

Supplementary materials 1

Characterization of the Phytochemical Composition and Bioactivities of *Anacyclus maroccanus* Ball. and *Anacyclus radiatus* Loisel Aerial Parts: Preliminary Evidence for the Possible Development of Moroccan Plants

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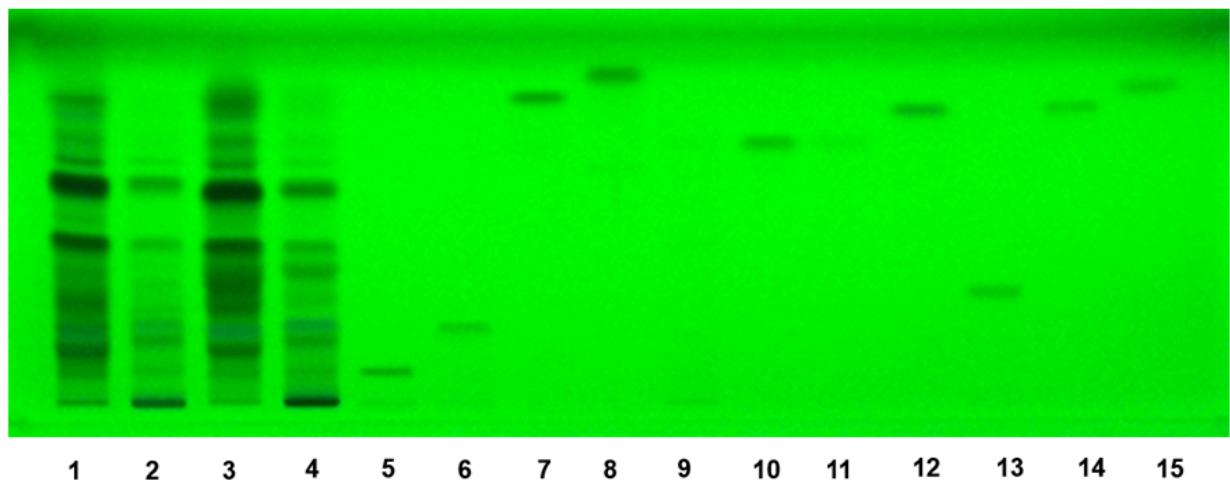
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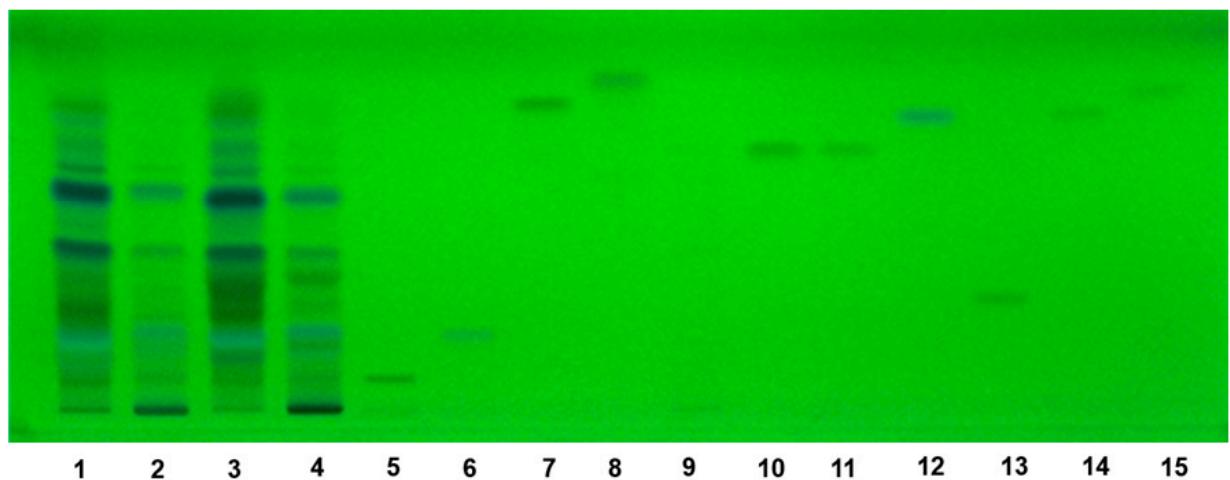
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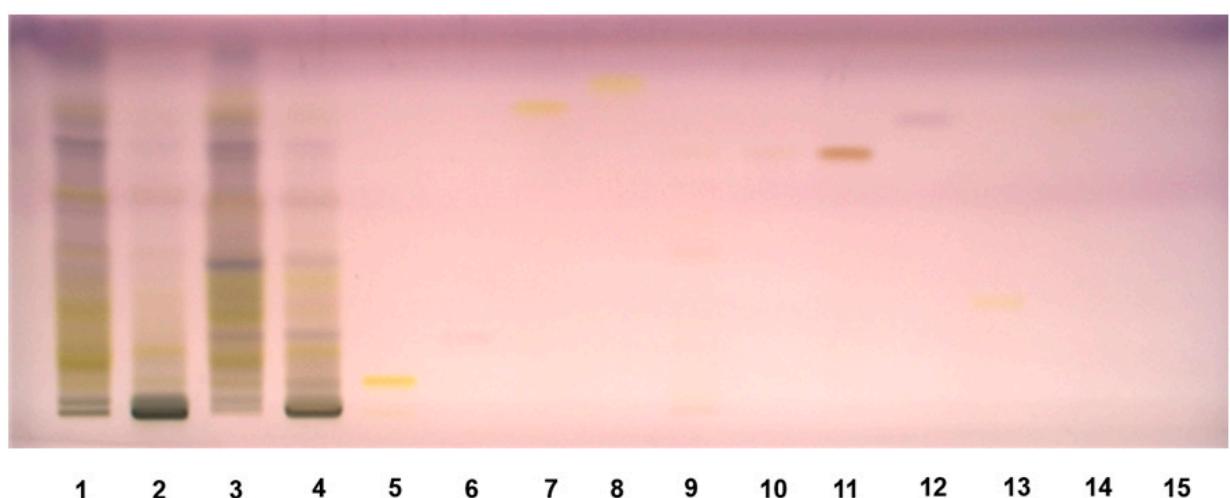
(a)



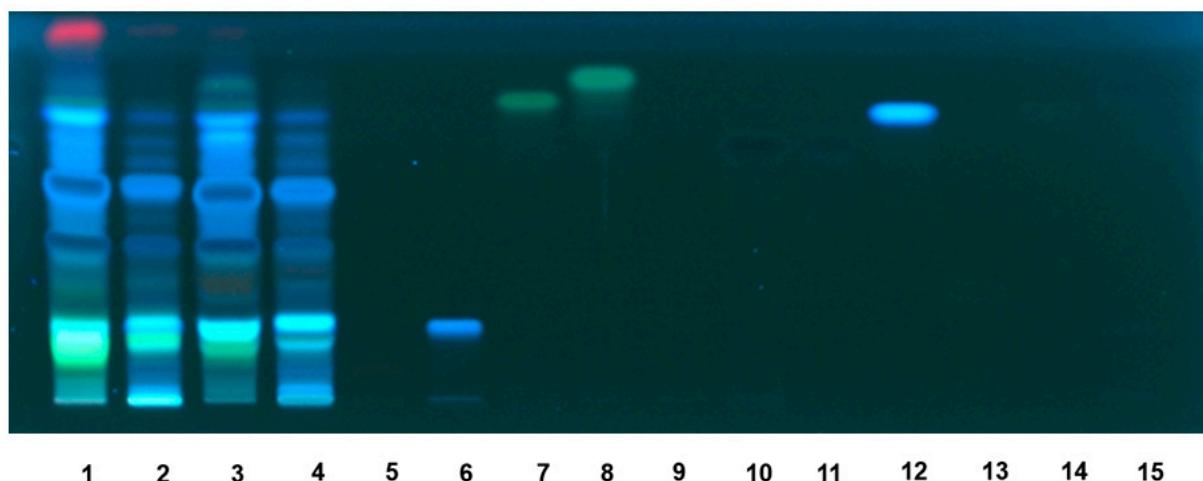
(b)



(c)



(d)



(e)

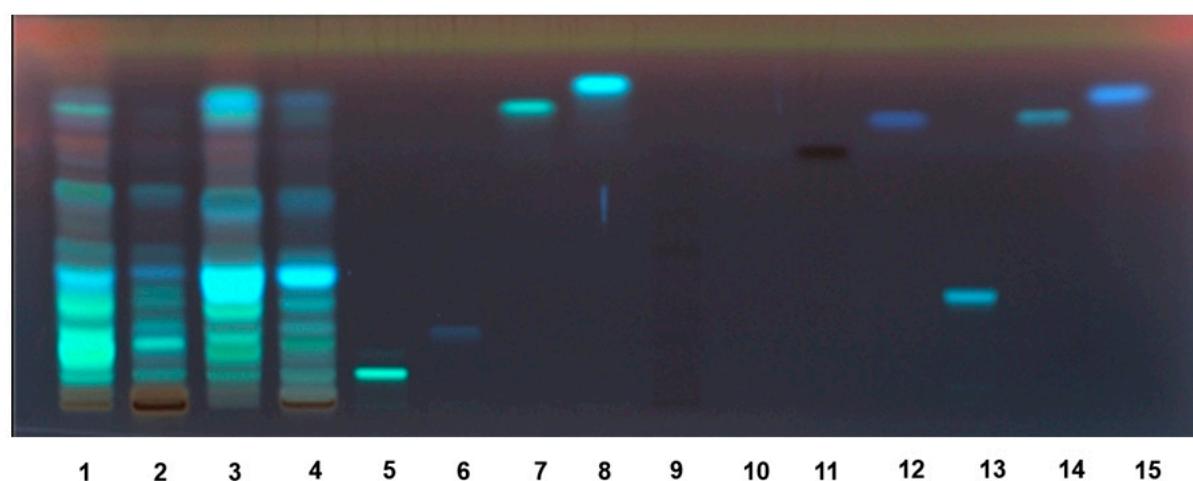
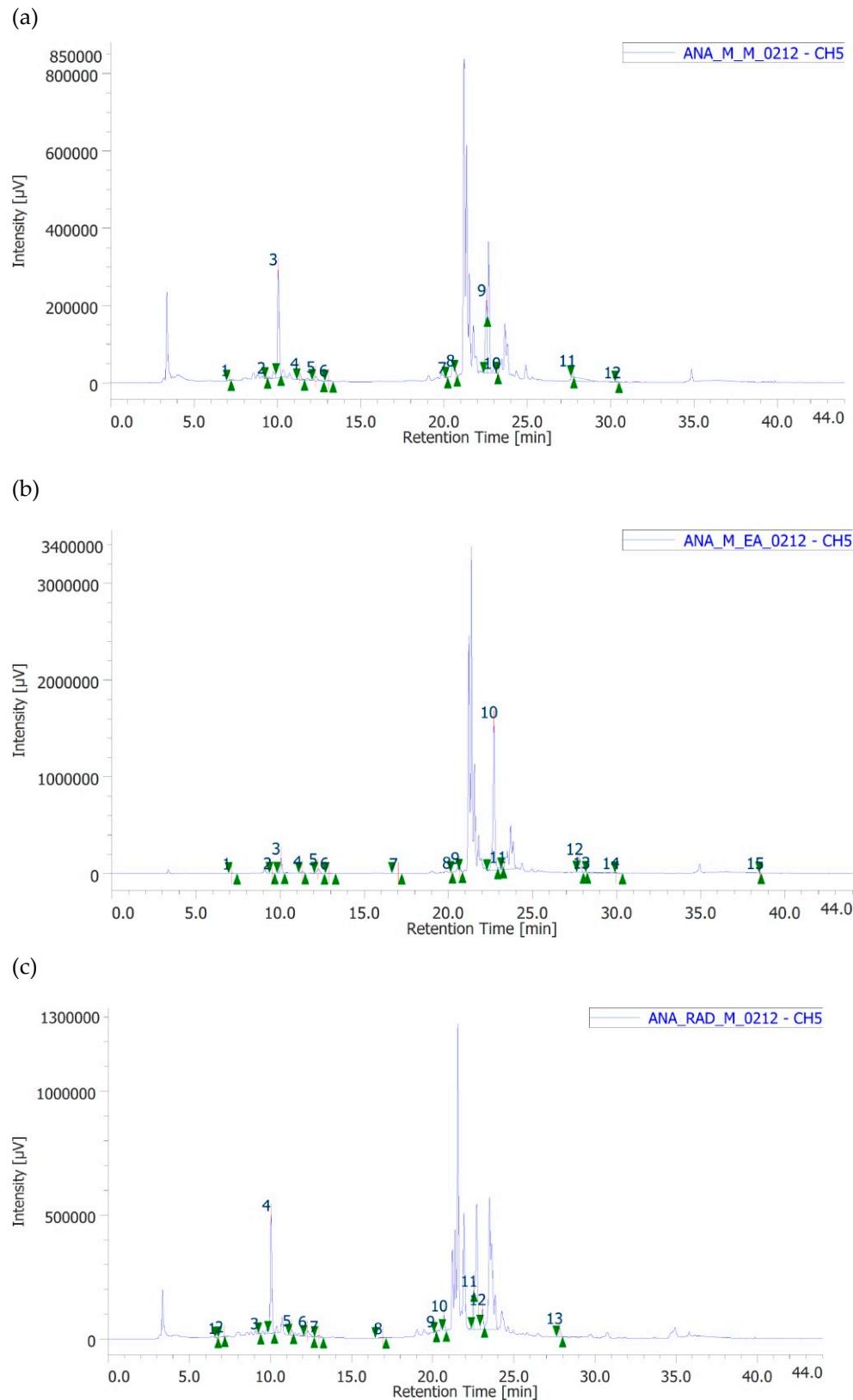


Figure S1. High-performance thin-layer chromatography (HPTLC) analysis of *Anacyclus maroccanus* Ball (AM) and *Anacyclus radiatus* Loisel (AR) extracts. HPTLC silica gel 60 glass-backed layers were developed using the solvent mixture ethyl acetate:dichloromethane:acetic acid:formic acid:water (100:25:10:10:11 v/v/v/v/v) and derivatized by Natural Product Reagent (NPR) and/or anisaldehyde. (a) Visualization at 254 nm. (b) Visualization at 254 nm after Natural Product Reagent (NPR) derivatization. (c) Visualization under white light after NPR and anisaldehyde derivatization (d) Visualization at 366 nm without derivatization. (e) Visualization at 366 nm after Natural Product Reagent (NPR) derivatization. The chromatograms correspond to 1. AM ethyl acetate extract; 2. AM methanolic extract; 3. AR ethyl acetate extract; 4. AR methanolic extract; 5. rutin; 6. chlorogenic acid; 7. quercetin; 8. kampferol; 9. epigallocatechin; 10. gallic acid; 11. catechin; 12. caffeic acid; 13. luteolin 7-O-glucoside; 14. luteolin; 15. apigenin.



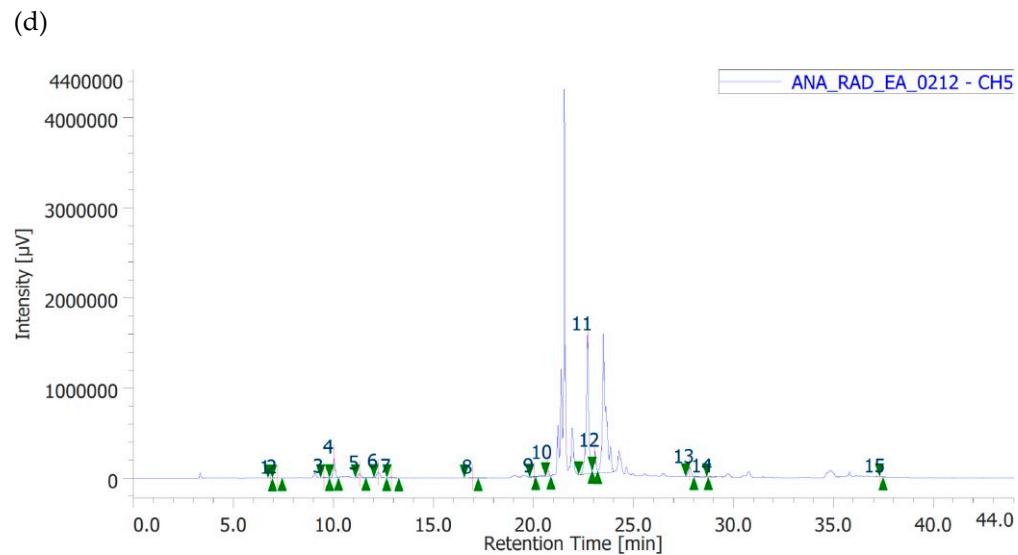
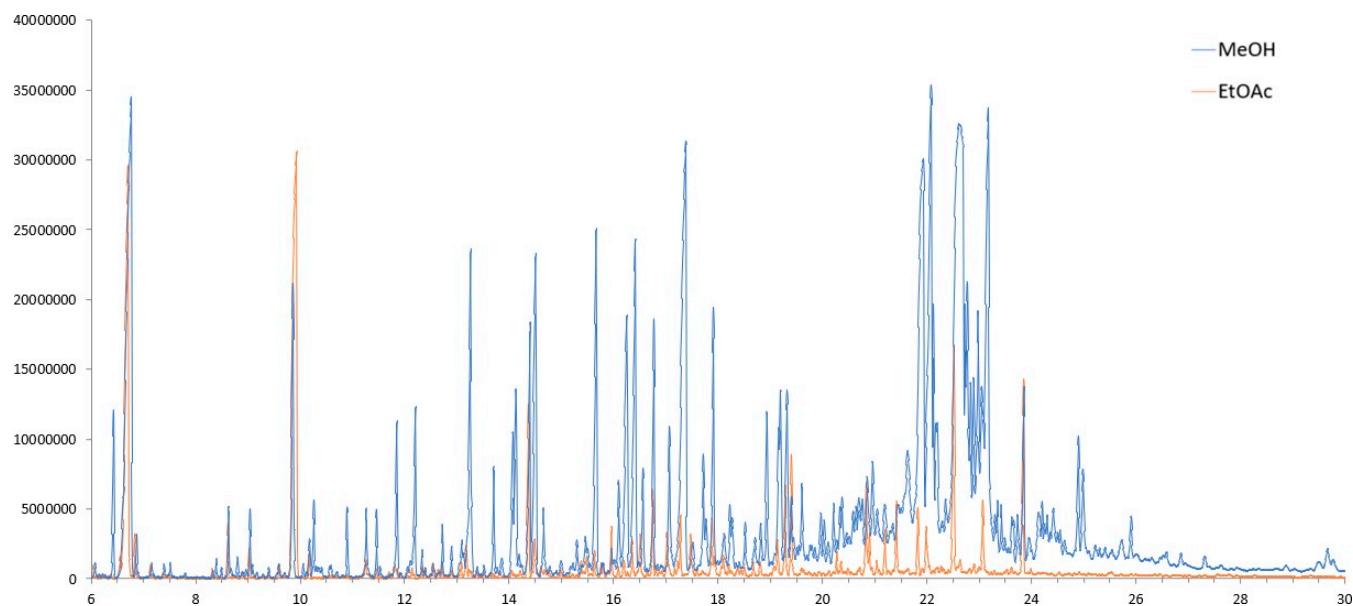


Figure S2. HPLC-DAD chromatograms of *Anacyclus maroccanus* Ball (AM) and *Anacyclus radiatus* Loisel (AR) extracts. (a) AM methanolic extract (b) AM ethyl acetate extract (c) AR methanolic extract (d) AR ethyl acetate extract.

(a)



(b)

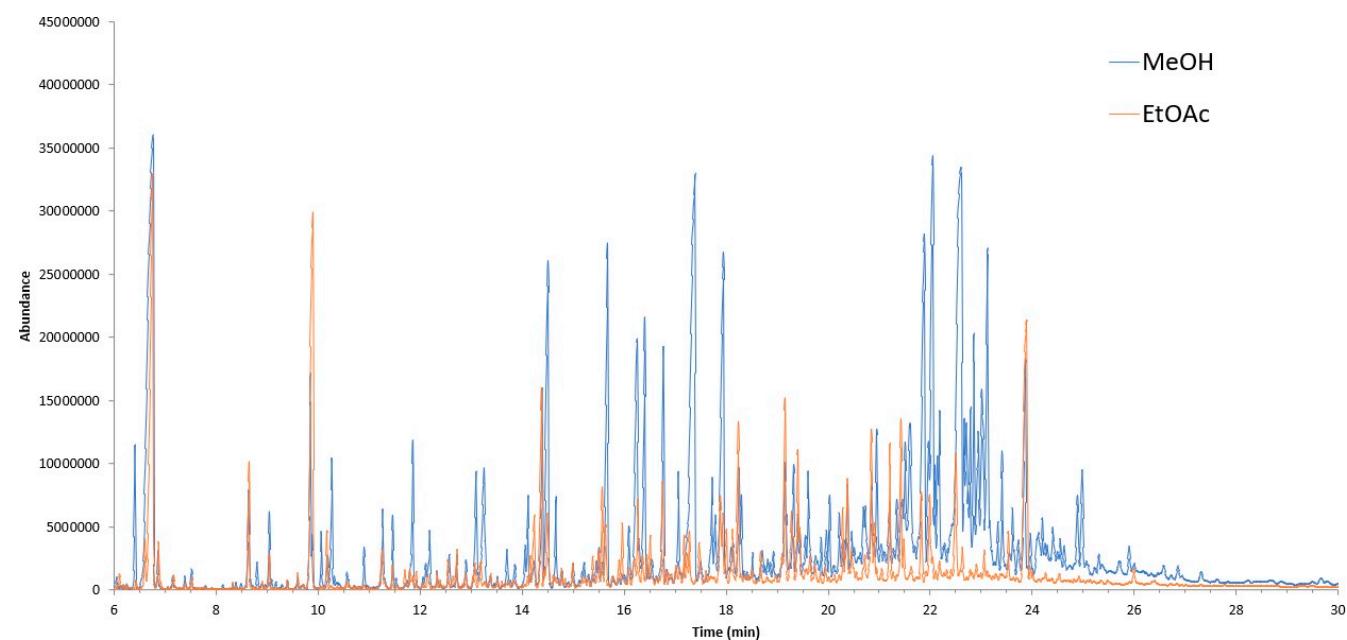


Figure S3. GC-MS chromatograms of *Anacyclus maroccanus* Ball (AM) and *Anacyclus radiatus* Loisel (AR) extracts. (a) AM methanolic and ethyl acetate extracts (b) AR methanolic and ethyl acetate extracts.

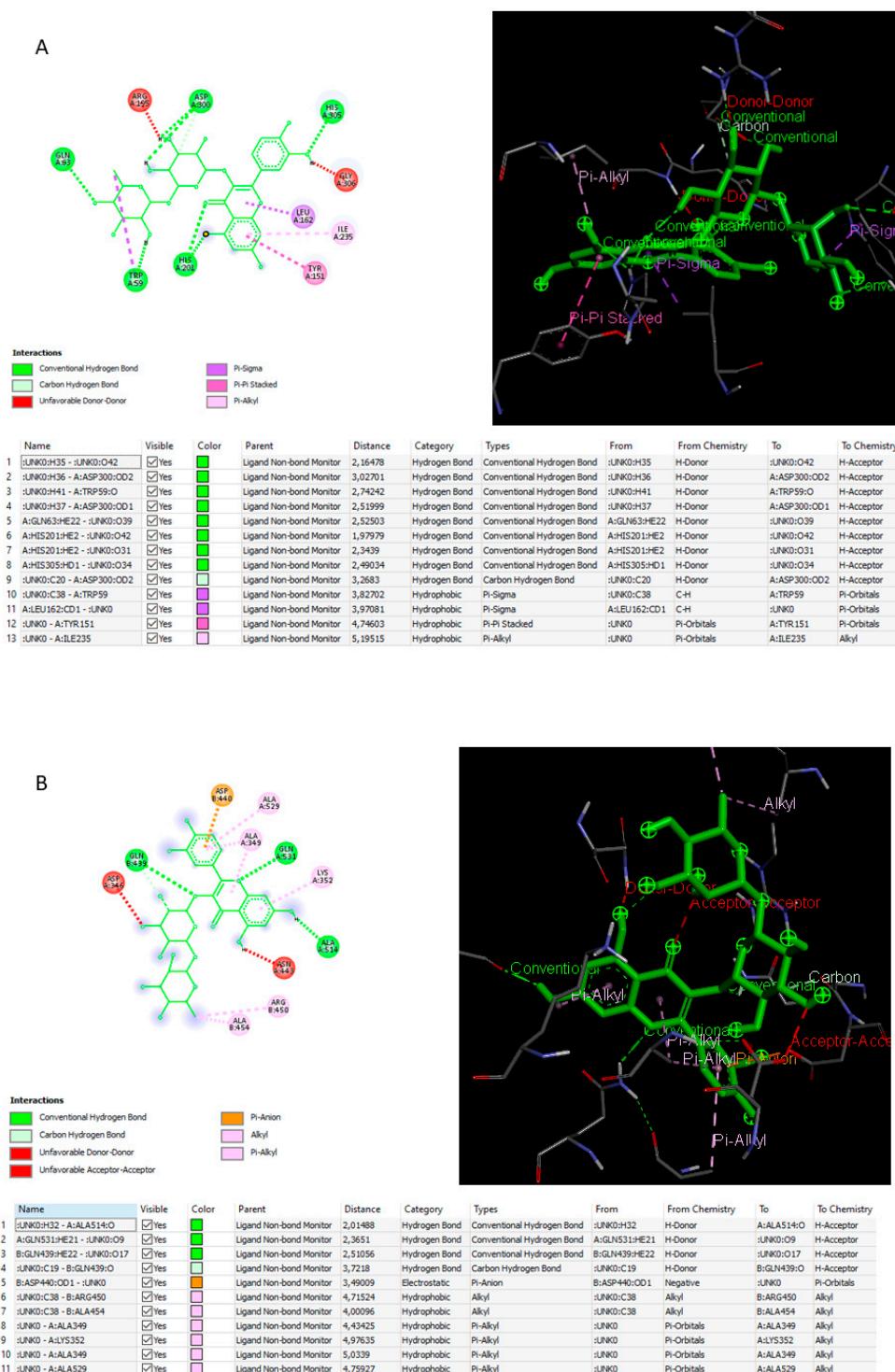


Figure S4. (A) Putative interactions between rutin and α -amylase (PDB: 1B2Y). Free energy of binding (ΔG) and affinity (K_i) are -9.3 kcal/mol and 180 nM, respectively. (B) Putative interactions between rutin and α -glucosidase (PDB: 1B2Y). Free energy of binding (ΔG) and affinity (K_i) are -10.3 kcal/mol and 29 nM, respectively.