

NALIDIXIC ACID, 25G**PG-4310-25G**

Nalidixic Acid is a synthetic quinolone antibiotic widely used in molecular biology, microbiology, bacterial genetics, and biotechnology laboratories. It inhibits bacterial DNA replication by targeting DNA gyrase and is commonly employed as a selective agent in bacterial culture media, mutagenesis studies, and antimicrobial susceptibility testing. Nalidixic Acid is particularly effective against many Gram-negative bacteria and is frequently used in research involving plasmid maintenance and bacterial strain selection.

Parameter	Specification
Product Name	Nalidixic Acid
Chemical Name	1-Ethyl-7-methyl-4-oxo-1,8-naphthyridine-3-carboxylic acid
Molecular Formula	C ₁₂ H ₁₂ N ₂ O ₃
Molecular Weight	232.23 g/mol
Appearance	White to pale yellow crystalline powder
Assay	≥ 98.0%
Solubility	Slightly soluble in water; soluble in alkali solutions and organic solvents
Melting Point	225–231°C
Loss on Drying	≤ 0.5%
CAS Number	389-08-2
Storage Condition	RT

Applications: Selection of nalidixic acid-resistant bacterial strains, Bacterial genetics and mutagenesis studies, Antimicrobial susceptibility testing, Microbiology and biotechnology research etc.

Safety

Harmful if inhaled, swallowed, or absorbed through skin. Suspected carcinogen. May cause liver, kidney, and central nervous system damage following prolonged or repeated exposure. Use in a well-ventilated area and wear appropriate PPE including gloves, lab coat, and safety goggles. Avoid contact with skin, eyes, and clothing. Store away from heat and incompatible materials.