

Accepted Manuscript

Functional characterization of neotropical snakes peripheral blood leukocytes subsets: Linking flow cytometry cell features, microscopy images and serum corticosterone levels

Marcelo Pires Nogueira de Carvalho, Nicolle Gilda Teixeira Queiroz-Hazarbassanov, Cristina de Oliveira Massoco, Sávio Stefanini Sant'Anna, Mariana Mathias Lourenço, Gabriel Levin, Mari Cleide Sogayar, Kathleen Fernandes Grego, José Luiz Catão-Dias

PII: S0145-305X(16)30445-1

DOI: [10.1016/j.dci.2017.04.007](https://doi.org/10.1016/j.dci.2017.04.007)

Reference: DCI 2871

To appear in: *Developmental and Comparative Immunology*

Received Date: 25 November 2016

Revised Date: 11 April 2017

Accepted Date: 11 April 2017

Please cite this article as: de Carvalho, M.P.N., Queiroz-Hazarbassanov, N.G.T., de Oliveira Massoco, C., Sant'Anna, Sá.Stefanini., Lourenço, M.M., Levin, G., Sogayar, M.C., Grego, K.F., Catão-Dias, José.Luiz., Functional characterization of neotropical snakes peripheral blood leukocytes subsets: Linking flow cytometry cell features, microscopy images and serum corticosterone levels, *Developmental and Comparative Immunology* (2017), doi: 10.1016/j.dci.2017.04.007.

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.



1 **Functional characterization of neotropical snakes peripheral blood**
2 **leukocytes subsets: Linking flow cytometry cell features, microscopy**
3 **images and serum corticosterone levels.**

4

5 Marcelo Pires Nogueira de Carvalho^a, Nicolle Gilda Teixeira Queiroz-
6 Hazarbassanov^a, Cristina de Oliveira Massoco^a, Sávio Stefanini Sant'Anna^b,
7 Mariana Mathias Lourenço^b, Gabriel Levin^c, Mari Cleide Sogayar^{c,d}, Kathleen
8 Fernandes Grego^b, José Luiz Catão-Dias^a

9

10 ^aDepartment of Pathology, School of Veterinary Medicine and Animal Science,
11 University of São Paulo, São Paulo, Brazil. Avenida Orlando Marques de Paiva,
12 87. CEP: 05508-270.

13 ^bLaboratory of Herpetology, Butantan Institute, São Paulo, Brazil. Avenida Vital
14 Brazil, 1500. CEP: 05503-900.

15 ^cNUCEL/NETCEM (Cell and Molecular Therapy Center), Internal Medicine
16 Department, Medical School, University of São Paulo, São Paulo, Brazil. Rua
17 Pangaré, 100. Vila Butantã, CEP: 05360-130.

18 ^dChemistry Institute, Biochemistry Department, University of São Paulo, São
19 Paulo, Brazil

20

21 Corresponding author

22 Marcelo Pires Nogueira de Carvalho

23 e-mail: marcelopnc@yahoo.com.br

24

25 **Abstract**

26

27 Reptiles are the unique ectothermic amniotes, providing the key link between
28 ectothermic anamniotes fish and amphibians, and endothermic birds and
29 mammals; becoming an important group to study with the aim of providing
30 significant knowledge into the evolutionary history of vertebrate immunity.

31 Classification systems for reptiles' leukocytes have been described by their
32 appearance rather than function, being still inconsistent. With the advent of
33 modern techniques and the establishment of analytical protocols for snakes'
34 blood by flow cytometry, we bring a qualitative and quantitative assessment of

Download English Version:

<https://daneshyari.com/en/article/5540099>

Download Persian Version:

<https://daneshyari.com/article/5540099>

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