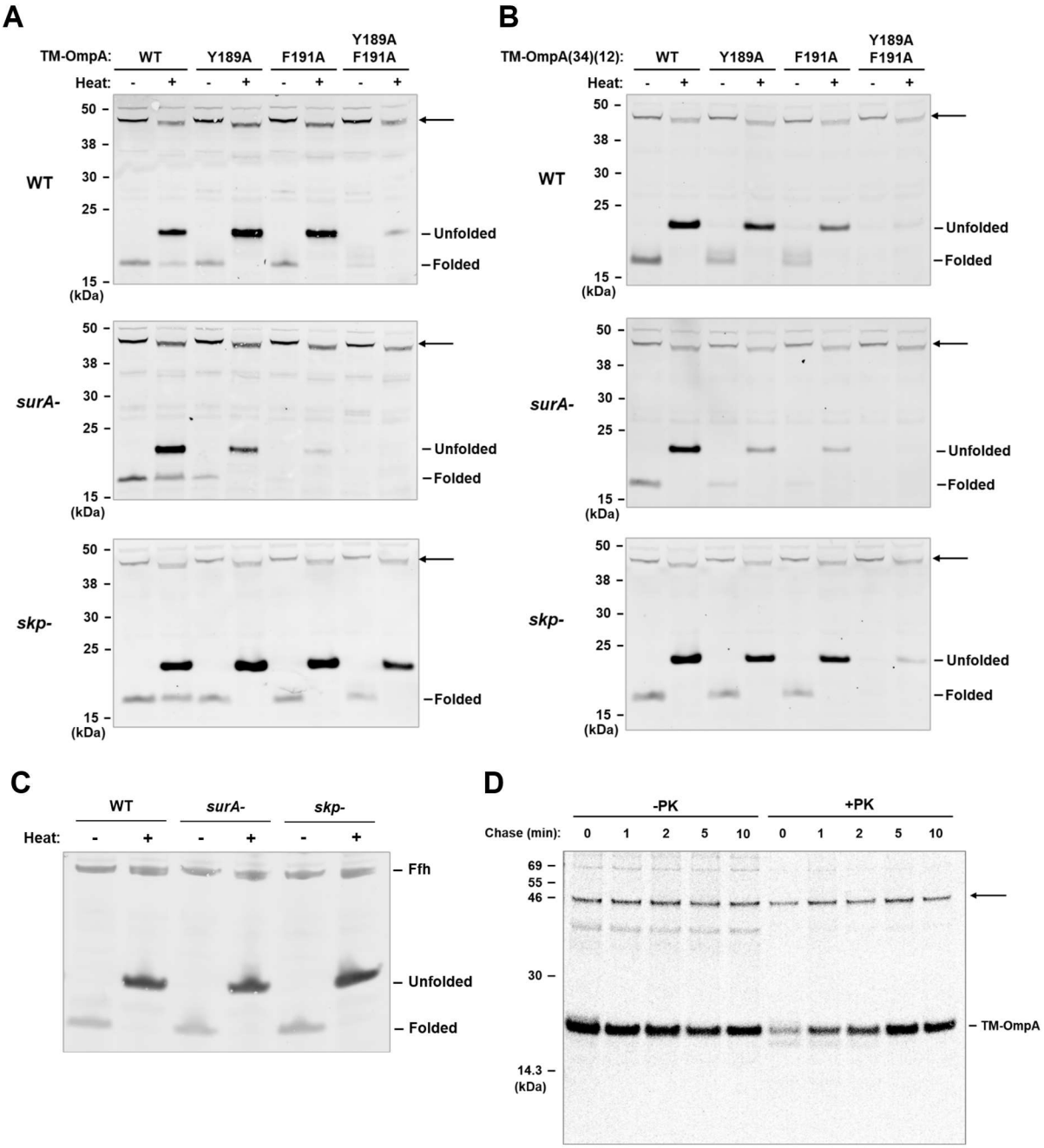

FIG S1 Loading controls used in Western blot and pulse-chase analysis. Larger portions of the Western blots presented in Figures 2B (A) and 7B (B) are shown. An unidentified ~45 kDa background band (arrow) was used as a reference to confirm that similar amounts of cell extracts were loaded in each lane. (C) XW100 (MC4100 Δ*ompA*; WT) and *surA*- and *skp*-

derivatives transformed with pXW01 were grown to mid-log phase and lysates were analyzed by Western blot using antisera against an OmpA loop 1 peptide and a loading control, the cytoplasmic protein Ffh (H. D. Bernstein, D. Zopf, D. M. Freymann, and P. Walter, Proc Natl Acad Sci USA 90:5229–5233, 1993, doi:10.1073/pnas.90.11.5229). (D) In all pulse-chase experiments in which the stability and assembly kinetics of TM-OmpA or TM-OmpA$^{Y189A, F191A}$ were measured, the TM-OmpA signal in each lane was first normalized to the signal generated by an unidentified ~46 kDa background band to account for differences in loading. As an example, a larger portion of one of the gels presented in Fig. 2C (upper right gel) is shown.