

PRODUCT INFORMATION

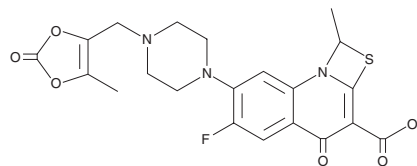


Prulifloxacin

Item No. 31624

CAS Registry No.: 123447-62-1
Formal Name: 6-fluoro-1-methyl-7-[4-[(5-methyl-2-oxo-1,3-dioxol-4-yl)methyl]-1-piperazinyl]-4-oxo-1H,4H-[1,3]thiazeto[3,2-a]quinoline-3-carboxylic acid

Synonym: NM441
MF: C₂₁H₂₀FN₃O₆S
FW: 461.5
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Prulifloxacin is supplied as a crystalline solid. A stock solution may be made by dissolving the prulifloxacin in the solvent of choice, which should be purged with an inert gas. Prulifloxacin is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml. Prulifloxacin is also slightly soluble in dimethyl formamide.

Prulifloxacin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, prulifloxacin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Prulifloxacin has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Prulifloxacin is a prodrug form of the fluoroquinolone antibiotic ulifloxacin.¹ *In vivo*, prulifloxacin increases survival in mouse models of systemic *S. aureus*, *S. pyogenes*, *S. pneumoniae*, *E. coli*, *K. pneumoniae*, *S. marcescens*, or *P. aeruginosa* infection (ED₅₀s = 0.35-23 mg/kg). It also increases survival in a mouse model of *K. pneumoniae*-induced respiratory tract infection (ED₅₀ = 0.981 mg/kg).

Reference

1. Ozaki, M., Matsuda, M., Tomii, Y., *et al.* *In vivo* evaluation of NM441, a new thiazeto-quinoline derivative. *Antimicrob. Agents Chemother.* **35(12)**, 2496-2499 (1991).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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