

PRODUCT INFORMATION

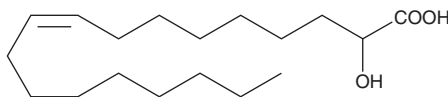


2-hydroxy Oleic Acid

Item No. 36044

CAS Registry No.: 56472-29-8
Formal Name: 2-hydroxy-9Z-octadecenoic acid
Synonyms: FA 18:1;O, 2-HOME,
2-hydroxy-*cis*-9 -Octadecenoic Acid,
 α -hydroxy-*cis*-9 -Octadecenoic Acid,
2-hydroxy-9(Z)-OME-d,
2-Hydroxyoctadecenoic Acid, 2-OHOA

MF: C₁₈H₃₄O₃
FW: 298.5
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

2-hydroxy Oleic acid is supplied as a solid. A stock solution may be made by dissolving the 2-hydroxy oleic acid in the solvent of choice, which should be purged with an inert gas. 2-hydroxy Oleic acid is slightly soluble in chloroform, methanol, and DMSO.

Description

2-hydroxy Oleic acid is a synthetic monounsaturated hydroxylated fatty acid.¹ It decreases the lamellar-to-hexagonal transition temperature of bovine liver phosphatidylethanolamine (PE) membranes by approximately 12.5°C when included at a 20:1 molar ratio of PE:2-hydroxy oleic acid. 2-hydroxy Oleic acid increases levels of protein kinase C α (PKC α) in and decreases proliferation of A549 non-small cell lung cancer (NSCLC) cells in a concentration-dependent manner. It reduces tumor growth in an A549 mouse xenograft model when administered at doses of 75 and 200 mg/kg. 2-hydroxy Oleic acid has been used in the generation of liposomes.²

References

1. Martínez, J., Vögler, O., Casas, J., *et al.* Membrane structure modulation, protein kinase C α activation, and anticancer activity of minerval. *Mol. Pharmacol.* **67**(2), 531-540 (2004).
2. Olechowska, K., Mach, M., Hąc-Wydro, K., *et al.* Studies on the interactions of 2 hydroxyoleic acid with monolayers and bilayers containing cationic lipid: Searching for the formulations for more efficient drug delivery to cancer cells. *Langmuir* **35**(27), 9084-9092 (2019).

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.

WARRANTY AND LIMITATION OF REMEDY

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