PRODUCT INFORMATION



Arteether

Item No. 11814

CAS Registry No.: 75887-54-6

Formal Name: (3R,5aS,6R,8aS,9R,10S,12R,12aR)-

> 10-ethoxydecahydro-3,6,9-trimethyl-3,12-epoxy-12H-pyrano[4,3-i]-1,2-

benzodioxepin

Synonyms: Artemotil, Dihydroartemisinin ethyl ether,

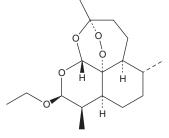
NSC 665971

MF: $C_{17}H_{28}O_5$ FW: 312.4 **Purity:** ≥95%

Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

Arteether is supplied as a crystalline solid. A stock solution may be made by dissolving the arteether in the solvent of choice. Arteether is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of arteether in these solvents is approximately 16, 10, and 20 mg/ml, respectively.

Arteether is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, arteether should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Arteether has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Arteether is a derivative of the antimalarial drug artemisinin (Item No. 11816). Arteether inhibits P. falciparum with an IC₅₀ value of 1.27 nM in vitro. It is effective against various strains of P. berghei in mice with ED₉₀ values of 0.5-8.2 nM.

Reference

1. Brossi, A., Venugopalan, B., Dominguez Gerpe, L., et al. Arteether, a new antimalarial drug: Synthesis and antimalarial properties. J. Med. Chem. 31(3), 645-650 (1988).

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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