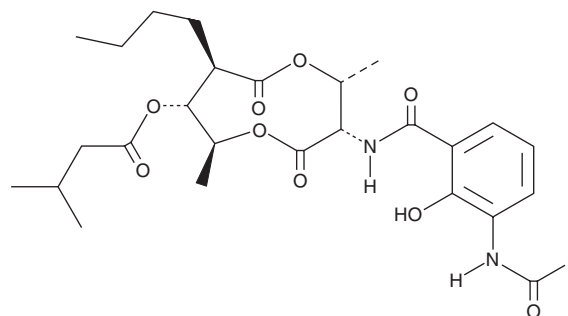


PRODUCT INFORMATION



Antimycin A₃ Item No. 21998

CAS Registry No.: 522-70-3
Formal Name: 2(or 3)-methyl-butanoic acid, (2R,3S,6S,7R,8R)-3-[[3-(formylamino)-2-hydroxybenzoyl]amino]-8-butyl-2,6-dimethyl-4,9-dioxo-1,5-dioxonan-7-yl ester
Synonyms: Blastomycin, NSC 58239
MF: C₂₆H₃₆N₂O₉
FW: 520.6
Purity: ≥98%
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 A₃ is supplied as a solid. A stock solution may be made by dissolving the antimycin A₃ in the solvent of choice, which should be purged with an inert gas. Antimycin A₃ is soluble in organic solvents such as ethanol, DMSO, dimethyl formamide and methanol.

Description

Antimycin A₃ is a component of the antimycin A complex that is more polar than antimycin A₁ (Item No. 19433) and antimycin A₂ (Item No. 21997) but not antimycin A₄ (Item No. 21999).¹⁻⁴ Antimycin A₃ binds to the Q(inner) site of mitochondrial complex III (cytochrome bc1) and inhibits mitochondrial respiration (IC₅₀ = 38 nM in isolated rat liver mitochondria).⁵ It also inhibits ATP-citrate lyase with a K_i value of 60.1 μM, and it stimulates the production of reactive oxygen species.^{6,7} In molecular modeling studies, antimycin binds to a mutant form of Bcl-2 (hBcl-2Δ22) and has a K_d value of 0.82 μM for binding to a recombinant mutant form of Bcl-2 (rhBcl-2Δ22) in an isothermal calorimetry assay.⁸

References

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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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