

## Accepted Manuscript

Title: A transient insulin system dysfunction in newborn rat brain followed by neonatal intracerebroventricular administration of streptozotocin could be accompanied by a labile cognitive impairment

Authors: Zohreh Abbasi, Fatemeh Behnam-Rassouli, Mohammad Mahdi Ghahramani Seno, Masoud Fereidoni

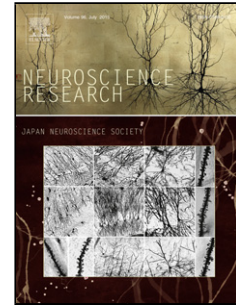
PII: S0168-0102(17)30303-6  
DOI: <https://doi.org/10.1016/j.neures.2017.10.003>  
Reference: NSR 4101

To appear in: *Neuroscience Research*

Received date: 21-5-2017  
Revised date: 16-9-2017  
Accepted date: 6-10-2017

Please cite this article as: Abbasi, Zohreh, Behnam-Rassouli, Fatemeh, Seno, Mohammad Mahdi Ghahramani, Fereidoni, Masoud, A transient insulin system dysfunction in newborn rat brain followed by neonatal intracerebroventricular administration of streptozotocin could be accompanied by a labile cognitive impairment. *Neuroscience Research* <https://doi.org/10.1016/j.neures.2017.10.003>

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.



# **A transient insulin system dysfunction in newborn rat brain followed by neonatal intracerebroventricular administration of streptozotocin could be accompanied by a labile cognitive impairment**

**Zohreh Abbasi<sup>1</sup>, Fatemeh Behnam-Rassouli<sup>2</sup>, Mohammad Mahdi Ghahramani Seno<sup>3</sup>, Masoud Fereidoni<sup>1\*</sup>**

<sup>1</sup> Rayan Center for Neuroscience and Behavior, Department of Biology, Faculty of Science, Ferdowsi University of Mashhad, Mashhad, Iran

<sup>2</sup> Cellular and Molecular Research Group, Institute of Biotechnology, Ferdowsi University of Mashhad, Mashhad, Iran

<sup>3</sup> Department of Basic Sciences, Faculty of Veterinary Medicine, Ferdowsi University of Mashhad, Mashhad, Iran

\*Correspondence:

**Masoud Fereidoni, PhD,**  
Rayan Center for Neuroscience and Behavior,  
Department of Biology,  
Faculty of Science,  
Ferdowsi University of Mashhad,  
Mashhad, Iran,  
Fax: +985138762227  
E-mail address: fereidoni@um.ac.ir

## **Highlights:**

- 20 µg/kg icv-STZ at critical postnatal period causes transient IR mRNA alterations.
- ChAT and Tau undergo transient impairments at mRNA levels by 20 µg/kg icv-STZ.
- 20 µg/kg icv-STZ induces short-term behavioral deficits at developmental age.

Download English Version:

<https://daneshyari.com/en/article/8842054>

Download Persian Version:

<https://daneshyari.com/article/8842054>

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