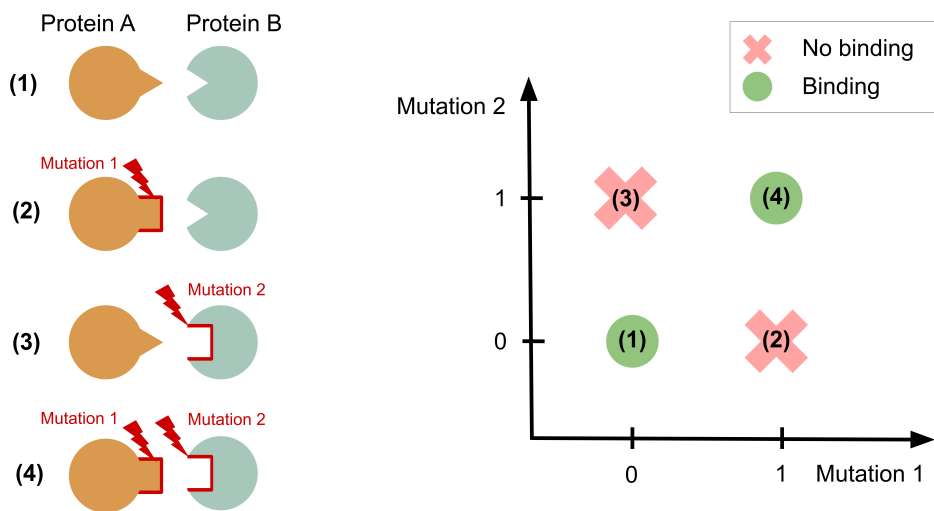


Additional file 6: Fig. S2: Exclusive OR (XOR) as a well known nonlinearly separable problem in machine learning

A.



B.

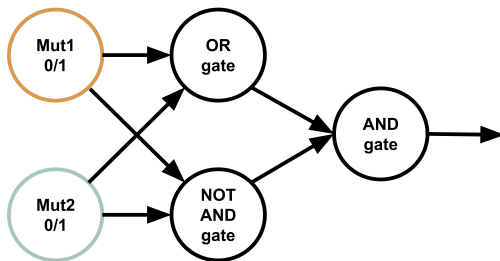


Figure 1: (A) Illustrative example of the nonlinear XOR interaction, a well known nonlinearly separable machine learning problem, in a biological pathway named *lock-and-key model*, which occurs between two mutations in the binding pocket of two proteins. (B) The minimal needed neural network architecture to model XOR classification, needing at least two hidden neurons, representing an OR and NOT AND operation.