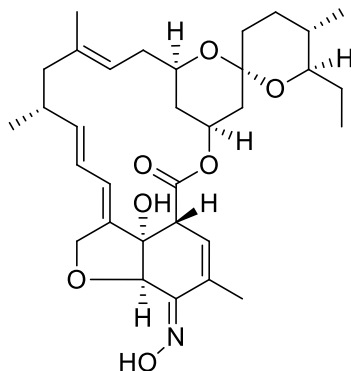


Milbemycin A4 oxime

Code No.: **BIA-M1532**

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



Synonyms : 5-Oxomilbemycin A4 oxime

Specifications

CAS #	: 93074-04-5
Molecular Formula	: $C_{32}H_{45}NO_7$
Molecular Weight	: 555.7
Source	: Semi-synthetic
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Milbemycin A4 oxime is a semi-synthetic macrocyclic lactone prepared by the oxidation and oximation of milbemycin A4. Milbemycin A4 oxime is the major component (~70%) in the commercial product, milbemycin oxime, marketed for endo- and exo-parasite infections. Like the other milbemycin/ivermectins, milbemycin A4 oxime acts by opening glutamate sensitive chloride channels in neurons of invertebrates, leading to paralysis by hyperpolarisation of these cells and signal transfer blocking.

References

1. Synthesis of 5-keto-5-oxime derivatives of milbemycins and their activities against microfilariae. Tsukamoto Y. et al., Agric. Biol. Chem. 1991, 55, 2615.
2. Effects of milbemycin on adult *Toxocara canis* in dogs with experimentally induced infection. Bowman D.D. et al., Am. J. Vet. Res. 1988, 49, 1986.