

PRODUCT INFORMATION



Arachidonic Acid-¹³C₅ methyl ester

Item No. 17461

Formal Name: 5Z,8Z,11Z,14Z-eicosatetraenoic-1,2,3,4,5-¹³C₅ acid, methyl ester

Synonyms: C20:4 (cis-5,8,11,14)-¹³C₅-methyl ester, Methyl Arachidonate-¹³C₅, Methyl (cis-5,8,11,14)-eicosatetraenoate-¹³C₅

MF: C₁₆[¹³C]₅H₃₄O₂

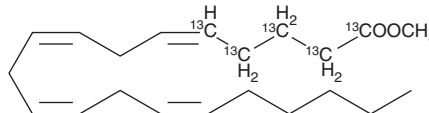
FW: 323.4

Purity: ≥95%

Supplied as: A solution in methanol

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-¹³C₅ methyl ester is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of arachidonic acid-¹³C₅ methyl ester in these solvents is approximately 100 mg/ml.

Description

Arachidonic acid-¹³C₅ 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. 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.

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