

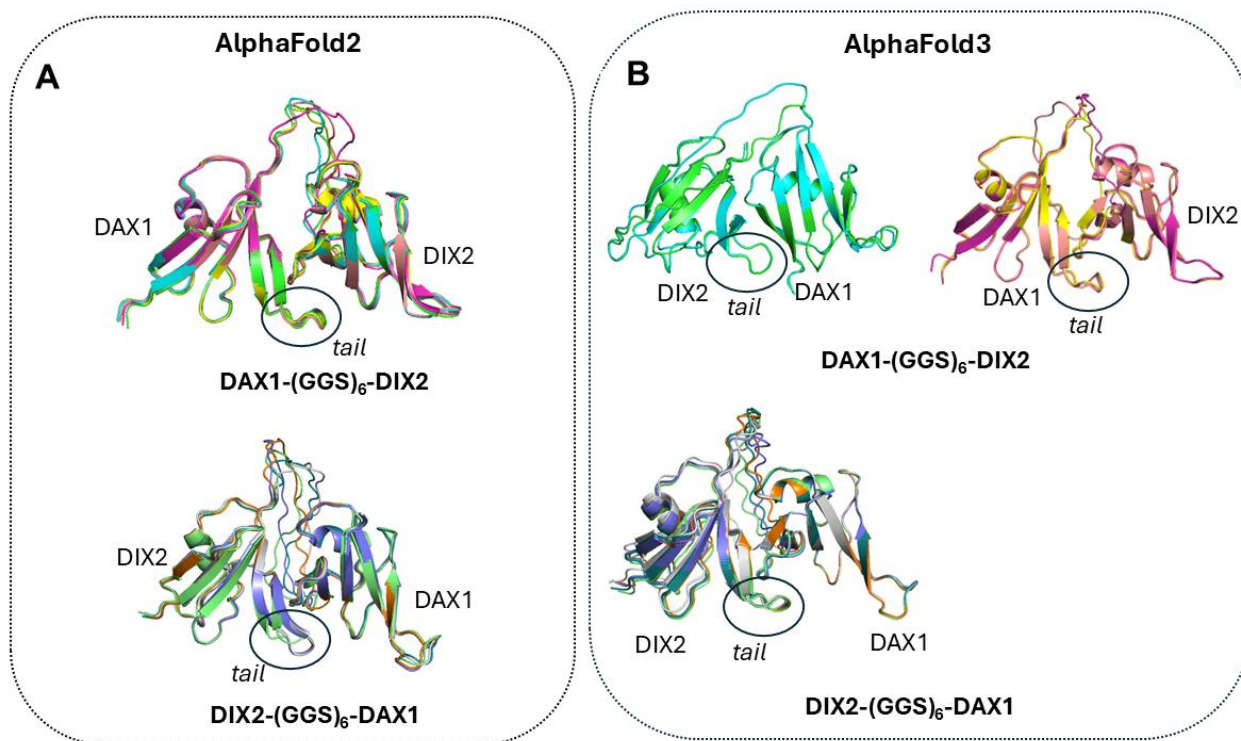


Figure S1. AlphaFold2 and AlphaFold3 predictions of DAX1-DIX2 and DIX2-DAX1 heterodimeric structures. (A) AlphaFold2 predictions of the DAX1-DIX2 and DIX2-DAX1 heterodimers. The predicted models support both tail-to-head arrangements, including the DAX1 tail/DIX2 head and DIX2 tail/DAX1 head interfaces, consistent with the experimental results. (B) AlphaFold3 predictions of the same heterodimeric constructs. For DAX1-(GGG)₆-DIX2, two heterodimeric arrangements were predicted: the DIX2 tail/DAX1 head structure appeared as the rank 1 and rank 2 models, whereas the DAX1 tail/DIX2 head structure appeared as the rank 3, rank 4, and rank 5 models, differing from the AlphaFold2 prediction. For DIX2-(GGG)₆-DAX1, AlphaFold3 predicted the DIX2 tail/DAX1 head structure, consistent with the AlphaFold2 prediction.

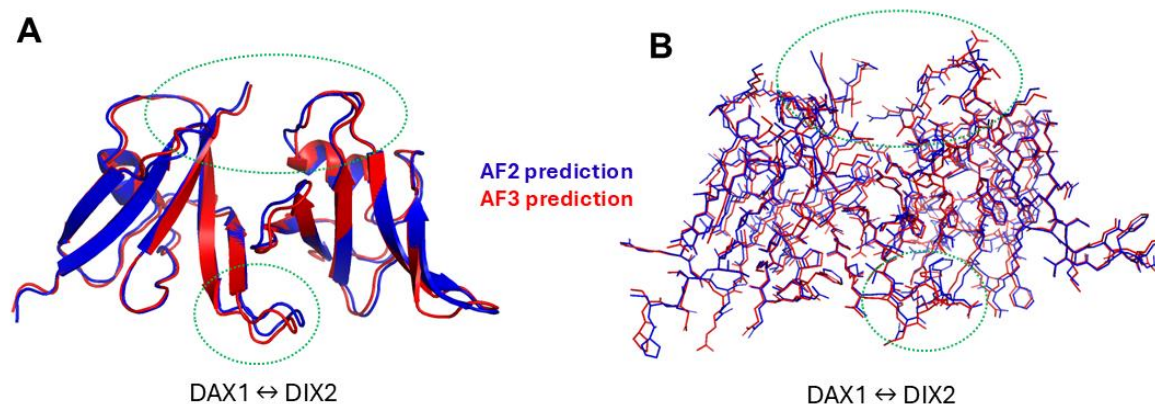


Figure S2. Comparison of AlphaFold2 and AlphaFold3 predictions for the DAX1-DIX2 heterodimer. (A) Superposition of the AlphaFold2 model (blue, rank 1) and the AlphaFold3 model (red, rank 3) for the DAX1-DIX2 heterodimer, shown as cartoon representations. The two predicted structures are highly similar, with an RMSD of 0.715 Å. The green-circled region highlights a local structural difference between the two predictions. (B) Comparison of side-chain conformations in the predicted heterodimeric interface (stick model). Although the overall heterodimeric architecture is similar between the AlphaFold2 and AlphaFold3 models, the side chains in the green-circled region do not fully overlap, indicating a local difference in side-chain placement.