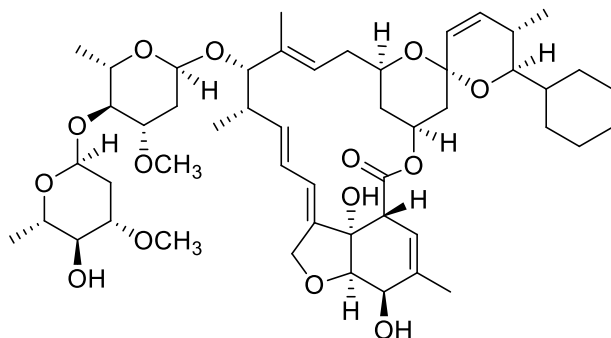


## Doramectin

Code No.: **BIA-D1301**

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



Synonyms : UK67994

## Specifications

CAS #	: 117704-25-3
Molecular Formula	: C <sub>50</sub> H <sub>74</sub> O <sub>14</sub>
Molecular Weight	: 899.1
Source	: <i>Streptomyces</i> sp.
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

Doramectin is a biosynthetic avermectin derived from a mutant strain of *Streptomyces avermitilis*, supplemented with a cyclohexylcaboxylic acid starting unit. Doramectin was developed as an anthelmintic for internal parasite control. The presence of the cyclohexyl group replacing the sec-butyl moiety affords greater hydrophobicity and longer biological half-life compared to avermectin. Like the other milbemycin/avermectins, it selectively binds to parasite glutamate-gated chloride ion channels and disrupts neurotransmission leading to paralysis and death of the parasite.

## References

1. Novel avermectins produced by mutational biosynthesis. Dutton C. J. et al., J. Antibiot. 1991, 44, 357.
2. Doramectin - a novel avermectin. Vercruyse J. Vet. Parasitol. 1993, 49, 1.