

## Accepted Manuscript

Title: Quantifying rotavirus kinetics in the REH tumor cell line using in vitro data

Author: Gilberto González-Parra Hana M. Dobrovolny Diego F. Aranda Benito Chen-Charpentier Rafael Antonio Guerrero Rojas



PII: S0168-1702(16)30769-9  
DOI: <https://doi.org/doi:10.1016/j.virusres.2017.09.023>  
Reference: VIRUS 97251

To appear in: *Virus Research*

Received date: 21-11-2016  
Revised date: 5-9-2017  
Accepted date: 28-9-2017

Please cite this article as: Gilberto González-Parra, Hana M. Dobrovolny, Diego F. Aranda, Benito Chen-Charpentier, Rafael Antonio Guerrero Rojas, Quantifying rotavirus kinetics in the REH tumor cell line using in vitro data, *Virus Research* (2017), <https://doi.org/10.1016/j.virusres.2017.09.023>

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.

## Highlights

- A viral kinetics model is fit to experimental data of rotavirus infection for the first time.
- The time course of the infection is quantified, estimating an infecting time of 2 minutes, an eclipse duration of 7.25 h and an infectious cell lifespan of 46.2 h.
- The number of infectious virus produced over the lifespan of the cell is found to be  $1.42 \times 10^5$  FFU/mL, but the number of virions needed to infect a cell is 1420 FFU/mL.

Download English Version:

<https://daneshyari.com/en/article/8751967>

Download Persian Version:

<https://daneshyari.com/article/8751967>

[Daneshyari.com](https://daneshyari.com)