

Genome-wide Identification of Subcellular Localization for *Escherichia coli* B Proteome Using Experimental and Computational Methods

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Escherichia coli B has been the major organism for production of various proteins and biomaterials including bioethanol in the field of biotechnology. Recently, The full genome information of two representative descendants of *E. coli* B strains, REL606 and BL21(DE3), has been determined by our co-workers. In this study, we have constructed 2-D subproteome maps of *E. coli* B REL606 by analyzing cytoplasmic, periplasmic, inner and outer membrane, and extracellular proteins based on the genome information using experimental and computational approaches. Thus this work represents one of the most comprehensive proteomic analyses of the subproteome of *E. coli* B. [This work was supported by the Korean Systems Biology Research Project (M10309020000-03B5002-00000) of the Ministry of Education, Science and Technology. Further supports by the LG Chem Chair Professorship, Microsoft, and IBM SUR program are appreciated.]