

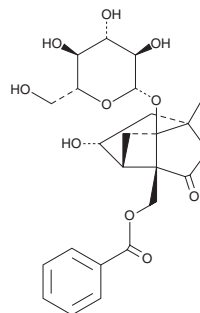
PRODUCT INFORMATION



Albiflorin

Item No. 29744

CAS Registry No.: 39011-90-0
Formal Name: (1R,3R,4R,6S,9S)-9-[(benzoyloxy)methyl]-1-(β-D-glucopyranosyloxy)-4-hydroxy-6-methyl-7-oxatricyclo[4.3.0.0^{3,9}]nonan-8-one
MF: C₂₃H₂₈O₁₁
FW: 480.5
Purity: ≥98%
UV/Vis.: λ_{max}: 230 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/Peony



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

Laboratory Procedures

Albiflorin is supplied as a solid. A stock solution may be made by dissolving the albiflorin in the solvent of choice, which should be purged with an inert gas. Albiflorin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of albiflorin in these solvents is approximately 30 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 albiflorin can be prepared by directly dissolving the solid in aqueous buffers. The solubility of albiflorin in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Albiflorin is a monoterpene glycoside that has been found in *P. lactiflora* and has diverse biological activities.¹⁻³ It prevents increases in reactive oxygen species (ROS), nitrotyrosine, and mitochondrial superoxide levels induced by antimycin A in MC3T3-E1 osteoblastic cells when used at concentrations of 0.1 and 1 μM.¹ Albiflorin (50 mg/kg) increases the paw withdrawal threshold and decreases spinal cord levels of IL-1β, IL-6, TNF-α, and chemokine (C-X-C motif) ligand 1 (CXCL1) in rat model of neuropathic pain induced by chronic constriction injury (CCI).² It decreases the time spent immobile in the forced swim and tail suspension tests in mice when administered at doses of 3.5, 7, and 14 mg/kg, indicating antidepressant-like effects.³

References

1. Suh, K.S., Choi, E.M., Lee, S.Y., *et al.* Protective effect of albiflorin against oxidative-stress-mediated toxicity in osteoblast-like MC3T3-E1 cells. *Fitoterapia* **89**, 33-41 (2013).
2. Zhou, J., Wang, L., Wang, J., *et al.* Paeoniflorin and albiflorin attenuate neuropathic pain via MAPK pathway in chronic constriction injury rats. *Evid. Based Complement. Alternat. Med.* **2016:8082753**, (2016).
3. Wang, Y.-L., Wang, J.-X., Hu, X.-X., *et al.* Antidepressant-like effects of albiflorin extracted From *Radix Paeoniae alba*. *J. Ethnopharmacol.* **179**, 9-15 (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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