SUPPLEMENTARY INFORMATION

Pif1 removes a Rap1-dependent barrier to the strand displacement activity of DNA polymerase δ

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SUPPLEMENTARY FIGURES

Figure S1. A single bound Rap1 is a barrier to the strand displacement activity of Pol δ. A) Quantitation of the primer extension reactions in Figure 1B using Pol δ. **B)** Quantitation of the primer extension reactions in Figure 1C using Pol δ^{DV}. **C)** Reproducibility of the Rap1 block was tested in independent experiments (n=5) using the indicated substrate.

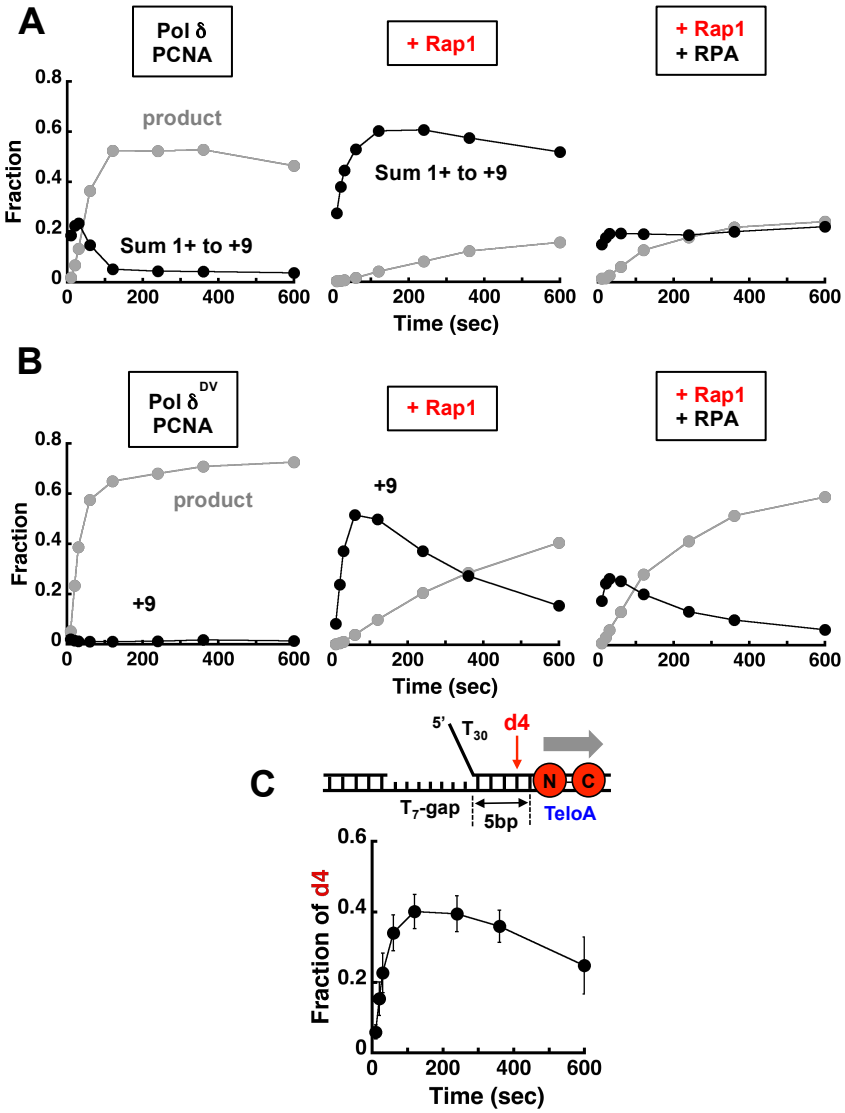

Figure S2. Pif1 stimulates the strand displacement activity of Pol δ^{DV} in the absence of PCNA. Primer extension assays with non-PCNA loaded Pol δ^{DV} (25nM) in the absence (lanes 1,2) and presence of 20nM Pif1 (lanes 5-8). The assays were performed at 40mM NaCl, a condition where Pol δ has slow strand displacement activity. In the presence of Pif1 strand displacement activity is observed at shorter times. The same experiments were also performed in the presence of 100nM Rap1 (lanes 3,4 and 9-12) and show that Pif1 allows bypass of the Rap1 block by Pol δ^{DV}.

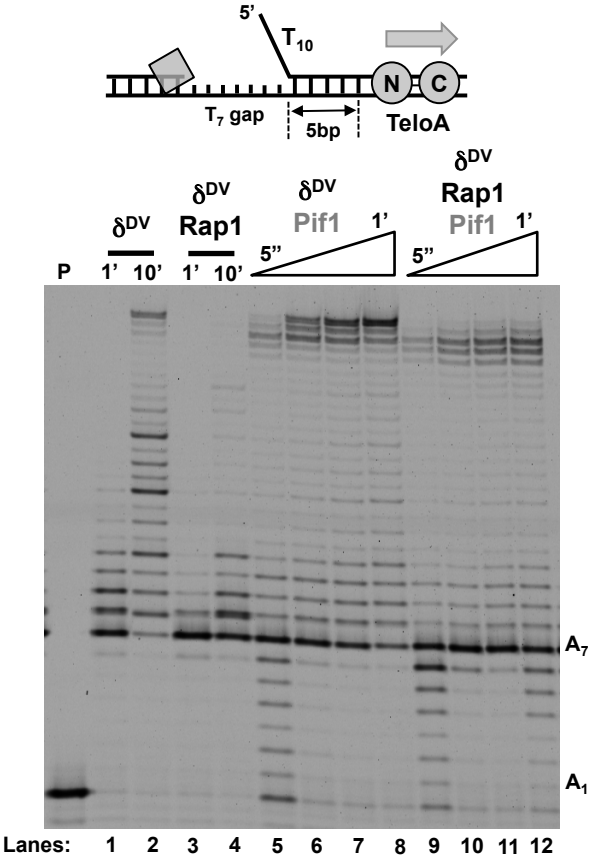

Figure S3. Pif1 stimulates the strand displacement activity of PCNA-loaded Pol δ^{DV}. Quantitation of primer extension assays as described for Figure 4 but performed in the presence of 50nM RPA.