

**Figure S1** - Native gel shift of BRG1 and SNF2H remodeled products displays differences in mobilization of remodeled H2A.Z nucleosomes. Recombinant mononucleosomes assembled on DNA with the TPT positioning sequence and a 45b.p. overhang were incubated for 15 minutes in the presence of the indicated remodeling enzyme (recombinant) both with and without ATP. Reactions were then run on a native 5% polyacrylamide gel in TBE. Two separate reactions for both H2A and H2A.Z from different assemblies of starting material are shown for SNF2H. It has previously been demonstrated that extensive remodeling by the ISWI family can occur in the absence of observable movement of the final product around the start position as determined by gel mobility (26). This is consistent with the results obtained on H2A.Z containing templates here where the restriction enzyme accessibility assay that is sensitive to any type of nucleosome disruption (see Fig. 2) is compared here with the gel-mobility assay measuring sliding of nucleosomes. These types of 'sliding' protocols should be interpreted with caution until numerous starting templates are tested.