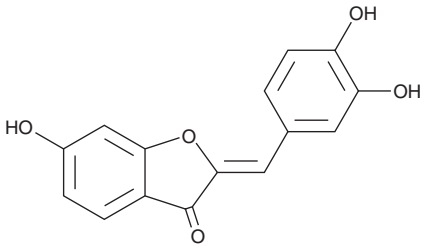
PRODUCT INFORMATION

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:	$C_{15}H_{10}O_5$
FW:	270.2
Purity:	≥98%
UV/Vis.:	λ_{max}: 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.[1-3] It inhibits mushroom tyrosinase activity (IC_{50} = 13.64 µM).[1] Sulfuretin decreases cytotoxicity induced by infectious hematopoietic necrosis virus (IHNV) in JFSP cells and viral hemorrhagic septicemia virus (VHSV) in CHSE-214 cells (EC_{50}s = 178.2 and 197.3 µM, respectively).[2] 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.[3]

References

1. 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).
2. 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).
3. 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).

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