## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Full proteomic dataset for LESB65 and  $\Delta pmrB$  during exponential growth in broth.

File Name: Supplementary Data 2 Description: Full proteomic dataset for LESB65,  $\Delta pmrB$  and pmrB SNP during exponential growth in broth.

File Name: Supplementary Data 3 Description: ChemDraw file for the hexa-acylated LPS structure in Supplementary Figure 6.

File Name: Supplementary Data 4 Description: ChemDraw file for the penta-acylated LPS structure in Supplementary Figure 6.