10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 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 ddH_2O 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.

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.