

Reconstruction of a genome-scale metabolic network for *Clostridium acetobutylicum* ATCC 824 and an investigation of its metabolic features

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Clostridium acetobutylicum is an attention-grabbing bacterium in that it produces several solvents, especially butan-1-ol. We reconstructed a genome-scale metabolic network of *C. acetobutylicum* ATCC 824 which comprises 502 reactions and 479 metabolites. Then, we carried out flux balance analysis using both linear and non-linear approach which is a modification of previous studies. Here, we present metabolic features and feasibilities of *C. acetobutylicum*, and hypothetical annotations derived during the reconstruction of the network. [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.]