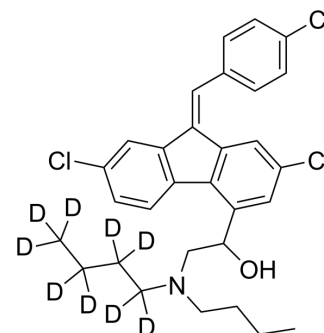


Lumefantrine-d₉

Cat. No.:	HY-B0803S1		
CAS No.:	2477594-24-2		
Molecular Formula:	C ₃₀ H ₂₃ D ₉ Cl ₃ NO		
Molecular Weight:	538		
Target:	Autophagy; Parasite; Isotope-Labeled Compounds		
Pathway:	Autophagy; Anti-infection; Others		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (92.94 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		1.8587 mL	9.2937 mL	18.5874 mL
		5 mM		0.3717 mL	1.8587 mL	3.7175 mL
	10 mM		0.1859 mL	0.9294 mL	1.8587 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.25 mg/mL (2.32 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Lumefantrine-d ₉ is the deuterium labeled Lumefantrine. Lumefantrine is an antimalarial drug, used in combination with Artemether. The artemether-lumefantrine (AL) as the first- and second-line anti-malarial drugs.
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]. Ndounga M, et al. Artesunate-amodiaquine versus artemether-lumefantrine for the treatment of acute uncomplicated malaria in Congolese children under 10 years old living in a suburban area: a randomized study. *Malar J.* 2015 Oct 29;14(1):423.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA