

PRODUCT INFORMATION



Pulchinenoside B₄

Item No. 30271

CAS Registry No.: 129741-57-7
Formal Name: (3β,4α)-3-[[2-O-(6-deoxy-α-L-mannopyranosyl)-α-L-arabinopyranosyl]oxy]-23-hydroxy-lup-20(29)-en-28-oic acid, O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl ester

Synonyms: Anemoside B₄, Pulchinenoside C

MF: C₅₉H₉₆O₂₆

FW: 1,221.4

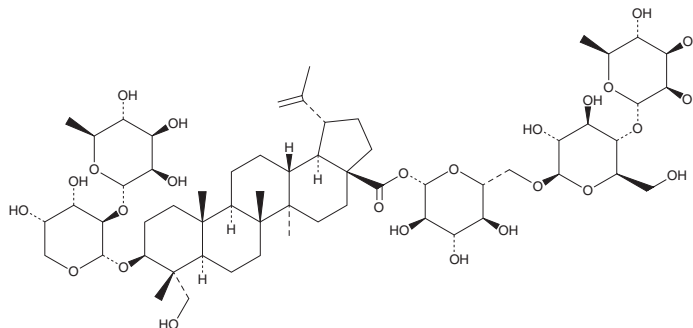
Purity: ≥98%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2 years

Item Origin: Plant/*Pulsatilla chinensis*



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

Laboratory Procedures

Pulchinenoside B₄ is supplied as a crystalline solid. A stock solution may be made by dissolving the pulchinenoside B₄ in the solvent of choice, which should be purged with an inert gas. Pulchinenoside B₄ is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of pulchinenoside B₄ can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of pulchinenoside B₄ in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Pulchinenoside B₄ is a triterpenoid glycoside that has been found in *P. chinensis* and has diverse biological activities.^{1,2} It inhibits cisplatin-induced apoptosis, increases in reactive oxygen species (ROS) production, and decreases in superoxide dismutase (SOD) and catalase activities in HEK293 cells when used at concentrations of 6 and 12 μM.¹ Pulchinenoside B₄ (50 and 100 mg/kg twice per day) prevents increases in plasma blood urea nitrogen (BUN) and creatinine levels, markers of kidney injury, in a mouse model of cisplatin-induced nephrotoxicity. It prevents xylene-induced ear edema in mice in a dose-dependent manner.² Pulchinenoside B₄ (50 mg/kg) inhibits LPS-induced increases in serum TNF-α, IL-6, and IL-1β levels in a mouse model of LPS-induced systemic inflammation.

References

1. Luan, H., Yong, Z., Naixin, K., *et al.* Anemoside B4 attenuates nephrotoxicity of cisplatin without reducing anti-tumor activity of cisplatin. *Phytomedicine* **56**, 136-146 (2019).
2. Kang, N., Shen, W., Zhang, Y., *et al.* Anti-inflammatory and immune-modulatory properties of anemoside B4 isolated from *Pulsatilla chinensis* *in vivo*. *Phytomedicine* **64**, 152934 (2019).

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.

WARRANTY AND LIMITATION OF REMEDY

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