

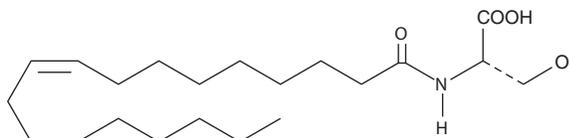
PRODUCT INFORMATION



N-Oleoyl-L-Serine

Item No. 13058

CAS Registry No.: 107743-37-3
Formal Name: (S)-3-hydroxy-2-oleamidopropanoic acid
MF: $C_{21}H_{39}NO_4$
FW: 369.5
Purity: $\geq 98\%$
Supplied as: A solution in ethanol
Storage: $-20^{\circ}C$
Stability: ≥ 2 years



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

Laboratory Procedures

N-Oleoyl-L-serine is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol 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-L-serine in these solvents is approximately 20 mg/ml.

N-Oleoyl-L-serine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of N-oleoyl-L-serine should be diluted with the aqueous buffer of choice. N-Oleoyl-L-serine has a solubility of 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Bone mass and shape is continuously remodeled by the concerted and balanced action of osteoblasts (bone forming cells) and osteoclasts (bone-resorbing cells). The endocannabinoid system plays an essential role in the maintenance of normal bone mass via signaling through the CB_2 receptor.¹ N-Oleoyl-L-serine is an endogenous lipid that has been reported to stimulate bone formation and to inhibit bone resorption.²

References

1. Bab, I. and Zimmer, A. Cannabinoid receptors and the regulation of bone mass. *Br. J. Pharmacol.* **153**(2), 182-188 (2008).
2. Mechoulam, R. and Bab, I. An endogenous lipid with novel bone anabolic activity in vivo. *Int. Cannabinoid Res. Soc.* (2008).

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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