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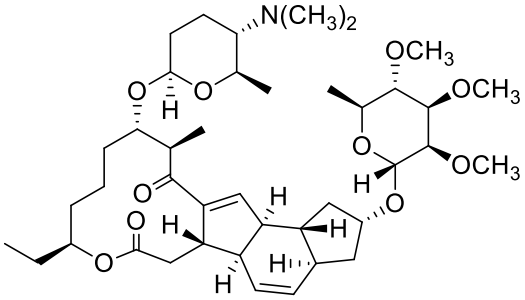
PRODUCT DATA SHEET

Spinosyn A

Code No.: **BIA-S1337**

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



Synonyms : Lepicidin A, A 83543A, LY 232105

Specifications

CAS #	:	**131929-60-7**
Molecular Formula	:	**$C_{41}H_{65}NO_{10}$**
Molecular Weight	:	**732**
Source	:	***Saccharopolyspora spinosa***
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

Spinosyn A is the major component of a complex of unusual, hydrophobic macrocyclic lactones isolated from Saccharopolyspora spinosa in 1991. The 12-membered macrocyclic lactone is fused to form a rare 12-5-6-5 tetracyclic ring system, with the macrocycle and the terminal cyclopentane bearing glycosides. Spinosyn A is a potent insecticide for crop pathogens and ectoparasite control on animals. The spinosyns have a unique mechanism of action involving disruption of nicotinic acetylcholine receptors.

References

1. A 83543A-D, unique fermentation-derived tetracyclic macrolides. Kirst H.A. et al., Tetrahedron Lett. 1991, 32, 4839.
2. The spinosyn family of insecticides: realizing the potential of natural products research. Kirst H.A. J. Antibiot. 2010, 63, 101.

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