Vibrio fluvialis TKU005所生產蛋白?純化及定性之研究

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摘 要

本研究乃利用蝦蟹殼粉為主要碳源，於pH10、30°C條件下篩選出一株具有蛋白?生產菌TKU005，經鑑定為Vibrio fluvialis 。 Vibrio fluvialis TKU005生產蛋白?之較適培養條件如下為，於3%蝦蟹殼粉、3%NaCl、0.1%K2HPO4、0.05%MgSO4 · 7H2O之液態培養基中於pH10、30°C、150rpm，的條件下培養2天之後，可得較高之蛋白?活性（0.1 unit/mg）。 從Vibrio fluvialis TKU005所得發酵液經硫酸銨沉澱、DEAE-Sepharose CL-6B等步驟分離結果，純化出分子量以SDS-PAGE法測得分別為41 kDa及39 kDa 之兩種酵素FⅠ及FⅡ。 FⅠ及FⅡ之最適反應pH、最適反應溫度、pH安定性、熱安定性，分別為(9 、60°C、7-9、<50°C)及(9、60°C、6-9、<60°C)。酵素FⅠ活性會被PMSF完全抑制，因此推測係屬一種絲胺酸蛋白?。至於酵素FⅡ活性則會被EDTA完全抑制，因而推測係屬一種金屬型酵素。

關鍵詞 : 蝦蟹殼粉、蛋白質?、酵素純化、Vibrio fluvialis TKU005

目錄

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