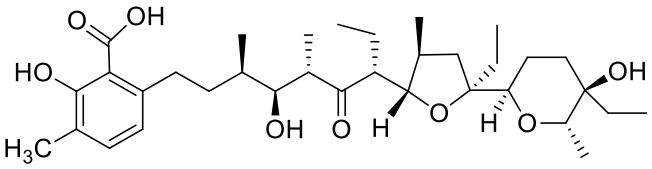
PRODUCT DATA SHEET

Lasalocid

Code No.: **BIA-L1533**

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



Synonyms : X 537A, Lasalocid A

Specifications

CAS #	:	**25999-31-9**
Molecular Formula	:	**$C_{34}H_{54}O_8$**
Molecular Weight	:	**590.8**
Source	:	***Streptomyces* 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

Lasalocid is a polyether ionophore with potent antibacterial activity isolated from Streptomyces lasaliensis, first reported in 1951. 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. 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. U.S.A. 1977, 74, 4734.

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