



Product Information

Product ID E5358

CAS No. 74011-58-8

Chemical Name 1-Ethyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)-1,8-naphthyridine-3-carboxylic acid

Synonym Abenox, Bactidan, Comprecin, Flumark, Penetrex

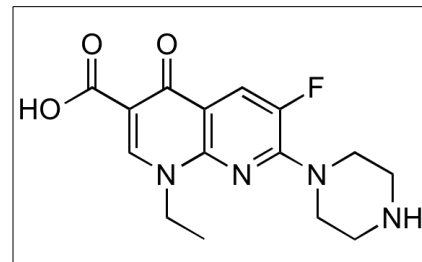
Formula C₁₅H₁₇FN₄O₃

Formula Wt. 320.32

Melting Point 220-224°C

Purity ≥98%

Solubility Insoluble in water.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
E5358	500 mg	\$48.50
E5358	1 g	\$80.60
E5358	5 g	\$257.70

Store Temp Ambient

Ship Temp Ambient

Description Enoxacin is a fluoroquinolone antibiotic that is clinically used to treat urinary tract infections and gonorrhea; like other fluoroquinolones, enoxacin inhibits DNA gyrase and topoisomerase IV. Enoxacin displays antibacterial and anti-resorptive activities. In vivo, this compound decreases RANKL-induced JNK signaling, inhibiting osteoclast formation. Additionally, enoxacin inhibits vacuolar H⁺ ATPase activity, preventing bone resorption.

References Liu X, Qu X, Wu C, et al. The effect of enoxacin on osteoclastogenesis and reduction of titanium particle-induced osteolysis via suppression of JNK signaling pathway. *Biomaterials*. 2014 Jul;35(22):5721-30. PMID: 24767789.

Toro EJ, Zuo J, Ostrov DA, et al. Enoxacin directly inhibits osteoclastogenesis without inducing apoptosis. *J Biol Chem*. 2012 May 18;287(21):17894-904. PMID: 22474295.

Zuma AA, Cavalcanti DP, Maia MC, et al. Effect of topoisomerase inhibitors and DNA-binding drugs on the cell proliferation and ultrastructure of *Trypanosoma cruzi*. *Int J Antimicrob Agents*. 2011 May;37(5):449-56. PMID: 21292448.

Koseki N, Deguchi J, Yamashita A, et al. Establishment of a novel experimental protocol for drug-induced seizure liability screening based on a locomotor activity assay in zebrafish. *J Toxicol Sci*. 2014 Aug;39(4):579-600. PMID: 25056783.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.