

Extracellular Production of Recombinant Proteins in *Escherichia coli*

최종현*, 이상엽
한국과학기술원 생명화학공학과
(jonghc@kaist.ac.kr*)

The expression of heterologous genes in bacteria has been known to be the simplest and most inexpensive means available for obtaining large amounts of desired target proteins for research, clinical and industrial purposes. *Escherichia coli* is the most widely used host for the production of biomolecular products because of the well-characterized system. Due to availability of a various techniques for metabolic engineering, the efficient production of various biomolecular products in *E. coli* has become a routine matter. Extracellular production of recombinant proteins has advantages over secretion into the periplasm. Extracellular production does not require outer membrane disruption to recover target proteins, and therefore, it avoids intracellular proteolysis by periplasmic proteases and allows continuous production of recombinant proteins. I report the new approach for the extracellular production of recombinant proteins in *E. coli*. [This work was supported by the Korean Systems Biology Research Grant (M10309020000-03B5002-00000) from the Ministry of Science and Technology, and Regional Innovation System (RIS) from the Korean Ministry of Commerce, Industry, and Energy.]