

ALB (m): 293T Lysate: sc-118327

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 prealbumin, 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

1. Ruiz, M., et al. 1982. Familial dysalbuminemic hyperthyroxinemia: a syndrome that can be confused with thyrotoxicosis. *N. Engl. J. Med.* 306: 635-639.
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.
4. Wachtell, K., et al. 2003. Albuminuria and cardiovascular risk in hypertensive patients with left ventricular hypertrophy: the LIFE study. *Ann. Intern. Med.* 139: 901-906.
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.
6. Tavoulari, S., et al. 2004. The recombinant subdomain IIIB of human serum albumin displays activity of gonadotrophin surge-attenuating factor. *Hum. Reprod.* 19: 849-858.
7. Mitrogianni, Z., et al. 2004. Tyrosine nitration in plasma proteins from patients undergoing hemodialysis. *Am. J. Kidney Dis.* 44: 286-292.
8. Alderson, P., et al. 2004. Human albumin solution for resuscitation and volume expansion in critically ill patients. *Cochrane Database Syst. Rev.* 4: CD001208.
9. Seppelt, I., et al. 2005. Human albumin meta-analysis. *Crit. Care Med.* 33: 914-915.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Alb1 (mouse) mapping to 5 E1.

PRODUCT

ALB (m): 293T Lysate represents a lysate of mouse ALB transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

ALB (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ALB antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

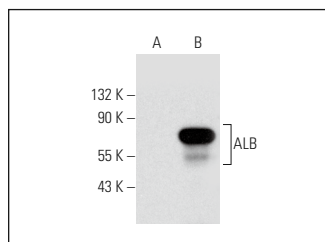
ALB (G-8): sc-515019 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse ALB expression in ALB transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

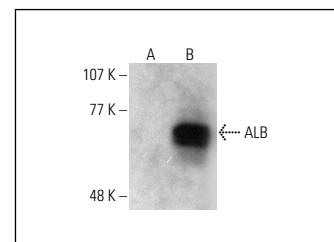
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



ALB (G-8): sc-515019. Western blot analysis of ALB expression in non-transfected: sc-117752 (A) and mouse ALB transfected: sc-118327 (B) 293T whole cell lysates.



ALB (F-8) HRP: sc-374670 HRP. Direct western blot analysis of ALB expression in non-transfected: sc-117752 (A) and mouse ALB transfected: sc-118327 (B) 293T whole cell lysates.

RESEARCH USE

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