

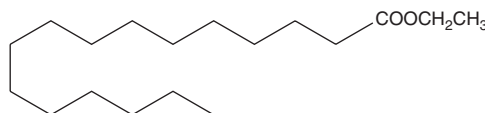
PRODUCT INFORMATION



Palmitic Acid ethyl ester

Item No. 10008202

CAS Registry No.: 628-97-7
Formal Name: hexadecanoic acid, ethyl ester
Synonym: SFE 18:0
MF: $C_{18}H_{36}O_2$
FW: 284.5
Purity: $\geq 98\%$
Supplied as: A solution in ethanol
Storage: $-20^{\circ}C$
Stability: ≥ 2 years



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

Laboratory Procedures

Palmitic acid ethyl 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 palmitic acid ethyl ester in these solvents is approximately 20 mg/ml.

Description

Palmitic acid is a common 16-carbon saturated fatty acid that represents 10-20% of the normal human dietary fat intake. Palmitic acid also makes up approximately 25% of the total plasma fatty acids in plasma lipoproteins.¹ Saturated fatty acids induce the expression of cyclooxygenase-2 and, after protein acylation, are used to confer lipid anchoring to a variety of signaling molecules.²⁻⁶ Palmitic acid ethyl ester is a neutral, lipid-soluble form of the free acid. It is one of the fatty acid ethyl esters that increase cytosolic Ca^{2+} concentration leading to pancreatic acinar cell injury due to excessive consumption of ethanol.⁷

References

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6. Miggin, S.M., Lawler, O.A., and Kinsella, B.T. Palmitoylation of the human prostacyclin receptor. Functional implications of palmitoylation and isoprenylation. *J. Biol. Chem.* **278(9)**, 6947-6958 (2003).
7. Chen, N., Appell, M., Berfield, J.L., *et al.* Inhibition by arachidonic acid and other fatty acids of dopamine uptake at the human dopamine transporter. *Eur. J. Pharmacol.* **478(2-3)**, 89-95 (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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