

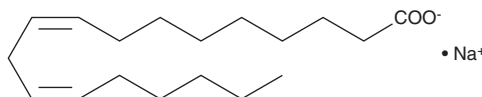
PRODUCT INFORMATION



Linoleic Acid (sodium salt)

Item No. 21909

CAS Registry No.: 822-17-3
Formal Name: 9Z,12Z-octadecadienoic acid, monosodium salt
Synonym: Telfairic Acid
MF: $C_{18}H_{31}O_2 \cdot Na$
FW: 302.4
Purity: $\geq 98\%$
Supplied as: A crystalline solid
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

Linoleic acid (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the linoleic acid (sodium salt) in the solvent of choice. Linoleic acid (sodium salt) is soluble in the organic solvent ethanol, which should be purged with an inert gas, at a concentration of approximately 1.5 mg/ml.

Linoleic acid (sodium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, linoleic acid (sodium salt) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Linoleic acid (sodium salt) 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

Linoleic acid is an essential ω -6 polyunsaturated fatty acid (PUFA).¹ It is the most abundant PUFA in a variety of foods, and dietary sources of linoleic acid include vegetable oils, meats, nuts, seeds, and eggs. Linoleic acid (30 μ M) increases migration of IEC-6 rat intestinal epithelial cells in a wound healing assay.² Rats fed a linoleate-deficient diet exhibit decreased body weight and an increased ratio of eicosatrienoate to arachidonate in liver and serum phospholipids compared with rats fed a control diet, as well as mild scaling of forepaw skin.³

References

1. Whelan, J. and Fritsche, K. Linoleic acid. *Adv. Nutr.* **4**(3), 311-312 (2013).
2. Ruthig, D.J., and Meckling-Gill, K.A. Both (n-3) and (n-6) fatty acids stimulate wound healing in the rat intestinal epithelial cell line, IEC-6. *J. Nutr.* **129**(10), 1791-1798 (1999).
3. Cunnane, S.C. and Anderson, M.J. Pure linoleate deficiency in the rat: Influence on growth, accumulation of n-6 polyunsaturates, and [1 - ^{14}C]linoleate oxidation. *J. Lipid Res.* **38**(4), 805-812 (1997).

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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