

On the study of chitinase inhibitor produced by microorganism

蔡愷鴻、 --

E-mail: 8701176@mail.dyu.edu.tw

ABSTRACT

After screening and identification, we isolated a chitinase inhibitor producing strain, from dinner set, which was named as *Bacillus cereus* S129. In studying the fermentation medium, results showed that, 3.5% SCSP, 0.1% K₂HPO₄, 0.1% MgSO₄·7H₂O, 0.1% (NH₄)₂SO₄, 0.4% ZnSO₄ was the optimum medium composition, and, pH 6.0, 37 °C, 72hrs, 180rpm was the optimum cultural condition. The chitinase inhibitor was purified from the fermentation broth of *B. cereus* S129 by ammonium sulfate precipitation, followed by DEAE- Sepharose CL-6B chromatography. The optimum pH, pH stability, optimum temperature and thermal stability of chitinase inhibitor were 8.5-7.5, 50 °C, respectively. When using *Micrococcus lysodeikticus* as substrate, the chitinase inhibitor also showed inhibitor activity to the enzyme.

Keywords : 幾丁質酶 ; 溶菌酶 ; 幾丁質酶抑制劑

Table of Contents

0

REFERENCES

0