

Description of Additional Supplementary Files

File name: Supplementary Movie 1

Description: Dynamic hydrogen bond formation that drives sequence selectivity of DNMT3A and its cognate CGC motif. The stable hydrogen bonds formed by Arg836 of DNMT3A with the G+2' are highlighted.

File name: Supplementary Movie 2

Description: Dynamic hydrogen bond formation that drives sequence selectivity of DNMT3B and its cognate CGG motif. Lys777 forms hydrogen bonds with G+1 and G+2, while Asn779 compensates for the loss of branching in Lys777 by forming hydrogen bonds with C+2'.