

Description of Additional Supplementary Files

Supplementary Movie 1: Conformational changes of *Tko* RNAP

This video shows conformational changes in *Tko* RNAP that occur during formation of the binary complex (from the apo-form RNAP to RNAP-TFE α complex) and the ternary complex (from the binary to RNAP-TFE α -DNA complex). The movie is related to Fig. 2.

Supplementary Movie 2: PIC and open complex formations

This video shows the PIC and open complex formations in the archaeal transcription system in the presence of TFE α .