Supplementary Information

Conformational Selection or Induced Fit for Brinker and DNA Recognition

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Figure 1S. Ca RMSD relative to initial NMR structure of bound and apo-Brinker.



Figure 2S. Native contacts and hydrogen bonds between DNA and Brinker. A: native

contacts. B: hydrogen bonds.



Figure 3S. Kinetics fitting for apo-Brinker.



Figure 4S. A representative transition probability P calculated at 498K for the F \Leftrightarrow U transition for snapshot in the transition region for one of trajectories for bound and apo-Brinker, respectively. The red line is the fit to P = $1/{1+ \exp[(\tau - \tau_{TS})/\tau_{trans}]}$.



Figure 5S. Average structures of TSE for bound (A) and apo-Brinker (B). The

 Φ -value of red is equal to 1, blue equal to -1, and green between -1 and 1.



Figure 6S. C α and Ψ/Φ variations relative to initial NMR structure at transition state for bound and apo-Brinker, respectively.



Figure 7S. The energy landscape with the variables of RMSD and Rg for

bound and apo states at 498K.



Figure 8S. Unfolding pathway of apo-Brinker. A: <0ns (F), B : 2.73ns (τ_{Qf}), C: > 6ns (U).