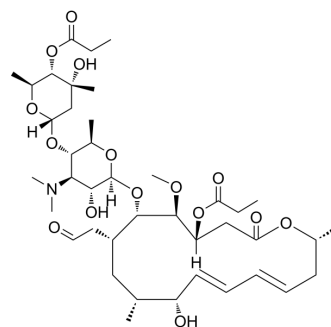


Midecamycin

Cat. No.:	HY-B1908		
CAS No.:	35457-80-8		
Molecular Formula:	C ₄₁ H ₆₇ NO ₁₅		
Molecular Weight:	813.97		
Target:	Bacterial; Antibiotic		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 36 mg/mL (44.23 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.2285 mL	6.1427 mL	12.2855 mL
	5 mM	0.2457 mL	1.2285 mL	2.4571 mL
	10 mM	0.1229 mL	0.6143 mL	1.2285 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.25 mg/mL (2.76 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.25 mg/mL (2.76 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.25 mg/mL (2.76 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Midecamycin, an acetoxy-substituted macrolide antibiotic, is tested against gram-positive and gram-negative bacteria.

IC₅₀ & Target

Macrolide

In Vitro

Midecamycin inhibits the majority of streptococci, staphylococci, and strains of Haemophilus and Listeria at concentrations of less than 3.1 μg/mL^[1]. Midecamycin is a 16-membered macrolide. Midecamycin is a new macrolide antibiotic, which is

produced by *Streptomyces mycarofaciens*^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Acta Pharm Sin B. 2021 Mar 11.
- Cell Prolif. 2021 Jan;54(1):e12953.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Neu HC. In vitro activity of midecamycin, a new macrolide antibiotic. *Antimicrob Agents Chemother.* 1983 Sep;24(3):443-4.

[2]. Cong L, et al. Cloning and characterization of genes encoded in dTDP-D-mycaminose biosynthetic pathway from amidecamycin-producing strain, *Streptomyces mycarofaciens*. *Acta Biochim Biophys Sin (Shanghai).* 2007 Mar;39(3):187-93.

Caution: Product has not been fully validated for medical applications. For research use only.

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