

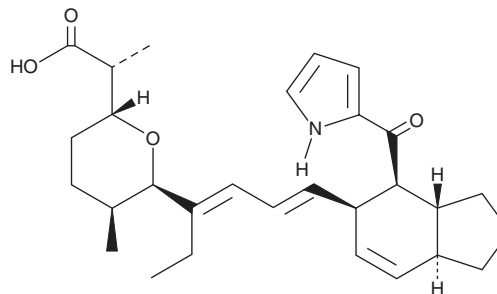
PRODUCT INFORMATION



Deethylindanomycin

Item No. 28089

CAS Registry No.: 106803-22-9
Formal Name: (αR,2R,5S,6R)-6-[(1E,3E)-1-ethyl-4-[(3aR,4S,5S,7aS)-2,3,3a,4,5,7a-hexahydro-4-(1H-pyrrol-2-ylcarbonyl)-1H-inden-5-yl]-1,3-butadien-1-yl]tetrahydro-α,5-dimethyl-2H-pyran-2-acetic acid
Synonyms: A 83094A, 16-Deethylindanomycin, Omomycin
MF: C₂₉H₃₉NO₄
FW: 465.6
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Streptomyces* sp.



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

Laboratory Procedures

Deethylindanomycin is supplied as a solid. A stock solution may be made by dissolving the deethylindanomycin in the solvent of choice, which should be purged with an inert gas. Deethylindanomycin is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Deethylindanomycin is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Deethylindanomycin is a polyether antibiotic that has been found in *S. setonii*.^{1,2} It is active against a variety of Gram-positive bacteria, including various strains of *S. aureus* and *Streptococcus*, as well as one strain of *S. pneumoniae* (MICs = 4, 4, and 2 μg/ml, respectively).² It is also active against coccidia *in vitro*, inhibiting *E. tenella* development, but is inactive against *E. tenella* infection in chicks when administered at a dose of 200 μg/g in the diet. Deethylindanomycin acts as an ionophore in lipid bilayer membranes and is more selective for potassium ions than calcium, magnesium, and sodium ions.¹ It induces histamine release from rodent mast cells and human basophils *in vitro* in a calcium-dependent manner.

References

1. Zebrev, A.I., Antonenko, Y.N., Gushchin, I.S., *et al.* Ionophore properties and histamine-releasing action of the polyether antibiotic omomycin (985-l). *Biol. Membrany* **3(12)**, 1224-1231 (1986).
2. Larsen, S.H., Boeck, L.D., Mertz, F.P., *et al.* 16-Deethylindanomycin (A83094A), a novel pyrrole-ether antibiotic produced by a strain of *Streptomyces setonii*. Taxonomy, fermentation, isolation and characterization. *J. Antibiot. (Tokyo)* **41(9)**, 1170-1177 (1988).

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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