PRODUCT INFORMATION

Hypophyllanthin
Item No. 11715

CAS Registry No.: 33676-00-5
Formal Name: (7S,8S,9R)-9-(3,4-dimethoxyphenyl)-6,7,8,9-tetrahydro-4-methoxy-7,8-bis(methoxymethyl)-naphtho[1,2-d]1,3-dioxole
Synonym: NSC 619044
MF: C_{24}H_{30}O_{7}
FW: 430.5
Purity: ≥98%
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

Hypophyllanthin is supplied as a crystalline solid. A stock solution may be made by dissolving the hypophyllanthin in the solvent of choice, which should be purged with an inert gas. Hypophyllanthin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of hypophyllanthin in these solvents is approximately 0.2, 10, and 30 mg/ml, respectively.

Hypophyllanthin 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

Hypophyllanthin is an active principle of *P. amarus*, a plant studied for its potential to treat hepatotoxicity. In Caco-2 cells 100 µM hypophyllanthin has been shown to reversibly inhibit P-glycoprotein (also known as multidrug resistance protein 1 (MDR1)) function without effect on MDR2 activity.

References