

ALB Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM2069b

Specification

ALB Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P02768</u> <u>A2V9Z4</u>, <u>NP_000468.1</u>, <u>P35747</u> Human Horse, Monkey Mouse Monoclonal IgG2a 69367 540-569

ALB Antibody - Additional Information

Gene ID 213

Other Names Serum albumin, ALB

Target/Specificity

This ALB antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 540-569 amino acids from human ALB.

Dilution WB~~1:500~1000 E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions ALB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ALB 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:<u>19021548</u>). 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:<u>6234017</u>). Does not prevent iron uptake by the bacterial siderophore.

Cellular Location Secreted.

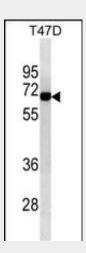
Tissue Location Plasma.

ALB Antibody - Protocols

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

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

ALB Antibody - Images



ALB Antibody (Cat. #AM2069b) western blot analysis in T47D cell line lysates ($35\mu g$ /lane).This demonstrates the ALB antibody detected the ALB protein (arrow).

ALB Antibody - 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 a globular unglycosylated serum protein of molecular weight 65,000. 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.

ALB Antibody - References

Schelleman, H., et al. Br J Clin Pharmacol 70(3):393-399(2010) Minchiotti, L., et al. Hum. Mutat. 29(8):1007-1016(2008) Rikova, K., et al. Cell 131(6):1190-1203(2007) Sugio, S., et al. Protein Eng. 12(6):439-446(1999) Sakamoto, Y., et al. Biochim. Biophys. Acta 1252(2):209-216(1995)