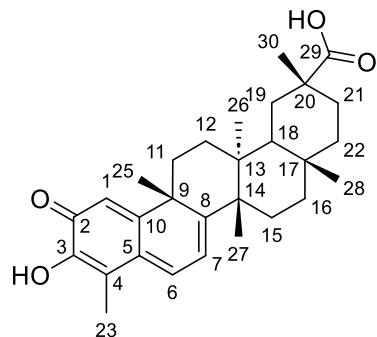


Description of the Compound Isolated.

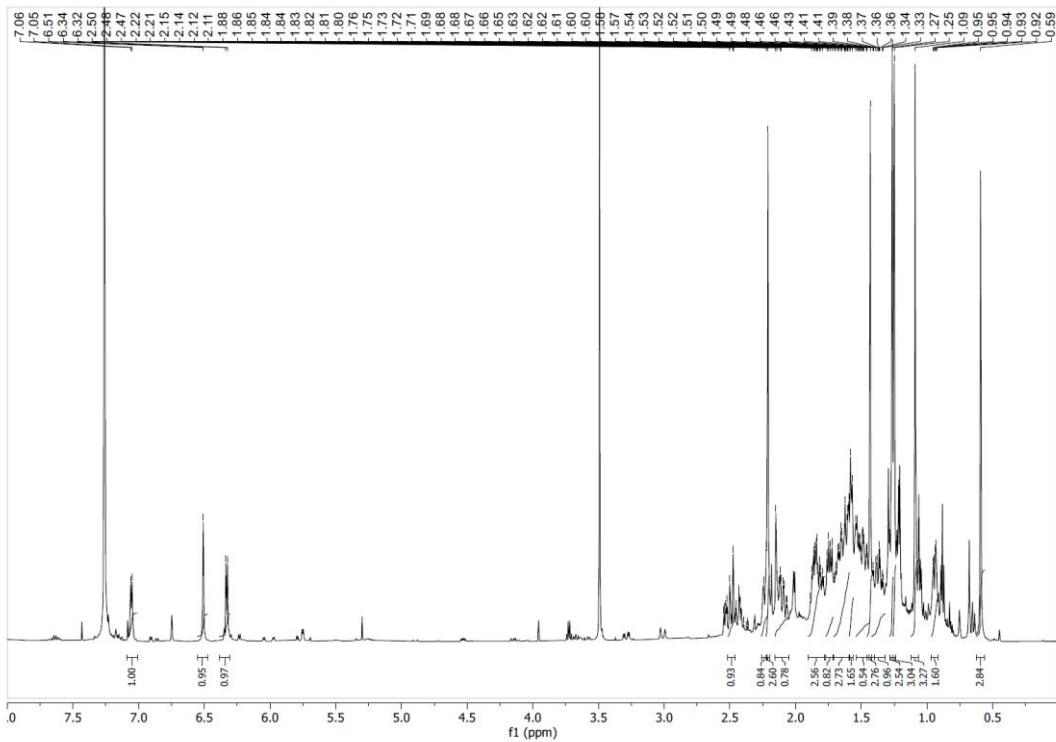
Compound 1: Celastrol. Amorphous orange powder, HRESIMS m/z 451.2858 [$M+H]^+$ (calculated for $C_{29}H_{38}O_4$, error 3.42 ppm); $[\alpha]_D^{20} -2.52$ (c 0.0074, MeOH); UV (c 0.0074, MeOH) λ_{max} 221, 241(s) nm.



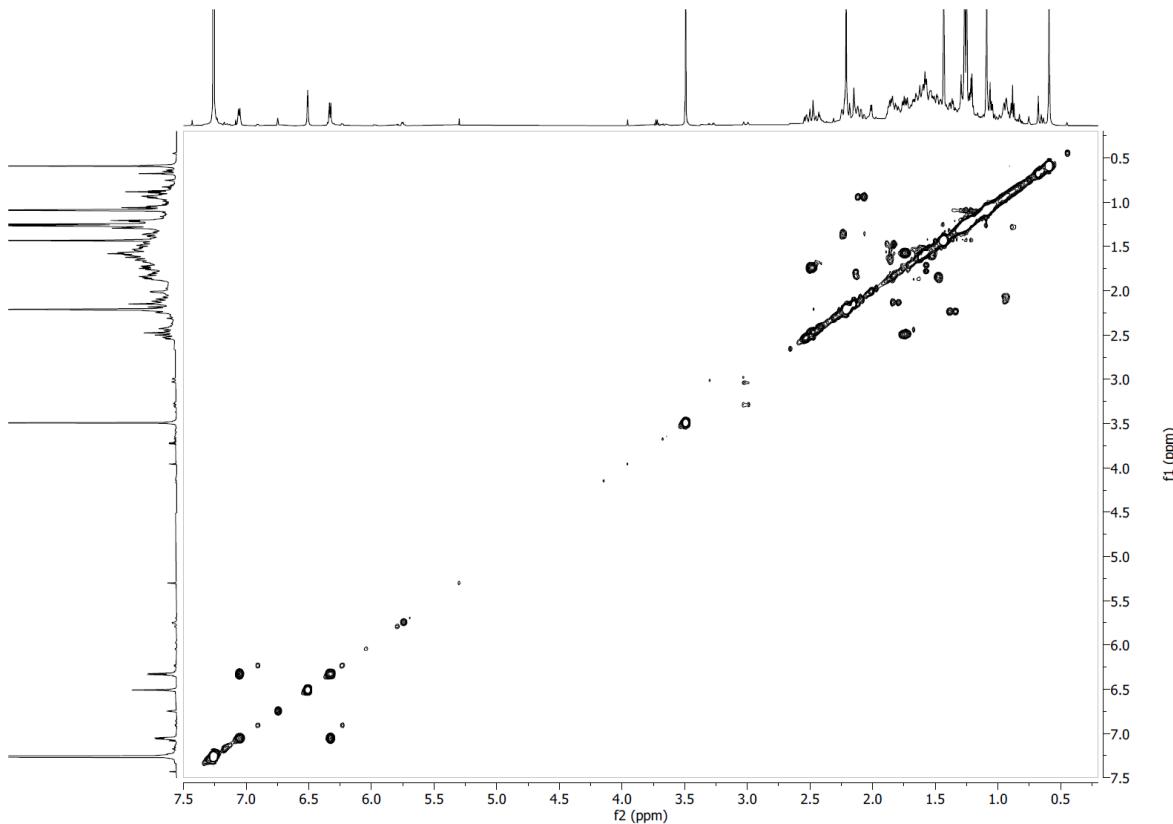
Chemical Formula: $C_{29}H_{38}O_4$

Exact Mass: 450.28

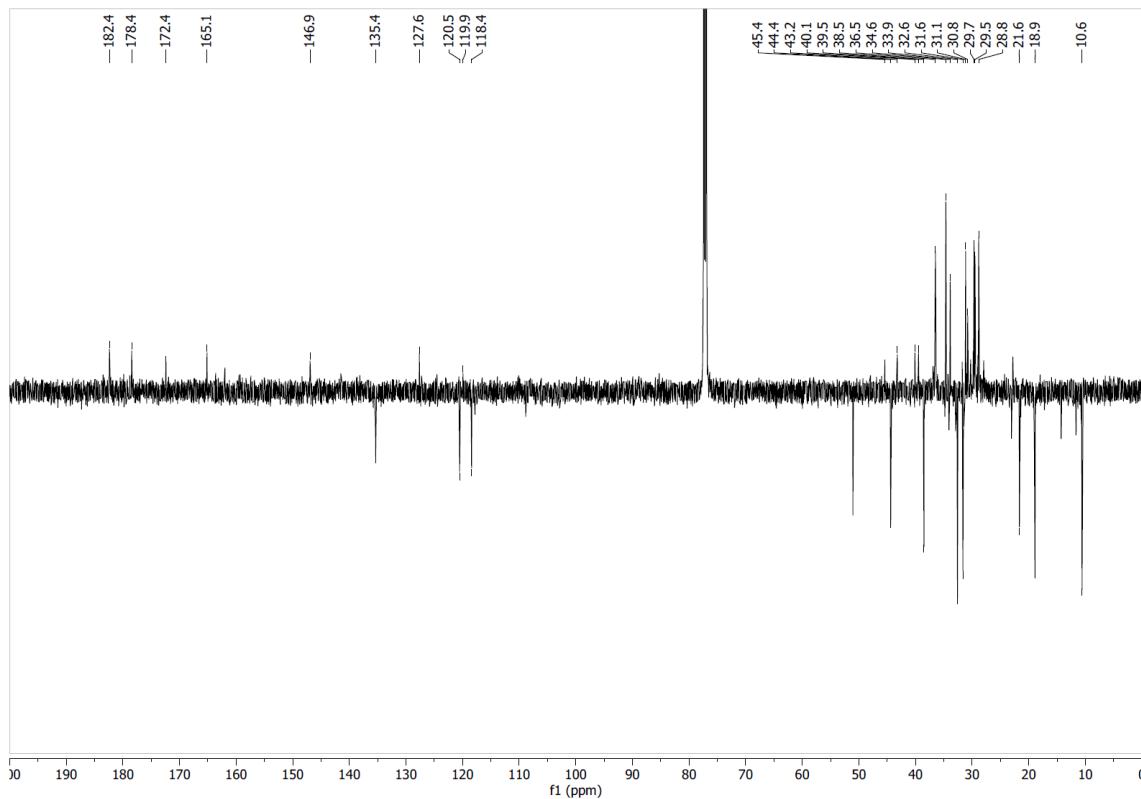
1H NMR ($CDCl_3$, 600 MHz) δ 0.59 (3H, s, H_3-27), 0.94 (1H, m, $H-22\beta$), 1.09 (3H, s, H_3-28), 1.25 (3H, s, H_3-26), 1.27 (3H, s, H_3-30), 1.36 (1H, td, $J = 14.0, 4.2$ Hz, $H_2-21\beta$), 1.43 (3H, s, H_3-25), 1.49 (1H, td, $J = 14.8, 4.3$ Hz, $H_2-16\beta$), 1.53 (1H, m, H_2-15'), 1.58 (1H, m, $H-18$), 1.59 (1H, m, H_2-15''), 1.61 (1H, m, $H_2-12\beta$), 1.74 (1H, dd, $J = 15.0, 7.9$ Hz, $H_2-19\beta$), 1.88 (1H, m, H_2-11a), 1.85 (1H, m, H_2-12a), 1.86 (1H, m, $H_2-16\alpha$), 2.09 (1H, td, $J = 14.0, 4.2$ Hz, $H_2-22\alpha$), 2.13 (1H, m, H_2-11b), 2.21 (3H, s, H_3-23), 2.23 (1H, d, $J = 14.0$ Hz, $H_2-21\alpha$), 2.49 (1H, d, $J = 15.0$ Hz, $H_2-19\alpha$), 6.33 (1H, d, $J = 7.1$ Hz, $H-7$), 6.51 (1H, s, $H-1$), 7.05 (1H, d, $J = 7.1$ Hz, $H-6$); ^{13}C NMR ($CDCl_3$, 151 MHz) δ 10.6 (CH_3-23), 18.9 (CH_3-27), 21.6 (CH_3-26), 28.8 (CH_2-15), 29.5 (CH_2-12), 29.7 (CH_2-21), 30.8 (C-17), 31.1 (CH_2-19), 31.6 (CH_3-28), 32.6 (CH_3-30), 33.9 (CH_2-11), 34.6 (CH_2-22), 36.5 (CH_2-16), 38.5 (CH_3-25), 39.5 (C-13), 40.1 (C-20), 43.2 (C-9), 44.4 (CH-18), 45.4 (C-14), 118.4 (CH-7), 119.9 (C-4), 120.5 (CH-1), 127.6 (C-5), 135.4 (CH-6), 146.9 (C-3), 165.1 (C-10), 172.4 (C-8), 178.4 (C-2), 182.4 (C-29). Supplementary Figures S2.2.1-2.2.6. MS/MS [CCMSLIB00010129509](#).



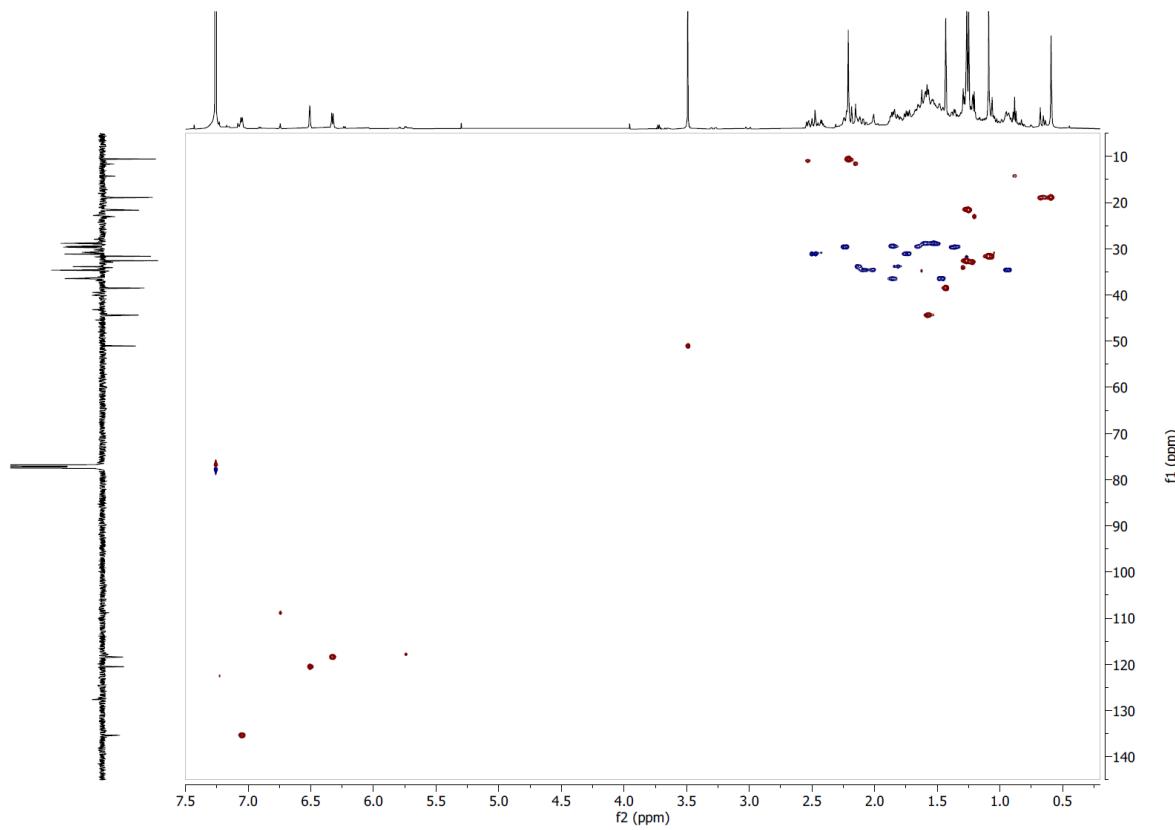
Supplementary Figure S2.2.1. ^1H NMR spectrum of **1** in CDCl_3 at 600 MHz.



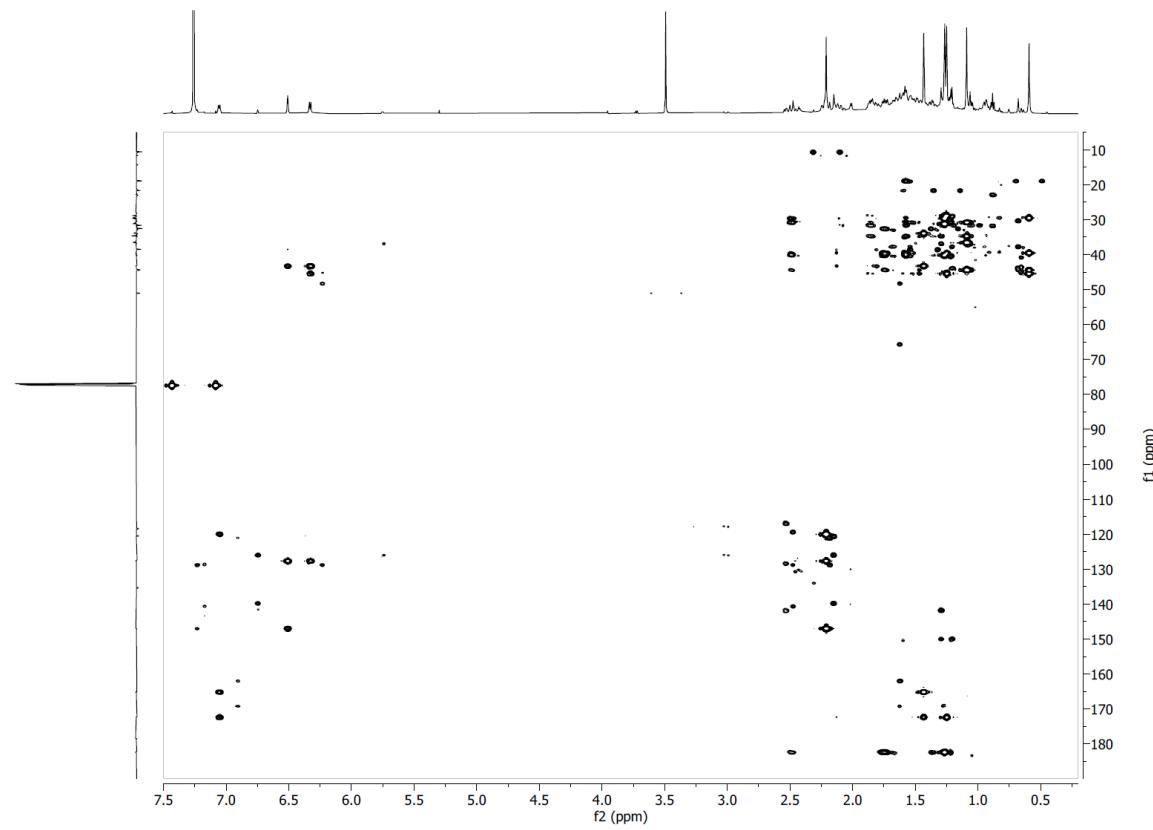
Supplementary Figure S2.2.2. COSY NMR spectrum of **1** in CDCl_3 .



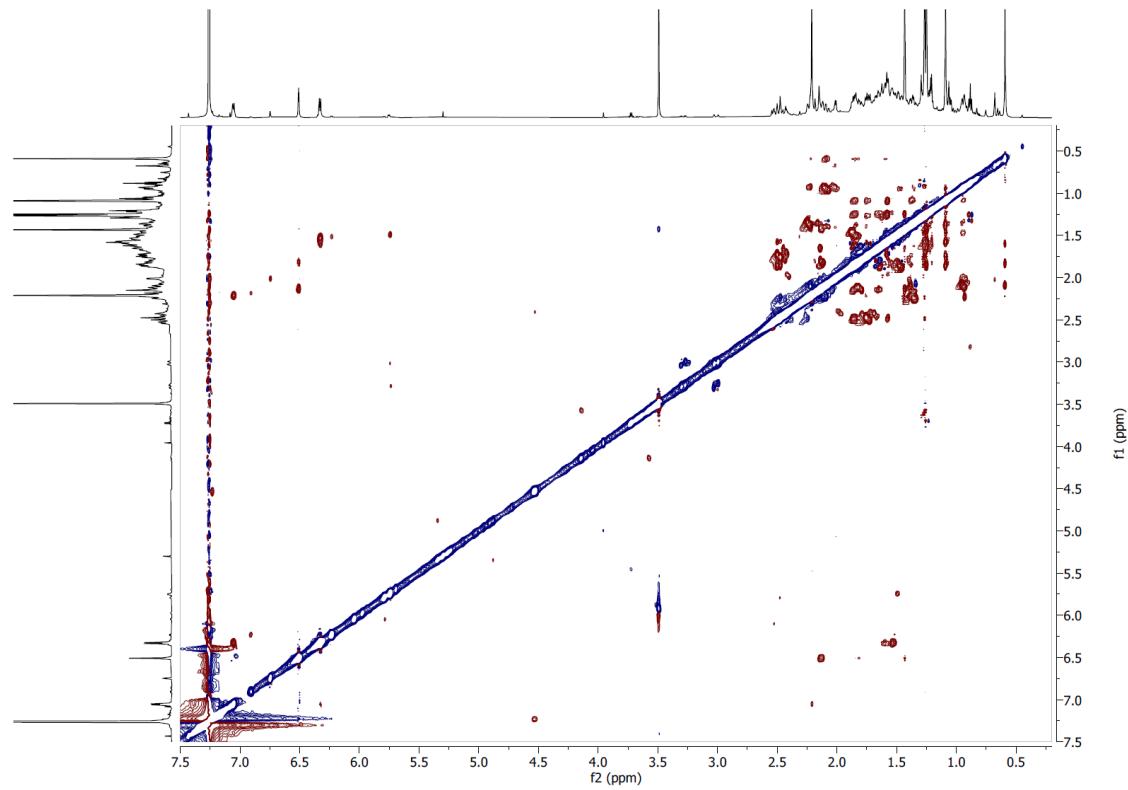
Supplementary Figure S2.2.3. ^{13}C -DEPTQ NMR spectrum of **1** in CDCl_3 at 151 MHz.



Supplementary Figure S2.2.4. Edited HSQC NMR spectrum of **1** in CDCl_3 .

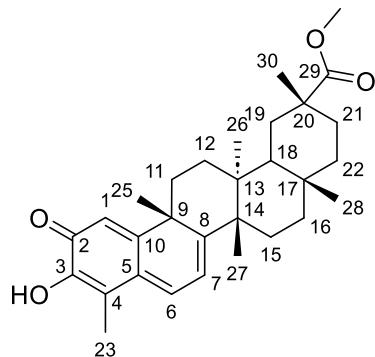


Supplementary Figure S2.2.5. HMBC NMR spectrum of **1** in CDCl_3 .



Supplementary Figure S2.2.6. ROESY NMR spectrum of **1** in CDCl_3 .

Compound **2**: Pristimerin. Amorphous dark orange powder, HRESIMS m/z 465.3002 [$\text{M}+\text{H}]^+$ (calculated for $\text{C}_{30}\text{H}_{41}\text{O}_4$, error 0.69 ppm); $[\alpha]_D^{20} -22$ (c 0.0005, MeOH). UV (c 0.0005, MeOH) λ_{max} 214 nm, 422 nm.

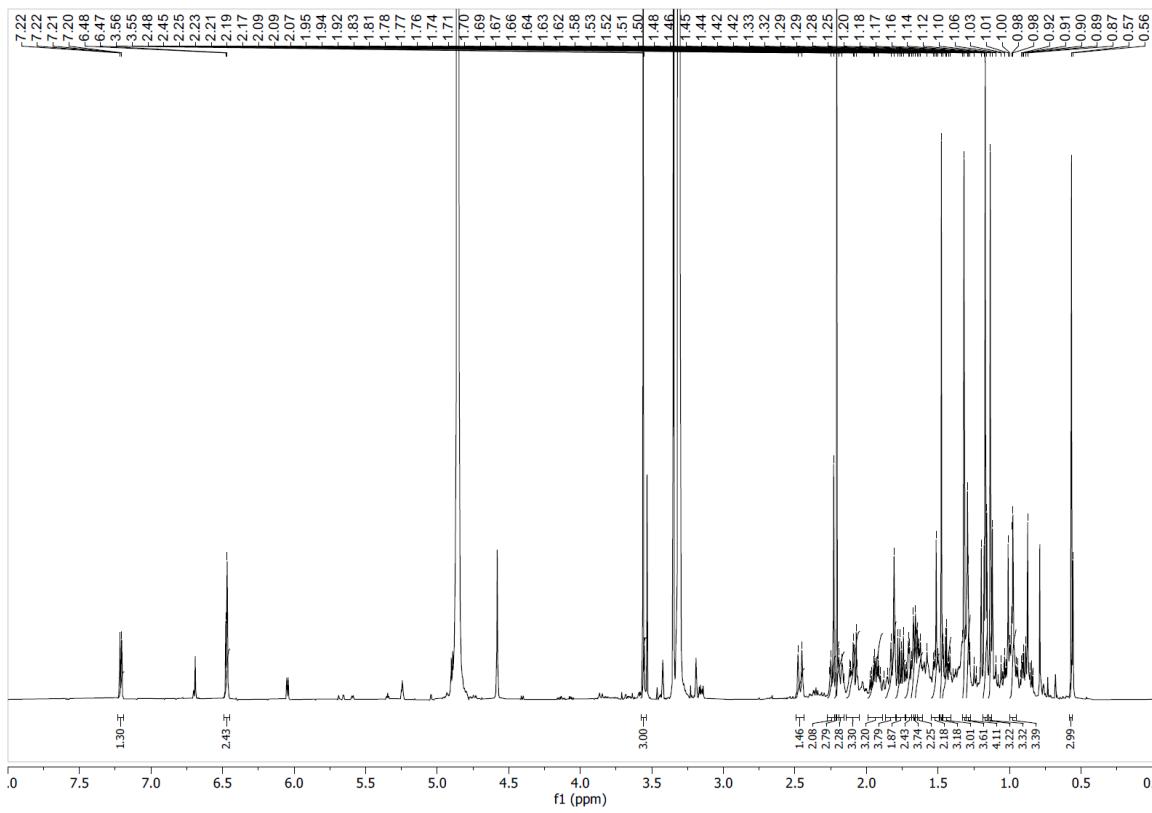


Chemical Formula: $\text{C}_{30}\text{H}_{40}\text{O}_4$

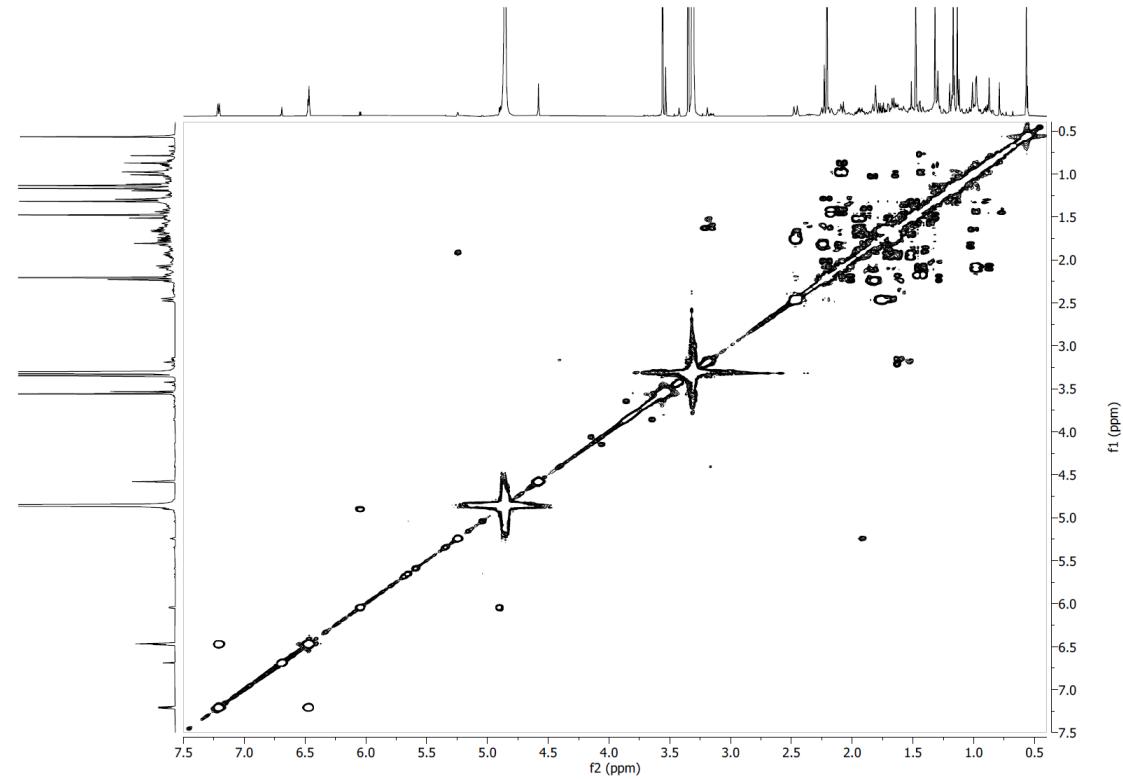
Exact Mass: 464.29

^1H NMR (CD_3OD , 600 MHz) δ 0.57 (3H, s, H₃₋₂₇), 0.97 (1H, m, H_{2-22β}), 1.13 (3H, s, H₃₋₂₈), 1.17 (3H, s, H₃₋₃₀), 1.32 (3H, s, H-26), 1.32 (1H, m, H_{2-12'}), 1.44 (1H, td, $J = 13.5, 4.7$ Hz, H_{2-21β}), 1.48 (3H, s, H₃₋₂₅), 1.50 (1H, m, H_{2-16a}), 1.64 (1H, m, H_{2-15'}), 1.66 (1H, m, H-18), 1.70 (1H, m, H_{2-15'}), 1.74 (1H, m, H_{2-19b}), 1.80 (2H, m, H_{2-12'}, H_{2-11a}), 1.95 (1H, td, $J = 14.4, 6.4$ Hz, H_{2-16β}), 2.10 (1H, m, H_{2-22α}), 2.18 (1H, d, $J = 13.5$ Hz, H_{2-21α}), 2.21 (3H, s, H₃₋₂₃), 2.24 (1H, d, $J = 10.9$ Hz, H_{2-11β}), 2.47 (1H, d, $J = 16.0$ Hz, H_{2-19α}), 3.56 (3H, s, OMe), 6.47 (2H, m, H-1, H-7), 7.21 (1H, dd, $J = 7.2, 1.4$ Hz, H-6); ^{13}C NMR (CD_3OD , 151 MHz) δ 10.3 (CH₃₋₂₃), 19.2 (CH₃₋₂₇), 22.1 (CH₃₋₂₆), 29.7 (CH₂₋₁₅), 30.7 (CH₂₋₁₂), 30.9 (CH₂₋₂₁), 31.4 (C-17), 31.9 (CH₂₋₁₉), 32.0 (CH₃₋₂₈), 33.0 (CH₃₋₃₀), 34.6 (CH₂₋₁₁), 35.9 (CH₂₋₂₂), 37.6 (CH₂₋₁₆), 38.9 (CH₃₋₂₅), 40.7 (C-13), 41.6 (C-20), 44.2 (C-9), 45.7 (CH-18), 46.3 (C-14), 52.2 (OMe), 119.8 (CH-7), 120.1 (C-5), 120.6 (CH-1), 128.7, 136.3 (CH-6), 147.7 (C-3), 166.4 (C-10), 171.8 (C-8), 180.6 (C-29).

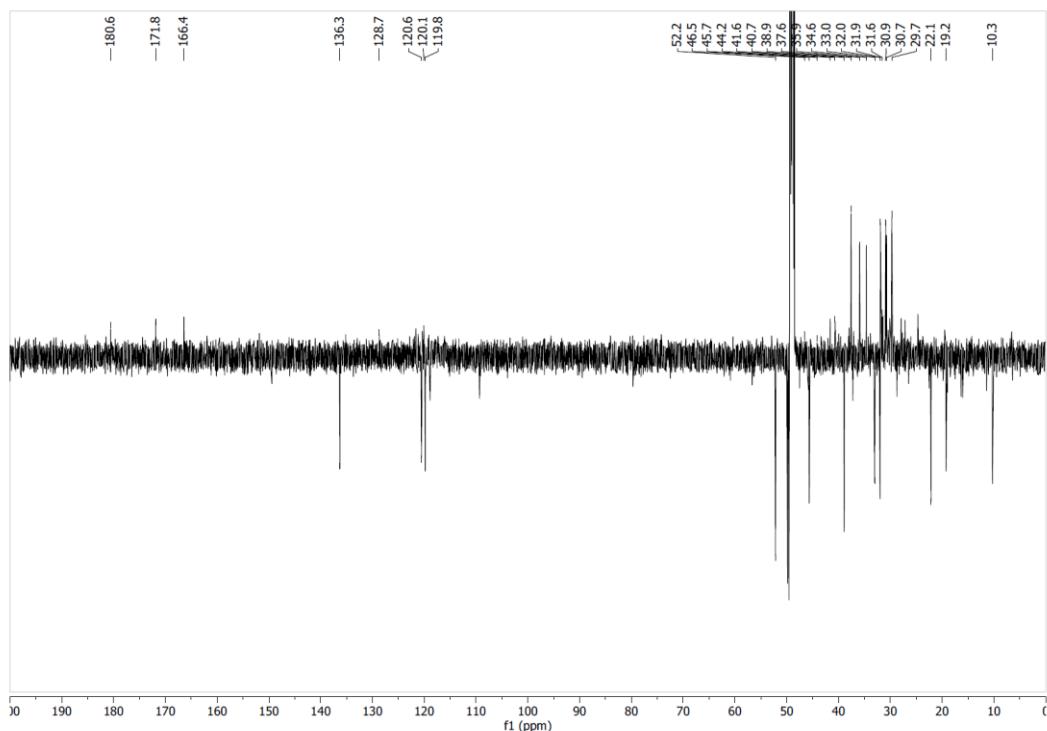
Supplementary Figures S2.2.7-2.2.12. MS/MS [CCMSLIB00010129507](#).



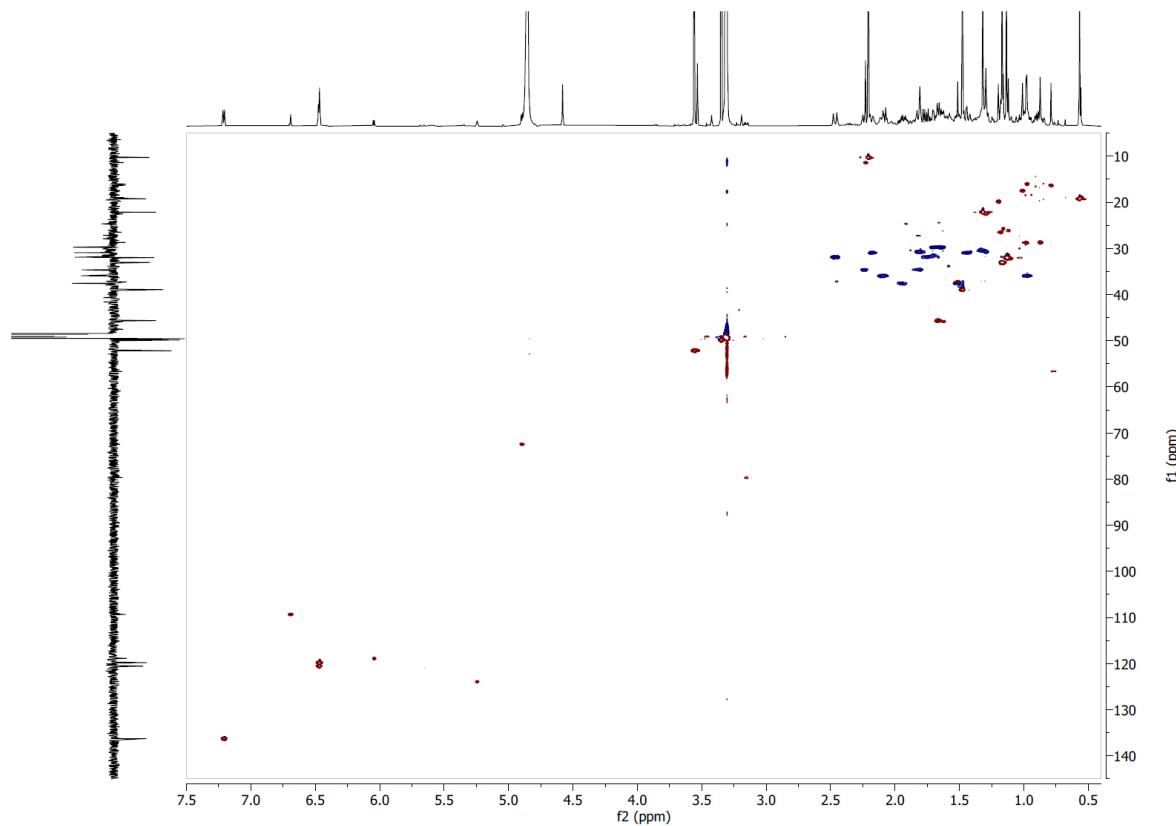
Supplementary Figure S2.2.7. ¹H NMR spectrum of **2** in CD_3OD at 600 MHz.



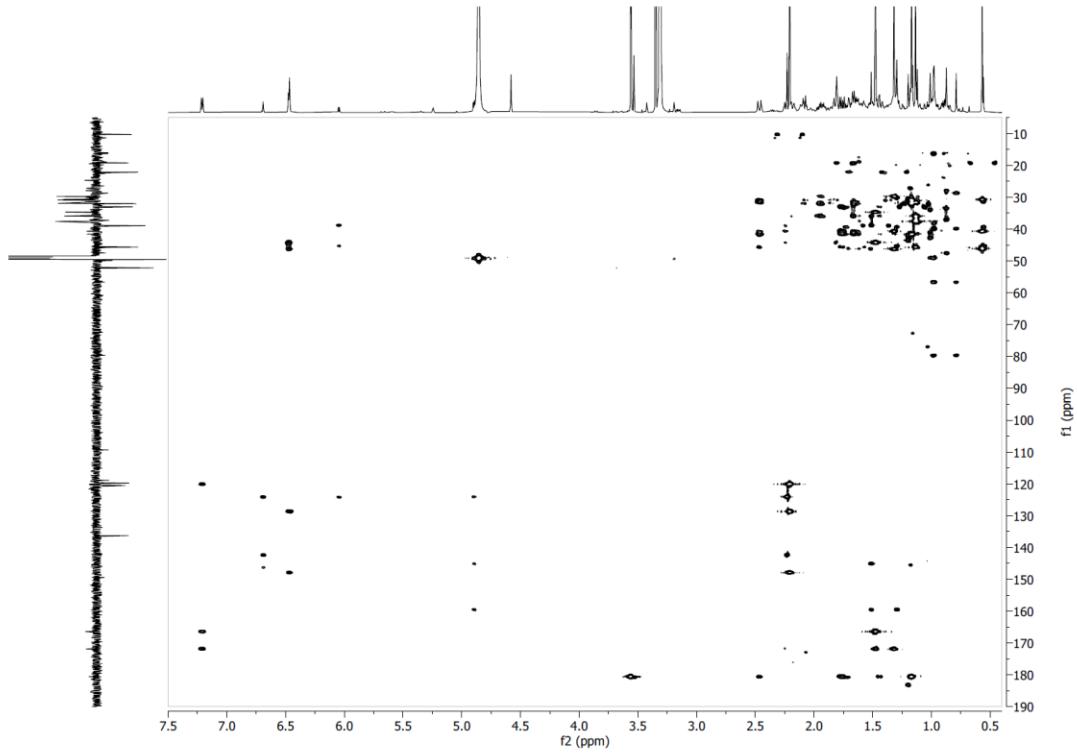
Supplementary Figure S2.2.8. COSY NMR spectrum of **2** in CD_3OD .



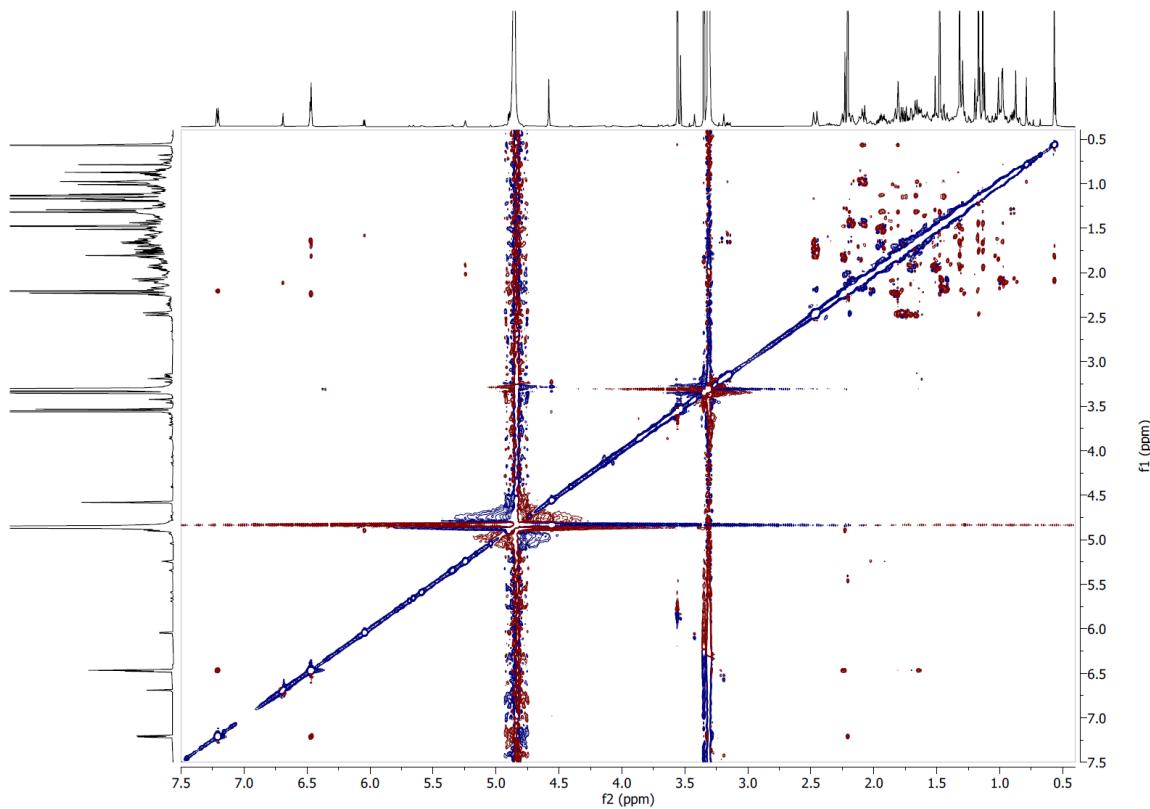
Supplementary Figure S2.2.9. ^{13}C -DEPTQ NMR spectrum of **2** in CD_3OD at 151 MHz.



Supplementary Figure S2.2.10. Edited HSQC NMR spectrum of **2** in CD_3OD .

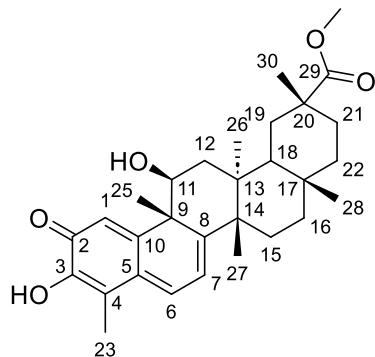


Supplementary Figure S2.2.11. HMBC NMR spectrum of **2** in CD_3OD .



Supplementary Figure S2.2.12. ROESY NMR spectrum of **2** in CD_3OD .

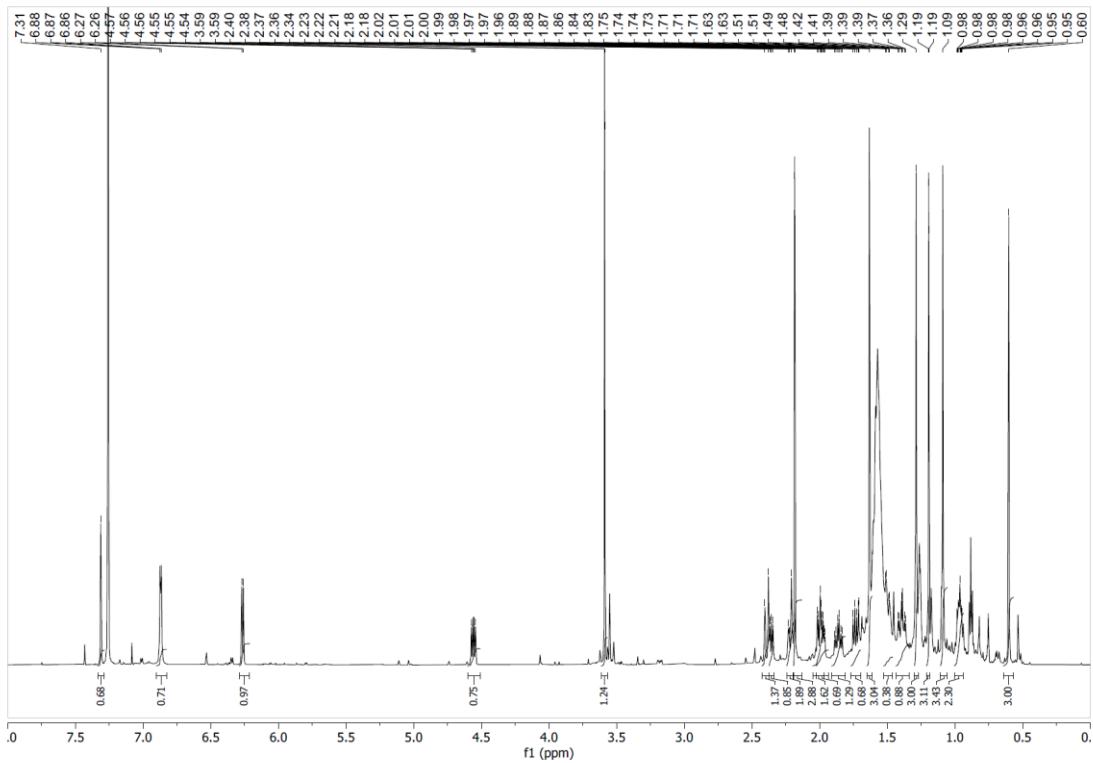
Compound **3**: 11β -hydroxypristimerin¹. Amorphous dark orange powder, HRESIMS m/z 481.2950 [M+H]⁺ (calculated for C₃₀H₄₁O₅, error 0.33 ppm); $[\alpha]_D^{20}$ +21 (c 0.0009, MeOH). UV (c 0.0009, MeOH) λ_{max} 219 nm, 329 nm.



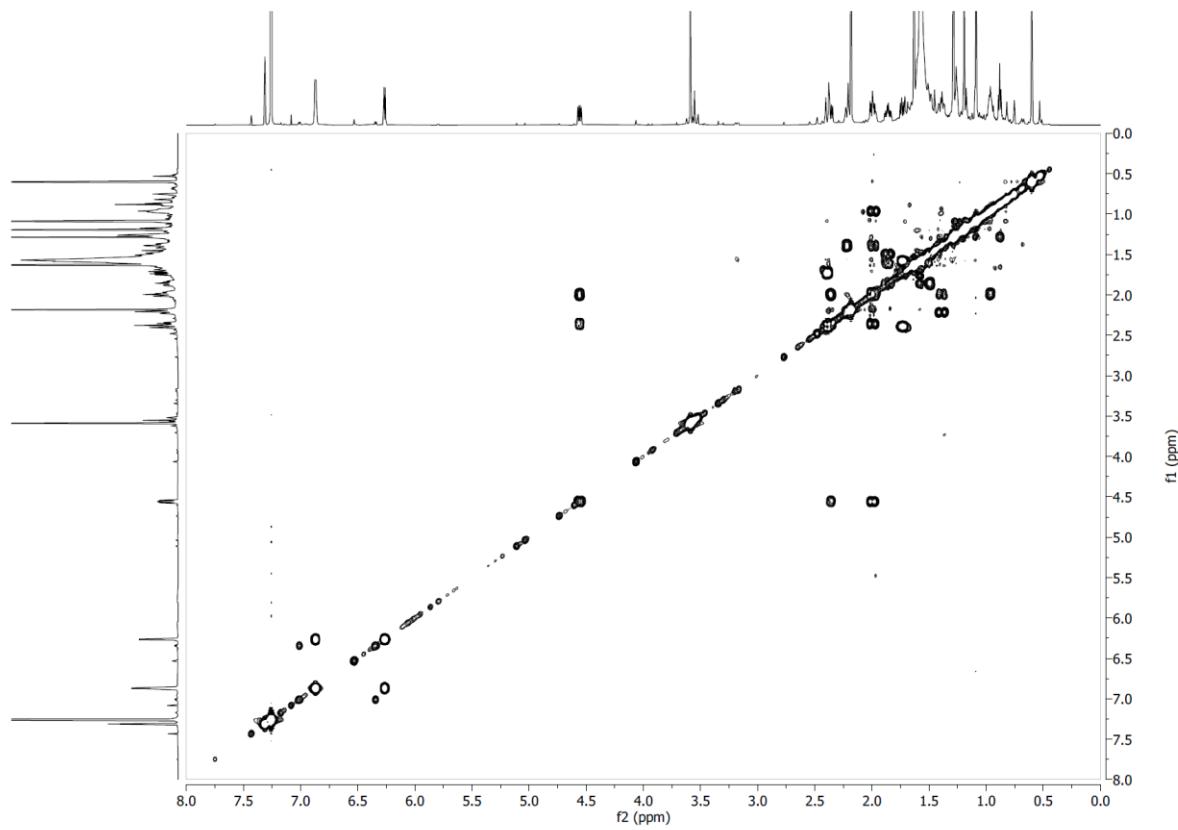
Chemical Formula: C₃₀H₄₀O₅
Exact Mass: 480.29

¹H NMR (CDCl₃, 600 MHz) δ 0.60 (3H, s, H3-27), 0.97 (1H, m, H2-22 β), 1.09 (3H, s, H3-28), 1.19 (3H, s, H3-30), 1.29 (3H, s, H3-26), 1.39 (1H, td, J = 14.0, 13.2, 4.8 Hz, H2-21 β), 1.50 (1H, dd, J = 14.0, 6.1 Hz, H2-16 α), 1.58 (3H, m, H2-15, H-18), 1.63 (3H, s, H3-25), 1.73 (1H, dd, J = 16.2, 8.4 Hz, H2-19 β), 1.86 (1H, td, J = 14.0, 6.1 Hz, H2-16 β), 1.99 (1H, td, J = 14.0, 4.8 Hz, H2-22 α), 1.99 (1H, t, J = 13.7, 12.2 Hz, H2-12 β), 2.18 (3H, s, H3-23), 2.22 (1H, d, J = 13.2 Hz, H2-156 21 α), 2.36 (1H, dd, J = 13.7, 6.4 Hz, H2-12 α), 2.39 (1H, d, J = 16.2 Hz, H2-19 α), 3.59 (3H, s, OMe), 4.56 (1H, dd, J = 12.2, 6.4 Hz, H-11), 6.26 (1H, d, J = 7.1 Hz, H-7), 6.87 (1H, d, J = 7.1 Hz, H-6), 7.31 (1H, s, H-1); ¹³C NMR (CDCl₃, 151 MHz) δ 10.5 (CH₃-23), 18.7 (CH₃-27), 21.6 (CH₃-26), 28.8 (CH₂-15), 29.9 (CH₂-21), 31.0 (C-17), 31.0 (CH₂-19), 31.6 (CH₃-28), 32.8 (CH₃-30), 34.4 (CH₂-22), 34.5 (CH₃-25), 36.4 (CH₂-16), 40.5 (C-20), 40.7 (C-13), 43.5 (CH₂-12), 44.0 (CH-18), 45.0 (C-14), 48.2 (C-9), 65.5 (CH-11), 118.2 (C-4), 118.9 (CH-7), 121.8 (CH-1), 128.7 (C-5), 132.3 (CH-6), 146.1 (C-3), 161.7 (C-10), 167.3 (C-8), 178.3 (C-2), 178.9 (C-29). Supplementary Figures S2.2.13-2.2.18. MS/MS [CCMSLIB00010129506](#).

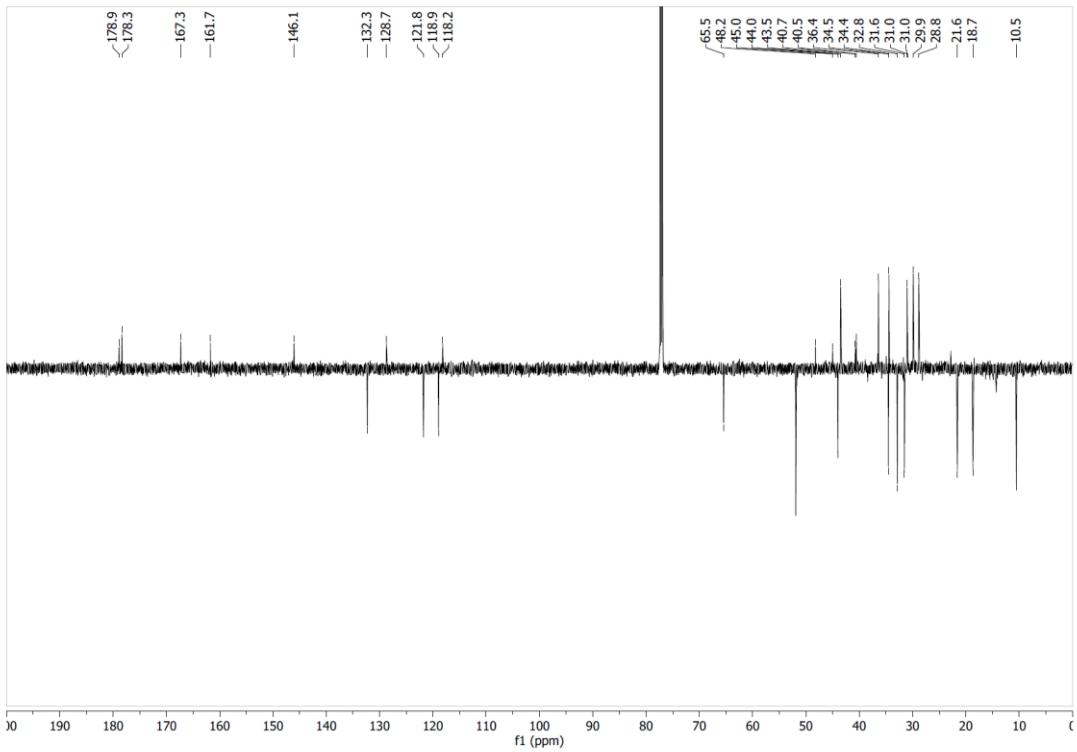
¹ 11β -hydroxypristimerin is a new compound isolated from *Pristimera indica*. This compound was tested with other QMTs against *Leishmania donovani* for the Thesis of Dr. Arnaud Gaudry (previous Ph.D. candidate in Prof. J-L. Wolfender's group). Because it was published as new in his thesis early this year, it is not described here.



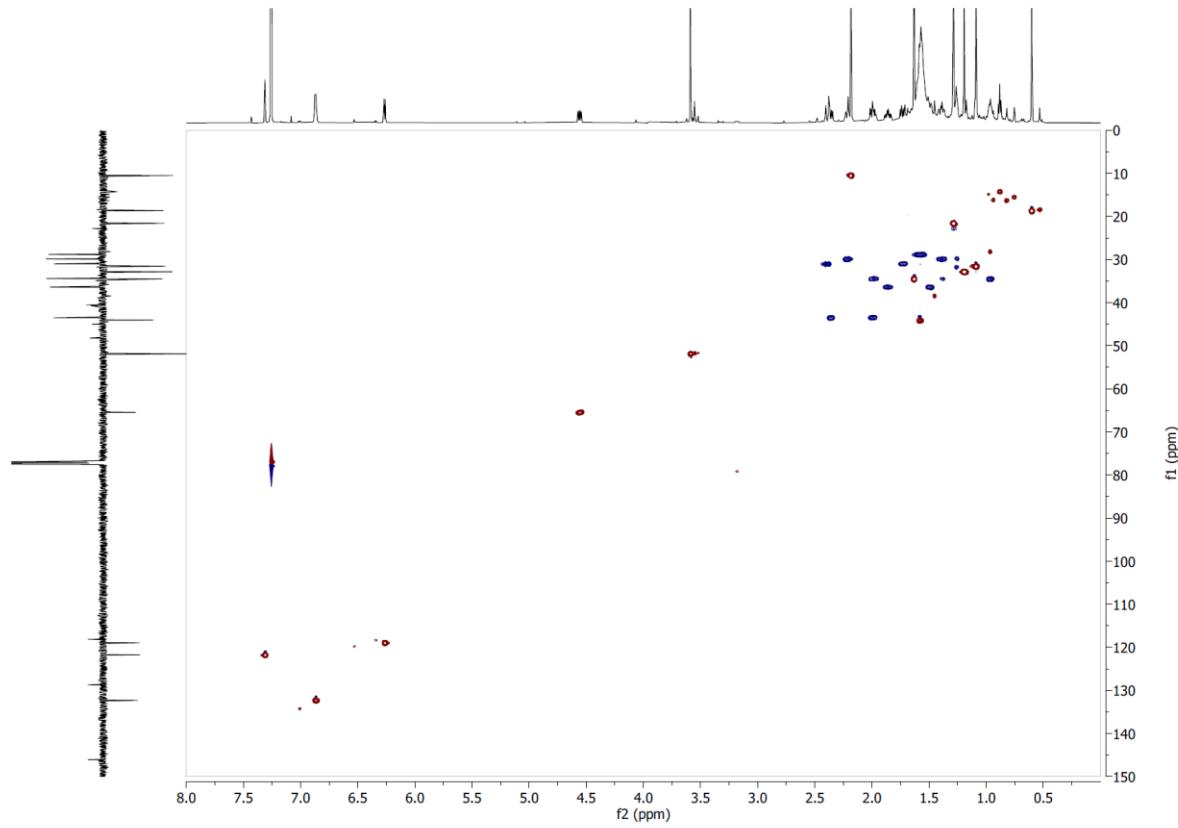
Supplementary Figure S2.2.13. ^1H NMR spectra of **3** in CDCl_3 at 600 MHz.



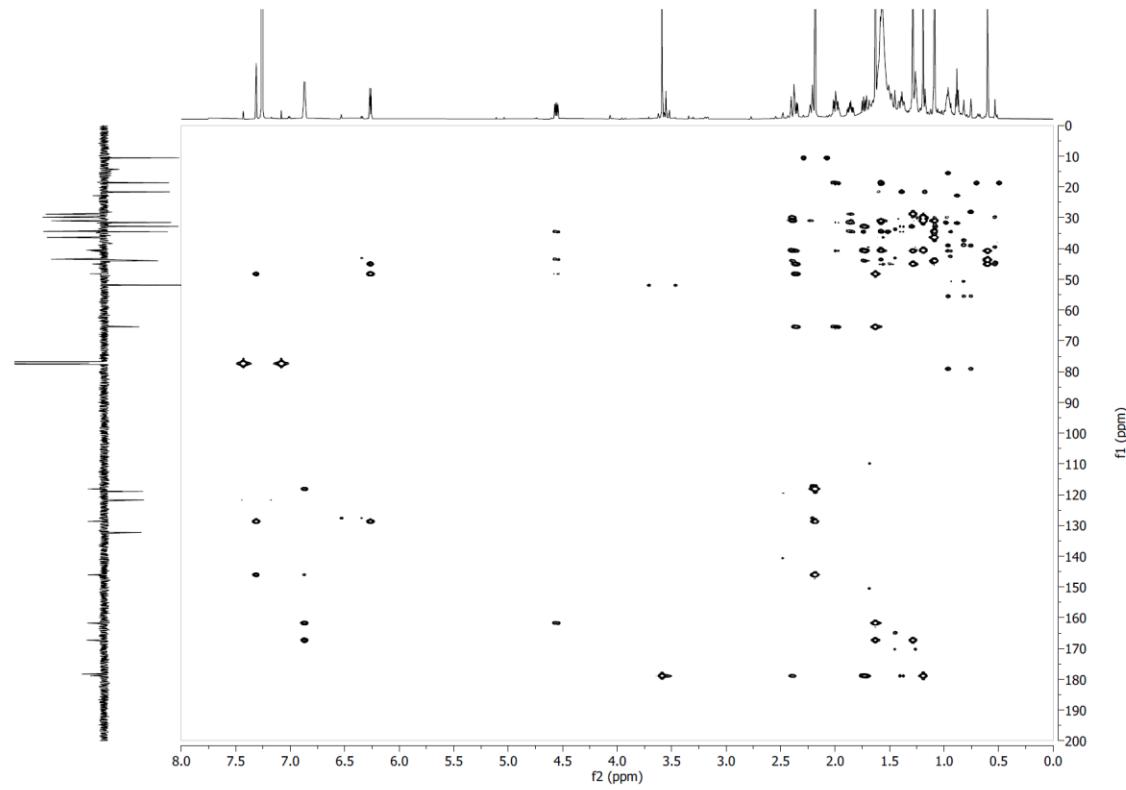
Supplementary Figure S2.2.14. COSY NMR spectra of **3** in CDCl_3 .



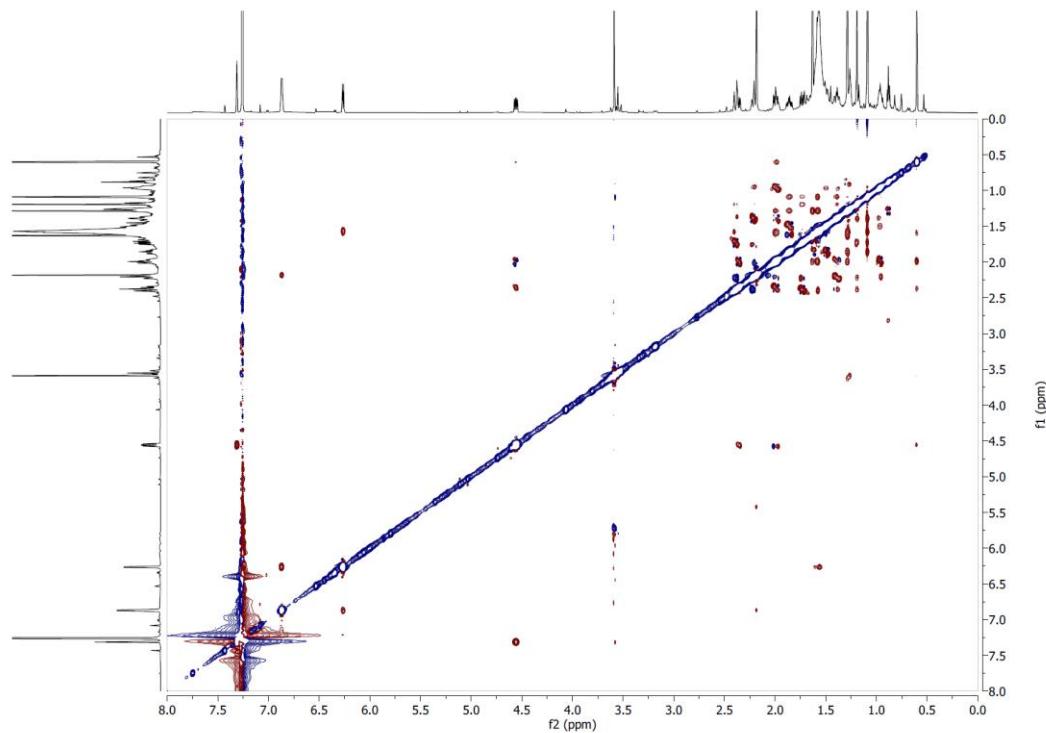
Supplementary Figure S2.2.15. ^{13}C -DEPTQ NMR spectrum of **3** in CDCl_3 at 151 MHz.



Supplementary Figure S2.2.16. Edited-HSQC NMR spectra of **3** in CDCl_3 .

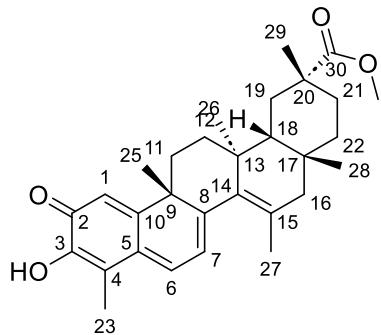


Supplementary Figure S2.2.17. HMBC NMR spectra of **3** in CDCl_3 .



Supplementary Figure S2.2.18. ROESY NMR spectra of **3** in CDCl_3 .

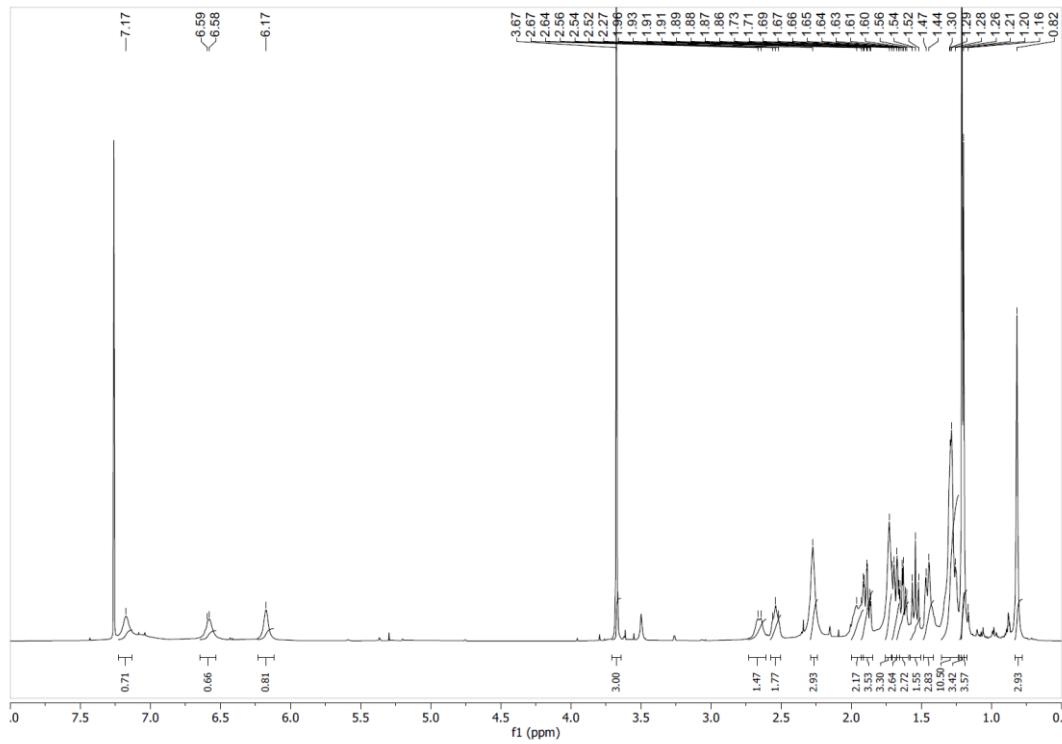
Compound 4: Vitideasin [47]. Amorphous orange powder, HRESIMS m/z 463.2861 [$M+H$]⁺ (calculated for C₃₀H₃₈O₄, error 4.17 ppm); $[\alpha]_D^{20} -25$ (c 0.0074, MeOH). UV (c 0.0074, MeOH) λ_{max} 214 nm, 422 nm.



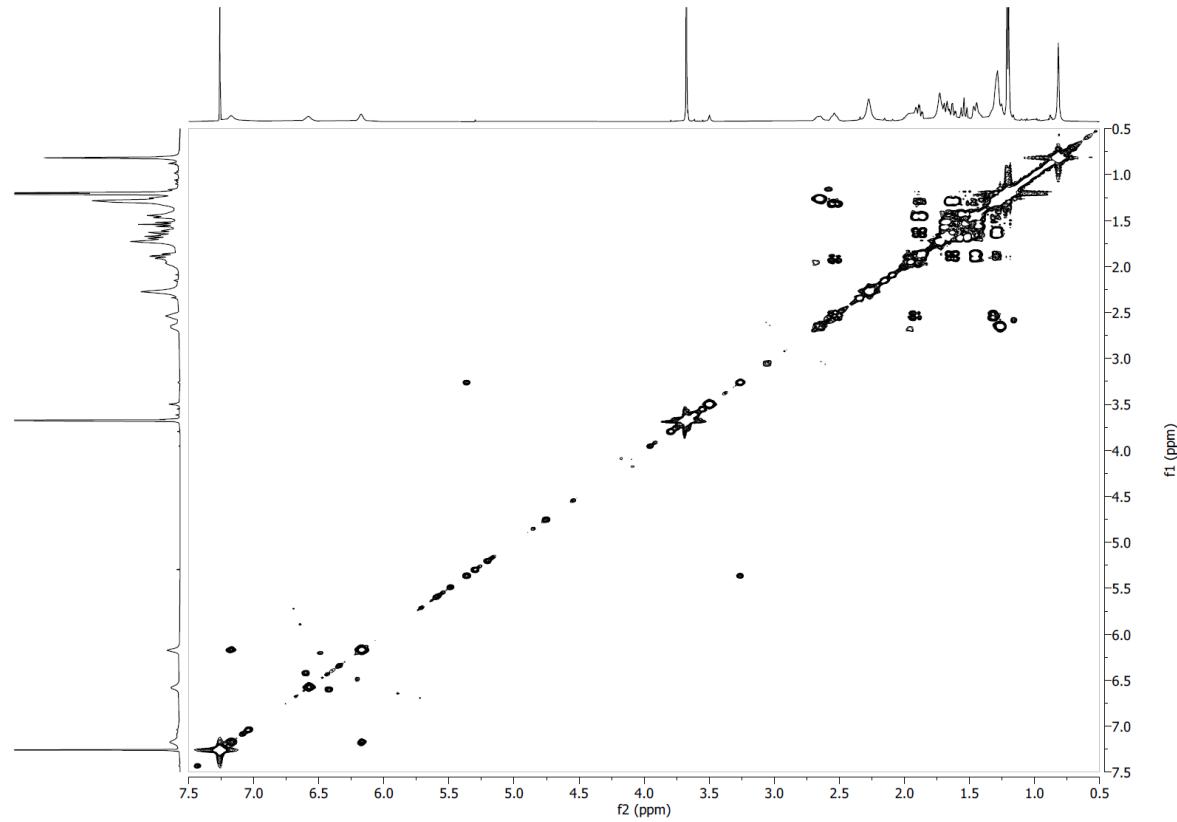
Chemical Formula: C₃₀H₃₈O₄

Exact Mass: 462.28

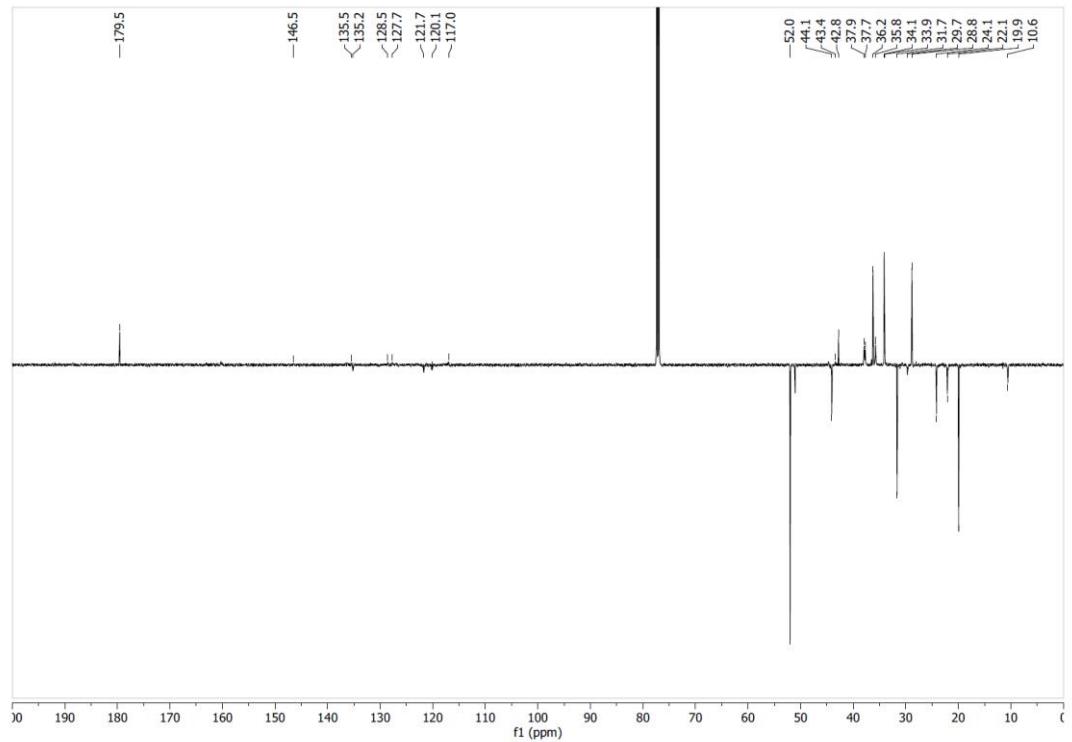
¹H NMR (CDCl₃, 600 MHz) δ 0.82 (3H, s, H₃-26), 1.20 (3H, s, H₃-28), 1.21 (3H, s, H₃-29), 1.26 (1H, m, H-16¹¹), 1.28 (3H, s, H₃-25), 1.28 (1H, m, H-22 α), 1.33 (1H, H-12 α), 1.44 (1H, m, H-18), 1.46 (1H, d, J = 13.7 Hz, H-21 β), 1.54 (1H, t, J = 13.1 Hz, H-19 α), 1.63 (1H, td, J = 14.3, 4.2 Hz, H-22 β), 1.68 (1H, d, J = 13.1 Hz, H-19 β), 1.73 (3H, s, H₃-27), 1.89 (1H, td, J = 13.7, 4.0 Hz, H-21 α), 1.95 (2H, m, H₂-11), 2.27 (3H, s, H₃-23), 2.54 (1H, t, J = 12.8 Hz, H-12 β), 2.65 (1H, d, J = 14.2 Hz, H-16 α), 3.67 (3H, s, OCH₃), 6.17 (1H, s, H-7), 6.58 (1H, s, H-1), 7.17 (1H, s, H-6); ¹³C NMR (CDCl₃, 151 MHz) δ 10.6 (CH₃-23), 19.9 (CH₃-29), 22.1 (CH₃-27), 24.1 (CH₃-26), 28.8 (CH₂-21), 29.7 (CH₃-25), 31.7 (CH₃-28), 33.9 (C-17), 34.1 (CH₂-19), 35.8 (CH₂-12), 36.2 (CH₂-22), 37.7 (CH₂-11), 37.9 (CH₂-16), 42.8 (C-20), 43.4 (C-13), 44.1 (CH-18), 52.0 (OCH₃), 117.0 (C-4), 120.1 (CH-1), 121.7 (CH-7), 127.7 (C-5), 128.5 (C-15), 135.2 (CH-6), 135.5 (C-14), 146.5 (C-3), 179.5 (C-30). Supplementary Figures S2.2.19–2.2.24. MS/MS [CCMSLIB00010129715](#).



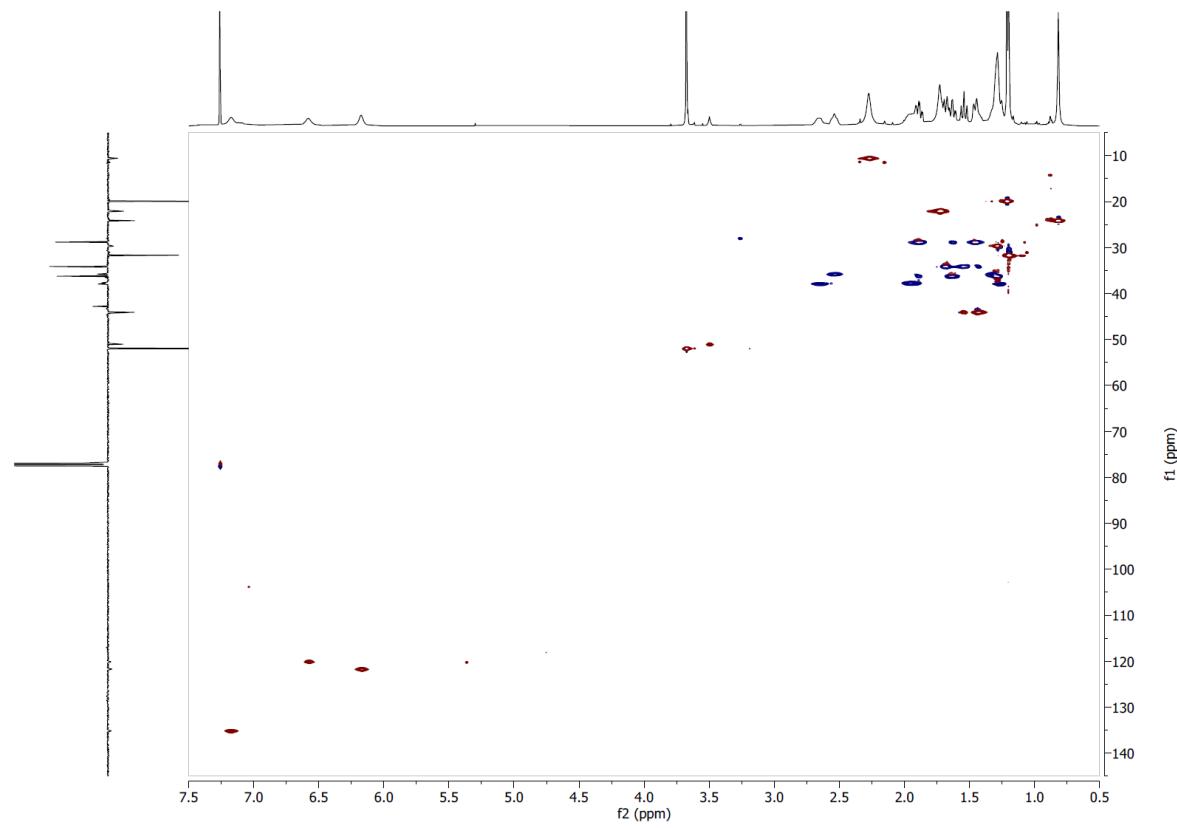
Supplementary Figure S2.2.19. ^1H NMR spectrum of **4** in CDCl_3 at 600 MHz



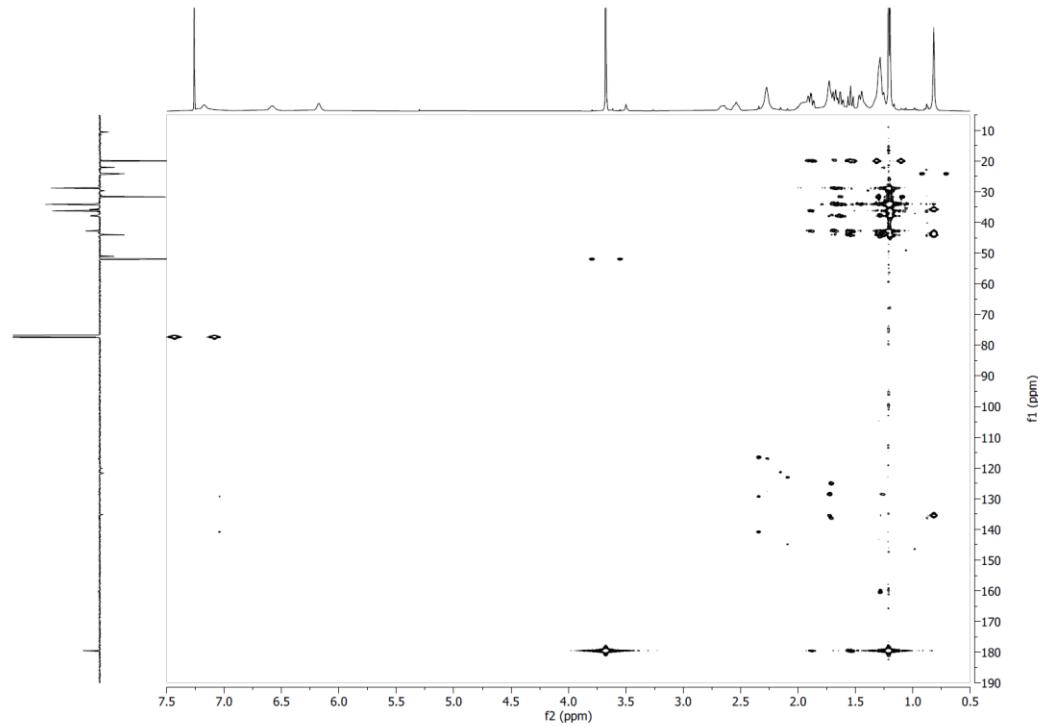
Supplementary Figure S2.2.20. COSY NMR spectrum of **4** in CDCl_3



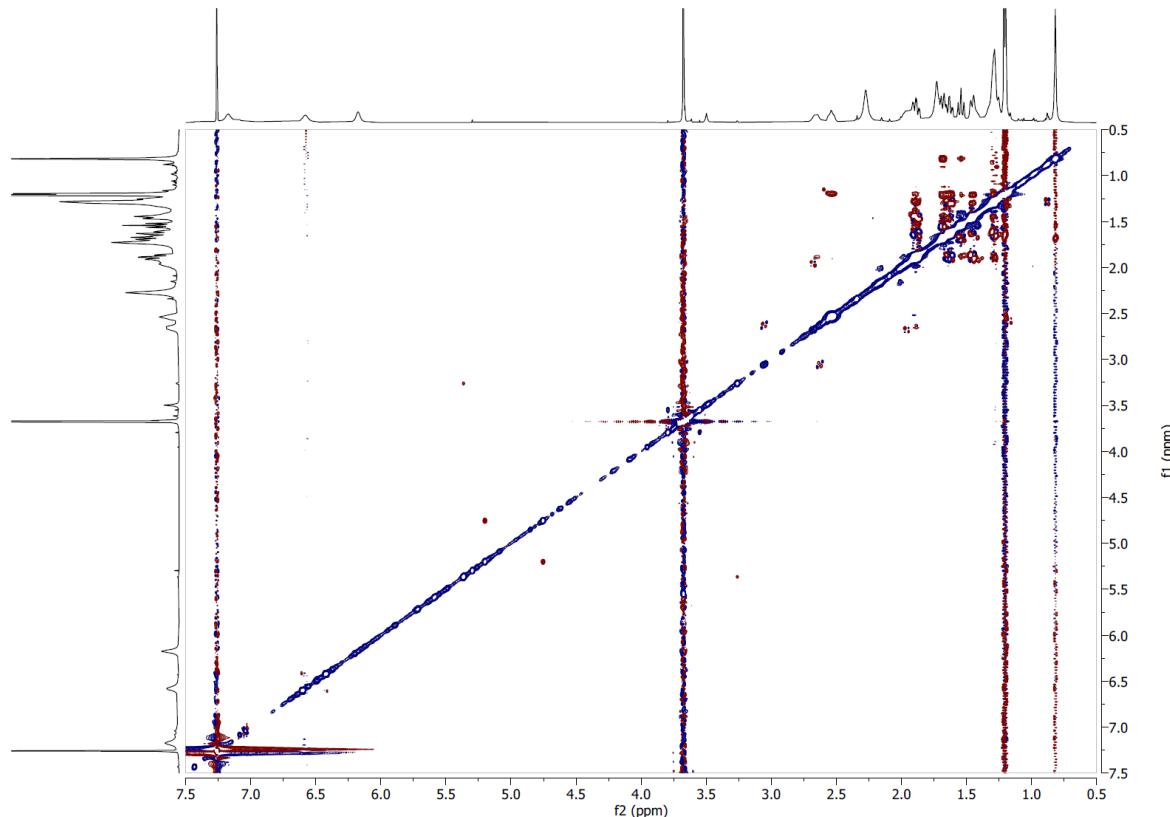
Supplementary Figure S2.2.21. ^{13}C -DEPTQ NMR spectrum of **4** in CDCl_3 at 151 MHz



Supplementary Figure S2.2.22. Edited HSQC NMR spectrum of **4** in CDCl_3

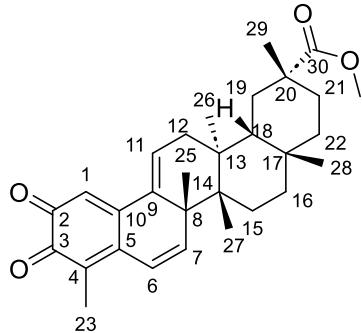


Supplementary Figure S2.2.23. HMBC NMR spectrum of **4** in CDCl_3



Supplementary Figure S2.2.24. ROESY NMR spectrum of **4** in CDCl_3

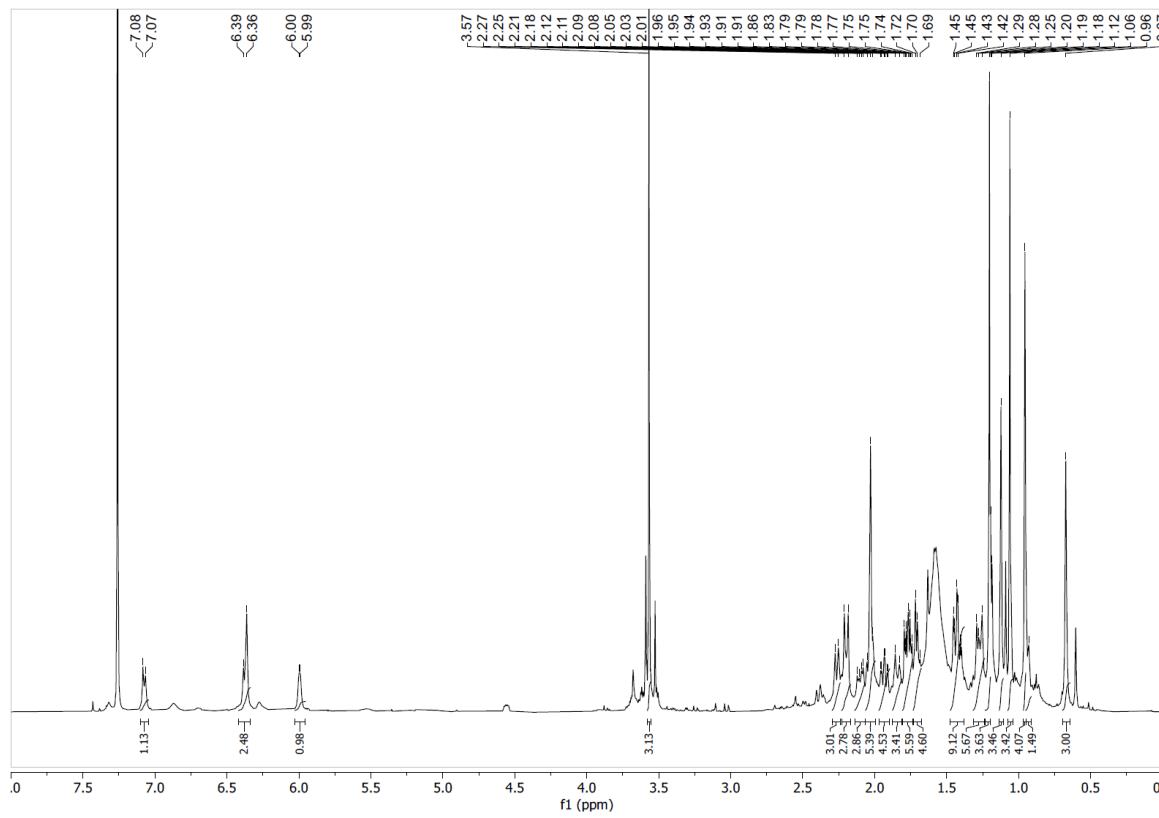
Compound 5: Methyl (13 α ,14 β ,20 α)-13-methyl-2,3-dioxo-24,25-dinoroleana-1(10),4,6,9(11)-tetraen-29-oate [54,55]. Amorphous orange powder, HRESIMS m/z 463.2865 [$M+H$]⁺ (calculated for C₃₀H₃₈O₄, error 4.71ppm); $[\alpha]_D^{20} -5.1$ (c 0.007, MeOH). UV (c 0.007, MeOH) λ_{max} 221 nm, 289 nm.



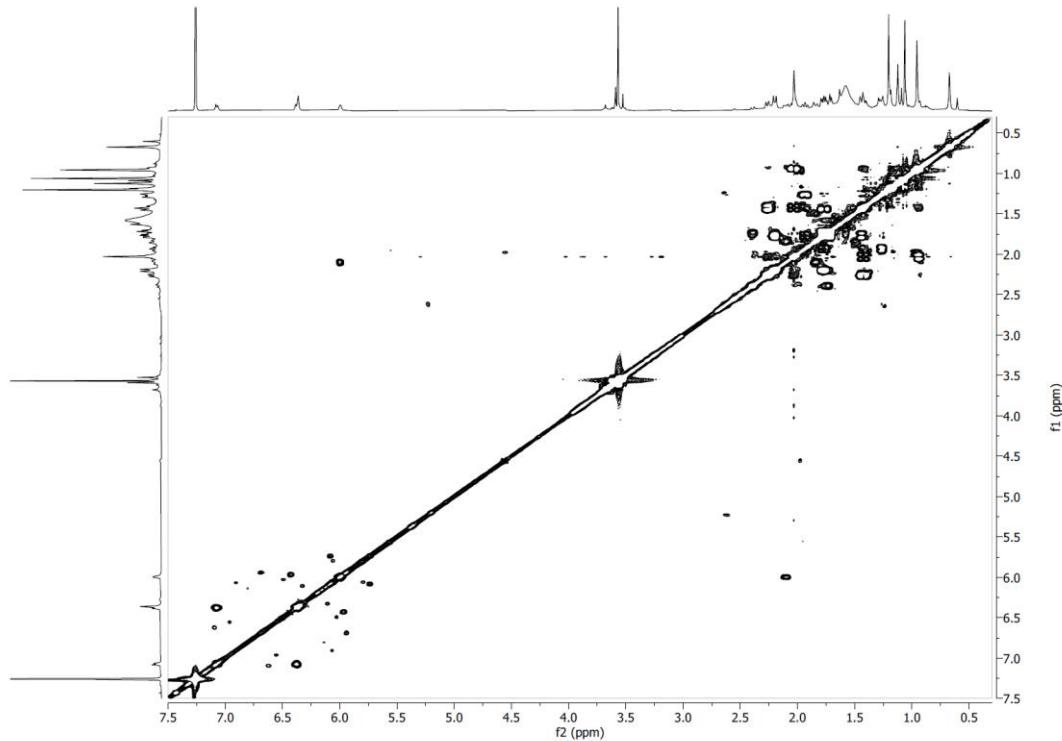
Chemical Formula: C₃₀H₃₈O₄

Exact Mass: 462.28

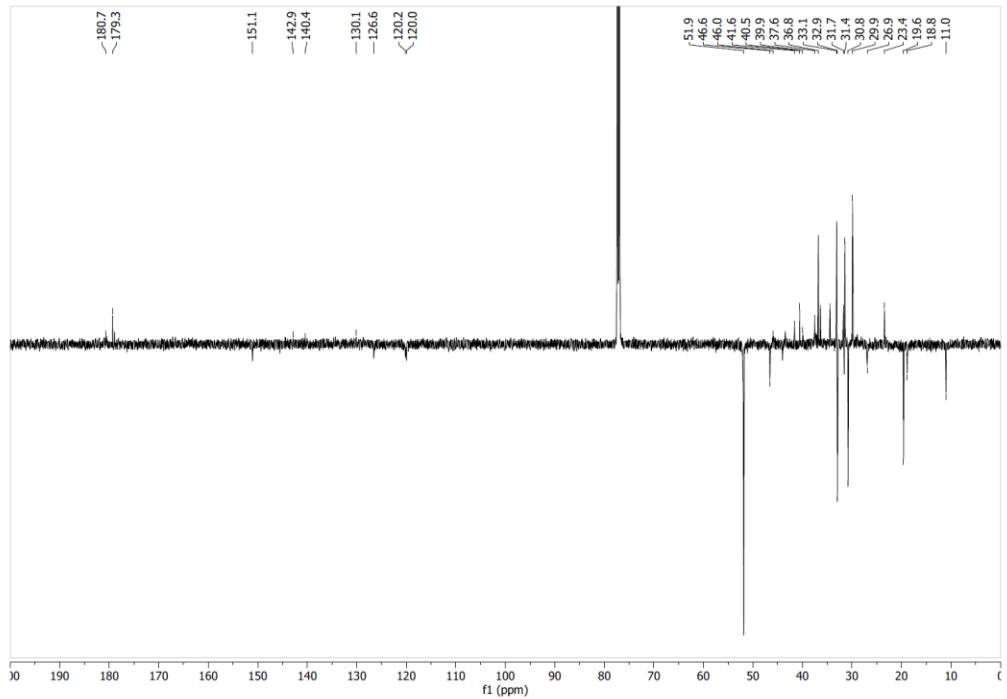
¹H NMR (CDCl₃, 600 MHz) δ 0.67 (3H, s, H₃-26), 0.93 (1H, s, H-22''), 0.96 (3H, s, H₃-27), 1.06 (3H, s, H₃-28), 1.12 (3H, s, H₃-25), 1.20 (3H, s, H₃-29), 1.27 (1H, m, H-15''), 1.43 (2H, m, H-16'', H-21''), 1.71 (1H, d, J = 8.3 Hz, H-18), 1.77 (2H, m, H-16', H-19''), 1.84 (1H, d, J = 17.7 Hz, H-12''), 1.93 (1H, m, H-15'), 2.02 (1H, m, H-22'), 2.03 (3H, s, H₃-23), 2.10 (1H, dd, J = 17.7, 7.3 Hz, H-12'), 2.20 (1H, d, J = 15.5 Hz, H-19'), 2.26 (1H, d, J = 13.6 Hz, H-21'), 3.57 (3H, s, OCH₃), 5.99 (1H, d, J = 4.5 Hz, H-11), 6.36 (1H, s, H-1), 6.38 (1H, d, J = 10.2 Hz, H-6), 7.07 (1H, d, J = 10.2 Hz, H-7); ¹³C NMR (CDCl₃, 151 MHz) δ 11.0 (CH₃-23), 18.8 (CH₃-26), 19.6 (CH₃-27), 23.4 (CH₂-15), 26.9 (CH₃-25), 29.9 (CH₂-21), 30.8 (CH₃-28), 31.4 (CH₂-19), 31.7 (C-17), 32.9 (CH₃-29), 33.1 (CH₂-22), 36.8 (CH₂-16), 37.6 (CH₂-12), 39.9 (C-13), 40.5 (C-20), 41.6 (C-14), 46.0 (C-8), 46.6 (CH-18), 51.9 (OCH₃), 120.0 (CH-6), 120.2 (CH-1), 126.6 (CH-11), 130.1 (C-4), 140.4 (C-5), 142.9 (C-9), 151.1 (CH-7), 179.3 (C-30), 180.7 (C-3). Supplementary Figures S2.2.25–2.2.30. MS/MS [CCMSLIB00010129716](#).



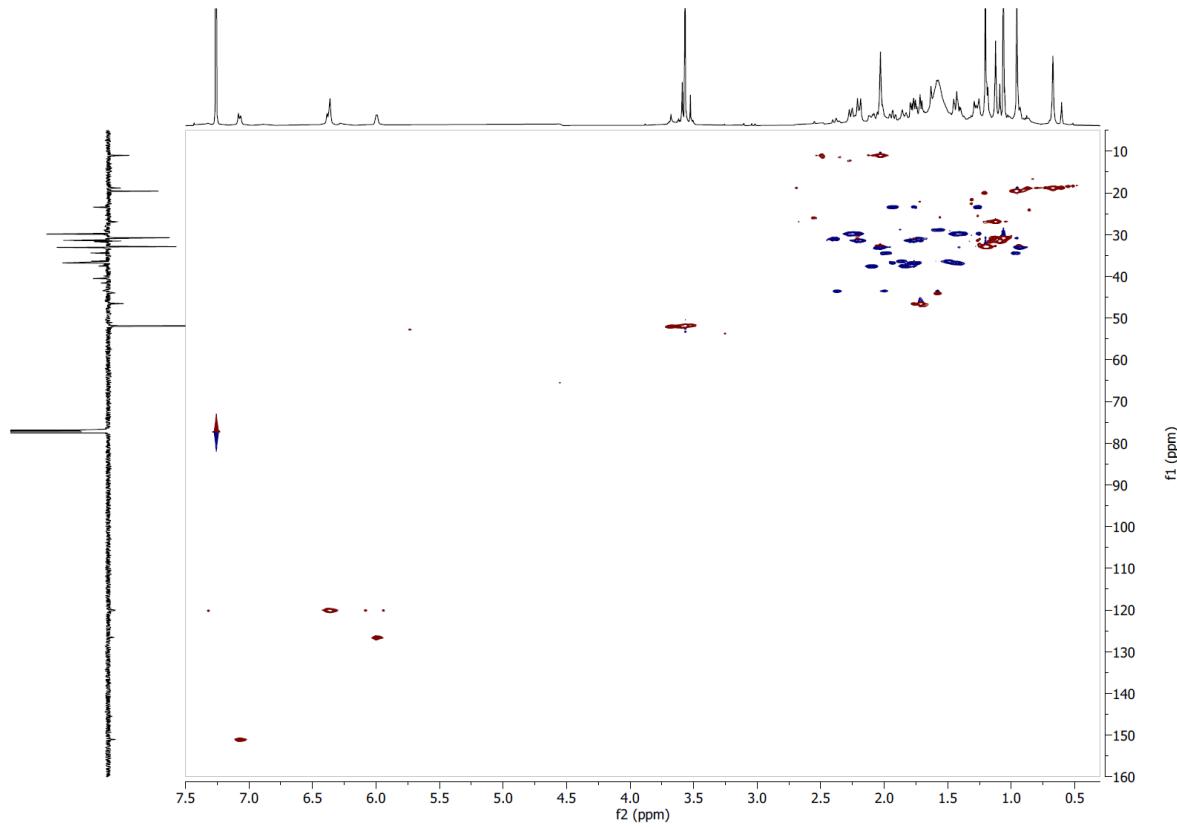
Supplementary Figure S2.2.25. ^1H NMR spectrum of compound 5 in CDCl_3 at 600 MHz.



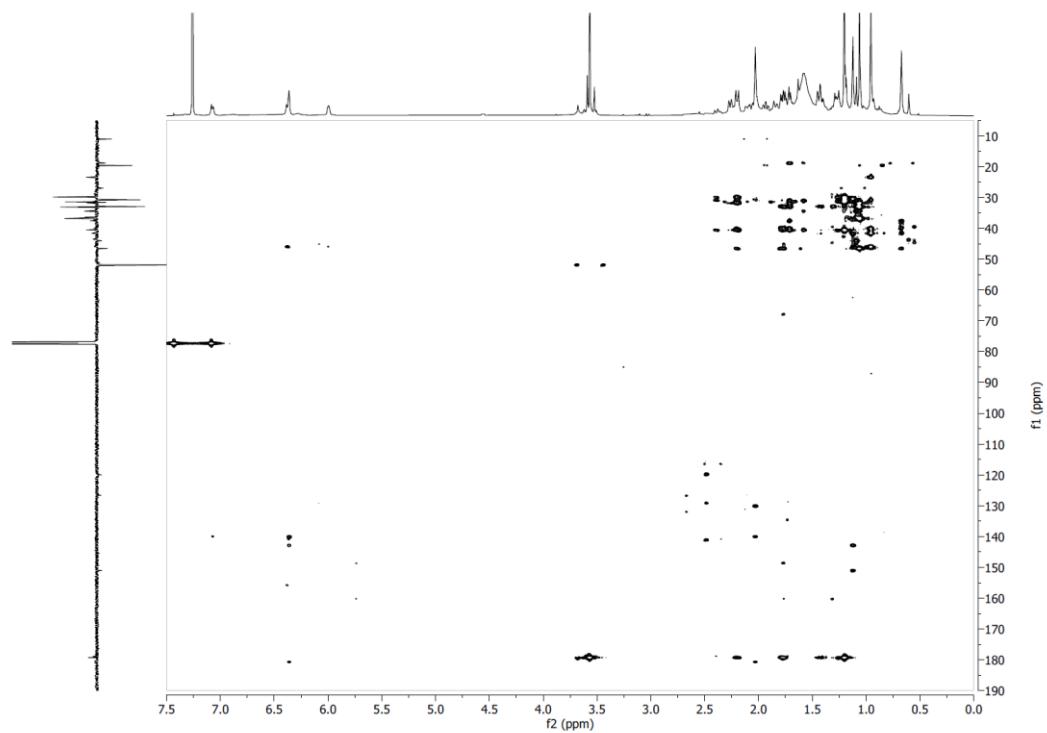
Supplementary Figure S2.2.26. COSY NMR spectrum of compound 5 in CDCl_3 .



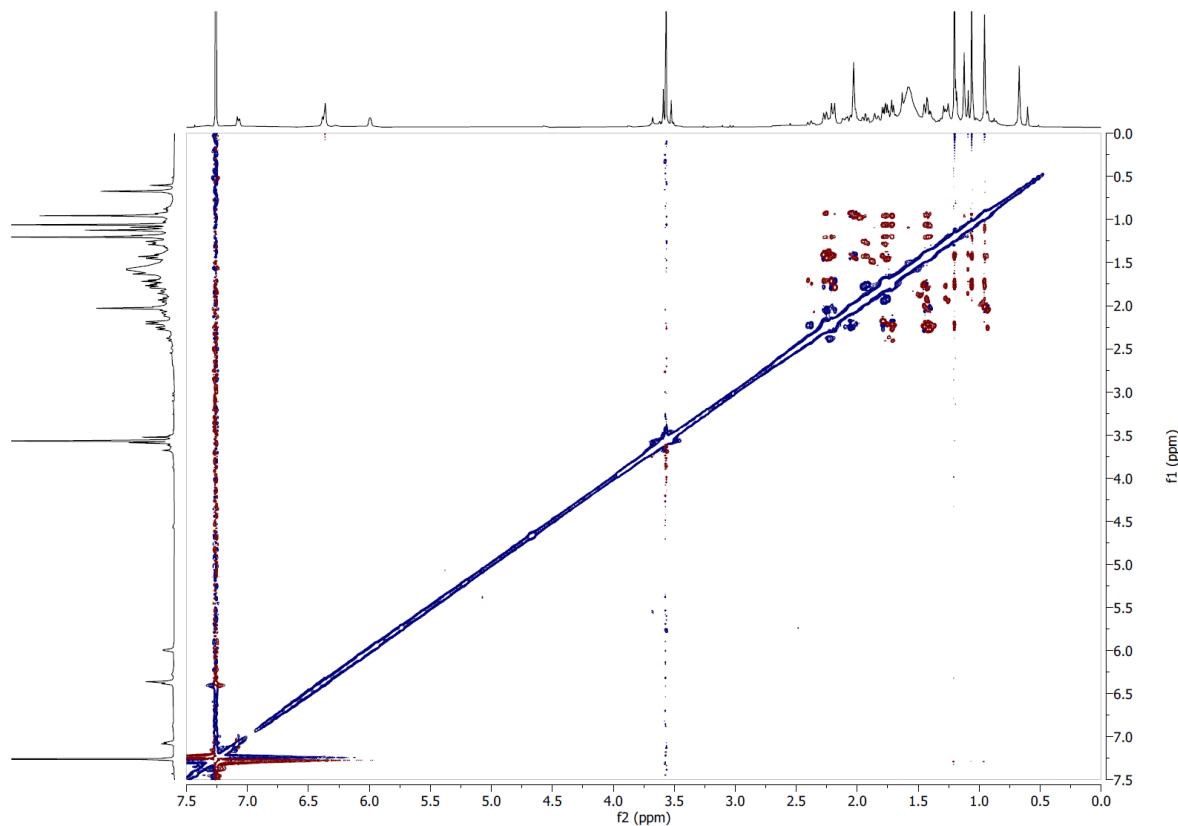
Supplementary Figure S2.2.27. ^{13}C -DEPTQ NMR spectrum of compound **5** in CDCl_3 at 151 MHz.



Supplementary Figure S2.2.28. Edited HSQC NMR spectrum of compound **5** in CDCl_3 .

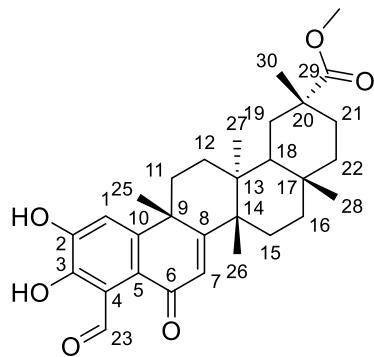


Supplementary Figure S2.2.29. HMBC NMR spectrum of compound 5 in CDCl_3 .



Supplementary Figure S2.2.30. ROESY NMR spectrum of compound 5 in CDCl_3 .

Compound 6: Zeylasterol [48]. Amorphous orange powder, HRESIMS m/z 495.2754 [$M+H$]⁺ (calculated for C₃₀H₃₈O₆, error 2.69 ppm); $[\alpha]_D^{20} +43$ (c 0.0003, MeOH). UV (c 0.0003, MeOH) λ_{max} 204 nm, 255 nm, 300 nm.

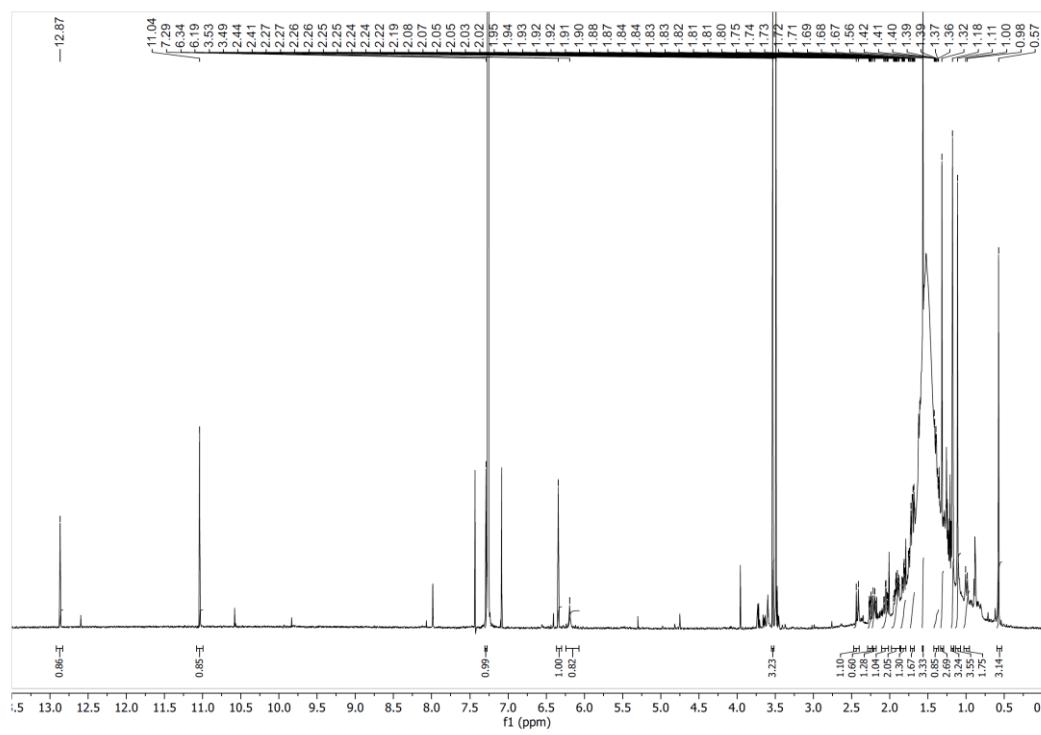


Chemical Formula: C₃₀H₃₈O₆

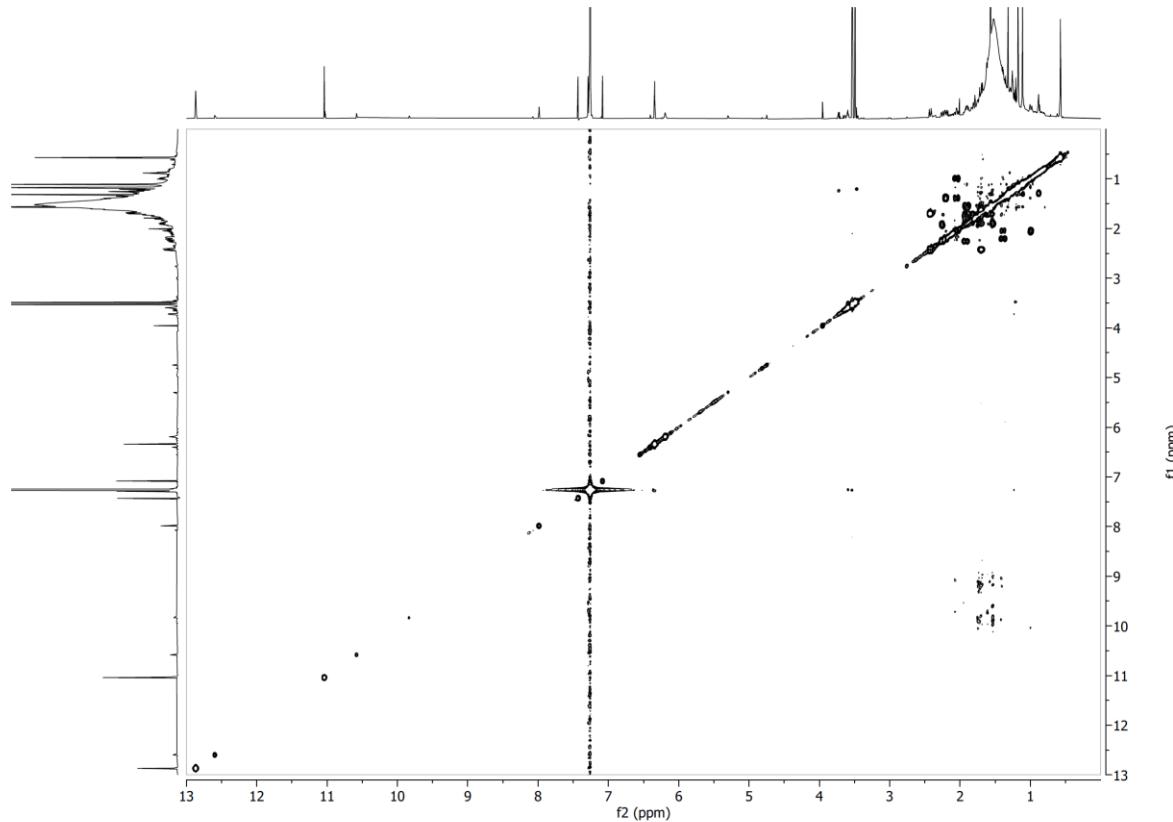
Exact Mass: 494.27

¹H NMR (CDCl₃, 600 MHz) δ 0.57 (3H, s, H₃-27), 0.99 (2H, d, J = 14.1 Hz, H₂-22 β), 1.11 (3H, s, H₃-28), 1.18 (3H, s, H₃-30), 1.32 (3H, s, H₃-26), 1.39 (1H, td, J = 14.1, 4.6 Hz, H₂-21 β), 1.56 (3H, s, H₃-25), 1.58 (1H, m, H₂-15b), 1.61 (1H, m, H-18), 1.68 (1H, m, H₂-15a), 1.69 (1H, m, H₂-16a), 1.70 (1H, dd, J = 15.9, 8.2 Hz, H₂-19 β), 1.73 (1H, m, H₂-12b), 1.82 (1H, ddd, J = 13.9, 5.3, 2.4 Hz, H₂-12 α), 1.89 (1H, m, H₂-16b), 1.92 (1H, m, H₂-11a), 2.05 (1H, td, J = 14.1, 4.2 Hz, H₂-22 α), 2.20 (1H, d, J = 14.1 Hz, H₂-21 α), 2.26 (1H, ddd, J = 13.6, 4.3, 2.4 Hz, H₂-11 β), 2.42 (1H, d, J = 15.9 Hz, H₂-19 α), 3.53 (3H, s, OMe), 6.19 (1H, s, 2OH), 6.34 (1H, s, H-7), 7.29 (1H, s, H-1), 11.04 (1H, s, H-23), 12.87 (1H, s, 3OH); ¹³C NMR (CDCl₃, 151 MHz) δ 18.2 (CH₃-27), 20.5 (CH₃-26), 28.6 (CH₂-15), 29.7 (CH₂-12), 29.8 (CH₂-21), 30.3 (C-17), 30.7 (CH₂-19), 31.5 (CH₃-28), 32.6 (CH₃-30), 33.6 (CH₂-11), 34.7 (CH₂-22), 36.2 (CH₂-16), 36.3 (CH₃-25), 39.2 (C13), 40.3 (C-20), 40.4 (C-9), 44.2 (CH-18), 44.9 (C-14), 51.4 (OMe), 116.1 (CH-1), 116.8 (C-4), 122.8 (C-5), 125.0 (CH-7), 148.9 (C-2), 149.3 (C-3), 150.2 (C-10), 173.8 (C-8), 178.6 (C-29), 200.1 (CH-23).

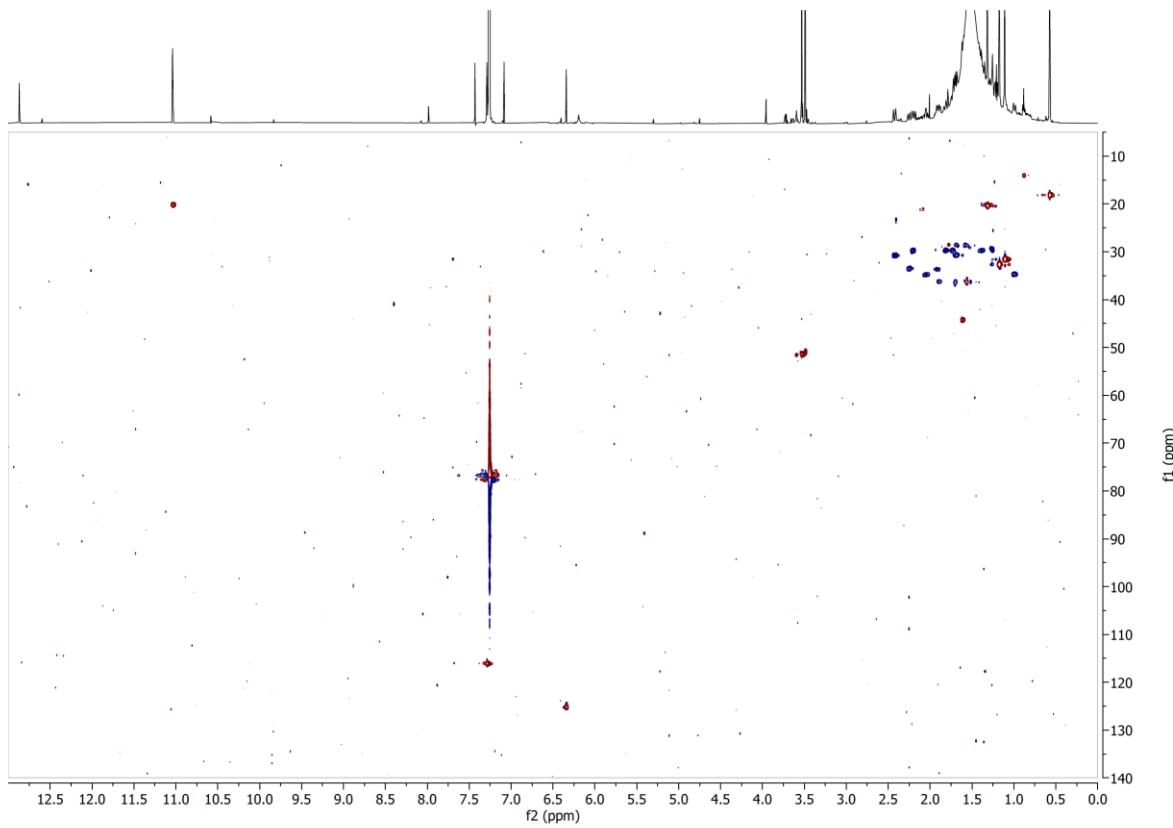
Supplementary Figures S2.2.31-2.2.35. MS/MS [CCMSLIB00010129508](#).



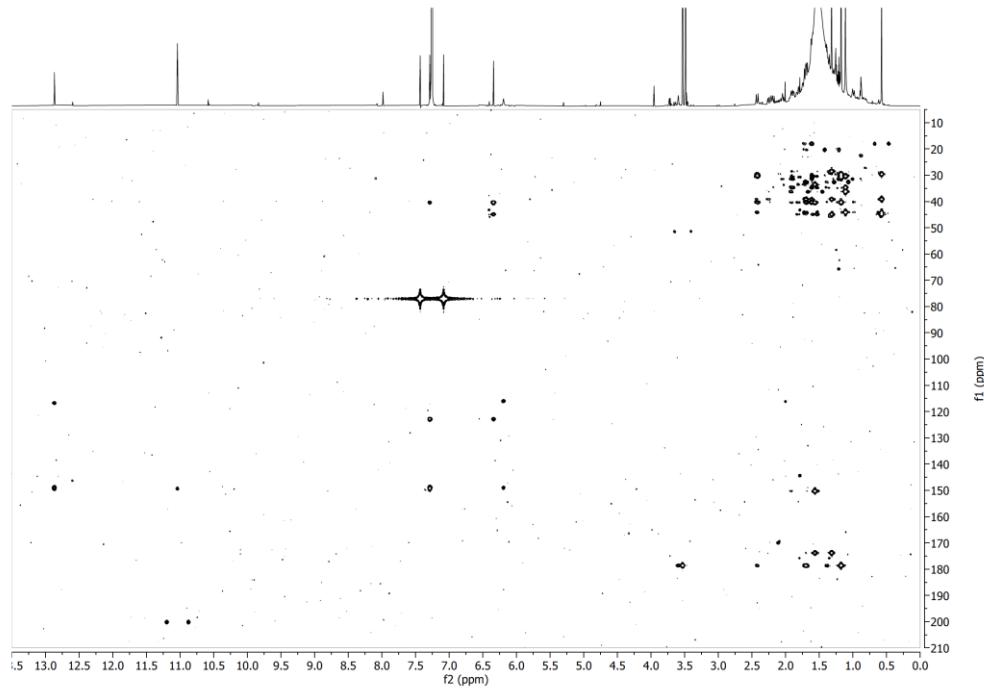
Supplementary Figure S2.2.31. ^1H NMR spectrum of **6** in CDCl_3 at 600 MHz.



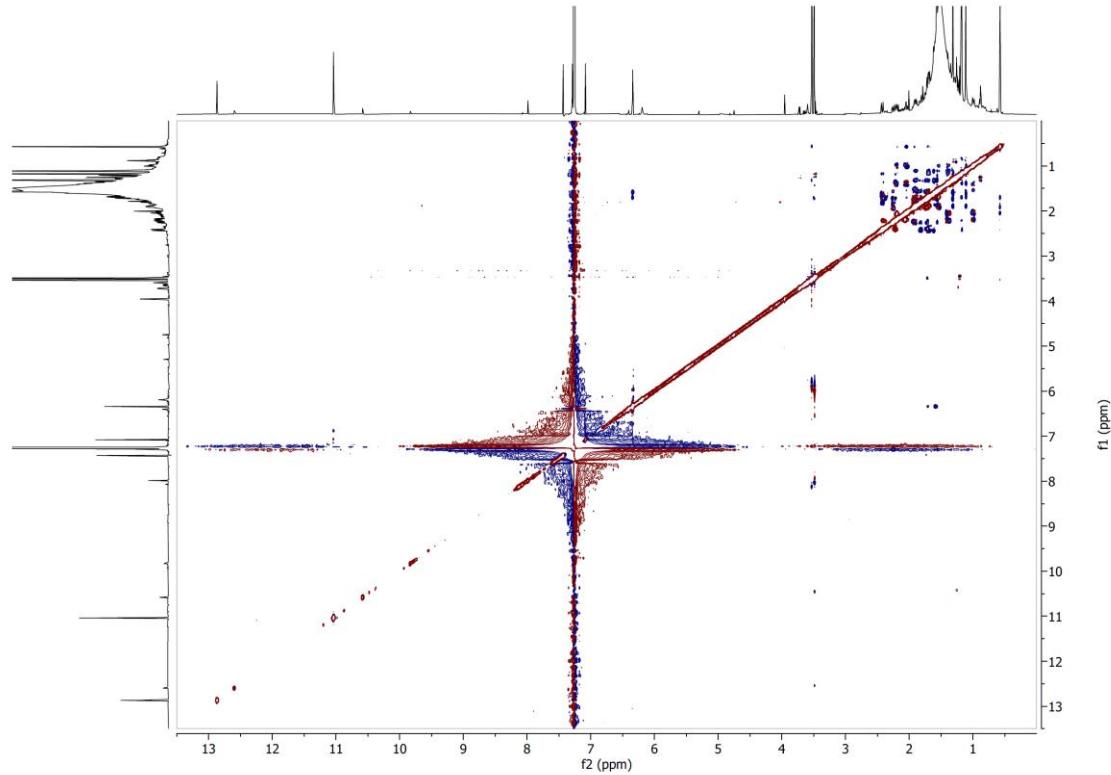
Supplementary Figure S2.2.32. COSY NMR spectrum of **6** in CDCl_3 .



Supplementary Figure S2.2.33. Edited HSQC NMR spectrum of **6** in CDCl_3 .

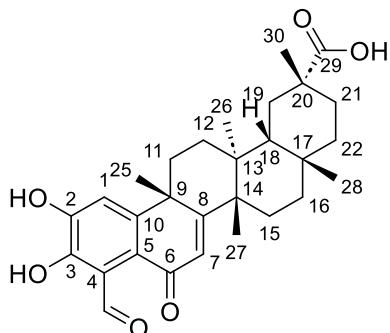


Supplementary Figure S2.2.34. HMBC NMR spectrum of **6** in CDCl_3 .



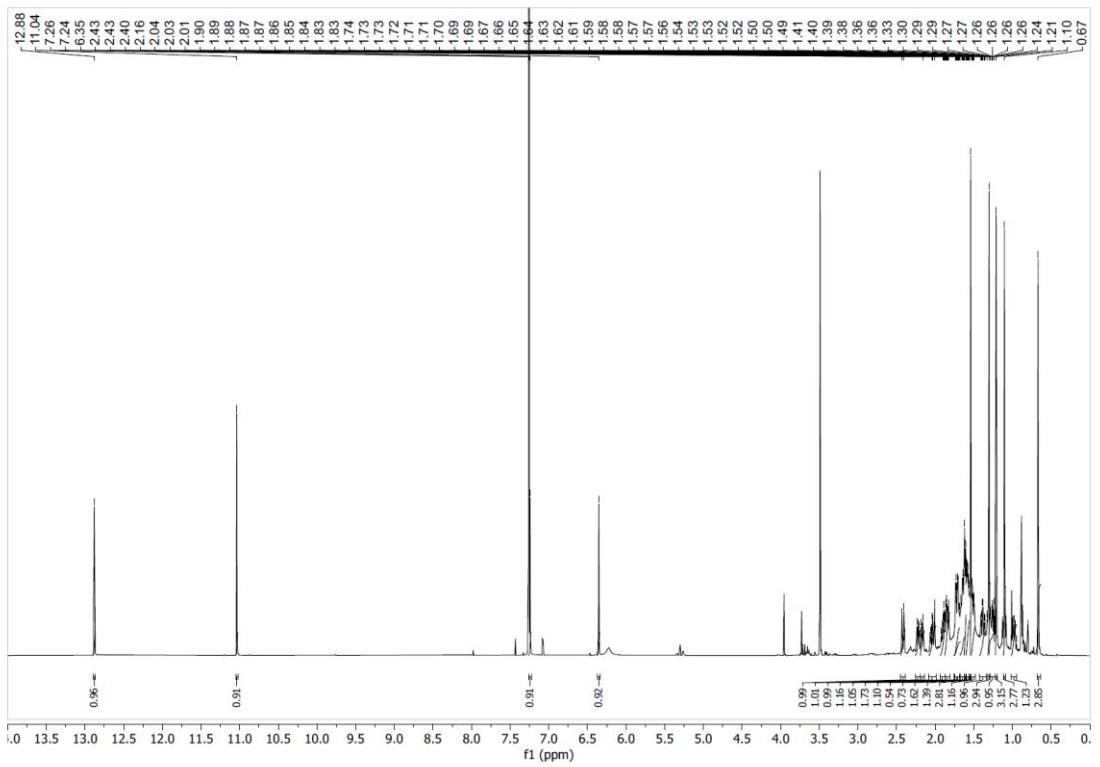
Supplementary Figure S2.2.35. ROESY NMR spectrum of **6** in CDCl_3 .

Compound **7**: Demethylzeylasterol [56]. Amorphous dark orange powder, HRESIMS m/z 481.2577 [$M+H$]⁺ (calculated for C₂₉H₃₆O₆, error -0.71 ppm); $[\alpha]_D^{20}$ -28 (c 0.0003, MeOH); UV (c 0.0003, MeOH) λ_{max} 217, 255, 302, 339 nm.

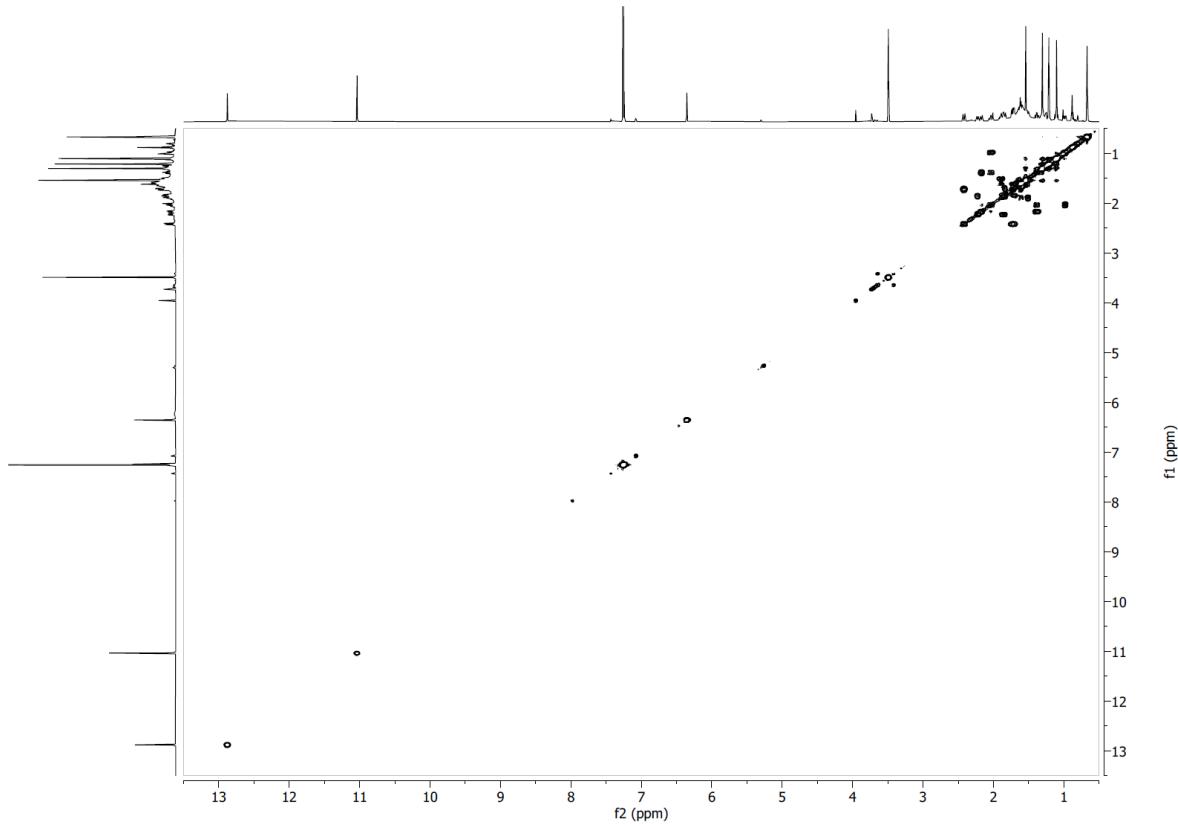


Chemical Formula: C₂₉H₃₆O₆
Exact Mass: 480.25

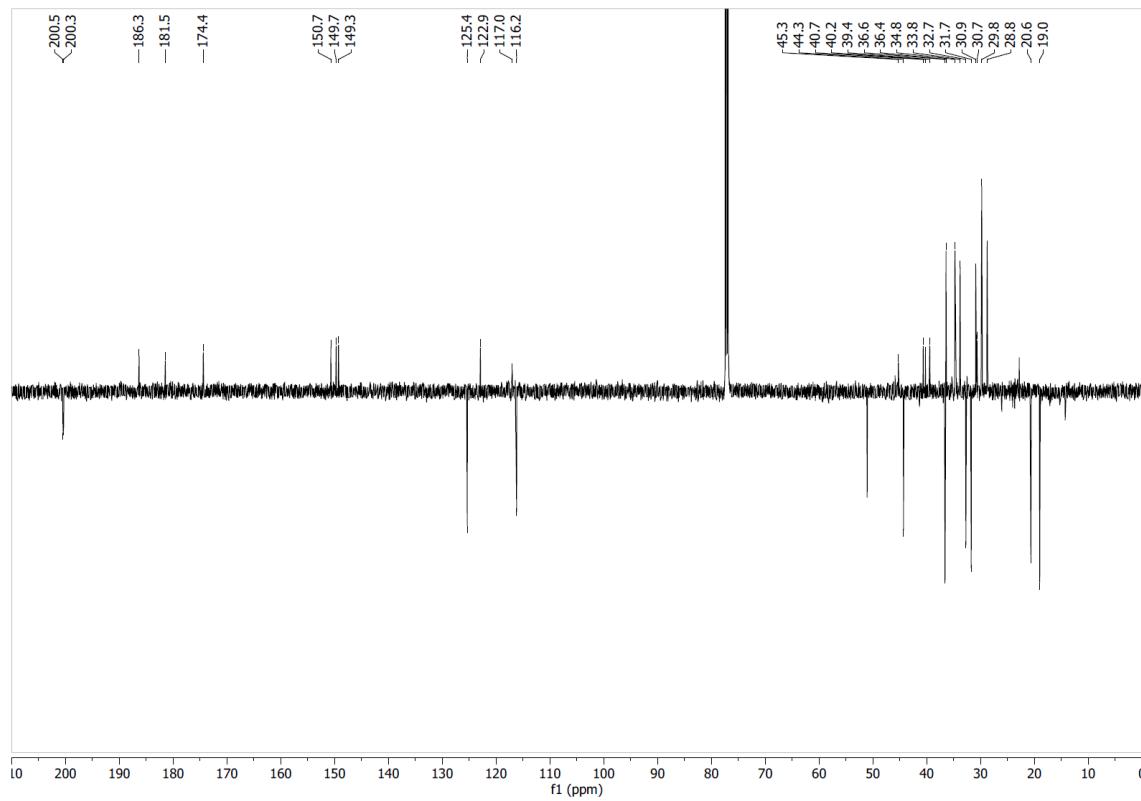
¹H NMR (CDCl₃, 600 MHz) δ 0.67 (3H, s, H₃-26), 0.98 (1H, brd, J = 14.6 Hz, H-22b), 1.10 (3H, s, H₃-28), 1.21 (3H, s, H₃-30), 1.30 (3H, s, H₃-27), 1.38 (1H, td, J = 14.2, 4.6 Hz, H-21b), 1.51 (1H, m, H-16a), 1.54 (3H, s, H₃-25), 1.58 (1H, m, H-15b), 1.61 (1H, d, J = 8.0 Hz, H-18), 1.65 (1H, td, J = 13.2, 6.3 Hz, H-15a), 1.71 (1H, m, H-12a), 1.72 (1H, dd, J = 16.0, 8.0 Hz, H-19a), 1.85 (2H, m, H-11a, H-12b), 1.90 (1H, m, H-16b), 2.03 (1H, td, J = 14.4, 4.1 Hz, H-22a), 2.17 (1H, d, J = 14.2 Hz, H-21a), 2.22 (1H, d, J = 13.5 Hz, H-11b), 2.42 (1H, d, J = 16.0 Hz, H-19b), 6.35 (1H, s, H-7), 7.24 (1H, s, H-1), 11.04 (1H, s, H-23), 12.88 (1H, s, OH₃); ¹³C NMR (CDCl₃, 151 MHz) δ 19.0 (CH₃-26), 20.6 (CH₃-27), 28.8 (CH₂-15), 29.8 (CH₂-12, CH₂-21), 30.7 (C-17), 30.9 (CH₂-19), 31.7 (CH₃-28), 32.7 (CH₃-30), 33.8 (CH₂-11), 34.8 (CH₂-22), 36.4 (CH₂-16), 36.6 (CH₃-25), 39.4 (C-13), 40.2 (C-20), 40.7 (C-9), 44.3 (C-18), 45.3 (C-14), 116.2 (CH-1), 117.0 (C-4), 122.9 (C-5), 125.4 (CH-7), 149.3 (C-2), 149.7 (C-3), 150.7 (C-10), 174.4 (C-8), 181.5 (C-29), 186.3 (C-6), 200.3 (C-23), 200.4 (C-22). Supplementary Figures 2.2.36–2.2.41. MS/MS [CCMSLIB00010129516](#).



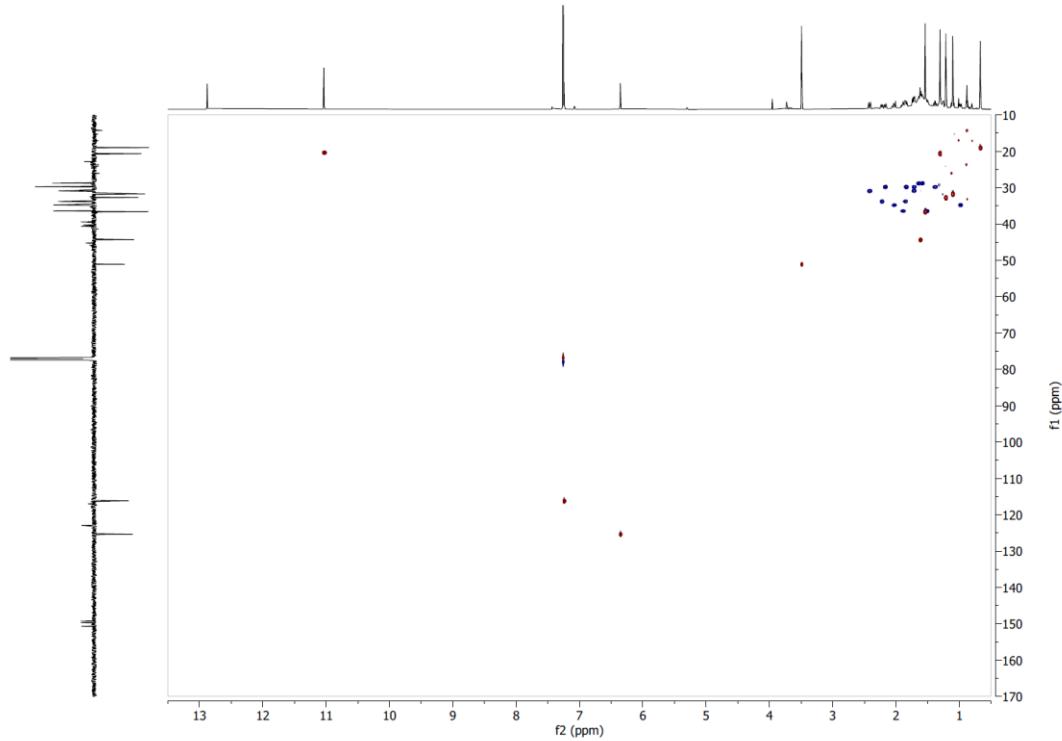
Supplementary Figure S2.2.36. ^1H NMR spectrum of **7** in CDCl_3 at 600 MHz.



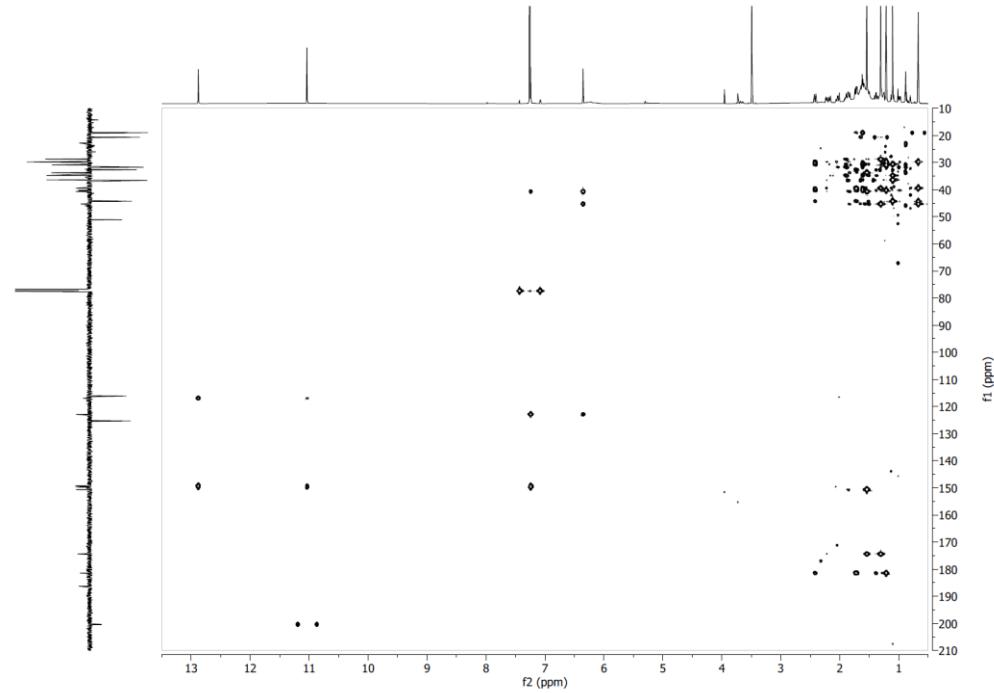
Supplementary Figure S2.2.37. COSY NMR spectrum of **7** in CDCl_3 at 600 MHz..



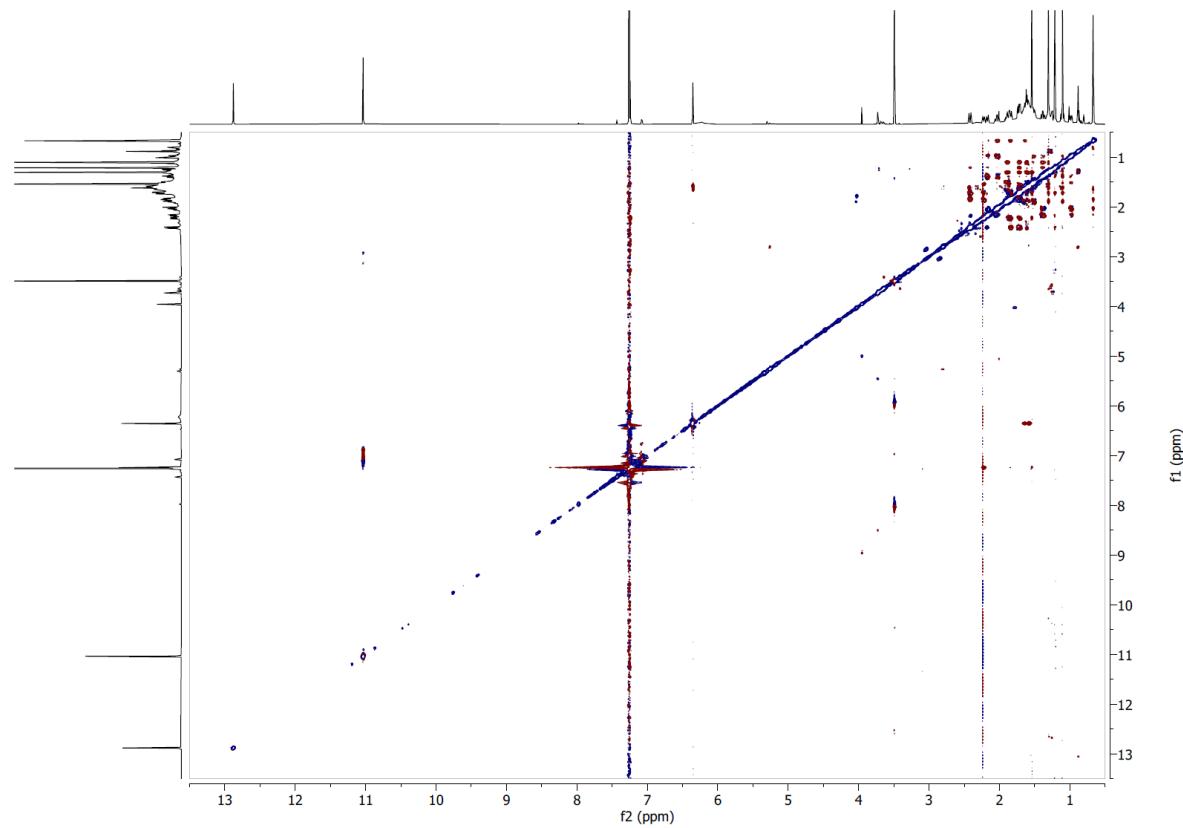
Supplementary Figure S2.2.38. ^{13}C -DEPTQ NMR spectrum of **7** in CDCl_3 at 151 MHz.



Supplementary Figure S2.2.39. Edited HSQC NMR spectrum of **7** in CDCl_3 .

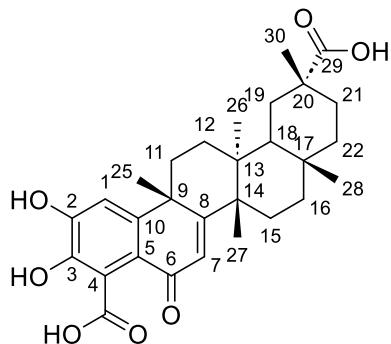


Supplementary Figure S2.2.40. HMBC NMR spectrum of **7** in CDCl_3 at 600 MHz..



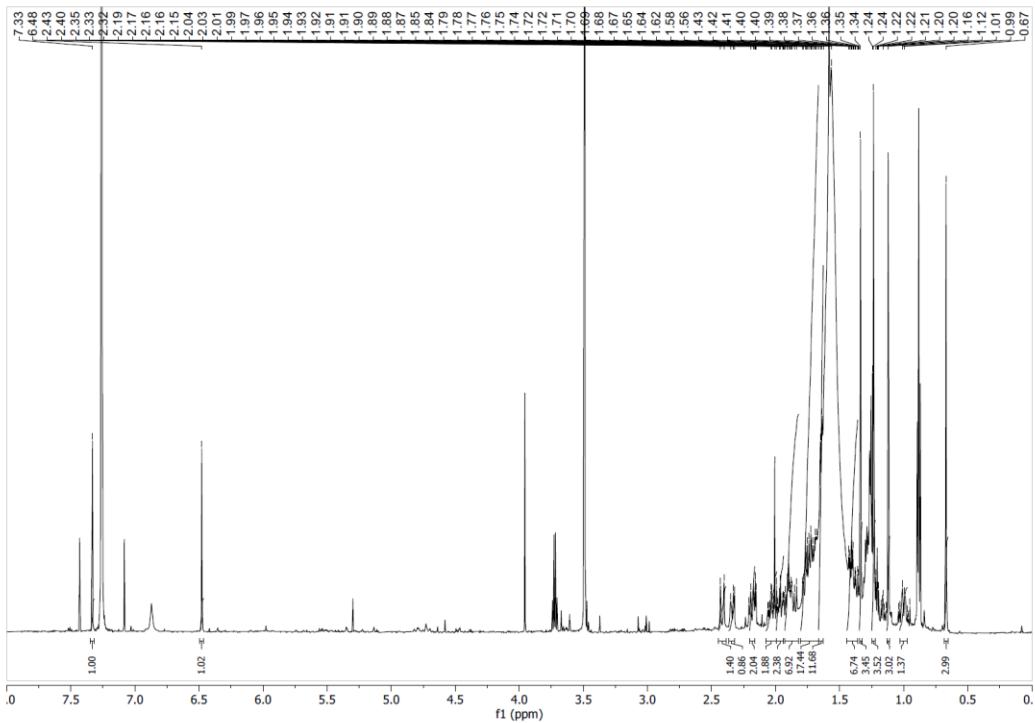
Supplementary Figure S2.2.41. ROESY NMR spectrum of **7** in CDCl_3 at 600 MHz..

Compound **8**: Demethylzeylasterone [56]. Amorphous dark orange powder, HRESIMS m/z 497.2520 [$M+H$]⁺ (calculated for C₂₉H₃₆O₇, error -2.69 ppm); $[\alpha]_D^{20}$ -34 (c 0.0003, MeOH); UV (c 0.0003, MeOH) λ_{max} 203, 254, 343 nm.

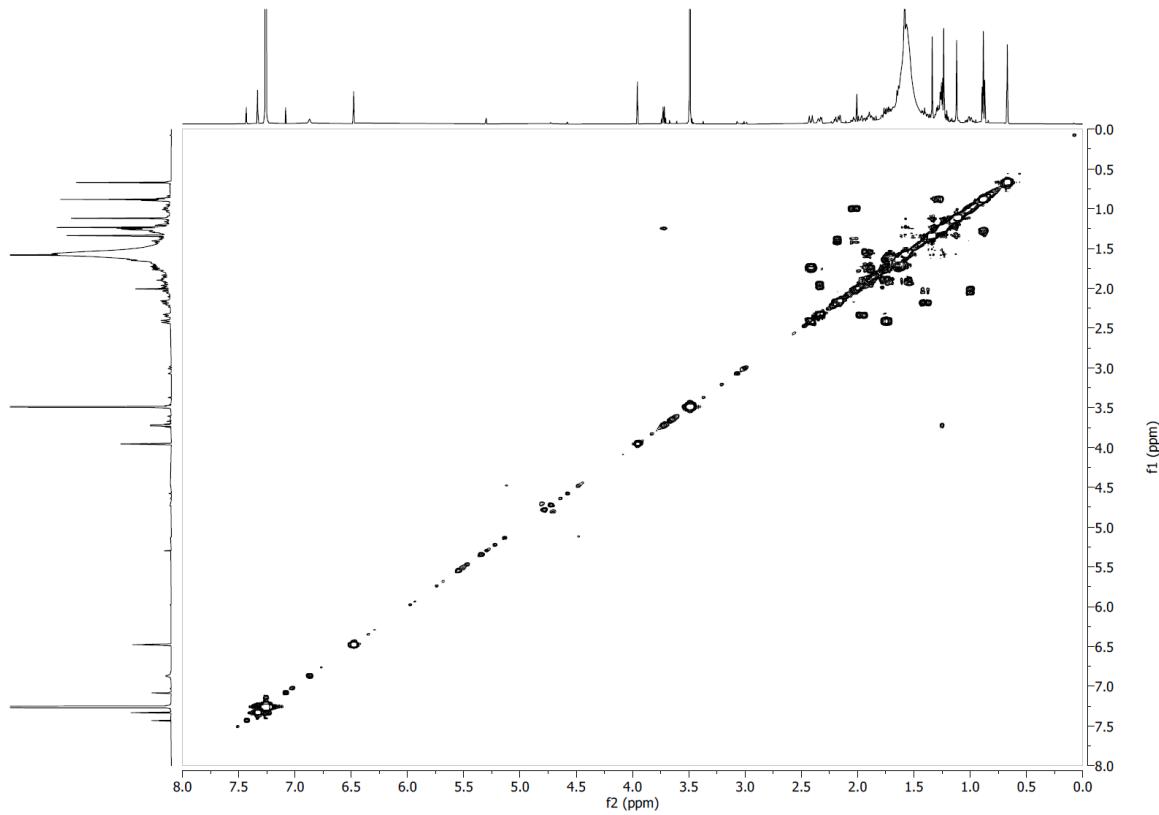


Chemical Formula: C₂₉H₃₆O₇
Exact Mass: 496.25

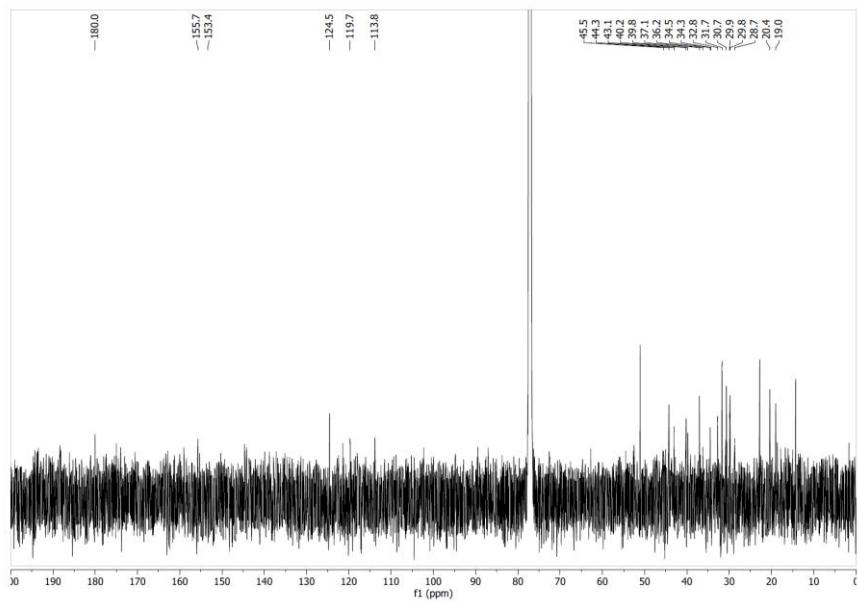
¹H NMR (CDCl₃, 600 MHz) δ 0.67 (3H, s, H₃-26), 1.00 (1H, d, J = 14.1 Hz, H-22 β), 1.12 (3H, s, H₃-28), 1.24 (3H, s, H₃-30), 1.34 (3H, s, H₃-27), 1.40 (7H, td, J = 14.2, 4.6 Hz, H-21 β), 1.55 (1H, overlapped, H-16a), 1.58 (3H, s, H₃-25), 1.60 (1H, overlapped, H-15b), 1.67 (1H, d, J = 8.0 Hz, H-18), 1.71 (1H, m, H-15a), 1.73 (1H, m, H-12a), 1.88 (1H, m, H-12b), 1.91 (1H, m, H-16b), 1.97 (1H, td, J = 13.7, 5.3 Hz, H-11a), 2.04 (2H, td, J = 14.1, 4.2 Hz, H-22 α), 2.18 (1H, d, J = 14.2 Hz, H-21 α), 2.34 (1H, d, J = 13.7 Hz, H-11 β), 2.42 (1H, d, J = 16.0 Hz, H-19 β), 6.48 (1H, s, H-7), 7.33 (1H, s, H-1); ¹³C NMR (CDCl₃, 151 MHz) δ 19.0 (CH₃-26), 20.4 (CH₃-27), 28.7 (CH₂-15), 29.8 (CH₂-21), 29.9 (CH₂-12), 30.7 (C-17), 31.7 (CH₃-28), 32.8 (CH₃-30), 34.3 (CH₂-11), 34.5 (CH₂-22), 36.2 (CH₂-16), 37.1 (CH₃-25), 39.8 (C-13), 40.2 (C-20), 43.1 (C-9), 44.3 (CH-18), 45.5 (C-14), 113.8 (CH-1), 119.7 (C-5), 124.5 (CH-7), 153.4 (C-3), 155.7 (C-10), 180.0 (C-8, C-29). **Supplementary Figures S2.2.42-2.2.47. MS/MS** [CCMSLIB00010129513](#).



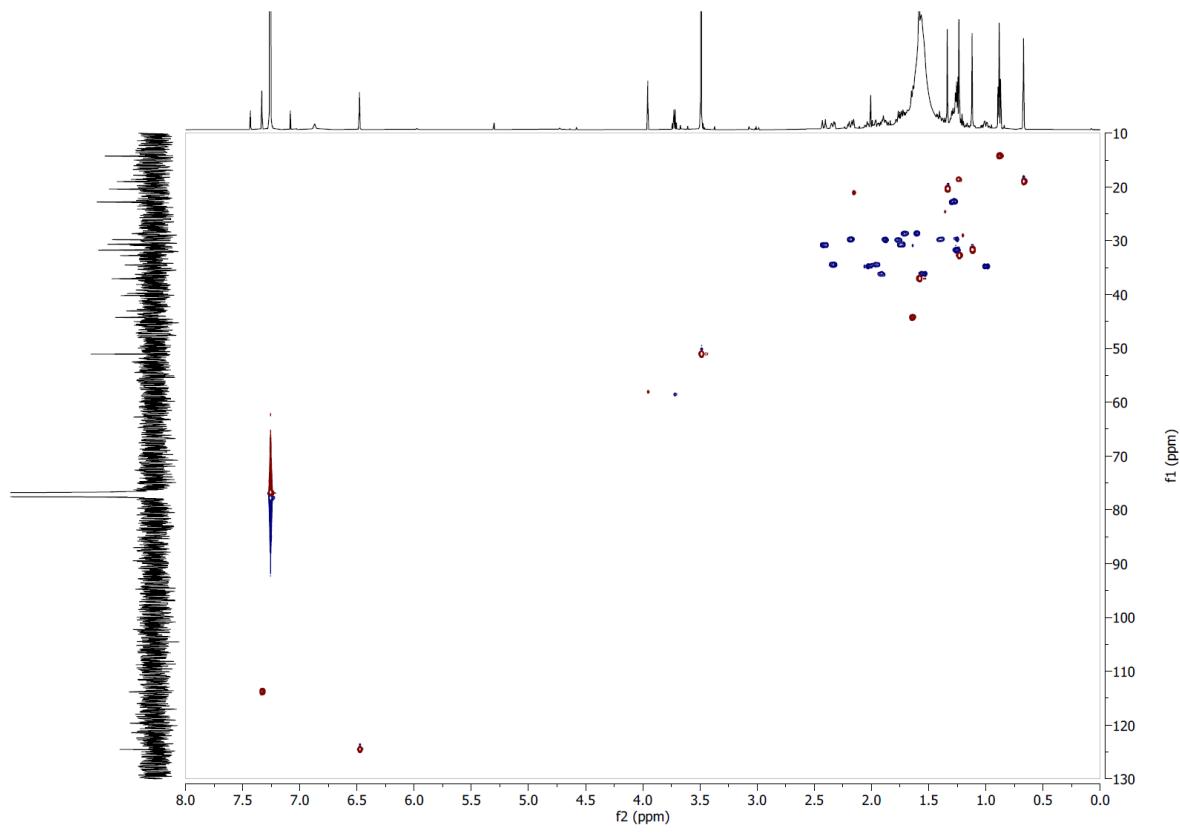
Supplementary Figure S2.2.42. ^1H NMR spectrum of **8** in CDCl_3 at 600 MHz.



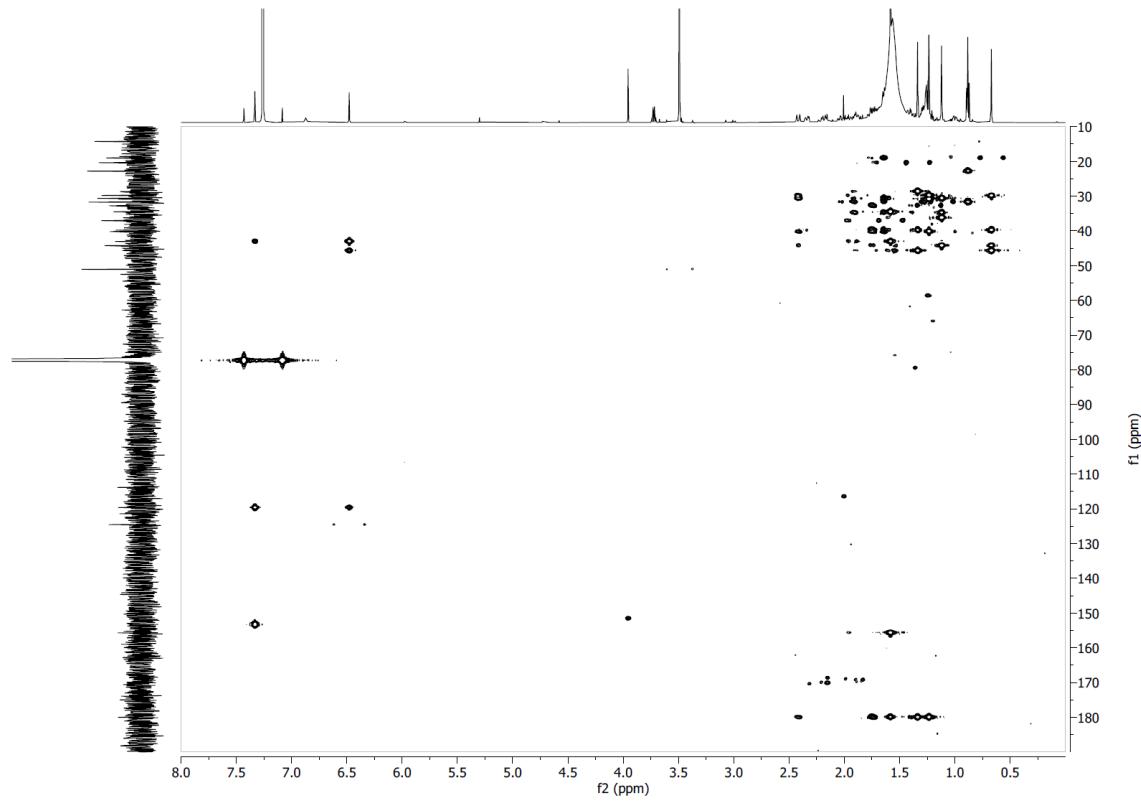
Supplementary Figure S2.2.43. COSY NMR spectrum of **8** in CDCl_3



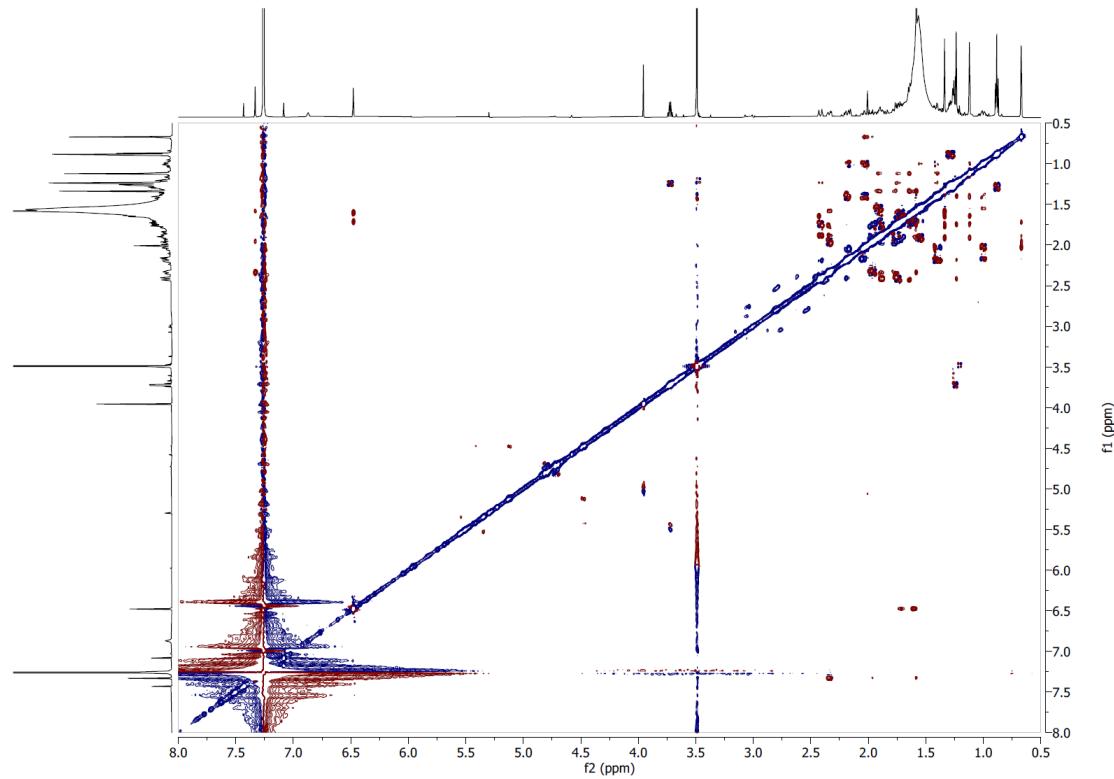
Supplementary Figure S2.2.44. ^{13}C NMR spectrum of **8** in CDCl_3 at 151 MHz



Supplementary Figure S2.2.45. Edited HSQC NMR spectrum of **8** in CDCl_3 .

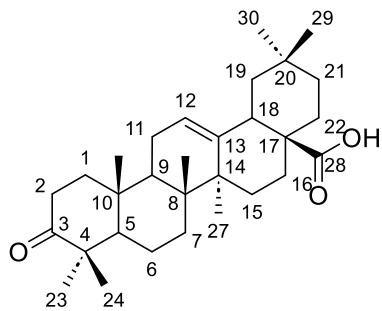


Supplementary Figure S2.2.46. HMBC NMR spectrum of **8** in CDCl_3 .



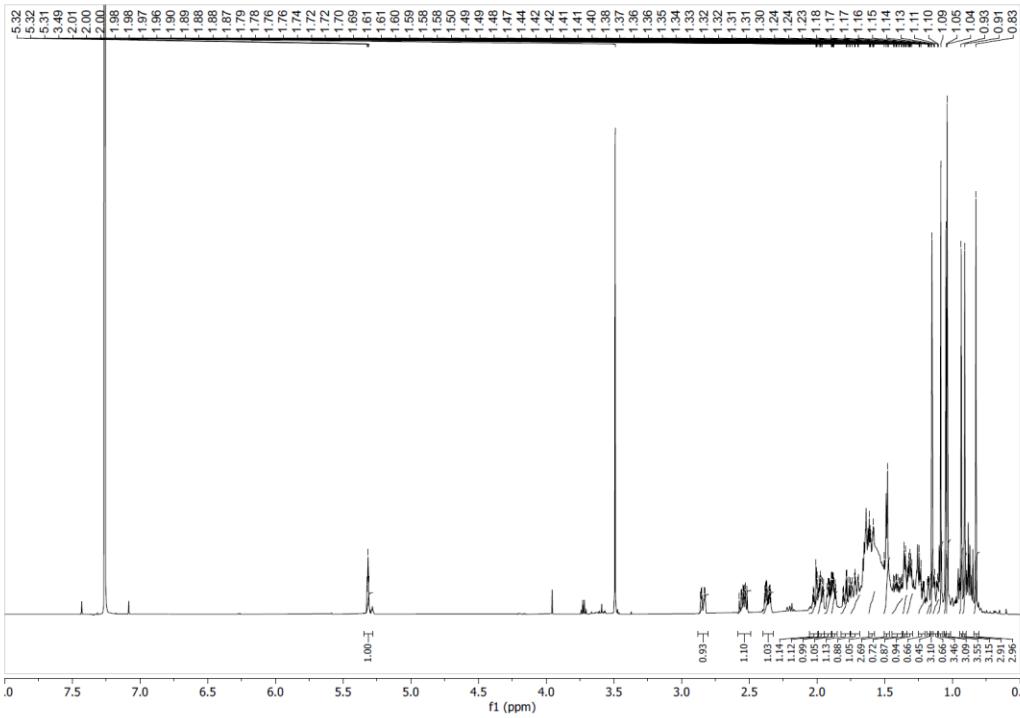
Supplementary Figure S2.2.47. ROESY NMR spectrum of **8** in CDCl_3 .

Compound **9**: Oleanonic acid [57]. Amorphous white powder, HRESIMS m/z 455.3536 [$M+H$]⁺ (calculated for C₃₀H₄₆O₃, error 1.67 ppm); $[\alpha]_D^{20} + 25$ (c 0.0011 MeOH); UV (c 0.0011 MeOH) λ_{max} 203 nm.

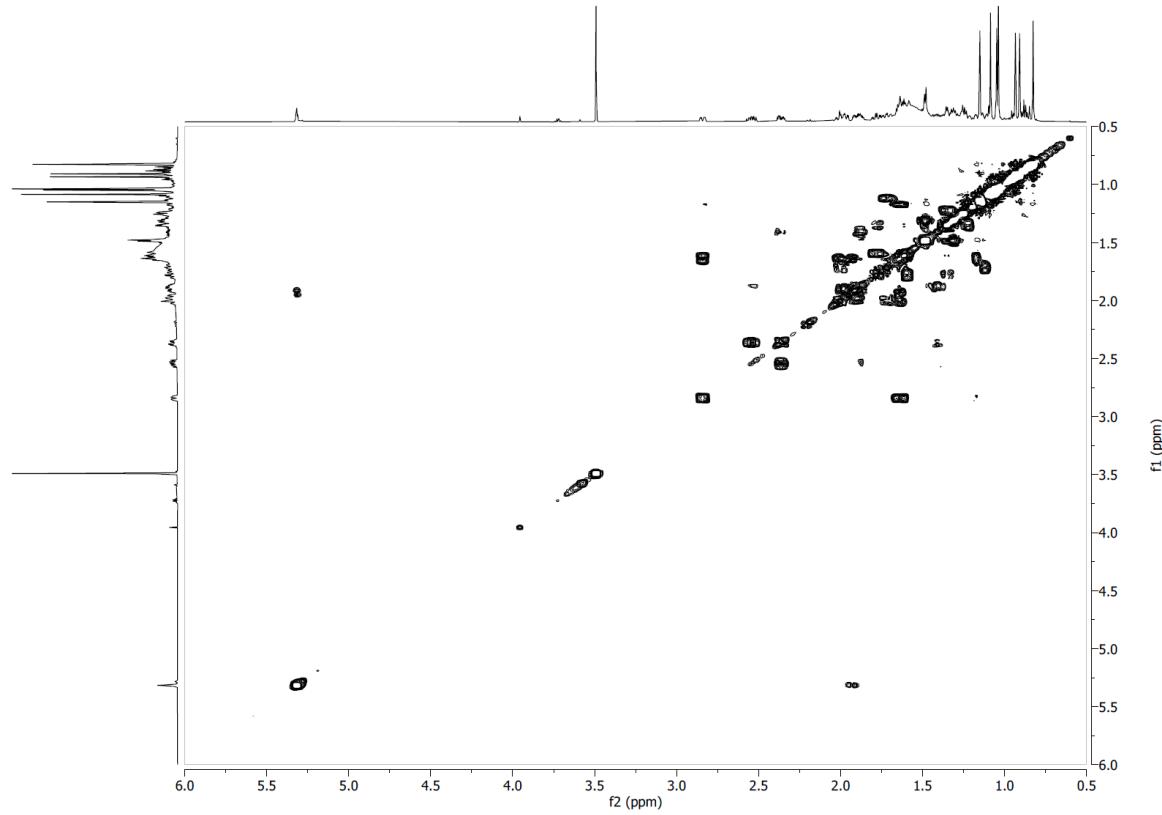


Chemical Formula: C₃₀H₄₆O₃
Exact Mass: 454.34

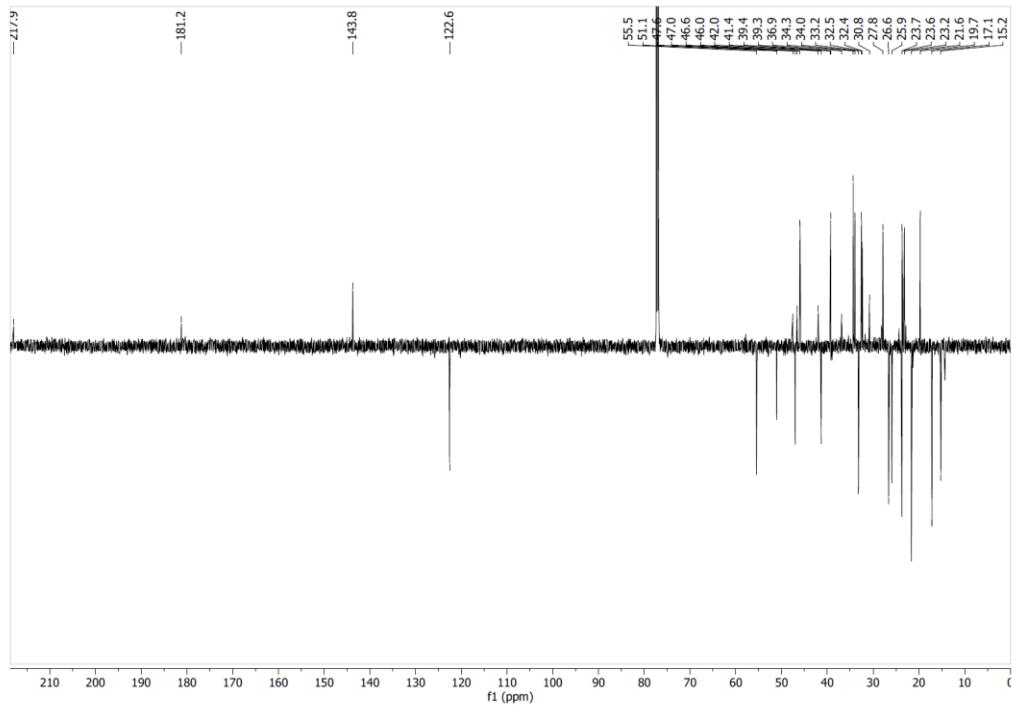
¹H NMR (CDCl₃, 600 MHz) δ 0.83 (3H, s, H₃-26), 0.91 (3H, s, H₃-29), 0.93 (3H, s, H₃-30), 1.04 (3H, s, H₃-24), 1.05 (3H, s, H₃-25), 1.09 (3H, s, H₃-23), 1.12 (1H, dt, $J = 13.8, 3.4$ Hz, H-15 α), 1.15 (3H, s, H₃-27), 1.17 (1H, m, H-19b), 1.22 (1H, m, H-21b), 1.32 (1H, m, H-5), 1.35 (2H, m, H-7 β , H-21a), 1.40 (1H, m, H-1a), 1.49 (3H, m, H₂-6, H-7 α), 1.60 (1H, m, H-22b), 1.63 (3H, m, H-9, H-19a, H-16b), 1.72 (1H, td, $J = 13.8, 4.0$ Hz, H-15 β), 1.78 (1H, td, $J = 13.9, 4.5$ Hz, H-22a), 1.88 (1H, m, H-1b), 1.91 (1H, m, H-11a), 1.97 (1H, m, H-11b), 2.01 (1H, m, H-16a), 2.36 (1H, ddd, $J = 16.0, 6.7, 3.7$ Hz, H-2 α), 2.54 (1H, ddd, $J = 16.0, 11.2, 7.3$ Hz, H-2 β), 2.84 (1H, dd, $J = 13.7, 4.4$ Hz, H-18), 5.32 (1H, t, $J = 3.7$ Hz, H-12); ¹³C NMR (CDCl₃, 151 MHz) δ 15.2 (CH₃-25), 17.1 (CH₃-26), 19.7 (CH₂-6), 21.6 (CH₃-24), 23.2 (CH₂-16), 23.6 (CH₂-11), 23.7 (CH₃-30), 25.9 (CH₃-27), 26.6 (CH₃-23), 27.8 (CH₂-15), 30.8 (C-20), 32.4 (CH₂-7), 32.5 (CH₂-22), 33.2 (CH₃-29), 34.0 (CH₂-21), 34.3 (CH₂-2), 36.9 (C-10), 39.3 (CH₂-1), 39.4 (C-8), 41.4 (CH-18), 42.0 (C-14), 46.0 (CH₂-19), 46.6 (C-17), 47.0 (CH-9), 47.6 (C-4), 55.5 (CH-5), 122.6 (CH-12), 143.8 (C-13), 181.2 (C-28), 217.9 (C-3). Supplementary Figures S2.2.48–2.2.53. MS/MS [CCMSLIB00010129510](#).



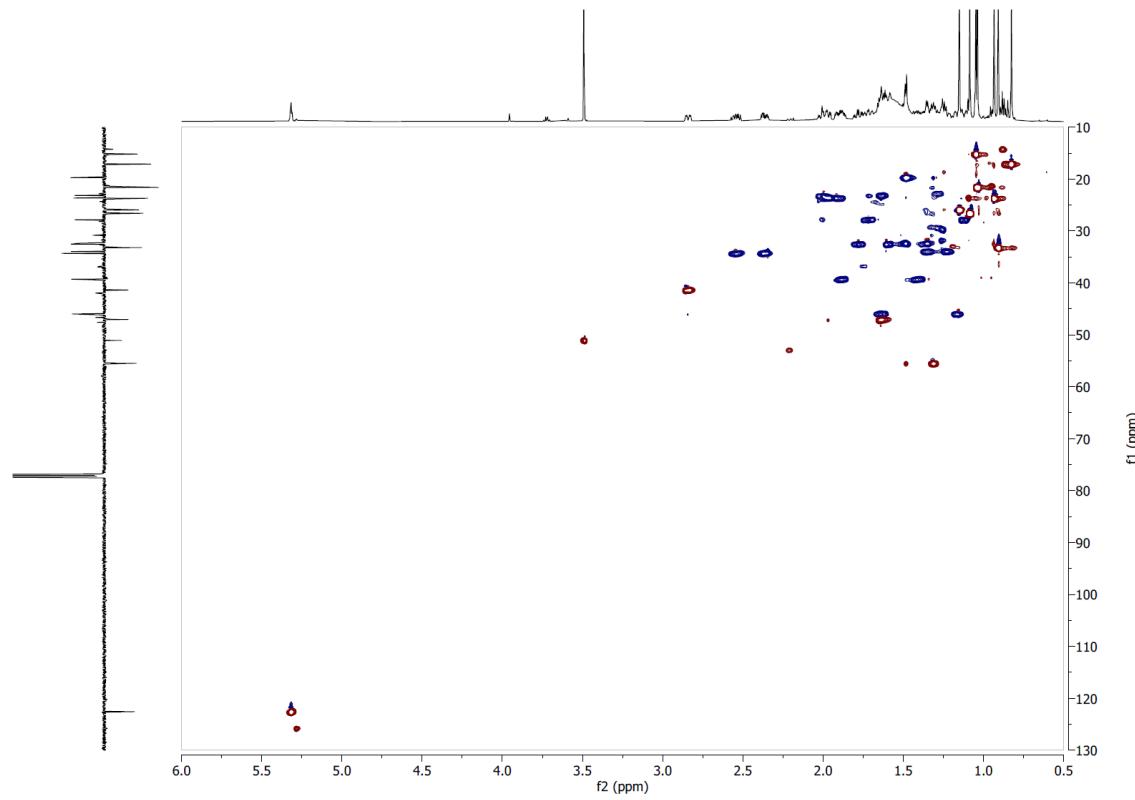
Supplementary Figure S2.2.48. ^1H NMR spectrum of **9** in CDCl_3 at 600 MHz.

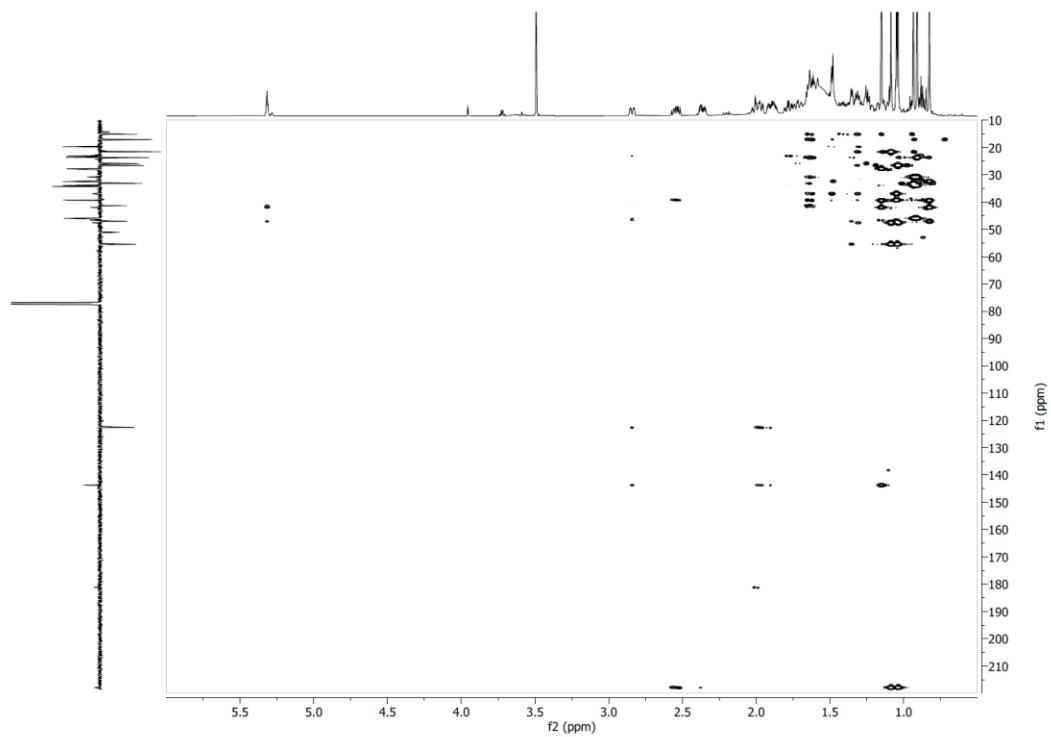


Supplementary Figure S2.2.49. COSY NMR spectrum of **9** in CDCl_3 .

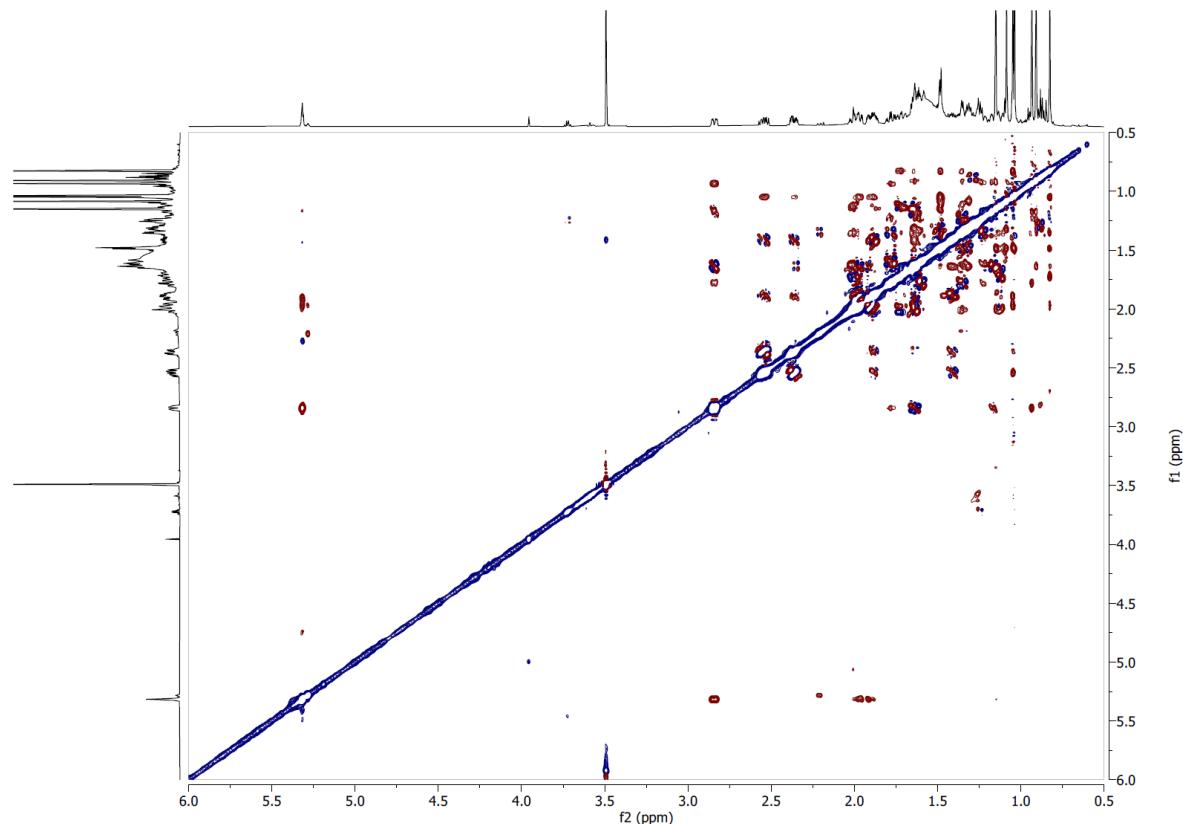


Supplementary Figure S2.2.50. ^{13}C -DEPTQ NMR spectrum of **9** in CDCl_3 at 151 MHz





Supplementary Figure S2.2.52. HMBC NMR spectrum of **9** in CDCl_3 .



Supplementary Figure S2.2.53. ROESY NMR spectrum of **9** in CDCl_3 .