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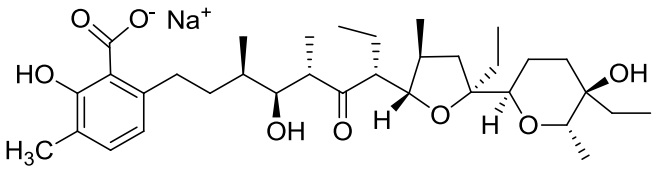
PRODUCT DATA SHEET

Lasalocid sodium

Code No.: **BIA-L1302**

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



Synonyms : Avatec, Bovatec, Ro 2-2985, X 537A

Specifications

CAS #	:	**25999-20-6**
Molecular Formula	:	**$C_{34}H_{53}NaO_8$**
Molecular Weight	:	**612.8**
Source	:	***Streptomyces* sp.**
Appearance	:	**White solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.**

Application Notes

Lasalocid sodium is a salt of the polyether ionophore lasalocid, with potent antibacterial activity. Lasalocid was developed as an animal health product for treatment of coccidia. Lasalocid is able to form neutral complexes with monovalent and divalent cations and transport the ions through apolar phase, including lipid bilayer membranes. Interestingly, lasalocid can also transport larger organic cations, e.g. protonated dopamine.

References

1. The Isolation of three new crystalline antibiotics from Streptomyces. Berger J. et al., J. Am. Chem. Soc. 1951, 73, 5295.
2. Structure of antibiotic X-537A. Westley J. W. J. Chem. Soc. D, 1970, 71.
3. Biosynthesis of antibiotic X-537A. Westley, J.W. et al., J. Chem. Soc. D, 1970, 1467.
4. Biogenic amine-ionophore interactions: Structure and dynamics of lasalocid (X537A) complexes with phenethylamines and catecholamines in nonpolar solution. Shen C. & Patel D. J. Proc Natl Acad Sci USA. 1977, 74, 4734.
5. The effect of amine structure on complexation with lasalocid in model membrane systems. I. Identification of charged complexes in lipid bilayer membranes. Kinsel J.F. Biochim Biophys Acta. 1982, 684, 233.

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