

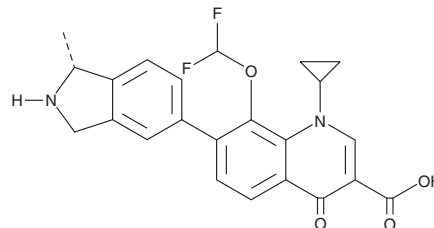
PRODUCT INFORMATION



Garenoxacin

Item No. 33599

CAS Registry No.: 194804-75-6
Formal Name: 1-cyclopropyl-8-(difluoromethoxy)-7-[(1R)-2,3-dihydro-1-methyl-1H-isoindol-5-yl]-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid
Synonyms: BMS-284756, T-3811ME
MF: C₂₃H₂₀F₂N₂O₄
FW: 426.4
Purity: ≥98%
UV/Vis.: λ_{max}: 221, 286 nm
Supplied as: A crystalline 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

Garenoxacin is supplied as a crystalline solid. A stock solution may be made by dissolving the garenoxacin in the solvent of choice, which should be purged with an inert gas. Garenoxacin is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

Description

Garenoxacin is a quinolone antibiotic.¹ It is active against a variety of Gram-positive and Gram-negative bacteria (MIC₉₀s = 0.025-6.25 and 0.0125-100 µg/ml, respectively). Garenoxacin inhibits *E. coli* DNA gyrase supercoiling and *S. aureus* topoisomerase IV decatenation activities (IC₅₀s = 0.17 and 2.19 mg/L, respectively).² It is selective for *S. aureus* topoisomerase IV over human topoisomerase II (IC₅₀ = 509.7 µg/L). Garenoxacin is efficacious against systemic quinolone-resistant *S. aureus* infection and pneumonia induced by the penicillin-resistant *S. pneumoniae* clinical isolate D-979 in mice (ED₅₀s = 0.0189 and 0.0278 mg/animal, respectively).¹

References

1. Takahata, M., Mitsuyama, J., Yamashiro, Y., *et al.* In vitro and in vivo antimicrobial activities of T-3811ME, a novel des-F(6)-quinolone. *Antimicrob. Agents Chemother.* **43**(5), 1077-1084 (1999).
2. Lawrence, L.E., Wu, P., Fan, L., *et al.* The inhibition and selectivity of bacterial topoisomerases by BMS-284756 and its analogues. *J. Antimicrob. Chemother.* **48**(2), 195-201 (2001).

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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