SANTA CRUZ BIOTECHNOLOGY, INC.

ALB (BGN/1328/33): sc-80674

BACKGROUND

Serum albumin (ALB), the main protein in plasma, has a very good binding capacity for water, fatty acids, calcium, sodium, bilirubin, hormones, potassium and drugs. The primary function of ALB is to regulate the colloidal osmotic pressure of blood. 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 form of albumin. Mutations in the ALB gene may result in familial dysalbuminemic hyperthyroxinemia (FDH), a form of euthyroid hyperthyroxinemia that is due to increased affinity of ALB for T4. FDH is the most common cause of inherited euthyroid hyperthyroxinemia in Caucasian populations.

REFERENCES

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2. Angelisova, P., et al. 1986. The characteristics of monoclonal antibodies against human albumin. Folia Biol. 32: 289-294.
3. Bennett, P.H., et al. 1995. Screening and management of microalbuminuria in patients with diabetes mellitus: recommendations to the Scientific Advisory Board of the National Kidney Foundation from an ad hoc committee of the Council on Diabetes. Am. J. Kidney Dis. 25: 107-112.
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5. Salmasi, A.M., et al. 2003. The degree of albuminuria is related to left ventricular hypertrophy in hypertensive diabetics and is associated with abnormal left ventricular filling: a pilot study. Angiology 54: 671-678.
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8. Alderson, P., et al. 2004. Human albumin solution for resuscitation and volume expansion in critically ill patients. Cochrane Database Syst. Rev. CD001208.
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CHROMOSOMAL LOCATION

Genetic locus: ALB (human) mapping to 4q13.3.

SOURCE

ALB (BGN/1328/33) is a mouse monoclonal antibody raised against native ALB of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ALB (BGN/1328/33) is recommended for detection of ALB of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for ALB siRNA (h): sc-45606, ALB shRNA Plasmid (h): sc-45606-SH and ALB shRNA (h) Lentiviral Particles: sc-45606-V.

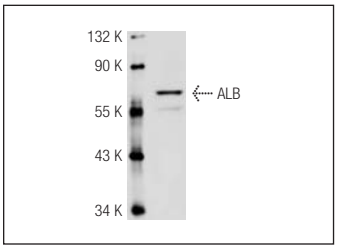
Molecular Weight of ALB: 66 kDa.

Positive Controls: Human PBL whole cell lysate.

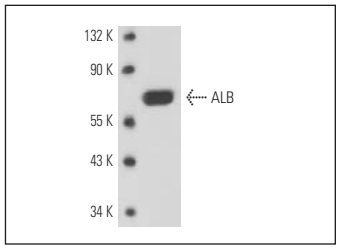
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ALB (BGN/1328/33): sc-80674. Western blot analysis of ALB expression in Hep G2 whole cell lysate.



ALB (BGN/1328/33): sc-80674. Western blot analysis of ALB expression in human PBL whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.