

Molecular interaction studies on ellagic acid for its anticancer potential targeting pyruvate dehydrogenase kinase 3

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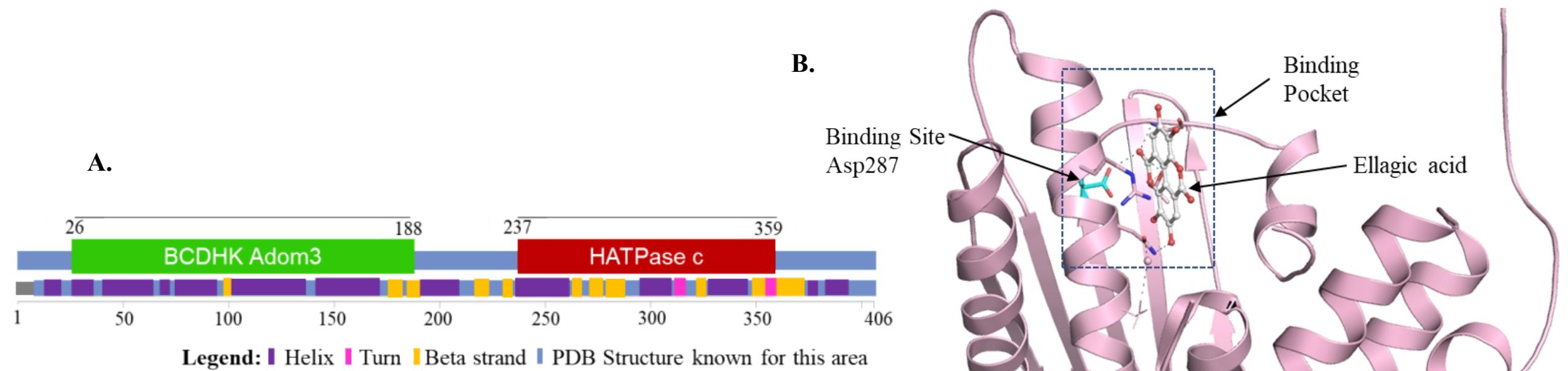


Figure S1: Structural representation of PDK3 (A). Schematic representation of domain organization of PDK3 with secondary structural features. **(B).** Cartoon representation of PDK3 with ATP-binding cavity present at the C-terminal region.

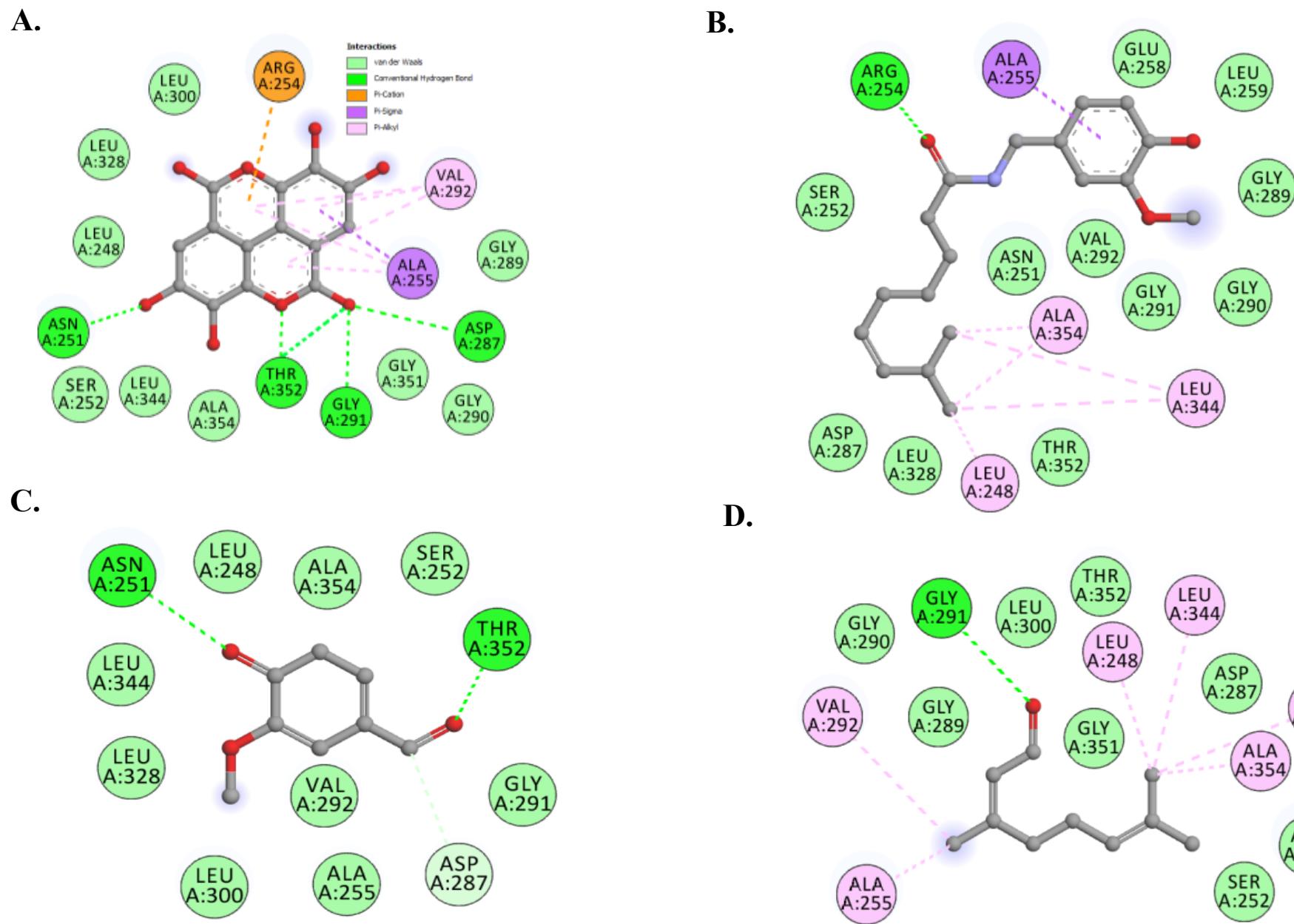
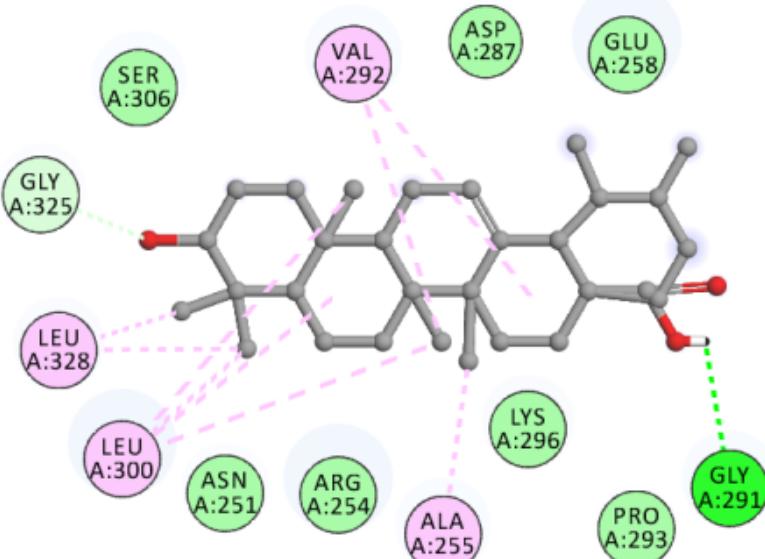
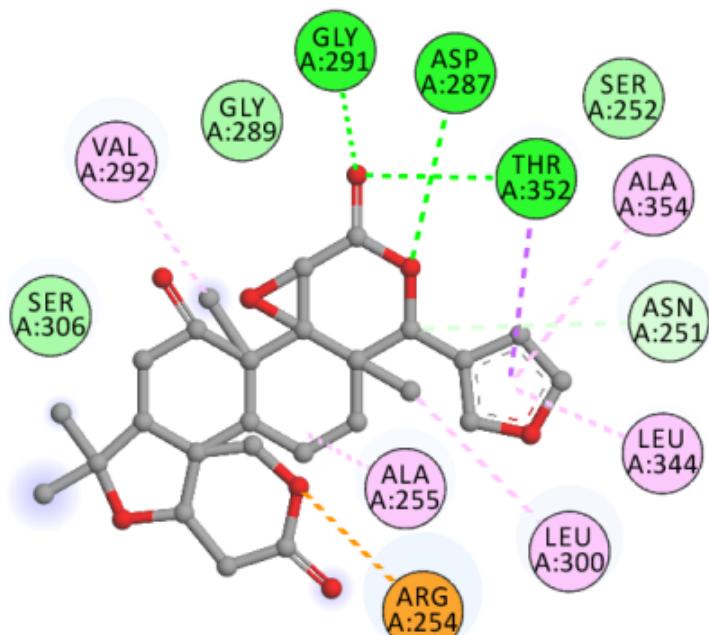


Figure S2: 2D representation of PDK3 residues interacting to (A) Ellagic Acid (B) Capsaicin (C) Vanillin (D) Citral

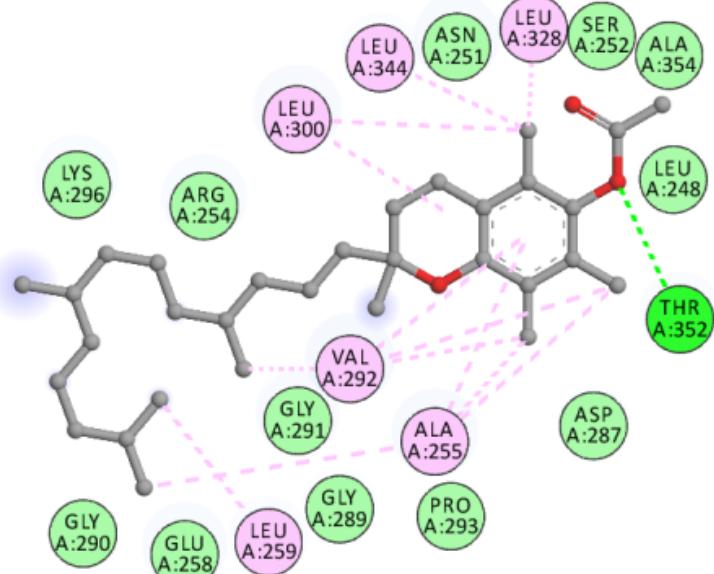
A.



B.



C.



D.

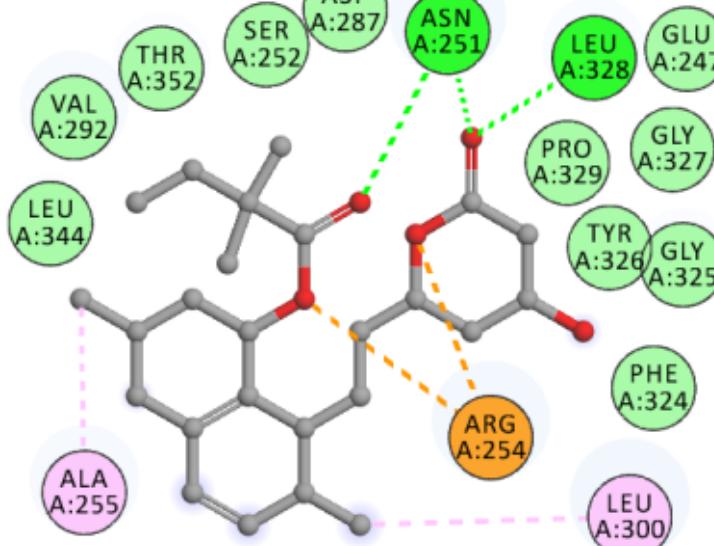


Figure S3: 2D representation of PDK3 residues interacting to (A) Ursolic Acid (B) Limonin (C) DL- α tocopherol acetate (D) Simvastatin.

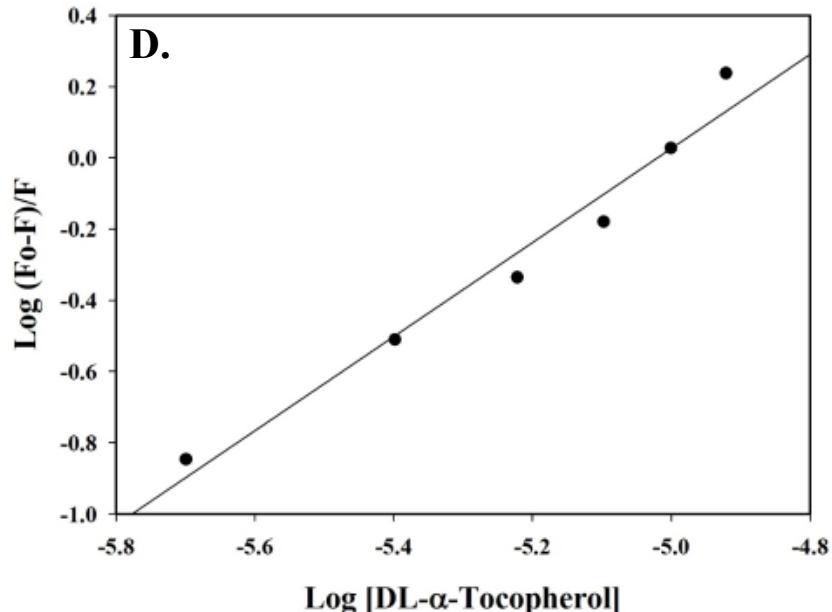
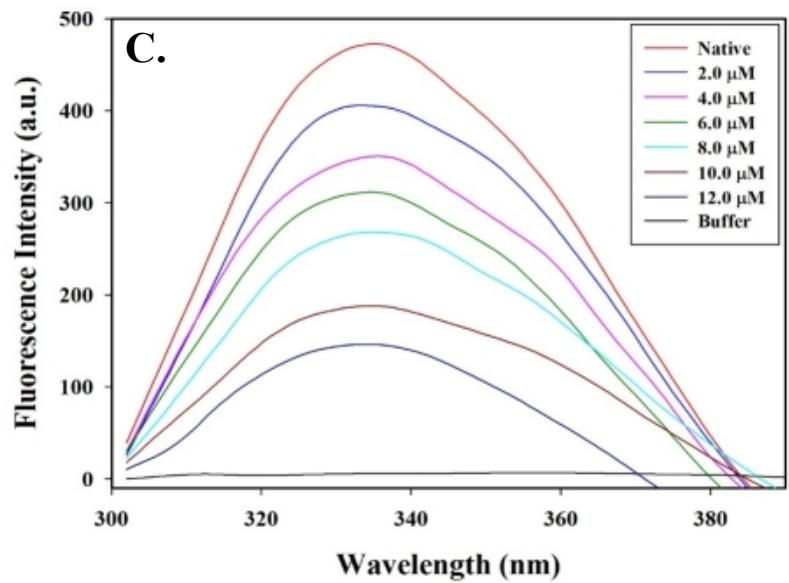
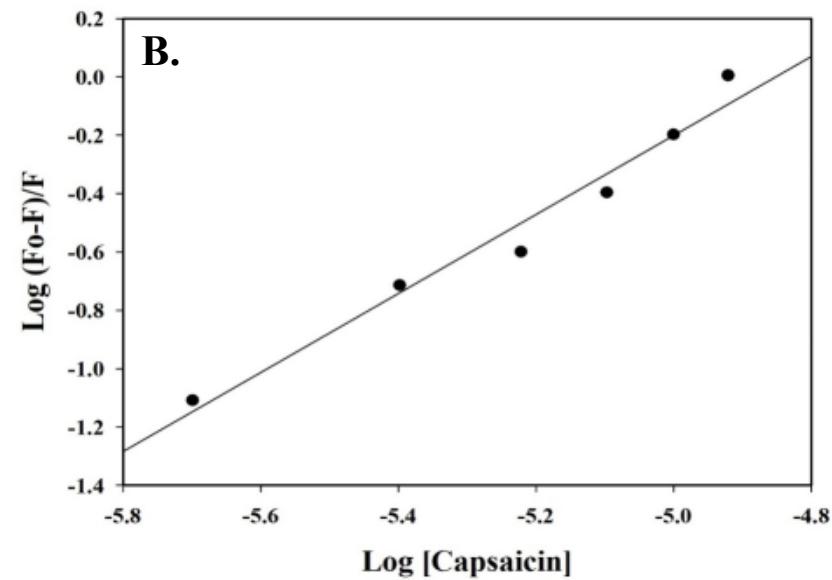
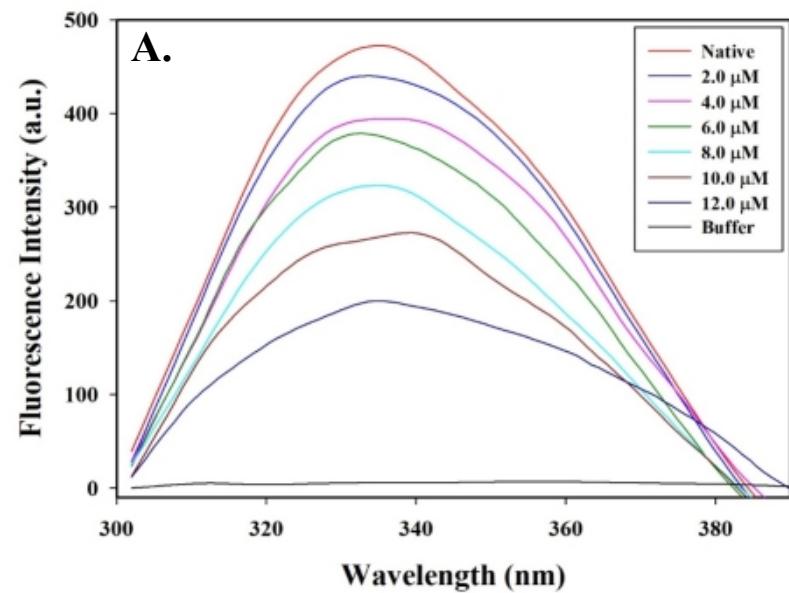


Figure S4: Fluorescence emission spectrum of **(A)** Capsaicin and **(C)** DL- α -Tocopherol. Stern Volmer plot of **(B)** Capsaicin and **(D)** DL-Tocopherol biding to the PDK3.

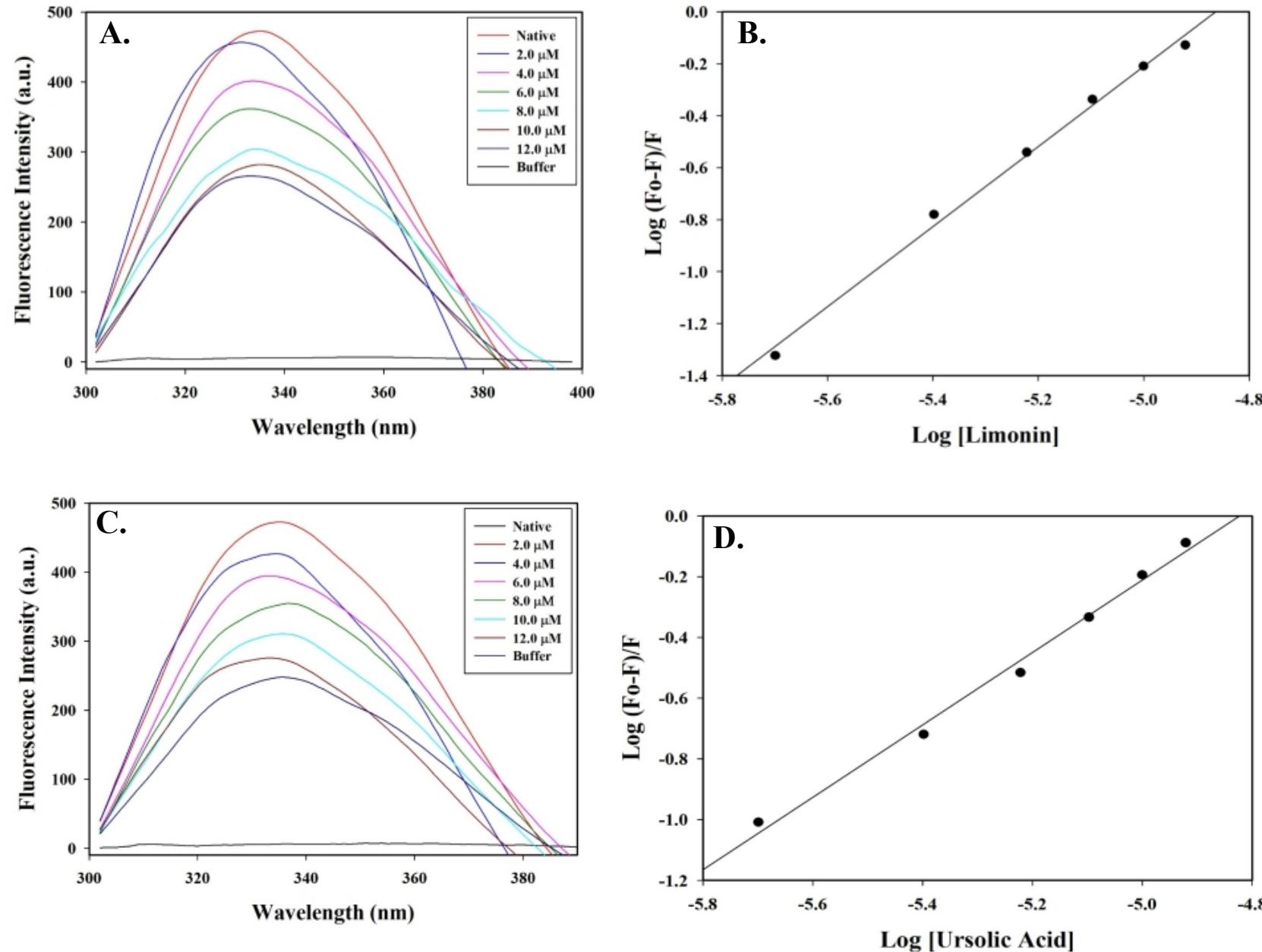


Figure S5: Fluorescence emission spectrum of **(A)** Limonin and **(C)** Ursolic acid. Stern Volmer plot of **(B)** Limonin and **(D)** Ursolic acid binding to the PDK3.

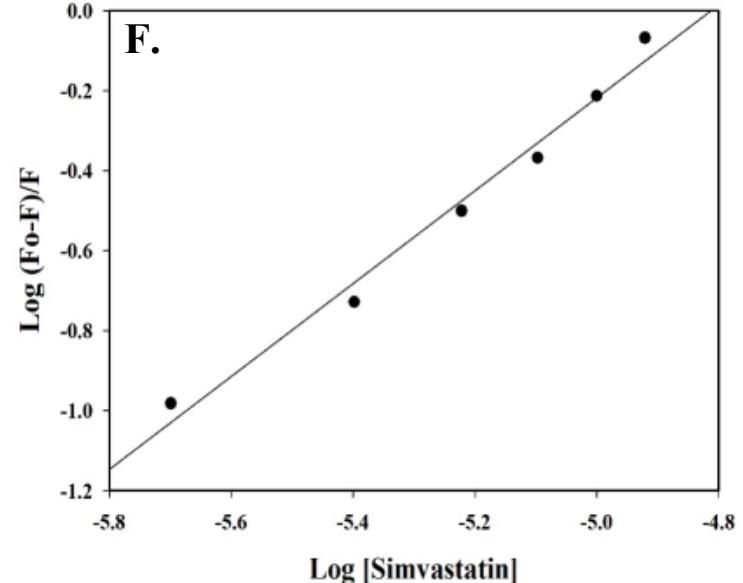
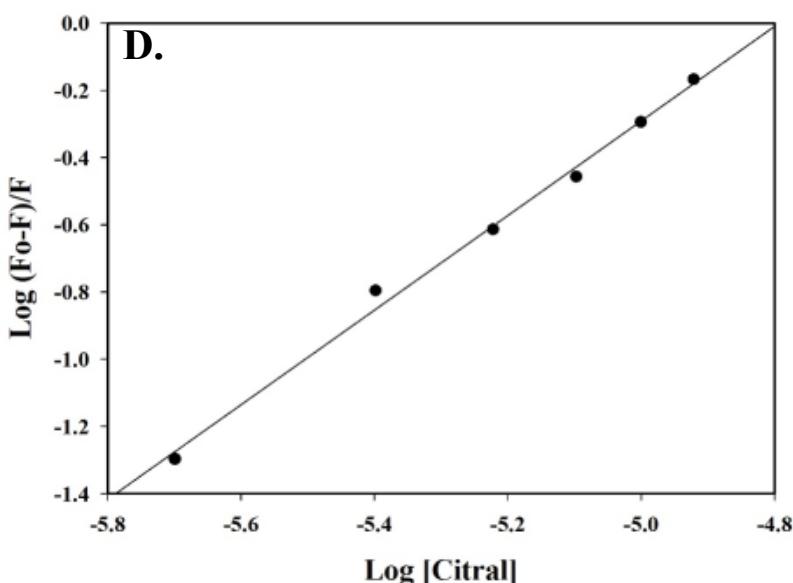
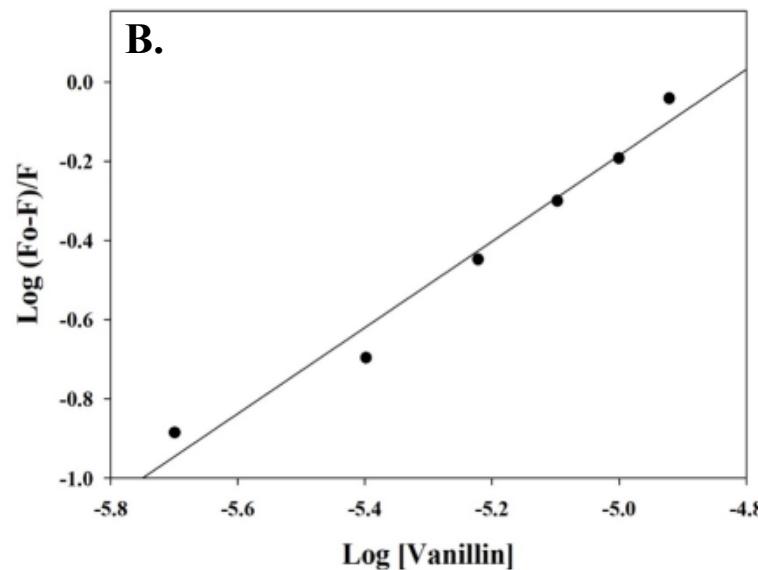
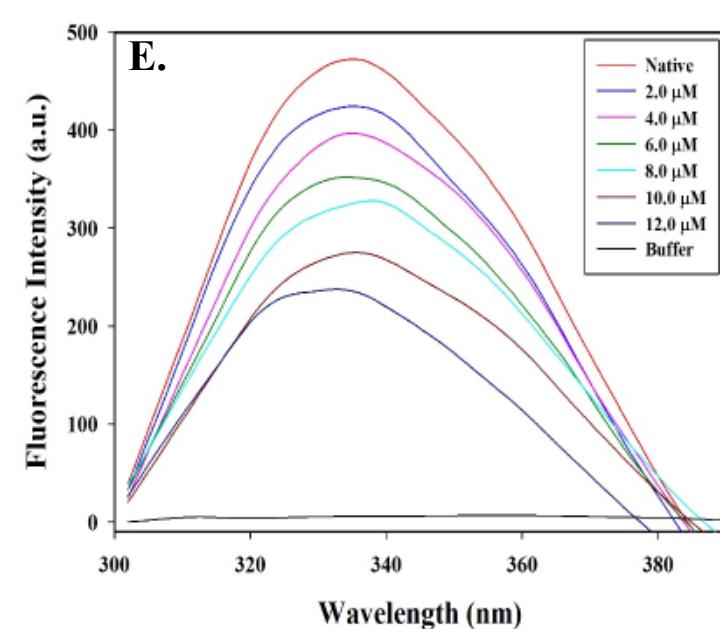
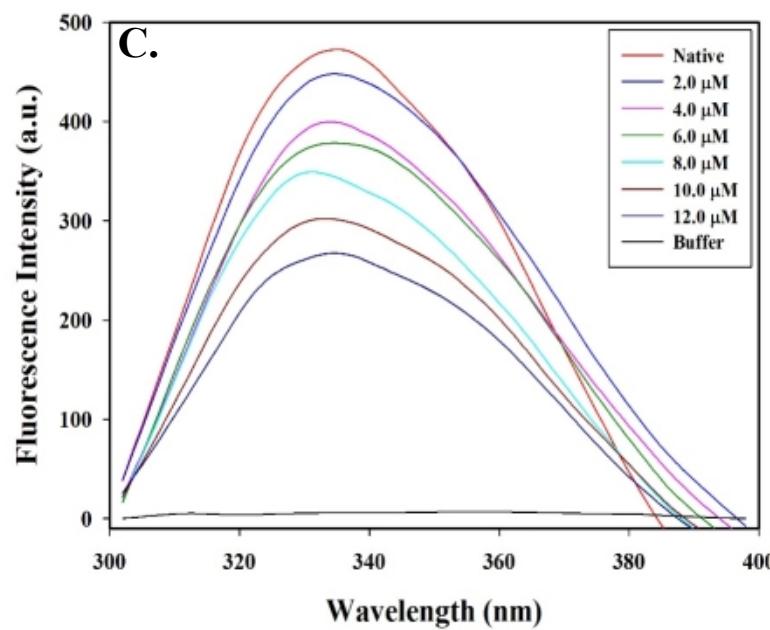
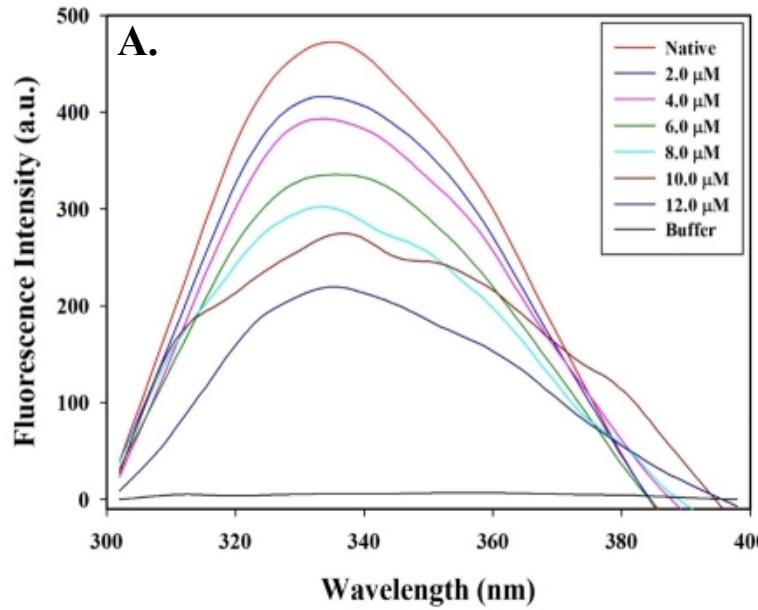


Figure S6: Fluorescence emission spectrum of **(A)** Vanillin and **(C)** Citral and **(E)** Simvastatin. Stern Volmer plot of **(B)** Vanillin **(D)** Citral and **(F)** Simvastatin biding to the PDK3.

Table S1: Percentage of residues participated in average structure formation.

*Structure = α -helix + β -sheet + β -bridge + Turn

Complexes	Percentage of protein secondary structure (SS %)							
	Structure*	Coil	β -sheet	β -bridge	Bend	Turn	α -helix	
PDK3	73	18	13	2	9	7	51	
PDK3-Ellagic acid	71	19	13	1	10	7	50	