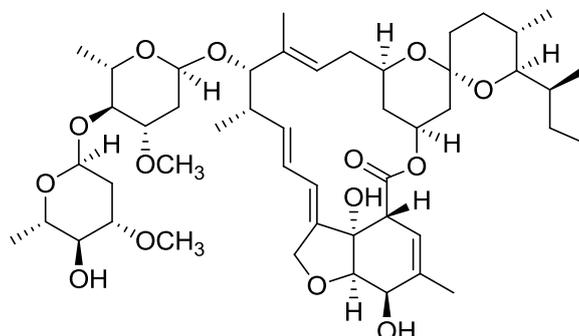


## Ivermectin B1a

Code No.: **BIA-I1119**

Pack sizes: **5 mg, 25 mg**



Synonyms : Dihydroavermectin B1a, Ivermectin, 22,23-Dihydroavermectin B1a

### Specifications

CAS #	: 70161-11-4
Molecular Formula	: C <sub>48</sub> H <sub>74</sub> O <sub>14</sub>
Molecular Weight	: 875.1
Source	: <b>Semi-synthetic</b>
Appearance	: <b>White solid</b>
Purity	: <b>&gt;95% 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

Ivermectin B1a (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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