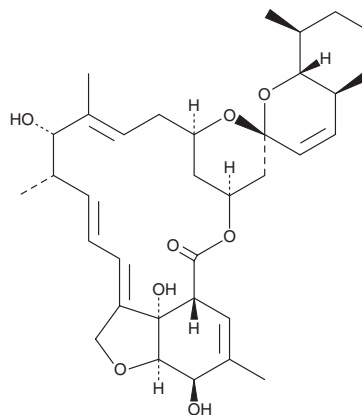


PRODUCT INFORMATION



Avermectin B_{1a} aglycone Item No. 28051

CAS Registry No.: 71828-14-3
Formal Name: (6R,13S,25R)-22,23-didehydro-5-O-demethyl-28-deoxy-6,28-epoxy-13-hydroxy-25-[(1S)-1-methylpropyl]-milbemycin B
MF: C₃₄H₄₈O₈
FW: 584.7
Purity: ≥95%
UV/Vis.: λ_{max}: 247 nm
Supplied as: A crystalline 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

Avermectin B_{1a} aglycone is supplied as a solid. A stock solution may be made by dissolving the avermectin B_{1a} aglycone in the solvent of choice, which should be purged with an inert gas. Avermectin B_{1a} aglycone is soluble in organic solvents such as ethanol, methanol, and DMSO.

Description

Avermectin B_{1a} aglycone is an aglycone form of the anthelmintic and insecticide avermectin B_{1a} (Item No. 22000).¹ It hyperpolarizes *P. crassipes* muscle fibers with a minimum active concentration (MAC) value of 0.1 μM. Avermectin B_{1a} aglycone decreases survival of *C. elegans* (MAC = 0.1 μM). *In vivo*, avermectin B_{1a} aglycone prevents seizures induced by pentylenetetrazole (PTZ; Item No. 18682) in mice (ED₅₀ = 43.9 mg/kg) without inducing deficits in rotarod performance.²

References

1. Bowman, J.W., Lee, B.L., Whaley, H.A., *et al.* Effects of dihydroavermectin B_{1a} and analogs on stretcher muscle of the lined shore crab, *Pachygrapsus crassipes*. *Comp. Biochem. Physiol.* **99(3)**, 333-340 (1991).
2. Dawson, G.R., Wafford, K.A., Smith, A., *et al.* Anticonvulsant and adverse effects of avermectin analogs in mice are mediated through the γ-aminobutyric acid_A receptor. *J. Pharmacol. Exp. Ther.* **295(3)**, 1051-1060 (2000).

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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