

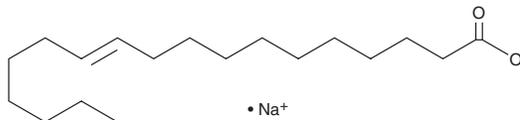
PRODUCT INFORMATION



trans-Vaccenic Acid (sodium salt)

Item No. 44257

CAS Registry No.: 104233-68-3
Formal Name: (11E)-11-octadecenoic acid, monosodium salt
Synonyms: C18:1(11E), C18:1 *n*-7, FA 18:1, *trans*-11-Octadecenoic Acid
MF: C₁₈H₃₃O₂ • Na
FW: 304.4
Purity: ≥98%
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

trans-Vaccenic acid (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the *trans*-vaccenic acid (sodium salt) in the solvent of choice, which should be purged with an inert gas. *trans*-Vaccenic acid (sodium salt) is sparingly soluble (1-10 mg/ml) in methanol.

Description

trans-Vaccenic acid is an ω-7 fatty acid that has been found in bovine milk fats.¹ Dietary administration of *trans*-vaccenic acid (1% w/w) reduces total body fat, mesenteric fat, and adipocyte size, increases inguinal fat mass, and decreases intestinal and hepatic triglyceride secretion in a rat model of obesity with features of metabolic syndrome.² It decreases hepatocellular ballooning and steatosis, markers of non-alcoholic fatty liver disease (NAFLD), in the same model. Dietary administration of a butter enriched with *trans*-vaccenic acid decreases serum cholesterol levels and the formation of aortic atherosclerotic lesions in *Ldlr*^{-/-} mice.³

References

1. Santora, J.E., Palmquist, D.L., and Roehrig, K.L. *Trans*-vaccenic acid is desaturated to conjugated linoleic acid in mice. *J. Nutr.* **130**(2), 208-215 (2000).
2. Jacome-Sosa, M.M., Borthwick, F., Mangat, R., *et al.* Diets enriched in *trans*-11 vaccenic acid alleviate ectopic lipid accumulation in a rat model of NAFLD and metabolic syndrome. *J. Nutr. Biochem.* **25**(7), 692-701 (2014).
3. Bassett, C.M., Edel, A.L., Patenaude, A.F., *et al.* Dietary vaccenic acid has antiatherogenic effects in *LDLr*^{-/-} mice. *J. Nutr.* **140**(1), 18-24 (2010).

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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