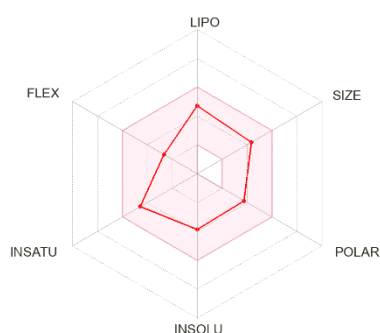


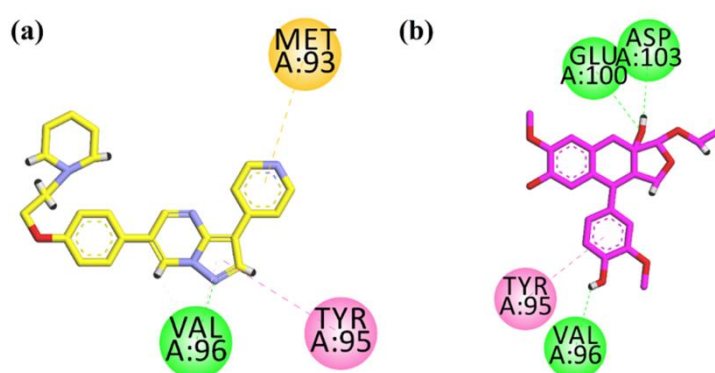
# Supporting Information

## Anti-inflammatory and Anti-diabetic Activity of Ferruginan, a Natural Compound from *Olea ferruginea*

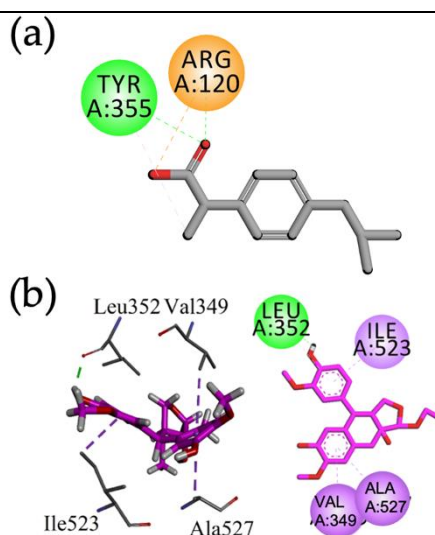
Abdur Rauf, Umer Rashid, Zafar Ali Shah, Gauhar Rehman, Kashif Bashir, Johar Jamil, Iftikhar, Abdur Rahman, Abdulrahman Alsahammari, Metab Alharbi, Abdulmajeed Al-Shahrani, Giovanni Ribaudo



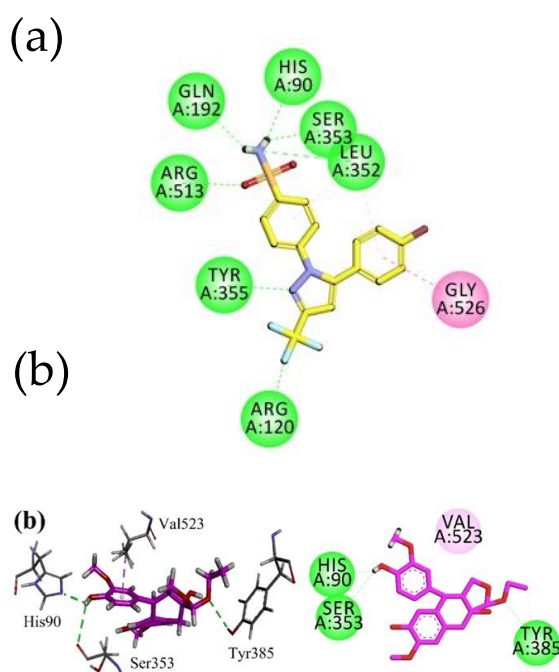
**Figure S1.** Radar graph representing the predicted physico-chemical properties for ferruginan. The ideal chemical space in terms of lipophilicity, size, polarity, solubility, degree of instauration and flexibility for a drug-like compound is depicted in light red.



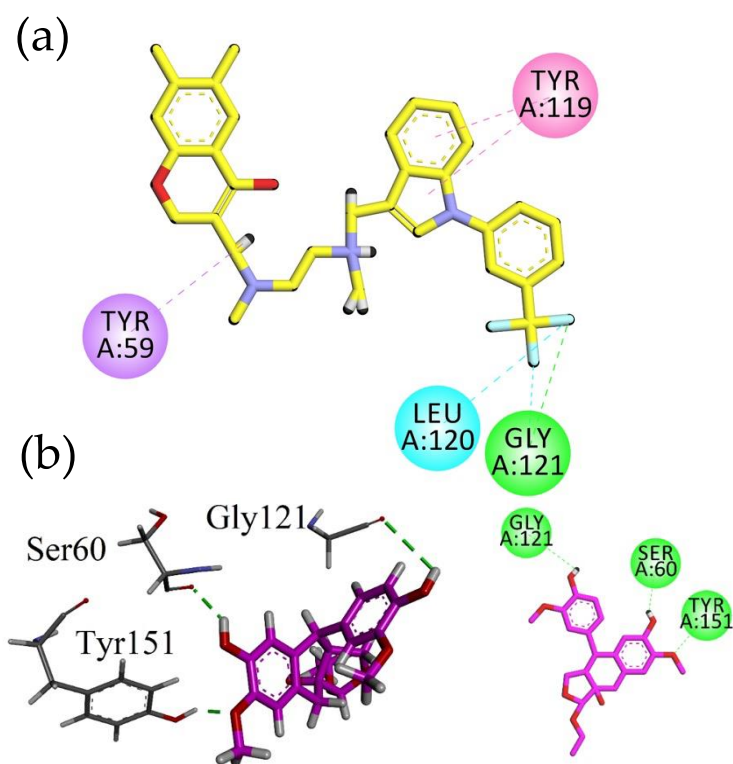
**Figure S2.** Comparison of the interaction pattern of native ligand (a) and docked ferruginan (b) in AMPK.



**Figure S3.** Interaction pattern of native ligand (a) and docked ferruginan (comparison between 3D and 2D model, b) in COX-1.



**Figure S4.** Interaction pattern of native ligand (a) and docked ferruginan (comparison between 3D and 2D model, b) in COX-2.



**Figure S5.** Interaction pattern of native ligand (a) and docked ferruginan (comparison between 3D and 2D model, b) in TNF- $\alpha$ .