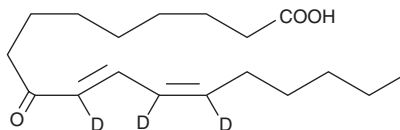


PRODUCT INFORMATION



9-OxoODE-d₃ Item No. 338420

Formal Name: 9-oxo-10E,12Z-10,12,13-d₃-octadecadienoic acid
Synonym: 9-KODE-d₃
MF: C₁₈H₂₇D₃O₃
FW: 297.5
Purity: ≥98% 9-OxoODE
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀
UV/Vis.: λ_{max}: 275 nm ε: 19,000
Supplied as: A solution in acetonitrile
Storage: -80°C
Stability: ≥2 years



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

Laboratory Procedures

9-OxoODE-d₃ is intended for use as an internal standard for the quantification of 9-oxoODE (Item No. 38420) 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).

9-OxoODE-d₃ is supplied as a solution in acetonitrile. To change the solvent, simply evaporate the acetonitrile 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 9-oxoODE-d₃ in these solvents is approximately 50 mg/ml.

Description

Rabbit reticulocyte mitochondrial and plasma membranes contain small amounts of 9-oxoODE and 13-oxoODE.¹⁻³ These species represent about 2% of the total linoleate residues in the membranes.³ Approximately 88% of the oxo fatty acids in these membranes are esterified to membrane lipids.^{1,3} The occurrence of oxidized fatty acids in these membranes has been attributed to the action of a reticulocyte 15-lipoxygenase.¹⁻³

References

1. Kühn, H., Belkner, J., Wiesner, R. Subcellular distribution of lipoxygenase products in rabbit reticulocyte membranes. *Eur. J. Biochem.* **191**, 221-227 (1990).
2. Kühn, H., Belkner, J., Wiesner, R. Metabolism of polyenoic fatty acids by rabbit reticulocytes. Intracellular action of the erythroid lipoxygenase on membrane lipids. *Biomed. Biochim. Acta* **49**, S25-S30 (1990).
3. Kühn, H., Belkner, J., Wiesner, R., *et al.* Occurrence of 9- and 13-keto-octadecadienoic acid in biological membranes oxygenated by the reticulocyte lipoxygenase. *Arch. Biochem. Biophys.* **279**, 218-224 (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.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM