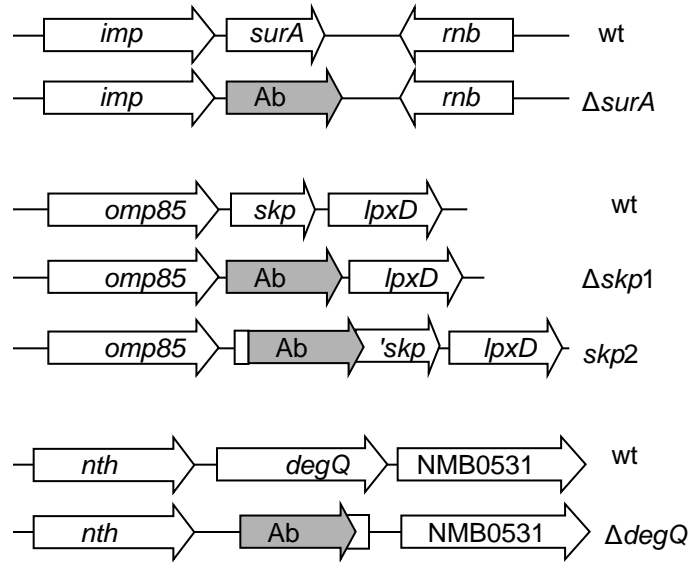
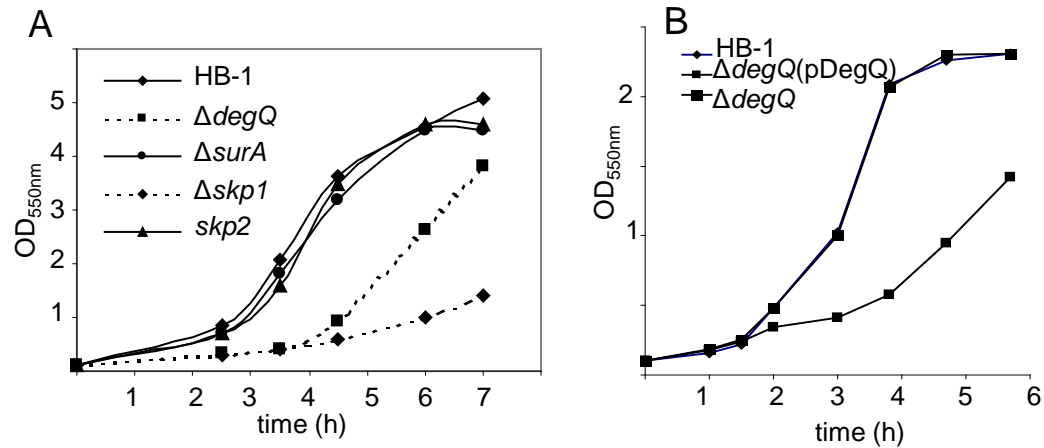


Supplementary Figure 1



Supplementary Figure 1: Mutants constructed. Gene organization of wild-type and mutant loci. *Ab*, antibiotic resistance marker (either *kan* or *cat*). Annotations are from strain MC58 as found at <http://cmr.icvi.org>. *rnb*, exoribonuclease II; *nth*, endonuclease III; NMB0531, conserved hypothetical protein.

Supplementary Figure 2

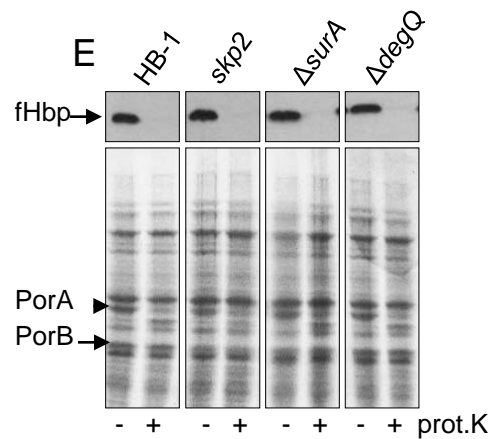
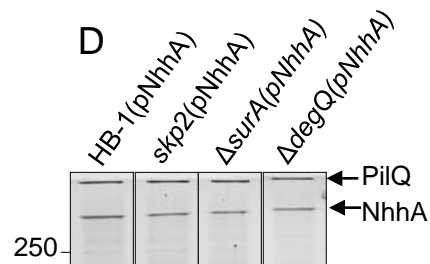
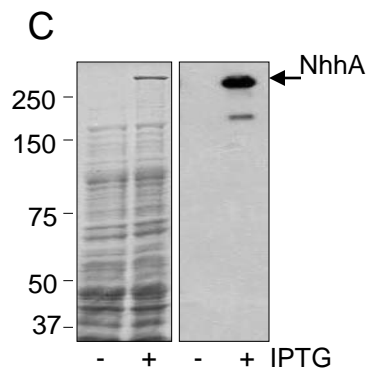
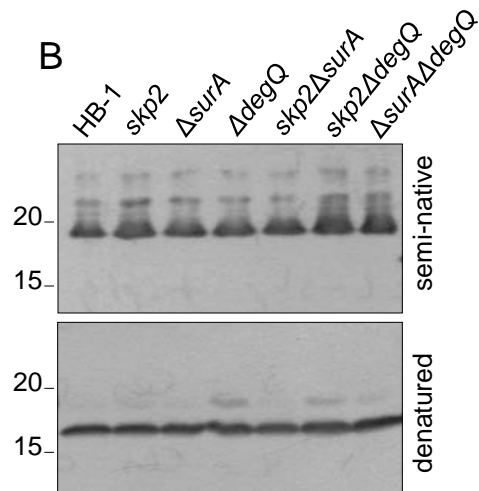
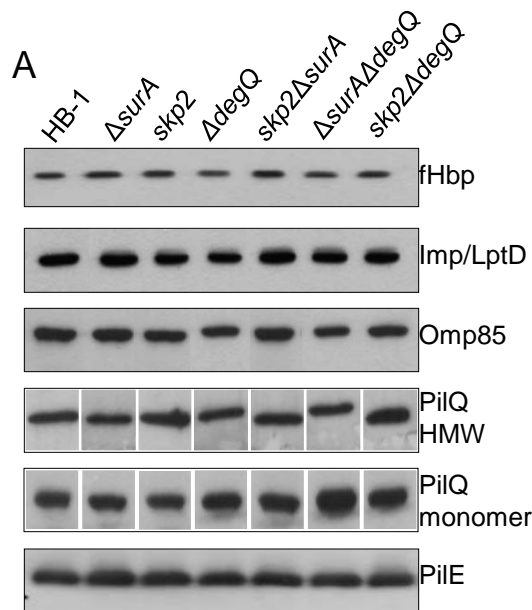


Supplementary Figure 2: Growth properties of the mutants.

(A) Representative growth curves of parent (HB-1) and single mutant strains in TSB.

(B) Complementation of the increased lag time of the $\Delta degQ$ mutant by expression of a copy of *degQ* in trans. Strain HB1 $\Delta degQ(pDegQ)$ was grown in the presence of 0.1 mM IPTG.

Supplementary Figure 3



Supplementary Figure 3: Levels and assembly of OMPs and surface-exposed proteins in chaperone mutants.

(A) Similar amounts of cell lysates were subjected to SDS-PAGE and immunoblot analyses with antibodies directed against the proteins indicated on the right. HMW PilQ represents the oligomeric PilQ complex migrating far above the 250 kDa marker protein; monomeric PilQ represents the signal found at ~80 kDa.

(B) Cell envelopes of the indicated strains were subjected to semi-native or denaturing SDS-PAGE followed by immunoblotting with anti-NspA Mabs.

(C) Cell lysates of HB-1(pNhhA) grown with and without 1 mM IPTG were subjected to SDS-PAGE and Coomassie Brilliant Blue staining (left panel) or blotted with an anti-NhhA Mab (right panel).

(D) Cell lysates of the indicated strains grown in the presence of IPTG were analyzed by denaturing SDS-PAGE followed by Coomassie Brilliant Blue staining. Only the relevant part of the gel is shown.

(E) Cells of the indicated strains were treated with proteinase K, as indicated, and processed for SDS-PAGE analysis followed by Coomassie Brilliant Blue staining (lower part) or immunoblotting with an anti-fHbp antiserum (upper panel).