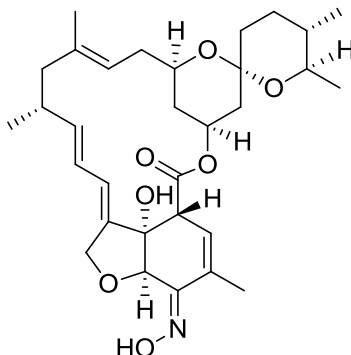


## Milbemycin A3 oxime

Code No.: **BIA-M1531**

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



Synonyms : 5-Oxomilbemycin A3 oxime

### Specifications

CAS #	: 114177-14-9
Molecular Formula	: C <sub>31</sub> H <sub>43</sub> NO <sub>7</sub>
Molecular Weight	: 541.7
Source	: Semi-synthetic
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

Milbemycin A3 oxime is a semi-synthetic macrocyclic lactone prepared by the oxidation and oximation of milbemycin A3. Milbemycin A3 oxime is the minor component (~30%) in the commercial product milbemycin oxime, marketed for endo- and exo-parasite infections. Like the other milbemycin/ivermectins, milbemycin A3 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.

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