

Accepted Manuscript

Title: *Atp13a2* expression in the periaqueductal gray is decreased in the *Pink1* *-/-* rat model of Parkinson disease

Author: Cynthia A. Kelm-Nelson Sharon A. Stevenson
Michelle R. Ciucci



PII: S0304-3940(16)30208-7
DOI: <http://dx.doi.org/doi:10.1016/j.neulet.2016.04.003>
Reference: NSL 31953

To appear in: *Neuroscience Letters*

Received date: 9-10-2015
Revised date: 31-3-2016
Accepted date: 2-4-2016

Please cite this article as: Cynthia A.Kelm-Nelson, Sharon A.Stevenson, Michelle R.Ciucci, *Atp13a2* expression in the periaqueductal gray is decreased in the *Pink1* *-/-* rat model of Parkinson disease, *Neuroscience Letters* <http://dx.doi.org/10.1016/j.neulet.2016.04.003>

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.

***Atp13a2* expression in the periaqueductal gray is decreased in the *Pink1* ^{-/-} rat model of Parkinson disease**

Cynthia A. Kelm-Nelson ^a, Sharon A. Stevenson ^b, and Michelle R. Ciucci ^{a, c, d}

^a Department of Surgery, Division of Otolaryngology

^b Department of Zoology

^c Neuroscience Training Program

^d Department of Communication Sciences and Disorders
University of Wisconsin-Madison
Madison, WI USA

*Corresponding Author:

Cynthia A. Kelm-Nelson, Ph.D.

Department of Surgery, Division of Otolaryngology

1300 University Avenue, 483 Medical Sciences Center

University of Wisconsin-Madison

Madison, WI 53706 USA

Phone: 608-262-6122

Fax: 608-262-6356

Email: CAKelm@wisc.edu

Research Highlights:

- *Pink1* ^{-/-} rats do not show increased *alpha synuclein* gene expression.
- *Pink1* ^{-/-} rats do exhibit decreased *Atp13a2* expression in the periaqueductal gray.
- *Gad1* expression is reduced in the periaqueductal gray of *Pink1* ^{-/-} rats.

Abstract:

Vocal communication deficits are common in Parkinson disease (PD). Widespread alpha-synuclein pathology is a common link between familial and sporadic PD, and recent genetic rat models based on familial genetic links increase the opportunity to explore vocalization deficits and their associated neuropathologies. Specifically, the *Pink1* knockout (^{-/-}) rat presents with early, progressive motor deficits, including

Download English Version:

<https://daneshyari.com/en/article/6279537>

Download Persian Version:

<https://daneshyari.com/article/6279537>

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