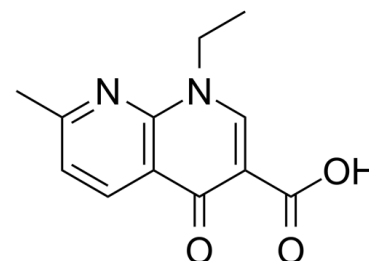


Data Sheet

Product Name:	Nalidixic acid
Cat. No.:	CS-2493
CAS No.:	389-08-2
Molecular Formula:	C ₁₂ H ₁₂ N ₂ O ₃
Molecular Weight:	232.24
Target:	Bacterial
Pathway:	Anti-infection
Solubility:	DMSO : 6 mg/mL (25.84 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Nalidixic acid is a synthetic 1,8-naphthyridine antimicrobial agent with a limited bacteriocidal spectrum. Target: Antibacterial Nalidixic acid is the first of the synthetic quinolone antibiotics. Nalidixic acid is effective against both gram-positive and gram-negative bacteria. In lower concentrations, it acts in a bacteriostatic manner; that is, it inhibits growth and reproduction. In higher concentrations, it is bactericidal, meaning that it kills bacteria instead of merely inhibiting their growth. Nalidixic selectively and reversibly blocks DNA replication in susceptible bacteria. Nalidixic acid and related antibiotics inhibit a subunit of DNA gyrase and topoisomerase IV and induce formation of cleavage complexes. It also inhibits the nicking-closing activity on the subunit of DNA gyrase that releases the positive binding stress on the supercoiled DNA. From Wikipedia.

References:

[1]. http://en.wikipedia.org/wiki/Nalidixic_acid

CAIndexNames:

1,8-Naphthyridine-3-carboxylic acid, 1-ethyl-1,4-dihydro-7-methyl-4-oxo-

SMILES:

O=C(C1=CN(CC)C2=C(C=CC(C)=N2)C1=O)O

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

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA