

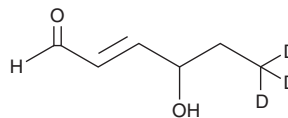
PRODUCT INFORMATION



4-hydroxy Hexenal-d₃

Item No. 10007657

CAS Registry No.: 148706-05-2
Formal Name: (±)-4-hydroxy-2E-hexenal-6,6,6-d₃
Synonym: 4-HHE-d₃
MF: C₆H₇D₃O₂
FW: 117.2
Chemical Purity: ≥98% (4-hydroxy Hexenal)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀
UV/Vis.: λ_{max}: 221 nm
Supplied as: A solution in methyl acetate
Storage: -80°C
Stability: ≥1 year



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

Laboratory Procedures

4-hydroxy Hexenal-d₃ is intended for use as an internal standard for the quantification of 4-hydroxy hexenal (Item No. 32060) 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).

4-hydroxy Hexenal-d₃ is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate 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 4-hydroxy Hexenal-d₃ in these solvents is approximately 50 mg/ml.

Description

4-hydroxy Hexenal is a lipid peroxidation product derived from oxidized ω-3 fatty acids such as DHA.^{1,2}

References

1. van Kuijk, F.J.G.M., Holte, L.L., and Dratz, E.A. 4-Hydroxyhexenal: A lipid peroxidation product derived from oxidized docosahexaenoic acid. *Biochim. Biophys. Acta* **1043**(1), 116-118 (1990).
2. van Kuijk, F.J.G.M., Siakotos, A.N., Fong, L.G., *et al.* Quantitative measurement of 4-hydroxyalkenals in oxidized low-density lipoprotein by gas chromatography-mass spectrometry. *Anal. Biochem.* **224**(1), 420-424 (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.

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