

عنوان مقاله:

The effect of different concentrations of artemin on the formation of α -synuclein s amyloid fibrils

محل انتشار:

چهارمین کنفرانس بین المللی پژوهشهای کاربردی در علوم شیمی و زیست شناسی (سال: 1396)

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خلاصه مقاله:

Partially folded stages in folding process arise due to a large number of hydrophobic amide groups exposing to solvent and capable of forming interactions between the molecules and leading to the formation of large protein complexes. The accumulation of altered proteins such as alpha-synuclein is a common pathogenic mechanism in several neurodegenerative disorders such as Alzheimer s and Parkinson s disease. Chaperones are shown to be critical in the process of protein folding, thus the presence of these molecules like artemin as a molecular chaperone may play an important role in preventing fibril formation process. For this reason α -synuclein was expressed, purified and concentrated using Polyethylene Glycol. Subsequently its fibrillation was examined in the absence and presence of different concentrations (0.001, 0.002, 0.004 and 0.016 mg/ml) of artemin, using ThioflavinT Fluorescence and Congo red absorption. Results revealed that 0.002 and 0.004 concentrations had more effect on fibril formation

کلمات کلیدی:

α -synuclein, artemin, amyloid fibril, protein complex

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