

AI-BP (K-13): sc-161322

BACKGROUND

Apolipoproteins are protein components of plasma lipoproteins. Apolipoprotein A-I (apoA-I) promotes cholesterol efflux from tissues to the liver for excretion. apoA-I is the major protein component of high density lipoprotein (HDL) in the plasma. It can function as a cofactor for lecithin cholesterolacyltransferase, which is responsible for the formation of most plasma cholesteryl esters. AI-BP (apolipoprotein A-I-binding protein), also known as YjeF N-terminal domain-containing protein 1, is a 288 amino acid secreted protein that binds apoA-I, apoA2 and HDL. Individuals with impaired renal function show an increased rate of AI-BP excretion, indicating that it is normally reabsorbed within the kidney tubules. AI-BP belongs to the YjeF N-terminal domain protein family, which includes proteins that are frequently involved in oogenesis and spermatogenesis. There are two isoforms of AI-BP that are produced as a result of alternative splicing events.

REFERENCES

1. Keso, L., et al. 1987. Apolipoprotein A-I-binding protein from human term placenta. Purification and partial characterization. *FEBS Lett.* 215: 105-108.
2. Sviridov, D.D., et al. 1992. Studies on the proteins involved in the interaction of high-density lipoprotein with isolated human small intestine epithelial cells. *FEBS Lett.* 303: 202-204.
3. Jin, F.Y., et al. 1998. Estradiol stimulates apolipoprotein A-I- but not A-II-containing particle synthesis and secretion by stimulating mRNA transcription rate in Hep G2 cells. *Arterioscler. Thromb. Vasc. Biol.* 18: 999-1006.
4. Ritter, M., et al. 2002. Cloning and characterization of a novel apolipoprotein A-I binding protein, AI-BP, secreted by cells of the kidney proximal tubules in response to HDL or apoA-I. *Genomics* 79: 693-702.
5. Online Mendelian Inheritance in Man, OMIM[™]. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608862. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: APOA1BP (human) mapping to 1q23.1; Apoa1bp (mouse) mapping to 3 F1.

SOURCE

AI-BP (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of AI-BP of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161322 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

AI-BP (K-13) is recommended for detection of AI-BP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

AI-BP (K-13) is also recommended for detection of AI-BP in additional species, including equine.

Suitable for use as control antibody for AI-BP siRNA (h): sc-88158, AI-BP siRNA (m): sc-140920, AI-BP shRNA Plasmid (h): sc-88158-SH, AI-BP shRNA Plasmid (m): sc-140920-SH, AI-BP shRNA (h) Lentiviral Particles: sc-88158-V and AI-BP shRNA (m) Lentiviral Particles: sc-140920-V.

Molecular Weight of (predicted) AI-BP isoforms 1/2: 32/20 kDa.

Molecular Weight of (observed) AI-BP isoforms: 25-37 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

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.