

---

[Skip to Main Content](#) if(true) { document.getElementById("skipNavigationLink").onclick =function skipElement () { var element = document.getElementById('article\_\_content'); if(element == null || element == undefined) { element = document.getElementsByClassName('article\_\_content').item(0); } element.setAttribute('tabindex','0'); element.focus(); } }



[Access byCAS - National Science Library](#)

[Access byCAS - National Science Library](#)

- [This Journal](#)
- [Anywhere](#)

- 
-

---

[Login / Register](#)

The full text of this article hosted at iucr.org is unavailable due to technical difficulties.

googletag.cmd.push ( function () { googletag.display ( 'advert-leaderboard' ); }); \_

[Bulletin of the Korean Chemical Society](#)

[Volume 37, Issue 11](#)

---

# Protection Effect of Punicalagin Isolated from Pomegranate on Inflammation and Ethanol-Induced Gastric Mucosal Injury

[Hye Lim Lee](#)

College of Korean Medicine, Gachon University, Seongnam, Korea

[Search for more papers by this author](#)

[Ki Sung Kang](#)

Corresponding Author

E-mail address: [kkang@gachon.ac.kr](mailto:kkang@gachon.ac.kr)

College of Korean Medicine, Gachon University, Seongnam, Korea

[Search for more papers by this author](#)

[Hye Lim Lee](#)

College of Korean Medicine, Gachon University, Seongnam, Korea

[Search for more papers by this author](#)

[Ki Sung Kang](#)

---

Corresponding Author

E-mail address: [kkang@gachon.ac.kr](mailto:kkang@gachon.ac.kr)

College of Korean Medicine, Gachon University, Seongnam, Korea

[Search for more papers by this author](#)

First published: 05 October 2016

<https://doi.org/10.1002/bkcs.10973>

[Read the full text](#)

[About](#)

[PDF](#)

[PDF](#)

[Tools](#)

- [Request permission](#)
- [Export citation](#)

- 
- [Add to favorites](#)
  - [Track citation](#)

[Share](#)

Give access

[Share full text access](#)

Share full text access

Share a link

- [Email to a friend](#)
- [Facebook](#)
- [Twitter](#)
- [Linkedin](#)
- [Google+](#)
- [Reddit](#)
- [CiteULike](#)

## Abstract

Excessive alcohol consumption is one of the most common causes of gastritis. The activation of cyclooxygenase-2 (COX-2), associated with reactive oxygen species, is a key process in the inflammatory response of ethanol-induced gastritis. Punicalagin, a naturally occurring active ingredient of pomegranate, is a potential antioxidant. In this study, pomegranate extract and punicalagin exhibited free radical scavenging activity in a

---

dose-dependent manner. Pretreatment with pomegranate extract also exerted gastroprotective effects by reducing the inflammatory response to ethanol-induced gastric mucosal damage. Furthermore, punicalagin inhibited the expression of inflammatory COX-2 by suppressing the activation of mitogen-activated protein kinases in lipopolysaccharide-induced inflammation. These findings suggest that punicalagin may be beneficial for the prevention and/or treatment of gastric inflammation.

[Volume37, Issue11](#)

November 2016

Pages 1778-1782

googletag.cmd.push ( function () { googletag.display ( 'advert-rail-1' ); }); \_

- [Related](#)
- [Information](#)

•

•

googletag.cmd.push ( function () { googletag.display ( 'advert-rail-2' ); }); \_

•

---

```
var articleRef = document.querySelector('.article__body:not(.show-references) .article__references');  
if (articleRef) { articleRef.style.display = "none"; }
```

[Caption](#)

## **Additional links**

## **About Wiley Online Library**

- [Privacy Policy](#)
- [Terms of Use](#)
- [Cookies](#)
- [Accessibility](#)

---

## Help & Support

- [Contact Us](#)

## Opportunities

- [Subscription Agents](#)
- [Advertisers & Corporate Partners](#)

## Connect with Wiley

- [The Wiley Network](#)
- [Wiley Press Room](#)



---

## Log in to Wiley Online Library

[NEW USER >](#) [INSTITUTIONAL LOGIN >](#)

## Change Password

## Congrats!

Your password has been changed

---

## Create a new account

[Returning user](#)

## Forgot your password?

Enter your email address below. If your address has been previously registered, you will receive an email with instructions on how to reset your password. If you don't receive an email, you should register as a new user

Please check your email for your password reset instructions.

## Request Username

Can't sign in? Forgot your username?

---

Enter your email address below and we will send you your username

If the address matches an existing account you will receive an email with instructions to retrieve your username

```
if(window._satellite) { _satellite.pageBottom(); }
```

```
var _prum=[[['id','59e8fecb3847311aab7b23c6'],['mark','firstbyte',(new Date()).getTime()]];](function(){var s=document.getElementsByTagName('script')[0],p=document.createElement('script');p.async='async';p.src='//rum-static.pingdom.net/prum.min.js';s.parentNode.insertBefore(p,s);})();
```