

Models for how the FANCM-MHF complex binds branched DNA

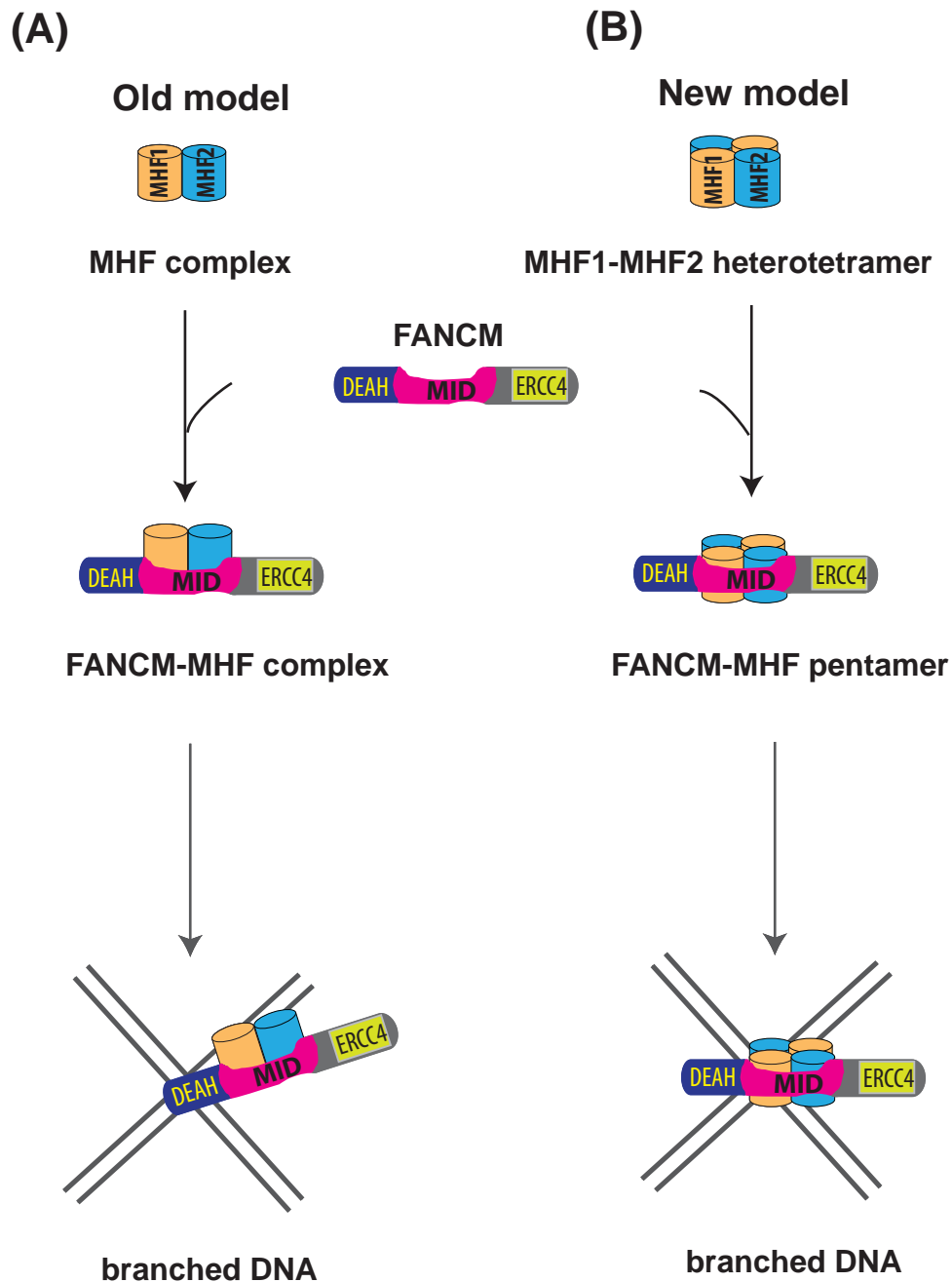


Figure S9. (A) An earlier model proposed that MHF1 and MHF2 constitute a histone-fold complex, MHF, which interacts with FANCM to form the FANCM-MHF complex (Reference 14). The helicase domain (DEAH) of FANCM binds the DNA branch-point, whereas MHF binds the surrounding duplex DNA to stabilize the interaction between FANCM and the branch point.

(B) A new model based on the current study postulates that MHF1 and MHF2 form a histone H3/H4-like heterotetramer that associates with MID to create a composite DNA interface favoring branched DNA over duplex DNA. Both the FANCM-helicase domain (DEAH) and MID-MHF pentamer can bind the branch-point DNA structure in cooperative manner.