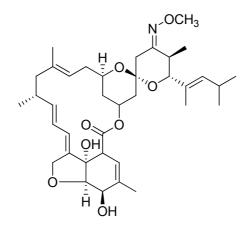


PRODUCT DATA SHEET

Moxidectin

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