

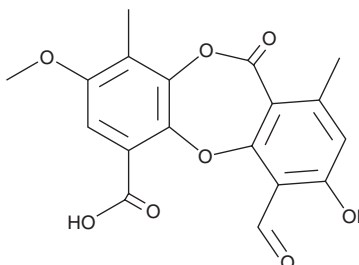
PRODUCT INFORMATION



Psoromic Acid

Item No. 22168

CAS Registry No.: 7299-11-8
Formal Name: 4-formyl-3-hydroxy-8-methoxy-1,9-dimethyl-11-oxo-11H-dibenzo[b,e][1,4]dioxepin-6-carboxylic acid
Synonyms: NSC 92186, Parellic Acid
MF: C₁₈H₁₄O₈
FW: 358.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Usnea* sp.



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

Laboratory Procedures

Psoromic acid is supplied as a solid. A stock solution may be made by dissolving the psoromic acid in the solvent of choice. Psoromic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas.

Description

Psoromic acid is an inhibitor of Rab geranylgeranyl transferase (IC₅₀ = 1.3 μM) and *P. falciparum* fatty acid synthesis (FAS) II.^{1,2} It shows cytotoxic effects on primary rat cerebral cortex and human cancer U87MG cell lines *in vitro* (IC₅₀s = 79.40 and 56.22 mg/L, respectively).³ It also is cytotoxic against human KB cancer cells (IC₅₀ = 31.6 μM).² It shows moderate activity against liver stage *P. berghei* (IC₅₀ = 31.6 μM) and drug-resistant blood stage *P. falciparum* (IC₅₀ = 29.2 μM).² The maximum tolerated dose in zebrafish larvae is 15.5 μM.²

References

1. Deraeve, C., Guo, Z., Bon, R.S., *et al.* Psoromic acid is a selective and covalent Rab-prenylation inhibitor targeting autoinhibited RabGGTase. *J. Am. Chem. Soc.* **134(17)**, 7384-7391 (2012).
2. Lauinger, I.L., Vivas, L., Perozzo, R., *et al.* Potential of lichen secondary metabolites against *Plasmodium* liver stage parasites with FAS-II as the potential target. *J. Nat. Prod.* **76(6)**, 1064-1070 (2013).
3. Emsen, B., Aslan, A., Togar, B., *et al.* *In vitro* antitumor activities of the lichen compounds olivetoric, physodic and psoromic acid in rat neuron and glioblastoma cells. *Pharm. Biol.* **54(9)**, 1748-1762 (2016).

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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