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Biosafety model of adenovirus infection: Effects of bacterial proteases for infection of human cells in vitro

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Abstract

To determine the antiviral activity of various biologically active compounds, the model of adenovirus infection on the basis of cell cultures of human HEK293A and recombinant adenovirus Ad-EGFP, expressing green fluorescent protein EGFP. Adenoviruses have a capsid size of 70-90 nm and are able to infect dividing and nondividing cells in vitro and in vivo. Recombinant adenoviruses are the replicative defect in the cells of humans and animals. The developed model allowed us to determine the effect of bacterial proteases in the infected cell cultures with adenovirus. This model can also be used for screening drugs with potential protivivovirusnoy activity.

Keywords

Bacterial proteases, Cell culture, Flow cytometry, Infection, Recombinant adenoviruses