

APOBEC3F Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9176a**Specification**

APOBEC3F Antibody (N-term) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	Q8IUX4
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	45020
Antigen Region	22-48

APOBEC3F Antibody (N-term) - 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

This APOBEC3F antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 22-48 amino acids from the N-terminal region of human APOBEC3F.

Dilution

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

APOBEC3F Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

APOBEC3F Antibody (N-term) - 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](#), PubMed:[20062055](#), PubMed:[22915799](#), PubMed:[34774569](#)). Exhibits antiviral activity against virus such as HIV-1 or HIV-2 (PubMed:[15141007](#), PubMed:[15152192](#), PubMed:[20219927](#), PubMed:[21835787](#), PubMed:[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

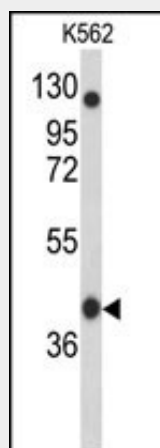
Tissue Location

Widely expressed. Highly expressed in ovary.

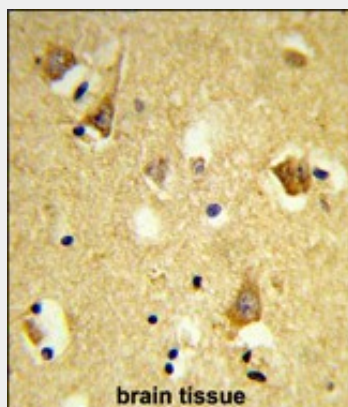
APOBEC3F Antibody (N-term) - Protocols

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

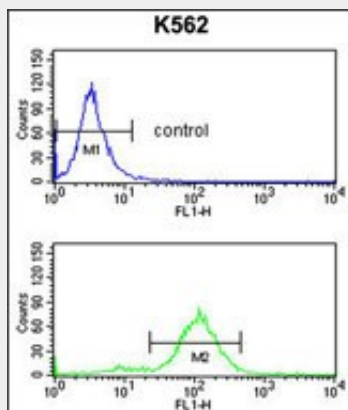
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

APOBEC3F Antibody (N-term) - Images

Western blot analysis of APOBEC3F Antibody (N-term) (Cat. #AP9176a) in K562 cell line lysates (35ug/lane). APOBEC3F (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with APOBEC3F Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



APOBEC3F Antibody (N-term) (Cat. #AP9176a) flow cytometry analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

APOBEC3F Antibody (N-term) - 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) - References

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