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ALB Antibody (Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2069a

Product Information

Application	WB, E
Primary Accession	P02768
Other Accession	A2V9Z4, NP_000468.1
Reactivity	Human
Predicted	Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Clone Names	500CT2.1.4
Calculated MW	69367
Antigen Region	540-569

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~~1:500~8000 E~~Use at an assay dependent concentration.
Format	Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.
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 (Ascites) 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 (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.

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.

References

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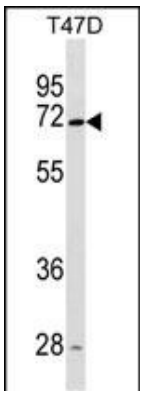
Minchiotti, L., et al. Hum. Mutat. 29(8):1007-1016(2008)
Rikova, K., et al. Cell 131(6):1190-1203(2007)
Sugio, S., et al. Protein Eng. 12(6):439-446(1999)
Sakamoto, Y., et al. Biochim. Biophys. Acta 1252(2):209-216(1995)

Images



ALB Antibody (Cat. #AM2069a) western blot analysis in T47D cell line lysates (35µg/lane).This demonstrates the ALB antibody detected the ALB protein (arrow).