



APOBEC3C (C-12): sc-46731

BACKGROUND

APOBEC (apolipoprotein B mRNA editing enzyme, catalytic) proteins inhibit retroviruses by deaminating cytosine residues of viral RNA and DNA. The seven APOBEC3 genes or pseudogenes are found in a cluster thought to result from gene duplication on chromosome 22. APOBEC3C acts as a single-domained deaminase catalyzing dC to dU during the viral reverse transcription process SIV. It is also thought to play a role in the regulation of L1 retrotransposition. The N-terminal domain of the deaminase contains all the information necessary for both Vif-binding and cytidine deaminase activity, as compared to the double-domained deaminases APOBEC3F and APOBEC3G, which confer their target site specificity for cytidine deamination in their C-terminal domain. APOBEC3C is expressed in a variety of tissues.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: APOBEC3C (human) mapping to 22q13.1-q13.2.

SOURCE

APOBEC3C (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of APOBEC3C 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-46731 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

APOBEC3C (C-12) is recommended for detection of APOBEC3C of 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); may cross-react with APOBEC3F, APOBEC3D and APOBEC3B.

Suitable for use as control antibody for APOBEC3C siRNA (h): sc-60071.

Molecular Weight of APOBEC3C: 22 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.

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 or our catalog for detailed protocols and support products.