PRODUCT INFORMATION

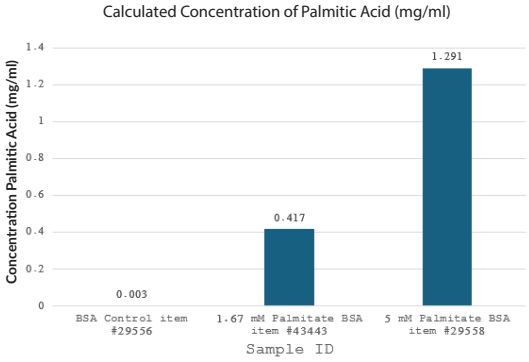
BSA-Palmitate Saturated Fatty Acid Complex (1.67 mM)

Item No. 43443

Synonyms: Bovine Serum Albumin-PA, Bovine Serum Albumin-Palmitate, BSA-PA
Supplied as: 1.67 mM Palmitate:0.8 mM BSA (2:1 palmitate:BSA) in 150 mM sodium chloride, pH 7.4
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.

Image



Palmitic acid concentration in BSA-Palmitate Saturated Fatty Acid Complex (1.67 mM) (Item No. 43443) and BSA-Palmitate Saturated Fatty Acid Complex (5 mM) (Item No. 29558) compared to BSA Control for BSA-Fatty Acid Complexes (5 mM) (Item No. 29556) using GC-MS analysis.

Description

BSA-Palmitate saturated fatty acid complex is composed of palmitic acid (Item No. 10006627) and fatty acid-free bovine serum albumin (BSA) at an approximately 2:1 molar ratio of palmitate:BSA. It has been 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.[1-3] 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 (5 mM) (Item No. 29556).

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).

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