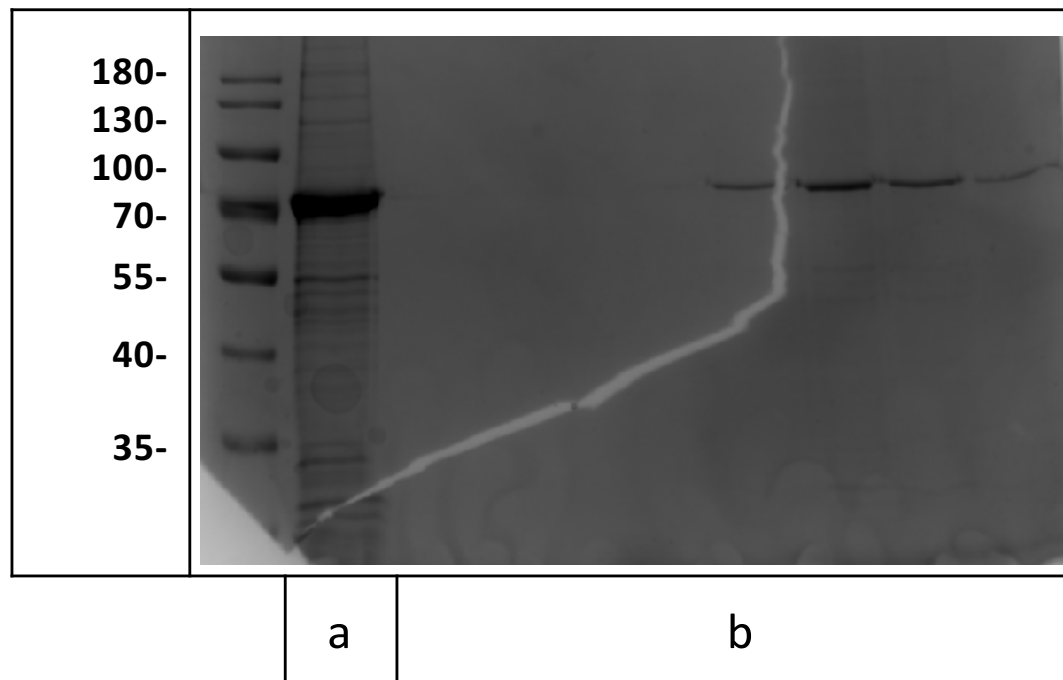
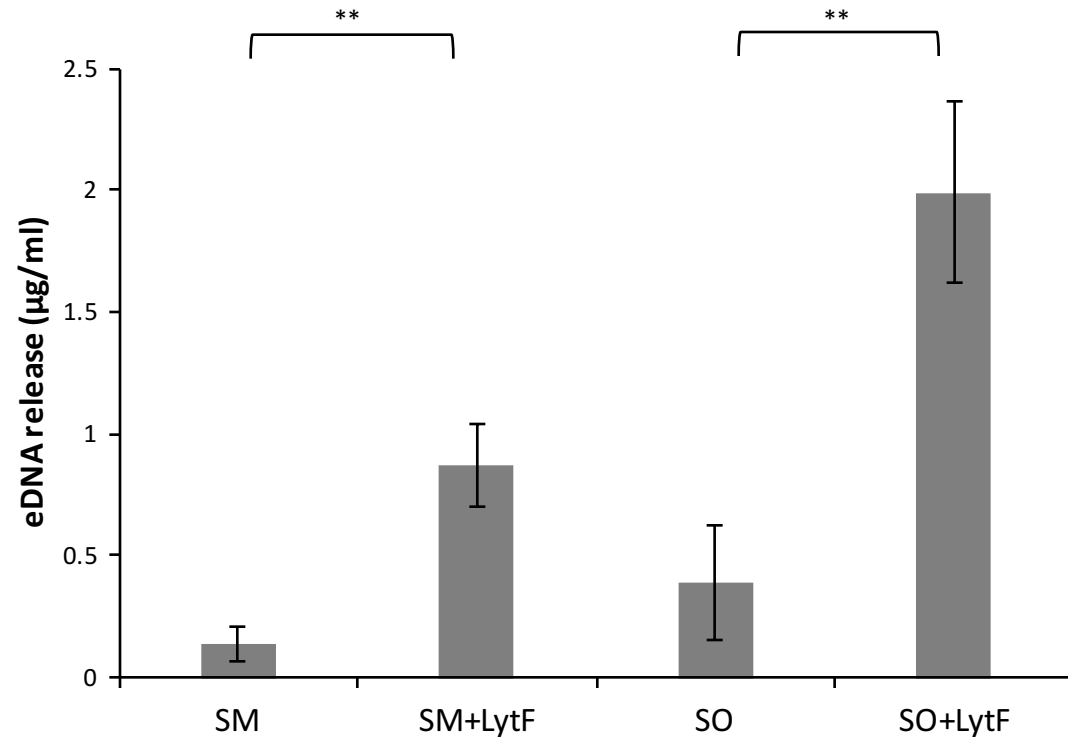


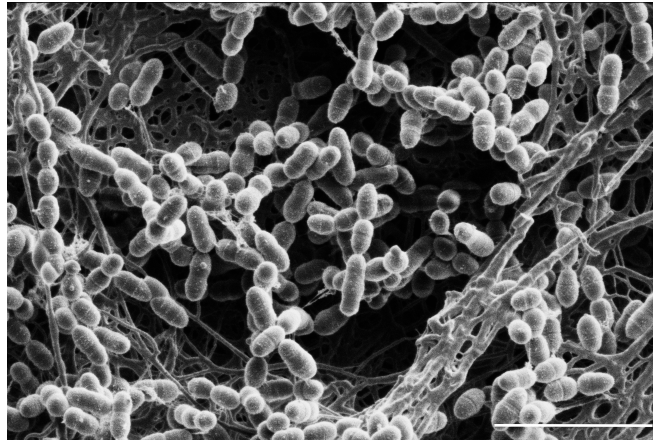
**Figure S1. LytF of *S. sanguinis* is capable of digesting *S. mutans*.** Zymogram with *S. mutans* substrate cells showing the clearance band at approximately 70 kDa after *S. sanguinis* SK36 proteins were electrophoresed. Zymogram was photographed on a black background and image adjusted for brightness and contrast. Image is representative of multiple experiments performed on different days



**Figure S2. FPLC purification of LytF.** SDS-PAGE analysis of *lytF-c* precipitated protein sample (a) compared to collected fractions (b) after FPLC purification of the *lytF-c* precipitated sample. The strongest band in (a) and the bands visible for fractions in (b) are approximately 70 kDa, corresponding to LytF. Image is representative of three independent purifications performed on different days.



**Figure S3. eDNA release from *S. mutans* and *S. oralis* after LytF treatment.** Relative amount of eDNA release was quantified at 15 minutes post-treatment with  $12.1 \mu\text{g ml}^{-1}$  LytF. Compared to no treatment, eDNA release is significantly increased over time from *S. mutans* and *S. oralis* cultures treated with LytF ( $p=0.0023$  and  $0.0033$ , respectively). Data represent means and standard deviations of four independent experiments.



**Figure S4.** Influence of *S. sanguinis* LytF on cell morphology of *S. gordonii*. *S. gordonii* DL1 biofilms with treatment of purified LytF ( $12.1 \mu\text{g ml}^{-1}$ ). Cells within the biofilm appear enlarged and elongated at the poles. Image is representative of multiple fields of view from one experiment. Scale bar is  $5 \mu\text{m}$ .