

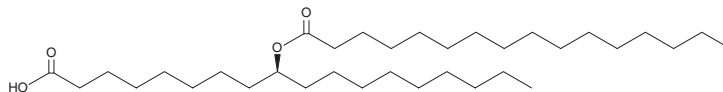
# PRODUCT INFORMATION



## 9(S)-PAHSA

Item No. 18023

**CAS Registry No.:** 2097130-87-3  
**Formal Name:** 9S-[(1-oxohexadecyl)oxy]-octadecanoic acid  
**MF:** C<sub>34</sub>H<sub>66</sub>O<sub>4</sub>  
**FW:** 538.9  
**Purity:** ≥95%  
**Supplied as:** A solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

9(S)-PAHSA is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 9(S)-PAHSA in ethanol and DMF is approximately 20 mg/ml and approximately 15 mg/ml in DMSO.

9(S)-PAHSA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 9(S)-PAHSA should be diluted with the aqueous buffer of choice. 9(S)-PAHSA has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

9-PAHSA (Item No. 17037) is a newly identified endogenous lipid that belongs to a collection of branched fatty acid esters of hydroxy fatty acids (FAHFAs). It is found in wild-type and AG4OX mice, as well as humans, and is reduced in the serum and adipose tissues of insulin-resistant humans.<sup>1</sup> 9-PAHSA improves glucose tolerance, stimulates insulin secretion, and has anti-inflammatory effects in mice.<sup>1</sup> 9(S)-PAHSA is the S enantiomer of 9-PAHSA. There are no published reports on the activity of this enantiomer.

### Reference

1. Yore, M.M., Syed, I., Moraes-Vieira, P.M., *et al.* Discovery of a class of endogenous mammalian lipids with anti-diabetic and anti-inflammatory effects. *Cell* **159**(2), 318-332 (2014).

The use of this optically-active FAHFA product (the "Product") is covered by U.S. Patent No. 10,240,025 and corresponding foreign counterpart applications. These patents and applications are licensed by Cayman pursuant to an agreement with BT Food, Drug and Personal Care, LLC, and this Product is sold exclusively for research and development purposes only. Product may not be used for human studies, veterinary use or diagnostics, clinical trial work, clinical diagnostics, or any other clinical trial or approval activities related to humans or animals. This limited label license does not grant any right to use the Product or a Product derivative in commercial products or services. This Product may not be re-sold, distributed, or repackaged unless by official Cayman distributors. For information on commercial rights, please contact the outlicensing department at [jforest@biosynthetic.com](mailto:jforest@biosynthetic.com).

**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, 11/10/2023

### 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