

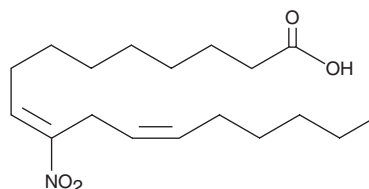
PRODUCT INFORMATION



10-Nitrolinoleate

Item No. 10037

CAS Registry No.: 774603-04-2
Formal Name: 10-nitro-9E,12Z-octadecadienoic acid
Synonyms: 10-LNO₂, 10-nitro-9,12-Octadecadienoic Acid, 10-NO₂-LA
MF: C₁₈H₃₁NO₄
FW: 325.4
Purity: ≥95%
UV/Vis.: λ_{max}: 249 nm
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

10-Nitrolinoleate is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 10-nitrolinoleate in ethanol and DMF is approximately 30 mg/ml and approximately 25 mg/ml in DMSO.

10-Nitrolinoleate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 10-nitrolinoleate should be diluted with the aqueous buffer of choice. 10-Nitrolinoleate 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

10-Nitrolinoleate is a nitrated fatty acid and a peroxisome proliferator-activated receptor γ (PPAR γ) agonist.¹ It is formed from linoleic acid (Item Nos. 90150 | 90150.1 | 21909) upon exposure to acidified nitrite.²

References

1. Dunny, E. and Evans, P. Stereocontrolled synthesis of the PPAR- γ agonist 10-nitrolinoleic acid. *J. Org. Chem.* **75(15)**, 5334-5336 (2010).
2. Woodcock, S.R., Salvatore, S.R., Bonacci, G., *et al.* Biomimetic nitration of conjugated linoleic acid: Formation and characterization of naturally occurring conjugated nitrodienes. *J. Org. Chem.* **79(1)**, 25-33 (2014).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material 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, 03/01/2024

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