

UCSF

UC San Francisco Previously Published Works

Title

Correction: LprG-Mediated Surface Expression of Lipoarabinomannan Is Essential for Virulence of Mycobacterium tuberculosis

Permalink

<https://escholarship.org/uc/item/37n4h1c5>

Journal

PLOS Pathogens, 11(12)

ISSN

1553-7366

Authors

Gaur, Rajiv L
Ren, Kangning
Blumenthal, Antje
[et al.](#)

Publication Date

2015-12-01

DOI

10.1371/journal.ppat.1005336

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

CORRECTION

Correction: LprG-Mediated Surface Expression of Lipoarabinomannan Is Essential for Virulence of *Mycobacterium tuberculosis*

Rajiv L. Gaur, Kangning Ren, Antje Blumenthal, Suresh Bhamidi, Sara Gibbs, Mary Jackson, Richard N. Zare, Sabine Ehrt, Joel D. Ernst, Niaz Banaei

There is an error in [Fig 1C](#). Lanes shown formed part of a larger gel, which is included in this Correction as [S1 Fig](#).

The corrected version of [Fig 1](#) can be seen here.



OPEN ACCESS

Citation: Gaur RL, Ren K, Blumenthal A, Bhamidi S, Gibbs S, Jackson M, et al. (2015) Correction: LprG-Mediated Surface Expression of Lipoarabinomannan Is Essential for Virulence of *Mycobacterium tuberculosis*. PLoS Pathog 11(12): e1005336. doi:10.1371/journal.ppat.1005336

Published: December 9, 2015

Copyright: © 2015 Gaur et al. This is an open access article distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

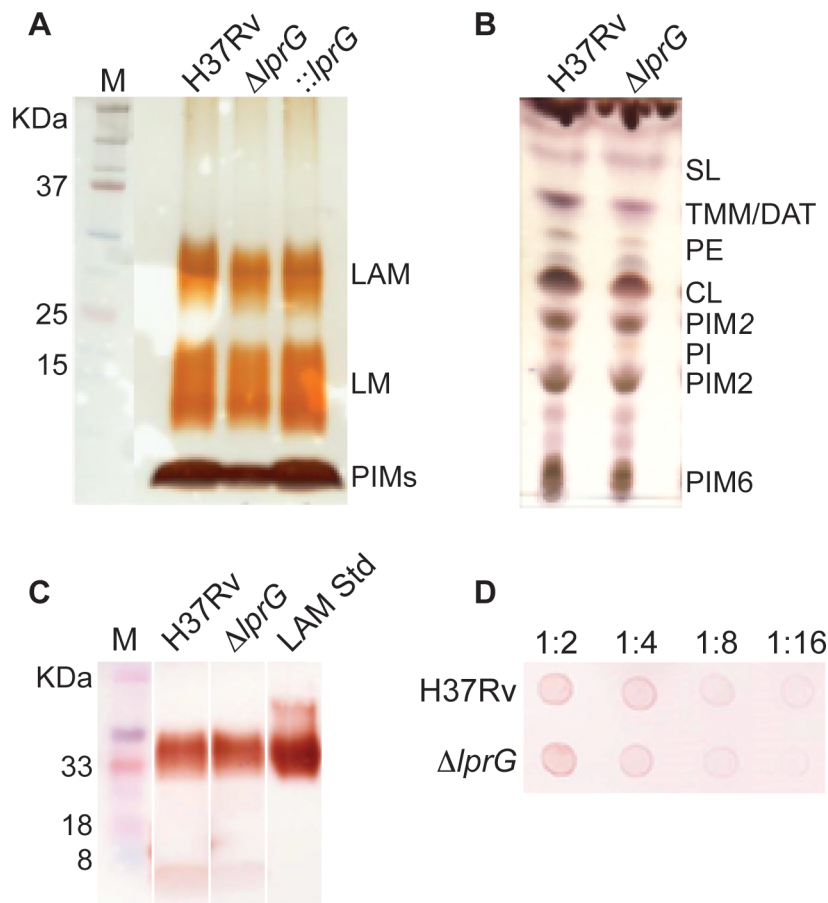


Fig 1. The *lprG* mutant has normal LAM content in the cell envelope. (A) SDS/PAGE analysis of phosphatidylinositol mannosides (PIMs), lipomannan (LM) and LAM prepared from wild-type (*H37Rv*), *lprG* mutant ($\Delta lprG$), and $\Delta lprG$ complemented with *lprG*-Rv1410c ($::lprG$). LM and LAM extracted from equal amounts of bacterial cells were separated on a 10–20% Tricine gel and visualized by periodic acid/Schiff reagent staining. (B) Thin-layer chromatograms of total lipids extracted from *H37Rv* and $\Delta lprG$. The same amounts of total lipids extract from bacilli grown in GAS medium were loaded for each strain. Thin-layer chromatogram plates were run in the solvent system $\text{CHCl}_3/\text{CH}_3\text{OH}/\text{H}_2\text{O}$ (65:25:4, by vol.) and revealed with α -naphthol. SL, sulfolipid; TMM, trehalose monomycolates; DAT, diacyltrehaloses; PE, phosphatidylethanolamine; CL, cardiolipin; PIM₂, phosphatidylinositol dimannoside; PI, phosphatidylinositol; PIM₆, phosphatidylinositol hexamannosides. (C) SDS/PAGE immunoblot for LAM analysis in *H37Rv* and $\Delta lprG$ cellular extracts. Extracts normalized to protein concentration were separated on a 15% SDS/PAGE gel and transferred to PVDF membrane. The blot was blocked, and then stained with anti-LAM pAb (α -LAM) followed by goat anti-rabbit IgG-HRP secondary antibody. The blot was washed and imaged after adding 30% 3,3'-diaminobenzidine tetrahydrochloride solution plus 0.0005% H_2O_2 . LAM Std, purified *H37Rv* LAM standard. Lanes shown formed part of a larger gel. (D) Spot immunoblot for analysis of capsular α -glucan. Capsular content extracted from equal numbers of bacteria were spotted on PVDF membrane and stained with goat anti-phosphatidylinositol-glycans pAb followed by donkey anti-goat IgG-HRP secondary antibody. The membrane was developed and imaged as described in C. Dilutions of extract spotted on membrane are shown. Data is representative of two independent experiments.

doi:10.1371/journal.ppat.1005336.g001

Supporting Information

S1 Fig. The original SDS/PAGE immunoblot for LAM analysis in *H37Rv* and $\Delta lprG$ cellular extracts. Extracts normalized to protein concentration were separated on a 15% SDS/PAGE gel and transferred to PVDF membrane. The blot was blocked, and then stained with anti-LAM pAb (α -LAM) followed by goat anti-rabbit IgG-HRP secondary antibody. The blot

was washed and imaged after adding 30% 3,3'-diaminobenzidine tetrahydrochloride solution plus 0.0005% H₂O₂. LAM Std, purified H37Rv LAM standard. Soluble cell wall, purified H37Rv cell wall extract.
(PPTX)

Reference

1. Gaur RL, Ren K, Blumenthal A, Bhamidi S, Gibbs S, Jackson M, et al. (2014) LprG-Mediated Surface Expression of Lipoarabinomannan Is Essential for Virulence of *Mycobacterium tuberculosis*. PLoS Pathog 10(9): e1004376. doi:[10.1371/journal.ppat.1004376](https://doi.org/10.1371/journal.ppat.1004376) PMID: [25232742](https://pubmed.ncbi.nlm.nih.gov/25232742/)