

عنوان مقاله:

Investigation on the effect of kosmotropic and chaotropic of zinc and copper ions in vitro fibrillization of human serum albumin

محل انتشار:

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خلاصه مقاله:

Amyloid fibrils, formed by aggregation of improperly folded or intrinsically disordered proteins, are closely related with the pathology of the number of devastating amyloid diseases, such as Alzheimer"s, Parkinson"s, and Creutzfeldt –Jakob diseases. Occupational exposure to specific metals, especially copper, lead, iron, zinc, appears to be a risk factor for some of these disease based on epidemiological studies. The interaction of proteins with aqueous solutions of ionic ligands has attracted considerable recent attention. We investigated the interaction of Zn^{+2} and Cu^{+2} in chloride salt forms with human serum albumin (HSA) fibrils through ThT fluorescence method under physiological pH. Also, in this work we studied kosmotropic and chaotropic effects of these ions on the protein fibrils. A comparison of the effects of these chloride salts revealed that anions don"t obserable response in stabilizing HSA fibrils

کلمات کلیدی:

Zinc ion, copper ion, human serum albumin (HSA), amyloid disease, protein fibrillation

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