

Product Name:	Antimycin
Product Number:	A129
CAS Number:	1397-94-0
Molecular Formula:	C ₂₈ H ₄₀ N ₂ O ₉ (for A1)
Molecular Weight:	548.6 (for A1)
Appearance:	White solid
Storage Conditions:	-20°C
Description:	<p>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 is widely used as a bioprobe of respiration and other applications with over 5,000 literature citations.</p> <p>Antimycin A is soluble in ethanol, methanol, DMF and DMSO.</p>
Mechanism of Action:	Antimycin A binds to cytochrome C reductase at the Qi site, inhibiting the oxidation of ubiquinol to ubiquinone.
References:	<p>The isolation and properties of antimycin A. Bryant R. & Dunshee B.R. et al. J. Am. Chem. Soc. 1949, 71, 2436.</p> <p>Inhibition of electron transport by antimycin A, alkyl hydroxy naphthoquinones and metal coordination compounds. Tappel A.L. Biochem. Pharmacol. 1960, 3, 289.</p> <p>Biosynthetic pathway for high structural diversity of a common dilactone core in antimycin production. Yan Y. et al. Org. Lett. 2012, 14, 4142.</p>