

native amino acid sequence

↓ inverse translation

‘native’ DNA sequence

↓ initialization

wild type DNA sequence

↓ mutation

mutant DNA sequence

↓ translation

mutant amino acid sequence

↓ folding model

folding stabilities

lethal

neutral

$(F < F_{\text{thr}}, \alpha > \alpha_{\text{thr}})$

wild type DNA sequence remains

mutant DNA sequence becomes
new wild type DNA sequence