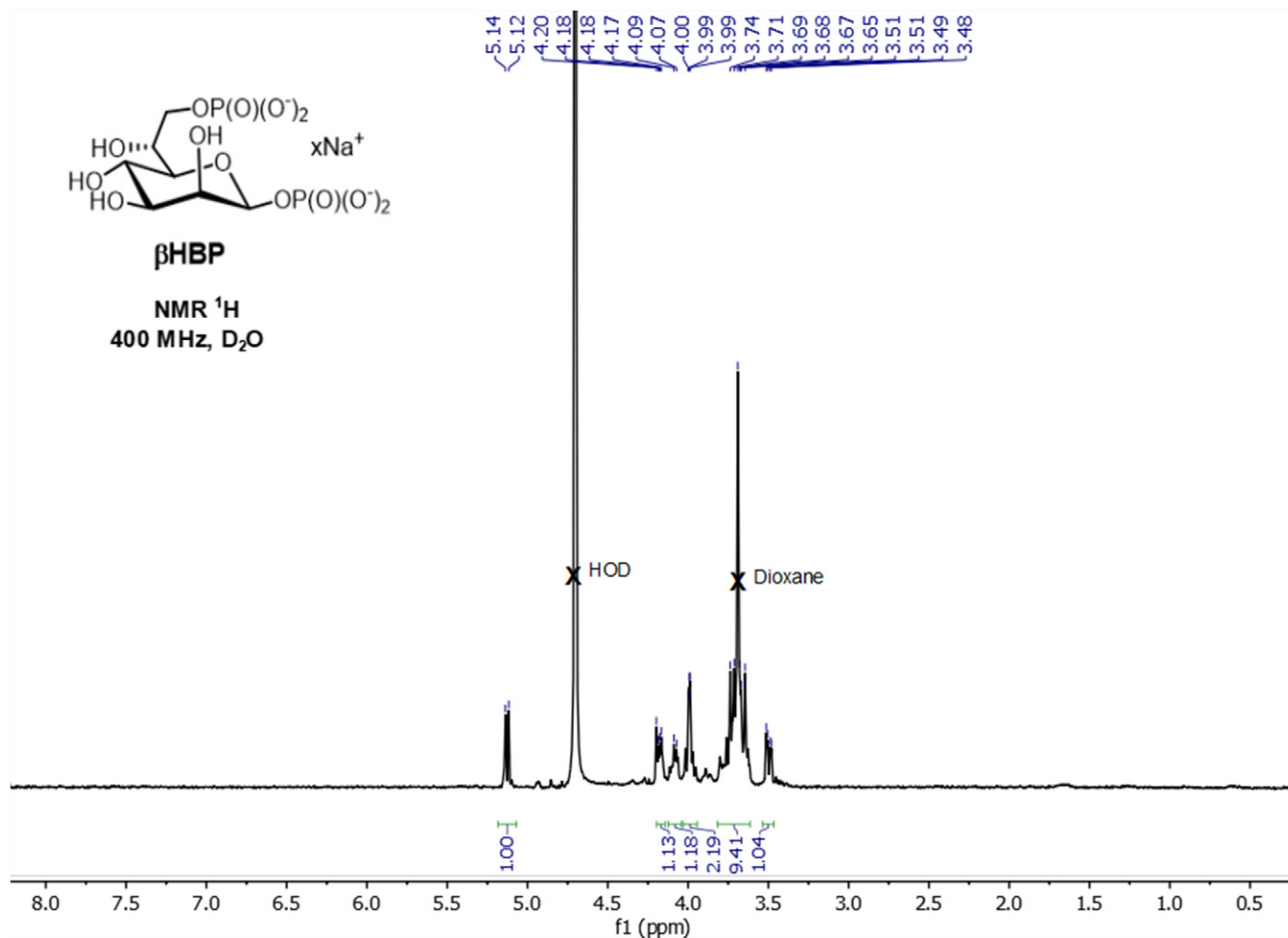


## Expanded View Figures

Figure EV1. <sup>1</sup>H-NMR spectrum of synthetic β-heptose 1,7-bisphosphate in its sodium salt form (400 MHz, D<sub>2</sub>O).

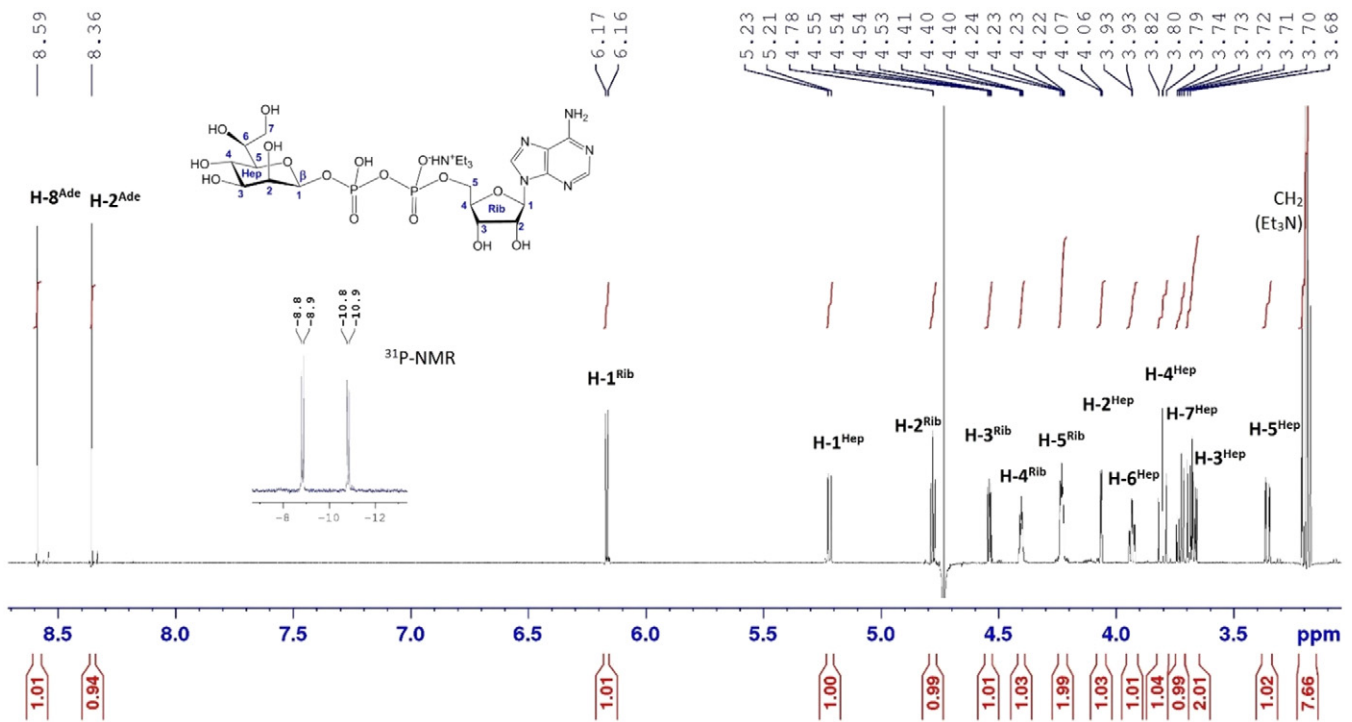


Figure EV2. <sup>1</sup>H-NMR (600 MHz, D<sub>2</sub>O) and <sup>31</sup>P-NMR (243 MHz) spectra of synthetic ADP-L-glycero-β-D-manno-heptose.

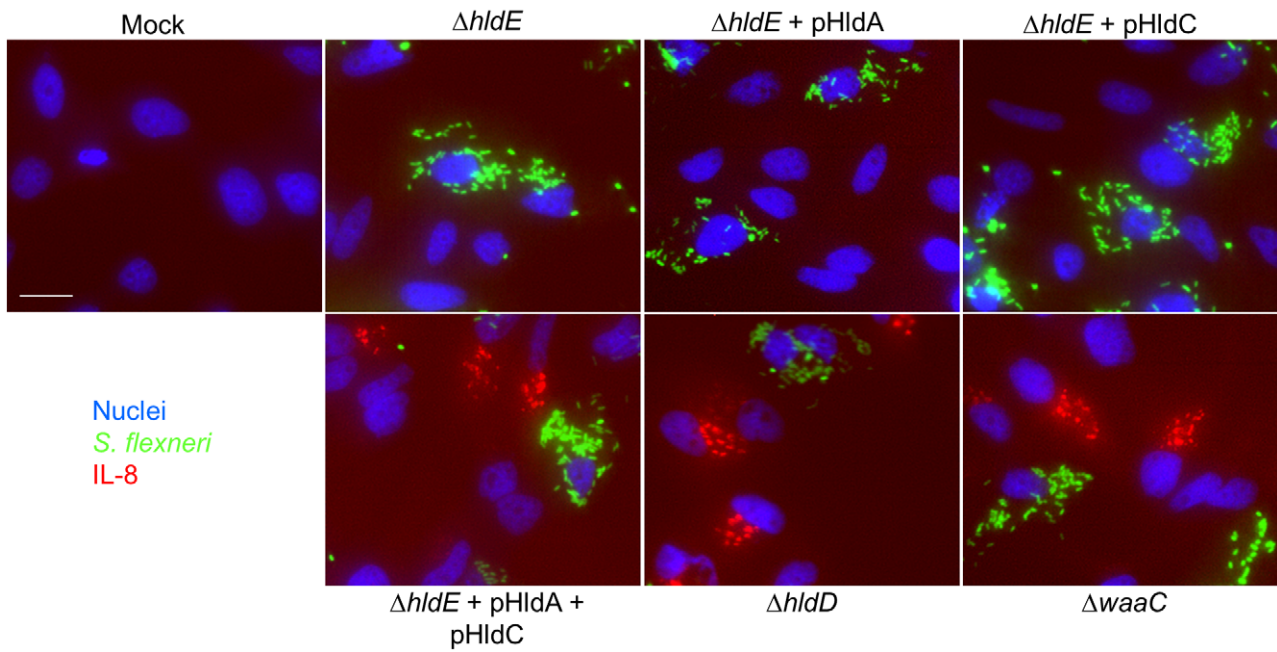


Figure EV3. IL-8 measurements after infection with selected mutants of the LPS biosynthesis pathway.

Cells were infected with selected mutants of the LPS biosynthesis pathway at MOI 5, and IL-8 accumulation was visualized after 4 h. Hoechst, *Shigella flexneri*, and IL-8 are shown in blue, green, and red, respectively. Scale bar, 20 μm.