

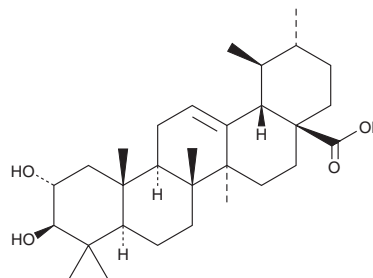
PRODUCT INFORMATION



Corosolic Acid

Item No. 27887

CAS Registry No.: 4547-24-4
Formal Name: 2 α ,3 β -dihydroxy-urs-12-en-28-oic acid
Synonyms: CA, Glucosol, 2 α -Hydroxyursolic Acid
MF: C₃₀H₄₈O₄
FW: 472.7
Purity: $\geq$ 98%
Supplied as: A solid
Storage: -20°C
Stability: $\geq$ 4 years
Item Origin: Plant/Loquat leaf



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

Laboratory Procedures

Corosolic acid is supplied as a solid. A stock solution may be made by dissolving the corosolic acid in the solvent of choice, which should be purged with an inert gas. Corosolic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of corosolic acid in these solvents is approximately 1, 20, and 14 mg/ml, respectively.

Description

Corosolic acid is a triterpenoid that has been found in *L. speciosa* leaves and has diverse biological activities, including anticancer, anti-inflammatory, antidiabetic, antihypertensive, antihyperlipidemic, and antioxidant properties.¹⁻⁴ It is cytotoxic to HepG2, A549, SNU-C4, HeLa S3, and K562 cells (EC₅₀s = 4.8, 5, 0.4, 1, and 4.3 μ g/ml, respectively).¹ Corosolic acid inhibits ear edema in mice induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014) with an ID₅₀ value of 0.09 mg/ear.² It reduces blood glucose levels in an insulin tolerance test in a KKAY mouse model of type 2 diabetes when administered at doses of 2 and 10 mg/kg.³ Corosolic acid (0.072% in the diet) reduces systolic blood pressure and serum levels of free fatty acids, the oxidative stress markers thiobarbituric acid-reactive substances (TBARS) and 8-hydroxy-2'-deoxyguanosine (8-OHdG), and the myeloperoxidase markers 3-nitrotyrosine and 3-chlorotyrosine in an SHR/NDmcr-cp (*cp/cp*) rat model of metabolic syndrome.⁴

References

1. Ahn, K.-S., Hahm, M.S., Park, E.J., *et al.* Corosolic acid isolated from the fruit of *Crataegus pinnatifida* var. *psilosa* is a protein kinase C inhibitor as well as a cytotoxic agent. *Planta Med.* **64**(5), 468-470 (1998).
2. Banno, N., Akihisa, T., Tokuda, H., *et al.* Triterpene acids from the leaves of *Perilla frutescens* and their anti-inflammatory and antitumor-promoting effects. *Biosci. Biotechnol. Biochem.* **68**(1), 85-90 (2004).
3. Miura, T., Ueda, N., Yamada, K., *et al.* Antidiabetic effects of corosolic acid in KK-Ay diabetic mice. *Biol. Pharm. Bull.* **29**(3), 585-587 (2006).
4. Yamaguchi, Y., Yamada, K., Yoshikawa, N., *et al.* Corosolic acid prevents oxidative stress, inflammation and hypertension in SHR/NDmcr-cp rats, a model of metabolic syndrome. *Life Sci.* **79**(26), 2474-2479 (2006).

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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