### Accepted Manuscript

PAKs in the brain: Function and dysfunction

Laura Civiero, Elisa Greggio

PII: S0925-4439(17)30419-2

DOI: doi:10.1016/j.bbadis.2017.11.005

Reference: BBADIS 64954

To appear in:

Received date: 31 July 2017
Revised date: 31 October 2017
Accepted date: 6 November 2017

Please cite this article as: Laura Civiero, Elisa Greggio, PAKs in the brain: Function and dysfunction. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Bbadis(2017), doi:10.1016/j.bbadis.2017.11.005

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**

PAKs in the brain: function and dysfunction

Laura Civiero<sup>1,\*</sup> and Elisa Greggio<sup>1,\*</sup>

<sup>1</sup> Department of Biology, University of Padova, Italy

\* corresponding address: Department of Biology University of Padova, Via Ugo Bassi 58/B,

35131, Padova, Italy

Email: laura.civiero@unipd.it and elisa.greggio@unipd.it

#### **Abstract**

p21-activated kinases (PAKs) comprise a family of proteins covering a central role in signal transduction. They are downstream effectors of Rho GTPases and can affect a variety of processes in different cell types and tissues by remodeling the cytoskeleton and by promoting gene transcription and cell survival. Given the relevance of cytoskeletal organization in neuronal development as well as synaptic function and the importance of pro-survival signals in controlling neuronal cell fate, accumulating studies investigated the role of PAKs in the nervous system. In this review, we provide a critical overview of the role of PAKs in the nervous system, both in neuronal and non-neuronal cells, and discuss their potential link with neurodegenerative diseases.

#### **Keywords**

p21-activated kinases; actin cytoskeleton; CNS; signal transduction; neurodegeneration

#### Download English Version:

# https://daneshyari.com/en/article/8258676

Download Persian Version:

https://daneshyari.com/article/8258676

<u>Daneshyari.com</u>