PRODUCT DATA SHEET

9(Z),11(E)-Octadecadienoic acid

Catalog number: 1245; 1245-1; 1245-10
Synonyms: 9-cis, 11-trans CLA; Bovinic acid; Rumenic acid
Source: Synthetic
Solubility: Chloroform, Ethanol, Hexane, Methanol, DMSO
CAS NO: 2540-56-9

Molecular Formula: C_{18}H_{32}O_{2}
Molecular Weight: 280
Storage: -20°C
Purity: TLC: >98%; GC: >98%
TLC System: Hexane/ Ethyl ether/ Acetic acid (80: 20: 1 by Vol.)
Appearance: Liquid

IUPAC Name: (9Z, 11E)octadeca-9,11-dienoic acid

Application notes:
9(Z),11(E)-Octadecadienoic acid is a conjugated linoleic acid (CLA), an isomer of linoleic acid. CLA is found mostly in lipids originating in ruminant animals including dairy products. It has several biological properties including anti-carcinogenic activity, suppressing in vitro growth of human melanoma, colorectal, and breast cancer cells, and exhibiting anti-atherogenic activity.\(^1\) It is thought that CLA itself may not have anti-oxidant capabilities but may produce substances which protect cells from the detrimental effects of peroxides. 9(Z),11(E)-Octadecadienoic acid is the major natural isomer of CLA constituting 73% to 93% of the total CLA in dairy products\(^2\) and it appears to be the most biologically active isomer. It appears to enhance animal growth and inhibit osteoclast formation and activity from human cells,\(^3\) as well as decrease LDL:HDL and total:HDL cholesterol levels in humans.\(^4\)

Selected References:

All chemicals listed are for investigational research purposes only. They are not intended for human consumption or to be used in food or food additives. None are for general drug or medicinal use on humans. We believe that the information, offered in good faith, is accurate.

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