Author's Accepted Manuscript

Folic Acid Production by Engineered Ashbya gossypii

Cristina Serrano-Amatriain, Rodrigo Ledesma-Amaro, Rubén López-Nicolás, Gaspar Ros, Alberto Jiménez, José Luis Revuelta



 PII:
 S1096-7176(16)30193-8

 DOI:
 http://dx.doi.org/10.1016/j.ymben.2016.10.011

 Reference:
 YMBEN1165

To appear in: Metabolic Engineering

Received date: 22 June 2016 Revised date: 13 September 2016 Accepted date: 25 October 2016

Cite this article as: Cristina Serrano-Amatriain, Rodrigo Ledesma-Amaro, Rubé López-Nicolás, Gaspar Ros, Alberto Jiménez and José Luis Revuelta, Folic Acic Production by Engineered Ashbya gossypii, *Metabolic Engineering* http://dx.doi.org/10.1016/j.ymben.2016.10.011

This is a PDF file of an unedited manuscript that has been accepted fo publication. As a service to our customers we are providing this early version o the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain

ACCEPTED MANUSCRIP

Folic Acid Production by Engineered Ashbya gossypii

Cristina Serrano-Amatriain¹, Rodrigo Ledesma-Amaro¹, Rubén López-Nicolás², Gaspar Ros², Alberto Jiménez¹ and José Luis Revuelta^{1*}

¹Metabolic Engineering Group, Department of Microbiology and Genetics, University of Salamanca, Campus Miguel de Unamuno, E-37007 Salamanca, Spain.

²Department of Food Science and Nutrition, Faculty of Veterinary Sciences, University of manusci Murcia, Campus de Espinardo, 30071, Espinardo (Murcia), Spain.

*Corresponding author:

E-mail address: revuelta@usal.es

Phone: +34 923 294 671

Fax: +34 923 224876

Highlights:

- Ashbya gossypii was metabolically engineered to produce folic acid
- GTP cyclohydrolase I is the limiting step in folate bioproduction
- Overproducer strains show a mixture of bioactive vitamin B₉ forms
- The highest folic acid yield ever reported achieved by microbial fermentation

Download English Version:

https://daneshyari.com/en/article/1780934

Download Persian Version:

https://daneshyari.com/article/1780934

Daneshyari.com