

## **BSA**

Catalog # PVGS1758

## **Product Information**

Primary Accession P02769
Species Bovine

Sequence Asp25-Ala607

**Purity** ≥ 95% as analyzed by SDS-PAGE

**Endotoxin Level** 

**Expression System** P. pastoris

Theoretical Molecular Weight 67.3 kDa

**Formulation** Lyophilized from a 0.2 Im filtered solution in PBS, pH 7.4

**Reconstitution** Before opening, centrifuge the vial briefly to bring the contents to the bottom.

Reconstitute the lyophilized powder in ddH<sub>2</sub>O up to 100 [g/ml

Storage & Stability Upon receiving, this product remains stable up to 6 months at -20 °C or

below. Upon reconstitution, the product should be stable up to 1 week at 4 °C

or up to 3 months at -20 °C. Avoid repeated freeze-thaw cycles.

## **Additional Information**

**Gene ID** 280717

Other Names Albumin, BSA, Bos d 6, ALB

**Target Background**Bovine serum albumin (BSA) is a soluble monomeric protein. It is widely as a

supplement in biochemical and tissue culture media, promoting cell growth and survival. BSA stabilizes extracellular fluid volume and functions as a carrier for small molecules such as steroids, fatty acids, and thyroid

hormones. It is also used in drug development, protein purification, and food

processing.

## **Protein Information**

Name ALB

**Function** Binds water, Ca(2+), Na(+), K(+), fatty acids, hormones, bilirubin and drugs.

Its main function is the regulation of the colloidal osmotic pressure of blood. Major zinc transporter in plasma, typically binds about 80% of all plasma zinc (By similarity). Major calcium and magnesium transporter in plasma, binds approximately 45% of circulating calcium and magnesium in plasma

(Probable). Potentially has more than two calcium-binding sites and might additionally bind calcium in a non-specific manner (PubMed:22677715). The shared binding site between zinc and calcium at residue Asp-272 suggests a crosstalk between zinc and calcium transport in the blood (Probable). The rank order of affinity is zinc > calcium > magnesium (Probable). Binds to the bacterial siderophore enterobactin and inhibits enterobactin- mediated iron uptake of E.coli, and may thereby limit the utilization of iron and growth of enteric bacteria such as E.coli (PubMed:6234017). Does not prevent iron uptake by the bacterial siderophore aerobactin (PubMed:6234017).

**Cellular Location** Secreted.

**Tissue Location** Plasma.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.