

Accepted Manuscript

Title: The internal gene duplication and interrupted coding sequences in the *MmpL* genes of *Mycobacterium tuberculosis*: towards understanding the multidrug transport in an evolutionary perspective

Author: Padmani Sandhu Yusuf Akhter

PII: S1438-4221(15)00024-7
DOI: <http://dx.doi.org/doi:10.1016/j.ijmm.2015.03.005>
Reference: IJMM 50939

To appear in:

Received date: 20-10-2014
Revised date: 18-12-2014
Accepted date: 10-3-2015

Please cite this article as: Sandhu, P., Akhter, Y., The internal gene duplication and interrupted coding sequences in the *MmpL* genes of *Mycobacterium tuberculosis*: towards understanding the multidrug transport in an evolutionary perspective, *International Journal of Medical Microbiology* (2015), <http://dx.doi.org/10.1016/j.ijmm.2015.03.005>

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.



1 **The internal gene duplication and interrupted coding sequences in the *MmpL* genes of**
2 ***Mycobacterium tuberculosis*: towards understanding the multidrug transport in an**
3 **evolutionary perspective.**

4 Padmani Sandhu and Yusuf Akhter*

5 School of Life Sciences, Central University of Himachal Pradesh, District - Kangra, Himachal
6 Pradesh - 176206, India

7 *** Correspondence:** Dr. Yusuf Akhter, Centre for Computational Biology and Bioinformatics,
8 School of Life Sciences, Central University of Himachal Pradesh, Shahpur, District- Kangra,
9 Himachal Pradesh- 176206, India, Tel: +91-1892-237288 ext 309, 310, 311. Fax: +91-1892-
10 2372286. Email: yusuf@cuhimachal.ac.in; yusuf@daad-alumni.de

11
12 **Running Title:** RND transporters of *Mtb*

13
14 **Abbreviations:** *Mtb*, *Mycobacterium tuberculosis*; MmpL, Mycobacterial Membrane Protein
15 Large; MDR, Multi Drug Resistance; RND, Resistance Nodulation Division; TM, Trans
16 Membrane; TMD, Trans Membrane Domain; TB, Tuberculosis; PS, Partial Sequences, ICDSs;
17 Interrupted Coding Sequences

18
19 **Key words:** *MmpL* genes; RND transporters; *Mycobacterium tuberculosis*; Reductive evolution;
20 Multidrug resistance; Efflux pumps.

Download English Version:

<https://daneshyari.com/en/article/8385258>

Download Persian Version:

<https://daneshyari.com/article/8385258>

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