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Hantaviral proteins: Structure, functions, and role in hantavirus infection

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Abstract

© 2015 Muyangwa, Martynova, Khaiboullina, Morzunov and Rizvanov. Hantaviruses are the members of the family Bunyaviridae that are naturally maintained in the populations of small mammals, mostly rodents. Most of these viruses can easily infect humans through contact with aerosols or dust generated by contaminated animal waste products. Depending on the particular Hantavirus involved, human infection could result in either hemorrhagic fever with renal syndrome or in Hantavirus cardiopulmonary syndrome. In the past few years, clinical cases of the Hantavirus caused diseases have been on the rise. Understanding structure of the Hantavirus genome and the functions of the key viral proteins are critical for the therapeutic agents' research. This paper gives a brief overview of the current knowledge on the structure and properties of the Hantavirus nucleoprotein and the glycoproteins.

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Keywords

Glycoprotein, Hantavirus, MxA protein, Nucleocapsid protein, Reassortment