

**VACCINIA VIRUS INHIBITS TYPE III INTERFERONS ACTIVITY THROUGH A
MECHANISM DISTINCT FROM SOLUBLE VIROCEPTORS**

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Poxviruses are DNA viruses with large genomes, containing several genes for evading the host immune system. The B18R and B8R genes encode soluble viroceptors capable of binding type I and type II IFNs, thus inhibiting their antiviral activity. Type III IFNs were described recently, and there is no Vaccinia virus viroceptor described for them. In this work we tested the ability of type III IFNs in inhibiting the multiplication of several Brazilian *Vaccinia virus* strains. All the viruses used were able to replicate in the presence of type I and type III IFNs. To verify if there is a viroceptor specific for type III IFNs, we incubated IFN lambda1 with inactivated supernatant from Vaccinia virus infected cells and titrated the IFN activity. We were able to see that incubation with the supernatant did not inhibit IFN lambda1 activity but inhibited IFN alpha2 activity, as expected. We can conclude that *Vaccinia virus* is able to inhibit type III IFNs activity, but it is not done through a soluble viroceptor.

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