

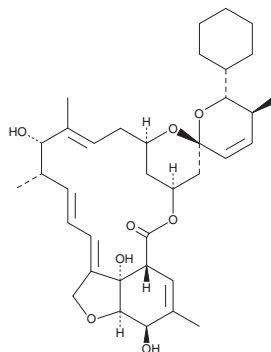
# PRODUCT INFORMATION



## Doramectin aglycone

Item No. 23655

**CAS Registry No.:** 1987883-26-0  
**Formal Name:** 25R-cyclohexyl-22,23-didehydro-5-O-demethyl-28-deoxy-6R,28-epoxy-13S-hydroxy-milbemycin B  
**MF:** C<sub>36</sub>H<sub>50</sub>O<sub>8</sub>  
**FW:** 610.8  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 246 nm  
**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 aglycone is supplied as a solid. A stock solution may be made by dissolving the doramectin aglycone in the solvent of choice, which should be purged with an inert gas. Doramectin aglycone is soluble in organic solvents such as methanol, ethanol, DMSO, and dimethyl formamide.

### Description

Doramectin aglycone 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, and its acid-catalyzed hydrolysis product doramectin monosaccharide (Item No. 23823).<sup>1-3</sup> Doramectin undergoes one round of acid-catalyzed hydrolysis to form doramectin monosaccharide which is then hydrolyzed again to remove the remaining saccharide unit and form doramectin aglycone.

### References

1. Holden-Dye, L. and Walker, R.J. Anthelmintic drugs and nematicides: Studies in *Caenorhabditis elegans*. *WormBook* **16(143.2)** (2014).
2. Hong, B., Prabhu, V.V., Zhang, S., *et al.* Prodigiosin rescues deficient p53 signaling and antitumor effects via upregulating p73 and disrupting its interaction with mutant p53. *Cancer Res.* **74(4)**, 1153-1165 (2014).
3. 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM