

APOBEC3D Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP18763a

Product Information

Application	WB, E
Primary Accession	Q96AK3
Other Accession	NP_689639.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38687
Calculated MW	46598
Antigen Region	46-72

Additional Information

Gene ID	140564
Other Names	DNA dC->dU-editing enzyme APOBEC-3D, A3D, 354-, APOBEC3D
Target/Specificity	This APOBEC3D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 46-72 amino acids from the N-terminal region of human APOBEC3D.
Dilution	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	APOBEC3D Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	APOBEC3D (HGNC:17354)
Function	DNA deaminase (cytidine deaminase) which acts as an inhibitor of retrovirus replication and retrotransposon mobility via deaminase-dependent and -independent mechanisms (PubMed: 16920826 , PubMed: 20062055 , PubMed: 21835787). Exhibits antiviral activity against

HIV-1. 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:[16920826](#)). 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. Also inhibits the mobility of LTR and non-LTR retrotransposons (PubMed:[27428332](#)).

Cellular Location

Cytoplasm. Cytoplasm, P-body

Tissue Location

Expressed in lymphoid organs. Also detected in non- lymphoid tissues including lung.

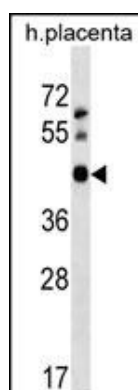
Background

Unknown. Unable to reduce HIV-1 infectivity in vitro.

References

Zhang, W., et al. PLoS ONE 3 (12), E3963 (2008) :
Dang, Y., et al. J. Virol. 80(21):10522-10533(2006)
Stenglein, M.D., et al. J. Biol. Chem. 281(25):16837-16841(2006)
Conticello, S.G., et al. Mol. Biol. Evol. 22(2):367-377(2005)
Harris, R.S., et al. Nat. Rev. Immunol. 4(11):868-877(2004)

Images



APOBEC3D Antibody (N-term)(Cat. #AP18763a) western blot analysis in human placenta tissue lysates (35ug/lane).This demonstrates the APOBEC3D antibody detected the APOBEC3D protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.