

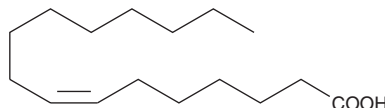
PRODUCT INFORMATION



cis-7-Hexadecenoic Acid

Item No. 10007290

CAS Registry No.: 2416-19-5
Formal Name: 7Z-hexadecenoic acid
Synonym: FA 16:1
MF: C₁₆H₃₀O₂
FW: 254.4
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥1 year



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

cis-7-Hexadecenoic 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 *cis*-7-hexadecenoic acid in these solvents is approximately 30 mg/ml.

cis-7-Hexadecenoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of *cis*-7-hexadecenoic acid should be diluted with the aqueous buffer of choice. *cis*-7-Hexadecenoic acid has a solubility of approximately 0.25 mg/ml in a 1:7 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Mono-unsaturated fatty acids are components of the cellular membranes of autotrophic bacteria. The specific composition and abundance of membrane fatty acids can be used to identify specific genera of bacterial populations in natural environments (e.g., mining lakes, etc.).¹ *cis*-7-Hexadecenoic acid has been isolated from autotrophic bacterial cultures associated with the accumulation of sulfate in biofilters. This indicates they originate from a sulfide-oxidizing autotrophic organism. To date, however, this fatty acid has only been detected in strains of the genera *Nitrospira*, which are nitrite oxidizing autotrophic bacteria.

Reference

1. Knief, C., Altendorf, K., and Lipski, A. Linking autotrophic activity in environmental samples with specific bacterial taxa by detection of ¹³C-labelled fatty acids. *Environmental Microbiology* **5(11)**, 1155-1167 (2003).

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, 03/11/2024

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