

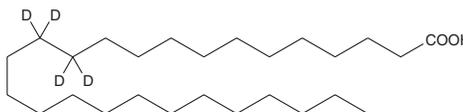
PRODUCT INFORMATION



Hexacosanoic Acid-d₄

Item No. 44298

CAS Registry No.: 1194984-85-4
Formal Name: hexacosanoic-12,12,13,13-d₄ acid
Synonyms: C 26:0-d₄, Ceric Acid-d₄, Cerotic Acid-d₄,
FA 26:0-d₄
MF: C₂₆H₄₈D₄O₂
FW: 400.7
Chemical Purity: ≥98% (Hexacosanoic Acid)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Hexacosanoic acid-d₄ is intended for use as an internal standard for the quantification of hexacosanoic acid (Item No. 13354) 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).

Description

Hexacosanoic acid is a 26-carbon saturated (26:0) very-long-chain fatty acid (VLCFA). Plasma levels of hexacosanoic acid are increased in a mouse model of adrenoleukodystrophy, a peroxisomal disorder.¹ Increased levels of hexacosanoic acid in red blood cells or in plasma positively correlate with atherosclerotic risk factors and metabolic syndrome, respectively.^{2,3}

References

1. Kobayashi, T., Shinnoh, N., Kondo, A., *et al.* Adrenoleukodystrophy protein-deficient mice represent abnormality of very long chain fatty acid metabolism. *Biochem. Biophys. Res. Commun.* **232(3)**, 631-636 (1997).
2. Antoku, Y., Tsukamoto, K., Miyoshi, Y., *et al.* Correlations of elevated levels of hexacosanoate in erythrocyte membranes with risk factors for atherosclerosis. *Atherosclerosis* **153(1)**, 169-173 (2000).
3. Kume, A., Miyazaki, T., Kitamura, Y., *et al.* High levels of saturated very long-chain fatty acid (hexacosanoic acid; C26:0) in whole blood are associated with metabolic syndrome in Japanese men. *Diab. Res. Clin. Pract.* **80(2)**, 259-264 (2008).

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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