

AI-BP (D-3): sc-393532

BACKGROUND

Apolipoproteins are protein components of plasma lipoproteins. Apolipoprotein A-I (ApoA1) promotes cholesterol efflux from tissues to the liver for excretion. ApoA1 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 ApoA1, 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.

CHROMOSOMAL LOCATION

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

SOURCE

AI-BP (D-3) is a mouse monoclonal antibody raised against amino acids 221-263 mapping within an internal region of AI-BP of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AI-BP (D-3) is available conjugated to agarose (sc-393532 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393532 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393532 PE), fluorescein (sc-393532 FITC), Alexa Fluor[®] 488 (sc-393532 AF488), Alexa Fluor[®] 546 (sc-393532 AF546), Alexa Fluor[®] 594 (sc-393532 AF594) or Alexa Fluor[®] 647 (sc-393532 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393532 AF680) or Alexa Fluor[®] 790 (sc-393532 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

AI-BP (D-3) is recommended for detection of AI-BP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

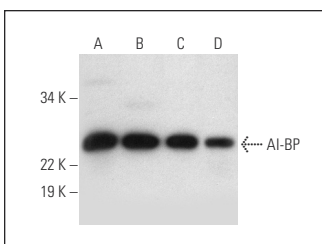
Molecular Weight (observed) of AI-BP isoforms: 25-37 kDa.

Positive Controls: human kidney extract: sc-363764, human heart extract: sc-363763 or human liver extract: sc-363766.

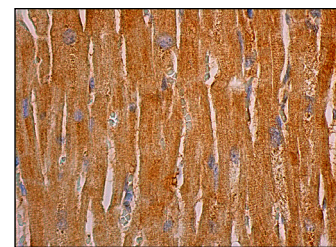
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BPFITC: sc-516140 or m-IgGκ BPE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BPHRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



AI-BP (D-3): sc-393532. Western blot analysis of AI-BP expression in human kidney (A), human heart (B), human liver (C) and human testis (D) tissue extracts.



AI-BP (D-3): sc-393532. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

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.