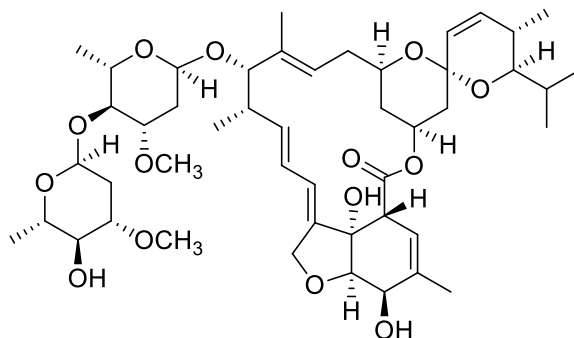


## Avermectin B1b

Code No.: **BIA-A1011**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : C 076B1b

### Specifications

CAS #	: 65195-56-4
Molecular Formula	: <b>C<sub>47</sub>H<sub>70</sub>O<sub>14</sub></b>
Molecular Weight	: <b>859.1</b>
Source	: <b><i>Streptomyces avermitilis</i></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

Avermectin B1b is the minor component (<20%) of a commercially available anthelmintic used to control parasitic nematodes in livestock. Avermectin B1b contains an isopropyl residue in the 25-position. In vitro and in vivo studies have shown this analogue to be active, but less potent than the B1a analogue

### References

1. Avermectin B1a irreversibly blocks postsynaptic potentials at the lobster neuromuscular junction by reducing muscle membrane resistance. Fritz L.C. et al., et al., Proc Natl Acad Sci U S A. 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 (Review).