Elaidic Acid
Item No. 90250

CAS Registry No.: 112-79-8
Formal Name: 9E-octadecenoic acid
Synonym: trans-Oleic Acid
MF: C_{18}H_{34}O_{2}
FW: 282.5
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that elaidic acid be stored as supplied at -20°C. It should be stable for at least two years. Elaidic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the elaidic acid in the solvent of choice. Elaidic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of elaidic acid 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 elaidic acid can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of elaidic acid in 0.15 M Tris-HCl buffer (pH 8.5) is approximately 1 mg/ml. Store aqueous solutions of elaidic acid on ice and use within 12 hours of preparation. Although the aqueous solutions of elaidic acid may be stable for more than 12 hours, we strongly recommend using a fresh preparation each day.

Elaidic acid is the 9-trans isomer of oleic acid. Elaidic acid is a polyunsaturated fatty acid (PUFA) which can be found in plant tissues and commercially in cooking oils. In human platelets incubated with arachidonic acid, elaidic acid inhibits HHT and HETE formation while inducing prostaglandin and thromboxane synthesis.¹

Reference

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/90250

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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 Safety Data Sheet, which has been sent to your institution.

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