SZABO SCANDIC

Part of Europa Biosite

# Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand


**SZABO-SCANDIC HandelsgmbH**

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

# Ailanthoidol

**Cat. No.:** HY-N8449

**CAS No.:** 156398-61-7

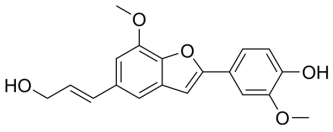
**Molecular Formula:** $C_{19}H_{18}O_5$

**Molecular Weight:** 326.34

**Target:** Others

**Pathway:** Others

**Storage:** Please store the product under the recommended conditions in the Certificate of Analysis.




## BIOLOGICAL ACTIVITY

**Description**

Ailanthoidol is a natural occurring neolignan, with anti-inflammatory and antitumor activities. Ailanthoidol has chemopreventive activity against tumor promotion[1][2].

**In Vitro**

Ailanthoidol (20 μM; 24-72 hours) showed no cytotoxicity toward RAW264.7 macrophages[1].
Ailanthoidol (1.25-20 μM; 24 hours) suppresses the generation of nitric oxide (NO) and prostaglandin E2 , aswell as theexpression of inducible NO synthase (iNOS) and cyclooxygenase (COX)-2 induced by lipopolysaccharide (LPS) in RAW264.7 cells[1].
Ailanthoidol (1.25-20 μM; 24 hours) inhibits the production of inflammatory cytokines induced by LPS in RAW264.7 cells, including interleukin (IL)-1b and IL-6[1].
Ailanthoidol suppresses NF-kB activation by blocking Ik-Ba degradation[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

| | |
|---|---|
| Cell Line: | RAW264.7 cells |
| Concentration: | 0 μM, 1.25 μM, 2.5 μM,5 μM, 10 μM, 20 μM |
| Incubation Time: | 24 hours |
| Result: | Inhibited LPS-induced NO and PGE2 secretion in a dose-dependent manner. |

**In Vivo**

Ailanthoidol (0.1-10 mg/kg; i.g.; 24 hours and 1 hours before LPS was injected, for 5 days) protects BALB/c mice from LPS (25mg/kg)-induced endotoxin shock, possibly through inhibition of the production of inflammatory cytokines and NO[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

| | |
|---|---|
| Animal Model: | Eight-week-old male BALB/c mice[1] |
| Dosage: | 0.1 mg/kg, 1 mg/kg, 10 mg/kg, 20 mg/kg |
| Administration: | Oral gavage, 24 hours and 1 hours before LPS was injected, for 5 days |
| Result: | Significantly improved the mortality of these mice in a concentration-dependent manner and no mice were killed in the 20mg/kg group. |

## REFERENCES

[1]. Jin-Kyung Kim, et al. Ailanthoidol suppresses lipopolysaccharide-stimulated inflammatory reactions in RAW264.7 cells and endotoxin shock in mice. J Cell Biochem. 2011 Dec;112(12):3816-23.

[2]. Yean-Jang Lee, et al. Inhibitory effect of ailanthoidol on 12-O-tetradecanoyl-phorbol-13-acetate-induced tumor promotion in mouse skin. Oncol Rep. 2006 Oct;16(4):921-7.



Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA