Supplementary Figure 1 | Single molecule FRET experiments in the presence of 2 mM Trolox or 143 mM BME for the construct of Figure 2d. (a) FRET efficiency histograms, averaged over 10 frames taken at 30 ms time resolution. Results are shown for different excitation intensities in the presence of BME or Trolox. Peak positions were determined fitting to Lorentzian peaks and are represented in Figure 2e. (b) Typical time traces for Cy3 and Cy5 on a single DNA construct at high excitation intensity. At 143 mM BME, frequent transitions of Cy5 to short lived dark states are observed, resulting in an average lower FRET efficiency value. In the presence of 2 mM Trolox such fluctuations are not observed.