



Product Information

Product ID M0113

CAS No. 34540-22-2

Chemical Name

Synonym

Formula C₄₈H₇₈O₂₀

Formula Wt. 975.12

Melting Point

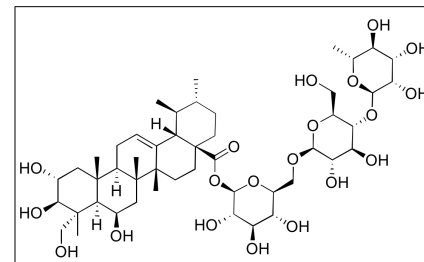
Purity ≥90%

Solubility Soluble in water (10 mg/mL).

Store Temp Ambient

Ship Temp Ambient

Description Madecassoside is a triterpenoid found in *Centella* that exhibits anti-inflammatory, antioxidative, anti-fibrotic, neuroprotective, and cardioprotective activities. In animal models of cerebral ischemia/reperfusion, madecassoside downregulates expression of malondialdehyde, NO, and pro-inflammatory cytokines, prevents apoptosis, decreases infarct size, and attenuates cognitive deficits. Madecassoside protects neurons against amyloid-β (Aβ)-induced inflammation and autophagy; it also shows potential benefit in animal models of Parkinson's disease. Additionally, madecassoside downregulates expression of α-smooth muscle actin and TGF-β1, attenuates phosphorylation of Smad2/3, decreases myeloperoxidase activity and malondialdehyde levels, and increases superoxide dismutase and glutathione levels, ameliorating pulmonary fibrosis. This compound also decreases infarct size, lowers levels of lactate dehydrogenase, malondialdehyde, and creatine kinase, and suppresses apoptosis, providing protection in myocardial ischemia/reperfusion models.



Bulk quantities available upon request

Product ID	Size
M0113	25 mg
M0113	100 mg
M0113	250 mg
M0113	1 g

References Luo Y, Yang YP, Liu J, et al. Neuroprotective effects of madecassoside against focal cerebral ischemia reperfusion injury in rats. *Brain Res.* 2014 May 27;1565:37-47. PMID: 24735651.

Du B, Zhang Z, Li N. Madecassoside prevents Aβ(25-35)-induced inflammatory responses and autophagy in neuronal cells through the class III PI3K/Beclin-1/Bcl-2 pathway. *Int Immunopharmacol.* 2014 May;20(1):221-8. PMID: 24631516.

Lu GX, Bian DF, Ji Y, et al. Madecassoside Ameliorates Bleomycin-Induced Pulmonary Fibrosis in Mice by Downregulating Collagen Deposition. *Phytother Res.* 2014 Jan 23. [Epub ahead of print]. PMID: 24458872.

Bian GX, Li GG, Yang Y, et al. Madecassoside reduces ischemia-reperfusion injury on regional ischemia induced heart infarction in rat. *Biol Pharm Bull.* 2008 Mar;31(3):458-63. PMID: 18310910.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.