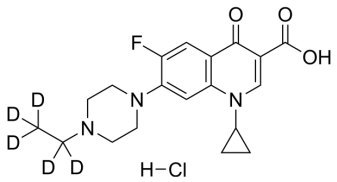
Enrofloxacin-d_5 hydrochloride

Cat. No.:	HY-B0502AS
Molecular Formula:	$C_{19}H_{18}D_5ClFN_3O_3$
Molecular Weight:	400.89
Target:	Bacterial; Endogenous Metabolite; Antibiotic; Isotope-Labeled Compounds
Pathway:	Anti-infection; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Enrofloxacin-d_5 (hydrochloride) is deuterium labeled Enrofloxacin (monohydrochloride). Enrofloxacin monohydrochloride (BAY Vp 2674 monohydrochloride) is an effective antibiotic with an MIC90 of 0.312 µg/mL for Mycoplasma bovis.
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]. Hetze S, et al. Superiority of preventive antibiotic treatment compared with standard treatment of poststroke pneumonia in experimental stroke: a bed to bench approach. J Cereb Blood Flow Metab. 2013 Jun;33(6):846-54.

[3]. Sulyok KM, et al.Antibiotic susceptibility profiles of Mycoplasma bovis strains isolated from cattle in Hungary, Central Europe. BMC Vet Res. 2014 Oct 25;10:256.

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