

Abstract:

The aim of this thesis is to summarize the findings on the involvement of PML nuclear bodies in the regulation of the innate immune response. The thesis includes a description of PML nuclear bodies and the immune response to viral infection. It describes how the PML protein and other components of the PML nuclear bodies - SP100, DAXX/ATRX and the HIRA chaperone complex - regulate the type I interferon response. The mechanisms by which selected representatives of Herpesviruses, Adenoviruses and Polyomaviruses interfere with this regulation and how they inhibit PML nuclear body functions or exploit them for the course of infection are discussed.

Keywords: PML, nuclear bodies, innate immunity, virus