



**Figure S6. Disruption of the Reading-Frame Efficiently Inhibited Translation and**

**Degradation of PTC+ mRNAs.**

(a) Equal amount of  $\beta$ -globin constructs that described in Figure 4a were transfected, and 12 hrs after transfection, western blots were carried out using antibodies to HA and GFP. The GFP was shown as transfected control. (b) insertion of a hairpin structure at 5'UTR inhibited translation of  $\beta$ -globin mRNA. Equal amount of the hairpin containing and the hairpin uncontained  $\beta$ -globin construct was transfected to HeLa cells. After 48h, the western blot was carried with HA antibody to test the expression of  $\beta$ -globin. The GFP was shown as transfected control. (c) Same as

(a), except that the constructs that described in Figure 6a were transfected. (d) the construct that described in (a) and (b) was co-transfected with GFP construct. 24 hrs after transfection, RNAs were extracted followed by RT-PCR using  $\beta$ -globin and GFP primers. The ratio of mRNA level of  $\beta$ -globin to GFP was quantified and indicated by the bars. Error bars indicate the standard errors from three independent experiments. Statistical analysis was performed using the Student's t test. \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .