

Supplemental material

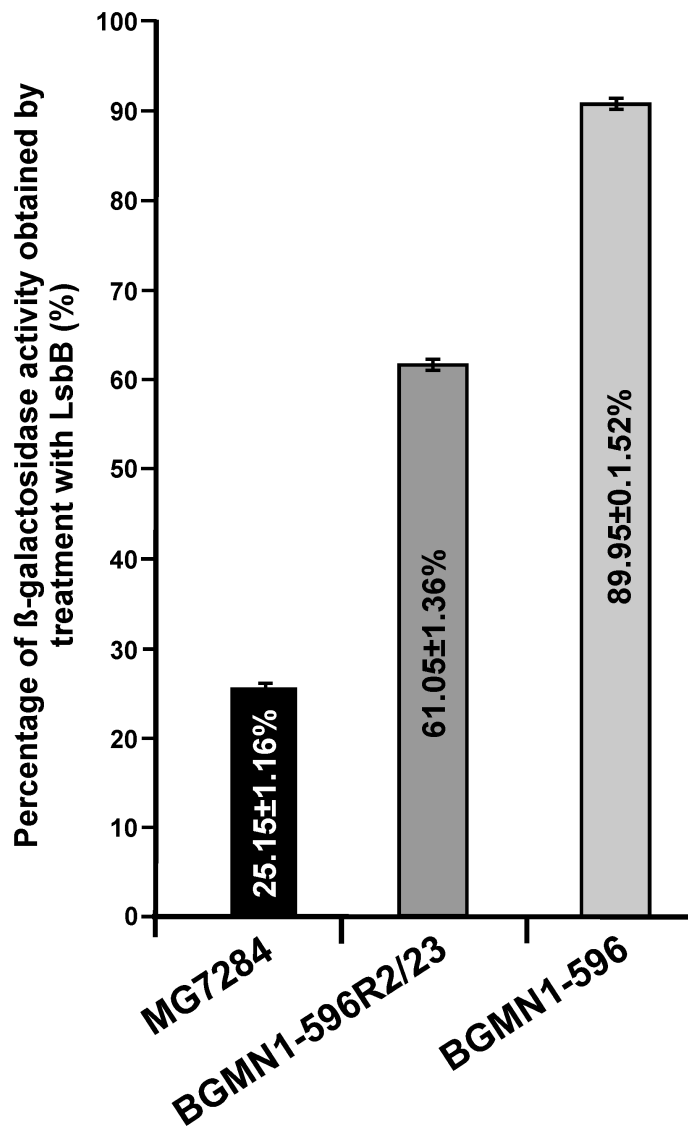


Figure S1. Percentage of β -galactosidase activities of different strains/mutants carrying pNZ8150lacZ1PlcnB exposed to synthetic LsbB (100 μ g/ml) compared with those obtained by treatment with SDS and chloroform (control).

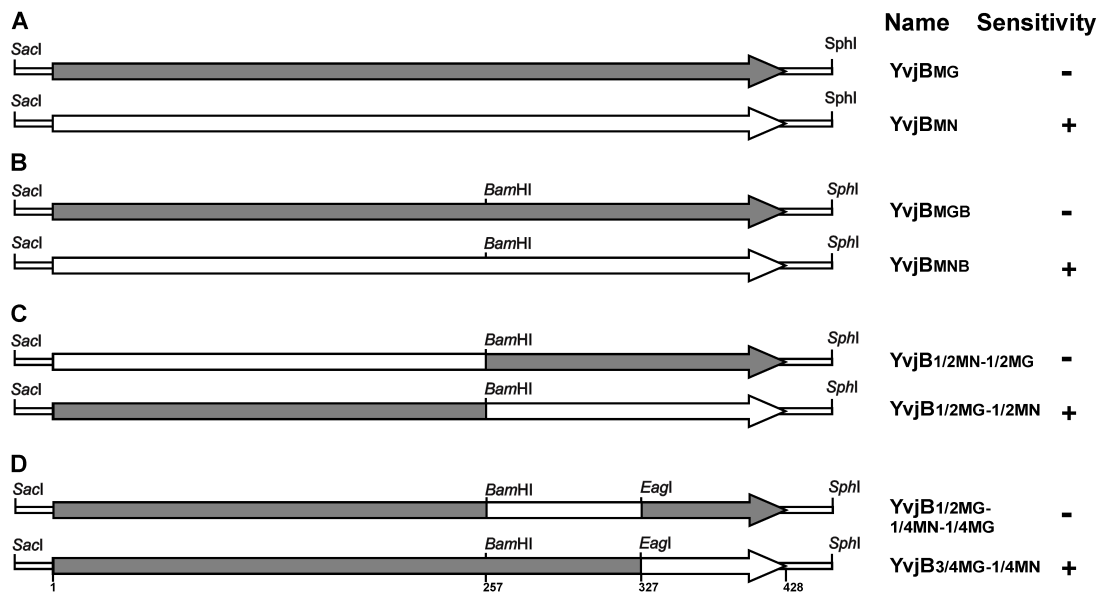


Figure S2. Scheme of construction hybrid YvjB_{MN}-YvjB_{MG} clones used to determine the region responsible for interaction with LsbB. Positions of relevant restriction sites and amino acids are indicated. Parts belonging to different YvjB encoding genes are indicated by different colors.

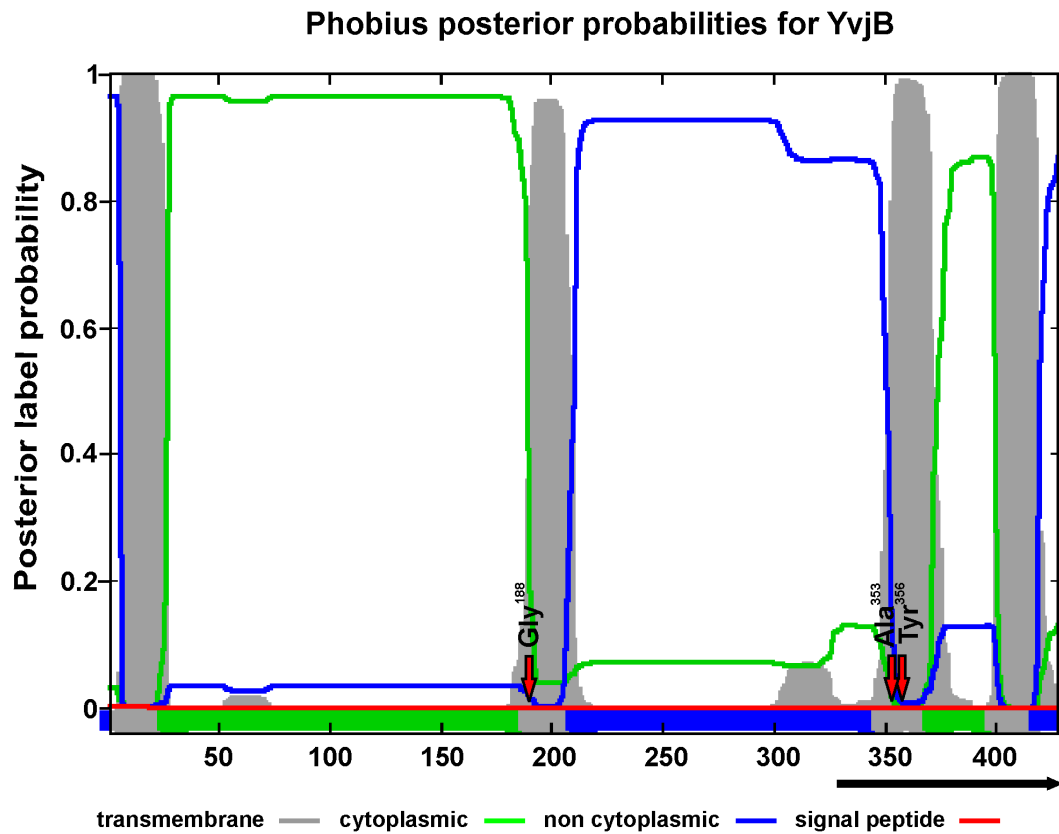


Figure S3. Graph indicating predicted transmembrane domains of YvjB protein using Phobius (<http://phobius.binf.ku.dk/index.html>) software. Black arrow indicates the smallest region that confers sensitivity to LsbB in the hybrid protein. Red arrows indicate relevant amino acids involved in interaction of YvjB with LsbB.

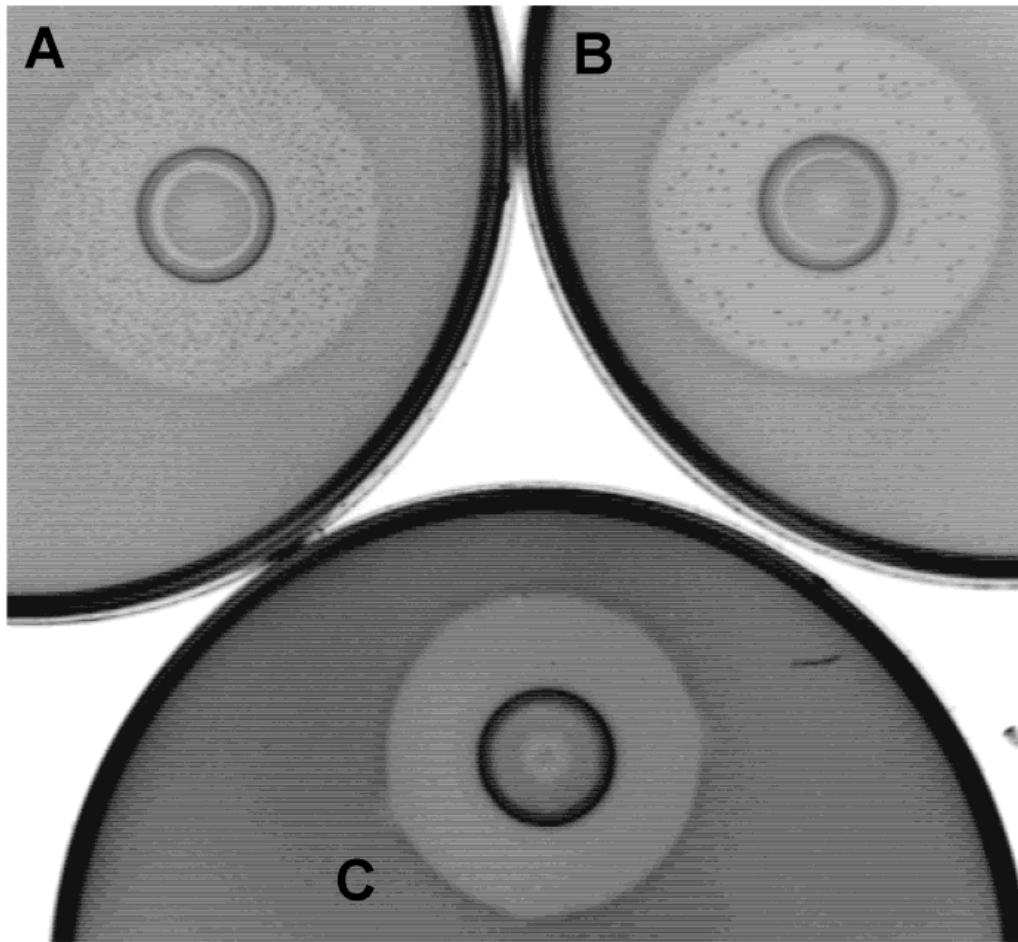


Figure S4. Assay of sensitivity to LsbB of selected YvjB_{MG} mutants. A. MG7284/pAZIL-YvjB_{MG}-Thr³⁵³Ala + Gln³⁵⁶Tyr, B. MG7284/pAZIL-YvjB_{MG}-Leu³⁵¹Phe + Thr³⁵³Ala + Gln³⁵⁶Tyr, C. MG7284/pAZIL-YvjB_{MN}. *L. lactis* BGMN1-596T was used as the LsbB producer. Inhibition is seen as clear zones or the number of resistant colonies around the wells.

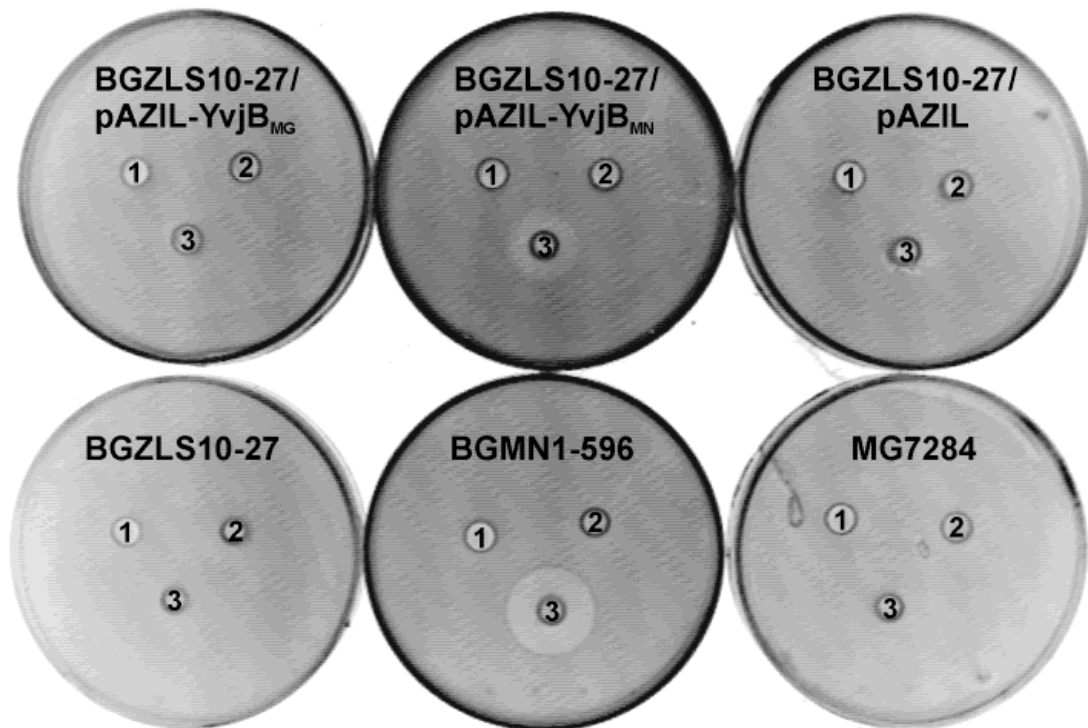


Figure S5. Antimicrobial activity of LsbB on different indicator strains and transformants. Cultures of LsbB producer (BGMN1-596T) and control strains (MG7284 and BGZLS10-27) were introduced into wells: 1. BGZLS10-27; 2. MG7284; 3. BGMN1-596T made in soft agar inoculated with different indicator strains and transformants: BGZLS10-27/pAZIL-YvjB_{MG} (BGZLS10-27 with expressed YvjB protein from MG7284 - resistant strain to LsbB), BGZLS10-27/pAZIL-YvjB_{MN} (BGZLS10-27 with expressed YvjB protein from BGMN1-596 - sensitive strain to LsbB), BGZLS10-27/pAZIL (BGZLS10-27 with empty plasmid - control), BGZLS10-27 (resistant strain to LsbB), BGMN1-596 (sensitive strain to LsbB), MG7284 (resistant strain to LsbB).