

Replication protein A prohibits diffusion of the PCNA sliding clamp along single-stranded DNA

Mark Hedglin[†] and Stephen J. Benkovic^{†,*}

[†]Department of Chemistry, The Pennsylvania State University, University Park, PA 16802, U.S.A.

Supporting Information

Supporting Information Figure Legend

Figure S1 Steady state FRET for the Cy3P/BioT DNA substrate requires a tight-binding protein to stabilize PCNA on DNA. (**Top**) The Cy3PddC/BioT DNA substrate is identical to the Cy3P/BioT DNA substrate (**Figure 1**) except it contains a 3'-dideoxy-terminated primer. **C** denotes a dideoxy-terminating cytosine nucleotide. Human DNA polymerase δ binds tight to this substrate in the presence of the first dNTP to be incorporated (dGTP). (**Bottom**) Cy5-PCNA was assembled onto the Cy3-labeled DNA (100 nM of either Cy3P/BioT or Cy3PddC/BioT) under various conditions as indicated and the steady state FRET (I_{665}/I_{561}) was measured as described in **Figure 2**. RPA was omitted from all experiments.

Supporting Information Figure

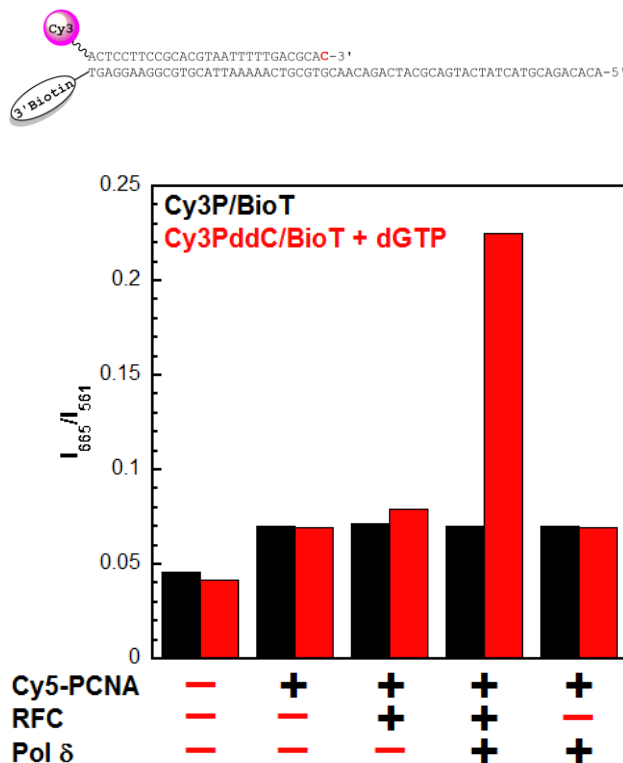


Figure S1