

APOBEC3F Antibody (N-term) Blocking PeptideSynthetic peptide
Catalog # BP9176a**Specification**

APOBEC3F Antibody (N-term) Blocking Peptide - Product InformationPrimary 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](/products/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 {ECO:0000303|PubMed:15141007, ECO:0000312|HGNC:HGNC:17356}

Function

DNA deaminase (cytidine deaminase) which acts as an inhibitor of retrovirus replication and retrotransposon mobility via deaminase- dependent and -independent mechanisms (PubMed: [15141007](http://www.uniprot.org/citations/15141007), PubMed: [20062055](http://www.uniprot.org/citations/20062055), PubMed: [22915799](http://www.uniprot.org/citations/22915799), PubMed: [34774569](http://www.uniprot.org/citations/34774569)). Exhibits antiviral activity against viruses such as HIV-1 or HIV-2 (PubMed: [15141007](http://www.uniprot.org/citations/15141007), PubMed: [15152192](http://www.uniprot.org/citations/15152192), PubMed: [20219927](http://www.uniprot.org/citations/20219927), PubMed: [21835787](http://www.uniprot.org/citations/21835787), PubMed: 15141007, PubMed: 20062055, PubMed: 22915799, PubMed: 34774569). Exhibits antiviral activity against viruses such as HIV-1 or HIV-2 (PubMed: 15141007, PubMed: 15152192, PubMed: 20219927, PubMed: 21835787, PubMed: 15141007, PubMed: 20062055, PubMed: 22915799, PubMed: 34774569).

<http://www.uniprot.org/citations/22807680> target="_blank">22807680, PubMed:23001005, PubMed:23097438, PubMed:23152537, 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 (PubMed:15141007). Selectively targets single-stranded DNA and does not deaminate double-stranded DNA or single- or double-stranded RNA (PubMed:15141007). 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 (PubMed:16378963, PubMed:16527742, PubMed:19458006, PubMed:20062055, PubMed:20335265). May also play a role in the epigenetic regulation of gene expression through the process of active DNA demethylation (PubMed:21496894).

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)