

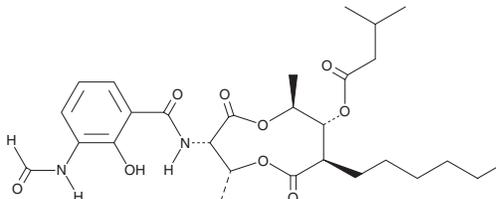
# PRODUCT INFORMATION



## Antimycin A<sub>1</sub> Item No. 19433

**CAS Registry No.:** 642-15-9  
**Formal Name:** 2(or 3)-methyl-butanoic acid,  
(2R,3S,6S,7R,8R)-3-[[3-(formylamino)-  
2-hydroxybenzoyl]amino]-8-hexyl-2,6-  
dimethyl-4,9-dioxo-1,5-dioxonan-7-yl ester

**MF:** C<sub>28</sub>H<sub>40</sub>N<sub>2</sub>O<sub>9</sub>  
**FW:** 548.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 230, 321 nm  
**Supplied as:** A 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

Antimycin A<sub>1</sub> is supplied as a solid. A stock solution may be made by dissolving the antimycin A<sub>1</sub> in the solvent of choice, which should be purged with an inert gas. Antimycin A<sub>1</sub> is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

### Description

Antimycin A<sub>1</sub> is an active component of the antimycin A complex.<sup>1-3</sup> It inhibits electron transport.<sup>1</sup> Antimycin A<sub>1</sub> (3.3-160 μM) induces the synthesis of carotenoids in *M. marinum*.<sup>2</sup> It also inhibits ATP-citrate lyase (K<sub>i</sub> = 29.5 μM).<sup>3</sup>

### References

1. Liu, W.-C. and Strong, F.M. The chemistry of antimycin A. VI. Separation and properties of antimycin A subcomponents. *J. Am. Chem. Soc.* **81(16)**, 4387-4390 (1959).
2. Batra, P.P., Harbin, T.L., Howes, C.D., *et al.* A study of the relationship of structure and activity of antimycin A in the induction of carotenoid synthesis in *Mycobacterium marinum*. *J. Biol. Chem.* **246(23)**, 7125-7130 (1971).
3. Barrow, C.J., Oleynek, J.J., Marinelli, V., *et al.* Antimycins, inhibitors of ATP-citrate lyase, from a *Streptomyces* sp. *J. Antibiot. (Tokyo)* **50(9)**, 729-733 (1997).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 08/28/2023

#### 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