

**Supplemental Figure 1**: Quantification of total SUR1 signals (upper and lower bands) at 0 hr and 7 hr in the metabolic pulse-chase experiments shown in Figure 5. The total signal was comparable between the two groups at 0 hr. However, after 7 hours of chase the signal of the WT+Syn-1A group was significantly lower than that of the WT+Vector control group, indicating increased degradation. \*\*\* p < 0.001 unpaired Student's t-test



**Supplemental Figure 2**: COSm6 cells transfected with Syn-1A only were subjected to immunoprecipitation using anti-FLAG or anti-HA antibody conjugated agarose beads. The immunoprecipitate was then blotted with anti-Syn-1A antibody. Syn-1A was not detected in either FLAG- or HA-antibody precipitated samples but was clearly seen in the input (cell lysate prior to immunoprecipitation), demonstrating the specificity of the anti-FLAG and anti-HA antibody.