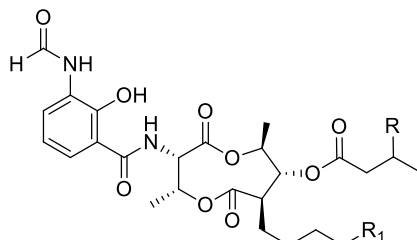


Antimycin complex

Code No.: **BIA-A1374**

Pack sizes: **5 mg, 25 mg**



	R	R ₁
A ₁	-CH ₃	-CH ₂ CH ₃
A ₂	-H	-CH ₂ CH ₃
A ₃	-CH ₃	-H
A ₄	-H	-H

Synonyms : Antipiriculin, Levoristatin, Virosin, Vulgarin

Specifications

CAS #	: 1397-94-0
Molecular Formula	: C₂₈H₄₀N₂O₉ (for A₁)
Molecular Weight	: 548.6 (for A₁)
Source	: <i>Streptomyces</i> sp.
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Antimycin A is a complex of related macrocyclic lactones, predominantly A1 to A4, isolated from several species of *Streptomyces*, first reported in the early 1950s for potent antifungal activity. There are over 20 known analogues in the antimycin A class, mostly involving variation of the fatty acid ester chain length or adjacent alkyl starting unit. Antimycin A binds to cytochrome C reductase at the Qi site, inhibiting the oxidation of ubiquinol to ubiquinone. Antimycin A is widely used as a bioprobe of respiration and other applications with over 5,000 literature citations.

References

1. The isolation and properties of antimycin A. Bryant R. & Dunshee B.R. et al., J. Am. Chem. Soc. 1949, 71, 2436.
2. Inhibition of electron transport by antimycin A, alkyl hydroxy naphthoquinones and metal coordination compounds. Tappel A.L. Biochem. Pharmacol. 1960, 3, 289.
3. Biosynthetic pathway for high structural diversity of a common dilactone core in antimycin production. Yan Y. et al., Org. Lett. 2012, 14, 4142.