

**Supplementary information, Fig. S10 Ddx3xb proteins bind maternal RNA during zebrafish early embryogenesis. a,** RPKM correlation of RIP-seq data between biological replicates at 2 hpf and 4 hpf. **b,** Venn diagram showing the overlap of Ddx3xb target mRNAs detected by RIP-seq using 2 hpf or 4 hpf embryos. **c,** Boxplot showing the enrichment of Ddx3xb at 5' UTR of target mRNAs at 2 hpf and 4 hpf. *P* values were determined by the Kruskal Wallis test. **d,** Gene ontology enrichment map of Ddx3xb target mRNAs at 4 hpf. Similar GO terms are connected by the edge of the network. The color of the ball is proportional to the *P* value, and the lighter the color the smaller the *p* value. **e,** Boxplot showing the 5' UTR average icSHAPE reactivity of non-Ddx3xb target mRNAs and Ddx3xb target mRNAs at 2 hpf. *P* values were

determined by the Kruskal Wallis test, n.s., not significant. **f**, Ddx3xb target maternal transcripts specifically enriched in Ddx3xb condensates.