

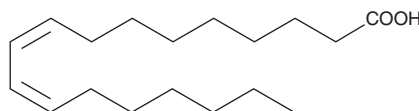
PRODUCT INFORMATION



9(Z),11(Z)-Conjugated Linoleic Acid

Item No. 24582

CAS Registry No.: 544-70-7
Formal Name: 9Z,11Z-octadecadienoic acid
Synonyms: 9Z,11Z-CLA, FA 18:2
9(Z),11(Z)-Octadecadienoic Acid
MF: C₁₈H₃₂O₂
FW: 280.5
Purity: ≥96%
Supplied as: A 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

9(Z),11(Z)-Conjugated linoleic acid is supplied as a solid. A stock solution may be made by dissolving the 9(Z),11(Z)-conjugated linoleic acid in the solvent of choice. 9(Z),11(Z)-Conjugated linoleic acid is soluble in organic solvents such as ethanol, methanol, chloroform, and ethyl ether, which should be purged with an inert gas.

Description

9(Z),11(Z)-Conjugated linoleic acid is an isomer of linoleic acid (Item No. 90150) that has been found in milk from cows and other animals.^{1,2} It is cytotoxic to Caco-2 human colon cancer cells (EC₅₀ = 446.1 μM) and induces changes in the miRNA profile, including an upregulation hsa-miR-146a-5p and downregulation of hsa-miR-32-5p, which is involved in apoptosis.³

References

1. Brainbridge, M.L., Egolf, E., Barlow, J.W., *et al.* Milk from cows grazing on cool-season pastures provides an enhanced profile of bioactive fatty acids compared to those grazed on a monoculture of pearl millet. *Food Chem.* **217**, 750-755 (2017).
2. Revilla, I., Escuredo, O., González-Martín, M.I., *et al.* Fatty acids and fat-soluble vitamins in ewe's milk predicted by near infrared reflectance spectroscopy. Determination of seasonality. *Food Chem.* **214**, 468-477 (2017).
3. Köpke, S., Buhrke, T., and Lampen, A. miRNA expression in human intestinal Caco-2 cells is comparably regulated by *cis*- and *trans*-fatty acids. *Lipids* **50(3)**, 227-239 (2015).

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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