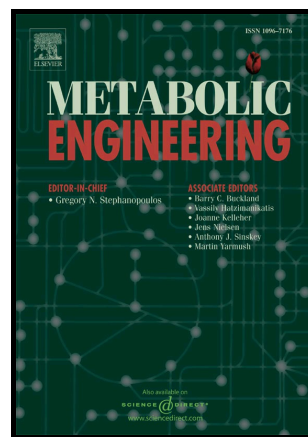


Author's Accepted Manuscript

Mitochondrial acetyl-CoA utilization pathway for terpenoid productions

Jifeng Yuan, Chi-Bun Ching



www.elsevier.com/locate/ymben

PII: S1096-7176(16)30063-5
DOI: <http://dx.doi.org/10.1016/j.ymben.2016.07.008>
Reference: YMBEN1135

To appear in: *Metabolic Engineering*

Received date: 11 March 2016
Revised date: 25 June 2016
Accepted date: 25 July 2016

Cite this article as: Jifeng Yuan and Chi-Bun Ching, Mitochondrial acetyl-CoA utilization pathway for terpenoid productions, *Metabolic Engineering* <http://dx.doi.org/10.1016/j.ymben.2016.07.008>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of 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.

Mitochondrial acetyl-CoA utilization pathway for terpenoid productionsJifeng Yuan^{1,2,4*} and Chi-Bun Ching^{1,3*}

¹ Department of Chemical and Biomolecular Engineering, National University of Singapore, 4 Engineering Drive 4, Singapore 117585, Singapore

² Temasek Laboratories, National University of Singapore, T-Lab Building 5A, Engineering Drive 1, Singapore 117411, Singapore

³ Singapore Institute of Technology, 10 Dover Drive, Singapore 138683, Singapore

⁴ Present address: Biotransformation Innovation Platform, Agency for Science, Technology and Research (A*STAR), Singapore 138673

* Corresponding author address: Department of Chemical and Biomolecular Engineering, National University of Singapore, 4 Engineering Drive 4, Singapore 117585, Singapore;

Tel: +65 66013179; Fax: +65 67764382;

Email address: jifeng_yuan@biotrans.a-star.edu.sg (J. Yuan) or cheching@nus.edu.sg

(C.B. Ching)

ABSTRACT

Acetyl-CoA is a central molecule in the metabolism of the cell, which is also a precursor molecule to a variety of value-added products such as terpenoids and fatty acid derived molecules. Considering subcellular compartmentalization of metabolic pathways allows higher concentrations of enzymes, substrates and intermediates, and bypasses competing pathways, mitochondrion-compartmentalized acetyl-CoA utilization pathways might

Download English Version:

<https://daneshyari.com/en/article/6494206>

Download Persian Version:

<https://daneshyari.com/article/6494206>

[Daneshyari.com](https://daneshyari.com)