

S8 Figure: Schematic of the GdpP operon, showing the acquired SNPs and effect of *gdpP* deletion on resistance.

A) The genomic region of the *gdpP* operon along with *rpll* and *dnaC* genes. The N-terminus of the GdpP protein contains two transmembrane helices (black boxes), a PAS domain, GGDEF, DHH and DHHA1 domains. Amino acid substitutions identified in highly resistant derivatives of pRB474-p*mecA* (SJF4981) are indicated and strain details are shown in boxes. B) The inactivation of *gdpP* in $\Delta gdpP$::*kan*^R (SJF5025) showed susceptibility to oxacillin in the absence of *mecA*. Subsequent introduction of pRB474-p*mecA* into $\Delta gdpP$::*kan*^R (SJF5025) resulted in $\Delta gdpP$::*Kan*^R pRB474-p*mecA* (SJF5026) was accompanied by high-level resistance to oxacillin. The MIC for oxacillin determined by Etest is listed in brackets.