

Product Data Sheet

Product Name: Enrofloxacin-d5

Cat. No.: GC49101

Chemical Properties

Cas. No. 1173021-92-5

SMILES O=C1C2=CC(F)=C(N3CCN(CC3)C([2H])([2H])C([2H])([2H])[2H])C=C2N(C4CC4)C=C1C(O)=O

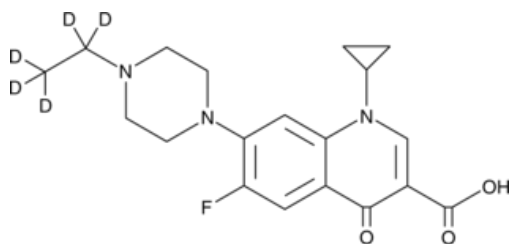
Formula C₁₉H₁₇D₅FN₃O₃ M.Wt 364.4

Solubility DMF: 10 mg/ml, DMF:PBS (pH 7.2) Storage -20°C
(1:1): 0.5 mg/ml, DMSO: 1 mg/ml

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

Enrofloxacin-d₅ is intended for use as an internal standard for the quantification of enrofloxacin by GC- or LC-MS. Enrofloxacin is a fluoroquinolone antibiotic.¹ It is active against panels of *Campylobacter*, *E. coli*, and *Salmonella* isolates (mean MIC₅₀s = 0.06, 0.5, and 0.03 µg/ml, respectively). It is also active against equine isolates of *L. intracellularis* (MICs = 0.125-0.5 µg/ml).² Enrofloxacin inhibits bacterial DNA gyrase.³ *In vivo*, enrofloxacin (10 mg/kg) increases survival in a mouse model of enteropathogenic *E. coli*-induced sepsis. Formulations containing enrofloxacin have been used in the treatment of veterinary bacterial infections.

1. Randall, L., Ridley, A., Lemma, F., et al. *In vitro* investigations into the use of antimicrobials in

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

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combination to maintain efficacy of fluoroquinolones in poultry Res. Vet. Sci. 10847-53(2016)
2. Pereira, C.E.R., Resende, T.P., Vasquez, E., et al. In vitro antimicrobial activity against equine
Lawsonia intracellularis strains Equine Vet. J. 51(5)665-668(2019)
3. Slate, A.R., Bandyopadhyay, S., Francis, K.P., et al. Efficacy of enrofloxacin in a mouse model of sepsis J. Am. Assoc. Lab. Anim.
Sci. 53(4)381-386(2014)

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