

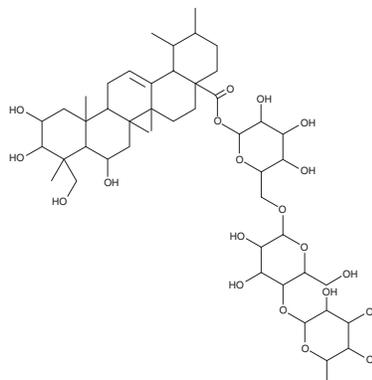
PRODUCT INFORMATION



Madecassoside

Item No. 11855

CAS Registry No.: 34540-22-2
Formal Name: (2 α ,3 β ,4 α ,6 β)-2,3,6,23-tetrahydroxyurs-12-en-28-oic acid-O-6-deoxy- α -L-mannopyranosyl-(1 \rightarrow 4)-O- β -D-glucopyranosyl-(1 \rightarrow 6)- β -D-glucopyranosyl ester
Synonym: Asiaticoside A
MF: C₄₈H₇₈O₂₀
FW: 975.1
Purity: \geq 98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Plant/*Centella asiatica*



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

Laboratory Procedures

Madecassoside is supplied as a crystalline solid. A stock solution may be made by dissolving the madecassoside in the solvent of choice, which should be purged with an inert gas. Madecassoside is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of madecassoside in these solvents is approximately 5, 10, and 25 mg/ml, respectively.

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 madecassoside can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of madecassoside in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Madecassoside is a triterpenoid saponin found in the tropical Asian plant *C. asiatica*.¹ It has a wide range of reported anti-inflammatory, wound healing, and antioxidant activities and has been shown to suppress LPS-induced TNF- α production *via* inhibition of ERK, p38, and NF- κ B activity.^{2,3}

References

1. Hashim, P., Sidek, H., Helan, M.H.M., *et al.* Triterpene composition and bioactivities of *Centella asiatica*. *Molecules* **16**(2), 1310-1322 (2011).
2. Su, Z., Ye, J., Qin, Z., *et al.* Protective effects of madecassoside against Doxorubicin induced nephrotoxicity *in vivo* and *in vitro*. *Sci. Rep.* **14**(5), 18314 (2015).
3. Huo, Q., Li, M., Lu, Y.-H., *et al.* Burn wound healing properties of asiaticoside and madecassoside. *Exp. Ther. Med.* **12**(3), 1269-1274 (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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