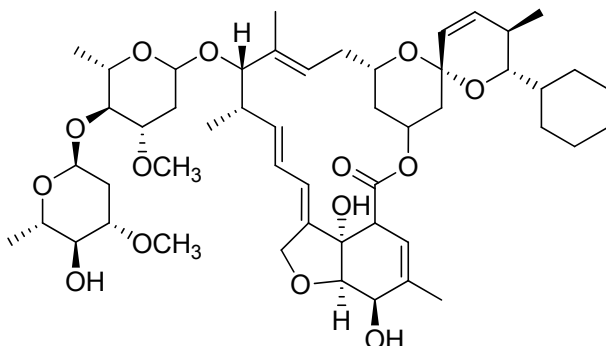


Doramectin

Code: **BIA-D1301**

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



Synonyms : **UK67994, Dectomax**

Specifications

CAS # : **117704-25-3**
Molecular Formula : **C₅₀H₇₄O₁₄**
Molecular Weight : **899.1**
Source : ***Streptomyces* sp., biosynthetic**
Appearance : **White solid**
Purity : **>95%**
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 of the original *Streptomyces avermitilis* strain supplemented with a cyclohexylcarboxylic 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. Duttom C. J. et al. J. Antibiot. 1991, 44, 357.
2. Doramectin - a novel avermectin. Vercruysse J. Vet. Parasitol. 1993, 49, 1.