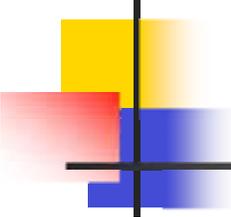


Self Cleavage by the Hepatitis δ Virus Ribozyme

Mark Olbris

Biomolecular Structure Presentation

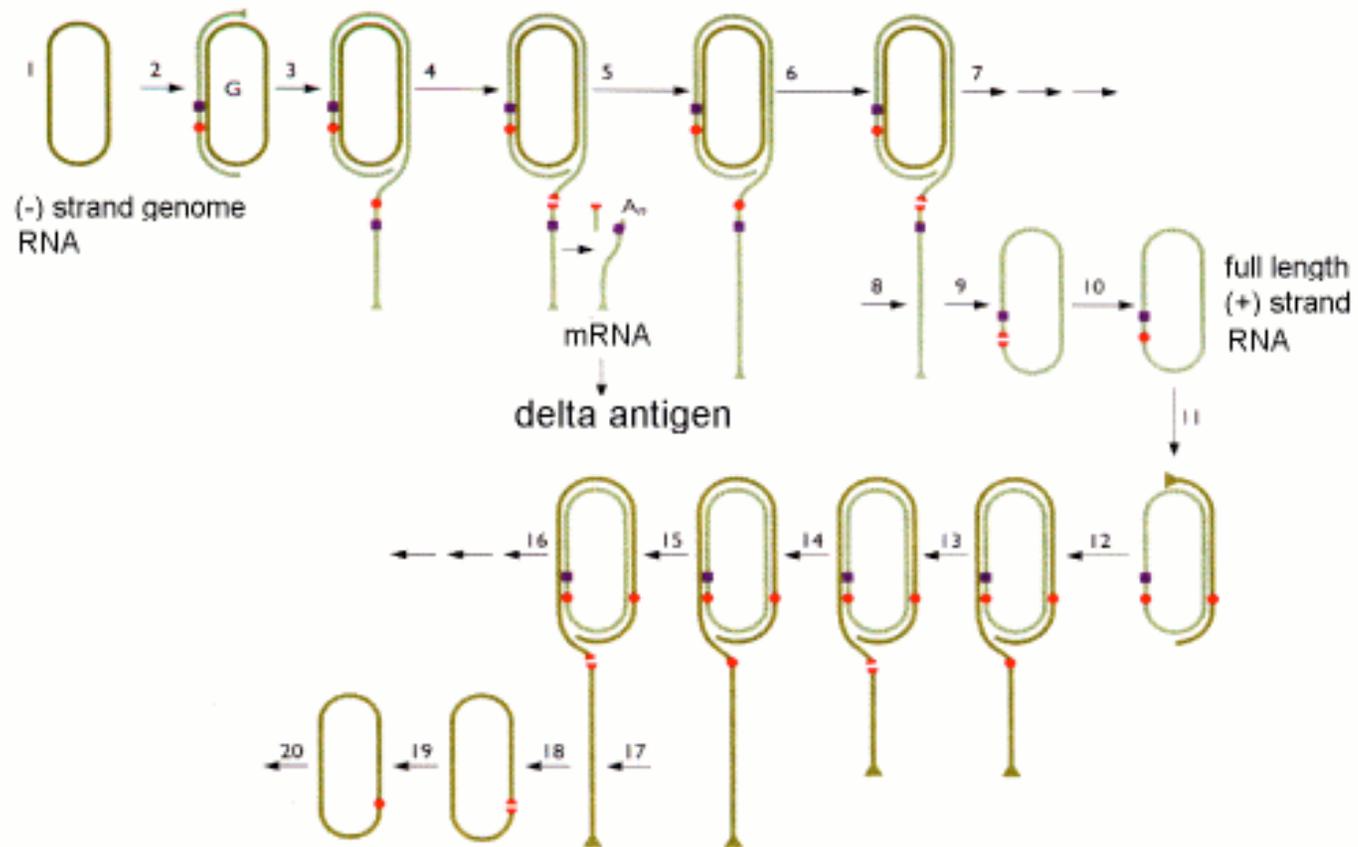
5 December 2005



Hepatitis δ Virus

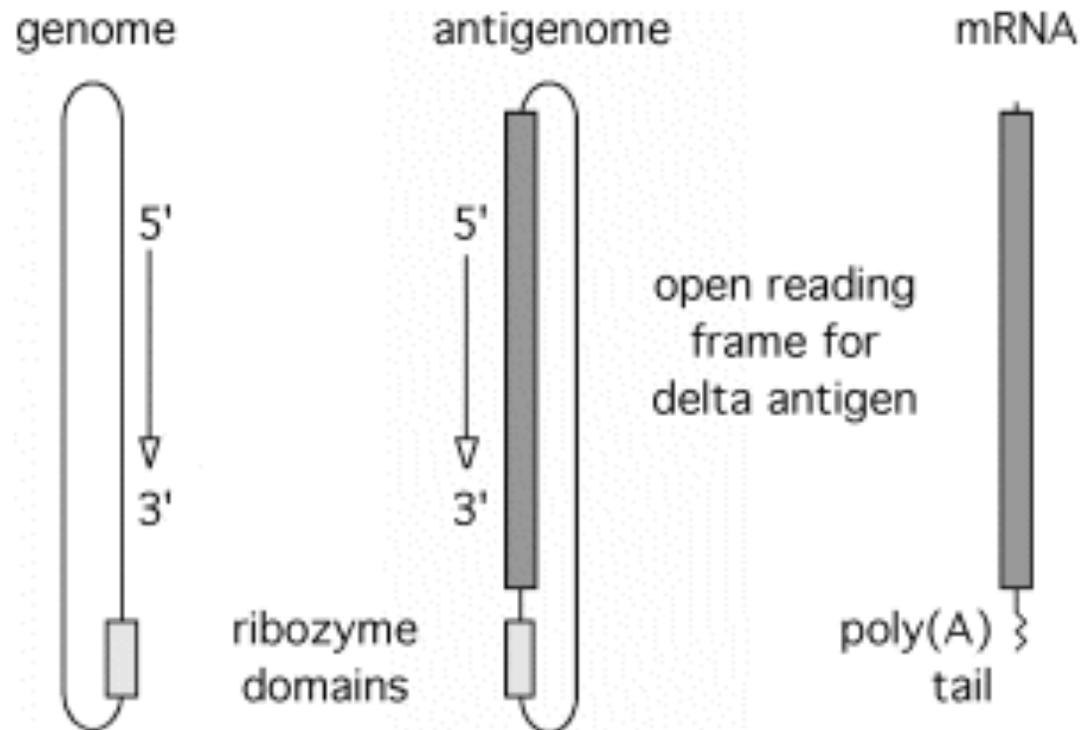
- RNA virus but is not a Retrovirus
- Small 1679 nt genome
- Requires co-infection with Hepatitis B for reproduction
- Genome encodes two related antigens
- Small 195 aa antigen required for replication
- Large 214 aa antigen inhibits replication and needed for virus particle assembly

Double Rolling Circle Replication

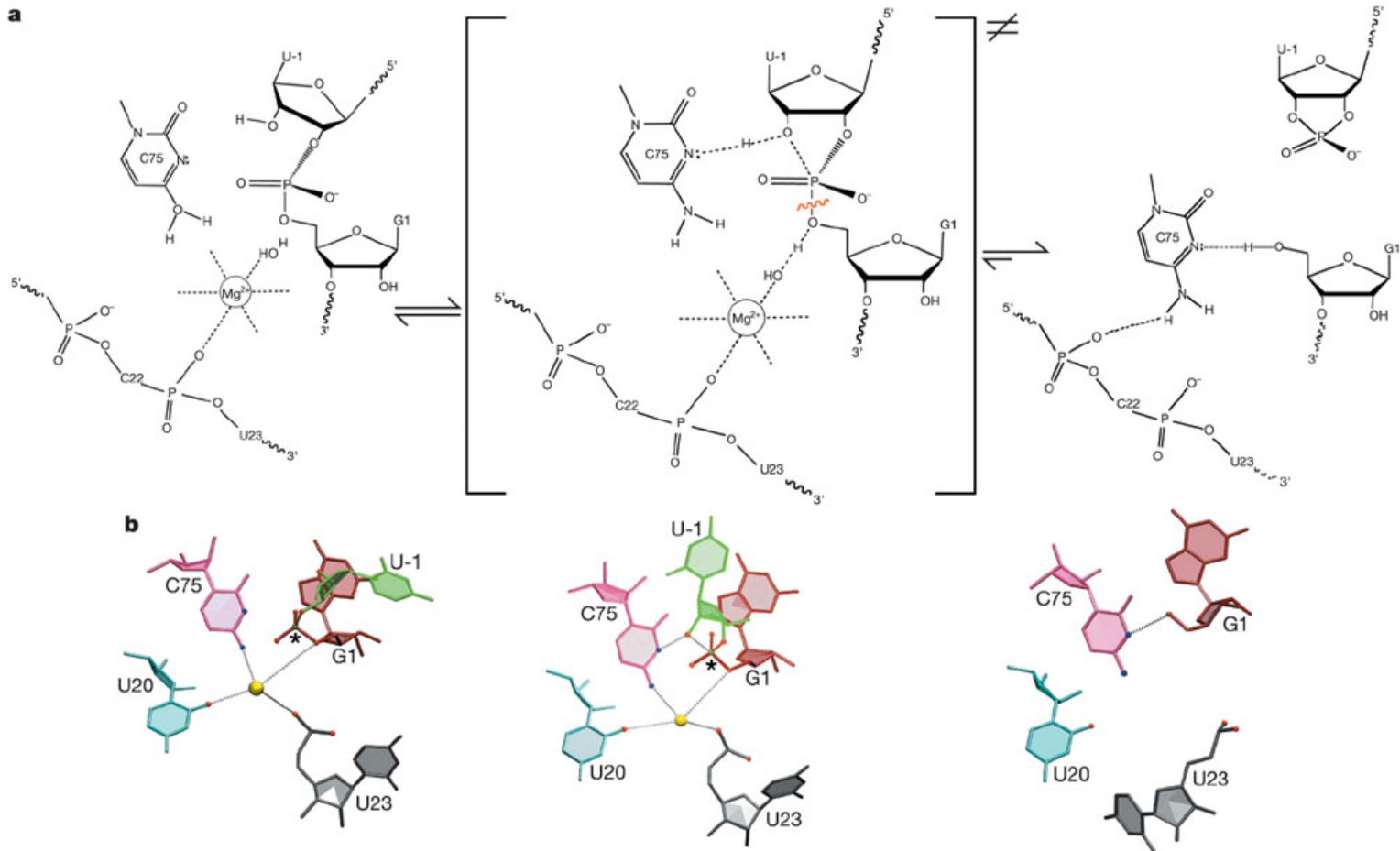


http://www.fccc.edu/docs/research/hdv.html#Ribozymes_and_Ligation

HDV Replication



Proposed Mechanism



Ailong Ke, Kaihong Zhou, Fang Ding, Jamie H. D. Cate and Jennifer A. Doudna
Nature 429, 201-205 (13 May 2004)