

PRODUCT INFORMATION



Monazomycin

Item No. 20589

CAS Registry No.: 11006-31-8
Formal Name: 48-(7-amino-1-methylheptyl)-8,10,16,20,24,26,28,32,36,38,40,42,44,46-tetradecahydroxy-23-(α -D-mannopyranosyloxy)-9,15,17,19,21,25,31,33,39,41,47-undecamethyl-oxacyclooctatetracont-13,17,21,29-tetraen-2-one

Synonyms: Takacidin, U-0142

MF: $C_{72}H_{133}NO_{22}$

FW: 1,364.8

Purity: $\geq 95\%$

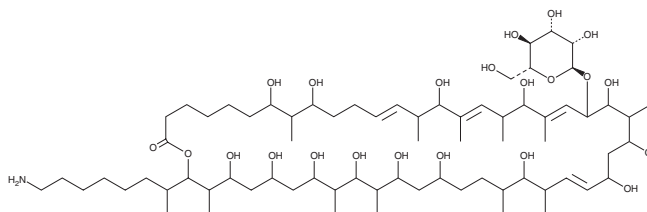
Supplied as: A solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years

Item Origin: Bacterium/*Streptomyces* sp.

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Laboratory Procedures

Monazomycin is supplied as a solid. A stock solution may be made by dissolving the monazomycin in the solvent of choice, which should be purged with an inert gas. Monazomycin is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Description

Monazomycin is a macrocyclic polyol lactone first isolated from *Streptoverticillium* that is active against Gram-positive bacteria. In solution, monazomycin exists as hydrophilic clusters that, when adsorbed onto a lipid bilayer, can induce voltage-dependent conductance.^{1,2}

References

1. Andersen, O.S. and Muller, R.U. Monazomycin-induced single channels. I. Characterization of the elementary conductance events. *J. Gen. Physiol.* **80(3)**, 403-426 (1982).
2. Muller, R.U., Orin, G., and Peskin, C.S. The kinetics of monazomycin-induced voltage-dependent conductance. I. Proof of the validity of an empirical rate equation. *J. Gen. Physiol.* **78(2)**, 171-200 (1981).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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