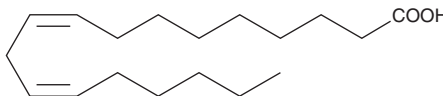


PRODUCT INFORMATION



Linoleic Acid Item No. 90150

CAS Registry No.: 60-33-3
Formal Name: 9Z,12Z-octadecadienoic acid
Synonyms: C18:2(9Z,12Z), C18:2 n-6, FA 18:2, 9,12-Octadecadienoic Acid, Telfairic Acid
MF: C₁₈H₃₂O₂
FW: 280.5
Purity: ≥98%
Supplied as: A neat oil
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Linoleic acid is supplied as a neat oil. A stock solution may be made by dissolving the linoleic acid in the solvent of choice, which should be purged with an inert gas. Linoleic acid is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of linoleic acid in these solvents is approximately 100 mg/ml. Linoleic acid is also miscible in ethanol.

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 [1-¹⁴C]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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