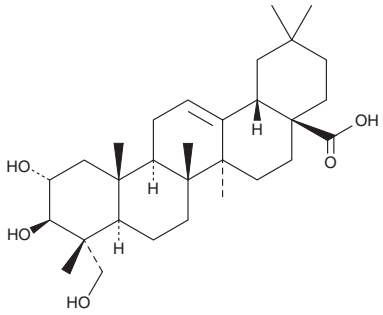
PRODUCT INFORMATION

Arjunolic Acid

Item No. 29438



CAS Registry No.:	465-00-9
Formal Name:	(2α,3β,4α)-2,3,23-trihydroxy-olean-12-en-28-oic acid
MF:	$C_{30}H_{48}O_5$
FW:	488.7
Purity:	≥98%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Cyclocarya paliurus*

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

Laboratory Procedures

Arjunolic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the arjunolic acid in the solvent of choice, which should be purged with an inert gas. Arjunolic acid is soluble in the organic solvent DMSO.

Description

Arjunolic acid is a triterpene that has been found in *T. arjuna* and has diverse biological activities, including antioxidant, anticancer, and anti-inflammatory properties.[1-3] It scavenges 2,2-diphenyl-1-picrylhydrazyl (DPPH; Item No. 14805) radicals in a cell-free assay when used at a concentration of 0.8 mM.[1] Arjunolic acid (20 mg/kg for four days) prevents arsenic-induced decreases in the activity of superoxide dismutase (SOD1), catalase, GST, and glutathione reductase in mouse brain. It reduces tumor growth in an Ehrlich murine spontaneous adenocarcinoma model when administered at doses of 100 and 250 mg/kg for 20 days.[2] Arjunolic acid reduces renal fibrosis and increases in kidney TNF-α and IL-1β levels induced by cisplatin (Item No. 13119) in mice when administered at doses of 100 and 250 mg/kg per day for 10 days.[3]

References

1. Sinha, M., Manna, P., and Sil, P.C. Protective effect of arjunolic acid against arsenic-induced oxidative stress in mouse brain. *J. Biochem. Mol. Toxicol.* **22(1)**, 15-26 (2008).
2. Elsherbiny, N.M. and Al-Gayyar, M.M. Anti-tumor activity of arjunolic acid against Ehrlich Ascites Carcinoma cells *in vivo* and *in vitro* through blocking TGF-β type 1 receptor. *Biomed. Pharmacother.* **82**, 28-34 (2016).
3. Elsherbiny, N.M., Eladl, M.A., and Al-Gayyar, M.M. Renal protective effects of arjunolic acid in a cisplatin-induced nephrotoxicity model. *Cytokine* **77**, 26-34 (2016).

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