NCp7 Role in DIS Maturation

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NCp7 aids in DIS maturation from a KL → ED. Researchers used mutants to identify key parts of NCp7, and how that plays a role in DIS dimer maturation. NCp7 is a nucleocapsid protein that dimerizes and packages the 5’-L. 2-AP is a base analogous to A used for fluorescence studies. By mutating amino acids of NCp7, we can determine the importance of this nucleocapsid protein in DIS dimer maturation from KL to ED. Mutation 2-AP into the DIS hairpin for fluorescence assay; Mutational studies to investigate NCp7; NMR mapped binding interfaces in complexes formed between NCp7 and KL RNA. The cation of N-terminal orients Zn fingers on binding of RNA. The type of Zn finger (CCHC) is important and aromatic amino acids (Phe16 and Trp37) play a role in dimer maturation.

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