

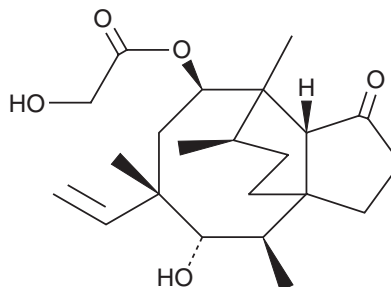
PRODUCT INFORMATION



Pleuromutilin

Item No. 19452

CAS Registry No.: 125-65-5
Formal Name: 2-hydroxy-acetic acid, (3aS,4R,5S,6S,8R,9R,9aR,10R)-6-ethenyldecahydro-5-hydroxy-4,6,9,10-tetramethyl-1-oxo-3a,9-propano-3aH-cyclopentacycloocten-8-yl ester
Synonyms: Antibiotic A 40104C, Drosophilin B, NSC 121145
MF: C₂₂H₃₄O₅
FW: 378.5
Purity: ≥98%
Supplied as: A crystalline solid
Storage: 4°C
Stability: ≥4 years



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

Laboratory Procedures

Pleuromutilin is supplied as a crystalline solid. A stock solution may be made by dissolving the pleuromutilin in the solvent of choice, which should be purged with an inert gas. Pleuromutilin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of pleuromutilin in these solvents is approximately 50, 25, and 30 mg/ml, respectively.

Pleuromutilin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, pleuromutilin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Pleuromutilin has a solubility of approximately 0.02 mg/ml in a 1:40 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Pleuromutilin is an antibiotic derived from the fungus *Clitopilus* that inhibits bacterial protein synthesis by binding to bacterial ribosomes in the peptidyl transferase component of the 50S subunit and inhibiting peptide bond formation.^{1,2}

References

1. Killaru, S., Collins, C.M., Hartley, A.J., *et al.* Establishing molecular tools for genetic manipulation of the pleuromutilin-producing fungus *Clitopilus passeckerianus*. *Appl. Environ. Microbiol.* **75(22)**, 7196-7204 (2009).
2. Long, K.S., Hansen, L.H., Jakobsen, L., *et al.* Interaction of pleuromutilin derivatives with the ribosomal peptidyl transferase center. *Antimicrob. Agents Chemother.* **50(4)**, 1458-1462 (2006).

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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