Accepted Manuscript

Title: *In-silico* driven engineering of enantioselectivity of a penicillin G acylase towards active pharmaceutical ingredients

Author: Michal Grulich Jan Brezovský Václav Štěpánek Andrea Palyzová Helena Marešová Jiří Zahradník Eva Kyslíková Pavel Kyslík

PII: \$1381-1177(16)30227-2

DOI: http://dx.doi.org/doi:10.1016/j.molcatb.2016.11.014

Reference: MOLCAB 3479

To appear in: Journal of Molecular Catalysis B: Enzymatic

Received date: 16-9-2016 Revised date: 12-11-2016 Accepted date: 14-11-2016

Please cite this article as: Michal Grulich, Jan Brezovský, Václav Štěpánek, Andrea Palyzová, Helena Marešová, Jiří Zahradník, Eva Kyslíková, Pavel Kyslík, Insilico driven engineering of enantioselectivity of a penicillin G acylase towards active pharmaceutical ingredients, Journal of Molecular Catalysis B: Enzymatic http://dx.doi.org/10.1016/j.molcatb.2016.11.014

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

In-silico driven engineering of enantioselectivity of a penicillin G acylase towards active pharmaceutical ingredients

 $\label{eq:michal Grulich} \mbox{Michal Grulich}^{1*}\mbox{Jan Brezovsk}\mbox{\acute{y}}^{2,3}\mbox{ Václav Štěpánek}^{1}\mbox{ Andrea Palyzová}^{1}\mbox{ Helena Marešová}^{1}\mbox{ Jiří Zahradník}^{1,4}\mbox{ Eva Kyslíková}^{1}\mbox{ Pavel Kyslík}^{1}$

³ International Institute of Molecular and Cell Biology in Warsaw, Ks Trojdena 4, 02-109, Warsaw, Poland

*Corresponding author

Michal Grulich Tel.: +420 241062657 Fax: +420 296442347

E-mail address: grulich@biomed.cas.cz

Co-authors

Václav Štěpánek, Andrea Palyzová, Helena Marešová, Jiří Zahradník, Eva Kyslíková, Pavel Kyslík: Laboratory of Enzyme Technology, Institute of Microbiology of the CAS, v.v.i., Prague, Czech Republic Jan Brezovský: Laboratory of Biomolecular Interactions and Transport, Department of Gene Expression, Institute of Molecular Biology and Biotechnology, Faculty of Biology, Adam Mickiewicz University, Poznan, Poland and International Institute of Molecular and Cell Biology in Warsaw, Warsaw, Poland

Graphical abstract

¹ Laboratory of Enzyme Technology, Institute of Microbiology of the CAS, v.v.i., Vídeňská 1083, 142 20 Prague 4, Czech Republic

² Laboratory of Biomolecular Interactions and Transport, Department of Gene Expression, Institute of Molecular Biology and Biotechnology Faculty of Biology, Adam Mickiewicz University, Umultowska 89, 61-614 Poznan, Poland

⁴Department of Genetics and Microbiology, Faculty of Science, Charles University Prague, Viničná 5, CZ-128 44 Prague 2, Czech Republic

Download English Version:

https://daneshyari.com/en/article/6530902

Download Persian Version:

https://daneshyari.com/article/6530902

<u>Daneshyari.com</u>