
Product Data Sheet

Product Name: Lumefantrine-d9

Cat. No.: GC64363

Chemical Properties

Cas. No. 2477594-24-2

Formula C₃₀H₂₃D₉Cl₃NO

M.Wt 538

Solubility DMSO : 50 mg/mL (92.94 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

Lumefantrine-d9 (Benflumetol-d9) 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.

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].

[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.

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