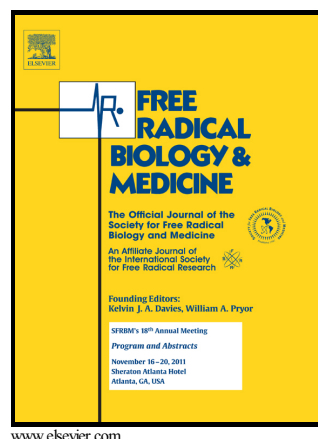


Author's Accepted Manuscript

Nitrite and nitrate-dependent generation of anti-inflammatory fatty acid nitroalkenes

Meghan Delmastro-Greenwood, Kara S. Hugan, Dario A. Vitturi, Sonia R. Salvatore, George Grimes, Gopal Potti, Sruti Shiva, Francisco J. Schopfer, Mark T. Gladwin, Bruce A. Freeman, Stacy Gelhaus Wendell



PII: S0891-5849(15)00496-7
DOI: <http://dx.doi.org/10.1016/j.freeradbiomed.2015.07.149>
Reference: FRB12530

To appear in: *Free Radical Biology and Medicine*

Received date: 11 June 2015
Revised date: 23 July 2015
Accepted date: 24 July 2015

Cite this article as: Meghan Delmastro-Greenwood, Kara S. Hugan, Dario A. Vitturi, Sonia R. Salvatore, George Grimes, Gopal Potti, Sruti Shiva, Francisco J. Schopfer, Mark T. Gladwin, Bruce A. Freeman and Stacy Gelhaus Wendell, Nitrite and nitrate-dependent generation of anti-inflammatory fatty acid nitroalkenes, *Free Radical Biology and Medicine*, <http://dx.doi.org/10.1016/j.freeradbiomed.2015.07.149>

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 galley proof before it is published in its final citable 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.

Nitrite and nitrate-dependent generation of anti-inflammatory fatty acid nitroalkenes

Meghan Delmastro-Greenwood^{†,a}, Kara S. Hughan^{†,b}, Dario A. Vitturi^a, Sonia R. Salvatore^a, George Grimes^c, Gopal Potti^c, Sruti Shiva^{a,b}, Francisco J. Schopfer^{a,b}, Mark T. Gladwin^b, Bruce A. Freeman^{a,b*} and Stacy Gelhaus Wendell^{a,b*}

^aDepartment of Pharmacology and Chemical Biology, University of Pittsburgh, Pittsburgh, PA 15261, USA

^bPittsburgh Heart, Lung, Blood and Vascular Medicine Institute, University of Pittsburgh, Pittsburgh PA, 15261, USA.

^cPharmaceutical Development Section, Pharmacy Department, Clinical Center, National Institutes of Health, Bethesda, MD, 20892, USA.

[†]These authors contributed equally to this manuscript.

*To whom correspondence should be addressed: Stacy Gelhaus Wendell and Bruce A. Freeman, Department of Pharmacology & Chemical Biology, University of Pittsburgh, School of Medicine, 200 Lothrop Street, Biomedical Science Tower E1340, Pittsburgh, PA 15261, USA, Tel: (412)-648-9319, Fax: (412)-648-2229, Email: gstacy@pitt.edu and freerad@pitt.edu

Abbreviations: 4-phenyl-1,2,4 triazoline-3,5 dione (PTAD); [¹³C₁₈]-nitro-oleic acid ([¹³C₁₈]-NO₂-OA); ¹⁴nitro-conjugated linoleic acid (¹⁴NO₂-cLA; ¹⁵nitro-conjugated linoleic acid (¹⁵NO₂-cLA); conjugated linoleic acid (cLA); cyclic GMP (cGMP); diaminonaphthalene (DAN); glutathione (GSH); high performance liquid chromatography (HPLC); Kelch-like ECH-associated protein 1 (KEAP1); liquid chromatography tandem mass spectrometry (LC-MS/MS); N-naphthotriazole (NT); nitro-fatty acid (NO₂-FA); Nuclear factor (erythroid-derived 2)-like 2 (Nrf2); nuclear factor kappa-light-chain-enhancer of activated B cells (NF-κB); Peroxisome proliferator-activated receptor gamma (PPARγ); post-translational modification (PTM); retention time (RT); solid phase extraction (SPE)

Download English Version:

<https://daneshyari.com/en/article/8268528>

Download Persian Version:

<https://daneshyari.com/article/8268528>

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