

PRODUCT INFORMATION

BSA-Polyunsaturated Fatty Acid Complex Mixture (0.33 mM)

Item No. 44496

Overview and Properties

Synonyms:	Bovine Serum Albumin-Polyunsaturated Fatty Acid, BSA-AA-DHA-EPA
Source:	Bovine
Storage:	-20°C (as supplied)
Stability:	≥2 years
Supplied in:	0.33 mM Arachidonate, 0.33 mM Docosahexanoate, 0.33 mM Eicosapentaenoate:0.17 mM BSA in 150 mM sodium chloride

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

Description

BSA polyunsaturated fatty acid complex mixture is composed of BSA polyunsaturated fatty acid complex mixture is composed of BSA-docosahexanoate polyunsaturated fatty acid complex (1 mM) (Item No. 35872), BSA-arachidonate polyunsaturated fatty acid complex (1 mM) (Item No. 34931), and BSA-eicosapentaenoate polyunsaturated fatty acid complex (1 mM) (Item No. 43473), which contain fatty acid-free bovine serum albumin (BSA) at an approximately 6:1 molar ratio of PUFA:BSA. It can be used for efficient fatty acid delivery to cells in culture for the purpose of monitoring fatty acid oxidation or similar processes in various cellular metabolic studies.¹⁻⁴ BSA/BSA-Fatty acids are suitable for use in short-term cell culture applications (acute treatment to 18 hours); however, for long-term applications (25+ hours) the product should be filter-sterilized using a 0.2 µm filter and sterile receptacle, which will not affect its performance. For best results, it is recommended that this product be used in conjunction with BSA control for BSA-fatty acid complexes (1 mM) (Item No. 34932).

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. Wang, D., Green, M.F., McDonnell, E., *et al.* Oxygen flux analysis to understand the biological function of sirtuins. *Methods Mol. Biol.* **1077**, 241-258 (2013).
3. Bentebibel, A., Sebastián, D., Herrero, L., *et al.* Novel effect of C75 on carnitine palmitoyltransferase I activity and palmitate oxidation. *Biochemistry* **45**(14), 4339-4350 (2006).
4. 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).

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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