

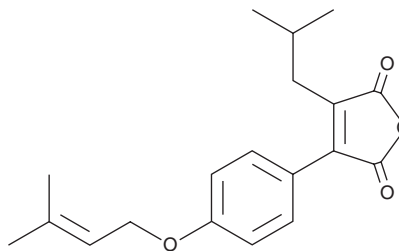
PRODUCT INFORMATION



Antrodin A

Item No. 36094

CAS Registry No.: 656830-24-9
Formal Name: 3-[4-[(3-methyl-2-buten-1-yl)oxy]phenyl]-4-(2-methylpropyl)-2,5-furandione
Synonym: Camphorataanhydride A
MF: C₁₉H₂₂O₄
FW: 314.4
Purity: ≥95%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years
Item Origin: Synthetic



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

Laboratory Procedures

Antrodin A is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and acetonitrile purged with an inert gas can be used.

Description

Antrodin A is a microbial metabolite originally found in *A. camphorata* that has antiviral and hepatoprotective activities.¹⁻³ It is an inhibitor of hepatitis C virus (HCV) protease (IC₅₀ = 0.9 µg/ml).¹ Antrodin A reduces cytotoxicity in Vero cells infected with herpes simplex virus 1 (HSV-1) or HSV-2 (IC₅₀s = 5.8 and 5.5 µg/ml, respectively) and has additive effects on HSV-induced cytotoxicity when combined with the antiviral guanosine analog acyclovir (Item No. 14160).² It decreases viral plaque formation in Vero cells infected with HSV-1 or HSV-2 in a concentration-dependent manner. Antrodin A (200 mg/kg per day) inhibits alcohol-induced increases in serum triglyceride levels and decreases in serum HDL levels in a mouse model of alcoholic fatty liver disease (ALD).³ It also prevents alcohol-induced increases in hepatic lipid accumulation and the activity of serum alanine transaminase (ALT) and aspartate aminotransferase (AST), as well as decreases in the activity of malondialdehyde (MDA), superoxide dismutase (SOD), and catalase and in the levels of glutathione (GSH) in isolated mouse liver in the same model.

References

1. Phuong, D.T., Ma, C.M., Hattori, M., *et al.* Inhibitory effects of antrodins A-E from *Antrodia cinnamomea* and their metabolites on hepatitis C virus protease. *Phytother. Res.* **23(4)**, 582-284 (2009).
2. He, Y.C., Lu, Z.H., Shi, P., *et al.* Anti-herpes simplex virus activities of bioactive extracts from *Antrodia camphorata* mycelia. *Antivir. Ther.* **21(5)**, 377-383 (2016).
3. Yi, Z.-W., Xia, Y.-J., Liu, X.-F., *et al.* Antrodin A from mycelium of *Antrodia camphorata* alleviates acute alcoholic liver injury and modulates intestinal flora dysbiosis in mice. *J. Ethnopharmacol.* **254**, 112681 (2020).

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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