## Accepted Manuscript

Altered glutamate clearance in ascorbate deficient mice increases seizure susceptibility and contributes to cognitive impairment in *APP/PSEN1* mice

Deborah J. Mi, Shilpy Dixit, Timothy A. Warner, John A. Kennard, Daniel A. Scharf, Eric S. Kessler, Lisa M. Moore, David C. Consoli, Corey W. Bown, Angeline J. Eugene, Jing-Qiong Kang, Fiona E. Harrison

PII: S0197-4580(18)30285-9

DOI: 10.1016/j.neurobiolaging.2018.08.002

Reference: NBA 10338

To appear in: Neurobiology of Aging

Received Date: 13 November 2017

Revised Date: 31 July 2018

Accepted Date: 2 August 2018

Please cite this article as: Mi, D.J, Dixit, S., Warner, T.A, Kennard, J.A, Scharf, D.A, Kessler, E.S, Moore, L.M, Consoli, D.C, Bown, C.W, Eugene, A.J, Kang, J.-Q., Harrison, F.E, Altered glutamate clearance in ascorbate deficient mice increases seizure susceptibility and contributes to cognitive impairment in *APP/PSEN1* mice, *Neurobiology of Aging* (2018), doi: 10.1016/ j.neurobiolaging.2018.08.002.

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 Altered glutamate clearance in ascorbate deficient mice increases seizure susceptibility and 2 contributes to cognitive impairment in APP/PSEN1 mice 3 4 Abbreviated title: Ascorbate deficiency and seizure susceptibility Deborah J Mi<sup>2</sup>, Shilpy Dixit<sup>2</sup>, Timothy A Warner<sup>3</sup>, John A Kennard<sup>2</sup>, Daniel A Scharf<sup>4</sup>, Eric S Kessler<sup>4</sup>, 5 Lisa M Moore<sup>4</sup>, David C Consoli<sup>5</sup>, Corey W Bown<sup>5</sup>, Angeline J Eugene<sup>4</sup>, Jing-Qiong Kang<sup>3</sup>, Fiona E 6 Harrison<sup>1,2</sup> 7 8 9 <sup>1</sup> Corresponding Author: Fiona E Harrison, PhD, 7465 MRB4, 2213 Garland Avenue, Vanderbilt University Medical Center, Nashville, TN Fiona.harrison@vanderbilt.edu 10 11 <sup>2</sup> Division of Diabetes, Endocrinology & Metabolism, Department of Medicine, Vanderbilt University Medical Center, Nashville, TN, 37232 12 <sup>3</sup> Division of Neurology, Department of Medicine, Vanderbilt University Medical Center, Nashville, TN, 13 14 37232 <sup>4</sup> Undergraduate Program in Neuroscience, Vanderbilt University, Nashville, TN, 37240 15 <sup>5</sup> Interdisciplinary Graduate Program, Vanderbilt University, Nashville, TN, 37240 16 17 FEH, JQK, JAK and TAW all designed research; FEH, DJM, SD, TAW, JAK, DAS, ESK, LMM, DCC, 18 CWB, AJE all performed research, FEH analyzed data and wrote the paper. 19 20 21 Number of Pages = 4222 Number of Figures = 5Number of Tables = 323 24 Abstract = 196 words 25 Introduction = 672 words Discussion = 1599 words 26 27 Conflicts of Interest. The authors have no competing conflicts of interest to report. 28

Download English Version:

## https://daneshyari.com/en/article/11002000

Download Persian Version:

https://daneshyari.com/article/11002000

Daneshyari.com