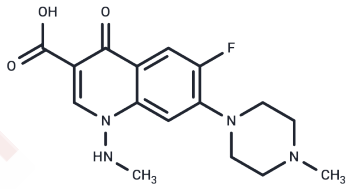
Data Sheet (Cat.No.T17254)

TargetMol

Amifloxacin

Chemical Properties



CAS No. : 86393-37-5

Formula: C16H19FN4O3

Molecular Weight: 334.35

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Amifloxacin (Win49375) is a synthetic antibacterial compound demonstrating moderate activity against Staphylococcus aureus, with MICs ≤ 2 micrograms/ml.
Targets(IC50)	Antibacterial
In vitro	The activity of Amifloxacin in vitro was comparable to those of norfloxacin and pefloxacin against Enterobacteriaceae and generally greater than those of tobramycin and cefotaxime. Amifloxacin was more active in vitro than carbenicillin and mezlocillin against Pseudomonas aeruginosa isolates[1].
In vivo	Against systemic, gram-negative bacterial infections in mice, Amifloxacin was generally less active than cefotaxime but more active than gentamicin. WIN 49548, the major piperazinyl-N-desmethyl metabolite of Amifloxacin, was aa effective as the parent drug against experimental infections in mice when given parenterally. When administered orally, however, this metabolite was less potent than Amifloxacin. Amifloxacin was highly active by the oral route, with 50% effective doses within two- to threefold of those obtained with parenteral medication[1].

Solubility Information

Solubility	DMSO: 4 mg/mL (11.96 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9909 mL	14.9544 mL	29.9088 mL
5 mM	0.5982 mL	2.9909 mL	5.9818 mL
10 mM	0.2991 mL	1.4954 mL	2.9909 mL
50 mM	0.0598 mL	0.2991 mL	0.5982 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

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