

# PRODUCT INFORMATION



## Pyridomycin

Item No. 17095

**CAS Registry No.:** 18791-21-4  
**Formal Name:** 3-hydroxy-N-[(2Z,5R,6S,9S,10S,11R)-10-hydroxy-5,11-dimethyl-2-(1-methylpropylidene)-3,7,12-trioxo-9-(3-pyridinylmethyl)-2-pyridinecarboxamide

**Synonyms:** Erizomycin, NSC 246134

**MF:** C<sub>27</sub>H<sub>32</sub>N<sub>4</sub>O<sub>8</sub>

**FW:** 540.6

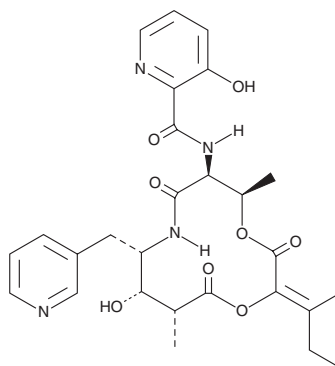
**Purity:** ≥95%

**UV/Vis.:** λ<sub>max</sub>: 221, 277, 316 nm

**Supplied as:** A residue

**Storage:** -20°C

**Stability:** ≥4 years



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

### Laboratory Procedures

Pyridomycin is supplied as a residue. A stock solution may be made by dissolving the pyridomycin in the solvent of choice, which should be purged with an inert gas. Pyridomycin is soluble in ethanol, methanol, DMSO, and dimethyl formamide.

### Description

Pyridomycin is a structurally unusual antimycobacterial cyclodepsipeptide whose composition includes two rare moieties: 3-(3-pyridyl)-L-alanine and 2-hydroxy-3-methylpent-2-enoic acid.<sup>1</sup> It inhibits NADH-dependent enoyl (Acyl-Carrier-Protein) reductase InhA, preventing mycolic acid synthesis in *M. tuberculosis*, including isoniazid-resistant strains (MICs = 0.31-0.63 µg/ml).<sup>2</sup>

### References

- Huang, T., Wang, Y., Yin, J., *et al.* Identification and characterization of the pyridomycin biosynthetic gene cluster of *Streptomyces pyridomyceticus* NRRL B-2517. *J. Biol. Chem.* **286(23)**, 20648-20657 (2011).
- Hartkoorn, R.C., Sala, C., Neres, J., *et al.* Towards a new tuberculosis drug: Pyridomycin - nature's isoniazid. *EMBO Mol. Med.* **4(10)**, 1032-1042 (2012).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM