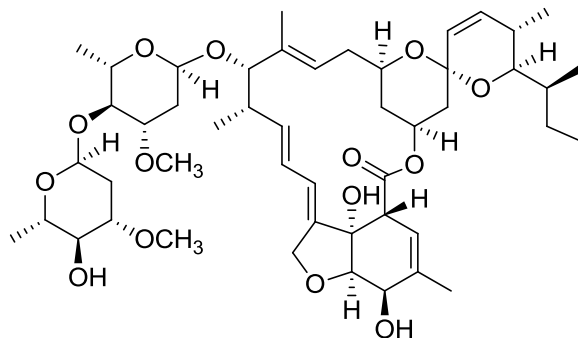


Avermectin B1a

Code No.: **BIA-A1010**

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



Synonyms : 5-O-Demethylavermectin A1a, C 076B1a

Specifications

CAS #	: 65195-55-3
Molecular Formula	: C ₄₈ H ₇₂ O ₁₄
Molecular Weight	: 873.1
Source	: <i>Streptomyces avermitilis</i>
Appearance	: White solid
Purity	: >99% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Avermectin B1a is the major component (>80%) of a commercially available anthelmintic used to control parasitic nematodes in livestock. Avermectin B1a contains a sec-butyl residue in the 25-position. In vitro and in vivo studies have shown that this analogue is the more potent analogue in the commercial product.

References

1. Avermectin B1a irreversibly blocks postsynaptic potentials at the lobster neuromuscular junction by reducing muscle membrane resistance. Fritz L.C. et al., Proc Natl Acad Sci USA 1979, 76, 2062.
2. Solubilization and characterization of a high affinity ivermectin binding site from *Caenorhabditis elegans*. Cully D.F. et al., Mol Pharmacol. 1991, 40, 326.
3. Glutamate-gated chloride channels and the mode of action of the avermectin/milbemycin anthelmintics. Wolstenholme A.J. and Rogers A.T. Parasitology 2005, 131, S85-95.