

Global analysis of protein localization in
Escherichia coli B

한미정¹, 이정욱¹, 윤홍석¹, 김지만¹, 이상엽^{1,2,*}, 유종신³

¹Metabolic and Biomolecular Engineering National Research Laboratory, Department of Chemical & Biomolecular Engineering and BioProcess Engineering Research Center, KAIST; ²Department of BioSystems and Bioinformatics Research Center, KAIST; ³Korea Basic Science Institute
(leesy@kaist.ac.kr*)

Recently, the full genome sequences of two representative descendants of *E. coli* B, REL606 and BL21(DE3), have been completely determined by International *E. coli* B Consortium. Here we systematically determined for the first time the subcellular localizations of *E. coli* B REL606 by analyzing cytoplasmic, periplasmic, inner and outer membrane, and extracellular proteins based on the genome information using two-dimensional gel electrophoresis (2-DE) and liquid chromatography-tandem mass spectrometry (LC-MS/MS). This study represents one of the large-scale proteomic analyses of the subproteome of *E. coli* B. [This work was supported by the Korean Systems Biology Research Grant from the Ministry of Education, Science and Technology through the Korea Science and Engineering Foundation (No. M10309020000-03B5002-00000).].