Supplementary Figure 1. Biochemical properties of Che9c gp60 and gp61.

(a) Exonuclease activity was assayed by incubating Che9c gp60, λ Exo, or control protein extract with 32P–labeled dsDNA (100 bp) for 5 mins at room temperature and the reactions analyzed by polyacrylamide gel electrophoresis. Reactions contained either no protein (−), or two–fold serial dilutions as indicated. Reactions with the highest protein concentrations contained Che9c gp60 at 0.2 µM or 5 U of λ Exo (NEB). The control protein extract was prepared from mock–induced cells and the highest concentration corresponds to approximately 0.1 µg/ml.  

(b) Che9c gp60 (final concentration 0.2 µM) or λ Exo (5 U) was incubated for increasing times (0, 5, and 10 min) with a 3 kbp dsDNA substrate (2 nM) that was either supercoiled closed circular or linear (as indicated) and the products analyzed by agarose gel electrophoresis. 

(c) Che9c gp61 binds to ssDNA and dsDNA as seen by mobility shift assay using native polyacrylamide gel electrophoresis. Binding reactions contained no protein or increasing concentrations of Che9c gp61 (final concentrations 0.17, 0.33, 0.67, 1.33, 2.00, 1.67, 3.23 µM) and were incubated at 37°C for 20 mins prior to electrophoresis.