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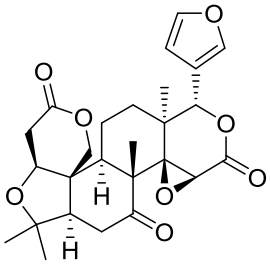
PRODUCT DATA SHEET

Limonin

Code No.: **BIA-L1755**

Pack sizes: **1 mg, 5 mg**



Synonyms : Di-δ-lactone limonoic acid, 7,16-Dioxo-7,16-dideoxylimondiol, Citrolimonin, Dictamnolactone, Evodin, Limonine, Obaculactone, Obakulactone

Specifications

CAS #	:	**1180-71-8**
Molecular Formula	:	**$C_{26}H_{30}O_8$**
Molecular Weight	:	**470.5**
Source	:	***Acradenia euodiiformis***
Appearance	:	**White solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO.**

Application Notes

Limonin is a highly oxygenated terpenoid which forms the core structure of the citrus limonoid metabolites found mostly in the seeds, fruits and peel tissues of citrus. Limonin was first isolated over 175 years ago. In Australia, limonin was isolated from the components of the tree, Acradenia euodiiformis (syn. Bosistoa euodiiformis), by Taylor, Ritchie and colleagues in 1975. Limonin has antiproliferative activity in the low micromolar range. Members of the group display numerous pharmacological activities, including anticancer, antimicrobial, antioxidant, antidiabetic, metabolic and insecticidal, among others. There is extensive research into liminoids to modulate the bitter principles of citrus for food and beverage products.

References

1. Constituents of Bosistoa euodiiformis (Rutaceae). Structure and synthesis of bosistoin, a triterpene with a C33 Skeleton. Croft J.A. et al., Aust. J. Chem. 1975, 28, 201.
2. The chemistry and pharmacology of citrus limonoid. Gualdani R. et al., Molecules 2016, 21, 1530.
3. By blocking hexokinase-2 phosphorylation, limonin suppresses tumor glycolysis and induces cell apoptosis in hepatocellular carcinoma. Yao J. et al., Oncol. Targets Ther. 2018, 11, 3793.
4. Limonin alleviates macro- and micro-vascular complications of metabolic syndrome in rats: A comparative study with azelnidipine. Hassan N.A. et al., Phytomed. 2018, 43, 92.
5. Limonin monolactone, the nonbitter precursor responsible for delayed bitterness in certain citrus juices. Maier V.P. & Beverley G.D., J. Food Sci., 1968, 33, 488.

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