

PRODUCT INFORMATION



Picroside II

Item No. 30319

CAS Registry No.: 39012-20-9

Formal Name: (1aS,1bS,2S,5aR,6S,6aS)-1a,1b,2,5a,6,6a-hexahydro-6-[(4-hydroxy-3-methoxybenzoyl)oxy]-1a-(hydroxymethyl)oxireno[4,5]cyclopenta[1,2-c]pyran-2-yl β-D-glucopyranoside

Synonyms: Ampicoside, Vanilloyl catalpol

MF: C₂₃H₂₈O₁₃

FW: 512.5

Purity: ≥98%

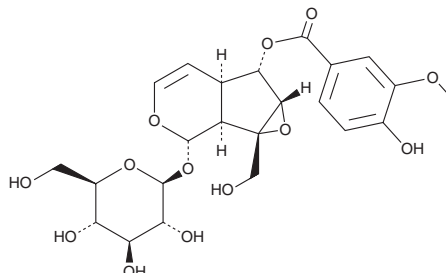
UV/Vis.: λ_{max}: 221, 265, 293 nm

Supplied as: A solid

Storage: -20°C

Stability: ≥2 years

Item Origin: Plant/Radix picrorrhizae



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

Laboratory Procedures

Picroside II is supplied as a solid. A stock solution may be made by dissolving the picroside II in the solvent of choice, which should be purged with an inert gas. Picroside II is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of picroside II in these solvents is approximately 30 mg/ml.

Picroside II is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, picroside II should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Picroside II has a solubility of approximately 0.20 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Picroside II is a flavonoid that has been isolated from *P. kurroa* and has diverse biological activities.¹⁻⁴ It decreases expression of *FATP5* and *SCD*, encoding fatty acid transport protein 5 and steroyl CoA desaturase, respectively, and inhibits free fatty acid-induced lipid accumulation in HepG2 cells when used at a concentration of 10 μM.¹ Picroside II inhibits RANKL-induced osteoclast formation in isolated murine bone marrow cells and decreases the size of bone resorption pits in bovine bone slices.² *In vivo*, picroside II (10 and 60 mg/kg) inhibits LPS-induced trabecular bone loss in a mouse model of inflammatory osteoporosis. It prevents ischemia-reperfusion-induced testicular apoptosis and malondialdehyde (MDA) production in a rat model of testicular torsion.³ Picroside II also reduces airway inflammation, lung mucus hypersecretion, and bronchoalveolar lavage fluid (BALF) inflammatory cell infiltration in a mouse model of house dust mite-induced allergic asthma.⁴

References

1. Dharni-Shah, H., Vaidya, R., Udipi, S., et al. *Clin. Mol. Hepatol.* **24**(1), 77-87 (2018).
2. Yang, X., Gao, W., Wang, B., et al. *J. Cell. Biochem.* **118**(12), 4479-4486 (2017).
3. Li, Y., Wang, L., Chen, Z., et al. *Acta. Cir. Bras.* **34**(11), e201901102 (2019)
4. Choi, J., Choi, B.K., Kim, J.S., et al. *PLoS One* **11**(11), e0167098 (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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