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Goat Anti-APOBEC3C (C-term) Antibody

Peptide-affinity purified goat antibody

Catalog # AF1079a

Specification

Goat Anti-APOBEC3C (C-term) Antibody - Product Information

Application	**WB, E**
Primary Accession	Q9NRW3
Other Accession	NP_055323, 27350
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**22826**

Goat Anti-APOBEC3C (C-term) Antibody - Additional Information

Gene ID 27350

Other Names
DNA dC->dU-editing enzyme APOBEC-3C, A3C, 3.5.4.-, APOBEC1-like, Phorbolin I, APOBEC3C, APOBEC1L, PBI

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-APOBEC3C (C-term) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-APOBEC3C (C-term) Antibody - Protein Information

Name APOBEC3C

Synonyms APOBEC1L, PBI

Function

DNA deaminase (cytidine deaminase) which acts as an inhibitor of retrovirus replication and retrotransposon mobility via deaminase- dependent and -independent mechanisms. After the penetration of retroviral nucleocapsids into target cells of infection and the initiation of reverse transcription, it can induce the conversion of cytosine to uracil in the minus-sense single-strand viral DNA, leading to G-to-A hypermutations in the subsequent plus-strand viral DNA. The resultant detrimental levels of mutations in the proviral genome, along with a deamination-independent mechanism that works prior to the proviral integration, together exert efficient antiretroviral effects in infected target cells. Selectively targets single-stranded DNA and does not deaminate double-stranded DNA or single- or double-stranded RNA. Exhibits antiviral activity against simian immunodeficiency virus (SIV), hepatitis B virus (HBV), herpes simplex virus 1 (HHV-1) and Epstein-Barr virus (EBV) and may inhibit the mobility of LTR and non- LTR retrotransposons. May also play a role in the epigenetic regulation of gene expression through the process of active DNA demethylation.

Cellular Location
Nucleus. Cytoplasm

Tissue Location
Expressed in spleen, testes, peripherical blood lymphocytes, heart, thymus, prostate and ovary

Goat Anti-APOBEC3C (C-term) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-APOBEC3C (C-term) Antibody - Images

AF1079a (0.5 µg/ml) staining of Daudi lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-APOBEC3C (C-term) Antibody - Background

This gene is a member of the cytidine deaminase gene family. It is one of seven related genes or pseudogenes found in a cluster thought to result from gene duplication, on chromosome 22.

Members of the cluster encode proteins that are structurally and functionally related to the C to U RNA-editing cytidine deaminase APOBEC1. It is thought that the proteins may be RNA editing enzymes and have roles in growth or cell cycle control.

Goat Anti-APOBEC3C (C-term) Antibody - References

Interactions of host APOBEC3 restriction factors with HIV-1 in vivo: implications for therapeutics. Albin JS, et al. Expert Rev Mol Med, 2010 Jan 22. PMID 20096141.
APOBEC deaminases-mutases with defensive roles for immunity. Prochnow C, et al. Sci China C Life Sci, 2009 Oct. PMID 19911124.
Model structure of APOBEC3C reveals a binding pocket modulating ribonucleic acid interaction required for encapsidation. Stauch B, et al. Proc Natl Acad Sci U S A, 2009 Jul 21. PMID 19581596.
Are viruses inhibited by APOBEC3 molecules from their host species? Ross SR. PLoS Pathog, 2009 Apr. PMID 19390611.
Primary culture of human blood-retinal barrier cells and preliminary study of APOBEC3 expression: an in vitro study. Lin H, et al. Invest Ophthalmol Vis Sci, 2009 Sep. PMID 19369234.