KINETIC CHARACTERIZATION OF AN IMMOBILIZED b-D-*N*-ACETYLGLUCOSAMINIDASE EXTRACTED FROM *Artemia franciscana* CRUSTACEAN

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The process of enzymatic immobilization is one technique that confines or binds enzymes at a support with retention of its catalytic activities. The immobilized enzymes can be reused by diverse times maintaining its catalytic activity, still makes possible the separation of the reaction product. The objectives of this work are the partial purification, immobilization, kinetic characterization and to study the performance of immobilized ß-D-N-acetylglucosaminidase extracted from *Artemia fransciscana* crustacean against glycosaminoglycans. Enzymatic extracts from *A.fransciscana* were purified by ammonium sulfate (F-0-30%), gel filtration chromatography in Bio Gel A- 1.5m and covalently immobilized on ferromagnetic Dacron. This preparation was easily removed from the reaction mixture by a magnetic field and reused at least 10 times without significant loss in its activity. The best immobilization was in pH 5,0 and 7,0 and presented apparent K_m of 2,91 ± 0,48 mM. The optimum temperature and pH was at 50°C and 5,5, respectively. The immobilized ß-D-N-acetylglucosaminidase presented practically the same thermal stability of the soluble enzyme. It still showed better capacity of degradation on heparan sulphate.

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