### Accepted Manuscript

Improving peptide quantification in chitosan nanoparticles

Maycon Carvalho Ribeiro, Viviane Lopes Rocha Corrêa, Francenya Kelley Lopes da Silva, Jerônimo Raimundo de Oliveira Neto, Ariádine Amorim Casas, Liliana Borges de Menezes, André Corrêa Amaral



PII: S0141-8130(18)33116-7

DOI: doi:10.1016/j.ijbiomac.2018.07.119

Reference: BIOMAC 10163

To appear in: International Journal of Biological Macromolecules

Received date: 23 June 2018 Revised date: 18 July 2018 Accepted date: 19 July 2018

Please cite this article as: Maycon Carvalho Ribeiro, Viviane Lopes Rocha Corrêa, Francenya Kelley Lopes da Silva, Jerônimo Raimundo de Oliveira Neto, Ariádine Amorim Casas, Liliana Borges de Menezes, André Corrêa Amaral, Improving peptide quantification in chitosan nanoparticles. Biomac (2018), doi:10.1016/j.ijbiomac.2018.07.119

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.

## ACCEPTED MANUSCRIPT

#### Improving peptide quantification in chitosan nanoparticles

Maycon Carvalho Ribeiro<sup>1</sup>, Viviane Lopes Rocha Corrêa<sup>1</sup>, Francenya Kelley Lopes da Silva<sup>1</sup>, Jerônimo Raimundo de Oliveira Neto<sup>2</sup>, Ariádine Amorim Casas<sup>1</sup>, Liliana Borges de Menezes<sup>3</sup>, André Corrêa Amaral<sup>1,\*</sup>

<sup>1</sup>Laboratory of Nano & Biotechnology, Instittute of Tropical Pathology and Public Health, Universidade Federal de Goiás, Goiânia GO 74605-050, Brazil.

<sup>2</sup>Laboratory of Quality Control of Medicine, Faculty of Pharmacy, Universidade Federal de Goiás, Goiânia GO 74605-220, Brazil.

<sup>3</sup>Pathology, Institute of Tropical Pathology and Public Health, Universidade Federal de Goiás, Goiânia GO 74605-050, Brazil.

\*Corresponding author: Universidade Federal de Goiás, Instituto de Patologia Tropical e Saúde Pública (IPTSP), Rua 235, s/n, Setor Universitário, Goiânia, GO, 74605-050, Brazil. Tel.: +55-62-998171-9282; Fax: +55-62-3209-6103; E-mail: amaral.nanobio@gmail.com

#### **Abstract**

The objective of the present study was to evaluate different methodologies for peptide quantification in the supernatant of chitosan nanoparticles by removing the unliked polymer in the suspension. The ionic gelation method was used to prepare the chitosan nanoparticles encapsulating a 5.3 kDa peptide. Three different methodologies for the processment of the solutions were compared before subjecting the samples to the Bradford protocol or Qubit<sup>®</sup> kit for protein detection. For the quantification, it was necessary to create a standard peptide

#### Download English Version:

# https://daneshyari.com/en/article/8326644

Download Persian Version:

https://daneshyari.com/article/8326644

<u>Daneshyari.com</u>