Inhibitors

**Screening Libraries** 

**Proteins** 

## **Pazufloxacin**

**Cat. No.:** HY-B0724B

CAS No.: 127045-41-4  $\text{Molecular Formula:} \qquad \text{C}_{_{16}}\text{H}_{_{15}}\text{FN}_{_2}\text{O}_{_4}$ 

Molecular Weight: 318.3

Target: Bacterial; Antibiotic

Pathway: Anti-infection

**Storage:** Please store the product under the recommended conditions in the Certificate of

Analysis.

O OH O NH<sub>2</sub>

## **BIOLOGICAL ACTIVITY**

## Description

Pazufloxacin (T-3761) is a fluoroquinolone antibiotic. Target: Antibacterial Pazufloxacin (T-3761), a new quinolone derivative, showed broad and potent antibacterial activity. T-3761 showed good efficacy in mice against systemic, pulmonary, and urinary tract infections with gram-positive and gram-negative bacteria, including quinolone-resistant Serratia marcescens and Pseudomonas aeruginosa. The in vivo activity of T-3761 was comparable to or greater than those of ofloxacin, ciprofloxacin, norfloxacin, and tosufloxacin against most infection models in mice. The activities of T-3761 were lower than those of tosufloxacin against gram-positive bacterial systemic and pulmonary infections in mice but not against infections with methicillin-resistant Staphylococcus aureus [1]. T-3761 had a broad spectrum of activity and had potent activity against gram-positive and -negative bacteria. The MICs of T-3761 against 90% of the methicillin-susceptible Staphylococcus aureus, methicillin-susceptible and -resistant Staphylococcus epidermidis, and Clostridium spp. tested were 0.39 to 6.25 micrograms/ml. The MBCs of T-3761 were either equal to or twofold greater than the MICs. The 50% inhibitory concentrations of T-3761 for DNA gyrases isolated from E. coli and P. aeruginosa were 0.88 and 1.9 micrograms/ml, respectively [2].

IC<sub>50</sub> & Target

Quinolone

## **REFERENCES**

[1]. Fukuoka, Y., et al., In vitro and in vivo antibacterial activities of T-3761, a new quinolone derivative. Antimicrob Agents Chemother, 1993. 37(3): p. 384-92.

[2]. Muratani, T., M. Inoue, and S. Mitsuhashi, In vitro activity of T-3761, a new fluoroquinolone. Antimicrob Agents Chemother, 1992. 36(10): p. 2293-303.

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

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