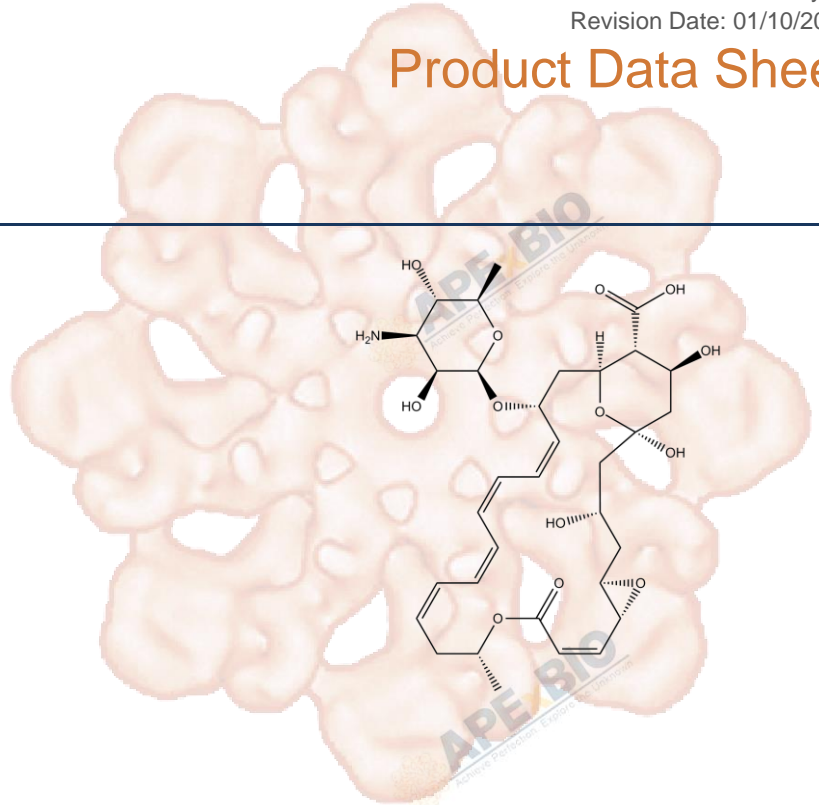


Product Data Sheet

Natamycin

Cat. No.:	A5786
CAS No.:	7681-93-8
Formula:	C33H47NO13
M.Wt:	665.73
Synonyms:	
Target:	Microbiology & Virology
Pathway:	Antibiotic
Storage:	Store at -20°C



Solvent & Solubility

insoluble in EtOH; insoluble in H₂O; ≥16.43 mg/mL in DMSO with gentle warming

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
		1 mM	1.5021 mL	7.5106 mL	15.0211 mL
		5 mM	0.3004 mL	1.5021 mL	3.0042 mL
		10 mM	0.1502 mL	0.7511 mL	1.5021 mL

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

Biological Activity

Shortsummary

Antifungal macrolide polyene

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line: human corneal epithelial cells(HCE)

Preparation method: Soluble in DMSO > 10.75 mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

	Reacting conditions:	5 μ M of FITC(Fluorescein isothiocyanate) labelled natamycin for 1 h at 37°C
	Applications:	The drug natamycin had a broad spectrum activity against filamentous fungi in the HCE, therefore, it was considered as the drug of choice for the treatment of filamentous fungi associated Keratitis.
In Vivo	Animal experiment	
	Dosage form:	5% natamycin plus 0.02% preservative, one drop to the affected eye every one hour while awake for 1 week, then every 2 hours while awake until 3 weeks
	Applications:	Topical natamycin was superior to topical voriconazole for the treatment of filamentous fungal corneal ulcers, and in particular those culture-positive for Fusarium species. Vision-related functioning was higher among those treated with natamycin compared with voriconazole.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

- [1]. Jain A1, Shah SG, Chugh A, Cell penetrating peptides as efficient nanocarriers for delivery of antifungal compound, natamycin for the treatment of fungal keratitis. Pharm Res. 2015 Jun;32(6):1920-30. doi: 10.1007/s11095-014-1586-x. Epub 2014 Dec 3.
- [2]. Rose-Nussbaumer J1,2,3, Prajna NV4, et al, Risk factors for low vision related functioning in the Mycotic Ulcer Treatment Trial: a randomised trial comparing natamycin with voriconazole. Br J Ophthalmol. 2016 Jul;100(7):929-932. doi: 10.1136/bjophthalmol-2015-306828. Epub 2015 Nov 3.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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