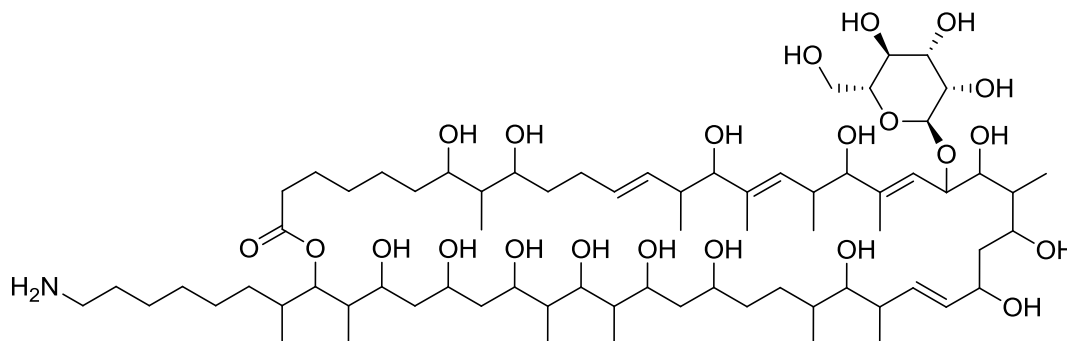


Monazomycin

Code No.: **BIA-M1400**

Pack sizes: **1 mg, 5 mg**



Synonyms :

Specifications

CAS #	: 11006-31-8
Molecular Formula	: $C_{72}H_{133}NO_{22}$
Molecular Weight	: 1364.8
Source	: <i>Streptomyces</i> sp.
Appearance	: White to fawn solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Monazomycin is a macrocyclic polyol lactone isolated from several species of *Streptomyces*, first reported in 1963. Monazomycin is active against Gram positive bacteria with weak Gram negative activity. In solution, monazomycin exists as hydrophilic clusters which, when adsorbed onto a lipid bilayer, can induce channel formation. Monazomycin is an important bioprobe for understanding membrane channels.

References

1. Monazomycin, a new antibiotic produced by a *Streptomyces*. Akasaki K. et al., J. Antibiot. 1963, 16, 127.
2. Structure of monazomycin, a new ionophorous antibiotic. Nakayama H. et al., Tet. Letters 1981, 22, 5217.
3. Kinetics of channel formation in bilayer lipid membranes (BLMs) and tethered BLMs, monazomycin and melittin. Becucci L. & Guidelli R. Langmuir 2007, 23, 5601.