
Product Data Sheet

Product Name: Atovaquone-d5

Cat. No.: GC65088

Chemical Properties

Cas. No. 1329792-63-3

Formula C₂₂H₁₄D₅ClO₃

M.Wt

371.87

Solubility

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

Atovaquone-d5 (Atavaquone-d5) is the deuterium labeled Atovaquone. Atovaquone (Atavaquone) is a potent, selective and orally active inhibitor of the parasite's mitochondrial cytochrome bc₁ complex. Atovaquone is against human and *P. falciparum* cytochrome bc₁ activity with IC₅₀ values of 460 nM and 2.0 nM, respectively. Atovaquone is an antimalarial agent and has the potential for the investigation of pneumocystis pneumonia, toxoplasmosis, malaria, and babesia[1][2].

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]. Nilsen A, et al. Quinolone-3-diarylethers: a new class of antimalarial drug. *Sci Transl Med.* 2013 Mar 20;5(177):177ra37.

[3]. SchÖler N, et al. Atovaquone nanosuspensions show excellent therapeutic effect in a new murine model of reactivated toxoplasmosis. *Antimicrob Agents Chemother.* 2001 Jun;45(6):1771-9.

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

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