Product Information

13(Z)-Docosenoic Acid
Catalog No. 90175

CAS Registry No.: 112-86-7
Formal Name: 13Z-docosenoic acid
Synonym: Erucic Acid
MF: C22H34O2
FW: 338.6
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A solution in ethanol

Laboratory Procedures
For long term storage, we suggest that 13(Z)-docosenoic acid be stored as supplied at -20°C. It should be stable for at least two years.

13(Z)-Docosenoic acid 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 13(Z)-docosenoic acid in these solvents is approximately 100 mg/ml.

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 13(Z)-docosenoic acid is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 13(Z)-docosenoic acid in PBS (pH 7.2) is approximately 100 µg/ml. For maximum aqueous solubility, we suggest dissolving 1 mg of the compound in the compound of 200 µl of ethanol, add 200 µl of 0.1 M sodium carbonate, mix well, and then dilute with 500 µl of PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

13(Z)-Docosenoic acid is a 22-carbon monounsaturated fatty acid. 13(Z)-Docosenoic acid is found predominantly in rapeseed oil. 13(Z)-Docosenoic acid is metabolized to oleic acid in vivo. Diets rich in 13(Z)-docosenoic acid were shown to cause heart lipidosis in experimental animals. The C-1 amide of docosenoic acid has been identified as one of the anandamide-related neurotransmitters associated with sleep.

References

Related Product
13-Docosenamide - Catalog No. 90377

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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Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals herein. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or neglect of Cayman, its directors or its employees.

Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications. Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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