

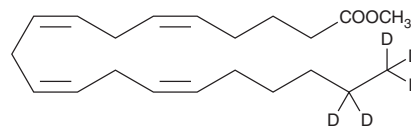
PRODUCT INFORMATION



Arachidonic Acid-d₅ methyl ester

Item No. 32535

CAS Registry No.: 123167-39-5
Formal Name: (all-Z)-5,8,11,14-eicosatetraenoic-19,19,20,20,20-d₅ acid, methyl ester
Synonyms: Methyl Arachidonate-d₅, Methyl (cis-5,8,11,14)-eicosatetraenoate-d₅, C20:4 (cis-5,8,11,14)-d₅-methyl ester, SFE 21:5-d₅
MF: C₂₁H₂₉D₅O₂
FW: 323.5
Chemical Purity: ≥98% (Arachidonic Acid Methyl Ester)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤1% d₀
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

Arachidonic acid-d₅ methyl ester is intended for use as an internal standard for the quantification of arachidonic acid methyl ester (Item No. 90014) by GC- or LC-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).

Arachidonic acid-d₅ methyl ester 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. Arachidonic acid-d₅ methyl ester is miscible in these solvents.

Description

Arachidonic acid methyl ester is an esterified form of arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607). It is commonly used as a reference standard for the quantification of arachidonic acid in biological samples and as a source of exogenous arachidonic acid in cells and *in vivo*.¹⁻⁴

References

1. Leichsenring, M., Sütterlin, N., Less, S., *et al.* Polyunsaturated fatty acids in erythrocyte and plasma lipids of children with severe protein-energy malnutrition. *Acta Paediatr.* **84(5)**, 516-520 (1995).
2. Burdge, G.C. and Postle, A.D. Phospholipid molecular species composition of developing fetal guinea pig brain. *Lipids* **30(8)**, 719-724 (1995).
3. Martins, A.P., Yokoya, N.S., and Colepicolo, P. Comparison of extraction and transesterification methods on the determination of the fatty acid contents of three Brazilian seaweed species. *Braz. J. Pharmacol.* **22(4)**, 854-860 (2012).
4. Laborit, H. and Valette, N. The action of arachidonic acid on experimental hypertension in the rat. *Chem. Biol. Interact.* **10(4)**, 239-246 (1975).

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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