

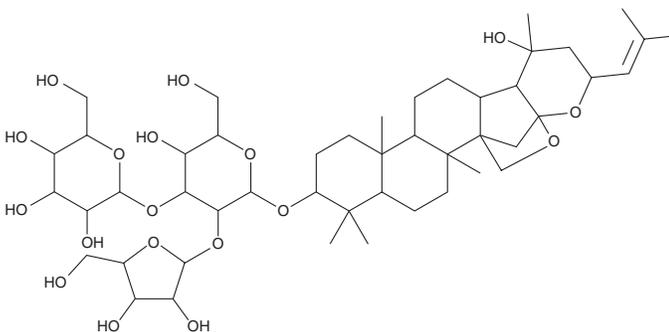
PRODUCT INFORMATION



Bacoside A₃ Item No. 11824

CAS Registry No.: 157408-08-7
Formal Name: (3β,16β,23R)-16,23:16,30-diepoxy-20-hydroxydammar-24-en-3-yl O-α-L-arabinofuranosyl-(1→2)-O-[β-D-glucopyranosyl-(1→3)]-β-D-glucopyranoside

Synonym: Bacopa Pgp
MF: C₄₇H₇₆O₁₈
FW: 929.1
Purity: ≥98%
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

Bacoside A₃ is supplied as a solid. A stock solution may be made by dissolving the bacoside A₃ in the solvent of choice, which should be purged with an inert gas. Bacoside A₃ is very slightly soluble in organic solvents such as methanol and pyridine.

Description

Bacoside A₃ is a triterpenoid saponin first isolated from *B. monniera*.¹ Bacoside A₃ inhibits the ATP-binding cassette transporter P-glycoprotein (P-gp), decreasing efflux 4-fold compared with control *in vitro*.² An extract containing bacoside A₃ and bacoside II (4 and 1.3 μg/mg extract, respectively) administered for eight days at a dose of 10-30 mg/kg reduces opioid withdrawal-induced depression in mice using the forced swim test.³ Bacoside A₃ also has antioxidant properties following liver and kidney damage induced by street heroin in rats.⁴

References

1. Rastogi, S., Pal, R., Kulshreshtha, and D.K. Bacoside A3-a triterpenoid saponin from *Bacopa monniera*. *Phytochemistry* **36(1)**, 133-137 (1994).
2. Singh, R., Rachumallu, R., Bhateria, M., *et al.* *In vitro* effects of standardized extract of *Bacopa monniera* and its five individual active constituents on human P-glycoprotein activity. *Xenobiotica* **45(8)**, 741-749 (2015).
3. Rauf, K., Subhan, F., Abbas, M., *et al.* Inhibitory effect of bacosides on spontaneous morphine withdrawal induced depression in mice. *Phytother. Res.* **28(6)**, 937-939 (2014).
4. Shahid, M., Subhan, F., Ullah, I., *et al.* Beneficial effects of *Bacopa monnieri* extract on opioid induced toxicity. *Heliyon* **2(2)**, e00068 (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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