

## Supplemental material.

### Figure S1.

Alignment of Spx from *B. subtilis* and *S. aureus*. White letters on black background represent identical residues.  $\alpha$ -Spx peptide antibodies were raised against the (NHCOCH<sub>3</sub>)CGYNEDEIRRFLPRKVR(CONH<sub>2</sub>) peptide (peptide  $\alpha$ ).

### Figure S2.

Construction of an *S. aureus yjbH* mutant strain. See Materials and Methods section for details.

### Figure S3.

PCR to verify a double crossover recombination event in the chromosomal *yjbH* locus of the *S. aureus yjbH* mutant using the SAYJBH2/SPC2 and SPC10/SAYJBH1 primer pairs. (A) Primer positions. (B) Agarose gel. Lane a: Molecular marker. Lane b: Strain 8325 4  $\Delta yjbH$  was used as template with primer pair SPC10/SAYJBH1, giving a PCR product of the expected size (1476 bp). Lane c: Strain 8325-4  $\Delta yjbH$  was used as template with primer pair SAYJBH2/SPC2, giving a PCR product of the expected size (1644 bp).

### Figure S4

Immunoblot assay of the content of Spx in LUW400 ( $\Delta yjbH::spc$ ) and LUW428 ( $\Delta yjbH::spc$ , *amyE::yjbH<sub>S(A)</sub>*) with different concentrations of the inducer IPTG.

### Figure S5

Growth curve of *S. aureus* Newman (pCL25) (●), LUSA10 ( $\Delta yjbH$  pCL25-*yjbIH*) (○), LUSA2 ( $\Delta yjbH$ ) (◆), LUSA9 ( $\Delta yjbH$  pCL25) (Δ).

### Figure S6

The diagram shows the clearing zone of wt. (*S. aureus* Newman pCL25), LUSA9 ( $\Delta yjbH$  pCL25) and LUSA10 ( $\Delta yjbH$  pCL25-*yjbIH*) in the presence of diamide. The error bars represent the standard deviation of three separate clearing zones.

### Figure S7

Immunoblot assay of *S. aureus* YjbH heterologously expressed in *B. subtilis*. The strain contains an IPTG-inducible *S. aureus yjbH* gene integrated in single copy at the *amyE* locus on the chromosome of a *B. subtilis yjbH* null mutant. The IPTG concentrations used are indicated.

### Figure S8

Immunoblot assay of the YjbH (Top) and Spx (Bottom) levels in *S. aureus* Newman pCL25-*yjbIH* with anhydrotetracycline concentrations as indicated.

**Figure S1**

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                20                40
Bs Spx : MVTLLTSPSCTSCRKARAWLEHEIIPFVERNIFSEPLSIDEIKQILRMTEDE : 51
Sa_Spx : MVTLLTSPSCTSCRKAKAWLQEHDIPTYERNIFSEHLTIDEIKQILKMTED : 51

                60                80                100
Bs Spx : GTDEIISTRKVFQKLNVNVESEMPLODLYRLINEHPGLLRPITIDEKRLQ : 102
Sa_Spx : GTDEIISTRKTYQKLNVDIDSEMPLODLYSTIQDNPGLLRPITIDNKRLQ : 102

                120
Bs Spx : VGYNEDEIRRFLPRKVRSEFOLREAORLAN : 131
Sa Spx : VGYNEDEIRRFLPRKVRSEFOLQEAORMVD : 131
    
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peptide  $\alpha$

**Figure S2.**

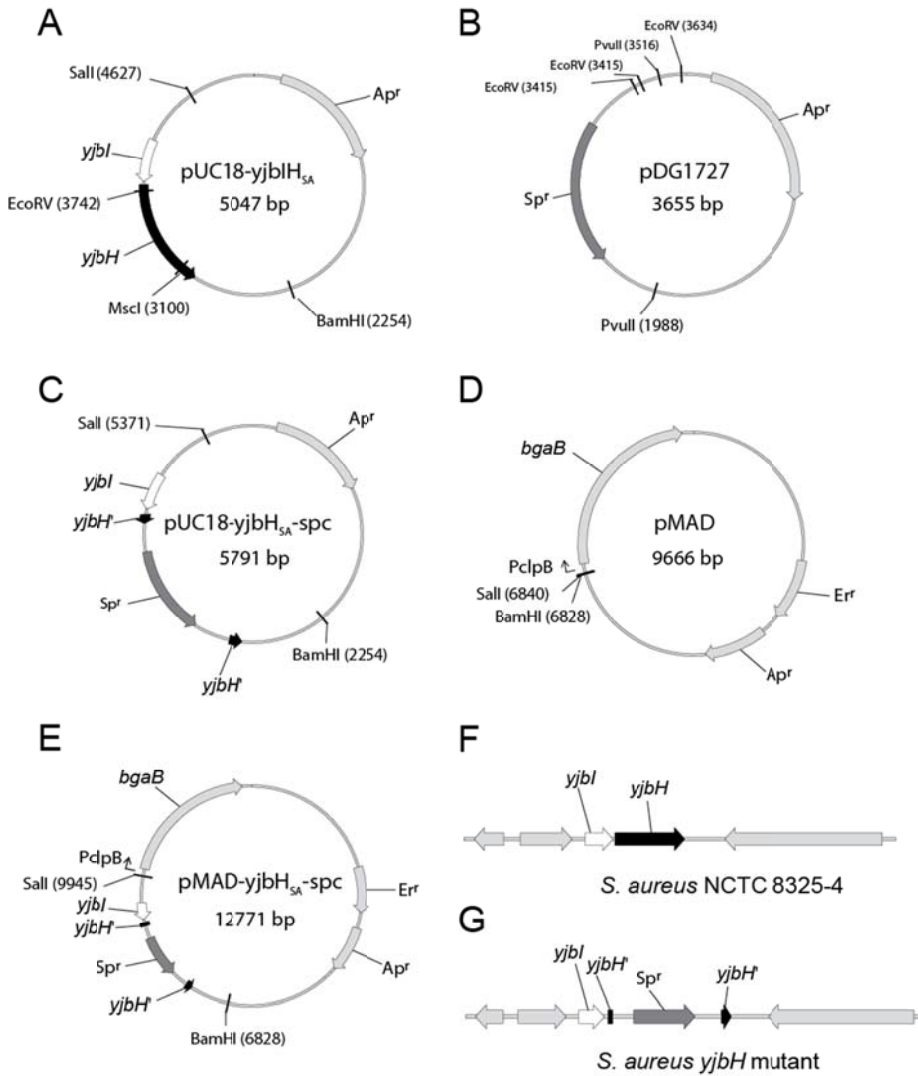


Figure S3.

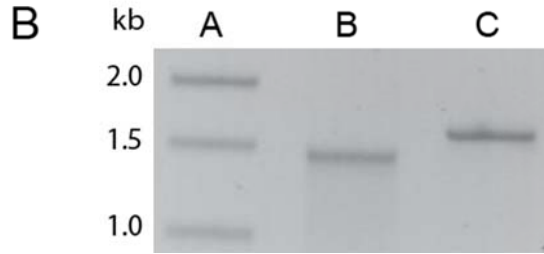
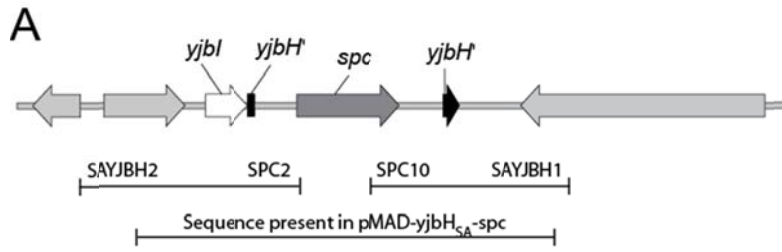


Figure S4.

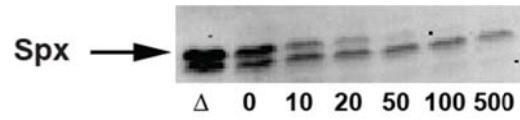


Figure S5.

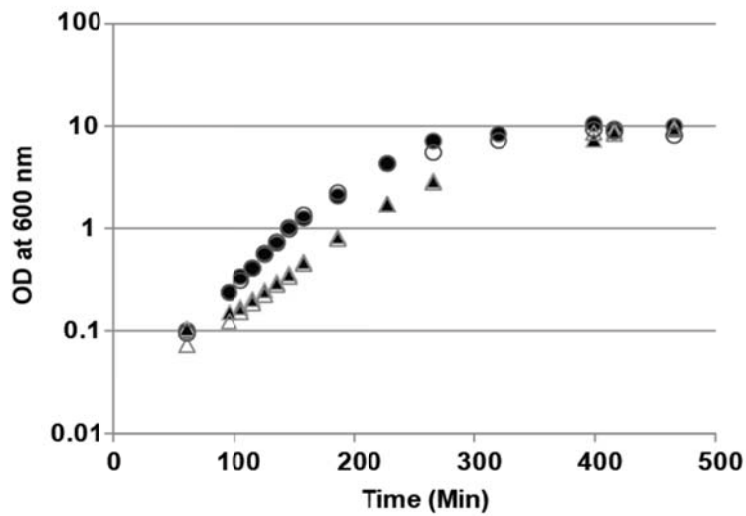


Figure S6.

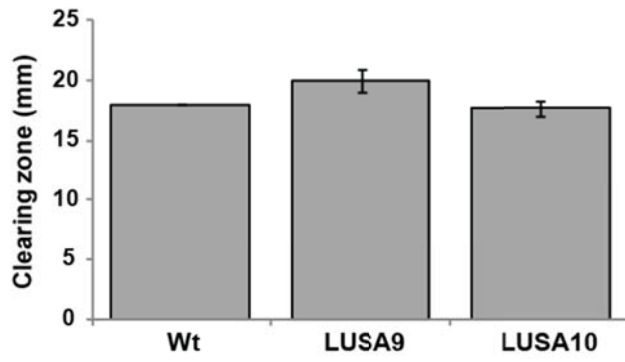


Figure S7.

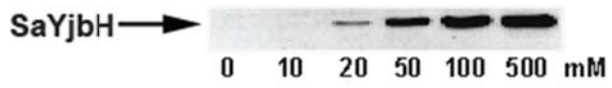


Figure S8.

