

## Supplementary Figures

### SUPPLEMENTARY FIGURE LEGENDS

#### **Fig. S1. Cellulose, O-Ag capsule and colanic acid are important constituents in**

**Sal4-induced biofilm formation.** *S. Typhimurium wcaA::luc, ΔyihO, bscE::kan,*

*bscE::kan(pYeaJ)* strains were grown in borosilicate glass tubes for 24 h at 37°C in

containing LB broth with Sal4 (15 µg/ml), 23D7 (15 µg/ml) or CDM. Representative

images demonstrating pellicle formation (top panel) and biofilm formation (bottom panel)

on borosilicate culture tubes in response to Sal4 (arrows) is dependent on the

production of cellulose, O-Ag capsule and colanic acid. Biofilm formation in response to

Sal4 was restored in the *bscE::kan* mutant when YeaJ was overexpressed from a

plasmid. Each experimental strain was performed duplicate culture tubes.

#### **Fig. S2. ΔcsgD exhibits reduce capacity to form a biofilm in response to Sal4.** *S.*

*Typhimurium ΔcsgD* strain was grown in borosilicate glass tubes for 24 h at 37°C in

containing LB broth with Sal4 (15 µg/ml) or CDM. Representative images

demonstrating pellicle formation (top panel) and biofilm formation (bottom panel) on

borosilicate culture tubes in response to Sal4. Each experimental strain was performed

duplicate culture tubes.

#### **Fig. S3. c-di-GMP levels present in WT and WT strain carrying pBAD24 plasmid**

**alone.** WT, and WT + pBAD24 strains of *S. Typhimurium* were grown M9 medium

supplemented with 0.4% glucose to mid-log phase and collected by centrifugation.

Nucleotides were extracted from the cell pellets as described in Materials and Methods

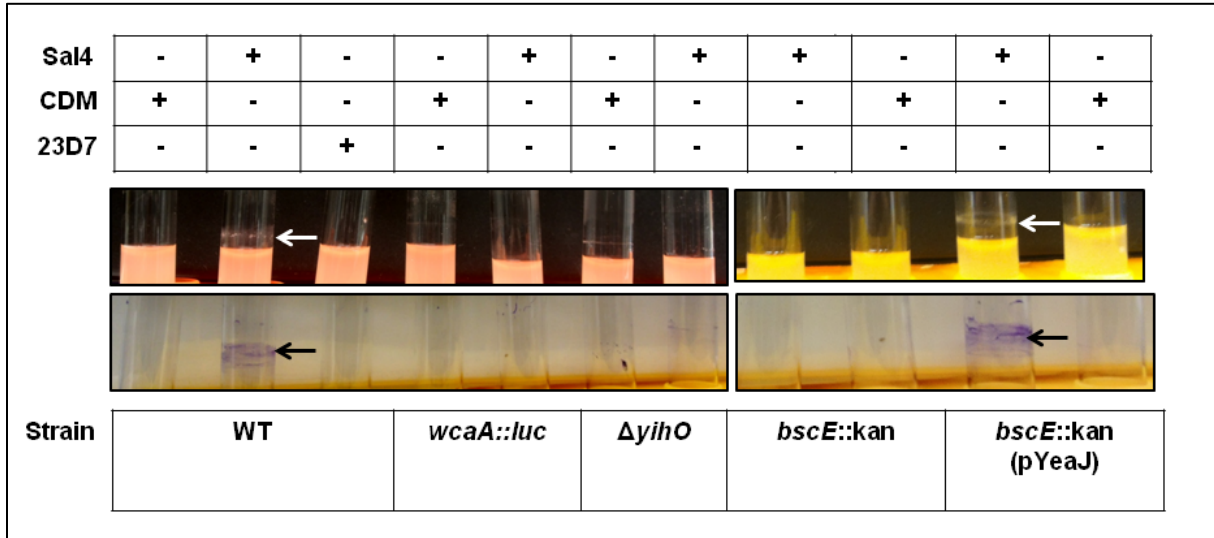
and then subjected to UPLC-MS-MS. Relative levels of c-di-GMP were normalized

24 relative to the WT strain (set to a value of 1). Statistical significance was determined by  
25 one-way ANOVA, followed by Bonferroni's post hoc test, compared to the control (WT):  
26 ns- not significant.

27 **Fig. S4. Cellulose production at 25°C by WT and WT strain carrying pBAD24**  
28 **vector alone (A)** WT, JA002 ( $\Delta$ yeaJ), and WT + pBAD24 strains were struck on CR  
29 and CF agar plates and incubated at 25°C for 72 h to assess cellulose production.  
30 Under these conditions, WT strain carrying the pBAD24 vector alone produced similar  
31 levels of cellulose as compared to the WT strain.

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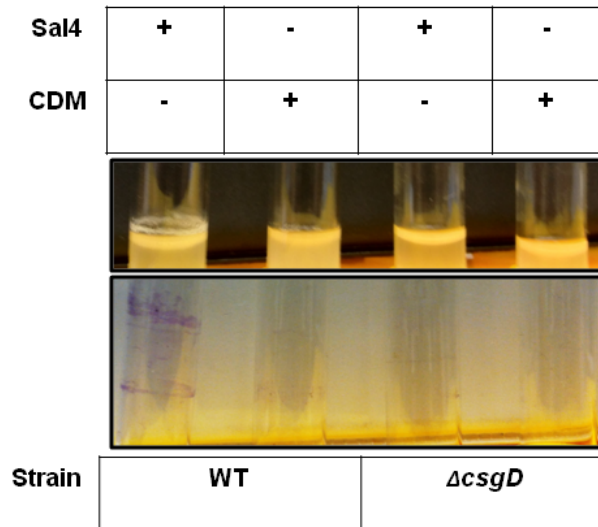
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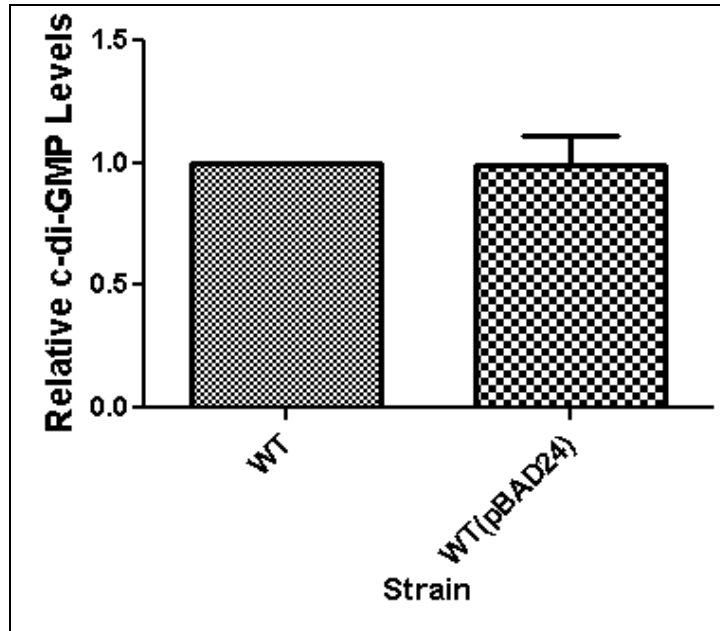
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52 **Fig. S2.  $\Delta csgD$  exhibits reduce capacity to form a biofilm in response to Sal4. S.**

53 Typhimurium  $\Delta csgD$  strain was grown in borosilicate glass tubes for 24 h at 37°C in  
54 containing LB broth with Sal4 (15  $\mu\text{g/ml}$ ) or CDM. Representative images demonstrating  
55 pellicle formation (top panel) and biofilm formation (bottom panel) on borosilicate culture  
56 tubes in response to Sal4. Each experimental strain was performed duplicate culture  
57 tubes.

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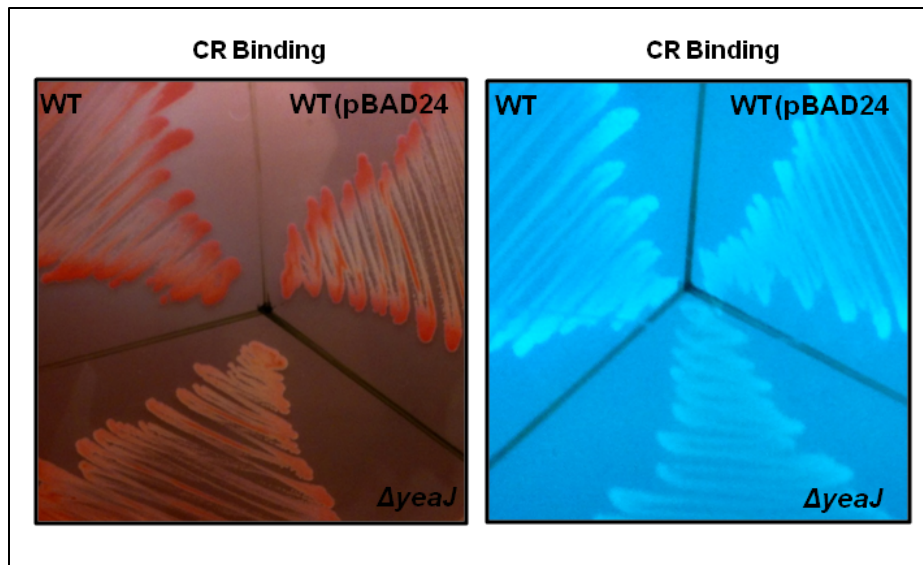
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