

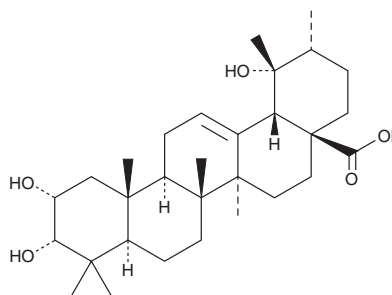
PRODUCT INFORMATION



Euscaphic Acid

Item No. 36162

CAS Registry No.: 53155-25-2
Formal Name: 2 α ,3 α ,19-trihydroxy-urs-12-en-28-oic acid
MF: C₃₀H₄₈O₅
FW: 488.7
Purity: \geq 98%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Synthetic



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

Laboratory Procedures

Euscaphic acid is supplied as a solid. A stock solution may be made by dissolving the euscaphic acid in the solvent of choice, which should be purged with an inert gas. Euscaphic acid is soluble in methanol.

Description

Euscaphic acid is a triterpene that has been found in *R. alceaefolius* and has diverse biological activities.¹⁻³ It inhibits the proliferation of CNE-1 and C666-1 nasopharyngeal carcinoma cells when used at concentrations of 5 and 10 μ g/ml.¹ Euscaphic acid inhibits acetylcholinesterase (AChE; IC₅₀ = 35.9 μ M) and α -glucosidase (IC₅₀ = 24.9 μ M).² It reduces the production of nitric oxide (NO) and levels of inducible nitric oxide synthase (iNOS) and COX-2 in LPS-stimulated RAW 264.7 cells.³ Euscaphic acid (10 mg/kg) reduces serum IgE and IgG2a levels, ear tissue mast cell infiltration, and pruritis in a mouse model of difluoroethane- and 2,4-dinitrochlorobenzene-induced atopic dermatitis.⁴

References

1. Dai, W., Dong, P., Liu, J., *et al.* Euscaphic acid inhibits proliferation and promotes apoptosis of nasopharyngeal carcinoma cells by silencing the PI3K/AKT/mTOR signaling pathway. *Am. J. Transl. Res.* **11(4)**, 2090-2098 (2019).
2. Ado, M.A., Maulidiani, M., Ismail, I.S., *et al.* Acetylcholinesterase and α -glucosidase inhibitory compounds from *Callicarpa maingayi*. *Nat. Prod. Res.* **35(17)**, 2992-2996 (2021).
3. Kim, I.-T., Ryu, S., Shin, J.-S., *et al.* Euscaphic acid isolated from roots of *Rosa rugosa* inhibits LPS-induced inflammatory responses via TLR4-mediated NF- κ B inactivation in RAW 264.7 macrophages. *J. Cell. Biochem.* **113(6)**, 1936-1946 (2012).
4. Jeong, N.-H., Lee, S., Choi, Y.-A., *et al.* Inhibitory effects of euscaphic acid in the atopic dermatitis model by reducing skin inflammation and intense pruritus. *Inflammation* **45(4)**, 1680-1691 (2022).

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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