

**Anti-Malignant Ascites Effect of Total Diterpenoids from *Euphorbiae Ebracteolatae* Radix Is Attributable to Alterations of Aquaporins via Inhibiting PKC Activity in the Kidney**

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## Supplementary Materials

Compound **1** was obtained as a colorless crystal (methanol). The molecular formula  $C_{20}H_{26}O_4$  was determined by the positive HR-ESI-TOF-MS.  $^1H$  NMR (600 MHz,  $CDCl_3$ )  $\delta$ : 4.99 (Sext, 1H), 4.83 (s, 1H), 2.49 (dd,  $J=18.81, 5.90$  Hz, 1H), 2.35 (ddd,  $J=18.88, 11.60, 7.30$  Hz, 1H), 2.19 (d,  $J=1.88$  Hz, 3H), 1.90 (m, 1H), 1.65 (m, 3H), 1.47 (br.d,  $J=13.47$  Hz, 1H), 1.40 (m, 1H), 1.24 (br.dd,  $J=12.84, 1.80$  Hz, 1H), 1.19 (td,  $J=13.47, 3.30$  Hz, 1H), 1.14 (s, 3H), 0.95 (s, 3H), 0.89 (s, 3H);  $^{13}C$  NMR (600 MHz,  $CDCl_3$ )  $\delta$ : 185.28, 174.05, 161.19, 146.33, 136.55, 133.54, 80.87, 63.79, 50.41, 41.15, 39.75, 34.96, 33.52, 33.03, 24.64, 21.65, 20.28, 18.52, 17.59, 9.87. The  $^1H$  and  $^{13}C$  NMR data were in agreement with the reported data [1], named euphorin G.

Compound **2** was obtained as a white powder (methanol). The molecular formula  $C_{20}H_{28}O_3$  was determined by the positive HR-ESI-TOF-MS.  $^1H$  NMR (600 MHz,  $CDCl_3$ )  $\delta$ : 6.33 (s, 1H), 4.92 (s, 1H), 4.51 (s, 1H), 2.54 (d,  $J=13.44$  Hz, 1H), 2.29 (s, 1H), 2.26 (dd,  $J=13.59, 4.78$  Hz, 1H), 1.96 (d,  $J=12.27$  Hz, 1H), 1.88 (s, 3H), 1.85 (d,  $J=2.16$  Hz, 1H), 1.61 (dd,  $J=7.10, 3.13$  Hz, 2H), 1.48 (d,  $J=13.12$  Hz, 1H), 1.39 (qd,  $J=3.95$  Hz, 2H), 1.27 (m, 2H), 0.94 (s, 6H), 0.88 (s, 3H);  $^{13}C$  NMR (600 MHz,  $CDCl_3$ )  $\delta$ : 175.44, 152.67, 150.11, 118.15, 113.49, 79.43, 64.53, 60.81, 55.38, 41.73, 40.30, 39.43, 37.10, 33.91, 33.60, 23.78, 21.80, 19.01, 17.34, 8.50. The  $^1H$  and  $^{13}C$  NMR data were in agreement with the reported data [2], named ent-11 $\alpha$ -hydroxyabicta-8(14),13(15)-dien-16,12-olide.

Compound **3** was obtained as a colorless needle-like crystals ( $CHCl_3$ ). The molecular formula  $C_{20}H_{26}O_4$  was determined by the positive HR-ESI-TOF-MS.  $^1H$  NMR (600 MHz,  $CDCl_3$ )  $\delta$  4.05 (s, 1H), 3.70 (s, 1H), 2.30 (s, 1H), 2.10 (s, 3H), 2.03 (m, 1H), 1.95 (m, 1H), 1.84 (m, 1H), 1.57 (m, 2H), 1.49 (m, 3H), 1.29 (m, 2H), 1.12 (dd,  $J = 12.17, 2.32$  Hz, 1H), 0.96 (s, 3H), 0.87 (s, 3H), 0.84 (s, 3H);  $^{13}C$  NMR (600 MHz,  $CDCl_3$ )  $\delta$ : 169.59, 148.60, 130.26, 85.19, 66.05, 60.94, 55.34, 53.48, 48.01, 41.28, 39.21, 39.15, 35.62, 33.52, 33.47, 21.87, 20.88, 18.42, 15.42, 8.72. The  $^1H$  and  $^{13}C$  NMR data were in agreement with the reported data [3], named jolkinolide B.

Compound **4** was obtained as a yellow oil. The molecular formula  $C_{19}H_{26}O_2$  was

determined by the positive HR-ESI—TOF-MS.  $^1\text{H}$  NMR (600 MHz,  $\text{CDCl}_3$ )  $\delta$ : 6.74 (s, 1H), 5.90 (dd,  $J=10.7, 17.3$ , 1H), 4.97 (dd,  $J=1.14, 17.38$  Hz, 1H), 4.90 (dd,  $J=1.11, 10.79$  Hz, 1H), 2.67 (m, 2H), 2.14 (s, 3H), 1.98 (m, 1H), 1.69 (m, 6H), 1.44 (m, 2H), 1.22 (m, 1H), 1.05 (s, 3H), 1.03 (s, 3H);  $^{13}\text{C}$  NMR (600 MHz,  $\text{CDCl}_3$ )  $\delta$ : 151.13, 140.78, 140.42, 139.87, 127.11, 122.64, 108.87, 108.79, 39.65, 36.47, 36.45, 36.40, 34.10, 32.90, 26.92, 25.67, 22.80, 21.37, 11.43. The  $^1\text{H}$  and  $^{13}\text{C}$  NMR data were in agreement with the reported data [4], named euphebracteolatin A.

Compound **5** was obtained as a colorless needle-like crystals (methanol). The molecular formula  $\text{C}_{19}\text{H}_{28}\text{O}_2$  was determined by the positive HR-ESI-TOF-MS;  $^1\text{H}$  NMR (600 MHz,  $\text{CDCl}_3$ )  $\delta$ : 5.89 (s, 1H), 5.78 (dd,  $J = 17.55, 10.73$  Hz, 1H), 4.93 (t,  $J = 7.92$  Hz, 2H), 4.88 (d,  $J = 10.96$  Hz, 1H), 1.64 (m, 5H), 1.50 (m, 2H), 1.45 (t,  $J = 13.30$  Hz, 1H), 1.26 (ddd,  $J = 13.1, 5.46, 2.51$  Hz, 1H), 1.21 (s, 3H), 1.20 (s, 3H), 1.12 (m, 2H), 1.02 (s, 3H), 0.69 (s, 3H);  $^{13}\text{C}$  NMR (600 MHz,  $\text{CDCl}_3$ )  $\delta$ : 183.91, 173.35, 149.97, 117.25, 109.48, 89.90, 43.20, 40.95, 39.58, 39.28, 39.28, 39.09, 35.96, 31.60, 29.99, 28.46, 22.58, 18.86, 18.74. The  $^1\text{H}$  and  $^{13}\text{C}$  NMR data were in agreement with the reported data [5], named fischeria A.

Compound **6** was obtained as a colorless needle-like crystals (methanol). The molecular formula  $\text{C}_{20}\text{H}_{28}\text{O}_2$  was determined by the positive HR-ESI-TOF-MS.  $^1\text{H}$  NMR (600 MHz,  $\text{CDCl}_3$ )  $\delta$ : 6.28 (s, 1H), 4.83 (dd,  $J=13.32, 6.00$  Hz, 1H), 2.59 (dd,  $J=13.50, 6.19$  Hz, 1H), 2.52 (ddd,  $J=13.39, 4.10, 2.48$  Hz, 1H), 2.20 (m, 2H), 1.90 (d,  $J=12.63$  Hz, 1H), 1.84 (m, 4H), 0.94 (s, 3H), 0.93 (s, 3H), 0.87 (s, 3H);  $^{13}\text{C}$  NMR (600 MHz,  $\text{CDCl}_3$ )  $\delta$ : 175.46, 156.35, 152.36, 116.18, 113.91, 76.08, 55.28, 51.90, 41.93, 41.63, 39.65, 37.18, 33.87, 33.57, 27.53, 23.89, 21.78, 19.08, 16.82, 8.26. The  $^1\text{H}$  and  $^{13}\text{C}$  NMR data were in agreement with the reported data [6], named jolkinolide E.

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