PRODUCT INFORMATION



Uvaol

Item No. 33915

CAS Registry No.: 545-46-0

Formal Name: urs-12-ene-3\(\beta\),28-diol

Synonym: NSC 159627 MF: $C_{30}H_{50}O_{2}$ FW: 442.7 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years Item Origin: Synthetic

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

Laboratory Procedures

Uvaol is supplied as a solid. A stock solution may be made by dissolving the uvaol in the solvent of choice, which should be purged with an inert gas. Uvaol is soluble in the organic solvent chloroform. Uvaol is slightly soluble in ethanol. The solubility of uvaol in chloroform is approximately 5 mg/ml.

Description

Uvaol is a pentacyclic triterpenoid that has been found in olive (O. europaea) leaves and has diverse biological activities. $^{1-4}$ It induces cell cycle arrest at the $\rm G_0/\rm G_1$ phase and inhibits proliferation of MCF-7 human breast cancer cells in a concentration-dependent manner.² Uvaol (10 μM) prevents hydrogen peroxide-induced DNA damage in the same cells. It induces relaxation of phenylephrine- or potassium chloride-precontracted aortic rings isolated from spontaneously hypertensive rats when used at a concentration of 100 μM.³ Uvaol (200 and 500 μmol/kg) inhibits ovalbumin-induced bronchoalveolar lavage fluid (BALF) eosinophil infiltration in an ovalbumin-sensitized mouse model of allergic asthma.⁴

References

- 1. Guinda, A., Rada, M., Delgado, T., et al. Pentacyclic triterpenoids from olive fruit and leaf. J. Agric. Food Chem. 58(17), 9685-9691 (2010).
- 2. 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).
- 3. Rodriguez-Rodriguez, R., Perona, J.S., Herrera, M.D., et al. Triterpenic compounds from "orujo" olive oil elicit vasorelaxation in aorta from spontaneously hypertensive rats. J. Agric. Food Chem. 54(6), 2096-2102
- Agra, L.C., Lins, M.P., da Silva Marques, P., et al. Uvaol attenuates pleuritis and eosinophilic inflammation in ovalbumin-induced allergy in mice. Eur. J. Pharmacol. 780, 232-242 (2016).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

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

Copyright Cayman Chemical Company, 11/22/2022

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