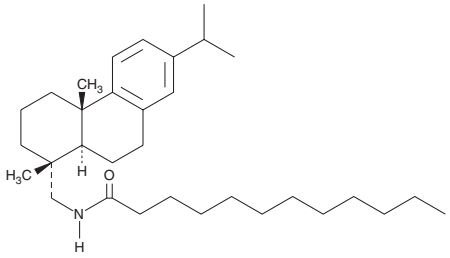
Product Information

Lauric Acid Leelamide

Catalog No. 10008618

Formal Name: 1R,2,3,4,4aS,9,10,10aR-octahydro-1,4a-dimethyl-7-(1-methylethyl)-1-phenanthrene-dodecanamide
MF: $C_{32}H_{53}NO$
FW: 467.8
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in ethanol



Laboratory Procedures

For long term storage, we suggest that lauric acid leelamide be stored as supplied at -20°C. It should be stable for at least one year.

Lauric acid leelamide 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 lauric acid leelamide in these solvents is approximately 20 mg/ml.

Lauric acid leelamide is sparingly soluble in aqueous buffers. If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Lauric acid leelamide is the lauric (C-12) amide analog of leelamine. Leelamine has weak affinity for the human central cannabinoid (CB_1) and peripheral cannabinoid (CB_2) receptors, exhibiting 20% displacement of [^{3}H]-CP55940 at a concentration of 10 µM.[1] Leelamine inhibits pyruvate dehydrogenase kinase (PDK) with an IC_{50} value of 9.5 µM.[2] Derivatives of leelamine exhibit anti-inflammatory activity and show moderate inhibition of phospholipase A_2 activity from a variety of sources.[3] There are no published studies of the pharmacological properties of lauric acid leelamide.

References

1. Martin, B.R. Personal Communication.
2. Aicher, T.D., Damon, R.E., Koletar, J., *et al.* Triterpene and diterpene inhibitors of pyruvate dehydrogenase kinase (PDK). *Biooganic & Medicinal Chemistry Letters* **9**, 2223-2228 (1999).
3. Wilkerson, W., DeLucca, I., Galbraith, W., *et al.* Antiinflammatory phospholipase-A_2 inhibitors. I. *Eur. J. Med. Chem.* **26**, 667-676 (1991).

Related Products

Leelamine - Cat. No. 10006148 • Lauric Acid - Cat. No. 10006626 • Lauric Acid ethyl ester - Cat. No. 10008203 • Leelamine (hydrochloride) - Cat. No. 10008614

Cayman Chemical

Mailing address
1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone
(800) 364-9897
(734) 971-3335

Fax
(734) 971-3640

E-Mail
custserv@caymanchem.com

Web
www.caymanchem.com