

Product Name:	Nadifloxacin
Product Number:	N062
CAS Number:	124858-35-1
Molecular Formula:	C ₁₉ H ₂₁ FN ₂ O ₄
Molecular Weight:	360.379 g/mol
Form:	Powder
Appearance:	Off white to pale yellow crystalline powder
Solubility:	DMSO (20 mg/ml) @ 25°C) water (<1 mg/ml @ 25°C), ethanol (<1 mg/ml @ 25°C).
Source:	Synthetic
Storage Conditions:	-20°C
Description:	Nadifloxacin is a fluorinated fluoroquinolone antibiotic with broad-spectrum activity against Gram-positive and Gram-negative bacteria, especially <i>Propionibacterium acnes</i> . It also shows antibacterial activity against methicillin-resistant <i>Staphylococcus aureus</i> (MRSA). Nadifloxacin is capable of treating green nail syndrome caused by <i>Pseudomonas aeruginosa</i> .
Mechanism of Action:	Nadifloxacin inhibits Topo II (DNA gyrase) in Gram-negative bacteria, and Topo IV in Gram-positive bacteria, which both function to relax positive supercoils prior to DNA replication, thus inhibiting bacterial multiplication.
Spectrum:	broad-spectrum activity against Gram-positive and Gram-negative bacteria.
References:	Narayanan V et al (2014) Efficacy and safety of nadifloxacin for bacterial skin infections: Results from clinical and post-marketing studies. Dermatol. Ther. 4:233-248 Müller S (2014) Green nail syndrome (<i>Pseudomonas aeruginosa</i> nail infection): Two cases successfully treated with topical Nadifloxacin, an acne medication. Case Rep. Dermatol. 6:180-184.