

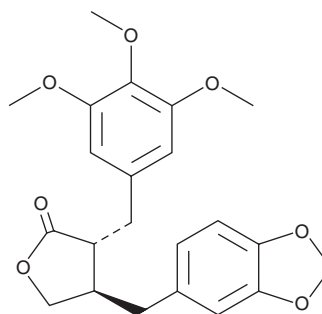
PRODUCT INFORMATION



Yatein

Item No. 29766

CAS Registry No.: 40456-50-6
Formal Name: (3R,4R)-4-(1,3-benzodioxol-5-ylmethyl) dihydro-3-[(3,4,5-trimethoxyphenyl)methyl]-2(3H)-furanone
Synonyms: Deoxy podorhizone, (-)-Yatein
MF: C₂₂H₂₄O₇
FW: 400.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Austrocedrus chilensis*



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

Laboratory Procedures

Yatein is supplied as a solid. A stock solution may be made by dissolving the yatein in the solvent of choice, which should be purged with an inert gas. Yatein is soluble in DMSO.

Description

Yatein is a lignan that has been found in *C. formosana* and has diverse biological activities.¹⁻⁴ It inhibits the cytochrome P450 (CYP) isoform CYP3A4 (IC₅₀ = 1 μM).¹ Yatein inhibits herpes simplex virus 1 (HSV-1) replication in a plaque reduction assay (IC₅₀ = 30.6 μM).² It induces apoptosis and production of reactive oxygen species (ROS) in, and is cytotoxic to, A549 and CL1-5 non-small cell lung cancer (NSCLC) cells (IC₅₀s = 3.5 and 1.9 μM, respectively).³ Yatein inhibits aggregation of rabbit platelets induced by platelet-activating factor (PAF), collagen, or arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) in a concentration-dependent manner.⁴

References

- Usia, T., Watabe, T., Kadota, S., *et al.* Potent CYP3A4 inhibitory constituents of Piper cubeba. *J. Nat. Prod.* **68(1)**, 64-68 (2005).
- Kuo, Y.-C., Kuo, Y.-H., Lin, Y.-L., *et al.* Yatein from *Chamaecyparis obtusa* suppresses herpes simplex virus type 1 replication in HeLa cells by interruption the immediate-early gene expression. *Antiviral Res.* **70(3)**, 112-120 (2006).
- Ho, S.-T., Lin, C.-C., Wu, T.-L., *et al.* Antitumor agent yatein from *Calocedrus formosana* Florin leaf induces apoptosis in non-small-cell lung cancer cells. *J. Wood Sci.* **65:59** (2019).
- Chen, J.-J., Chang, Y.-L., Teng, C.-M., *et al.* Anti-platelet aggregation alkaloids and lignans from *Hernandia nymphaeifolia*. *Planta Med.* **66(3)**, 251-256 (1999).

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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