

# apoH (C-2): sc-515677

## BACKGROUND

Human apolipoprotein H (apoH, also designated  $\beta_2$ -glycoprotein I, activated protein C binding protein or APC inhibitor) is a five-domain plasma membrane-adhesion protein that is rich in sialic acid linked to galactose or N-acetylglucosamine. apoH has been implicated in a variety of physiological pathways, including blood coagulation and the immune response. apoH is a cofactor for the binding of serum auto-antibodies from antiphospholipid syndrome, and is correlated with thrombosis, lupus erythematosus and recurrent fetal loss. In addition, apoH is also implicated in the clearance of apoptotic bodies from the circulation. The apoH gene is located on human chromosome 17q24.2. apoH is synthesized by hepatocytes and is present in blood associated with plasma lipoproteins. apoH displays a genetically determined structural polymorphism including three alleles (apoH\*1, apoH\*2 and apoH\*3). apoH can inhibit the translocation of cholesterol from extracellular pools to macrophages, which reduces the cellular accumulation of cholesterol, suggesting that apoH may play an important role in the prevention of atherosclerosis.

## REFERENCES

1. Mehdi, H., et al. 1991. Nucleotide sequence and expression of the human gene encoding apolipoprotein H ( $\beta_2$ -glycoprotein I). *Gene* 108: 293-298.
2. Steinkasserer, A., et al. 1991. Complete nucleotide and deduced amino acid sequence of human  $\beta_2$ -glycoprotein I. *Biochem. J.* 277: 387-391.
3. Ruii, G., et al. 1997. Influence of apoH protein polymorphism on apoH levels in normal and diabetic subjects. *Clin. Genet.* 52: 167-172.

## CHROMOSOMAL LOCATION

Genetic locus: APOH (human) mapping to 17q24.2; Apoh (mouse) mapping to 11 E1.

## SOURCE

apoH (C-2) is a mouse monoclonal antibody raised against amino acids 182-340 mapping near the C-terminus of apoH of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

apoH (C-2) is available conjugated to agarose (sc-515677 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515677 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515677 PE), fluorescein (sc-515677 FITC), Alexa Fluor® 488 (sc-515677 AF488), Alexa Fluor® 546 (sc-515677 AF546), Alexa Fluor® 594 (sc-515677 AF594) or Alexa Fluor® 647 (sc-515677 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515677 AF680) or Alexa Fluor® 790 (sc-515677 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## STORAGE

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

## APPLICATIONS

apoH (C-2) is recommended for detection of apoH of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for apoH siRNA (h): sc-72518, apoH siRNA (m): sc-72519, apoH shRNA Plasmid (h): sc-72518-SH, apoH shRNA Plasmid (m): sc-72519-SH, apoH shRNA (h) Lentiviral Particles: sc-72518-V and apoH shRNA (m) Lentiviral Particles: sc-72519-V.

Molecular Weight of apoH: 38 kDa.

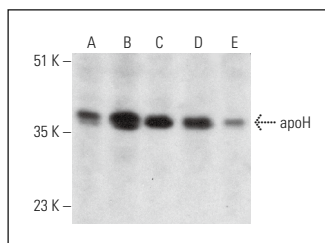
Positive Controls: NRK whole cell lysate: sc-364197, c4 whole cell lysate: sc-364186 or MTE1D whole cell lysate: sc-364918.

## RECOMMENDED SUPPORT REAGENTS

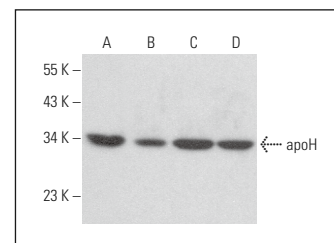
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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.
- 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



apoH (C-2): sc-515677. Western blot analysis of apoH expression in C3H/10T1/2 (A), c4 (B), NRK (C) and MTE1D (D) whole cell lysates and rat liver tissue extract (E).



apoH (C-2): sc-515677. Western blot analysis of apoH expression in NIH/3T3 (A), U-937 (B), Caco-2 (C) and A549 (D) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Salunkhe, V., et al. 2019. A comprehensive proteomics study on platelet concentrates: platelet proteome, storage time and Mirasol pathogen reduction technology. *Platelets* 30: 368-379.
2. Cheng, Q., et al. 2022. Serum proteome profiling reveals differentially expressed proteins between subjects with metabolically healthy obesity and nonalcoholic fatty liver disease. *J. Proteomics* 260: 104556.

## RESEARCH USE

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