

PRODUCT DATA SHEET

Milbemycin A3

Code: **BIA-M1051**

Pack sizes: 1.0 mg, 5.0 mg

Synonyms : Antibiotic B 41A3, Milbemycin α1, Milbemectin

Specifications

CAS # : 51596-10-2 Molecular Formula : $C_{31}H_{44}O_7$ Molecular Weight : 528.7

Source : Streptomyces hygroscopicus subsp. aureolacrimosus MST-AS4496

Appearance : White Lyophilisate
Purity : > 95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Milbemycins are a complex family of macrocyclic lactones containing a highly characteristic spiroketal group produced by *Streptomyces hydroscopicus* subsp. *aureolarcrimosus*. Milbemycin A3 is a major member of a group of analogues containing a 25-methyl substituent. Milbemycin A3 is a highly selective and potent nematocide and insecticide. Like the closely related avermectins, milbemycins are thought to act on chloride-gated ion channels.

References

1. Milbemycins, a new family of macrolide antibiotics: fermentation, isolation and physico-chemical properties. Takiguchi Y. et al. *J. Antibiot.* **1980**, 33, 1120.

2. Milbemycins, a new family of macrolide antibiotics: producing organism and its mutants. Okazaki T. et al. *J. Antibiot.* **1983**, 36, 438.