

# APOBEC2 (FL-224): sc-98335

## BACKGROUND

Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 2 (APOBEC2) is a 224 amino acid protein that belongs to the cytidine and deoxycytidylate deaminase family. Expressed exclusively in heart and skeletal muscle, APOBEC2 is thought to be a probable C (cytidine) to U (uridine) editing enzyme. However, unlike other members of the family, such as APOBEC1, which mediates the editing of apolipoprotein (apo) B mRNA, APOBEC2 does not display any detectable apoB mRNA editing activity. Also, APOBEC2 has been shown to have low, but definite, intrinsic cytidine deaminase activity.

## REFERENCES

- Liao, W., et al. 1999. APOBEC2, a cardiac- and skeletal muscle-specific member of the cytidine deaminase supergene family. *Biochem. Biophys. Res. Commun.* 260: 398-404.
- Xie, K., et al. 2004. The structure of a yeast RNA-editing deaminase provides insight into the fold and function of activation-induced deaminase and APOBEC1. *Proc. Natl. Acad. Sci. USA* 101: 8114-8119.

## CHROMOSOMAL LOCATION

Genetic locus: APOBEC (human) mapping to 6p21.1; Apobec2 (mouse) mapping to 17 C.

## SOURCE

APOBEC2 (FL-224) is a rabbit polyclonal antibody raised against amino acids 1-224 representing full length APOBEC2 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.

## APPLICATIONS

APOBEC2 (FL-224) is recommended for detection of APOBEC2 of mouse, rat and 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), 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).

APOBEC2 (FL-224) is also recommended for detection of APOBEC2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for APOBEC2 siRNA (h): sc-95404, APOBEC2 siRNA (m): sc-141158, APOBEC2 shRNA Plasmid (h): sc-95404-SH, APOBEC2 shRNA Plasmid (m): sc-141158-SH, APOBEC2 shRNA (h) Lentiviral Particles: sc-95404-V and APOBEC2 shRNA (m) Lentiviral Particles: sc-141158-V.

Molecular Weight (predicted) of APOBEC2: 26 kDa.

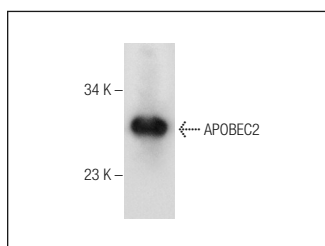
Molecular Weight (observed) of APOBEC2: 32 kDa.

Positive Controls: Human skeletal muscle extract: sc-363776.

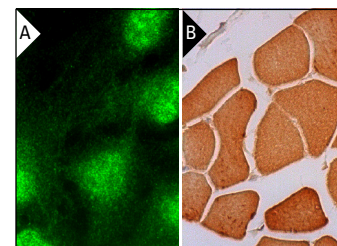
## RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



APOBEC2 (FL-224): sc-98335. Western blot analysis of APOBEC2 expression in human skeletal muscle tissue extract.



APOBEC2 (FL-224): sc-98335. Immunofluorescence staining of formalin-fixed HepG2 cells showing nuclear and cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal tissue showing cytoplasmic and nuclear staining of myocytes (B).

## 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.

## PROTOCOLS

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



Try **APOBEC2 (B-12): sc-365151**, our highly recommended monoclonal alternative to APOBEC2 (FL-224).