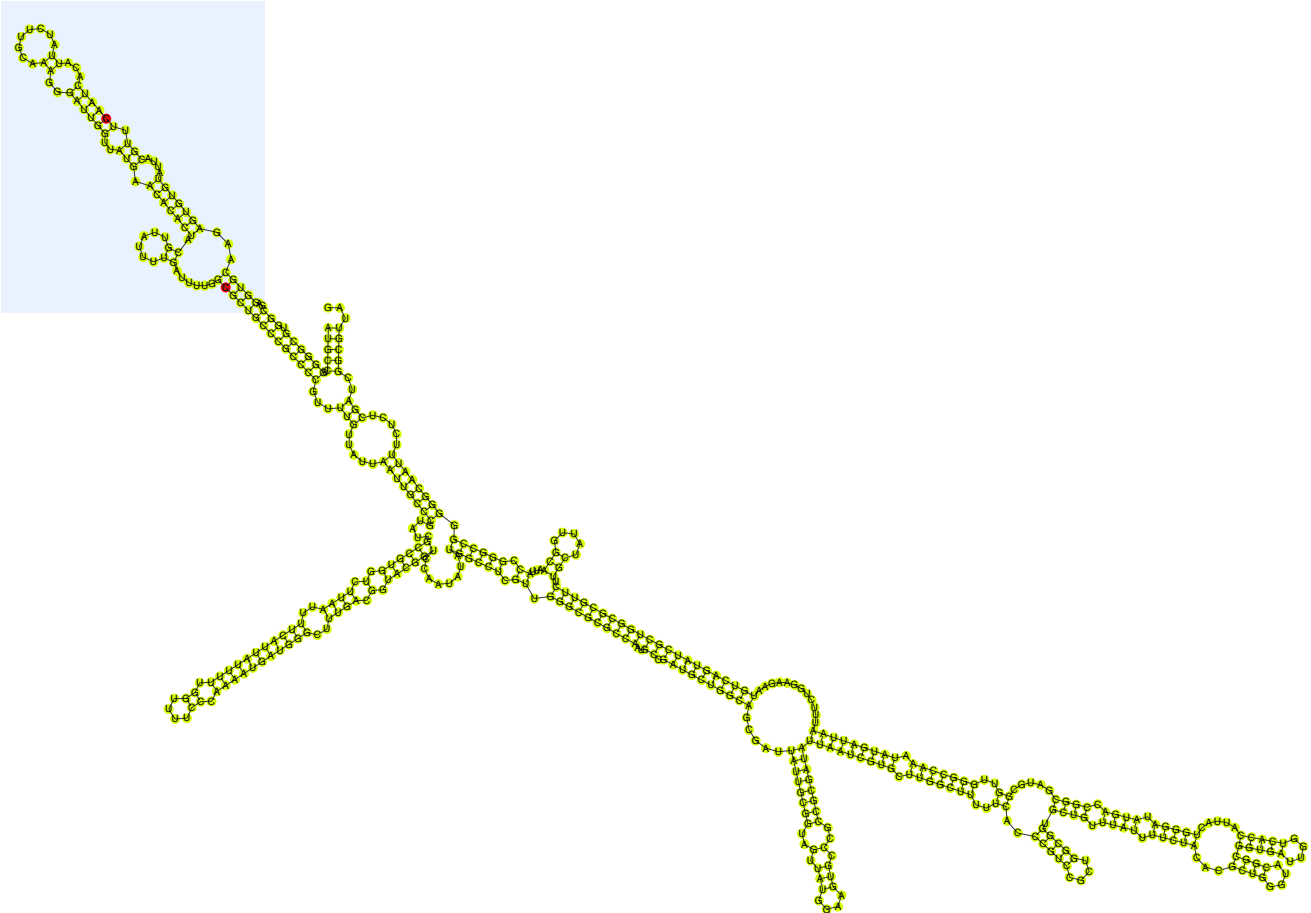
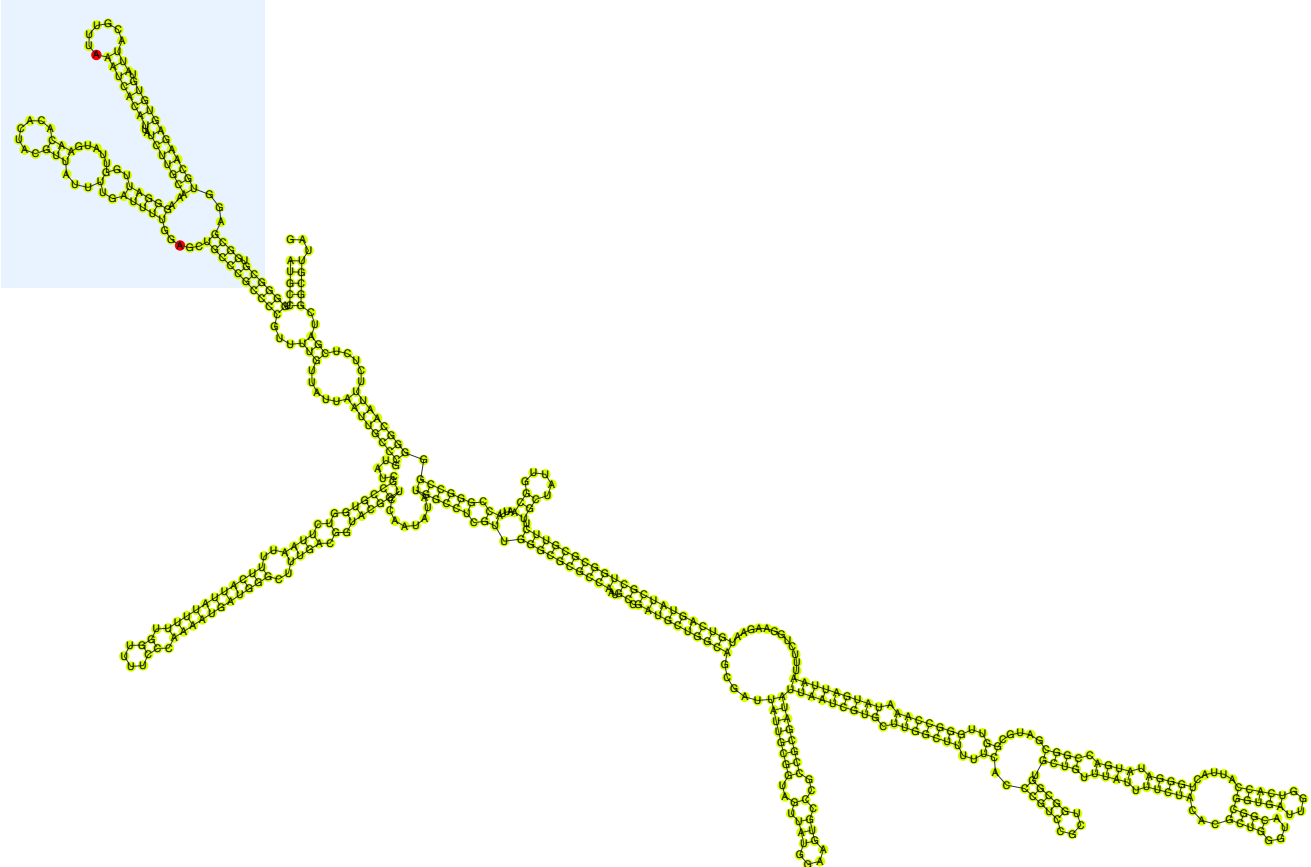


Supplementary Figure S1:

A.



B.



*In silico* predicted structures of mRNAs for the nonessential *ypbA* gene before (A) and after (B) two point mutations (depicted with red color) acquired in the course of the “Long-Term Evolution Experiment”. Difference in optimal structures predicted by RNAfold exemplifies perturbations induced by mutations altering minimal free energy of the mRNA ( $|\Delta G|=2.9$  kcal/mol). This figure is provided for visualization purposes only and does not represent the entire ensemble of possible RNA structures.