Accepted Manuscript

Title: Isolation and characterization of a novel tyrosinase produced by Sahara soil actinobacteria and immobilization on nylon nanofiber membranes

Authors: Mohammed Harir, Bellahcene Miloud, Maria Camilla Baratto, Simona Pollini, Gian Maria Rossolini, Lorenza Trabalzini, Enrico Fatarella, Rebecca Pogni



PII:	S0168-1656(17)31737-6
DOI:	https://doi.org/10.1016/j.jbiotec.2017.11.004
Reference:	BIOTEC 8050
To appear in:	Journal of Biotechnology
Received date:	21-7-2017
Revised date:	8-11-2017
Accepted date:	8-11-2017

Please cite this article as: Harir, Mohammed, Miloud, Bellahcene, Baratto, Maria Camilla, Pollini, Simona, Rossolini, Gian Maria, Trabalzini, Lorenza, Fatarella, Enrico, Pogni, Rebecca, Isolation and characterization of a novel tyrosinase produced by Sahara soil actinobacteria and immobilization on nylon nanofiber membranes.Journal of Biotechnology https://doi.org/10.1016/j.jbiotec.2017.11.004

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.

ACCEPTED MANUSCRIPT

Isolation and characterization of a novel tyrosinase produced by Sahara soil actinobacteria and immobilization on nylon nanofiber membranes

Mohammed Harir^{ab}, Bellahcene Miloud^c, Maria Camilla Baratto^d, Simona Pollini^e, Gian Maria Rossolini^{e,f}, Lorenza Trabalzini^d, Enrico Fatarella^g, Rebecca Pogni^{d*}

^aBiology of Microorganisms and Biotechnology laboratory, University of Oran 1 Ahmed Ben Bella, BP1524, Oran El Mnaouer, 31000 Oran, Algeria
^bFaculty of Sciences, Natural and Life Sciences Department, Mohamed Boudiaf University, M'sila, Algeria
^cInstitut of Sciences, Natural and Life Sciences Department, University Center of Ain Temouchent, 46000 Ain Temouchent, Algeria.
^dDepartment of Biotechnology, Chemistry and Pharmacy, University of Siena, 53100 Siena, Italy
^e Department of Experimental and Clinical Medicine, University of Florence, Florence, Italy
^f Clinical Microbiology and Virology Unit, Careggi University Hospital, Florence, Italy
^gNext Technology Tecnotessile Società Nazionale di Ricerca s.r.l., 59100 Prato, Italy

*Corresponding Author: <u>rebecca.pogni@unisi.it</u> Rebecca Pogni Dept. of Biotechnology, Chemistry and Pharmacy University of Siena Via A. Moro 2 53100 Siena (Italy) tel: +39 0577 234258

Highlights

- Isolation of a novel highly stable tyrosinase from extremophile bacteria and biochemical characterization.
- Genome sequencing and assignment of the strain to *Streptomyces cyaneofuscatus* sp.
- Bacterial tyrosinase with high temperature and neutral and alkaline pH activity
- Substrate specificity with higher diphenolase than monophenolase activity

Download English Version:

https://daneshyari.com/en/article/6490420

Download Persian Version:

https://daneshyari.com/article/6490420

Daneshyari.com