

Product Data Sheet

Product Name: Palmitoleic Acid ethyl ester

Cat. No.: GC41588

Chemical Properties

Cas. No. 56219-10-4

SMILES CCCCC/C=C\CCCCCCCC(OCC)=O

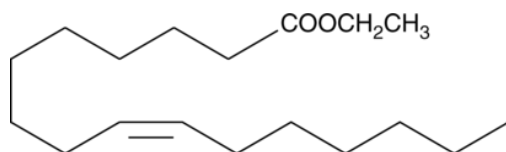
Formula C₁₈H₃₄O₂ M.Wt 282.5

Solubility DMF: 30 mg/ml, DMSO: 30 mg/ml, Ethanol: >50 mg/ml Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Palmitoleic acid (9-hexadecenoic acid) is an unsaturated fatty acid that is found in highest concentration in the liver. It is a common component of the glycerides of human adipose tissues. Two other sources of palmitoleic acid are macadamia oil and sea buckthorn oil which contain about 20% and 40% of total fatty acid composition, respectively. Palmitoleic acid ethyl ester (ethyl palmitoleate) is a more lipophilic form of the free acid. It is one of the fatty acid ethyl esters that increase cytosolic Ca²⁺ concentration leading to pancreatic acinar cell injury due to excessive consumption of ethanol. Ethyl palmitoleate (10-100 μM) in addition to 850 mM ethanol resulted in sustained, concentration-dependent increases in Ca²⁺ that caused cell death. This fatty acid ethyl ester is also a potential biomarker for fetal exposure to alcohol.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA