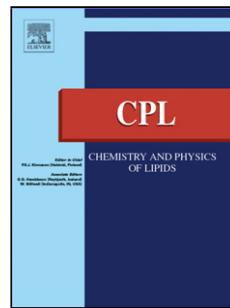


Accepted Manuscript

Title: Evidence of K⁺ homeostasis disruption in cellular dysfunction triggered by 7-ketcholesterol, 24S-hydroxycholesterol, and tetracosanoic acid (C24:0) in 158N murine oligodendrocytes



Authors: Maryem Bezine, Meryam Debbabi, Thomas Nury, Rym Ben-Khalifa, Mohammad Samadi, Mustapha Cherkaoui-Malki, Anne Vejux, Jérôme de Sèze, Thibault Moreau, Mohamed El-Ayeb, Gérard Lizard

PII: S0009-3084(17)30011-7

DOI: <http://dx.doi.org/doi:10.1016/j.chemphyslip.2017.03.006>

Reference: CPL 4535

To appear in: *Chemistry and Physics of Lipids*

Received date: 24-1-2017

Revised date: 6-3-2017

Accepted date: 7-3-2017

Please cite this article as: Bezine, Maryem, Debbabi, Meryam, Nury, Thomas, Ben-Khalifa, Rym, Samadi, Mohammad, Cherkaoui-Malki, Mustapha, Vejux, Anne, de Sèze, Jérôme, Moreau, Thibault, El-Ayeb, Mohamed, Lizard, Gérard, Evidence of K⁺ homeostasis disruption in cellular dysfunction triggered by 7-ketcholesterol, 24S-hydroxycholesterol, and tetracosanoic acid (C24:0) in 158N murine oligodendrocytes. *Chemistry and Physics of Lipids* <http://dx.doi.org/10.1016/j.chemphyslip.2017.03.006>

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.

Evidence of K⁺ homeostasis disruption in cellular dysfunction triggered by 7-ketcholesterol, 24S-hydroxycholesterol, and tetracosanoic acid (C24:0) in 158N murine oligodendrocytes

Maryem Bezine ^{a,b}, Meryam Debbabi ^{a,c}, Thomas Nury ^a, Rym Ben-Khalifa ^b, Mohammad Samadi ^d, Mustapha Cherkaoui-Malki ^a, Anne Vejux ^a, Jérôme de Sèze ^e, Thibault Moreau ^f, Mohamed El-Ayeb ^b, Gérard Lizard ^{a*}

^a Univ. Bourgogne Franche-Comté, Team ‘Biochemistry of the peroxisome, inflammation and lipid metabolism’ EA 7270 / INSERM, Dijon, France;

^b Univ. Tunis El Manar – Pasteur Institut, Lab. ‘Venoms & Therapeutic Biomolecules’, Tunis, Tunisia;

^c Univ. Monastir, LR12ES05, Lab-NAFS ‘Nutrition - Functional Food & Vascular Health’, Monastir, Tunisia;

^d Univ. Lorraine, LCPMC-A2, ICPM, Dept of Chemistry, Metz, France,

^e Dept. Neurology, Hôpital de Hautepierre, Strasbourg, France.

^f Dept. Neurology, Univ. Hospital of Dijon, Univ. Bourgogne Franche-Comté / EA7270, Dijon, France

- *Corresponding author (Dr Gérard Lizard) at:*

Univ. Bourgogne Franche-Comté, Faculté des Sciences Gabriel

EA7270 / Bio-PeroxIL (Biochemistry of the peroxisome, inflammation and lipid metabolism)

6, Bd Gabriel; 21 000 Dijon, FRANCE

Tel: +33 380 39 62 56

Fax: + 33 380 39 62 50

E.mail: gerard.lizard@u-bourgogne.fr

Highlights

- 7-ketcholesterol and 24S-hydroxycholesterol induce apoptosis on 158N murine oligodendrocytes

- C24:0 induces necrosis on 158N murine oligodendrocytes

- 7-ketcholesterol, 24S-hydroxycholesterol and C24:0 induced-cell death is associated with intracellular potassium retention

Download English Version:

<https://daneshyari.com/en/article/5142606>

Download Persian Version:

<https://daneshyari.com/article/5142606>

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