

PRODUCT INFORMATION



Arachidonic Acid-d₁₁ MaxSpec[®] Standard

Item No. 24919

CAS Registry No.: 2692624-11-4

Formal Name: 5Z,8Z,11Z,14Z-eicosatetraenoic-16,16,17,17,18,18,19,19,20,20,20-d₁₁ acid

Synonym: AA-d₁₁, FA 20:0-d₁₁

MF: C₂₀H₂₁D₁₁O₂

FW: 315.5

Purity: ≥95%

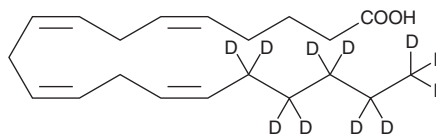
Supplied as: A solution in ethanol; in a deactivated glass ampule

Concentration: 100 µg/ml (nominal); see certificate of analysis for verified concentration

Storage: -20°C

Stability: ≥5 years; *Stability testing is ongoing to ensure concentration accuracy. The certificate of analysis and product expiry date will be updated upon completion of testing.*

Special Conditions: Store upright and unopened at -20°C. Warm to room temperature prior to opening. Light sensitive.



Description

Arachidonic acid-d₁₁ is intended for use as an internal standard for the quantification of arachidonic acid (Item No. 90010) by GC- or LC-mass spectrometry. Arachidonic acid is an essential fatty acid and a precursor for all prostaglandins, thromboxanes, and leukotrienes. Virtually all cellular arachidonic acid is esterified in membrane phospholipids where its presence is tightly regulated through multiple interconnected pathways.¹ Free arachidonic acid is a transient, critical substrate for the biosynthesis of eicosanoid second messengers. Receptor-stimulated release, metabolism, and re-uptake of free arachidonate are all important aspects of cell signaling and inflammation.²

Arachidonic acid-d₁₁ MaxSpec[®] standard is a quantitative grade standard of arachidonic acid-d₁₁ (Item No. 10006758) that has been prepared specifically for mass spectrometry or any application where quantitative reproducibility is required. The solution has been prepared gravimetrically and is supplied in a deactivated glass ampule sealed under argon. The concentration was verified by comparison to an independently prepared calibration standard. This arachidonic acid-d₁₁ MaxSpec[®] standard is guaranteed to meet identity, purity, stability, and concentration specifications and is provided with a batch-specific certificate of analysis. Ongoing stability testing is performed to ensure the concentration remains accurate throughout the shelf life of the product. **Note:** *The amount of solution added to the vial is in excess of the listed amount. Therefore, it is necessary to accurately measure volumes for preparation of calibration standards. Follow recommended storage and handling conditions to maintain product quality.*

References

1. Nixon, A.B., Greene, D.G., and Wykle, R.L. Comparison of acceptor and donor substrates in the CoA-independent transacylase reaction in human neutrophils. *Biochim. Biophys. Acta.* **1300**(3), 187-196 (1996).
2. Burgoyne, R.D. and Morgan, A. The control of free arachidonic acid levels. *Trends Biochem. Sci.* **15**(10), 365-366 (1990).

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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