

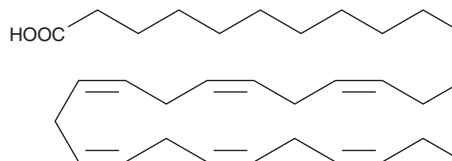
PRODUCT INFORMATION



CAY10632

Item No. 10497

CAS Registry No.: 105517-82-6
Formal Name: 14Z,17Z,20Z,23Z,26Z,29Z-dotriacontahexaenoic acid
Synonym: FA 32:6
MF: C₃₂H₅₂O₂
FW: 468.8
Purity: ≥98%
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

CAY10632 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 CAY10632 in these solvents is approximately 50 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of CAY10632 is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of CAY10632 in 0.15 M Tris-HCl (pH 8.5) is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Very long chain polyunsaturated fatty acids (VLCPUFA) are present in retina, sperm, and brain.¹⁻³ Though little is known of their biosynthesis or functional roles in these tissues, recent studies using the elongation of very long-chain FA-4 protein suggest a unique role for VLCPUFA in retinal development and macular degeneration.^{4,5} CAY10632 is a C₃₂:6 VLCPUFA whose specific biological actions are largely unknown, but are thought to involve normal photoreceptor cell function in the retina.^{4,6}

References

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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).
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5. Agbaga, M.P., Mandal, M.N.A., and Anderson, R.E. Retinal very long-chain PUFAs: New insights from studies on ELOVL4 protein. *J. Lipid Res.* **51(7)**, 1624-1642 (2010).
6. Agbada, M.P., Brush, R.S., Mandal, N.A., et al. Role of Stargardt-3 macular dystrophy protein (ELOVL4) in the biosynthesis of very long chain fatty acids. *Proc. Natl. Acad. Sci. USA* **105(35)**, 12843-8 (2008).

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.

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