

Fluorescent Lifetime Trajectories of a Single Fluorophore Reveal Reaction Intermediates During Transcription Initiation [*J. Am. Chem. Soc.* 2009, *131*, 9630–9631]. Maria Sorokina, Hye-Ran Koh, Smita S. Patel, and Taekjip Ha*

Page 9630. The labels of the vertical axis in Figure 1B (a) were inadvertently shifted vertically by 0.5 ns. The corrected Figure 1 is shown below.

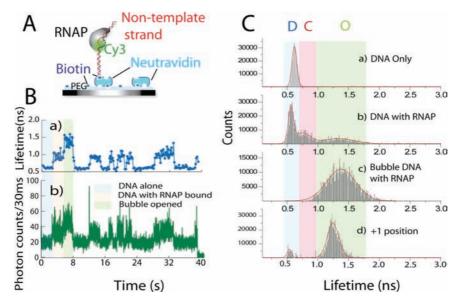


Figure 1. Transcription bubble opening: (A) Schematic of the experiment. (B) Example of the corresponding SM lifetime trace, demonstrating successive RNAP binding and transcription bubble opening events. (C) (a) SM lifetime distribution histogram of Cy3 conjugated to −4 position of the nontemplate strand shows a peak at 0.6 ns, consistent with bulk solution data. (b) Three peaks are distinguished when RNAP is added to the solution. (c) The lifetime distribution of Cy3 conjugated to the bubble DNA with RNAP in the solution suggests that the third peak in (b) corresponds to the opened DNA−RNAP complex. (d) After adding 3′-dGTP, RNAP is stalled at position +1/+2.

JA906682A 10.1021/ja906682a Published on Web 08/25/2009