

# **Product** Data Sheet

# **Enrofloxacin-d5**

Cat. No.: HY-B0502S CAS No.: 1173021-92-5 Molecular Formula:  $C_{19}H_{17}D_{5}FN_{3}O_{3}$ 

Molecular Weight: 364.43

Target: Bacterial; Antibiotic; Endogenous Metabolite Pathway: Anti-infection; Metabolic Enzyme/Protease

Storage: Powder

> 4°C 2 years -80°C 6 months

3 years

In solvent

-20°C

-20°C 1 month

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 2.94 mg/mL (8.07 mM; ultrasonic and warming and heat to 70°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7440 mL	13.7201 mL	27.4401 mL
	5 mM	0.5488 mL	2.7440 mL	5.4880 mL
	10 mM			

Please refer to the solubility information to select the appropriate solvent.

# **BIOLOGICAL ACTIVITY**

Description Enrofloxacin-D5 (BAY Vp 2674-D5) is the deuterium labeled Enrofloxacin. Enrofloxacin (BAY Vp 2674) is an effective antibiotic with an MIC  $_{\rm 90}$  of 0.312  $\mu g/mL$  for Mycoplasma bovis.

> 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<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

In Vitro

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. 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.; Hetze S, et al. Superiority of preventive antibiotic treatment compared with standard treatme

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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