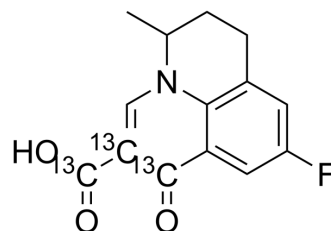


Flumequine-¹³C₃

Cat. No.:	HY-B0526S
CAS No.:	1185049-09-5
Molecular Formula:	C ₁₁ ¹³ C ₃ H ₁₂ FNO ₃
Molecular Weight:	264.23
Target:	Topoisomerase; Bacterial; Antibiotic; Isotope-Labeled Compounds
Pathway:	Cell Cycle/DNA Damage; Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Flumequine- ¹³ C ₃ is the ¹³ C ₃ labeled Flumequine. Flumequine (R-802) is a quinolone antibiotic, and acts as a topoisomerase II inhibitor, with an IC ₅₀ of 15 μM (3.92 μg/mL).
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]. Aller-Morán LM, et al. Evaluation of the in vitro activity of flumequine against field isolates of *Brachyspira hyodysenteriae*. *Res Vet Sci*. 2015 Dec;103:51-3.
- [2]. Giraud E, et al. Mechanisms of quinolone resistance and clonal relationship among *Aeromonas salmonicida* strains isolated from reared fish with furunculosis. *J Med Microbiol*. 2004 Sep;53(Pt 9):895-901.
- [3]. Kashida Y, et al. Mechanistic study on flumequine hepatocarcinogenicity focusing on DNA damage in mice. *Toxicol Sci*. 2002 Oct;69(2):317-21.
- [4]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216.

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

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