

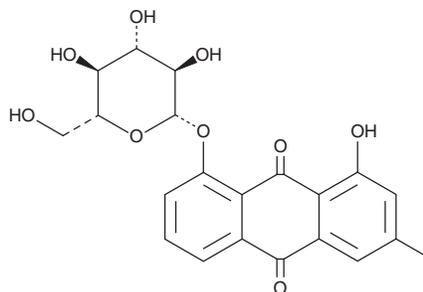
PRODUCT INFORMATION



Pulmatin

Item No. 36343

CAS Registry No.: 13241-28-6
Formal Name: 8-(β-D-glucopyranosyloxy)-1-hydroxy-3-methyl-9,10-anthracenedione
Synonyms: Chrysophanol 8-O-glucoside, Chrysophanol 8-O-β-D-glucopyranoside,
MF: C₂₁H₂₀O₉
FW: 416.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Rheum emodi*



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

Laboratory Procedures

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

Description

Pulmatin is an anthraquinone glycoside that has been found in *R. emodi* and has diverse biological activities.¹⁻³ It inhibits protein tyrosine phosphatase 1B (PTP1B; IC₅₀ = 18.34 μM) and yeast and rat intestinal α-glucosidase when used at a concentration of 50 μg/ml.^{1,2} Pulmatin (25 μM) increases insulin-induced glucose transport by 255% in L6 myotubes.¹ It lowers plasma levels of total cholesterol, phospholipids, LDL, VLDL, and triglycerides in a rat model of Triton WR-1339-induced dyslipidemia when administered at a dose of 100 mg/kg.³

References

1. Lee, M.S. and Sohn, C.B. Anti-diabetic properties of chrysophanol and its glucoside from rhubarb rhizome. *Biol. Pharm. Bull.* **31(11)**, 2154-2157 (2008).
2. Babu, K.S., Tiwari, A.K., Srinivas, P.V., et al. Yeast and mammalian α-glucosidase inhibitory constituents from Himalayan rhubarb *Rheum emodi* Wall.ex Meisson. *Bioorg. Med. Chem. Lett.* **14(14)**, 3841-3845 (2004).
3. Mishra, S.K., Tiwari, S., Shrivastava, A., et al. Antidyslipidemic effect and antioxidant activity of anthraquinone derivatives from *Rheum emodi* rhizomes in dyslipidemic rats. *J. Nat. Med.* **68(2)**, 363-371 (2014).

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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