



**Figure 7 - Supplement 1.**

**With subsaturating H2A/H2B dimer addition, rates of nucleosome sliding by Chd1 are not sensitive to nucleosome:hexasome ratios.**

(A) Nucleosome sliding monitored by Cy3-Cy3 fluorescence quenching on a stopped-flow fluorometer. The legend shows the amount of H2A/H2B dimer for each reaction, which contained 10 nM 0-601-80 hexasome, 50 nM Chd1, and 25  $\mu\text{M}$  ATP. Each trace is an average of 4 or more injections from the same stopped flow experiment. The black curves show double exponential fits to the data.

(B) Graph of overall intensity changes at each H2A/H2B dimer concentration added to hexasomes, with higher intensity reflecting a greater proportion of nucleosomes that can be shifted. Error bars indicate the range from two independent sets of experiments.

(C) Graph of sliding rates for stopped flow H2A/H2B dimer addition. The observed rates (given as  $k_1$  and  $k_2$ ) were determined from double exponential fits to the data. Error bars indicate the range from two independent sets of experiments.

(D) Native PAGE visualization of nucleosomes generated by addition of H2A/H2B dimer to hexasomes. Shown is a representative of ten similar titrations performed using wild-type or modified H2A/H2B dimers.