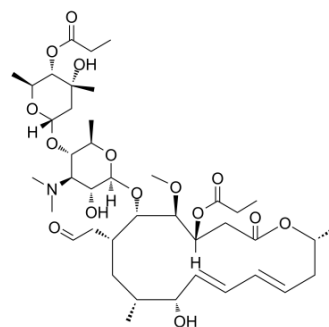


## Midecamycin

<b>Cat. No.:</b>	HY-B1908		
<b>CAS No.:</b>	35457-80-8		
<b>Molecular Formula:</b>	C <sub>41</sub> H <sub>67</sub> NO <sub>15</sub>		
<b>Molecular Weight:</b>	813.97		
<b>Target:</b>	Bacterial; Antibiotic		
<b>Pathway:</b>	Anti-infection		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

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

Concentration	Mass		
	1 mg	5 mg	10 mg
<b>1 mM</b>	1.2285 mL	6.1427 mL	12.2855 mL
<b>5 mM</b>	0.2457 mL	1.2285 mL	2.4571 mL
<b>10 mM</b>	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.

#### IC<sub>50</sub> & Target

Antibacterial<sup>[1]</sup>

#### In Vitro

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

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produced by *Streptomyces mycarofaciens*<sup>[2]</sup>.

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

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## CUSTOMER VALIDATION

- Acta Pharm Sin B. 2021 Mar 11.
- Cell Prolif. 2020 Nov 19;e12953.

See more customer validations on [www.MedChemExpress.com](http://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.

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

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