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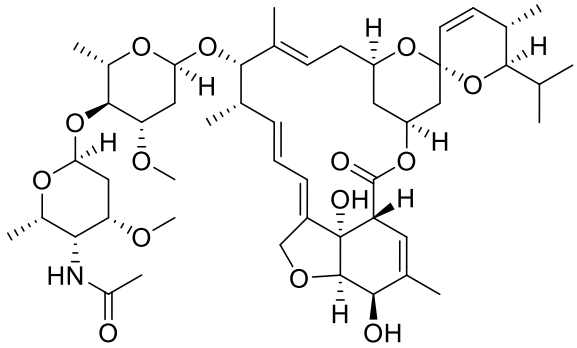
PRODUCT DATA SHEET

Eprinomectin B1b

Code No.: **BIA-E1548**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : -

Specifications

CAS #	:	**133305-89-2**
Molecular Formula	:	**$C_{49}H_{73}NO_{14}$**
Molecular Weight	:	**900.1**
Source	:	**Semi-synthetic**
Appearance	:	**White solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol, DMSO. Poor water solubility.**

Application Notes

Eprinomectin B1b is a semi-synthetic analogue of avermectin B1b prepared by oxidation of the 4”-hydroxy moiety and reductive amination followed by acetylation. Eprinomectin B1b is the minor component (<10%) 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.

For in vitro laboratory use only. Not for human or animal use.

Updated: 14 November 2025

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