

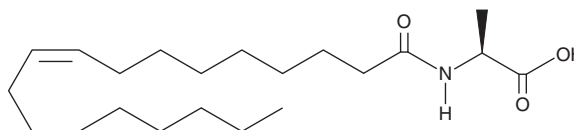
PRODUCT INFORMATION



N-Oleoyl Alanine

Item No. 20368

CAS Registry No.: 745733-78-2
Formal Name: N-[(9Z)-1-oxo-9-octadecen-1-yl]-L-alanine
Synonym: N-Oleoyl-L-Alanine
MF: C₂₁H₃₉NO₃
FW: 353.5
Purity: ≥95%
UV/Vis.: λ_{max}: 201 nm
Supplied as: A 10 mg/ml solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

N-Oleoyl alanine is supplied as a solution in ethanol. To change the solvent, simply evaporate the N-oleoyl alanine under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of N-oleoyl alanine in these solvents is approximately 30 and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of N-oleoyl alanine is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of N-oleoyl alanine in PBS, pH 7.2, is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

N-Oleoyl alanine is a natural N-acyl amide that has been detected in insect and animal tissues.^{1,2} Several N-acyl amides are bioactive mediators that modulate G protein-coupled receptors or transient receptor potential channels, although the activity of N-oleoyl alanine has not been delineated.^{1,2}

References

1. Tan, B., O'Dell, D.K., Yu, Y.W., *et al.* Identification of endogenous acyl amino acids based on a targeted lipidomics approach. *J. Lipid. Res.* **51**(1), 112-119 (2010).
2. Tortoriello, G., Rhodes, B.P., Takacs, S.M., *et al.* Targeted lipidomics in *Drosophila melanogaster* identifies novel 2-monoacylglycerols and N-acyl amides. *PLoS One* **8**(7), e67865 (2013).

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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