
Product Data Sheet

Product Name: (R)-Ofloxacin

Cat. No.: GC34990

Chemical Properties

Cas. No. 100986-86-5

SMILES O=C(C(C1=O)=CN2[C@H](C)COC3=C(N4CCN(C)CC4)C(F)=CC1=C23)OFormula $C_{18}H_{20}FN_3O_4$

M.Wt 361.37

Solubility DMF: 20 mg/ml, DMSO: 20 mg/ml, Ethanol: 1 mg/ml, PBS
(pH 7.2): 10 mg/mlStorage 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 sizes: ship with RT, or blue ice upon request.

Structure **Background**

(R)-Ofloxacin is a fluoroquinolone antibiotic and the (R) isomer of the antibiotics ofloxacin and levofloxacin.¹ It is active against certain Gram-positive and Gram-negative bacteria, including *E. coli*, *P. aeruginosa* strains 32104 and 32122, *S. aureus* strains 209P and Smith, and *S. epidermis* strain 56556 (MICs = 0.78, 12.5, 6.25, 25, 12.5, and 25 µg/ml, respectively) but not *S. epidermis* strain 56500, *S. pyogenes*, or *S. faecalis* (MICs = >100 µg/ml for all).² (R)-Ofloxacin inhibits *E. coli* DNA gyrase with an IC₅₀ value of 75 µg/ml, which is approximately 30- and 50-fold lower than inhibition by ofloxacin and levofloxacin, respectively.¹

1. Morrissey, I., Hoshino, K., Sato, K., et al. Mechanism of differential activities of ofloxacin enantiomers. *Antimicrob. Agents Chemother.* 40(8):1775-1784 (1996)
 2. Hayakawa, I., Atarashi, S., Yokohama, S., et al. Synthesis and antibacterial activities of optically active ofloxacin. *Antimicrob. Agents Chemother.* 29(1):163-164 (1986)

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA
