

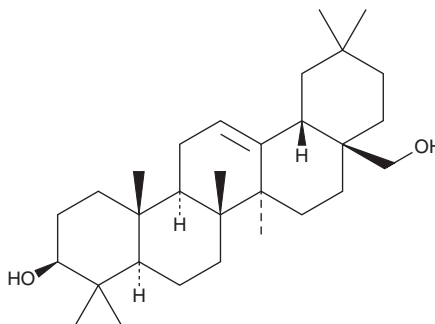
PRODUCT INFORMATION



Erythrodiol

Item No. 30135

CAS Registry No.: 545-48-2
Formal Name: (3 β)-olean-12-ene-3,28-diol
Synonyms: (+)-Erythrodiol, 3 β -Erythrodiol, Oleanolic Alcohol
MF: C₃₀H₅₀O₂
FW: 442.7
Purity: \geq 95%
Supplied as: A solid
Storage: -20°C
Stability: \geq 2 years
Item Origin: Plant/*Pittosporum tobira* leaf



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

Laboratory Procedures

Erythrodiol is supplied as a solid. A stock solution may be made by dissolving the erythrodiol in the solvent of choice, which should be purged with an inert gas. Erythrodiol is soluble in organic solvents such as ethanol and dimethyl formamide (DMF). The solubility of erythrodiol in these solvents is approximately 1 and 3 mg/ml, respectively.

Erythrodiol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, erythrodiol should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Erythrodiol has a solubility of approximately 0.11 mg/ml in a 1:8 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Erythrodiol is a triterpene that has been found in olive oil and has diverse biological activities.¹⁻⁴ It induces relaxation of isolated rat aortic rings precontracted with phenylephrine (EC₅₀ = 3.38 μ M).¹ Erythrodiol inhibits the growth of HT-29 adenocarcinoma cells (EC₅₀ = 48.8 μ M).² It induces production of reactive oxygen species (ROS) and apoptosis in MCF-7 cells when used at a concentration of 100 μ M.³ Topical administration of erythrodiol (0.5 mg/ear) reduces ear edema and myeloperoxidase (MPO) activity induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014) in mice.⁴

References

- Rodríguez-Rodríguez, R., Herrera, M.D., Perona, J.S., *et al.* Potential vasorelaxant effects of oleanolic acid and erythrodiol, two triterpenoids contained in 'orujo' olive oil, on rat aorta. *Br. J. Nutr.* **92(4)**, 635-642 (2004).
- Juan, M.E., Wenzel, U., Daniel, H., *et al.* Erythrodiol, a natural triterpenoid from olives, has antiproliferative and apoptotic activity in HT-29 human adenocarcinoma cells. *Mol. Nutr. Food Res.* **52(5)**, 595-599 (2008).
- Allouche, Y., Warleta, F., Campos, M., *et al.* Antioxidant, antiproliferative, and pro-apoptotic capacities of pentacyclic triterpenes found in the skin of olives on MCF-7 human breast cancer cells and their effects on DNA damage. *J. Agric. Food Chem.* **59(1)**, 121-130 (2011).
- Máñez, S., Recio, M.C., Giner, R.M., *et al.* Effect of selected triterpenoids on chronic dermal inflammation. *Eur. J. Pharmacol.* **334(1)**, 103-105 (1997).

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, 05/13/2020

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