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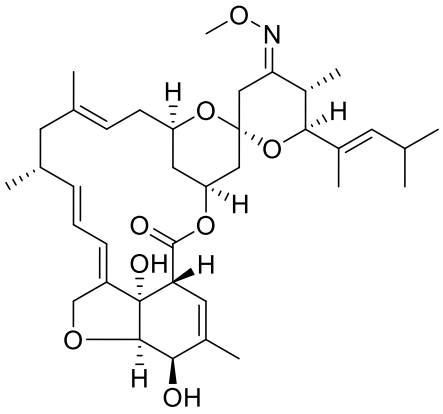
PRODUCT DATA SHEET

Moxidectin

Code No.: **BIA-M1298**

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



Synonyms : Cydectin, CL 301,423

Specifications

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 methanol, 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

1. 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.

For in vitro laboratory use only. Not for human or animal use.

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Building C, 28-54 Percival Road, Smithfield, NSW 2164, AUSTRALIA

Tel: 61 2 9757 4515 Fax: 61 2 9757 2586 Web: www.bioaustralis.com Email: info@bioaustralis.com