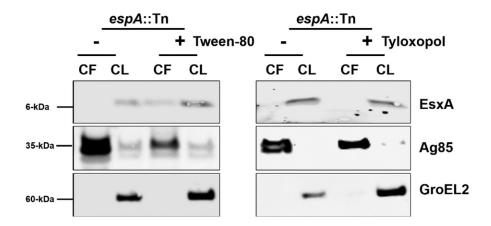
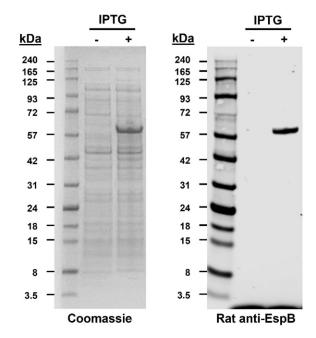


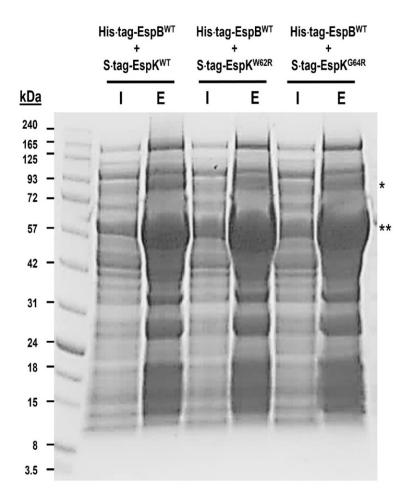
- 2 Supplementary fig. 1. Cellular localization of EspK in M. tb H37Rv. Immunoblots of
- 3 10 μg/well each of CF, CW, CM and cytosol proteins from *M. tb* H37Rv sourced from BEI
- 4 Resources (ATCC).



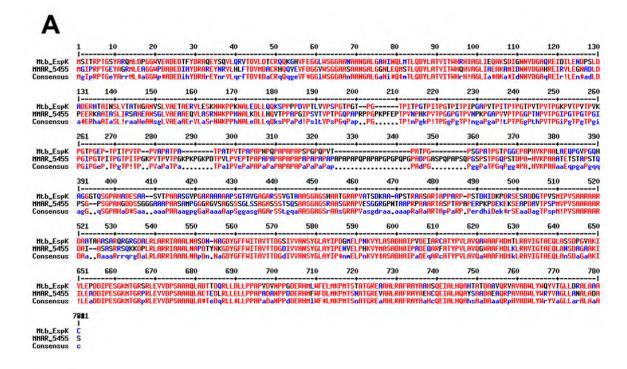
Supplementary fig. 2. Secretion and expression of EsxA by espA::Tn cultured in liquid media with and without detergent. Immunoblot analysis of CF (10 μg/well) and CL (5 μg/well) proteins of espA::Tn strain cultured for 3 days in Sauton's medium with and without Tween-80 (left), and with and without Tyloxapol (right).

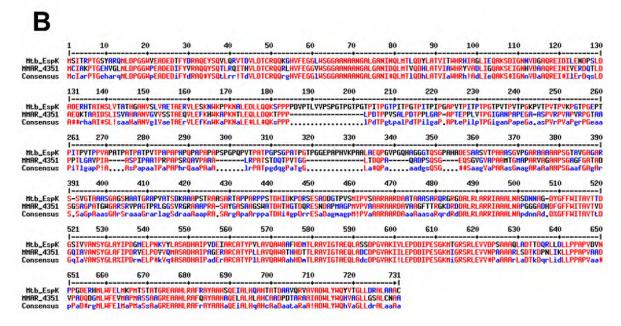


Supplementary fig. 3. Specificity of rat anti-EspB antibody. Coomassie stained SDS-PAGE gel (left) and immunoblot using rat anti-EspB antibodies generated for this study (right) of lysates from non-induced and IPTG-induced *E. coli*/His-tag EspB<sup>WT</sup> expressing full-length EspB.

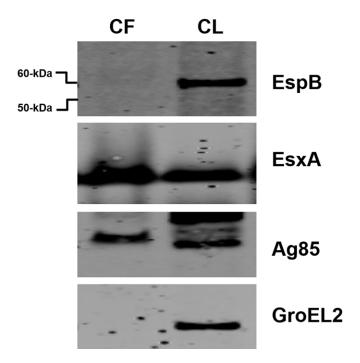


Supplementary fig. 4. Coomassie stained SDS-PAGE gel of input lysates and proteins eluted from his-tag Dynabeads. SDS-PAGE gel of input lysates (I) at 30  $\mu$ g/well each of *E. coli*/His-tag EspB<sup>WT</sup> + S-tag EspK<sup>WT</sup>, *E. coli*/His-tag EspB<sup>WT</sup> + S-tag EspK<sup>W62R</sup> and *E. coli*/His-tag EspB<sup>WT</sup> + S-tag EspK<sup>G64R</sup> and corresponding total captured and eluted proteins (E) in 50  $\mu$ L of SDS-PAGE loading buffer (the single asterisk indicates the position of EspK protein band while the double asterisk indicates the position of the EspB protein band).





**Supplementary fig. 5. Amino acid alignments.** Clustal alignment of *M. tb* EspK with **(A)** *M. marinum* EspK (MMAR\_5455) and **(B)** *M. marinum* MMAR\_4351 amino acid sequences using MultAlin.



29 Supplementary fig. 6. Secretion and expression of EsxA and EspB by *M. africanum*.

- Immunoblots of CF (10 μg/well) and CL (5 μg/well) proteins from *M. africanum* NR-49251
- 31 (Type-1 strain) cultured for 4 days in Sauton's medium without Tween-80 (representative
- of 2 independent experiments).