



# 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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

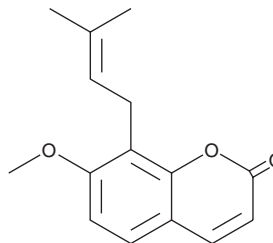
# PRODUCT INFORMATION



## Osthole

Item No. 19195

**CAS Registry No.:** 484-12-8  
**Formal Name:** 7-methoxy-8-(3-methyl-2-buten-1-yl)-2H-1-benzopyran-2-one  
**Synonyms:** 7-Methoxy-8-(3-methyl-2-butenyl)coumarin, NSC 31868  
**MF:** C<sub>15</sub>H<sub>16</sub>O<sub>3</sub>  
**FW:** 244.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 257, 321 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years  
**Item Origin:** Plant/*Cnidium monnieri*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Osthole is supplied as a crystalline solid. A stock solution may be made by dissolving the osthole in the solvent of choice, which should be purged with an inert gas. Osthole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of osthole in ethanol is approximately 20 mg/ml and approximately 25 mg/ml in DMSO and DMF.

Osthole is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Osthole should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Osthole has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Osthole is a coumarin that has been found in *C. monnieri* and has diverse biological activities.<sup>1-3</sup> It decreases secretion of hepatitis B surface antigen (HBsAg) from Huh7 cells transfected with hepatitis B virus (HBV) DNA by 70% when used at a concentration of 20 µg/ml.<sup>1</sup> Osthole induces bone morphogenetic protein 2 (BMP2) production in and differentiation of MG-63 and hFOB osteoblast-like cells.<sup>2</sup> It induces vasorelaxation in isolated rat blood vessels, ileum, corpus cavernosum, and trachea.<sup>3</sup> Osthole inhibits migration and invasion of MCF-7, MDA-MB-231, H1299, and A549 cancer cells *in vitro* and increases survival in an SMMC-7721 hepatocellular carcinoma mouse xenograft model. It also has hepatoprotective effects in mouse models of hepatitis induced by concanavalin A (Item No. 14951) and alcoholic fatty liver disease.

### References

1. Huang, R.-L., Chen, C.-C., Huang, Y.-L., *et al.* Osthole increases glycosylation of hepatitis B surface antigen and suppresses the secretion of hepatitis B virus *in vitro*. *Hepatology* **24**(3), 508-515 (1996).
2. Kuo, P.-L., Hsu, Y.-L., Chang, C.-H., *et al.* Osthole-mediated cell differentiation through bone morphogenetic protein-2/p38 and extracellular signal-regulated kinase 1/2 pathway in human osteoblast cells. *J. Pharmacol. Exp. Ther.* **314**(3), 314-1290 (2005).
3. Zhang, Z.-R., Leung, W.N., Cheung, H.Y., *et al.* Osthole: A review on its bioactivities, pharmacological properties, and potential as alternative medicine. *Evid. Based Complement. Alternat. Med.* **2015**:919616, (2016).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 07/16/2020

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM