

**A Mechanistic Insight into the Structure and Dynamics of Entangled and Hydrated  
Lambda-Phage DNA**

**Supporting Information**

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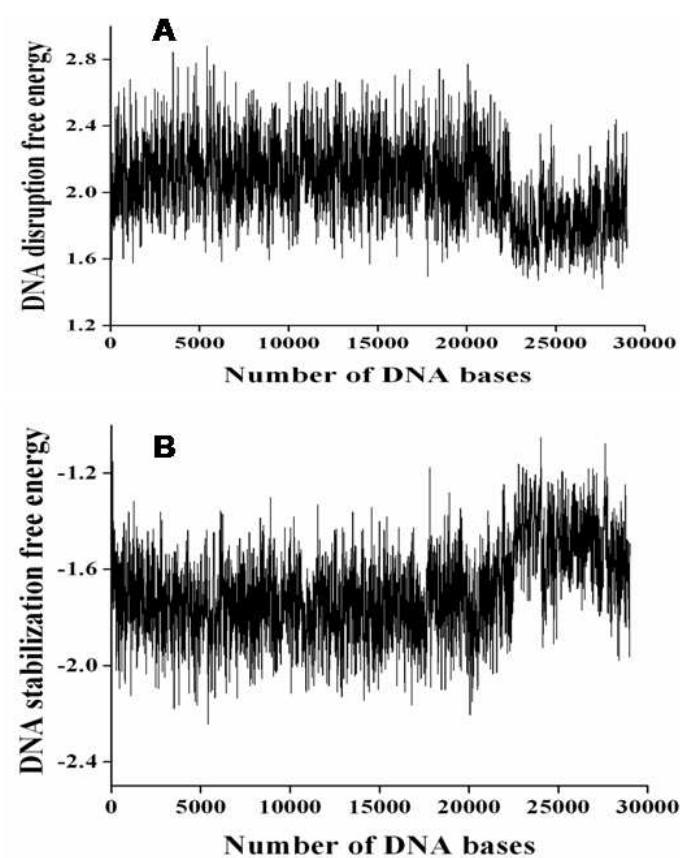
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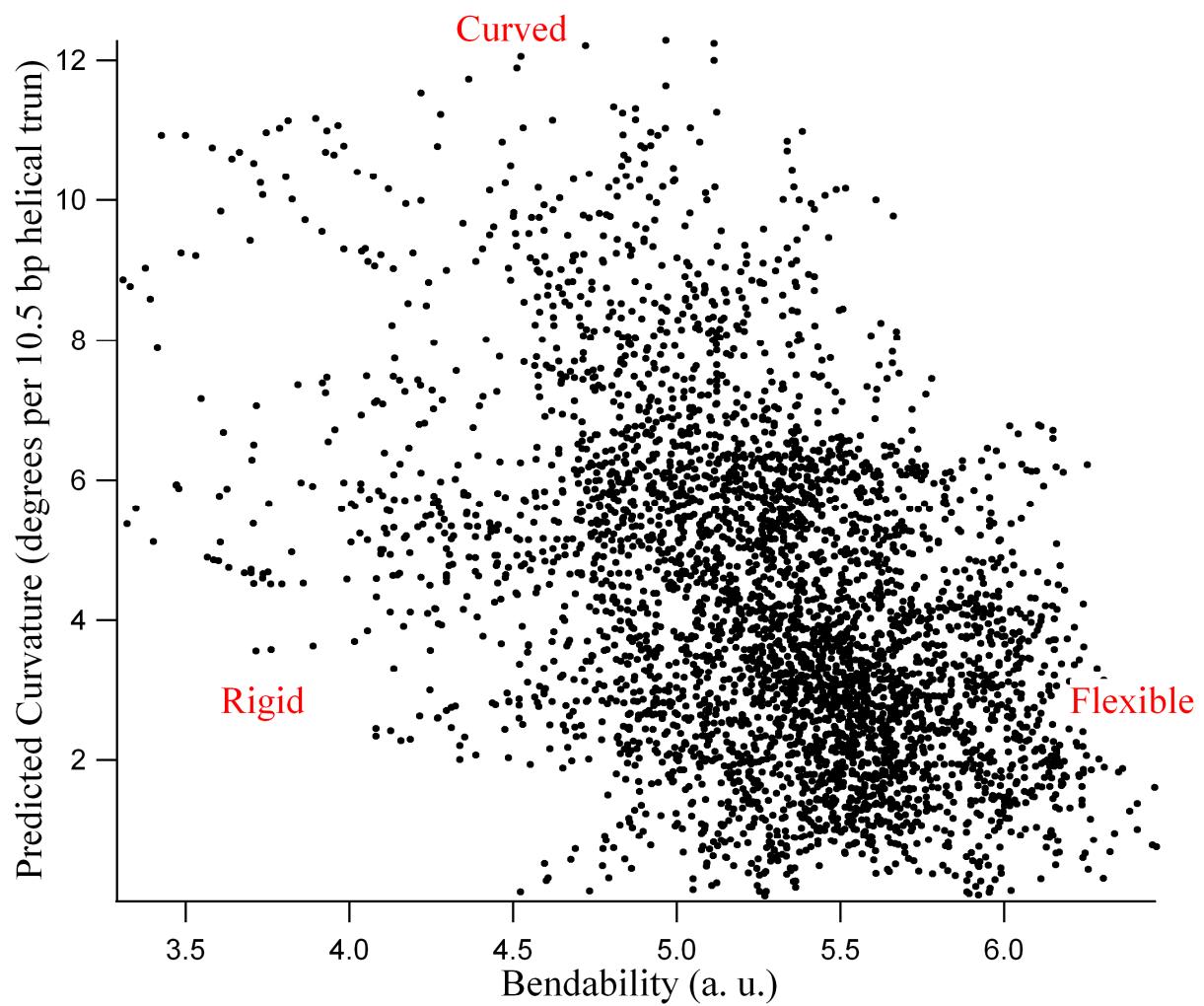
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**Figure 1S:** Analysis of duplex disruption free energy (A) and duplex stabilization free energy (B) along 29 kb  $\lambda$ -phage genome.



**Figure 2S:** 2-D distribution of predicted curvature with bendability for the  $\lambda$ -phage genome.