

Product Name: Artesunate

Catalog No.: 6827

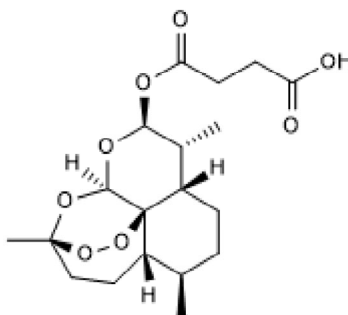
Batch No.: 1

CAS Number: 88495-63-0

IUPAC Name: 4-Oxo-4-(((3*R*,5*aS*,6*R*,8*aS*,9*R*,10*S*,12*R*,12*aR*)-3,6,9-trimethyldecahydro-3*H*-3,12-epoxy[1,2]dioxepino[4,3-*l*]isochromen-10-yl)oxy)butanoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₁₉ H ₂₈ O ₈
Batch Molecular Weight:	384.42
Physical Appearance:	White solid
Solubility:	DMSO to 100 mM ethanol to 100 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 99.9% purity		
¹H NMR:	Consistent with structure		
Mass Spectrum:	Consistent with structure		
Microanalysis:	Carbon Hydrogen Nitrogen		
	Theoretical	59.36	7.34
	Found	59.27	7.3

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Artesunate suppresses ROS-induced activation of the NLRP3 inflammasome. Arrests cell cycle in the G₂/M phase and sensitizes human renal cell carcinoma (RCC) cell lines to sorafenib in vitro. Artesunate is an antimalarial (Plasmodium).

Physical and Chemical Properties:

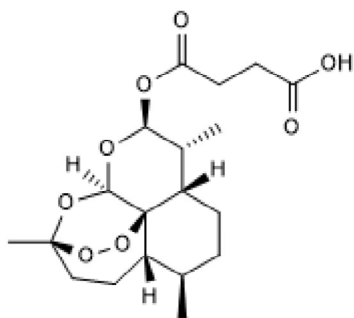
Batch Molecular Formula: C₁₉H₂₈O₈

Batch Molecular Weight: 384.42

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Liu et al (2018) Artesunate inhibits renal ischemia-reperfusion-mediated remote lung inflammation through attenuating ROS-induced activation of NLRP3 inflammasome. *Inflammation* **41** 1546. PMID: 29730819 .

Jeong et al (2015) Repurposing the anti-malarial drug artesunate as a novel therapeutic agent for metastatic renal cell carcinoma due to its attenuation of tumor growth, metastasis, and angiogenesis. *Oncotarget*. **6** 33046. PMID: 26426994.

Meshnick et al (2002) Artemisinin: mechanisms of action, resistance and toxicity. *In.J.Parasitol.* **32** 1655. PMID: 12435450.

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