PRODUCT INFORMATION



Arteannuin B

Item No. 33852

CAS Registry No.: 50906-56-4

Formal Name: (3R,3aS,5aR,6aR,6bR,9aS)-decahydro-3,5a-

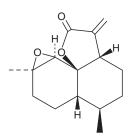
dimethyl-9-methylene-8H-oxireno[7,8]

naphtho[8a,1-b]furan-8-one

MF: $C_{15}H_{20}O_3$ 248.3 FW: **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Item Origin: Plant/Artemisia carvifolia Buch.-Ham. ex Roxb. Hort. Beng

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



Laboratory Procedures

Arteannuin B is supplied as a solid. A stock solution may be made by dissolving the arteannuin B in the solvent of choice, which should be purged with an inert gas. Arteannuin B is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of arteannuin B in ethanol and DMSO is approximately 25 mg/ml and approximately 30 mg/ml in DMF.

Description

Arteannuin B is a precursor in the biosynthesis of the antimalarial artemisinin (Item No. 11816) that has been found in A. annua and has diverse biological activities. 1-3 It is active against a variety of bacteria and fungi in disk assays.¹ Arteannuin B reduces viral RNA levels in Vero E6 cells infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; EC_{50} = 10.28 μ M), acting at a post-entry step in the infection process.² It is also cytotoxic to Ehrlich ascites tumor cells (IC₅₀ = 47 μ M).³

References

- 1. Dhingra, V., Pakki, S.R., and Narasu, M.L. Antimicrobial activity of artemisinin and its precursors. Curr. Sci. India 78(6), 709-713 (2000).
- 2. Cao, R., Hu, H., Li, Y., et al. Anti-SARS-CoV-2 potential of artemisinins in vitro. ACS Infect. Dis. 6(9), 2524-2531 (2020).
- Woerdenbag, H.J., Moskal, T.A., Pras, N., et al. Cytotoxicity of artemisinin-related endoperoxides to Ehrlich ascites tumor cells. J. Nat. Prod. 56(6), 849-856 (1993).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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