

1,8-cineol inhibits the Wnt/ $\beta$ -catenin signaling pathway through GSK-3 dephosphorylation in nasal polyps of chronic rhinosinusitis patients

Karl-Ludwig Bruchhage, Michael Koennecke, Maren Drenckhan, Kirstin Plötze-Martin, Ralph Pries, Barbara Wollenberg



[www.elsevier.com/locate/ejphar](http://www.elsevier.com/locate/ejphar)

PII: S0014-2999(18)30437-0  
DOI: <https://doi.org/10.1016/j.ejphar.2018.07.060>  
Reference: EJP71925

To appear in: *European Journal of Pharmacology*

Received date: 20 June 2018  
Revised date: 25 July 2018  
Accepted date: 31 July 2018

Cite this article as: Karl-Ludwig Bruchhage, Michael Koennecke, Maren Drenckhan, Kirstin Plötze-Martin, Ralph Pries and Barbara Wollenberg, 1,8-cineol inhibits the Wnt/ $\beta$ -catenin signaling pathway through GSK-3 dephosphorylation in nasal polyps of chronic rhinosinusitis patients, *European Journal of Pharmacology*, <https://doi.org/10.1016/j.ejphar.2018.07.060>

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.

**1,8-cineol inhibits the Wnt/ $\beta$ -catenin signaling pathway through  
GSK-3 dephosphorylation in nasal polyps of chronic rhinosinusitis  
patients**

Karl-Ludwig Bruchhage<sup>1</sup>, Michael Koennecke<sup>1</sup>, Maren Drenckhan, Kirstin Plötze-  
Martin, Ralph Pries and Barbara Wollenberg \*

Department of Otorhinolaryngology, University Medical Center Schleswig-Holstein,  
Campus Lübeck, Lübeck, Germany

\*Correspondence to: Barbara Wollenberg, University Medical Center Schleswig-  
Holstein Campus Luebeck, Department of Otorhinolaryngology, Ratzeburger Allee  
160, D-23538 Luebeck, Germany, Phone +49 451 500 42001, Fax +49 451 500  
42004, E-mail: Barbara.Wollenberg@uksh.de

---

<sup>1</sup> KLB and MK have shared primary authorship

Download English Version:

<https://daneshyari.com/en/article/8528871>

Download Persian Version:

<https://daneshyari.com/article/8528871>

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