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Metabolic engineering of Escherichia coli for the biosynthesis of aromatic building blocks

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Recently, chemicals and fuel production from renewable resources, such as biomass resources, have attracted attention due to global warming and limited amounts of fossil fuels. The aromatic compounds include a huge number of industrially important materials, and production of them using microorganisms is an active research area, as well as production of biofuel and other building-block compounds. In the present study, we focused on chorismate derivatives, such as salicylate, p-hydroxbenzoate, and p-aminobenzoate, production using genetically engineered *Escherichia coli*. Increasing intracellular accumulation of phosphoenol pyruvate obtained high productivity of the aromatic compounds by combining several strategies.

Biography

Dr. Shuhei Noda is currently serving as Special Postdoctoral Researcher, RIKEN, Japan. He received his PhD from Kobe University in 2013. His current research focused on metabolic engineering of E. coli and non-conventional yeast for chemicals and fuels production.

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