

For life science research only.
Not for use in diagnostic procedures.



Bovine Serum Albumin Fraction V, fatty acid free from bovine serum

 **Version: 07**
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Lyophilized

Cat. No. 10 775 835 001 50 g
Not available in US

Store the product at +2 to +8°C.

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1. General Information

1.1. Contents

Vial / bottle	Label	Content
1	Bovine Serum Albumin Fraction V, fatty acid free	1 vial, 50 g

1.2. Storage and Stability

Storage Conditions (Product)

When stored at +2 to +8°C, the product is stable through the expiry date printed on the label.

Vial / bottle	Label	Storage
1	Bovine Serum Albumin Fraction V, fatty acid free	Store at +2 to +8°C.

Storage Conditions (Working Solution)

In solution, albumin is stable for approximately three months at –15 to –25°C.

Reconstitution

Albumin is readily soluble at concentrations of 50 to 100 mg/ml.

⚠ For best results, add a non-ionic detergent to avoid the formation of foam when preparing solutions, gently stirring.

1.3. Application

Bovine Serum Albumin Fraction V, free from fatty acids is used in lipid research to:

- Study lipid metabolism in biological systems.
- Identify the transport mechanism in living organisms.
- Study ligand binding.
- Investigate ionic binding.

2. How to Use this Product

2.1. Parameters

Contaminants

Analysis	[%]
Water	≤5
Fatty acids (total)	≤0.2 mg/g
Triglycerides (enzym.)	not detectable
Immunoglobulins	not detectable
Sodium (flame photometry)	≤0.5
Potassium (flame photometry)	≤0.01
Iron (AAS)	≤0.001
Copper (AAS)	≤0.002

Molecular Weight

68,000 Da (583 amino acids)

pH Stability

pH 7.0 ± 0.2

Purity

Analysis	[%]
Protein	≥97

3. Additional Information on this Product

3.1. Test Principle

Ligand binding

Albumin reversibly binds many substances and can assume transport and vehicle functions in the body. Albumin's ability to bind a number of anions and cations can be used to study ion binding.

The affinity of albumin for ligands depends on the hydrophobic character of the molecules and their charge.

- Molecules with long alkyl chains and negatively charged groups are bound very firmly.
- Molecules with short chains and positively charged groups are bound less firmly.

Ligands bound by albumin include fatty acids, cationic and neutral detergents, acetylcholine, ascorbic acid, penicillin, thyroxin, digitonin, hormones, metal ions, bilirubin, sugars, and drugs. The most important function of albumin in the body is the transport of lipids and free fatty acids. Albumin, free from fatty acids, is used to investigate these processes.

4. Supplementary Information

4.1. Conventions

To make information consistent and easier to read, the following text conventions and symbols are used in this document to highlight important information:

Text convention and symbols

i *Information Note: Additional information about the current topic or procedure.*

⚠ Important Note: Information critical to the success of the current procedure or use of the product.

① ② ③ etc. Stages in a process that usually occur in the order listed.

1 2 3 etc. Steps in a procedure that must be performed in the order listed.

* (Asterisk) The Asterisk denotes a product available from Roche Diagnostics.

4.2. Changes to previous version

Layout changes.

Editorial changes.

4.3. Trademarks

All product names and trademarks are the property of their respective owners.

4.4. License Disclaimer

For patent license limitations for individual products please refer to:

List of biochemical reagent products.

4.5. Regulatory Disclaimer

For life science research only. Not for use in diagnostic procedures.

4.6. Safety Data Sheet

Please follow the instructions in the Safety Data Sheet (SDS).

4.7. Contact and Support

To ask questions, solve problems, suggest enhancements or report new applications, please visit our **Online Technical Support Site.**

To call, write, fax, or email us, visit **sigma-aldrich.com**, and select your home country. Country-specific contact information will be displayed.

