

## Accepted Manuscript

Title: Characterization and immunomodulatory activities of polysaccharide isolated from *Pleurotus eryngii*

Author: Duoduo Xu Haiyang Wang Wei Zheng Yang Gao  
Mingxing Wang Yanqiu Zhang Qipin Gao



PII: S0141-8130(16)30739-5  
DOI: <http://dx.doi.org/doi:10.1016/j.ijbiomac.2016.07.016>  
Reference: BIOMAC 6290

To appear in: *International Journal of Biological Macromolecules*

Received date: 18-5-2016  
Revised date: 3-7-2016  
Accepted date: 4-7-2016

Please cite this article as: Duoduo Xu, Haiyang Wang, Wei Zheng, Yang Gao, Mingxing Wang, Yanqiu Zhang, Qipin Gao, Characterization and immunomodulatory activities of polysaccharide isolated from *Pleurotus eryngii*, *International Journal of Biological Macromolecules* <http://dx.doi.org/10.1016/j.ijbiomac.2016.07.016>

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.

<AT>Characterization and immunomodulatory activities of polysaccharide isolated from *Pleurotus eryngii*

<AU>Duoduo Xu<sup>ab</sup>, Haiyang Wang<sup>ab</sup>, Wei Zheng<sup>c</sup>, Yang Gao<sup>ab</sup>, Mingxing Wang<sup>db</sup>, Yanqiu Zhang<sup>d</sup>, Qipin Gao<sup>ab,\*</sup> ##Email##czzxuduoduo@163.com##/Email##

<AU> ##Email##20241877@qq.com##/Email##

<AFF>aCenter of Research & Development, Changchun University of Chinese Medicine, Changchun, Jilin 130117, China

<AFF>bMacromolecule of Chinese Medicine Key Lab of Jilin Province, Changchun 130117, Jilin, China

<AFF>cDepartments of Ophthalmology, The Affiliated Hospital, Changchun University of Chinese Medicine, Changchun, Jilin 130021, China

<AFF>dPreparation center, The Affiliated Hospital, Changchun University of Chinese Medicine, Changchun, Jilin 130021, China

### E-mail and postal address

Duoduo Xu E-mail: Postal address: No.1035, Boshuo Rd, Jingyue Econmic Development District, Changchun, Jilin, China. 130117.

Haiyang Wang E-mail:1204334211 @qq.com; Postal address: No.1035, Boshuo Rd, Jingyue Econmic Development District, Changchun, Jilin, China. 130117.

Wei Zheng E-mail:drzhengwei@163.com :Postal address: No. 1478, Gongnong Rd, Chaoyang District, Changchun, Jilin, China. 130021 Yang Gao: E-mail:756287045 @qq.com Postal address: No.1035, Boshuo Rd, Jingyue Econmic Development District, Changchun, Jilin, China. 130117.

Mingxing Wang E-mail:578658688 @qq.com Postal address: No. 1478, Gongnong Rd, Chaoyang District, Changchun, Jilin, China. 130021 Yanqiu Zhang E-mail:45968162@qq.com Postal address: No. 1478, Gongnong Rd, Chaoyang District, Changchun, Jilin, China. 130021

<PA>Postal address: No.1035, Boshuo Rd, Jingyue Econmic Development District, Changchun, Jilin, China. 130117. Tel.: +86043186172070.  
E-mail:

<ABS-HEAD>Highlights ► •A polysaccharide (EPA-1) from *Pleurotus eryngii* was isolated and purified. ► •EPA-1 consists mainly of galactose, glucose and mannose. ► •One possible structure of EPA-1 was established by chemical methods and NMR spectroscopy. ► EPA-1 possessed good immunoregulatory activity in vivo, and stimulated the production of NO and cytokines by MAPK and NF-κB.

### <ABS-HEAD>ABSTRACT

<ABS-P>A water-soluble polysaccharide (EPA-1) from *Pleurotus eryngii* was obtained using DEAE-52 and Sephadex G-50 columns. The properties, structure and immunomodulatory activity of EPA-1 were studied. The results demonstrated that EPA-1 was a homogeneous polysaccharide with the molecular weight of  $9.97 \times 10^4$  Da. EPA-1 consisted of Man, Glc and Gal in a molar ratio of 2.2: 1.0: 3.2. The

Download English Version:

<https://daneshyari.com/en/article/8329662>

Download Persian Version:

<https://daneshyari.com/article/8329662>

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