# PRODUCT INFORMATION



## Bacopaside X

Item No. 11851

CAS Registry No.: 94443-88-6

Formal Name: (3β,16β,23R)-16,23:16,30-diepoxy-

> 20-hydroxydammar-24-en-3-yl  $O-\alpha$ -L-arabinofuranosyl- $(1\rightarrow 2)$ -O-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]- $\alpha$ -L-

arabinopyranoside

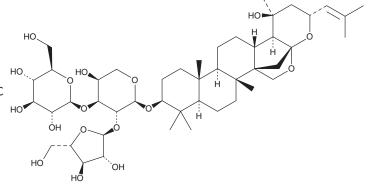
Synonyms: Bacopaside VII,

Jujubogenin isomer of Bacopasaponin C

MF:  $C_{46}H_{74}O_{17}$ FW: 899.1 ≥95% **Purity:** Supplied as: A solid Storage: -20°C Stability: ≥4 years

Item Origin: Plant/Bacopa monnieri

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



### **Laboratory Procedures**

Bacopaside X is supplied as a solid. A stock solution may be made by dissolving the bacopaside X in the solvent of choice, which should be purged with an inert gas. Bacopaside X is soluble in DMSO.

#### Description

Bacopaside X is a triterpenoid saponin that has been found in B. monniera and has antifungal and anticancer activities.<sup>1-3</sup> It inhibits the growth of the fungi C. albicans, C. neoformans, and A. fumigatus (MIC = 50 µg/ml for all).<sup>2</sup> Bacopaside X decreases the proliferation of MDA-MB-231, SHG44, HCT8, A549, and PC3M cancer cell lines with IC<sub>50</sub> values of 14.3, 15.9, 9.8, 9.7, and 10.1  $\mu$ M, respectively.<sup>3</sup> It reduces tumor growth by 84.13% in an S180 sarcoma mouse allograft model when administered at a dose of 50 μmol/kg.

#### References

- 1. Zhou, Y., Shen, Y.-H., Zhang, C., et al. Triterpene saponins from Bacopa monnieri and their antidepressant effects in two mice models. J. Nat. Prod. 70(4), 652-655 (2007).
- 2. Li, X.-C., ElSohly, H.N., Nimrod, A.C., et al. Antifungal jujubogenin saponins from Colubrina retusa. J. Nat. Prod. 62(5), 674-677 (1999).
- 3. Peng, L., Zhou, Y., Kong, D.Y., et al. Antitumor activities of dammarane triterpene saponins from Bacopa monniera. Phytother. Res. 24(6), 864-868 (2010).

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

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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