



Supplementary information, Fig. S9 The chimeric proteins containing IDRs from other RBPs can also fulfill the biological function of Ddx3xb during the MZT.

a, RPKM correlation of RNA-seq data between biological replicates for *ddx3xb_{FL}* and *ddx3xb_{ΔN}* mRNAs injected *ddx3xb* mutant embryos at 2 hpf, 4 hpf and 6 hpf. **b**, qPCR analyses demonstrating that the relative expression of maternal decay genes in the *ddx3xb* wild-type, *ddx3xb* mutant, *ddx3xb_{ΔN}-hnRNPA1_{IDR}* or *ddx3xb_{ΔN}-FUS_{IDR}* mRNA injected *ddx3xb* mutant embryos between 2 hpf and 6 hpf. Error bars, mean \pm SD, $n = 3$ biological replicates. P values were calculated by the two-tailed Student's t -test, **, $P < 0.01$, ***, $P < 0.001$. **c**, qPCR analyses demonstrating that the relative expression of zygotic activation genes in the *ddx3xb* wild-type, *ddx3xb* mutant, *ddx3xb_{ΔN}-hnRNPA1_{IDR}* or *ddx3xb_{ΔN}-FUS_{IDR}* mRNA injected *ddx3xb* mutant embryos between 2 hpf and 6 hpf. Error bars, mean \pm SD, $n = 3$ biological replicates. P values were calculated by the two-tailed Student's t -test, **, $P < 0.01$, ***, $P < 0.001$.