

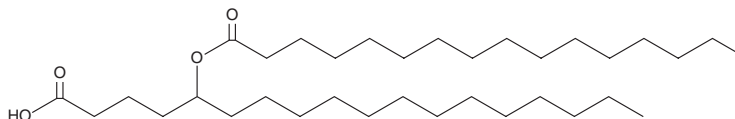
PRODUCT INFORMATION



5-PAHSA

Item No. 17043

CAS Registry No.: 1481636-41-2
Formal Name: 5-(palmitoyloxy)octadecanoic acid
MF: C₃₄H₆₆O₄
FW: 538.9
Supplied as: A 10 mg/ml solution in methyl acetate
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

5-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 5-PAHSA in ethanol and DMF is approximately 20 mg/ml and approximately 15 mg/ml in DMSO.

5-PAHSA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 5-PAHSA should be diluted with the aqueous buffer of choice. 5-PAHSA has a solubility of 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

5-PAHSA is a FAHFA in which palmitic acid is esterified at the 5th carbon of hydroxy stearic acid. PAHSA isoforms are the most abundant forms of FAHFA identified in the adipose tissue of glucose tolerant AG4OX mice.¹ PAHSAs are synthesized *in vivo* in both mice and humans and are regulated by fasting and high-fat feeding in mice.¹ PAHSA levels correlate highly with insulin sensitivity and are reduced in adipose tissue and serum of insulin-resistant humans. PAHSA administration lowers ambient glycemia, improves glucose tolerance, and stimulates GLP-1 and insulin secretion in mice.¹

References

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).

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, 4/22/2026

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