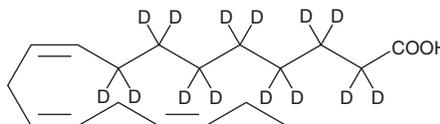


PRODUCT INFORMATION



α -Linolenic Acid-d₁₄ Item No. 9000433

CAS Registry No.: 1622944-40-4
Formal Name: 9Z,12Z,15Z-octadecatrienoic-2, 2', 3, 3', 4, 4', 5, 5', 6, 6', 7, 7', 8, 8'-d₁₄ acid
Synonyms: ALA-d₁₄, FA 18:3-d₁₄
MF: C₁₈H₁₆D₁₄O₂
FW: 292.5
Chemical Purity: ≥98% α -Linolenic Acid
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₁₄); ≤1% d₀
Supplied as: A 1 mg/ml 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

α -Linolenic acid-d₁₄ (ALA-d₁₄) contains fourteen deuterium atoms at the 2, 2', 3, 3', 4, 4', 5, 5', 6, 6', 7, 7', 8, and 8' positions. It is intended for use as an internal standard for the quantification of ALA (Item No. 90210) by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that ALA-d₁₄ be stored as supplied at -20°C. It should be stable for at least one year.

ALA-d₁₄ 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 or dimethyl formamide purged with an inert gas can be used. The solubility of ALA-d₁₄ in these solvents is approximately 100 mg/ml.

ALA-d₁₄ is used as an internal standard for the quantification of ALA by stable isotope dilution MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Description

ALA is an essential fatty acid found in leafy green vegetables. ALA, as part of a low saturated fat diet, helps prevent cardiovascular disease. ALA decreases blood pressure, serum cholesterol levels, and platelet aggregation.¹

Reference

1. Allman, M.A., Pena, M.M., Pang, D. Supplementation with flaxseed oil versus sunflowerseed oil in healthy young men consuming a low fat diet: Effects on platelet composition and function. *Eur. J. Clin. Nutr.* **49**, 169-178 (1995).

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

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