

Human Serum Albumin Antibody

Rabbit Polyclonal Antibody Catalog # ABV11486

Specification

Human Serum Albumin Antibody - Product Information

Application WB
Primary Accession P02768

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 69367

Human Serum Albumin Antibody - Additional Information

Gene ID 213

Positive Control Western blot: mouse muscle lysate, rat

kidney lysate, Human Serum Albumin

Application & Usage Western blot: 1-4 μg
Other Names

Target/Specificity

HSA, human serum albumin, serum albumin

Human Serum Albumin

Antibody Form Liquid

Appearance Colorless liquid

Formulation

100 μg (0.5 mg/ml) of antibody in PBS pH 7.2, 0.01 % BSA, 0.03 % ProClin®, and 50 % glycerol.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20°C

Background Descriptions

Precautions

Human Serum Albumin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Human Serum Albumin Antibody - Protein Information

Name ALB

Function

Binds water, Ca(2+), Na(+), K(+), fatty acids, hormones, bilirubin and drugs (Probable). Its main function is the regulation of the colloidal osmotic pressure of blood (Probable). Major zinc transporter in plasma, typically binds about 80% of all plasma zinc (PubMed:19021548). Major calcium and magnesium transporter in plasma, binds approximately 45% of circulating calcium and magnesium in plasma (By similarity). Potentially has more than two calcium-binding sites and might additionally bind calcium in a non-specific manner (By similarity). The shared binding site between zinc and calcium at residue Asp-273 suggests a crosstalk between zinc and calcium transport in the blood (By similarity). The rank order of affinity is zinc > calcium > magnesium (By similarity). Binds to the bacterial siderophore enterobactin and inhibits enterobactin-mediated iron uptake of E.coli from ferric transferrin, 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.

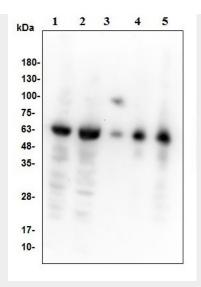
Human Serum Albumin Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Human Serum Albumin Antibody - Images





Western blot with Albumin antibody: Lane 1: 22 μg mouse muscle lysate. Lane 2: 60 μg rat kidney lysate. Lane 3: 2 ng Human Serum Albumin; Lane 4: 10 ng Human Serum Albumin; Lane 5: 50 ng Human Serum Albumin

Human Serum Albumin Antibody - Background

Albumin is synthesized in the liver as preproalbumin which has an N-terminal peptide that is removed before the nascent protein is released from the rough endoplasmic reticulum. The product, proalbumin, is in turn cleaved in the Golgi vesicles to produce the secreted albumin. Albumin is a soluble, monomeric protein which comprises about one-half of the blood serum protein. Albumin functions primarily as a carrier protein for steroids, fatty acids, and thyroid hormones and plays a role in stabilizing extracellular fluid volume. Mutations in this gene on chromosome 4 result in various anomalous proteins. Albumin is a globular unglycosylated serum protein of molecular weight 65,000. The human albumin gene is 16,961 nucleotides long from the putative 'cap' site to the first poly (A) addition site. It is split into 15 exons which are symmetrically placed within the 3 domains that are thought to have arisen by triplication of a single primordial domain. HSA is widely used to stabilize blood volume generally from donors but the fear of contamination such as HIV & Hepatitis has enticed great interest in the recombinant form which is identical to the natural blood.