

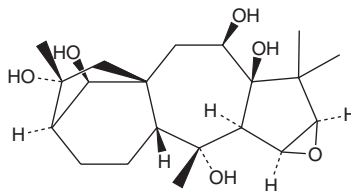
PRODUCT INFORMATION



Rhodojaponin III

Item No. 36345

CAS Registry No.: 26342-66-5
Formal Name: 2β,3β-epoxy-grayanotoxane-5,6β,10,14R,16-pentol
MF: C₂₀H₃₂O₆
FW: 368.5
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Rhododendron molle*



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

Laboratory Procedures

Rhodojaponin III is supplied as a solid. A stock solution may be made by dissolving the rhodojaponin III in the solvent of choice, which should be purged with an inert gas. Rhodojaponin III is soluble in the organic solvent DMSO at a concentration of approximately 10 mM.

Description

Rhodojaponin III is a diterpenoid that has been found in *R. molle* and has insecticidal and antinociceptive activities.^{1,2} It reduces pupation and the number of Colorado potato beetle (*L. decemlineata*) larvae on, and damage to, potato plants when applied at concentrations of 75 and 150 ppm.¹ It also induces mortality in adult confused flour beetles (*T. confusum*). Rhodojaponin III has antinociceptive effects in mouse models of chemical, inflammatory, and neuropathic pain.² It reduces acetic acid-induced writhing in mice (ID₅₀ = 0.0469 mg/kg) and increases the paw withdrawal threshold for mechanical stimuli in a mouse model of diabetic peripheral neuropathic pain when administered at doses of 0.04 and 0.08 mg/kg. Rhodojaponin III is toxic to mice with an LD₅₀ value of 0.271 mg/kg.

References

1. Mei-Ying, H., Klocke, J.A., Chiu, S.-F., *et al.* Response of five insect species to a botanical insecticide, rhodojaponin III. *J. Econ. Entomol.* **86**(3), 706–711 (1993).
2. Li, Y., Liu, Y.-B., Zhang, J.-J., *et al.* Antinociceptive grayanoids from the roots of *Rhododendron molle*. *J. Nat. Prod.* **78**(12), 2887–2895 (2015).

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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