

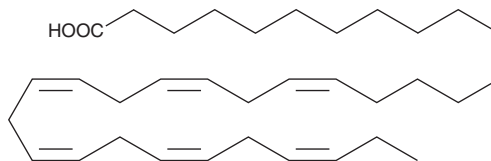
PRODUCT INFORMATION



Tetratriaconta-16(Z),19(Z),22(Z),25(Z),28(Z),31(Z)-hexaenoic Acid

Item No. 10539

CAS Registry No.: 105528-06-1
Formal Name: 16Z,19Z,22Z,25Z,28Z,31Z-tetratriacontahexaenoic acid
Synonym: FA 34:6
MF: $C_{34}H_{56}O_2$
FW: 496.8
Purity: $\geq 95\%$
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥ 1 year



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

Laboratory Procedures

Tetratriaconta-16(Z),19(Z),22(Z),25(Z),28(Z),31(Z)-hexaenoic acid is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of tetratriaconta-16(Z),19(Z),22(Z),25(Z),28(Z),31(Z)-hexaenoic acid in these solvents is approximately 100 mg/ml.

Tetratriaconta-16(Z),19(Z),22(Z),25(Z),28(Z),31(Z)-hexaenoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of tetratriaconta-16(Z),19(Z),22(Z),25(Z),28(Z),31(Z)-hexaenoic acid should be diluted with the aqueous buffer of choice. The solubility of tetratriaconta-16(Z),19(Z),22(Z),25(Z),28(Z),31(Z)-hexaenoic acid in PBS (pH 7.2) and 0.15 M Tris-HCl (pH 8.5) is approximately 0.1 and 1 mg/ml, respectively. We do not recommend storing the aqueous solution for more than one day.

Description

Very long chain polyunsaturated fatty acids (VLCPUFAs) are important components of ceramides and sphingomyelin and are present in retina, sperm, and brain.¹⁻³ Tetratriaconta-16(Z),19(Z),22(Z),25(Z),28(Z),31(Z)-hexaenoic acid is a C34:6 VLCPUFA whose specific biological actions are largely unknown. This VLCPUFA, along with others, has been investigated for its role in activating protein kinase C.⁴

References

1. Avelaño, M.I. Phospholipid species containing long and very long polyenoic fatty acids remain with rhodopsin after hexane extraction of photoreceptor membranes. *Biochemistry* **27**(4), 1229-1239 (1988).
2. Robinson, B.S., Johnson, D.W., and Poulos, A. Novel molecular species of spingomyelin containing 2-hydroxylated polyenoic very-long-chain fatty acids in mammalian testes and spermatozoa. *J. Biol. Chem.* **267**(3), 1746-1751 (1992).
3. Robinson, B.S., Johnson, D.W., and Poulos, A. Unique molecular species of phophatidylcholine containing very-long-chain (C24-C38) polyenoic fatty acids in rat brain. *Biochem. J.* **265**(3), 763-7 (1990).
4. Hardy, S.J., Ferrante, A., Robinson, B.S., et al. In vitro activation of rat brain protein kinase C by polyenoic very-long-chain fatty acids. *J. Neurochem.* **62**(4), 1546-51 (1994).

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, 03/27/2024

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