

BSA (Bovine Serum Albumin) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM376] Catalog # AH12850

Product Information

Application	E
Primary Accession	<u>P02769</u>
Other Accession	<u>280717 (Cow)</u> , <u>Bt.106669 (Cow)</u>
Reactivity	Rabbit, Bovine, Guinea Pig, Dog
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1
Clone Names	SPM376
Calculated MW	69293

Additional Information

Gene ID	280717
Other Names	Serum albumin, BSA, Bos d 6, ALB
Application Note	E~~N/A
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	BSA (Bovine Serum Albumin) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

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: <u>6234017</u>). Does not prevent iron

	uptake by the bacterial siderophore aerobactin (PubMed: <u>6234017</u>).
Cellular Location	Secreted.
Tissue Location	Plasma.

Background

Reacts with a protein of ~66kDa, identified as bovine serum albumin (BSA). It is a high affinity antibody and can be used for detection of traces of BSA. Bovine serum albumin (BSA) is an abundant plasma protein in cows that is important for maintaining osmotic pressure in blood plasma for proper distribution of body fluids between intravascular compartments and body tissues. BSA is a common buffer component for immunoglobulin type assays due to good solubility characteristics for water, Ca2+, Na+, K+, fatty acids, hormones and bilirubin. BSA makes up about half of the protein in plasma and represents the most stable and soluble protein in the plasma. It is a suitable reagent for laboratories developing immunoassays, mostly due to its availability, solubility and the numerous functional groups present for coupling. The BSA component contains several lysines that are capable of reacting with conjugation sites of linkers, making it applicable as a carrier protein for antigenic compounds.

References

Haroun, M. 2005. Bovine serum albumin antibodies as a disease marker for hepatitis E virus infection. J. Biomed. Biotechnol. 2005: 316-321

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