

# Accepted Manuscript

Glutamine has antidepressive effects through increments of glutamate and glutamine levels and glutamatergic activity in the medial prefrontal cortex

Hyeonwi Son, Ji Hyeong Baek, Bok Soon Go, Doo-hyuk Jung, Sneha B. Sontakke, Hye Jin Chung, Dong Hoon Lee, Gu Seob Roh, Sang Soo Kang, Gyeong Jae Cho, Wan Sung Choi, Dong Kun Lee, Hyun Joon Kim

PII: S0028-3908(18)30709-3

DOI: [10.1016/j.neuropharm.2018.09.040](https://doi.org/10.1016/j.neuropharm.2018.09.040)

Reference: NP 7365

To appear in: *Neuropharmacology*

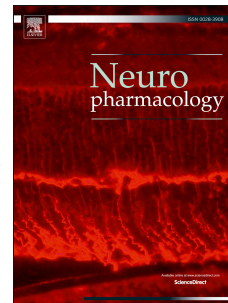
Received Date: 26 June 2018

Revised Date: 21 September 2018

Accepted Date: 24 September 2018

Please cite this article as: Son, H., Baek, J.H., Go, B.S., Jung, D.-h., Sontakke, S.B., Chung, H.J., Lee, D.H., Roh, G.S., Kang, S.S., Cho, G.J., Choi, W.S., Lee, D.K., Kim, H.J., Glutamine has antidepressive effects through increments of glutamate and glutamine levels and glutamatergic activity in the medial prefrontal cortex, *Neuropharmacology* (2018), doi: <https://doi.org/10.1016/j.neuropharm.2018.09.040>.

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.



**Glutamine has antidepressive effects through increments of glutamate and glutamine levels and glutamatergic activity in the medial prefrontal cortex**

Hyeonwi Son<sup>1</sup>, Ji Hyeong Baek<sup>1</sup>, Bok Soon Go<sup>1</sup>, Doo-hyuk Jung<sup>1</sup>, Sneha B. Sontakke<sup>2</sup>, Hye Jin Chung<sup>2</sup>, Dong Hoon Lee<sup>1</sup>, Gu Seob Roh<sup>1</sup>, Sang Soo Kang<sup>1</sup>, Gyeong Jae Cho<sup>1</sup>, Wan Sung Choi<sup>1</sup>, Dong Kun Lee<sup>3,\*</sup>, Hyun Joon Kim<sup>1,\*</sup>

<sup>1</sup>Department of Anatomy and Convergence Medical Sciences, Institute of Health Sciences, Bio Anti-aging Medical Research Center, Gyeongsang National University Medical School, 15 Jinju-daero 816 Beongil, Jinju, Gyeongnam, 52727, Republic of Korea

<sup>2</sup>College of Pharmacy and Research Institute of Pharmaceutical Sciences, Gyeongsang National University, 501 Jinju-daero, Jinju, Gyeongnam, 52828, Republic of Korea

<sup>3</sup>Department of Physiology, Institute of Health Sciences, Gyeongsang National University Medical School, 15 Jinju-daero 816 Beongil, Jinju, Gyeongnam, 52727, Republic of Korea

**\*Co-correspondence to:**

Hyun Joon Kim, PhD

Department of Anatomy and Convergence Medical Science, Institute of Health Sciences, Bio Anti-aging Medical Research Center, Gyeongsang National University Medical School, 15 Jinju-daero 816 Beongil, Jinju, Gyeongnam, 52727, Republic of Korea

E-mail: kimhj@gnu.kr; Tel: +82-55-772-8034; Fax: +82-55-772-8039

Dong Kun Lee, PhD

Download English Version:

<https://daneshyari.com/en/article/11025763>

Download Persian Version:

<https://daneshyari.com/article/11025763>

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