

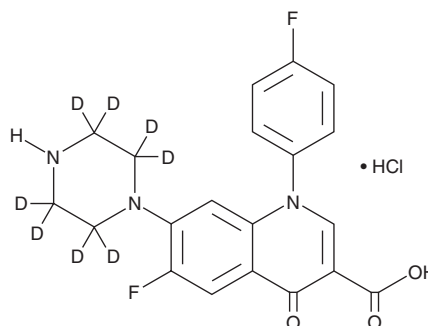
PRODUCT INFORMATION



Sarafloxacin-d₈ (hydrochloride)

Item No. 34226

CAS Registry No.: 2733145-07-6
Formal Name: 6-fluoro-1-(4-fluorophenyl)-1,4-dihydro-4-oxo-7-(1-piperazinyl-2,2,3,3,5,5,6,6-d₈)-3-quinolinecarboxylic acid, monohydrochloride
MF: C₂₀H₉D₈F₂N₃O₃ • HCl
FW: 429.9
Chemical Purity: ≥98% (Sarafloxacin)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₈); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Sarafloxacin-d₈ is intended for use as an internal standard for the quantification of sarafloxacin (Item No. 20299) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Sarafloxacin-d₈ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the sarafloxacin-d₈ (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Sarafloxacin-d₈ (hydrochloride) is soluble in the organic solvent DMSO.

Description

Sarafloxacin is a fluoroquinolone antibiotic.^{1,2} It is active against various clinical isolates of bacteria, including *Bacteroides*, *Fusobacterium*, *Eubacterium*, *Actinomyces*, and *Peptococcus* (MICs = 0.5-2 µg/ml).¹ Sarafloxacin inhibits *P. aeruginosa* DNA gyrase.³ It decreases air sac lesion severity in a chick model of *E. coli*-induced colisepticemia when administered at a dose of 8 mg/kg in the drinking water 24 hours per day for five days.² Formulations containing sarafloxacin have previously been used in the treatment of bacterial infections in poultry.

References

1. Bansal, M.B. and Thadepalli, H. Activity of difloxacin (A-56619) and A-56620 against clinical anaerobic bacteria in vitro. *Antimicrob. Agents Chemother.* **31(4)**, 619-621 (1987).
2. Charleston, B., Gate, J.J., Aitken, I.A., et al. Comparison of the efficacies of three fluoroquinolone antimicrobial agents, given as continuous or pulsed-water medication, against *Escherichia coli* infection in chickens. *Antimicrob. Agents Chemother.* **42(1)**, 83-87 (1998).
3. Moir, D.T., Di, M., Opperman, T., et al. A high-throughput, homogeneous, bioluminescent assay for *Pseudomonas aeruginosa* gyrase inhibitors and other DNA-damaging agents. *J. Biomol. Screen.* **12(6)**, 855-864 (2007).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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