

PRODUCT INFORMATION



Doramectin monosaccharide

Item No. 23823

CAS Registry No.: 165108-44-1

Formal Name: 25-cyclohexyl-4'-O-de(2,6-dideoxy-3-O-methyl- α -L-arabinohexopyranosyl)-5-O-demethyl-25-de(1-methylpropyl)-avermectin A_{1a}

MF: C₄₃H₆₂O₁₁

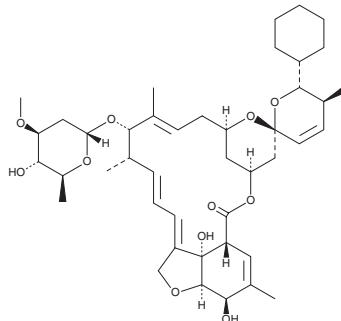
FW: 755.0

Purity: $\geq 95\%$

Supplied as: A solid

Storage: -20°C

Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Doramectin monosaccharide is supplied as a solid. A stock solution may be made by dissolving the doramectin monosaccharide in the solvent of choice, which should be purged with an inert gas. Doramectin monosaccharide is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Description

Doramectin monosaccharide is an acid degradation product of doramectin (Item No. 19467), a disaccharide-containing anthelmintic that potentiates glutamate- and GABA-gated chloride channel opening in nematodes.¹⁻³ Doramectin undergoes acid-catalyzed hydrolysis to form doramectin monosaccharide.

References

- Holden-Dye, L. and Walker, R.J. Anthelmintic drugs and nematicides: Studies in *Caenorhabditis elegans*. *WormBook* **16**, 1-29 (2014).
- Michael, B., Meinke, P.T., and Shoop, W. Comparison of ivermectin, doramectin, selamectin, and eleven intermediates in a nematode larval development assay. *J. Parasitol.* **87**(3), 692-696 (2001).
- Moore, A.F., Lacey, H.J., Crombie, A., et al. Primary pH degradation products of doramectin. *Tetrahedron Lett.* **57**(37), 4224-4227 (2016).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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