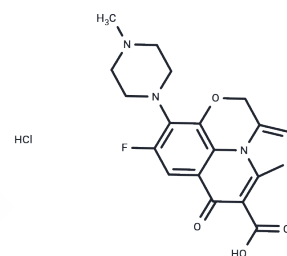


KB-5246

## Chemical Properties

CAS No. : 119474-55-4  
 Formula: C<sub>18</sub>H<sub>17</sub>ClFN<sub>3</sub>O<sub>4</sub>S  
 Molecular Weight: 425.86  
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
 Actual storage temperature shall be subject to the COA.



## Biological Description

Description	KB-5246, displays antibacterial activities.is a tetracyclic quinolone.
Targets(IC50)	Antibacterial,Antibiotic,Ras
In vitro	KB5246, a tetracyclic quinolone with antibacterial properties, effectively inhibits 90% of Escherichia coli, Klebsiella pneumoniae, and Klebsiella oxytoca isolates at concentrations of 0.10 µg/mL or lower. Notably, concentrations of KB-5246 at or above the minimum inhibitory concentration (MIC) prevent regrowth of these organisms after 24 hours of incubation. Additionally, the MICs for 90% of tested isolates (MIC90s) against key gram-positive microorganisms, including methicillin-resistant Staphylococcus aureus, Staphylococcus epidermidis, Streptococcus pneumoniae, and Streptococcus pyogenes, are 0.39 µg/mL, showcasing KB-5246's broad-spectrum antibacterial efficacy.
In vivo	The 50% effective dose (ED50) of KB-5246 for treating S. pneumoniae 2132 infections is 50.5 mg/kg. Its efficacy against S. aureus Smith, P. aeruginosa GN11189, and Serratia marcescens GN7577 is on par with ofloxacin and surpasses that of norfloxacin.

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3482 mL	11.7409 mL	23.4819 mL
5 mM	0.4696 mL	2.3482 mL	4.6964 mL
10 mM	0.2348 mL	1.1741 mL	2.3482 mL
50 mM	0.047 mL	0.2348 mL	0.4696 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Kotera Y, et al. In vitro and in vivo antibacterial activities of KB-5246, a new tetracyclic quinolone. Antimicrob Agents Chemother. 1989 Nov;33(11):1896-900.

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