ABSTRACT

A protease from sandworms (*Perinereis nuntia*) was purified by using a combination of ammonium sulfate precipitation, DEAE cellulose and Superdex-200, respectively. The enriched preparation had a specific activity of 355.74 U/mg proteins and a yield of 18.5% total protein. The molecular weight of this protease was estimated to be 37.4 kDa by SDS-15% (w/v) PAGE. The pH stability of this protease is between pH 7-8, and it is stable up to 40 °C. The activity of the enzyme was inhibited by Cu²⁺ and Co²⁺, but was enhanced by Ca²⁺ and Mg²⁺ ions. Furthermore, protease activity was potently inhibited by EDTA.

Keywords: protease, sandworms, Perinereis nuntia