

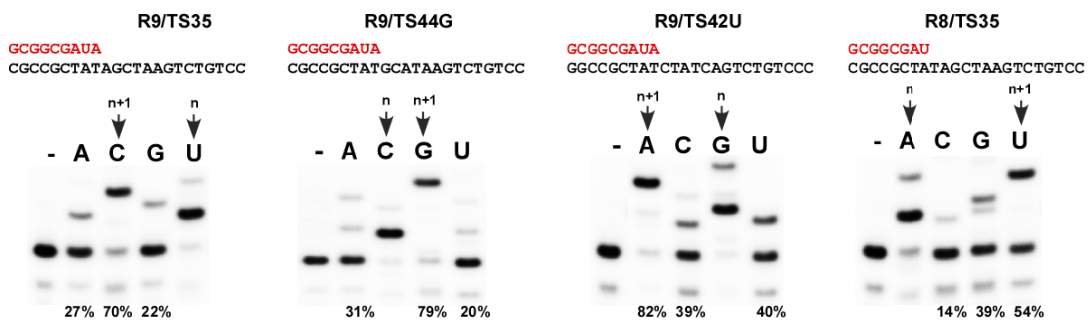
Supplemental Data

Template Misalignment in Multisubunit

RNA Polymerases and Transcription Fidelity

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A



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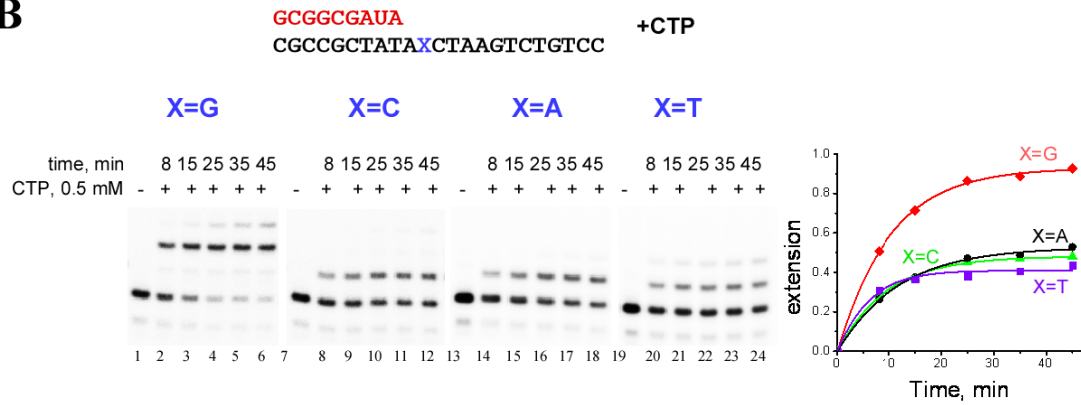


Figure S1. Misalignment in Multisubunit RNAPs

(A) Misalignment does not depend on n+1 NTP *per se*. *E.coli* RNAP ECs assembled on scaffolds indicated were incubated with the substrate NTPs (0.5 mM) for 15 min at 37°C. Numbers below indicate the efficiency of primer extension by non-cognate NTPs.

(B) Misincorporation of CTP in yeast RNAP II ECs in various sequence contexts. ECs were incubated with 0.5 mM CTP at 30⁰C for the times indicated. The fraction of the primer extended is plotted as a function of time.

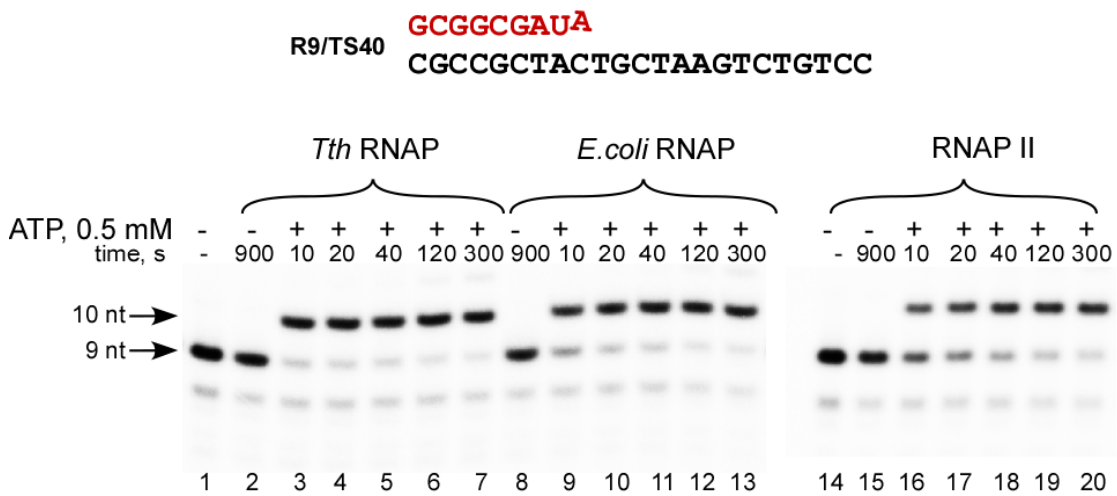


Figure S2. An RNA Primer Mismatched at the 3' End Is Efficiently Extended by Multisubunit RNAPs

The 5' labeled RNA primer in ECs assembled on R9/TS40 scaffold was extended by ATP at 60⁰C (*Tth* RNAP), 37⁰C (*E. coli* RNAP) or 30⁰C (yeast RNAP II).