Development of a System to Monitor ompC Transcription in Escherichia coli Using a Green Fluorescence Protein Reporter System

Angie Hui, Grace Lai, Jaclyn Lam, Fiona Wong

Department of Microbiology and Immunology, University of British Columbia

SUPPLEMENTAL MATERIAL

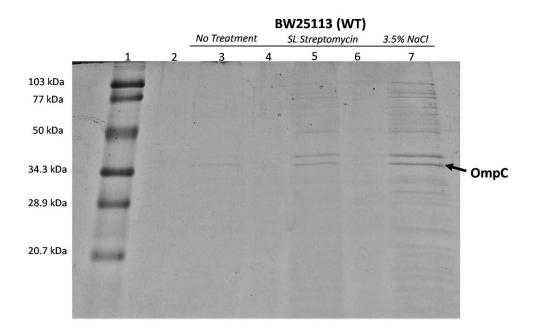


FIG S1. Effect of 1 hour of sublethal streptomycin treatment on wild type E. coli BW25113 strain. Lane 1 contains the prestained Bio-Rad low range protein standard. Lanes 3, 5, and 7 contains $0.5\mu g$ of total protein loaded in $30\mu L$ sample volume. Lanes 2, 4, 6 were left empty to capture overflow from sample lanes. The gel was stained using Coomassie Brilliant Blue R-250. OmpC is identified at 38kDa.

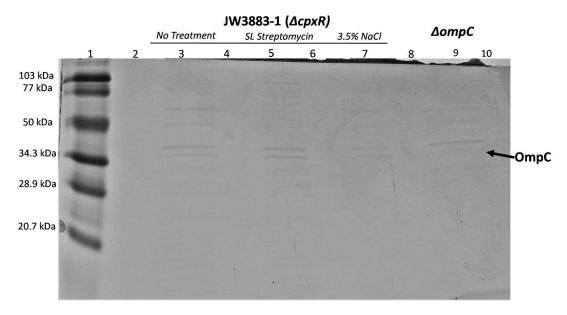


FIG S2. Effect of 1 hour of sublethal streptomycin treatment on *E. coli* Δ*cpxR* JW3883-1. Lane 1 contains the prestained Bio-Rad low range protein standard. Lanes 3, 5, and 7 contains 0.5μg of membrane protein loaded in 30μL sample volume. Lanes 2, 4, 6, 8 were left empty to capture overflow from sample lanes. Lane 9 contained 0.5μg membrane protein from *E. coli* Δ*ompC* JW2203. The gel was stained using Coomassie Brilliant Blue R-250. OmpC is identified at 38kDa.

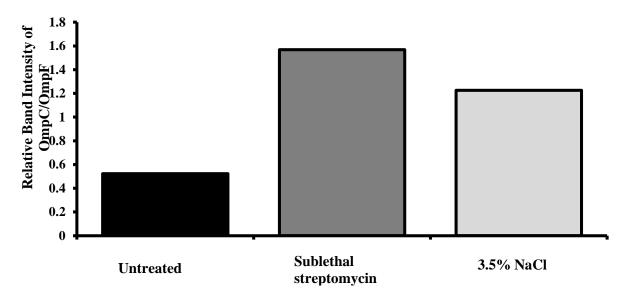


FIG S3. Relative expression of OmpC in *E. coli* BW25113 under no treatment, sublethal streptomycin or 3.5% NaCl conditions. Following ImageJ analysis, the area of the OmpC band was normalized to the area of the OmpF band for relative intensity to account for amount of protein loaded onto the gel. Data is based off digital photos of the SDS-PAGE gel stained with Coomassie Brilliant Blue R-250.

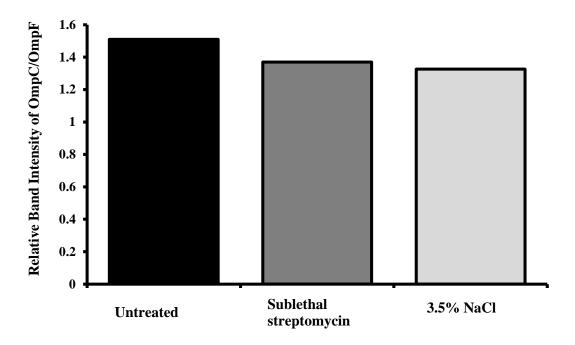


FIG S4. Relative expression of OmpC in *E. coli* JW3883-1 under no treatment, sublethal streptomycin or 3.5% NaCl conditions. Following ImageJ analysis, the area of the OmpC band was normalized to the area of the OmpF band for relative intensity to account for amount of protein loaded onto the gel. Data is based off digital photos of the SDS-PAGE gel stained with Coomassie Brilliant Blue R-250.

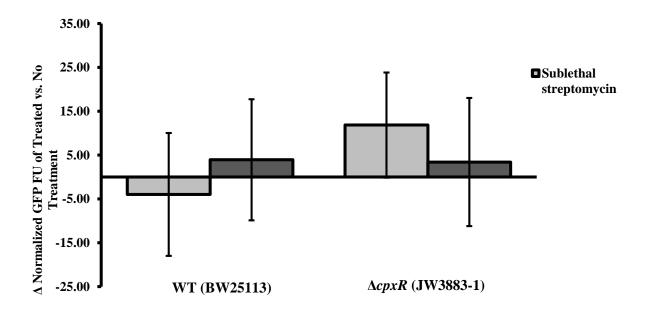


FIG S5. Difference in normalized GFP fluorescence units (FU) of one hour treated (sublethal streptomycin or 3.5% NaCl positive control) vs. untreated (no treatment) *E. coli* JW3883-1 and BW25113. The error bars represent the standard deviations between the averaged difference between treated and untreated conditions in each of five trials.