

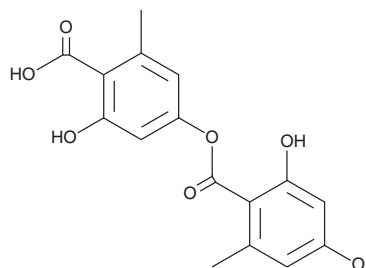
PRODUCT INFORMATION



Lecanoric Acid

Item No. 22710

CAS Registry No.: 480-56-8
Formal Name: 2,4-dihydroxy-6-methyl-benzoic acid,
4-carboxy-3-hydroxy-5-methylphenyl ester
Synonym: NSC 249981
MF: C₁₆H₁₄O₇
FW: 318.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Parmotrema* sp.



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

Laboratory Procedures

Lecanoric acid is supplied as a solid. A stock solution may be made by dissolving the lecanoric acid in the solvent of choice. Lecanoric acid is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide, which should be purged with an inert gas.

Description

Lecanoric acid is a naturally occurring depside polyphenol isolated from a variety of lichens.¹ It is a potent antioxidant, surpassing ascorbic acid in a 2,2-diphenyl-1-picryl-hydrazyl-hydrate (DPPH) free radical scavenging assay (IC₅₀s = 424.51 and 6.42 µg/ml for lecanoric and ascorbic acid, respectively).² Lecanoric acid has antibacterial and antifungal activities with minimum inhibitory concentrations ranging from 0.5 to 1 mg/ml for a panel of fifteen microorganisms. In a cell viability assay, lecanoric acid exhibits antiproliferative activity against HeLa cells (IC₅₀ = 123.97 µg/ml). Lecanoric acid also exhibits antidiabetic and hypolipidemic properties.^{1,3}

References

1. Thadhani, V.M. and Karunaratne, V. Potential of lichen compounds as antidiabetic agents with antioxidative properties: A review. *Oxid. Med. Cell. Longev.* **2017** (2017).
2. Ristić, S., Ranković, B., Kosanić, M., *et al.* Phytochemical study and antioxidant, antimicrobial and anticancer activities of *Melanelia subaurifera* and *Melanelia fuliginosa* lichens. *J. Food. Sci. Technol.* **53(6)**, 2804-2816 (2016).
3. Wei, A.-H., Zhou, D.-N., Ruan, J.-L., *et al.* Characterisation of phenols and antioxidant and hypolipidaemic activities of *Lethariella cladonioides*. *J. Sci. Food Agric.* **92(2)**, 373-379 (2012).

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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