

CoryneBrick: Synthetic Biology platform for the optimal expression of the target gene in
Corynebacterium glutamicum

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Recent development of synthetic platforms for the production of industrial interests have been developed and implemented to microbial cells. However, most synthetic tools have been targeted well known bacteria such as *Escherichia coli* and *Saccharomyces cerevisiae*. Here we expanded a synthetic biology platform of gene expression vectors applicable in *Corynebacterium glutamicum*, known industrial amino acid producers. We developed the CoryneBrick vectors featuring *E.coli*-*C. glutamicum* shuttle vectors with different origins of replication and controllable promoters. CoryneBrick were applied to the biofuel production system in *C. glutamicum*, which could be another example of industrial Corynebacteria. This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government (MEST) (2013, University-Institute cooperation program) and 'Creative Allied Program (CAP)' through the Korea Research Council of Fundamental Science and Technology (KRCF) and Korea Institute of Science and Technology (KIST).