

Supplemental Data

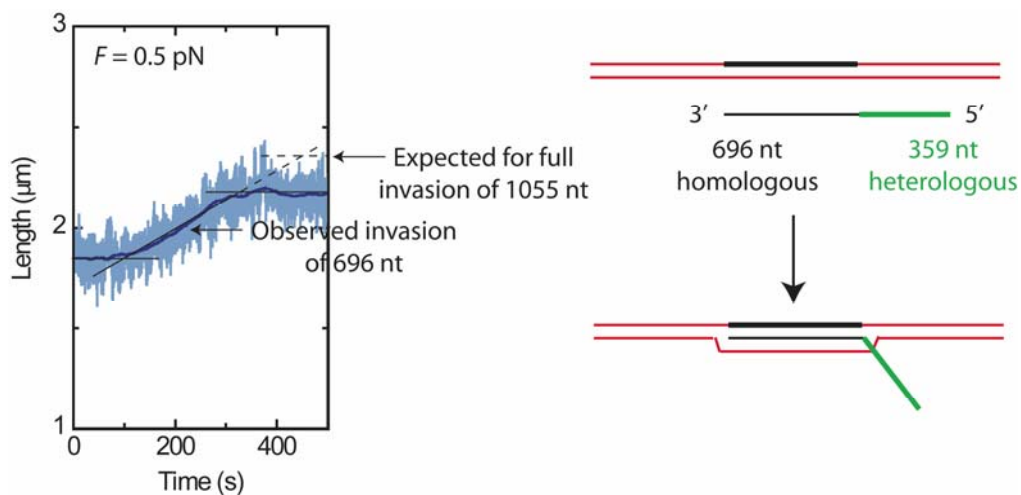
Homologous Recombination in Real Time:

DNA Strand Exchange by RecA

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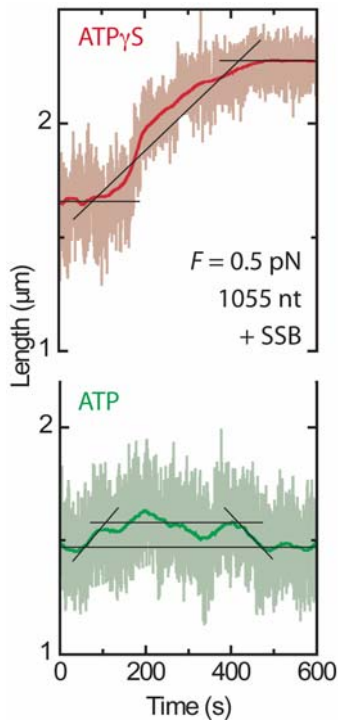
This section contains additional information on the interaction between RecA-coated single-stranded DNA formed in the presence of SSB with target duplex DNA for both ATP and ATP γ S. Furthermore, the interaction of RecA-coated single-stranded DNA with a 5' heterologous tail in the presence of ATP γ S is shown.

Figure S1



Interaction between RecA-coated 1055-nt long single-stranded DNA consisting of a 696-nt long homologous and a 359-nt long heterologous tail with respect to the target duplex DNA in the presence of ATP γ S. The observed interaction time corresponds to the homologous region between the invading and target DNA only. This interaction was observed multiple times ($N = 3$).

Figure S2



RecA-coated 1055-nt long single-stranded DNA nucleoprotein filaments assembled in the presence of single-stranded binding protein display a similar interaction time with the target duplex DNA in the presence of either ATP or ATP γ S compared to filaments assembled in the absence of single-stranded binding protein (cf. Figure 2A). This interaction was observed multiple times ($N = 3$). With respect to the data obtained in the absence of single-stranded binding protein, the interaction profiles are more irregular.