

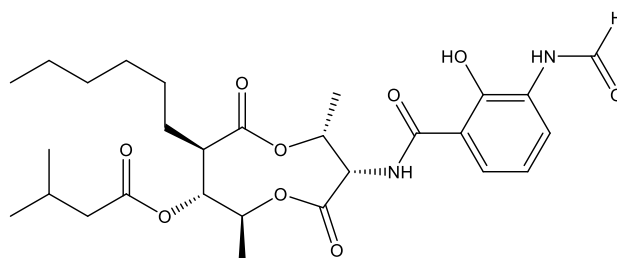
Catalog # 10-2611

Antimycin A

1397-94-0

Antimycin A Complex. Produced from *Streptomyces sp.*

Lot # X101458



Mitochondrial electron transport inhibitor at complex III. Induces apoptosis in various cell lines.¹ Antimycin A may be used to generate cellular models of degenerative disorders by blocking the mitochondrial electron transport chain, disrupting energy metabolism, and elevating ROS levels.²⁻⁴ Induces canonical PINK1-Parkin-dependent mitophagy in Parkin overexpressing cells upon cotreatment with oligomycin.⁵

- 1) Muller *et al.* (2003), *Architecture of the Qo site of the cytochrome bc1 complex probed by superoxide production*; *Biochemistry*, **42** 6493
- 2) Choi *et al.* (2012), *Magnolol protects osteoblastic MC3T3-E1 cells against antimycin A-induced cytotoxicity through activation of mitochondrial function*; *Inflammation*, **35** 1204
- 3) Smith *et al.* (2023), *Transient and Sustained Ganglion Cell Light Responses Are Differentially Modulated by Intrinsically Produced Reactive Oxygen Species Acting upon Specific Voltage-Gated Na⁺ Channel Isoforms*; *J. Neurosci*, **43** 2291
- 4) Barzegari *et al.* (2022), *The protective effect of N-acetylcysteine on antimycin A-induced respiratory chain deficiency in mesenchymal stem cells*; *Chem. Biol. Interact.*, **360** 109937
- 5) Zachari *et al.* (2019), *Selective Autophagy of Mitochondria on a Ubiquitin-Endoplasmic-Reticulum Platform*; *Dev. Cell*, **50** 627

PHYSICAL DATA

Molecular Weight:	548.63
Molecular Formula:	C ₂₈ H ₄₀ N ₂ O ₉
Purity:	>97% by TLC
	NMR: (Conforms)
Solubility:	DMSO (35 mg/ml); Ethanol (50 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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