

Accepted Manuscript

Metabolic enhancement of 2,3',4,4',5-pentachlorobiphenyl (CB118) using cytochrome P450 monooxygenase isolated from soil bacterium under the presence of perfluorocarboxylic acids (PFCAs) and the structural basis of its metabolism

Erika Goto, Yuki Haga, Makoto Kubo, Toshimasa Itoh, Chie Kasai, Osami Shoji, Keiko Yamamoto, Chisato Matsumura, Takeshi Nakano, Hideyuki Inui

PII: S0045-6535(18)31284-0

DOI: [10.1016/j.chemosphere.2018.07.026](https://doi.org/10.1016/j.chemosphere.2018.07.026)

Reference: CHEM 21741

To appear in: *ECSN*

Received Date: 18 May 2018

Revised Date: 4 July 2018

Accepted Date: 5 July 2018

Please cite this article as: Goto, E., Haga, Y., Kubo, M., Itoh, T., Kasai, C., Shoji, O., Yamamoto, K., Matsumura, C., Nakano, T., Inui, H., Metabolic enhancement of 2,3',4,4',5-pentachlorobiphenyl (CB118) using cytochrome P450 monooxygenase isolated from soil bacterium under the presence of perfluorocarboxylic acids (PFCAs) and the structural basis of its metabolism, *Chemosphere* (2018), doi: [10.1016/j.chemosphere.2018.07.026](https://doi.org/10.1016/j.chemosphere.2018.07.026).

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.



Metabolic enhancement of 2,3',4,4',5-pentachlorobiphenyl (CB118) using cytochrome P450 monooxygenase isolated from soil bacterium under the presence of perfluorocarboxylic acids (PFCAs) and the structural basis of its metabolism

Erika Goto^a, Yuki Haga^b, Makoto Kubo^c, Toshimasa Itoh^c, Chie Kasai^d, Osami Shoji^d, Keiko Yamamoto^c, Chisato Matsumura^b, Takeshi Nakano^c, Hideyuki Inui^{a,f,*}

^aGraduate School of Agricultural Science, Kobe University, 1-1 Rokkodai-cho, Nada-ku, Kobe, Hyogo 657-8501, Japan

^bHyogo Prefectural Institute of Environmental Sciences, 3-1-18 Yukihira-cho, Suma-ku, Kobe, Hyogo 657-0037, Japan

^cLaboratory of Drug Design and Medicinal Chemistry, Showa Pharmaceutical University, 3-3165 Higashitamagawagakuen, Machida, Tokyo 194-8543, Japan

^dGraduate School of Science, Nagoya University, Furo-cho, Chikusa-ku, Nagoya, Aichi 464-8602, Japan

^eResearch Center for Environmental Preservation, Osaka University, 2-4 Yamadaoka, Suita, Osaka 565-0871, Japan

^fBiosignal Research Center, Kobe University, 1-1 Rokkodai-cho, Nada-ku, Kobe, Hyogo 657-8501, Japan

***Corresponding author:** Hideyuki Inui, Biosignal Research Center, Kobe University, 1-1 Rokkodai-cho, Nada-ku, Kobe, Hyogo 657-8501, Japan.

E-mail: hinui@kobe-u.ac.jp; Telephone number: +81-78-803-5863.

Download English Version:

<https://daneshyari.com/en/article/8850405>

Download Persian Version:

<https://daneshyari.com/article/8850405>

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