Supplementary materials

Two new eudesmane-type sesquiterpene derivatives from *Lecokia cretica* (Lam.) DC.

Kevser Taban Akça ^a, Perihan Gürbüz ^{b*}, Şengül Dilem Doğan^c, Esra Emerce ^d, Ahmet C. Gören^e, Rıdvan Polat ^f, İpek Süntar ^{a*}

Abstract

Two new sesquiterpene glucosides, $1\alpha,6\beta,9\beta$ -trihydroxy-eudesm-4(15)-en-1,6-O- β -diglucopyranoside (**1**) and $1\alpha,6\beta,9\beta$ -trihydroxy-eudesm-3-en-1,6-O- β -diglucopyranoside (**2**) were obtained along with the $1\alpha,6\beta,9\beta$ -trihydroxy-5,10-bis-epi-eudesm-3-en-6-O- β -D-glucopyranoside (**3**), chlorogenic acid (**4**), luteolin 7-O-rutinoside (**5**) and luteolin 7-O-glucoside (**6**) from the whole plant parts of *Lecokia cretica*. Their structures were determined on the basis of 1D, 2D NMR and HRMS analyses. The *in vitro* cytotoxic activity of compounds **1-3** against human lung cancer cells (A549) and normal human lung cells (BEAS-2B) was determined using the MTT colorimetric assay. All the tested eudesmane derivatives were found to be inactive.

Keywords: *Lecokia cretica*, Apiaceae, eudesmane, sesquiterpene, cell viability, cytotoxic activity

^a Gazi University, Faculty of Pharmacy, Department of Pharmacognosy, 06560, Türkiye

^b Erciyes University, Faculty of Pharmacy, Department of Pharmacognosy, 38039, Türkiye

^c Erciyes University, Faculty of Pharmacy, Department of Basic Sciences, 38039, Türkiye

^d Gazi University, Faculty of Pharmacy, Department of Pharmaceutical Toxicology, Ankara, Türkiye

^e GebzeTechnicalUniversity, Faculty of Sciences, Department Chemistry, 41400, Gebze, Kocaeli, Türkiye

f Bingöl University, Faculty of Agriculture, Department of Landscape Architecture, Bingöl, Türkiye

^{*} Corresponding authors: E-mail: ipesin@gazi.edu.tr (Ipek Süntar); pgurbuz@erciyes.edu.tr (Perihan Gürbüz)

Contents

- Figure S1. ¹H NMR spectrum of compound 1
- Figure S2. ¹³C NMR spectrum of compound 1
- Figure S3. COSY spectrum of compound 1
- Figure S4. HSQC spectrum of compound 1
- Figure S5. HMBC spectrum of compound 1
- Figure S6. NOESY spectrum of compound 1
- Figure S7. HRMS spectrum of compound 1
- Figure S8. ¹H NMR spectrum of compound 2
- Figure S9. ¹³C NMR spectrum of compound 2
- Figure S10. COSY spectrum of compound 2
- Figure S11. HSQC spectrum of compound 2
- Figure S12. HMBC spectrum of compound 2
- Figure S13. NOESY spectrum of compound 2
- Figure S14. HRMS spectrum of compound 2

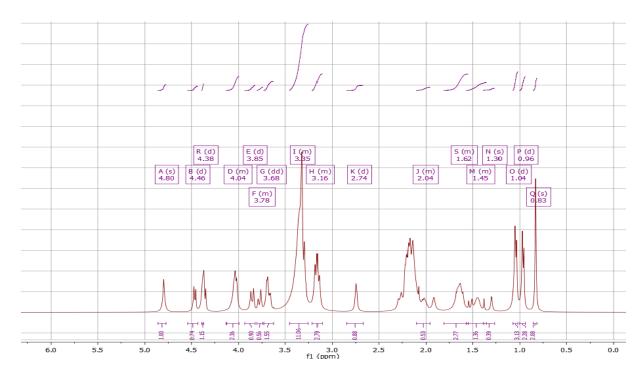


Figure S1. ¹H NMR spectrum of compound 1

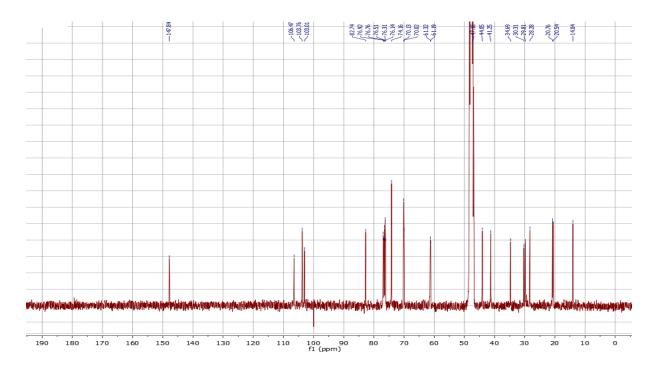


Figure S2. ¹³C NMR spectrum of compound **1**

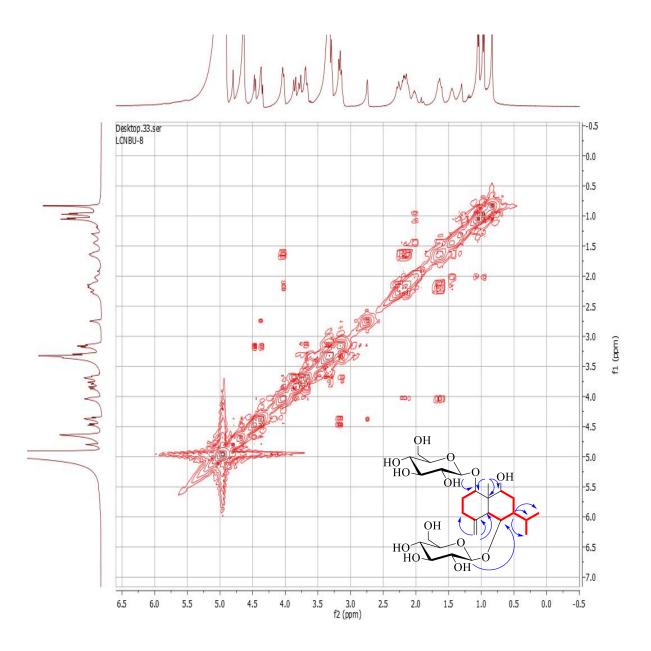


Figure S3. COSY spectrum of compound 1

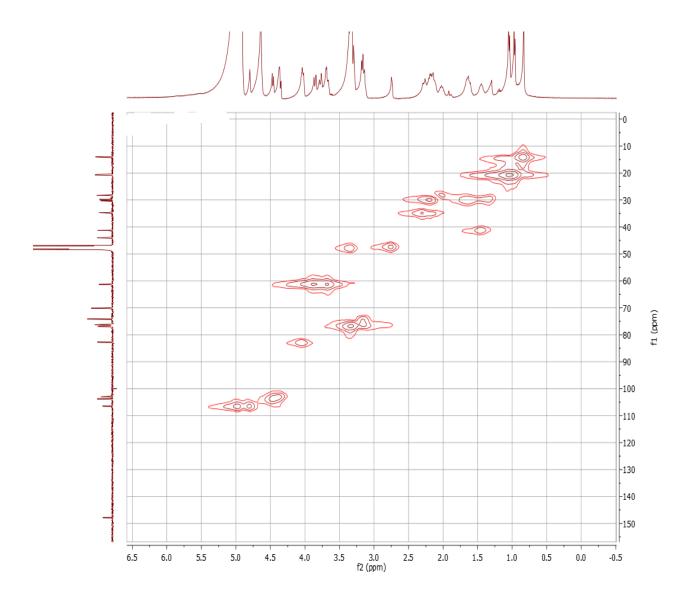


Figure S4. HSQC spectrum of compound 1

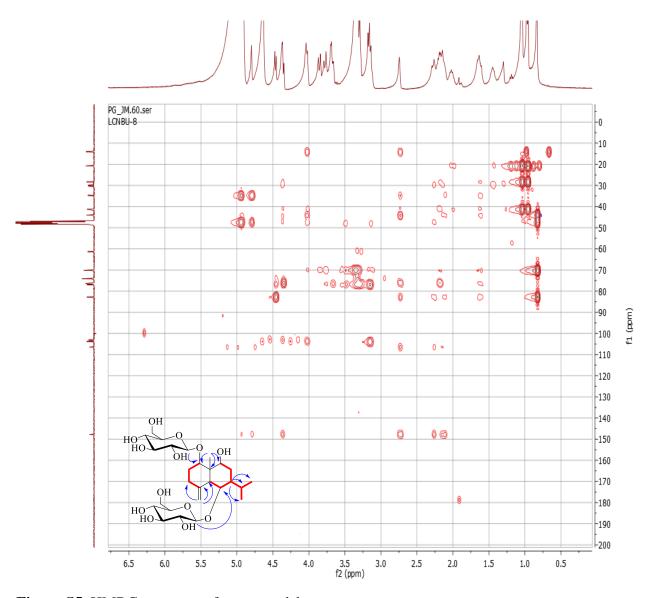


Figure S5. HMBC spectrum of compound ${\bf 1}$

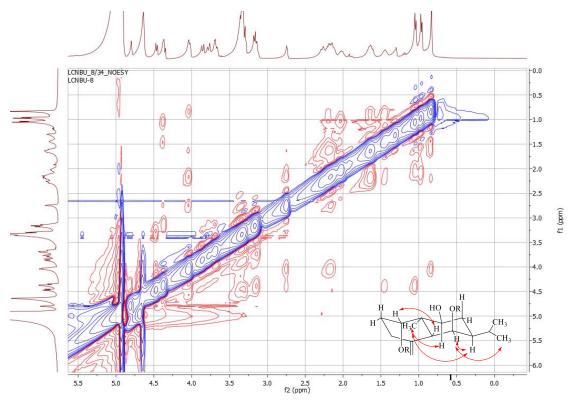


Figure S6. NOESY spectrum of compound 1

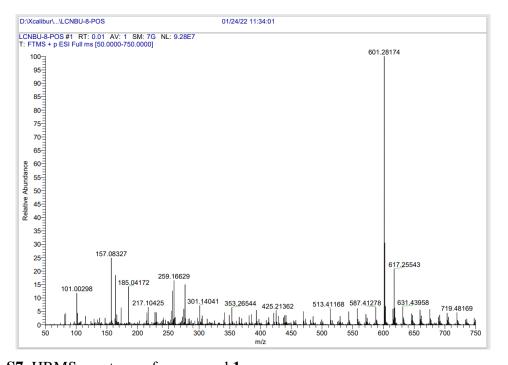


Figure S7. HRMS spectrum of compound 1

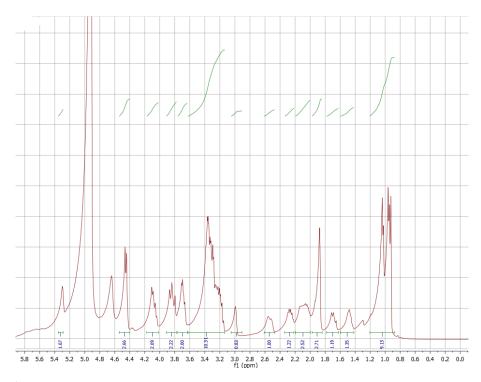


Figure S8. ¹H NMR spectrum of compound 2

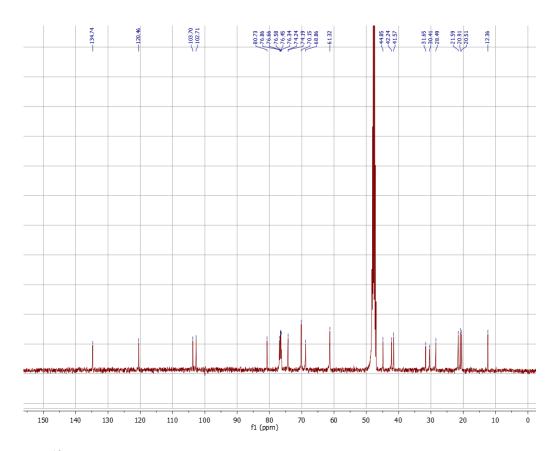


Figure S9. ¹³C NMR spectrum of compound **2**

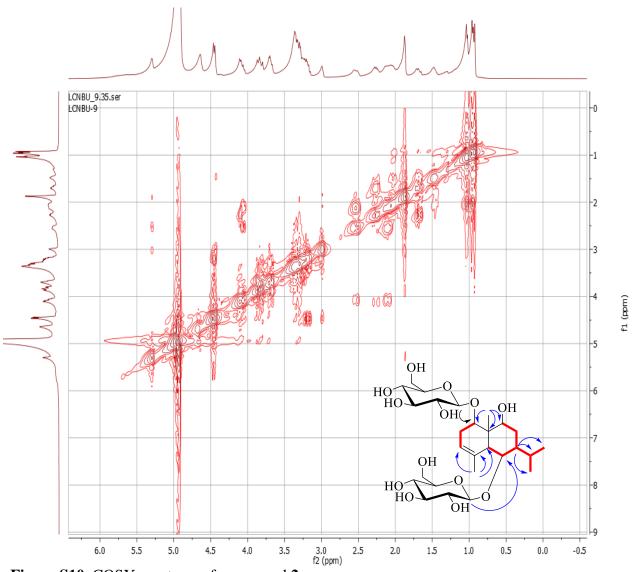


Figure S10. COSY spectrum of compound 2

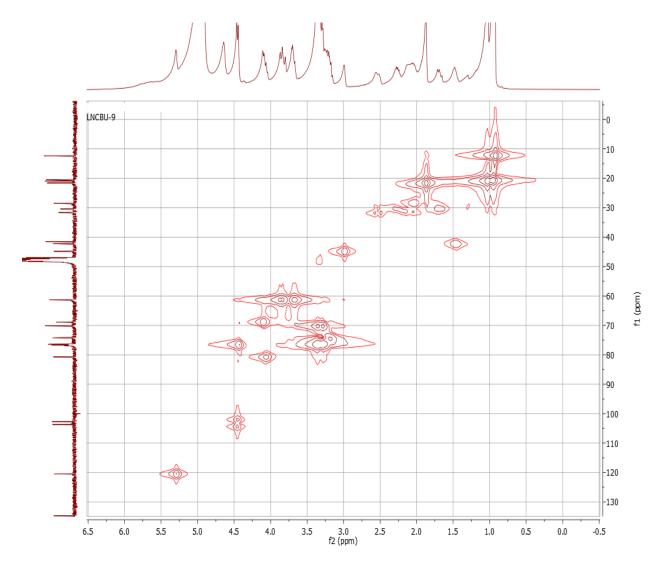


Figure S11. HSQC spectrum of compound 2

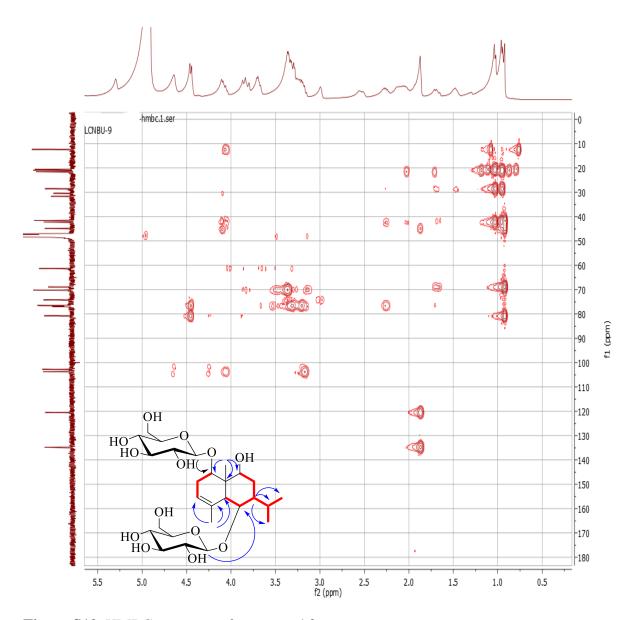


Figure S12. HMBC spectrum of compound 2

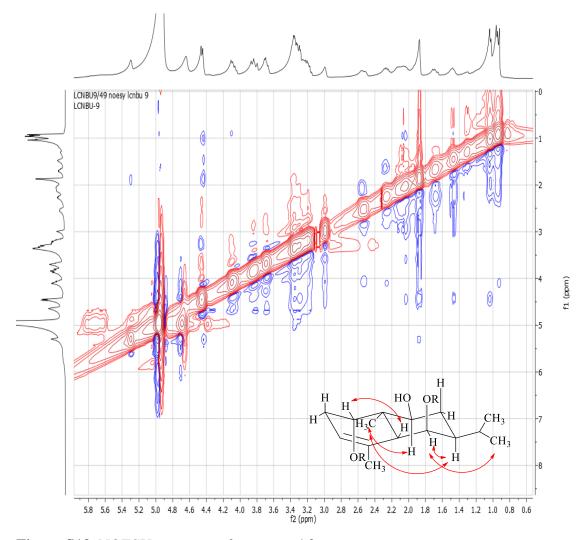


Figure S13. NOESY spectrum of compound ${\bf 2}$

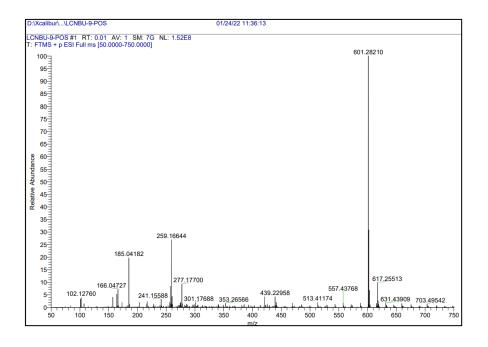


Figure S14. HRMS spectrum of compound 2