



**Supplemental Figure S8. Quality controls of HNRNPU bioChIP experiments.** (A) Schematic view of vector systems for expression of BirA and HNRNPU tagged with N-terminal FLAG and Bio peptides. (B) Western blot analysis with the antibody against Flag tag proteins;  $\beta$ -actin as loading the control. The result shows that tagged HNRNPU proteins have been expressed successfully. (C) Immunofluorescence staining displays co-localization of total HNRNPU (green) and tagged HNRNPU (red) in AML12 cells, indicating correct localization of tagged HNRNPU proteins. The scale bar represents 10  $\mu$ m. (D) Western blot

analysis of the nuclear extracts indicate that HNRNPU proteins are specifically and effectively biotinylated. Same amount of nuclear extract from bio-HNRNPU or BirA-only samples were blotted with Streptavidin-HRP (Pierce, 21130) or anti-HNRNPU antibody (Abcam, ab20666). (E) Western blot analysis of input and bioChIP products. Only the product of HNRNPU bioChIP can be detected by the anti-HNRNPU antibody, indicating that *in vivo* labeled HNRNPU proteins can be pull-down by the streptavidin beads specifically.