

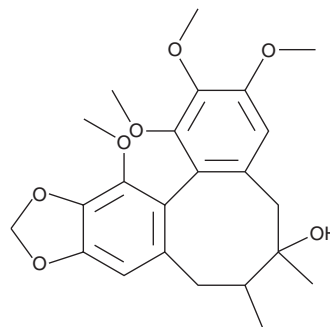
PRODUCT INFORMATION



Schisandrol B

Item No. 25149

CAS Registry No.: 58546-54-6
Formal Name: (6S,7S,13aR)-5,6,7,8-tetrahydro-1,2,3,13-tetramethoxy-6,7-dimethyl-benzo[3,4]cycloocta[1,2-f][1,3]benzodioxol-6-ol
Synonyms: Besigomisin, Gomisin A, Wuweizichun B
MF: C₂₃H₂₈O₇
FW: 416.5
Purity: ≥98%
UV/Vis.: λ_{max}: 219 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Schisandrol B is supplied as a crystalline solid. A stock solution may be made by dissolving the schisandrol B in the solvent of choice. Schisandrol B is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of schisandrol B in ethanol is approximately 5 mg/ml and approximately 10 mg/ml in DMSO and DMF.

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

Description

Schisandrol B is a lignan originally isolated from *S. chinensis* that has hepatoprotective activity.¹ It increases the expression of pregnane X receptor (PXR) target genes involved in bile acid metabolism, including *Cyp3a11*, *Ugt1a1*, *Oatp2*, and *Mrp3* in mouse liver and *CYP3A4*, *UGT1A1*, and *OATP2* in HEK293T cells.² It also protects against lithocholic acid-induced hepatic necrosis and intrahepatic cholestasis in wild-type, but not *Pxr*-null, mice and decreases mortality in a mouse model of cholestasis when administered at a dose of 100 mg/kg twice per day. It also promotes liver regeneration following partial hepatectomy and protects against hepatotoxicity induced by acetaminophen (Item No. 10024).^{3,4}

References

1. Taqguchi, H. and Ikeya, Y. The constituents of *Schizandra chinensis* BAILL. I. The structures of gomisin A, B and C. *Chem. Pharm. Bull.* **23(12)**, 3296-3298 (1975).
2. Zeng, H., Jiang, Y., Chen, P., et al. Schisandrol B protects against cholestatic liver injury through pregnane X receptors. *Br. J. Pharmacol.* **174(8)**, 672-688 (2017).
3. Li, X., Sun, J., Fan, X., et al. Schisandrol B promotes liver regeneration after partial hepatectomy in mice. *Eur. J. Pharmacol.* **818**, 96-102 (2018).
4. Jiang, Y.-m., Wang, Y., Tan, H.-s., et al. Schisandrol B protects against acetaminophen-induced acute hepatotoxicity in mice via activation of the NRF2/ARE signaling pathway. *Acta. Pharmacol. Sin.* **37(3)**, 382-389 (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.

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