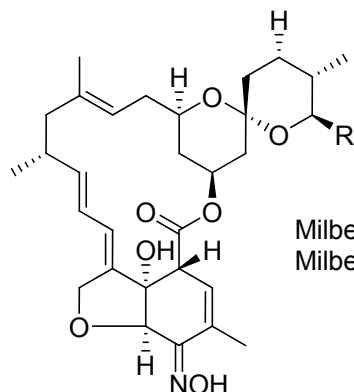


Milbemycin oxime

Code: **BIA-M1299**

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



Milbemycin A3 oxime R = CH₃
Milbemycin A4 oxime R = CH₂CH₃

Synonyms : **Interceptor**

Specifications

CAS # : **129496-10-2**
Molecular Formula : **C₃₁H₄₃NO₇ & C₃₂H₄₅NO₇**
Molecular Weight : **541.7, 555.7**
Source : **Semi-synthetic**
Appearance : **White solid**
Purity : **>95%**
Storage : **-20°C**
Solubility : **Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.**

Application Notes

Milbemycin oxime is a semi-synthetic macrocyclic lactone prepared by the oxidation and oximation of a mixture of two natural products, milbemycin A3 and A4 (in ~70: 30 ratio). Moxidectin oxime, marketed as Interceptor, is used therapeutically for the prevention of intestinal parasites in dogs. Like the other milbemycin/avermectins, it was developed for intestinal parasite control in animals and 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.