# **Supplementary Information 1**

### **Original Gel for Extended Data 1b**



**Extended Data 1b. Analysis of INO80-nucleosome complex sample.** Varying quantities of INO80-nucleosome complex were analysed by SDS-PAGE on a 4-20% Tris-Glycine gel. Bands were visualised by Coomassie staining. Dashed boxes indicate the crop in the final version of this image, which includes only the 2 and 10  $\mu$ L loadings.

## **Supplementary Information 1**

#### **Original Gel for Extended Data 6a**



**Extended Data 6. Interaction of human Actin, Arp5 and Arp8 with human H2A-H2B dimers assessed by** *in vitro* **pulldown.** *a*, SDS-PAGE analysis highlighting the interaction of Actin, Arp5 and Arp8 with H2A:H2B dimers. The original experiment also assessed the interaction with free H2A.Z:H2B histone dimers, and also included human Arp6 as an additional bait protein (a component of the human SRCAP complex). Denatured polypeptide bands were resolved on a 4-20% Tris-Glycine gel and visualised by Coomassie staining. The final crop shows only the H2A:H2B containing lanes for Actin, Arp5 and Arp8.

## **Supplementary Information 1**

#### **Original Gel for Extended Data 6b**



**Extended Data 6. Interaction of human Actin, Arp5 and Arp8 with human H2A-H2B dimers assessed by** *in vitro* **pulldown. b**, EMSA analysis of Arp5:les6 interaction with nucleosomes. The nucleosomes in this experiment were fluorescently labelled with a Cy5 fluorophore. EMSA products were resolved by native PAGE on a 6% acrylamide, 0.5x TBE gel run in 0.5x TBE buffer, and then visualised by fluorescent scan on a flatbed scanner. The original experiment compared the effect of ATP on binding to the nucleosome substrate. The final crop contains only the right-hand side of this image, showing the electrophoretic mobility change in the absence of ATP (red dashed box).