

PRODUCT INFORMATION



Liriodendrin

Item No. 40743

CAS Registry No.: 573-44-4

Formal Name: [(1S,3aR,4S,6aR)-tetrahydro-1H,3H-furo[3,4-c]furan-1,4-diyl]bis(2,6-dimethoxy-4,1-phenylene) bis-β-D-glucopyranoside

Synonyms: Acanthoside D, (+)-Syringaresinol di-O-β-D-glucoside, (+)-Syringaresinol-4,4'-di-O-β-D-glucopyranoside

MF: C₃₄H₄₆O₁₈

FW: 742.7

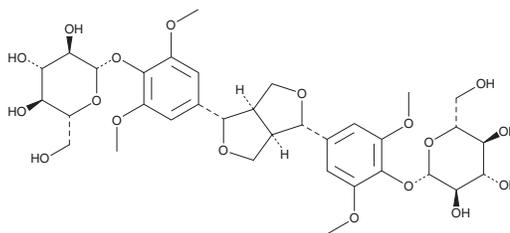
Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Plant/*Boerhaavia diffusa*



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

Laboratory Procedures

Liriodendrin is supplied as a solid. A stock solution may be made by dissolving the liriodendrin in the solvent of choice, which should be purged with an inert gas. Liriodendrin is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

Liriodendrin is a lignan glucoside that has been found in *B. diffusa* and has diverse biological activities.^{1,2} It prevents LPS-induced increases in nitrite (NO), prostaglandin E₂ (PGE₂; Item No. 14010), TNF-α, inducible nitric oxide synthase (iNOS), and COX-2 levels in RAW 264.7 macrophages when used at a concentration of 120 μM.¹ Liriodendrin (1, 10, or 100 μM) decreases calcium channel currents in a whole-cell patch-clamp assay using isolated frog atrial cells.² It inhibits carrageenan-induced paw edema in rats when administered at a dose of 10 mg/kg.¹ Liriodendrin increases the latency to paw withdrawal in the hot plate test in mice when administered at a dose of 10 mg/kg.

References

1. Jung, H.J., Park, H.J., Kim, R.G., *et al.* *In vivo* anti-inflammatory and antinociceptive effects of liriodendrin isolated from the stem bark of *Acanthopanax senticosus*. *Planta Med.* **69**(7), 610-616 (2003).
2. Lami, N., Kadota, S., Kikuchi, T., *et al.* Constituents of the roots of *Boerhaavia diffusa* L. III. Identification of Ca²⁺ channel antagonistic compound from the methanol extract. *Chem. Pharm. Bull. (Tokyo)* **39**(6), 1551-1555 (1991).

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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