

PRODUCT DATA SHEET

Code No.: BIA-M1052

Pack sizes: 1 mg, 5 mg

Milbemycin A4

Synonyms : B 41A4, Milbemycin alpha3, Milbemectin A4

Specifications

CAS # : 51596-11-3 Molecular Formula : $C_{32}H_{46}O_7$ Molecular Weight : 542.7

Source : Streptomyces hygroscopicus subsp. aureolacrimosus

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 A4 is the dominant member of a group of analogues containing a 25-ethyl substituent. Milbemycin A4 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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