

PRODUCT INFORMATION



1-Stearoyl-2-15(S)-HpETE-*sn*-glycero-3-PE

Item No. 25856

CAS Registry No.: 154436-49-4

Formal Name: [S-[R*,S*-(E,Z,Z,Z)]]-15-hydroperoxy-5,8,11,13-eicosatetraenoic acid, 2-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]-1-[[[(1-oxooctadecyl)oxy]methyl]ethyl ester

Synonyms: 15(S)-HpETE-SAPE, 15(S)-hydroperoxyeicosatetraenoic acid-SAPE, 1-Stearoyl-2-15(S)-HpETE-*sn*-glycero-3-Phosphoethanolamine

MF: C₄₃H₇₈NO₁₀P

FW: 800.1

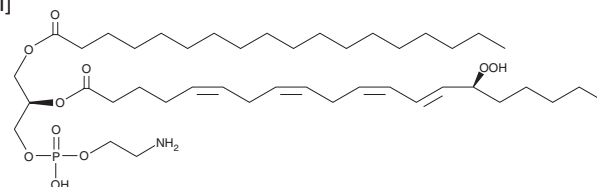
Purity: ≥90%

UV/Vis.: λ_{max}: 237 nm

Supplied as: A solution in ethanol

Storage: -80°C

Stability: ≥2 years



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

Laboratory Procedures

1-Stearoyl-2-15(S)-HpETE-*sn*-glycero-3-PE is supplied as a solution in ethanol. 1-Stearoyl-2-15(S)-HpETE-*sn*-glycero-3-PE is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 1-stearoyl-2-15(S)-HpETE-*sn*-glycero-3-PE should be diluted with the aqueous buffer of choice. 1-Stearoyl-2-15(S)-HpETE-*sn*-glycero-3-PE has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method.

Description

1-Stearoyl-2-15(S)-HpETE-*sn*-glycero-3-PE is a phospholipid that contains stearic acid (Item No. 10011298) at the *sn*-1 position and 15(S)-HpETE (Item No. 44720) at the *sn*-2 position. It is produced *via* oxidation of 1-stearoyl-2-arachidonoyl-*sn*-glycero-3-PE (SAPE; Item No. 25871) by 15-lipoxygenase (15-LO).¹ 1-Stearoyl-2-15(S)-HpETE-*sn*-glycero-3-PE (0.6 and 0.9 μM) increases ferroptotic cell death in wild-type and *Acsf4* knockout Pfa1 mouse embryonic fibroblasts (MEFs) treated with the GPX4 inhibitor RSL3.²

Reference

1. Morgan, A.H., Hammond, V.J., Morgan, L., *et al.* Quantitative assays for esterified oxylipins generated by immune cells. *Nat. Protoc.* **5**(12), 1919-1931 (2010).
2. Kagan, V.E., Mao, G., Qu, F., *et al.* Oxidized arachidonic and adrenic PEs navigate cells to ferroptosis. *Nat. Chem. Biol.* **13**(1), 81-90 (2017).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 03/07/2024

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