



# APOBEC3H (FL-182): sc-98334

## BACKGROUND

APOBEC3H (apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3H), also known as ARP10, is a 200 amino acid protein that belongs to the cytidine and deoxycytidylate deaminase family. Highly expressed in ovary, testis, colon, cerebellum, skin and fetal liver, APOBEC3H uses zinc as a co-factor to catalyze the deamination of cytidine to produce uridine, a reaction that edits mRNA and increases protein diversity. Additionally, via its catalytic activity, APOBEC3H can inhibit retroviral replication and it is thought to play a role in intrinsic immune system defense mechanisms. Overexpression of APOBEC3H may be associated with the formation of tumors, suggesting a role for APOBEC3H in carcinogenesis. Two isoforms of APOBEC3H exist due to alternative splicing events.

## REFERENCES

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5. Köck, J. and Blum, H.E. 2008. Hypermutation of hepatitis B virus genomes by APOBEC3G, APOBEC3C and APOBEC3H. *J. Gen. Virol.* 89: 1184-1191.
6. Vartanian, J.P., Guetard, D., Henry, M. and Wain-Hobson, S. 2008. Evidence for editing of human papillomavirus DNA by APOBEC3 in benign and pre-cancerous lesions. *Science* 320: 230-233.

## CHROMOSOMAL LOCATION

Genetic locus: APOBEC3H (human) mapping to 22q13.1.

## SOURCE

APOBEC3H (FL-182) is a rabbit polyclonal antibody raised against amino acids 1-182 representing full length APOBEC3H 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.

## 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.

## APPLICATIONS

APOBEC3H (FL-182) is recommended for detection of APOBEC3H of human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for APOBEC3H siRNA (h): sc-72517, APOBEC3H shRNA Plasmid (h): sc-72517-SH and APOBEC3H shRNA (h) Lentiviral Particles: sc-72517-V.

Molecular Weight of APOBEC3H: 24 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.