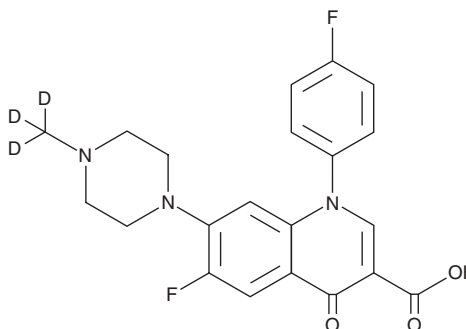


PRODUCT INFORMATION



Difloxacin-d₃ Item No. 27617

CAS Registry No.: 1173147-93-7
Formal Name: 6-fluoro-1-(4-fluorophenyl)-7-(4-(methyl-d₃)piperazin-1-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylic acid
MF: C₂₁H₁₆D₃F₂N₃O₃
FW: 402.4
Chemical Purity: ≥95% (Difloxacin)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₃); ≤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

Difloxacin-d₃ is intended for use as an internal standard for the quantification of difloxacin 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).

Difloxacin-d₃ is supplied as a solid. A stock solution may be made by dissolving the difloxacin-d₃ in the solvent of choice, which should be purged with an inert gas. Difloxacin-d₃ is soluble in ethanol and chloroform.

Description

Difloxacin is a fluoroquinolone antibiotic.¹ It is active against isolates of anaerobic bacteria, including *B. fragilis*, as well as *Fusobacterium* and *Actinomyces* species with MIC values ranging from ≤0.125 to 8 µg/ml. It eliminates *E. coli* and *B. fragilis* infection in a rat intra-abdominal abscess model when administered at a dose of 40 mg/kg three times per day.²

Reference

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. Thadepalli, H., Gollapudi, S.V., and Chuah, S.K. Therapeutic evaluation of difloxacin (A-56619) and A-56620 for experimentally induced *Bacteroides fragilis*-associated intra-abdominal abscess. *Antimicrob. Agents Chemother.* **30(4)**, 574-576 (1986).

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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