

Accepted Manuscript

Title: Development of a simple intensified fermentation strategy for growth of *Magnetospirillum gryphiswaldense* MSR-1: physiological responses to changing environmental conditions

Authors: Alfred Fernández-Castané, Hong Li, Owen R.T. Thomas, Tim W. Overton

PII: S1871-6784(18)30086-4
DOI: <https://doi.org/10.1016/j.nbt.2018.05.1201>
Reference: NBT 1116

To appear in:

Received date: 13-2-2018
Revised date: 30-5-2018
Accepted date: 31-5-2018

Please cite this article as: Fernández-Castané A, Li H, Thomas ORT, Overton TW, Development of a simple intensified fermentation strategy for growth of *Magnetospirillum gryphiswaldense* MSR-1: physiological responses to changing environmental conditions, *New BIOTECHNOLOGY* (2018), <https://doi.org/10.1016/j.nbt.2018.05.1201>

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 proof before it is published in its final 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.



Development of a simple intensified fermentation strategy for growth of *Magnetospirillum gryphiswaldense* MSR-1: physiological responses to changing environmental conditions

Alfred Fernández-Castané^{a,b,*}, Hong Li^a, Owen R.T. Thomas^a, Tim W. Overton^{a,b,§}

^aSchool of Chemical Engineering and ^bInstitute for Microbiology & Infection, University of Birmingham, B15 2TT Birmingham, UK.

[§]Corresponding author: t.w.overton@bham.ac.uk; Telephone +44 121 414 5306

*Present address: Aston Institute of Materials Research & European Bioenergy Research Institute, Aston University, Birmingham, B4 7ET, UK.

Email addresses: AFC, a.fernandez-castane1@aston.ac.uk; HL, HXL388@student.bham.ac.uk; ORTT, o.r.t.thomas@bham.ac.uk; TWO, t.w.overton@bham.ac.uk

Running title: Optimization of *M. gryphiswaldense* fermentation

HIGHLIGHTS

- Magnetosomes are natural intracellular, membrane-bound, magnetic nanoparticles.
- Magnetosomes have a variety of clinical and biotechnological applications.
- Magnetosomes are currently difficult to produce at large scale.
- We developed a simple, scalable, fermentation strategy for magnetosome production.

Download English Version:

<https://daneshyari.com/en/article/6494769>

Download Persian Version:

<https://daneshyari.com/article/6494769>

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