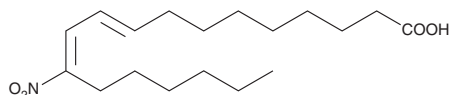


PRODUCT INFORMATION

9(E),11(E)-12-nitro Conjugated Linoleic Acid

Item No. 30834

CAS Registry No.: 1515620-30-0
Formal Name: (9E,11E)-12-nitro-9,11-octadecadienoic acid
Synonyms: 9(E),11(E)-12-nitro CLA, 12-NO₂-CLA
MF: C₁₈H₃₁NO₄
FW: 325.4
Purity: ≥95%
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

9(E),11(E)-12-nitro Conjugated linoleic acid 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 DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 9(E),11(E)-12-nitro conjugated linoleic acid in these solvents is approximately 50 mg/ml. The solubility of 9(E),11(E)-12-nitro conjugated linoleic acid in 0.1 M Na₂CO₃ is approximately 1 mg/ml.

Description

9(E),11(E)-12-nitro Conjugated linoleic acid (9(E),11(E)-12-nitro CLA) is a nitrated fatty acid. It is formed from 9(Z),11(E)-CLA (Item No. 90140) upon exposure to acidified nitrite, peroxyxynitrite, gaseous nitrogen dioxide, or a combination of myeloperoxidase, hydrogen peroxide, and nitrite.¹ It is also formed in LPS-stimulated RAW 264.7 macrophages, an effect that can be reduced by the nitric oxide synthase (NOS) inhibitor L-NAME (Item No. 80210).² 9(E),11(E)-12-nitro CLA has been found in human plasma.

References

1. 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).
2. Bonacci, G., Baker, P.R.S., Salvatore, S.R., *et al.* Conjugated linoleic acid is a preferential substrate for fatty acid nitration. *J. Biol. Chem.* **287**(53), 44071-44082 (2012).

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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