
Product Data Sheet

Product Name: Clinafloxacin (AM1091)

Cat. No.: GC16681

Chemical Properties

Cas. No. 105956-97-6

Chemical Name 7-(3-aminopyrrolidin-1-yl)-8-chloro-1-cyclopropyl-6-fluoro-4-oxoquinoline-3-carboxylic acid

SMILES C1CC1N2C=C(C(=O)C3=CC(=C(C(=C32)Cl)N4CCC(C4)N)F)C(=O)OFormula $C_{17}H_{17}ClFN_3O_3$ M.Wt 365.8Solubility $\geq 3.66\text{mg/mL}$ in DMSO 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

Clinafloxacin(PD-127391) is a fluoroquinolone antibiotic.Target:

Antibacterial Clinafloxacin is a broad-spectrum antibiotic of the quinolone carboxylic acid category currently in development for intravenous and oral therapy of serious infections [1]. Clinafloxacin is a novel fluoroquinolone with potent broad-spectrum in vitro activity against gram-positive, gram-negative, and anaerobic pathogens. Clinafloxacin is highly active against *S. pneumoniae* 7785 (MIC, $0.125\ \mu\text{g/mL}$), and neither gyrA nor parC quinolone resistance mutations alone have much effect on this activity [2]. Clinafloxacin is identified as the most active fluoroquinolone against *S. pneumoniae* when compared with ofloxacin, levofloxacin, sparfloxacin, grepafloxacin, and trovafloxacin and is currently being evaluated as an antipneumococcal agent [3].

References:

[1]. Humphrey, G.H., et al., Pharmacokinetics of clinafloxacin enantiomers in humans. *J Clin Pharmacol*, 1999. 39(11): p. 1143-50.

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

Product Data Sheet

[2]. Pan, X.S. and L.M. Fisher, DNA gyrase and topoisomerase IV are dual targets of clinafloxacin action in *Streptococcus pneumoniae*. *Antimicrob Agents Chemother*, 1998. 42(11): p. 2810-6.

[3]. Jorgensen, J.H., et al., Activities of clinafloxacin, gatifloxacin, gemifloxacin, and trovafloxacin against recent clinical isolates of levofloxacin-resistant *Streptococcus pneumoniae*. *Antimicrob Agents Chemother*, 2000. 44(11): p. 2962-8.

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