

Supplementary data Metals Assay

We evaluated the effect of various divalent cations (CaCl_2 , ZnCl_2 , MgCl_2 and KCl at a concentration of 1 mM) on efflux of EtBr in *S. aureus* cells. Cells were pelleted and washed twice with PBS to remove excess BHI. They were then incubated for 30 minutes in EtBr and a divalent metal cation. Fluorescence was subsequently monitored for 20 min at 585 nm. The data indicated that CaCl_2 had a significantly greater (Kruskal-Wallis $p < 0.0001$) effect on the efflux of EtBr compared to the other metals and control (*S. aureus* cells and EtBr without metal)

Divalent cations assay- Supplementary Figure

S. aureus cells were incubated in 1mM of divalent metals, MgCl_2 , CaCl_2 , ZnCl_2 , KCl and EtBr alone (control) for observation of efflux. Significant differences were observed between Ca^{2+} and other divalent metals as well as the control. Each time point represents the average mean \pm SD of at least three biological replicates and three independent experiments. A Kruskal-Wallis analysis was used to determine significant differences. ($p < 0.0001$).