



Figure S10 (Supplement to Figure 4) YTHDC2 affects the translation efficiency and stability of its targets. **(A)** Protein levels of Smc3 normalized to Tubulin in *Ythdc2*^{+/+} and *Ythdc2*^{-/-} mice . Error bars, mean \pm sd, $n = 3$. $*P < 0.05$ (Student's *t*-test). **(B)** Enrichment of m⁶A in Smc3, determined by qRT-PCR. Figure shows raw m⁶A enrichment of Smc3 (left), as has been convention for literature thus far, as well as m⁶A enrichment normalized to Gapdh, an unmethylated gene (right). Error bars, mean \pm sd, $n = 4$. $****P < 0.001$, $*P < 0.05$ (Student's *t*-test). **(C-E)** protein level ($n = 3$), mRNA level ($n = 6$), and translation efficiency (protein level / mRNA level) of Cep76. Error bars, mean \pm sd, $*P < 0.05$ (Student's *t*-test). **(F)** Enrichment of m⁶A in Cep76, determined by qRT-PCR. Figure shows raw m⁶A enrichment of Cep76 (left), as well as m⁶A enrichment normalized to Gapdh, an unmethylated gene (right). Error bars, mean \pm sd, $n = 4$. $*P < 0.05$ (Student's *t*-test). **(G)** Protein level of F-Luc normalized to R-luc 4 hours after post F-Luc induction. Error bars, mean \pm sd, $n = 4$, $****P < 0.001$, $*P < 0.05$ (Student's *t*-test). **(H)** Polysome profiling of HeLa cells, and western blotting of YTHDC2 and EIF3A in each fraction.