

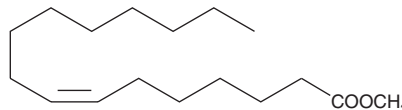
PRODUCT INFORMATION



7(Z)-Hexadecenoic Acid methyl ester

Item No. 10006864

CAS Registry No.: 56875-67-3
Formal Name: 7Z-hexadecenoic acid, methyl ester
Synonyms: Methyl *cis*-7-hexadecenoate, SFE 17:1
MF: C₁₇H₃₂O₂
FW: 268.4
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

7(Z)-Hexadecenoic acid methyl ester 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 7(Z)-Hexadecenoic acid methyl ester in these solvents is approximately 30 mg/ml.

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 7(Z)-Hexadecenoic acid methyl ester is a complement to *cis*-7-hexadecenoic acid. The non-esterified molecule 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

- Knief, C., Altendorf, K., and Lipski, A. Linking autotrophic activity in environmental samples with specific bacterial taxa by detection of ¹³C-labelled fatty acids. *Environ. Microbiol.* **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.

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