Accepted Manuscript

Infection of neuroblastoma cells by rabies virus is modulated by the virus titer

Natalia Langenfeld Fuoco, Sandriana Dos Ramos Silva, Elaine Raniero Fernandes, Fernanda Guedes Luiz, Orlando Garcia Ribeiro, Iana Suly Santos Katz

PII: S0166-3542(17)30614-9

DOI: 10.1016/j.antiviral.2017.11.003

Reference: AVR 4184

To appear in: Antiviral Research

- Received Date: 1 September 2017
- Revised Date: 27 October 2017

Accepted Date: 1 November 2017

Please cite this article as: Fuoco, N.L., Dos Ramos Silva, S., Fernandes, E.R., Luiz, F.G., Ribeiro, O.G., Katz, I.S.S., Infection of neuroblastoma cells by rabies virus is modulated by the virus titer, *Antiviral Research* (2017), doi: 10.1016/j.antiviral.2017.11.003.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Title: Infection of Neuroblastoma Cells by Rabies Virus Is Modulated by the Virus Titer

Natalia Langenfeld Fuoco¹, Sandriana Dos Ramos Silva¹, Elaine Raniero Fernandes1, Fernanda Guedes Luiz¹, Orlando Garcia Ribeiro², Iana Suly Santos Katz^{1, *}.

¹ Laboratory of Diagnostic, Pasteur Institute, São Paulo, Brazil

² Laboratory of Immunogenetics, Butantan Institute, São Paulo, Brazil

* Corresponding author: 393, Paulista Ave, São Paulo, SP, 01311-000, Brazil, E-mail address: <u>ianasuly@gmail.com</u> (Iana Suly Santos Katz)

ABSTRACT

Rabies is a lethal viral infection that can affect almost all mammals, including humans. To better understand the replication of *Rabies lyssavirus*, we investigated if the viral load in brains naturally infected with rabies influences viral internalization and viral growth kinetics in neuroblastoma cells, and if the viral load affects mortality in mice after intradermal infection. We noted that high initial viral loads in brains (group II) were unfavourable for increasing viral titers during serial passages in neuroblastoma cells when compared to low initial viral loads in brains (group I). In addition, group I strains showed higher viral growth and enhanced internalization efficiency in neuroblastoma cells than group II strains. However, we observed that the dominant virus subpopulation in group II promoted efficient viral infection in the central nervous system in the new host,

Download English Version:

https://daneshyari.com/en/article/8523432

Download Persian Version:

https://daneshyari.com/article/8523432

Daneshyari.com