

Product Information



Arachidonic Acid Leelamide

Catalog No. 10008617

Formal Name: 1R,2,3,4,4aS,9,10,10aR-octahydro-1,4a-dimethyl-7-(1-methylethyl)-1-phenanthrene-5Z,8Z,11Z,14Z-eicosatetraenamide

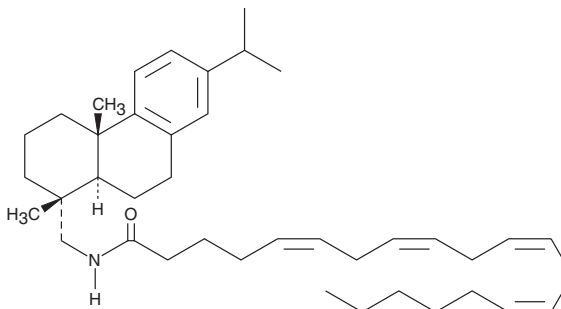
MF: C₄₀H₆₁NO

FW: 571.9

Purity: ≥95%

Stability: ≥1 year at -20°C

Supplied as: A solution in ethanol



Laboratory Procedures

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

Arachidonic 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 arachidonic acid leelamide in these solvents is approximately 20 mg/ml.

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.

Arachidonic acid leelamide is the arachidonic amide analog of leelamine. Leelamine has weak affinity for the human central cannabinoid (CB₁) and peripheral cannabinoid (CB₂) receptors, exhibiting 20% displacement of [³H]-CP55940 at a concentration of 10 μM.¹ Leelamine inhibits pyruvate dehydrogenase kinase (PDK) with an IC₅₀ value of 9.5 μM.² Derivatives of leelamine exhibit anti-inflammatory activity and show moderate inhibition of phospholipase A₂ activity from a variety of sources.³ There are no published studies of the pharmacological properties of arachidonic 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). *Bioorganic & Medicinal Chemistry Letters* **9**, 2223-2228 (1999).
3. Wilkerson, W., DeLucca, L., Galbraith, W., *et al.* Antiinflammatory phospholipase-A₂ inhibitors. I. *Eur. J. Med. Chem.* **26**, 667-676 (1991).

Related Products

Arachidonic Acid - Cat. No. 90010 • Leelamide - Cat. No. 10006148 • Leelamine (hydrochloride) - Cat. No. 10008614 • Lauric Acid Leelamide - Cat. No. 10008618

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

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