

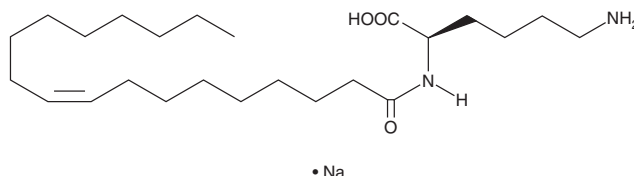
PRODUCT INFORMATION



Oleoyl-D-lysine (sodium salt)

Item No. 27862

Formal Name: N²-[(9Z)-1-oxo-9-octadecen-1-yl]-D-lysine, monosodium salt
MF: C₂₄H₄₆N₂O₃ • Na
FW: 433.6
Purity: ≥98%
Supplied as: A 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

Oleoyl-D-lysine (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the oleoyl-D-lysine (sodium salt) in the solvent of choice, which should be purged with an inert gas. Oleoyl-D-lysine (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of oleoyl-D-lysine (sodium salt) in these solvents is approximately 50, 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. Organic solvent-free aqueous solutions of oleoyl-D-lysine (sodium salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of oleoyl-D-lysine (sodium salt) 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

Oleoyl-D-lysine is an inhibitor of glycine transporter 2a (GlyT2a).¹ It selectively inhibits GlyT2a (IC₅₀ = 48.3 nM) over GlyT1b (IC₅₀ = >3,000 nM) in *Xenopus* oocytes expressing the human transporters. Oleoyl-D-lysine (30 mg/kg, i.p.) reduces allodynia in a nerve ligation rat model of neuropathic pain.

Reference

1. Mostyn, S.N., Rawling, T., Mohammadi, S., *et al.* Development of an N-acyl amino acid that selectively inhibits the glycine transporter 2 to produce analgesia in a rat model of chronic pain. *J. Med. Chem.* **62**(5), 2466-2484 (2019).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 05/07/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 • USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM