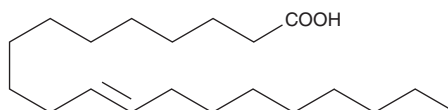


PRODUCT INFORMATION

11(E)-Eicosenoic Acid

Item No. 22578

CAS Registry No.: 62322-84-3
 Formal Name: 11E-eicosenoic acid
 Synonyms: *trans*-11-Eicosenoic Acid,
 FA 20:1
 MF: C₂₀H₃₈O₂
 FW: 310.5
 Purity: ≥98%
 UV/Vis.: λ_{max}: 204 nm
 Supplied as: A crystalline solid
 Storage: -20°C
 Stability: ≥4 years



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

Laboratory Procedures

11(E)-Eicosenoic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 11(E)-eicosenoic acid in the solvent of choice. 11(E)-Eicosenoic acid is soluble in the organic solvent ethanol, which should be purged with an inert gas, at a concentration of approximately 20 mg/ml.

11(E)-Eicosenoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 11(E)-eicosenoic acid should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 11(E)-Eicosenoic acid has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

11(E)-Eicosenoic acid is a very long-chain ω-9 fatty acid that is a *trans* monounsaturated isomer of arachidic acid (Item No. 9000339). 11(E)-Eicosenoic acid is one of several monounsaturated 20-carbon fatty acids.¹ The combined C20:1 isomers constitute 70% of the total fatty acid pool in jojoba seed oil isolated from plants in the Arizona desert. Unlike other eicosenoic fatty acids, 11(E)-eicosenoic acid does not inhibit leukotriene B₄ (K_i = 1,150 μM in a radioligand binding assay in pig neutrophil membranes) or affect telomerase activity.^{2,3}

References

1. Miwa, T.K. Jojoba oil wax esters and derived fatty acids and alcohols: Gas chromatographic analyses. *J. Am. Chem. Soc.* **48(6)**, 259-264 (1971).
2. Yagaloff, K.A., Franco, L., Simko, B., *et al.* Essential fatty acids are antagonists of the leukotriene B₄ receptor. *Prostaglandins, Leukot. Essent. Fatty Acids* **52(5)**, 293-297 (1995).
3. Eitsuka, T., Nakagawa, K., Suzuki, T., *et al.* Polyunsaturated fatty acids inhibit telomerase activity in DLD-1 human colorectal adenocarcinoma cells: A dual mechanism approach. *Biochim Biophys. Acta.* **1737(1)**, 1-10 (2005).

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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