PRODUCT INFORMATION



1,2,3-Trilinoleoyl Glycerol

Item No. 26951

CAS Registry No.: 537-40-6

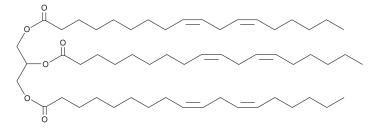
Formal Name: 9Z,12Z-octadecadienoic acid,

1,1',1''-(1,2,3-propanetriyl) ester

Synonyms: Glycerol Trilinoleate,

TG(18:2/18:2/18:2), Trilinolein

MF: $C_{57}H_{98}O_{6}$ FW: 879.4 **Purity:** ≥95% Supplied as: An oil Storage: -20°C Stability: ≥4 years



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

Laboratory Procedures

1,2,3-Trilinoleoyl glycerol is supplied as an oil. A stock solution may be made by dissolving the 1,2,3-trilinoleoyl glycerol in the solvent of choice, which should be purged with an inert gas. 1,2,3-Trilinoleoyl glycerol is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of 1,2,3-trilinoleoyl glycerol in these solvents is approximately 10 mg/ml.

1,2,3-Trilinoleoyl glycerol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 1,2,3-trilinoleoyl glycerol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 1,2,3-Trilinoleoyl glycerol 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

1,2,3-Trilinoleoyl glycerol is a triacylglycerol that contains linoleic acid (Item Nos. 90150 | 90150.1 | 21909) at the sn-1, sn-2, and sn-3 positions. It reduces production of oxygen-derived free radicals in leukocytes. 1 1,2,3-Trilinoleoyl glycerol (1 µM) reduces mitochondrial swelling and deformation induced by ischemia and reperfusion injury in perfused rat hearts. In vivo, 1,2,3-trilinoleoyl glycerol (1 mg/kg) reduces the incidence rate and duration of ventricular tachycardia, as well as infarct size in a rat model of coronary artery ligation-induced ischemia and reperfusion injury.²

References

- 1. Chan, P., Niu, C.-S., Cheng, J.-T., et al. Trilinolein preserves mitochondria ultrastructure in isolated rat heart subjected to global ischemia through antioxidant activity as measured by chemiluminescence. Pharmacology **52(4)**, 216-225 (1996).
- 2. Chan, P., Tsai, S.-K., Chiang, B.-N., et al. Trilinolein reduces infarct size and suppresses ventricular arrhythmias in rats subjected to coronary ligation. Pharmacology 51(2), 118-126 (1995).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 12/22/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM