
Product Data Sheet

Product Name: Garenoxacin (BMS284756)

Cat. No.: GC33972

Chemical Properties

Cas. No. 194804-75-6

SMILES O=C(C1=CN(C2CC2)C3=C(C=CC(C4=CC5=C([C@@H](C)NC5)C=C4)=C3OC(F)F)C1=O)OFormula $C_{23}H_{20}F_2N_2O_4$ M.Wt 426.41

Solubility DMSO: 1 mg/ml Storage Store at -20°C

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

Garenoxacin is a quinolone antibiotic.¹ It is active against a variety of Gram-positive and Gram-negative bacteria (MIC_{90s} = 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 (IC_{50s} = 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 (ED_{50s} = 0.0189 and 0.0278 mg/animal, respectively).¹

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)

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

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