

BSA
Catalog # PVGS1758

Specification

BSA - Product Information

Primary Accession [P02769](#)
Species
Bovine

Sequence
Asp25-Ala607

Purity
≥ 95% as analyzed by SDS-PAGE

Endotoxin Level
< 0.2 EU/ µg of protein by gel clotting method

Expression System
<I>P. pastoris</I>

Theoretical Molecular Weight
67.3 kDa

Formulation **Lyophilized from a 0.2 µm 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 ddH₂O up to 100 µg/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.

BSA - 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 used 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.

BSA - 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.

BSA - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BSA - Images