

Napyradiomycin A1

Chemical Properties

CAS No. :	103106-24-7
Formula:	C ₂₅ H ₃₀ Cl ₂ O ₅
Molecular Weight:	481.41
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

Biological Description

Description	Napyradiomycin A1 is a fungal metabolite originally isolated from <i>C. rubra</i> and has diverse biological activities. ^{1,2} It is active against <i>S. aureus</i> , <i>M. luteus</i> , <i>B. anthracis</i> , <i>C. bovis</i> , and <i>M. smegmatis</i> (MICs = 1.56-12.5 µg/ml). ¹ Napyradiomycin A1 is an estrogen receptor antagonist (IC ₅₀ = 4.2 µM in rat uterine homogenates). ² It also inhibits mitochondrial NADH:ubiquinone oxidoreductase (complex I) and succinate:ubiquinone oxidoreductase (complex II) activities in bovine heart homogenates (IC ₅₀ s = 20 and 9.7 µM, respectively). ³
Targets(IC ₅₀)	Others, Antibacterial, Antibiotic

Solubility Information

Solubility	DMSO: Soluble Methanol: Soluble Ethanol: Soluble Dichloromethane: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0772 mL	10.3862 mL	20.7723 mL
5 mM	0.4154 mL	2.0772 mL	4.1545 mL
10 mM	0.2077 mL	1.0386 mL	2.0772 mL
50 mM	0.0415 mL	0.2077 mL	0.4154 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Shiomi, K., Inuma, H., Hamada, M., et al. Novel antibiotics napyradiomycins. Production, isolation, physico-chemical properties and biological activity. *J. Antibiot. (Tokyo)*39(4)487-493(1986)
- Hori, Y., Abe, Y., Shigematsu, N., et al. Napyradiomycins A and B1: Non-steroidal estrogen-receptor antagonists produced by a *Streptomyces*. *J. Antibiot. (Tokyo)*46(12)1890-1893(1993)
- Yamamoto, K., Tashiro, E., Motohashi, K., et al. Napyradiomycin A1, an inhibitor of mitochondrial complexes I and II. *J. Antibiot. (Tokyo)*65(4)211-214(2012)

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481