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Rational engineering of the shikimate and related pathways in *Corynebacterium glutamicum* for 4-hydroxybenzoate production

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Highlights

- Rational engineering of the shikimate and related pathways for 4-hydroxybenzoate production
- Pathway extending into 4-hydroxybenzoate by introduction of a feedback-resistant chorismate-pyruvate lyase
- Optimization of shikimate pathway established
- Modulation of the quinate/shikimate degradation pathway established
- Strategy to reduce accumulation of pathway intermediates generated

Abstract

4-Hydroxybenzoate (4HBA) is a valuable platform intermediate for the production of commodity and fine chemicals, including protocatechuate, *cis,cis*-muconic acid, adipic acid, terephthalic acid, phenol, vanillin, and 4-hydroxybenzyl alcohol glycoside (gastrodin). Here we

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