

PRODUCT DATA SHEET

Code No.: BIA-M1298

Pack sizes: 5 mg, 25 mg

Synonyms : Cydectin, CL 301,423

Specifications

Moxidectin

CAS # : 113507-06-5 Molecular Formula : $C_{37}H_{53}NO_8$ Molecular Weight : 639.8

Source : Semi-synthetic
Appearance : White solid
Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Moxidectin is a semi-synthetic milbemycin derived from nemadectin by selective oxidation followed by methyloximation. Moxidectin was patented in 1991 as an anthelmintic for internal parasite control. The presence of the methyloxime affords moxidectin a greater hydrophobicity and longer biological half-life compared to nemadectin. Moxidectin binds selectively to parasite glutamate-gated chloride ion channels and disrupts neurotransmission leading to paralysis and death of the parasite.

References

 Process for the preparation of 23-(C1-C6 alkyloxime)-LL-F28249 compounds. Maulding D. R & Kumar A. US Patent 4,988,824 (1991).

2. 2. Moxidectin: a review of chemistry, pharmacokinetics and use in horses. Cobb R. & Boeckh. A. Parasites and Vectors 2009, 2 (Suppl 2) S5.

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