Product Data Sheet

Product Name: Ciprofloxacin-d8
Cat. No.: GC64109

Chemical Properties

Cas. No.	1130050-35-9		
Formula	C17H10D8FN3O3	M.Wt	339.39
Solubility		Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	Ciprofloxacin-d8		

Background

Ciprofloxacin-d8 (Bay-09867-d8) is the deuterium labeled Ciprofloxacin. Ciprofloxacin (Bay-09867) is a fluoroquinolone antibiotic, exhibiting potent antibacterial activity.

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]. Peltzer PM, et al. Ecotoxicity of veterinary enrofloxacin and ciprofloxacin antibiotics on anuran amphibian larvae. Environ Toxicol Pharmacol. 2017 Feb 4. pii: S1382-6689(17)30029-7
[3]. Steenbergen J, et al. In Vitro and In Vivo Activity of Omadacycline Against Two Biothreat Pathogens: Bacillus anthracis and Yersinia pestis. Antimicrob Agents Chemother. 2017 Feb 21.
[4]. Hamblin KA, et al. Inhaled Liposomal Ciprofloxacin Protects against a Lethal Infection in a Murine Model of Pneumonic Plague. Front Microbiol. 2017 Feb 6;8:91.

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