

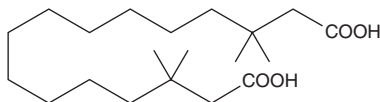
Product Information



MEDICA 16

Catalog No. 90290

CAS Registry No.: 87272-20-6
Formal Name: 3,3,14,14-tetramethylhexadecanedioic acid
MF: C₂₀H₃₈O₄
FW: 342.5
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that MEDICA 16 be stored as supplied at -20°C. It should be stable for at least one year.

MEDICA 16 is supplied as a crystalline solid. A stock solution may be made by dissolving the MEDICA 16 in the solvent of choice. MEDICA 16 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of MEDICA 16 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. Organic solvent-free aqueous solutions of MEDICA 16 can be prepared by directly dissolving the crystalline solid. The solubility of MEDICA 16 in 0.15 M Tris-HCl (pH 8.5) is approximately 1 mg/ml, whereas the solubility in PBS (pH 7.2) is less than 100 µg/ml. For greater aqueous solubility, MEDICA 16 can be directly dissolved in 0.1 M Na₂CO₃ and then diluted with PBS (pH 7.2) to achieve the desired concentration or pH. We do not recommend storing the aqueous solution for more than one day.

MEDICA 16 is a β,β'-dimethyl hexadecanedioic acid which exhibits hypolipidemic and antidiabetogenic effects in the rat. In animals that were fed a diet which was 0.25% MEDICA 16 by weight, the hypolipidemic effect consisted of a 70-80% decrease in plasma chylomicrons and VLDL-triacylglycerols as well as a 40-60% decrease in plasma VLDL-cholesterol.¹

Reference

1. Kalderon, B., Hertz, R., and Bar-Tana, J. Tissue selective modulation of redox and phosphate potentials by β,β'-methyl-substituted hexadecanedioic acid. *Endocrinology* **131**, 1629-1635 (1992).

Related Product

Ciglitazone - Cat. No. 71730

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.

WARRANTY AND LIMITATION OF REMEDY

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 hereof. 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 negligence 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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