DNA microarray analysis of succinic acid shock response in *Mannheimia succiniciproducens*

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High concentration of succinic acid produced in Mannheimia succiniciproducens influences the cell physiology and growth of host. In order to enhance succinic acid tolerance strains of M. succiniciproducens, the transcriptome response to succinic acid stress was analyzed in chemically mutated tolerance strain using by DNA microarray, the resulting genes were tested. From the DNA microarray analysis, up-regulations on expression level in tolerant mutant cells were shown for carbohydrate transport and metabolism, amino acid transport and metabolism, general function prediction only, and cell wall/membrane biogenesis. Genes selected in these categories were characterized. [This work was supported by the Korea Science and Engineering Foundation (KOSEF) grant funded by the Korea government (MOST) (No. 2005-01294). Further supports by the LG Chem Chair Professorship, IBM SUR program, and by the KOSEF through the Center for Ultramicrochemical Process Systems are appreciated].