

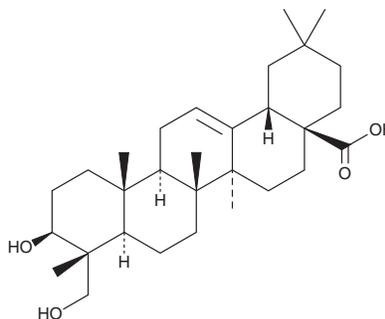
PRODUCT INFORMATION



Hederagenin

Item No. 27030

CAS Registry No.: 465-99-6
Formal Name: (4 α)-3 β ,23-dihydroxy-olean-12-en-28-oic acid
Synonyms: Astrantiagenin E, Caulosapogenin, Hederagenic Acid, NSC 24954
MF: C₃₀H₄₈O₄
FW: 472.7
Purity: \geq 98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Plant/*Lonicera fulvotomentosa*



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

Laboratory Procedures

Hederagenin is supplied as a crystalline solid. A stock solution may be made by dissolving the hederagenin in the solvent of choice. Hederagenin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of hederagenin in these solvents is approximately 30 mg/ml.

Hederagenin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, hederagenin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Hederagenin has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Hederagenin is a triterpene saponin that has been found in *P. eximia* with diverse biological activities.¹⁻⁵ It increases production of reactive oxygen species (ROS), reduces colony formation, and induces apoptosis in cisplatin-resistant head and neck carcinoma (HNC) cells.² *In vivo*, hederagenin (50, 100, and 200 mg/kg) suppresses tumor growth in a cisplatin-resistant HNC mouse xenograft model. It reduces aortic atherosclerotic lesion area, serum cholesterol and LDL levels, and inducible nitric oxide synthase (iNOS) protein levels in a rat model of atherosclerosis.³ Hederagenin (50 mg/kg) reduces ethanol-induced production of TNF- α , IL-6, and COX-2, alcohol dehydrogenase 2 (ALDH2) mRNA expression, and liver damage in a rat model of alcohol-induced hepatotoxicity.⁴ It also induces autophagy and inhibits oligomerization of α -synuclein in a mouse model of Parkinson's disease induced by MPTP.⁵

References

1. Jayasinghe, L., Shimada, H., Hara, N., *et al. Phytochemistry* **40(3)**, 891-897 (1995).
2. Kim, E.H., Baek, S., Shin, D., *et al. Oxid. Med. Cell. Longev.* 5498908 (2017).
3. Lu, S.-H., Guan, J.-H., Huang, Y.-L., *et al. Evid. Based Complement. Alternat. Med.* 456354 (2015).
4. Kim, G.-J., Song, D.H., Yoo, H.S., *et al. Nutrients* **9(1)**, E41 (2017).
5. Wu, A.-G., Zeng, W., Wong, V.K.-W., *et al. Pharmacol. Res.* **115**, 25-44 (2017).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/11/2019

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM