

Fig. S1. List of *S. thermophilus* strains tested for the biofilm capacity in static conditions on stainless steel in milk. The strain UC8547 used for the further studies is indicated in bold. Strains harbouring the *prtS* gene are highlighted in blue. Biofilm formation in static conditions was tested as described in Material and Methods and measured analysing the optical density at 590 nm after staining with crystal violet. Bars indicate the mean values and error bars the standard deviations. Experiments were performed in triplicate.



Fig. S2. SDS-PAGE analysis of proteins adhered to the stainless steel wire extracted from: (A) stainless steel wire maintained in the biofilm apparatus in a flow of sterile milk; (B) stainless steel wire in presence of *S. thermophilus* UC8547 biofilm. The samples were collected after 30 h of incubation at 42°C. the wires were extracted from the flow cells, washed twice with sterile distilled water and proteins analysed with 12% SDS-PAGE. Milk proteins are indicated by arrows. In lane A the main milk proteins are visible. In lane B, the protein profile of biofilm formed by *S. thermophilus* UC8547 contains both cellular proteins and milk proteins.