

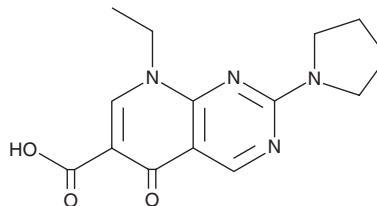
# PRODUCT INFORMATION



## Piromidic Acid

Item No. 19255

**CAS Registry No.:** 19562-30-2  
**Formal Name:** 8-ethyl-5,8-dihydro-5-oxo-2-(1-pyrrolidinyl)-pyrido[2,3-d]pyrimidine-6-carboxylic acid  
**Synonym:** NSC 291120  
**MF:** C<sub>14</sub>H<sub>16</sub>N<sub>4</sub>O<sub>3</sub>  
**FW:** 288.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 218, 280, 322 nm  
**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

Piromidic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the piromidic acid in the solvent of choice. Piromidic acid is soluble in the organic solvent chloroform, which should be purged with an inert gas, at a concentration of approximately 1 mg/ml. Piromidic acid is slightly soluble in ethanol.

### Description

Piromidic acid is a quinolone antibiotic that is active against Gram-positive and Gram-negative bacteria including *S. aureus* and *E. coli* (MICs = 10 and 1 µg/ml, respectively).<sup>1,2</sup> It inhibits growth of nalidixic acid-sensitive strains of *E. coli* in an *in vitro* model of bacterial cystitis when used at concentrations of 10 and 50 mg/L.<sup>2</sup> Piromidic acid also has antimalarial properties and is active against chloroquine-sensitive and -resistant strains of *P. falciparum in vitro* (IC<sub>50</sub>s = 41.4 and 14.4 µg/ml, respectively) as well as against hepatic stages of *P. yoelii yoelii* (IC<sub>50</sub> = 21.6 µg/ml).<sup>3</sup>

### References

1. Minami, S., Shono, T., and Matsumoto, J.I. Pyrido [2, 3-d] pyrimidine antibacterial agents. II. Piromidic acid and related compounds. *Chem. Pharm. Bull.* **19(7)**, 1426-1432 (1971).
2. Greenwood, D. The assessment of antimicrobial activity in an in-vitro model of the treatment of bacterial cystitis. *J. Antimicrob. Chemother.* **13(Suppl B)**, 43-48 (1984).
3. Mahmoudi, N., Ciceron, L., Franetich, J.F., et al. *In vitro* activities of 25 quinolones and fluoroquinolones against liver and blood stage *Plasmodium* spp. *Antimicrob. Agents Chemother.* **47(8)**, 2636-2639 (2003).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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