

MID-MHF complex preferentially binds to branched DNA

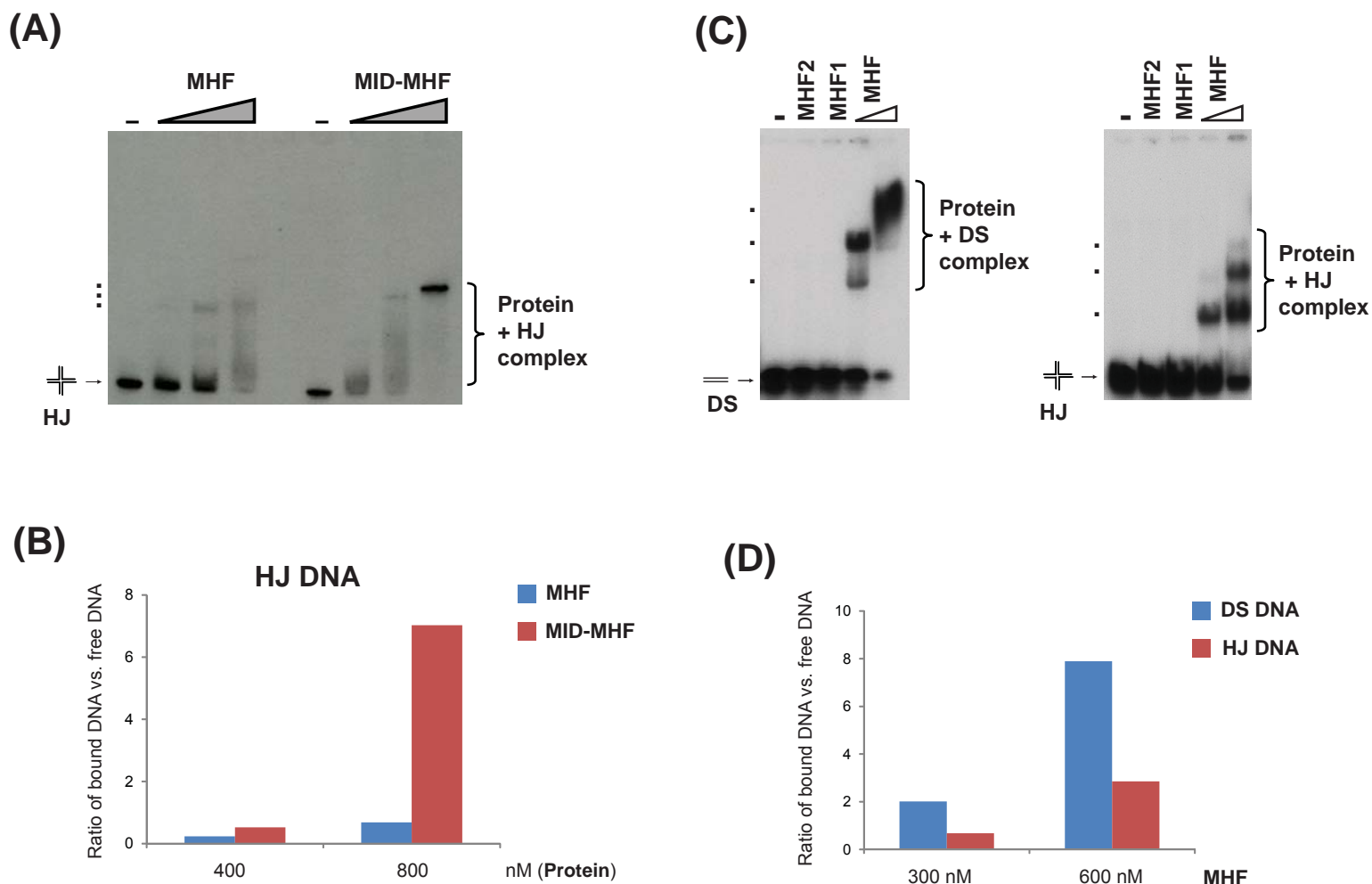


Figure S8. (A) EMSA for comparison of the HJ DNA-binding activity of MHF and MID-MHF complexes. The reaction contained the Digoxigenin-labeled HJ substrate (1 nM) with or without MHF and MID-MHF complexes as indicated. The protein concentrations are: 0, 200, 400, and 800 nM, from left to right. **(B)** The specific protein-bound DNA complexes (bands marked with dots) and free HJ DNA substrate shown in **(A)** were quantified, and the ratios are shown by a graph. **(C and D)** EMSA assays and their quantification to show that MHF preferentially binds dsDNA over HJ DNA. These EMSA images have been previously published in Yan et al. 2010, Figure 2B, lanes 6-10 and 26-30 (Reference 14). However, we did not perform quantification analyses of these images in our previous publication to demonstrate that MHF preferentially binds dsDNA over HJ DNA. In the current study, we quantified the specific protein-bound DNA bands (marked with dots) and free DS DNA substrate in **(C)**, and the results are shown in **(D)**. The images in **(C)** are for convenience of the readers so that they do not have to go back to the original publication to search for these images.