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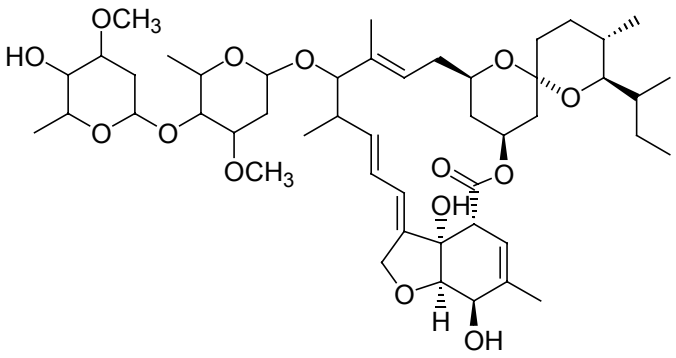
PRODUCT DATA SHEET

Dihydroavermectin B1a

Code: **BIA-D1119**

Pack sizes: **1.0 mg, 5.0 mg**



Synonyms : **Ivermectin, Ivermectin B1a, 22, 23-Dihydro-avermectin B1a**

Specifications

CAS #	:	**70161-11-4**
Molecular Formula	:	**$C_{48}H_{74}O_{14}$**
Molecular Weight	:	**875.1**
Source	:	***Streptomyces avermitilis* MST-AS4526, semi-synthetic**
Appearance	:	**White solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO.**

Application Notes

Dihydroavermectin B1a is the major component (>80%) of the commercial anthelmintic, ivermectin. Members of the avermectin/milbemycin anthelmintic 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. The individual 25-sec-butyl (B1a) and 25-iso-propyl (B1b) components of ivermectin have received little separate study.

References

1. Ivermectin, a new broad-spectrum antiparasitic agent. Chabala J.C. et al. *J. Med. Chem.* **1980**, 23, 1134.
2. Glutamate-gated chloride channels and the mode of action of the avermectin/milbemycin anthelmintics. Wolstenholme A.J & Rogers A.T. *Parasitology*, **2005**, 131, S85.
3. Avermectin/milbemycin resistance in trichostrongylid nematodes. Gill J.H. & Lacey E. *Int. J. Parasitol.* **1998**, 28, 863.
4. Ivermectin: a potent new antiparasitic agent. Campbell W.C. et al., *Science*, **1983**, 221, 823.

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