

E319

Fibrinolytic protease in *Pleurotus ostreatus*

Hye-Seon Choi and Hyun-Hee Shin*

Department of Microbiology, Ulsan University

Fibrinolytic protease activity was detected from crude extract of fruit body of *P. ostreatus* using fibrin plate method. When it was grown in mycelial culture, fibrinolytic protease started appear at the point which the dry weight of mycelium was highest. Two peaks of activity was found after G-150 gel filtration and the major activity was at 24,000 dalton while it was determined to be 12,000 dalton in SDS-PAGE. The enzyme cleaved B_β and γ chain of human fibrinogen. Purified 12,000 dalton protein was degraded in the incubation of 37°C. When the fibrinolytic activity was compared between crude extract and purified one, both were found to be quite stable up to 8 days at 4°C. The enzyme was sensitive to metal chelating agent, 1,10-phenanthroline, and inactivated enzyme activity was recovered by addition of Zn²⁺ or Co²⁺, suggesting that it is a Zn²⁺ metalloprotease.

E320

Cloning and sequencing of a starvation-driven promoter region from *Pseudomonas putida*

Jeong-eun Park*, Young-jun Kim †, and Ho-sa Lee

Dept. of Biology Kyung-Hee University, † Dept. of Environmental Science Catholic University

We previously isolated and characterized some starvation-driven gene mutants from *Pseudomonas putida*, and the promoter of a starvation gene has been sequenced and characterized. Here we report the cloning and sequencing data of another starvation promoter from a Tn5-induced mutant, *P. putida* MK114. Chromosomal DNA of *P. putida* MK114 was partially digested with *Pst*I and various fragments containing Tn5 and flanking DNA was cloned into the broad host vector pMMB67EH. The shortest plasmid pMK201 which showed carbon starvation-induced promoter activity was selected and mapped by various restriction enzymes. The 1.3kb fragment containing promoter region was further subcloned, sequenced, and the possible promoter region was localized by promoter analysis using promoter probing vector system.