

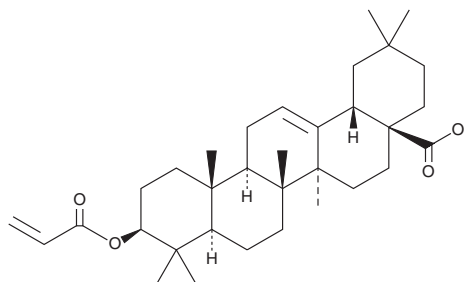
PRODUCT INFORMATION



Oleanolic Acid Acrylate

Item No. 27206

CAS Registry No.: 1975976-24-9
Formal Name: 3β-[(1-oxo-2-propen-1-yl)oxy]-olean-12-en-28-oic acid
Synonym: OAA
MF: C₃₃H₅₀O₄
FW: 510.7
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Oleanolic acid acrylate (OAA) is supplied as a crystalline solid. A stock solution may be made by dissolving the OAA in the solvent of choice, which should be purged with an inert gas. OAA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of OAA in ethanol and DMF is approximately 30 mg/ml and approximately 20 mg/ml in DMSO.

OAA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, OAA should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. OAA has a solubility of approximately 0.02 mg/ml in a 1:40 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

OAA is an agonist of the serotonin (5-HT) receptor subtype 5-HT_{1A} and a derivative of oleanolic acid (Item No. 11726).¹ It acts as an agonist at the 5-HT_{1A} receptor in mouse hippocampal homogenates in a [³⁵S]GTPγS binding assay (EC₅₀ = 0.79 μM). It is also a selective inhibitor of MAO-A over MAO-B (IC₅₀s = 48.8 μM and >100 μM, respectively). In mice, OAA (10 mg/kg) reduces immobility in the forced swim test and increases the number of crossings and time spent at the center in the open field test, indicating anti-depressant-like and anxiolytic activities.

Reference

1. Fajemiroye, J.O., Polepally, P.R., Chaurasiya, N.D., *et al.* Oleanolic acid acrylate elicits antidepressant-like effect mediated by 5-HT_{1A} receptor. *Sci. Rep.* **5**, 11582 (2015).

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.

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