

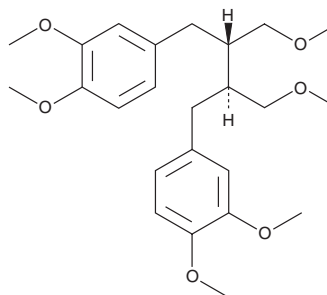
PRODUCT INFORMATION



Phyllanthin

Item No. 11745

CAS Registry No.: 10351-88-9
Formal Name: 1,1'-[(2S,3S)-2,3-bis(methoxymethyl)-1,4-butanediyl]bis[3,4-dimethoxybenzene
Synonym: NSC 619043
MF: C₂₄H₃₄O₆
FW: 418.5
Purity: ≥98%
UV/Vis.: λ_{max}: 230, 280 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

Phyllanthin is supplied as a crystalline solid. A stock solution may be made by dissolving the phyllanthin in the solvent of choice. Phyllanthin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of phyllanthin in these solvents is approximately 5, 10, and 15 mg/ml, respectively.

Phyllanthin is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Phyllanthin is a major bioactive lignan component of *P. amarus* with antioxidative and hepatoprotective properties. It scavenges DPPH radicals with an IC₅₀ value of 7.4 μM and, at 30 μM, has been shown to alleviate carbon tetrachloride-induced lipid peroxidation and cytotoxicity in a human hepatoma HepG2 cell line.¹

Reference

1. Krithika, R., Mohankumar, R., Verma, R.J., *et al.* Isolation, characterization and antioxidative effect of phyllanthin against CCl₄-induced toxicity in HepG2 cell line. *Chem. Biol. Interact.* **181(3)**, 351-358 (2009).

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.

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