이학규*, 곽영학, 김한복 호서대학교 자연과학대학 생명과학과

항암, 혈전 용해 효과가 있다고 알려져 있는 한국의 전통 발효 식품인 된장으로부터 Bacillus cereus SH-7을 분리한 바 있다. 이 균주가분비하는 단백질 분해효소의 특성을 규명하기 위해 Anion exchange chromatography (DEAE Sepharose), Gel filtration chromatography (Sephadex)를 이용하여 분자량 150 kDa의 단백질 분해효소를 분리하였다. 이 효소는 casein을 포함하는 native PAGE와 SDS-PAGE에 의해 homogeneous multi-subunit으로 구성되어 있음을 확인하였다.

E324 Purification and Characterization of Superoxide Dismutase from Schizosaccharomyces pombe

Tae Hyung Lee* and Sang Jin Chung Department of Genetic Engineering, Chong-Ju University

Superoxide dismutase (SOD) was purified from Schizosaccharomyces pombe. SOD was purified by $(NH_4)_2SO_4$ fractionation, Sephadex G-100 gel chromatography and DEAE-Sephadex A-25 ion exchange chromatography. The molecular weight of the purified enzyme estimated from SDS-polyacrylamide gel electrophoresis was approximately 26.6 KDa. The purified enzyme remained stable at pH 8.0 - 11.0 at 25 °C but was rapidly inactivated below pH 8.0. This enzyme was stable up to 50 °C at pH 8.0 with about 75 % relative activity but was rapidly inactivated at higher temperature. This enzyme was inhibited by CN , SDS and was little inhibited by N₃ . Thus the result on this special properties showed that SOD was composed of Cu/Zn-form.