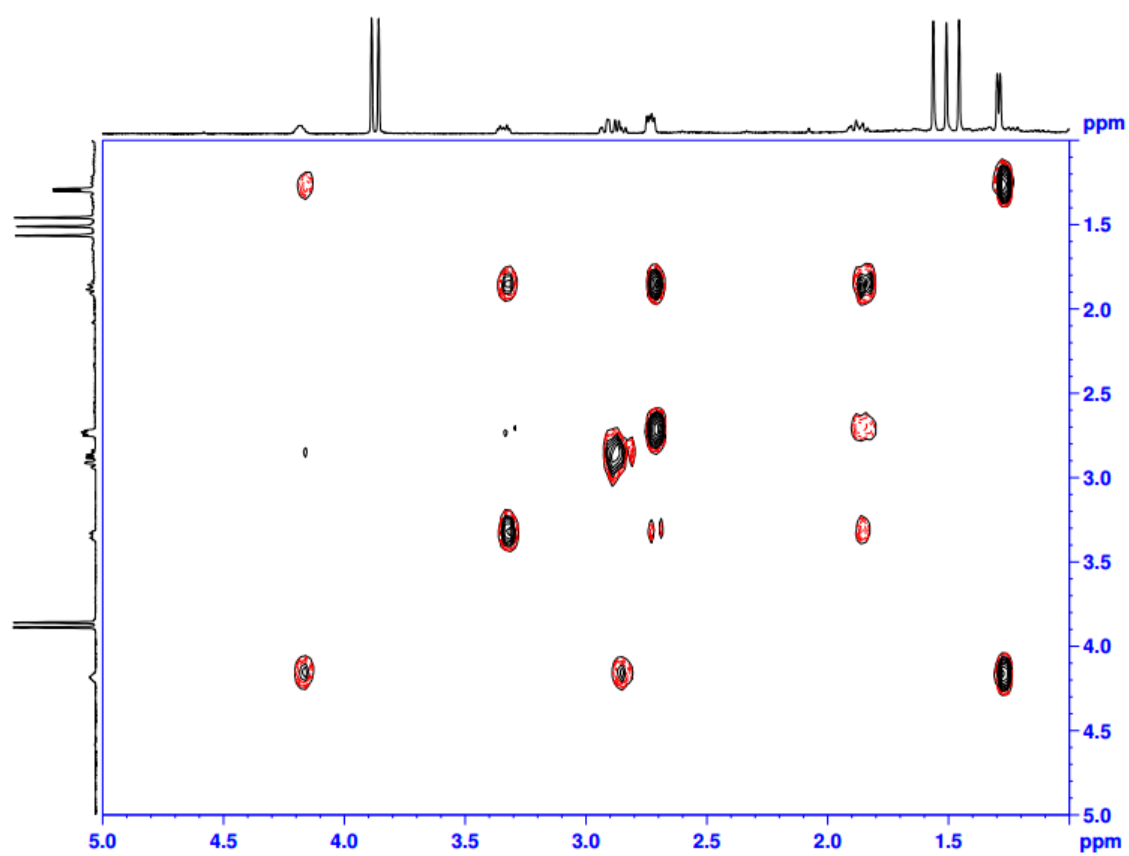


Figure S9. ^1H - ^1H COSY of compound 2.

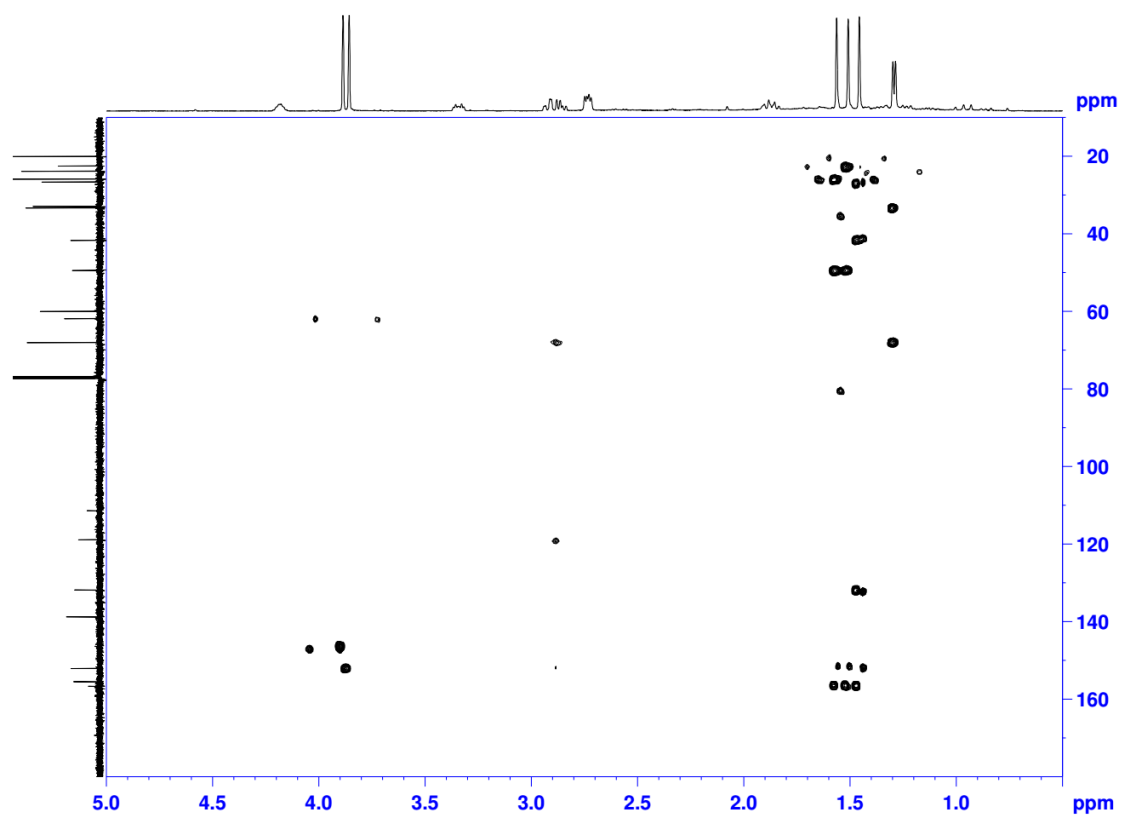


Figure S10. HMBC of compound 2.

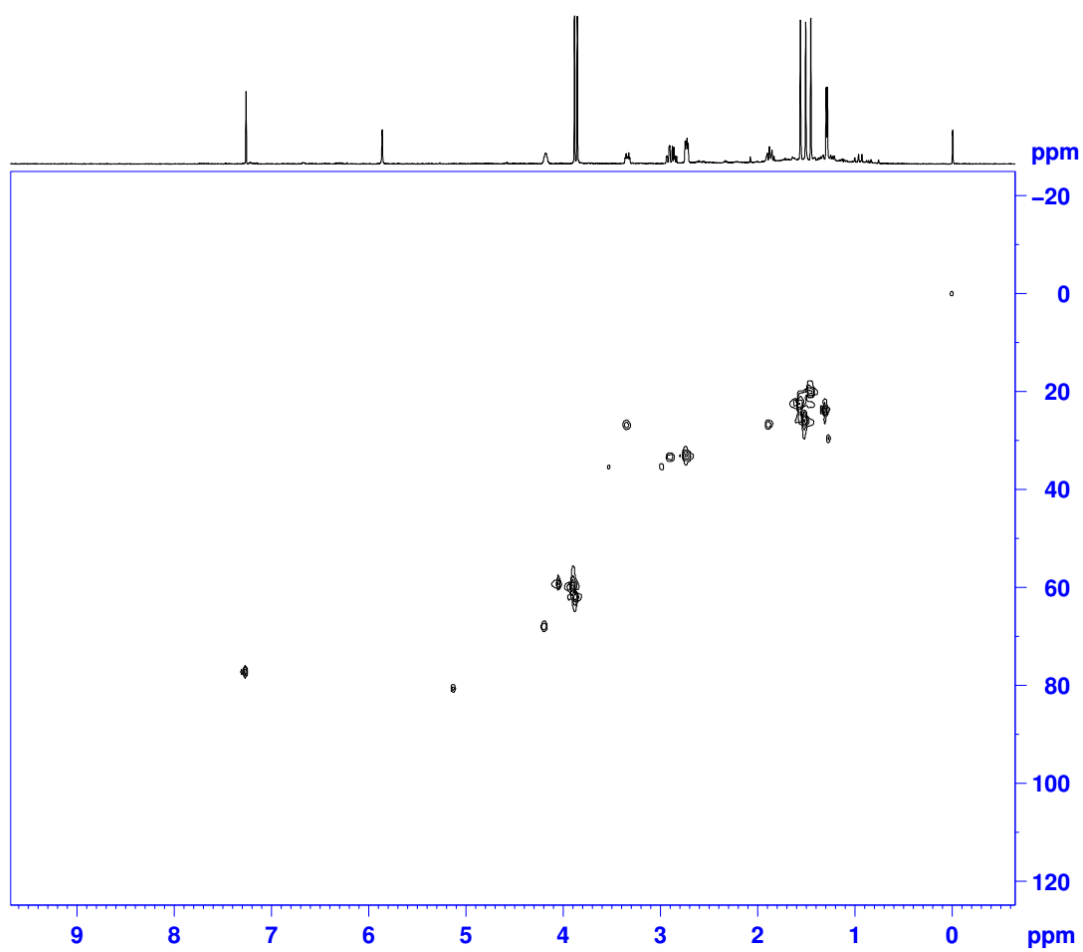


Figure S11. HSQC of compound 2.

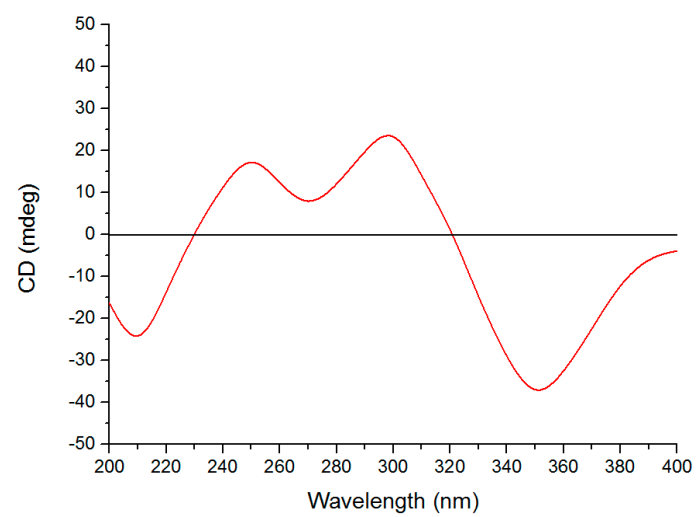


Figure S12. ECD spectrum of compound 2.