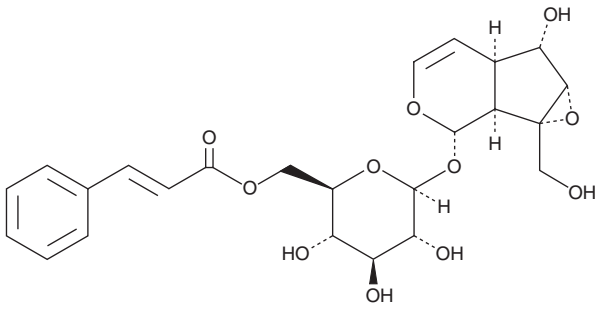
PRODUCT INFORMATION

Picroside I

Item No. 15431

CAS Registry No.: 27409-30-9
Formal Name: 6-[(2E)-3-phenyl-2-propenoate]-1aS,1bS,2S,5aR,6S,6aS-hexahydro-6-hydroxy-1a-(hydroxymethyl)oxireno[4,5]cyclopenta[1,2-c]pyran-2-yl-β-D-glucopyranoside
Synonym: 6'-Cinnamoylcatalpol
MF: $C_{24}H_{28}O_{11}$
FW: 492.5
Purity: ≥98%
UV/Vis.: λ_{max}: 216, 222, 276 nm
Supplied as: A crystalline 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

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

Description

Picroliv is a hepatoprotective mixture of compounds that is isolated from an herb native to the Himalayas.[1] Picroside I is an iridoid glycoside found in picroliv.[1] By itself, picroside I blocks changes in acid phosphatase activity, phospholipid levels, and lipid peroxide production induced by D-galactosamine in rat liver.[2] Picroside I also enhances neurite outgrowth in PC12D cells induced by basic fibroblast growth factor and 7S nerve growth factor when given at 60 µM.[3,4] At concentrations as low as 5 µM, picroside I enhances the ATPase activity of the efflux transporter P-glycoprotein.[5]

References

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3. Li, P., Matsunaga, K., Yamakuni, T., *et al. Eur. J. Pharmacol.* **406(2)**, 203-208 (2000).
4. Li, P., Matsunaga, K., Yamakuni, T., *et al. Life Sci.* **71(15)**, 1821-1835 (2002).
5. Najar, I.A., Sachin, B.S., Sharma, S.C., *et al. Phytother. Res.* **24(3)**, 454-458 (2010).

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