

## Bovine Serum Albumin 30%

**CAT N°:** SA-296

**Collected from the source:** Not applicable

**Country of origin:**

All bovine proteins are obtained from Bovine Spongiform Encephalopathy (BSE) free countries or are declared BSE free by the European authorities.

**Storage conditions:** 2°C to 8°C

**Shelf life:** 36 months

**Filtration:** Not applicable

**Theoretical pH:** 6.5 – 7.4

**Osmolality:** Not applicable

**Endotoxin:** Not applicable

**Haemoglobin:** Not applicable

**Cell Culture:** Not applicable

**Total Protein:** Not applicable

**Sterility tests:**

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

**Virus test:** Not applicable

**Other tests:** Not applicable

**Treatments:** Not applicable

**Recommended use:**

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light
- Manipulate the product in aseptic conditions (e.g. : under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)
- In order to preserve all product qualities, it is recommended to thaw out the flask, to aliquote, then to re-freeze the produced flasks rather than to thaw out and re-freeze the flask at each use.
- It is recommended to use the product immediately after its thaw out.

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*L'unité de production pour BIOSERA à Nuaille est certifiée ISO 9001*

The product is intended to be used in vitro for research or further manufacturing only and not for use as an Active Pharmaceutical Ingredient or food or animal feed.

**Remarks:**

Bovine serum albumin (BSA) makes up approximately 30% of all proteins in animal serum. It is commonly used in cell culture protocols, particularly where protein supplementation is necessary and the other components of serum are unwanted. In cell culture its main role is as a carrier of small molecules. Because of its negative charge, BSA binds water, salts, fatty acids, vitamins and hormones, then carries these bound components between tissues and cells. The binding capacity also makes BSA an effective scavenger to remove toxic substances, including pyrogens, from the medium.

Albumins are readily soluble in water and can only be precipitated by high concentrations of neutral salts such as ammonium sulfate. The solution stability of BSA is very good (especially if the solutions are stored as frozen aliquots). In fact, albumins are frequently used as stabilisers for other solubilized proteins (e.g., labile enzymes). However, albumin is readily coagulated by heat. When heated to 50°C or above, albumin quite rapidly forms hydrophobic aggregates which do not revert to monomers upon cooling. At somewhat lower temperatures aggregation is also expected to occur, but at relatively slower rates.

Bovine albumins contain 16% nitrogen and are often used as standards in protein calibration studies.

Albumin is used to solubilize lipids, and is also used as a blocking agent in Western blots or ELISA applications.