

PRODUCT DATA SHEET

Code No.: BIA-M1051

Pack sizes: 1 mg, 5 mg

Milbemycin A3

Synonyms : B 41A3, Milbemycin alpha1, Milbemectin, Milbemectin A3

Specifications

CAS # : 51596-10-2 Molecular Formula : $C_{31}H_{44}O_{7}$ Molecular Weight : 528.7

Source : Streptomyces hygroscopicus

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

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 by opening glutamate sensitive chloride 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.

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