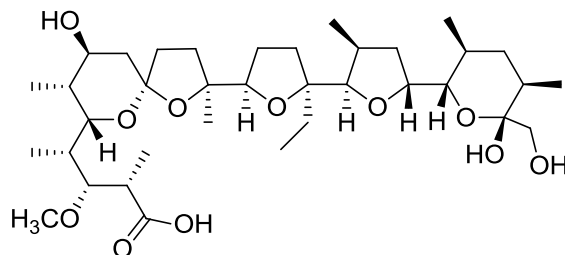


Monensin A

Code No.: **BIA-M1303**

Pack sizes: **5 mg, 25 mg**



Synonyms : Monensic acid, Lilly 67314, A 3223A.

Specifications

CAS #	: 17090-79-8
Molecular Formula	: C₃₆H₆₂O₁₁
Molecular Weight	: 670.8
Source	: <i>Streptomyces</i> sp.
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Monensin A is a polyether antibiotic first isolated from *Streptomyces cinnamomensis* in 1967. Monensin A is a broad-spectrum anticoccidial antibiotic, also exhibiting antifungal and antiviral activity. Monensin A forms complexes with monovalent cations such as Li⁺, Na⁺, K⁺, Rb⁺, Ag⁺ and Tl⁺ and is thus able to transport these cations across lipid membranes of cells, playing an important role as an Na⁺/H⁺ antiporter. It blocks intracellular protein transport and is used in animals to prevent coccidiosis, promote growth and prevent bloat. Derivatives of monensin, monensin methyl ester and particularly monensin decyl ester, are used in ion selective electrodes.

References

1. Structure of monensic acid, a new biologically active compound. Agtarap A. et al., J. Am. Chem. Soc. 1967, 89, 5737.
2. Molecular structure of monovalent metal cation complexes of monensin. Pinkerton M. et al., J. Mol. Biol. 1970, 48, 533