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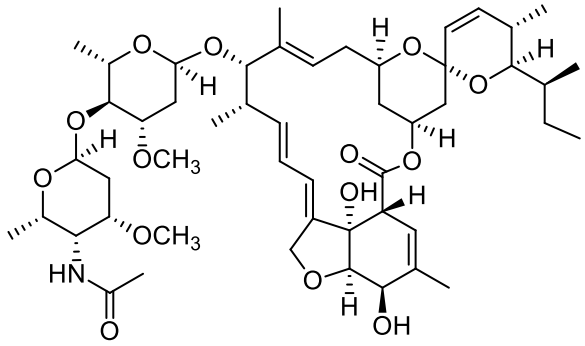
PRODUCT DATA SHEET

Eprinomectin B1a

Code No.: **BIA-E1547**

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



Synonyms :

Specifications

CAS #	:	**133305-88-1**
Molecular Formula	:	**$C_{50}H_{75}NO_{14}$**
Molecular Weight	:	**914.1**
Source	:	**Semi-synthetic**
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

Eprinomectin B1a is a semi-synthetic analogue of avermectin B1a prepared by oxidation of the 4”-hydroxy moiety and reductive amination followed by acetylation. Eprinomectin B1a is the major component (>90%) of the commercial product for endo- and exo-parasite control, eprinomectin. Members of the avermectin/milbemycin class exert their anthelmintic effects by binding to glutamate-gated chloride channels expressed on nematode neurones and pharyngeal muscle cells. The avermectins and milbemycins are also potent insecticides and acaricides.

References

1. 4-Keto- and 4-amino-4-deoxy avermectin compounds and substituted amino derivatives thereof. Mrozik H.H. et al., 1984 US Patent 4,427,663.
2. Synthesis of 4"-*epi*-amino-4"-deoxyavermectins B1. Cvetovich R.J. et al., J. Org. Chem. 1994, 59, 7704.
3. Efficacy in sheep and pharmacokinetics in cattle that led to the selection of eprinomectin as a topical endectocide for cattle. Shoop W.L. et al., Int. J. Parasitol. 1996, 26, 1227.

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