10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

APOBEC3F Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP9176a

Specification

APOBEC3F Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q8IUX4

APOBEC3F Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 200316

Other Names
DNA dC->dU-editing enzyme APOBEC-3F, 354-, Apolipoprotein B mRNA-editing enzyme catalytic polypeptide-like 3F, A3F, APOBEC3F

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP9176a was selected from the N-term region of human APOBEC3F. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

APOBEC3F Antibody (N-term) Blocking Peptide - Protein Information

Name APOBEC3F

Function
DNA deaminase (cytidine deaminase) which acts as an inhibitor of retrovirus replication and retrotransposon mobility via deaminase- dependent and -independent mechanisms. Exhibits antiviral activity against viruse such as HIV-1 or HIV-2 (PubMed:15141007, PubMed:15152192, PubMed:23001005, PubMed:34774569). 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 (PubMed:15141007). 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 also against hepatitis B virus (HBV), equine infectious anemia virus (EIAV), xenotropic MuLV-related virus (XMRV) and simian foamy virus (SFV) 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
Cytoplasm. Cytoplasm, P-body.

Tissue Location
Widely expressed. Highly expressed in ovary.

APOBEC3F Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

APOBEC3F Antibody (N-term) Blocking Peptide - Images

APOBEC3F Antibody (N-term) Blocking Peptide - Background

This protein 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.

APOBEC3F Antibody (N-term) Blocking Peptide - References

Khatua,A.K., et.al., Virology 400 (1), 68-75 (2010)Koning,F.A., et.al., J. Virol. 83 (18), 9474-9485 (2009)