

R1048BS

Polyclonal Antibody to Albumin - Biotin

Alternate names:

ALB, BSA, HSA, Serum Albumin

Quantity:

1 ml

Concentration:

10 mg/ml

Background:

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. 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.

Uniprot ID:

[P02769](#)

NCBI:

[NP_851335](#)

GeneID:

[280717](#)

Host / Isotype:

Rabbit / IgG

Immunogen:

Albumin is a stable small polypeptide with a strong antigenicity. Its molecular weight is about 69,000. It has a high mobility in electrophoresis, shows macro-heterogeneity especially under pathological conditions and it can bind a large number of physiological and non-physiological molecules. Albumin is isolated from human serum by sequential precipitation and purified by ion exchange chromatography and affinity chromatography. Freund's complete adjuvant is used in the first step of the immunization procedure.

Format:

State: Lyophilized purified hyperimmune IgG fraction

Purification: Hyperimmune antisera with strong precipitating activity are selected for fractionation by salt by salt-precipitation and purification of the IgG (7S) fraction by DEAE-chromatography.

Buffer System: PBS, pH 7.2

Preservatives: None

Label: Biotin

Molar Ratio: 6.2 moles Biotin per mole of Rabbit IgG.

Reconstitution: Restore with 1.0 ml of deionized water (or equivalent).

Applications:

ELISA.

Dot blot.

Immunoblotting.

Immunocytochemistry.

Immunohistochemistry on Paraffin Sections.

In immunocytochemical and immunohistochemical use for the detection of Albumin at the cellular and subcellular level by staining of appropriately treated cell and tissue substrates; in non-isotopic assay methodology (e.g. ELISA) to measure albumin in bovine serum or other body fluids. As a second step an avidin or streptavidin conjugate of the user's choice has to be used. This immunoconjugate is not pre-

diluted. The optimum working dilution of each conjugate should be established by titration before being used. Excess labelled antibody must be avoided because it may cause high unspecific background staining and interfere with the specific signal.

Recommended Working Dilutions:

Histochemical and Cytochemical Use: 1/100-1/250.

ELISA and comparable non-precipitating antibody-binding assays: 1/2,000-1/10,000.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

The defined antibody specificity is directed to Albumin as tested against Bovine sera. In immunoelectrophoresis and double radial immunodiffusion (Ouchterlony), using various antiserum concentrations against appropriate concentrations of the immunogen, a single characteristic precipitin line is obtained which shows a reaction of identity with the precipitin lines obtained against Bovine serum and the purified Albumin.

Cross-reactivity: Inter-species cross-reactivity is a normal feature of antibodies to mammalian serum proteins, since homologous proteins of different species frequently share antigenic determinants. The degree of crossreactivity is also dependent on the concentrations of the reactants and the sensitivity of the assay arrangement. This antiserum fraction has been tested for cross-reactivity by double radial immunodiffusion against several species sera with the following results: Chicken (-), Dog (+), Goat (++), Guinea Pig ($\pm$), Horse (+), Human (+), Monkey (+), Mouse (-), Rabbit (-), Rat ($\pm$), Sheep (++), Swine (+).

Species: Bovine.

Other species not tested.

Storage:

Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.