



RETRACTION NOTE

## Retraction Note to: Genome Shuffling Enhances Lipase Production of Thermophilic *Geobacillus* Sp

**Pornchanok Chalopagorn**<sup>1</sup> •  
**Jittima Charoenpanich**<sup>2,3,4</sup> •  
**Kiattawee Choowongkamon**<sup>1,5</sup>

Published online: 3 June 2017

© Springer Science+Business Media New York 2017

**Retraction to: Appl Biochem Biotechnol (2014) 174:1444–1454  
DOI 10.1007/s12010-014-1109-6**

Per the request of the Faculty of Science, Kasetsart University, who conducted an internal investigation, this article has been retracted due a conflict concerning the origin of science discussed in this article.

---

The online version of the original article can be found at <http://dx.doi.org/10.1007/s12010-014-1109-6>

✉ Jittima Charoenpanich  
jittima@bua.ac.th

✉ Kiattawee Choowongkamon  
fsciktc@ku.ac.th

<sup>1</sup> Department of Biochemistry, Faculty of Science, Kasetsart University, 50 Ngam Wong Wan Rd, Chatuchak, Bangkok 10900, Thailand

<sup>2</sup> Department of Biochemistry and Centre of Excellence for Innovation in Chemistry (PERCH-CIC), Faculty of Science, Burapha University, Bangsaen, Chonburi 20131, Thailand

<sup>3</sup> Environmental Science Program, Faculty of Science, Burapha University, Bangsaen, Chonburi 20131, Thailand

<sup>4</sup> Center of Excellence on Environmental Health and Toxicology (CHE), Ministry of Education, Bangkok, Thailand

<sup>5</sup> Center for Advanced Studies in Tropical Natural Resources, National Research University-Kasetsart University, Thailand CAST-NAR, Bangkok, NRU- KU, Thailand