PRODUCT INFORMATION



Ofloxacin

Item No. 22891

CAS Registry No.: 82419-36-1

Formal Name: 9-fluoro-2,3-dihydro-3-methyl-

> 10-(4-methyl-1-piperazinyl)-7oxo-7H-pyrido[1,2,3-de]-1,4benzoxazine-6-carboxylic acid

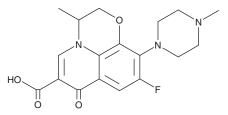
Synonyms: DL-8280, WP0405 $\mathrm{C_{18}H_{20}FN_3O_4}$ MF:

FW: 361.4 **Purity:** ≥95%

Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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



Description

Ofloxacin is a broad-spectrum fluoroquinolone antibiotic that prevents supercoiling of bacterial chromosomes by DNA gyrase.^{1,2} It is active against Gram-positive and Gram-negative bacteria with MIC₀₀s ranging from 0.39 to 3.13 µg/ml for clinical isolates of S. aureus, S. epidermidis, S. pyogenes, and S. faecalis and ≤0.78 µg/ml for N. gonorrhoeae and various species of Enterobacteriaceae. Ofloxacin is active in vivo, with ED₅₀ values ranging from 0.7 to 75.1 mg/kg in infected mice. Formulations containing ofloxacin have been used to treat urinary tract infections, gonorrhea, prostatitis, and gastroenteritis.³

References

- 1. Sato, K., Matsuura, Y., Inoue, M., et al. In vitro and in vivo activity of DL-8280, a new oxazine derivative. Antimicrob. Agents and Chemother. 22(4), 548-553 (1982).
- 2. Smith, J.T. The mode of action of 4-quinolones and possible mechanisms of resistance. J. Antimicrob. Chemother. 18 (Suppl. D), 21-29 (1986).
- Hooper, D.C., and Wolfson, J.S. The fluoroquinolones: pharmacology, clinical uses, and toxicities in humans. Antimicrob. Agents Chemother. 28(5), 716-721 (1985).

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

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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