

PRODUCT INFORMATION

BSA-Linoleate ω -6 Polyunsaturated Fatty Acid Complex (5 mM)

Item No. 46461

Overview and Properties

Synonyms:	Bovine Serum Albumin-LA, Bovine Serum Albumin-Linoleate, BSA-LA, BSA-9(Z),12(Z)-Octadecadienoic Acid
Supplied as:	5 mM linoleate:0.8 mM BSA in 150 mM sodium chloride
Storage:	-20°C (as supplied)
Stability:	≥ 2 years
Item Origin:	Animal/Bovine

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

Description

BSA-Linoleate ω -6 Polyunsaturated Fatty Acid Complex (5 mM) is composed of linoleic acid (Item No. 90150) and fatty acid-free bovine serum albumin (BSA) at an approximately 6:1 molar ratio of linoleate:BSA. It was prepared under sterile conditions, then filtered and aliquoted into sterile vials. Cayman's BSA-Linoleate ω -6 Polyunsaturated Fatty Acid Complex (5 mM) can be used for efficient fatty acid delivery to cells in culture as a source of essential nutrients to support cell growth in serum-free or reduced-serum media. It can also be used for the purpose of monitoring lipid metabolism and inflammatory signaling pathways, as linoleic acid is a precursor to arachidonic acid and downstream inflammatory lipid mediators.¹⁻⁵ Cayman's BSA-Linoleate ω -6 Polyunsaturated Fatty Acid Complex (5 mM) is suitable for use in short- and long-term cell culture applications (25+ hours). This product can be used to achieve higher concentrations or perform larger experiments than can be achieved with BSA-Linoleate ω -6 Polyunsaturated Fatty Acid Complex (1 mM) (Item No. 38649). For best results, it is recommended that this product be used in conjunction with Cayman's BSA Control for BSA-Fatty Acid Complexes (5 mM) (Item No. 29556), prepared with fatty acid-free BSA.

References

1. Alsabeeh, N., Chausse, B., Kakimoto, P.A., *et al.* Cell culture models of fatty acid overload: Problems and solutions. *Biochim. Biophys. Acta Mol. Cell Biol. Lipids* **1863**(2), 143-151 (2018).
2. Menon, D., Salloum, D., Bernfeld, E., *et al.* Lipid sensing by mTOR complexes via *de novo* synthesis of phosphatidic acid. *J. Biol. Chem.* **292**(15), 6303-6311 (2017).
3. Wiesenfeld, P.W., Babu, U.S., and O'Donnell, M.W. Effect of long-chain fatty acids in the culture medium on fatty acid composition of WEHI-3 and J774A.1 cells. *Comp. Biochem. Physiol. B Biochem. Mol. Biol.* **128**(1), 123-134 (2001).
4. Colquhoun, A. and Curi, R. Regulation of tumour cell fatty acid oxidation by n-6 polyunsaturated fatty acids. *Biochem. Soc. Trans.* **25**(4), S681 (1997).
5. Mukherjee, A., Adhikari, A., Das, P., *et al.* Loss of virulence in NAD(P)H cytochrome b5 oxidoreductase deficient *Leishmania major*. *Biochem. Biophys. Res. Commun.* **503**(1), 371-377 (2018).

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, 08/28/2026

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