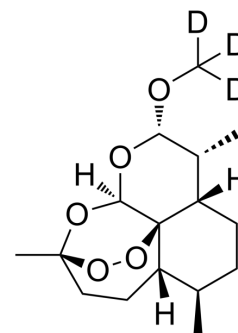


Artemether-d₃

Cat. No.:	HY-N0402S
CAS No.:	93787-85-0
Molecular Formula:	C ₁₆ H ₂₃ D ₃ O ₅
Molecular Weight:	301.39
Target:	Parasite; Isotope-Labeled Compounds
Pathway:	Anti-infection; Others
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (331.80 mM; Need ultrasonic)
 DMSO : 100 mg/mL (331.80 mM; Need ultrasonic)
 H₂O : 0.1 mg/mL (0.33 mM; Need ultrasonic)
 H₂O : 0.1 mg/mL (0.33 mM; Need ultrasonic)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.3180 mL	16.5898 mL	33.1796 mL
	5 mM	0.6636 mL	3.3180 mL	6.6359 mL
	10 mM	0.3318 mL	1.6590 mL	3.3180 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Artemether-d₃ is the deuterium labeled Artemether. Artemether is an antimalarial for the treatment of resistant strains of falciparum malaria.

IC₅₀ & Target

Plasmodium

In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-216.

[2]. Xiao, S., et al., Recent investigations of artemether, a novel agent for the prevention of schistosomiasis japonica, mansoni and haematobia. *Acta Trop*, 2002. 82(2): p. 175-81.

[3]. Wu, Z.P., et al., Inhibitive effect of artemether on tumor growth and angiogenesis in the rat C6 orthotopic brain gliomas model. *Integr Cancer Ther*, 2009. 8(1): p. 88-92.

Caution: Product has not been fully validated for medical applications. For research use only.

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