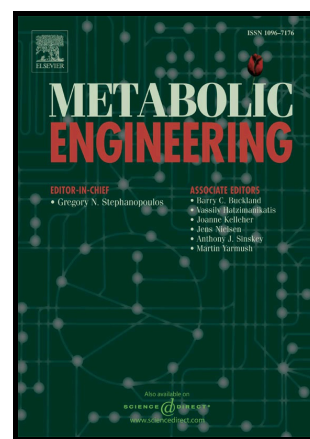


Increasing Oxygen Availability for Improving Poly
(3-hydroxybutyrate) Production by *Halomonas*

Pengfei Ouyang, Huan Wang, Ivan Hajnal, Qiong
Wu, Yingying Guo, Guo-Qiang Chen



www.elsevier.com/locate/ymben

PII: S1096-7176(17)30354-3
DOI: <https://doi.org/10.1016/j.ymben.2017.11.006>
Reference: YMBEN1315

To appear in: *Metabolic Engineering*

Received date: 13 September 2017
Revised date: 9 November 2017
Accepted date: 12 November 2017

Cite this article as: Pengfei Ouyang, Huan Wang, Ivan Hajnal, Qiong Wu, Yingying Guo and Guo-Qiang Chen, Increasing Oxygen Availability for Improving Poly (3-hydroxybutyrate) Production by *Halomonas*, *Metabolic Engineering*, <https://doi.org/10.1016/j.ymben.2017.11.006>

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.

Increasing Oxygen Availability for Improving Poly (3-hydroxybutyrate)

Production by *Halomonas*

Pengfei Ouyang^{1,1}, Huan Wang⁵, Ivan Hajnal¹, **Qiong Wu¹** Yingying Guo^{1*},
Guo-Qiang Chen^{1, 2, 3, 4*}

¹ MOE Key Lab of Bioinformatics, School of Life Sciences, Tsinghua-Peking Center
for Life Sciences, Tsinghua University, Beijing, 100084, China

² Center for Synthetic and Systems Biology, Tsinghua University, Beijing 100084, China

³ Center for Nano and Micro Mechanics, Tsinghua University, Beijing 100084, China

⁴ MOE Key Laboratory for Industrial Biocatalysis, Tsinghua University, Beijing 100084, China

⁵ State Key Laboratory of Plateau Ecology and Agriculture, Qinghai University,
810016 Xining, China

E-mail: chengq@mail.tsinghua.edu.cn

guoyingying@phalab.org

*Corresponding authors: Guo-Qiang CHEN (Chen GQ), Yingying Guo. School of
Life Sciences, Tsinghua University, Beijing, 100084, China. Tel.: +86 10 62783844;
fax: +86 10 62794217.

Abstract

Technologies enabling high-cell-density growth are required for economical industrial
production of most biotechnological products. However, the key factor limiting cell
density in bioreactors is the availability of oxygen during the late phases of
fermentation. Although the expression of bacterial *Vitreoscilla* hemoglobin (VHb) is

¹ Authors contributed equally to this paper.

Download English Version:

<https://daneshyari.com/en/article/6494122>

Download Persian Version:

<https://daneshyari.com/article/6494122>

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