

**SUPPLEMENTAL FIGURE S3.** The DDB1-CUL4B<sup>DDB2</sup> E3 ligase is more efficient in ubiquitinating histone H2A and H3 than DDB1-CUL4A<sup>DDB2</sup> E3 ligase. Free Myc-H2A or HA-H3 was used as a substrate for DDB1-CUL4<sup>DDB2</sup> E3 ligases (4 pmole). Each ubiquitination assay was performed ± FLAG-ubiquitin (FLAG-Ub). The total reaction was separated on 15% SDS-PAGE. Unmodified Myc-H2A and HA-H3 were detected with Myc and HA antibodies respectively; modified histones were detected with FLAG antibody. Unmodified and modified FLAG-tagged-DDB2, around position 50 kDa and above, respectively, were detected with FLAG antibody.