Supplementary Figures

SUPPLEMENTARY FIGURE LEGENDS

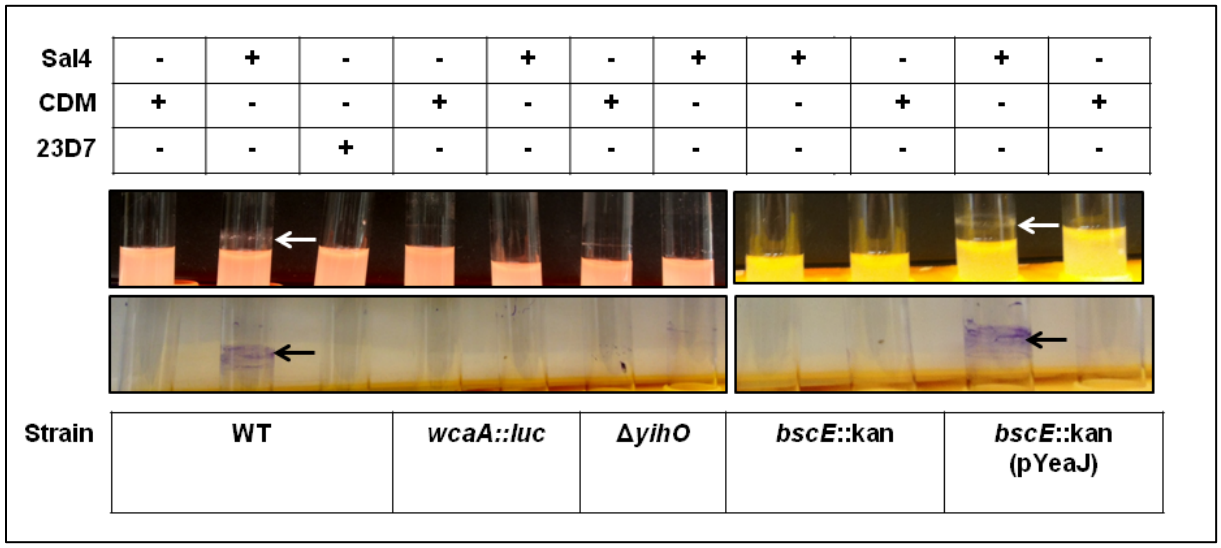
Fig. S1. Cellulose, O-Ag capsule and colanic acid are important constitutes in Sal4-induced biofilm formation. *S*. Typhimurium *wcaA::luc*, Δ*yihO*, *bscE*::*kan*, *bscE*::*kan*(pYeaJ) strains were grown in borosilicate glass tubes for 24 h at 37ºC in containing LB broth with Sal4 (15 µg/ml), 23D7 (15 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 *bcsE::kan* mutant when YeaJ was overexpressed from a plasmid. Each experimental strain was performed duplicate culture tubes.

Fig. S2. Δ*csgD* exhibits reduce capacity to form a biofilm in response to Sal4. *S*. Typhimurium Δ*csgD* strain was grown in borosilicate glass tubes for 24 h at 37ºC 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

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

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



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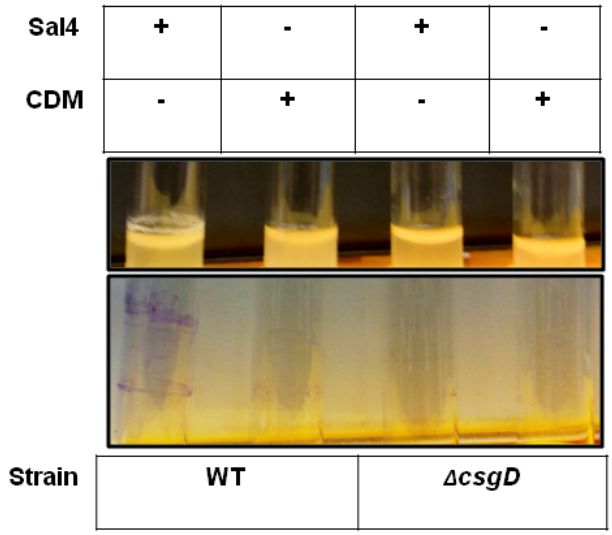

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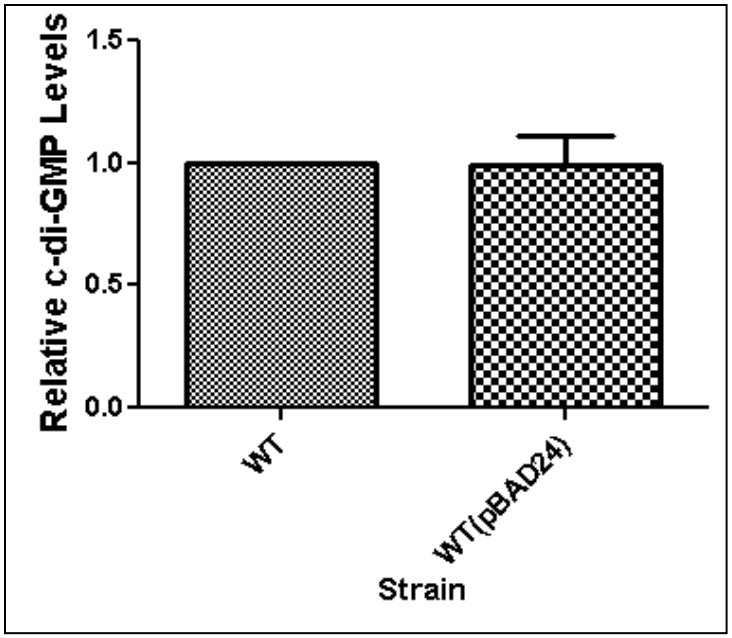

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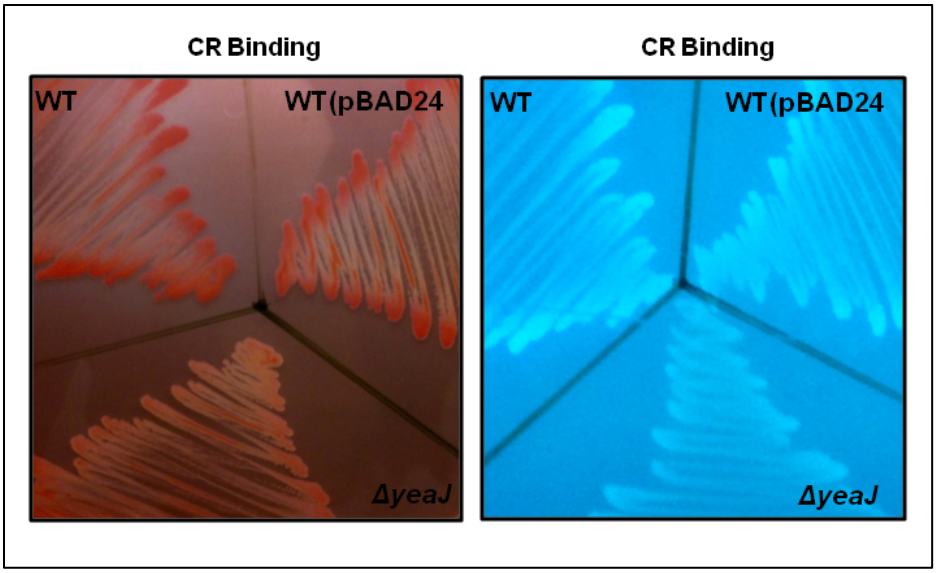

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