

PRODUCT INFORMATION



cis-Vaccenic Acid-d₁₃ Item No. 27716

Formal Name: (Z)-octadec-11-enoic-13,13,14,14,15,15,16,16,17,17,18,18,18-d₁₃ acid

Synonyms: 18:1 *cis*-11-d₁₃, *cis*-11-Octadecenoic Acid-d₁₃, FA 18:1-d₁₃

MF: C₁₈H₂₁D₁₃O₂

FW: 295.5

Chemical Purity: ≥98% (*cis*-Vaccenic Acid)

Deuterium

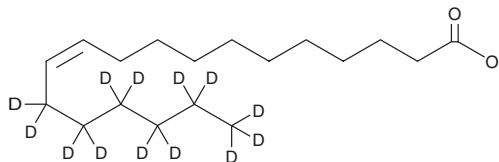
Incorporation: ≥99% deuterated forms (d₁-d₁₃); ≤1% d₀

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

cis-Vaccenic acid-d₁₃ is intended for use as an internal standard for the quantification of *cis*-vaccenic acid (Item No. 20023) 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).

cis-Vaccenic acid-d₁₃ 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. The solubility of *cis*-vaccenic acid-d₁₃ in these solvents is approximately 30 mg/ml.

Description

cis-Vaccenic acid is an ω-7 fatty acid that has been found in mango pulp.¹ It induces differentiation of, and γ-globin synthesis in, K562 and JK-1 cells, as well as isolated sickle cell transgenic mouse bone marrow erythroid progenitor cells (TMBmEPSCs).²

References

1. Shibahara, A., Yamamoto, K., Nakayama, T., *et al.* *cis*-Vaccenic acid in mango pulp lipids. *Lipids* **21**(6), 388-394 (1986).
2. Aimola, I.A., Inuwa, H.M., Nok, A.J., *et al.* *Cis*-vaccenic acid induces differentiation and up-regulates gamma globin synthesis in K562, JK1 and transgenic mice erythroid progenitor stem cells. *Eur. J. Pharmacol.* **776**, 9-18 (2016).

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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