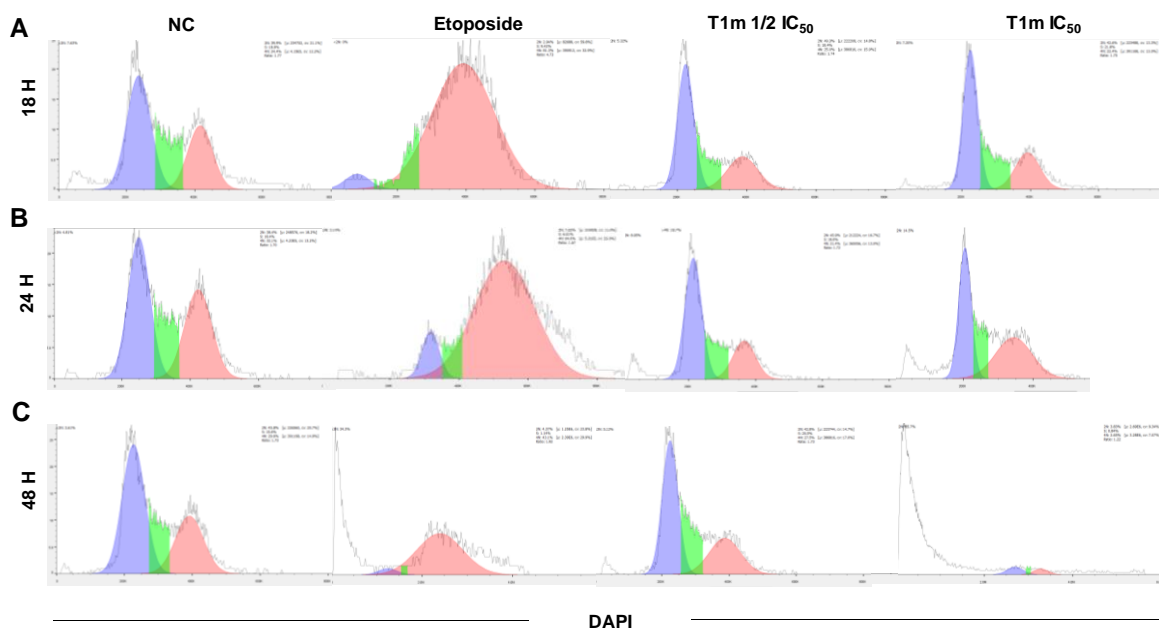
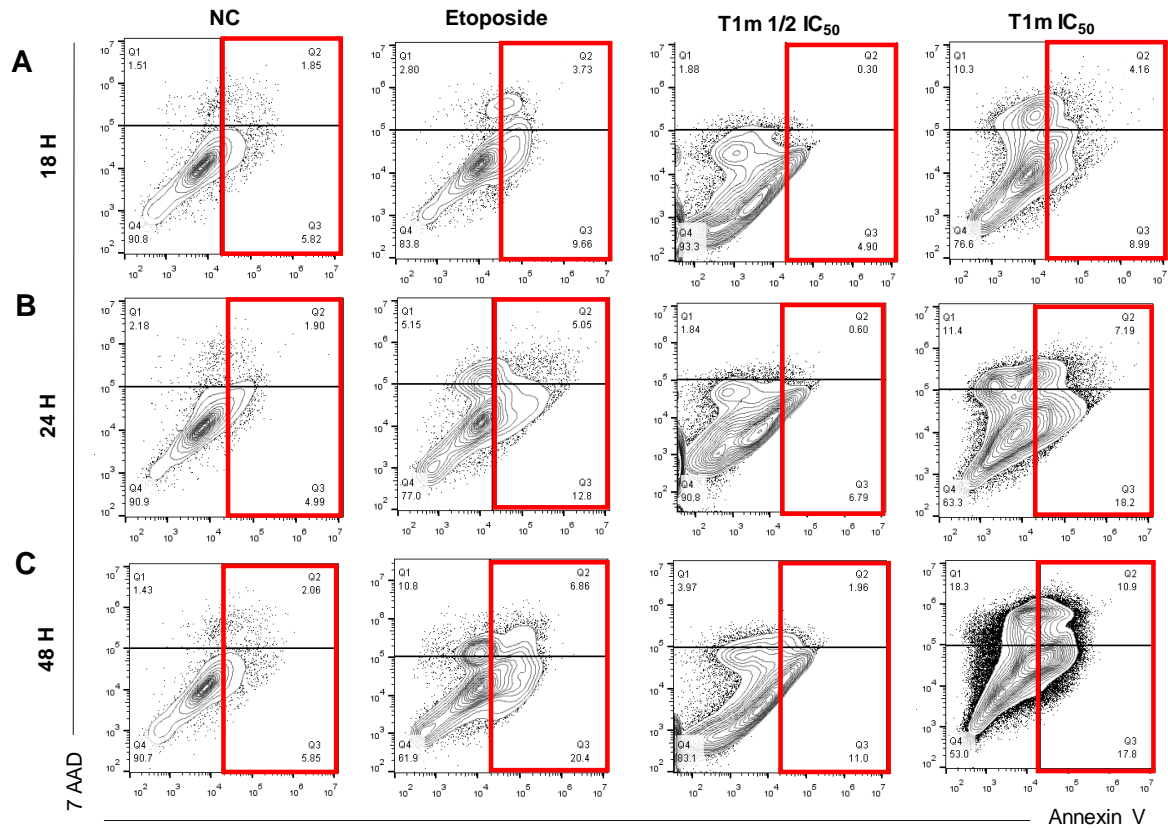


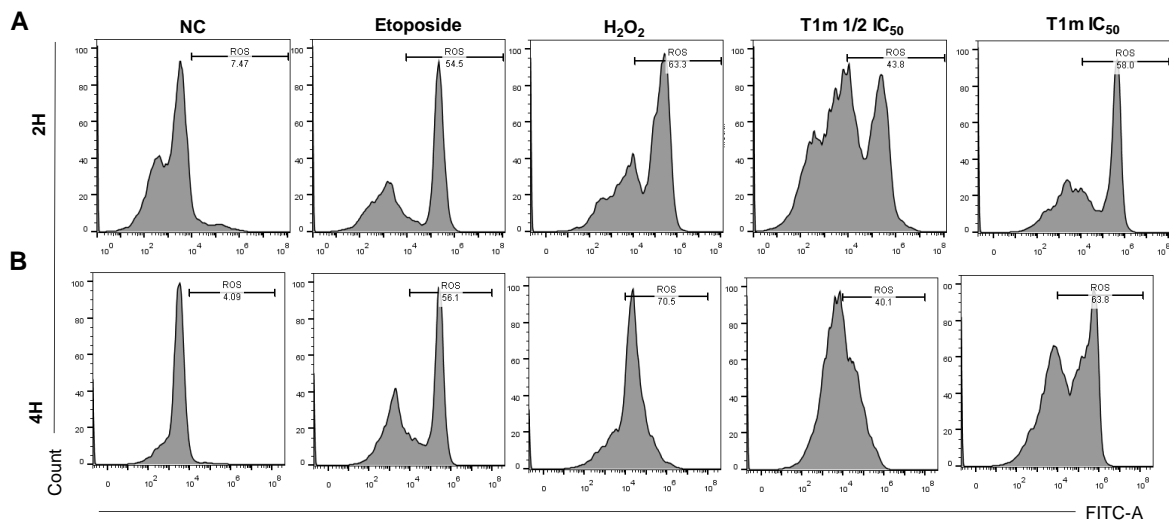
## Mechanism of action on leukemia cell lines of some derivatives of lupane triterpenes isolated from *Phoradendron wattii*



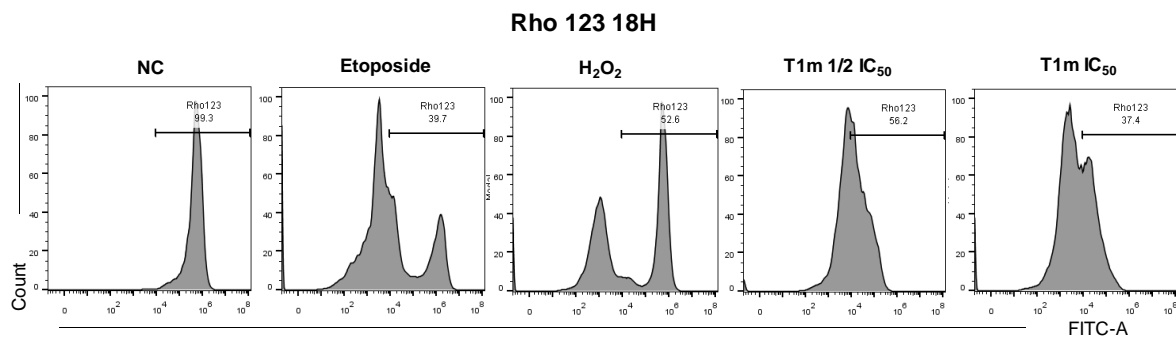
**Figure S1.** Effect of **T1m** on the cell cycle at two different concentrations and different times of culture (A: 18 h, B: 24 h and C: 48 h). Cell cycle status was analyzed by DAPI staining for three replicates, figure show a representative histograms.



**Figure S2.** Effect of **T1m** in cell death apoptosis. K562 cell lines were cultured 18 (A), 24 (B) and 48 h (C) in presence of different concentrations of **T1m**. Apoptotic cell population in red box (positive annexin V-FITC) and necrotic population (single positive 7-AAD).



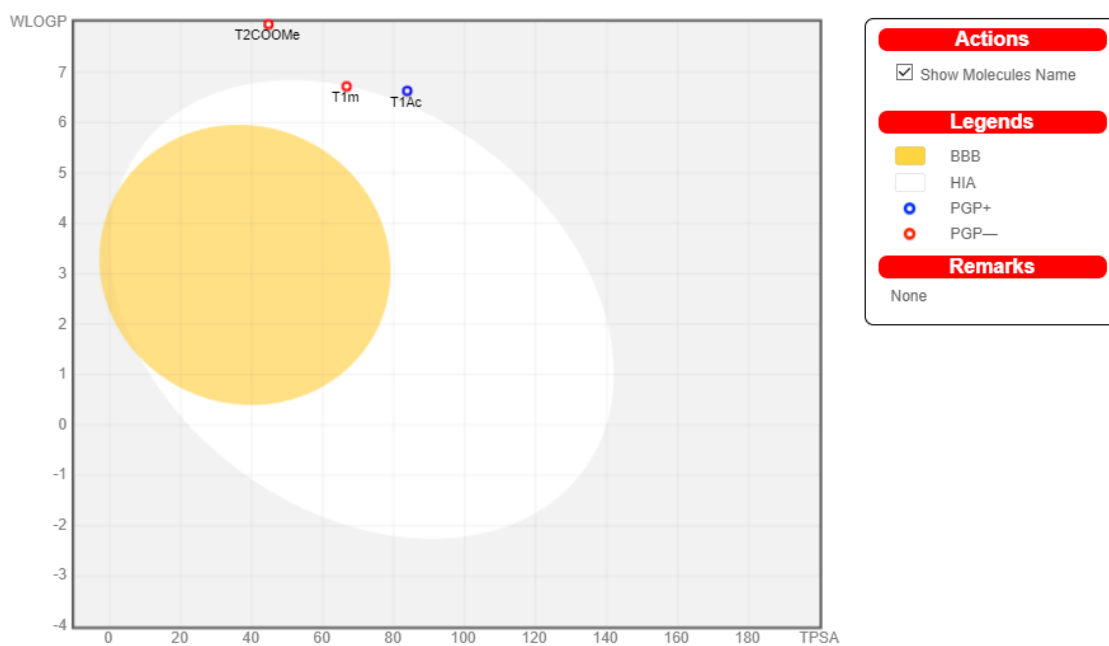
**Figure S3.** Effect of **T1m** on the generation of ROS at two concentrations and two times exposure (A: 2h and B: 4h), using CM-H2DCFDA. The histograms presented correspond to the representation of three different replicas.



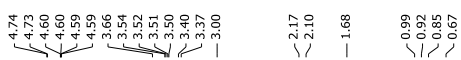
**Figure S4.** Effect of **T1m** on loss of mitochondrial membrane potential ( $\Delta\psi$ M) at two different concentrations and two times of 2h (A) and 4h (B) of exposure, using Rhodamine 123. The histograms presented correspond to the representation of three different replicas.

Hide BOILED-Egg

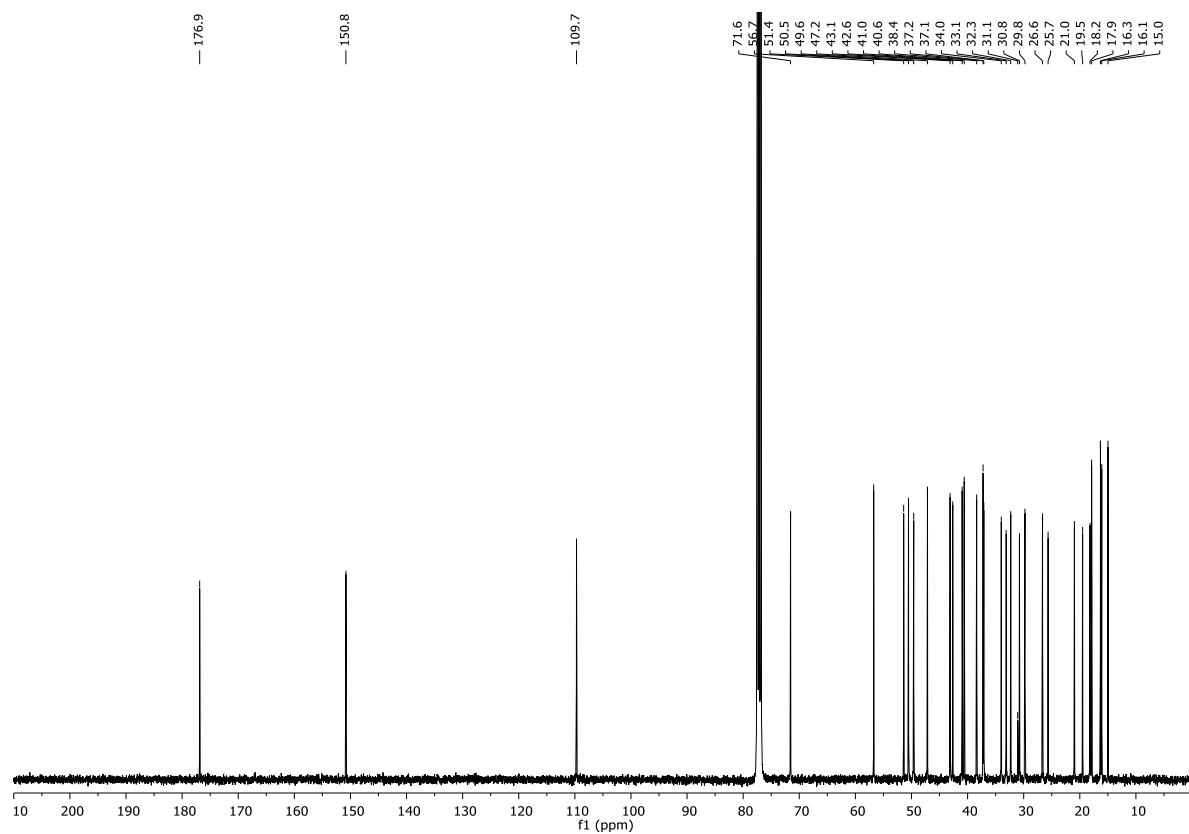
Retrieve data:   POWERED BY  ChemAxon



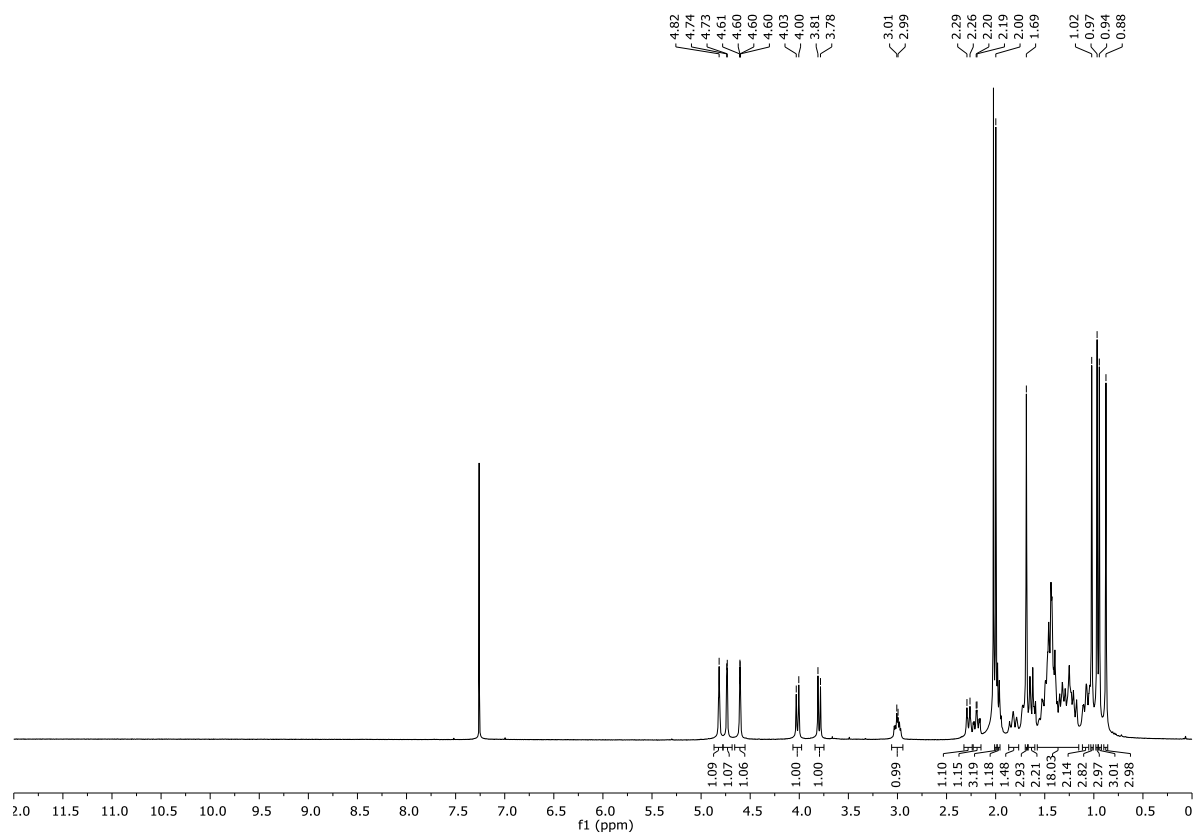
**Figure S5.** Boiled-egg graph from SwissADME prediction for triterpene derivatives. BBB: blood brain barrier, HIA: gastrointestinal absorption, PGP+: substrate of P-glycoprotein, PGP -: non-substrate of P-glycoprotein.



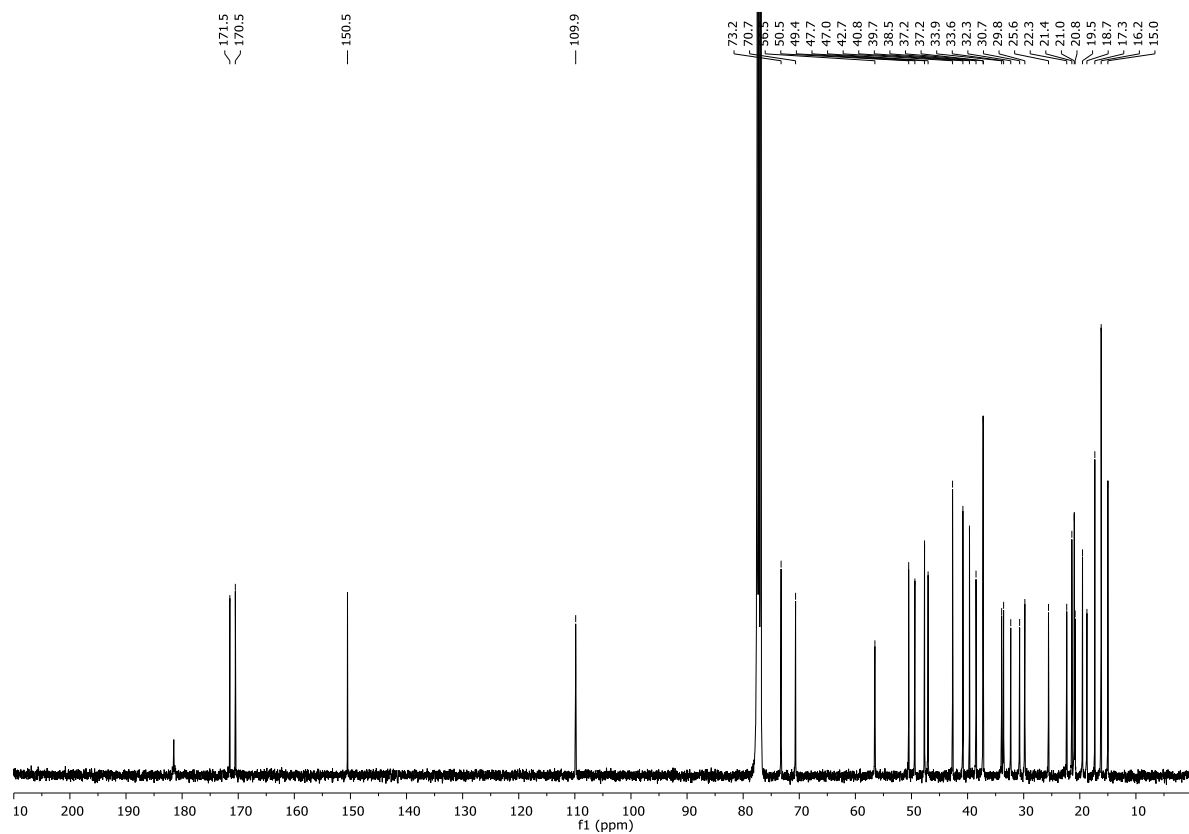
**Figure S6.** <sup>1</sup>H-NMR (400 MHz, CDCl<sub>3</sub>) spectrum of 3α-methoxy-24-hydroxylup-20(29)-en-28-oic acid (**T1m**).



**Figure S7.**  $^{13}\text{C}$ -NMR (100 MHz,  $\text{CDCl}_3$ ) spectrum of 3 $\alpha$ -metoxylup-20(29)-en-28-oic acid (**T1m**).

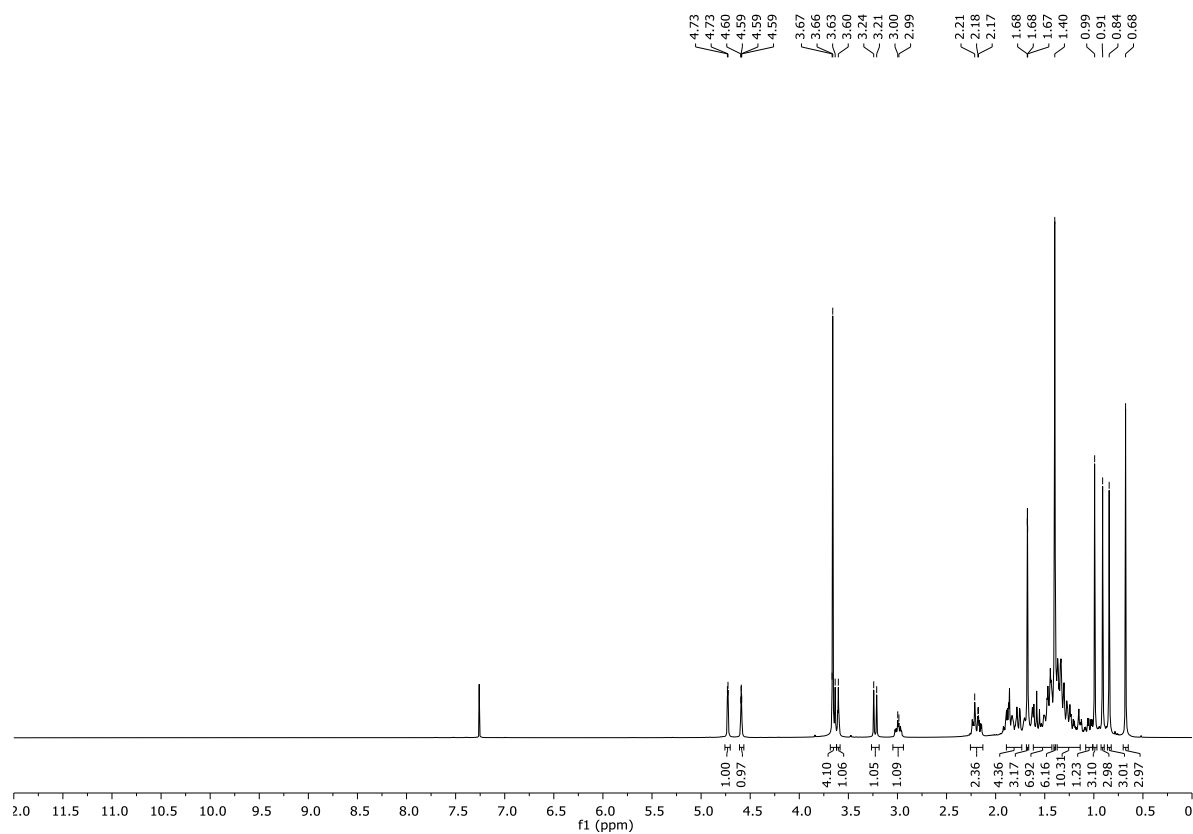


**Figure S8.**  $^1\text{H}$ -NMR (400 MHz,  $\text{CDCl}_3$ ) spectrum of 3 $\alpha$ -acetyl-24-hydroxylup-20(29)-en-28-oic acid (**T1Ac**).

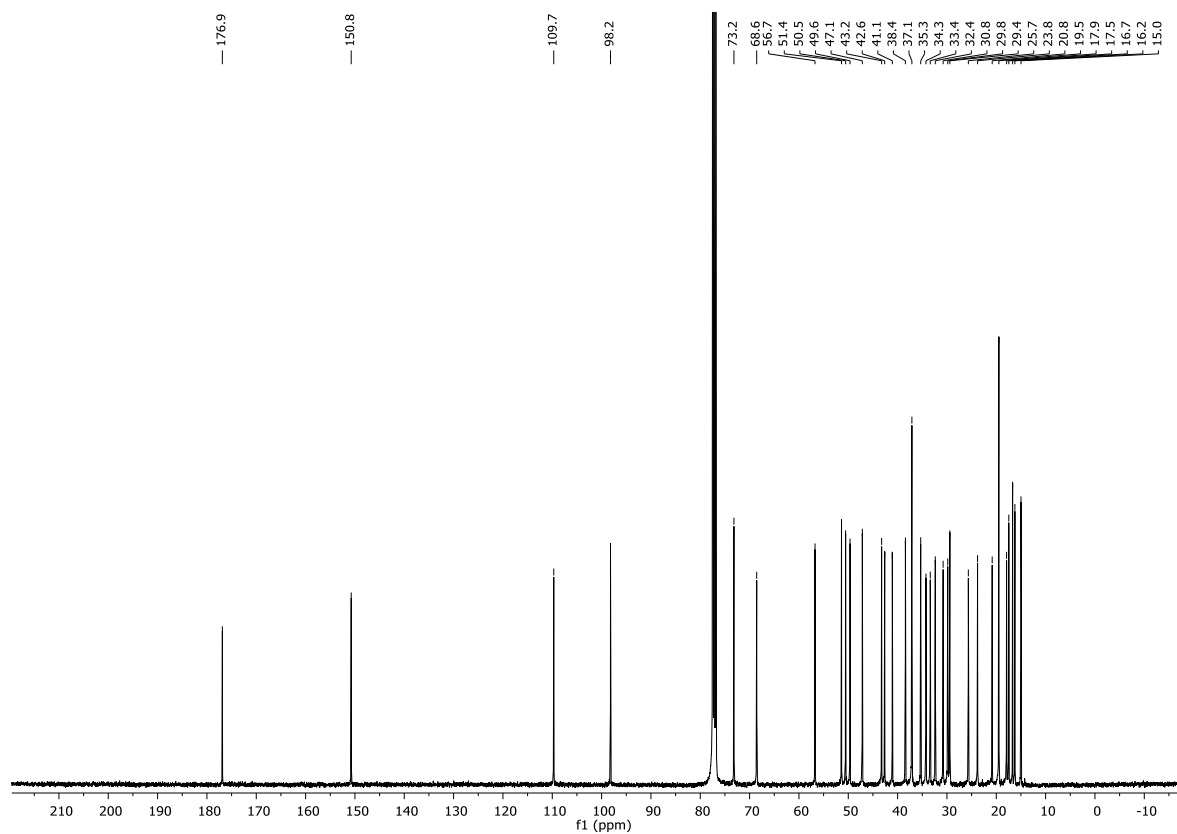


**Figure S9.**  $^{13}\text{C}$ -NMR (100 MHz,  $\text{CDCl}_3$ ) spectrum of 3 $\alpha$ -acetyl-24-hydroxylup-20(29)-en-28-oic acid (**T1Ac**).





**Figure S10.**  $^1\text{H}$ -NMR (400 MHz,  $\text{CDCl}_3$ ) spectrum of methyl ester of 3 $\alpha$ ,23-O-isopropylidenlup-3 $\alpha$ ,23-dihydroxylup-20(29)-en-28-oic acid (T2m).



**Figure S11.**  $^{13}\text{C}$ -NMR (100 MHz,  $\text{CDCl}_3$ ) spectrum of methyl ester of 3 $\alpha$ ,23-O-isopropylidenyl-3 $\alpha$ ,23-dihydroxylup-20(29)-en-28-oic acid (T2m).