

Product Data Sheet

Product Name: Pipemidic Acid (hydrate)

Cat. No.: GC48684

Chemical Properties

Cas. No. 72571-82-5

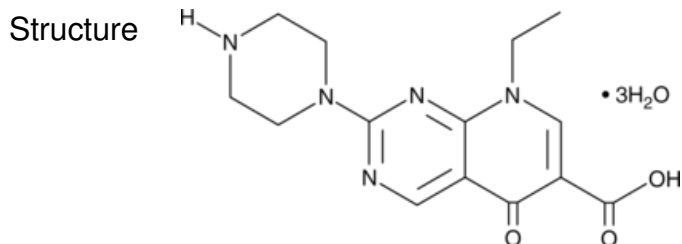
SMILES O=C(C1=CN(CC)C2=NC(N3CCNCCC3)=NC=C2C1=O)O.O.O.O

Formula C14H17N5O3·3H2O M.Wt 357.4

Solubility DMF: 0.50 mg/ml, DMSO: 1 mg/ml, DMSO:PBS (pH 7.2) (1:4): 0.20 mg/ml
Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.



Background

Pipemidic acid is an antibiotic and derivative of piromidic acid.¹ It is active against clinical isolates of *E. coli*, *P. mirabilis*, *P. inconstans*, *Shigella*, *Salmonella*, *Alcaligenes*, and *V. parahaemolyticus* (MICs = 0.78-100 µg/ml), as well as drug-resistant clinical isolates of *E. coli*, *P. mirabilis*, *Klebsiella*, and *Shigella* (MICs = 1.56-6.25 µg/ml). Pipemidic acid is protective against systemic *S. aureus*, *E. coli*, *K. pneumoniae*, and *P. aeruginosa* infections in mice (ED₅₀s = 237.5, 204.1, 28.6, and 99.5 mg/kg, respectively).² It is also protective against *P. aeruginosa*-induced pulmonary and dermal infections (ED₅₀s = 81.7 and 173.2 mg/kg, respectively), as well as *E. coli*, *K. pneumoniae*, and *P. aeruginosa* urinary bladder infections (ED₅₀s = 4.8, 11.9, and 30.6 mg/kg, respectively), in mice.

Caution: Product has not been fully validated for medical applications. For research use only.

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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1. Shimizu, Y., Takase, Y., Nakamura, S., et al. Pipemidic acid, a new antibacterial agent active against *Pseudomonas aeruginosa*: In vitro properties. *Antimicrob. Agents Chemother.* 8(2):132-138 (1975)
2. Shimizu, M., Takase, Y., Nakamura, S., et al. Pipemidic acid: Its activities against various experimental infections. *Antimicrob. Agents Chemother.* 9(4):569-574 (1976)

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