

Supplementary Information

Phytochemical analysis and *in vitro* antiproliferative activity of *Viscum album* ethanolic extracts

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V. album mother tinctures analysis by LC-HRMS/MS was performed using a phase-reverse C18 column (Hypersil Gold 100 mm x 2.1 mm; 3.0 µm particle size; Thermo Fisher Scientific). Mobile phase was: water-formic acid 0.1% v/v (A) and acetonitrile-formic acid 0.1% v/v (B). The elution gradient was: (i) 0-1 min, 10% B; (ii) 1-16 min, 10-95% B; (iii) 16-18 min, 95% B; (iv) 18-18.1 min, 95-10% B; (v) 18.1-22 min 10% B at a flow rate of 350 µL/min and injection volume of 5 µL. Mass spectra were acquired in full scan mode in positive and negative-ESI over a range of *m/z* 100-1000 and resolution of 35.000 k followed by MS/MS fragmentation analysis (DDA ddMS2 top 3). Data were acquired and processed on the Xcalibur v.2.0.7 (Thermo Scientific, Bremen, Germany).

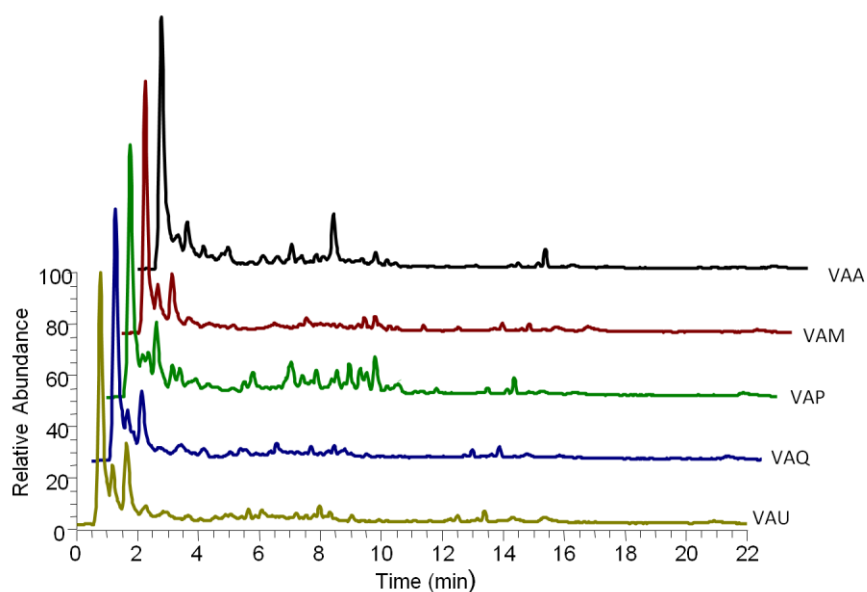


Figure S1. Total ion chromatogram (TIC) in negative electrospray ionization mode of the *Viscum album* mother tinctures analyzed by LC-HRMS. The abbreviations used are: *V. album* ssp. *album* growing on *Malus domestica* (VAM), *Quercus robur* (VAQ) and *Ulmus carpinifolia* (VAU); *V. album* ssp. *abietis* from *Abies alba* (VAA); *V. album* ssp. *austriacum* from *Pinus sylvestris* (VAP).

a) Precursor ion 191.05585 [M-H]⁻ (compound 1)

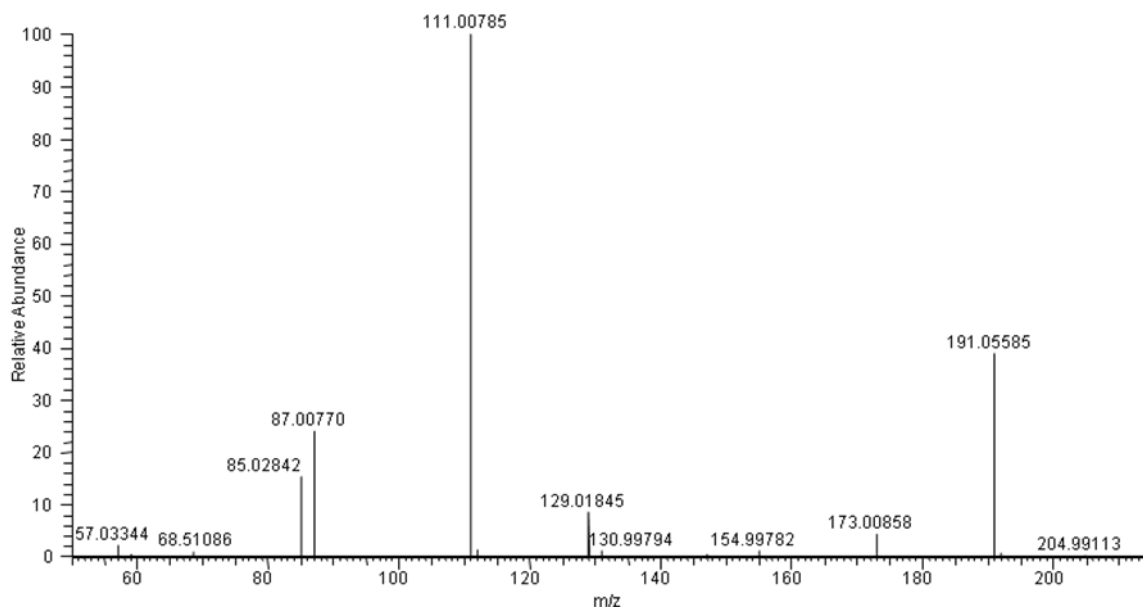


Figure S2: Mass fragmentation spectra obtained by LC-HRMS/MS of 191.05585 [M-H]⁻ putatively identified in *V. album* mother tinctures.

b) Precursor ion 353.08908 [M-H]⁻ (compounds 2, 3 and 4)

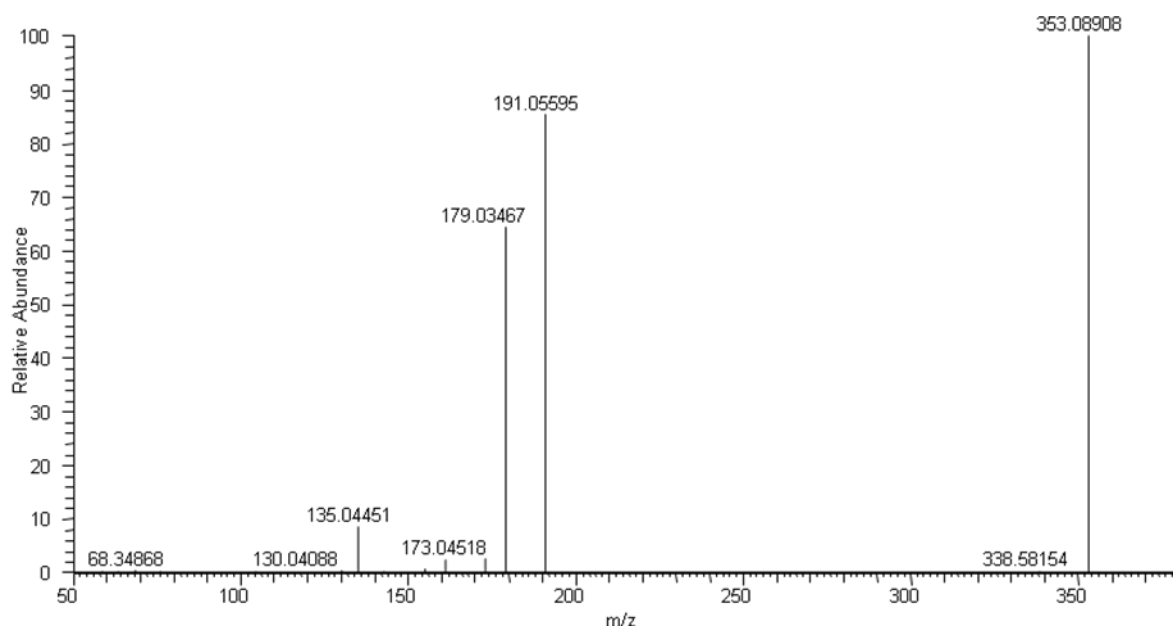


Figure S3: Mass fragmentation spectra obtained by LC-HRMS/MS of 353.08908 [M-H]⁻ putatively identified in *V. album* mother tinctures.

c) Precursor ion 625.14038 [M-H]⁻ (compound 5)

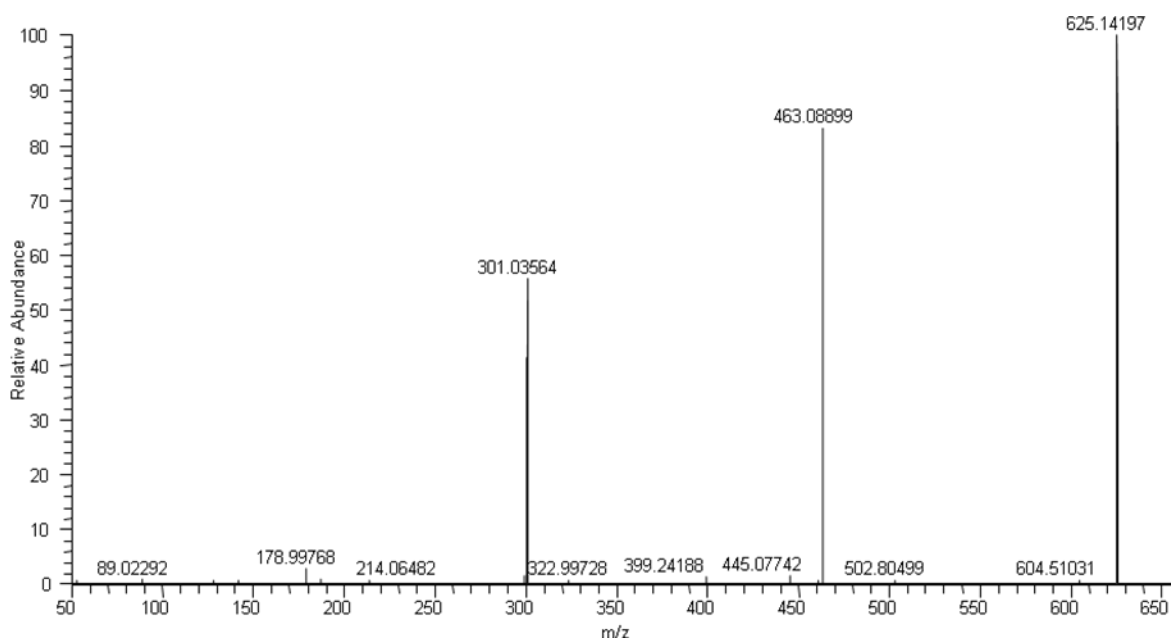


Figure S4: Mass fragmentation spectra obtained by LC-HRMS/MS of 625.14038 [M-H]⁻ putatively identified in *V. album* mother tinctures.

d) Precursor ion 65.15607 [M-H]⁻ (compound 6)

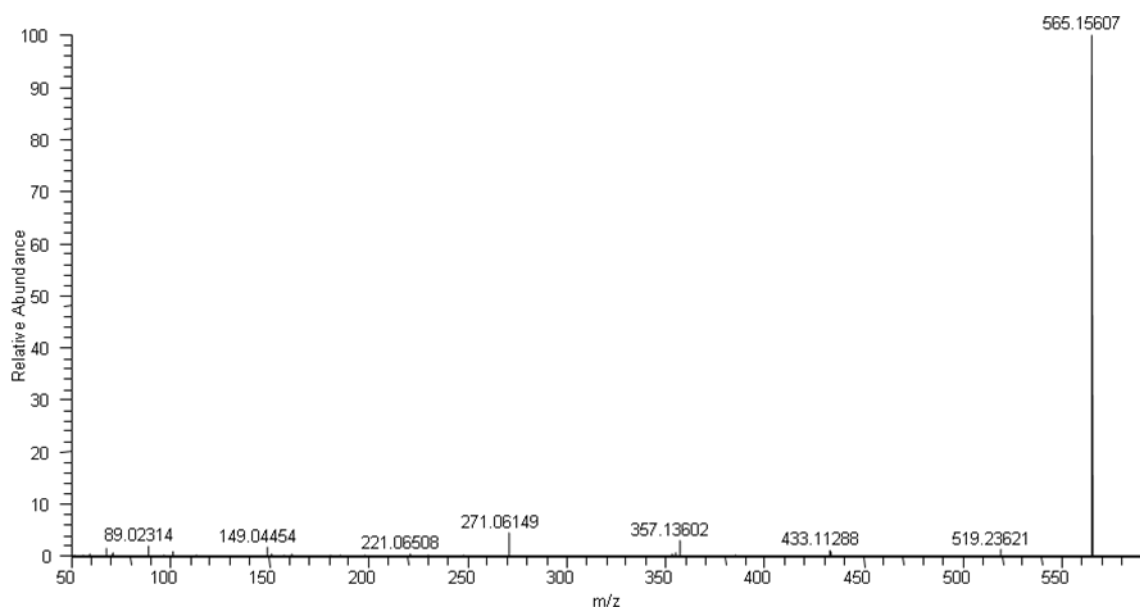


Figure S5: Mass fragmentation spectra obtained by LC-HRMS/MS of 565.15607 [M-H]⁻ putatively identified in *V. album* mother tinctures.

e) Precursor ion 581.22498 [M-H]⁻ (compound 7)

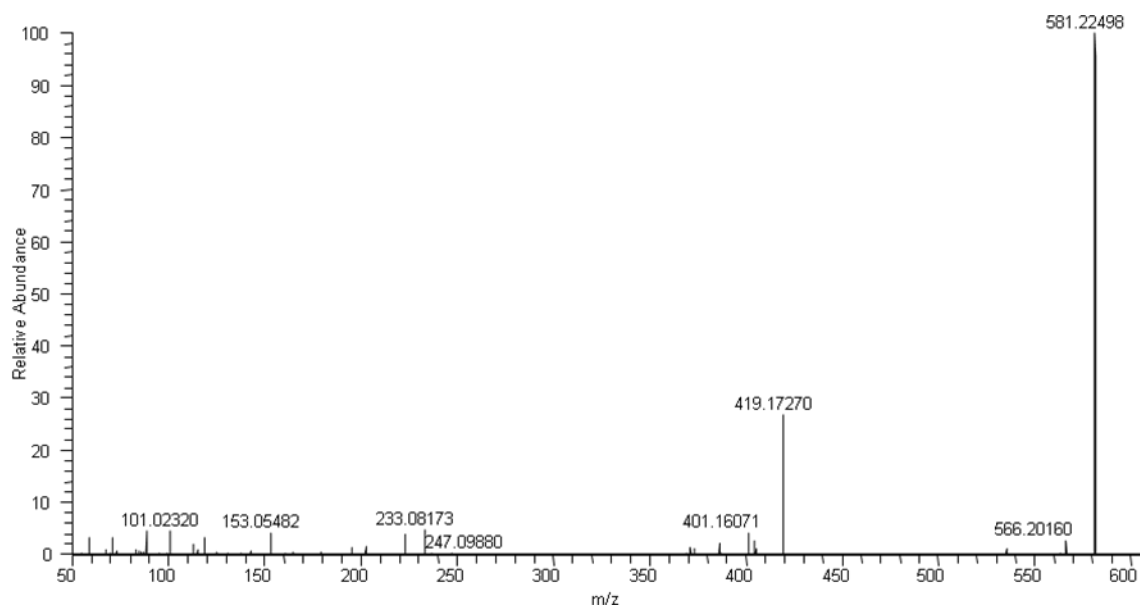


Figure S6: Mass fragmentation spectra obtained by LC-HRMS/MS of 581.22498 [M-H]⁻ putatively identified in *V. album* mother tinctures.