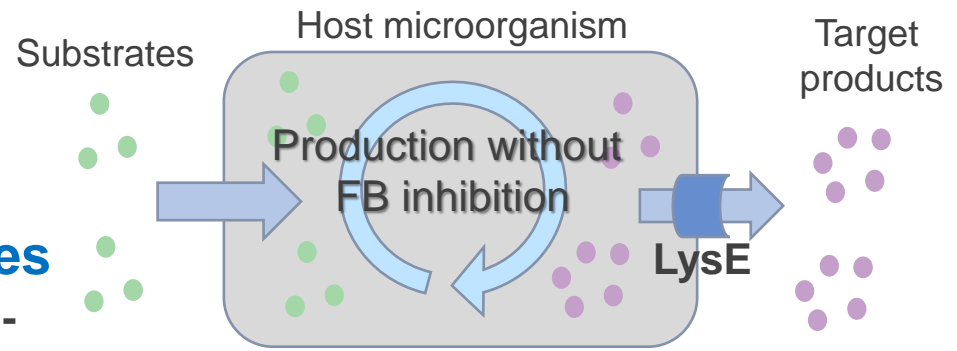


The methods to produce nucleic bases, organic acids and polyamines

New function of LysE will contribute to high-productivity of commercially used molecules



Overview

Some proteins/peptides like enzymes, as well as the small molecules like amino acids/organic acids are often used commercially and produced by industrial fermentation using microorganisms. Many technologies, including genetic engineering ones, have been developed to increase productivity thereof, but it is often reported that productivity does not rise to the expected level due to the influence of feedback (FB) inhibition caused by the accumulation of target products in microorganisms. The application of transporter proteins which express on microbial cell membranes and export target products to the outside of microorganism are expected not only to solve the such problem but to collect target products efficiently from fermenter.

This invention provides the method to produce nucleic bases, organic acids and polyamines using the novel function of lysine exporter LysE which was identified by combined screening with transporter expression library and omics analysis.

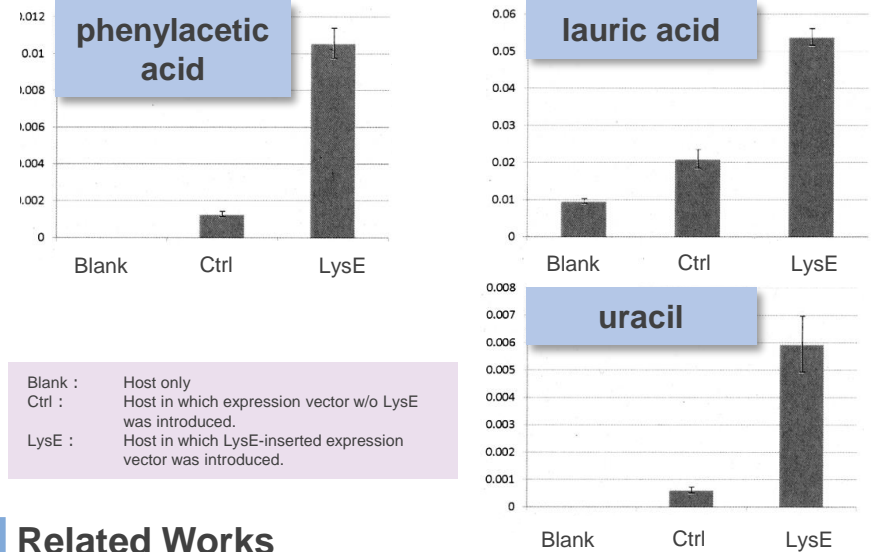
Product Application

- Industrial fermentation of nucleic bases, organic acids and polyamines using LysE expressing microorganisms.

IP Data

IP No. : JP2022-109064 A1
 Inventor : NANATANI Kei, ABE Keietsu
 Admin No. : T20-452

Features • Outstandings



Related Works

- [1] Nanatani et al (2022)
<https://doi.org/10.2323/jgam.2022.12.002>

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