Oleanolic Acid
Item No. 11726

CAS Registry No.: 508-02-1
Formal Name: (3β)-hydroxyolean-12-en-28-oic acid
Synonyms: Astrantiagenin C, Caryophyllin, Giganteumgenin C, Gledigenin 1, NSC 114945, Oleanoic Acid, Virgareugenin B
MF: \( C_{30}H_{48}O_3 \)
FW: 456.7
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that oleanolic acid be stored as supplied at -20°C. It should be stable for at least two years.

Oleanolic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the oleanolic acid in the solvent of choice. Oleanolic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of oleanolic acid in ethanol, DMSO, and DMF is approximately 5, 3, and 30 mg/ml, respectively.

Oleanolic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, oleanolic acid should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Oleanolic acid has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Oleanolic acid is a triterpenoid that is synthesized in many plants by the cyclization of squalene. Traditionally used in Asian medicine, oleanolic acid has long been known to have anti-inflammatory, anti-hyperlipidemic, and hepatoprotective \textit{in vivo} effects.\textsuperscript{1-3} It has also been found to have antiviral and anti-tumor actions.\textsuperscript{2,4} Synthetic triterpenoids based on oleanolic acid have been shown to bind specific proteins by Michael addition.\textsuperscript{5} Important protein targets include Keap1, IKK, JAK1, STAT3, PTEN, and proteins associated with the actin cytoskeleton.\textsuperscript{5}

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/11726

**WARNING:** This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

**SAFETY DATA**
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent to our institution.

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