

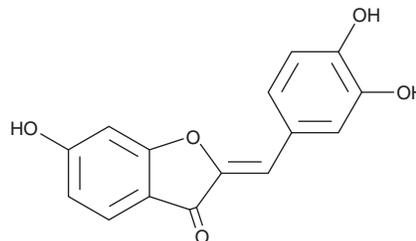
# PRODUCT INFORMATION



## Sulfuretin

Item No. 36569

**CAS Registry No.:** 120-05-8  
**Formal Name:** 2Z-[(3,4-dihydroxyphenyl)methylene]-6-hydroxy-3(2H)-benzofuranone  
**Synonyms:** Suphuretin, 3',4',6-Trihydroxyaurone, 3',4',6-Trihydroxybenzalcoumaranone  
**MF:** C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>  
**FW:** 270.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 401 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Plant/*Rhus verniciflua*



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

### Laboratory Procedures

Sulfuretin is supplied as a solid. A stock solution may be made by dissolving the sulfuretin in the solvent of choice, which should be purged with an inert gas. Sulfuretin is soluble in acetone, chloroform, dichloromethane, DMSO, and ethyl acetate.

### Description

Sulfuretin is a flavonoid that has been found in *R. verniciflua* and has diverse biological activities.<sup>1-3</sup> It inhibits mushroom tyrosinase activity (IC<sub>50</sub> = 13.64 μM).<sup>1</sup> Sulfuretin decreases cytotoxicity induced by infectious hematopoietic necrosis virus (IHNV) in JFSP cells and viral hemorrhagic septicemia virus (VHSV) in CHSE-214 cells (EC<sub>50</sub>s = 178.2 and 197.3 μM, respectively).<sup>2</sup> It decreases eosinophil, macrophage, and lymphocyte infiltration and reduces the levels of TNF-α, IL-5, IL-13, and CCL11 in bronchoalveolar lavage fluid (BALF), as well as inhibits methacholine-induced bronchoconstriction, in a mouse model of ovalbumin-induced asthma when administered at a dose of 40 μg/kg.<sup>3</sup>

### References

- Chen, H., Wang, C., Ye, J., *et al.* Isolation of sulfuretin and butin from *Rhus verniciflua* stokes using medium-pressure liquid chromatography and their tyrosinase inhibitory effects. *Bioresources* **11(1)**, 759-771 (2016).
- Kang, S.Y., Kang, J.-Y., and Oh, M.-J. Antiviral activities of flavonoids isolated from the bark of *Rhus verniciflua* stokes against fish pathogenic viruses *in vitro*. *J. Microbiol.* **50(2)**, 293-300 (2012).
- Song, M.-Y., Jeong, G.-S., Lee, H.-S., *et al.* Sulfuretin attenuates allergic airway inflammation in mice. *Biochem. Biophys. Res. Commun.* **400(1)**, 83-88 (2010).

#### 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, 04/21/2023

#### 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