

## Farrand et al. Figure S1



*clpP*, *ftsH*, or *hsIV* were grown in iron rich (TSB) or iron poor (TSB + DIP) media. Total protein in cell wall (IsdA) or protoplast (IsdC, IsdE and IsdI) fractions were normalized and separated by 15% SDS-PAGE. Proteins were transferred to nitrocellulose and probed with antibodies directed to IsdA, IsdC, IsdE or IsdI. Blots are representative of 3 independent experiments (*above*). Graphical representation of Isd protein abundance assessed by densitometry in TSB (black bars) or TSB + DIP (white bars) from immunoblot analysis (*below*). Error bars represent SEM. Asterisk denotes p < 0.006 relative to wild-type in the respective condition as calculated by Student's *t*-test.



**Figure S2.** Growth of *clp* mutants in iron-replete and iron-deplete media. Wild-type *S. aureus* or strains inactivated for *clp, fur,* or *isdB* genes were grown in TSB (A) or TSB supplemented with the iron chelator EDDHA (1.5mM) (B). Bacterial growth was assessed every hour for 10 hours and at 24 hours by measuring the optical density of the cultures at 600 nm. Error bars represent SEM of triplicate samples.

## Farrand et al. Figure S3



**Figure S3.** IsdB abundance is unaffected by inactivation of *clpB* or *clpL*. Wild-type *S. aureus* or strains inactivated for *clpB* or *clpL* were grown in TSB or TSB supplemented with the iron chelator DIP (1 mM). Total protein in cell wall fractions was normalized and separated by 15% SDS-PAGE. Proteins were transferred to nitrocellulose and probed with antibodies directed to IsdB. Blots are representative of 3 independent experiments (*above*). Graphical representation of Isd protein abundance assessed by densitometry in TSB (black bars) or TSB + DIP (white bars) from immunoblot analysis (*below*). Error bars represent SEM.

## Farrand et al. Figure S4



Figure S4. Staphylococcal regulators do not impact clp-dependent IsdB regulation. Wild-type *S. aureus* or strains inactivated for *fur, clpP* and *fur,* or *clpP, fur,* and prominent virulence regulators were grown in TSB (white bars) or TSB supplemented with DIP (black bars). IsdB protein levels were determined in cell wall fractions by Western blot. Data include at least three experiments. Error bars represent SEM. Asterisks denote *p* value < 0.008 compared to the  $\Delta clpP\Delta fur$  in the corresponding condition.

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Bacterial Strain	Description	Reference
Newman	S. aureus clinical isolate	(70)
ΔclpP	Isogenic Newman <i>clpP</i> knockout	(40)
$\Delta clpP + clpP$	Stable integration of <i>clpP</i> in chromosome of $\Delta clpP$	(40)
∆ftsH	Isogenic Newman ftsH knockout	(15)
ΔhslUV	Isogenic Newman hsIUV knockout	(15)
ΔclpC	Isogenic Newman <i>clpC</i> knockout	This study
ΔclpX	Isogenic Newman <i>clpX</i> knockout	This study
ΔclpB	Isogenic Newman <i>clpB</i> knockout	This study
ΔclpL	Isogenic Newman <i>clpL</i> knockout	This study
∆fur	Allelic replacement of fur with tetM cassette	(72)
$\Delta clpP\Delta fur$	Transduction of <i>fur</i> ::tetM into $\Delta clpP$	This study
∆isdB	Allelic replacement of <i>isdB</i> with ermC	(8)
Newman pOS1 plgt	Newman transformed with pOS1 plgt empty vector	(9)
<i>ΔclpP</i> Δ <i>fur</i> pOS1 plgt	Δ <i>clpP</i> Δ <i>fur</i> transformed with pOS1 plgt empty vector	This study
Δ <i>clpP</i> Δ <i>fur</i> pOS1 plgt <i>fur</i>	$\Delta clpP\Delta fur$ transformed with pOS1 plgt fur overexpression vector	This study
<i>ΔclpP</i> Δ <i>fur</i> pOS1 plgt <i>clpP</i>	$\Delta clpP\Delta fur$ transformed with pOS1 plgt $clpP$ overexpression vector	This study
ΔclpP∆fur∆codY	Transduction of <i>codY</i> ::ermC into $\Delta clpP\Delta fur$	This study
∆clpP∆fur∆agrA	Transduction of <i>agrA</i> ::ermC into $\Delta clpP\Delta fur$	This study
∆clpP∆fur∆saeR	Transduction of <i>saeR</i> ::ermC into $\Delta clpP\Delta fur$	This study
$\Delta clpP\Delta fur\Delta rot$	Transduction of <i>fot</i> ermC into $\Delta clpP\Delta fur$	This study