

PRODUCT INFORMATION



11(Z)-Vaccenic Acid methyl ester

Item No. 20693

CAS Registry No.: 1937-63-9
Formal Name: 11Z-octadecenoic acid, methyl ester
Synonyms: C18:1n-7, 18:1 *cis*-11-Octadecanoate, Methyl *cis*-Vaccenate, *cis*-11-methyl Octadecanoate, *cis*-11-Octadecenoic acid methyl ester, SFE 19:1, *cis*-Vaccenic Acid methyl ester

MF: C₁₉H₃₆O₂

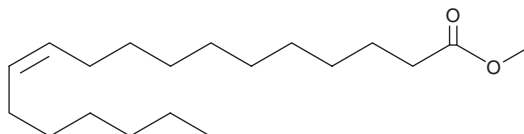
FW: 296.5

Purity: ≥98%

Supplied as: A liquid

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

11(Z)-Vaccenic acid methyl ester is supplied as a liquid. A stock solution may be made by dissolving the 11(Z)-vaccenic acid methyl ester in the solvent of choice. 11(Z)-Vaccenic acid methyl ester is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of 11(Z)-vaccenic acid methyl ester in ethanol is approximately 100 mg/ml, and approximately 30 mg/ml in DMSO and DMF.

Description

11(Z)-Vaccenic Acid methyl ester is a methyl ester form of the monounsaturated fatty acid *cis*-vaccenic acid (Item No. 20023). It inhibits sodium influx in mouse brain synaptic plasma membranes, which is positively correlated with an increase in the disordering of membrane lipids.¹ It has been used as an internal standard for the quantification of *cis*-vaccenic acid in *A. mollis* by LC-MS and in hempseed oil by GC-MS.^{2,3}

References

- Harris, R.A. and Bruno, P. Membrane disordering by anesthetic drugs: Relationship to synaptosomal sodium and calcium fluxes. *J. Neurochem.* **44**(4), 1274-1281 (1985).
- Liu, F., Zamora, L., Jeffs, A., *et al.* Biochemical composition of the Australasian sea cucumber, *Australostichopus mollis*, from a nutritional point of view. *Nutrire* **42:12**, (2017).
- Petrović, M., Debeljak, Ž., Kezić, N., *et al.* Relationship between cannabinoids content and composition of fatty acids in hempseed oils. *Food Chem.* **170**, 218-225 (2015).

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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