

**Supplementary Figure S2: Comparison of the activity of parental LST and LST fused to CPHP candidates.** *S. aureus* Cowan I (10<sup>6</sup> CFU/mL) in cell culture medium (AMEM) was treated with 20 nM enzyme for 120 minutes. Surviving bacteria were enumerated by plating and the average log(CFU/mL) reduction compared to the untreated control was determined (± SEM) from biological triplicates. No significant differences were observed for the modified constructs as compared to the unmodified LST.