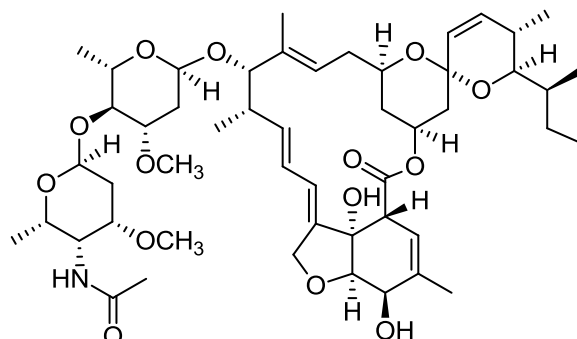


## Eprinomectin B1a

Code No.: **BIA-E1547**

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



Synonyms :

## Specifications

CAS #	: <b>133305-88-1</b>
Molecular Formula	: <b>C<sub>50</sub>H<sub>75</sub>NO<sub>14</sub></b>
Molecular Weight	: <b>914.1</b>
Source	: <b>Semi-synthetic</b>
Appearance	: <b>White solid</b>
Purity	: <b>&gt;99% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.</b>

## 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.

Updated: 2 December 2014