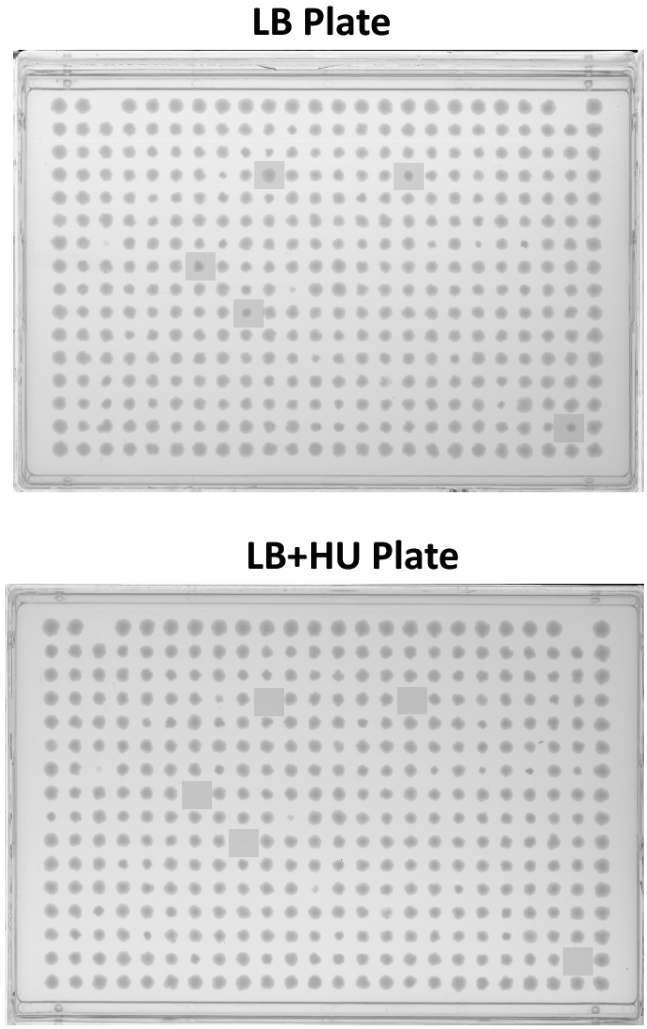
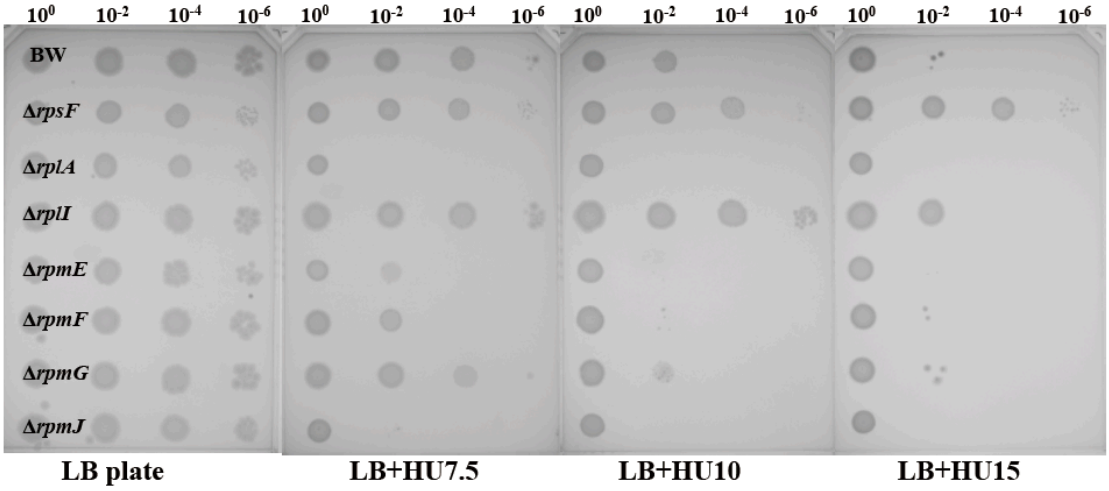
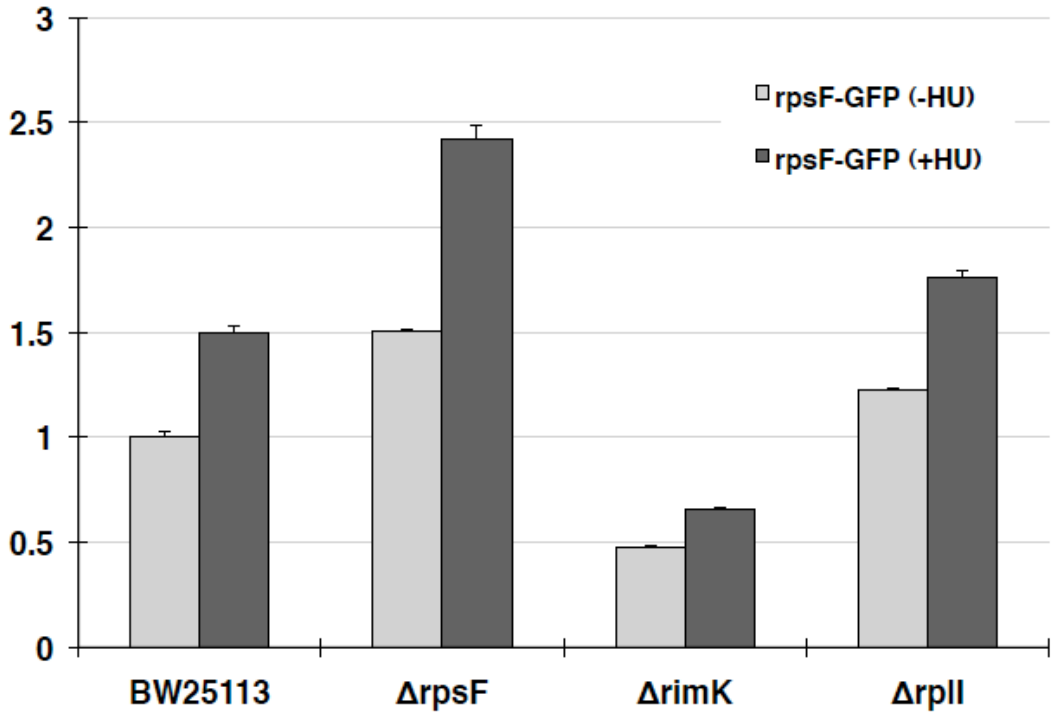


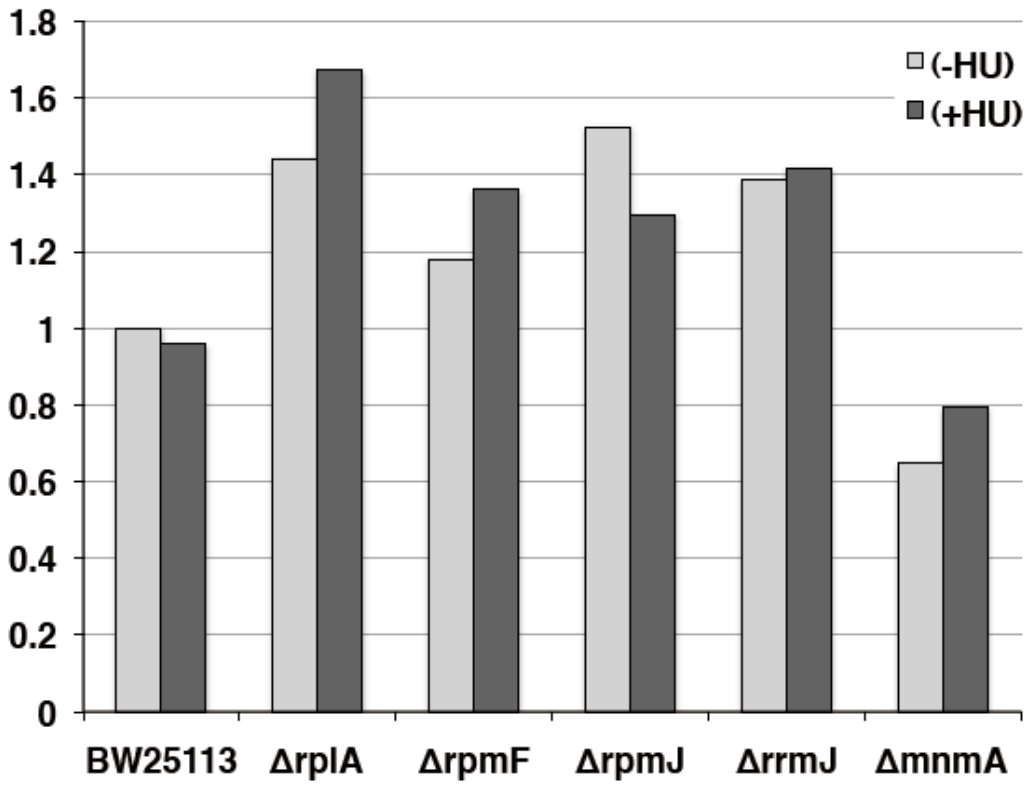
Supplementary figure 1. Genome-wide screening for HU sensitive mutants using Keio collection with 384-pin format**.** HU was added at 7.5 mM (lower panel) and plates were incubated at 37 °C for 18h. Masked colonies were selected as HU-sensitive clones in the first screening.



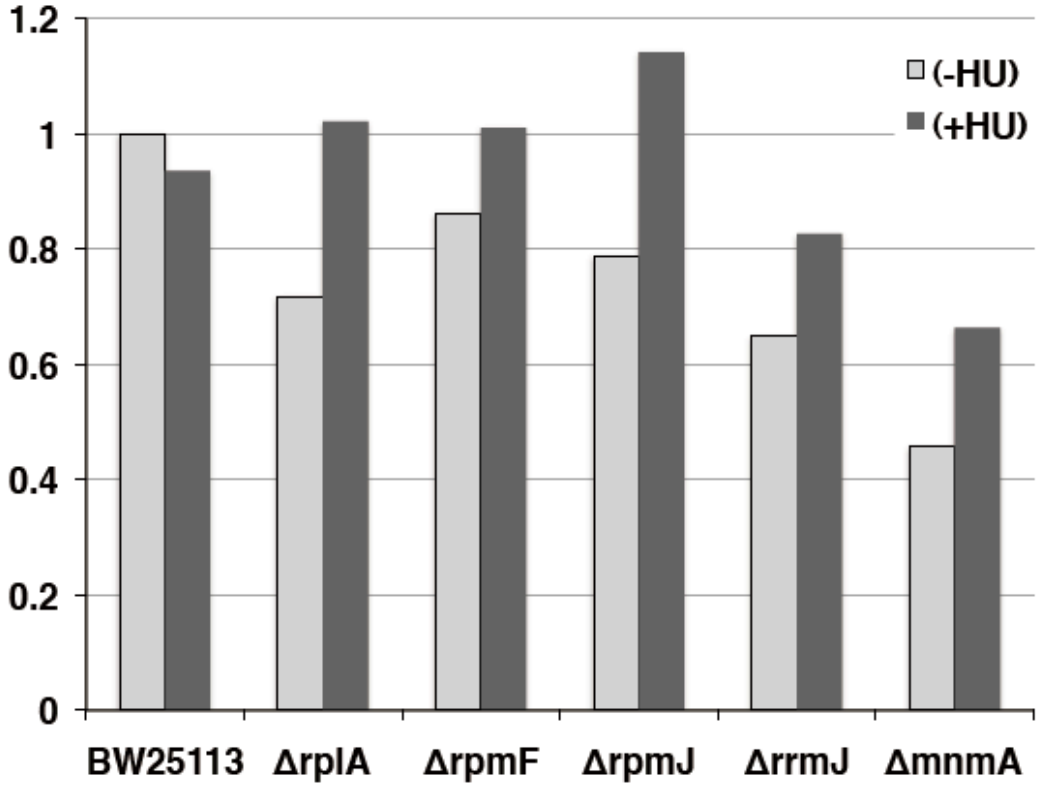
Supplementary figure 2. HU sensitivity of mutants of ribosomal protein deletions. 5 µl of overnight cultures was spotted onto agar plates at the indicated dilution rates. HU was added at the indicated concentrations (mM). Plates were incubated at 37 C° for 24 h.



Supplementary figure 3. Promoter assays of *rpsF* operon. Cells harboring pTN174 were grown at 37 C° in LB+Cm medium with or without 5 mM HU until OD_{600} reached 0.4. Intensity of GFP fluorescence was measured by flowcytometory. Vertical axis was represented by relative values with BW25113 (-HU) as 1.0.



Supplementary figure 4. Frameshift efficiency was calculated as fluorescent intensity of cells harboring pTN196/ fluorescent intensity of cells harboring pTN197. In pTN196 and pTN197, Venus GFP gene was fused to *dnaX* frameshift region with -1 frame and in frame, respectively. Vertical axis was represented by relative values with BW25113 (-HU) as 1.0.



Supplementary figure 5. Suppression frequency was calculated as fluorescent intensity of cells harboring pTN252/ fluorescent intensity of cells harboring pTN251. In pTN251 and pTN252, Venus GFP gene was fused to *gapA* promoter and its first 20 aa where 18th codon was replaced with TGG and TGA, respectively. Vertical axis was represented by relative values with BW25113 (-HU) as 1.0.