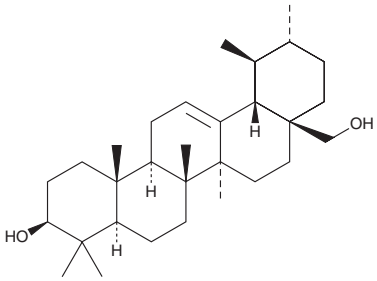
PRODUCT INFORMATION

Uvaol

Item No. 33915

CAS Registry No.:	545-46-0
Formal Name:	urs-12-ene-3β,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 G_0/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 (2006).
4. 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).

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