

# APOBEC3A (D-23): sc-130688

## BACKGROUND

APOBEC3A (apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3A), also known as ARP3 or PHRBN is a 199 amino acid protein that belongs to the cytidine deaminase family. Expressed in keratinocytes, as well as in peripheral leukocytes, APOBEC3A may be implicated in cell growth and cell cycle control. The gene encoding APOBEC3A is one of seven related genes which map to a cluster on chromosome 22 and are thought to play a role in tumor transformation and metastasis, as well as in host-associated antiviral activity. Chromosome 22 houses over 500 genes, some of which are involved in Phelan-McDermid syndrome, schizophrenia and Neurofibromatosis type 2.

## REFERENCES

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- Goila-Gaur, R., Khan, M.A., Miyagi, E., Kao, S. and Strebel, K. 2007. Targeting APOBEC3A to the viral nucleoprotein complex confers antiviral activity. *Retrovirology* 4: 61.
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- Vartanian, J.P., Guétard, 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.
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## CHROMOSOMAL LOCATION

Genetic locus: APOBEC3A (human) mapping to 22q13.1.

## SOURCE

APOBEC3A (D-23) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of APOBEC3A of human origin.

## PRODUCT

Each vial contains 100 µg of IgG in PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

APOBEC3A (D-23) is recommended for detection of APOBEC3A 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), 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 APOBEC3A siRNA (h): sc-72514, APOBEC3A shRNA Plasmid (h): sc-72514-SH and APOBEC3A shRNA (h) Lentiviral Particles: sc-72514-V.

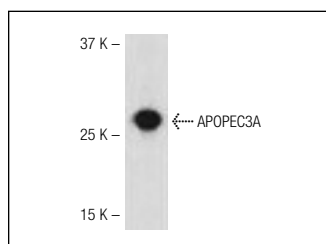
Molecular Weight of APOBEC3A: 23 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## 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



APOBEC3A (D-23): sc-130688. Western blot analysis of APOBEC3A expression in Jurkat whole cell lysate.

## SELECT PRODUCT CITATIONS

- Taylor, H.E., Khatua, A.K. and Popik, W. 2014. The innate immune factor apolipoprotein L1 restricts HIV-1 infection. *J. Virol.* 88: 592-603.

## 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.