

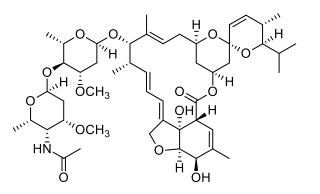
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**Eprinomectin B1b** 

## PRODUCT DATA SHEET

Code No.: BIA-E1548

Pack sizes: 0.5 mg, 2.5 mg



Synonyms

## Specifications

CAS #	:	133305-89-2
Molecular Formula	:	C49H73NO14
Molecular Weight	:	900.1
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 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.

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