

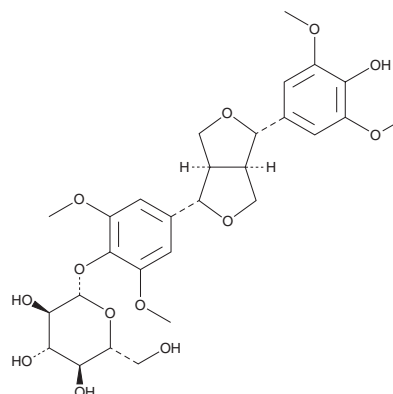
PRODUCT INFORMATION



Acanthoside B

Item No. 40280

CAS Registry No.: 7374-79-0
Formal Name: 2,6-dimethoxy-4-[(1S,3aR,4S,6aR)-tetrahydro-4-(4-hydroxy-3,5-dimethoxyphenyl)-1H,3H-furo[3,4-c]furan-1-yl]phenyl-β-D-glucopyranoside
Synonym: Eleutheroside E1
MF: C₂₈H₃₆O₁₃
FW: 580.6
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Synthetic



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

Laboratory Procedures

Acanthoside B is supplied as a solid. A stock solution may be made by dissolving the acanthoside B in the solvent of choice, which should be purged with an inert gas. Acanthoside B is soluble in methanol and acetonitrile.

Description

Acanthoside B is a lignan that has been found in *P. villosa* and has diverse biological activities.¹⁻³ It scavenges DPPH (Item No. 14805) and ABTS (Item No. 27317) radicals in cell-free assays (IC₅₀s = 9.9 and 12.7 μM, respectively).¹ Acanthoside B (20 μM) inhibits LPS-induced nitric oxide (NO) production in RAW 264.7 cells.² *In vivo*, acanthoside B (20 mg/kg) reverses scopolamine-induced memory impairment, reduces hippocampal malondialdehyde (MDA) levels, and increases hippocampal superoxide dismutase (SOD), catalase, and glutathione peroxidase (GPX) levels in a mouse model of scopolamine-induced amnesia.³

References

1. Bai, M., Li, S.-F., Liu, S.-F., *et al.* Iridoid glycoside and lignans from a wild vegetable (*Patrinia villosa* Juss.) with antioxidant activity. *J. Food Biochem.* **42**(3), e12521 (2018).
2. Li, J., Guo, X., Luo, Z., *et al.* Chemical constituents from the flowers of *Inula japonica* and their anti-inflammatory activity. *J. Ethnopharmacol.* **318**(Pt. B), 117052 (2024).
3. Karthivashan, G., Kweon, M.-H., Park, S.-Y., *et al.* Cognitive-enhancing and ameliorative effects of acanthoside B in a scopolamine-induced amnesic mouse model through regulation of oxidative/inflammatory/cholinergic systems and activation of the TrkB/CREB/BDNF pathway. *Food Chem. Toxicol.* **129**, 444-457 (2019).

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.

Copyright Cayman Chemical Company, 04/02/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM