

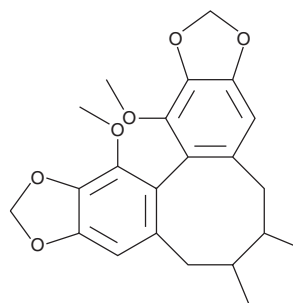
PRODUCT INFORMATION



Schisandrin C

Item No. 27475

CAS Registry No.: 61301-33-5
Formal Name: (6R,7S,13aS)-5,6,7,8-tetrahydro-13,14-dimethoxy-6,7-dimethyl-cycloocta[1,2-f:3,4-f']bis[1,3]benzodioxole
Synonyms: Schisandrin C, Wuweizisu C
MF: C₂₂H₂₄O₆
FW: 384.4
Purity: ≥98%
UV/Vis.: λ_{max}: 220 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Schisandra chinensis*



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

Laboratory Procedures

Schisandrin C is supplied as a crystalline solid. A stock solution may be made by dissolving the schisandrin C in the solvent of choice, which should be purged with an inert gas. Schisandrin C is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of schisandrin C in these solvents is approximately 30 mg/ml.

Description

Schisandrin C is a lignan originally isolated from *Schizandrae* that has diverse biological activities.¹⁻⁵ It decreases viability of U937 cells in a concentration-dependent manner and induces cell cycle arrest at the G₁ phase when used at a concentration of 100 μM.² Schisandrin C (5-20 μM) decreases hydrogen peroxide-induced cell death and production of reactive oxygen species (ROS) in C2C12 skeletal muscle cells.³ It also decreases levels of matrix metalloproteinase-2 (MMP-2), MMP-9, COX-2, VCAM-1, IL-1β, and TNF-α in hydrogen peroxide-stimulated C2C12 cells. Schisandrin C decreases lipoteichoic acid-induced production of nitric oxide (NO), prostaglandin E₂ (PGE₂; Item No. 14010), TNF-α, IL-1β, and IL-6 in mouse primary microglia.⁴ *In vivo*, schisandrin C (200 mg/kg) decreases serum alanine amino transferase (ALT) and aspartate amino transferase (AST) activity, increases hepatic mitochondrial and total glutathione (GSH) levels, and reduces liver injury in a mouse model of acetaminophen-induced liver injury partially *via* inhibition of the cytochrome P450 (CYP) isoforms CYP2E1, CYP1A2, and CYP3A11.⁵

References

1. Li, X.Y. *Mem. Inst. Oswaldo Cruz.* **86(Suppl 2)**, 31-37 (1991).
2. Park, C., Choi, Y.-W., Hyun, S.K., *et al.* *Int. J. Mol. Med.* **24(4)**, 495-502 (2009).
3. Kim, J.S. and Yi, H.K. *Naunyn Schmiedebergs Arch. Pharmacol.* **391(2)**, 197-206 (2018).
4. Park, S.Y., Park, S.J., Park, T.G., *et al.* *Int. Immunopharmacol.* **17(2)**, 415-426 (2013).
5. Jiang, Y., Fan, X., Wang, Y., *et al.* *Chem. Biol. Interact.* **231**, 83-89 (2015).

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.

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